Appendix 1

Crook County Parcel Information

Western Title & Escrow

Parcel Information

Parcel #:	**1193**
Tax Account:	**1515170000100**
Site Address:	8911 SW Wiley Rd
	Powell Butte OR 97753
Owner:	818 Powell Butte LLC
	21059 Avery Ln
	Bend OR 97702
Twn/Range/Section:	15S / 15E / 17
Parcel Size:	300.25 Acres (13,078,890 SqFt)
Legal Lot/Block:	18 / 4
Census Tract/Block:	950300 / 5062
Levy Code:	21
Levy Rate:	12.5019
Levy Year:	2020
Market Land Value:	$42,690.00
Market Impr Value:	$25,680.00
Market Total Value:	$68,370.00 (2021)
Assd Total Value:	$56,760.00 (2021)

Tax Information

Tax Year	Annual Tax
2021	$708.54
2020	$646.59
2019	$596.59

Legal

Lot: 18, Block: 4, Township: 15S, Range: 15E, Section: 17

Land

Land Use:	551 - Farm Zone EFU Improved	Zoning:	EFU3 - Exclusive Farm Use
# Dwellings:		School District:	Powell Butte School District
Primary School:	Powell Butte Community Charter School	Middle School:	Powell Butte Community Charter School
High School:	Crook County High School		

Improvement

Year Built:		Bedrooms:		Bathrooms, Total:	
Bathrooms, Full:		Bathrooms, Half:		Finished Area:	
Floor 1:		Floor 2:		Garage:	
Carport:		Attic:		Basement:	
Condition:					

Transfer Information

Sale Date:	08/14/2003	Sale Price:	$977,857.00	Doc Num:	182839	Doc Type:	WARRANTY DEED

Crook County Property Summary Report

Report Date: 1/4/2022 1:23:58 PM

Disclaimer

The information and maps presented in this report are provided for your convenience. Every reasonable effort has been made to assure the accuracy of the data and associated maps. Crook County makes no warranty, representation or guarantee as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein. Crook County explicitly disclaims any representations and warranties, including, without limitation, the implied warranties of merchantability and fitness for a particular purpose. Crook County shall assume no liability for any errors, omissions, or inaccuracies in the information provided regardless of how caused. Crook County assumes no liability for any decisions made or actions taken or not taken by the user of this information or data furnished hereunder.

Account Summary

Account Information

Mailing Name: 818 POWELL BUTTE LLC
Map and Taxlot: 15151700-00100-1193
Account: 1193
Tax Status: Taxable
Situs Address: 8911 SW WILEY RD, POWELL BUTTE OR 97753

Property Taxes

Current Tax Year: 2021
Tax Code Area: 0021

Assessment

Subdivision: PART PLAT YEAR & # NO PARCEL #
Lot: 18
Block: 4
Assessor Acres: 300.25
Property Class: 551

Ownership

Mailing Address:
818 POWELL BUTTE LLC
21059 AVERY LN
BEND, OR 97702-3043

Valuation

Real Market Values as of Jan. 1, 2022

Land $42,690
Structures $25,680
Total $68,370

Current Assessed Values:

Maximum Assessed $128,769
Assessed Value $56,760
Veterans Exemption $0.00

Warnings, Notations, and Special Assessments

Assessor's Office Notations

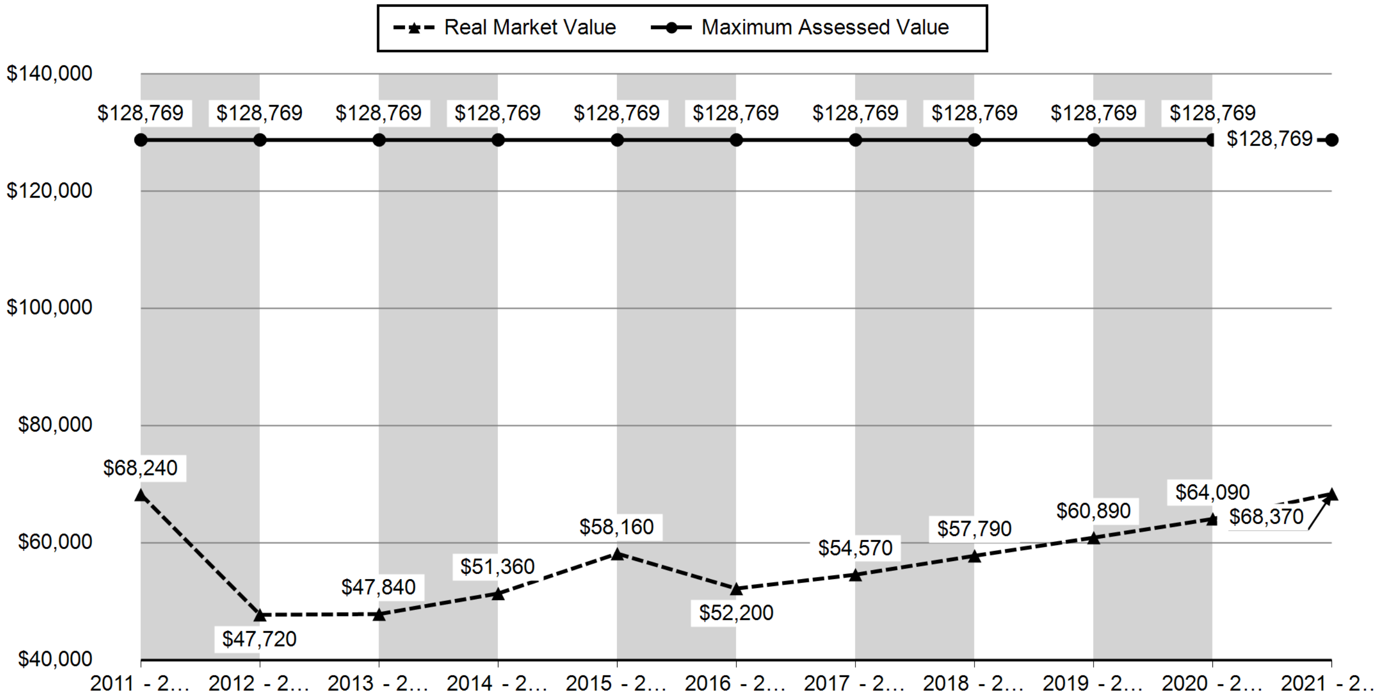
Code	Description	Remarks
501		Potential Additional Tax Liability

Valuation History *All values are as of January 1 of each year. Tax year is July 1st through June 30th of each year.*

	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016
Real Market Value - Land	$43,040	$33,300	$33,600	$34,780	$36,670
Real Market Value - Structures	$25,200	$14,420	$14,240	$16,580	$21,490
Total Real Market Value	$68,240	$47,720	$47,840	$51,360	$58,160
Maximum Assessed Value	$128,769	$128,769	$128,769	$128,769	$128,769
Total Assessed Value	$49,710	$39,550	$40,230	$43,200	$48,740
Exemption Value	$0	$0	$0	$0	$0

2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	2021 - 2022
$38,550	$40,500	$42,060	$42,690	$42,690	$42,690
$13,650	$14,070	$15,730	$18,200	$21,400	$25,680
$52,200	$54,570	$57,790	$60,890	$64,090	$68,370
$128,769	$128,769	$128,769	$128,769	$128,769	$128,769
$41,530	$42,570	$44,860	$48,030	$51,720	$56,760
$0	$0	$0	$0	$0	$0

 (For Report Disclaimer see page 1)



Tax Payment History

Year	Date Due	Transaction Type	Transaction Date	As Of Date	Amount Received	Tax Due	Discount Amount	Interest Charged	Refund Interest
2021	11/15/2021	PAYMENT	11/04/2021	11/04/2021	$687.28	($708.54)	$21.26	$0.00	$0.00
2021	11/15/2021	IMPOSED	10/12/2021	11/15/2021	$0.00	$708.54	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2020	11/15/2020	PAYMENT	11/03/2020	11/03/2020	$627.19	($646.59)	$19.40	$0.00	$0.00
2020	11/15/2020	IMPOSED	10/16/2020	11/15/2020	$0.00	$646.59	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2019	11/15/2019	IMPOSED	11/15/2019	11/15/2019	$0.00	$596.59	$0.00	$0.00	$0.00
2019	11/15/2019	PAYMENT	11/04/2019	11/15/2019	$578.69	($596.59)	$17.90	$0.00	$0.00
					Total:	**$0.00**			
2018	11/15/2018	IMPOSED	11/15/2018	11/15/2018	$0.00	$559.45	$0.00	$0.00	$0.00
2018	11/15/2018	PAYMENT	11/06/2018	11/15/2018	$542.67	($559.45)	$16.78	$0.00	$0.00
					Total:	**$0.00**			
2017	11/15/2017	IMPOSED	11/15/2017	11/15/2017	$0.00	$538.54	$0.00	$0.00	$0.00
2017	11/15/2017	PAYMENT	11/06/2017	11/15/2017	$522.38	($538.54)	$16.16	$0.00	$0.00
					Total:	**$0.00**			
2016	11/15/2016	IMPOSED	11/15/2016	11/15/2016	$0.00	$516.30	$0.00	$0.00	$0.00
2016	11/15/2016	PAYMENT	11/08/2016	11/15/2016	$500.81	($516.30)	$15.49	$0.00	$0.00
					Total:	**$0.00**			
2015	11/15/2015	PAYMENT	11/17/2015	11/15/2015	$579.01	($596.92)	$17.91	$0.00	$0.00
2015	11/15/2015	IMPOSED	11/15/2015	11/15/2015	$0.00	$596.92	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2014	11/15/2014	IMPOSED	11/15/2014	11/15/2014	$0.00	$521.86	$0.00	$0.00	$0.00
2014	11/15/2014	PAYMENT	11/05/2014	11/15/2014	$506.20	($521.86)	$15.66	$0.00	$0.00
					Total:	**$0.00**			
2013	11/15/2013	IMPOSED	11/15/2013	11/15/2013	$0.00	$499.86	$0.00	$0.00	$0.00
2013	11/15/2013	PAYMENT	11/06/2013	11/15/2013	$484.86	($499.86)	$15.00	$0.00	$0.00
					Total:	**$0.00**			

Year	Date Due	Transaction Type	Transaction Date	As Of Date	Amount Received	Tax Due	Discount Amount	Interest Charged	Refund Interest
2012	11/15/2012	PAYMENT	11/16/2012	11/15/2012	$477.10	($491.86)	$14.76	$0.00	$0.00
2012	11/15/2012	IMPOSED	11/15/2012	11/15/2012	$0.00	$491.86	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2011	11/15/2011	IMPOSED	11/15/2011	11/15/2011	$0.00	$623.55	$0.00	$0.00	$0.00
2011	11/15/2011	PAYMENT	11/08/2011	11/15/2011	$604.84	($623.55)	$18.71	$0.00	$0.00
					Total:	**$0.00**			
2010	11/15/2010	PAYMENT	02/03/2011	11/15/2010	$1,169.99	($1,206.18)	$36.19	$0.00	$0.00
2010	11/15/2010	PAYMENT	02/03/2011	11/15/2010	($1,206.18)	$1,206.18	$0.00	$0.00	$0.00
2010	11/15/2010	PAYMENT	02/03/2011	11/15/2010	($179.49)	$222.35	($42.86)	$0.00	$0.00
2010	11/15/2010	IMPOSED	11/15/2010	11/15/2010	$0.00	$1,206.18	$0.00	$0.00	$0.00
2010	11/15/2010	PAYMENT	11/02/2010	11/15/2010	$1,385.67	($1,428.53)	$42.86	$0.00	$0.00
					Total:	**$0.00**			
2009	11/15/2009	IMPOSED	11/15/2009	11/15/2009	$0.00	$1,333.29	$0.00	$0.00	$0.00
2009	11/15/2009	PAYMENT	11/09/2009	11/15/2009	$1,293.29	($1,333.29)	$40.00	$0.00	$0.00
					Total:	**$0.00**			
2008	11/15/2008	PAYMENT	04/06/2009	11/15/2008	$1,267.03	($1,228.80)	$0.00	$38.23	$0.00
2008	11/15/2008	IMPOSED	11/15/2008	11/15/2008	$0.00	$1,228.80	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2007	11/15/2007	PAYMENT	11/28/2007	11/15/2007	$2,011.84	($2,002.94)	$0.00	$8.90	$0.00
2007	11/15/2007	IMPOSED	11/15/2007	11/15/2007	$0.00	$2,002.94	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2006	11/15/2006	PAYMENT	03/06/2007	11/15/2006	$1,996.09	($1,952.70)	$0.00	$43.39	$0.00
2006	11/15/2006	IMPOSED	11/15/2006	11/15/2006	$0.00	$1,952.70	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2005	11/15/2005	IMPOSED	11/15/2005	11/15/2005	$0.00	$1,641.77	$0.00	$0.00	$0.00
2005	11/15/2005	PAYMENT	11/03/2005	11/15/2005	$1,592.52	($1,641.77)	$49.25	$0.00	$0.00
					Total:	**$0.00**			
2004	11/15/2004	PAYMENT	11/17/2004	11/15/2004	$6,989.54	($7,205.71)	$216.17	$0.00	$0.00
2004	11/15/2004	IMPOSED	11/15/2004	11/15/2004	$0.00	$7,205.71	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2003	11/15/2003	IMPOSED	11/15/2003	11/15/2003	$0.00	$1,840.84	$0.00	$0.00	$0.00
2003	11/15/2003	PAYMENT	11/04/2003	11/15/2003	$1,785.61	($1,840.84)	$55.23	$0.00	$0.00
					Total:	**$0.00**			
2002	11/15/2002	IMPOSED	11/15/2002	11/15/2002	$0.00	$1,806.66	$0.00	$0.00	$0.00
2002	11/15/2002	PAYMENT	11/01/2002	11/15/2002	$1,752.46	($1,806.66)	$54.20	$0.00	$0.00
					Total:	**$0.00**			
2001	11/15/2001	IMPOSED	11/15/2001	11/15/2001	$0.00	$2,233.31	$0.00	$0.00	$0.00
2001	11/15/2001	PAYMENT	10/30/2001	11/15/2001	$2,166.31	($2,233.31)	$67.00	$0.00	$0.00
					Total:	**$0.00**			
2000	11/15/2000	PAYMENT	07/01/2001	11/15/2000	$2,340.09	($2,193.84)	$0.00	$146.25	$0.00
2000	11/15/2000	IMPOSED	11/15/2000	11/15/2000	$0.00	$2,193.84	$0.00	$0.00	$0.00
					Total:	**$0.00**			

Sales History

Sale Date	Seller	Buyer	Sale Amount	Sale Type	Recording
06/20/1996	HODDER, RICHARD G & SHIRLEY L		$0	WARRANTY DEED	1998-128645
10/20/1992	UNDETERMINED GRANTOR NAME		$392,000	WARRANTY DEED	1994-106165
08/14/2003	GRAMZOW, EUGENE W TRUSTEE		$977,857	WARRANTY DEED	2005-182839

Structures

Stat Class/Description	Improvement Description	Code Area	Year Built	Eff Year Built	Total Sq Ft
FARM BLDG - : MACHINE SHED	MACHINE SHED	0021	0	1975	1800

Accessories

Improvement Type	Sq Ft
Machine Shed	1800

Land Characteristics

Land Description	Acres	Land Classification
Farm Use Zoned	229.01	0272
Market	1.00	02SHS
Farm Use Zoned	69.63	024
OSD	0.00	SA OSD

Related Accounts

Related accounts apply to a property that may be on one map and tax lot but due to billing have more than one account. This occurs when a property is in multiple tax code areas. In other cases there may be business personal property or a manufactured home on this property that is not in the same ownership as the land.

No Related Accounts found.

Ownership

Name Type	Name	Ownership Type	Percentage
OWNER	818 POWELL BUTTE LLC ,		100.00%
Taxpayer	818 POWELL BUTTE LLC,		100.00%
			200.00%

JULY 1, 2021 TO JUNE 30, 2022
CROOK COUNTY TAX COLLECTOR
200 NE 2nd St
Prineville, OR 97754

REAL PROPERTY TAX STATEMENT

ACCOUNT NO: 1193

PROPERTY DESCRIPTION

CODE: 0021
MAP: 151517-00-00100 **ACRES:** 300.25
SITUS: 8911 SW WILEY RD POWELL BUTTE

818 POWELL BUTTE LLC
21059 AVERY LN
BEND OR 97702-3043

2021 - 2022 CURRENT TAX BY DISTRICT

HIGH DESERT ESD	5.47
CROOK COUNTY SCHOOL DIST	271.63
CENTRAL OR COMM COLLEGE	35.21
EDUCATION TOTAL:	312.31
CROOK COUNTY GENERAL FUND	219.67
AG EXTENSION SERVICE	6.85
CROOK CO HISTORICAL FUND	3.41
CROOK CO FIRE & RESCUE	90.25
CEMETERY DISTRICT	5.64
GENERAL GOVT TOTAL:	325.82
CC JAIL BOND	12.37
CC SCHOOL BOND	52.16
COCC BOND & INTEREST	5.88
BONDS - OTHER TOTAL:	70.41

VALUES:	LAST YEAR	THIS YEAR
REAL MARKET (RMV)		
LAND	42,690	42,690
STRUCTURES	21,400	25,680
TOTAL RMV	64,090	68,370
TOTAL SAV	64,090	68,370
TOTAL ASSESSED VALUE	51,720	56,760
NET TAXABLE:	**51,720**	**56,760**
TOTAL PROPERTY TAX	**646.59**	**708.54**

2021 - 2022 TAX (Before Discount) 708.54

****POTENTIAL ADDITIONAL TAX LIABILITY****

Please Make Payment To: CROOK COUNTY TAX COLLECTOR
(Refer to back of statement and insert enclosed for more information)

Crook County Website - www.co.crook.or.us

Tax Collector (541) 447-6554 or Assessor (541) 447-4133

TOTAL DUE (After Discount) 687.28

(See back of statement for instructions)

TAX PAYMENT OPTIONS

PAYMENT OPTIONS	Date Due	Discount Allowed		Amount
FULL PAYMENT	**Nov 15, 2021**	**21.26**	**3% Discount ....**	**687.28**
2/3 PAYMENT	Nov 15, 2021	9.45	2% Discount	462.91
1/3 PAYMENT	Nov 15, 2021		No Discount	236.18

↑ **Tear Here** **PLEASE RETURN THIS PORTION WITH YOUR PAYMENT** **Tear Here** ↑

2021 - 2022 PROPERTY TAXES **CROOK COUNTY, OREGON** **ACCOUNT NO. 1193**

FULL PAYMENT	**(Includes 3% Discount)**	**DUE**	**Nov 15, 2021**	**687.28**
2/3 PAYMENT	(Includes 2% Discount)	DUE	Nov 15, 2021	462.91
1/3 PAYMENT	(No Discount Offered)	DUE	Nov 15, 2021	236.18

(DISCOUNT IS LOST & INTEREST APPLIES AFTER DUE DATE)

☐ **Mailing address change on back**

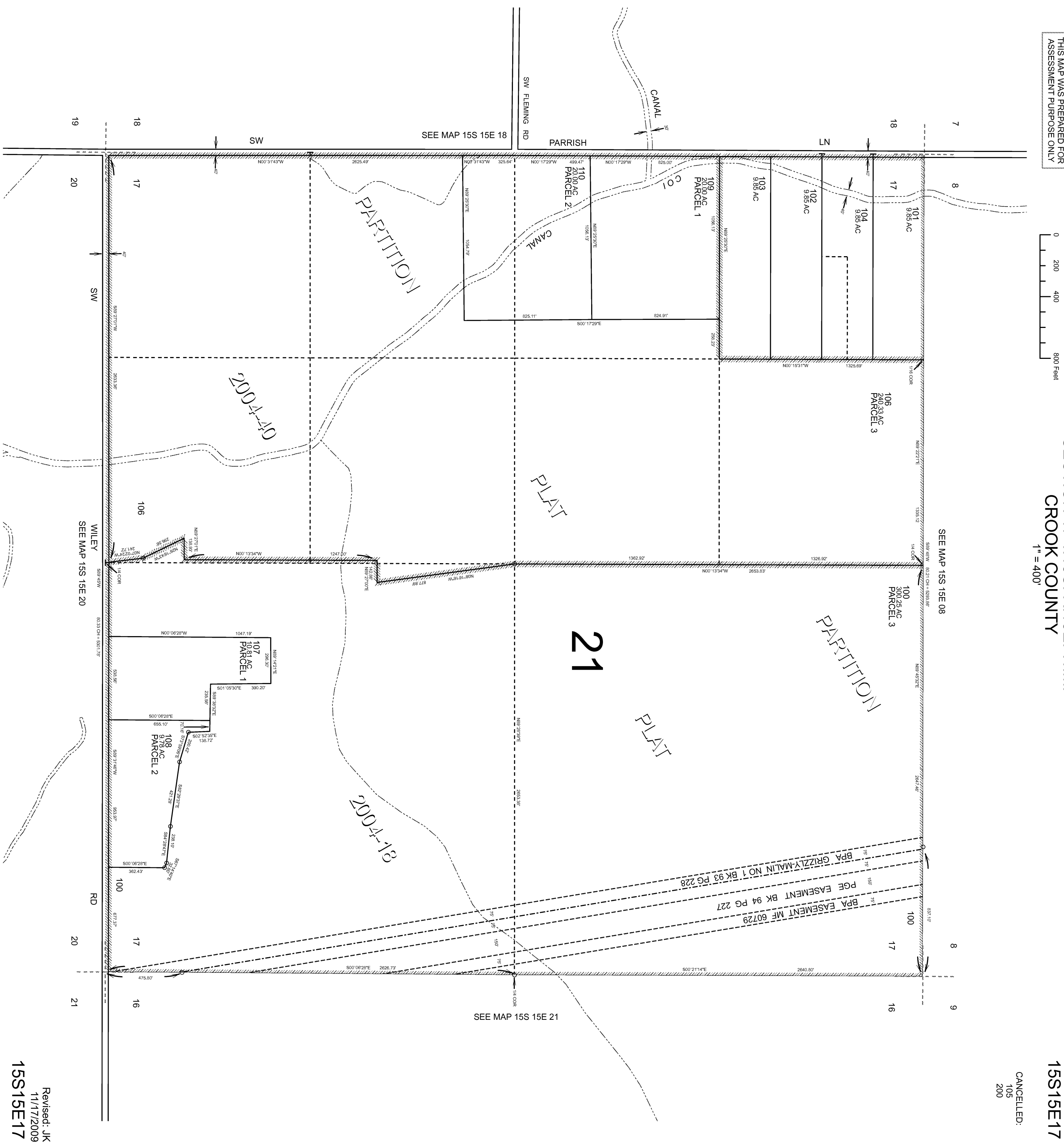
MAKE PAYMENT TO:

Enter Payment Amount

818 POWELL BUTTE LLC
21059 AVERY LN
BEND OR 97702-3043

CROOK COUNTY TAX COLLECTOR
200 NE 2nd St
Prineville, OR 97754

07100000011930000023618000004629100000687281



SECTION 17 T.15S. R.15E. W.M.
CROOK COUNTY
1" = 400'
THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSE ONLY
SW PARRISH LN
SW FLEMING RD
SW WILEY RD
CANAL
PARTITION
PLAT
2004-40
2004-18
21
SEE MAP 15S 15E 18
SEE MAP 15S 15E 08
SEE MAP 15S 15E 20
SEE MAP 15S 15E 21
BPA GRIZZLY-MALIN NO 1 BK 93 PG 228
PGE EASEMENT BK 94 PG 227
BPA EASEMENT MF 60729
15S15E17
CANCELLED:
105
200
Revised: JK
11/17/2009
15S15E17

Document: Warranty Deed
Grantor: Eugene W. Gramzow Revocable Trust
Grantee: 818 Powell Butte, LLC

After recording, please return to:
818 Powell Butte, LLC, at 321 Goodpasture Island Road, Eugene, OR 97401

WARRANTY DEED

This instrument is made on July 1, 2003, between Eugene W. Gramzow, Trustee of the Eugene W. Gramzow Revocable Trust, dated February 3, 1998, as Grantor, and 818 Powell Butte, LLC, an Oregon limited liability company, as Grantee. Grantor hereby conveys and warrants to Grantee the following described real property situated in Crook County, Oregon, free of encumbrances except as set forth herein, to-wit:

See Exhibit "A"

This conveyance is subject to and excepts rights of the public in streets, roads and highways, covenants, conditions, restrictions, reservations and easements of record.

The true consideration for this conveyance is $977,857.50.

THIS INSTRUMENT WILL NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY APPROVED USES AND TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES AS DEFINED IN ORS 30.930.

Dated July 1, 2003.

Eugene W. Gramzow Revocable Trust, dated February 3, 1998

By Eugene W. Gramzow, Trustee

State of Oregon)
) ss:
County of Lane)

OFFICIAL SEAL
AMY S LA GRANDER
NOTARY PUBLIC - OREGON
COMMISSION NO. 354390
MY COMMISSION EXPIRES MAR. 2, 2006

This instrument was acknowledged before me on July 1, 2003, by Eugene W. Gramzow, who is Trustee of the Eugene W. Gramzow Revocable Trust, dated February 3, 1998.

Amy S. LaGrander
Notary Public for Oregon
My Commission expires: 3-2-2006

182839 (2pp)

EXHIBIT “A”

Township 15 South, Range 15 East of the Willamette Meridian: Section 17, the East ½ of the Northwest ¼; the Southwest ¼ of the Northwest ¼; the Southwest ¼ and the East ½, all located in Crook County, Oregon.

COUNTY COURT, CROOK COUNTY
STATE OF OREGON

STATE OF OREGON
COUNTY OF CROOK } ss 182839

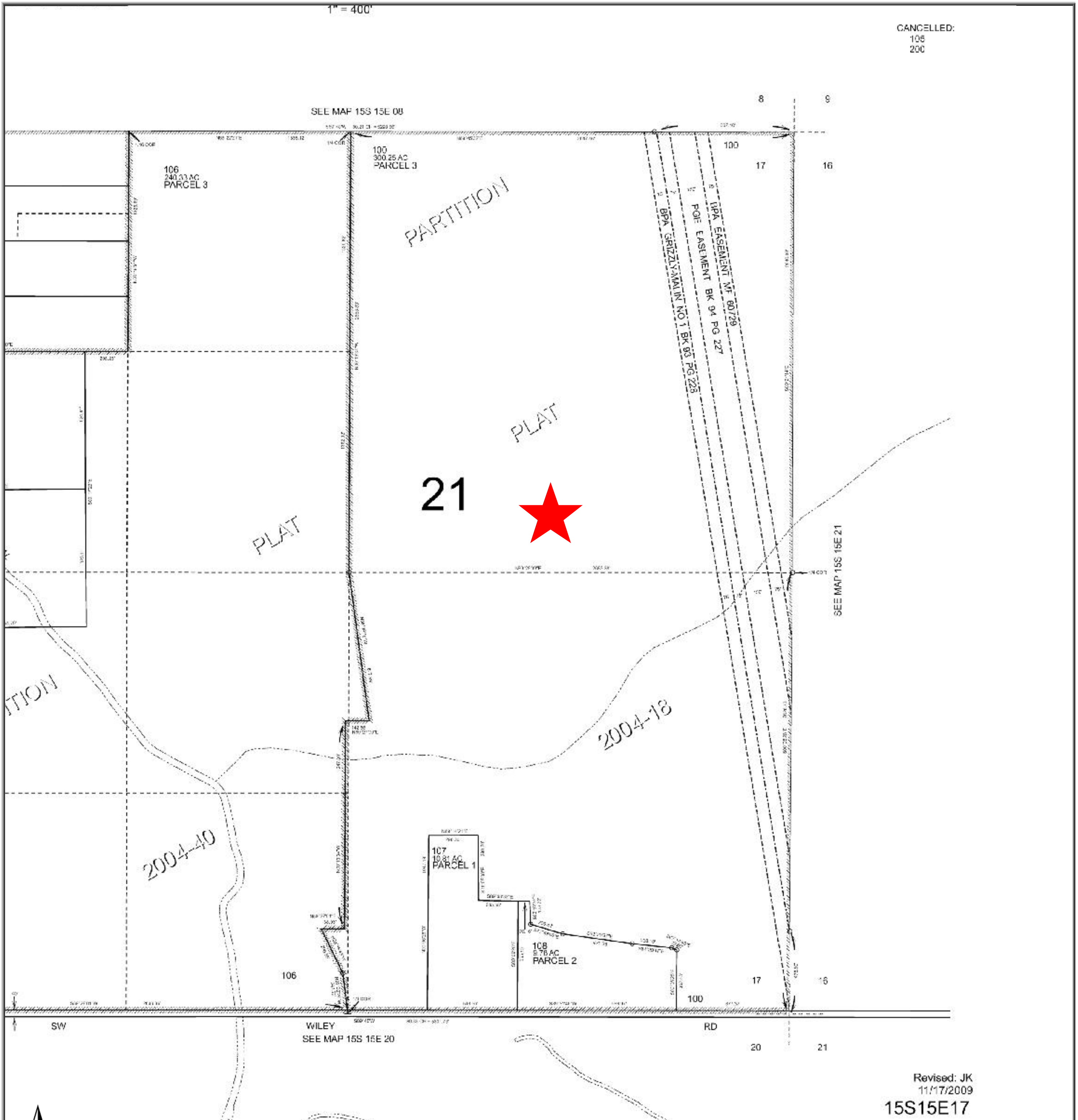
I CERTIFY THAT THE WITHIN INSTRUMENT WAS RECEIVED FOR RECORD ON THE 14th DAY OF August, 20 2003, AT 12:10 P. M.
AND RECORDED IN Deeds
RECORDS OF SAID COUNTY MF NO. 182839
DEANNA E. BERMAN, CROOK COUNTY CLERK
BY Eloise Brumener DEPUTY

31

AUG 18 2003

KEY PUNCHED

;



Western Title & Escrow

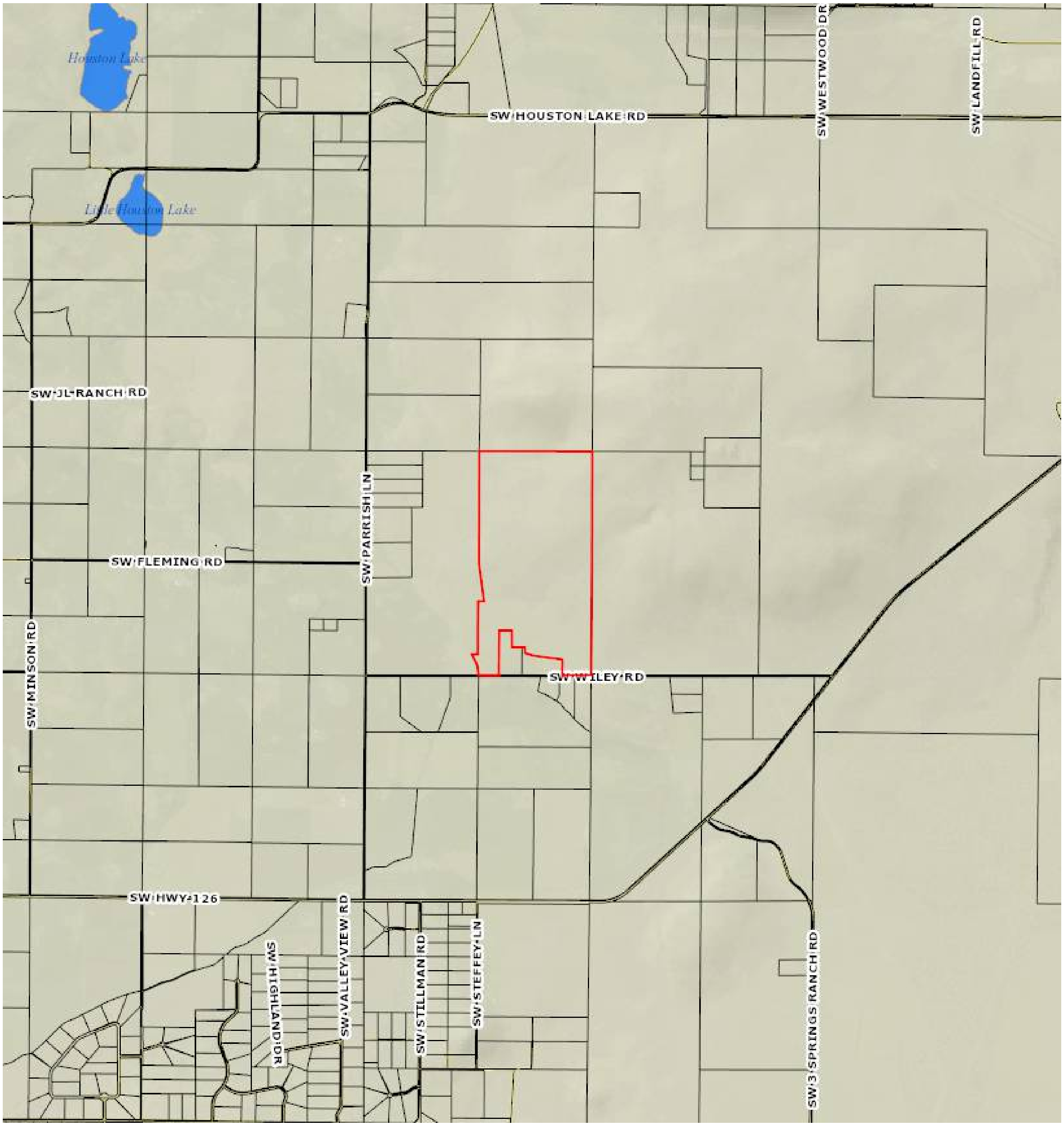
ParcelID: 1193

Tax Account #: 1515170000100

8911 SW Wiley Rd, Powell Butte OR 97753

This map/plat is being furnished as an aid in locating the herein described land in relation to adjoining streets, natural boundaries and other land, and is not a survey of the land depicted. Except to the extent a policy of title insurance is expressly modified by endorsement, if any, the company does not insure dimensions, distances, location of easements, acreage or other matters shown thereon.

Aerial Map



Western Title & Escrow

Parcel ID: 1193

Sentry Dynamics, Inc. and its customers make no representations, warranties or conditions, express or implied, as to the accuracy or completeness of information contained in this report.

Crook County Parcel Information

Western Title & Escrow

Parcel Information

Parcel #:	**16275**
Tax Account:	**1515170000106**
Site Address:	4272 SW Parrish Ln
	Powell Butte OR 97753
Owner:	818 Powell Butte LLC
	21059 Avery Ln
	Bend OR 97702
Twn/Range/Section:	15S / 15E / 17
Parcel Size:	240.33 Acres (10,468,775 SqFt)
Legal Lot/Block:	40 / 4
Census Tract/Block:	950300 / 5062
Levy Code:	21
Levy Rate:	12.5019
Levy Year:	2020
Market Land Value:	$48,110.00
Market Impr Value:	$0.00
Market Total Value:	$48,110.00 (2021)
Assd Total Value:	$33,660.00 (2021)

Tax Information

Tax Year	Annual Tax
2021	$420.17
2020	$408.82
2019	$398.10

Legal

Lot: 40, Block: 4, Township: 15S, Range: 15E, Section: 17

Land

Land Use:	550 - Farm Zone EFU Unimp	Zoning:	EFU3 - Exclusive Farm Use
# Dwellings:		School District:	Powell Butte School District
Primary School:	Powell Butte Community Charter School	Middle School:	Powell Butte Community Charter School
High School:	Crook County High School		

Improvement

Year Built:		Bedrooms:		Bathrooms, Total:	
Bathrooms, Full:		Bathrooms, Half:		Finished Area:	
Floor 1:		Floor 2:		Garage:	
Carport:		Attic:		Basement:	
Condition:					

Transfer Information

Sale Date:	08/14/2003	Sale Price:	$977,857.00	Doc Num:	182839	Doc Type:	WARRANTY DEED

Crook County Property Summary Report

Report Date: 1/4/2022 1:45:11 PM

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Account Summary

Account Information

Mailing Name: 818 POWELL BUTTE LLC
Map and Taxlot: 15151700-00106-16275
Account: 16275
Tax Status: Taxable
Situs Address: 4272 SW PARRISH LN, POWELL BUTTE OR 97753

Property Taxes

Current Tax Year: 2021
Tax Code Area: 0021

Assessment

Subdivision: PART PLAT YEAR & # NO PARCEL #
Lot: 40
Block: 4
Assessor Acres: 240.33
Property Class: 550

Ownership

Mailing Address:
818 POWELL BUTTE LLC
21059 AVERY LN
BEND, OR 97702

Valuation

Real Market Values as of Jan. 1, 2022

Land $48,110
Structures
Total $48,110

Current Assessed Values:

Maximum Assessed $0
Assessed Value $33,660
Veterans Exemption $0.00

Warnings, Notations, and Special Assessments

Assessor's Office Notations

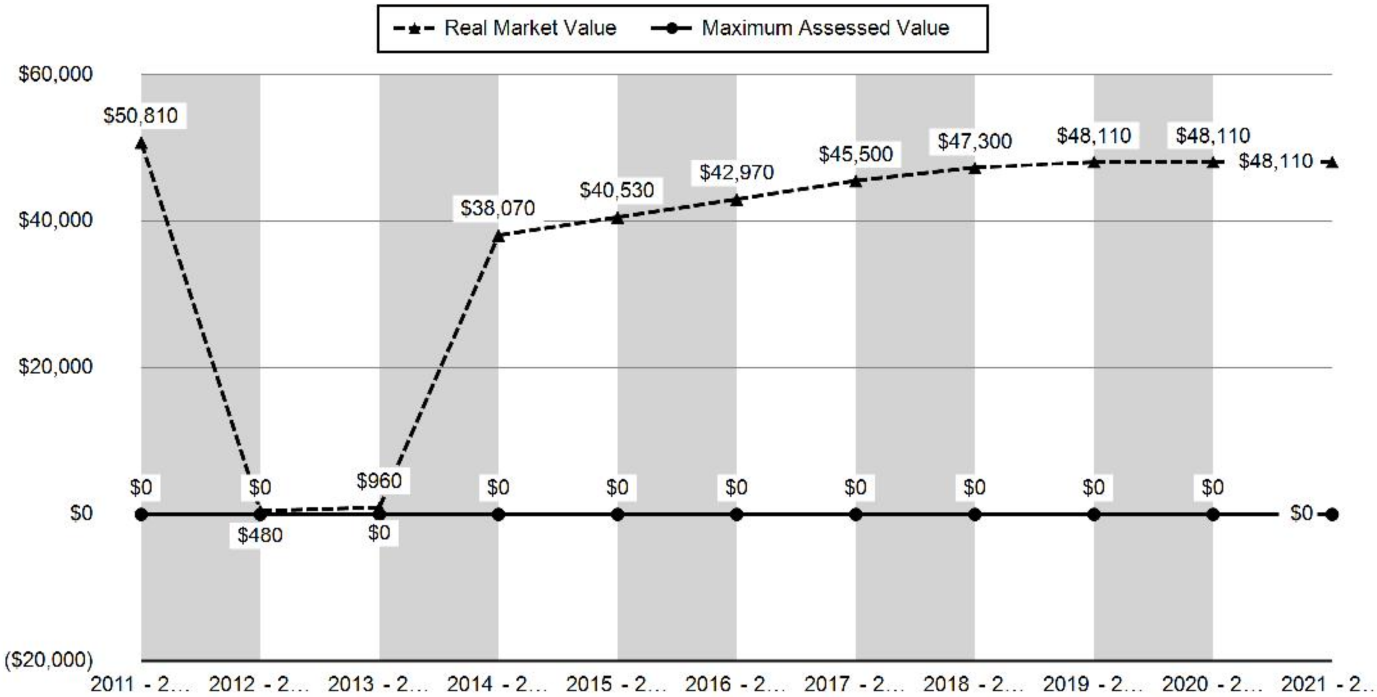
Code	Description	Remarks
501		Potential Additional Tax Liability

Valuation History

All values are as of January 1 of each year. Tax year is July 1st through June 30th of each year.

	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016
Real Market Value - Land	$50,810	$480	$960	$38,070	$40,530
Real Market Value - Structures	$0	$0	$0	$0	$0
Total Real Market Value	$50,810	$480	$960	$38,070	$40,530
Maximum Assessed Value	$0	$0	$0	$0	$0
Total Assessed Value	$480	$480	$960	$27,890	$28,700
Exemption Value	$0	$0	$0	$0	$0

2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	2021 - 2022
$42,970	$45,500	$47,300	$48,110	$48,110	$48,110
$0	$0	$0	$0	$0	$0
$42,970	$45,500	$47,300	$48,110	$48,110	$48,110
$0	$0	$0	$0	$0	$0
$29,510	$30,340	$31,150	$32,050	$32,700	$33,660
$0	$0	$0	$0	$0	$0



Tax Payment History

Year	Date Due	Transaction Type	Transaction Date	As Of Date	Amount Received	Tax Due	Discount Amount	Interest Charged	Refund Interest
2021	11/15/2021	PAYMENT	11/04/2021	11/04/2021	$407.56	($420.17)	$12.61	$0.00	$0.00
2021	11/15/2021	IMPOSED	10/12/2021	11/15/2021	$0.00	$420.17	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2020	11/15/2020	PAYMENT	11/03/2020	11/03/2020	$396.56	($408.82)	$12.26	$0.00	$0.00
2020	11/15/2020	IMPOSED	10/16/2020	11/15/2020	$0.00	$408.82	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2019	11/15/2019	IMPOSED	11/15/2019	11/15/2019	$0.00	$398.10	$0.00	$0.00	$0.00
2019	11/15/2019	PAYMENT	11/04/2019	11/15/2019	$386.16	($398.10)	$11.94	$0.00	$0.00
					Total:	**$0.00**			
2018	11/15/2018	IMPOSED	11/15/2018	11/15/2018	$0.00	$388.47	$0.00	$0.00	$0.00
2018	11/15/2018	PAYMENT	11/06/2018	11/15/2018	$376.82	($388.47)	$11.65	$0.00	$0.00
					Total:	**$0.00**			
2017	11/15/2017	IMPOSED	11/15/2017	11/15/2017	$0.00	$383.83	$0.00	$0.00	$0.00
2017	11/15/2017	PAYMENT	11/06/2017	11/15/2017	$372.32	($383.83)	$11.51	$0.00	$0.00
					Total:	**$0.00**			
2016	11/15/2016	IMPOSED	11/15/2016	11/15/2016	$0.00	$366.87	$0.00	$0.00	$0.00
2016	11/15/2016	PAYMENT	11/08/2016	11/15/2016	$355.86	($366.87)	$11.01	$0.00	$0.00
					Total:	**$0.00**			
2015	11/15/2015	PAYMENT	11/17/2015	11/15/2015	$340.95	($351.49)	$10.54	$0.00	$0.00
2015	11/15/2015	IMPOSED	11/15/2015	11/15/2015	$0.00	$351.49	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2014	11/15/2014	IMPOSED	11/15/2014	11/15/2014	$0.00	$336.91	$0.00	$0.00	$0.00
2014	11/15/2014	PAYMENT	11/05/2014	11/15/2014	$326.80	($336.91)	$10.11	$0.00	$0.00
					Total:	**$0.00**			
2013	11/15/2013	IMPOSED	11/15/2013	11/15/2013	$0.00	$11.45	$0.00	$0.00	$0.00
2013	11/15/2013	PAYMENT	11/06/2013	11/15/2013	$11.11	($11.45)	$0.34	$0.00	$0.00
					Total:	**$0.00**			

Year	Date Due	Transaction Type	Transaction Date	As Of Date	Amount Received	Tax Due	Discount Amount	Interest Charged	Refund Interest
2012	11/15/2012	PAYMENT	11/16/2012	11/15/2012	$5.56	($5.73)	$0.17	$0.00	$0.00
2012	11/15/2012	IMPOSED	11/15/2012	11/15/2012	$0.00	$5.73	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2011	11/15/2011	IMPOSED	11/15/2011	11/15/2011	$0.00	$5.78	$0.00	$0.00	$0.00
2011	11/15/2011	PAYMENT	11/08/2011	11/15/2011	$5.61	($5.78)	$0.17	$0.00	$0.00
					Total:	**$0.00**			
2010	11/15/2010	IMPOSED	11/15/2010	11/15/2010	$0.00	$5.75	$0.00	$0.00	$0.00
2010	11/15/2010	PAYMENT	11/02/2010	11/15/2010	$5.58	($5.75)	$0.17	$0.00	$0.00
					Total:	**$0.00**			
2009	11/15/2009	IMPOSED	11/15/2009	11/15/2009	$0.00	$53.56	$0.00	$0.00	$0.00
2009	11/15/2009	PAYMENT	11/09/2009	11/15/2009	$51.95	($53.56)	$1.61	$0.00	$0.00
					Total:	**$0.00**			
2008	11/15/2008	PAYMENT	03/24/2009	11/15/2008	($184.66)	$192.25	($7.59)	$0.00	$0.00
2008	11/15/2008	PAYMENT	11/17/2008	11/15/2008	$245.52	($253.11)	$7.59	$0.00	$0.00
2008	11/15/2008	IMPOSED	11/15/2008	11/15/2008	$0.00	$60.86	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2007	11/15/2007	PAYMENT	11/28/2007	11/15/2007	$221.11	($220.13)	$0.00	$0.98	$0.00
2007	11/15/2007	IMPOSED	11/15/2007	11/15/2007	$0.00	$220.13	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2006	11/15/2006	PAYMENT	03/06/2007	11/15/2006	$219.50	($214.73)	$0.00	$4.77	$0.00
2006	11/15/2006	IMPOSED	11/15/2006	11/15/2006	$0.00	$214.73	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2005	11/15/2005	IMPOSED	11/15/2005	11/15/2005	$0.00	$7,338.45	$0.00	$0.00	$0.00
2005	11/15/2005	PAYMENT	10/13/2005	11/15/2005	$7,118.30	($7,338.45)	$220.15	$0.00	$0.00
					Total:	**$0.00**			
2004	11/15/2004	PAYMENT	11/17/2004	11/15/2004	$636.23	($655.91)	$19.68	$0.00	$0.00
2004	11/15/2004	IMPOSED	11/15/2004	11/15/2004	$0.00	$655.91	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2003	11/15/2003	IMPOSED	11/15/2003	11/15/2003	$0.00	$670.26	$0.00	$0.00	$0.00
2003	11/15/2003	PAYMENT	11/04/2003	11/15/2003	$650.15	($670.26)	$20.11	$0.00	$0.00
					Total:	**$0.00**			
2002	11/15/2002	IMPOSED	11/15/2002	11/15/2002	$0.00	$657.81	$0.00	$0.00	$0.00
2002	11/15/2002	PAYMENT	11/01/2002	11/15/2002	$638.08	($657.81)	$19.73	$0.00	$0.00
					Total:	**$0.00**			

Sales History

Sale Date	Seller	Buyer	Sale Amount	Sale Type	Recording
08/14/2003	GRAMZOW, EUGENE W TRUSTEE		$977,857	WARRANTY DEED	2005-182839

Structures

Land Characteristics

Land Description	Acres	Land Classification
Farm Use Zoned	81.25	024
Farm Use Zoned	74.34	0272
Farm Use Zoned	2.99	026
Farm Use Zoned	81.25	261CW

Related Accounts

Related accounts apply to a property that may be on one map and tax lot but due to billing have more than one account. This occurs when a property is in multiple tax code areas. In other cases there may be business personal property or a manufactured home on this property that is not in the same ownership as the land.

No Related Accounts found.

Ownership

Name Type	Name	Ownership Type	Percentage
OWNER	818 POWELL BUTTE LLC ,		100.00%
Taxpayer	818 POWELL BUTTE LLC,		100.00%
			200.00%

JULY 1, 2021 TO JUNE 30, 2022
CROOK COUNTY TAX COLLECTOR
200 NE 2nd St
Prineville, OR 97754

REAL PROPERTY TAX STATEMENT

ACCOUNT NO: 16275

PROPERTY DESCRIPTION

CODE: 0021
MAP: 151517-00-00106 ACRES: 240.33
SITUS: 4272 SW PARRISH LN POWELL BUTTE

818 POWELL BUTTE LLC
21059 AVERY LN
BEND OR 97702

VALUES:	LAST YEAR	THIS YEAR
REAL MARKET (RMV)		
LAND	48,110	48,110
STRUCTURES		
TOTAL RMV	48,110	48,110
TOTAL SAV	48,110	48,110
TOTAL ASSESSED VALUE	32,700	33,660
NET TAXABLE:	32,700	33,660
TOTAL PROPERTY TAX	408.82	420.17

2021 - 2022 CURRENT TAX BY DISTRICT	
HIGH DESERT ESD	3.24
CROOK COUNTY SCHOOL DIST	161.08
CENTRAL OR COMM COLLEGE	20.88
EDUCATION TOTAL:	185.20
CROOK COUNTY GENERAL FUND	130.27
AG EXTENSION SERVICE	4.06
CROOK CO HISTORICAL FUND	2.02
CROOK CO FIRE & RESCUE	53.52
CEMETERY DISTRICT	3.35
GENERAL GOVT TOTAL:	193.22
CC JAIL BOND	7.33
CC SCHOOL BOND	30.93
COCC BOND & INTEREST	3.49
BONDS - OTHER TOTAL:	41.75

2021 - 2022 TAX (Before Discount) 420.17

POTENTIAL ADDITIONAL TAX LIABILITY

Please Make Payment To: CROOK COUNTY TAX COLLECTOR
(Refer to back of statement and insert enclosed for more information)

Crook County Website - www.co.crook.or.us

Tax Collector (541) 447-6554 or Assessor (541) 447-4133

TOTAL DUE (After Discount) 407.56

(See back of statement for instructions)

TAX PAYMENT OPTIONS

PAYMENT OPTIONS	Date Due	Discount Allowed		Amount
FULL PAYMENT	Nov 15, 2021	12.61	3% Discount	407.56
2/3 PAYMENT	Nov 15, 2021	5.60	2% Discount	274.51
1/3 PAYMENT	Nov 15, 2021		No Discount	140.06

↑ Tear Here PLEASE RETURN THIS PORTION WITH YOUR PAYMENT Tear Here ↑

2021 - 2022 PROPERTY TAXES CROOK COUNTY, OREGON ACCOUNT NO. 16275

FULL PAYMENT	(Includes 3% Discount)	DUE	Nov 15, 2021	407.56
2/3 PAYMENT	(Includes 2% Discount)	DUE	Nov 15, 2021	274.51
1/3 PAYMENT	(No Discount Offered)	DUE	Nov 15, 2021	140.06

(DISCOUNT IS LOST & INTEREST APPLIES AFTER DUE DATE)

☐ Mailing address change on back

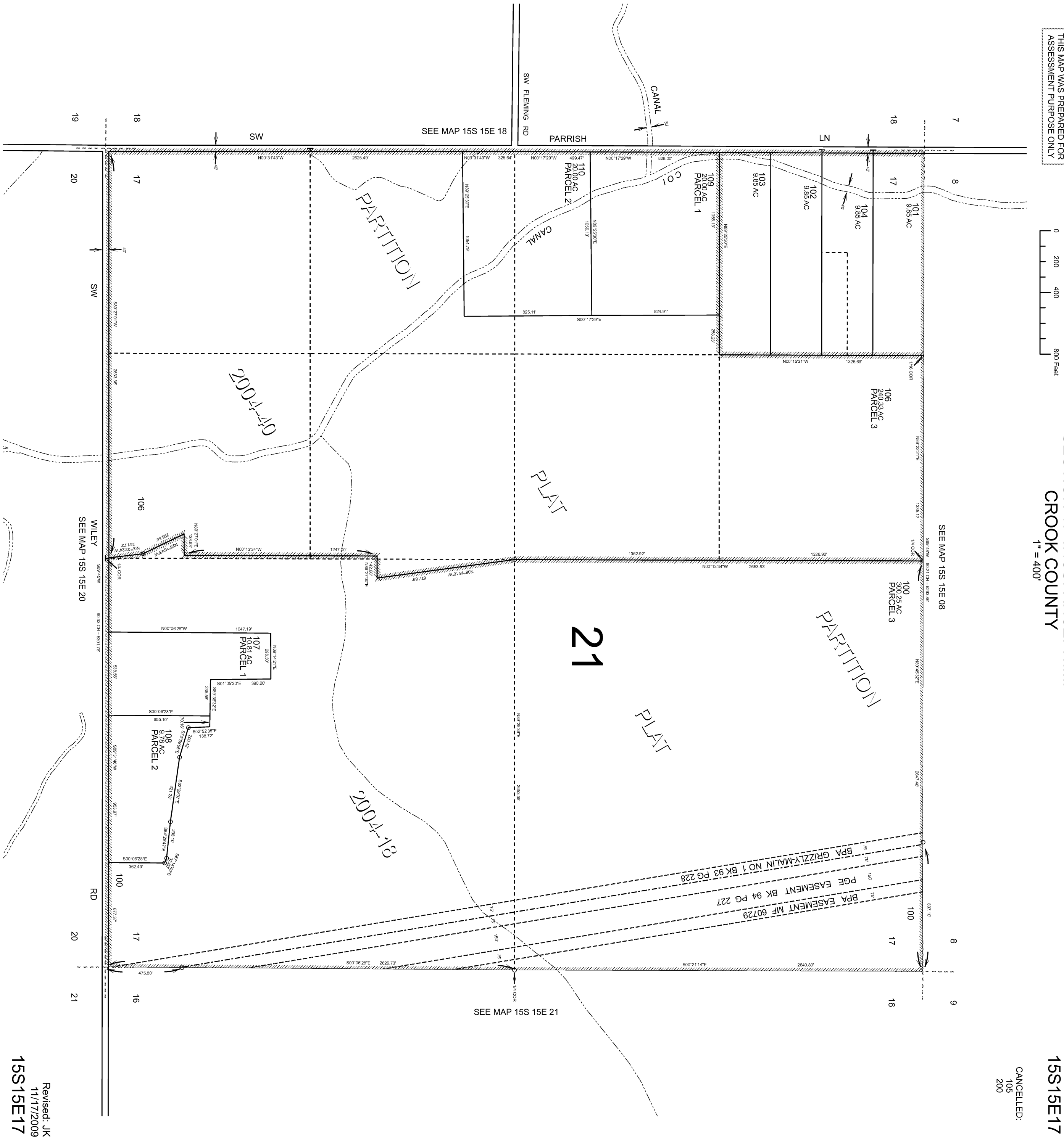
MAKE PAYMENT TO:

Enter Payment Amount

818 POWELL BUTTE LLC
21059 AVERY LN
BEND OR 97702

CROOK COUNTY TAX COLLECTOR
200 NE 2nd St
Prineville, OR 97754

071000001627500000140060000027451000004075 65


THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSE ONLY
SECTION 17 T.15S. R.15E. W.M.
CROOK COUNTY
1" = 400'
0
200
400
800 Feet
15S15E17
CANCELLED:
105
200
SEE MAP 15S 15E 18
SEE MAP 15S 15E 08
SEE MAP 15S 15E 20
SEE MAP 15S 15E 21
SW PARRISH LN
SW FLEMING RD
SW WILEY RD
CANAL
PARTITION
2004-40
PLAT
2004-18
21
101
9.85 AC
102
9.85 AC
103
9.85 AC
104
9.85 AC
109
20.00 AC
PARCEL 1
110
20.00 AC
PARCEL 2
106
240.33 AC
PARCEL 3
100
300.25 AC
PARCEL 3
107
10.61 AC
PARCEL 1
108
9.78 AC
PARCEL 2
BPA GRIZZLY-MALIN NO 1 BK 93 PG 228
PGE EASEMENT BK 94 PG 227
BPA EASEMENT MF 60729
Revised: JK
11/17/2009
15S15E17

Document:	**Warranty Deed**
Grantor:	**Eugene W. Gramzow Revocable Trust**
Grantee:	**818 Powell Butte, LLC**

After recording, please return to:
818 Powell Butte, LLC, at 321 Goodpasture Island Road, Eugene, OR 97401

WARRANTY DEED

This instrument is made on July 1, 2003, between Eugene W. Gramzow, Trustee of the Eugene W. Gramzow Revocable Trust, dated February 3, 1998, as Grantor, and 818 Powell Butte, LLC, an Oregon limited liability company, as Grantee. Grantor hereby conveys and warrants to Grantee the following described real property situated in Crook County, Oregon, free of encumbrances except as set forth herein, to-wit:

See Exhibit "A"

This conveyance is subject to and excepts rights of the public in streets, roads and highways, covenants, conditions, restrictions, reservations and easements of record.

The true consideration for this conveyance is $977,857.50.

THIS INSTRUMENT WILL NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY APPROVED USES AND TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES AS DEFINED IN ORS 30.930.

Dated July 1, 2003.

Eugene W. Gramzow Revocable Trust, dated February 3, 1998

By Eugene W. Gramzow, Trustee

State of Oregon)
) ss:
County of Lane)

OFFICIAL SEAL
AMY S LA GRANDER
NOTARY PUBLIC - OREGON
COMMISSION NO. 354390
MY COMMISSION EXPIRES MAR. 2, 2006

This instrument was acknowledged before me on July 1, 2003, by Eugene W. Gramzow, who is Trustee of the Eugene W. Gramzow Revocable Trust, dated February 3, 1998.

Amy S. La Grander
Notary Public for Oregon
My Commission expires: 3-2-2006

182839 (2pp)

EXHIBIT "A"

Township 15 South, Range 15 East of the Willamette Meridian: Section 17, the East ½ of the Northwest ¼; the Southwest ¼ of the Northwest ¼; the Southwest ¼ and the East ½, all located in Crook County, Oregon.

COUNTY COURT, CROOK COUNTY STATE OF OREGON

STATE OF OREGON
COUNTY OF CROOK } ss 182839

I CERTIFY THAT THE WITHIN INSTRUMENT WAS RECEIVED FOR RECORD ON THE 14th DAY OF August, 20 2003, AT 12:10 P. M. AND RECORDED IN Deeds RECORDS OF SAID COUNTY MF NO. 182839

DEANNA E. BERMAN, CROOK COUNTY CLERK

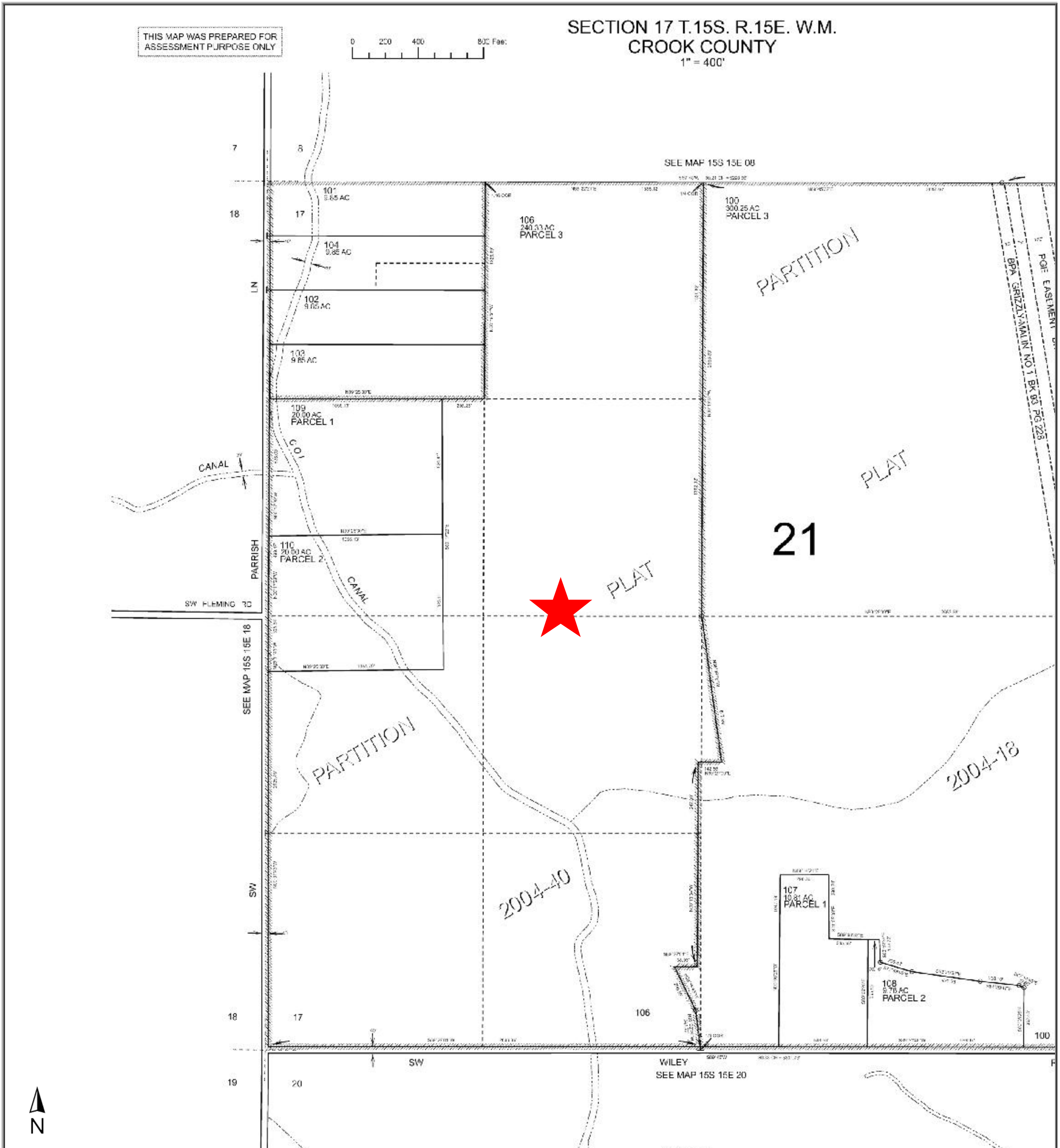
BY Eloise Brummer DEPUTY

31^00

AUG 18 2003

KEY PUNCHED

;



Western Title & Escrow

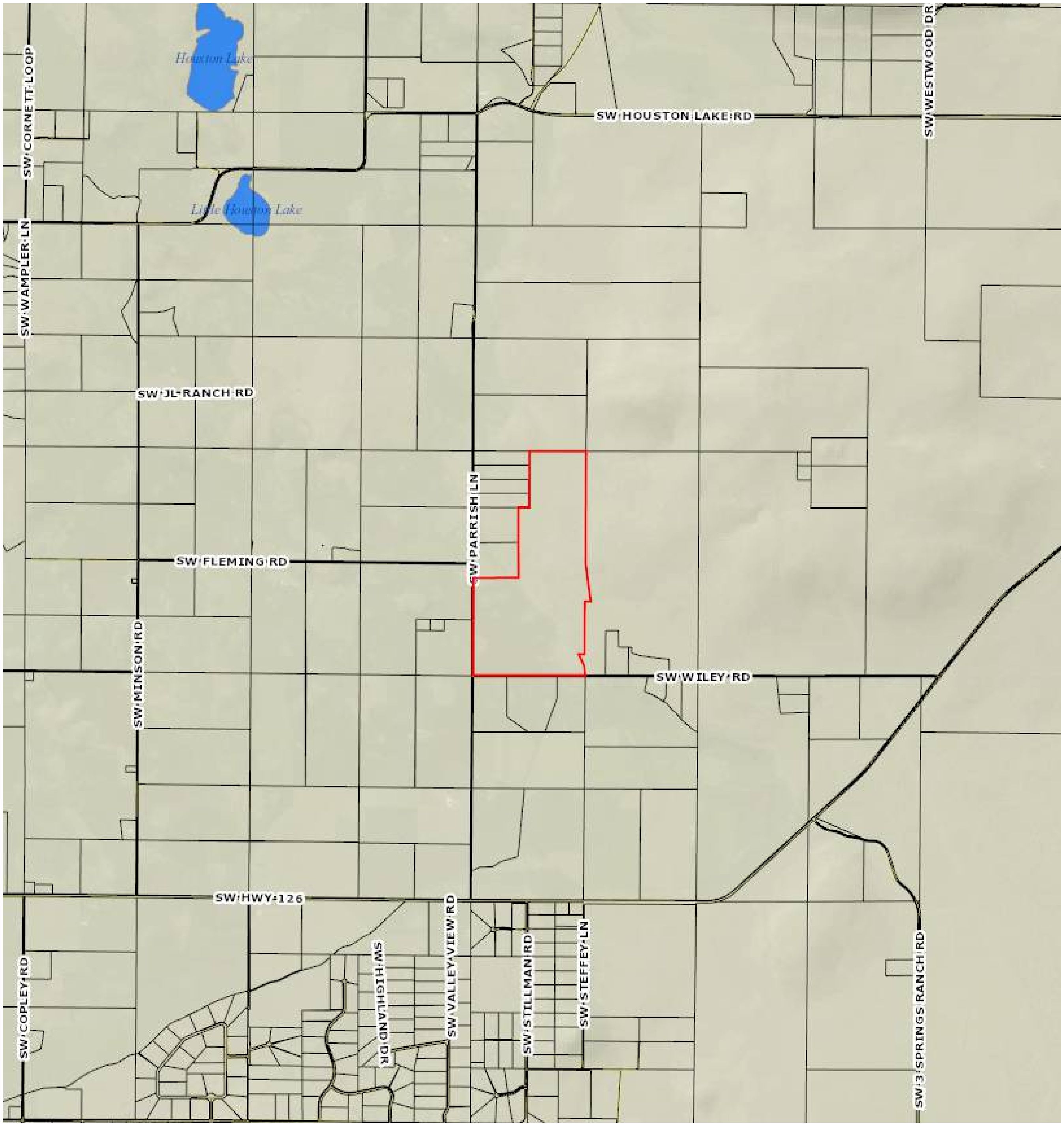
ParcelID: 16275

Tax Account #: 1515170000106

4272 SW Parrish Ln, Powell Butte OR 97753

This map/plat is being furnished as an aid in locating the herein described land in relation to adjoining streets, natural boundaries and other land, and is not a survey of the land depicted. Except to the extent a policy of title insurance is expressly modified by endorsement, if any, the company does not insure dimensions, distances, location of easements, acreage or other matters shown thereon.

Aerial Map



Western Title & Escrow

Parcel ID: 16275

Sentry Dynamics, Inc. and its customers make no representations, warranties or conditions, express or implied, as to the accuracy or completeness of information contained in this report.

Crook County Parcel Information

Western Title & Escrow

Parcel Information

Parcel #:	**16828**
Tax Account:	**1515170000109**
Site Address:	
	OR 97753
Owner:	818 Powell Butte LLC
	21059 Avery Ln
	Bend OR 97702
Twn/Range/Section:	15S / 15E / 17
Parcel Size:	20.00 Acres (871,200 SqFt)
Legal Lot/Block:	40 / 4
Census Tract/Block:	950300 / 5062
Levy Code:	21
Levy Rate:	12.5019
Levy Year:	2020
Market Land Value:	$248,370.00
Market Impr Value:	$0.00
Market Total Value:	$248,370.00 (2021)
Assd Total Value:	$148,920.00 (2021)

Tax Information

Tax Year	Annual Tax
2021	$1,858.98
2020	$1,807.62
2019	$1,743.65

Legal

Lot: 40, Block: 4, Township: 15S, Range: 15E, Section: 17

Land

Land Use:	470 - Tract Land Perm FU Disq Unimp	Zoning:	EFU3 - Exclusive Farm Use
# Dwellings:		School District:	Powell Butte School District
Primary School:	Powell Butte Community Charter School	Middle School:	Powell Butte Community Charter School
High School:	Crook County High School		

Improvement

Year Built:		Bedrooms:		Bathrooms, Total:	
Bathrooms, Full:		Bathrooms, Half:		Finished Area:	
Floor 1:		Floor 2:		Garage:	
Carport:		Attic:		Basement:	
Condition:					

Crook County Property Summary Report

Report Date: 1/4/2022 1:52:20 PM

Disclaimer

Account Summary

Account Information

Mailing Name: 818 POWELL BUTTE LLC
Map and Taxlot: 15151700-00109-16828
Account: 16828
Tax Status: Taxable
Situs Address: UNDETERMINED SITUS ADDRESS

Property Taxes

Current Tax Year: 2021
Tax Code Area: 0021

Assessment

Subdivision: PART PLAT YEAR & # NO PARCEL #
Lot: 40
Block: 4
Assessor Acres: 20.00
Property Class: 470

Ownership

Mailing Address:
818 POWELL BUTTE LLC
21059 AVERY LN
BEND, OR 97702

Valuation

Real Market Values as of Jan. 1, 2022

Land $248,370
Structures
Total $248,370

Current Assessed Values:

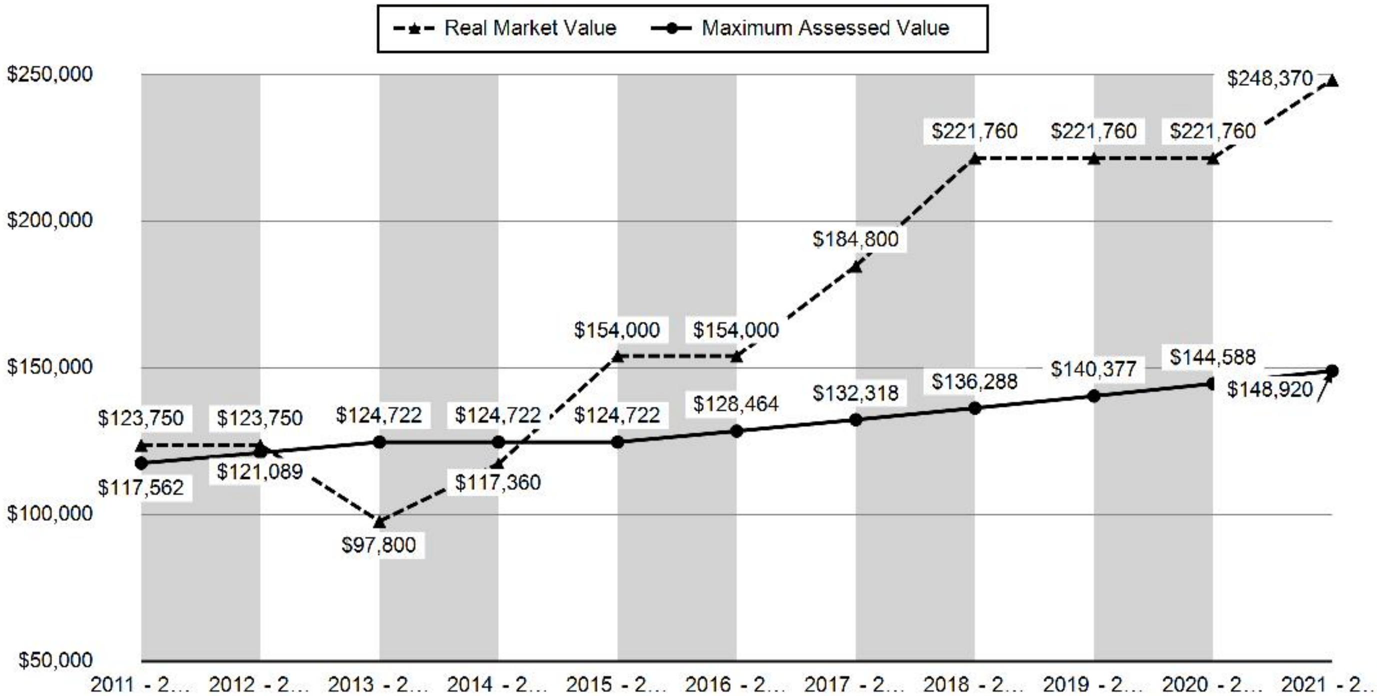
Maximum Assessed $148,920
Assessed Value $148,920
Veterans Exemption $0.00

Warnings, Notations, and Special Assessments

Valuation History *All values are as of January 1 of each year. Tax year is July 1st through June 30th of each year.*

	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016
Real Market Value - Land	$123,750	$123,750	$97,800	$117,360	$154,000
Real Market Value - Structures	$0	$0	$0	$0	$0
Total Real Market Value	$123,750	$123,750	$97,800	$117,360	$154,000
Maximum Assessed Value	$117,562	$121,089	$124,722	$124,722	$124,722
Total Assessed Value	$117,562	$121,089	$97,800	$117,360	$124,722
Exemption Value	$0	$0	$0	$0	$0

2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	2021 - 2022
$154,000	$184,800	$221,760	$221,760	$221,760	$248,370
$0	$0	$0	$0	$0	$0
$154,000	$184,800	$221,760	$221,760	$221,760	$248,370
$128,464	$132,318	$136,288	$140,377	$144,588	$148,920
$128,464	$132,318	$136,288	$140,377	$144,588	$148,920
$0	$0	$0	$0	$0	$0



Tax Payment History

Year	Date Due	Transaction Type	Transaction Date	As Of Date	Amount Received	Tax Due	Discount Amount	Interest Charged	Refund Interest
2021	11/15/2021	PAYMENT	11/04/2021	11/04/2021	$1,803.21	($1,858.98)	$55.77	$0.00	$0.00
2021	11/15/2021	IMPOSED	10/12/2021	11/15/2021	$0.00	$1,858.98	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2020	11/15/2020	PAYMENT	11/03/2020	11/03/2020	$1,753.39	($1,807.62)	$54.23	$0.00	$0.00
2020	11/15/2020	IMPOSED	10/16/2020	11/15/2020	$0.00	$1,807.62	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2019	11/15/2019	IMPOSED	11/15/2019	11/15/2019	$0.00	$1,743.65	$0.00	$0.00	$0.00
2019	11/15/2019	PAYMENT	11/04/2019	11/15/2019	$1,691.34	($1,743.65)	$52.31	$0.00	$0.00
					Total:	**$0.00**			
2018	11/15/2018	IMPOSED	11/15/2018	11/15/2018	$0.00	$1,699.66	$0.00	$0.00	$0.00
2018	11/15/2018	PAYMENT	11/06/2018	11/15/2018	$1,648.67	($1,699.66)	$50.99	$0.00	$0.00
					Total:	**$0.00**			
2017	11/15/2017	IMPOSED	11/15/2017	11/15/2017	$0.00	$1,673.93	$0.00	$0.00	$0.00
2017	11/15/2017	PAYMENT	11/06/2017	11/15/2017	$1,623.71	($1,673.93)	$50.22	$0.00	$0.00
					Total:	**$0.00**			
2016	11/15/2016	IMPOSED	11/15/2016	11/15/2016	$0.00	$1,597.06	$0.00	$0.00	$0.00
2016	11/15/2016	PAYMENT	11/08/2016	11/15/2016	$1,549.15	($1,597.06)	$47.91	$0.00	$0.00
					Total:	**$0.00**			
2015	11/15/2015	PAYMENT	11/17/2015	11/15/2015	$1,481.65	($1,527.47)	$45.82	$0.00	$0.00
2015	11/15/2015	IMPOSED	11/15/2015	11/15/2015	$0.00	$1,527.47	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2014	11/15/2014	IMPOSED	11/15/2014	11/15/2014	$0.00	$1,358.76	$0.00	$0.00	$0.00
2014	11/15/2014	PAYMENT	11/05/2014	11/15/2014	$1,318.00	($1,358.76)	$40.76	$0.00	$0.00
					Total:	**$0.00**			
2013	11/15/2013	IMPOSED	11/15/2013	11/15/2013	$0.00	$1,166.04	$0.00	$0.00	$0.00
2013	11/15/2013	PAYMENT	11/06/2013	11/15/2013	$1,131.06	($1,166.04)	$34.98	$0.00	$0.00
					Total:	**$0.00**			

Year	Date Due	Transaction Type	Transaction Date	As Of Date	Amount Received	Tax Due	Discount Amount	Interest Charged	Refund Interest
2012	11/15/2012	PAYMENT	11/16/2012	11/15/2012	$1,414.63	($1,458.38)	$43.75	$0.00	$0.00
2012	11/15/2012	IMPOSED	11/15/2012	11/15/2012	$0.00	$1,458.38	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2011	11/15/2011	IMPOSED	11/15/2011	11/15/2011	$0.00	$1,446.55	$0.00	$0.00	$0.00
2011	11/15/2011	PAYMENT	11/08/2011	11/15/2011	$1,403.15	($1,446.55)	$43.40	$0.00	$0.00
					Total:	**$0.00**			
2010	11/15/2010	IMPOSED	11/15/2010	11/15/2010	$0.00	$1,424.13	$0.00	$0.00	$0.00
2010	11/15/2010	PAYMENT	11/02/2010	11/15/2010	$1,381.41	($1,424.13)	$42.72	$0.00	$0.00
					Total:	**$0.00**			
2009	11/15/2009	IMPOSED	11/15/2009	11/15/2009	$0.00	$1,380.55	$0.00	$0.00	$0.00
2009	11/15/2009	PAYMENT	11/09/2009	11/15/2009	$1,339.13	($1,380.55)	$41.42	$0.00	$0.00
					Total:	**$0.00**			
2008	11/15/2008	PAYMENT	11/17/2008	11/15/2008	$1,332.93	($1,374.15)	$41.22	$0.00	$0.00
2008	11/15/2008	IMPOSED	11/15/2008	11/15/2008	$0.00	$1,374.15	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2007	11/15/2007	PAYMENT	01/04/2008	11/15/2007	$165.41	($165.41)	$0.00	$0.00	$0.00
2007	11/15/2007	PAYMENT	11/28/2007	11/15/2007	$1,129.92	($1,124.19)	$0.00	$5.73	$0.00
2007	11/15/2007	IMPOSED	11/15/2007	11/15/2007	$0.00	$1,289.60	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2006	11/15/2006	PAYMENT	03/06/2007	11/15/2006	$1,285.15	($1,257.21)	$0.00	$27.94	$0.00
2006	11/15/2006	IMPOSED	11/15/2006	11/15/2006	$0.00	$1,257.21	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2005	11/15/2005	IMPOSED	11/15/2005	11/15/2005	$0.00	$1,057.01	$0.00	$0.00	$0.00
2005	11/15/2005	PAYMENT	11/03/2005	11/15/2005	$1,025.30	($1,057.01)	$31.71	$0.00	$0.00
					Total:	**$0.00**			

Sales History

Sale Date	Seller	Buyer	Sale Amount	Sale Type	Recording

Structures

Land Characteristics

Land Description	Acres	Land Classification
Market	19.96	Mrkt

Related Accounts

Related accounts apply to a property that may be on one map and tax lot but due to billing have more than one account. This occurs when a property is in multiple tax code areas. In other cases there may be business personal property or a manufactured home on this property that is not in the same ownership as the land.

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Ownership

Name Type	Name	Ownership Type	Percentage
OWNER	818 POWELL BUTTE LLC ,		100.00%

Taxpayer	818 POWELL BUTTE LLC,	100.00%
		200.00%

JULY 1, 2021 TO JUNE 30, 2022
CROOK COUNTY TAX COLLECTOR
200 NE 2nd St
Prineville, OR 97754

REAL PROPERTY TAX STATEMENT

ACCOUNT NO: 16828

PROPERTY DESCRIPTION

CODE: 0021
MAP: 151517-00-00109   ACRES: 20.00
SITUS: UNDETERMINED

818 POWELL BUTTE LLC
21059 AVERY LN
BEND OR 97702

VALUES:	LAST YEAR	THIS YEAR
REAL MARKET (RMV)		
LAND	221,760	248,370
STRUCTURES		
TOTAL RMV	221,760	248,370
TOTAL ASSESSED VALUE	144,588	148,920
NET TAXABLE:	144,588	148,920
TOTAL PROPERTY TAX	1,807.62	1,858.98

2021 - 2022 CURRENT TAX BY DISTRICT	
HIGH DESERT ESD	14.36
CROOK COUNTY SCHOOL DIST	712.67
CENTRAL OR COMM COLLEGE	92.39
EDUCATION TOTAL:	819.42
CROOK COUNTY GENERAL FUND	576.35
AG EXTENSION SERVICE	17.97
CROOK CO HISTORICAL FUND	8.94
CROOK CO FIRE & RESCUE	236.78
CEMETERY DISTRICT	14.80
GENERAL GOVT TOTAL:	854.84
CC JAIL BOND	32.45
CC SCHOOL BOND	136.84
COCC BOND & INTEREST	15.43
BONDS - OTHER TOTAL:	184.72

2021 - 2022 TAX (Before Discount) 1,858.98

Please Make Payment To: CROOK COUNTY TAX COLLECTOR
(Refer to back of statement and insert enclosed for more information)

Crook County Website - www.co.crook.or.us

Tax Collector (541) 447-6554 or Assessor (541) 447-4133

TOTAL DUE (After Discount) 1,803.21

(See back of statement for instructions)

TAX PAYMENT OPTIONS

PAYMENT OPTIONS	Date Due	Discount Allowed		Amount
FULL PAYMENT	Nov 15, 2021	55.77	3% Discount	1,803.21
2/3 PAYMENT	Nov 15, 2021	24.79	2% Discount	1,214.53
1/3 PAYMENT	Nov 15, 2021		No Discount	619.66

↑ Tear Here   PLEASE RETURN THIS PORTION WITH YOUR PAYMENT   Tear Here ↑

2021 - 2022 PROPERTY TAXES   CROOK COUNTY, OREGON   ACCOUNT NO. 16828

FULL PAYMENT	(Includes 3% Discount)	DUE	Nov 15, 2021	1,803.21
2/3 PAYMENT	(Includes 2% Discount)	DUE	Nov 15, 2021	1,214.53
1/3 PAYMENT	(No Discount Offered)	DUE	Nov 15, 2021	619.66

(DISCOUNT IS LOST & INTEREST APPLIES AFTER DUE DATE)

☐ Mailing address change on back

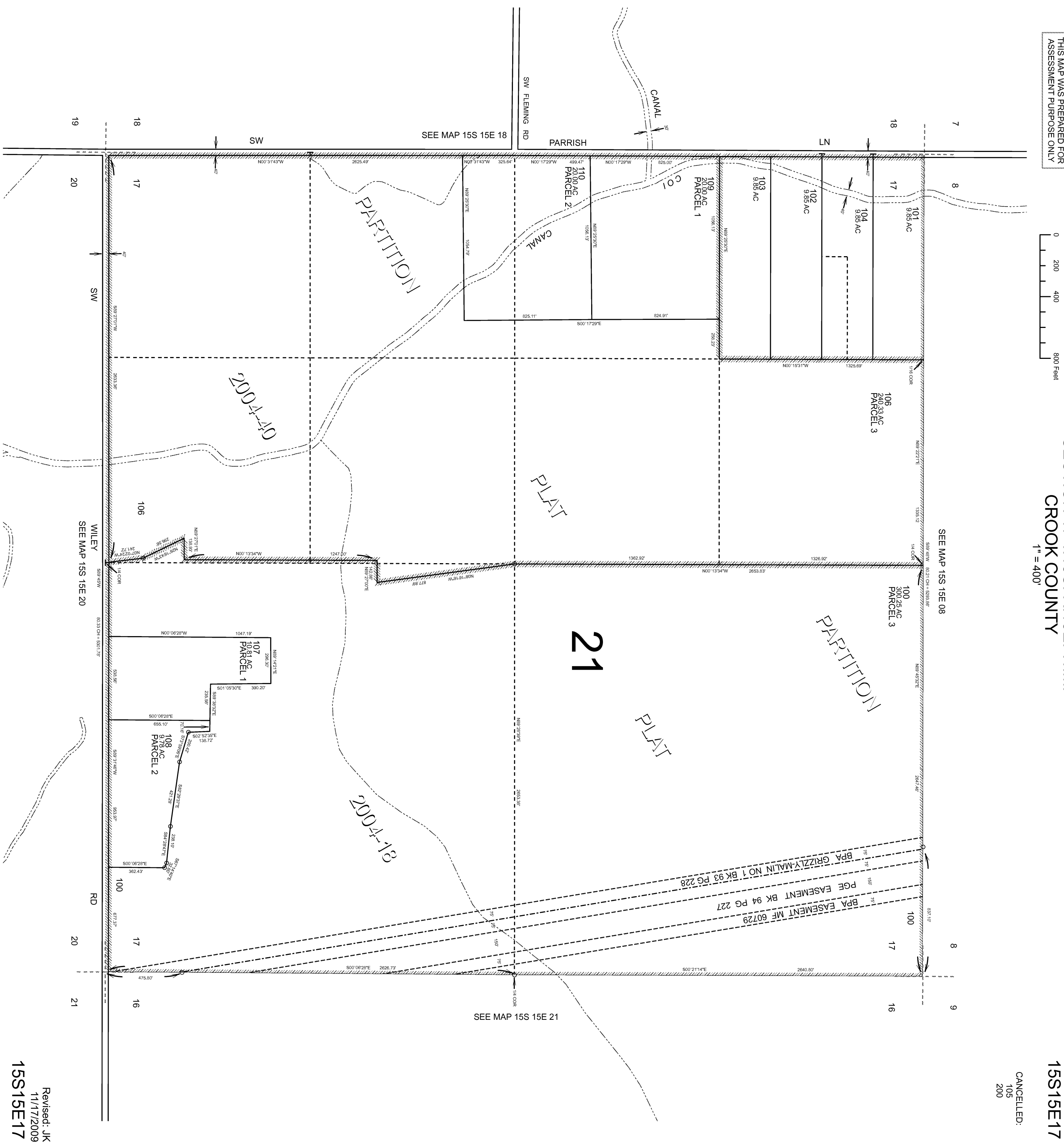
MAKE PAYMENT TO:

Enter Payment Amount

818 POWELL BUTTE LLC
21059 AVERY LN
BEND OR 97702

CROOK COUNTY TAX COLLECTOR
200 NE 2nd St
Prineville, OR 97754

07100000168280000061966000012145300001803212



THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSE ONLY
SECTION 17 T.15S. R.15E. W.M.
CROOK COUNTY
1" = 400'
0 200 400 800 Feet
15S15E17
CANCELLED:
105
200
SEE MAP 15S 15E 18
SW PARRISH LN
SW FLEMING RD
CANAL
SW WILEY RD
SEE MAP 15S 15E 20
SEE MAP 15S 15E 08
SEE MAP 15S 15E 21
PARTITION PLAT 2004-40
PARTITION PLAT 2004-18
PARTITION PLAT
21
101
9.85 AC
104
9.85 AC
102
9.85 AC
103
9.85 AC
109
20.00 AC
PARCEL 1
110
20.00 AC
PARCEL 2
106
240.33 AC
PARCEL 3
100
300.25 AC
PARCEL 3
107
10.81 AC
PARCEL 1
108
9.78 AC
PARCEL 2
BPA GRIZZLY-MALIN NO 1 BK 93 PG 228
PGE EASEMENT BK 94 PG 227
BPA EASEMENT MF 60729
Revised: JK
11/17/2009
15S15E17

Document: Warranty Deed
Grantor: Eugene W. Gramzow Revocable Trust
Grantee: 818 Powell Butte, LLC

After recording, please return to:
818 Powell Butte, LLC, at 321 Goodpasture Island Road, Eugene, OR 97401

WARRANTY DEED

This instrument is made on July 1, 2003, between Eugene W. Gramzow, Trustee of the Eugene W. Gramzow Revocable Trust, dated February 3, 1998, as Grantor, and 818 Powell Butte, LLC, an Oregon limited liability company, as Grantee. Grantor hereby conveys and warrants to Grantee the following described real property situated in Crook County, Oregon, free of encumbrances except as set forth herein, to-wit:

See Exhibit "A"

This conveyance is subject to and excepts rights of the public in streets, roads and highways, covenants, conditions, restrictions, reservations and easements of record.

The true consideration for this conveyance is $977,857.50.

THIS INSTRUMENT WILL NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY APPROVED USES AND TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES AS DEFINED IN ORS 30.930.

Dated July 1, 2003.

Eugene W. Gramzow Revocable Trust, dated February 3, 1998

By Eugene W. Gramzow, Trustee

State of Oregon)
) ss:
County of Lane)

OFFICIAL SEAL
AMY S LA GRANDER
NOTARY PUBLIC - OREGON
COMMISSION NO. 354390
MY COMMISSION EXPIRES MAR. 2, 2006

This instrument was acknowledged before me on July 1, 2003, by Eugene W. Gramzow, who is Trustee of the Eugene W. Gramzow Revocable Trust, dated February 3, 1998.

Notary Public for Oregon
My Commission expires: 3-2-2006

182839 (2pp)

EXHIBIT "A"

Township 15 South, Range 15 East of the Willamette Meridian: Section 17, the East ½ of the Northwest ¼; the Southwest ¼ of the Northwest ¼; the Southwest ¼ and the East ½, all located in Crook County, Oregon.

COUNTY COURT, CROOK COUNTY STATE OF OREGON

STATE OF OREGON
COUNTY OF CROOK } ss 182839

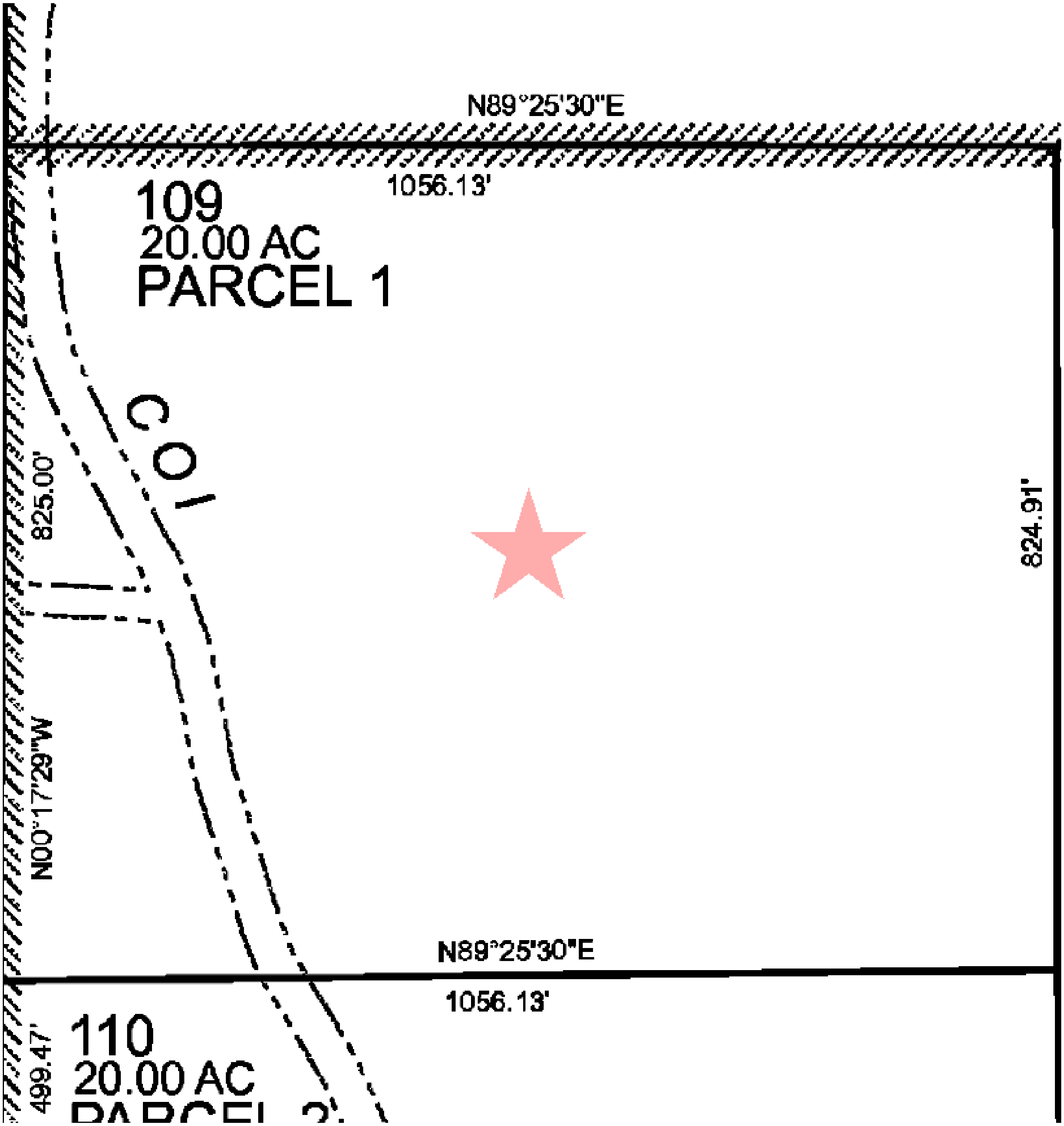
I CERTIFY THAT THE WITHIN INSTRUMENT WAS RECEIVED FOR RECORD ON THE 14th DAY OF August, 20 2003, AT 12:10 P. M.
AND RECORDED IN Deeds
RECORDS OF SAID COUNTY MF NO. 182839
DEANNA E. BERMAN, CROOK COUNTY CLERK
BY Eloise Brummer DEPUTY

31

AUG 18 2003

KEY PUNCHED

Assessor Map



Western Title & Escrow

Parcel ID: 16828

Site Address:

Sentry Dynamics, Inc. and its customers make no representations, warranties or conditions, express or implied, as to the accuracy or completeness of information contained in this report.

Aerial Map

Western Title & Escrow

Parcel ID: 16828

Sentry Dynamics, Inc. and its customers make no representations, warranties or conditions, express or implied, as to the accuracy or completeness of information contained in this report.

Crook County Parcel Information

Western Title & Escrow

Parcel Information

Parcel #:	**16829**
Tax Account:	**1515170000110**
Site Address:	
	OR 97753
Owner:	818 Powell Butte LLC
	21059 Avery Ln
	Bend OR 97702
Twn/Range/Section:	15S / 15E / 17
Parcel Size:	20.00 Acres (871,200 SqFt)
Legal Lot/Block:	40 / 4
Census Tract/Block:	950300 / 5062
Levy Code:	21
Levy Rate:	12.5019
Levy Year:	2020
Market Land Value:	$248,370.00
Market Impr Value:	$0.00
Market Total Value:	$248,370.00 (2021)
Assd Total Value:	$148,920.00 (2021)

Tax Information

Tax Year	Annual Tax
2021	$1,858.98
2020	$1,807.62
2019	$1,743.65

Legal

Lot: 40, Block: 4, Township: 15S, Range: 15E, Section: 17

Land

Land Use:	470 - Tract Land Perm FU Disq Unimp	Zoning:	EFU3 - Exclusive Farm Use
# Dwellings:		School District:	Powell Butte School District
Primary School:	Powell Butte Community Charter School	Middle School:	Powell Butte Community Charter School
High School:	Crook County High School		

Improvement

Year Built:		Bedrooms:		Bathrooms, Total:	
Bathrooms, Full:		Bathrooms, Half:		Finished Area:	
Floor 1:		Floor 2:		Garage:	
Carport:		Attic:		Basement:	
Condition:					

Crook County Property Summary Report

Report Date: 1/4/2022 1:57:25 PM

Disclaimer

The information and maps presented in this report are provided for your convenience. Every reasonable effort has been made to assure the accuracy of the data and associated maps. Crook County makes no warranty, representation or guarantee as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein. Crook County explicitly disclaims any representations and warranties, including, without limitation, the implied warranties of merchantability and fitness for a particular purpose. Crook County shall assume no liability for any errors, omissions, or inaccuracies in the information provided regardless of how caused. Crook County assumes no liability for any decisions made or actions taken or not taken by the user of this information or data furnished hereunder.

Account Summary

Account Information

Mailing Name: 818 POWELL BUTTE LLC
Map and Taxlot: 15151700-00110-16829
Account: 16829
Tax Status: Taxable
Situs Address: UNDETERMINED SITUS ADDRESS

Property Taxes

Current Tax Year: 2021
Tax Code Area: 0021

Assessment

Subdivision: PART PLAT YEAR & # NO PARCEL #
Lot: 40
Block: 4
Assessor Acres: 20.00
Property Class: 470

Ownership

Mailing Address:
818 POWELL BUTTE LLC
21059 AVERY LN
BEND, OR 97702

Valuation

Real Market Values as of Jan. 1, 2022

Land $248,370
Structures
Total $248,370

Current Assessed Values:

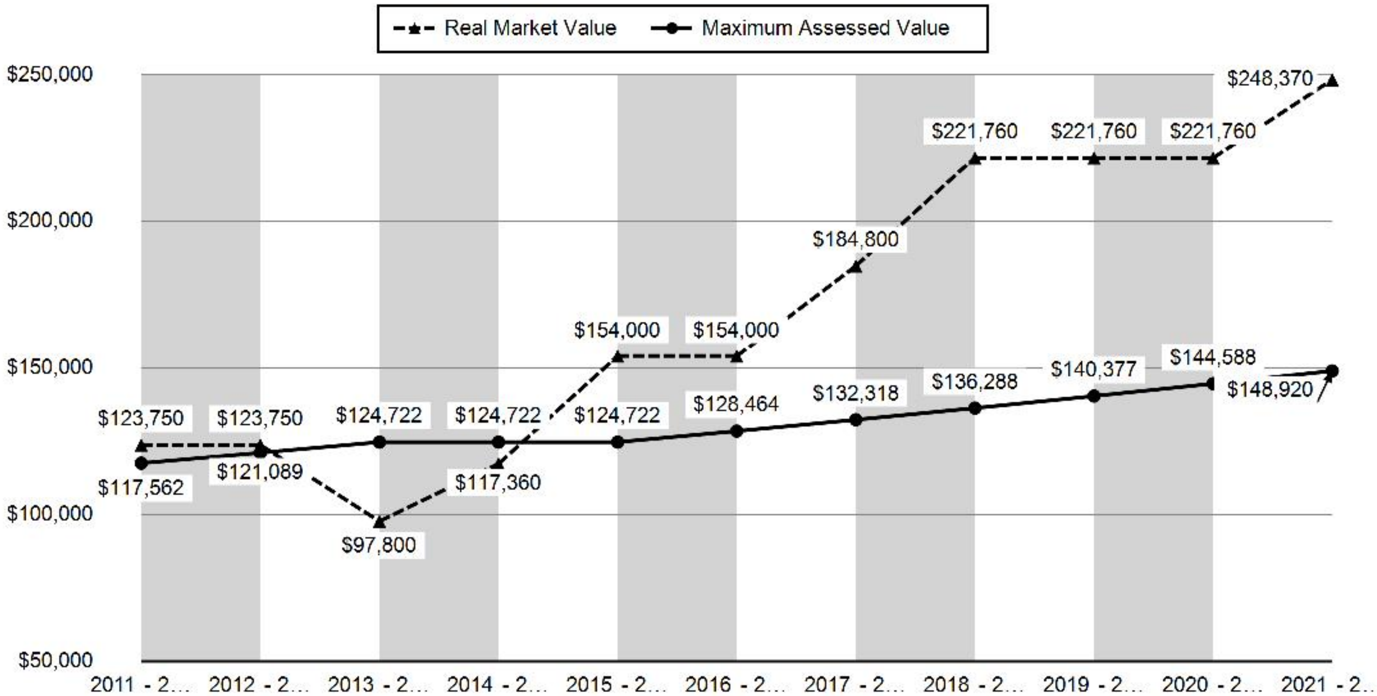
Maximum Assessed $148,920
Assessed Value $148,920
Veterans Exemption $0.00

Warnings, Notations, and Special Assessments

Valuation History *All values are as of January 1 of each year. Tax year is July 1st through June 30th of each year.*

	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016
Real Market Value - Land	$123,750	$123,750	$97,800	$117,360	$154,000
Real Market Value - Structures	$0	$0	$0	$0	$0
Total Real Market Value	$123,750	$123,750	$97,800	$117,360	$154,000
Maximum Assessed Value	$117,562	$121,089	$124,722	$124,722	$124,722
Total Assessed Value	$117,562	$121,089	$97,800	$117,360	$124,722
Exemption Value	$0	$0	$0	$0	$0

2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	2021 - 2022
$154,000	$184,800	$221,760	$221,760	$221,760	$248,370
$0	$0	$0	$0	$0	$0
$154,000	$184,800	$221,760	$221,760	$221,760	$248,370
$128,464	$132,318	$136,288	$140,377	$144,588	$148,920
$128,464	$132,318	$136,288	$140,377	$144,588	$148,920
$0	$0	$0	$0	$0	$0



Tax Payment History

Year	Date Due	Transaction Type	Transaction Date	As Of Date	Amount Received	Tax Due	Discount Amount	Interest Charged	Refund Interest
2021	11/15/2021	PAYMENT	11/04/2021	11/04/2021	$1,803.21	($1,858.98)	$55.77	$0.00	$0.00
2021	11/15/2021	IMPOSED	10/12/2021	11/15/2021	$0.00	$1,858.98	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2020	11/15/2020	PAYMENT	11/03/2020	11/03/2020	$1,753.39	($1,807.62)	$54.23	$0.00	$0.00
2020	11/15/2020	IMPOSED	10/16/2020	11/15/2020	$0.00	$1,807.62	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2019	11/15/2019	IMPOSED	11/15/2019	11/15/2019	$0.00	$1,743.65	$0.00	$0.00	$0.00
2019	11/15/2019	PAYMENT	11/04/2019	11/15/2019	$1,691.34	($1,743.65)	$52.31	$0.00	$0.00
					Total:	**$0.00**			
2018	11/15/2018	IMPOSED	11/15/2018	11/15/2018	$0.00	$1,699.66	$0.00	$0.00	$0.00
2018	11/15/2018	PAYMENT	11/06/2018	11/15/2018	$1,648.67	($1,699.66)	$50.99	$0.00	$0.00
					Total:	**$0.00**			
2017	11/15/2017	IMPOSED	11/15/2017	11/15/2017	$0.00	$1,673.93	$0.00	$0.00	$0.00
2017	11/15/2017	PAYMENT	11/06/2017	11/15/2017	$1,623.71	($1,673.93)	$50.22	$0.00	$0.00
					Total:	**$0.00**			
2016	11/15/2016	IMPOSED	11/15/2016	11/15/2016	$0.00	$1,597.06	$0.00	$0.00	$0.00
2016	11/15/2016	PAYMENT	11/08/2016	11/15/2016	$1,549.15	($1,597.06)	$47.91	$0.00	$0.00
					Total:	**$0.00**			
2015	11/15/2015	PAYMENT	11/17/2015	11/15/2015	$1,481.65	($1,527.47)	$45.82	$0.00	$0.00
2015	11/15/2015	IMPOSED	11/15/2015	11/15/2015	$0.00	$1,527.47	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2014	11/15/2014	IMPOSED	11/15/2014	11/15/2014	$0.00	$1,358.76	$0.00	$0.00	$0.00
2014	11/15/2014	PAYMENT	11/05/2014	11/15/2014	$1,318.00	($1,358.76)	$40.76	$0.00	$0.00
					Total:	**$0.00**			
2013	11/15/2013	IMPOSED	11/15/2013	11/15/2013	$0.00	$1,166.04	$0.00	$0.00	$0.00
2013	11/15/2013	PAYMENT	11/06/2013	11/15/2013	$1,131.06	($1,166.04)	$34.98	$0.00	$0.00
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2007	11/15/2007	IMPOSED	11/15/2007	11/15/2007	$0.00	$1,289.60	$0.00	$0.00	$0.00
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200 NE 2nd St
Prineville, OR 97754

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PROPERTY DESCRIPTION

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BEND OR 97702

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CENTRAL OR COMM COLLEGE	92.39
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1/3 PAYMENT	Nov 15, 2021		No Discount	619.66

↑ Tear Here PLEASE RETURN THIS PORTION WITH YOUR PAYMENT Tear Here ↑

2021 - 2022 PROPERTY TAXES CROOK COUNTY, OREGON ACCOUNT NO. 16829

FULL PAYMENT	(Includes 3% Discount)	DUE	Nov 15, 2021	1,803.21
2/3 PAYMENT	(Includes 2% Discount)	DUE	Nov 15, 2021	1,214.53
1/3 PAYMENT	(No Discount Offered)	DUE	Nov 15, 2021	619.66

(DISCOUNT IS LOST & INTEREST APPLIES AFTER DUE DATE)

☐ Mailing address change on back

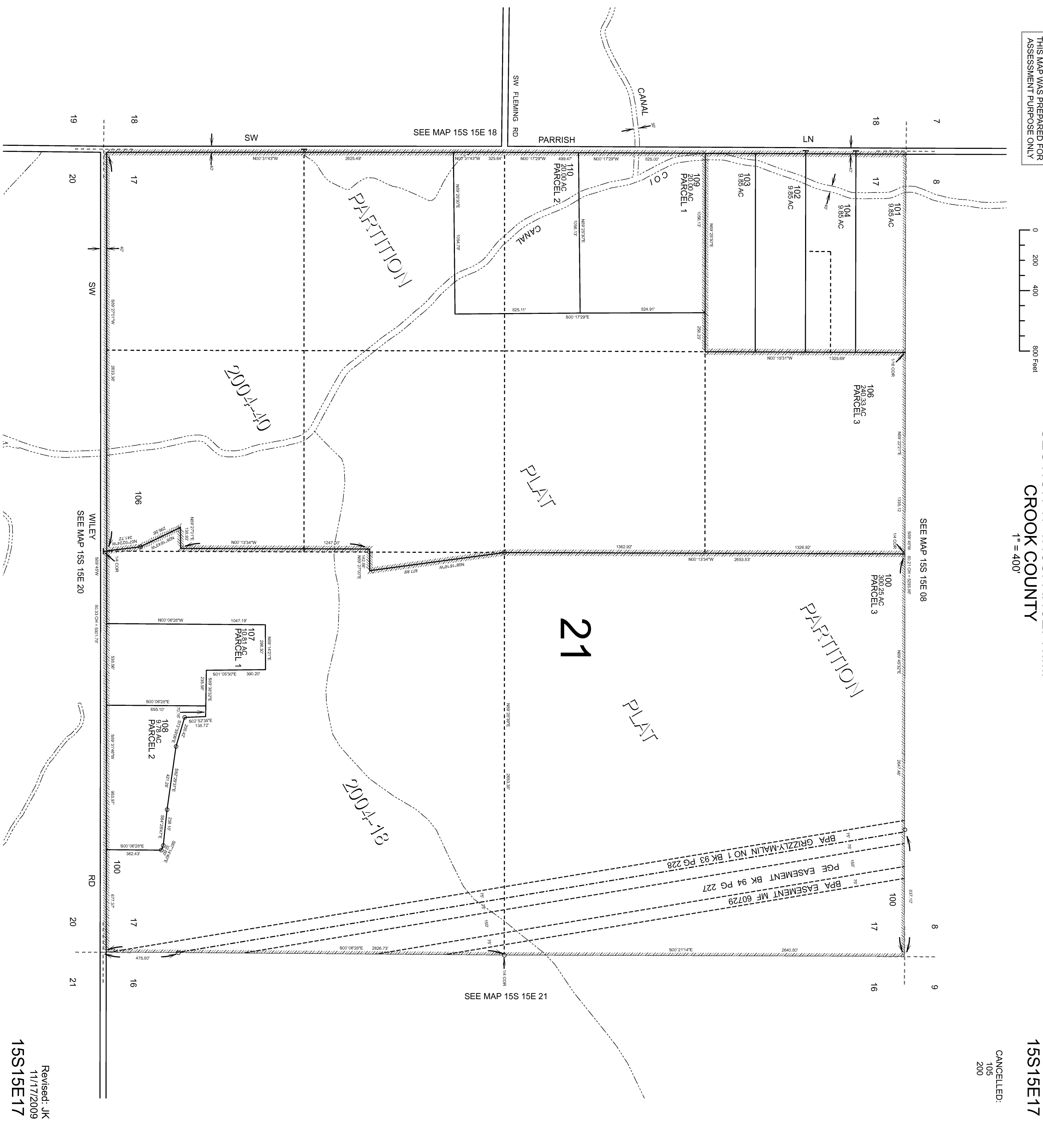
MAKE PAYMENT TO:

Enter Payment Amount

818 POWELL BUTTE LLC
21059 AVERY LN
BEND OR 97702

CROOK COUNTY TAX COLLECTOR
200 NE 2nd St
Prineville, OR 97754

07100000168290000061966000012145300001803210


THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSE ONLY
SECTION 17 T.15S. R.15E. W.M.
CROOK COUNTY
1" = 400'
SEE MAP 15S 15E 18
SEE MAP 15S 15E 08
SEE MAP 15S 15E 20
SEE MAP 15S 15E 21
SW PARRISH LN
SW FLEMING RD
SW WILEY RD
CANAL
PARTITION PLAT 2004-40
PARTITION PLAT 2004-18
101 9.85 AC
102 9.85 AC
103 9.85 AC
104 9.85 AC
106 240.33 AC PARCEL 3
109 20.00 AC PARCEL 1
110 20.00 AC PARCEL 2
100 300.25 AC PARCEL 3
107 10.81 AC PARCEL 1
108 9.78 AC PARCEL 2
21
BPA GRIZZLY-MALIN NO 1 BK 93 PG 228
PGE EASEMENT BK 94 PG 227
BPA EASEMENT MF 60729
15S15E17
CANCELLED:
105
200
Revised: JK
11/17/2009
15S15E17

Document: Warranty Deed
Grantor: Eugene W. Gramzow Revocable Trust
Grantee: 818 Powell Butte, LLC

After recording, please return to:
818 Powell Butte, LLC, at 321 Goodpasture Island Road, Eugene, OR 97401

WARRANTY DEED

This instrument is made on July 1, 2003, between Eugene W. Gramzow, Trustee of the Eugene W. Gramzow Revocable Trust, dated February 3, 1998, as Grantor, and 818 Powell Butte, LLC, an Oregon limited liability company, as Grantee. Grantor hereby conveys and warrants to Grantee the following described real property situated in Crook County, Oregon, free of encumbrances except as set forth herein, to-wit:

See Exhibit "A"

This conveyance is subject to and excepts rights of the public in streets, roads and highways, covenants, conditions, restrictions, reservations and easements of record.

The true consideration for this conveyance is $977,857.50.

THIS INSTRUMENT WILL NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY APPROVED USES AND TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES AS DEFINED IN ORS 30.930.

Dated July 1, 2003.

Eugene W. Gramzow Revocable Trust, dated February 3, 1998

By Eugene W. Gramzow, Trustee

State of Oregon)
) ss:
County of Lane)

OFFICIAL SEAL
AMY S LA GRANDER
NOTARY PUBLIC - OREGON
COMMISSION NO. 354390
MY COMMISSION EXPIRES MAR. 2, 2006

This instrument was acknowledged before me on July 1, 2003, by Eugene W. Gramzow, who is Trustee of the Eugene W. Gramzow Revocable Trust, dated February 3, 1998.

Notary Public for Oregon
My Commission expires: 3-2-2006

182839 (2pp)

EXHIBIT "A"

Township 15 South, Range 15 East of the Willamette Meridian: Section 17, the East ½ of the Northwest ¼; the Southwest ¼ of the Northwest ¼; the Southwest ¼ and the East ½, all located in Crook County, Oregon.

COUNTY COURT, CROOK COUNTY STATE OF OREGON

STATE OF OREGON } ss 182839
COUNTY OF CROOK

I CERTIFY THAT THE WITHIN INSTRUMENT WAS RECEIVED FOR RECORD ON THE 14th DAY OF August, 20 2003, AT 12:10 P. M. AND RECORDED IN Deeds RECORDS OF SAID COUNTY MF NO. 182839

DEANNA E. BERMAN, CROOK COUNTY CLERK

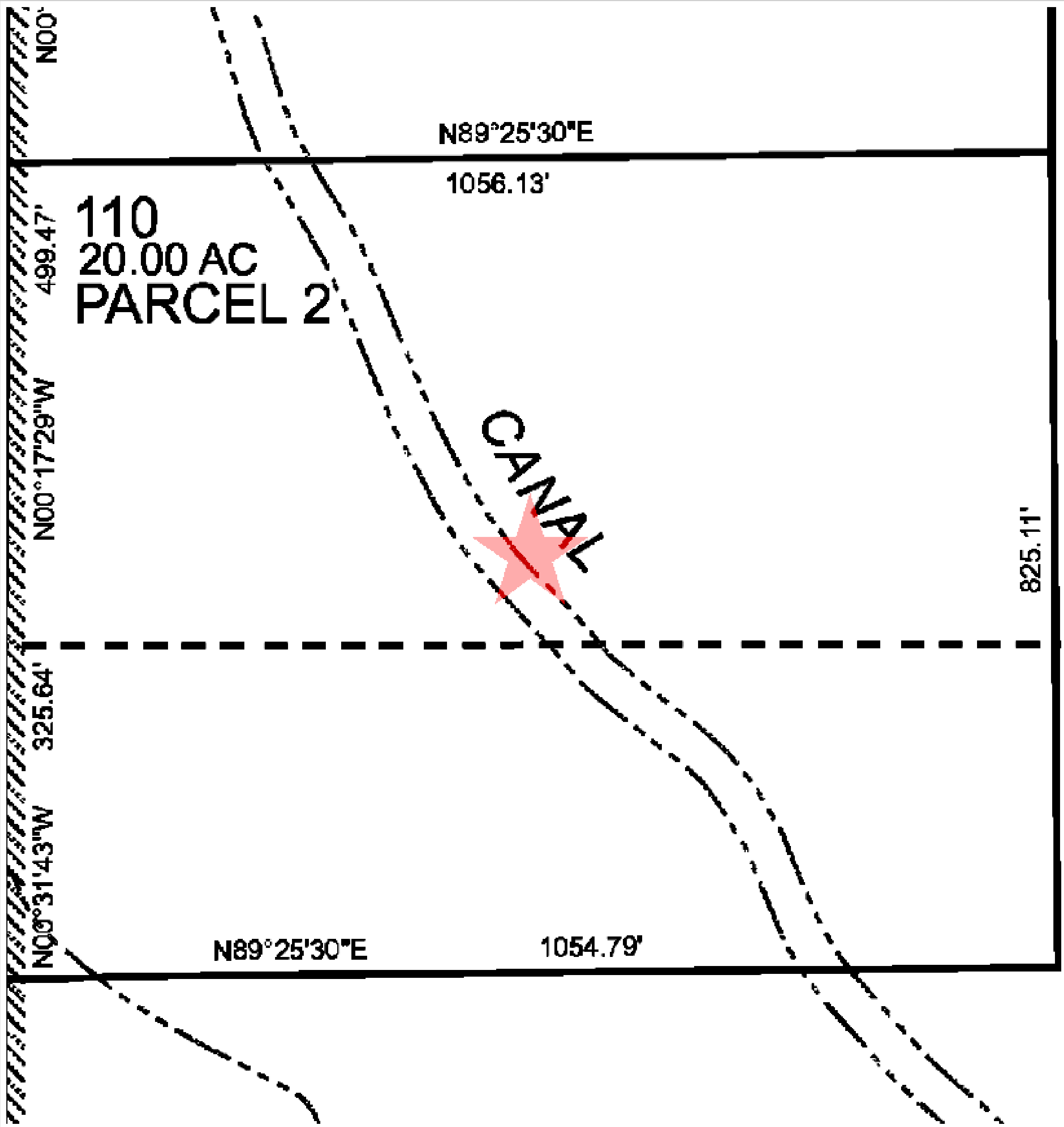
BY Eloise Brummer DEPUTY

31

AUG 1 8 2003

KEY PUNCHED

Assessor Map



Western Title & Escrow

Parcel ID: 16829

Site Address:

Sentry Dynamics, Inc. and its customers make no representations, warranties or conditions, express or implied, as to the accuracy or completeness of information contained in this report.

Aerial Map

Western Title & Escrow

Parcel ID: 16829

Sentry Dynamics, Inc. and its customers make no representations, warranties or conditions, express or implied, as to the accuracy or completeness of information contained in this report.

Appendix 2

Crook County Property Summary Report

Report Date: 6/3/2021 12:12:06 PM

Disclaimer

Account Summary

Account Information

Mailing Name: 818 POWELL BUTTE LLC

Map and Taxlot: 15151700-00100-1193

Account: 1193

Tax Status: Taxable

Situs Address: 8911 SW WILEY RD, POWELL BUTTE OR 97753

Property Taxes

Current Tax Year: 2020

Tax Code Area: 0021

Assessment

Subdivision: PART PLAT YEAR & # NO PARCEL #

Lot: 18

Block: 4

Assessor Acres: 300.25

Property Class: 551

Ownership

Mailing Address:

818 POWELL BUTTE LLC
21059 AVERY LN
BEND, OR 97702

Valuation

Real Market Values as of Jan. 1, 2020

Land	$42,690
Structures	$21,400
Total	$64,090

Current Assessed Values:

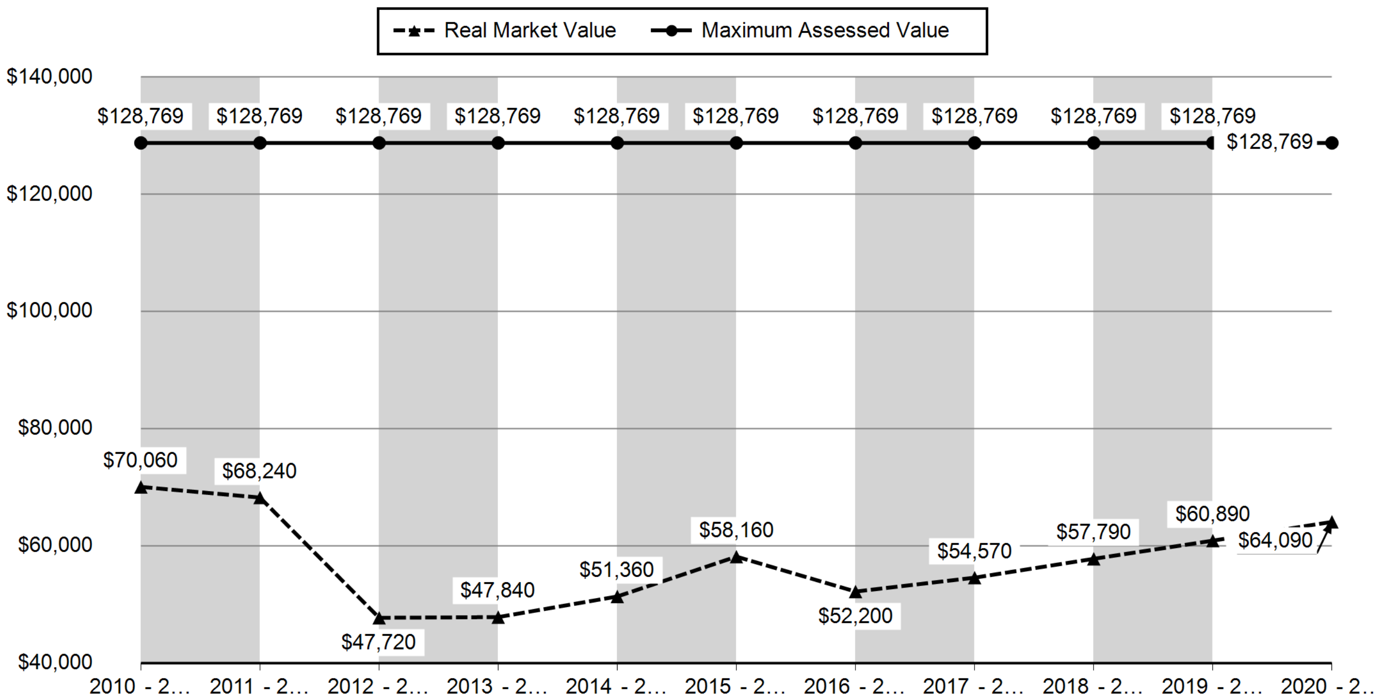
Maximum Assessed	$128,769
Assessed Value	$51,720
Veterans Exemption	$0.00

Warnings, Notations, and Special Assessments

Valuation History *All values are as of January 1 of each year. Tax year is July 1st through June 30th of each year.*

	2010 - 2011	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015
Real Market Value - Land	$43,430	$43,040	$33,300	$33,600	$34,780
Real Market Value - Structures	$26,630	$25,200	$14,420	$14,240	$16,580
Total Real Market Value	$70,060	$68,240	$47,720	$47,840	$51,360
Maximum Assessed Value	$128,769	$128,769	$128,769	$128,769	$128,769
Total Assessed Value	$50,780	$49,710	$39,550	$40,230	$43,200
Exemption Value	$0	$0	$0	$0	$0

2015 - 2016	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021
$36,670	$38,550	$40,500	$42,060	$42,690	$42,690
$21,490	$13,650	$14,070	$15,730	$18,200	$21,400
$58,160	$52,200	$54,570	$57,790	$60,890	$64,090
$128,769	$128,769	$128,769	$128,769	$128,769	$128,769
$48,740	$41,530	$42,570	$44,860	$48,030	$51,720
$0	$0	$0	$0	$0	$0



Tax Payment History

Year	Date Due	Transaction Type	Transaction Date	As Of Date	Amount Received	Tax Due	Discount Amount	Interest Charged	Refund Interest
2020	11/15/2020	PAYMENT	11/03/2020	11/03/2020	$627.19	($646.59)	$19.40	$0.00	$0.00
2020	11/15/2020	IMPOSED	10/16/2020	11/15/2020	$0.00	$646.59	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2019	11/15/2019	IMPOSED	11/15/2019	11/15/2019	$0.00	$596.59	$0.00	$0.00	$0.00
2019	11/15/2019	PAYMENT	11/04/2019	11/15/2019	$578.69	($596.59)	$17.90	$0.00	$0.00
					Total:	**$0.00**			
2018	11/15/2018	IMPOSED	11/15/2018	11/15/2018	$0.00	$559.45	$0.00	$0.00	$0.00
2018	11/15/2018	PAYMENT	11/06/2018	11/15/2018	$542.67	($559.45)	$16.78	$0.00	$0.00
					Total:	**$0.00**			
2017	11/15/2017	IMPOSED	11/15/2017	11/15/2017	$0.00	$538.54	$0.00	$0.00	$0.00
2017	11/15/2017	PAYMENT	11/06/2017	11/15/2017	$522.38	($538.54)	$16.16	$0.00	$0.00
					Total:	**$0.00**			
2016	11/15/2016	IMPOSED	11/15/2016	11/15/2016	$0.00	$516.30	$0.00	$0.00	$0.00
2016	11/15/2016	PAYMENT	11/08/2016	11/15/2016	$500.81	($516.30)	$15.49	$0.00	$0.00
					Total:	**$0.00**			
2015	11/15/2015	PAYMENT	11/17/2015	11/15/2015	$579.01	($596.92)	$17.91	$0.00	$0.00
2015	11/15/2015	IMPOSED	11/15/2015	11/15/2015	$0.00	$596.92	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2014	11/15/2014	IMPOSED	11/15/2014	11/15/2014	$0.00	$521.86	$0.00	$0.00	$0.00
2014	11/15/2014	PAYMENT	11/05/2014	11/15/2014	$506.20	($521.86)	$15.66	$0.00	$0.00
					Total:	**$0.00**			
2013	11/15/2013	IMPOSED	11/15/2013	11/15/2013	$0.00	$499.86	$0.00	$0.00	$0.00
2013	11/15/2013	PAYMENT	11/06/2013	11/15/2013	$484.86	($499.86)	$15.00	$0.00	$0.00
					Total:	**$0.00**			
2012	11/15/2012	PAYMENT	11/16/2012	11/15/2012	$477.10	($491.86)	$14.76	$0.00	$0.00
2012	11/15/2012	IMPOSED	11/15/2012	11/15/2012	$0.00	$491.86	$0.00	$0.00	$0.00
					Total:	**$0.00**			

Year	Date Due	Transaction Type	Transaction Date	As Of Date	Amount Received	Tax Due	Discount Amount	Interest Charged	Refund Interest
2011	11/15/2011	IMPOSED	11/15/2011	11/15/2011	$0.00	$623.55	$0.00	$0.00	$0.00
2011	11/15/2011	PAYMENT	11/08/2011	11/15/2011	$604.84	($623.55)	$18.71	$0.00	$0.00
					Total:	**$0.00**			
2010	11/15/2010	PAYMENT	02/03/2011	11/15/2010	$1,169.99	($1,206.18)	$36.19	$0.00	$0.00
2010	11/15/2010	PAYMENT	02/03/2011	11/15/2010	($1,206.18)	$1,206.18	$0.00	$0.00	$0.00
2010	11/15/2010	PAYMENT	02/03/2011	11/15/2010	($179.49)	$222.35	($42.86)	$0.00	$0.00
2010	11/15/2010	IMPOSED	11/15/2010	11/15/2010	$0.00	$1,206.18	$0.00	$0.00	$0.00
2010	11/15/2010	PAYMENT	11/02/2010	11/15/2010	$1,385.67	($1,428.53)	$42.86	$0.00	$0.00
					Total:	**$0.00**			
2009	11/15/2009	IMPOSED	11/15/2009	11/15/2009	$0.00	$1,333.29	$0.00	$0.00	$0.00
2009	11/15/2009	PAYMENT	11/09/2009	11/15/2009	$1,293.29	($1,333.29)	$40.00	$0.00	$0.00
					Total:	**$0.00**			
2008	11/15/2008	PAYMENT	04/06/2009	11/15/2008	$1,267.03	($1,228.80)	$0.00	$38.23	$0.00
2008	11/15/2008	IMPOSED	11/15/2008	11/15/2008	$0.00	$1,228.80	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2007	11/15/2007	PAYMENT	11/28/2007	11/15/2007	$2,011.84	($2,002.94)	$0.00	$8.90	$0.00
2007	11/15/2007	IMPOSED	11/15/2007	11/15/2007	$0.00	$2,002.94	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2006	11/15/2006	PAYMENT	03/06/2007	11/15/2006	$1,996.09	($1,952.70)	$0.00	$43.39	$0.00
2006	11/15/2006	IMPOSED	11/15/2006	11/15/2006	$0.00	$1,952.70	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2005	11/15/2005	IMPOSED	11/15/2005	11/15/2005	$0.00	$1,641.77	$0.00	$0.00	$0.00
2005	11/15/2005	PAYMENT	11/03/2005	11/15/2005	$1,592.52	($1,641.77)	$49.25	$0.00	$0.00
					Total:	**$0.00**			
2004	11/15/2004	PAYMENT	11/17/2004	11/15/2004	$6,989.54	($7,205.71)	$216.17	$0.00	$0.00
2004	11/15/2004	IMPOSED	11/15/2004	11/15/2004	$0.00	$7,205.71	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2003	11/15/2003	IMPOSED	11/15/2003	11/15/2003	$0.00	$1,840.84	$0.00	$0.00	$0.00
2003	11/15/2003	PAYMENT	11/04/2003	11/15/2003	$1,785.61	($1,840.84)	$55.23	$0.00	$0.00
					Total:	**$0.00**			
2002	11/15/2002	IMPOSED	11/15/2002	11/15/2002	$0.00	$1,806.66	$0.00	$0.00	$0.00
2002	11/15/2002	PAYMENT	11/01/2002	11/15/2002	$1,752.46	($1,806.66)	$54.20	$0.00	$0.00
					Total:	**$0.00**			
2001	11/15/2001	IMPOSED	11/15/2001	11/15/2001	$0.00	$2,233.31	$0.00	$0.00	$0.00
2001	11/15/2001	PAYMENT	10/30/2001	11/15/2001	$2,166.31	($2,233.31)	$67.00	$0.00	$0.00
					Total:	**$0.00**			
2000	11/15/2000	PAYMENT	07/01/2001	11/15/2000	$2,340.09	($2,193.84)	$0.00	$146.25	$0.00
2000	11/15/2000	IMPOSED	11/15/2000	11/15/2000	$0.00	$2,193.84	$0.00	$0.00	$0.00
					Total:	**$0.00**			

Sales History

Sale Date	Seller	Buyer	Sale Amount	Sale Type	Recording
08/14/2003	GRAMZOW, EUGENE W TRUSTEE		$977,857	WARRANTY DEED	2005-182839
10/20/1992	UNDETERMINED GRANTOR NAME		$392,000	WARRANTY DEED	1994-106165
06/20/1996	HODDER, RICHARD G & SHIRLEY L		$0	WARRANTY DEED	1998-128645

Structures

Stat Class/Description	Improvement Description	Code Area	Year Built	Eff Year Built	Total Sq Ft
FARM BLDG - : MACHINE SHED	MACHINE SHED	0021	0	1975	1800

Accessories

Improvement Type	Sq Ft
Machine Shed	1800

Land Characteristics

Land Description	Acres	Land Classification
Farm Use Zoned	229.01	0272
Market	1.00	02SHS
Farm Use Zoned	69.63	024
OSD	0.00	SA OSD

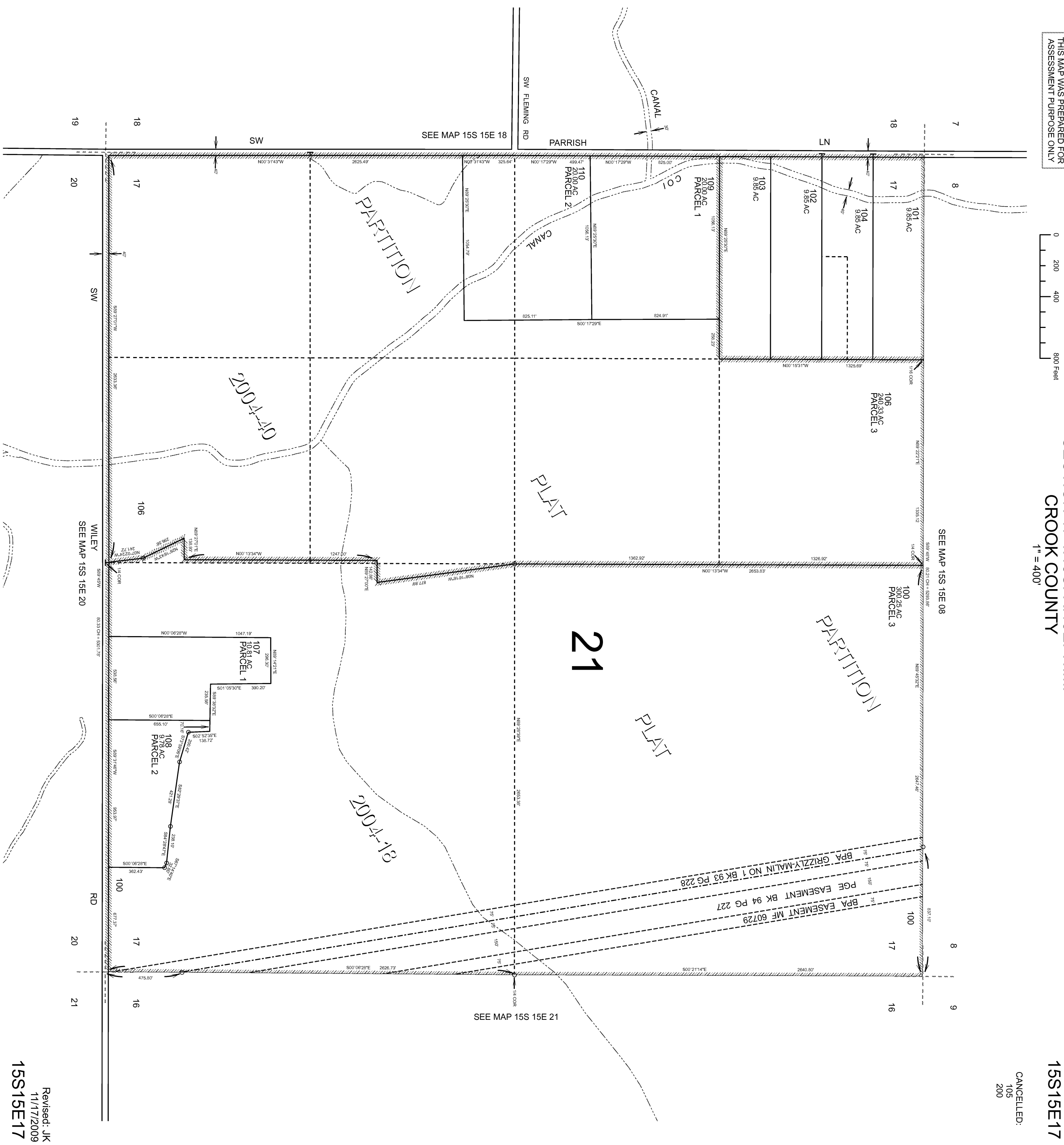
Related Accounts

Related accounts apply to a property that may be on one map and tax lot but due to billing have more than one account. This occurs when a property is in multiple tax code areas. In other cases there may be business personal property or a manufactured home on this property that is not in the same ownership as the land.

No Related Accounts found.

Ownership

Name Type	Name	Ownership Type	Percentage
OWNER	818 POWELL BUTTE LLC ,		100.00%
Taxpayer	818 POWELL BUTTE LLC,		100.00%
			200.00%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CROOK COUNTY
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200
400
800 Feet
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SW FLEMING RD
SW WILEY RD
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SEE MAP 15S 15E 18
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109
20.00 AC
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PARCEL 2
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PARCEL 3
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9.78 AC
PARCEL 2
BPA GRIZZLY-MALIN NO 1 BK 93 PG 228
PGE EASEMENT BK 94 PG 227
BPA EASEMENT MF 60729
CANCELLED:
105
200
15S15E17
Revised: JK
11/17/2009
15S15E17

Crook County Property Summary Report

Report Date: 6/3/2021 12:10:51 PM

Disclaimer

The information and maps presented in this report are provided for your convenience. Every reasonable effort has been made to assure the accuracy of the data and associated maps. Crook County makes no warranty, representation or guarantee as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein. Crook County explicitly disclaims any representations and warranties, including, without limitation, the implied warranties of merchantability and fitness for a particular purpose. Crook County shall assume no liability for any errors, omissions, or inaccuracies in the information provided regardless of how caused. Crook County assumes no liability for any decisions made or actions taken or not taken by the user of this information or data furnished hereunder.

Account Summary

Account Information

Mailing Name: 818 POWELL BUTTE LLC

Map and Taxlot: 15151700-00106-16275

Account: 16275

Tax Status: Taxable

Situs Address: 4272 SW PARRISH LN, POWELL BUTTE OR 97753

Property Taxes

Current Tax Year: 2020

Tax Code Area: 0021

Assessment

Subdivision: PART PLAT YEAR & # NO PARCEL #

Lot: 40

Block: 4

Assessor Acres: 240.33

Property Class: 550

Ownership

Mailing Address:

818 POWELL BUTTE LLC
21059 AVERY LN
BEND, OR 97702

Valuation

Real Market Values as of Jan. 1, 2020

Land $48,110

Structures

Total $48,110

Current Assessed Values:

Maximum Assessed $0

Assessed Value $32,700

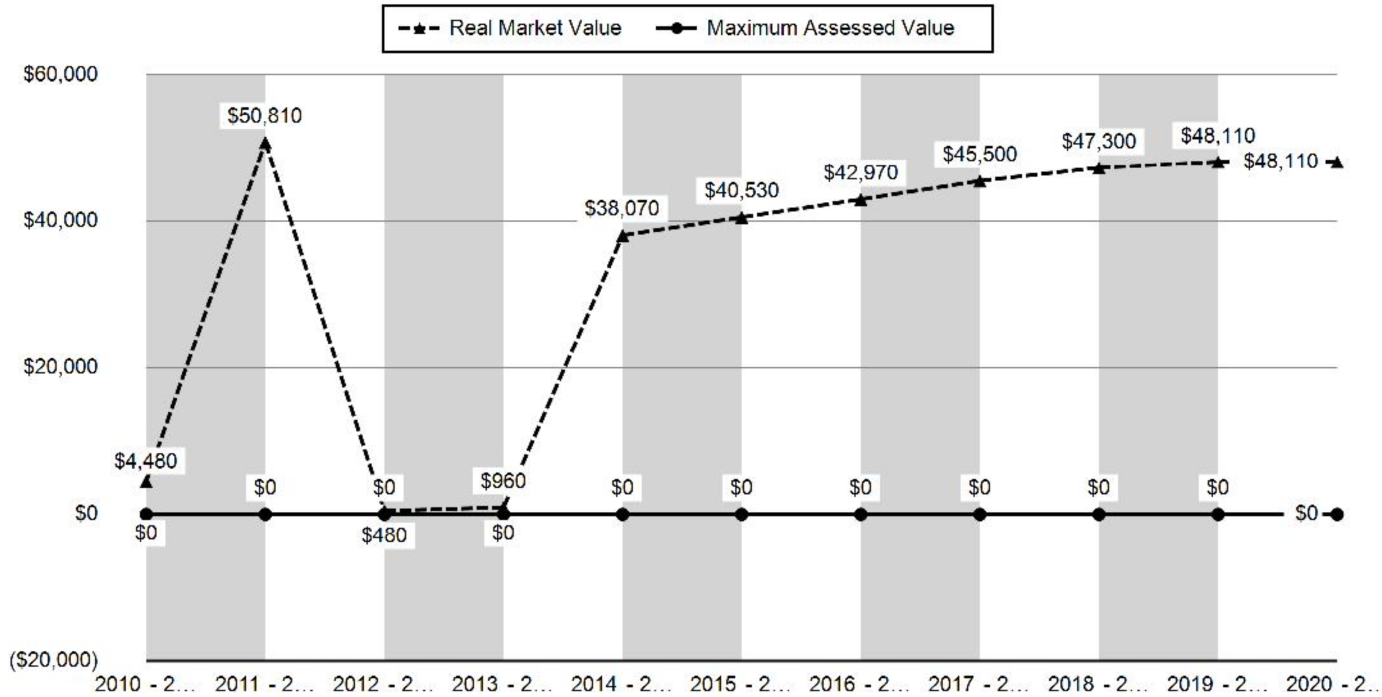
Veterans Exemption $0.00

Warnings, Notations, and Special Assessments

Valuation History *All values are as of January 1 of each year. Tax year is July 1st through June 30th of each year.*

	2010 - 2011	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015
Real Market Value - Land	$4,480	$50,810	$480	$960	$38,070
Real Market Value - Structures	$0	$0	$0	$0	$0
Total Real Market Value	$4,480	$50,810	$480	$960	$38,070
Maximum Assessed Value	$0	$0	$0	$0	$0
Total Assessed Value	$480	$480	$480	$960	$27,890
Exemption Value	$0	$0	$0	$0	$0

2015 - 2016	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021
$40,530	$42,970	$45,500	$47,300	$48,110	$48,110
$0	$0	$0	$0	$0	$0
$40,530	$42,970	$45,500	$47,300	$48,110	$48,110
$0	$0	$0	$0	$0	$0
$28,700	$29,510	$30,340	$31,150	$32,050	$32,700
$0	$0	$0	$0	$0	$0



Tax Payment History

Year	Date Due	Transaction Type	Transaction Date	As Of Date	Amount Received	Tax Due	Discount Amount	Interest Charged	Refund Interest
2020	11/15/2020	PAYMENT	11/03/2020	11/03/2020	$396.56	($408.82)	$12.26	$0.00	$0.00
2020	11/15/2020	IMPOSED	10/16/2020	11/15/2020	$0.00	$408.82	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2019	11/15/2019	IMPOSED	11/15/2019	11/15/2019	$0.00	$398.10	$0.00	$0.00	$0.00
2019	11/15/2019	PAYMENT	11/04/2019	11/15/2019	$386.16	($398.10)	$11.94	$0.00	$0.00
					Total:	**$0.00**			
2018	11/15/2018	IMPOSED	11/15/2018	11/15/2018	$0.00	$388.47	$0.00	$0.00	$0.00
2018	11/15/2018	PAYMENT	11/06/2018	11/15/2018	$376.82	($388.47)	$11.65	$0.00	$0.00
					Total:	**$0.00**			
2017	11/15/2017	IMPOSED	11/15/2017	11/15/2017	$0.00	$383.83	$0.00	$0.00	$0.00
2017	11/15/2017	PAYMENT	11/06/2017	11/15/2017	$372.32	($383.83)	$11.51	$0.00	$0.00
					Total:	**$0.00**			
2016	11/15/2016	IMPOSED	11/15/2016	11/15/2016	$0.00	$366.87	$0.00	$0.00	$0.00
2016	11/15/2016	PAYMENT	11/08/2016	11/15/2016	$355.86	($366.87)	$11.01	$0.00	$0.00
					Total:	**$0.00**			
2015	11/15/2015	PAYMENT	11/17/2015	11/15/2015	$340.95	($351.49)	$10.54	$0.00	$0.00
2015	11/15/2015	IMPOSED	11/15/2015	11/15/2015	$0.00	$351.49	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2014	11/15/2014	IMPOSED	11/15/2014	11/15/2014	$0.00	$336.91	$0.00	$0.00	$0.00
2014	11/15/2014	PAYMENT	11/05/2014	11/15/2014	$326.80	($336.91)	$10.11	$0.00	$0.00
					Total:	**$0.00**			
2013	11/15/2013	IMPOSED	11/15/2013	11/15/2013	$0.00	$11.45	$0.00	$0.00	$0.00
2013	11/15/2013	PAYMENT	11/06/2013	11/15/2013	$11.11	($11.45)	$0.34	$0.00	$0.00
					Total:	**$0.00**			
2012	11/15/2012	PAYMENT	11/16/2012	11/15/2012	$5.56	($5.73)	$0.17	$0.00	$0.00
2012	11/15/2012	IMPOSED	11/15/2012	11/15/2012	$0.00	$5.73	$0.00	$0.00	$0.00
					Total:	**$0.00**			

Year	Date Due	Transaction Type	Transaction Date	As Of Date	Amount Received	Tax Due	Discount Amount	Interest Charged	Refund Interest
2011	11/15/2011	IMPOSED	11/15/2011	11/15/2011	$0.00	$5.78	$0.00	$0.00	$0.00
2011	11/15/2011	PAYMENT	11/08/2011	11/15/2011	$5.61	($5.78)	$0.17	$0.00	$0.00
					Total:	**$0.00**			
2010	11/15/2010	IMPOSED	11/15/2010	11/15/2010	$0.00	$5.75	$0.00	$0.00	$0.00
2010	11/15/2010	PAYMENT	11/02/2010	11/15/2010	$5.58	($5.75)	$0.17	$0.00	$0.00
					Total:	**$0.00**			
2009	11/15/2009	IMPOSED	11/15/2009	11/15/2009	$0.00	$53.56	$0.00	$0.00	$0.00
2009	11/15/2009	PAYMENT	11/09/2009	11/15/2009	$51.95	($53.56)	$1.61	$0.00	$0.00
					Total:	**$0.00**			
2008	11/15/2008	PAYMENT	03/24/2009	11/15/2008	($184.66)	$192.25	($7.59)	$0.00	$0.00
2008	11/15/2008	PAYMENT	11/17/2008	11/15/2008	$245.52	($253.11)	$7.59	$0.00	$0.00
2008	11/15/2008	IMPOSED	11/15/2008	11/15/2008	$0.00	$60.86	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2007	11/15/2007	PAYMENT	11/28/2007	11/15/2007	$221.11	($220.13)	$0.00	$0.98	$0.00
2007	11/15/2007	IMPOSED	11/15/2007	11/15/2007	$0.00	$220.13	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2006	11/15/2006	PAYMENT	03/06/2007	11/15/2006	$219.50	($214.73)	$0.00	$4.77	$0.00
2006	11/15/2006	IMPOSED	11/15/2006	11/15/2006	$0.00	$214.73	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2005	11/15/2005	IMPOSED	11/15/2005	11/15/2005	$0.00	$7,338.45	$0.00	$0.00	$0.00
2005	11/15/2005	PAYMENT	10/13/2005	11/15/2005	$7,118.30	($7,338.45)	$220.15	$0.00	$0.00
					Total:	**$0.00**			
2004	11/15/2004	PAYMENT	11/17/2004	11/15/2004	$636.23	($655.91)	$19.68	$0.00	$0.00
2004	11/15/2004	IMPOSED	11/15/2004	11/15/2004	$0.00	$655.91	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2003	11/15/2003	IMPOSED	11/15/2003	11/15/2003	$0.00	$670.26	$0.00	$0.00	$0.00
2003	11/15/2003	PAYMENT	11/04/2003	11/15/2003	$650.15	($670.26)	$20.11	$0.00	$0.00
					Total:	**$0.00**			
2002	11/15/2002	IMPOSED	11/15/2002	11/15/2002	$0.00	$657.81	$0.00	$0.00	$0.00
2002	11/15/2002	PAYMENT	11/01/2002	11/15/2002	$638.08	($657.81)	$19.73	$0.00	$0.00
					Total:	**$0.00**			

Sales History

Sale Date	Seller	Buyer	Sale Amount	Sale Type	Recording
08/14/2003	GRAMZOW, EUGENE W TRUSTEE		$977,857	WARRANTY DEED	2005-182839

Structures

Land Characteristics

Land Description	Acres	Land Classification
Farm Use Zoned	74.34	0272
Farm Use Zoned	2.99	026
Farm Use Zoned	81.25	261CW
Farm Use Zoned	81.25	024

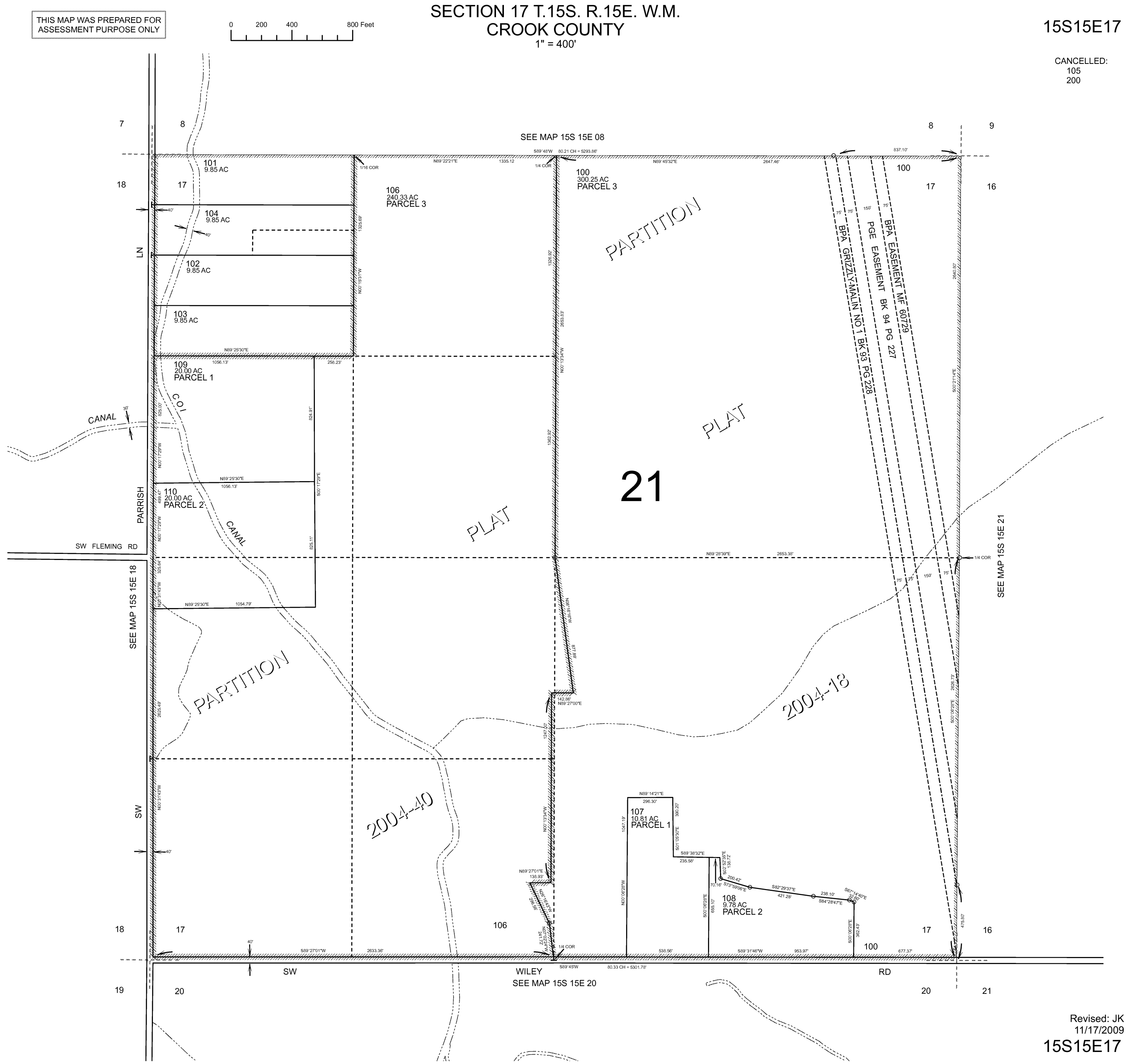
Related Accounts

Related accounts apply to a property that may be on one map and tax lot but due to billing have more than one account. This occurs when a property is in multiple tax code areas. In other cases there may be business personal property or a manufactured home on this property that is not in the same ownership as the land.

No Related Accounts found.

Ownership

Name Type	Name	Ownership Type	Percentage
OWNER	818 POWELL BUTTE LLC ,		100.00%
Taxpayer	818 POWELL BUTTE LLC,		100.00%
			200.00%


THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSE ONLY
0 200 400 800 Feet
SECTION 17 T.15S. R.15E. W.M.
CROOK COUNTY
1" = 400'
15S15E17
CANCELLED:
105
200
SEE MAP 15S 15E 08
101
9.85 AC
104
9.85 AC
102
9.85 AC
103
9.85 AC
106
240.33 AC
PARCEL 3
100
300.25 AC
PARCEL 3
109
20.00 AC
PARCEL 1
110
20.00 AC
PARCEL 2
COI
CANAL
PARTITION
PLAT
21
BPA EASEMENT MF 60729
PGE EASEMENT BK 94 PG 227
BPA GRIZZLY-MALIN NO 1 BK 93 PG 228
2004-18
2004-40
107
10.81 AC
PARCEL 1
108
9.78 AC
PARCEL 2
SW FLEMING RD
PARRISH
LN
SEE MAP 15S 15E 18
SEE MAP 15S 15E 21
SW
WILEY
RD
SEE MAP 15S 15E 20
Revised: JK
11/17/2009
15S15E17

Crook County Property Summary Report

Report Date: 6/3/2021 12:13:50 PM

Disclaimer

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Account Summary

Account Information

Mailing Name: 818 POWELL BUTTE LLC
Map and Taxlot: 15151700-00109-16828
Account: 16828
Tax Status: Taxable
Situs Address: UNDETERMINED SITUS ADDRESS

Property Taxes

Current Tax Year: 2020
Tax Code Area: 0021

Assessment

Subdivision: PART PLAT YEAR & # NO PARCEL #
Lot: 40
Block: 4
Assessor Acres: 20.00
Property Class: 470

Ownership

Mailing Address:
818 POWELL BUTTE LLC
21059 AVERY LN
BEND, OR 97702

Valuation

Real Market Values as of Jan. 1, 2020

Land $221,760
Structures
Total $221,760

Current Assessed Values:

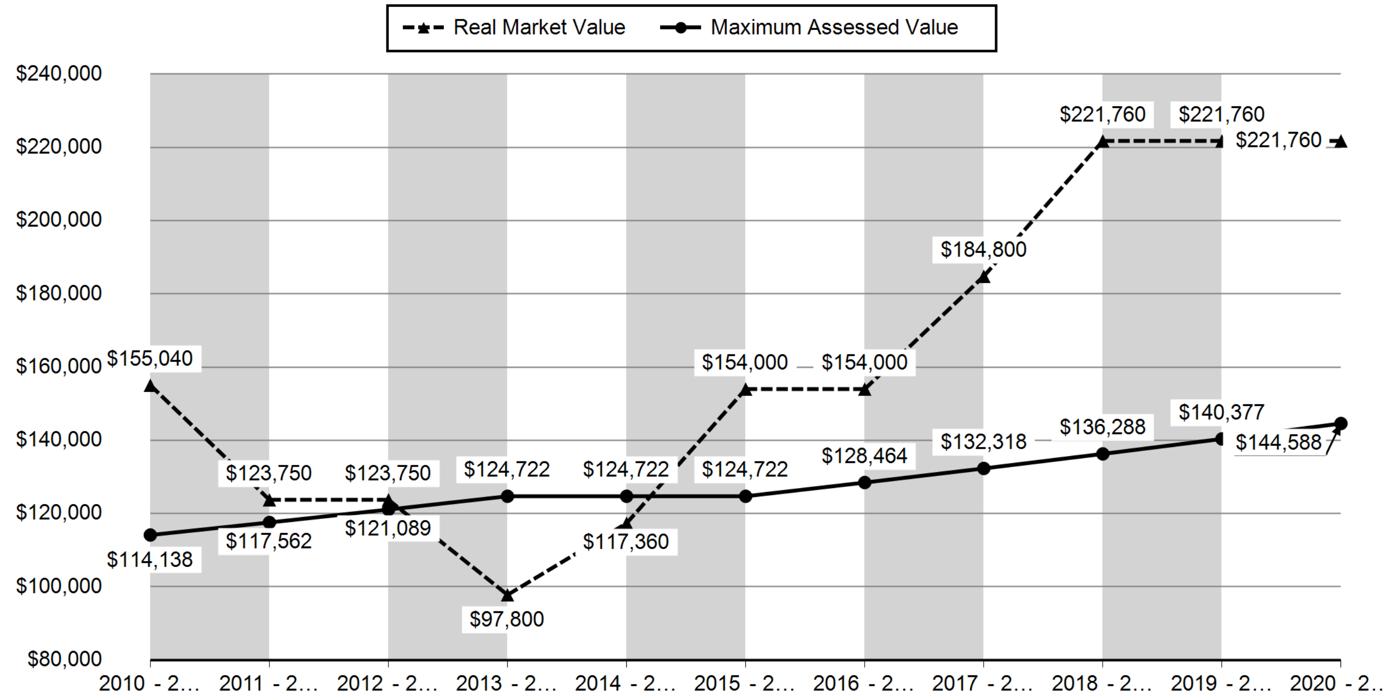
Maximum Assessed $144,588
Assessed Value $144,588
Veterans Exemption $0.00

Warnings, Notations, and Special Assessments

Valuation History *All values are as of January 1 of each year. Tax year is July 1st through June 30th of each year.*

	2010 - 2011	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015
Real Market Value - Land	$155,040	$123,750	$123,750	$97,800	$117,360
Real Market Value - Structures	$0	$0	$0	$0	$0
Total Real Market Value	$155,040	$123,750	$123,750	$97,800	$117,360
Maximum Assessed Value	$114,138	$117,562	$121,089	$124,722	$124,722
Total Assessed Value	$114,138	$117,562	$121,089	$97,800	$117,360
Exemption Value	$0	$0	$0	$0	$0

2015 - 2016	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021
$154,000	$154,000	$184,800	$221,760	$221,760	$221,760
$0	$0	$0	$0	$0	$0
$154,000	$154,000	$184,800	$221,760	$221,760	$221,760
$124,722	$128,464	$132,318	$136,288	$140,377	$144,588
$124,722	$128,464	$132,318	$136,288	$140,377	$144,588
$0	$0	$0	$0	$0	$0



Tax Payment History

Year	Date Due	Transaction Type	Transaction Date	As Of Date	Amount Received	Tax Due	Discount Amount	Interest Charged	Refund Interest
2020	11/15/2020	PAYMENT	11/03/2020	11/03/2020	$1,753.39	($1,807.62)	$54.23	$0.00	$0.00
2020	11/15/2020	IMPOSED	10/16/2020	11/15/2020	$0.00	$1,807.62	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2019	11/15/2019	IMPOSED	11/15/2019	11/15/2019	$0.00	$1,743.65	$0.00	$0.00	$0.00
2019	11/15/2019	PAYMENT	11/04/2019	11/15/2019	$1,691.34	($1,743.65)	$52.31	$0.00	$0.00
					Total:	**$0.00**			
2018	11/15/2018	IMPOSED	11/15/2018	11/15/2018	$0.00	$1,699.66	$0.00	$0.00	$0.00
2018	11/15/2018	PAYMENT	11/06/2018	11/15/2018	$1,648.67	($1,699.66)	$50.99	$0.00	$0.00
					Total:	**$0.00**			
2017	11/15/2017	IMPOSED	11/15/2017	11/15/2017	$0.00	$1,673.93	$0.00	$0.00	$0.00
2017	11/15/2017	PAYMENT	11/06/2017	11/15/2017	$1,623.71	($1,673.93)	$50.22	$0.00	$0.00
					Total:	**$0.00**			
2016	11/15/2016	IMPOSED	11/15/2016	11/15/2016	$0.00	$1,597.06	$0.00	$0.00	$0.00
2016	11/15/2016	PAYMENT	11/08/2016	11/15/2016	$1,549.15	($1,597.06)	$47.91	$0.00	$0.00
					Total:	**$0.00**			
2015	11/15/2015	PAYMENT	11/17/2015	11/15/2015	$1,481.65	($1,527.47)	$45.82	$0.00	$0.00
2015	11/15/2015	IMPOSED	11/15/2015	11/15/2015	$0.00	$1,527.47	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2014	11/15/2014	IMPOSED	11/15/2014	11/15/2014	$0.00	$1,358.76	$0.00	$0.00	$0.00
2014	11/15/2014	PAYMENT	11/05/2014	11/15/2014	$1,318.00	($1,358.76)	$40.76	$0.00	$0.00
					Total:	**$0.00**			
2013	11/15/2013	IMPOSED	11/15/2013	11/15/2013	$0.00	$1,166.04	$0.00	$0.00	$0.00
2013	11/15/2013	PAYMENT	11/06/2013	11/15/2013	$1,131.06	($1,166.04)	$34.98	$0.00	$0.00
					Total:	**$0.00**			
2012	11/15/2012	PAYMENT	11/16/2012	11/15/2012	$1,414.63	($1,458.38)	$43.75	$0.00	$0.00
2012	11/15/2012	IMPOSED	11/15/2012	11/15/2012	$0.00	$1,458.38	$0.00	$0.00	$0.00
					Total:	**$0.00**			

Year	Date Due	Transaction Type	Transaction Date	As Of Date	Amount Received	Tax Due	Discount Amount	Interest Charged	Refund Interest
2011	11/15/2011	IMPOSED	11/15/2011	11/15/2011	$0.00	$1,446.55	$0.00	$0.00	$0.00
2011	11/15/2011	PAYMENT	11/08/2011	11/15/2011	$1,403.15	($1,446.55)	$43.40	$0.00	$0.00
					Total:	**$0.00**			
2010	11/15/2010	IMPOSED	11/15/2010	11/15/2010	$0.00	$1,424.13	$0.00	$0.00	$0.00
2010	11/15/2010	PAYMENT	11/02/2010	11/15/2010	$1,381.41	($1,424.13)	$42.72	$0.00	$0.00
					Total:	**$0.00**			
2009	11/15/2009	IMPOSED	11/15/2009	11/15/2009	$0.00	$1,380.55	$0.00	$0.00	$0.00
2009	11/15/2009	PAYMENT	11/09/2009	11/15/2009	$1,339.13	($1,380.55)	$41.42	$0.00	$0.00
					Total:	**$0.00**			
2008	11/15/2008	PAYMENT	11/17/2008	11/15/2008	$1,332.93	($1,374.15)	$41.22	$0.00	$0.00
2008	11/15/2008	IMPOSED	11/15/2008	11/15/2008	$0.00	$1,374.15	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2007	11/15/2007	PAYMENT	01/04/2008	11/15/2007	$165.41	($165.41)	$0.00	$0.00	$0.00
2007	11/15/2007	PAYMENT	11/28/2007	11/15/2007	$1,129.92	($1,124.19)	$0.00	$5.73	$0.00
2007	11/15/2007	IMPOSED	11/15/2007	11/15/2007	$0.00	$1,289.60	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2006	11/15/2006	PAYMENT	03/06/2007	11/15/2006	$1,285.15	($1,257.21)	$0.00	$27.94	$0.00
2006	11/15/2006	IMPOSED	11/15/2006	11/15/2006	$0.00	$1,257.21	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2005	11/15/2005	IMPOSED	11/15/2005	11/15/2005	$0.00	$1,057.01	$0.00	$0.00	$0.00
2005	11/15/2005	PAYMENT	11/03/2005	11/15/2005	$1,025.30	($1,057.01)	$31.71	$0.00	$0.00
					Total:	**$0.00**			

Sales History

Sale Date	Seller	Buyer	Sale Amount	Sale Type	Recording

Structures

Land Characteristics

Land Description	Acres	Land Classification
Market	19.96	Mrkt

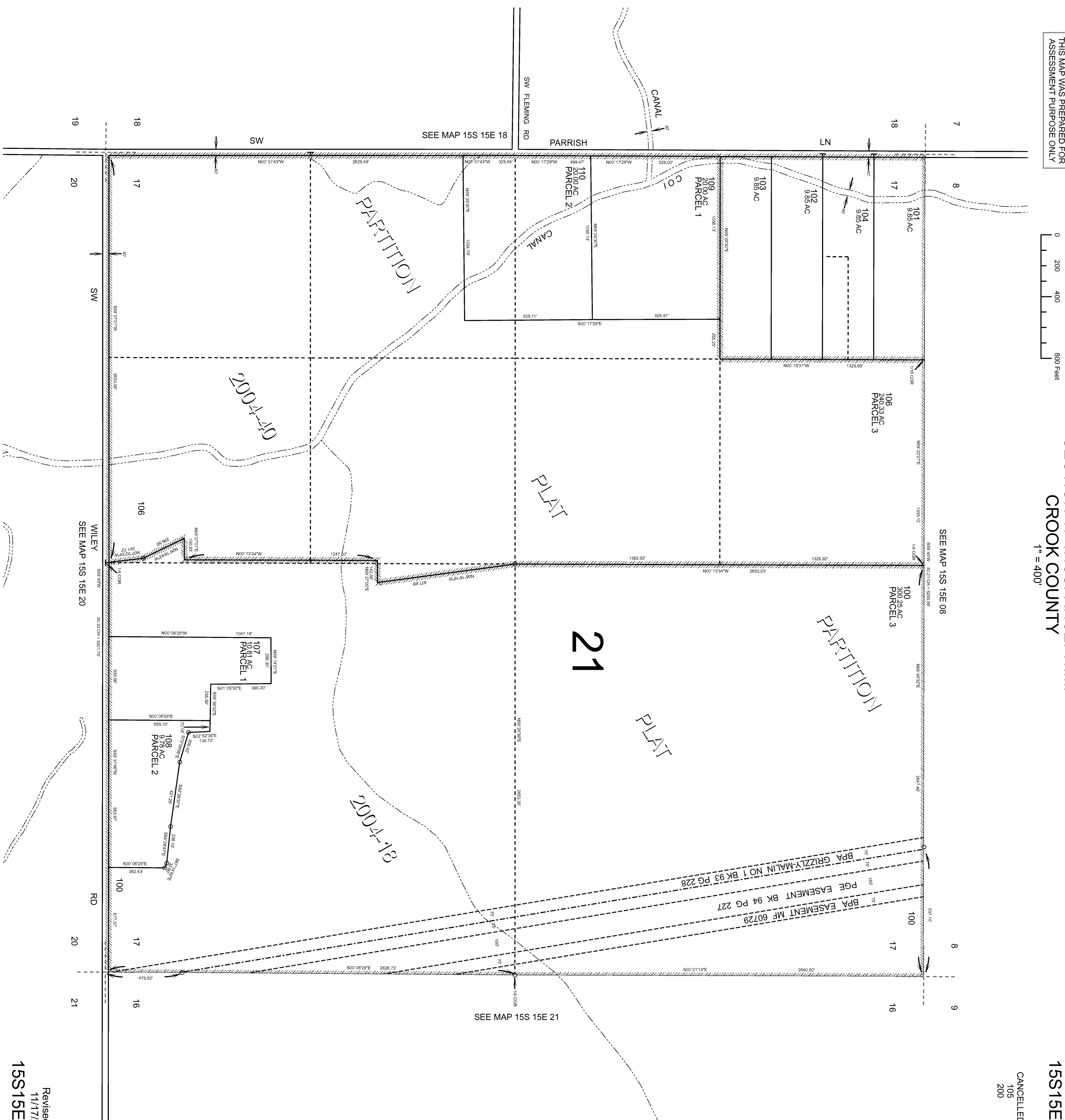
Related Accounts

Related accounts apply to a property that may be on one map and tax lot but due to billing have more than one account. This occurs when a property is in multiple tax code areas. In other cases there may be business personal property or a manufactured home on this property that is not in the same ownership as the land.

No Related Accounts found.

Ownership

Name Type	Name	Ownership Type	Percentage
OWNER	818 POWELL BUTTE LLC ,		100.00%
Taxpayer	818 POWELL BUTTE LLC,		100.00%
			200.00%


THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSE ONLY
SECTION 17 T.15S. R.15E. W.M.
CROOK COUNTY
1" = 400'
0 200 400 800 Feet
SW PARRISH LN
SW FLEMING RD
SW WILEY RD
SEE MAP 15S 15E 18
SEE MAP 15S 15E 08
SEE MAP 15S 15E 20
SEE MAP 15S 15E 21
CANAL
PARTITION
PLAT
2004-40
2004-18
21
101 9.85 AC
102 9.85 AC
103 9.85 AC
104 9.85 AC
109 20.00 AC PARCEL 1
110 20.00 AC PARCEL 2
106 240.33 AC PARCEL 3
100 300.25 AC PARCEL 3
107 10.81 AC PARCEL 1
108 9.78 AC PARCEL 2
BPA GRIZZLY-MALIN NO 1 BK 93 PG 228
PGE EASEMENT BK 94 PG 227
BPA EASEMENT MF 60729
CANCELLED: 105 200
15S15E17
Revised: JK 11/17/2009
15S15E17

Crook County Property Summary Report

Report Date: 6/3/2021 12:13:05 PM

Disclaimer

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Account Summary

Account Information

Mailing Name: 818 POWELL BUTTE LLC
Map and Taxlot: 15151700-00110-16829
Account: 16829
Tax Status: Taxable
Situs Address: UNDETERMINED SITUS ADDRESS

Property Taxes

Current Tax Year: 2020
Tax Code Area: 0021

Assessment

Subdivision: PART PLAT YEAR & # NO PARCEL #
Lot: 40
Block: 4
Assessor Acres: 20.00
Property Class: 470

Ownership

Mailing Address:
818 POWELL BUTTE LLC
21059 AVERY LN
BEND, OR 97702

Valuation

Real Market Values as of Jan. 1, 2020
Land $221,760
Structures
Total $221,760

Current Assessed Values:
Maximum Assessed $144,588
Assessed Value $144,588
Veterans Exemption $0.00

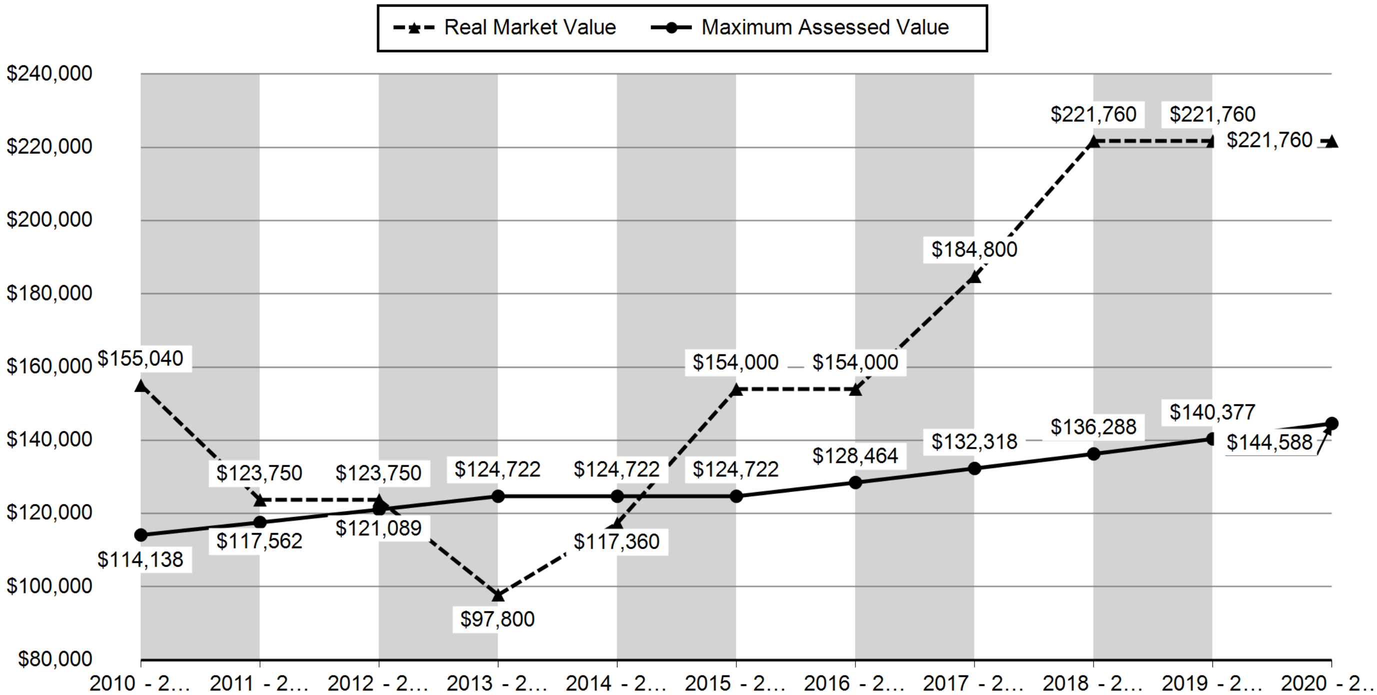
Warnings, Notations, and Special Assessments

Valuation History *All values are as of January 1 of each year. Tax year is July 1st through June 30th of each year.*

	2010 - 2011	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015
Real Market Value - Land	$155,040	$123,750	$123,750	$97,800	$117,360
Real Market Value - Structures	$0	$0	$0	$0	$0
Total Real Market Value	$155,040	$123,750	$123,750	$97,800	$117,360
Maximum Assessed Value	$114,138	$117,562	$121,089	$124,722	$124,722
Total Assessed Value	$114,138	$117,562	$121,089	$97,800	$117,360
Exemption Value	$0	$0	$0	$0	$0

2015 - 2016	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021
$154,000	$154,000	$184,800	$221,760	$221,760	$221,760
$0	$0	$0	$0	$0	$0
$154,000	$154,000	$184,800	$221,760	$221,760	$221,760
$124,722	$128,464	$132,318	$136,288	$140,377	$144,588
$124,722	$128,464	$132,318	$136,288	$140,377	$144,588
$0	$0	$0	$0	$0	$0

 (For Report Disclaimer see page 1)



Tax Payment History

Year	Date Due	Transaction Type	Transaction Date	As Of Date	Amount Received	Tax Due	Discount Amount	Interest Charged	Refund Interest
2020	11/15/2020	PAYMENT	11/03/2020	11/03/2020	$1,753.39	($1,807.62)	$54.23	$0.00	$0.00
2020	11/15/2020	IMPOSED	10/16/2020	11/15/2020	$0.00	$1,807.62	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2019	11/15/2019	IMPOSED	11/15/2019	11/15/2019	$0.00	$1,743.65	$0.00	$0.00	$0.00
2019	11/15/2019	PAYMENT	11/04/2019	11/15/2019	$1,691.34	($1,743.65)	$52.31	$0.00	$0.00
					Total:	**$0.00**			
2018	11/15/2018	IMPOSED	11/15/2018	11/15/2018	$0.00	$1,699.66	$0.00	$0.00	$0.00
2018	11/15/2018	PAYMENT	11/06/2018	11/15/2018	$1,648.67	($1,699.66)	$50.99	$0.00	$0.00
					Total:	**$0.00**			
2017	11/15/2017	IMPOSED	11/15/2017	11/15/2017	$0.00	$1,673.93	$0.00	$0.00	$0.00
2017	11/15/2017	PAYMENT	11/06/2017	11/15/2017	$1,623.71	($1,673.93)	$50.22	$0.00	$0.00
					Total:	**$0.00**			
2016	11/15/2016	IMPOSED	11/15/2016	11/15/2016	$0.00	$1,597.06	$0.00	$0.00	$0.00
2016	11/15/2016	PAYMENT	11/08/2016	11/15/2016	$1,549.15	($1,597.06)	$47.91	$0.00	$0.00
					Total:	**$0.00**			
2015	11/15/2015	PAYMENT	11/17/2015	11/15/2015	$1,481.65	($1,527.47)	$45.82	$0.00	$0.00
2015	11/15/2015	IMPOSED	11/15/2015	11/15/2015	$0.00	$1,527.47	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2014	11/15/2014	IMPOSED	11/15/2014	11/15/2014	$0.00	$1,358.76	$0.00	$0.00	$0.00
2014	11/15/2014	PAYMENT	11/05/2014	11/15/2014	$1,318.00	($1,358.76)	$40.76	$0.00	$0.00
					Total:	**$0.00**			
2013	11/15/2013	IMPOSED	11/15/2013	11/15/2013	$0.00	$1,166.04	$0.00	$0.00	$0.00
2013	11/15/2013	PAYMENT	11/06/2013	11/15/2013	$1,131.06	($1,166.04)	$34.98	$0.00	$0.00
					Total:	**$0.00**			
2012	11/15/2012	PAYMENT	11/16/2012	11/15/2012	$1,414.63	($1,458.38)	$43.75	$0.00	$0.00
2012	11/15/2012	IMPOSED	11/15/2012	11/15/2012	$0.00	$1,458.38	$0.00	$0.00	$0.00
					Total:	**$0.00**			

Year	Date Due	Transaction Type	Transaction Date	As Of Date	Amount Received	Tax Due	Discount Amount	Interest Charged	Refund Interest
2011	11/15/2011	IMPOSED	11/15/2011	11/15/2011	$0.00	$1,446.55	$0.00	$0.00	$0.00
2011	11/15/2011	PAYMENT	11/08/2011	11/15/2011	$1,403.15	($1,446.55)	$43.40	$0.00	$0.00
					Total:	**$0.00**			
2010	11/15/2010	IMPOSED	11/15/2010	11/15/2010	$0.00	$1,424.13	$0.00	$0.00	$0.00
2010	11/15/2010	PAYMENT	11/02/2010	11/15/2010	$1,381.41	($1,424.13)	$42.72	$0.00	$0.00
					Total:	**$0.00**			
2009	11/15/2009	IMPOSED	11/15/2009	11/15/2009	$0.00	$1,380.55	$0.00	$0.00	$0.00
2009	11/15/2009	PAYMENT	11/09/2009	11/15/2009	$1,339.13	($1,380.55)	$41.42	$0.00	$0.00
					Total:	**$0.00**			
2008	11/15/2008	PAYMENT	11/17/2008	11/15/2008	$1,332.93	($1,374.15)	$41.22	$0.00	$0.00
2008	11/15/2008	IMPOSED	11/15/2008	11/15/2008	$0.00	$1,374.15	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2007	11/15/2007	PAYMENT	11/28/2007	11/15/2007	$1,295.33	($1,289.60)	$0.00	$5.73	$0.00
2007	11/15/2007	IMPOSED	11/15/2007	11/15/2007	$0.00	$1,289.60	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2006	11/15/2006	PAYMENT	03/06/2007	11/15/2006	$1,285.15	($1,257.21)	$0.00	$27.94	$0.00
2006	11/15/2006	IMPOSED	11/15/2006	11/15/2006	$0.00	$1,257.21	$0.00	$0.00	$0.00
					Total:	**$0.00**			
2005	11/15/2005	IMPOSED	11/15/2005	11/15/2005	$0.00	$1,057.01	$0.00	$0.00	$0.00
2005	11/15/2005	PAYMENT	11/03/2005	11/15/2005	$1,025.30	($1,057.01)	$31.71	$0.00	$0.00
					Total:	**$0.00**			

Sales History

Sale Date	Seller	Buyer	Sale Amount	Sale Type	Recording

Structures

Land Characteristics

Land Description	Acres	Land Classification
Market	19.96	Mrkt

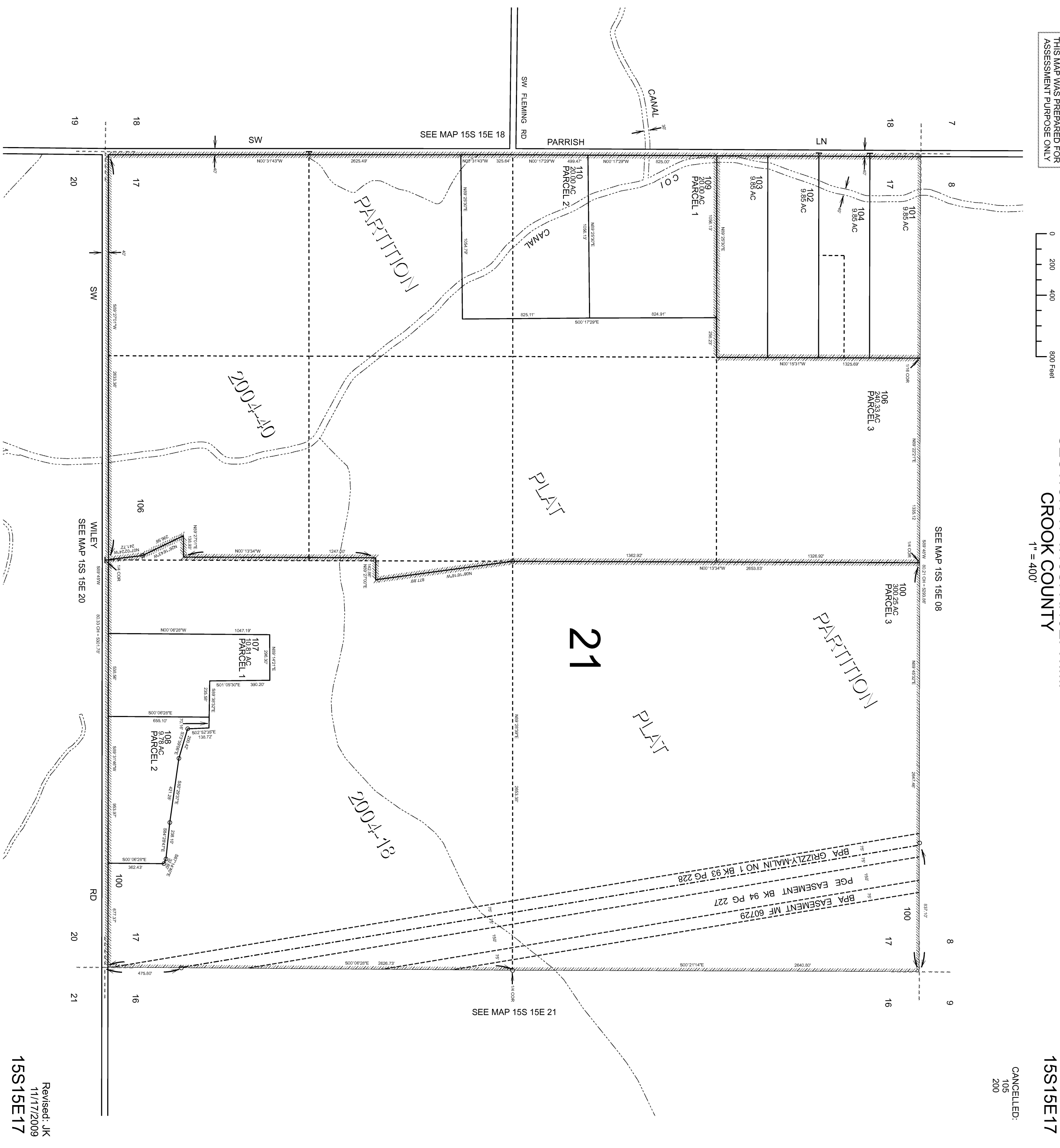
Related Accounts

Related accounts apply to a property that may be on one map and tax lot but due to billing have more than one account. This occurs when a property is in multiple tax code areas. In other cases there may be business personal property or a manufactured home on this property that is not in the same ownership as the land.

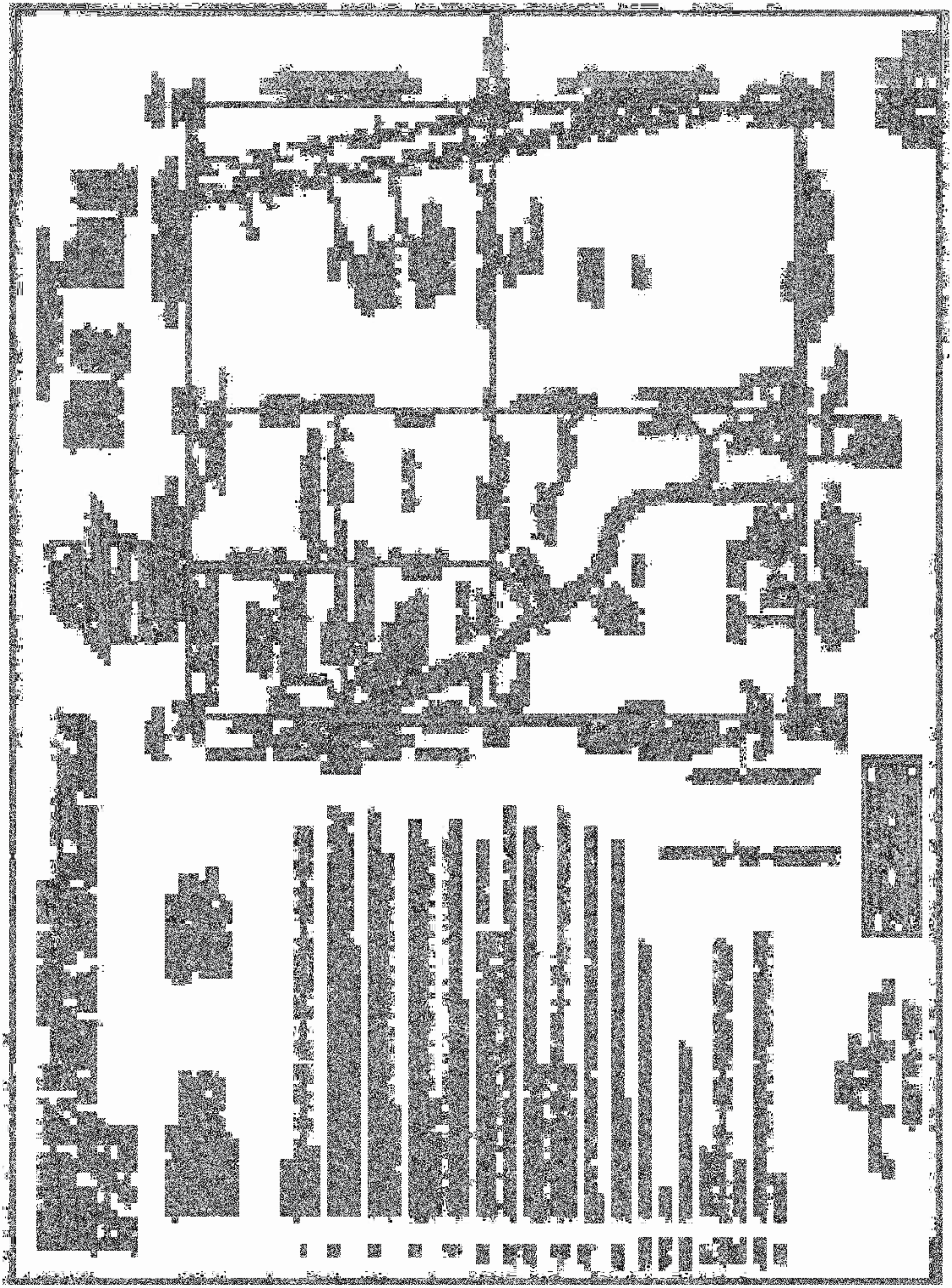
No Related Accounts found.

Ownership

Name Type	Name	Ownership Type	Percentage
OWNER	818 POWELL BUTTE LLC ,		100.00%
Taxpayer	818 POWELL BUTTE LLC,		100.00%
			200.00%


THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSE ONLY
SECTION 17 T.15S. R.15E. W.M.
CROOK COUNTY
1" = 400'
15S15E17
CANCELLED:
105
200
Revised: JK
11/17/2009
SW PARRISH LN
SW FLEMING RD
SW WILEY RD
SEE MAP 15S 15E 18
SEE MAP 15S 15E 08
SEE MAP 15S 15E 20
SEE MAP 15S 15E 21
CANAL
PARTITION
PLAT
2004-40
2004-18
21
101
9.85 AC
102
9.85 AC
103
9.85 AC
104
9.85 AC
109
20.00 AC
PARCEL 1
110
20.00 AC
PARCEL 2
106
240.33 AC
PARCEL 3
100
300.25 AC
PARCEL 3
107
10.81 AC
PARCEL 1
108
9.78 AC
PARCEL 2
BPA GRIZZLY-MALIN NO 1 BK 93 PG 228
PGE EASEMENT BK 94 PG 227
BPA EASEMENT MF 60729

Appendix 3



[illegible]

[illegible]

[illegible]

[illegible]

Appendix 4

2360

PARTITION PLAT NO. 2004-18

PARTITION PLAT OF PARCEL 2 OF PARTITION PLAT NO. 2001-22, LOCATED IN SECTION 17, TOWNSHIP 15 SOUTH, RANGE 15 EAST, W.M., CROOK COUNTY, OREGON

C-LP(NF)-339-02
W.O. 04-2289

SURVEYED FOR
818 POWELL BUTTE, LLC
EUGENE W. GRAMZOW, MANAGING MEMBER
679 RENDEZOUS CT.
PAGOSA SPRINGS, CO 81147
(970) 731-9518

SURVEYED BY
ARMSTRONG SURVEYING & ENGINEERING, INC
378 NE SECOND STREET
PRINEVILLE, OR 97754
(541) 447-7791

CENTRAL OREGON IRRIGATION DISTRICT
WATER RIGHTS C. 76358
SEC. 17, T.15S., R.15E., W.M.

PARCEL 3

SE1/4 SW1/4	0.6 AC.
SW1/4 SE1/4	15.7 AC.
NW1/4 SE1/4	13.0 AC.
NE1/4 SE1/4	11.6 AC.
SE1/4 SE1/4	24.6 AC.
	65.35 AC.

SCALE
1" = 500'
500 0 500 1000

APRIL 20, 2004

SURVEY NOTE
ALL BEARINGS AND DISTANCES SHOWN ARE IDENTICAL TO THOSE OF PARTITION PLAT NO. 2001-22, C.S. 2073 EXCEPT THE PARTITION LINES WHICH WERE MEASURED AS PER THIS SURVEY.

LEGEND
- SET 5/8" x 30" LONG IRON ROD WITH YELLOW PLASTIC CAP MARKED "ARMSTRONG S&E LS 1026".
- FOUND 5/8" IRON ROD WITH 1-1/2" ALUMINUM CAP MARKED "ARMSTRONG S&E LS1026" AS PER PARTITION PLAT NO. 2001-22, C.S. 2073 BY DAVID B. ARMSTRONG, LS 1026, RECORDED JUNE 29, 2001.
- FOUND 2" ALUMINUM CAP ON 5/8" IRON ROD IN ALUMINUM MONUMENT BOX IN ROAD AS PER CERTIFIED RECORD OF LAND CORNER MONUMENTATION BY DAVID B. ARMSTRONG, LS 1026, CROOK COUNTY SURVEYOR, RECORDED DATE SHOWN.
- FOUND 2-1/2" ALUMINUM CAP MONUMENT AS PER CERTIFIED RECORD OF LAND CORNER MONUMENTATION BY DAVID B. ARMSTRONG, LS 1026 CROOK COUNTY SURVEYOR, RECORDED DATE SHOWN.
- FOUND 5/8" IRON ROD WITH RED PLASTIC CAP MARKED "LS 1020" AS PER CERTIFIED RECORD OF LAND CORNER MONUMENTATION BY GEORGE W. COLVIN, JR., LS 1020, RECORDED OCT. 2, 1998
- FOUND 5/8" IRON ROD AS PER C.S. 764, PRINEVILLE RANCH SUBDIVISION, BY GARY W. HICKMAN, LS 1578, RECORDED DEC. 21, 1982

1( ) RECORD AS PER GENERAL LAND OFFICE BY JOHN H. McCLUNG, DEPUTY SURVEYOR, UNDER JOINT G.L.O. CONTRACT NO. 129 DATED JUNE 7, 1869.

2( ) RECORD AS PER C.S. 1599 BY GEORGE W. COLVIN, JR., LS 1020, RECORDED OCT. 2, 1996

3( ) RECORD AS PER C.S. 764, PRINEVILLE RANCH SUBDIVISION, BY GARY W. HICKMAN, LS 1578 RECORDED DEC. 21, 1982.

4( ) RECORD AS PER C.S. 1494, PARTITION PLAT NO. 1995-36, BY DAVID B. ARMSTRONG, LS 1026, RECORDED NOV. 21, 1995

FORM CERTIFIED RECORD OF LAND CORNER MONUMENTATION FORM

FC FENCE CORNER ℄ CENTERLINE

— FENCE

I HEREBY CERTIFY THIS IS AN EXACT COPY OF THE ORIGINAL PLAT.
7/08/04
DAVID B. ARMSTRONG, LS 1026

APPROVALS

Gary S. Dejarnatt 6/08/04
COUNTY SURVEYOR DATE
JEFFERSON COUNTY SURVEYOR
O.R.S. 92.100(4)

CROOK COUNTY PLANNER for 7/2/04
DATE

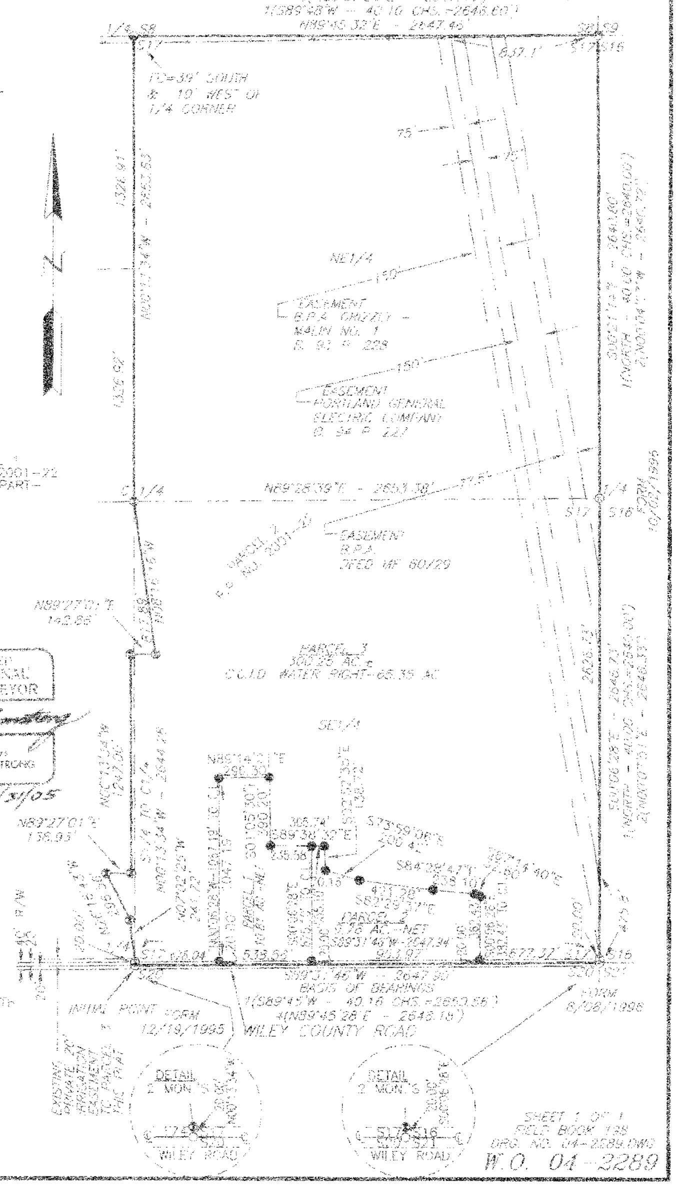
MANAGER, CENTRAL OREGON IRRIGATION DISTRICT DATE

EASEMENTS OF RECORD
1. TRANSMISSION LINE EASEMENT IN FAVOR OF UNITED STATES OF AMERICA RECORDED IN DEED BOOK 93 AT PAGE 228, RECORDS OF CROOK COUNTY, OREGON

2. TRANSMISSION LINE EASEMENT IN FAVOR OF PORTLAND GENERAL ELECTRIC COMPANY, AN OREGON CORPORATION, RECORDED IN DEED BOOK 54 AT PAGE 227, RECORDS OF CROOK COUNTY, OREGON

3. TRANSMISSION LINE EASEMENT IN FAVOR OF UNITED STATES OF AMERICA RECORDED IN DEEDS MF 60729, RECORDS OF CROOK COUNTY, OREGON

4. RIGHT OF WAY IN FAVOR OF CENTRAL ELECTRIC COOPERATIVE, INC. RECORDED IN DEED BOOK 83 AT PAGE 67, RECORDS OF CROOK COUNTY, OREGON (NOT MAPPED NO LOCATION DATA IN DEED)



SURVEYOR'S CERTIFICATE
I, DAVID B. ARMSTRONG, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF OREGON, DO HEREBY CERTIFY THAT I HAVE CORRECTLY SURVEYED AND MARKED WITH PROPER MONUMENTS THE LANDS SHOWN ON THIS PARTITION PLAT, SAID LANDS BEING LOCATED IN SECTION 17, TOWNSHIP 15 SOUTH, RANGE 15 EAST, W.M., CROOK COUNTY, OREGON, MORE PARTICULARLY DESCRIBED AS FOLLOWS: PARCEL 2 OF PARTITION PLAT NO. 2001-22, RECORDED ON JUNE 29, 2001 IN DEEDS/PART. MF 164561, RECORDS OF CROOK COUNTY, OREGON. SAID PLAT CONTAINS 520.84 ACRES, MORE OR LESS. SUBJECT TO ALL EXISTING EASEMENTS AND RIGHTS OF WAY.

REGISTERED PROFESSIONAL LAND SURVEYOR
OREGON
DAVID B. ARMSTRONG
1026
Renews 12/31/05

SURVEY NARRATIVE
WE WERE EMPLOYED BY EUGENE W. GRAMZOW TO PERFORM A PARTITION SURVEY OF HIS PROPERTY BEING PARCEL 2 OF PARTITION PLAT NO. 2001-22, RECORDED ALSO AS C.S. 2073 SURVEYED BY MYSELF. I FOUND AND TIED ALL OF THE MONUMENTS AROUND SAID PARCEL 2 AND HELD THEM AS FOUND. THE PARTITION LINES ARE FREE LINES AS DESIRED BY THE CLIENT TO FOLLOW THE EDGE OF AN IRRIGATED FIELD AND MAINTAIN ALL WATER RIGHTS ON PARCEL 3. THIS SURVEY WAS PERFORMED USING A TRIMBLE 4800 GPS SYSTEM IN RTK MODE USING THE SAME CONTROL AS THAT USED TO PERFORM C.S. 2073

TAX CERTIFICATES
I HEREBY CERTIFY THAT ALL AD VALOREM TAXES, SPECIAL ASSESSMENTS, FEES AND OTHER CHARGES REQUIRED BY LAW TO BE PLACED ON THE 2003 - 2004 TAX ROLL WHICH BECAME A LIEN OR WILL BECOME A LIEN ON THIS PARTITION DURING THIS TAX YEAR BUT NOT YET CERTIFIED TO THE TAX COLLECTOR FOR COLLECTION HAVE BEEN PAID TO ME

COUNTY ASSESSOR DATE 6/7/04

I HEREBY CERTIFY THAT ALL TAXES ARE PAID AS OF THIS DATE.

Darlene A. Martin Deputy 6-7-04
COUNTY TAX COLLECTOR DATE

DECLARATION AND DEDICATION
KNOW ALL PEOPLE BY THESE PRESENTS THAT 818 POWELL BUTTE LLC, AN OREGON LIMITED LIABILITY COMPANY, IS THE FEE SIMPLE OWNER OF THE LANDS MORE PARTICULARLY DESCRIBED IN THE ACCOMPANYING SURVEYOR'S CERTIFICATE AND HAS CAUSED THE SAME TO BE SURVEYED AND PARTITIONED INTO PARCELS AS SHOWN HEREON IN ACCORDANCE WITH THE PROVISIONS OF OREGON REVISED STATUTES, CHAPTER 92. IRRIGATION WATER RIGHTS UNDER CENTRAL OREGON IRRIGATION DISTRICT CERTIFICATE NO. 76358 ARE ASSIGNED TO PARCEL 3 AND SHOWN HEREON. THERE ARE NO IRRIGATION WATER RIGHTS APPURTENANT TO PARCELS 1 AND 2

AFFIDAVIT OF CONSENT TO DECLARATION FROM 818 POWELL BUTTE LLC BY EUGENE W. GAMZOW, MANAGING MEMBER, HAS BEEN RECORDED IN DEEDS MF 191840 RECORDS OF CROOK COUNTY, OREGON

RECORDATION — CLERK
STATE OF OREGON } ss 191841
COUNTY OF CROOK }
I CERTIFY THAT THE WITHIN INSTRUMENT WAS RECEIVED FOR RECORD ON THE 8th DAY OF July 2004 AT ____ M. AND RECORDED IN Deed/Part RECORDS OF SAID COUNTY MF NO. 191841
DEANNA E. BERMAN CROOK COUNTY CLERK
BY ____ DEPUTY

RECORDATION — SURVEYOR
STATE OF OREGON } ss
COUNTY OF CROOK }
I CERTIFY THAT THE WITHIN INSTRUMENT WAS RECEIVED FOR RECORD ON THE 8th DAY OF JULY A.D. 20 04 AND RECORDED IN SURVEYS # 2360 OF SAID COUNTY
DAVID B. ARMSTRONG
COUNTY SURVEYOR

SHEET 1 OF 1
FIELD BOOK 138
DRG. NO. 04-2289.DWG
W.O. 04-2289

Appendix 5

PARTITION PLAT NO. 2004-40

PARTITION PLAT OF PARCEL 1 OF PARTITION PLAT NO. 2001-22, LOCATED IN SECTION 17, TOWNSHIP 15 SOUTH, RANGE 15 EAST, W.M., CROOK COUNTY, OREGON

C-LP(NF)-340-02

W.O. 04-2940

SURVEYED FOR

EUGENE W. GRAMZOW
818 POWELL BUTTE, LLC
578 RENDEZOUS CT
PAGOSA SPRINGS, CO 81147
(970) 731-9518

SURVEYED BY

ARMSTRONG SURVEYING
& ENGINEERING, INC.
378 NE SECOND STREET
PRINEVILLE, OR 97754
(541) 447-7791

SURVEY NOTE

ALL BEARINGS AND DISTANCES SHOWN ARE IDENTICAL TO THOSE OF PARTITION PLAT NO. 2001-22, C.S. 2073, EXCEPT FOR THE PARTITION LINES WHICH ARE SURVEYED AS PER THIS SURVEY.

SCALE
1" = 400'
400 0 400 800

DECEMBER 6, 2004

REGISTERED PROFESSIONAL LAND SURVEYOR
12/20/04
OREGON
AUGUST 22, 1975
DAVID B. ARMSTRONG
1026
Renews 12/31/05

LEGEND

- ● SET 5/8" X 30" LONG IRON ROD WITH YELLOW PLASTIC CAP MARKED "ARMSTRONG S&E LS1026" SET STEEL FENCE POST ALONGSIDE.
- ○ FOUND 5/8" IRON ROD WITH 1-1/2" ALUMINUM CAP MARKED "ARMSTRONG S&E LS1026" AS PER PARTITION PLAT NO. 2001-22, C.S. 2073, BY DAVID B. ARMSTRONG, LS 1026, RECORDED JUNE 29, 2001
- ⊗ FOUND 2" ALUMINUM CAP ON 5/8" IRON ROD IN ALUMINUM MONUMENT BOX IN ROAD AS PER CERTIFIED RECORD OF LAND CORNER MONUMENTATION BY DAVID B. ARMSTRONG, LS 1026, CROOK COUNTY SURVEYOR, RECORDED DATE SHOWN
- FOUND 5/8" IRON ROD AS PER C.S. 764, PRINEVILLE RANCH SUBDIVISION, BY GARY W. HICKMAN, LS 1678, RECORDED DEC. 21, 1982

1( ) RECORD AS PER GENERAL LAND OFFICE CONTRACT NO. 129 BY JOHN H. McCLUNG, DEPUTY SURVEYOR, DATED JUNE 7, 1869.

2( ) RECORD AS PER C.S. 458 BY DAVID B. ARMSTRONG, LS 1026, RECORDED JAN. 17, 1978

3( ) RECORD AS PER C.S. 764, PRINEVILLE RANCH SUBDIVISION, BY GARY W. HICKMAN, LS 1678, RECORDED DEC. 21, 1982.

4( ) RECORD AS PER C.S. 1494, PARTITION PLAT NO. 1995-36 BY DAVID B. ARMSTRONG, LS 1026, RECORDED NOV. 21, 1995.

5( ) RECORD AS PER C.S. 1514 BY C.O.I.D. LAND SURVEYS PERFORMED 1903-05 AND RECORDED JAN. 31, 1996.

P.O.D. POINT OF DELIVERY – CENTRAL OREGON IRRIGATION DISTRICT

C.O.C. CENTRAL OREGON CANAL

APPROVALS

Gary S. [signature] COUNTY SURVEYOR JEFFERSON COUNTY SURVEYOR O.R.S. 92.100(4)	12/21/04 DATE
[signature] CROOK COUNTY PLANNER	12/27/04 DATE
[signature] CENTRAL OREGON IRRIGATION DISTRICT	23 December 2004 DATE

SURVEYOR'S CERTIFICATE

I, DAVID B. ARMSTRONG, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF OREGON, DO HEREBY CERTIFY THAT I HAVE CORRECTLY SURVEYED AND MARKED WITH PROPER MONUMENTS THE LANDS SHOWN ON THIS PARTITION PLAT, SAID LANDS ARE LOCATED IN SECTION 17, TOWNSHIP 15 SOUTH, RANGE 15 EAST, W.M., CROOK COUNTY, OREGON, MORE PARTICULARLY DESCRIBED AS FOLLOWS: PARCEL 1 OF PARTITION PLAT NO. 2001-22, RECORDED IN DEEDS/PARTITIONS MF 163561 ON JUNE 29, 2001, RECORDS OF CROOK COUNTY, OREGON. SAID PARTITION CONTAINS 280.33 ACRES, MORE OR LESS.

SUBJECT TO ALL EXISTING EASEMENTS AND RIGHTS OF WAY INCLUDING WILEY COUNTY ROAD AND PARRISH COUNTY ROAD.

SUBJECT TO RIGHT OF WAY IN FAVOR OF CENTRAL ELECTRIC COOPERATIVE, INC. RECORDED FEBRUARY 10, 1960 IN DEED BOOK 83 AT PAGE 67, RECORDS OF CROOK COUNTY, OREGON. (NOT MAPPABLE).

SURVEY NARRATIVE

WE WERE EMPLOYED BY EUGENE W. GRAMZOW TO PERFORM A PARTITION SURVEY AND PREPARE A PLAT OF THIS APPROVED PARTITION. SUBJECT PROPERTY WAS PREVIOUSLY SURVEYED BY MYSELF AS PARCEL 1 OF PARTITION PLAT NO. 2001-22, C.S. 2073. SEARCH IN THE FIELD RECOVERED ALL OF THE MONUMENTS AROUND SAID PARCEL AND I HELD THEM AS FOUND. THE PARTITION LINES ARE SURVEYED SO THAT PARCELS 1 AND 2 HAVE A NET ACREAGE OF 20.00 ACRES EXCLUDING THE PARRISH ROAD RIGHT OF WAY. THIS SURVEY WAS PERFORMED USING A TRIMBLE 4800 GPS SYSTEM IN RTK MODE. BEARINGS ARE BASED ON PARTITION PLAT NO. 2001-22.

DECLARATION AND DEDICATION

KNOW ALL PEOPLE BY THESE PRESENTS THAT 818 POWELL BUTTE, LLC, IS THE OWNER OF THE LANDS MORE PARTICULARLY DESCRIBED IN THE ACCOMPANYING SURVEYOR'S CERTIFICATE AND HAS CAUSED THE SAME TO BE SURVEYED AND PARTITIONED INTO PARCELS AND NON-EXCLUSIVE JOINT ACCESS EASEMENT AS SHOWN HEREON IN ACCORDANCE WITH THE PROVISIONS OF OREGON REVISED STATUTES, CHAPTER 92, AND DOES HEREBY DEDICATE TO PARCELS 1, 2 AND 3 THE NON-EXCLUSIVE JOINT ACCESS EASEMENT. IRRIGATION WATER RIGHTS UNDER CENTRAL OREGON IRRIGATION DISTRICT CERTIFICATE NO. 76358 ARE ASSIGNED TO THE PARCELS AS SHOWN HEREON.

AFFIDAVIT OF CONSENT TO DECLARATION FROM 818 POWELL BUTTE, LLC BY EUGENE W. GRAMZOW, MANAGING MEMBER, HAS BEEN RECORDED IN DEEDS MF 126478, RECORDS OF CROOK COUNTY, OREGON.

AFFIDAVIT OF CONSENT TO DECLARATION FROM EUGENE W. GRAMZOW, TRUSTEE FOR THE "EUGENE W. GRAMZOW REVOCABLE TRUST DATED FEBRUARY 3, 1998", HAS BEEN RECORDED IN DEEDS MF 126479, RECORDS OF CROOK COUNTY, OREGON.

TAX CERTIFICATES

I HEREBY CERTIFY THAT ALL AD VALOREM TAXES, SPECIAL ASSESSMENTS, FEES AND OTHER CHARGES REQUIRED BY LAW TO BE PLACED ON THE 2004 – 2005 TAX ROLL WHICH BECAME A LIEN OR WILL BECOME A LIEN ON THIS PARTITION DURING THIS TAX YEAR BUT NOT YET CERTIFIED TO THE TAX COLLECTOR FOR COLLECTION HAVE BEEN PAID TO ME.

[signature] deputy 12-22-04
COUNTY ASSESSOR DATE

I HEREBY CERTIFY THAT ALL TAXES ARE PAID AS OF THIS DATE.

Barbara [signature] Deputy 12-22-04
COUNTY TAX COLLECTOR DATE

I HEREBY CERTIFY THIS IS AN EXACT COPY OF THE ORIGINAL PLAT.
12/20/04
[signature]
DAVID B. ARMSTRONG, LS 1026

WATER RIGHTS

CENTRAL OREGON IRRIGATION DISTRICT
WATER RIGHTS – C.76358
PARCEL 1 – NO WATER RIGHTS
PARCEL 2 – NO WATER RIGHTS

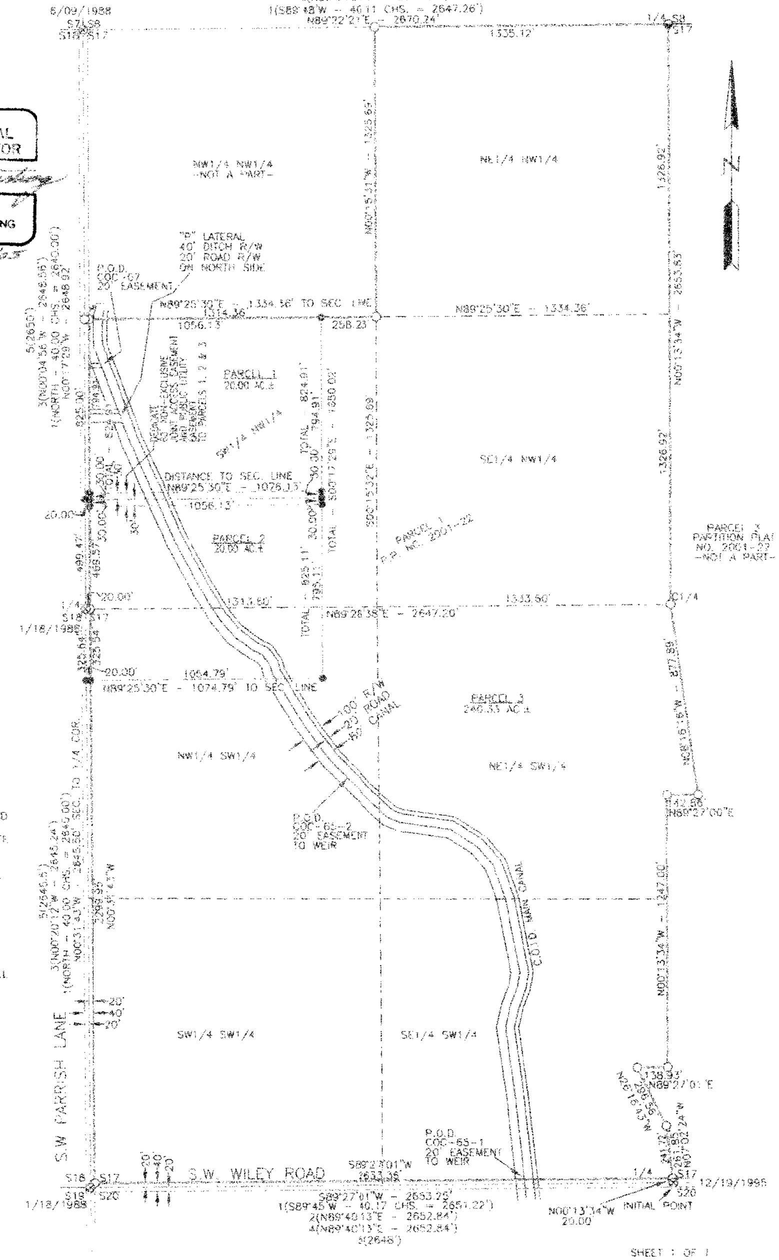
PARCEL 3 –	SW1/4 NW1/4	NO WATER RIGHTS.
	NW1/4 SW1/4	27.25 AC.
	NE1/4 SW1/4	10.10 AC.
	SW1/4 SW1/4	35.90 AC.
	SE1/4 SW1/4	25.35 AC.
		98.60 AC.

RECORDATION – CLERK

STATE OF OREGON } SS 136480
COUNTY OF CROOK }
I CERTIFY THAT THE WITHIN INSTRUMENT WAS RECEIVED FOR RECORD ON THE 27th DAY OF December, 2004, AT 11:00 AM, AND RECORDED IN Deeds/Partitions RECORDS OF SAID COUNTY MF NO. 136480
DEANNA E. BERMAN, CROOK COUNTY CLERK
BY: [signature] DEPUTY

RECORDATION – SURVEYOR

STATE OF OREGON } SS
COUNTY OF CROOK }
I CERTIFY THAT THE WITHIN INSTRUMENT WAS RECEIVED FOR RECORD ON THE 27th DAY OF DECEMBER A.D. 2004, AND RECORDED IN SURVEYS # 2413 OF SAID COUNTY
DAVID B. ARMSTRONG
[signature]
COUNTY SURVEYOR



W.O. 04-2940

Appendix 6

AMERITITLE PRELIMINARY TITLE REPORT NO. 469881AM - SCHEDULE A:

AMERITITLE PRELIMINARY TITLE REPORT NO. 469881AM - SCHEDULE B, SECTION II:

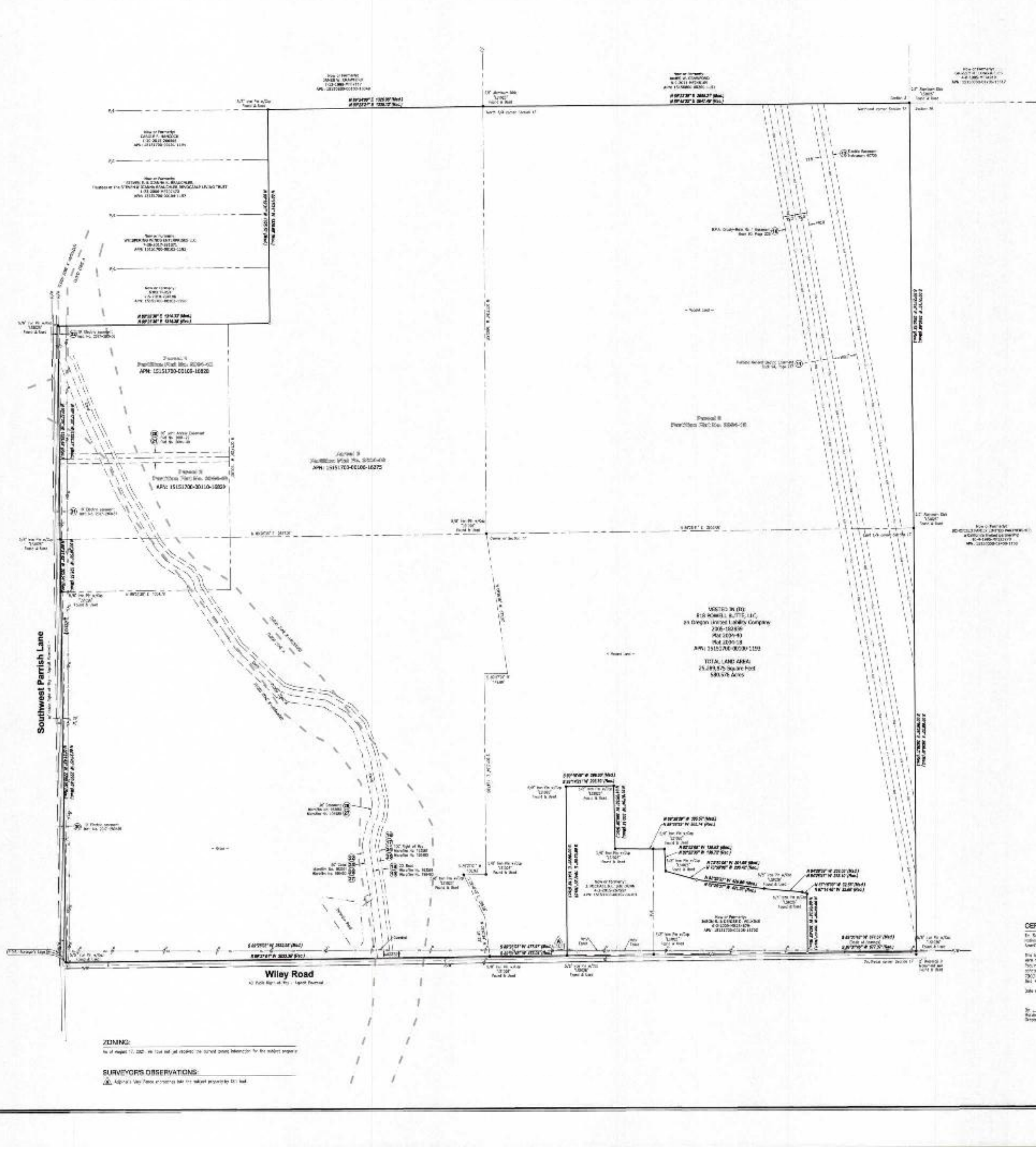
MISCELLANEOUS NOTES:

BASIS OF BEARING:

FLOOD ZONE:

PARKING:

TOTAL LAND AREA:



ZONING:

SURVEYOR'S OBSERVATIONS:

SITE

VICINITY MAP
NOT TO SCALE

SYMBOL LEGEND

CERTIFICATION:

REVISION HISTORY

millman
National Land Services
Transforming the Industry
Surveying
Zoning
Environmental
Real Support · Title Review
Millman Surveying, Inc.
Corporate Headquarters
4111 Bradley Circle NW
Canton, OH 44718
Phone: 800-520-1010
Fax: 330-342-0834
www.millmanland.com
landsurveys@millmanland.com

ALTA/NSPS LAND TITLE SURVEY PREPARED FOR:

Jaffe Raitt Heuer & Weiss, P.C.
27777 Franklin Road
Suite 2500
Southfield, MI 48034
(248) 351-3000

6911 Wiley Road
Powell Butte
County of Crook
State of Oregon
Zip Code of 97753

NORTH
GRAPHIC SCALE

REGISTERED
PROFESSIONAL
LAND SURVEYOR
8/26/21
OREGON
MARVIN G. LOKLEN
Surveyor's Seal

Sheet No. **1** of **1**
MSI Project No. 60148

Appendix 7

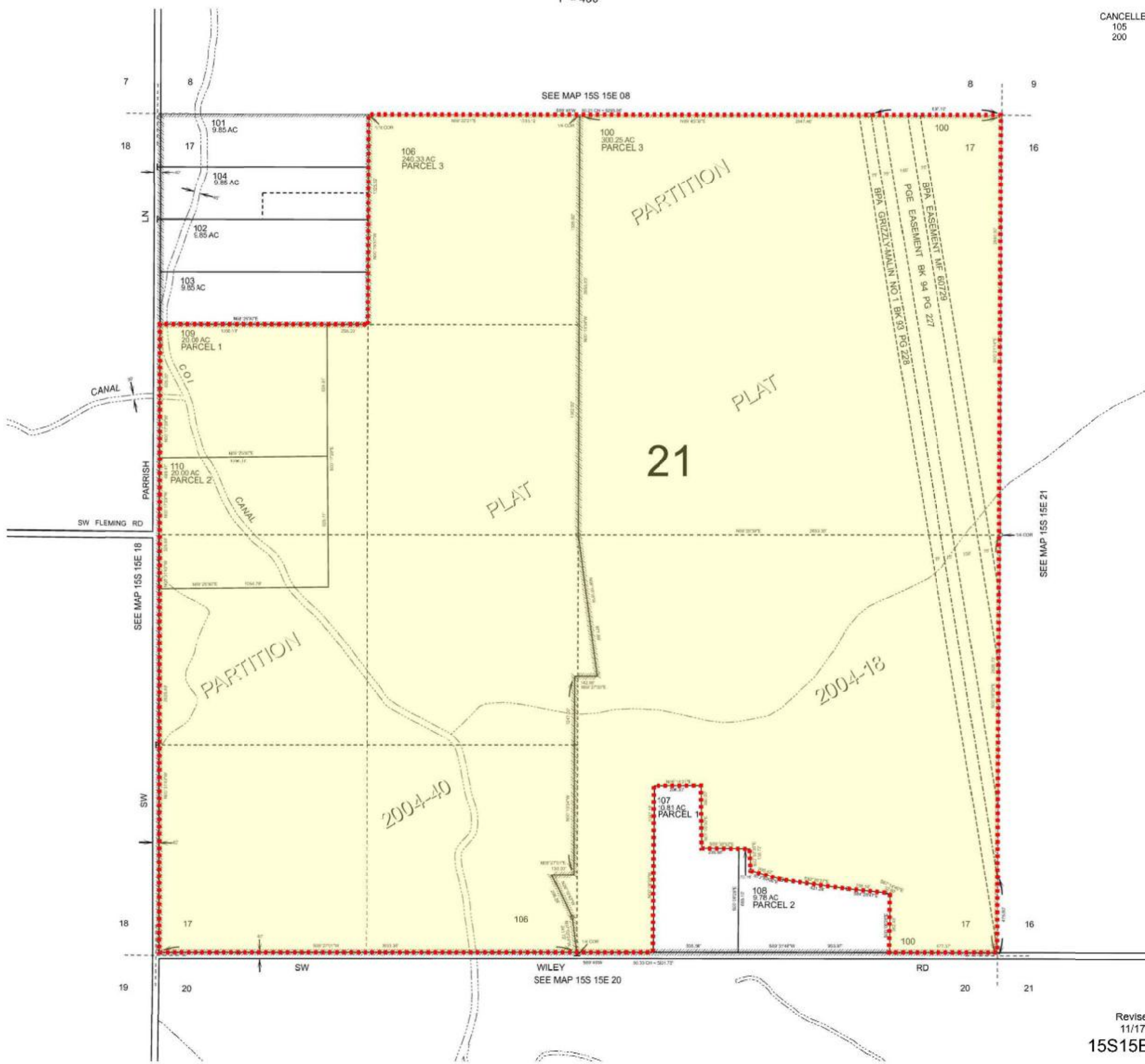
THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSE ONLY

SECTION 17 T.15S. R.15E. W.M.
CROWN COUNTY

1" = 400'

15S15E17

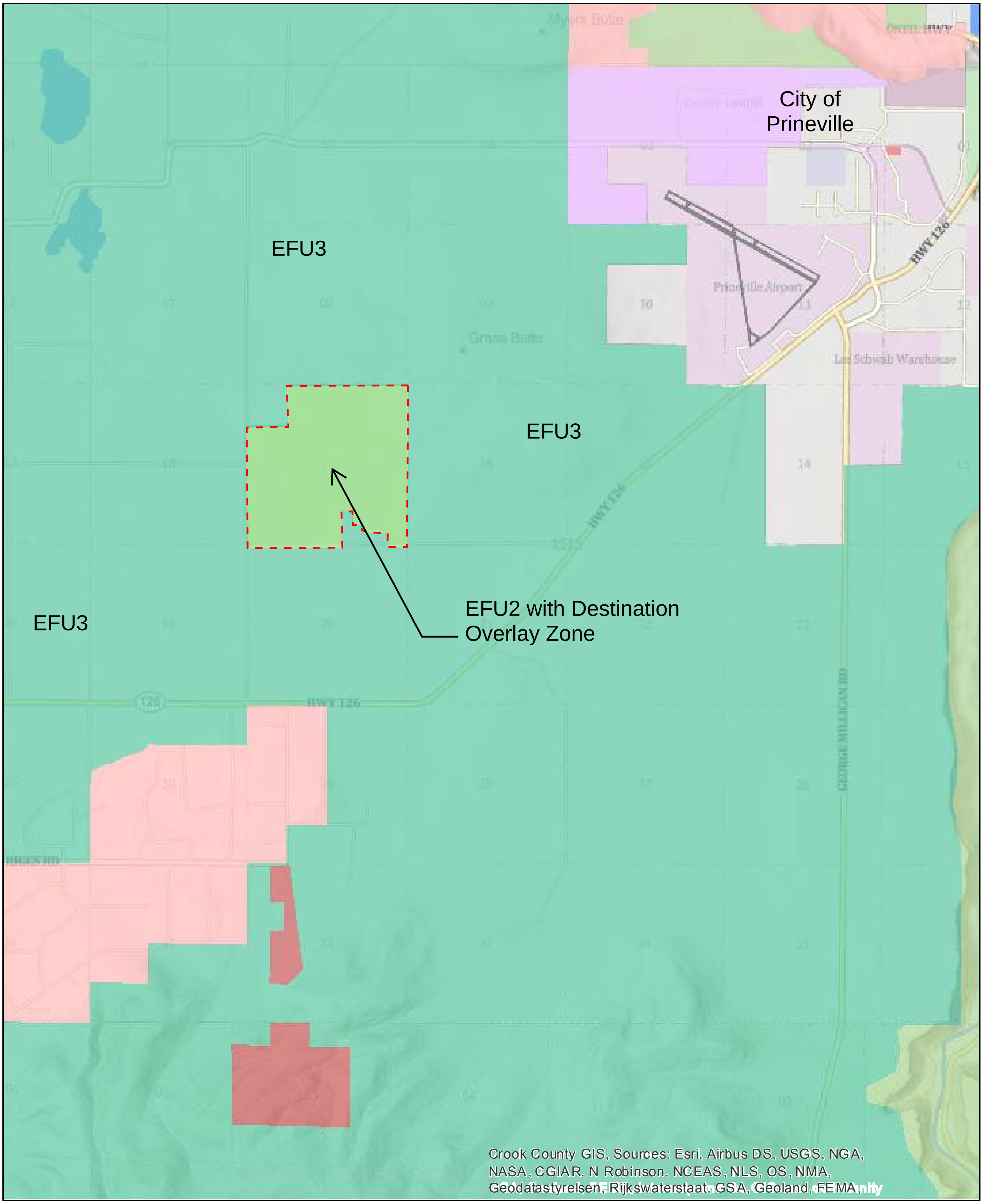
CANCELLED:
105
200



Revised: JK
11/17/2009
15S15E17

Appendix 8

Crook County, Oregon



Disclaimer: CROOK COUNTY MAKES NO WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ANY OTHER MATTER. THE COUNTY IS NOT RESPONSIBLE FOR POSSIBLE ERRORS, OMISSIONS, MISUSE, OR MISINTERPRETATION. COUNTY DIGITAL INFORMATION IS PREPARED FOR REFERENCE PURPOSES ONLY AND SHOULD NOT BE USED, AND IS NOT INTENDED FOR, SURVEY OR ENGINEERING PURPOSES OR THE AUTHORITATIVE AND/OR PRECISE LOCATION OF BOUNDARIES, FIXED HUMAN WORKS, AND/OR THE SHAPE AND CONTOUR OF THE EARTH. NO REPRESENTATION IS MADE CONCERNING THE LEGAL STATUS OF ANY APPARENT ROUTE OF ACCESS IDENTIFIED IN DIGITAL OR HARDCOPY MAPPING OF GEOSPATIAL INFORMATION OR DATA. DATA FROM THE CROOK COUNTY ASSESSOR'S OFFICE MAY NOT BE CURRENT. DATA IS UPDATED AS SCHEDULES AND RESOURCES PERMIT. PLEASE NOTIFY CROOK COUNTY GIS OF ANY ERRORS (541) 416-3930.

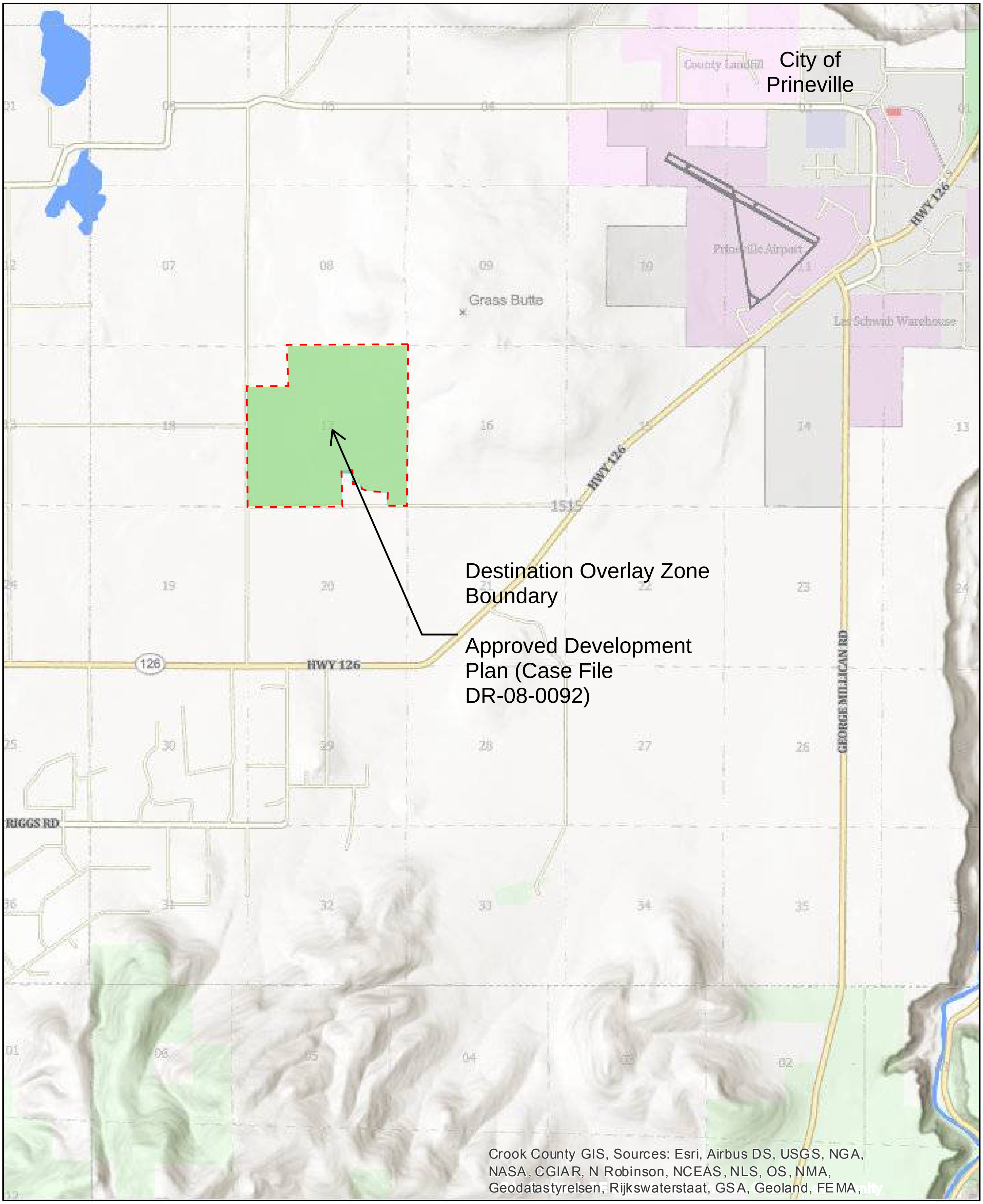
0 0.75 1.5 mi

N

Crook County GIS
GEOGRAPHIC INFORMATION SYSTEMS

Appendix 9

Crook County, Oregon



0 0.75 1.5 mi

N

Crook County GIS
GEOGRAPHIC INFORMATION SYSTEMS

Appendix 10

CROOK COUNTY COURT
FINDINGS AND DECISION
CROSSING TRAILS RESORT DEVELOPMENT PLAN
DR-08-0092

APPLICANT: PROPERTY OWNER:	818 Powell LLC c/o Gene Gramzow 380 Q Street, Suite 240 Springfield, OR 97477
ATTORNEY:	Peter Livingston Martha O. Pagel Myles A. Conway Schwabe Williamson & Wyatt 1211 SW 5th Avenue, Suite 1500 Portland, OR 97204
AGENT:	Ron Hand Chelsea Schneider WH Pacific 920 SW Emkay Drive, Suite C-100 Bend, Oregon 97702
ENGINEER:	Jeff Fuchs Bussard Williams 389 Scalehouse Court Bend OR 97702
PROPERTY:	See attached property description
SUBJECT:	Request for Development Plan approval to allow a destination resort on approximately 580 acres of land zoned EFU-3 with a Destination Resort (DR) overlay.

Introduction and Findings of Fact

818 Powell LLC ("Applicant"), seeks to develop the Crossing Trails Resort as a visitor-oriented destination resort in Crook County ("County"). The proposed resort will be located on a 580-acre site in the vicinity of the rural community of Powell Butte. The site is located within the County destination resort overlay zone. The property is north of Oregon Highway 126 and east of SW Parrish Lane. It is approximately six miles west of downtown Prineville and 10 miles east of Redmond. Privately owned lands surround it on all sides, with large ranch properties

adjacent to the south, west and north. The open grasslands of Grass Butte are to the east. The planning commission toured the proposed resort site on June 4, 2008.

The property is relatively flat with a gentle slope rising approximately 280 feet from the southwest to northeast corners of the site. It has prominent views of the Cascade mountain peaks, as well as Smith Rock State Park. Nearly one-third of the property contains areas of meadow grass. The remainder is vegetated with juniper and other low growth vegetation common to Central Oregon.

The property is bisected by an irrigation canal serving the Central Oregon Irrigation District ("COID"), which runs from the southern border of the property to its northwest corner. COID utilizes the irrigation canal during the irrigation season from April through September of each year. The property is also bisected by large, regional electric transmission lines owned and controlled by the Bonneville Power Administration ("BPA"), which run north to south. The property is burdened by a 150-foot-wide electrical utility easement in favor of the BPA. There are also a 150-foot-wide Portland General Electric ("PGE") easement east of the BPA easement and a second BPA easement east of the PGE easement, 77.5 feet in width. The terms of these easements limit development opportunities on the eastern portion.

The property has approximately 163 acres of appurtenant water rights through COID. Portions of these water rights are the subject of a temporary in-stream water lease with the State of Oregon that can be terminated when the water rights are needed for the project. The remainder of the water has been applied to the land in connection with an ongoing, low-scale livestock grazing operation on the subject property. At present, the property is developed with three existing dwellings and associated outbuildings. The property has two irrigation ponds. There are two nonfarm parcels on the southern edge of the property.

The property is located north of Highway 126 and east of SW Parrish Lane. Primary and secondary resort access points to the resort will be located on SW Wiley Road, which borders the subject property to the south. An additional access point, for emergency access only, will be located on SW Parrish Lane. Traffic to Prineville, which is to the east, and Bend/Redmond, which are to the west, will use Highway 126.

The County Planning Commission ("Commission") held hearings on this application on April 30, June 4, June 18, July 2, August 13 and August 27, 2008. The Commission deliberated at public meetings on September 3 and September 9, 2008. Based on written and oral testimony received, the Commission concluded that the resort met all applicable destination resort siting standards in the Crook County Code ("CCC" or "Code") and ORS 197.435-197.467.

On November 3, 2008, the Oregon Department of Transportation ("ODOT") and the Goal One Coalition ("Coalition") filed appeals of the Commission's decisions with the County Court ("Court") under CCC 18.172.110. Under CCC 18.172.110(4), the appeal from the Commission final decision was based on the record made before the Commission. However, as allowed by CCC 18.172.110(12), the Court permitted written argument as follows: (1) Applicant submitted a memorandum dated November 26, 2008, which addressed the issues stated in the notices of appeal; (2) ODOT submitted a letter dated November 26, 2008, containing a legal analysis and a proposed condition 28 (revised and renumbered in this decision to Condition 36) ;

and (3) the Coalition submitted a letter dated December 3, 2008, responding to the Applicant's November 26, 2008 memorandum;

On November 12, 2008 the Court set the schedule for the appeal and considered a motion to take evidence outside the record filed by Jan Wilson of the Coalition on behalf of Anderson et al pursuant to Crook County Code § 18.172.110(12)(a)(vi) which states:

18.172.110(12)(a)(vi) The appellate body may, at its option, admit additional testimony and other evidence from an interested party or party of record to supplement the record of prior proceedings. The record may be supplemented by order of the appellate body or upon written motion by a party. The written motion shall set forth with particularity the basis for such request and the nature of the evidence sought to be introduced. Prior to supplementing the record, the appellate body shall provide an opportunity for all parties to be heard on the matter. The appellate body may grant the motion upon a finding that the supplement is necessary to take into consideration the inconvenience of locating the evidence at the time of initial hearing, with such inconvenience not being the result of negligence or dilatory act by the moving party.

The evidence the Coalition sought to introduce related to Crook County appeals fees. The Court elected not to take evidence outside the record because the Court determined that the Coalition had not established that "the supplement is necessary to take into consideration the inconvenience of locating the evidence at the time of the initial hearing, with such inconvenience not being the result of negligence or dilatory act by the moving party" pursuant to the Code. The Court noted that the staff memorandum had been available since June 13, 2008 and that the other information appeared to be the same as the information that was submitted in *Young v. Crook County* (LUBA No. 2007-250 June 11, 2008) , *aff'd* 224 Or App 1, (2008). The Court found that the information could have been submitted into the record during the initial hearings in front of the Commission. The Court further stated that the appropriate forum to bring such a challenge was during the public hearings held to review adoption of the annual county fee schedule, and that the annual schedule adopted had not been appealed to LUBA.

On December 3, 2008, the Court heard testimony from representatives of Applicant, ODOT and the Coalition. Then, as directed by the Court, the parties submitted additional written argument as follows: (1) Applicant submitted an email on December 8, 2008, with three opinions attached and a proposed alternative Condition 28 (revised and renumbered in this decision to Condition 36); and (2) the Coalition submitted a transcript of an omitted public hearing held with respect to this matter held on September 9, 2008 before the Planning Commission; (3) the Coalition submitted a letter dated December 10, 2008, responding to Applicant's email; and (4) Applicant submitted a memorandum on December 12, 2008, addressing the Coalition's letter.

On December 17, 2008, the Court deliberated and required modifications to the Commission's findings and conditions as they pertain to certain issues raised on appeal. Those modifications are incorporated into the findings and conditions below. Except as modified, the Court accepts and adopts the Commissions findings and conclusions as they are stated below. The Court approves the proposed development plan for a destination resort.

18.116.020 Applicability.

(1) The provisions of this chapter shall apply solely to development which meets the standards set forth in CCC 18.116.040 or 18.116.050. Development, which meets the standards in CCC 18.116.040, shall be referred to hereafter as a "destination resort," and development, which meets the standards in CCC 18.116.050, shall be referred to hereafter as a "small destination resort." Where special standards or criteria are not specifically called out for small destination resorts, the standards for destination resorts shall apply. For a destination resort application, the standards and procedures of this chapter shall govern in cases where they conflict with the standards or procedures of the underlying zone. Other provisions of this title, made applicable by specific map designations such as the floodplain combining zone (FP), airport obstruction overlay zone, riparian protection zone, and sensitive bird habitat combining zone (SBH), or otherwise applicable under the terms of the county zoning ordinance shall remain in full force and effect, except as otherwise specified herein.

(2) Destination resorts shall be allowed only on tracts mapped by the county as eligible for destination resort siting and designated as such in the comprehensive plan.

As shown on the Destination Resort Overlay Zone map, Application Exhibit ("App. Ex.") 7, the entire property is eligible for destination resort siting and development.

18.116.040 Standards.

A destination resort shall meet the following standards:

(1) Development shall be located on a tract that contains at least 160 acres.

The proposed destination resort site is approximately 580 acres.

(2) Development shall not be located on high value farmland.

The proposed destination resort will not be located on High Value Farmland. OAR 660-033-0020(8)(a) defines "High Value Farmland" as "land in a tract composed predominantly of soils that are: (A) Irrigated and classified prime, unique, Class I or II; or (B) Not irrigated and classified prime, unique, Class I or II." Similarly, CCC 18.116.030(3) defines High Value Farmland as "a tract composed predominantly of soils that are classified as prime, unique, Class I, or Class II. A tract is composed predominantly of such soils if more than 50% of the acreage of the tract is composed of prime, unique, Class I, or Class II soils."

The resort tract contains no Class I or II soils and no areas of prime or unique soils. Soil data from the Natural Resource Conservation Service ("NRCS") shows that over 50 percent of the tract is composed of soils with a NRCS rating of Class III or higher. The Stuckmond-Lickskillet complex is Class VIe. The Redmond-Stuckmond complex and the Searles-Lickskillet complex are Class IIIe, if irrigated, and Class VIe, if not irrigated. *See* App. Ex. 31. Therefore, because the tract is not composed of predominantly Class I, II, or prime soils, it does not qualify as High Value Farmland under the state or local rules.

Some opponents, including the Coalition and 1000 Friends of Oregon, contend that a resort may not be sited on the subject property for the following reasons:

(1) ORS 197.455 states, "A destination resort must be sited on lands mapped as eligible for destination resort siting by the affected county. The county may not allow destination resorts approved pursuant to ORS 197.435 to 197.467 to be sited in any of the following areas: * * * (b)(B) On a site within three miles of a high value crop area." A high-value crop area is defined by ORS 197.435(2) to mean "an area in which there is a concentration of commercial farms capable of producing crops or products with a minimum gross value of $1,000 per acre per year. These crops and products include field crops, small fruits, berries, tree fruits, nuts or vegetables, dairying, livestock feedlots or Christmas trees as these terms are used in the 1983 County and State Agricultural Estimates prepared by the Oregon State University Extension Service."

(2) ORS 197.455(1) was amended in 2003 as follows (with removed language in *italics* and new language in **bold**):

> A destination resort [*shall*] **must** be sited on lands mapped as eligible for destination resort siting by the affected county. [*A map adopted by a*] **The** county [*shall*] **may** not allow destination resorts approved pursuant to ORS 197.435 to 197.467 to be sited in any of the following areas.

(3) Hay is a "high-value crop," since recently it has been selling at a minimum gross value of $1,000 per acre per year. Since the land is presently producing hay, it is a high-value crop area and cannot be developed as a destination resort.

In response, Applicant states:

(1) Opponents misread ORS 197.455(1), which begins by a reference to "lands mapped as eligible." The statute addresses the mapping process and identifies certain areas that cannot be mapped as eligible for resorts. To focus on one sentence, to the exclusion of the balance of the statute, is to improperly disregard context. ORS 197.455(2) provides, "In carrying out subsection (1) of this section, a county shall adopt, as part of its comprehensive plan, a map consisting of eligible lands within the county. The map must be based on reasonably available information and may be amended pursuant to ORS 197.610 to 197.625, but no more frequently than once every 30 months. The county shall develop a process for collecting and processing concurrently all map amendments made within a 30-month period. A map adopted pursuant to this section shall be *the sole basis for determining whether tracts of land are eligible for destination resort siting* pursuant to ORS 197.435 to 197.467." (Emphasis added.) In other words, a county cannot change the designation of land as eligible for destination resort siting without amending its destination resort map. It cannot make individual eligibility determinations at the time of application for a resort.

(2) The 2003 amendment to ORS 197.455(1) does not change its meaning. In the context of the entire statute, it would be incorrect to rely on a change in one sentence, which was made without mention anywhere in the legislative history of the statute, and which would invalidate a clear history involving case law (*Foland v. Jackson County*, 311 Or 167, 807 P2d 801 (1991)) and subsequent statutory amendments intended to address the *Foland* holding. As stated by the Destination Resort Handbook, published by the Department of Land Conservation

and Development in 1995, "The purpose of mapping is to clearly show areas available for resort development. * * * It is important that counties precisely map eligible areas. The mapping must be property-specific to avoid uncertainty in applying the plan. *The law says that this map is the sole determinant of tracts eligible for destination resorts*." (Emphasis added.) Goal 8, which addresses destination resort siting, states in the "Implementing Measures": "A map adopted pursuant to this section shall be the sole basis for determining whether tracts of land are eligible for siting of large destination resorts under the provisions of this goal and ORS 197.435 to 197.467."

The Merriam Webster dictionary defines the term "field crop" as "an agricultural crop (as hay, grain, or cotton) grown on large areas." However, while hay is therefore a "field crop" as that term is used in ORS 197.435(2), hay is not a high-value crop. The opponents have not persuaded the Court that hay has had a *consistent* value of more than $1,000 per acre per year.

As explained by Applicant's agricultural consultant, Bruce Andrews, in his August 27, 2008 letter (R 198-99), the per-acre values of hay and alfalfa production in the County have been below $500 per acre for the last five production years. In the production and marketing years of 2006 and 2007, the combined average value (sales) per acre was $319.40 and $364.50.

The Crook County Comprehensive Plan ("CCCP") discusses high value crop areas at length and explains the methodology that was used to map them. CCCP, pp. 76-78. The mapping work was done by Stanley D. Miles, a consultant and Agricultural Economist Emeritus at Oregon State University. As explained by the CCCP, p. 76, "The DLCD Destination Resort Handbook further explains that this standard [for a High Value Crop Area] does not include land that routinely fails to produce High Value Crops, but has an exceptionally productive year."

Concerning the report prepared by Miles ("the Miles Report"), the CCCP states:

> "[T]he concentrations of commercial farms growing High Value Crops in Crook County are located north and northwest of Prineville and in the northwest corner of Crook County. The Miles Report did not identify a concentration of High Value Crops in the Powell Butte Area (generally defined as Range 14 East, Townships 16 South and 15 South). . . .
>
> "To explain why the Powell Butte Area is not a High Value Crop Area, the Miles Report explains that, under Goal 8 and the Destination Resort Handbook, the definition of "High Value Crop Area" emphasizes the productivity of commercial farms and does not focus solely on the potential productivity of a farm based upon soil type alone. Rather, the definition takes into account all factors relevant to the *consistent* production of crops with a minimum gross value of $1,000 per acre per year. The Miles Report shows that the unique factors such as the high elevation, high risk of frost, short growing season, and relatively unproductive soil profiles within the Powell Butte Area limit farmers' ability to cover the costs of production and therefore render the area unsuitable for consistent High Value Crop production. Therefore, the Powell Butte Area does not support a concentration of commercial farms that are capable of producing High Value Crops on a regular or routine annual basis due to climate and topography.

Because the High Value Crop Area standard 'does not include land that routinely doesn't produce high value crops, but has an exceptionally productive year,' the Powell Butte Area is not a High Value Crop Area." CCCP, pp. 77-78.

In adopted Ordinance 17, Amendments 52 and 53, the County considered the issue of mapping of high value crop lands. The county's findings are to be found in Exhibit A of the Comprehensive Plan relating to Destination Resorts. Therein, the County in painstaking detail explains the process used to map high value croplands in the County at the time of map preparation in a report and subsequent supplement. The mapping relied upon data provided by the U.S. Census of Agriculture, Oregon State University, USDA and Crook and Jefferson County OSU Extension offices. The report noted that the definition of a high value crop area "takes into account all factors relevant to the *consistent* production of crops with a minimum gross value of $1,000 per acre per year." (Emphasis in the original.) The report shows that the "unique factors such as the high elevation, high risk of frost, short growing season and relatively unproductive soil profiles within the Powell Butte area limit farmers' ability to cover the costs of production and therefore render the area unsuitable for consistent High Value Crop production."

Appellants during testimony before the planning commission cited advertising and data to the effect that the value of hay will likely exceed $1,000 per acre in 2008 based on current pricing. That may be so, although data supporting this contention will lag. A one-year anomaly, however, does not a *consistent* trend make. The best data before the Commission is at R 200, and consists of a chart prepared by consultant Bruce Andrews showing that the value of alfalfa hay during the period 2002 to 2007 consistently averaged under $500 per acre. A reasonable decision maker could have and likely did rely on that evidence to conclude that the hay, at this time, is not a high value crop, and even had the decision-makers on the Commission determined otherwise, that would not have relieved them of the obligation to evaluate the siting criteria for the proposed development solely within the context of the adopted overlay map. The concept that a mapping process must precede a determination of viability for high value crop production was previously confirmed by LUBA in *Boyer v. Baker County,* 35 Or LUBA 223 (1998), wherein LUBA concluded: "The statutory order of operations for confirming that a destination resort overlay amendment meets the requirements of Goal 8 and ORS 197.435(2) is to first map the concentrations of commercial farms and then determine which farms could produce the requisite $1,000 per-acre per-year yield. " Appellants request of this court is to do the reverse: to determine the viability of high value crop production on an acre-by-acre basis, and then, based on that analysis, to add property to or delete property from a previously adopted map.

The Court agrees with Applicant that ORS 197.455(1) applies to the mapping process for destination resorts and is not to be applied to individual destination resort applications on land already mapped as eligible for destination resort development. The Court is also persuaded by Applicant's evidence, which is consistent with the analysis in the CCCP, that hay and alfalfa are not "high-value" crops with a minimum gross value of $1,000 per acre per year.

Powell Butte Agreement

Some members of the public contend that a destination resort cannot be sited on the subject property because of a mediated settlement agreement ("Powell Butte Agreement") associated with the appeal of *Burke v. Crook County*, LUBA Nos. 98-200, 98-221, 98-222, 98-223, 98-224, 98-225, 99-037, 99-038, 99-039, 99-040 and 99-041. *Burke* was an appeal of a series of land use decisions called "the exceptions ordinances" and the "non-resource ordinances." It adopts certain policies as part of the County's comprehensive plan, including Policy 2, which provides, "The County will not initiate additional exceptions or nonresource designations within the Powell Butte Study Area until the next periodic review," and Policy 3, which provides, "The land north of Highway 126 shall be retained as exclusive farm use as that land is composed of large parcels and contains less rural residential development than the area south of the highway."

When the County adopted the destination resort map in Ordinance No. 17, Amendment 52 on May 22, 2002, it found as follows:

> "The County Court finds that the Mutual Settlement Agreement entered into by the County to settle LUBA Case Nos. 98-220, 222, 223, 224, 225 and 99-037, 038, 039, 040, 041 does not prohibit the county from implementing Goal 8. The Settlement Agreement governs the reclassification of certain lands within the Powell Butte Study Area. Aside from the zoning map and code amendments approved pursuant to the Agreement, the Agreement prohibits additional exceptions or nonresource designations within the Powell Butte Study Area except in connection with periodic review. However, the Agreement specifically allows the continuation and establishment of uses that are permitted outright or conditionally on resource land. Destination resorts are permitted as a condition use on EFU land pursuant to ORS 215.283(2)(t). Furthermore, Goal 8 and ORS 197.450 specifically authorize destination resorts on resource lands without an exception to Goals 3, 4, 11, or 14. All property underlying the Destination Resort Overlay will maintain its current zoning designation, including properties with *resource designations*." (Emphasis added).

Applicant has properly relied on the County destination resort eligibility map, which was adopted in May 2002. Opponents' contention that the Powell Butte Agreement precludes destination resort development on the subject property is a collateral attack on the final land use decision to adopt the map. The attack is not timely and must be rejected.

(3) Development shall include meeting rooms, restaurants with seating for at least 100 persons, and a minimum of 150 separate rentable units for overnight lodging, oriented toward the needs of visitors rather than area residents. However, the rentable units may be phased in as follows:

The resort is planned to contain a restaurant and meeting rooms with seating for a minimum of 100 people. These facilities will be located within the "Core Area" shown on the Development Plan map, App. Ex. 3. Applicant explains that the eating and meeting facilities will be oriented toward the needs of visitors rather than area residents. These facilities will be open for public use.

(a) A total of 150 units of overnight lodging shall be provided as follows:

The resort will contain a minimum of 150 units of overnight lodging, as that term is defined in CCC 18.116.030(5):

> "Overnight lodgings" means permanent, separately rentable accommodations which are not available for residential use. Overnight lodgings include hotel rooms, lodges, cabins and time-share units. Individually owned units may be considered overnight lodgings if they are available for overnight rental use by the general public for at least 45 weeks per calendar year through a central reservation and check-in service. Tent sites, recreational vehicle parks, manufactured dwellings, dormitory rooms and similar accommodations do not qualify as overnight lodgings for the purpose of this definition.

Applicant has not finalized the make-up and allocation of its overnight lodging units. To fulfill the overnight accommodation requirements, the resort will build a combination of stand-alone units, called "Casitas," together with multi-family structures with individual "lock off" rooms. Applicant anticipates the development of 154 stand-alone Casita units, each of which will be approximately 400 square feet in size.

In addition to the Casita units, Applicant will develop a number of multi-family and/or townhome structures, each offering a number of separate rentable overnight units. Within these structures, Applicant will utilize the lock-off concept, where an overnight lodging structure is divided into multiple units that can be separately rented. Each such structure will provide several separately rentable units to meet the overnight accommodation requirements of the destination resort code. A number of area resorts employ the lock-off concept. Lock-offs provide more overnight lodging units, with less impact on the landscape.

On appeal to the Court, the Coalition stated concerns about the definition of "Casitas" and "lock off rooms" and how they will be counted toward overnight accommodations. The application of this standard has been an issue in administering previous decisions related to destination resort approvals. At oral argument on December 3, 2008, Applicant represented that all overnight units will be at least 400 square feet and will include a self-contained bath. Any such units should have a kitchenette, including a sink for food preparation (in addition to the bathroom sink); either a microwave oven or a hot plate; and a refrigerator.

The overnight lodging units may also include some individually owned units, subject to the rental availability requirements stated in CCC 18.116.030(5). Applicant will build (or financially assure, to the extent financial assurances are permitted by law) enough overnight lodging units to meet the 150-unit minimum standard and to maintain the required 2:1 ratio.

(i) At least 75 units of overnight lodging, not including any individually owned homes, lots or units, shall be constructed or guaranteed through surety bonding or equivalent financial assurance prior to the closure of sale of individual lots or units.

ORS 197.445(4)(b)(B) now requires that in Eastern Oregon, including Crook County, at least 50 units of overnight lodging must actually be constructed prior to the closure of sale of individual lots or units. Applicant shall construct these units during the first phase of development. The 25 units remaining of the first increment of 75 units shall be constructed or guaranteed through surety bonding or equivalent financial assurance prior to the closure of sale of individual lots or units.

(ii) The remainder shall be provided as individually owned lots or units subject to deed restrictions that limit their use to overnight lodging units. The deed restrictions may be rescinded when the resort has constructed 150 units of permanent overnight lodging as required by this subsection.

The remaining 75 lots or units shall be owned by Applicant, Applicant's successors and assigns, sold as timeshares or sold as individually owned lots or units subject to deed restrictions that limit their use to overnight lodging units, subject to rescission when the resort has constructed 150 units of permanent overnight lodging.

(b) The number of units approved for residential sale shall not be more than two units for each unit of permanent overnight lodging provided under subsection (3)(a)(i) of this section.

Applicant will maintain the required 2:1 ratio during the life of the resort, documenting ongoing compliance prior to tentative subdivision plan approval for each phase of resort development.

(c) The development approval shall provide for the construction of other required overnight lodging units within five years of the initial lot sales.

ORS 197.445(4)(b)(C) requires that after the construction of the first 50 overnight units, at least 50 of the remaining 100 overnight lodging units required to meet the statutory minimum of 150 units must be constructed or guaranteed through surety bonding or equivalent financial assurance within five years of the initial lot sales. The remaining 50 overnight lodging units required by statute must be constructed or guaranteed through surety bonding or equivalent financial assurances within 10 years of the initial lot sales.

Reading the statute together with the Crook County Code, and implementing the code where it requires more than the statute, at least 50 units of overnight lodging must be constructed prior to the closure of sale of the first individual lot or unit. At least 100 more units of overnight lodging must be constructed within five years of the sale of the initial lot sales. Under ORS 197.445(b)(F), if Applicant guarantees the construction of any of the required 150 units through surety bonding or other equivalent financial assurance, these overnight lodging units must be constructed within four years of the date of the execution of the surety bond or other equivalent financial assurance.

(4) All required developed recreational facilities, key facilities intended to serve the entire development, and visitor-oriented accommodations shall be physically provided or guaranteed, proportional to the extent of the phased development, pursuant to CCC 18.160.040 through surety bonding or equivalent financial assurances prior to closure of sale of individual lots or units. In phased developments, developed recreational facilities and other key facilities intended to serve a particular phase shall be constructed prior to sales in that phase or

guaranteed through surety bonding. Nothing in this subsection shall be interpreted to require the construction of all approved phases of a destination resort; provided, that the destination resort as developed complies with the minimum development requirements of subsections (3), (5), and (7) of this section.

This criterion distinguishes between facilities and accommodations intended to serve the entire development and facilities intended to serve a particular phase. Those for the entire development must be physically provided or guaranteed "proportional to the extent of the phased development." An estimate of the total cost of the facilities and accommodations intended to serve the entire development is provided below.

The proportionality component of this criterion will be satisfied because all of the required developed recreational facilities, key facilities intended to serve the entire development, and visitor-oriented accommodations will be constructed in the first phase.

(5) At least $7,000,000 shall be spent on improvements for on-site developed recreational facilities and visitor-oriented accommodations exclusive of costs for land, sewer and water facilities, and roads. Not less than one-third of this amount shall be spent on developed recreational facilities. Spending required under this subsection is stated in 1993 dollars. The spending required shall be adjusted to the year in which calculations are made in accordance with the United States Consumer Price Index.

The proposed recreational facilities will include an 18-hole golf course and associated golf complex facilities, various recreational facilities, hiking/running trails, a swimming pool, and similar recreational amenities. A list of the potential recreational uses/amenities that may be developed at the resort is set forth in App. Ex. 8.

The average Consumer Price Index for urban households, as compiled by the U.S. Department of Labor Bureau of Labor Statistics, indicates that $7 million in 1993 dollars has the same buying power as $10,225,329 in year 2008. Not less than one-third of this amount ($3,408,443) must be spent on "developed recreational facilities" as that term is defined in CCC 18.16.030(2). Applicant will exceed these minimum investment standards.

The following construction cost estimates are based on unit prices taken from Applicant's past construction projects together with an analysis of data developed at similar resort facilities in Central Oregon. The following cost estimate demonstrates that Applicant will exceed the requirements for total expenditures on required resort facilities. Applicant also retains the flexibility to refine the type of amenities and commercial facilities provided within the project.

ESTIMATED TOTAL COST

RESORT FACILITIES	
Eating Facilities for 100 Persons Minimum	$800,000
Meeting Space for 100 Persons	$400,000
154 "Casita" Units (overnight accommodations)	$9,240,000
96 lock off multi-family units (overnight accommodations)	$10,560,000
RESORT FACILITIES SUB-TOTAL:	**$21,000,000**
RECREATIONAL/OPEN AMENITIES SUB-TOTAL	
18-Hole Golf Course, including Driving Range	$4,000,000
Golf Complex and Maintenance	$1,000,000
Trail System	$300,000
Swimming Pool/Jacuzzi	$200,000
RECREATIONAL AMENITIES SUB-TOTAL:	**$5,500,000**
TOTAL ESTIMATED DEVELOPMENT COSTS:	**$26,500,000**

The above-stated minimum construction cost estimate for eating facilities and meeting space is based on the construction of an 8,000 square foot conference facility that will provide sufficient space for both a 4,000 square foot meeting facility and a 4,000 square foot dining facility. Each facility will be designed to accommodate a minimum of 100 persons on site. Applicant projects a $150/per-square-foot construction cost figure for this eating/meeting facility. The total cost of such facility is estimated at $1.2 million.

The above-stated minimum construction cost estimate for overnight accommodation units is as follows. Applicant intends to construct 154 stand alone Casita units that will be approximately 400 square feet in size. The total square footage of Casita units is projected as 61,600 square feet. Applicant believes these units can be constructed for a price of $150 per square foot, for a total cost of $9,240,000. In addition to the Casita units, Applicant anticipates the construction of 32 attached multi-family townhome units. Each of these 32 multi-family units will have three different lock-off units, for a total of 96 additional overnight accommodation units. The 32 multi-family units are expected to be a minimum of 2,200 square feet in size for a total square footage of 70,400 square feet. Applicant anticipates construction of such units for a price of $150 per square foot, for a total investment of $10,560,000.

The golf course construction cost estimate includes clearing and grubbing, rough grading, green and tee construction, bunker drainage, bunker sand, finish grading, seeding and cart paths. The construction cost estimate is based on golf course construction experience as well as an analysis of the costs incurred in the construction of other Central Oregon resort projects.

The total estimated cost of $26,500,000 far exceeds the minimum investment requirement of $10,225,329. In addition, the estimate of $5,500,000 for recreational facilities far exceeds the minimum investment required of $3,408,443.

(6) Commercial uses are limited to those listed in CCC 18.116.070(8). Such uses must be internal to the resort, and are limited to the types and levels of use necessary to meet the needs of visitors to the resort. Industrial uses of any kind are not permitted.

The potential commercial uses that may be developed at the resort are listed in App. Ex. 9. These uses are consistent with CCC 18.116.070(8). They will be located in the areas designated for Core Area, Core Area/Single Family, Ancillary Resort Uses, and Ancillary Resort Uses as Allowed in Easements on the Development Plan map, App. Ex. 3. All commercial uses will be internal to the resort, limited to the types and levels of use necessary to meet the needs of resort visitors. No industrial uses are proposed.

The Coalition objects that the commercial uses will be of a nature other than those intended to serve the resort community. The Commission specifically addressed this concern in what is now Condition 7, which, by incorporating reference to CCC18.116.070(8), limits commercial services to those "necessary to meet the needs of visitors to the resort." Absent knowing what specific businesses will someday be recruited to the proposed development, it is unclear how the Coalition would have the Court or the Commission further address this condition to provide more specificity or assurance.

(7) At least 50 percent of the site shall be dedicated to permanent open space, excluding yards, streets, and parking areas.

As depicted on the Development Plan map, App. Ex. 3, and the Open Space Management Plan, App. Ex. 15, over 50 percent of the site, including the area devoted to the golf courses, will be maintained as open space throughout the life of the resort. Compliance with this standard will be continuously documented prior to approval of each subdivision plat. Recorded deed restrictions will ensure that open space within the resort is protected in perpetuity.

(8) If the site includes a resource site designated on the county's Goal 5 inventories as significant, the resource site shall be protected in accordance with the adopted Goal 5 management plan for the site. Sites designated for protection pursuant to Goal 5 shall also be preserved by design techniques, open space designation, or a conservation easement sufficient to protect the resource values of the resource site. Any conservation easement created pursuant to this subsection shall be recorded with the property records of the tract on which the destination resort is sited prior to development of the phase of which the resource site is a part.

According to County staff, the resort property does not contain any inventoried Goal 5 resources. The Oregon Department of Fish and Wildlife ("ODFW") has confirmed (on the County comment form submitted as page 4 of the destination resort application cover sheet), that there are no wildlife overlays or designated wildlife ranges on the property. There is also no Sensitive Bird Habitat area anywhere on the property.

(9) Riparian vegetation within 100 feet of natural lakes, rivers, streams and designated significant wetlands shall be retained as set forth in CCC 18.124.090

The dry terrain indicates there are no natural lakes, rivers, streams or designated wetlands on the subject property. However, as noted above, a COID irrigation canal crosses a portion of the future resort site. The canal is used to convey water during the course of the regular irrigation season (April through October). There is no "riparian vegetation," and there are no apparent areas of designated wetlands within or adjacent to the canal. If any wetlands are discovered, Applicant shall mitigate for the loss of wetlands through enhancement of the remaining wetlands (if any) and the creation of new wetlands at a different location.

(10) The dimensional standards otherwise applicable to lots and structures in underlying zones pursuant to Chapters 18.16 through 18.112 and 18.120 through 18.140 CCC shall not apply within destination resorts. The planning commission shall establish appropriate dimensional standards during final development plan review.

The applicant proposes the dimensional standards set forth in App. Ex. 18. As permitted by this criterion, the final dimensional standards will be worked out during development plan review.

(11) Except where more restrictive minimum setbacks are called for, the minimum setback from exterior property lines, excluding public or private roadways through the resort, for all development (including structures and site-obscuring fences of over three feet in height but excepting existing buildings and uses) shall be as follows:

(a) Two hundred fifty feet for commercial development listed in CCC 18.116.070, including all associated parking areas;

Applicant shall comply with this standard.

(b) One hundred feet for visitor-oriented accommodations other than single-family residences, including all associated parking areas;

Applicant shall comply with this standard.

(c) Twenty-five feet for above-grade development other than that listed in subsections (11)(a) and (b) of this section;

Applicant shall comply with this standard.

(d) Twenty-five feet for internal roads;

Applicant shall comply with this standard.

(e) Twenty-five feet for golf courses and playing fields;

Applicant shall comply with this standard.

(f) Twenty-five feet for jogging trails, nature trails and bike paths where they abut private developed lots, and no setback where they abut public roads and public lands;

Applicant shall comply with this standard.

(g) The setbacks of this section shall not apply to entry roadways, landscaping, utilities and signs.

Compliance with these setbacks shall be documented during each phase of subdivision or site plan review. As explained below in response to the approval criteria, additional setbacks have been imposed where appropriate to ensure compatibility with surrounding uses.

(12) Alterations and nonresidential uses within the 100-year floodplain and alterations and all uses on slopes exceeding 25 percent are allowed only if Applicant submits and the planning commission approves a geotechnical report that demonstrates adequate soil stability and implements mitigation measures designed to mitigate adverse environmental effects. Such alterations and uses include, but are not limited to:

(a) Minor drainage improvements which do not significantly impact important natural features of the site;

(b) Roads, bridges, and utilities where there are no feasible alternative locations on the site; and

(c) Outdoor recreational facilities, including golf courses, bike paths, trails, boardwalks, picnic tables, temporary open sided shelters, boating facilities, ski lifts, and runs.

The general physical characteristics of the site are depicted in the series of maps in App. Ex. 4. The App. Ex. 4 maps include easements (App. Ex. 4.1), year 2005 aerial photograph of the site (App. Ex. 4.2), a map of adjacent properties (App. Ex. 4.3), wildlife migration zone map (App. Ex. 4.4), 100-year floodplain (showing floodplains) (App. Ex. 4.5), elevation/topography analysis (App. Ex. 4.6) and slope analysis (App. Ex. 4.7).

The App. Ex. 4.5, "100 Year Floodplain," is based upon standard Federal Emergency Management Association ("FEMA") mapping. As App. Ex. 4.5 demonstrates, the 100-year floodplain is mapped along a corridor that parallels the COID Irrigation ditch as it traverses the subject property. Most, if not all, of the area in the 100-year floodplain falls within areas of right-of-way held by COID. Bridges, canal crossings, pathways and the golf course amenities are the only improvements anticipated in this area. Applicant shall comply with all applicable legal and permitting requirements to the extent any structures are constructed in areas impacted by the floodplain.

With the exception of two minor rock ridgelines, no portion of the site contains slopes in excess of 25 percent. One of the ridgelines runs parallel to the irrigation canal in the southern portion of the resort. Another rock ridge is located in the northeastern portion of the subject property and is largely encumbered by the BPA transmission line easements (discussed in greater detail below). The Slope Analysis map, App. Ex. 4.7, shows existing slopes on the subject property and the two rock ridgelines.

The Coalition's request for assurances that development will not be allowed on slopes of greater than 25 percent or within the floodplain of the COID waterway without a geotechnical report is a reasonable request to ensure development in accordance with CCC 18.116.040 (12). However, "blob diagrams" in a preliminary concept plan do not provide the knowledge needed to know when, where and whether such development might occur. Prior to tentative plan approval of development on a slope of greater than 25 percent or within the floodplain of the COID, Applicant shall be required to prepare and submit for review by the Commission a geotechnical report demonstrating adequate soil stability and proposing any measures needed to mitigate adverse environmental impacts.

The criteria in CCC 18.116.040 are met.

18.116.080 Application procedures and contents.

(1) Before submitting a development plan for approval, an applicant proposing a destination resort shall conduct a preapplication conference with the planning department to obtain general information, guidelines, procedural requirements, advisory opinions, and technical assistance for the project concept.

Applicant and its representatives discussed the subject application with the planning director and the County Road Department on several occasions. Applicant submitted an earlier application in July 2007, which was subsequently withdrawn. Prior to this submittal, a pre-application meeting was held on July 3, 2007, which suffices for this submittal. The signed pre-application verification is part of the destination resort application cover sheet, page 5. In response to comments provided by the County Planning and Road Departments, Applicant submitted a new application.

(2) Following a preapplication conference, Applicant shall submit a development plan for review by the planning commission. Fifteen copies of the development plan shall be submitted to the planning department along with a filing fee set by the Crook County court to defray costs incidental to the review process.

Applicant complied with the applicable procedural requirements in the filing and submission of this application.

The Coalition argues that the Commission erred in finding the application complete, arguing that the record does not contain evidence that a "new" $25,000 filing fee was paid. CCC18.116.080 (2) provides that the purpose of the paying a fee is to "defray costs incidental to the review process." The record is clear that a fee was paid in conjunction with filing of a previous destination resort application for this same tract of land. When that application was withdrawn, the fee was not refunded and instead was applied to the current application. This is an accounting and bookkeeping issue, not an issue of substantive due process.

The substantive information contained within the application was adequate for the Commission to make a judgment regarding whether the application could meet approval criteria. LUBA has long held that where information has been omitted from an application and the omission does not preclude the jurisdiction's ability to apply the approval criteria, there is no basis for remand or reversal. *Caster v. City of Silverton,* 54 Or LUBA 441 (2007), *Douglas v. City of Salem,* 53 Or LUBA 567 (2007), *Venable v. City of Albany,* 33 Or LUBA 1 (1997), *Le Roux v. Malheur County* 32 Or LUBA (1996), *Champion v. City of Portland,* 28 Or LUBA 618 (1995), *Roth v. Jackson County,* 38 Or LUBA 894 (2000).

(3) The development plan shall contain the following elements:

(a) Illustrations and graphics to scale, identifying:

(i) The location and total number of acres to be developed as a destination resort;

The general location of the Crossing Trails Resort is depicted on the Context Map (vicinity map), App. Ex. 2. The Context Map locates the property relative to the cities of Prineville, Redmond and Bend and to other previously approved Goal 8 destination resort projects in Crook and Deschutes counties. The maps of App. Ex. 4 illustrate the location of the resort property in relation to the local street system in the vicinity of the Powell Butte rural community. The resort property borders SW Wiley Road, which is to the south and SW Parrish Lane, which is to the west. The attached Development Plan map, App. Ex. 3, depicts the boundaries of the 580-acre resort parcel and the general location of all proposed resort uses, including residential, commercial, recreational uses and open space. The Development Plan map illustrates the general location of single family residential units, overnight accommodations, open space, core areas within the resort and ancillary resort uses. Areas of designated "open space" will include the golf course and additional common areas. Commercial uses will be located within the "Core Area, Core Area/Single Family, Ancillary Resort Uses, and Ancillary Resort Uses as Allowed in Easements" illustrated on App. Ex. 3.

(ii) The subject area and all adjacent tax lots, with existing zoning;

The Crossing Trails Resort property is located north of Oregon Highway 126 in the vicinity of the SW Parrish Lane/Highway 126 intersection. The property is approximately 6 miles west of downtown Prineville and 10 miles east of Redmond. The subject property is surrounded by privately owned lands on all sides, with the exception of one parcel at the northeast corner, which is owned by Crook County.

The subject property and all adjacent tax lots are depicted on the Adjacent Property Owners map, App. Ex. 4.3. This map shows the location, size and ownership of all properties that abut the proposed resort development. The subject property and surrounding properties are zoned Exclusive Farm Use, EFU-3 (Powell Butte Area), as depicted on the Crook County zoning map. The subject property is also zoned with Crook County's Destination Resort Overlay Zone, shown on App. Ex. 7. This overlay zone includes all of the subject property as well as the adjacent properties to the north, west and east, and four parcels to the south.

(iii) Types and general location of proposed development and uses, including residential and commercial uses;

The types and general location of proposed land uses within the resort project are depicted on the Development Plan map, App. Ex. 3. The Development Plan map depicts the general location of residential housing units, overnight accommodations, commercial areas, maintenance facilities, infrastructure and open space. The Development Plan map also depicts the general location of the looped road system that will serve the resort. The resort will be developed with relatively low density residential development (0.77 dwelling units/gross acre) centered upon an 18-hole championship golf course. *See* Resort Unit Summary, Density Calculations and Open Space Area calculations, App. Ex. 5.

Commercial activities developed within the resort boundaries will be located within the resort's Core Area shown on the Development Plan map, App. Ex. 3. Resort infrastructure will be located within the designated core areas and the Ancillary Resort Use area depicted on the map. App. Ex. 9 contains a list of the specific types of commercial uses that may be developed in the resort. Commercial uses will be located in the designated areas ("Core Area, Core Area/Single Family, Ancillary Resort Uses, and Ancillary Resort Uses as Allowed in Easements") and will be situated near the primary resort entry on SW Wiley Road. The specific mix and location of commercial uses developed within the resort will be subject to market forces and demand. Any commercial uses developed at the resort will be subject to additional site plan review and approval.

The proposed single-family residential units and overnight lodging units are dispersed throughout the property, to allow resort residents and guests to enjoy the open space amenities of the project. An area designated exclusively for overnight lodging will be located on the eastern portion of the subject property, as depicted on the Development Plan map, App. Ex. 3. A second area, containing a mix of single-family and overnight lodging units, is located in the southwest corner of the property, adjacent to SW Parrish Lane. The golf course and associated recreational amenities will be located in the areas depicted as Open Space on the Development Plan. The golf course will enhance the value of residential lots and provide a recreational element critical to the financial success of the resort. It will be open to public play.

The resort property will be unified by the interconnected looped road system shown on the Development Plan map, App. Ex. 3. The application materials contain a Major Road Plan, App. Ex. 20, which illustrates the location of major roadways, as well as access points to the resort. The primary resort entry will be located on SW Wiley Road at the location specified in App. Ex. 20. A secondary entry point, for emergency access only, will be located on SW Parrish Lane. An employee and visitor entry is proposed east of the main entry on SW Wiley Road. The looped road system and multiple access points will provide the resort with multiple access and evacuation routes in the case of fire or emergency.

The resort project will also contain a network of pedestrian trails. The trail system will parallel the developed road system contained on App. Ex. 3. The trail system will facilitate and encourage non-motorized transportation to all destinations within the boundaries of the resort. It will include small interpretive sites intended to highlight the natural vegetation of the Central Oregon high desert environment. The trail system will provide access to recreational amenities within the resort, as well as the public clubhouse, resort dining facilities and commercial uses developed within the resort boundary. The trail network is expected to be a significant recreational amenity at the resort.

The Development Plan map is conceptual in nature. It is subject to evolution and refinement through subsequent land use proceedings, as market demand and other factors dictate the final design. As with all resort developments, the economics of the project demand that Applicant construct the Crossing Trails Resort in phases over many years, with the actual development schedule responsive to market demand. The general location of the nine resort phases is illustrated in a diagram on App. Ex. 3.

(iv) A general depiction of the characteristics of the site, including:

(A) Goal 5 resources on the county's comprehensive plan inventory;

According to the Crook County Comprehensive Plan Goal 5 inventory, there are no inventoried sites on the property. The County's Goal 5 Resource material confirms that there are no Goal 5 resource sites.

(B) Riparian vegetation within 100 feet of natural lakes, rivers, streams, and designated significant wetlands;

No natural lakes, rivers, streams or designated significant wetlands are believed to exist on the subject property. The property is bisected by an irrigation canal operated by the Central Oregon Irrigation District ("COID"). The irrigation canal is in operation during the irrigation season from April to October of each year. An irrigation pond is located on the southern boundary of the subject property adjacent to the canal and SW Wiley Road. The year 2005 aerial photograph, App. Ex. 4.2, depicts the current location of both the irrigation pond and canal. There are no apparent areas of riparian vegetation associated with the irrigation canal or pond.

(C) Water areas, including streams, lakes, ponds and designated significant wetlands;

The subject property is bisected by the COID irrigation canal. The property also contains an irrigation pond that has been used for the delivery of irrigation water. The location of these features is depicted on the App. Ex. 4.4 aerial photograph. There are no apparent areas of designated wetlands on the subject property.

(D) Boundaries of the 100-year floodplain, if present on the site;

The Floodplain Analysis map, App. Ex. 4.5, depicts the location of the 100-year floodplain as it affects the subject property. App. Ex. 4.5 is based on standard FEMA mapping. The 100-year floodplain is mapped along a corridor that parallels the COID Irrigation ditch as it traverses the subject property. Much of the area that falls within the 100-year floodplain is encumbered by the canal easement held by COID. The area mapped as floodplain is depicted as "canal" on the Development Plan map, App. Ex. 3. Applicant does not propose to erect any buildings, residences or similar above-ground structures within areas mapped for the 100-year floodplain. Bridges, canal crossings, pathways and the golf course are the only amenities anticipated in this area. Applicant will comply with all applicable legal and permitting requirements to the extent any structures or previously described uses are constructed within areas subject to the 100-year floodplain.

(E) Slopes exceeding 25 percent;

A Slope Analysis covering the subject property is attached as App. Ex. 4.7. App. Ex. 4.7 identifies slopes on the property that exceed 25 percent, which are found in two primary areas on the subject property. One is a minor rock ridgeline located parallel to the COID irrigation ditch in the southern portion of the property. The majority of this ridgeline will be utilized as open space. Areas of steeper slopes are also contained in rock ridges found in the northeast corner of the subject property. Most of these areas are depicted as open space on the Development Plan map, App. Ex. 3. A significant portion of this area is also encumbered by the electric transmission line easements on the property.

(F) Existing topography.

The natural topography of the site is relatively flat with a gentle slope rising approximately 280 feet from the southwest to the northeast corners of the site. Site topography is depicted on the Elevation/Topography Analysis, App. Ex. 4.6.

With the exception of the rock ridgelines discussed above, slopes on the site do not exceed 25 percent. The southwest portion of the site is relatively flat. The northern portion is very flat with the typical natural slopes of less than two percent. Nearly one-third of the property contains areas of meadow grass, while the remainder is vegetated with juniper and other low-growth vegetation common to Central Oregon.

The NRCS mapping of soils in Crook County, App. Ex. 31, depicts the following soil types within the boundaries of the resort property:

- Stukmond-Lickskillet- Redmond Complex (type 143)
- Redmond-Stukmond Complex (type 144)

- Searles- Lickskillet complex (type 162)

None of the designated soil types found on the subject property are considered to be prime, unique or high value. *See* App. Ex. 31. The lack of quality soils within the resort property rendered the site eligible for the Destination Resort overlay when the County adopted its overlay map.

(v) Proposed methods of access to the development, identifying the main vehicular circulation system within the resort and an indication of whether streets will be public or private;

The Development Plan map, App. Ex. 3, shows the main internal road system serving the proposed resort, as well as each of the proposed points of resort access. The resort development is served with a loop road system of interconnected private roadways. This will provide access to residential units, recreational amenities and resort infrastructure. The internal road system is designed to promote the safe and efficient circulation of vehicle traffic inside the resort. The resort will have two access points on SW Wiley Road that will distribute project traffic to SW Wiley Road en route to Oregon Highway 126. Resort traffic going to Prineville will also use SW Wiley Road. An emergency access route will be located on SW Parrish Lane, in the location depicted on the attached Development Plan map. All of the roads within the resort will be private and will be maintained by the developer and the resort homeowners.

(vi) Major trail systems;

The Development Plan map, App. Ex. 3, depicts the looped road system that will serve the proposed resort development. Applicant will construct and maintain a trail system that parallels the developed road system. Resort trails will be designed to provide pedestrian, bicycle and non-motorized access throughout the resort. Each resort lot, as well as all units of overnight accommodations, will be provided with access to the internal resort trail system. Trail systems within the resort will provide access to areas of open space and recreational amenities offered by the resort. In addition, the resort trail system will provide pedestrian, bicycle and non-motorized access to the core resort area depicted on the Vehicle Circulation and Trail Plan, App. Ex. 20. The trail network will encourage walking and biking to the primary resort destinations, including the public clubhouse, dining facilities, and other commercial uses. The trail network should be a significant recreational amenity at the resort.

(vii) The approximate location and number of acres proposed as open space, buffer area or common area. Areas proposed to be designated as "open space," "buffer area" or "common area" should be conceptually illustrated and labeled as such;

A minimum of 290 acres of the 580-acre resort will be maintained as open space. This acreage includes the area devoted to the golf courses, trails, buffers within the external setbacks, and natural common areas. The land devoted to open space is conceptually depicted on the Development Plan map, App. Ex. 3, and shown on the Open Space Plan, App. Ex. 15.

Because the exact boundaries of the space areas are subject to change as the resort development progresses, Applicant will document compliance with the minimum open space standard prior to approval of the subdivision plat for each phase.

(viii) List of proposed recreational amenities and approximate location.

The resort will contain an 18-hole championship golf course and a variety of associated recreational amenities for landowners and guests, including the trail system described above. A list of potential recreational uses is attached as App. Ex. 8. The areas contemplated for recreational facilities and golf fairways are depicted on the Development Plan map, App. Ex. 3.

(b) A conceptual water and sewer facilities master plan for the site, including a master plan study prepared by a professional engineer certified in the state of Oregon, describing:

(i) An estimate of water demands for the destination resort at maximum build-out;

(ii) Availability of water for estimated demands at the destination resort, including (1) identification of the proposed source; (2) identification of all available information on ground and surface waters relevant to the determination of adequacy of water supply for the destination resort; (3) a copy of any water right application or permit submitted to or issued by the Oregon Water Resources Department (OWRD), including a description of any mitigation measures proposed to satisfy OWRD standards or requirements;

(iii) A water conservation plan including an analysis of available measures, which are commonly used to reduce water consumption. This shall include a justification of the chosen water conservation plan. The water conservation plan shall analyze a wastewater disposal plan utilizing beneficial use of reclaimed water to the extent practicable. For the purposes of subsection (3)(b) of this section, beneficial uses may include, but are not limited to:

(A) Agricultural irrigation or irrigation of golf courses and greenways;

(B) Establishment of artificial wetlands for wildlife habitation;

(C) Groundwater recharge.

Applicant provided a Conceptual Water and Sewer Facilities Master Plan ("Master Plan") as part of the application materials. App., App. Ex. 11. The plan was prepared by J. Rob von Rohr, PE; and Jeffrey Fuchs, PE, registered professional engineers with the consulting firm of Bussard Williams, in Bend, Oregon, and complies with the requirements of (i)-(iii) above.

As required under subsection (i), the Master Plan includes an estimate of water demand for various types of water uses at the resort at maximum build-out. That demand is estimated to be 802 acre-feet per year. This estimate includes water for a variety of proposed resort uses including single family residential, overnight lodging, commercial facilities, golf course irrigation, landscape irrigation and small ponds and water features. App. Ex. 11, Table 1.

As required under subsection (ii), the Master Plan describes the water sources available to meet the estimated demand. Potable water will be supplied by Avion Water Company (Avion) to serve all residential and commercial uses, including residential landscape irrigation, and required fire flows. Avion is a privately-owned public utility regulated by the Oregon Public Utility Commission. The application includes, as App. Ex. 13, a letter from Avion confirming its commitment to serve the proposed project. Non-potable water for golf course and common area irrigation, ponds and water features, and miscellaneous related uses will be provided under existing surface water rights appurtenant to the property and delivered by Central Oregon Irrigation District (COID). A small portion of the COID water rights will also be used to provide a temporary source of water for project construction. A summary of the COID water rights appurtenant to the property is included with App. Ex. 11, Appendix E. The combination of Avion and COID water, provided under existing water rights, is sufficient to meet maximum project demands at full build-out. No new water rights will be required for the project.

As required under subsection (iii), the Master Plan includes a Water Conservation Plan component that analyzes the available measures commonly used to reduce water consumption and justifies the measures chosen at this stage of project planning. Selected conservation measures include: highly efficient golf course irrigation technologies and irrigation sprinkler systems; lining and designing storage ponds to minimize evaporation and seepage losses; efficient water conveyance systems; beneficial use of treated wastewater; use of individual water meters; use of drought resistant and low-water use landscaping; low water use plumbing fixtures, use of conditions, covenants & restrictions ("CC&Rs") to implement conservation measures; and public education and outreach. The Water Conservation Plan also analyzes a wastewater disposal plan utilizing the beneficial use of reclaimed water to the extent practicable. Additional details related to effluent disposal are included in the Sewer Facilities portion of the Master Plan.

(c) A conceptual site drainage plan;

The conceptual site drainage plan is described in Applicant's Erosion Control and Stormwater Management Program that was included as App. Ex. 21.

(d) A solid waste management plan;

Applicant expects to contract for solid waste collection and disposal with an authorized Crook County franchise hauler, such as Prineville Disposal, which has already offered its services. *See* App. Ex. 23.

(e) An open space management plan, including:

The open space management plan is shown as App. Ex. 15.

(i) An explanation of how the open space management plan will ensure that at least 50 percent of the resort is dedicated to open space at all times;

The Open Space Plan, App. Ex. 15, shows the proposed location of open space. The final location, acreage and dimensions of any open space area are subject to limited refinement during the process of developing a final development plan. All of the open space areas shown on the Open Space Plan shall be designated as such on the plat and included in the legal description of the property appended to the CC&Rs.

As set forth in the draft CC&Rs, App. Ex. 24, title to or a legal interest in the common areas in each phase will be conveyed to a homeowners' association prior to or concurrently with the conveyance to an owner of the first lot in that particular phase. The board of the homeowners' association may transfer some common area to a homeowner or the declarant, but only for the purposes of small adjustments not to exceed 2,000 square feet. The CC&Rs provide that every homeowner shall have a non-exclusive right and easement for the ingress, egress, use and enjoyment of the common areas, which shall be appurtenant and shall pass with the title to every lot, subject to stated restrictions. The easements and the rights to use of the common areas shall exist regardless of whether they are also set forth in individual grant deeds to lots.

The CC&Rs provide that, at all times, at least 50 percent of the property shall be designated as open space, and make that requirement a covenant and equitable servitude, which cannot be amended without the consent of the County, which runs with the land in perpetuity, and which is for the benefit of all of the property initially included in or annexed to the resort, each homeowner, the declarant, the homeowners' association, and any of the golf clubs developed on the property, as well as the County. Any of these individuals or entities may enforce the covenant and equitable servitude. This is sufficient to satisfy the requirement that at least 50 percent of the property be preserved as open space.

The CC&Rs shall make clear that the open space designated in the Open Space Plan, as finalized in the Final Development Plan ("FDP"), is the open space that is protected by the CC&Rs. Applicant suggests a condition that requires all deeds conveying all or some of the resort property to include a restriction specifying that the property is subject to the provisions of the resort final development plan and the CC&Rs and noting that the FDP and CC&Rs contain a delineation of open space areas which shall be maintained as open space areas in perpetuity.

There are other safeguards in addition to the provisions of the CC&Rs to ensure that the requirements of this criterion are satisfied. As each subdivision plat is submitted to the County, open space designated as such on the plat will be protected. The County land use process for approval of a subdivision plat will require compliance at each phase with the destination resort standards in the statutes and the County code and with the County's approval of this conceptual master plan application. Under ORS 92.010(7)(b) and ORS 92.070(7)-(8), open space could not be converted to another use unless the County approved a replat or a lot line adjustment.

Since any such replat or lot line adjustment would be subject to the terms of this approval, the preservation of open space would be considered and ensured when the application was reviewed.

(ii) Proposed conservation easements to protect significant Goal 5 sites pursuant to CCC 18.116.040(8).

Because there are no inventoried Goal 5 sites within the resort, no conservation easements are required pursuant to this subsection.

(f) A description of measures intended to mitigate significant project impacts on fish and wildlife and other natural values present in the open space areas;

The County destination resort application form, page 4, is a signed verification from ODFW confirming that the property does not contain big game habitat winter ranges or sensitive bird habitat. The property also does not contain any Goal 5 resources.

Applicant submitted a Wildlife Evaluation Report as App. Ex. 16. Applicant and its wildlife consultant, Gary L. Ivey, worked directly with ODFW to inventory wildlife resources on the subject property and to produce the report. In coordination with ODFW, Applicant produced a Draft Habitat Evaluation Procedures ("HEP") Analysis that is attached to the Wildlife Evaluation Report as Appendix 3. Applicant quantitatively evaluated the impact of resort development on wildlife and habitat values.

In response to letters from ODFW dated April 30 and May 20, 2008, and testimony at the hearings by ODFW representatives, Applicant prepared a draft Crossing Trails Resort Wildlife Mitigation Plan, dated July 31, 2008. This plan updates and elaborates upon the HEP analysis contained in the Wildlife Evaluation Report. It contains a detailed discussion of possible onsite mitigation measures and the possible creation of a fund to address offsite mitigation. Exhibit D of the Wildlife Mitigation Plan is a "Declaration of Covenant for Waiver of Remonstrance Crossing Trails." In its August 13, 2008 letter, ODFW states the Waiver of Remonstrance "addresses the damage concerns previously expressed by ODFW."

(g) A traffic study which addresses: (1) impacts on affected county, city, and state road systems, and (2) transportation improvements necessary to mitigate any such impacts. The study shall be prepared by a licensed traffic engineer in coordination with the affected road authority (either the county department of public works or the Oregon Department of Transportation, or both);

A Traffic Impact Analysis (TIA) is attached as App. Ex. 10. The TIA was prepared by Scott Ferguson, a licensed traffic engineer with Ferguson & Associates, Inc., in coordination with the County planning director and ODOT. The analysis explains potential resort impacts on affected roadways and intersections and proposes mitigation measures. Chris Clemow, a licensed traffic engineer with Group MacKenzie, has reviewed and supplemented the traffic data and analysis in letters dated March 28, 2008, which is attached as a supplement to App.

Ex. 10, and in two subsequent letters dated June 3 and July 16, 2008. The Ferguson analysis is discussed in more detail below, in response to the relevant approval criteria.

(h) A written statement addressing how the proposed destination resort satisfies the standards of CCC 18.116.040 or 18.116.050, and the approval criteria of CCC 18.116.100;

This narrative and the attached reports demonstrate how the proposed resort satisfies the applicable resort siting standards of CCC chapter 18.116.

(i) A description of any proposed development or design standards, together with an explanation of why the standards are adequate to minimize significant adverse impacts on adjacent land uses within 500 feet of the boundaries of the parcel on which the destination resort is to be developed;

(a) Design Standards. All development within the resort will be subject to CC&Rs, App. Ex. 24, and Architectural Design Guidelines, which will implement the Preliminary Architectural Theme Presentation, App. Ex. 19. The CC&Rs will require compliance with the dimensional standards set forth in App. Ex. 18. The CC&Rs will also require compliance with the external setbacks established by CCC chapter 18.116 and any additional setbacks imposed by the County. Finally, the CC&Rs and the Architectural Design Guidelines, when adopted, will regulate the style of commercial and residential structures within the resort to ensure that the structures are compatible with the landscape of the area.

(b) Impacts on Adjacent Land Uses. Applicant shall present the final CC&Rs prior to approval of the tentative plan for the first phase of the resort. App. Ex. 18, 19 and 24 provide only the general framework for development restrictions. Following issuance of the development plan and FDP decisions, Applicant shall incorporate any additional standards imposed as conditions of those decisions.

Ownership of lands within the 500' study boundary is listed by tax lot, along with the size of parcel, zoning, and the current crop production. *See* App. Ex. 32, Agricultural Survey Report and map of agricultural uses.

Tax Lot	Ownership	Acreage	Zoning	Crop
1515170000107	Mendes	11.08	EFU3	Range
1515170000108	Whitaker	10.15	EFU3	Range
1515200000103	Stafford	6.03	EFU3	Range/hay
1515200000100	Stafford	92.10	EFU3	Pasture/hay
1515200000200	Allen, B	22.31	EFU3	Pasture/hay
1515200000301	Allen, C	29.79	EFU3	Pasture/hay
1515200000300	Allen, C	25.74	EFU3	Pasture/hay
1515190000100	Malott	158.95	EFU3	Hay
1515180000600	Robinson	39.3	EFU3	Pasture/hay
1515180000500	Eder	118.44	EFU3	Pasture/hay
1515180000200	Allen, A	76.56	EFU3	Hay

1515180000100	Coleman	80.14	EFU3	Pasture/hay
1515170000103	Hanna	9.84	EFU3	Pasture/hay
1515170000102	Hanna	9.68	EFU3	Range
1515170000104	Brauchler	9.57	EFU3	Range
1515170000101	Garrison	9.29	EFU3	Range
1515080000103	Crawford	78.65	EFU3	Range
1515080000200	Crawford	312.88	EFU3	Range
151500001206	Crook County	169.08	EFU3	Range
151500002400	Schofield	428.73	EFU3	Range

The property is surrounded on all sides by parcels of land that are privately owned, with the exception of the northeast corner of the property. Crook County owns a large piece of property that touches the northeast corner of the property. The property on the eastern border and the northeastern half of the property is unimproved sagebrush and juniper woodlands. The northwest portion of the property is adjacent to an 80-acre piece of property that is being used for grazing and to four 10-acre parcels of land that are primarily used for residences and/or provide dry land grazing. The property directly to the northwest, which borders SW Parrish Lane, is primarily irrigated and used for grazing. However, there is a portion of land west of SW Parrish Lane and at the corner of SW Parrish Lane and SW Wiley Road that is being used for hay production. The property south of SW Wiley Road is irrigated and is used primarily for grazing.

Twenty parcels border the proposed resort. Of these twenty parcels, seven are 12 acres or less, eight are between 12 and 100 acres, and five have acreage larger then 100 acres. The three largest parcels are dryland range.

Crops identified within the 500-foot study area adjoining the proposed resort are irrigated hayfields, pasture, range and livestock. Irrigation is present on a number of parcels. Extending beyond the 500-foot study area, the agriculture remains dedicated to hay and livestock production. Hay fields both in and outside the study area are either mixture of grasses or alfalfa. Where irrigation is present, other field or grain crops can be substituted. Due to the arid nature of the Crook County, dry land crop production is limited. Geographically this area ranges from approximately 3,200 feet to 3,400 feet in elevation. Annual precipitation averages 10 inches.

Grazing of livestock has been demonstrated to be compatible with destination resort development, as evidenced by livestock grazing on the perimeter of Black Butte Ranch, Eagle Crest and other resort properties in Central Oregon. The fencing proposed by Applicant around the resort property will eliminate any potential conflicts and assist the owners of the adjacent properties in their efforts to corral their livestock. To the north and west, the subject property borders four non-irrigated parcels that lie east of SW Parrish Lane. Larger agricultural parcels (ranging from 39 to 118 acres in size) abut SW Parrish Lane to the west. The subject property borders two vacant and non-irrigated parcels to the south. Larger agricultural operations are located adjacent to SW Wiley Road to the south.

Possible impacts to agriculture in the study area originating from the proposed resort development and mitigation measures (*italics*) include:

- Loss or removal of fences during construction

- *Coordinate with landowners to replace fences in a fashion to fully restore livestock grazing capacity.*

- Possible disruption of water source for grazing cattle

  Coordinate with landowner's access to water where needed.

- Possible dust impact on hay crops and livestock (during construction)

  Rangeland plants are not very sensitive to dust. The sparse population of cattle grazing per acre on rangeland in the immediate area would eliminate dust as a major concern. In more concentrated pasture-grazing areas to the west and south, the number of cattle per acre increases markedly. However, if dust becomes evident during construction standard water applications and dust control efforts shall be employed. Crops can be sensitive to excess dust during pollination and affect grade quality at harvest. Applicant shall utilize dust control measures during construction to prevent dust contamination to crops or livestock.

- Potential for spray drift from golf courses

  Current EPA and ODA pesticide rules prevent the drift of pesticides during application. Resort facilities will need to adopt and manage a weed and pest control plan keeping with state and federal laws.

- Increased potential for wildfires arising from development.

  Wildfire danger is a concern for all rangelands. Applicant will be required by state and local codes to reduce and prevent all fire dangers. A wildfire management plan is an important component of development not only for the resort, but also for the adjacent public lands.

  The subject property is currently within the Crook County Fire and Rescue's fire protection District. Crook County Fire and Rescue will respond to any fire on the resort property. Access is currently available to the property along either Wiley Road or Parrish Lane. As the destination resort develops, a series of roadways will interconnect and provide extensive access for emergency vehicles. The proposed primary access off Wiley Road and secondary access off the Parrish Road will offer alternative evacuation routes for future residents.

  Development of Applicant's resort shall include construction of a domestic and fire protection water supply system. Based upon similar resort projects in Central Oregon, a minimum fire protection flow rate of 1,000 gallons per minute in residential areas and 1,500 gallons per minute in commercial areas is expected. Applicant's resort will ultimately be served by an extension of an Avion supply pipeline from Bend.

Large diameter water mains shall be extended throughout the residential and commercial sections of the resort to provide a domestic water supply and to serve fire hydrants. Fire hydrant locations shall be subject to the review of Crook County Fire and Rescue and Crook County Road Department and will be installed as each phase of development proceeds. The water supply system will assure an adequate on-site water system for fire protection, throughout all developed areas of the resort property.

The subject property abuts two County roads, SW Parrish Lane and SW Wiley Road to the west and south respectively. A nearly 350 foot wide clearing for power lines lies within the project boundary on the east side. The roads and power line corridor account for excellent fire breaks. The north side of the project is the only section where native conditions are contiguous to both sides of the boundary.

Development at of the proposed resort will include an 18-hole golf course. The 18 holes of irrigated turf will meander throughout the central resort core, providing an excellent fire break under wildfire conditions.

Constructed roadways and trails throughout the developed portions of the resort provide additional fire breaks, in addition to critical access.

In addition to the broad scale fire break provided by the golf course and roadways, the developer will encourage sound fire protection measures around structures. Fire resistant roofing materials will be required and ladder fuels around structures will be eliminated. Disturbed areas will be restored with landscaping, native bunchgrass, or other native vegetation that will reduce the potential for wildfires, as compared to juniper trees and native brush.

Open space areas within the resort, with emphasis on the open north side, will be thinned and ladder fuels removed. Exterior property boundary setbacks will be thinned for reduction of wildfire hazards. Thinning and ladder fuel reduction will continue as development proceeds.

Destination resort development assures the presence of construction personnel, resort operations staff and managers, and future residents. These responsible parties will monitor and report illegal activities, trespassers, lightning strikes, and similar activities or events that increase the risk of wildfire. Resort development will assure the presence of responsible parties, but also provide communication services throughout the resort for immediate responses to emergency personnel.

- Elevated noise impact on area livestock

The proposed resort is spread over a large area and will include activities that are not large generators of noise. The sparse number of livestock on the east and north in the study area should be well insulated from any secondary noise generated by the resort. Trails and buffer areas on the west and south flanks of the resort will insulate what little noise is associated with the listed recreational activities and facility maintenance.

- Spread of noxious weeds

  Applicant shall be responsible for identifying and controlling noxious weeds on its land. This is consistent with its self-interest, since it must maintain golf courses and other outdoor venues. Applicant will conduct a weed survey prior to construction and control any identified weed infestations prior to construction to minimize the possible spread through normal construction activities.

- Increased traffic on secondary roads

  Applicant will establish a private new entry and road for the development reducing potential traffic problems on secondary roads. It will work with the County to create an acceptable traffic plan. Resort management will work with area landowners to create traffic flow patterns that will not disrupt the flow of agricultural equipment, livestock or other agricultural activities especially during harvest or seasonal fieldwork periods.

- Possible increased agricultural practices conflicts with resort residents

  Applicant is committed to being a good neighbor and realizes that the resort is adjacent to EFU zoned farmland. While a resort-zoned activity has been designated by the County, resort management understands the nature of farming practices on the surrounding farmland. Applicant will make sure through its CC&Rs that any residents and guests of the resort are made aware of accepted farming practices of the area, which include noise, dust, and odor generated through accepted farming practices.

- Night light impact to surrounding ranch and farm residents and livestock.

  Crossing Trails will employee a dark skies strategy that will greatly reduce the potential that light pollution could emanate from the resort.

Additional measures proposed to minimize significant adverse impacts on these adjacent land uses within 500 feet of the boundaries of the resort property include the following:

- The exterior setbacks imposed by the Crook County Destination Resort Ordinance will provide significant buffers between the resort uses and the adjacent lands;

- Applicant's commitment to low-density single-family lots and the required 50 percent open space, will maintain consistency with the rural landscape;

- To minimize light pollution, the resort will use only fully or partially shielded outdoor light fixtures to ensure that light rays emitted by the fixtures are generally projected below the horizontal plane;

- The Resort will take its primary access from SW Wiley Road to the south which provides a direct connection to Highway 126. This direct highway connection will minimize the impact of the project on the local street system;

- Applicant proposes to maintain perimeter livestock fencing around the entire resort boundary, at Applicant's expense. This will ensure that any surrounding owners of EFU lands who choose to conduct grazing operations on their properties will not face any additional financial impact in order to keep their livestock off of the resort property. It will also provide a clear delineation between the resort and the surrounding parcels, thereby minimizing trespass in both directions;

- The resort will include a domestic water supply system with fire protection capacity to minimize risk of wildfire. The resort will also implement and maintain wildfire fuel reduction programs to further reduce the risks of wildfire on and around the resort property;

- The resort will implement and maintain a noxious weed program to reduce the spread of noxious weeds on and around the resort property;

- The resort will require all property owners to execute waivers of remonstrance to enable ODFW to manage wildlife to protect agricultural and other uses on adjacent lands;

- The resort will apply water during periods of construction to minimize dust impacts on any surrounding properties and/or agricultural activities;

- The resort will adhere to applicable EPA and ODA pesticide rules to minimize potential spray drift from the golf course;

- The resort will improve SW Parrish Lane and SW Wiley Road to provide better access to agricultural properties surrounding the resort.

The resort will be served by the Crook County Sheriff's Department and will have efficient access to medical and emergency facilities in Prineville, Redmond, and Bend.

(j) A description of the proposed method of providing all utility systems, including the preliminary or schematic location and sizing of the utility systems;

Water and sewer mains will be constructed within the right of way under the road surface with a minimum of 10-foot separations. The sizing of the water and sewer mains is dependent upon units of density (equivalent dwelling units) within each phase. Water and sewer design will accompany each phase of development and will be subject to review and approval by Avion, the Department of Environmental Quality and the County to ensure the appropriate sizing. Other utilities (power, phone and cable TV) are proposed to be in a common trench just outside the road sections. A schematic of the location of the water and sewer system and utilities is provided in App. Ex. 11, Appendix A. Copies of "will serve" letters from Qwest and Central Electrical Cooperative, Inc. are included in App. Ex. 22; and from Avion in App. Ex. 11, Appendix D.

(k) A description of the proposed order and schedule for phasing (if any) of all development including an explanation of when facilities will be provided and how they will be secured, proportional to the level of development, if not completed prior to the closure of sale of individual lots or units;

Development is expected to occur in numerous phases over the next 20 years. A general illustration of the proposed phasing is shown on App. Ex. 3. Utilities will be developed proportional to the level of development. Final development plans for each area shall be submitted for approval at the time of final platting. Density, overnight lodging/residential lot ratios and total units, and open space ratios will be tracked on a plat-by-plat basis and required ratios shall be maintained throughout the project development.

Water and sewer facilities shall be constructed in phases to respond to demand as the project is built out. As the project progresses, the projected daily flows and requirements shall be refined to better reflect actual contributions and needs. Water and sewer lines will be stubbed to the next phase of development with the completion of the previous phase.

(l) A description of the proposed method for providing emergency medical facilities and services and public safety facilities and services, including fire and police protection.

The Crook County Sheriff's Office will provide police protection to the resort property. Fire protection will be provided by Crook County Fire & Rescue. App. Ex. 22 contains a letter from Crook County Fire & Rescue confirming they will provide fire protection to the resort.

Applicant has furnished the information required by CCC 18.116.080. This criterion is met.

18.116.090 Development plan review procedure.

(1) Review of the development plan shall be in accordance with the provisions of the planning commission review procedure (Chapter 18.172 CCC).

The Commission conducted hearings and reviewed written testimony from Applicant and others during the hearings process. The Court has conducted a hearing on the record and considered additional argument from Applicant and appellants ODOT and the Coalition.

(2) The planning commission may attach any conditions (including requirements for improvement assurances) it deems necessary to the development plan approval when directly related to applicable standards and criteria and supported by substantial evidence in the whole record.

The Commission attached conditions to this decision. The Court has added several conditions and has expanded and modified certain conditions.

(3) The planning commission shall issue a final order of its decision on the development plan. The planning commission's decision may be appealed to the county court. (Ord. 18 12.090, 2003)

These findings support the Court's decision on appeal.

The procedures established by CCC 18.116.090 have been followed. This criterion is met.

18.116.100 Approval criteria.

The planning commission or county court shall approve a development plan for a destination resort if it determines that all of the following criteria are met:

(1) The tract where the development is proposed is eligible for destination resort siting, as depicted on the acknowledged destination resort overlay map.

The resort property is mapped as eligible for resort siting on the acknowledged Destination Resort Overlay map, App. Ex. 7, and is deemed eligible for destination resort siting.

(2) The development plan contains the elements required by CCC 18.116.080.

As detailed above, the materials submitted by Applicant satisfy all of the content requirements of CCC 18.116.080.

(3) The proposed development meets the standards established in CCC 18.116.040 or 18.116.050, qualifying as a destination resort or a small destination resort, respectively. .

As detailed above, the proposed Crossing Trails Resort qualifies as a destination resort under CCC 18.116.040.

(4) The uses included in the destination resort are either permitted uses listed in CCC 18.116.060, or accessory uses listed in CCC 18.116.070 that are ancillary to the destination resort and consistent with the purposes of this chapter.

All uses proposed within the resort are either permitted or accessory uses listed in CCC Sections 18.116.060 and .070. The final CC&Rs shall expressly restrict all uses to those allowed by Sections 18.116.060 and .070, as amended. *See* App. Ex. 24. Applicant submitted lists of potential commercial and recreational uses as App. Ex. 8 (recreational uses) and App. Ex. 9 (commercial uses).

(5) The development will be reasonably compatible with surrounding land uses, particularly farming and forestry operations. The destination resort will not cause a significant change in farm or forest practices on surrounding lands or significantly increase the cost of accepted farm or forest practices.

As required by this criterion, the Crossing Trails Resort will be reasonably compatible with surrounding land uses. The Adjacent Property Owner map, App. Ex. 4.3, illustrates the ownership, size and configuration of all surrounding properties. All of the surrounding properties are zoned Exclusive Farm Use, EFU-3 (Powell Butte Area). In addition, many of the surrounding properties are mapped with the County's Destination Resort Overlay. The boundaries of resort overlay zoning are illustrated on the Destination Resort Overlay map, App. Ex. 7.

The resort has been designed in a manner that will ensure compatibility with privately-owned parcels in the surrounding area, and will not cause a significant change in or significantly increase the cost of farm uses on those parcels.

As explained above in response to CCC 18.116.080(3)(a)(i), the subject property borders privately held landholdings on all sides. Crook County owns a large parcel that touches the northeast corner of the property. Adjacent properties to the north and east are largely undeveloped and vegetated with sage brush and juniper woodlands. Some livestock grazing occurs on parcels to the north and west of the subject property. Grazing of livestock has been demonstrated to be compatible with destination resort development, as evidenced by livestock grazing on the perimeter of Black Butte Ranch, Eagle Crest, and other resort properties in Central Oregon. The fencing proposed by Applicant around the resort property will eliminate any potential conflicts and assist the owners of the adjacent properties in their efforts to corral their livestock. To the north and west, the subject property borders four non-irrigated parcels that lie east of SW Parrish Lane. Larger agricultural parcels (ranging from 39 to 118 acres in size) abut SW Parrish Lane to the west. The subject property borders two vacant and non-irrigated parcels to the south. Larger agricultural operations are located adjacent to SW Wiley Road to the south.

The Agricultural Survey Report, App. Ex. 32, discusses the potential for impacts on surrounding properties in the 500' impact area stated in CCC 18.116.080(3)(a)(i), and concludes the proposed development of the resort will not force a significant change in accepted farm or forest practices. This is because (1) the property is entirely surrounded by (mostly private) land dedicated to livestock grazing, alfalfa hay, and small pastures; (2) the impact study area includes livestock (cattle and horses), pasture, and rangeland, grass hay, and alfalfa hay production, which are not likely to be affected by the resort; (3) all agricultural activities are buffered by roads, open spaces, and small parcels; (4) all possible impacts can be readily mitigated or avoided through planning and project development. The Court rejects as anecdotal and unpersuasive testimony that individuals have driven golf balls onto the property of neighbors of the resort, causing harm to domestic animals and livestock, since such activity is apparently unmonitored and has never originated on Applicant's property. There is no credible testimony to suggest that resort development will force a *significant* change in accepted farm practices.

Applicant's agricultural impact study also concludes that the proposed resort will not significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use. (R 1365) That is because, as explained in the impact study, there will be no impacts that cannot readily be mitigated or avoided, and, without significant impacts, there should be no significant increase in cost. In reaching this conclusion, the Court relies on the expertise of the Applicant's expert, Bruce Andrews, who is a farmer and a former director of the Oregon Department of Agriculture. The Court is more persuaded by the expert testimony and evidence of Bruce Andrews than by the arguments of appellants. (See transcripts April 30, 2008 pages 37-44 and September 3, 2008, pages 32-33).

The Coalition (and other opponents) have not cited or produced any convincing conflicting evidence to indicate a "significant increase" in the cost of accepted farm or forest practices. Opponents have cited no evidence indicating how costs will increase (e.g. fertilizer, chemicals, power, labor, water, and misc. supplies) to contradict the Applicant's expert testimony and evidence. The Court is not obligated to comb the record on behalf of appellants to locate evidence to support their assertion. When faced with conflicting evidence, the Court can choose which evidence it finds more persuasive and credible. The Court finds, having reviewed all of the evidence and testimony in the record, that there is no credible or specific evidence cited by the Coalition in the record to indicate that the development will significantly increase the costs of accepted farm or forest practices. The Court, however, finds that Applicant has met its burden and, based on the evidence and testimony in the record of Bruce Andrews and the mitigation implemented through conditions, that the development will not significantly increase the cost of accepted farm or forest practices.

The Waiver of Remonstrance discussed above under CCC 18.116.080(3)(f) will allow neighbors of the resort to address wildlife concerns on their properties without interference from resort management or residents.

(6) The development will not have a significant adverse impact on fish and wildlife, taking into account mitigation measures.

ODFW applied its own rules (OAR 635 division 415) in making recommendations for mitigation measures to address impacts on fish and wildlife. Applicant submitted a Wildlife Evaluation Report as App. Ex. 16 and, in response to ODFW concerns, the draft July 31, 2008 Wildlife Mitigation Plan (R 324-71).

The Coalition argues that the Commission's decision inadequately addresses code provisions related to mitigation of impacts on wildlife. CCC 18.116.080(3)(f) provides that an application shall contain "A description of measures intended to mitigate significant project impacts on fish and wildlife and other natural values present in the open space areas." During oral argument before the Court, the Coalition representative stated that the phrase "present in the open space areas" modifies only the phrase "natural values." The Court disagrees. The inclusion of the adverb "other" in the phrase "fish, wildlife and *other* natural values" (emphasis supplied) suggests that fish and wildlife are themselves considered "natural values" and that the description included in the application must explain only the impact on these natural values only in open space areas.

The second citation relates to approval criteria and is found at CCC18.116.100(6). It is a more problematic sentence for Applicant because it requires a finding that "The development will not have a significant adverse impact on fish and wildlife, taking into account mitigation measures."

The Commission in its decision concluded that "because there are no significant fish and wildlife habitats mapped on the property under Goal 5 . . . with or without mitigation measures, the proposed resort will not have a significant adverse impact on fish and wildlife." (R at 84) The Commission then declined to require applicant to implement a wildlife mitigation plan. In its conditions, the Commission imposes only two conditions related to wildlife mitigation: one regarding wildlife friendly livestock fencing and one regarding non-remonstrance agreements related to wildlife management activities.

The Court believes the Commission errs in conflating the terms "no significant fish and wildlife habitats mapped on the property" and "no significant adverse impact on fish and wildlife." The one relates to specific species of concern. The other—the relevant approval criteria—relates to all species generally. The Court believes that a plain reading of CCC 18.116.090 can lead one to no conclusion other than the determination that adverse impacts on *any and all* species of fish and wildlife must be considered in reviewing and approving destination resort developments. While not all impacts need be mitigated, "significant adverse impact" must be mitigated.

ODFW in its final report to the commission (Record 318-320) asserts that based on the applicant's information the proposed development will result in the total loss of between 3,468 and 4,909 habitat units as a result of development. ODFW's representative indicated in his testimony that the habitat being mitigated for was not a "high value" and therefore mitigation did not need to be necessarily on-site or in close proximity off-site. (August 13, 2008 transcripts pages 11 &12). The Court finds that the number of habitat units lost prior to mitigation results in a "significant adverse impact" for this development.

According to the wildlife mitigation plan at R 324 submitted by the applicant's expert, Applicant proposes to mitigate by recovery of 513 on-site habitat units and by recovery of 4396 off-site habitat units (for a total of 4909 habitat units mitigated). As such, the Court finds that there will be no net loss of habitat units.

The Court finds that the applicant's draft wildlife mitigation plan proposal is substantial evidence that a reasonable person would rely on. The Court finds that based on the draft wildlife mitigation plan, the mitigation measures proposed therein and the testimony and evidence provided by the applicants expert Gary Ivey, that there will be "no significant adverse impact" on fish and wildlife (See September 3 , 2008 transcripts pages 39-35).

The Court further finds that while ODFW would prefer a higher dollar amount for off-site mitigation (R at 320) that the information is not sufficiently developed enough for the Court to rely on. The Court finds that it is not required to adopt ODFWs numbers or its request for more money when ODF&W merely expresses a "belief," without further detail and explanation.

The Court, having balanced all the evidence and testimony in the record, is more persuaded by the comprehensive draft wildlife mitigation plan analysis and the testimony and evidence provided by the Applicant's expert, Gary Ivey,. The draft mitigation plan proposes a net gain of habitat units, and all that is actually required by the Crook County Code is a finding of "no significant adverse impact" on fish and wildlife. The Crook County Code does not have a "no net loss" requirement although the applicant has proposed a plan that addresses and exceeds this higher standard. As such the Court finds that the mitigation proposed exceeds the requirement of the County Code.

A condition shall be imposed requiring Applicant to enter into an MOU with the County incorporating those proposals contained in the draft mitigation plan prior to receiving FDP approval. In addition, the MOU should require Applicant to pay up front or bond or provide through other financial security such costs in 2008 dollars as Applicant may be reasonably expected to incur related to off-site mitigation measures, and Applicant should be required to augment such additional funds, bonds or financial securities as may be necessary to ensure that adequate funds are available in dollars equivalent to 2008 dollar investment to complete all required off-site mitigation. Pursuant to Crook County Code 18.116.110 the FDP review procedures occur at a hearing with public participation. .

(a) The traffic study required by CCC 18.116.080(3)(g) illustrates that the proposed development will not significantly affect a transportation facility. A resort development will significantly affect a transportation facility for purposes of this approval criterion if it would, at any point within a 20-year planning period:

(i) Change the functional classification of the transportation facility;

The "functional classification" of a road refers to a designation, such as "arterial" or "collector." *Melton v. City of Cottage Grove*, 28 Or LUBA 1 (1994). It does not refer to performance standards, level of service or volume/capacity ratio.

The transportation facilities that will be most affected by the proposed development are Huston Lake Road, SW Wiley Road and SW Parrish Lane. The Crook County TSP classifies Huston Lake Road as a "rural major collector," SW Wiley Road as a "local street" and SW Parrish Lane as a "rural minor collector." The proposed development will not change the functional classification of these transportation facilities.

(ii) Result in levels of travel or access which are inconsistent with the functional classification of the transportation facility; or

The proposed development will not result in a level of travel inconsistent with the functional classifications of Huston Lake Road, SW Wiley Road and SW Parrish Lane. There is one emergency access proposed onto SW Parrish Lane, which is aligned with Fleming Road. There are two proposed access points to SW Wiley Road, approximately 1,500 feet apart. These are consistent with the County access standards.

(iii) Reduce the performance standards of the transportation facility below the minimum acceptable level identified in the applicable transportation system plan (TSP).

Because Applicant does not propose an amendment to a functional plan, an acknowledged comprehensive plan or a land use regulation, OAR 660-012-0060 ("Plan and Land Use Regulation Amendments") does not apply to the application. As the ODOT Development Review Guidelines, which are attached as Appendix D to the Ferguson study, explain at p. 3-3-2, "The authority to require a Traffic Impact Study as part of a local land use review comes from the local government's development code."

Applicant submitted the first Traffic Impact Analysis ("TIA"), which was prepared by Ferguson & Associates ("Ferguson"), as a CD as part of App. Ex. 10. Group Mackenzie supplemented the Ferguson work with three letters, dated March 28, June 4, and June 18, 2008. The studies identified the two intersections where the proposed development would "[r]educe the performance standards of the transportation facility below the minimum acceptable level identified in the applicable transportation system plan ("TSP"). They also identified six additional intersections that are already operating below minimum acceptable levels and one intersection (Reif Road/Hwy 126) that will cease to meet the standard at some time between 10 and 20 years, regardless of the resort, and calculated the proportional-share impact of the proposed resort on these intersections. On that basis, Group Mackenzie suggested a contribution amount calculated as the sum of the cost of the two intersection improvements and the proportional share amount ($730,716).

ODOT submitted comment letters dated April 30, June 3, and July 16, 2008. ODOT contends the proposed mitigation is insufficient to satisfy the County's approval criteria, as ODOT interprets those criteria. ODOT makes three arguments: (1) the impacts of the resort will generate mitigation requirements costing about $14,100,000; (2) the County's TSP requires the county to defer to ODOT's mobility standards; (3) The Oregon Highway Plan ("OHP") is the TSP for destination resort applications.

The County's TSP is part of its comprehensive plan (OAR 660-012-0015(4)). It contains goals and policies, with supporting data (like v/c ratios), not criteria applicable to individual applications. Even if the TSP did contain evaluative criteria, none of the provisions quoted by ODOT actually support ODOT's position. ODOT quotes the County TSP as follows: "2.4 Goal – Equity: Developments shall be responsible for mitigating their direct traffic impacts." This supports requiring mitigation proportional to Applicant's direct traffic impacts, not mitigation for the contribution of others.

The OHP is not the TSP for destination resorts. As explained at length in Applicant's

June 3, 2008 memorandum and in Applicant's November 26, 2008 memorandum, and as Applicant explained at the June 3, 2008 and the December 3, 2008 hearings, the OHP does not mention destination resorts. Any analysis based on the OHP is therefore incorrect.

ODOT acknowledges that Applicant has agreed to construct needed mobility improvements at Highway 126/SW Wiley Road and Highway 126/SW Parrish Lane, as well as make a proportional share contribution to additional intersections. ODOT requests that if the application is approved, Applicant, ODOT and the County enter into a memorandum of understanding ("MOU") that requires the agreed improvements be constructed and the agreed contributions are made.

The Goal One Coalition submitted a letter dated June 10, 2008 from Main Street Engineering, a Vancouver, Washington traffic engineering firm. The letter calls for more technical analysis and contends that there will be a "significant impact" on additional intersections.

The Main Street Engineering letter contains no independent traffic data collection or on-site study, which casts doubt on its recommendation that there be more technical analysis. The TIA and Group Mackenzie's supplemental letters were prepared after close consultation with ODOT and Crook County staff, both of whom approved the scope of the study. As shown by its July 29, 2008 letter to engineer Jeff Fuchs, ODOT has approved a design exception for the proposed future intersection improvements at Hwy 126 and SW Parrish Lane.

In a situation where an applicant and opponents rely on experts, the County occasionally commissions an independent expert to provide reliable advice. The county's own traffic consultant, OTAK, prepared a study, dated July 1, 2008, which supports the data and conclusions of Ferguson and Group Mackenzie. OTAK calculated a similar amount ($754,950). Using OTAK's higher number, plus amounts for road improvements and a proposed bridge replacement, Applicant's total contribution will be approximately $1,455,000.

The TIA, Table E-1, shows intersections that do not meet operation standards today, in 10 years or in 20 years. Although many of the intersections are presently failing or will fail during the next 20 years, only the intersection of Highway 126 and SW Wiley Road is shown to fail as a result of the proposed resort. A subsequent study showed that eliminating left-hand turns on SW Wiley Road would redirect north- and south-bound traffic onto SW Parrish Lane, causing the intersection of Highway 126 and SW Parrish Lane to fail. Therefore, the proposed resort can be said to "significantly affect" only two intersections: (1) Highway 126 and SW Wiley Road; and (2) Highway 126 and SW Parrish Lane.

OTAK rebuts arguments made by ODOT in its submissions and effectively agrees with the legal reasoning contained in a Memorandum dated June 3, 2008 submitted by Applicant. The Court agrees with OTAK and Applicant that under *Dolan v. City of Tigard*, 512 US 374 (1994), as it has been interpreted by the Oregon Court of Appeals in *Clark v. City of Albany*, 137 Or App 293, 300, 904 P2d 185 (1995), exactions must be roughly proportional to the impact of a proposed development. The Court specifically incorporates by reference the legal analysis in Applicant's June 3, 2008 memorandum and December 3, 2008 memorandum and concludes that not only does the proposed development not have a "significant affect" on transportation facilities, as the term is used (in a technical sense) in CCC 18.116.100(6)(a), but the Court cannot constitutionally require Applicant to contribute to make major improvements to already failing transportation facilities, given the small amount of traffic Applicant will be contributing to those facilities. The County has the burden of proof on rough proportionality, and ODOT has not provided any evidence to support a finding of rough proportionality if Applicant were required to pay a sum in excess of 14 million dollars.

To elaborate further: The Coalition asserts that the Commission erred in finding that Goal 12's transportation planning rule ("TPR") either does not apply or is satisfied. ODOT, in verbal testimony to the Court at the hearing of December 3, 2008, asserted that the TPR does not apply to this application, but that the OHP (and specifically its highway mobility standard) does apply. At no point in any pleading does the Coalition concur with ODOT's stipulation, so it is necessary for the Court to address this argument. Exhibit C, which is attached to the ordinances adopting the destination resort overlay zone (Ordinance 17, amendments 52 and 53 and Ordinance 18, amendments 59 and 60), clearly spells out in section 18 (compliance) how the County intended to comply with Goal 12. Section 18 of Exhibit C states: "The County Court finds that the Comprehensive Plan and Zoning Ordinance amendments are consistent with Goal 12, Transportation, because Goal 8 and the Crook County implementing regulations require the resort to be constructed so that it is not designed to attract highway traffic through the use of extensive outdoor advertising signage. Furthermore, the amendments are consistent with OAR 660-012-0060, the TPR implementing Goal 12, because the implementing regulations also require analysis of transportation impacts of specific resort proposals at the time of future development review.

The Court finds that the amendments had the potential to significantly affect a number of transportation facilities under OAR 660-012-0060(2), because the amendments permitted the siting of destination resorts in Crook County, and future resorts are likely to add traffic to existing facilities, which in turn could have a "significant effect," as that term is defined in the TPR. However, the Court finds that OAR 660-012-0060(1) allowed the Court to adopt the subject amendments so long as it "limit[ed] allowed land uses to be consistent with the planned function, capacity, and performance standards of affected transportation facilities." Since compliance with particular performance standards cannot be determined until a specific resort proposal is submitted, the Court finds that the amendment properly limited uses to be consistent with any applicable performance standards by requiring resort applicants to provide a traffic study (CCC 18.116.080(3)(g)) at the time of development review to show that the proposed development will not reduce the level of service of any impacted transportation facility based on the performance standards set forth in the applicable transportation system plan (CCC 18.116.100(6)(a)).

The Court clearly intended at the time the above was adopted to comply with the TPR, as it existed then (including its reference to level of service), and to comply with applicable transportation system plans (including the OHP, when applicable), but to undertake that compliance through the traffic analysis to be implemented and used with each and every application submitted. This approach was not challenged when the destination resort implementing ordinances were passed. DLCD was timely informed of the amendment to the County's comprehensive plan and zoning ordinances prior to adoption, giving the agency plenty of time to object to the County's interpretation. It did not do so. To attempt to reinterpret this application of Goal 12 now is an impermissible collateral attack on the implementing ordinances for destination resorts, the time for which has passed.

ODOT further asserts that CCC 18.116.100(6)(b)(ii) establishes an approval criterion for destination resort applications, providing that "a resort development will not significantly affect a transportation facility…" [ODOT appears to mis-cite the relevant section, which appears to be CCC 18.116.100(6)(a)]. ODOT places great importance on this phrase, noting that resort-related traffic would "reduce performance standards below an acceptable level" [an apparent reference to CCC 18.100(6)(a)(iii)] and asserting that "The Planning Commission's decision does not require the Applicant to mitigate for the impact of its traffic at the affected intersections. Therefore, the decision cannot be affirmed."

A closer reading of the Crook County Code is instructive. CCC 18.116.100(6)(a) provides that the traffic study must illustrate that the proposed development will not significantly affect a transportation facility. CCC 18.116.100(6)(b) provides that if a proposed development signficantly affects a transportation facility, mitigation may occur in one of three ways: (i) By limiting development (ii) By providing facilities which meet the requirements of Chapter 660, Division 12 (implementing Oregon's Statewide Planning Goals and Guidelines related to Goal 12, Transportation); or (iii) Altering land use densities or adding design requirements to mitigate impacts. CCC18.100(6)(c) further defines how an Applicant will implement sub ii, when that option is chosen, as it has been in this case. Sub ii provides: "The Applicant shall be required to provide the transportation facilities to the full standards of the affected authority as a condition of approval. Timing of such improvements shall be based upon the timing of the impacts created by the development, as determined by the traffic study or the recommendations of the affected road authority."

The relevant phrases are "provide … to the full standards" and "Timing …as determined by the traffic study or the recommendations of the affected road authority." These seemingly proscriptive statements, however, must be read in conjunction with *Dolan*, which requires a demonstration of "essential nexus" and "rough proportionality." Because *Dolan* is a U.S. Supreme Court case, its requirements supersede the County code and any applicable provision of Oregon or Crook County statute, rules or code. There is no dispute that the impact of proposed development has an essential nexus to state and local transportation facilities. The crux of the dispute between appellants and Applicants is how to satisfy the "rough proportionality" test. Under *Dolan*, the burden of determining "rough proportionality" falls on the local government. *Art Piculell Group v. Clackamas County* 142 Or App 327 (1996) further addresses how this is applied in Oregon, noting that it is the government's burden, not the developer's, to articulate numerical and other facts necessary to demonstrate rough proportionality between developmental condition and impacts of development for purposes of takings clause analysis. Continuing, the *Picullel* analysis reads, "…concern is not with apportionment of costs for general improvement and general body of benefitted property owners, but with the extent to which a particular property may be burdened because of impacts that are attributable to its development."

The determinative factor in analyzing rough proportionality between developmental condition and impacts of development, for takings clause purposes, must be the relationship between impacts of development and approval conditions, and not the extent of public's needs for road or other improvements that happen to exist at the time that this particular development is approved. ODOT and appellants would argue that the Applicant has the misfortune to be "last in" and therefore must disproportionately bear the burden of having to construct improvements triggered by the impact of Applicant's proposed development. But the Oregon Court of Appeals citing *Schultz v. City of Grants* Pass, 131 Or App 220, 227, 884 P2d 569 (1994), held that impacts must be narrowly construed to consider the impact of a particular property, not to speculative uses. Those speculative uses might well include the theoretical "ghost traffic" that ODOT and the Coalition are concerned may develop in the future as a result of other previously approved but far-from-certain-to-be-built destination resorts. Because there is uncertainty about the extent and timing of future traffic, the decision of the Commission to apportion costs roughly proportionate to anticipated development impact seems the fairest way to balance Applicant's contribution to demand on public infrastructure.

What is reasonable under both a *Dolan* test and the County code is to consider the timing and extent of payment by the proposed development for its proportional share of improvements. That proportional share is agreed, through the traffic study used in application proceeding, to be $454,950 identified by the County's engineering consultant, calculated as follows: $754,950 for all improvements minus an estimated $300,000 for improvements for which Applicant is solely responsible equals $454,950. Under the County code provision requiring Applicant to mitigate its significant impacts, the Commission elected the option which requires Applicant to "provide" transportation facilities. It is a reasonable interpretation of that clause that "providing" encompasses requiring advance payment or surety bonding or financial equivalent of the $454,950, to be provided and maintained either with County or state in 2008 dollars until such time as the actual improvements are constructed. This represents the amount deemed to be "roughly proportional" to Applicant's identified impact. In addition, Applicant has agreed to make an additional contribution of approximately $700,000 for road and bridge improvements, depending on actual cost. (See Applicant response brief dated Nov. 26, 2008.)

The Commission, in deliberating toward a final decision, was constrained by the record before it. As noted above, the local government, not the Applicant or appellant, bears the burden of demonstrating rough proportionality. The Commission had to rely upon the evidence before it at the time of making its decision. ODOT might well have brought before the Commission additional information which would have increased this number. The Coalition, likewise, might have engaged independent analysis which would have produced a higher number. However, neither of these events happened. The Commission made the most reasonable and defensible decision available to it, considering the evidence before it and considering the extraordinary burden which *Dolan* forces a local government to carry.

(b) If the traffic study required by CCC 18.116.080(3)(g) illustrates that the proposed development will significantly affect a transportation facility, Applicant for the destination resort shall assure that the development will be consistent with the identified function, capacity, and level of service of the facility through one or more of the following methods:

(i) Limiting the development to be consistent with the planned function, capacity and level of service of the transportation facility;

There are no plans to limit the development.

(ii) Providing transportation facilities adequate to support the proposed development consistent with Chapter 660 OAR, Division 12; or

Applicant has agreed to enter into a Memorandum of Understanding ("MOU") with ODOT and the County to undertake the planning, and design of necessary improvements at SW Wiley Road and SW Parrish Lane and for proportional contributions to additional intersections, as detailed in Table 3 of the July 1, 2008 OTAK study.

(iii) Altering land use densities, design requirements or using other methods to reduce demand for automobile travel and to meet travel needs through other modes.

There are no plans to alter land use densities, design requirements or use other methods to reduce demand for automobile travel and meet travel needs through other modes.

(c) Where the option of providing transportation facilities is chosen in accordance with subsection (6)(b)(ii) of this section, Applicant shall be required to provide the transportation facilities to the full standards of the affected authority as a condition of approval. Timing of such improvements shall be based upon the timing of the impacts created by the development, as determined by the traffic study or the recommendations of the affected road authority.

As stated under (b)(ii) above, Applicant shall be required to entire into a MOU with ODOT and the County that states the amount of Applicant's financial contribution to the required improvements and addresses the timing of the impacts created by the development.

(7) The water and sewer facilities master plan required by CCC 18.116.080(3)(b) illustrates that proposed water and sewer facilities can reasonably serve the destination resort.

The Applicant's conceptual Water and Sewer Facilities Master Plan ("Master Plan") contained in App. Ex. 11, along with additional evidence provided in response to public comments, illustrate that the proposed water and sewer facilities can reasonably serve the destination resort.

Adequacy of Proposed Water Facilities

The Master Plan identifies a total annual water demand for the resort of 802 acre-feet per year at full build out. This total includes water for domestic/residential uses, a variety of commercial uses, golf course and common area landscape irrigation, and small ponds and water features. A minimum rate of 1,500 gallons per minute is required for fire protection flows. Water to meet these requirements will be supplied by Avion and COID, under existing water rights. No new water rights are required for the project.

Avion will supply potable water to the resort site through an extension of services currently planned for the Powell Butte area. A letter of commitment provided by Avion, App. App. Ex. 11, Appendix D, confirms that Avion is prepared to deliver water for up to 680 "equivalent dwelling units" and the required fire flow rate of 1500 gallons per minute. A copy of the Avion Master Plan demonstrates Avion's ability to serve the resort. App. Ex. 11, Appendix C. The arrangement with Avion will include construction by Crossing Trails of a 150,000 to 200,000-gallon reservoir on Avion property for resort purposes. The reservoir will ensure capacity to meet peak-hour demands and fire flow requirements for the resort, and will provide a reserve system for emergency use. The water supplied by Avion will be used for all potable water needs, including residential and commercial uses. Avion water will also be used for individual residential irrigation.

Water for golf course and common area irrigation, and related ponds and water features, will be provided by COID, under existing water rights appurtenant to the property. The Master Plan identifies a need for up to 140 acres of non-residential irrigation for the resort, including up to approximately 120 acres for the golf course and the remainder for landscaping in common areas. A total of 420 acre-feet of water per year is estimated for these irrigation purposes, determined on the basis of 3 acre-feet per acre. The COID water rights will also be used to provide the primary source of water for small ponds and water features, estimated at approximately 53 acre-feet.

The existing COID water rights authorize a total of 5.45 acre-feet per acre, per year, for irrigation use on 163.45 acres appurtenant to the resort property, and are therefore sufficient for the golf course, small ponds and water features. The proposed combination of potable water service to be provided by Avion, and use of the existing appurtenant COID water rights is sufficient to fully address the estimated need at full build-out of the resort. In addition, Applicant proposes to use treated effluent, as it becomes available to the project, to offset irrigation demand and for recharge purposes as described in the Master Plan.

During the public hearing process, a number of comments raised concerns about potential impacts from increased use of ground water by Avion to serve the resort. In response to these questions, the Applicant clarified, in a Technical Memorandum dated July 30, 2008, "Supplement to Water and Wastewater Facilities Mater Plan," that Avion water would be provided in two stages: short-term water supply needs will come from an existing well (referred to as the "Nixon Well" by Avion), in the Powell Butte area and long-term water supply will come from Avion's primary wells in the Bend area, following extension of a main-line from Bend. Therefore, the long-term supply for the project will not draw ground water from the Powell Butte area. In addition, the Applicant provided documents from the Oregon Water Resources Department ("OWRD") relating to the state review of the Avion application for a water right for use of the Nixon Well. The documents show OWRD findings that use of the well was not expected to cause any interference or injury to other wells in the area and that the Avion well draws water from the Deschutes regional aquifer. Applicant also confirmed that OWRD has not received any complaints from other well owners regarding operation of the Nixon Well by Avion since it was originally approved and put into use and provided testimony from a hydro-geologist confirming that short-term use of the well is not expected to cause interference with other wells in the area.

The Commission also heard comments about general concerns for possible impacts to the aquifer and ground water supply. In response to these questions, Applicant provided additional analysis by its consultant, Mr. David Newton, P.E., C.E.G., confirming that the Avion water wells draw from the Deschutes regional aquifer and not from the local Powell Butte aquifer. Memorandum dated August 27, 2007, from David Newton. Mr. Newton's analysis confirms the regional aquifer is substantial and, based on information obtained from OWRD, concludes there is adequate ground water available.

A specific concern was raised by a neighboring landowner as to whether the existing COID canal would be relocated or changed in a way that would interfere with his continued use of COID water. In response, the Applicant confirmed there are no plans to alter the location of the canal or make any modification that would impair water flow and use by downstream users. Applicant provided documentation for the record that COID controls the irrigation canal and prohibits changes that would interfere with COID purposes.

Public comments also raised general concerns about the amount of water to be used for the golf course and whether the Applicant has sufficient water rights for golf course irrigation. In response, Applicant provided testimony that the amount of water proposed for the golf course is consistent with the amounts approved for other projects in the area and will be less than the amount historically used for crop irrigation on the property. Applicant's Master Plan explains that the new irrigation system to be installed for the golf course will be highly efficient and minimize water use. As a result, the existing irrigation water rights are sufficient.

Sewer Facilities

The Sewer Facilities Component of the Master Plan demonstrates that the proposed community sewage systems can reasonably serve the proposed resort. The community sewerage systems for the project will be constructed and operated under a Water Pollution Control Facilities ("WPCF") permit issued by the Oregon Department of Environmental Quality ("DEQ"). Collection, treatment, disposal and reuse systems will be designed in accordance with applicable state and local rules, statutes and guidelines. Total projected daily sewage flow for the project is estimated at 150,000 gallons per day, at full build-out. The sewage system will be built in phases corresponding to resort development. Each phase of system will include components for collection, wastewater treatment, subsurface drip distribution/irrigation reuse systems and/or storage, and solids handling and disposal systems.

As described in the Master Plan, Applicant will use a septic tank effluent pump ("STEP") and septic tank effluent gravity ("STEG") system. Primary treatment of sewage will occur in the septic tanks. Effluent will flow from the tanks into a collection system. Where topography will not allow for gravity flow from the tanks, a pumping system will lift effluent to the collection system. Applicant will use membrane bioreactors ("MBR") technology for wastewater treatment. Disposal and reuse options will focus on subsurface drip disposal systems, and seasonal drip irrigation reuse. Any re-use water with potential for human contact, such as water features, will be treated to "Level IV," suitable for any use except direct consumption. Septic tank solids and biological treatment solids will not be treated on site, but instead will be appropriately transported for off-site processing and disposal in accordance with state and local requirements.

During the public hearing process, comments expressed a general concern about possible odor or ground water contamination due to the proposed sewage treatment facilities. In response, Applicant provided additional evidence describing the "closed system" technology planned for the project that is expected to almost completely eliminate odor. As discussed in the Technical Memorandum dated August 26, 2008, from Jeff Fuchs, P.E., the system will also be required to comply with state DEQ regulations to ensure against potential ground water contamination.

(8) The development complies with other applicable standards of the county zoning ordinance.

The only additional standards applicable to the resort are the road standards. The roads depicted on the Development Plan map are consistent with the County's minimum rural road standards. Applicant will be required to demonstrate consistency with these standards at the time of future subdivision plat review. Applicant has agreed to make any needed improvements to the roads to bring them up to County requirements and also to reconstruct one bridge on SW Parrish Lane and a second bridge on SW Wiley Road, to the south of the property.

The criteria in CCC 18.116.100 are met.

18.116.110 Final development plan review procedure.

(1) Following approval of the development plan, Applicant shall submit for review a final development plan that meets the requirements of CCC 18.172.040 and addresses all conditions of the development plan.

(2) The planning commission shall review a final development plan pursuant to CCC 18.172.060. The planning commission shall approve a final development plan if it conforms to the approved development plan and its conditions of approval.

(3) If the planning commission finds that the final development plan is materially different from the approved development plan, Applicant shall submit an amended development plan for review. "Materially different," as used in this subsection, means a change in the type, scale, location, or other characteristics of the proposed development such that findings of fact on which the original approval was based would be materially affected. Submission of an amended plan shall be considered in the same manner as the original application, except that the review of an amended plan shall be limited to aspects of the proposed development that are materially different from the approved development plan.

Compliance with CCC 118.160.020 General Conditional Use Criteria

CCC 18.160.020 sets forth the County's general conditional use criteria. The destination resort ordinance (CCC chapter 18.116) sets forth a very specific set of criteria to govern resorts, and those criteria typically go beyond the conditional use criteria set forth below.

> ***In judging whether or not a conditional use proposal shall be approved or denied, the commission shall weigh the proposal's appropriateness and desirability or the public convenience or necessity to be served against any adverse conditions that would result from authorizing the particular development at the location proposed and, to approve such use, shall find that the following criteria are either met, can be met by observance of conditions, or are not applicable:***
>
> ***(1) The proposal will be consistent with the comprehensive plan and the objectives of the zoning ordinance and other applicable policies and regulations of the county.***

The relevant provisions of the zoning ordinance are addressed above and incorporated herein by reference. CCC chapter 18.116 implements the destination resort chapter of the County comprehensive plan, which itself implements Goal 8. Therefore, because Applicant has demonstrated compliance with CCC chapter 18.116, it is not necessary to directly address the comprehensive plan policies or Goal 8.

Applicant shall address the County's subdivision ordinance as each future tentative plat is submitted. Applicant shall also submit site plans when required for various elements of the resort, following or concurrent with FDP approval.

> ***(2) Taking into account location, size, design and operation characteristics, the proposal will have minimal adverse impact on the (a) livability, (b) value and (c) appropriate development of abutting properties and the surrounding area compared to the impact of development that is permitted outright***

Compatibility and the minimization of adverse impacts on surrounding uses is discussed above in response to CCC 18.116.100(5) and 18.116.080(3)(i). The findings discuss compatibility with abutting properties currently in farm use, and with the surrounding area generally. This criterion does not require Applicant to show that the resort will have no adverse impacts. Rather, it requires Applicant to *minimize* its potential adverse impacts through careful design, location, and mitigation measures. As a result of the development standards and mitigation measures discussed above, the development will have minimal adverse impacts on surrounding properties.

The proposed low density of a destination resort, combined with Applicant's proposal to provide an 18-hole golf course and associated open space features on the central basin of the resort property, will maintain significant open space, consistent with the character of the surrounding farming community. Thus, for these reasons and those set forth above in response to CCC chapter 18.116, the development will have minimal adverse impacts on the livability, value, and development of surrounding properties.

> ***(3) The location and design of the site and structures for the proposal will be as attractive as the nature of the use and its setting warrants.***

The resort will be located in a high desert setting suitable for destination resort development. The design will respect the setting and will incorporate elements appropriate to the high desert, as set forth in Architectural Guidelines. Applicant's stated goal is to use the natural amenities of the property and the region to enhance the proposed resort. Further land use reviews will allow greater focus on the exact design of the proposed development.

The criteria of CCC 18.160.020 are met.

As conditioned below, the proposed development complies with all applicable approval criteria for a destination resort.

Conditions of Approval

The County Court hereby approves the development plan application for the Crossing Trails Resort with the following conditions of approval. When reference is made to "Applicant," the reference includes Applicant's successors and assigns:

1. The resort shall contain a restaurant and meeting rooms with seating for a minimum of 100 people.

a. The minimum required eating and meeting facilities shall be constructed or guaranteed through surety bonding or equivalent financial assurance prior to the sale of individual lots.

b. The eating and meeting facilities shall be oriented toward the needs of resort visitors rather than area residents.

2. The number of lots approved for residential sale shall not be more than two lots for each unit of permanent overnight lodging, as that term is defined in Statewide Planning Goal 8, ORS 197.435(5), and CCC 18.116.030(5).

a. Applicant shall document compliance with this ratio prior to tentative subdivision plan approval for each phase of resort development.

b. Pursuant to this development plan approval, the applicant may provide a maximum of 500 single family lots and 250 overnight lodging units to meet the ratio. Multiple overnight lodging units may be provided as "lock-off units" or "keys" within a single dwelling or structure.

3. The resort shall contain a minimum of 150 rentable units for overnight lodging, oriented toward the needs of visitors rather than area residents. (CCC 18.116.040(3)).

a. The minimum 150 units of overnight lodging must be constructed within five years of the initial lot sales. (CCC 18.116.040(c)).

b. At least 50 units of overnight lodging must actually be constructed prior to the closure of sale of individual lots or units. (ORS 197.445(4)(b)). Applicant shall construct these units during the first phase of development. An additional 25 units shall be constructed or guaranteed through surety bonding or other equivalent financial assurance prior to the closure of sale of individual lots or units. (CCC 18.116.050(a)(i)).

c. After the construction of the first 50 overnight lodging units, the remaining 100 overnight lodging units required to meet the statutory minimum of 150 units must be constructed or guaranteed through surety bonding or equivalent financial assurance within five years of the initial lot sales. (CCC 18.116.050(3)(c)).

d. If Applicant guaranteed the construction of any of the required 150 units through surety bonding or other equivalent financial assurance, these overnight lodging units must be constructed within four years of the date of the execution of the surety bond or other equivalent financial assurance. (ORS 197.445(b)(F)).

4. All developed recreational facilities and visitor-oriented accommodations required to serve a particular phase shall be constructed or guaranteed through surety bonding or equivalent financial assurances prior to closure of sale of individual lots or units in that phase.

5. Applicant shall invest a minimum of $10,225,329 (in 2008 dollars) for developed recreational facilities and visitor-oriented accommodations, exclusive of costs for land, sewer and water facilities, and roads. At least $3,408,443 (in 2008 dollars) shall be spent on developed recreational facilities. The minimum spending requirements shall be increased to present day dollars at the time of the approval of the bond for the subject improvements, based upon the United States Consumer Price Index. The recreational facilities may include, but shall not be limited to, those listed in App. Ex. 8. ("Crossing Trails Destination Resort Development Plan Recreational Uses").

6. Casitas and "lock offs" shall be at least 400 square feet and shall include a self-contained bath. Any such units shall have a kitchenette, including a sink for food preparation (in addition to the bathroom sink); either a microwave oven or a hot plate; and a refrigerator. The cost to construct such overnight lodging shall not be counted toward the investment requirement in CCC 18.116.050(4) for the development of recreational amenities.

7. Commercial uses within the resort shall generally be limited to the categories of uses listed in CCC 18.116.070(8) and App. Ex. 9, which is attached to the development plan application. All commercial uses shall be internal to the resort, limited to the types and levels of use necessary to meet the needs of resort visitors, and oriented towards guests rather than the general public.

8. Applicant shall present the final CC&Rs prior to approval of the tentative plan for the first phase of the resort.

9. The final CC&Rs shall expressly restrict all uses to those allowed by CCC 18.116.060 and 18.116.070.

10. Over 50 percent of the resort site including the area devoted to golf course uses, but excluding yards, streets and parking areas, shall be maintained as open space throughout the life of the resort. Compliance with this standard shall be continuously documented prior to approval of each subdivision plat.

a. The resort shall maintain compliance with the open space standard pursuant to the Open Space Management Plan attached to the development plan application as App. Ex. 15.

b. The CC&Rs shall provide that, at all times, at least 50 percent of the property shall be designated as open space, and make that requirement a covenant and equitable servitude, which cannot be amended without the consent of the County, which runs with the land in perpetuity, and which is for the benefit of all of the property initially included in or annexed to the resort, each homeowner, the declarant, the homeowners' association, and any of the golf clubs developed on the property, as well as the County. Any of these individuals or entities may enforce the covenant and equitable servitude.

c. The CC&Rs shall make clear that the open space designated in the Open Space Plan, as finalized in the FDP, is the open space that is protected by the CC&Rs.

d. All deeds conveying all or some of the resort property shall include a restriction specifying that the property is subject to the provisions of the resort FDP and the CC&Rs and noting that the FDP and CC&Rs contain a delineation of open space areas which shall be maintained as open space areas in perpetuity.

11. Unless modified during the FDP approval process, the dimensional standards applicable to lots and structures within the resort shall be the standards attached to the development plan application as App. Ex. 18.

12. Compliance with setback requirements shall be documented during each phase of subdivision or site plan review.

13. The resort's CC&Rs shall mandate the use of fully or partially shielded outdoor light fixtures to ensure that light rays emitted by the fixtures are generally projected below the horizontal plane.

14. The resort shall maintain perimeter livestock fencing around the entire resort boundary. Applicant may install the fence in segments, concurrent with development of each phase abutting the exterior property boundary. To the degree necessary to prevent livestock from entering the resort property, Applicant shall construct and/or install cattle control devices at entrances to the resort. Applicant shall coordinate the fence design with ODFW to ensure that the fence is "wildlife friendly" where appropriate.

15. Applicant and individual property owners in the resort shall execute and record in the County deed records a waiver of remonstrance agreeing that they and their successors will not now or in the future complain about any accepted agricultural practices on the EFU-3

properties immediately adjacent to the resort. At the time of closure of sale of each individually-owned residential lot or unit, the buyer shall execute and record the waiver of remonstrance in the County deed records.

16. Applicant and individual property owners shall execute and record in the County deed records a waiver of remonstrance agreeing that they and their successors will not now or in the future complain about any authorized wildlife damage control activities conducted within the resort or on properties immediately adjacent to the resort boundaries. The waiver of remonstrance may be in a form substantially similar to the "Declaration of Covenant for Waiver of Remonstrance Crossing Trails," which is Exhibit D to the draft Crossing Trails Resort Wildlife Mitigation Plan, dated July 31, 2008. At the time of closure of sale of each individually-owned residential lot or unit, the buyer shall execute and record the waiver of remonstrance in the County deed records.

17. Prior to FDP approval, Applicant shall submit a plan for approval by the Commission that includes the following mitigation measures, as detailed in the Andrews Agricultural Impact Study: (a) Coordinate with landowners in the replacement of fences in a fashion that will fully restore livestock grazing capacity; (b) In cases where the resort development disrupts water availability to grazing cattle, assist in providing access as needed; (c) Conduct a weed survey prior to construction and control any identified weed infestations prior to construction to minimize the possible spread through normal construction activities; (d) Educate residents and guests to respect accepted farming practices in the area; and (e) Implement "dark sky" measures to control potential light pollution.

18. Prior to FDP approval, Applicant shall submit a plan for approval by the Commission that provides for visual buffering of the resort from adjacent residences through the use of appropriate, varied vegetation. The plan shall detail the height, width and density of such vegetation to ensure year-round screening.

19. The resort shall apply water during periods of construction to minimize dust impacts on any surrounding properties and/or agricultural activities.

20. The resort shall adhere to applicable EPA and ODA pesticide rules to minimize potential spray drift from the golf course.

21. Applicant shall design all site drainage plans consistent with the Erosion Control and Stormwater Management Program, attached to the development plan as App. Ex. 21, or as amended following consultation with the Crook County Planning Department.

22. Prior to FDP approval, Applicant shall enter into an MOU with the County that requires Applicant to implement the on-site mitigation measures described (at R 332-36) in the Crossing Trails Wildlife Mitigation Plan dated July 31, 2008. The MOU shall provide that prior to recordation of the plat for Phase 1 of resort development, Applicant shall (a) contribute $110,000 to an appropriate third-party agency for the benefit of wildlife habitat, located in Crook County if possible, to pay private contractors to implement the off-site mitigation described in the Wildlife Mitigation Plan (R 337-39); and (b) contribute an additional $40,000 to the agency listed in (a) to maintain ongoing mitigation measures indefinitely.

23. Prior to recordation of the final plat for the first phase of the resort, Applicant shall submit documentation of the final plans for solid waste collection, recycling, and/or disposal to the Crook County Planning Department. Recycling programs shall include, but not be limited to, paper, glass, and plastics. Solid waste shall be collected by a hauler and disposed of in the Crook County Landfill.

24. If Applicant proposes development in the floodplain of the COID waterway or on slopes greater than 25 percent, Applicant shall, prior to tentative plan approval of individual phases in the resort, file with the County a geotechnical report that demonstrates adequate soil stability and implements mitigation measures designed to mitigate adverse environmental effects.

25. If any wetlands are discovered on the property, Applicant shall mitigate for the loss of wetlands through enhancement of the remaining wetlands (if any) or the creation of new wetlands at a different location.

26. Potable/domestic water shall be provided by Avion or another commercial water company drawing from the Deschutes Regional Aquifer.

27. Applicant shall document compliance with the Noxious Weed Plan, which is attached to the development plan application as App. Ex. 19, on an annual basis by submitting a written report to the Crook County Weed Master.

28. Prior to tentative plan approval for the first phase of the resort, Applicant shall submit a Conceptual Visual Impact Mitigation Plan. The Plan shall be completed in consultation with a licensed landscape architect. Applicant shall incorporate the Plan into the resort CC&Rs to ensure compliance with the following Planting and Building Materials Guidelines:

a. <u>Planting Guidelines</u>:

i. The Planting Guidelines shall require each applicant for a building permit to identify the vegetation to be retained within the subject lot;

ii. The Planting Guidelines shall contain a planting list identifying the acceptable plants for use on each individual lot and within the open space tracts to provide supplementary screening and aesthetic benefits;

iii. The plant species on the planting list shall be native species with low water needs, appropriate soil characteristics screening potential, and suitability to the resort site;

iv. Applicant's CC&Rs and/or Design Guidelines shall establish an Architectural Review Committee (ARC) process to implement the planting guidelines on each lot at the time of building permit review, and within open space tracts.

b. <u>Building Materials Guidelines</u>: The Building Materials Guidelines shall include a list/palette of building materials intended to blend with the natural environment. This list shall require applicants for building permits to use the following types of materials to minimize visual impacts:

i. Downward or shielded outdoor lights; and

ii. Facade materials that reflect the natural environment: wood, muted colors, non reflective materials, etc.

29. Prior to tentative plan approval for the first phase of the resort, Applicant shall submit evidence to the Crook County Planning Department documenting DEQ approval of the WPCF permit from DEQ for the resort's sewage treatment facilities.

30. All new utilities shall be installed underground with the exception of overhead electrical transmission lines, which may remain above-ground.

31. If Applicant elects to extract and process aggregate materials on-site to support the infrastructure needs of the resort, Applicant shall not exceed the scope of what CCC 18.24.010(12) allows. Applicant shall depict the location of the extraction/processing operation on the FDP, either at the time of FDP issuance of through an FDP amendment. Applicant shall also gain all necessary local and state permits necessary to allow the extraction and processing to occur. Under no circumstances may Applicant export aggregate materials from the site for sale or commercial or industrial purposes.

32. Prior to tentative plan approval for each phase of resort development, Applicant shall submit a detailed depiction of the final location and size of all roads and trails within a phase to the Crook County Planning Department and its consulting engineering firm.

33. Primary and secondary resort access points to the resort shall be located on SW Wiley Road, which borders the subject property to the south. An additional access point, for emergency access only, shall be located on SW Parrish Lane. Traffic to Prineville, which is to the east, and Bend/Redmond, which are to the west, are expected to use Highway 126. Applicant shall obtain County road access permits from the County Roadmaster prior to FDP approval.

34. All minor street approaches intersecting with the primary roadways within the resort shall be stop sign or roundabout controlled.

35. As required by ODOT, Applicant shall provide the improvements to Reif Road/Highway 126, Highway 126/SW Wiley Road and Highway 126/SW Parrish Lane listed in Table 3 of OTAK's July 1, 2008 letter to the County (R 566). The improvements to Highway 126/SW Parrish Lane shall be as detailed in ODOT's July 29, 2008 letter (R 248) addressed to Jeffrey Fuchs at Bussard Williams and the attachments to that letter. Prior to FDP approval, Applicant shall complete an MOU with ODOT to establish the timing of these improvements.

36. Prior to FDP approval, Applicant shall complete an MOU with the County and ODOT to facilitate contributions for its proportional share ($454,950, in 2008 dollars) of funding for the traffic facility improvements (other than those addressed by Condition 35) listed by the County's agent, OTAK, in Table 3 of OTAK's July 1, 2008 letter to the County (R 566). Such contributions shall be guaranteed through bonding or equivalent financial assurances at the time of recordation of the Phase I plat and shall be paid no later than three years after recordation of the Phase 1 plat.

37. Prior to FDP approval, Applicant shall enter into an MOU with the County requiring Applicant to pay the actual cost to improve (a) affected portions of SW Parrish Lane from Highway 126 to the north boundary of the subject property adjoining SW Parrish Lane; and (b) affected portions of SW Wiley Road from its intersection with SW Parrish Lane to Highway 126. Such improvements, to be within the existing right-of-way, shall include overlays, shoulders, two canal bridges on SW Parrish Lane and one canal bridge on SW Wiley Road. The improvements shall be built to any governing jurisdictional standards so that they can adequately serve the proposed development and existing adjacent uses. Timing for such improvements shall be as stated in the MOU.

38. The County Road Department shall monitor pavement conditions on affected portions of SW Parrish Lane and SW Wiley Road prior to construction of the improvements required by Condition 37. If the monitoring reveals, as determined by the County Road Department, that the existing pavement index falls below "60" prior to construction of these improvements, Applicant shall conduct interim repairs, including repairs as necessary to the two existing bridges on SW Parrish Lane and the one bridge on SW Wiley Road, to meet reasonable safety standards as determined by the Crook County Road Department. Applicant shall not be required to repair damage to any road that is caused by third parties, beyond normal wear and tear.

39. If Crook County adopts a systems development charge ("SDC") ordinance or similar mechanism, Applicant shall be exempt from or eligible for credit or reimbursement under the ordinance if: (1) the ordinance requires Applicant to pay SDC s for an improvement that Applicant is already required to contribute to pursuant to the conditions of this decision, and (2) the subject improvement is listed on the County's Capital Improvement Program ("CIP").

40. Cash obligations upon which a development is conditioned shall be paid in full prior to the approval of the final development plan or prior to recordation of the first phase plat. If bonding or other suitable financial assurances are used to guarantee ultimate payment of any obligations, then these shall be in a form approved by Crook County Counsel and the Crook County Court and drawn on a bonding agent or other source which is acceptable to the Crook County Court. The Court may, at any time, require additional bonding or assurances or a change in the bonding agent or other guarantor as the Court may reasonably determine is necessary to ensure that the County's interest in ensuring completion of the financially-assured elements is protected. If Applicant fails to make a required cash payment or to maintain the level or form of financial assurances required by the Court, the County may enjoin further development or revoke the conditional use permit. In the event that the Court believes at any time that Applicant is in default, the Court shall give Applicant 120 days' written notice and an opportunity to cure the default to the satisfaction of the Court prior to enforcement action by the County.

41. As stated in Condition 3(b), at least 50 units of overnight lodging, as defined in ORS 197.435(5) and as further described in this decision, shall be constructed prior to the sale of any individual lots or units. Prior to approving the sale of lots or units, the County shall certify in writing that the required overnight lodging has been constructed. To be effective, such certification shall be approved by the County Court.

42. Release of bonds or other financial securitization shall be at the sole discretion of the Crook County Court. Bonds or other financial securitization may be reduced in proportion to the amount required to ensure that the work remaining to be completed, but no bonds or securitization shall be released without a finding by the court that the remaining bond or financial securitization is adequate to secure all additional construction anticipated by the conditional use permit and not yet completed.

43. The Court may at any time require an increase in the level of bonding or financial securitization in order to ensure sufficiency of resources to undertake anticipated construction in light of changing construction costs.

44. No plats for individual phases shall be recorded, no construction of overnight units or infrastructure shall commence nor shall the sale of individual lots occur prior to the execution of Memoranda of Understanding related to transportation facilities and wildlife mitigation and any other conditions requiring said memoranda, except as approved by the County Court. Failure to abide by this condition may result in County enforcement action.

45. All utilities placed in county road rights of way shall be installed at the direction of the county road master only upon issuance of a right of way permit. No installation of utilities shall render the use of county roads impassable by the public except by written permission of the road master, and road master shall determine in issuing any such permission that no other feasible and reasonably affordable option exists for the installation of such utilities other than to inconvenience the public by rendering the roads impassable for a time certain. When permission is granted to render a road impassable, it shall be only for the minimum time necessary to complete installation.

DATED this 2nd day of January, 2009.

Scott R. Cooper, Judge

Mike McCabe, Commissioner

Lynn Lundquist, Commissioner

Appendix 11

BEFORE THE LAND USE BOARD OF APPEALS

OF THE STATE OF OREGON

GARY EDER, MOLLIE EDER, NANCY KNOCHE,
KAREN LANG, DENNIS HILDERBRAND,
ANNETTE HILDERBRAND, VERN DEWEY,
DALE TOMPKINS, CAROLE HANCOCK,
TOM ALEXANDER and CURTISS BURRELL,
Petitioners,

vs.

CROOK COUNTY,
Respondent,

and

818 POWELL BUTTE, LLC,
Intervenor-Respondent.

LUBA No. 2009-018

FINAL OPINION
AND ORDER

Appeal from Crook County.

Jannett Wilson, Eugene, filed the petition for review and argued on behalf of petitioners. With her on the brief was Western Environmental Law Center.

Heidi Bauer, Assistant County Counsel, Prineville, filed a response brief and argued on behalf of respondent. With her on the brief was David M. Gordon.

Peter Livingston, Portland, filed a response brief and argued on behalf of intervenor-respondent. With him on the brief was Schwabe, Williamson & Wyatt, P.C.

HOLSTUN, Board Member; BASSHAM, Board Chair; RYAN, Board Member, participated in the decision.

REMANDED 12/17/2009

You are entitled to judicial review of this Order. Judicial review is governed by the provisions of ORS 197.850.

Opinion by Holstun.

NATURE OF THE DECISION

Petitioners appeal a county decision that grants conditional approval for a development plan for Crossing Trails, a destination resort.

FACTS

In early 2007 an application was submitted to request approval of a destination resort in the Powell Butte area of Crook County, approximately six miles southwest of Prineville and ten miles east of Redmond. That destination resort was to be named Seven Peaks. On February 28, 2008, the applicant (intervenor-respondent 818 Powell Butte LLC) advised the county that the name of the proposed destination resort was being changed to Crossing Trails Resort. Approximately two weeks later, on March 17, 2008, the applicant advised the county that it wished to withdraw its pending application. The applicant also included the following request:

> "We ask that the county please return all documents submitted and refund the application fee. Or, if you prefer, please let us know how and when to pick up the materials." Record 1950.

Eleven days later, on March 28, 2009, a new application was filed for approval of a destination resort named Crossing Trails on the same property.

Crossing Trails would occupy approximately 580 acres of exclusive farm use zoned land, and would include 500 single-family dwellings and 250 overnight units. The "amenities at the resort will include an 18-hole championship golf course, a clubhouse and associated golf facilities * * * a trail system, swimming pool, athletic facilities and other recreational amenities." Record 1586.

The planning commission held a number of public hearings and ultimately approved the application with conditions. The planning commission decision was appealed by petitioners and the Oregon Department of Transportation (ODOT), who were allowed to split the $6,850 appeal fee. After additional hearings before the county court, the county court approved the application with conditions. Both ODOT and petitioners appealed that decision to LUBA. ODOT later dismissed its appeal, and we now resolve petitioners' appeal.

FIRST ASSIGNMENT OF ERROR

Before turning to the first assignment of error, we first briefly describe the statutory framework for approval of destination resorts. The county is required to adopt maps and regulations to ensure that any destination resorts that the county approves comply with statutory requirements.[1] ORS 197.455 identifies a number of areas that are not eligible for destination resort siting and requires that counties adopt comprehensive plan maps that show areas that are eligible for destination resorts. ORS 197.455 is the focus of the first assignment of error. A different statute, ORS 197.445, sets out detailed approval criteria and requirements for approval of destination resorts. The county adopted its Destination Resort Overlay Zone to implement and comply with ORS 197.445. Crook County Zoning Ordinance (CCZO) 18.116. CCZO 18.116 incorporates the ORS 197.445 destination resort standards and approval criteria that must be satisfied to approve individual applications for destination resort approval. As we explain in more detail below, an application for destination resort approval cannot be granted unless the property where the destination resort would be developed is first included on the county's comprehensive plan map that has been adopted to identify the areas in the county that are eligible for destination resort approval.

Under ORS 197.455, destination resorts cannot be sited closer than three miles from a "high value crop area." As defined by statute, a high value crop area is "an area in which

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[1] ORS 197.465 provides in part:

> "An acknowledged comprehensive plan that allows for siting of a destination resort shall include implementing measures which:
>
> "(1) Map areas where a destination resort described in ORS 197.445 (1) to (5) is permitted pursuant to ORS 197.455;
>
> "(2) Limit uses and activities to those defined by ORS 197.435 and allowed by ORS 197.445[.]"

there is a concentration of commercial farms capable of producing crops or products with a minimum gross value of $1,000 per acre per year." ORS 197.435(2).[2] In their first assignment of error, petitioners allege the county erred by relying on the Crook County Comprehensive Plan (CCCP) Destination Resort Map to conclude that Crossing Trails does not violate the ORS 197.455(1)(b)(B) requirement that a destination resort may not be sited "within 3 miles of a high value crop area."

As we noted briefly above, ORS 197.455 identifies a number of areas that are not eligible for destination resorts and requires that counties adopt maps as part of their comprehensive plan that show areas that are eligible for destination resorts. The relevant text of ORS 197.455 is set out below:

> "(1) A destination resort must be sited on lands mapped as eligible for destination resort siting by the affected county. The county may not allow destination resorts approved pursuant to ORS 197.435 to 197.467 to be sited in any of the following areas:
>
> "(a) Within 24 air miles of an urban growth boundary with an existing population of 100,000 or more unless residential uses are limited to those necessary for the staff and management of the resort.
>
> "(b)(A)On a site with 50 or more contiguous acres of unique or prime farmland * * *.
>
> "(B) On a site within three miles of a high value crop area * * *.

[2] The complete ORS 197.435(2) definition is set out below:

> "'High value crop area' means an area in which there is a concentration of commercial farms capable of producing crops or products with a minimum gross value of $1,000 per acre per year. These crops and products include field crops, small fruits, berries, tree fruits, nuts or vegetables, dairying, livestock feedlots or Christmas trees as these terms are used in the 1983 County and State Agricultural Estimates prepared by the Oregon State University Extension Service. The 'high value crop area' designation is used for the purpose of minimizing conflicting uses in resort siting and does not revise the requirements of an agricultural land goal or administrative rules interpreting the goal."

> "(c) On predominantly Cubic Foot Site Class 1 or 2 forestlands * * * which are not subject to an approved goal exception.
>
> "(d) In the Columbia River Gorge National Scenic Area * * *.
>
> "(e) In an especially sensitive big game habitat area * * *.
>
> "(2) In carrying out subsection (1) of this section, a county shall adopt, as part of its comprehensive plan, a map consisting of eligible lands within the county. The map must be based on reasonably available information and may be amended pursuant to ORS 197.610 to 197.625, but not more frequently than once every 30 months. The county shall develop a process for collecting and processing concurrently all map amendments made within a 30-month planning period. *A map adopted pursuant to this section shall be the sole basis for determining whether tracts of land are eligible for destination resort siting pursuant to ORS 197.435 to 197.467.*" (Emphasis added.)

In 2002, the county prepared and adopted a Destination Resort Map that shows areas eligible for destination resort siting. As the CCCP explains, in preparing that Destination Resort Map in 2002, the county excluded all the areas that are *ineligible* for destination resort siting under ORS 197.455(1)(a) through (e), and in that process attempted to exclude all areas that are ineligible because they are "within 3 miles of a high value crop area." CCCP 74-80.[3] As provided by ORS 197.455(2), that map cannot be amended "more frequently than once every 30 months" and must "be the sole basis for determining whether tracts of land are eligible for destination resort siting pursuant to ORS 197.435 to 197.467."

Petitioners argue that although the property where the proposed Crossing Trails destination resort would be developed is shown as eligible for destination resort siting on the county's acknowledged Destination Resort Map, before approving a development plan for Crossing Trails the county must nevertheless find that the Crossing Trails destination resort will not be sited "within 3 miles of a high value crop area." Petitioners contend that there is

[3] The discussion regarding how areas "within 3 miles of a high value crop area" were excluded appears at CCCP 76-78. The complete discussion of the mapping process appears at CCCP 74-80. Some of those pages of the CCCP are attached as an appendix to intervenor-respondent's brief, but in copying those pages the odd-numbered pages were omitted. The complete text of the CCCP is available on the county's website.

evidence in the record that there is a high value crop area within three miles of the proposed Crossing Trails.[4] Petitioner's argument relies in large part on amendments to ORS 197.455(1), which were adopted in 2003. The text of that amendment is set out below with the deleted text in bracketed italics and the new text in bold letters:

> "197.455. (1) A destination resort [*shall*] **must** be sited on lands mapped as eligible for destination resort siting by the affected county. [*A map adopted by a*] **The** county [*shall*] **may** not allow destination resorts approved pursuant to ORS 197.435 to 197.467 to be sited in any of the following areas:" Or Laws 2003, ch 812, § 3.

We understand petitioners to argue that in changing the text from "[a] map adopted by a county shall not allow destination resorts approved pursuant to ORS 197.435 to 197.467 to be sited in any of the following areas" to "[t]he county may not allow destination resorts approved pursuant to ORS 197.435 to 197.467 to be sited in any of the following areas" the legislature intended to impose an additional obligation that applies at the time individual destination resorts are proposed for land that is already shown as eligible for destination resorts on the adopted comprehensive plan map. Under petitioners' reading of ORS 197.455(1), even though the county took action to identify lands that are ineligible for destination resort siting under ORS 197.455(1)(a) through (e) when its Destination Resort Map was adopted in 2002, and that map shows the proposed site is within an area that is eligible for a destination resort if it meets the standards and criteria set out in CCZO 18.116, the county must again establish that the proposed site is still eligible under ORS 197.455(1)(a) through (e) when it approves individual requests for destination resort approval.

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[4] There is conflicting evidence regarding whether there currently are "commercial farms capable of producing crops or products with a minimum gross value of $1,000 per acre per year" within three miles of the proposed destination resort. Because we agree with the county that under the relevant statutes its adopted Destination Resort Map conclusively resolves that question, we do not consider petitioners' evidentiary challenge.

If the first two sentences of ORS 197.455(1) are read in isolation, it might be possible to argue that the map that is required by the first sentence of ORS 197.455(1) is not determinative of a site's eligibility under the factors set out in ORS 197.455(1)(a) through (e), although such a reading renders the effort required to prepare the map of eligible sites of dubious value. But when those two sentences are read in context with the balance of ORS 197.455, petitioners' reading of the statute is not plausible. If the legislature had intended to require that counties apply the ORS 197.455(1)(a) through (e) exclusions and prepare the map required by ORS 197.455 and also revisit the ORS 197.455(1)(a) through (e) exclusions each time a destination resort application is filed and make findings regarding those exclusions, it would not have kept the language in ORS 197.455(2) that states "[a] map adopted pursuant to this section shall be the sole basis for determining whether tracts of land are eligible for destination resort siting pursuant to ORS 197.435 to 197.467." If such a two-step process is required by ORS 197.455, the map adopted pursuant to ORS 197.455 would not be the "sole basis for determining whether tracts of land are eligible for destination resort siting," that map would be one of two bases for making that determination. Petitioners' interpretation is inconsistent with the text of the last sentence of ORS 197.455(2).

The first assignment of error is denied.

SECOND ASSIGNMENT OF ERROR

A. Introduction

Petitioners' second assignment of error is set out below:

> "The county erred in approving a development that would significantly affect existing transportation facilities without requiring adequate mitigation, in violation of Goal 12 and local code requirements."

Our resolution of the second assignment of error would have been easier if petitioners' arguments under this assignment of error were more clearly developed. Similarly, our resolution of the second assignment of error would have been easier if the county's decision had done a clearer job of explaining what the applicable transportation planning standard is, what that standard requires of the applicant and why the county believes the proposal complies with that transportation planning standard. We have attempted to read petitioners' arguments fairly, without making arguments for petitioners. And we have attempted to read the county's decision fairly, without reading in legal theories that are not fairly stated.

Before turning to the parties' arguments, we briefly describe the heart of the parties' dispute under the second assignment of error. As we explain in more detail below, the traffic that Crossing Trails is expected to generate, unless mitigated, would cause two transportation facilities to fail that would not otherwise have failed during the relevant planning period. The traffic that Crossing Trails is expected to generate will also impact a number of other transportation facilities, but those transportation facilities are either already failing or projected to fail during the planning period, with or without the traffic that Crossing Trails is expected to generate.[5] There was no dispute below that under the 1998 version of OAR 660-012-0060, which the county incorporated into its Destination Resort Overlay Zone in 2002, the applicant is required to mitigate for the traffic impacts on the transportation facilities that Crossing Trails would cause to fail, in accordance with the incorporated rule language. With that required mitigation the additional and improved transportation facilities needed to handle the traffic from Crossing Trails will be in place when needed to avoid failure of those transportation facilities.[6] However, the applicant took the position that it was not required to provide the kind of mitigation that is required by the incorporated version of OAR 660-012-0060 for Crossing Trails' traffic impacts on the transportation facilities that are failing or

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[5] It is not clear to us whether any of the transportation facilities in the area are *already* failing. But due to the county's approval of other destination resorts in the area that are expected to generate a significant amount of traffic, a number of transportation facilities are projected to fail within the planning period, with or without Crossing Trails.

[6] OAR 660-012-0060 is a section of the Land Conservation and Development Commission's (LCDC's) Transportation Planning Rule. We discuss that section the rule later in this decision.

projected to fail with or without the Crossing Trails traffic. With regard to transportation facilities that are failing or projected to fail with or without Crossing Trails, the applicant took the position that it would agree to contribute funding for improvements, provided that funding contribution was limited to a contribution that is roughly proportional to Crossing Trails' traffic impact on those transportation facilities that Crossing Trails will not cause to fail. However, the applicant expressly took the position that it was not legally required by the incorporated OAR 660-012-0060 rule language to provide any mitigation for transportation facilities that Crossing Trails would not cause to fail.[7] At the June 4, 2008 planning commission hearing in this matter, the applicant presented the following argument:

> "* * * You recall the last time I addressed these questions I was making the case that because of the Coos County decision we were not required to provide compensation or provide funding [for] a transportation facility that's already operating below deployment [*sic* should be "the performance"] standard for that facility. * * *
>
> "* * * * *
>
> "* * * [A]lthough we do not believe we are legally required to contribute to improvements for already failing infrastructure, we are willing to contribute proportional share contributions to take care of the additional traffic. We are contributing to those intersections and Chris can better explain exactly what that means in terms of dollars. But the point it that although there is a strong legal argument that would preclude us from having to pay for any intersection that is already failing and we're making worse, we are not going to rely on that argument. We are willing to make a proportional share contribution." Record 1250-53.[8]

The "Coos County decision" referenced in the quoted text is a Court of Appeals' decision that we discuss later in this opinion

[7] The applicant took that position in a June 3, 2008 memorandum from the applicant to the county's attorney. Record 1302-1311. The challenged decision expressly adopts the legal analysis in that June 3, 2008 memorandum, and we discuss the memorandum later in this opinion.

[8] Although intervenor-respondent does not call our attention to the quoted testimony by applicant, petitioners do. Petition for Review 12.

Although it is less than clear from the parties' arguments, the applicant apparently also took the position that the needed improvements for those transportation facilities that are failing or projected to fail with or without the Crossing Trails need not be in place before Crossing Trails is developed.[9]

B. Destination Resort Map and Destination Resort Overlay Zone

When the county adopted its Destination Resort Map and Destination Resort Overlay Zone in 2002, it adopted the following findings to address its obligation under OAR 660-012-0060 to ensure that those amendments would not significantly affect transportation facilities or, if they would, to provide the mitigation specified in the rule:

> "* * * [T]he amendments are consistent with OAR 660-012-0060, * * * because the implementing regulations also require analysis of transportation impacts of specific resort proposals at the time of future development review. The County Court finds that the amendments have the potential to significantly affect a number of transportation facilities under OAR 660-012-0060(2) because the amendments permit the siting of destination resorts in Crook County, and the future resorts are likely to add traffic to existing facilities. However, the Court finds that OAR 660-012-0060(1) allows the Court to adopt the subject amendments so long as it 'limits allowed land uses to be consistent with the planned function, capacity, and performance standards of affected transportation facilities.' Since compliance with particular performance standards cannot be determined until a specific resort proposal is submitted, the Court finds that the amendments properly limit uses to be consistent with any applicable performance standards by requiring resort applicants to provide a traffic study * * * at the time of development review to show that the proposed development will not reduce the level of service of any impacted transportation facility based on the performance standards set forth in the applicable transportation system plan * * *." Petition for Review, Appendix C, finding 18.

As the above findings suggest, to ensure that its 2002 plan and land use regulation amendment decisions were consistent with the OAR 660-012-0060 transportation planning requirements in effect at that time, the county did two things. First, the Destination Resort

[9] Apparently the timing of those facility improvements and the timing of the applicant's financial contributions to construct those facility improvements was to be worked out between the applicant and ODOT in a memorandum of understanding.

Overlay Zone that was adopted in 2002 requires that individual applications for approval of destination resorts include a traffic impact study. CCC 18.116.080(3)(g).[10] Second, the county adopted as part of the Destination Resort Overlay Zone the version of OAR 660-012-0060 that was in effect in 2002.[11] That OAR 660-012-0060 language is codified at CCZO 18.116.100(6) and is set out below:

> "(a) The traffic study required by CCC 18.116.080(3)(g) illustrates that the proposed development will not significantly affect a transportation facility. A resort development will *significantly affect a transportation facility* for purposes of this approval criterion if it would, at any point within a 20-year planning period:
>
> "* * * * *
>
> "(iii) *Reduce the performance standards of the transportation facility below the minimum acceptable level identified in the applicable transportation system plan (TSP).*
>
> "(b) If the traffic study required by CCC 18.116.080(3)(g) illustrates that the proposed development will significantly affect a transportation facility, the applicant for the destination resort shall assure that the development will be consistent with the identified function, capacity, and level of service of the facility through one or more of the following methods:
>
> "(i) Limiting the development to be consistent with the planned function, capacity and level of service of the transportation facility;

---

[10] CCZO 18.116.080(3)(g) sets out the required elements of a destination resort development plan. CCZO 18.116.080(3)(g) requires that a destination resort development plan include the following:

> "A traffic study which addresses: (1) impacts on affected county, city, and state road systems, and (2) transportation improvements necessary to mitigate any such impacts. The study shall be prepared by a licensed traffic engineer in coordination with the affected road authority (either the county department of public works or the Oregon Department of Transportation, or both[.]"

[11] We note that under the Court of Appeals' recent decision in *Willamette Oaks LLC. v. City of Eugene*, 232 Or App 29, ___ P3d ___ (2009), it may be that the approach the county took in 2002 would be viewed as an improper deferral of OAR 660-012-0060. However, the county's 2002 decision is not before us in this appeal.

> "(ii) Providing transportation facilities adequate to support the proposed development consistent with Chapter 660 OAR, Division 12; or
>
> "(iii) Altering land use densities, design requirements or using other methods to reduce demand for automobile travel and to meet travel needs through other modes.
>
> "(c) Where the option of providing transportation facilities is chosen in accordance with subsection (6)(b)(ii) of this section, the applicant shall be required to provide the transportation facilities to the full standards of the affected authority as a condition of approval. Timing of such improvements shall be based upon the timing of the impacts created by the development, as determined by the traffic study or the recommendations of the affected road authority." (Emphases added.)

Under the 1998 version of OAR 660-012-0060, which was incorporated into CCC 18.116, the obligation to mitigate for destination resort traffic impacts in one or more of the three ways set out in CCC 18.116.100(6)(b) is only triggered if the destination resort traffic would "significantly affect a transportation facility." As relevant in this appeal, destination resort traffic will "significantly affect a transportation facility" if that traffic will "[r]educe the performance standards of the transportation facility below the minimum acceptable level identified in the applicable transportation system plan (TSP)." CCC 18.116.100(6)(a)(iii).

C. The Meaning of "Significantly Affect a Transportation Facility"

Because the mitigation obligations set out in CCC 18.116.100(6)(b) only apply for transportation facilities that Crossing Trails will significantly affect, the meaning of "significantly affect a transportation facility" is a key consideration. Although petitioners suggest otherwise, the relevant definition of those words is the definition that is provided in the 1998 version of OAR 660-012-0060, which was incorporated into CCC 18.116.100(6), not the definition of those words in the current version of OAR 660-012-0060.[12]

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[12] Under the current version of OAR 660-012-0060, a comprehensive plan or land use regulation will "significantly affect" a transportation facility if it would "[w]orsen the performance of an existing or planned transportation facility that is otherwise projected to perform below the minimum acceptable performance standard * * *."

The applicant relied in large part below on *Dept. of Transportation v. Coos County*, 158 Or App 568, 976 P2d 68 (1999). That decision concerned an earlier version of OAR 660-012-0060(2)(d) with language that was similar to the language in the 1998 version of OAR 660-012-0060(2)(d).[13] The applicable TSP in that case was the Oregon Highway Plan (OHP), and at the time the OHP provided that the transportation facilities that would be affected by the amendments at issue in that case should operate at level of service (LOS) C. The applicant's traffic study in *Dept. of Transportation v. Coos County* showed that all of the impacted transportation facilities were operating at LOS E and thus were already failing, with or without the amendment. The amendment would have generated additional traffic for those transportation facilities and thus would have worsened the existing failure, but it would not have caused a change in the existing LOS E. The Court of Appeals held that such worsening of an already failing transportation facility does not result in a "significant affect," within the meaning of the applicable version of OAR 660-012-0060(2)(d):

> "It is unnecessary for us to resolve the full scope of the interpretive question that the parties pose in order to decide this case. The parties appear to agree that 'level of service,' although not defined in the rule, is a 'term of art,' and that it refers to six discrete incremental stages that are identified in descending order of sufficiency by letters of the alphabet. In order for there to be a 'significant effect' under OAR 660-012-0060(2)(d), whatever else an amendment may or may not have to do, it must 'reduce the level of service.' The amendment here does not do that. The level of service was at E before the enactment of the amendment, and it will remain within the E range after the amendment." 158 Or app at 572.

DLCD v. City of Warrenton, 37 Or LUBA 933 (2000) is another decision that was discussed below. That case concerned a land use regulation amendment and the 1998 version

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[13] As we have already explained, the 1998 version of OAR 660-012-0060(2)(d) provided that a decision would "significantly affect a transportation facility" if the traffic that decision will generate would "[r]educe the performance standards of the transportation facility below the minimum acceptable level identified in the applicable transportation system plan (TSP). "

The version of OAR 660-012-0060(2)(d) at issue in *Dept. of Transportation* provided that a decision would "significantly affect a transportation facility" if the traffic that decision will generate would "[r]educe the level of service of the facility below the minimum acceptable level identified in the (TSP)."

of OAR 660-012-0060(2)(d). *See* n 13. The words "level of service" in OAR 660-012-0060(2)(d) had been changed to "performance standards" but the rule language was otherwise the same. DLCD also concerned the OHP, but the OHP had also been amended after the Court of Appeals' *Dept. of Transportation v. Coos County* decision in two important ways. As amended, the OHP no longer used LOS to establish the desired performance level of transportation facilities and instead used volume to capacity ratio (V/C ratio).[14] In addition to amending the OHP to replace LOS with V/C, the OHP was amended to include the following action item "Action 1F.6," which provides

> "For purposes of evaluating amendments to transportation system plans, acknowledged comprehensive plans and land use regulations subject to OAR 660-012-0060, in situations where the [V/C ratio] for a highway segment, intersection or interchange is above the standards [established in the OHP] and transportation improvements are not planned within the planning horizon to bring performance to standard, the performance standard is to avoid further degradation. If an amendment to [an] acknowledged comprehensive plan or land use regulation increases the [V/C ratio] further, it will significantly affect the facility." OHP 82.

Based on the changed language in OAR 660-012-0060(2)(d) and the amendments to the OHP, we concluded that the no "further degradation" standard applies and that an amendment that would result in increase in the V/C ratio for a transportation facility that is already failing "significantly affects" that facility, within the meaning of OAR 660-012-0060(2)(d). 37 Or LUBA at 945-46. In doing so, we rejected arguments that ODOT's amendments to the OHP were an improper attempt by ODOT to amend the TPR and overrule the result in *Dept. of Transportation v. Coos County*. We also rejected the argument that the

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[14] As we explained in DLCD:

> "V/C ratios replace the LOS performance standard contained in the 1991 OHP. According to the 1999 OHP, LOS was defined by letter grades A-F, with each grade representing a range of V/C ratios. The OHP explains that V/C ratios are similar in concept, but represents LOS by specific V/C ratios to improve clarity and ease of implementation. OHP 72." 37 Or LUBA at 944 n 8.

Action 1F.6 non-degradation requirement should not be viewed as part of the "performance standards," as those words are used in OAR 660-012-0060(2)(d). *Id.* at 946.

Finally, in a 2001 decision that petitioners do not discuss at all and that intervenor-respondent relies on to question the soundness of our decision in *DLCD v. City of Warrenton*, the Court of Appeals agreed with LUBA that under the 1998 version of OAR 660-012-0060 a comprehensive plan or land use regulation amendment would "significantly affect" a transportation facility that was not already failing but was projected to fail during the planning period, if that amendment would cause the performance standard to be "violated sooner than it otherwise would be during the planning period." *Department of Transp. v. City of Klamath Falls,* 177 Or App 1, 9, 34 P3d 667 (2001).

To summarize, under the Court of Appeals' 1999 decision in *Dept. of Transportation v. Coos County* a comprehensive plan or land use regulation amendment that only worsened the performance of a transportation facility that had already failed would not "[r]educe the level of service of the facility below the minimum acceptable level" and therefore would not significantly affect a transportation facility under the TPR. Under LUBA's 2000 decision in *DLCD v. Warrenton*, a comprehensive plan or land use regulation amendment that reduces the V/C ratio of a transportation facility that is already failing would "[r]educe the performance standards of the transportation facility below the minimum acceptable level," within the meaning of OAR 660-012-0060. *See* n 13. Finally, under *Department of Transp. v. City of Klamath Falls,* a comprehensive plan or land use regulation amendment that hastens the failure of a transportation facility that is already projected to fail during the planning period "significantly affects" that facility, within the meaning of the 1998 version of OAR 660-012-0060.

D. The Debate Below Regarding Transportation Impacts

The applicant's initial July 2, 2007 Transportation Impact Study (TIS) was prepared for Seven Peaks Resort by Ferguson & Associates (Ferguson). Supplemental Record 193-

337.[15] The Ferguson TIS identified ten intersections in the vicinity of Crossing Trails that were already failing or forecast to exceed state or county performance standards in the 2028 planning period. The Ferguson TIS concluded that the proposed destination resort would be the cause of intersection failure in only one of those ten instances—Highway 26/Wiley Road. The Ferguson TIS included proposed mitigation for seven of the ten intersections that would be impacted by the proposal. Supplemental Record 239.

DKS Associates (DKS) conducted a review of the Ferguson TIS, on behalf of OTAK, the county's engineering firm. That review is dated October 26, 2007 and includes the following discussion:

> "The only substandard operating condition triggered by the proposed development is at the Highway 126/Wiley Road intersection under the 2018 scenario. Several mitigation options are discussed but no improvements are identified as an impact of the proposed development. County and ODOT staff should consider an appropriate condition of approval for this location.
>
> "The potential funding of the mitigation measures * * * should be identified. This review should include all off-site improvements that are not the sole responsibility of the development applicant. It should be clarified if the County or ODOT expects to construct the improvement within the planning horizon, or if this is an unfunded improvement that would likely only be built with proportionate share funds collected from development applicants. It is important to establish that the identified off-site mitigations can reasonably be expected to be constructed within the timeframe at which they will be needed to serve traffic from the proposed development." Record 1697.

The DKS report is not expressed in TPR terminology, but it appears to assume that if the proposed destination resort will accelerate the failure of a transportation facility that would fail with or without the proposed destination resort, it would "significantly affect" that facility within the meaning of 18.116.100(6)(a) and therefore require one or more of the mitigation measures set out in 18.116.100(6)(b) be assured so that it would be in place when needed to

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[15] The Supplemental Record submitted by the county did not include the entire Ferguson TIS. The omitted portion of the Ferguson TIS was submitted in a document entitled Second Supplemental Record but that document continues the pagination in the Supplemental Record, pages 280-337.

handle the traffic to be generated by the proposal. That approach is consistent with the Court of Appeals' decision in *Department of Transp. v. City of Klamath Falls*.

In its application for Crossing Trails, which was received by the county on March 28, 2008, the applicant took the following position in its burden of proof:

> "Because Applicant does not propose an amendment to a functional plan, an acknowledged comprehensive plan or a land use regulation, OAR 660-012-0060 ('Plan and Land use Regulation Amendments') does not apply to the application. As the ODOT Development Review Guidelines, which are attached as Appendix D to the Ferguson study, explain at p. 3-3-2, 'The authority to require a Traffic Impact Study as part of a local land use review comes from the [CCC].'
>
> "CCC 18.116.[100](6)(a) is modeled on an earlier version of the rule. Under the reasoning in *Dept. of Transportation v. Coos County* * * * which analyzes the version of OAR 660-012-0060 from which the County standard is taken, before there can be a finding of 'significant affect,' the *resort itself* must 'reduce the performance standards of the transportation facility below the minimum acceptable level' in the TSP. If the transportation facility is already failing or would fail without the development of the resort, it cannot be said that the resort development has reduced or will reduce the performance standards below the minimum acceptable level." Record 1615 (emphasis in original).

Another report was prepared by Group Mackenzie on March 28, 2008 to address traffic issues raised by Crossing Trails. Record 1702-08. That report includes the following discussion:

> "Analysis presented in the TIA identifies a number of transportation facilities in the study area that are currently operating, or are projected to operate, below the minimum acceptable performance standards as identified in the applicable TSP regardless of the proposed development. In other words, the proposed development does not cause these facilities to exceed performance standards – the CCC criterion necessitating mitigation.
>
> "The Applicant acknowledges the proposed development impacts other study area transportation facilities, especially those under ODOT jurisdiction. However, it is important to note those transportation facilities (intersections), with the exception of the OR 126/Wiley Road intersection, are projected to exceed minimum acceptable performance standards by the end of the planning

> period, regardless of development impact.[[16]] Although the Applicant is not actually required by CCC Section 18.116.100(6)(a)(iii) to mitigate development impacts at these intersections, the Applicant will work with ODOT to reach an agreement concerning these intersections and proposes to enter into a memorandum of understanding (MOU) with ODOT to document the agreement." Record 1706.

The burden of proof and the Group Mackenzie report rely on the result in *Dept. of Transportation v. Coos County* and that reliance would appear to be inconsistent with the Court of Appeals' decision in *Department of Transp. v. City of Klamath Falls* and LUBA's decision in *DLCD v. City of Warrenton.*[17]

In an April 30, 2008 letter from ODOT to the county, ODOT appears to take the position that Crossing Trails will significantly affect seven intersections that are failing or would fail during the planning period, with or without Crossing Trails, and that the applicant should be required to mitigate those impacts in accordance with CCC 18.116.100(b). Record 1434-35. The letter lists the costs of that mitigation and suggests that if the required funding cannot be guaranteed from other sources to ensure the required mitigation will be in place when needed to serve Crossing Trails, the applicant should be required to provide that funding or the application should be denied.[18] Although ODOT's letter never mentions LUBA's decision in *DLCD v. Warrenton*, or the Court of Appeals' decision in *Department of Transp. v. City of Klamath Falls* it seems likely those decisions were the basis for ODOT's position that the applicant could be required to provide mitigation for intersections that were failing or would fail even if Crossing Trails is not built.

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[16] Earlier in the report, Group Mackenzie concluded that the proposal would be the cause of failure for a second intersection, OR 126/Parrish Lane. Record 1703.

[17] As we note later in this opinion, the applicant argued that the nondegradation standard that LUBA found in OAR 660-012-0060(2)(d) and the OHP in *DLCD v. City of Warrenton* does not apply in this case for several reasons.

[18] The combined cost of that mitigation would be almost 14 million dollars.

The applicant responded in a June 3, 2009 letter that *DLCD v. Warrenton* was not controlling here and that because the seven intersections identified in ODOT's letter would fail, with or without Crossing Trails, Crossing Trails does not significantly affect those intersections within the meaning of CCC 18.116.100(a)(iii).[19] The applicant took the position that if Crossing Trails does not "significantly affect" those intersections, within the meaning of CCC 18.116.100(a)(iii), the applicant is not legally required to provide any mitigation at those intersections under CCC 18.116.100(b).

> "* * * If the performance standards of the transportation facility are already below the minimum acceptable level, expressed as a V/C ratio, then the proposed development will not reduce the standards below that level. In that case, the analysis in *Dept. of Transportation v. Coos County* * * * discussed in Crossing Trails' burden of proof statement, applies. Under that analysis, as stated in the burden of proof statement, the proposed resort can be said to 'significantly affect' only two intersections: (1) Highway 126 and SW Wiley Road; and (2) Highway 126 and SW Parrish Lane." Record 1306.

As the above makes reasonably clear, there was generally agreement below that Crossing Trails will significantly affect the intersection of Highway 126 and SW Wiley Road and the intersection of Highway 126 and SW Parish Road, within the meaning of CCC 18.116.100(a)(iii), and therefore the applicant is obligated to mitigate its impact on those intersections under CCC 18.116.100(b). But there was confusion and disagreement below regarding whether Crossing Trails would "significantly affect" the other impacted

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[19] The basis for that position seems to be threefold. First, *DLCD v. Warrenton* concerned a decision that is subject to OAR 660-012-0060 (a land use regulation amendment), whereas the challenged decision is a conditional use permit that is not directly subject to OAR 660-012-0060. Second, the applicant cited two Court of Appeals decisions which it contended suggest that *DLCD v. Warrenton* may have been wrongly decided. Third, the applicant noted that following *DLCD v. Warrenton*, DLCD took action to amend the OAR 660-012-0060(2) definition of "significant effect" to make an amendment that worsened the performance of a already-failing facility an amendment that significantly affects that facility. The applicant took the position that that amendment would not have been necessary if *DLCD v. Warrenton* was correctly decided. Record 1302-1307.

One of the Court of Appeals decisions that the applicant contended undermined LUBA's decision in *DLCD v. Warrenton* is *Department of Transp. v. City of Klamath Falls*. However, the applicant does not discuss the part of that decision where the Court of Appeals holds that an amendment that will hasten the failure of a transportation facility that is not failing but is projected to fail during the planning period "significantly affects" that facility, within the meaning of the 1998 version of OAR 660-012-0060.

intersections that have already failed or will fail during the planning period with or without Crossing Trails and whether the applicant was legally obligated to mitigate those impacts in the ways specified in CCC 18.116.100(b).[20] To add to the confusion, the applicant appears to have been willing from the beginning to make a financial contribution to improve transportation facilities that would be affected by Crossing Trails, while maintaining the position that it was not legally obligated to make that proportional contribution or any contribution to improve those transportation facilities that Crossing Trails would not cause to fail.

E. The County's Decision

The county's decision acknowledges the disagreement between ODOT and the applicant concerning the scope of the applicant's mitigation obligation under CCC 18.116.100(b) and how much the applicant's financial contribution should be. The decision then provides the following explanation:

> "ODOT acknowledges that Applicant has agreed to construct needed mobility improvements at Highway 126/SW Wiley Road and Highway 126/SW Parish Lane, as well as make a proportional share contribution to additional intersections. ODOT requests that if the application is approved, Applicant, ODOT and the County enter into a memorandum of understanding ('MOU') that requires the agreed improvements be constructed and the agreed contributions are made.
>
> "* * * * *
>
> "In a situation where an applicant and opponents rely on experts, the County occasionally commissions an independent expert to provide reliable advice. The county's own traffic consultant, OTAK, prepared a study * * * which supports the data and conclusions of Ferguson and Group Mackenzie. OTAK calculated a similar amount ($754,950). Using OTAK's higher number, plus amounts for road improvements and a proposed bridge replacement, Applicant's total contribution will be approximately $1,455,000.

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[20] The applicant's focus on LUBA's decision in *DLCD v. City of Warrenton* seems misplaced since at least some and perhaps most of the affected intersections are projected to fail during the planning period but are not currently failing. Crossing Trails would "significantly affect" those intersections under *Department of Transp. v. City of Klamath Falls* if it would hasten the failure of those intersections.

> "The TIA, Table E-1, shows intersections that do not meet operation standards today, in 10 years or in 20 years. Although many of the intersections are presently failing or will fail during the next 20 years, only the intersection of Highway 126 and SW Wiley Road is shown to fail as a result of the proposed resort. A subsequent study showed that eliminating left-hand turns on SW Wiley Road would redirect north- and south-bound traffic onto SW Parrish Lane, causing the intersection of Highway 126 and SW Parrish Lane to fail. Therefore, the proposed resort can be said to 'significantly affect' only two intersections: (1) Highway 126 and SW Wiley Road; and (2) Highway 126 and SW Parrish Lane.
>
> "OTAK rebuts arguments made by ODOT in its submissions and effectively agrees with the legal reasoning contained in a Memorandum dated June 3, 2008 submitted by Applicant.[[21]] * * * *The Court specifically incorporates by reference the legal analysis in Applicant's June 3, 2008 memorandum and December 3, 2008 memorandum and concludes that not only does the proposed development not have a 'significant affect' on transportation facilities, as the term is used (in a technical sense) in CCC 18.116.100(6)(a), but the Court cannot constitutionally require the Applicant to contribute to make major improvements to already failing transportation facilities, given the small amount of traffic Applicant will be contributing to those facilities.* * * *" (Emphasis added.)[22]

The challenged decision goes on at some length discussing the constitutional implications under *Dolan v. City of Tigard*, 512 US 734, 114 S Ct 2309, 129 L Ed 2d 304 (1994), if the county were to require that the applicant fully fund solutions for the transportation facilities that would fail even if Crossing Trails is not built. But those constitutional issues simply do not arise unless the Crossing Trails traffic will "significantly affect" transportation facilities, within the meaning of CCC 18.116.100(6)(a), so that the applicant is legally obligated by CCC 18.116.100(6)(a) to mitigate the traffic impact of Crossing Trails in one of the three ways set out in CCC 18.116.100(6)(b).

The challenged decision imposes conditions of approval to ensure that needed improvements are made to the Highway 126/Wiley Road and Highway 126/Parrish Road

[21] This is the memorandum submitted by the applicant and discussed above. *See* n 19 and related text.

[22] There is no December 3, 2008 memorandum. The county likely intended to refer to a November 26, 2008 memorandum that appears at Supplemental Record 13-25.

intersections. The applicant appears to have agreed to pay the full cost of these improvements, and we do not understand petitioners to challenge the adequacy of these improvements to fully mitigate for the impact of Crossing Trails on these intersections. Petitioners' arguments under the second assignment of error are directed entirely at the adequacy of intervenor's proportionate financial contribution to mitigate for Crossing Trails' traffic impact on those intersections that are currently failing or would fail even if Crossing Trails is not constructed.

F. Petitioners' Argument

Petitioners' substantive argument is set out below:

> "Three traffic studies and testimony from ODOT and others underlie the county's findings that, in fact, a number of roads and intersections near the proposed site are already at or exceeding capacity, in part due to other destination resort proposals previously approved, which would, like this one, contribute thousands of daily vehicle trips to local and state roadways. The proposed resort would push two other intersections over the 'failure' point. Thus, under either the existing Goal 12 TPR or the 'old' TPR language incorporated into the county code, the proposed development would 'significantly affect' transportation facilities in the area.
>
> "Therefore, the county is required to deny the proposal unless it can be shown that the proposed mitigation measures 'assure that the development will be consistent with the identified function, capacity, and level of service of the facility.' Relying on the second of the three allowed mitigation methods, the county conditioned approval of the proposal upon the applicant fully paying for some of the necessary improvements and partially paying for others.
>
> "Significantly, however, the county did not find that that required mitigation would be adequate to fully fund the upgrades necessary, and, in fact, ODOT testified that that amount needed to actually construct the improvements would be *more than fourteen times* the amount the conditions of approval required the applicant to pay, and that neither state nor local funding had been identified to make up the difference. As both ODOT and the petitioners pointed out during the local appeal, the mitigation measures would not 'assure that the development would be consistent with the identified function, capacity, and level of service of the facilities,' as required by the TPR and thus, the county was required to deny the proposal. Rec. 735-36, 740-41." Petition for Review 11-12 (italics and underscoring in original).

Intervenor-respondent first argues that petitioners' arguments under the second assignment of error should be summarily rejected as insufficiently developed for review.[23] Although petitioners' argument could be stated more clearly, we believe it is adequate to express petitioners' position that the condition requiring the applicant to enter a MOU with ODOT and the county to provide its proportional share financial contribution for failing intersections is not sufficient to comply with CCC 18.116.100(6)(b)(ii), which requires that the applicant provide "transportation facilities adequate to support the proposed development consistent with Chapter 660 OAR, Division 12[.]"[24]

The argument quoted above can be understood to take the position that the only way the applicant can comply with CCC 18.116.100(6)(b)(ii) is to fully fund all of the improvements that will be necessary to correct the failing intersections, and any lesser financial contribution necessarily falls short of what is required under CCC 18.116.100(6)(b)(ii). That argument would be an erroneous construction of CCC 18.116.100(6)(b)(ii), since CCC 18.116.100(6)(b)(ii) and CCC 18.116.100(6)(c) are only concerned with the timing and availability of facility improvements when they are needed. Those rules are not concerned with who pays for those facilities. But the above argument relies in part on arguments advanced by ODOT at 740-41, where ODOT explained its concern with the applicant's proposal:

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[23] Intervenor-respondent's argument is set out below:

> "The second assignment of error should be denied for the simple reason that petitioners' assumption that the proposed mitigation measures are inadequate is incorrect. Petitioners offer no argument or evidence in support of that assumption. ODOT's letters do not support it. * * *" Intervenor-Respondent's Brief 16.

[24] CCC 18.116.100(6)(c) elaborates:

> "Where the option of providing transportation facilities is chosen in accordance with subsection (6)(b)(ii) of this section, the applicant shall be required to provide the transportation facilities to the full standards of the affected authority as a condition of approval. *Timing of such improvements shall be based upon the timing of the impacts created by the development, as determined by the traffic study or the recommendations of the affected road authority.*" (Emphasis added.)

> "The proffered proportional share contribution does not comply with [CCC 18.116.100(6)(c)] since it does not include the timing of the improvements. Some of the improvements are needed at day of opening and other are needed through the study horizon year. The assurance of the necessary improvements being in place at the time of need is required to protect the safety of the traveling public." Record 740.

We understand ODOT to have argued below that the applicant's offer to pay a proportional share of the cost of improvements needed to correct failing intersections, by itself, is not sufficient to assure that "transportation facilities adequate to support the proposed development" will be provided at the time they are needed, as required under CCC 18.116.100(6)(b)(ii) and CCC 18.116.100(6)(c). Petitioners cite to ODOT's testimony in the petition for review, in support of their argument. Again, while that argument could have been stated more clearly in the petition for review, it is stated clearly enough so that summary rejection is not appropriate. Assuming Crossing Trails will "significantly affect" the failing intersections so that the applicant was obligated to mitigate that significant affect under CCC 18.116.100(6)(b), petitioners' argument is sufficient to challenge the adequacy of the county's decision, as conditioned, to ensure that the applicant's proposed mitigation is sufficient to comply with CCC 18.116.100(6)(b)(ii) and CCC 18.116.100(6)(c).

Our discussion under the second assignment of error to this point was necessary to set the backdrop for what has been the threshold question under the second assignment of error from the very beginning. That question is: Will the traffic that will be generated by Crossing Trails "significantly affect" the intersections that are either already failing or will fail during the planning period with or without the construction of Crossing Trails? Unless that is the case, the applicant has no obligation to mitigate under CCC 18.116.100(6)(b). In that case, it does not matter whether the proportional financial contribution that the applicant has agreed to provide is sufficient to comply with CCC 18.116.100(6)(b)(ii) and 18.116.100(6)(c).

As we have explained, the challenged decision finds that Crossing Trails traffic will not "significantly affect" those intersections, within the meaning of CCC

18.116.100(6)(a)(iii). In adopting that finding, the county expressly relied on the legal analysis that was supplied by the applicant. *See* n 19. In their petition for review, petitioners neither acknowledge that finding nor offer any challenge to the legal reasoning the county adopted in support of those findings. We seriously question that legal reasoning.[25] However, based on petitioners' failure to challenge either the county's finding that Crossing Trails will not significantly affect those failing intersections and petitioners' failure to offer any response to the legal reasoning the county adopted in support of that finding, we deny the second assignment of error. To do otherwise would require that we (1) supplement petitioner's second assignment of error to read in a challenge to the county's finding that Crossing Trails will not significantly affect those failing intersections and (2) address the merits of the legal reasoning the county adopted in support of that finding with no legal argument from petitioners challenging that legal reasoning. We decline to do so.

The second assignment of error is denied.

THIRD ASSIGNMENT OF ERROR

Applicants for development plan approval for a destination resort must pay an application fee. CCC 18.116.080(2).[26] Pursuant to CCC 18.172.050(2), "[f]iling of an application is not considered complete until all applicable fee(s) are paid to the director." In this case the applicant paid the required $25,000 application fee when the application for

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[25] That reasoning is based almost entirely on criticism of LUBA's decision in *DLCD v. Warrenton,* a case that was concerned with a transportation facility that was already failing. In this case it appears that few if any of the affected transportation facilities are already failing, although a number of those facilities are projected to fail during the planning period, with or without Crossing Trails. It would appear that *Department of Transp. v. City of Klamath Falls* is likely the controlling precedent and that under that decision Crossing Trails significantly affects those transportation facilities and is required to mitigate that effect under CCC 18.116.100(6)(b)(ii) and 18.116.100(6)(c).

[26] CCC 18.116.080(2) provides:

> "Following a preapplication conference, the applicant shall submit a development plan for review by the planning commission. Fifteen copies of the development plan shall be submitted to the planning department along with a filing fee set by the Crook County court to defray costs incidental to the review process."

Seven Peaks was submitted in early 2007. When that application was withdrawn and the application for Crossing Trails was submitted, the applicant did not submit another $25,000 application fee. Petitioners assign error to the county's failure to require the applicant to pay a second application fee.

The record includes an e-mail message from the county planning director that provides the following explanation for why the county did not require the applicant to pay a second $25,000 application fee:

> "There is no cancelled check per se for Crossing Trails. They came in and withdrew their application fee and took their booklets as Seven Peaks. No refund was given on the $25,000 application fee because of the difficulties in refunding a check. They were required to submit an additional $5,900+ for traffic impact analysis fees which were paid to OTAK, the county's consultant. No renaming check fee was required as they submitted a 'new application' with their previously paid fee kept for that application." Record 1519.

The above seems to be a complete and adequate explanation for why the county did not require the applicant to pay a second $25,000 application fee. Although petitioners contend that some work had been done by the county in processing the Seven Peaks application and that the county should be required to account for that work, they cite no CCC requirement that the county do so. If the county wishes simply to apply the initial Seven Peaks application fee to the Crossing Trails application that replaced it, we do not see why the county cannot do so.

The third assignment of error is denied.

FOURTH ASSIGNMENT OF ERROR

In their fourth assignment of error, petitioners contend the $6,850 appeal fee the county charged to process their appeal was excessive. ORS 215.422(1)(c) limits the appeal fee a county may charge for land use permit appeals. The relevant text of OAR 215.422(1)(c) is set out below:

> "The governing body may prescribe, by ordinance or regulation, fees to defray the costs incurred in acting upon an appeal from a hearings officer, planning commission or other designated person. The amount of the fee shall be reasonable and shall be no more than the average cost of such appeals or the actual cost of the appeal, excluding the cost of preparation of a written transcript. * * *"

In a decision issued this date we remand the fee schedule that the county adopted in 2009. *1000 Friends of Oregon v. Crook County*, ___ Or LUBA ___, (LUBA No. 2009-077, December 17, 2009). However, because that decision concerns the 2009 appeal fee schedule, and petitioners' appeal fee was set by the 2008 appeal fee schedule, our decision in *1000 Friends of Oregon v. Crook County* does not directly dispose of this assignment of error.

In Crook County the appeal fee that the county charges for land use appeals is based on a formula. In this case that appeal fee is $1,850 plus 20 percent of the $25,000 application fee. The formula that was used to set petitioners' appeal fee was adopted in 2008. Although it is not entirely clear from the parties' arguments, the appeal fee schedule that was adopted in 2008 and the appeal fee schedule that was adopted in 2009 were both based on the same June 13, 2008 staff report and are the same appeal fee schedule.

Because petitioners are making an "as applied" challenge of the appeal fee, petitioners have the "burden to establish a *prima facie* case that the appeal fee violated [ORS 215.422(1)(c)]." *Young v. Crook County*, 224 Or App 1, 3, 197 P3d 48 (2008). To carry that burden, petitioners sent an e-mail message to the county requesting that the county provide written documentation of the actual or average cost of their appeal. Record 183-84. The county responded to that e-mail message with its own e-mail message, advising that petitioners must make a public records request on a form, which was attached to the e-mail message. *Id.* The county contends that petitioners never completed and submitted the form. We therefore do not consider that requested evidence further.

Under the CCC, appeals of planning commission decisions are on the record. However, under CCC 18.172.110(12)(a)(vi) the county court may allow the record to be supplemented with additional evidence.[27] Therefore, at the time petitioners filed their appeal of the planning commission decision, they also filed a request that the county court supplement the record with the June 13, 2008 staff report. Record 150. The county denied that request, and gave the following explanation for its denial:

> "The evidence [petitioners] sought to introduce related to Crook County appeals fees. The Court elected not to take evidence outside the record because the Court determined that the [petitioners] had not established that 'the supplement is necessary to take into consideration the inconvenience of locating the evidence at the time of the initial hearing, with such inconvenience not being the result of negligence or dilatory act by the moving party' pursuant to [CCC 18.172.110(12)(a)(vi)].[[28]] The Court noted that the staff memorandum had been available since June 13, 2008 * * *." Record 11.

Although it is an exceedingly close question, in large part because petitioners neither acknowledge nor direct any arguments at the above-quoted findings, we conclude the county erred by not granting petitioners' request to supplement the record with the June 13, 2009 staff report. While petitioners apparently intended to challenge the appeal fee the county charges for appeals of planning commission destination resort decisions, if an appeal was necessary, petitioners could not know for sure that they would challenge the appeal fee until the planning commission rendered a decision in the applicant's favor. Under the county courts' interpretation and application of CCC 18.172.110(12)(a)(vi), all parties who believe the county's appeal fees exceed actual or average costs would have to make an evidentiary

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[27] CCC 18.172.110(12)(a)(vi) provides as follows:

> "The appellate body may, at its option, admit additional testimony and other evidence from an interested party or party of record to supplement the record of prior proceedings. The record may be supplemented by order of the appellate body or upon written motion by a party. The written motion shall set forth with particularity the basis for such request and the nature of the evidence sought to be introduced. Prior to supplementing the record, the appellate body shall provide an opportunity for all parties to be heard on the matter. The appellate body may grant the motion upon a finding that the supplement is necessary to take into consideration the inconvenience of locating the evidence at the time of initial hearing, with such inconvenience not being the result of negligence or dilatory act by the moving party."

[28] *See* n 27.

showing that would be sufficient to establish the *prima facie* case that is required under *Young v. Crook County before* the county renders an appealable decision and *before* those parties know whether the decision will be an unfavorable decision that they wish to appeal. The county court is entitled to deference in interpreting and applying the CCC 18.172.110(12)(a)(vi) "inconvenience" standard for supplementing the record. However, we conclude that requiring such anticipatory and potentially unnecessary *prima facie* evidentiary showings at all planning commission hearings would be "inconvenient" for both the parties and the county under any reasonable understanding of the word.

We understand petitioners to have sought to supplement the record with the June 13, 2008 staff report so that they could argue that the staff report is not substantial evidence that the appeal fee established in the 2008 fee schedule for appeals of destination resorts does not exceed the average cost of such appeals. Given our decision in *1000 Friends of Oregon v. Crook County*, petitioners are likely correct in that contention unless the county can identify other evidence that supports a conclusion that its $6,850 appeal fee for appeals of destination resort decisions does not exceed the average cost of such appeals.

The fourth assignment of error is sustained.

The county's decision is remanded.

Appendix 12

Crook County

217-20-000846-PLNG-PLNG

November 10, 2020

OWNER: 818 Powell Butte, LLC
Eugene Gramzow
21059 Avery Lane
Bend, Oregon 97702

Dear Mr. Gramzow: Gene

I sent an initial response to your request for an extension on **CU DR-08-0092, Crossing Trails Destination Resort on October 30, 2020.** The property is located at: Township 15 South, Range 15 East, Section 17, Tax lots 100, 106, 109, and 110. The Crook County Court approved a destination resort on approximately 580 acres of land zoned EFU-3 with a Destination Resort (DR) overlay on January 2, 2009, on an appeal to the Crook County Court (the Board of County Commissioners) from the Crook County Planning Commission.

The expiration date the County has used in responding to prior Crossing Trail extension requests has been November 3, 2010, the date of Crook County Court's decision on the Land Use Board of Appeals' (LUBA) remand. After further consultation with County Counsel, and based on the history of using the November 3, 2010 date as the final approval date for the Crossing Trails Destination Resort, I am revising the timeframe outlined in the October 30, 2020 letter.

Original approvals for destination resort developments are granted for four years. Crook County Code 18.172.060(2) authorizes the County Planning Director to grant up to four extensions. These extensions are granted for two- year time periods. Using the November 3, 2010 decision date, the original approval extended to November 3, 2014 (Four years after the final decision). Two-year extensions were granted as follows:

1. To November 3, 2016.
2. To November 3, 2018.
3. To November 3, 2020.

The fourth and final extension is granted through November 3, 2022. No extensions are allowed after that date.

Please let me know if you have any questions.

Respectfully,

A. Beier

Ann Beier, Director

300 NE Third Street Rm 12 . Prineville, Oregon 97754 . 541-447-3211

Appendix 13

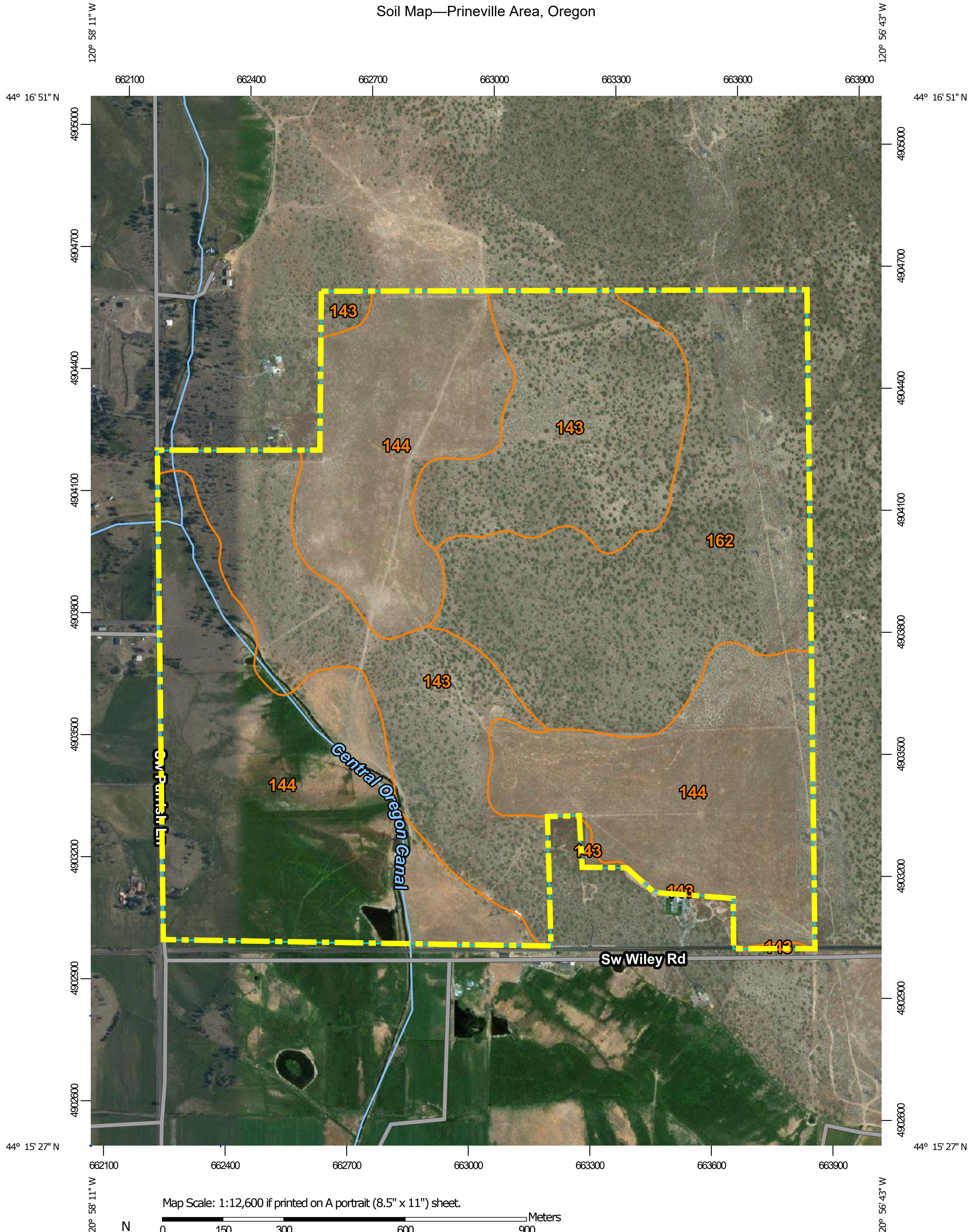
Stakeholder Contacts:

The proposed concept plan was issued to known stakeholders in order to solicit initial comments from each agency.

Below is a summary of the comments received from each agency:

- **Central Oregon Irrigation District (COID)** – An initial meeting was held to discuss the proposed project along with the necessary process and procedures. COID indicated that a Water Management Plan would be required as part of the submittal. Engineering plan approval for any canal crossings would be required prior to any construction. A conceptual plans was submitted to Kelly O'Rouke and Leslie Clark for review and comment on January 4, 2021. Kelly O'Rourke responded that "Leslie (Clark) and I will review your conceptual development plan for the Crossing Trails Destination Resort and follow up with you next week with initial comments"
- **Oregon Department of Fish and Wildlife (ODFW):** A conceptual plan was submitted to COID on updated plan was submitted for review and comment on January 4, 2021. No response has been received.
- **Crook County Weed Master:** A conceptual plan was submitted to COID on updated plan was submitted for review and comment on January 4, 2021. No response has been received.
- **Crook County Roadmaster:** A conceptual plan was submitted to Bob O'Neal on January 4, 2022. Bob indicated " You need to go through Community Development with any submittals".
- **Crook County Fire Marshall:** A conceptual plan was submitted Russ Beboodt on January 4, 2022. Russ indicated "that due to the number of units, a second access would be required on the vacation villa loop and the workforce housing loop. Also, the two access points to the overnight accommodations are not separated far enough apart to function as two accesses." For reference, Russ forwarded a copy of the Oregon Fire Code Applications Guide.

Appendix 14



Map Scale: 1:12,600 if printed on A portrait (8.5" x 11") sheet.

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Prineville Area, Oregon
Survey Area Data: Version 19, Sep 14, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 21, 2013—Jun 2, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
143	Stukmond-Lickskillet-Redmond complex, 0 to 8 percent slopes	160.6	27.7%
144	Redmond-Stukmond complex, 0 to 8 percent slopes	285.1	49.1%
162	Searles-Lickskillet complex, 12 to 35 percent south slopes	134.8	23.2%
Totals for Area of Interest		**580.6**	**100.0%**

Appendix 15

September 2, 2021

Mr. Hal Keever
Sun Communities, Inc.
c/o ATWELL, LLC
9755 SW Barnes Road, Suite 150
Portland, OR 97225

Subject: Infiltration Testing Summary & Preliminary Pavement Recommendations
Proposed Crossing Trails Resort
Northeast of Wiley Road and Parrish Lane
Crook County, Oregon

Project No. 21132, Task 2

Dear Hal:

Wallace Group is providing this infiltration testing summary and preliminary pavement design recommendations letter for the proposed 580-acre Crossing Trails Resort, located southwest of the city of Prineville in Crook County, Oregon. The purpose of this letter is to help Sun Communities, Inc. (Client) assess the design of stormwater management systems for the project as well as provide preliminary pavement design recommendations for use in project budgeting and feasibility analyses.

SCOPE OF SERVICES

The scope of work was outlined in Wallace Group's proposal to ATWELL, LLC, dated June 29, 2021. Our scope of services included the following tasks:

- *Data Review/Utility Clearance:* We proposed to begin our study with a review of existing literature on the subsurface conditions within the vicinity of the site, available historical photos, and previous geotechnical work completed in the area. We notified the One-Call Utility Notification Service to identify any underground utilities near the site.
- *Field Exploration:* We proposed to explore subsurface conditions by excavating eight (8) backhoe test pits in locations within the proposed roadways and parking areas. Test pits were advanced to refusal depth or maximum equipment reach. Wallace Group geotechnical staff logged the subsurface explorations and collected soil

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samples. Representative soil samples were retrieved, sealed, and transported to our laboratory for further evaluation, as warranted. All explorations were backfilled to surface grade upon completion of our work. Additionally, we performed six (6) single-ring infiltrometer tests in accordance with the Central Oregon Stormwater Manual (COSM) Method 4D.

- *Prepare Summary Memorandum*: Summary of findings and preliminary recommendations are presented in this technical letter.

PROJECT DESCRIPTION

Based upon our conversations with you, review of the conceptual layout, dated June 23, 2021, prepared by RVi, we understand that an approximate 580-acre parcel is proposed for development into a resort featuring Recreational Vehicle (RV) camping, vacation villas, workforce housing, glamping accommodations, amenity features, parks, ponds, and hiking trails. Additional improvements will include asphalt-paved access drives and parking areas, underground utility installations, stormwater collection and detention systems, septic systems, and landscaping.

GEOLOGIC SETTING

Prineville is in the southwest portion of the Blue Mountains Physiographic Province of northeastern Oregon. Topographically, the Blue Mountains increase in elevation to the east beginning with the foothills of the Ochoco Mountains north and northeast of Prineville (Elevation 2,860 feet, msl), and rising to glaciated peaks in the Wallowa Mountains (Elevation 7,800 feet+) of northeastern Oregon (Orr, et. al., 1992). The western portion of the province, near Prineville, is comprised of accreted oceanic terranes with fossil assemblages dating to late Cretaceous time (75 million years, Ma), overlain by thick accumulations of rhyolitic volcanic ash from the John Day Formation. The John Day Formation ash is thought to have originated in the western Cascade Mountains during late Oligocene to early Miocene time (30 to 20 Ma). Andesite and basaltic rocks of the late Eocene to early Oligocene age (45 to 35 Ma) form the foothills of the Ochoco Mountains immediately north of Prineville (Alt and Hyndman, 1978).

The subject site is located about 6 miles southwest of Prineville on a volcanic plateau, which rises approximately 300 feet above the city center. Subsurface materials consist of unconsolidated to semi-consolidated horizons of silty-sand, cemented silty-sand (hardpan or caliche), and basalt bedrock. The source of the volcanic deposits has been interpreted to be Grass Butte on which the site is located on the western flanks, deposited during the late Miocene or Pliocene (10 to 3 Ma).

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Current geologic research and field studies have also postulated that the volcanic terrain around Prineville may have been formed to a significant extent by, and possibly lies within, a large caldera (McClaughry, et. al., 2009). In addition, an aquifer within the ancestral channel of the Crooked River has been identified beneath the volcanic plateau. A recently completed City of Prineville water well near the Prineville Airport encountered this ancient alluvial channel and previously untapped aquifer at a depth of approximately 300 feet.

REGIONAL SEISMICITY

There are two primary earthquake source types that have been identified in the Pacific Northwest region: Cascadia Subduction Zone sources and shallow crustal sources. These sources result in three earthquake source classifications: (1) shallow crustal earthquakes, (2) deep earthquakes with a moment magnitude greater than 7.0 on the seismogenic part of the subducting plate of the Cascadia Subduction Zone, and (3) an earthquake with a possible moment magnitude of 9.0 (+/- 0.2) on the seismogenic part of the interface between the Juan de Fuca Plate and the North American Plate on the Cascadia Subduction Zone. Historic seismic activity in the Prineville (southwestern Blue Mountains) area has been primarily from shallow crustal sources. This crustal activity has occurred in a diffuse pattern and does not appear to be aligned with known, active fault features.

Geomatrix prepared a report for the Oregon Department of Transportation (ODOT) on the seismic hazards in Oregon. Included in the report is a map of Quaternary Faults in Oregon. The ODOT Report identified two, isolated, east-west trending faults that displace late Quaternary deposits or geomorphic surfaces (less than 780,000 years old) in the Western Blue Mountains source zone. These faults are located approximately 25 miles southwest of Prineville near the northern margin of the Sisters fault zone. The Sisters fault zone is generally characterized as "inactive," however, this represents the dominant structural feature of the High Lava Plains and central Oregon. This zone of generally southeast-northwest trending faults extends over 130 miles from Bend to Steens Mountain in southeastern Oregon. Maximum earthquake magnitudes associated with crustal sources in the Western Blue Mountains zone range between Magnitude 6.0 and 6.6, depending on recurrence interval (Geomatrix, 1995).

SEISMIC HAZARDS

Central Oregon is in an area of low to moderate seismic risk. The 2019 Oregon Structural Specialty Code (OSSC), based on the 2018 International Building Code (IBC), requires that the development be designed to sustain the maximum considered earthquake. At the time this

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report was written design subgrade elevations for developments were not yet established; however, we anticipate that proposed developments will be underlain by structural fill, native soil, and basalt bedrock. Structural fill and native, silty-sand soil underlain by basalt bedrock are not liquefiable during earthquakes. Other seismically related hazards, including lateral spreading, landslides and fault rupture are not applicable for this project. Based on our evaluation of the soil and rock encountered in the explorations and other published geologic information, we recommend the seismic soil profile for the upper 100 feet beneath the site be considered a ‘Rock’ profile. The associated Site Class is defined as B. Seismic design criteria is provided in **Appendix B**.

SUBSURFACE EXPLORATIONS

Subsurface conditions were explored on August 17, 2021. Eight (8) test pits, designated TP-01 through TP-08, were excavated to depths ranging from approximately 3-inches to 4.5-feet below ground surface (bgs). Test pits were excavated with a CAT backhoe operated by Terry Shine Excavating of Bend, Oregon. A Wallace Group geotechnical professional logged the test pits, and visually classified the materials encountered. The test pit logs, located in **Appendix A**, describe the materials encountered at each location explored. The soil and bedrock types between explorations are anticipated to be similar; however, variation should be expected. The stratigraphic contacts indicated at each point of exploration represent the approximate boundaries between soil and bedrock types. The approximate locations of the test pits are shown on **Figure 2**.

A more complete description of the sampling techniques and soil-classification terminology is presented in **Appendix A**.

SUBSURFACE CONDITIONS

Subsurface explorations generally encountered shallow deposits of native silty-sand and poorly graded sand that was underlain by calcite-cemented soil known locally as ‘hardpan’ and basalt bedrock. The silty-sand generally extends from the surface up to depths ranging from approximately 3-inches to 2.2-feet below ground surface (bgs). Below the soil, excavations encountered calcite-cemented soil and basalt bedrock. Refusal to excavation with the mini-excavator was encountered in the calcite-cemented material or basalt bedrock in all locations at depths ranging from approximately 3-inches to 4.5-feet bgs.

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CONCLUSIONS AND RECOMMENDATIONS

Based on the results of field exploration, engineering analyses, and our local experience, it is our opinion that the site is suitable for the proposed development from a geotechnical perspective, provided the recommendations presented in this letter are incorporated into design and construction.

EXCAVATIONS AND GRADING

At the time this report was written preliminary grading plans were not yet available; however, we anticipate cuts will be required to build roads, amenities, and detention ponds. Cuts to remove the native silty-sand soil can generally be excavated with conventional earth-moving equipment such as backhoes and small excavators. The hardpan can typically be excavated with large excavators equipped with 'rock teeth' on their bucket under hard digging conditions. The basalt bedrock is generally competent to fractured and will likely require drilling and blasting or hydraulic-hammer chipping to remove. Utility trench installations will likely encounter bedrock that will need to be removed.

Excavations made in native soil should be classified as "Type C" material for OSHA excavation purposes. Sloping excavations for temporary slopes should not be greater than 1.5 to 1 horizontal to vertical (H to V). Permanent slopes should be at grades no steeper than 2 to 1 (H to V). We do not anticipate groundwater will influence subgrade, utility, or foundation excavations, unless construction occurs in an abnormally wet season and water is perched at the soil/bedrock interface.

Site Preparation

All surficial vegetation and organic matter should be removed within development areas for the project. We recommend a minimum vegetation stripping depth of six inches below development areas to remove roots and organic matter. We anticipate stripping depths will be deeper where large trees are removed and where dense groves of trees are or were located. After stripping the upper six-inches, we recommend scarification of the upper one-foot and removal of any roots larger than ½-inch diameter below proposed developed areas.

Once the organic soil and roots are removed, the subgrade should be moisture-conditioned and compacted with suitable compaction equipment. The subgrade in the development areas should be proof-rolled with a loaded 10-cubic yard-dump truck, or full 4,000-gallon water truck, to confirm subgrade stability prior to placing new fill. Any deflection observed during proof-rolls should be addressed. If unstable ("pumping") soil is observed in isolated areas, remedial

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measures may consist of further compaction, including moisture-conditioning (aeration), or over-excavation and replacement with granular, structural fill. Pumping-soil conditions are more common when site preparation occurs during spring and after periods of prolonged precipitation. Wallace Group should observe proof-rolls and subgrade-bearing conditions prior to placing new structural fill.

DRAINAGE CONSIDERATIONS

Foundation and roadway performance is influenced by drainage conditions within and around the perimeter of the proposed developments. Adequate drainage should be provided and maintained throughout the life of the developments and water must not be allowed to infiltrate below the foundations or roadways. We recommend the ground surface is sloped to drain surface water away from the developments without ponding. The ground surface adjacent to foundations should be sloped away from foundations at least 5 percent in landscaped areas and 2 percent in hard-surfaced areas. We anticipate stormwater will be collected and discharged into on-site drainage swales.

Infiltration Testing

Infiltration testing was performed at six locations, designated IT-01 through IT-06, (see **Figure 2**, *Exploration Location Map*). The testing locations were selected near proposed parking areas where we anticipate potential stormwater disposal will be required. The infiltration testing was performed at a depth of approximately 6-inches bgs. The infiltration testing was conducted in general accordance with Method 4D-Single Ring Infiltrometer Method of the Central Oregon Stormwater Manual (COSM).

Field-measured infiltration rates in inches per hour and calculated, factored infiltration and permeability rates are shown in feet per second (per COSM) are shown below in **Table 1**.

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Table 1
Single-Ring Infiltration Rate Summary

Infiltration Test	Location	Drawdown (in/hr)	Infiltration Rate (I) (ft/sec)	Permeability Rate (K) (ft/sec)
IT-01	Proposed Swale	3.5	8.6×10^{-4}	2.5×10^{-3}
IT-02	Proposed Swale	2.0	3.5×10^{-5}	1.0×10^{-4}
IT-03	Proposed Swale	7.0	1.7×10^{-4}	5.0×10^{-4}
IT-04	Proposed Swale	7.5	1.7×10^{-4}	5.0×10^{-4}
IT-05	Proposed Swale	7.0	2.1×10^{-4}	6.1×10^{-4}
IT-06	Proposed Swale	6.0	2.1×10^{-4}	6.1×10^{-4}
The drawdown rates in inches per hour are based on a 30-minute "falling head" test, as prescribed in COSM.				

Infiltration rates are limited by shallow basalt bedrock and calcite-cemented soil. Improved infiltration rates are typically improved by hydraulic hammering or blasting to fracture the basalt bedrock and calcite-cemented soil. We recommend performance testing drainage facilities early in the construction process so that changes can be made, if necessary.

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PAVEMENT RECOMMENDATIONS

At the time this report was written traffic data and vehicle counts were not yet available; however, we anticipate that traffic will likely consist of light automotive and recreational vehicles. Traffic during construction will consist of heavier vehicles with higher wheel loads and precautions should be taken to prevent damage to any newly constructed pavement.

The proof-rolled, inorganic-native-granular soil, and properly compacted new structural fill will provide, in our opinion, adequate subgrade support for asphalt-paved-parking areas associated with the development. Proper roadway section drainage, including site drainage to avoid ponding of water adjacent to roadway areas, will aid in reducing the potential for pavement distress. Structural fill in paved areas should consist of processed on-site native soil or imported sand and gravel meeting the requirements of **Table 2**, *Engineered Fill Specifications Summary*. Roadway subgrade fill should be placed in maximum 8-inch lifts, loose thickness, moisture-conditioned, and compacted to at least 92 percent of ASTM D1557.

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Table 2

Engineered Fill Specification Summary

Material Type & Specifications	Placement Location	Placement Specifications
Base Course – Crushed Aggregate, ¾-inch minus, <8% passing #200 sieve.	Base Course Beneath Slabs on Grade, Pavement, and Footings	Maximum 6" lifts; compacted to minimum 95% of modified Proctor density (ASTM D1557) for floor slabs, footings, 92% for pavement, exterior slabs and sidewalks.
Structural Fill - Granular, Inorganic soil, 2-inch minus, <30% retained on ¾-inch sieve, <20% passing #200 sieve. Non-plastic. Maximum dry density of at least 90 pcf.	Beneath Slabs on Grade, Exterior Slabs, Pavement, Sidewalks, and Footings	Maximum 8" lifts; compacted to minimum 95% of modified Proctor density (ASTM D1557) for floor slabs, footings, all fill exceeding 5 feet vertical, 92% for pavement, exterior slabs and sidewalks.
Utility Trench and General Backfill – 2-inch minus sand & gravel, <20% passing the No. 200 sieve, or on-site soil materials.	Utility Trench Backfill, Foundation Wall Backfill	Maximum 8" lifts; compacted to minimum 95% of modified Proctor density (ASTM D1557) beneath footings, floor slabs, 92% for exterior pavement and sidewalks, 90% in non-structural areas.
Granular Landscape Fill – Inorganic soil, 3-inch minus.	Landscaped Areas	Fill depth less than 4 feet, compaction not required. Fill depths greater than 4 feet, compact to a minimum of 85% of modified Proctor (ASTM D1557).

Based on the project soil conditions and assumed traffic loads for asphalt-paved parking and access drives, we recommend a preliminary pavement section of 4-inches of Asphaltic Concrete (AC) underlain by 6-inches of crushed aggregate base course (ABC). Concrete pavement, if constructed, should consist of a minimum of 6-inches of concrete underlain by 8-inches of ABC. Concrete pavement is recommended for areas with heavy anticipated wheel loads, such as trash enclosures. As plans become finalized and traffic data is available, we can perform more detailed pavement analysis, if requested.

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Pavement Material Specifications

The AC should be dense-graded, hot mix asphalt concrete (HMAC) as specified in ODOT Section 00745 plus the following supplemental specifications for density testing:

- The HMAC mix design for the roadways should be Level 2.
- The asphalt binder should be PG 64-28, or as specified by the Civil Engineer.
- The ABC should be ¾-inch minus, dense graded aggregate as specified in ODOT Sections 00641 and 02630.10.
- Road-mixed ABC is permitted per Section 00641. Road-mixed ABC allows water to be added on-site for compaction vs. pug-milled materials processing.
- The HMAC should be compacted to a minimum of 92 percent of the Rice theoretical maximum density. The ABC should be compacted to a minimum of 92 percent of ASTM D1557.

Supplemental Specifications for Density Testing: The roadway AC and ABC should be field tested for in-place density. Density test frequency should be based on a "roll-pattern" or standard Crook County procedures.

LIMITATIONS

Exploratory test pits performed for this study were placed to obtain a representative understanding of subsurface conditions for evaluation and design purposes. The study was performed using a mutually-agreed-upon scope of services. Variations from these conditions, not indicated by the borings are possible. These variations are sometimes enough to necessitate design modifications. ATWELL, LLC (Client) must recognize that it is impossible to predict every physical condition that will be encountered. If unexpected conditions are observed during construction, or if the size, type, elevation, or location of the proposed development should differ from the preliminary plans, we should be notified to review the recommendations contained in this report. The professional judgments expressed in this report meet the standard of care of our profession; however, no warranty is expressed or implied.

This report may be used only by the Client and only for the purposes stated within a reasonable time from its issuance, *but in no event, later than three (3) years from the date of the report.* Land or facility use, on- and off-site conditions, regulations, or other factors may change over time, and additional work may be required with the passage of time. Any party other than the Client or their design team who wishes to use this report shall notify the Wallace Group of such

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intended use. Based on the intended use of the report, the Wallace Group may require that additional work be performed and that an updated report be issued. Non-compliance with any of these requirements by the Client or anyone else will release Wallace Group from any liability resulting from the use of this report by any unauthorized party.

The contractor selected for this project is responsible for supervision and direction of the actual work performed by his employees, subcontractors and agents. Wallace Group will use accepted geotechnical engineering and testing procedures; however, our testing and observations will not relieve the contractor of his primary responsibility to produce a completed project conforming to the project plans and specifications.

This firm does not practice or consult in the field of safety engineering. We do not direct the contractor's operations, and we cannot be responsible for the safety of personnel other than our own on the site. The safety of others is the responsibility of the contractor. The contractor should notify the owner if he considers any of the recommended actions presented herein unsafe.

Respectfully submitted,

Wallace Group, Inc.

Adam Larson, P.E.

Project Geotechnical Engineer

Lisa M. Splitter, P.E, G.E.

Senior Geotechnical Engineer

ATTACHMENTS

Figure 1: Vicinity Map

Figure 2: Exploration & Infiltration Testing Location Map

Appendix A: Test Pit Logs

Appendix B: Seismic Design Criteria

REFERENCES

Alt and Hyndman, 1978, Geologic Reconnaissance of the Western Ochoco Mountains, Crook County, Oregon.

American Society of Civil Engineers, 2021, ASCE 7 Hazard Tool Website Data Base.

Ferns, M.L., and McClaughry, J.D., 2006, Preliminary geologic map of the Huston Lake 7.5' Quadrangle, Crook County, Oregon: Oregon Department of Geology and Mineral Industries, Open-File Report O-06-21, scale 1:24,000

Geomatrix Consultants, 1995, Seismic Design Mapping State of Oregon: Final Report, prepared for Oregon Department of Transportation under personal services contract 11688.

Oregon Department of Transportation, Standard Specifications for Construction, 2018.

Oregon Structural Specialty Code 2019, Based on 2018 International Building Code, with Oregon amendments.

Orr, William N., and Elizabeth L. Orr, 1992, Oregon Geology.

McClaughry, Jason D, et. al., 2009, Field Trip Guide to the Oligocene Crooked River Caldera: Central Oregon's Supervolcano, Crook, Deschutes, and Jefferson Counties, Oregon.

United States Geological Survey, 2021, Seismic Hazards website data base.

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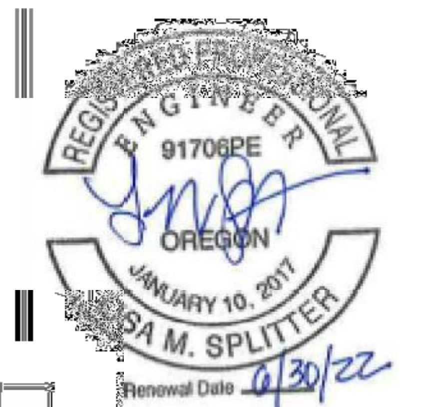
This report has been authored and reviewed by the undersigned, respectively. This report is void if the original seal(s) and signature(s) are not included.

igned by Adam Larson
1.09.02 09:06:07-07'00'

Adam Larson, P.E.

Project Geotechnical Engineer



Lisa M. Splitter, P.E., G.E.

Senior Geotechnical Engineer

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WALLACE
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FIGURES

WALLACE GROUP
NORTHWEST GEOSYSTEM EXPERTS

VICINITY MAP
CROSSING TRAILS RESORT
CROOK COUNTY, OREGON

PROJECT No:	21132 (2)
DRAWN:	August 18, 2021
DRAWN BY:	KAK
CHECKED BY:	AML
FILE NAME:	21132 (2) Figure 1

FIGURE
1

LEGEND

TP-01: Test Pit No. and Location

IT-01: Infiltration Test No. and Location

N

APPROXIMATE SCALE
1" = 600'

NOTE: Exploration Locations are Approximate
Site Plan Provided by RVi.

WALLACE GROUP
NORTHWEST GEOSYSTEM EXPERTS

EXPLORATION LOCATION MAP
CROSSING TRAILS RESORT
CROOK COUNTY, OREGON

PROJECT No:	21132 (2)
DRAWN:	August 18, 2021
DRAWN BY:	KAK
CHECKED BY:	AML
FILE NAME:	21132 (2) Figure 2

FIGURE: 2

WALLACE GROUP
NORTHWEST GEOSYSTEM EXPERTS

APPENDIX A

APPENDIX A
FIELD EXPLORATION SUMMARY

GENERAL

Subsurface conditions for the Crossing Trails Resort project, located in Crook County, Oregon, were explored by excavating 8 test pits, at the approximate locations shown on **Figure 2**, *Exploration Location Map*. Test pit logs are included in this appendix. The test pit explorations were performed on August 17, 2021. The procedures used to observe the test pits, and collect soil samples, and other field techniques are described in detail in this appendix. Unless otherwise noted, all soil sampling and classification procedures followed local engineering practices which are in general conformance with relevant ASTM procedures and the Unified Soil Classification System (USCS). “General conformance” means that certain local and common excavation and descriptive practices and methodologies have been followed.

TEST PITS

Eight (8) test pits were excavated by Terry Shine Excavating of Bend, Oregon. The test pits were observed by a Wallace Group geotechnical professional who maintained a detailed log of subsurface conditions and materials encountered and collected soil samples at appropriate depth intervals. The test pits were excavated to depths ranging between approximately 2- to 4.5-feet below ground surface (bgs). Bulk samples were retrieved for laboratory testing.

Dynamic Cone Penetration (DCP) testing was conducted to evaluate the relative density of the native overburden soils. DCP procedures are generally described in ASTM Special Technical Publication 399, which have been modified by Wallace Group to provide better representation of soil relative density or stiffness. During the DCP test, a 1.5-inch diameter steel cone is driven up to 18 inches into the soil using a 15-pound hammer dropped from a height of 18 inches. The number of blows is recorded and can be roughly correlated to the Standard Penetration Test. The number of blows required to drive the cone 12 inches into the soil provides a measure of the relative density of granular soils such as sand and gravel, and the strength of cohesive soils.

SAMPLING

Disturbed soil samples were retrieved from the test pits. The samples were classified and sealed in plastic bags for further examination and physical testing in our laboratory for gradation and moisture content.

TEST PIT LOGS

Figure A is a Legend explaining the information and symbols presented on the test pit logs. The logs of the test pits are presented on Figures A-1 through A-8. The logs describe the materials encountered and the depths where materials and/or characteristics of these materials changed, although the changes may be gradual. Where material types and descriptions changed between samples, the contacts were interpreted. On each test pit, the types of samples collected (including their identification number) are reported, including laboratory test results and DCP blow counts.

MATERIAL DESCRIPTIONS

Soil samples were visually classified in the field as they were collected. Consistency, color, relative moisture, degree of plasticity, and other distinguishing characteristics of the samples were noted. Afterwards, the samples were re-examined in the laboratory, various standard classification tests were conducted, and the field classifications were modified where necessary. The terminology used in the soil classifications and rock descriptions are defined beginning on Page 3 and are included under material description on each log.

GROUNDWATER

Groundwater was not encountered during subsurface exploration for this project.

TERMINOLOGY USED TO DESCRIBE SOIL AND ROCK

Soils exist in mixtures with varying proportions of components. The predominant soil, i.e., greater than 50 percent based upon total dry weight, is the primary soil type and is capitalized in our log descriptions, e.g., SAND, GRAVEL, SILT or CLAY. Lesser percentages of other constituents in the soil mixture are indicated by use of modifier words in general accordance with the Visual-Manual Procedure (ASTM D2488-93). "General Accordance" means that certain local and common descriptive practices have been followed. In accordance with ASTM D2488, group symbols (such as GP or CH) are applied on that portion of the soil passing the 3-inch (75mm) sieve based upon visual examination. The following describes the use of soil names and modifying terms used to describe fine- and coarse-grained soils.

Fine - Grained SOILS (More than 50% fines passing 0.074 mm, #200 sieve)

The primary soil type i.e. SILT or CLAY is designated through visual – manual procedures to evaluate soil toughness, dilatancy, dry strength, and plasticity. The following describes the terminology used to describe fine - grained soils and varies from ASTM 2488 terminology in the use of some common terms.

Primary soil NAME, adjective and symbols			**Plasticity Description**	**Plasticity Index (PI)**
SILT ML & MH	CLAY CL & CH	ORGANIC SILT & CLAY OL & OH		
SILT		Organic SILT	Non-plastic	0 - 3
SILT		Organic SILT	Low plasticity	4 - 10
Clayey SILT	Silty CLAY	Organic clayey SILT	Medium Plasticity	>10 – 20
Clayey SILT	CLAY	Organic silty CLAY	High Plasticity	>20 – 40
Clayey SILT	CLAY	Organic CLAY	Very Plastic	>40

Modifying terms describing secondary constituents, estimated to 5 percent increments, are applied as follows:

Description	**% Composition**
Trace sand, trace gravel	5% - 10%
With sand; with gravel	15% - 25%
Sandy, or gravelly	30% - 45%

Borderline Symbols, for example CH/MH, are used where soils are not distinctly in one category or where variable soil units contain more than one soil type. Dual Symbols, for example CL-ML, are used where two symbols are required in accordance with ASTM D2488.

Soil Consistency. Consistency terms are applied to fine-grained, plastic soils (i.e., PI > 4). Descriptive terms are based on direct measure or correlation to the Standard Penetration Test N-value as determined by ASTM D1586-84, as follows.

Consistency Term	SPT N-value	Unconfined Compressive Strength Tons/sq.ft.	kPa
Very soft	Less than 2	Less than 0.25	Less than 24
Soft	2 - 4	0.25 - 0.5	24 - 48
Medium stiff	5 - 8	0.5 - 1.0	48 – 96
Stiff	9 - 15	1.0 - 2.0	96 – 192
Very stiff	16 - 30	2.0 - 4.0	192 – 383
Hard	Over 30	Over 4.0	Over 383

Note: For SILT with low to non-plastic behavior, (i.e., PI < 4) a relative density description is applied.

Coarse-Grained Soils (less than 50% fines)

Coarse-grained soil descriptions, i.e., SAND or GRAVEL, are based on that portion of materials passing a 3-inch (75mm) sieve. Coarse-grained soil group symbols are applied in accordance with ASTM D2488 based upon the degree of grading, or distribution of grain sizes of the soil. For example, well graded sand containing a wide range of grain sizes is designated SW; poorly graded gravel, GP, contains high percentages of only certain grain sizes. Terms applied to grain sizes follow.

	Particle Diameter Inches	Millimeters
Sand (S)	0.003 - 0.19	0.075 - 4.8
Gravel (G)	0.19 - 3.0	4.8 - 75
	Additional Constituents	
Cobble	3.0 - 12	75 - 300
Boulder	12 - 120	300 - 3050
Rock Block	>120	>3050

The primary soil type is capitalized, and the amount of 'fines' in the soil are described as indicated by the following examples. Other soil mixtures will provide similar descriptive names.

Example: Coarse-Grained Soil Descriptions with Fines

5% fines	10% fines (Dual Symbols)	15% to 45% fines
GRAVEL with trace silt: GW or GP	GRAVEL with silt, GW-GM	Silty GRAVEL: GM
SAND with trace clay: SW or SP	SAND with clay, SP-SC	Silty SAND: SM

Additional descriptive terminology applied to coarse-grained soils follow.

Coarse-Grained Soil Containing Secondary Constituents

Clean	< 5% fines
With sand or with gravel	15% - 25% sand or gravel
Sandy or gravelly	30% - 45% sand or gravel
With cobbles; with boulders	Any amount cobbles or boulders. Additional terms may be used to describe amount including abundant, scattered.

Cobble and boulder deposits may include a description of the matrix soils, as defined above.

Relative Density terms are applied to granular, non-plastic soils based on direct measure or correlation to the Standard Penetration Test N-value as determined by ASTM D1586.

Relative Density Term	***SPT N-value***
Very loose	0 - 4
Loose	4 - 10
Medium dense	10 - 30
Dense	30 - 50
Very dense	> 50

Terminology Used to Describe Rock

Scale of Rock Strength

Description	Designation	Unconfined Compressive Strength, psi	Unconfined Compressive Strength, MP	Field Identification
Very low strength	R1	100 – 1000	0.7 – 7	Crumbles under firm blows with point of geology pick; can be peeled by a pocketknife.
Low strength	R2	1,000 – 4,000	7 – 28	Can be peeled by a pocketknife with difficulty; shallow indentation made by firm blows of geology pick.
Moderate strength	R3	4,000 – 8,000	28 – 55	Cannot by scraped or peeled with a pocketknife; specimen can be fractured with a single firm blow of geology hammer.
Medium high strength	R4	8,000 – 16,000	55 – 110	Specimen requires more than one blow with a geology hammer to fracture it.
High strength	R5	16,000 – 32,000	110 – 120	Specimen requires many blows of geology hammer to fracture it.
Very high strength	R6	> 32,000	> 220	Specimen can only be chipped with geology pick.

Descriptive Terminology for Joint Spacing or Bedding

Descriptive Term	*Spacing of Joints*	
Very close	Less than 2 inches	< 50 mm
Close	2 inches - 1 foot	50 mm – 300 mm
Moderately close	1 foot - 3 feet	300 mm – 1 m
Wide	3 feet -10 feet	1 m – 3 m
Very wide	Greater than 10 feet	> 3 m

Descriptive Terminology for Vesicularity

Descriptive Term	*Percent voids by volume*
Dense	< 1%
Slightly vesicular	1 – 10%
Moderately vesicular	10 – 30%
Highly vesicular	30 – 50%
Scoriaceous	> 50%

Correlation of RQD and Rock Quality

Rock Quality Descriptor	RQD Value
Very poor	0 – 25
Poor	25 - 50
Fair	50 - 75
Good	75 - 90

SCALE OF ROCK WEATHERING

Stage	*Description*	*Quality Distinction*
Fresh	Rock is fresh, crystals are bright, a few joints may show slight staining because of ground water.	Discoloration
Very Slight	Rock is generally fresh, joints are stained, some joints may have thin clay coatings, crystals in broken faces show bright.	Discoloration only on major discontinuity surfaces [i]
Slight	Rock is generally fresh, joints are stained, and discoloration extends into rock up to 1 in. Joints may contain clay. In granitoid rocks some feldspar crystals are dull and discolored. Rocks ring under hammer if crystalline.	Discoloration on all discontinuity surfaces and on rock
Moderate	Significant portions of rock show discoloration and weathering effects. In granitoid rocks, most feldspars are dull and discolored; some are clayey. Rock has dull sound under hammer and shows significant loss of strength as compared with fresh rock.	Decomposition and/or disintegration < 50% of rock [ii]
Moderately Severe	All rock, except quartz discolored or stained. In granitoid rocks, all feldspars dull and discolored and majority show kaolinization. Rock shows severe loss of strength and can be excavated with geologist's pick. Rock goes "clunk" when struck.	Decomposition and/or disintegration > 50%, but not complete
Severe	All rock, except quartz, discolored or stained. Rock "fabric" is clear and evident but reduced in strength to strong soil. In granitoid rocks, all feldspars kaolinized to some extent. Some fragments of harder rock usually left, such as corestones in basalt.	Decomposition and/or disintegration > 75%, nearly complete
Very Severe	All rock, except quartz, discolored or stained. Rock "fabric" is discernible, but mass effectively reduced to "soil" with only fragments of harder rock remaining.	Decomposition and/or disintegration 100% with structure/fabric intact
Complete	Rock is reduced to "soil". Rock "fabric" is not discernible, or only in small scattered locations. Quartz may be present as dikes or stringers.	Decomposition and/or disintegration 100% with structure/fabric destroyed

NOTES: [i] Discontinuities consist of any natural break (joint, fracture or fault) or plane of weakness (shear or gouge zone, bedding plane) in a rock mass

[ii] Decomposition refers to chemical alteration of mineral grains; disintegration refers to mechanical breakdown

[iii] Stage and description from ASCE Manual No. 56 (1976), quality distinction from Murray (1981)

KEY TO SYMBOLS

Wallace Group Inc.
62915 NE 18th Street, Suite 1
Bend, OR 97701

CLIENT ATWELL, LLC.
PROJECT NAME Crossing Trails Resort
PROJECT NUMBER 21132-2
PROJECT LOCATION Crook County, OR

LITHOLOGIC SYMBOLS
(Unified Soil Classification System)

SM: USCS Silty Sand

SP: USCS Poorly-graded Sand

SAMPLER SYMBOLS

WELL CONSTRUCTION SYMBOLS

ABBREVIATIONS

LL - LIQUID LIMIT (%)
PI - PLASTIC INDEX (%)
MC - MOISTURE CONTENT (%)
DD - DRY DENSITY (PCF)
NP - NON PLASTIC
FINES - PERCENT PASSING NO. 200 SIEVE
PP - POCKET PENETROMETER (TSF)
OC - ORGANIC CONTENT (%)

TV - TORVANE
PID - PHOTOIONIZATION DETECTOR
UCCS- UNCONFINED COMPRESSION
ppm - PARTS PER MILLION

Water Level at Time of Drilling, or as Shown
Water Level at End of Drilling, or as Shown
Water Level After 24 Hours, or as Shown

WALLACE GROUP NORTHWEST GEOSYSTEM EXPERTS
Wallace Group Inc.
62915 NE 18th Street, Suite 1
Bend, OR 97701

TEST PIT NUMBER TP-01

CLIENT ATWELL, LLC.
PROJECT NAME Crossing Trails Resort
PROJECT NUMBER 21132-2
PROJECT LOCATION Crook County, OR
DATE STARTED 8/17/21 **COMPLETED** 8/17/21
GROUND ELEVATION
EXCAVATION CONTRACTOR Terry Shine Excavating
GROUND WATER LEVELS:
EXCAVATION METHOD CAT Backhoe
AT TIME OF EXCAVATION ---
LOGGED BY KAK **CHECKED BY** AML
24HRS AFTER EXCAVATION ---
NOTES

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
0.0		SM		SILTY SAND, cobbles, dry to slightly moist, tan, fine to coarse grained, subangular to subrounded, minor roots, weak cementation
2.0				

Refusal at 2.0 feet on calcite cemented soil.
Bottom of test pit at 2.0 feet.

TWG-TEST PITS - WALLACE GROUP DATA TEMPLATE.GDT - 9/2/21 08:03 - W:\GINT PRO - FILES\BENTLEY\GINT\PROJECTS\21132-2 CROSSING TRAILS RESORT.GPJ

Wallace Group Inc.
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Bend, OR 97701

TEST PIT NUMBER TP-02

CLIENT ATWELL, LLC.
PROJECT NAME Crossing Trails Resort
PROJECT NUMBER 21132-2
PROJECT LOCATION Crook County, OR
DATE STARTED 8/17/21 **COMPLETED** 8/17/21
GROUND ELEVATION
EXCAVATION CONTRACTOR Terry Shine Excavating
GROUND WATER LEVELS:
EXCAVATION METHOD CAT Backhoe
AT TIME OF EXCAVATION ---
LOGGED BY KAK **CHECKED BY** AML
24HRS AFTER EXCAVATION ---
NOTES

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
0.0		SM	2.0	SILTY SAND, cobbles, slightly moist, brown, fine to coarse grained, subangular to subrounded
2.5		SM	3.0	SILTY SAND WITH GRAVEL, cobbles, slightly moist, tan with white, fine to coarse grained, angular to subangular, weak cementation

Refusal at 3.0 feet on basalt.
Bottom of test pit at 3.0 feet.

TWG-TEST PITS - WALLACE GROUP DATA TEMPLATE.GDT - 9/2/21 08:03 - W:\GINT PRO - FILES\BENTLEY\GINT\PROJECTS\21132-2 CROSSING TRAILS RESORT.GPJ

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Bend, OR 97701

TEST PIT NUMBER TP-03

CLIENT ATWELL, LLC.
PROJECT NAME Crossing Trails Resort
PROJECT NUMBER 21132-2
PROJECT LOCATION Crook County, OR
DATE STARTED 8/17/21 **COMPLETED** 8/17/21
GROUND ELEVATION
EXCAVATION CONTRACTOR Terry Shine Excavating
GROUND WATER LEVELS:
EXCAVATION METHOD CAT Backhoe
AT TIME OF EXCAVATION ---
LOGGED BY KAK **CHECKED BY** AML
24HRS AFTER EXCAVATION ---
NOTES

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
0.0		SM	2.0	SILTY SAND, cobbles, slightly moist, tannish brown, fine to coarse grained, subangular to subrounded, weak cementation

Refusal at 2.0 feet on basalt.
Bottom of test pit at 2.0 feet.

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TEST PIT NUMBER TP-04

CLIENT ATWELL, LLC.
PROJECT NAME Crossing Trails Resort
PROJECT NUMBER 21132-2
PROJECT LOCATION Crook County, OR
DATE STARTED 8/17/21 **COMPLETED** 8/17/21
GROUND ELEVATION
EXCAVATION CONTRACTOR Terry Shine Excavating
GROUND WATER LEVELS:
EXCAVATION METHOD CAT Backhoe
AT TIME OF EXCAVATION ---
LOGGED BY KAK **CHECKED BY** AML
24HRS AFTER EXCAVATION ---
NOTES

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
0.0		SM		SILTY SAND, cobbles, slightly moist, brown, fine to coarse grained, subangular to subrounded, pumiceous, weak cementation
			2.0	

Refusal at 2.0 feet on calcite cemented soil.
Bottom of test pit at 2.0 feet.

TEST PIT NUMBER TP-05

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CLIENT ATWELL, LLC.
PROJECT NAME Crossing Trails Resort
PROJECT NUMBER 21132-2
PROJECT LOCATION Crook County, OR
DATE STARTED 8/17/21 **COMPLETED** 8/17/21
GROUND ELEVATION
EXCAVATION CONTRACTOR Terry Shine Excavating
GROUND WATER LEVELS:
EXCAVATION METHOD CAT Backhoe
AT TIME OF EXCAVATION ---
LOGGED BY KAK **CHECKED BY** AML
24HRS AFTER EXCAVATION ---
NOTES

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
0.0		SM		SILTY SAND, slightly moist, brownish tan, fine to coarse grained, subangular to subrounded, pumiceous
			1.5	Refusal at 1.5 feet on basalt. Bottom of test pit at 1.5 feet.

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TEST PIT NUMBER TP-06

CLIENT ATWELL, LLC.
PROJECT NAME Crossing Trails Resort
PROJECT NUMBER 21132-2
PROJECT LOCATION Crook County, OR
DATE STARTED 8/17/21 **COMPLETED** 8/17/21
GROUND ELEVATION
EXCAVATION CONTRACTOR Terry Shine Excavating
GROUND WATER LEVELS:
EXCAVATION METHOD CAT Backhoe
AT TIME OF EXCAVATION ---
LOGGED BY KAK **CHECKED BY** AML
24HRS AFTER EXCAVATION ---
NOTES

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
0.0				
		SM		0.3 SILTY SAND, cobbles, slightly moist, brown, fine to coarse grained, subangular to subrounded

Refusal at 0.3 feet on basalt.
Bottom of test pit at 0.3 feet.

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TEST PIT NUMBER TP-07

CLIENT ATWELL, LLC.
PROJECT NAME Crossing Trails Resort
PROJECT NUMBER 21132-2
PROJECT LOCATION Crook County, OR
DATE STARTED 8/17/21 **COMPLETED** 8/17/21
GROUND ELEVATION
EXCAVATION CONTRACTOR Terry Shine Excavating
GROUND WATER LEVELS:
EXCAVATION METHOD CAT Backhoe
AT TIME OF EXCAVATION ---
LOGGED BY KAK **CHECKED BY** AML
24HRS AFTER EXCAVATION ---
NOTES

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
0.0		SM		SILTY SAND, cobbles, wet, brown, fine to coarse grained, subangular to subrounded, moderate cementation
2.5			2.5	

Refusal at 2.5 feet on calcite cemented soil.
Bottom of test pit at 2.5 feet.

TWG-TEST PITS - WALLACE GROUP DATA TEMPLATE.GDT - 9/2/21 08:03 - W:\GINT PRO - FILES\BENTLEY\GINT\PROJECTS\21132-2 CROSSING TRAILS RESORT.GPJ

Wallace Group Inc.
62915 NE 18th Street, Suite 1
Bend, OR 97701

TEST PIT NUMBER TP-08

CLIENT ATWELL, LLC.
PROJECT NAME Crossing Trails Resort
PROJECT NUMBER 21132-2
PROJECT LOCATION Crook County, OR
DATE STARTED 8/17/21 **COMPLETED** 8/17/21
GROUND ELEVATION
EXCAVATION CONTRACTOR Terry Shine Excavating
GROUND WATER LEVELS:
EXCAVATION METHOD CAT Backhoe
AT TIME OF EXCAVATION ---
LOGGED BY KAK **CHECKED BY** AML
24HRS AFTER EXCAVATION ---
NOTES

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
0.0		SM	1.5	SILTY SAND, dry to slightly moist, tan, fine to coarse grained, subangular to subrounded, pumiceous
2.5		SP	4.5	POORLY GRADED SAND, cobbles, moist, tannish brown, fine to coarse grained, subangular to subrounded

Refusal at 4.5 feet on basalt.
Bottom of test pit at 4.5 feet.

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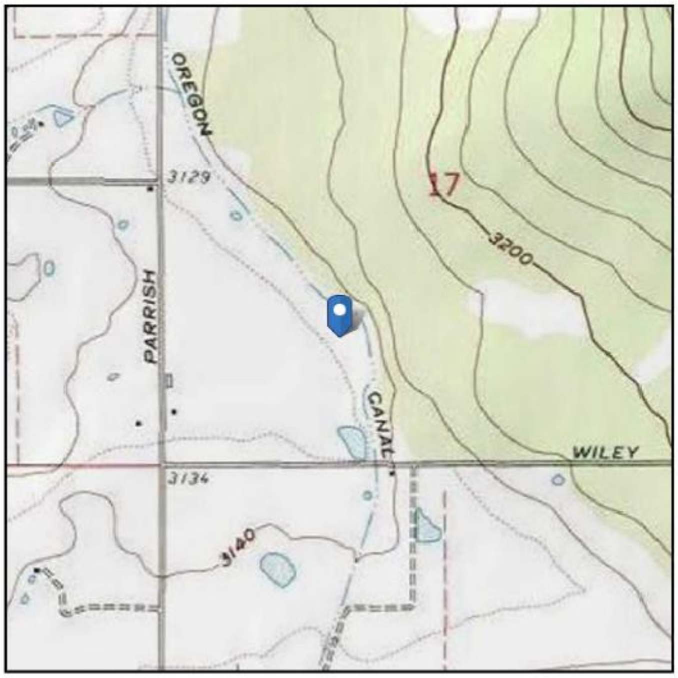
APPENDIX B

ASCE 7 Hazards Report

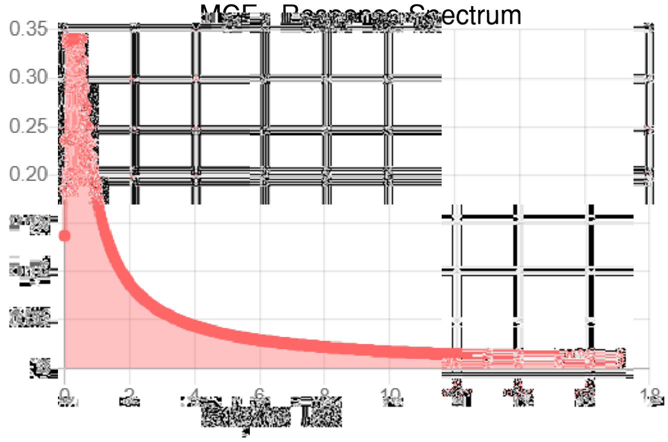
Standard:	ASCE/SEI 7-16	**Elevation:**	3135.81 ft (NAVD 88)
Risk Category:	II	**Latitude:**	44.26503
Soil Class:	B - Estimated (see Section 11.4.3)	**Longitude:**	-120.9613

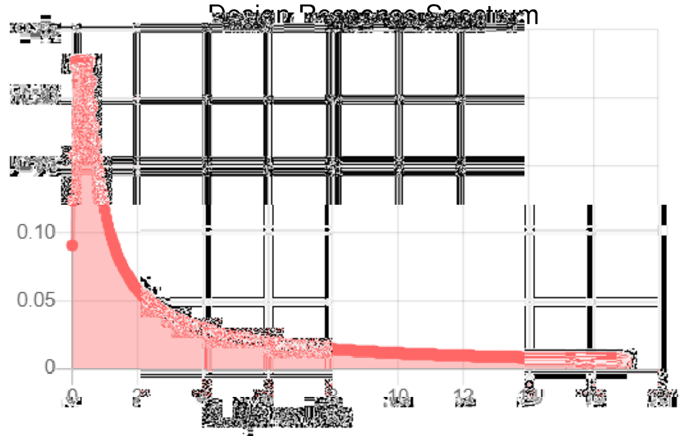


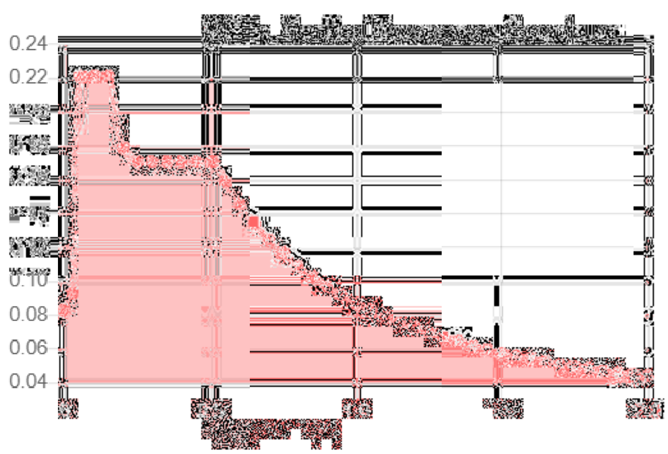
[illegible] B - Estimated (see Section 11.4.3)

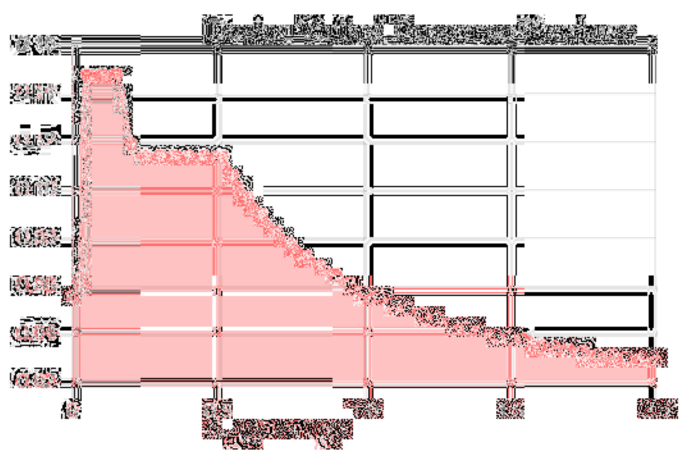
S_S :	0.341	S_{D1} :	0.117
S_1 :	0.175	T_L :	16
F_a :	1	PGA :	0.155
F_v :	1	PGA_M :	0.155
S_{MS} :	0.341	F_{PGA} :	1
S_{M1} :	0.175	I_e :	1
S_{DS} :	0.228	C_v :	0.814

Seismic Design Category B









Data Accessed: Wed Sep 01 2021

Date Source: USGS Seismic Design Maps based on ASCE/SEI 7-16 and ASCE/SEI 7-16 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-16 Ch. 21 are available from USGS.

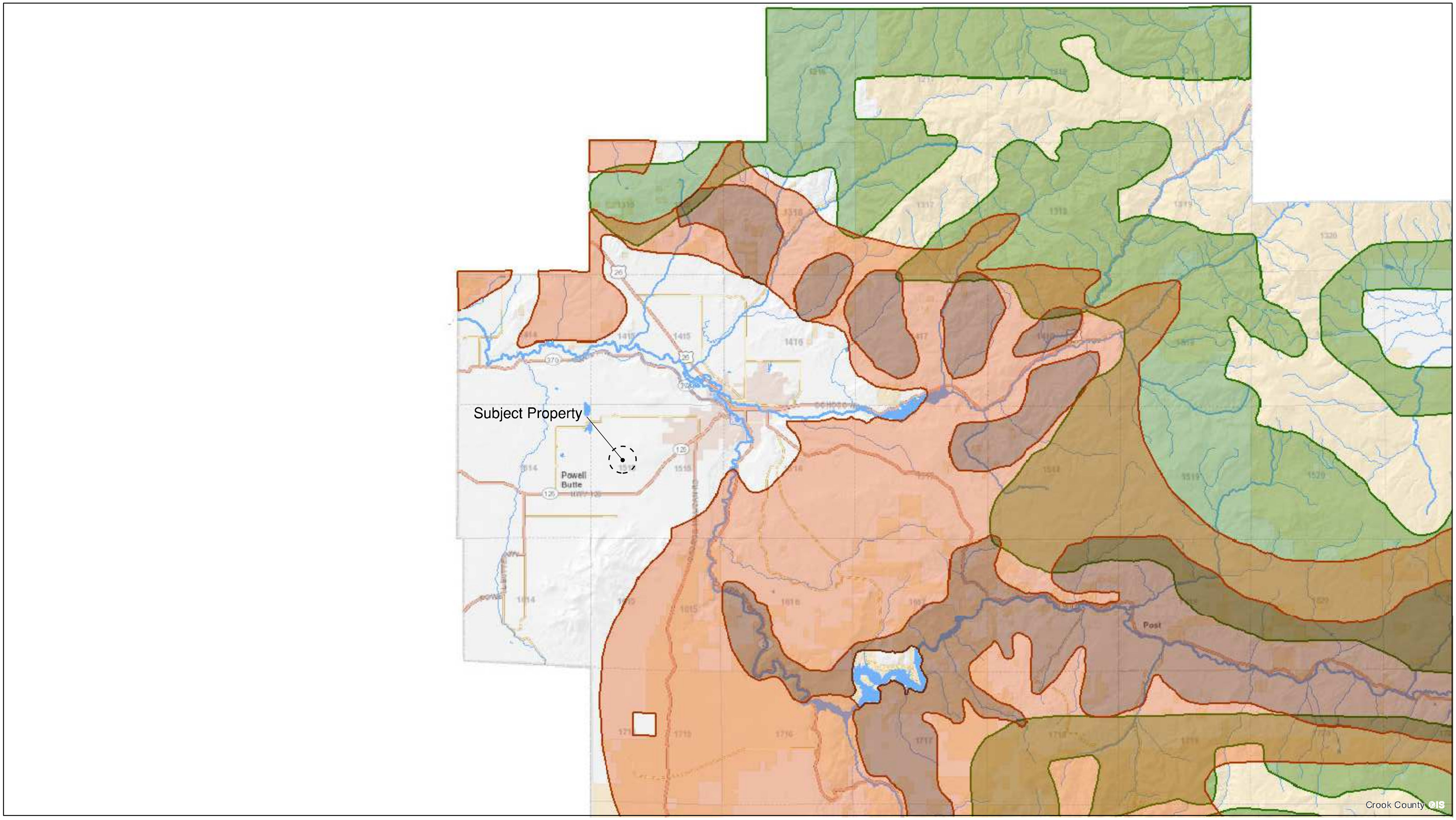
The ASCE 7 Hazard Tool is provided for your convenience, for informational purposes only, and is provided "as is" and without warranties of any kind. The location data included herein has been obtained from information developed, produced, and maintained by third party providers; or has been extrapolated from maps incorporated in the ASCE 7 standard. While ASCE has made every effort to use data obtained from reliable sources or methodologies, ASCE does not make any representations or warranties as to the accuracy, completeness, reliability, currency, or quality of any data provided herein. Any third-party links provided by this Tool should not be construed as an endorsement, affiliation, relationship, or sponsorship of such third-party content by or from ASCE.

ASCE does not intend, nor should anyone interpret, the results provided by this Tool to replace the sound judgment of a competent professional, having knowledge and experience in the appropriate field(s) of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the contents of this Tool or the ASCE 7 standard.

In using this Tool, you expressly assume all risks associated with your use. Under no circumstances shall ASCE or its officers, directors, employees, members, affiliates, or agents be liable to you or any other person for any direct, indirect, special, incidental, or consequential damages arising from or related to your use of, or reliance on, the Tool or any information obtained therein. To the fullest extent permitted by law, you agree to release and hold harmless ASCE from any and all liability of any nature arising out of or resulting from any use of data provided by the ASCE 7 Hazard Tool.

Appendix 16

Crook County, Oregon



0 5 10 mi

N

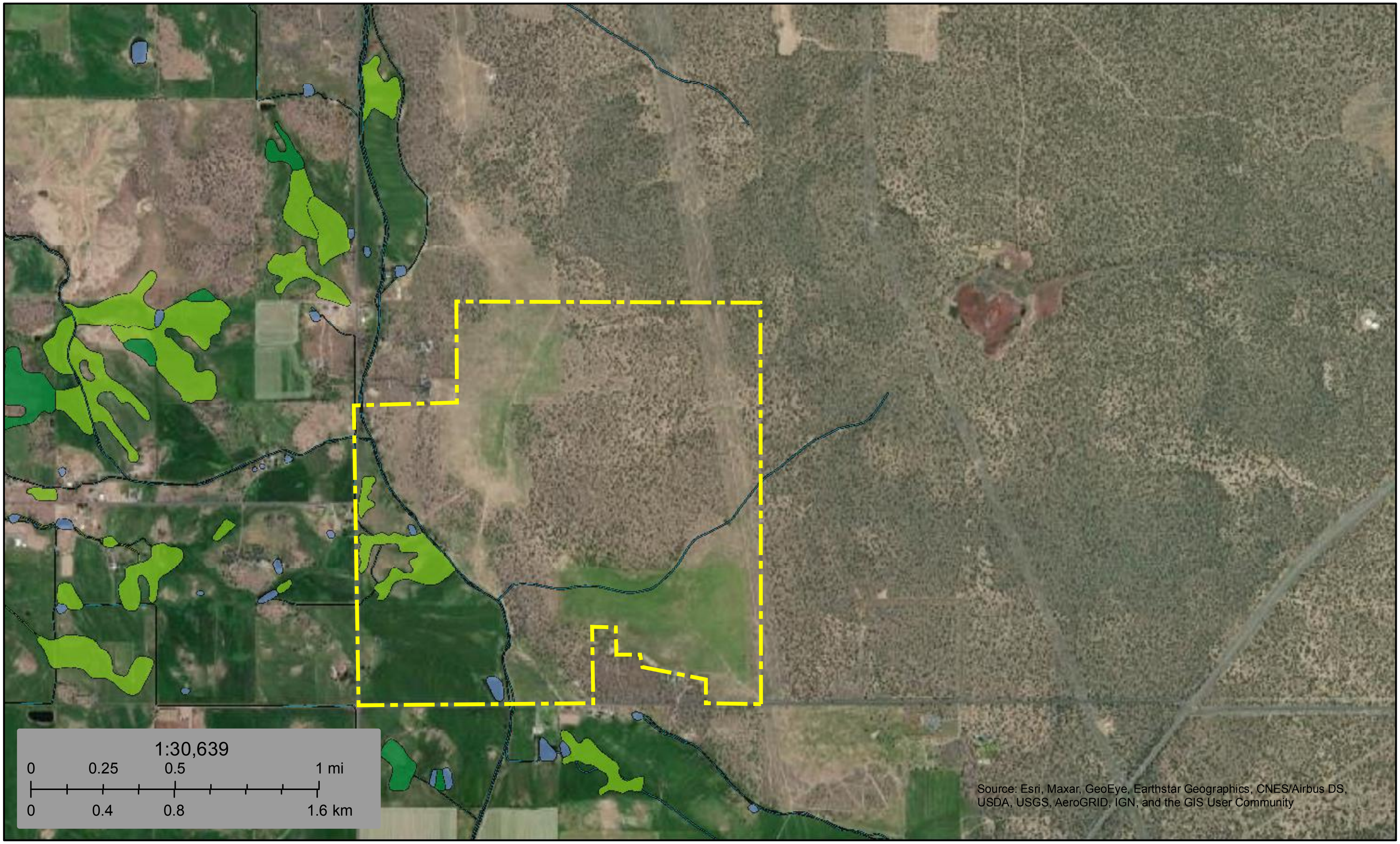
Crook County GIS
GEOGRAPHIC INFORMATION SYSTEMS

Appendix 17

U.S. Fish and Wildlife Service

National Wetlands Inventory

Crossing Trails



June 8, 2021

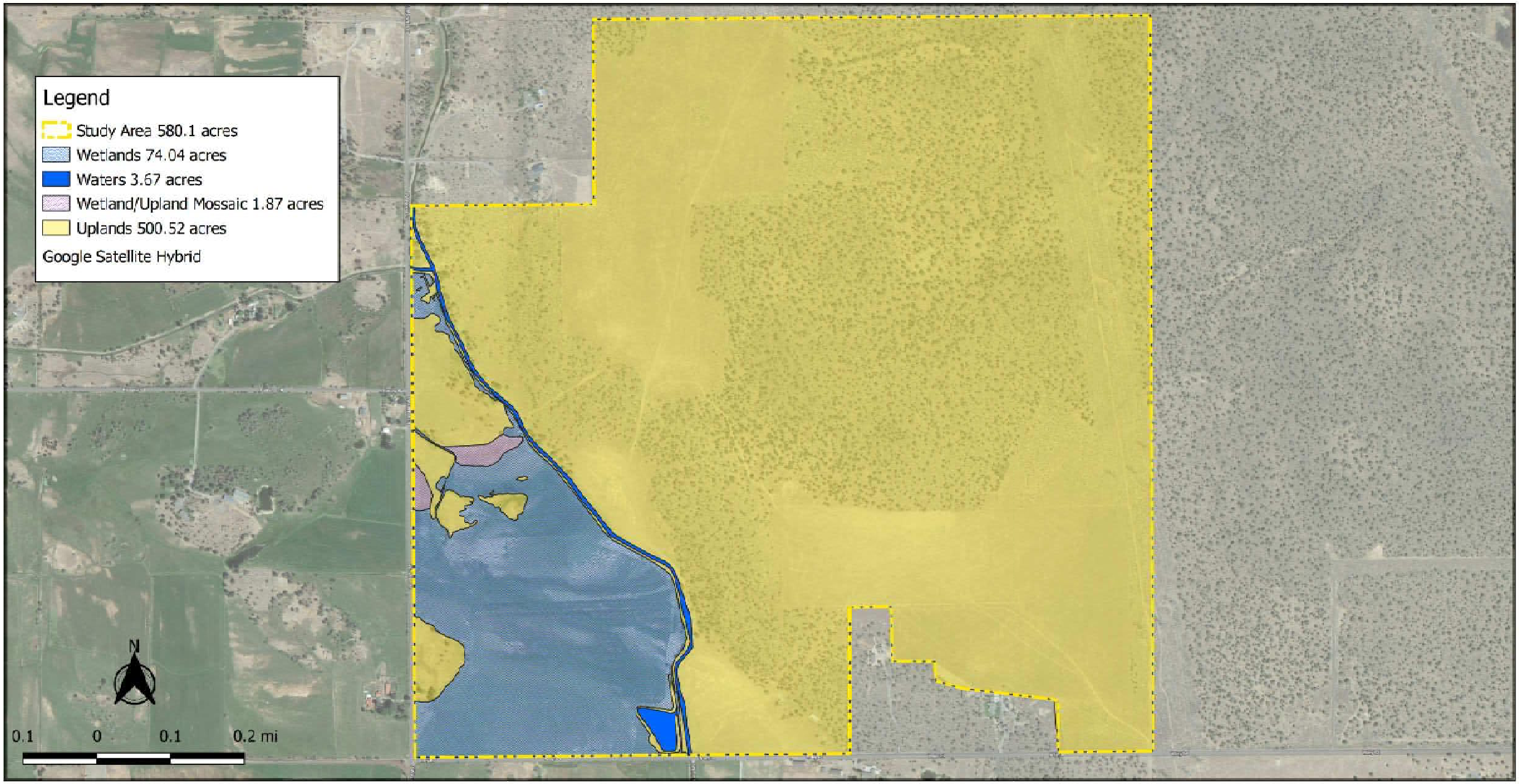
Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

Appendix 18



#7311
8/23/2021

Pacific Habitat Services, Inc.
9450 SW Commerce Circle, Suite 180
Wilsonville, OR 97070

Crossing Trails Resort - Powell Butte

Preliminary Wetlands and Waters

Appendix 19

NOTES TO USERS

...is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

...more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

...**Base Flood Elevations** shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study Report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

...of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

...areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

...**projection** used in the preparation of this map was Oregon State Plane South zone (FIPS zone 3602). The **horizontal datum** was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

...elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

...Information Services
...NGS12
...Geodetic Survey
...#9202
...East-West Highway
...Spring, Maryland 20910-3282
...-3242

...current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242**, or visit its website at http://www.ngs.noaa.gov.

...information shown on this **FIRM** was derived from multiple sources. Base map files were provided in digital format by Crook County GIS Department. This information was photogrammetrically compiled at a scale of 1:2,000 from aerial photography dated 2003 and 2005.

...**baselines** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the **profile baseline**, in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.

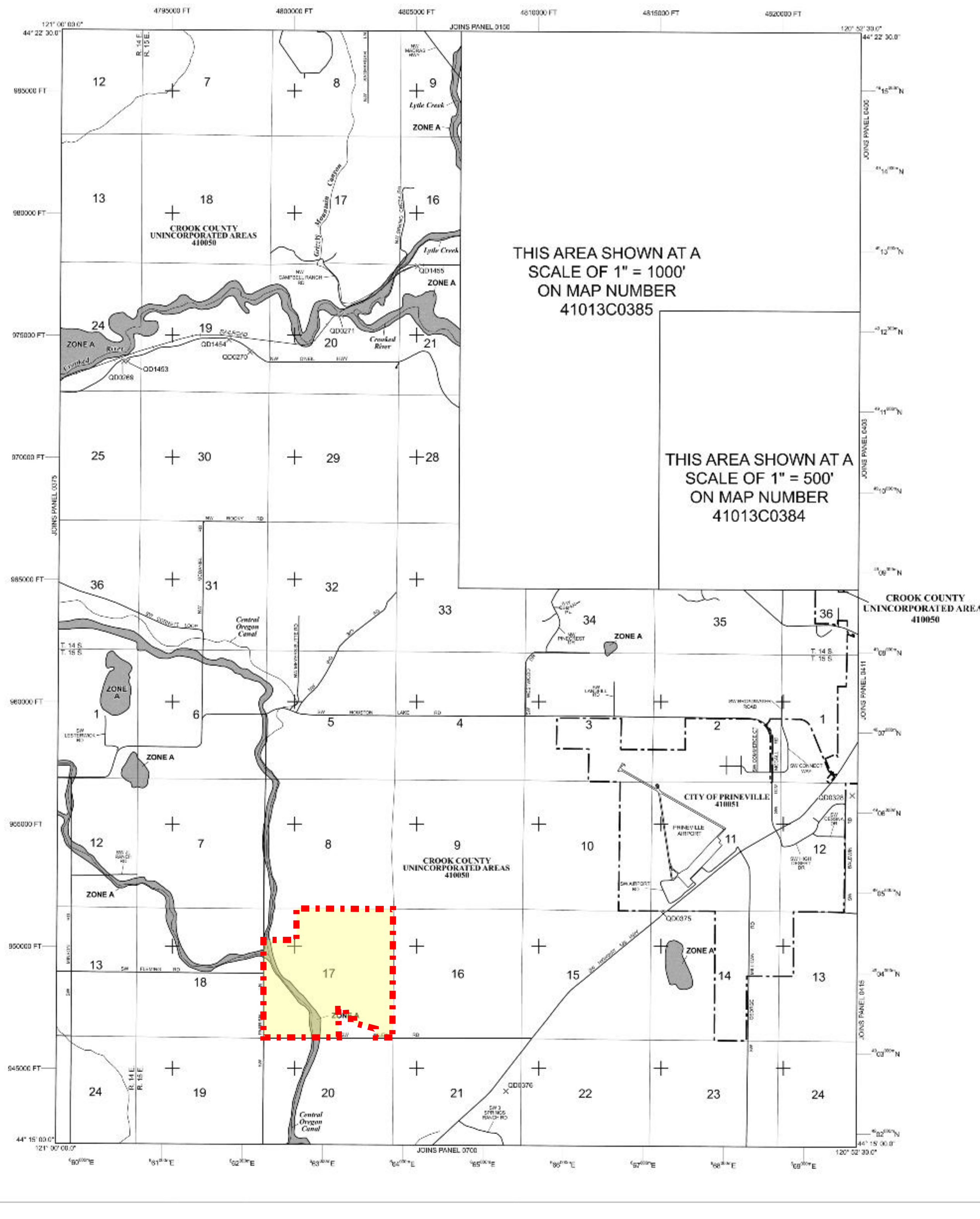
...reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

...**limits** shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

...refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

...information on available products associated with this FIRM visit the **Map Service Center** (MSC) website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

...have **questions about this map**, how to order products or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange (FMIX) at 1-877-FEMA MAP (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

ZONE A
ZONE AE
ZONE AH
ZONE AO
ZONE AR
ZONE A99
ZONE V
ZONE VE

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

ZONE X

OTHER AREAS

ZONE X
ZONE D

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
July 17, 1989

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

MAP SCALE 1" = 2000'

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0400C

FIRM
FLOOD INSURANCE RATE MAP
CROOK COUNTY, OREGON
AND INCORPORATED AREAS

PANEL 400 OF 1825

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL
CROOK COUNTY	410050	0400
PRINEVILLE, CITY OF	410051	0400

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
41013C0400C

MAP REVISED
FEBRUARY 2, 2012

Federal Emergency Management Agency

Appendix 20

Crossing Trails Resort - 21002079
1/25/2022

Crossing Trails Sewer Demand Calculations-Total	**Total**	**Sq Ft(Unit)**	**ADF/unit**	**ADF**	**ADF**	**Comments**
			gpd/unit*	gpd	MGD	
Vacation Villas	400	Each	250	100,000	0.1000	
Overnight Rentals/Cabins	200	Each	200	40,000	0.0400	Two persons
Overnight Seasonal Rentals	50	Each	200	10,000	0.0100	Luxury Camps with two persons
Workforce Housing	100	Each	250	25,000	0.0250	Mobile Home Parks
Starwood Amenity Space - 1.8 acres						
Clubhouse/Pool	2	Ac	500	1,000		Not sure what is proposed
Shared Amenity Space - 11.2 acres plus 2 ac						
	13	Ac	500	6,500		Not sure what is proposed
Other						
Maintenance Center	1	Each	300	300	0.0003	
Welcome Center	1	Each	300	300	0.0003	
				183,100	**0.1756**	

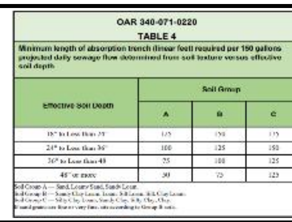
*OAR 340-071-0220 Table 2

Irrigation Demands
Per Ochinco Water District - Season is April 15-October 15. 3 ac-ft per irrigated acre or 1.5 inches per weel

Total site 580 ac					
	Acres Irrigated		gal/ac		
Ave weekly demand at 1.5"/ac/wk	28.5	ac	40,729	1,160,765	gallons/week
Daily				165,824	Gal/Day
Well run time based on 16 hours/day				173	gpm Irrigation only (Indicated from well, but may use COID rights)
Total Well Capacity including domestic				290	gpm total well capacity
Well production for 20 hr run time				348,000	gpd
Total Water Demand				348,924	gpd
Emergency Water Flow	2	1500	GPM	180,000	Gallons
Storage (Emergency flow plus two days domestic use)				877,847	Gallons
Yearly Demand				298	Acre Feet

Absorption Trenches
OARD Chapter 340 Division 71 - Onsite Wastewater Treatment Systems

Soil Type:	A				
Effective Soil Depth:	>48"	36"-48"	24"-36"	18"-24"	
Length of trench per 150 gpd:	50	75	100	125	
Trench Lenth Required: (Assume 15% disposal by absorption)	9155	13732.5	18310	22887.5	LF
Area Required:[1]	91550	137325	183100	228875	SF
	2.10	3.15	4.20	5.25	AC


OAR 340-071-0220
TABLE 4

Minimum length of absorption trench (linear feet) required per 150 gallons projected daily sewage flow determined from soil texture versus effective soil depth

Effective Soil Depth	Soil Group A	Soil Group B	Soil Group C
18" to Less than 24"	125	150	175
24" to Less than 36"	100	125	150
36" to Less than 48	75	100	125
48" or more	50	75	125

Soil Group A — Sand, Loamy Sand, Sandy Loam.
Soil Group B — Sandy Clay Loam, Loam, Silt Loam, Silt Clay Loam.
Soil Group C — Silty Clay Loam, Sandy Clay, Silty Clay, Clay.

[1] Assumes 150' rows with 10 o.c. row spacing

Pond Area for non-irrigation Months (Nov. 1 to April 1)

ADF Sewer Demand	183,100	gpd		
Non-Irrigation Days (5 Months)	27,648,100	gal		
	3,695,776	CF		
	84.8	Acer-Ft		
Pond Depth	4.0	Feet		
Pond Area	21.2	Acre	923,944	SF
Assume 60% Occupancy in Winter	12.7	Acre	554,366	SF

Appendix 21

L-385 L-387 L-389 L-391 L-393 L-395 L-397 L-399 L-401 L-403 ~~L-405~~
L-386 L-388 L-390 L-392 L-394 L-396 L-398 L-400 L-402 L-404 L-406

T-8692 spo. V55 p 941 V.56 p. 2014
T-8693 spo V55 p617 V.56 p.999 V57 p1263
T-8982 V.56 p. 124
T-8983 V.56 p. 127
T-8984 V.56 p. 130
T-8985 V.56 p. 133
T-9214 A POU/POD V57 p490 (withdrawn)

T-9299 AUSE/POU
T-9313 APOU V.56 p165
T-9314
T-9315
(Div 15) T-9343 AUSE/POU

Instream Lease #'s 260, 261, 257, 259, 258, 256, 266, 263, 262, 264, 265, 277

STATE OF OREGON

COUNTY OF DESCHUTES

CERTIFICATE OF WATER RIGHT

T-9500
T-9499
T-9555 WITHDRAWN V.60 p.329
T-9553
T-9557
T-9558
T-9423 WITHDRAWN V57 p.1155
T-9424 WITHDRAWN
T-9439
T-9440
T-9441
T-9463
T-9462
V.56 p.2042 T-9017, 9018, 9020, 9021, 9022, 9023, 9024 V.56 p.849 V.56 p.1027
T-9283
T-9113 V.56 p.1030
T-9150
T-9156 V.56 p.1033
T-9195 V.56 p.2051
T-9276
T-9516

THIS CERTIFICATE ISSUED TO

T-9163 V.64 p.43
T-9814 V.63 p.526

CENTRAL OREGON IRRIGATION DISTRICT
2598 N HIGHWAY 97
REDMOND, OREGON 97756

T-9605 T-9597 T-9603
T-9768 T-9604

confirms the right to use the waters of THE DESCHUTES RIVER, a tributary of THE COLUMBIA RIVER, for IRRIGATION OF ACRES 43,746.93 ACRES, 781.957 ACRES/EQUIVALENT FOR MUNICIPAL USE, 158.01 ACRES/EQUIVALENT FOR POND MAINTENANCE, 87.10 ACRES/EQUIVALENT FOR INDUSTRIAL USE, 7.0 ACRES/EQUIVALENT FOR QUASI-MUNICIPAL USE, 2.80 ACRES/EQUIVALENT FOR DUST ABATEMENT, STOCK WATER, AND DOMESTIC USE.

T-9769
T-9784
T-9785
T-9816
T-9817

This right was confirmed by decree of the Circuit Court of the State of Oregon for DESCHUTES County. The decree is of record at Salem, in the Order Record of the WATER RESOURCES DIRECTOR, in Volume 12, at Page 282 and in Volume 16, at pages 1 and 390. The dates of priority are OCTOBER 31, 1900 FOR 985.0 CUBIC FEET PER SECOND, AND DECEMBER 2, 1907 FOR THE BALANCE ALLOWED BY DECREE.

The amount of water used for irrigation, together with the amount secured under any other right existing for the same lands, is limited to a diversion of not to exceed the quantity determined by decree of the Circuit Court for Deschutes County, dated March 24, 1933, being:

L-498 T-9527 T-9524 Div 15

April 1 to May 1 and Oct. 1 to Nov. 1	1 cfs to 80.0 acres
May 1 to May 15 and Sept. 15 to Oct. 1	1 cfs to 60.0 acres
May 15 to Sept. 15	1 cfs to 32.4 acres

(MP-22) L-528 ~~L-414~~
(MP-16) L-495 L-464
L-497 L-496 (MP-36) (MP-22)

for each acre irrigated by the Central Oregon Irrigation District main canal systems during the irrigation season of each year, not to exceed 9.91 acre-feet for each acre irrigated during the irrigation season as measured at the diversion from the source. The quantities reflect a 45% transmission loss as determined by decree of the Circuit Court for Deschutes County, dated March 24, 1933. Those lands not served from the district main canal systems but by direct pumping from the Deschutes River will not be allowed the 45% transmission loss.

L-520 L-522 L-523 L-528
L-529 L-530 L-531 L-521 L-524
L-525 L-526 L-527 L-532 L-533
L-534 L-535 L-536 L-537 L-538
L-539 L-540 L-542 L-543 L-544
L-545 L-546 L-547 L-548 L-549

The points of diversion are located as follows:

L-637
L-370
L-371
L-372
L-373
L-374
~~L-375~~
L-376
~~L-377~~
L-378
L-379
L-381
L-382
L-383
L-384

1. Central Oregon Canal: SW¼ NE¼, Section 13, T. 18 S., R. 11 E., W.M.; 1520 feet south and 1535 feet west from the NE Corner of Section 13.

2. Smith Properties, Inc.: Lot 4 (NW¼ NW¼), Section 5, T. 18 S., R. 12 E., W.M.; 440 feet south and 970 feet east from the NW Corner of Section 5.

3. Columbia Park: SE¼ SE¼, Section 31, T. 17 S., R. 12 E., W.M.; 740 feet north and 490 feet west from the SE Corner of Section 31.

4. Drake Park South: NE¼ SE¼, Section 31, T. 17 S., R. 12 E., W.M.; 700 feet north and 120 feet west from the SE Corner of NE¼ SE¼, Section 31.

5. Drake Park North: SW¼ NW¼, Section 32, T. 17 S., R. 12 E., W.M.; 2150 feet south and 750 feet east from the NW Corner of Section 32.

6. Harmon Park: SW¼ NW¼, Section 32, T. 17 S., R. 12 E., W.M.; 700 feet south and 680 feet west from the NE Corner of SW¼ NW¼, Section 32.

L-641
L-567
L-568
L-569
L-570
L-571
L-584
L-675
L-640
L-631
L-651

V.56 p.2048 T-9035, 9036, 9040
T-9534 V.55 p.1365 ext. of time V.61 p.525
T-9027
V54 p 566 V54 p 560
T 8532 T-8514
V.57 p.379 V54 p 549
T-8486 T-8485 V.56 p.2015

~~L-369~~

AMENDED by special order v. 55 pg. 167

L-380 Instream Lease #187 5/2/2001-10/31/2002
L-368 Instream lease #234 9-19-01 / 9-30-01

7. Pioneer Park (South): NW¼ NE¼, Section 32, T. 17 S., R. 12 E., W.M.; 600 feet south and 450 feet west from the NE Corner of the NW¼ NE¼ of Section 32.

8. Pioneer Park (North): NW¼ NE¼, Section 32, T. 17 S., R. 12 E., W.M.; 560 feet west from the NE Corner of the NW¼ NE¼ of Section 32.

9. T.I.D. Bend Feed Canal: NW¼ NE¼, Section 32, T.17S., R. 12 E., W.M.; 2050 feet west from the NE Corner of Section 32.

10. Rivers Edge Golf Club: SW¼ NE¼, Section 29, T. 17 S., R. 12 E., W.M.; 1980 feet south and 1160 feet east from the N¼ Corner of Section 29.

11. C.O.I.D. North Canal: SE¼ NE¼, Section 29, T. 17 S., R. 12 E., W.M.; 850 feet north and 630 feet west from the E¼ Corner of Section 29.

12. Cline Falls State Park: NW¼ SE¼, Section 14, T. 15 S., R. 12 E., W.M.; 425 feet south and 1475 feet west from the E¼ Corner of Section 14.

A description of the place of use to which this right is appurtenant is as follows:

QTR/QTR	TL	USE	ACRES	DIV. PT.	OWNER
SW¼ SE¼	401	IR	1.820	12	OREGON STATE PARKS
SE¼ SE¼	600	IR	1.660	12	OREGON STATE PARKS
				Section 32	
SW¼ NE¼	200	IR	6.600	11	THORNBURGH, EVERETT
SE¼ NE¼	200	IR	8.900	11	THORNBURGH, EVERETT
NE¼ SW¼	500	IR	13.250	11	BRADEN, SONDRA D
NW¼ SW¼	500	IR	1.000	11	BRADEN, SONDRA D
SW¼ SW¼	500	IR	19.200	11	BRADEN, SONDRA D
SE¼ SW¼	600	IR	26.000	11	PRATT, DOROTHY LOU
NE¼ SE¼	300	IR	36.650	11	THORNBURGH, EVERETT
SW¼ SE¼	400	IR	0.100	11	THORNBURGH, EVERETT
SE¼ SE¼	400	IR	32.350	11	THORNBURGH, EVERETT
				Section 33	
SW¼ NW¼	400	IR	7.700	11	THORNBURGH, EVERETT
NE¼ SW¼	100	IR	4.000	11	HARPER, VIRGIL
NW¼ SW¼	400	IR	36.300	11	THORNBURGH, EVERETT
SW¼ SW¼	400	IR	37.400	11	THORNBURGH, EVERETT
SE¼ SW¼	100	IR	2.000	11	HARPER, VIRGIL
SE¼ SW¼	103	IR	14.000	11	GREGERSON, GARY E
				Section 34	
				Township 13 South, Range 13 East, W.M.	
NE¼ NE¼	300	IR	12.000	11	CLARK, DAVID L
SE¼ NE¼	300	IR	6.200	11	CLARK, DAVID L
				Section 12	
SE¼ NE¼	4300	IR	14.000	11	BETTESWORTH, JAY
SE¼ NE¼	4400	IR	5.000	11	GREGG, MARGARET
NE¼ SE¼	300	IR	1.000	11	BITTLER, SCOTT
NE¼ SE¼	400	IR	1.400	11	SCHULTZ, RUTH A
				Section 36	
				Township 14 South, Range 12 East, W.M.	
SW¼ NE¼	600	IR	3.200	11	HUMPHREYS FAMILY TRUST
SE¼ NE¼	600	IR	4.000	11	HUMPHREYS FAMILY TRUST
NE¼ NW¼	700	IR	8.100	11	GARDNER, JAMES

SE¼ NW¼	700	IR	12.400	11	GARDNER, JAMES
SE¼ NW¼	700	PND	0.400	11	GARDNER, JAMES
NE¼ SW¼	700	IR	15.700	11	GARDNER, JAMES
SW¼ SW¼	700	IR	18.400	11	GARDNER, JAMES
SE¼ SW¼	700	IR	21.000	11	GARDNER, JAMES
NE¼ SE¼	600	IR	12.700	11	HUMPHREYS FAMILY TRUST
NW¼ SE¼	600	IR	19.800	11	HUMPHREYS FAMILY TRUST
NW¼ SE¼	600	PND	0.600	11	HUMPHREYS FAMILY TRUST
SW¼ SE¼	600	IR	25.400	11	HUMPHREYS FAMILY TRUST
SW¼ SE¼	600	PND	0.300	11	HUMPHREYS FAMILY TRUST
SE¼ SE¼	600	IR	2.300	11	HUMPHREYS FAMILY TRUST

Section 3

NE¼ NE¼	100	IR	5.000	11	THORNBURGH, EVERETT
NW¼ NE¼	100	PND	1.500	11	CENTRAL OREGON IRRIGATION
SW¼ NE¼	200	IR	7.400	11	RIVERA, KEITH A
SW¼ NE¼	300	IR	10.700	11	BOYDSTON, KYLE S
SW¼ NE¼	300	PND	0.300	11	BOYDSTON, KYLE S
SW¼ NE¼	400	IR	4.000	11	BURTON, KYLE E
SE¼ NE¼	200	IR	24.600	11	RIVERA, KEITH A
NE¼ NW¼	100	IR	17.470	11	PATRICK, RANDALL E
NE¼ NW¼	101	IR	1.600	11	TERRY, TOM
NW¼ NW¼	200	IR	14.800	11	BRADEN, SONDRA D
SW¼ NW¼	500	IR	9.000	11	BRADEN, SONDRA D
SE¼ NW¼	300	IR	1.000	11	KOSKI, CLIFTON
SE¼ NW¼	400	IR	27.000	11	STANFILL, DOYLE S
NE¼ SW¼	900	IR	19.000	11	HOVEY, RONALD
NW¼ SW¼	700	IR	22.700	11	SCHWERBEL, RICHARD
SW¼ SW¼	700	IR	24.300	11	SCHWERBEL, RICHARD
SE¼ SW¼	800	IR	22.000	11	STEINKE, JAMES O
NE¼ SE¼	1100	IR	6.000	11	HUBBARD, HARRY
NE¼ SE¼	1200	IR	3.700	11	HUBBARD, HARRY
NE¼ SE¼	1300	IR	3.700	11	MESSNER, TIMOTHY
NW¼ SE¼	1000	IR	14.000	11	HOVEY, RONALD
NW¼ SE¼	1300	IR	5.300	11	MESSNER, TIMOTHY
SW¼ SE¼	1400	IR	11.900	11	HUMPHREYS FAMILY TRUST
SE¼ SE¼	1400	IR	24.800	11	HUMPHREYS FAMILY TRUST

Section 4

NW¼ NE¼	100	IR	0.280	11	OREGON STATE PARKS
SW¼ NE¼	200	IR	28.700	11	MEIER, MARTIN
SE¼ NE¼	200	IR	1.800	11	MEIER, MARTIN
SE¼ NE¼	300	IR	20.200	11	HOLM, DALE M
SW¼ NW¼	1100	PND	1.200	11	CENTRAL OREGON IRRIGATION
SW¼ NW¼	1200	PND	2.400	11	CENTRAL OREGON IRRIGATION
SW¼ NW¼	1400	PND	0.600	11	CENTRAL OREGON IRRIGATION
SW¼ NW¼	1500	PND	6.000	11	CENTRAL OREGON IRRIGATION
SW¼ NW¼	1600	PND	1.200	11	CENTRAL OREGON IRRIGATION
SW¼ NW¼	1900	IR	0.800	11	MYRIN, STEVE
SW¼ NW¼	1900	PND	0.160	11	MYRIN, STEVE
SW¼ NW¼	2000	IR	5.500	11	HERLOCKER, JOHN R.
SW¼ NW¼	2000	PND	5.700	11	CENTRAL OREGON IRRIGATION
SW¼ NW¼	2100	PND	6.900	11	CENTRAL OREGON IRRIGATION
NE¼ SW¼	500	IR	21.300	11	PINZ STOCK RANCH, INC
NE¼ SW¼	600	IR	0.700	11	PINZ STOCK RANCH, INC
NW¼ SW¼	400	IR	38.500	11	RIEDWEG, DAVID A &
SW¼ SW¼	400	IR	36.000	11	RIEDWEG, DAVID A &
SE¼ SW¼	500	IR	28.200	11	PINZ STOCK RANCH, INC
SE¼ SW¼	600	IR	2.300	11	PINZ STOCK RANCH, INC
NE¼ SE¼	300	IR	7.300	11	HOLM, DALE M

NW¼ SE¼	600	IR	4.000	11	PINZ STOCK RANCH, INC
NW¼ SE¼	700	IR	2.700	11	FOX, STEPHEN A
SW¼ SE¼	600	IR	11.700	11	PINZ STOCK RANCH, INC
SW¼ SE¼	700	IR	15.500	11	FOX, STEPHEN A
SW¼ SE¼	800	IR	3.000	11	FOX, STEPHEN A
SE¼ SE¼	1000	IR	10.620	11	FOX, STEPHEN A

Section 5

SE¼ NE¼	1500	IR	2.000	11	HERLOCKER, JOHN R.
SE¼ NE¼	2000	IR	5.000	11	HERLOCKER, JOHN R.
NE¼ NW¼	2102	IR	8.800	11	JOHNSTON, TERRY L
NW¼ NW¼	2102	IR	4.300	11	JOHNSTON, TERRY L
SW¼ NW¼	2102	IR	0.300	11	JOHNSTON, TERRY L
SW¼ NW¼	2104	IR	25.700	11	CLARK, DAVID L
SE¼ NW¼	2102	IR	2.200	11	JOHNSTON, TERRY L
SE¼ NW¼	2105	IR	24.800	11	CLARK, DAVID L
NE¼ SW¼	2101	IR	12.900	11	CLARK, DAVID L
NE¼ SW¼	2105	IR	6.100	11	CLARK, DAVID L
NE¼ SW¼	2300	IR	1.800	11	FREEMAN, W E
NW¼ SW¼	2103	IR	6.800	11	CLARK, DAVID L
NW¼ SW¼	2104	IR	17.600	11	CLARK, DAVID L
SW¼ SW¼	2103	IR	15.200	11	CLARK, DAVID L
SE¼ SW¼	2103	IR	23.100	11	CLARK, DAVID L
NE¼ SE¼	2200	IR	31.100	11	ABBEY, STEPHEN P
NW¼ SE¼	2200	IR	37.000	11	ABBEY, STEPHEN P
SW¼ SE¼	2200	IR	34.700	11	ABBEY, STEPHEN P
SE¼ SE¼	2200	IR	26.200	11	ABBEY, STEPHEN P

Section 6

NE¼ NE¼	2700	IR	36.000	11	LEU, J ERWIN
NW¼ NE¼	2701	IR	23.000	11	MCWILLIAMS, JUDY
SW¼ NE¼	2702	IR	14.500	11	COLVIN, DALE F
SE¼ NE¼	2702	IR	39.500	11	COLVIN, DALE F
NE¼ NW¼	2400	IR	9.400	11	CLARK, DAVID L
NW¼ NW¼	2103	IR	27.400	11	CLARK, DAVID L
NE¼ SE¼	2800	IR	39.300	11	SCHUDEL, HAROLD L
NW¼ SE¼	2800	IR	16.900	11	SCHUDEL, HAROLD L
SE¼ SE¼	2800	IR	36.800	11	SCHUDEL, HAROLD L

Section 7

NE¼ NE¼	100	IR	34.800	11	DICKSON, DWAINE
NW¼ NE¼	100	IR	36.100	11	DICKSON, DWAINE
NW¼ NE¼	100	PND	0.100	11	DICKSON, DWAINE
SW¼ NE¼	200	IR	4.500	11	WHITE, KENNETH
SW¼ NE¼	201	IR	27.700	11	ZINIKER, ROBIN L
SW¼ NE¼	202	IR	2.000	11	CAREY, WILSON B
SW¼ NE¼	204	IR	2.500	11	STARNES, RONALD
SE¼ NE¼	201	IR	32.300	11	ZINIKER, ROBIN L
NE¼ NW¼	300	IR	34.000	11	WANZO, CHARLES M
NW¼ NW¼	301	IR	15.000	11	RIDENOUR, VIRGIL M
SW¼ NW¼	403	IR	27.000	11	BUTTERFIELD, PATRICK
SE¼ NW¼	500	IR	20.000	11	AHRENS, H JOHN
SE¼ NW¼	501	IR	3.000	11	HOLLANDER, LEWIS E JR
SE¼ NW¼	502	IR	4.600	11	ALLEN, CHALLIS
NE¼ SW¼	400	IR	10.000	11	RODRIGUES, EDMUND P
NE¼ SW¼	405	IR	6.000	11	MAY, KEIPPIE L
NE¼ SW¼	406	IR	8.000	11	PRODZINSKI, MARK D ET AL
NE¼ SW¼	600	IR	4.200	11	RIEMENSCHNEIDER, D C
NE¼ SW¼	600	PND	0.200	11	RIEMENSCHNEIDER, D C
NW¼ SW¼	1300	IR	40.000	11	SCHUDEL, HAROLD L

SW¼ SW¼	1300	IR	36.500	11	SCHUDEL, HAROLD L
SE¼ SW¼	401	IR	4.500	11	BERGER, CHARLES D
SE¼ SW¼	402	IR	0.500	11	HENDERSON, WILLIAM
SE¼ SW¼	404	IR	21.100	11	BERGER, CHARLES D
SE¼ SW¼	700	IR	4.000	11	JAHN, M SCOTT
SE¼ SW¼	800	IR	2.000	11	PETERSON, TURE E
SE¼ SW¼	900	IR	0.500	11	BERGSTROM, DAVID L
NE¼ SE¼	1100	IR	36.100	11	ZINIKER, ROBIN L
NW¼ SE¼	1002	IR	7.000	11	BROWNING, SID
NW¼ SE¼	1100	IR	19.850	11	ZINIKER, ROBIN L
NW¼ SE¼	1101	IR	4.900	11	KILGORE, DAN
SW¼ SE¼	1000	IR	9.800	11	BROWNING, SID
SW¼ SE¼	1001	IR	6.000	11	GREGAN, DOUGLAS R
SW¼ SE¼	1002	IR	19.100	11	BROWNING, SID
SE¼ SE¼	1400	IR	28.600	11	ALDOUS, ELIZABETH A

Section 8

NE¼ NE¼	100	IR	18.000	11	GARDNER, JAMES & CAROL
NE¼ NE¼	100	PND	0.200	11	GARDNER, JAMES & CAROL
NW¼ NE¼	100	IR	11.500	11	GARDNER, JAMES & CAROL
NW¼ NE¼	200	IR	7.600	11	MANN, WILLIAM D
NW¼ NE¼	300	IR	2.200	11	DEATON, KATHLEEN ROSE
SW¼ NE¼	200	IR	15.150	11	MANN, WILLIAM D
SW¼ NE¼	300	IR	5.800	11	DEATON, KATHLEEN ROSE
SE¼ NE¼	100	IR	5.400	11	GARDNER, JAMES & CAROL
SE¼ NE¼	100	PND	3.800	11	GARDNER, JAMES & CAROL
NE¼ NW¼	400	IR	20.000	11	PERRY, JACK L
NW¼ NW¼	501	IR	4.810	11	ROGERS, CHARLES E JR
NW¼ NW¼	600	IR	6.000	11	MITCHELL, CHESTER
NW¼ NW¼	701	IR	10.400	11	KELLER, WALLACE L
SW¼ NW¼	701	IR	24.600	11	KELLER, WALLACE L
SW¼ NW¼	702	IR	1.440	11	KELLER, WALLACE L
SW¼ NW¼	801	IR	5.400	11	LORANGER, JON S
SE¼ NW¼	800	IR	3.500	11	HAGA, RICK A
SE¼ NW¼	801	IR	13.600	11	LORANGER, JON S
SE¼ NW¼	900	IR	2.800	11	DRUM, MICHAEL
SE¼ NW¼	902	IR	1.000	11	MURPHY, RICHARD A
NE¼ SW¼	1500	IR	28.000	11	BAIN, NORMAN C JR
NW¼ SW¼	701	IR	26.800	11	KELLER, WALLACE L
SW¼ SW¼	1100	IR	24.400	11	ALDOUS, ELIZABETH A
SW¼ SW¼	701	IR	5.000	11	KELLER, WALLACE L
SE¼ SW¼	1300	IR	5.480	11	JAGER, GERRIT A
SE¼ SW¼	1400	IR	27.000	11	BOLKEN, OLAF
NE¼ SE¼	1700	IR	10.000	11	KIMBALL, GEORGE H
NE¼ SE¼	1800	IR	0.500	11	FOSS, ART
NE¼ SE¼	1800	IR	2.700	11	RADANT, GERALD DANA
NE¼ SE¼	2000	IR	2.000	11	GROESZ, JOHN W
NE¼ SE¼	2100	IR	2.000	11	LONG, KEITH E
NE¼ SE¼	2200	IR	3.600	11	BOZARTH, JAMES F
NW¼ SE¼	1600	IR	8.000	11	FOSS, C B
SW¼ SE¼	1900	IR	14.300	11	FOSS, C B
SE¼ SE¼	1900	IR	22.900	11	FOSS, C B
SE¼ SE¼	2200	IR	0.100	11	BOZARTH, JAMES F
SE¼ SE¼	2300	IR	1.800	11	DIETZ, JAMES
SE¼ SE¼	2400	IR	1.700	11	HAMMOND, BARBARA L

Section 9

NE¼ NE¼	100	IR	4.200	11	GARDNER, JAMES & CAROL
NE¼ NE¼	400	IR	11.000	11	GARDNER, JAMES
NW¼ NE¼	500	IR	15.700	11	GARDNER, JAMES & CAROL

NW¼ NE¼	500	PND	0.280	11	GARDNER, JAMES & CAROL
SW¼ NE¼	501	IR	17.600	11	HUMPHREYS FAMILY TRUST
SE¼ NE¼	100	IR	18.100	11	GARDNER, JAMES & CAROL
SE¼ NE¼	200	IR	3.000	11	GARDNER, JAMES & CAROL
SE¼ NE¼	300	IR	1.000	11	GARDNER, JAMES & CAROL
NE¼ NW¼	500	IR	30.000	11	GARDNER, JAMES & CAROL
NW¼ NW¼	500	IR	23.900	11	GARDNER, JAMES & CAROL
SW¼ NW¼	500	IR	10.000	11	GARDNER, JAMES & CAROL
SW¼ NW¼	500	PND	3.580	11	GARDNER, JAMES & CAROL
SE¼ NW¼	500	IR	20.400	11	GARDNER, JAMES & CAROL
NE¼ SW¼	2500	IR	22.100	11	GARDNER, JAMES & CAROL
NW¼ SW¼	100	IR	2.000	11	FAHLGREN, MICHAEL J
NW¼ SW¼	1600	IR	0.500	11	BROWN, TIMOTHY RUSSELL
NW¼ SW¼	1600	IR	1.000	11	BROWN, TIMOTHY RUSSELL
NW¼ SW¼	1700	IR	2.000	11	WALKER, WALTER W
NW¼ SW¼	1800	IR	1.500	11	FOSS, ART
NW¼ SW¼	1900	IR	2.000	11	MATTOS, JILL L
NW¼ SW¼	200	IR	2.000	11	WILKERSON, MARK S
NW¼ SW¼	2200	IR	0.300	11	BOZARTH, JAMES F
NW¼ SW¼	300	IR	2.000	11	SMITH, DANIEL L
NW¼ SW¼	400	IR	2.000	11	WOOD, LEWIS O
NW¼ SW¼	500	IR	1.300	11	ANDERSON, RICHARD L
SW¼ SW¼	1300	IR	1.500	11	BYERLEY, JOHN W
SW¼ SW¼	1400	IR	2.000	11	PETERSEN, GARY H
SW¼ SW¼	1500	IR	4.700	11	SELLERS, RANDOLPH M &
SW¼ SW¼	1600	IR	0.500	11	BROWN, TIMOTHY RUSSELL
SW¼ SW¼	2300	IR	0.200	11	DIETZ, JAMES
SW¼ SW¼	2400	IR	10.440	11	HAMMOND, BARBARA L
SW¼ SW¼	500	IR	1.700	11	ANDERSON, RICHARD L
SE¼ SW¼	1000	IR	2.000	11	MILLER, RONALD H
SE¼ SW¼	1100	IR	4.110	11	SMITHERS, SUZANNE J
SE¼ SW¼	1200	IR	0.800	11	SMITH, JANICE A &
SE¼ SW¼	1300	IR	0.500	11	BYERLEY, JOHN W
SE¼ SW¼	600	IR	2.500	11	ANDERSON, RICHARD L
SE¼ SW¼	700	IR	2.000	11	ANDERSON, RICHARD L
SE¼ SW¼	800	IR	4.500	11	ANDERSON, RICHARD L
SE¼ SW¼	900	IR	2.000	11	GREEN, JOHN S
NE¼ SE¼	400	IR	0.900	11	HUMPHREYS FAMILY TRUST
NE¼ SE¼	400	PND	0.600	11	HUMPHREYS FAMILY TRUST
NE¼ SE¼	500	IR	25.900	11	GARDNER, JAMES & CAROL
NW¼ SE¼	500	IR	25.400	11	GARDNER, JAMES & CAROL
SW¼ SE¼	500	IR	28.000	11	GARDNER, JAMES & CAROL
SE¼ SE¼	600	IR	11.000	11	SCHOONMAKER, DOROTHY C

Section 10

NW¼ NW¼	300	IR	0.900	11	GARDNER, JAMES & CAROL
SW¼ NW¼	400	IR	1.400	11	HUMPHREYS FAMILY TRUST
NW¼ SW¼	400	IR	7.300	11	HUMPHREYS FAMILY TRUST
SE¼ SW¼	100	IR	4.390	11	OREGON STATE PARKS
NE¼ SE¼	300	IR	0.800	11	SHALLEY, JANET M
NE¼ SE¼	400	IR	1.300	11	SHERIDAN, DOUGLAS ET AL
NE¼ SE¼	500	IR	0.400	11	HANCOCK, DAVID
NW¼ SE¼	300	IR	1.700	11	SHALLEY, JANET M
NW¼ SE¼	400	IR	1.700	11	SHERIDAN, DOUGLAS ET AL
NW¼ SE¼	500	IR	0.500	11	HANCOCK, DAVID
NW¼ SE¼	800	IR	1.200	11	KEYTE, STUART A
SW¼ SE¼	1000	IR	4.000	11	VANDERWILT, ELLIS
SW¼ SE¼	1001	IR	2.500	11	SOULE, WILLIAM P
SW¼ SE¼	1100	IR	3.500	11	LUSK, SCOTT A
SW¼ SE¼	1200	IR	2.500	11	BERG, SHARON

SW¼ SE¼	600	IR	0.500	11	HANCOCK, DAVID
SW¼ SE¼	800	IR	0.550	11	KEYTE, STUART A
SW¼ SE¼	801	IR	1.250	11	GIBSON, MARLA ET AL
SW¼ SE¼	900	IR	5.000	11	BREWER, RUSSELL C
SE¼ SE¼	101	IR	2.000	11	LAY, STEVEN H
SE¼ SE¼	103	IR	4.250	11	MACNEILL, MURRAY
SE¼ SE¼	104	IR	2.000	11	MISHLER, DOUG A &
SE¼ SE¼	600	IR	3.600	11	HANCOCK, DAVID
SE¼ SE¼	700	IR	1.250	11	WILLIAMS, DEBRA J
SE¼ SE¼	701	IR	1.000	11	DAY, CURTIS

Section 11

SE¼ NE¼	300	IR	6.200	11	RE-GRET, INC
SE¼ NE¼	400	IR	3.000	11	WARD, ELMER S
NE¼ NW¼	203	IR	1.500	11	MENDENHALL, ALFRED L
NW¼ NW¼	300	IR	2.000	11	BOSCHMA, FRED
NW¼ NW¼	301	IR	1.750	11	MCFARLANE, BETTE J
NW¼ NW¼	304	IR	2.000	11	WRIGHT, CAROL F
NW¼ NW¼	305	IR	3.500	11	MCFARLANE, DEBORAH R
NW¼ NW¼	400	IR	3.600	11	LOREY, JOHN P
NW¼ NW¼	500	IR	1.000	11	FOUST, BARBARA &
NW¼ NW¼	501	IR	1.250	11	GOLDSTEIN, RICK N ET AL
NW¼ NW¼	502	IR	1.000	11	AYRES, MARVIN V
SW¼ NW¼	1300	IR	2.500	11	WRIGHT, CAROL F
SW¼ NW¼	1400	IR	2.500	11	BRYANT, CHARLES L
SW¼ NW¼	1500	IR	2.500	11	SMITH HILL PROPERTIES, INC.
SW¼ NW¼	1600	IR	2.500	11	LATENSER, B
SW¼ NW¼	1700	IR	2.500	11	EAGAN, JAMES J
SW¼ NW¼	1800	IR	2.500	11	RUNGE, LARRY C
SW¼ NW¼	1900	IR	2.500	11	NICHOLS, FRANKLIN A
SW¼ NW¼	2000	IR	2.500	11	GOODMAN, JOHN Q
SE¼ NW¼	1000	IR	2.500	11	STASTNY, DONALD J
SE¼ NW¼	1100	IR	2.300	11	MOLE, HOWARD
SE¼ NW¼	1200	IR	2.700	11	MOLE, HOWARD
SE¼ NW¼	2100	IR	2.500	11	PENIX-BROWN, DONNA K
SE¼ NW¼	900	IR	4.800	11	CRAFTON, JASON A
NE¼ SW¼	700	IR	25.000	11	GUTHRIE, DONNA MARIE
NW¼ SW¼	1000	IR	4.500	11	ROGERS, JIMMIE
NW¼ SW¼	1100	IR	4.000	11	BECK, GARY M
NW¼ SW¼	800	IR	10.500	11	DAVIS, FRANK
NW¼ SW¼	901	IR	5.000	11	BERGUM, ERIC
SW¼ SW¼	1200	IR	20.000	11	MOBERLY, JAY
SW¼ SW¼	1300	IR	5.000	11	ESKEW, ROBERT
SE¼ SW¼	1400	IR	28.000	11	EBERT, WILLIAM
SW¼ SE¼	1500	IR	0.800	11	KING, BRITT
SW¼ SE¼	1600	IR	4.200	11	KING, BRITT
SW¼ SE¼	1700	IR	7.000	11	ROGERSON, RONALD
SW¼ SE¼	1801	IR	5.000	11	CROSS, STEVE W
SW¼ SE¼	1802	IR	6.000	11	KLAUS, MONTY
SE¼ SE¼	1800	IR	11.750	11	BELCHER, RON
SE¼ SE¼	1800	PND	0.500	11	CENTRAL OREGON IRRIGATION
SE¼ SE¼	1803	IR	3.210	11	ETTER, RANDALL LEE

Section 13

NE¼ NE¼	1400	IR	3.000	11	JEFFREY, GARY N
NE¼ NE¼	1401	IR	6.500	11	MCBRIDE, KEVIN &
NE¼ NE¼	1402	IR	2.000	11	WHITE, KENNETH M ET AL
NE¼ NE¼	1403	IR	2.000	11	OLMSTEAD, PAUL S

NE¼ NE¼	1404	IR	3.000	11	AYRES, MARVIN V
NE¼ NE¼	1405	IR	5.000	11	COCHRAN, MIKE H
NW¼ NE¼	101	IR	1.000	11	RABE, DONALD
NW¼ NE¼	102	IR	3.900	11	DOWNS, ROBERT L
NW¼ NE¼	103	IR	1.000	11	BERG, SHARON
NW¼ NE¼	200	IR	1.000	11	CHUBB, CAROLINE
NW¼ NE¼	300	IR	1.000	11	SENN, JOSEPH L
NW¼ NE¼	301	IR	0.600	11	DOWNS, ROBERT L
NW¼ NE¼	400	IR	4.000	11	SKEEN, MICHAEL C
NW¼ NE¼	401	IR	2.000	11	JUSTICE, DONALD R
NW¼ NE¼	402	IR	2.000	11	FIRCH, CHARLES
SW¼ NE¼	500	IR	7.150	11	GALLIANO, STEVEN J
SW¼ NE¼	501	IR	3.250	11	SWIFT, KEVEN
SW¼ NE¼	502	IR	5.200	11	BOWEN, ROBERT L
SW¼ NE¼	503	IR	1.800	11	BOWEN, ROBERT L
SW¼ NE¼	504	IR	2.000	11	BOWEN, ROBERT L
SW¼ NE¼	505	IR	5.600	11	HAWES, SCOTT W
SE¼ NE¼	1501	IR	3.500	11	MORENTIN, DENNIS R
SE¼ NE¼	1600	IR	3.500	11	SHOWN, CHARLES G
SE¼ NE¼	1700	IR	3.500	11	HENNING, JOHN A
SE¼ NE¼	1800	IR	3.500	11	GROESZ, WILLIAM
SE¼ NE¼	600	IR	1.000	11	MARTINEZ, JOSEPH M
SE¼ NE¼	601	IR	1.500	11	SUDERNO, ROBERT J
SE¼ NE¼	700	IR	3.000	11	STEEL, JEFFREY C
SE¼ NE¼	800	IR	3.500	11	HAWKS FAMILY TRUST
SE¼ NE¼	901	IR	3.500	11	HAWKS FAMILY TRUST
NE¼ NW¼	101	IR	18.300	11	OREGON STATE PARKS
NE¼ NW¼	1500	IR	2.000	11	OREGON STATE PARKS
NE¼ NW¼	200	IR	0.700	11	OREGON STATE PARKS
NE¼ NW¼	300	IR	0.800	11	OREGON STATE PARKS
NE¼ NW¼	400	IR	0.800	11	OREGON STATE PARKS
NE¼ NW¼	500	IR	0.900	11	DAY, ROBERT L
NE¼ NW¼	600	IR	0.600	11	DAY, ROBERT L
SW¼ NW¼	1300	IR	10.000	11	OREGON STATE PARKS
SE¼ NW¼	1000	IR	4.100	11	EBY, DAVID L
SE¼ NW¼	1100	IR	9.000	11	CLARKE, WILLIAM LEONARD
SE¼ NW¼	1200	IR	5.000	11	TITTLE, AVERY
SE¼ NW¼	700	IR	7.500	11	COSTELLO, DONALD O.B.
SE¼ NW¼	800	IR	4.500	11	EBY, DAVID L
SE¼ NW¼	900	IR	4.500	11	EBY, DAVID L
NE¼ SW¼	100	IR	3.060	11	GRIFFIN, CURTIS L
NE¼ SW¼	1000	IR	2.200	11	SPIES, EDWARD
NE¼ SW¼	1200	IR	4.500	11	LAWRENCE, GARY DALE
NE¼ SW¼	1300	IR	4.000	11	GRIFFIN, CURTIS L
NE¼ SW¼	1400	IR	4.000	11	ALDERSON, IVAN E
NE¼ SW¼	1500	IR	4.600	11	DOLAN, CHRISTINA L
NE¼ SW¼	1600	IR	4.600	11	DOLAN, CHRISTINA L ET AL
NE¼ SW¼	1700	IR	2.000	11	BROOKS, STEVEN P
NE¼ SW¼	200	IR	2.200	11	CURTIS, ARCHIE
NW¼ SW¼	1000	IR	1.300	11	SPIES, EDWARD
NW¼ SW¼	200	IR	1.300	11	CURTIS, ARCHIE
NW¼ SW¼	300	IR	3.500	11	HEEREN, GUNTHER
NW¼ SW¼	400	IR	3.500	11	EMERSON, GERALDINE
NW¼ SW¼	500	IR	3.500	11	SMITH, DON IAN
NW¼ SW¼	600	IR	3.800	11	BUCARIA, GARVAN
NW¼ SW¼	700	IR	2.700	11	BUCARIA, GARVAN
NW¼ SW¼	800	IR	3.500	11	ELY, ROBERT W
NW¼ SW¼	900	IR	4.000	11	VANDERPLAAT, ANDREW E
SW¼ SW¼	1100	IR	24.000	11	LANTZ, MRS THELMA
SE¼ SW¼	1100	IR	13.250	11	LANTZ, MRS THELMA

SE¼ SW¼	1101	IR	0.900	11	MOBERLY, JAY
SE¼ SW¼	1102	IR	1.000	11	PRIDAY, LLOYD
NE¼ SE¼	100	IR	26.400	11	HINZMAN, BARBARA - ESTATE
NE¼ SE¼	200	IR	3.000	11	MCLAUGHLIN, DOUGLAS C
NE¼ SE¼	405	IR	0.700	11	TOLKE, WILLIAM I
NW¼ SE¼	100	IR	14.100	11	HINZMAN, BARBARA - ESTATE
NW¼ SE¼	405	IR	11.600	11	TOLKE, WILLIAM I
NW¼ SE¼	405	PND	0.600	11	TOLKE, WILLIAM I
SW¼ SE¼	402	IR	26.100	11	ABBAS, JACK
SW¼ SE¼	402	PND	1.200	11	ABBAS, JACK
SW¼ SE¼	405	IR	2.500	11	TOLKE, WILLIAM I
SE¼ SE¼	100	IR	2.500	11	HINZMAN, BARBARA - ESTATE
SE¼ SE¼	400	IR	7.500	11	SWIFT, JAMES A
SE¼ SE¼	402	IR	13.500	11	ABBAS, JACK
SE¼ SE¼	403	IR	1.500	11	ABBAS, JERRY G
SE¼ SE¼	404	IR	1.000	11	HANNEY, DERWYN T

Section 14

NE¼ NE¼	302	IR	1.000	11	CAROLYN S CHAMBERS TRUST
NW¼ NE¼	300	IR	24.500	11	CAROLYN S CHAMBERS TRUST
SW¼ NE¼	300	IR	26.600	11	CAROLYN S CHAMBERS TRUST
SE¼ NE¼	301	IR	4.800	11	CAROLYN S CHAMBERS TRUST
NE¼ NW¼	1200	IR	3.400	11	BETUEL, KENNETH C
NE¼ NW¼	1300	IR	3.000	11	MAZZA, TIMOTHY J - ESTATE
NE¼ NW¼	1400	IR	1.400	11	SKELTON, BRADLEY C
NE¼ NW¼	3500	IR	1.700	11	FERGUSON, DERYL
NE¼ NW¼	3600	IR	4.500	11	HARRIS, MRS DEL
NE¼ NW¼	3700	IR	4.000	11	FULLER, CHRIS C
NE¼ NW¼	3800	IR	2.100	11	ROGERS, DOYLE
NE¼ NW¼	400	IR	4.000	11	RALPH, JEFF
NE¼ NW¼	401	IR	3.000	11	BEACH, DOUGLAS E
NW¼ NW¼	2800	IR	1.000	11	BARR, LARRY A
NW¼ NW¼	2900	IR	3.700	11	HARRIS, MRS DEL
NW¼ NW¼	3000	IR	4.420	11	HARRIS, MRS DEL
NW¼ NW¼	3100	IR	3.000	11	HARRISON, HARRY B
NW¼ NW¼	3200	IR	3.000	11	CARTER, JAY D
NW¼ NW¼	3300	IR	3.500	11	CARTER, JAY D
NW¼ NW¼	3800	IR	0.900	11	ROGERS, DOYLE
SW¼ NW¼	2100	IR	5.000	11	HARRIS, MRS DEL
SW¼ NW¼	2300	IR	4.000	11	HARRIS, MRS DEL
SW¼ NW¼	2400	IR	4.500	11	HARRIS, MRS DEL
SW¼ NW¼	3300	IR	0.500	11	CARTER, JAY D
SE¼ NW¼	1400	IR	2.400	11	SKELTON, BRADLEY C
SE¼ NW¼	1500	IR	2.200	11	SKELTON, BRADLEY C
SE¼ NW¼	1600	IR	3.500	11	WRIGHT, ROBERT C
SE¼ NW¼	1700	IR	2.500	11	WRIGHT, ROBERT C
SE¼ NW¼	1800	IR	2.000	11	HARRIS, MRS DEL
SE¼ NW¼	1900	IR	4.980	11	HARRIS, MRS DEL
SE¼ NW¼	3400	IR	3.000	11	HARRIS, MRS DEL
SE¼ NW¼	3500	IR	2.520	11	FERGUSON, DERYL
NE¼ SW¼	600	IR	20.000	11	HARRIS, MRS DEL
NW¼ SW¼	700	IR	31.000	11	WOOD, JOE
SW¼ SW¼	800	IR	23.000	11	SHAW, NATHAN C
SW¼ SW¼	801	IR	10.000	11	ALBERT & MELBA GRANT
SE¼ SW¼	1000	IR	2.200	11	ROSEBROOK, DWAYNE
SE¼ SW¼	1100	IR	5.000	11	LEUNEN, MAARTEN J
SE¼ SW¼	900	IR	22.900	11	TOTTEN, FLOYD
NE¼ SE¼	500	IR	33.400	11	LEISER, SHIRLEY
NW¼ SE¼	500	IR	33.200	11	LEISER, SHIRLEY
SW¼ SE¼	500	IR	33.700	11	LEISER, SHIRLEY

SE¼ SE¼	500	IR	36.700	11	LEISER, SHIRLEY

Section 15

NE¼ NE¼	100	IR	12.070	11	FOSS, C B
NW¼ NE¼	100	IR	3.100	11	FOSS, C B
SW¼ NE¼	101	IR	0.980	11	LIVINGSTON, HELEN
SW¼ NE¼	103	IR	10.020	11	LIVINGSTON, HELEN
SW¼ NE¼	117	IR	0.100	11	HALL, LEONARD C
SW¼ NE¼	200	IR	0.240	11	SAWYER, MILTON F
SW¼ NE¼	201	IR	0.900	11	SAWYER, MILTON F
SW¼ NE¼	202	IR	0.500	11	GILBERTSON, WYNN
SW¼ NE¼	203	IR	0.300	11	TERREBONNE CONGREGATION
SW¼ NE¼	505	IR	0.400	11	FARRINGTON, DOROTHY
SW¼ NE¼	600	IR	0.380	11	ABBAS, JACK
SW¼ NE¼	604	IR	0.100	11	HALL, LEONARD C
SW¼ NE¼	605	IR	0.180	11	VAUGHAN, GEORGE H
SW¼ NE¼	606	IR	0.260	11	PETTIT, VIVIAN
SW¼ NE¼	700	IR	0.410	11	BURTON, DEANNA
SE¼ NE¼	200	IR	0.820	11	KOOPS, BEN
SE¼ NE¼	202	IR	0.680	11	ESTABROOK, FREDERICK J
SE¼ NE¼	204	IR	1.400	11	WILSON, FRANK A
SE¼ NE¼	207	IR	0.400	11	DAVIS, LARRY N
SE¼ NE¼	209	IR	0.080	11	CHRISTENSEN, CLIFFORD
SE¼ NE¼	211	IR	0.550	11	PARKER, ROY
SE¼ NE¼	212	IR	0.420	11	JOHNSON, ROBERT L JR
SE¼ NE¼	214	IR	0.440	11	PARTIN, DOROTHEA J
SE¼ NE¼	215	IR	0.280	11	GRIFFIN, DAVID B
SE¼ NE¼	300	IR	0.280	11	CHRISTENSEN, CLIFFORD
SE¼ NE¼	400	IR	0.350	11	FERGUSON, KEITH A
SE¼ NE¼	401	IR	1.040	11	PARKER, ROY
SE¼ NE¼	403	IR	0.510	11	PARKER, ROY
SE¼ NE¼	500	IR	0.850	11	HELMS, SUSAN ET AL
SE¼ NE¼	501	IR	0.830	11	FORTENBERRY, ALBERTA
NE¼ SW¼	100	IR	0.700	11	ENDICOTT, REASE N
NE¼ SW¼	3100	IR	0.280	11	CHAIN, ROBBIE
NE¼ SW¼	3200	IR	0.460	11	BURRIS, PATRICK L
NE¼ SW¼	3500	IR	0.110	11	POWELL, MRS IRENE
NE¼ SW¼	3600	IR	0.110	11	POWELL, MRS IRENE
NE¼ SW¼	500	IR	0.230	11	WILSON, JAMES L ET AL
NE¼ SW¼	606	IR	0.300	11	SAWDYE, RICHARD E
NE¼ SW¼	607	IR	0.400	11	PRINCE, JOSEPH M
NE¼ SW¼	638	IR	0.240	11	JONES, GARY C
NE¼ SW¼	648	IR	0.130	11	CARRELL, BRADFORD L
NE¼ SW¼	650	IR	0.320	11	CARRELL, BRADFORD L
NW¼ SW¼	1000	IR	0.500	11	MARSHALL, STEPHEN
NW¼ SW¼	1001	IR	0.160	11	WERNER, KATHLEEN E
NW¼ SW¼	1003	IR	0.250	11	COLE, JOHN D
NW¼ SW¼	1004	IR	0.340	11	SHORTREED, WAYNE E
NW¼ SW¼	1006	IR	0.080	11	SHORTREED, WAYNE E
NW¼ SW¼	1007	IR	0.230	11	PECK, LORNA
NW¼ SW¼	1009	IR	0.200	11	SHORTREED, WAYNE E
NW¼ SW¼	1011	IR	0.560	11	SAMMONS, KATHY
NW¼ SW¼	213	IR	0.120	11	MAHONEY, KEVIN T
NW¼ SW¼	239	IR	0.240	11	RIDGEWAY, RICHARD G
NW¼ SW¼	246	IR	0.330	11	SCHIFFERNS, ANTHONY E
NW¼ SW¼	249	IR	0.300	11	RICKETTS, ROBERT
NW¼ SW¼	250	IR	0.300	11	DENNISON, ARLEN R
NW¼ SW¼	253	IR	0.200	11	KENNEDY, JANET RAYE &
NW¼ SW¼	257	IR	0.500	11	FALK, RODNEY A
NW¼ SW¼	258	IR	0.240	11	ANDERSON, MICHAEL JENS

NW¼ SW¼	262	IR	0.330	11	COLGRAVE, JOAN M
SW¼ SW¼	1400	IR	1.120	11	JACKSON, ROBERT A
SW¼ SW¼	1500	IR	2.280	11	BOONE, JOHN W
SW¼ SW¼	1600	IR	1.500	11	WEBB, OLAN
SW¼ SW¼	1700	IR	0.600	11	LINVILLE, JANE E
SW¼ SW¼	1701	IR	0.480	11	HUGHLEY, WILLIAM A
SW¼ SW¼	1900	IR	0.180	11	SAUNDERS, JOHN C
SW¼ SW¼	1901	IR	1.340	11	SAUNDERS, KATHARINE
SW¼ SW¼	1902	IR	0.240	11	SAUNDERS, KATHARINE
SW¼ SW¼	1903	IR	0.180	11	SAUNDERS, JOHN C
SW¼ SW¼	1904	IR	0.240	11	SAUNDERS, KATHARINE
SW¼ SW¼	2000	IR	0.790	11	SAUNDERS, KATHARINE
SW¼ SW¼	2001	IR	1.190	11	SAUNDERS, KATHARINE
SW¼ SW¼	2300	IR	0.880	11	DUNCAN, DENVER
SW¼ SW¼	2301	IR	0.280	11	MORROW, HERBERT N
SW¼ SW¼	2302	IR	0.160	11	MORROW, HERBERT N
SW¼ SW¼	2303	IR	0.360	11	FUNKHOUSER, DONALD R
SW¼ SW¼	800	IR	1.280	11	HUGHLEY, JON K
SW¼ SW¼	801	IR	0.600	11	HUGHLEY, JON K
SW¼ SW¼	900	IR	0.240	11	JACKSON, ROBERT A
SE¼ SW¼	1101	IR	0.240	11	NOAH, LEONARD
SE¼ SW¼	1102	IR	0.240	11	FRIER, FRANK D
SE¼ SW¼	1400	IR	2.420	11	VERNON, GUY E
SE¼ SW¼	1500	IR	0.960	11	VERNON, GUY E
SE¼ SW¼	200	IR	0.090	11	ABBAS, JACK
SE¼ SW¼	300	IR	0.240	11	ESKEW, MARSHALL
SE¼ SW¼	400	IR	0.210	11	ESKEW, MARSHALL
SE¼ SW¼	700	IR	4.500	11	REDMOND SCHOOL DISTRICT
NE¼ SE¼	300	IR	0.240	11	HANEY, LARRY R
NE¼ SE¼	600	IR	1.280	11	CYRUS, RAY
NE¼ SE¼	601	IR	0.320	11	CYRUS, RAY
NE¼ SE¼	700	IR	1.000	11	GRAVES, SUZANNE M ET AL
NE¼ SE¼	800	IR	1.920	11	CISCO, HAROLD
NW¼ SE¼	103	IR	2.000	11	HANEY, LARRY R
NW¼ SE¼	104	IR	1.700	11	PYRITZ, ROSSIE
NW¼ SE¼	105	IR	0.300	11	PYRITZ, ROSSIE
NW¼ SE¼	107	IR	0.880	11	FORESTER, V LYNN
NW¼ SE¼	108	IR	0.460	11	MILLER, RONALD TIMOTHY
NW¼ SE¼	1100	IR	0.400	11	DEXTER, FRED
NW¼ SE¼	1101	IR	0.300	11	DEXTER, FRED
NW¼ SE¼	1200	IR	0.400	11	REILLY, PATRICK G
NW¼ SE¼	1300	IR	0.710	11	WILLIAMS, GLEN
NW¼ SE¼	1400	IR	0.400	11	WILLIAMS, GLEN
NW¼ SE¼	1401	IR	1.940	11	WILLIAMS, GLEN
NW¼ SE¼	1402	IR	1.600	11	WILLIAMS, GLEN
NW¼ SE¼	301	IR	0.980	11	CLARK, WILLIAM T
NW¼ SE¼	501	IR	0.550	11	WILLIAMS, LEONARD C
NW¼ SE¼	502	IR	1.240	11	WILLIAMS, LEONARD C
SW¼ SE¼	100	IR	3.360	11	MCCOIN, LYNN
SW¼ SE¼	105	IR	0.900	11	MCCOIN, LYNN
SW¼ SE¼	1600	IR	0.540	11	FERGUSON, DERYL
SW¼ SE¼	200	IR	0.220	11	TOTTEN, FLOYD
SW¼ SE¼	2200	IR	0.500	11	FEHRENBACHER, TED
SW¼ SE¼	2201	IR	0.360	11	PACIFIC NORTHWEST BELL
SW¼ SE¼	2300	IR	0.320	11	DENT, RICHARD
SW¼ SE¼	2400	IR	0.300	11	DENT, GWENDOLYN
SW¼ SE¼	2500	IR	1.900	11	MCCOIN, WALTER R
SW¼ SE¼	2600	IR	4.120	11	BIDWELL, WALTER
SW¼ SE¼	2700	IR	5.500	11	FERGUSON, DERYL
SW¼ SE¼	300	IR	0.560	11	MATHIESEN, PAUL

SE¼ SE¼	600A3	IR	0.400	11	OREGON TRUNK RAILWAY
SE¼ SE¼	2600	IR	1.000	11	BIDWELL, WALTER
SE¼ SE¼	300	IR	1.920	11	MCCOIN, LYNN
SE¼ SE¼	400	IR	0.960	11	DODSON, JAMES O
SE¼ SE¼	401	IR	0.480	11	DODSON, JAMES O
SE¼ SE¼	402	IR	0.840	11	DODSON, JAMES O
SE¼ SE¼	403	IR	0.600	11	DODSON, JAMES O
SE¼ SE¼	405	IR	2.000	11	WIEHR, LAURANCE
SE¼ SE¼	411	IR	0.300	11	DODSON, JAMES O
SE¼ SE¼	412	IR	0.240	11	DODSON, JAMES O

Section 16

NE¼ NE¼	2200	IR	38.000	11	FAST, ROBERT L
NW¼ NE¼	100	IR	38.000	11	THOMAS, JIM
SW¼ NE¼	100	IR	39.000	11	THOMAS, JIM
SE¼ NE¼	400	IR	17.600	11	GATES, SUSAN J
SE¼ NE¼	401	IR	4.270	11	KUPETZ, DAVID J
SE¼ NE¼	402	IR	4.700	11	CORRADINI, RICHARD F
SE¼ NE¼	500	IR	1.500	11	PARKER, ARTHUR L
SE¼ NE¼	600	IR	6.000	11	CLARK, JOHN P
SE¼ NE¼	700	IR	2.300	11	BURRIS, JOHN
NE¼ NW¼	200	IR	7.400	11	JOHANNSEN, MARTIN
NE¼ NW¼	201	IR	9.600	11	JOHANNSEN, MARTIN
NE¼ NW¼	300	IR	17.200	11	JOHNSON, BRENT L
NW¼ NW¼	1900	DUST	1.200	11	TERREBONNE HORSE CLUB
NW¼ NW¼	1900	IR	1.600	11	TERREBONNE HORSE CLUB
NW¼ NW¼	1901	IR	6.500	11	ROLEY, ROGER L
NW¼ NW¼	2000	IR	19.500	11	ELWESS, A LOUIS
NW¼ NW¼	2100	IR	8.700	11	PALMER, CARL K
SW¼ NW¼	1600	IR	4.370	11	BURRESS, LOVELL D
SW¼ NW¼	1601	IR	10.000	11	BURRESS, LOVELL D
SW¼ NW¼	1700	IR	3.000	11	TERRY, EVELYN L
SW¼ NW¼	1800	IR	9.000	11	CARTER, DANA R
SW¼ NW¼	1801	IR	7.480	11	MEWES, MAURICE D
SE¼ NW¼	300	IR	38.800	11	JOHNSON, BRENT L
NE¼ SW¼	900	IR	39.900	11	BECHTEL, LOUISE
NW¼ SW¼	1400	IR	1.850	11	TRUSSELL, GERALD L
NW¼ SW¼	1401	IR	12.930	11	CLARK, DANNY R
NW¼ SW¼	1500	IR	17.130	11	NASH, ROBERT T
SW¼ SW¼	1100	IR	3.000	11	BLACKBURN, WALLACE
SW¼ SW¼	1300	IR	1.780	11	ADAME, RAMON
SE¼ SW¼	1000	IR	33.800	11	LINTON, ROGER WILLIAM
NE¼ SE¼	801	IR	37.000	11	BROOKS, ROBERT
NW¼ SE¼	900	IR	36.300	11	BECHTEL, LOUISE MCCULLOUGH
SW¼ SE¼	901	IR	39.000	11	LINTON, ROGER WILLIAM
SE¼ SE¼	800	IR	36.800	11	HAMMOND, BARBARA L

Section 17

NE¼ NE¼	100	IR	16.500	11	ELWESS, A LOUIS
NE¼ NE¼	300	IR	14.000	11	DODRILL, EDGAR
NE¼ NE¼	400	IR	2.700	11	GUNZNER, JOHN H
SW¼ NE¼	2600	PND	1.000	11	CENTRAL OREGON IRRIGATION
SE¼ NE¼	400	IR	37.210	11	GUNZNER, JOHN H
NE¼ SE¼	400	IR	36.000	11	GUNZNER, JOHN H

Section 18

NE¼ SE¼	300	IR	1.700	11	ADAMS, ROGER J
NE¼ SE¼	400	IR	2.000	11	DUMMITT, RAMON
NE¼ SE¼	500	IR	1.000	11	FORD, MARK T
NE¼ SE¼	500	PND	3.660	11	CENTRAL OREGON IRRIGATION
NE¼ SE¼	600	PND	7.020	11	CENTRAL OREGON IRRIGATION

NE¼ SE¼	700	IR	3.700	11	PETERSON, ROBERT D
NE¼ SE¼	700	PND	1.770	11	CENTRAL OREGON IRRIGATION
NE¼ SE¼	800	PND	2.520	11	CENTRAL OREGON IRRIGATION
SE¼ SE¼	500	IR	0.480	11	FORD, MARK T

Section 19

NE¼ NE¼	100	IR	20.000	11	EWALT, CANDACE ET AL
NE¼ NE¼	101	IR	9.000	11	STORMS, JAMES D
NE¼ NE¼	102	IR	4.000	11	NASH, DOUG
NE¼ NE¼	103	IR	4.000	11	SURFACE, DONALD L
NW¼ NE¼	101	IR	35.000	11	STORMS, JAMES D
SW¼ NE¼	200	IR	4.600	11	CLARK, GERALD
SW¼ NE¼	201	IR	11.350	11	PARKER, FORREST R
SW¼ NE¼	202	IR	10.000	11	PHILLIPS, CLIFFORD R
SW¼ NE¼	203	IR	8.000	11	PAYE, HAROLD L
SE¼ NE¼	100	IR	36.000	11	EWALT, CANDACE ET AL
NE¼ NW¼	600	IR	18.800	11	DENT, LOWELL
NE¼ NW¼	700	IR	13.000	11	LAW, DAVID J
NW¼ NW¼	801	IR	32.700	11	CURTIS, JOHN W
SW¼ NW¼	800	IR	7.000	11	BROCK, CARL
SW¼ NW¼	801	IR	16.300	11	CURTIS, JOHN W
SE¼ NW¼	500	IR	32.000	11	MITCHELL, ROBERT
NE¼ SW¼	100	IR	32.500	11	FREDERICK, EUGENE
NW¼ SW¼	200	IR	4.000	11	ROUNDS, R D
NW¼ SW¼	300	IR	3.000	11	SMALLEY, JON C
NW¼ SW¼	300	PND	0.200	11	SMALLEY, JON C
NW¼ SW¼	402	IR	3.500	11	SOPHY, RAYMOND P
NW¼ SW¼	500	IR	4.000	11	BECKER, MICHAEL D
NW¼ SW¼	600	IR	2.500	11	HEATHCOTE, PATRICIA A
NW¼ SW¼	700	IR	4.000	11	STEWART, JESSIE
NW¼ SW¼	800	IR	3.000	11	MCPHEETERS, RICHARD
NW¼ SW¼	900	IR	3.000	11	HARGREAVES, KEVIN
NE¼ SE¼	200	IR	18.600	11	WILLIAMS, DONALD D
NE¼ SE¼	300	IR	10.000	11	STIREWALT, JAMES M II
NW¼ SE¼	400	IR	15.000	11	FREDERICK, EUGENE
SE¼ SE¼	300	IR	7.500	11	STIREWALT, JAMES M II

Section 20

NE¼ NE¼	0	IR	0.600	11	OREGON TRUNK RAILWAY
NE¼ NE¼	100	IR	7.000	11	MCINTOSH, C D
NE¼ NE¼	200	IR	5.000	11	YOUNG, C DUFF & MARGARET
NE¼ NE¼	201	IR	1.330	11	YOUNG, C DUFF & MARGARET
NE¼ NE¼	202	IR	14.600	11	WIEHR, LAURANCE
NW¼ NE¼	0	IR	3.300	11	OREGON TRUNK RAILWAY
NW¼ NE¼	202	IR	30.600	11	WIEHR, LAURANCE
SW¼ NE¼	202	IR	21.060	11	WIEHR, LAURANCE
SW¼ NE¼	800	IR	2.000	11	KERSLAKE, ROBERT H
SW¼ NE¼	900	IR	3.000	11	BALLEW, ERIC A
SE¼ NE¼	100	IR	26.000	11	MCINTOSH, C D
SE¼ NE¼	202	IR	4.100	11	WIEHR, LAURANCE
NE¼ NW¼	302	IR	1.250	11	SYKES, DAMON B
NE¼ NW¼	303	IR	5.500	11	INTERNATIONAL CHURCH
NE¼ NW¼	304	IR	6.500	11	MCFARLANE, MICHAEL
NE¼ NW¼	305	IR	7.000	11	BRUSVEN, RONALD D
NW¼ NW¼	400	IR	8.000	11	MCCLAY, JOE L
NW¼ NW¼	401	IR	11.000	11	ELLIS, ANTHONY
NW¼ NW¼	403	IR	3.000	11	MEDARIS, JANICE ET AL
NW¼ NW¼	404	IR	6.000	11	MEDARIS, JANICE ET AL
NW¼ NW¼	405	IR	4.000	11	PARKS, KENNETH D
SW¼ NW¼	402	IR	17.710	11	WIEGLENDA, HARRY

SW¼ NW¼	502	IR	4.000	11	HULSTEIN, JEFFERY C
SE¼ NW¼	300	IR	3.750	11	CHAMBERS, MARC W
SE¼ NW¼	601	IR	3.600	11	SIMPSON, RICHARD
SE¼ NW¼	602	IR	1.400	11	RICHARDSON, RONALD CLYDE
SE¼ NW¼	603	IR	2.500	11	SIMPSON, RICHARD
SE¼ NW¼	700	IR	6.000	11	CURTIS, SUZIE
NE¼ SW¼	100	IR	2.000	11	SPECE, JULIUS H II
NE¼ SW¼	101	IR	1.500	11	BUCKNER, WANEARD A
NE¼ SW¼	1201	IR	0.300	11	MUCKEY, JAMES C
NE¼ SW¼	1700	IR	4.900	11	CRAIG, MARGARET
SE¼ SW¼	4800	IR	8.500	11	PARKER, ROY
SE¼ SW¼	4801	IR	28.000	11	HANSON, RICHARD K
NE¼ SE¼	1900	IR	1.440	11	FRAZIER, STEVEN E
NE¼ SE¼	1901	IR	0.500	11	HOLTBY, RALPH B
NE¼ SE¼	1902	IR	26.000	11	MCINTOSH, C D
NW¼ SE¼	1000	IR	1.000	11	RISCH, DAVID C
NW¼ SE¼	1200	IR	3.000	11	MUCKEY, J K
NW¼ SE¼	1201	IR	1.300	11	MUCKEY, JAMES C
NW¼ SE¼	1300	IR	0.400	11	MUCKEY, JAMES C
NW¼ SE¼	1800	IR	6.000	11	FREDERICK, EUGENE
NW¼ SE¼	1800	PND	1.200	11	FREDERICK, EUGENE
SW¼ SE¼	1800	IR	9.500	11	FREDERICK, EUGENE
SE¼ SE¼	1800	IR	17.500	11	FREDERICK, EUGENE

Section 21

NE¼ NE¼	100	IR	2.000	11	LADIES PIONEER CLUB
NE¼ NE¼	200	IR	6.000	11	RIDGEWAY, RICHARD G
NE¼ NE¼	300	IR	13.200	11	MOBERLY, JAY
NW¼ NE¼	400	IR	28.100	11	BOEKENOOGEN, LOUISE
NW¼ NE¼	500	IR	1.000	11	BOEKENOOGEN, LOUISE
SW¼ NE¼	1100	IR	0.200	11	WALLER, HAROLD
SW¼ NE¼	1200	IR	3.100	11	DERRICK, DONALD R
SW¼ NE¼	1300	IR	3.060	11	MARSHALL, CHRISTOPHER E
SW¼ NE¼	1400	IR	2.510	11	ELARDO, RICHARD
SW¼ NE¼	1500	IR	1.800	11	STANLEY B & ERMA J JAYE TRST
SW¼ NE¼	300	IR	0.700	11	NIELSEN, JERRY L
SW¼ NE¼	400	IR	5.600	11	BOEKENOOGEN, LOUISE
SW¼ NE¼	800	IR	1.000	11	ZOWNEY, THOMAS J
SW¼ NE¼	900	IR	1.950	11	SINTON, W JACK
SE¼ NE¼	1000	IR	4.300	11	MORAN, GEORGE E
SE¼ NE¼	1100	IR	3.850	11	WALLER, HAROLD
SE¼ NE¼	400	IR	4.200	11	CORKER, ROBBIE
SE¼ NE¼	500	IR	1.070	11	BLAKELEY, BLAKE H
SE¼ NE¼	600	IR	1.150	11	KRASKE, RONALD P
SE¼ NE¼	700	IR	2.040	11	LECKIE, STEVEN A
SE¼ NE¼	800	IR	3.820	11	SEARS, C ROBERT ET AL
SE¼ NE¼	900	IR	2.700	11	SINTON, W JACK
NE¼ NW¼	400	IR	12.400	11	BOEKENOOGEN, LOUISE
NE¼ NW¼	600	IR	3.200	11	LEUNEN, MAARTEN J
NE¼ NW¼	600	IR	14.700	11	LEUNEN, MAARTEN J
NW¼ NW¼	600	IR	32.100	11	LEUNEN, MAARTEN J
NW¼ NW¼	600	PND	0.880	11	CENTRAL OREGON IRRIGATION
SW¼ NW¼	700	IR	34.000	11	MACHAU, JOHN &
SE¼ NW¼	400	IR	16.300	11	BOEKENOOGEN, LOUISE
SE¼ NW¼	400	PND	0.600	11	BOEKENOOGEN, LOUISE
SE¼ NW¼	900	IR	0.800	11	COOPER, GLENN L
NE¼ SW¼	100	IR	5.000	11	TOW, JAMES
NE¼ SW¼	1000	IR	1.700	11	DARNELL, DUANE
NE¼ SW¼	1400	IR	0.200	11	CONSTANTINE, MICHAEL
NE¼ SW¼	1500	IR	0.400	11	BAILEY, LAURENCE R

NE¼ SW¼	1500	IR	1.370	11	TRONO, RICHARD
NE¼ SW¼	1600	IR	1.200	11	CASISSA, FRED
NE¼ SW¼	1600	IR	1.350	11	COOMBE, KEVIN R
NE¼ SW¼	1700	IR	1.500	11	TURNER, LARRY
NE¼ SW¼	200	IR	2.480	11	JOLIN, MARC
NE¼ SW¼	300	IR	5.000	11	ROGERS, RAY
NE¼ SW¼	400	IR	1.000	11	ROGERS, RAY
NE¼ SW¼	800	IR	0.600	11	ZOWNEY, THOMAS J
NE¼ SW¼	900	IR	1.680	11	COOPER, GLENN L
NW¼ SW¼	1400	IR	1.920	11	DAVIS, RICHARD L
NW¼ SW¼	1500	IR	3.220	11	BAILEY, LAURENCE R
NW¼ SW¼	1600	IR	2.810	11	CASISSA, FRED
NW¼ SW¼	2500	IR	5.090	11	FIELDS, JUDITH
NW¼ SW¼	2600	IR	3.690	11	HAMILTON, DAVID J
NW¼ SW¼	2700	IR	6.000	11	MCINTOSH, C D
NW¼ SW¼	2800	IR	0.500	11	HOLTBY, RALPH B
SW¼ SW¼	1600	IR	0.600	11	CASISSA, FRED
SW¼ SW¼	1700	IR	3.260	11	SAILORS, ROBERT W
SW¼ SW¼	1800	IR	3.620	11	DERRICKSON, STEVE D
SW¼ SW¼	1900	IR	2.850	11	JONES, BRUCE A
SW¼ SW¼	2000	IR	4.200	11	DAVIS, RICHARD L
SW¼ SW¼	2100	IR	5.000	11	TANLER, CLAY
SW¼ SW¼	2200	IR	5.000	11	TANLER, CLAY
SW¼ SW¼	2300	IR	4.700	11	BESSEY, ROY E
SW¼ SW¼	2400	IR	4.800	11	SAILORS, ROBERT W
SW¼ SW¼	2500	IR	0.800	11	FIELDS, JUDITH
SE¼ SW¼	1100	IR	0.600	11	HODECKER, GREGORY W
SE¼ SW¼	1200	IR	0.450	11	MANEGOLD, ROBERT J
SE¼ SW¼	1300	IR	0.400	11	BRYANT, JAY D
SE¼ SW¼	1400	IR	0.800	11	CONSTANTINE, MICHAEL
SE¼ SW¼	1600	IR	0.300	11	CASISSA, FRED
SE¼ SW¼	1700	IR	1.700	11	SAILORS, ROBERT W
SE¼ SW¼	1800	IR	1.600	11	DERRICKSON, STEVE D
SE¼ SW¼	201	IR	3.400	11	BERMAN, MICHAEL A
SE¼ SW¼	400	IR	4.500	11	ROGERS, RAY
SE¼ SW¼	500	IR	5.000	11	ANDERSON, DUWAYNE R
SE¼ SW¼	600	IR	3.300	11	JONES, H BART
SE¼ SW¼	700	IR	3.510	11	KRAUS, JOHN C
NW¼ SE¼	1400	IR	0.100	11	CONSTANTINE, MICHAEL
NW¼ SE¼	1500	IR	0.850	11	STANLEY B & ERMA J JAYE TRUST
NW¼ SE¼	1500	IR	2.280	11	TRONO, RICHARD
NW¼ SE¼	1600	IR	2.000	11	COOMBE, KEVIN R
NW¼ SE¼	1700	IR	1.500	11	TURNER, LARRY
NW¼ SE¼	300	IR	2.300	11	NIELSEN, JERRY L
NW¼ SE¼	400	IR	3.000	11	COSENTINO, ROBERT L
NW¼ SE¼	500	IR	3.000	11	RANDOLPH, WILLIAM
NW¼ SE¼	600	IR	2.810	11	HUDSON, ALAN J
NW¼ SE¼	800	IR	1.400	11	ZOWNEY, THOMAS J
SW¼ SE¼	1000	IR	0.800	11	LOUTHAN, NICK L
SW¼ SE¼	1100	IR	3.900	11	HODECKER, GREGORY W
SW¼ SE¼	1200	IR	4.550	11	MANEGOLD, ROBERT J
SW¼ SE¼	1300	IR	4.600	11	BRYANT, JAY D
SW¼ SE¼	1400	IR	2.000	11	CONSTANTINE, MICHAEL
SW¼ SE¼	200	IR	1.200	11	LOVE, STUART L
SW¼ SE¼	600	IR	0.390	11	HUDSON, ALAN J
SW¼ SE¼	700	IR	4.410	11	LITTLE, RICHARD W JR
SW¼ SE¼	800	IR	3.030	11	HAASE, MICHAEL E
SW¼ SE¼	900	IR	4.380	11	MARNELL, EDWARD J
SE¼ SE¼	200	IR	1.500	11	HAUSNER, JILL W

Section 22

NE¼ NE¼	100	IR	9.380	11	MOBERLY, JAY
NW¼ NE¼	100	IR	16.600	11	MOBERLY, JAY
SW¼ NE¼	100	IR	14.000	11	MOBERLY, JAY
SE¼ NE¼	100	IR	33.450	11	MOBERLY, JAY
NE¼ NW¼	100	IR	16.200	11	MOBERLY, JAY
NE¼ SE¼	500	IR	1.670	11	CLARK, DOYLE D, ET AL
SW¼ SE¼	300	IR	26.350	11	ABBAS. RICHARD
SE¼ SE¼	300	IR	11.500	11	ABBAS. RICHARD
SE¼ SE¼	400	IR	6.750	11	CHURCH, LAWRENCE H
SE¼ SE¼	401	IR	1.500	11	ANDERSON, SHERRI

Section 23

NE¼ NE¼	100	IR	31.750	11	ARNETT, GARY
NW¼ NE¼	200	IR	18.000	11	LAURANCE, BARRY
SW¼ NE¼	300	IR	12.000	11	JEFFERS, HARRY D
SE¼ NE¼	100	IR	18.250	11	ARNETT, GARY
NE¼ NW¼	400	IR	28.750	11	MOBERLY, JAY
NW¼ NW¼	600	IR	3.000	11	WHISLER, MARIE
NW¼ NW¼	601	IR	4.310	11	WILLIAMS, ROBERT N
NW¼ NW¼	700	IR	6.000	11	DAVIS, GARY L
NW¼ NW¼	800	IR	8.000	11	JAMES, STEVENS
SW¼ NW¼	400	IR	31.800	11	MOBERLY, JAY
SE¼ NW¼	400	IR	27.800	11	MOBERLY, JAY
NE¼ SW¼	1100	IR	18.300	11	MILLS, HERB
NE¼ SW¼	1101	IR	0.200	11	BILYEU, WAYNE
NE¼ SW¼	400	IR	3.900	11	MOBERLY, JAY
NW¼ SW¼	400	IR	28.800	11	MOBERLY, JAY
SW¼ SW¼	400	IR	30.800	11	MOBERLY, JAY
SE¼ SW¼	1101	IR	6.150	11	BILYEU, WAYNE
SE¼ SW¼	904	IR	10.000	11	ELROD, WILLIAM
NW¼ SE¼	1100	IR	21.700	11	MILLS, HERB
SW¼ SE¼	1000	IR	9.900	11	KYTE, WILLIAM A ET AL
SW¼ SE¼	1001	IR	0.700	11	KYTE, WILLIAM A ET AL
SW¼ SE¼	1300	IR	15.400	11	NEWTON, BERTHA M

Section 24

NE¼ NE¼	100	IR	24.700	11	NEAL, JAMES L
NE¼ NE¼	100	PND	0.300	11	NEAL, JAMES L
NW¼ NE¼	600	IR	24.800	11	SANDERS, JAMES
SW¼ NE¼	300	IR	2.500	11	MACKENROTH, TONI MARIE
SW¼ NE¼	500	IR	21.600	11	SANDERS, JAMES
SE¼ NE¼	200	IR	30.600	11	BENHAM, JOHN G
NE¼ NW¼	707	IR	10.300	11	ELROD, WILLIAM
NW¼ NW¼	700	IR	2.100	11	ELROD, WILLIAM
NW¼ NW¼	701	IR	34.900	11	ELROD, WILLIAM
SW¼ NW¼	700	IR	16.800	11	ELROD, WILLIAM
NW¼ SW¼	700	IR	5.400	11	ELROD, WILLIAM

Section 25

NE¼ NE¼	100	IR	34.700	11	PRUITT, ROBERTA
NW¼ NE¼	100	IR	32.500	11	PRUITT, ROBERTA
SW¼ NE¼	101	IR	37.900	11	PRUITT, ROBERTA
SE¼ NE¼	101	IR	30.400	11	PRUITT, ROBERTA
SE¼ NW¼	300	IR	15.200	11	PRUITT, ROBERTA
NE¼ SW¼	402	IR	25.200	11	PRUITT, ROBERTA
NE¼ SW¼	404	IR	4.400	11	PARNELL, DANIEL B
NE¼ SW¼	500	IR	2.200	11	MANES, JOSEPHINE
NW¼ SW¼	1000	IR	13.500	11	BURKHART, RAYMOND H
SW¼ SW¼	600	IR	25.000	11	BOYD, LARRY R

SW¼ SW¼	700	IR	4.000	11	KEIMIG, MICHAEL D
SE¼ SW¼	404	IR	10.600	11	PARNELL, DANIEL B
SE¼ SW¼	500	IR	15.250	11	MANES, JOSEPHINE
SE¼ SW¼	501	IR	7.550	11	MANES, JOSEPHINE
NE¼ SE¼	400	IR	5.600	11	PARNELL, DANIEL B
NE¼ SE¼	401	IR	16.600	11	PARNELL, DANIEL B
NW¼ SE¼	401	IR	14.000	11	PARNELL, DANIEL B
NW¼ SE¼	403	IR	2.200	11	PARNELL, DANIEL B
NW¼ SE¼	404	IR	1.500	11	PARNELL, DANIEL B
SW¼ SE¼	403	IR	22.200	11	PARNELL, DANIEL B
SW¼ SE¼	404	IR	3.800	11	PARNELL, DANIEL B
SE¼ SE¼	400	IR	18.100	11	PARNELL, DANIEL B

Section 26

NE¼ NE¼	100	IR	11.100	11	HAUSNER, JILL W
NE¼ NE¼	100	PND	0.500	11	HAUSNER, JILL W
NW¼ NE¼	1000	IR	0.500	11	LOUTHAN, NICK L
NW¼ NE¼	200	IR	3.530	11	LOVE, STUART L
NW¼ NE¼	204	IR	2.000	11	TRUMP, DAVID R
NW¼ NE¼	205	IR	4.500	11	HOLLAND, ROY D
NW¼ NE¼	206	IR	5.000	11	BARON, MICHAEL R
NW¼ NE¼	300	IR	18.800	11	ARNETT, JOHN
SW¼ NE¼	300	IR	38.500	11	ARNETT, JOHN
NE¼ NW¼	201	IR	1.460	11	BERMAN, MICHAEL A
NE¼ NW¼	202	IR	3.600	11	SWIFT, ROBERT G
NE¼ NW¼	203	IR	4.700	11	JOHNSTON, ROBERT P
NE¼ NW¼	204	IR	2.700	11	TRUMP, DAVID R
NE¼ NW¼	300	IR	19.000	11	ARNETT, JOHN
NW¼ NW¼	500	IR	20.000	11	KILANDER, BRUCE
NW¼ NW¼	600	IR	0.470	11	EARP, NAOMI
NW¼ NW¼	700	IR	3.500	11	ARNETT, JOHN
SW¼ NW¼	800	IR	33.400	11	RENCHER, PETER PRESTON III
SW¼ NW¼	801	IR	1.500	11	RENCHER, FRANK
SE¼ NW¼	300	IR	28.700	11	ARNETT, JOHN
SE¼ NW¼	400	IR	3.000	11	SPRINGER, DAN JR
NE¼ SW¼	1000	IR	34.000	11	BRYANT, MILDRED A
NW¼ SW¼	800	IR	1.900	11	RENCHER, PETER PRESTON III
NW¼ SW¼	801	IR	32.800	11	RENCHER, FRANK
NW¼ SW¼	900	IR	0.500	11	RENCHER, FRANK
SW¼ SW¼	801	IR	2.100	11	RENCHER, FRANK
SW¼ SW¼	900	IR	13.800	11	RENCHER, FRANK
SE¼ SW¼	1100	IR	37.000	11	SIMPSON, CLINTON L
NE¼ SE¼	1301	IR	20.300	11	FREEBORN, ROBERT L
NE¼ SE¼	1301	PND	0.200	11	FREEBORN, ROBERT L
NW¼ SE¼	1301	IR	27.600	11	FREEBORN, ROBERT L
NW¼ SE¼	1301	PND	0.100	11	FREEBORN, ROBERT L
SW¼ SE¼	1200	IR	2.000	11	MAULT, ROY A
SW¼ SE¼	1301	IR	27.800	11	FREEBORN, ROBERT L
SW¼ SE¼	1301	PND	0.200	11	FREEBORN, ROBERT L
SE¼ SE¼	1301	IR	23.800	11	FREEBORN, ROBERT L
SE¼ SE¼	1400	IR	7.000	11	FAUGHT, GARY

Section 27

NE¼ NE¼	100	IR	15.200	11	FREDERICK, EUGENE
NW¼ NE¼	100	IR	5.300	11	FREDERICK, EUGENE
NW¼ NE¼	201	IR	0.600	11	WHITSON, JAMES
NW¼ NE¼	202	IR	3.000	11	PUTVIN, KEN
NW¼ NE¼	203	IR	0.300	11	BROSY, LAWRENCE
NW¼ NE¼	400	IR	2.000	11	MCBRIDE, MRS JOHN P
NW¼ NE¼	500	IR	3.000	11	BYERS, SALLY L

NW¼ NE¼	600	IR	0.600	11	LUCAS, BUZZ T
SW¼ NE¼	200	IR	7.000	11	SHARP, JOYCE
SW¼ NE¼	201	IR	8.900	11	WHITSON, JAMES
SW¼ NE¼	203	IR	5.700	11	BROSY, LAWRENCE
NE¼ NW¼	700	IR	3.000	11	HOLLANDER, HEATHER
NE¼ NW¼	701	IR	13.800	11	HARDWICK, JANET P
NE¼ NW¼	702	IR	4.200	11	DAVIS, LARRY LEE
SE¼ NW¼	800	IR	12.000	11	EVANS, JEFFERY L
SE¼ NW¼	801	IR	10.500	11	BAILEY, CLARENCE J.L.
SE¼ NW¼	900	IR	3.000	11	ESCH, REX E
NE¼ SW¼	1005	IR	22.600	11	DAY, FLOYD E
NE¼ SW¼	1006	IR	9.800	11	SATTERLEE, PAUL
NW¼ SW¼	1006	IR	3.200	11	SATTERLEE, PAUL
SW¼ SW¼	1006	IR	38.600	11	SATTERLEE, PAUL
SE¼ SW¼	1005	IR	2.700	11	DAY, FLOYD E
SE¼ SW¼	1006	IR	25.980	11	SATTERLEE, PAUL
NW¼ SE¼	1005	IR	21.200	11	DAY, FLOYD E
NW¼ SE¼	1100	IR	1.100	11	LEINENWEBER, NINA J
NW¼ SE¼	1101	IR	0.400	11	LEIGHTON, JAMES W
NW¼ SE¼	1102	IR	2.500	11	SMITH, SHAUN M
SW¼ SE¼	1005	IR	17.000	11	DAY, FLOYD E
SE¼ SE¼	1300	IR	8.300	11	BEN-LEE, INC.
SE¼ SE¼	1700	IR	2.000	11	BEN-LEE, INC.

Section 28

NE¼ SW¼	600	IR	2.800	11	WALLACE, JERRY
NE¼ SW¼	601	IR	4.000	11	PETERSON, ROBERT A
SW¼ SW¼	1200	IR	36.000	11	WILSON, GEORGE B
SE¼ SW¼	1201	IR	15.000	11	WILLIAMS, MICHAEL J
SE¼ SW¼	1202	IR	17.000	11	DONLAN, DAVID J
NW¼ SE¼	600	IR	0.200	11	WALLACE, JERRY
SW¼ SE¼	1300	IR	6.500	11	KARMY, JAMES R
SW¼ SE¼	1301	IR	3.700	11	KARMY, JAMES R
SW¼ SE¼	1302	IR	2.800	11	KARMY, JAMES R
SW¼ SE¼	1400	IR	2.000	11	HODSON, KLEEVE

Section 29

NE¼ SE¼	101	PND	2.600	11	CENTRAL OREGON IRRIGATION
SW¼ SE¼	500	IR	5.000	11	GRIBLING, RICHARD L
SW¼ SE¼	600	IR	5.000	11	GRIBLING, RICHARD L
SW¼ SE¼	600	PND	3.000	11	CENTRAL OREGON IRRIGATION
SW¼ SE¼	700	IR	5.000	11	HARDING, DONALD W
SW¼ SE¼	800	IR	1.000	11	LINDQUIST, ROBERT A
SW¼ SE¼	801	IR	1.000	11	VAUGHN, JACK
SE¼ SE¼	200	IR	2.500	11	GALVEZ, CAPT RICHARD
SE¼ SE¼	400	IR	1.500	11	RIAHI, JAMES H
SE¼ SE¼	401	IR	3.500	11	BRAXLING, RICHARD W

Section 30

NE¼ NE¼	100	IR	17.400	11	JOHNSON, JOHN V
NW¼ NE¼	200	IR	9.000	11	ZIERLEIN, LEONARD
NW¼ NE¼	300	IR	8.000	11	DEAN, DAVID J
NW¼ NE¼	400	IR	14.000	11	DILLING, ERIK R
NW¼ NE¼	500	IR	3.000	11	CAMPBELL, C DONALD, JR
SW¼ NE¼	1000	IR	0.600	11	ABBAS, TOM D
SW¼ NE¼	1200	IR	0.600	11	FOWLKES, ROGER R
SW¼ NE¼	1300	IR	0.600	11	MCMAHON, DANIEL W
SW¼ NE¼	1400	IR	0.600	11	MILLS, KAREN
SW¼ NE¼	1500	IR	0.600	11	SCHLOSSER, DOROTHY
SW¼ NE¼	1600	IR	0.600	11	MILLER, DANIEL F

SW¼ NE¼	1700	IR	0.600	11	THOMPSON, NEIL C
SW¼ NE¼	1800	IR	0.600	11	HANSEN, TIM
SW¼ NE¼	1900	IR	0.750	11	CHILDRESS, KENNETH D
SW¼ NE¼	2000	IR	0.750	11	MICHAEL, BRUCE F
SW¼ NE¼	2100	IR	0.600	11	JOHNSON, MARLYS M
SW¼ NE¼	2300	IR	0.600	11	O'BRIEN, JOHN S
SW¼ NE¼	3000	IR	0.360	11	LA CASA MIA HOME OWNERS
SW¼ NE¼	800	IR	0.600	11	ALLEN, ARTHUR L
SW¼ NE¼	900	IR	0.600	11	LEE, DON W JR
SE¼ NE¼	700	IR	28.600	11	JOHNSON, JOHN V
SW¼ NW¼	2100	IR	16.000	11	BETTESWORTH, JAY
NW¼ SW¼	1400	IR	1.500	11	DEMARIS, ALBERT J JR
NW¼ SW¼	1500	IR	2.800	11	DEMARIS, ALBERT J SR
NW¼ SW¼	600	IR	1.300	11	PLATT, GILBERT
NW¼ SW¼	700	IR	2.700	11	PLATT, GILBERT
SW¼ SW¼	1000	IR	1.000	11	DRASBEK, RAYMOND
SW¼ SW¼	800	IR	0.600	11	HANF, JOHN C
SW¼ SW¼	900	IR	1.400	11	HANF, JOHN C
NW¼ SE¼	1000	IR	0.600	11	LOGAN, CHARLES
NW¼ SE¼	1100	IR	0.600	11	COHEN, SHELDON E
NW¼ SE¼	1200	IR	0.600	11	SCHLEY, CATHRINA
NW¼ SE¼	1300	IR	0.600	11	ROUSKA, LESLIE A
NW¼ SE¼	1400	IR	0.600	11	DUNCOMBE, LANA L
NW¼ SE¼	1500	IR	0.600	11	HAYDEN, ERIC B
NW¼ SE¼	1600	IR	0.600	11	PRAZAK, STEVEN J
NW¼ SE¼	1700	IR	0.600	11	LOHNER, JAY R
NW¼ SE¼	1800	IR	0.600	11	NUTTER, JOSEPH
NW¼ SE¼	1900	IR	0.400	11	SCROGGINS, DOYLE B
NW¼ SE¼	300	IR	0.750	11	PARLIN, TOM
NW¼ SE¼	3000	IR	1.640	11	LA CASA MIA HOME OWNERS
NW¼ SE¼	400	IR	0.750	11	COOK, AUDREY K
NW¼ SE¼	500	IR	0.600	11	LOUGHTON, ANTHONY W
NW¼ SE¼	600	IR	0.600	11	MAXEY, CYLDE E
NW¼ SE¼	700	IR	0.600	11	DEASON, MARY
NW¼ SE¼	800	IR	0.600	11	ERTNER, DOUGLAS L
NW¼ SE¼	900	IR	0.600	11	VAN CLEAVE, PAUL M ET AL
SW¼ SE¼	3401	IR	4.500	11	WILLIAMS, DANIEL F
SW¼ SE¼	3402	IR	8.000	11	BAUMGARTNER, MICHAEL
SW¼ SE¼	3403	IR	9.000	11	SMALLING, KEVIN
SE¼ SE¼	3401	IR	3.500	11	WILLIAMS, DANIEL F
SE¼ SE¼	3500	IR	6.000	11	HARRIS, C E
SE¼ SE¼	3700	IR	5.000	11	HARRIS, C E

Section 31

NE¼ NE¼	100	IR	4.400	11	WOOD, KAREN
NE¼ NE¼	200	IR	9.600	11	WOOD, KAREN
NE¼ NE¼	300	IR	1.000	11	ADAMS, HUGH
NE¼ NE¼	400	IR	2.000	11	IUS, DINO A
NW¼ NE¼	500	IR	31.200	11	TANNER, EARL
SE¼ NE¼	1701	IR	2.000	11	FISHER, MIKE
NE¼ NW¼	100	IR	20.800	11	TANNER, EARL
NE¼ NW¼	101	IR	13.000	11	CLARK, CHARLES
NW¼ NW¼	200	IR	4.000	11	HELLBUSCH, BETTY L
NW¼ NW¼	300	IR	12.000	11	BAILEY, CLARENCE W
NW¼ NW¼	400	IR	13.400	11	ALEXANDER, R DOUGLAS
NW¼ NW¼	500	IR	2.000	11	BUCKINGHAM, BRIAN S
SW¼ NW¼	701	IR	7.300	11	MEYER, CLYDE N
SW¼ NW¼	702	IR	12.600	11	MEYER, CLYDE N
SW¼ NW¼	703	IR	5.100	11	MEYER, CLYDE N
SE¼ NW¼	603	IR	10.900	11	JOHNSON, A J

SE¼ NW¼	603	PND	0.100	11	JOHNSON, A J
SE¼ NW¼	605	IR	9.000	11	WALTERS, TIMOTHY J
SE¼ NW¼	606	IR	7.000	11	SILVA, ANDREW P ET AL
SE¼ NW¼	607	IR	4.500	11	VALLIE, DAVE
SE¼ NW¼	608	IR	3.500	11	VALLIE, DAVE
NE¼ SW¼	600	IR	2.000	11	HENDRICKS, DANIEL G
NE¼ SW¼	601	IR	7.000	11	JENNINGS, MICHELLE E
NE¼ SW¼	602	IR	8.000	11	PETERSON, STANLEY
NE¼ SW¼	604	IR	6.000	11	BACCHUS, RANDY J &
NW¼ SW¼	700	IR	12.000	11	PRICE, CHRISTOPHER D
NW¼ SW¼	800	IR	10.000	11	AULIE, ALAN L
SW¼ SW¼	1100	IR	17.500	11	B BAR B CATTLE COMPANY
SW¼ SW¼	900	IR	1.500	11	VAN TASSELL, GLEN
SW¼ SW¼	901	IR	8.000	11	AULIE, VERE
SW¼ SW¼	903	IR	4.000	11	HAYES, RAYMOND
SE¼ SW¼	1000	IR	2.000	11	KEMPER, ROBERT L
SE¼ SW¼	1100	IR	4.500	11	B BAR B CATTLE COMPANY
SE¼ SW¼	1200	IR	15.600	11	LEGG, P A
SE¼ SW¼	900	IR	0.500	11	VAN TASSELL, GLEN
SE¼ SW¼	903	IR	1.000	11	HAYES, RAYMOND
NE¼ SE¼	100	IR	1.750	11	MURDERS, CARROLL
NW¼ SE¼	100	IR	0.250	11	MURDERS, CARROLL
SW¼ SE¼	1600	IR	29.000	11	DONAHOE, DERICK
SE¼ SE¼	1500	IR	8.000	11	HOLLANDER, LEWIS E JR
SE¼ SE¼	1501	IR	2.000	11	HOLLANDER, LEWIS E JR

Section 32

NE¼ NE¼	100	IR	3.600	11	BEN-LEE, INC.
NE¼ NE¼	201	IR	11.700	11	TAYLOR, LEATA
SE¼ NE¼	200	IR	2.000	11	ENGLISH, FAYE
SE¼ NE¼	202	IR	3.000	11	AMBURN, ALLEN C
SE¼ NE¼	203	IR	2.000	11	HARTMAN, TED C
SE¼ NE¼	300	IR	1.000	11	DEAN, RUTH
SE¼ NE¼	301	IR	4.500	11	THORNBURGH, AMBERS J
NW¼ NW¼	2700	IR	11.000	11	MORRISON, JERRY L
SW¼ NW¼	2800	IR	5.000	11	PORTER, RON E
SW¼ NW¼	2900	IR	5.000	11	GIVENS, JOYCE S
SW¼ NW¼	3100	IR	8.000	11	ZITEK, KEN
NE¼ SW¼	1002	IR	1.900	11	ELLIOTT TRUSTS
NW¼ SW¼	1000	IR	19.000	11	ELLIOTT, RAYMOND
SW¼ SW¼	1003	IR	2.950	11	ELLIOTT, RAYMOND
SE¼ SW¼	1001	IR	1.500	11	WILSON, ROBERT A
SE¼ SW¼	1002	IR	13.900	11	ELLIOTT TRUSTS
SE¼ SW¼	1003	IR	10.800	11	ELLIOTT, RAYMOND
SE¼ SW¼	1100	IR	5.000	11	COFFMAN, DONALD R
NE¼ SE¼	1600	IR	1.500	11	MURRAY, DAVID H
NE¼ SE¼	1801	IR	4.100	11	DEAN, PAT C
NE¼ SE¼	1901	IR	0.300	11	DEAN, PAT C
NE¼ SE¼	1902	IR	1.000	11	WILSON, GERALD-DUNGAN, PHILLIP
NE¼ SE¼	2001	IR	1.000	11	MILER, ELMER F
NE¼ SE¼	2200	IR	1.000	11	DEWAELE, JAN D
NE¼ SE¼	2300	IR	2.700	11	BULTER, RICHARD L
NE¼ SE¼	2500	IR	11.000	11	SMITH, MORGAN
NW¼ SE¼	1500	IR	8.000	11	DETZEL, GORDON
NW¼ SE¼	1600	IR	1.500	11	MURRAY, DAVID H
NW¼ SE¼	1800	IR	7.600	11	HERSHEY & STAFFORD
NW¼ SE¼	1801	IR	1.100	11	DEAN, PAT C
NW¼ SE¼	1804	IR	5.100	11	PHILLIPS, DON W
SW¼ SE¼	1800	IR	32.450	11	HERSHEY & STAFFORD
SE¼ SE¼	1800	IR	7.000	11	HERSHEY & STAFFORD

SE¼ SE¼	2600	IR	25.000	11	MORGAN, GERTRUDE J

Section 33

NE¼ NE¼	100	IR	32.500	11	BURK, BILL
NW¼ NE¼	200	IR	6.100	11	FERGUSON, JAMES L
NW¼ NE¼	205	IR	13.200	11	FERGUSON, JAMES L
NW¼ NE¼	208	IR	3.100	11	BURK, BILL
SW¼ NE¼	201	IR	0.700	11	BURK, CURTIS
SW¼ NE¼	203	IR	0.700	11	DENISON, ROGER W
SW¼ NE¼	204	IR	1.000	11	LEHNERTZ, DONALD
SW¼ NE¼	206	IR	2.300	11	DENISON, ROGER W
SW¼ NE¼	208	IR	16.900	11	BURK, BILL
SE¼ NE¼	100	IR	30.500	11	BURK, BILL
NE¼ NW¼	202	IR	4.700	11	HIGSON, RICHARD K
NE¼ NW¼	202	PND	0.300	11	HIGSON, RICHARD K
NE¼ NW¼	207	IR	4.000	11	OLSEN, KENNETH
NE¼ NW¼	209	IR	5.670	11	GOOLD, PHILLIP
NE¼ NW¼	210	IR	5.000	11	GOOLD, PHILLIP
NE¼ NW¼	211	IR	5.000	11	GOOLD, PHILLIP
NW¼ NW¼	300	IR	19.600	11	BEN-LEE, INC.
NW¼ NW¼	301	IR	1.900	11	CENTRAL ELECTRIC CO-OP
SW¼ NW¼	400	IR	20.000	11	THOST, WILLIAM E SR
SE¼ NW¼	600	IR	16.000	11	BOEHLKE, GLEN
SE¼ NW¼	700	IR	2.000	11	ENNES, JOSEPH
SE¼ NW¼	701	IR	5.000	11	WHITE, EUGENE
SE¼ NW¼	702	IR	3.000	11	SMITH, RONALD G
NE¼ SW¼	801	IR	16.000	11	STEVENSON, STANLEY
NE¼ SW¼	802	IR	8.750	11	ALEXANDRE, YVONNE C
NE¼ SW¼	803	IR	4.250	11	NEASHAM, JOHN W
NW¼ SW¼	1100	IR	21.300	11	BLAKELY, R T
NW¼ SW¼	1200	IR	2.000	11	MULLANEY, COLLEEN M
NW¼ SW¼	1201	IR	2.000	11	MILLER, CARLOS J
NW¼ SW¼	1202	IR	3.000	11	STARR, WASSA L
SW¼ SW¼	1300	IR	4.000	11	ANDERSON, ROBERT A
SW¼ SW¼	1400	IR	4.000	11	DURAN, CATHY
SW¼ SW¼	1500	IR	8.700	11	SCHMIDT, DEBORAH RAE
SW¼ SW¼	1600	IR	2.000	11	HAYNES, BRADLEY N
SW¼ SW¼	1601	IR	1.000	11	HAYNES, BRADLEY N
SW¼ SW¼	1602	IR	4.700	11	OWEN, JACK D
SW¼ SW¼	1700	IR	1.000	11	ROBINSON, SIDNEY L
SW¼ SW¼	1800	IR	2.800	11	HART, DAVID L
SW¼ SW¼	1801	IR	4.010	11	BARNHART, CHARLES
SE¼ SW¼	1800	IR	5.700	11	HART, DAVID L
SE¼ SW¼	1801	IR	32.590	11	BARNHART, CHARLES
NE¼ SE¼	2002	IR	5.500	11	MOERSCHELL, PHILIP H
NE¼ SE¼	2004	IR	1.700	11	KEATHLEY, SCOTT
NE¼ SE¼	2005	IR	4.290	11	DIXON, KENNETH E
NE¼ SE¼	2008	IR	8.000	11	SHOEMAKER, DARVEN
NE¼ SE¼	2009	IR	6.460	11	MARLER, SHARI
NW¼ SE¼	1900	IR	28.700	11	BLAKELY, R T
NW¼ SE¼	1901	IR	1.000	11	CHERIE REMA ROBERTS LIVING TRST
NW¼ SE¼	1905	IR	2.500	11	ROBINSON, GARY
SW¼ SE¼	2004	IR	2.050	11	KEATHLEY, SCOTT
SW¼ SE¼	2006	IR	7.800	11	HAWKS FAMILY TRUST
SW¼ SE¼	2007	IR	5.500	11	BLUNT, JOHN C
SW¼ SE¼	2010	IR	4.560	11	BROWN, PARTICK
SE¼ SE¼	2001	IR	8.860	11	DAVIS, JAMES A
SE¼ SE¼	2003	IR	7.600	11	FISHER, CHERYL L
SE¼ SE¼	2004	IR	5.500	11	KEATHLEY, SCOTT
SE¼ SE¼	2012	IR	8.000	11	THOMPSON, ALFRED R

Section 34

NE¼ NE¼	100	IND	0.200	11	REDMOND TALLOW CO INC
NE¼ NE¼	100	IR	3.300	11	REDMOND TALLOW CO INC
NW¼ NE¼	1200	IR	2.900	11	DONOHO, W W
NW¼ NE¼	1300	IR	2.600	11	MEREDITH, ESME
NW¼ NE¼	1400	IR	2.500	11	GWIN, ARTHUR N
NW¼ NE¼	1500	IR	2.100	11	MCATEE, EDGAR L
NW¼ NE¼	1600	IR	0.660	11	MCATEE, EDGAR L
NW¼ NE¼	1601	IR	2.340	11	THOMPSON, HOWARD R
NW¼ NE¼	1700	IR	2.200	11	THOMPSON, HOWARD R
NW¼ NE¼	1800	IR	3.000	11	HARTZELL, PHILLIP L
NW¼ NE¼	2100	IR	7.500	11	GRIFFITH, SPENCER M
SW¼ NE¼	1800	PND	0.360	11	CENTRAL OREGON IRRIGATION
SW¼ NE¼	900	IR	16.300	11	HARTZELL, RICHARD
SW¼ NE¼	901	IR	7.700	11	HARTZELL, RICHARD
NE¼ NW¼	100	IR	3.200	11	LANE, DAVID
NE¼ NW¼	200	IR	3.200	11	HURLOCKER, SANFORD L &
NE¼ NW¼	300	IR	3.200	11	GUTHRIE, DENNIS G
NE¼ NW¼	400	IR	3.100	11	BATES, DAVID B
NE¼ NW¼	500	IR	4.100	11	HUDDLE, KENNETH
NE¼ NW¼	600	IR	4.200	11	HUDDLE, KENNETH
NE¼ NW¼	700	IR	4.200	11	JOHNSON, ROBERT O JR
NE¼ NW¼	800	IR	3.200	11	STEPHENS, GILBERT
NW¼ NW¼	900	IR	4.000	11	HUDDLE, KENNETH L
NW¼ NW¼	901	IR	10.500	11	HAYES, GEORGE M
NW¼ NW¼	902	IR	5.500	11	STILWELL, LISA D
SW¼ NW¼	1000	IR	35.900	11	HUDDLE, MRS KENNETH W
SE¼ NW¼	1000	IR	34.100	11	HUDDLE, MRS KENNETH W
NE¼ SW¼	1000	IR	0.300	11	HOFFMAN, CHARLES O
NE¼ SW¼	1100	IR	0.900	11	CHETWOOD, SAMUEL
NE¼ SW¼	1200	IR	1.200	11	MEANS, JIMMIE
NE¼ SW¼	1300	IR	2.000	11	WAGNER, CATHERINE L
NE¼ SW¼	1400	IR	2.200	11	KELLER, TOMMY A
NE¼ SW¼	1500	IR	2.500	11	HAYDEN, JAMES L
NW¼ SW¼	100	IR	4.300	11	HOLIWAY, MARK S
NW¼ SW¼	1000	IR	2.300	11	HOFFMAN, CHARLES O
NW¼ SW¼	1100	IR	1.400	11	CHETWOOD, SAMUEL
NW¼ SW¼	1200	IR	1.000	11	MEANS, JIMMIE
NW¼ SW¼	1300	IR	0.200	11	WAGNER, CATHERINE L
NW¼ SW¼	200	IR	4.300	11	ESPINOLA, WARREN A
NW¼ SW¼	300	IR	4.100	11	JARVIS, HAROLD L
NW¼ SW¼	400	IR	4.100	11	DALY, MICHAEL M
NW¼ SW¼	500	IR	4.000	11	BROWN, DIXIE L
NW¼ SW¼	600	IR	4.200	11	MEANS, GLEN
NW¼ SW¼	700	IR	1.600	11	HAYES, SHERI L
NW¼ SW¼	800	IR	0.600	11	LAKE PARK ESTATES PROPERTY
NW¼ SW¼	900	IR	1.900	11	ANDERSON, MICHAEL C
SW¼ SW¼	700	IR	2.000	11	HAYES, SHERI L
SW¼ SW¼	800	IR	1.500	11	LAKE PARK ESTATES PROPERTY
SW¼ SW¼	900	IR	0.500	11	ANDERSON, MICHAEL C

Section 35

Township 14 South, Range 13 East, W.M.

NW¼ SW¼	100	IR	6.900	11	CIRCLE F RANCHES INC
SW¼ SW¼	100	IR	25.100	11	CIRCLE F RANCHES INC
SW¼ SW¼	200	IR	1.000	11	BROOKS, GRETCHEN ET AL
SW¼ SW¼	300	IR	1.000	11	WYNN, DENNIS P

Section 17

SW¼ NE¼	503	IR	33.100	11	RE-GRET, INC
SE¼ NE¼	503	IR	16.800	11	RE-GRET, INC
SW¼ NW¼	301	IR	32.200	11	RE-GRET, INC
SE¼ NW¼	301	IR	33.000	11	RE-GRET, INC
NE¼ SW¼	503	IR	33.300	11	RE-GRET, INC
NW¼ SW¼	301	IR	2.100	11	RE-GRET, INC
SW¼ SW¼	400	IR	18.710	11	MCGINTY, ED
SW¼ SW¼	401	IR	6.000	11	WARNER, EDWARD
SE¼ SW¼	504	IR	16.000	11	LONE PINE,LLC
NE¼ SE¼	503	IR	31.700	11	RE-GRET, INC
NW¼ SE¼	503	IR	24.600	11	RE-GRET, INC
SW¼ SE¼	500	IR	5.400	11	BROOKS, GRETCHEN ET AL
SW¼ SE¼	504	IR	31.100	11	LONE PINE,LLC
SE¼ SE¼	500	IR	28.600	11	BROOKS, GRETCHEN ET AL
SE¼ SE¼	502	IR	2.000	11	BROOKS, GRETCHEN ET AL

Section 18

NE¼ NE¼	101	IR	3.200	11	WATSON, R W
NE¼ NE¼	102	IR	9.100	11	ALTIMORE, GREGORY L
NE¼ NE¼	103	IR	8.000	11	FEARRIEN, DONALD N
NE¼ NE¼	104	IR	2.500	11	ROSS, EDNA M
NE¼ NE¼	106	IR	5.000	11	FEARRIEN, DONALD N
NE¼ NE¼	107	IR	5.000	11	FEARRIEN, DONALD N
NW¼ NE¼	100	IR	31.000	11	ALVES, ERVIN D
SW¼ NE¼	300	IR	35.200	11	KASBERGER, MARQUERITE B
SE¼ NE¼	300	IR	27.200	11	KASBERGER, MARQUERITE B
NE¼ NW¼	201	IR	4.000	11	STITES, MARLYS M
NE¼ NW¼	202	IR	10.190	11	SKIDGEL, CHRIS J
NW¼ NW¼	202	IR	24.100	11	SKIDGEL, CHRIS J
SW¼ NW¼	300	IR	14.300	11	KASBERGER, MARQUERITE B
SE¼ NW¼	300	IR	28.100	11	KASBERGER, MARQUERITE B
NE¼ SW¼	300	IR	30.400	11	KASBERGER, MARQUERITE B
NE¼ SW¼	302	IR	1.300	11	TEGA 3 INC.
NW¼ SW¼	300	IR	12.700	11	KASBERGER, MARQUERITE B
SE¼ SW¼	302	IR	26.800	11	TEGA 3 INC.
NE¼ SE¼	300	IR	5.700	11	KASBERGER, MARQUERITE B
NW¼ SE¼	300	IR	26.400	11	KASBERGER, MARQUERITE B
SW¼ SE¼	302	IR	13.300	11	TEGA 3 INC.
SW¼ SE¼	304	IR	12.400	11	KASBERGER, MARQUERITE B
SE¼ SE¼	302	IR	0.400	11	TEGA 3 INC.
SE¼ SE¼	304	IR	25.800	11	KASBERGER, MARQUERITE B

Section 19

NE¼ NW¼	100	IR	4.800	1	BUTLER RANCH
NE¼ NW¼	101	IR	0.900	1	BULTER, RICHARD L
NW¼ NW¼	100	IR	16.300	1	BUTLER RANCH
NW¼ NW¼	101	IR	14.400	1	BULTER, RICHARD L
SW¼ NW¼	100	IR	38.600	1	BUTLER RANCH
SE¼ NW¼	100	IR	20.000	1	BUTLER RANCH
NE¼ SW¼	100	IR	1.200	1	BUTLER RANCH
NW¼ SW¼	100	IR	33.300	1	BUTLER RANCH

Section 20

NW¼ NW¼	101	IR	7.400	1	KILPATRICK ENTERPRISES LTD
SW¼ NW¼	101	IR	28.500	1	KILPATRICK ENTERPRISES LTD
NE¼ SW¼	101	IR	3.300	1	KILPATRICK ENTERPRISES LTD
NW¼ SW¼	101	IR	14.500	1	KILPATRICK ENTERPRISES LTD
NW¼ SW¼	101	PND	1.300	1	KILPATRICK ENTERPRISES LTD
SW¼ SW¼	101	IR	38.800	1	KILPATRICK ENTERPRISES LTD
SE¼ SW¼	101	IR	18.100	1	KILPATRICK ENTERPRISES LTD

Section 25

NE¼ NE¼	100	IR	11.300	1	KILPATRICK ENTERPRISES LTD
SW¼ NE¼	100	IR	30.500	1	KILPATRICK ENTERPRISES LTD
SE¼ NE¼	100	IR	39.900	1	KILPATRICK ENTERPRISES LTD
SW¼ NW¼	100	IR	0.800	1	KILPATRICK ENTERPRISES LTD
SE¼ NW¼	100	IR	20.190	1	KILPATRICK ENTERPRISES LTD
NE¼ SW¼	100	IR	17.700	1	KILPATRICK ENTERPRISES LTD
NW¼ SW¼	100	IR	1.700	1	KILPATRICK ENTERPRISES LTD
NW¼ SW¼	101	IR	8.800	1	KILPATRICK ENTERPRISES LTD
SW¼ SW¼	100	IR	8.500	1	KILPATRICK ENTERPRISES LTD
SE¼ SW¼	100	IR	22.400	1	KILPATRICK ENTERPRISES LTD
NE¼ SE¼	100	IR	19.600	1	KILPATRICK ENTERPRISES LTD
NW¼ SE¼	100	IR	2.900	1	KILPATRICK ENTERPRISES LTD
SW¼ SE¼	100	IR	28.000	1	KILPATRICK ENTERPRISES LTD
SE¼ SE¼	100	IR	21.200	1	KILPATRICK ENTERPRISES LTD

Section 26

SW¼ NE¼	100	IR	4.000	1	CENTRAL OREGON IRRIGATION
SE¼ NE¼	100	IR	1.000	1	CENTRAL OREGON IRRIGATION
SE¼ NW¼	100	IR	17.000	1	CENTRAL OREGON IRRIGATION
NE¼ SW¼	100	IR	6.000	1	CENTRAL OREGON IRRIGATION
NW¼ SE¼	100	IR	1.000	1	CENTRAL OREGON IRRIGATION

Section 27

NE¼ NE¼	100	IR	10.600	1	TEGA 3 INC.
NE¼ NE¼	101	IR	3.800	1	KASBERGER, MARQUERITE B
NE¼ NE¼	302	IR	19.000	1	TEGA 3 INC.
NW¼ NE¼	302	IR	31.800	1	TEGA 3 INC.
SW¼ NE¼	302	IR	10.600	1	TEGA 3 INC.
SE¼ NE¼	302	IR	9.400	1	TEGA 3 INC.
NE¼ NW¼	302	IR	9.800	1	ARNETT, JOHN
NW¼ NW¼	601	IR	3.500	1	RICHARDSON, DUANE E
SW¼ NW¼	601	IR	18.500	1	RICHARDSON, DUANE E

Section 30

NE¼ NE¼	100	IR	28.700	1	KILPATRICK ENTERPRISES LTD
NW¼ NE¼	100	IR	31.400	1	KILPATRICK ENTERPRISES LTD
SW¼ NE¼	100	IR	38.200	1	KILPATRICK ENTERPRISES LTD
SE¼ NE¼	100	IR	6.000	1	KILPATRICK ENTERPRISES LTD
NE¼ NW¼	100	IR	34.100	1	KILPATRICK ENTERPRISES LTD
NW¼ NW¼	100	IR	23.800	1	KILPATRICK ENTERPRISES LTD
SW¼ NW¼	100	IR	2.400	1	KILPATRICK ENTERPRISES LTD
SE¼ NW¼	100	IR	30.700	1	KILPATRICK ENTERPRISES LTD
NE¼ SW¼	101	IR	32.500	1	KILPATRICK ENTERPRISES LTD
NW¼ SW¼	101	IR	8.400	1	KILPATRICK ENTERPRISES LTD
SW¼ SW¼	101	IR	23.200	1	KILPATRICK ENTERPRISES LTD
SE¼ SW¼	101	IR	10.100	1	KILPATRICK ENTERPRISES LTD
NE¼ SE¼	102	IR	28.500	1	KILPATRICK ENTERPRISES LTD
NW¼ SE¼	102	IR	30.600	1	KILPATRICK ENTERPRISES LTD
SW¼ SE¼	102	IR	20.200	1	KILPATRICK ENTERPRISES LTD
SE¼ SE¼	102	IR	16.400	1	KILPATRICK ENTERPRISES LTD

Section 35

SW¼ NE¼	1400	IR	3.600	1	CENTRAL CASCADE CORP.
SE¼ NE¼	1400	IR	14.700	1	CENTRAL CASCADE CORP.
NW¼ NW¼	100	IR	10.920	1	KILPATRICK ENTERPRISES LTD
SW¼ NW¼	201	IR	10.000	1	MORGAN, CHARLES
SE¼ NW¼	201	IR	2.600	1	MORGAN, CHARLES
NE¼ SW¼	201	IR	16.100	1	MORGAN, CHARLES

NW¼ SW¼	201	IR	26.700	1	MORGAN, CHARLES
SW¼ SW¼	201	IR	38.700	1	MORGAN, CHARLES
SE¼ SW¼	201	IR	39.200	1	MORGAN, CHARLES
NE¼ SE¼	201	IR	0.900	1	MORGAN, CHARLES
NE¼ SE¼	202	IR	25.000	1	CENTRAL CASCADE CORP.
NW¼ SE¼	201	IR	3.600	1	MORGAN, CHARLES
NW¼ SE¼	202	IR	9.000	1	CENTRAL CASCADE CORP.
SW¼ SE¼	201	IR	29.500	1	MORGAN, CHARLES
SE¼ SE¼	201	IR	23.700	1	MORGAN, CHARLES

Section 36

Township 14 South, Range 14 East, W.M.

SW¼ SW¼	201	IR	27.300	1	MORGAN, CHARLES
SE¼ SW¼	201	IR	23.500	1	MORGAN, CHARLES
SW¼ SE¼	100	IR	5.700	1	PETERSON, DAVID L
SW¼ SE¼	101	IR	2.100	1	HANNA, GLENN
SW¼ SE¼	102	IR	7.200	1	HANNA, GLENN
SE¼ SE¼	100	IR	2.200	1	PETERSON, DAVID L
SE¼ SE¼	102	IR	10.700	1	HANNA, GLENN

Section 31

SW¼ SE¼	1800	IR	1.400	1	MCNABB, E L
SE¼ SE¼	1700	IR	3.000	1	MCNABB, E L

Section 32

Township 14 South, Range 15 East, W.M.

SW¼ SE¼	1000	IR	1.300	11	MILLS, HAROLD
SW¼ SE¼	1100	IR	0.800	11	RASH, LYLE H
SW¼ SE¼	1200	IR	0.250	11	PAYTON, ALBERT
SW¼ SE¼	1500	IR	0.300	11	HIX, LAWRENCE J
SW¼ SE¼	1600	IR	1.000	11	WILLIAMS, GARY
SW¼ SE¼	1600	PND	0.400	11	WILLIAMS, GARY
SW¼ SE¼	1700	IR	1.000	11	COCKELREAS, JOANNE
SW¼ SE¼	1701	IR	0.400	11	COCKELREAS, JOANNE
SW¼ SE¼	1800	IR	0.400	11	COCKELREAS, JOANNE
SW¼ SE¼	1900	IR	2.500	11	ROBERTS, THEODORE H
SW¼ SE¼	2000	IR	3.300	11	JOHNSON, RUSSELL
SE¼ SE¼	100	IR	2.000	11	FISHER, MELVIN
SE¼ SE¼	200	IR	2.000	11	SARGENT, DONALD L
SE¼ SE¼	2100	IR	2.190	11	BRYANT, DAVID H
SE¼ SE¼	2200	IR	2.190	11	DINGMAN, DANIEL A
SE¼ SE¼	2300	IR	2.190	11	POFFENBARGER, JACK A
SE¼ SE¼	2400	IR	2.190	11	KRUTSCH, ANTHONY
SE¼ SE¼	2500	IR	2.000	11	EDWARDS, ROY
SE¼ SE¼	2600	IR	2.190	11	WHITEHOUSE, JAMES W
SE¼ SE¼	2700	IR	2.000	11	WRIGHT, SHERMAN D
SE¼ SE¼	2800	IR	1.500	11	BLANKENSHIP, GARY M
SE¼ SE¼	300	IR	2.190	11	STRUCK, CHRISTOPHER
SE¼ SE¼	400	IR	1.000	11	FISHER, MELVIN
SE¼ SE¼	500	IR	2.190	11	CASTLE, WAYNE R
SE¼ SE¼	600	IR	2.190	11	MILLS, HAROLD
SE¼ SE¼	700	IR	2.000	11	LONG, JOHN E & PHYLIIS A
SE¼ SE¼	800	IR	2.000	11	CLOSE, DALE F

Section 1

SE¼ SE¼	1500	IR	2.000	11	BARTON, JOHN W
SE¼ SE¼	1600	IR	2.000	11	KUPER, JOHN
SE¼ SE¼	1700	IR	2.000	11	SULT, STEVEN V
SE¼ SE¼	1800	IR	2.000	11	LOWE, WARD A

Section 11

NE¼ NE¼	4700	IR	14.000	11	NANCE, ALBERT
NW¼ NE¼	100	IR	2.000	11	FULLMAN, HAROLD
NW¼ NE¼	1300	IR	2.000	11	BLAKLEY, DANIEL R
NW¼ NE¼	1400	IR	2.000	11	ALLEN, GARY O
NW¼ NE¼	1500	IR	2.000	11	ALEXANDER, CATHERINE L
NW¼ NE¼	1600	IR	1.000	11	SIMMONS, RANDALL K
NW¼ NE¼	1601	IR	1.000	11	RITCHEY, JAMES A
NW¼ NE¼	1700	IR	2.000	11	BOSCHMA, HENRY F
NW¼ NE¼	1800	IR	1.500	11	DAVIDSON, DON G &
NW¼ NE¼	1900	IR	0.700	11	HAWKINS, N
NW¼ NE¼	200	IR	1.600	11	FULLMAN, HAROLD
NW¼ NE¼	2000	IR	2.000	11	PARROTT, DICK
NW¼ NE¼	2600	IR	4.000	11	STONE, MAURICE
NW¼ NE¼	2601	IR	0.500	11	SMITH, DEAN
NW¼ NE¼	2700	IR	3.000	11	POPISH, LOUIS
NW¼ NE¼	2801	IR	0.300	11	GOULD, RICHARD &
NW¼ NE¼	2802	IR	0.300	11	SMITH, DEAN
NW¼ NE¼	2900	IR	1.200	11	ROBINSON, KENNETH L ET AL
NW¼ NE¼	300	IR	2.000	11	ALLEN, JERRY H
NW¼ NE¼	400	IR	2.000	11	SANDIFORD, WILLIAM
SW¼ NE¼	1100	IR	1.500	11	BJERKE, CHRIS N
SW¼ NE¼	1200	IR	1.200	11	BARNES, KENT C
SW¼ NE¼	2100	IR	2.000	11	CLARK, JEFFREY R
SW¼ NE¼	2200	IR	1.700	11	SPAULDING, SCOTT A
SW¼ NE¼	2300	IR	2.000	11	OWENS, RICHARD G
SW¼ NE¼	2400	IR	1.000	11	CLARK, JEFFREY R
SW¼ NE¼	2500	IR	2.000	11	CAPASSO, DANIEL E
SW¼ NE¼	900	IR	1.700	11	MCCORMICK, LESTER M
NE¼ NW¼	300	IR	8.000	11	JONES, CECIL
NE¼ NW¼	301	IR	5.800	11	SMITH, DEAN
NE¼ NW¼	400	IR	1.200	11	GOULD, RICHARD &
NE¼ NW¼	401	IR	4.400	11	SMITH, DEAN
NE¼ NW¼	500	IR	0.300	11	GOULD, RICHARD &
SW¼ NW¼	700	IR	3.940	11	SUDERNO, ROBERT J
SW¼ NW¼	701	IR	3.610	11	KEMRY, DARYL
SW¼ NW¼	704	IR	4.140	11	PERRYMAN, STEPHEN
SW¼ NW¼	705	IR	5.300	11	KEMRY, DARYL
SW¼ NW¼	706	IR	4.500	11	HABLE, JERRY F JR
SW¼ NW¼	708	IR	3.400	11	BURBEY, PAUL &
SW¼ NW¼	800	IR	1.500	11	SUDERNO, ROBERT J
SE¼ NW¼	600	IR	12.430	11	MARTENEY, SANDRA
SE¼ NW¼	702	IR	1.400	11	KIDD, WAYNE A
SE¼ NW¼	703	IR	2.000	11	VON EGGERS, KARL
SE¼ NW¼	707	IR	6.590	11	SMITH, WILLIAM P
NE¼ SW¼	1002	IR	4.400	11	CLINE FALLS RANCH, L.L.C
NE¼ SW¼	1003	IR	8.300	11	CLINE FALLS RANCH, L.L.C
NE¼ SW¼	702	IR	0.200	11	KIDD, WAYNE A
NW¼ SW¼	1001	IR	5.500	11	PETERSON, ALBERT T
NW¼ SW¼	1002	IR	4.200	11	CLINE FALLS RANCH, L.L.C
NW¼ SW¼	1003	IR	14.500	11	CLINE FALLS RANCH, L.L.C
SW¼ SW¼	1000	IR	26.100	11	CLINE FALLS RANCH, L.L.C
SW¼ SW¼	1003	IR	6.200	11	CLINE FALLS RANCH, L.L.C
SE¼ SW¼	1000	IR	6.600	11	CLINE FALLS RANCH, L.L.C
SE¼ SW¼	1003	IR	3.700	11	CLINE FALLS RANCH, L.L.C
SW¼ SE¼	1000	IR	1.500	11	MCCALL, STEVEN H
SW¼ SE¼	1100	IR	3.500	11	SHELBY, DARRIN R
SW¼ SE¼	1200	IR	1.000	11	JONES, ELWIN
SW¼ SE¼	500	IR	1.500	11	HAMMER, ROBERT L
SW¼ SE¼	600	IR	1.500	11	HEWITT, KAREN

SW¼ SE¼	700	IR	2.000	11	WRIGHT, CORRY F
SW¼ SE¼	800	IR	2.500	11	RAMEY, PRISCILLA
SW¼ SE¼	900	IR	1.500	11	HEINZE, STEVEN R

Section 12

NE¼ NE¼	100	IR	9.800	11	VANCE, WESLEY
NW¼ NE¼	300	IR	10.500	11	KORCEK, WALTER F JR
NW¼ NE¼	301	IR	5.800	11	LIA BRAATEN, GERALD
NW¼ NE¼	400	IR	2.300	11	MORGAN, VERNON
SW¼ NE¼	1000	IR	2.000	11	HUFF, RICHARD
SW¼ NE¼	901	IR	2.000	11	GRUBBS, GORDON R JR
SW¼ NE¼	902	IR	1.300	11	CRONENWETT, WILLIAM H
SW¼ NE¼	902	PND	0.110	11	CRONENWETT, WILLIAM H
SW¼ NE¼	903	IR	2.500	11	BEECHER, LYNN C
SW¼ NE¼	904	IR	2.800	11	MCFARLANE, KELLY R
SW¼ NE¼	910	IR	1.100	11	LANGELIERS, RALPH
SW¼ NE¼	913	IR	5.320	11	POPISH, CHARLES R
SE¼ NE¼	1000	IR	0.500	11	HUFF, RICHARD
NE¼ NW¼	400	IR	23.190	11	MORGAN, VERNON
NE¼ NW¼	500	IR	2.000	11	MOFFITT, OMAR L
NW¼ NW¼	500	IR	33.970	11	MOFFITT, OMAR L
SW¼ NW¼	600	IR	37.000	11	CLEMENT, CHARLES
SE¼ NW¼	700	IR	25.030	11	NASH, KEITH
NE¼ SW¼	1700	IR	29.800	11	CLEMENT, CHARLES
NE¼ SW¼	1700	PND	1.920	11	CENTRAL OREGON IRRIGATION
NW¼ SW¼	1700	IR	25.700	11	CLEMENT, CHARLES
SW¼ SW¼	1800	IR	7.500	11	WAREING, LUCILLE ESTATE
SW¼ SW¼	1801	IR	4.200	11	MOOR, JACK V
SE¼ SW¼	1600	IR	38.000	11	MAYFIELD, DICK
SE¼ SW¼	1800	IR	0.750	11	WAREING, LUCILLE ESTATE
SE¼ SW¼	1801	IR	0.550	11	MOOR, JACK V
NW¼ SE¼	1400	IR	1.300	11	CLEMENT, CHARLES
NW¼ SE¼	1402	IR	3.400	11	EDWARDS, LEO A
NW¼ SE¼	1403	IR	1.600	11	BUERGER, LEROY ET AL
NW¼ SE¼	1404	IR	3.000	11	BLACKBURN, L M, ET AL
NW¼ SE¼	1700	IR	1.200	11	CLEMENT, CHARLES
NW¼ SE¼	1700	PND	0.450	11	CENTRAL OREGON IRRIGATION
NW¼ SE¼	904	IR	0.200	11	MCFARLANE, KELLY R
NW¼ SE¼	905	IR	3.000	11	NANNETTI, ROBERT G
NW¼ SE¼	906	IR	3.000	11	SHEDECK, GLENN D
NW¼ SE¼	907	IR	3.000	11	SANBORN, ARLAND A
NW¼ SE¼	908	IR	3.000	11	PRICE, MICHAEL E
NW¼ SE¼	909	IR	3.000	11	BROWN, EDWIN F
NW¼ SE¼	910	IR	2.400	11	LANGELIERS, RALPH
SW¼ SE¼	1401	IR	3.750	11	FIX, DAVID A
SW¼ SE¼	1402	IR	15.700	11	EDWARDS, LEO A
SW¼ SE¼	1403	IR	13.350	11	BUERGER, LEROY ET AL
SW¼ SE¼	1404	IR	1.000	11	BLACKBURN, L M, ET AL
SW¼ SE¼	1500	IR	1.000	11	BRILEY, ODEN
SE¼ SE¼	1300	IR	2.880	11	RICH, BARBARA
SE¼ SE¼	2100	IR	3.340	11	RICH, BARBARA
SE¼ SE¼	2200	IR	2.440	11	SMITH, CHRISTOPHER F
SE¼ SE¼	2300	IR	3.340	11	DUNGAN, PHILLIP
SE¼ SE¼	2400	IR	1.720	11	SOLIZ, ARMANDO M
SE¼ SE¼	2401	IR	2.700	11	KING, RICKY L
SE¼ SE¼	2500	IR	2.690	11	BARBOUR, RICHARD V
SE¼ SE¼	2600	IR	3.890	11	EAGLE CREST PARTNERS, LTD

Section 13

NE¼ NE¼	100	IR	1.000	11	MILLER, DOUGLAS

NE¼ NE¼	200	IR	2.000	11	MILLER, DOUGLAS
NE¼ NE¼	300	IR	9.750	11	GREEN, JOHN C
NE¼ NE¼	500	IR	1.000	11	PEDERSEN, ERIC O
NE¼ NE¼	601	IR	1.000	11	WHITTON, LEONARD L
SE¼ NE¼	1100	IR	11.000	11	HILL, DAVID A
SE¼ NE¼	1101	IR	1.200	11	HILL, DAVID A
SE¼ NE¼	1102	IR	14.500	11	SMITH, HAROLD L
SE¼ NE¼	1200	IR	1.330	11	SEEDER, GARY P
NE¼ SE¼	100	IR	3.500	11	REID, PATRICIA A
NE¼ SE¼	200	IR	0.600	12	OREGON STATE PARKS
NE¼ SE¼	201	IR	3.500	11	PAVLICEK, JOHN J
NW¼ SE¼	200	IR	1.900	12	OREGON STATE PARKS

Section 14

NE¼ NE¼	100	IR	3.000	11	SMITH, ROCKY
NE¼ NE¼	102	IR	1.000	11	PEAVY, WESLEY R
NE¼ NE¼	103	IR	19.000	11	PEAVY, WESLEY R
NW¼ NE¼	1000	IR	2.500	11	WILLIAMS, LORI L
NW¼ NE¼	1100	IR	2.500	11	BRANDT, KEITH A
NW¼ NE¼	1200	IR	2.500	11	HUCKE, GARY
NW¼ NE¼	1300	IR	2.000	11	MILLER, LAWRENCE R
NW¼ NE¼	1800	IR	2.500	11	WAREING, STANLEY- ESTATE
NW¼ NE¼	303	IR	4.000	11	KNOX, DWIGHT G
NW¼ NE¼	304	IR	2.180	11	LEETCH, WILLIAM M
NW¼ NE¼	305	IR	4.300	11	COSTA, DONALD E
NW¼ NE¼	306	IR	3.600	11	TOEVS, SAMUEL C
SW¼ NE¼	1400	IR	2.500	11	STEEGE, ELMER H
SW¼ NE¼	1500	IR	2.500	11	KOLISCH, EDWARD P
SW¼ NE¼	1600	IR	0.900	11	LOW, DANIEL M
SW¼ NE¼	1700	IR	3.000	11	BOEGELSACK, ABE
SW¼ NE¼	1700	PND	0.500	11	BOEGELSACK, ABE
SW¼ NE¼	300	IR	0.600	11	LOW, DANIEL M
SW¼ NE¼	301	IR	4.140	11	KALER, KENNETH K JR
SW¼ NE¼	302	IR	2.120	11	KOCHHEIM, WILLIAM
SW¼ NE¼	308	IR	0.240	11	KNOX, DWIGHT G
SW¼ NE¼	309	IR	4.500	11	KALER, KENNETH K JR
SW¼ NE¼	700	IR	3.800	11	BUERGER, DARYL L
SE¼ NE¼	101	IR	6.000	11	PEAVY, WESLEY R
SE¼ NE¼	200	IR	7.320	11	BUZBEE, CHARLES
SE¼ NE¼	201	IR	10.560	11	HILL, JACK
NE¼ NW¼	103	IR	19.000	11	WAREING, STANLEY- ESTATE
SE¼ NW¼	700	IR	31.200	11	BUERGER, DARYL L
NE¼ SW¼	700	IR	8.800	11	BUERGER, DARYL L
SE¼ SW¼	900	IR	32.400	11	HARRY, JOHN
NE¼ SE¼	1100	IR	1.300	11	WM. & NORMA GRAVES TRUST
NE¼ SE¼	1101	IR	10.700	11	NELSON, RONALD O
NE¼ SE¼	1102	IR	9.000	11	WM. & NORMA GRAVES TRUST
NE¼ SE¼	1801	IR	3.000	11	SABINE, STEVEN P
NW¼ SE¼	1100	IR	1.000	11	MADDEN, PATRICK R
NW¼ SE¼	1200	IR	1.000	11	BERNARD, JEFFREY L
SW¼ SE¼	1400	IR	3.000	11	GILMER, BARBARA J
SW¼ SE¼	1500	IR	2.000	11	TAYLOR, LORI E
SW¼ SE¼	1600	IR	9.100	11	LANG, KATHRYN
SW¼ SE¼	1700	IR	7.300	11	GROGAN, THOMAS JR
SW¼ SE¼	900	IR	1.600	11	HARRY, JOHN
SE¼ SE¼	1100	IR	9.300	11	WM. & NORMA GRAVES TRST
SE¼ SE¼	1700	IR	1.700	11	GROGAN, THOMAS JR
SE¼ SE¼	1801	IR	21.000	11	SABINE, STEVEN P
SE¼ SE¼	1900	IR	0.700	11	OSSENKOP, JAMES F

Section 24

NE¼ NE¼	100	IR	20.000	11	HARRY, JOHN
NW¼ NE¼	100	IR	35.000	11	HARRY, JOHN
NW¼ NE¼	201	IR	2.400	11	MILES, BILL
SW¼ NE¼	508	IR	1.600	11	GERDES, GERALD D
SW¼ NE¼	509	IR	1.500	11	DWYER, SHAWN D
SW¼ NE¼	600	IR	5.000	11	HUTCHINSON, ERNEST J 'BUD'
SW¼ NE¼	601	IR	5.000	11	HUTCHINSON, ERNEST J 'BUD'
SW¼ NE¼	602	IR	5.000	11	HUTCHINSON, ERNEST J 'BUD'
SW¼ NE¼	603	IR	5.000	11	HUTCHINSON, ERNEST J 'BUD'
SW¼ NE¼	604	IR	4.600	11	HUTCHINSON, ERNEST J 'BUD'
SW¼ NE¼	605	IR	5.000	11	HUTCHINSON, ERNEST J 'BUD'
SW¼ NE¼	606	IR	5.000	11	HUTCHINSON, ERNEST J 'BUD'
SW¼ NE¼	606A	IR	1.600	11	HUTCHINSON, ERNEST J 'BUD'
SE¼ NE¼	700	IR	28.000	11	STOUTENBURG, BARBARA JEAN
NE¼ NW¼	200	IR	4.300	11	FOSTER, THORNE S
NE¼ NW¼	201	IR	31.600	11	MILES, BILL
NW¼ NW¼	300	IR	22.200	11	FOSTER, THORNE S
NW¼ NW¼	301	IR	2.000	11	CROCKER, NORMA PARK
NW¼ NW¼	302	IR	2.500	11	FOSTER, THORNE S
SW¼ NW¼	500	IR	3.200	11	LAMB, HAROLD D
SW¼ NW¼	501	IR	2.150	11	LAWSON, NORMAN R
SW¼ NW¼	502	IR	1.220	11	MURRAY, PETER
SW¼ NW¼	503	IR	1.000	11	WREN, WILLIAM J
SW¼ NW¼	504	IR	1.000	11	WINSTEAD, JARY D
SW¼ NW¼	513	IR	2.400	11	SUDERNO, JOSEPH C
SE¼ NW¼	504	IR	4.250	11	WINSTEAD, JARY D
SE¼ NW¼	505	IR	4.800	11	GERDES, GERALD D
SE¼ NW¼	506	IR	4.850	11	BRUGGER, KAREN L
SE¼ NW¼	507	IR	4.800	11	GERDES, GERALD D
SE¼ NW¼	508	IR	2.700	11	GERDES, GERALD D
SE¼ NW¼	509	IR	2.500	11	DWYER, SHAWN D
SE¼ NW¼	510	IR	5.000	11	CHRISTIE, ELMER
SE¼ NW¼	511	IR	4.450	11	CHRISTIE, ELMER
SE¼ NW¼	512	IR	4.600	11	BEGIN, MIKE
SE¼ NW¼	513	IR	1.800	11	SUDERNO, JOSEPH C
NE¼ SW¼	1000	IR	7.600	11	WOODARD, GERALD L
NE¼ SW¼	1100	IR	20.200	11	BROADDUS, ROBERT
SE¼ SW¼	1500	IR	5.000	11	CLARK, STANLEY E & EDNA KAY
SE¼ SW¼	1600	IR	3.200	11	NICHOLAS, JUNE U
SE¼ SW¼	1901	IR	1.000	11	CARDER, PAUL
NE¼ SE¼	800	IR	37.650	11	HUCKFELDT, ROBERT
NW¼ SE¼	1000	IR	0.400	11	WOODARD, GERALD L
NW¼ SE¼	1100	IR	1.800	11	BROADDUS, ROBERT
NW¼ SE¼	900	IR	16.000	11	HANNAN, ERNEST
NW¼ SE¼	901	IR	18.000	11	LEHNERTZ, DALE
SW¼ SE¼	1901	IR	0.400	11	CARDER, PAUL
SW¼ SE¼	2000	IR	2.000	11	HILL, LONNIE
SW¼ SE¼	2100	IR	0.200	11	CARDER, PAUL
SW¼ SE¼	2101	IR	27.300	11	CARDER, PAUL
SE¼ SE¼	2300	IR	35.000	11	PERRY, JAMES

Section 25

SW¼ SE¼	200	IR	0.900	11	BALBINI, ARTHUR
SE¼ SE¼	100	IR	0.300	11	WRIGHT, E D
SE¼ SE¼	101	IR	17.800	11	BENNETT, JAMES E
SE¼ SE¼	200	IR	6.100	11	BALBINI, ARTHUR

Section 35

NE¼ NE¼	202	IR	0.700	11	DORNBUSCH, STEVEN P

NW¼ NE¼	1901	IR	1.130	11	CARDER, PAUL
NW¼ NE¼	2500	IR	0.900	11	CARDER, PAUL
NW¼ NE¼	300	IR	8.300	11	DORNBUSCH, STEVEN P
SE¼ NE¼	407	IR	1.000	11	RANDOLPH, PERCY J
NE¼ NW¼	1901	IR	1.720	11	CARDER, PAUL
NE¼ NW¼	1901	PND	0.350	11	CARDER, PAUL
NE¼ NW¼	4300	IR	1.000	11	GOLDBECK, MONTE
SW¼ SW¼	100	IR	7.400	11	WRIGHT, E D
SW¼ SW¼	1400	IR	15.300	11	ACKLEY, SHERMAN L ET AL

Section 36

Township 15 South, Range 12 East, W.M.

NE¼ NE¼	100	IR	4.000	11	HOCKETT, DOUGLAS R
NE¼ NE¼	200	IR	15.000	11	CHRISTOPHER, GERALD A
NW¼ NE¼	500	IR	1.000	11	DAVIS, SANDY
NW¼ NE¼	501	IR	8.000	11	JACOBSON, ROBERT
NW¼ NE¼	502	IR	20.000	11	ANGEL, MARK G
SW¼ NE¼	401	IR	13.800	11	PETERSON, RICK
SW¼ NE¼	402	IR	17.200	11	PETERSON, RICK
SE¼ NE¼	301	IR	27.000	11	TAULBEE, CARL
NE¼ NW¼	601	IR	10.000	11	WATTS, GEORGE
NE¼ NW¼	700	IR	19.000	11	HART, DAVID L
NE¼ NW¼	700	PND	0.600	11	HART, DAVID L
NW¼ NW¼	1000	IR	3.000	11	CRUMMY, CHARLES P
NW¼ NW¼	1100	IR	7.000	11	POFFENBARGER, E H
NW¼ NW¼	1200	IR	4.000	11	WAKEFIELD, JEFFREY D
NW¼ NW¼	700	IR	9.600	11	HART, DAVID L
NW¼ NW¼	800	IR	2.500	11	STROUP, JOHN H
NW¼ NW¼	801	IR	0.500	11	CROSS, CLETUS B
NW¼ NW¼	802	IR	1.000	11	CROSS, CLETUS B
NW¼ NW¼	900	IR	4.000	11	SCHAFFER, MICHAEL
SW¼ NW¼	1300	IR	16.000	11	GRANT, RUTH MAE
SW¼ NW¼	1301	IR	10.500	11	HUFF, BETTY A
SE¼ NW¼	600	IR	24.000	11	LYCHE, WILLIAM D &
NE¼ SW¼	1400	IR	34.500	11	KIRK, ALLEN A &
NE¼ SW¼	1400	PND	0.500	11	KIRK, ALLEN A &
NW¼ SW¼	1400	IR	14.000	11	KIRK, ALLEN A &
NW¼ SW¼	1401	IR	20.000	11	WAGENBLAST, DAVID MIKE
SW¼ SW¼	1500	IR	9.600	11	SCHMIT, JAMES R &
SW¼ SW¼	1501	IR	16.500	11	PACIFIC STATES CLEARING CO.
SW¼ SW¼	400	IR	1.000	11	BOZARTH, RON &
SE¼ SW¼	100	IR	4.500	11	AYRES, HOBART
SE¼ SW¼	200	IR	23.300	11	BARTHOLEMY CONSTRUCTION, INC.
SE¼ SW¼	300	IR	4.800	11	KIRK, ALLEN A &
NE¼ SE¼	300	IR	1.800	11	TAULBEE, CHARLES W
NE¼ SE¼	302	IR	1.200	11	GROSSNICKLE, VIRGINIA
NW¼ SE¼	400	IR	22.560	11	SHORT, SARAH L
NW¼ SE¼	403	IR	4.000	11	SHAFER, JOYCE
NW¼ SE¼	404	IR	4.000	11	HANLON, LORRAINE C
SW¼ SE¼	1701	IR	18.400	11	GULLICKSON, JAMES D
SW¼ SE¼	1702	IR	5.800	11	BURRIGHT, BENTON F

Section 3

NE¼ NE¼	100	IR	12.000	11	ROGERS, DON D ET AL
NE¼ NE¼	200	IR	0.650	11	NORTH SANTIAM VENEER, INC
NE¼ NE¼	200	IR	1.000	11	ROGERS, DON D ET AL
NE¼ NE¼	600	IR	5.000	11	WATSON, HAYDEN H
NE¼ NE¼	700	IR	3.000	11	FROST, JOHN
NW¼ NE¼	101	IR	1.000	11	LOYAL ORDER OF MOOSE REDMOND
NW¼ NE¼	200	IR	5.500	11	NORTH SANTIAM VENEER, INC

NW¼ NE¼	300	IR	16.850	11	NORTH SANTIAM VENEER, INC
SW¼ NE¼	300	IR	0.800	11	JACOBS, J WAYNE
SW¼ NE¼	400	IR	1.600	11	KIRBY, LEONARD
SW¼ NE¼	500	IR	1.700	11	PEDEN, MRS MAXINE
SE¼ NE¼	100	IR	0.500	11	GRANT, RUTH MAE
SE¼ NE¼	200	IR	14.600	11	WATSON, ROBERT H
SE¼ NE¼	400	IR	8.500	11	WATSON, ROBERT H
NE¼ NW¼	500	IR	35.500	11	HERSHEY CATTLE CO
NW¼ NW¼	500	IR	34.500	11	HERSHEY CATTLE CO
SW¼ NW¼	515	IR	18.800	11	RANK, JEFF W
SE¼ NW¼	100	IR	2.500	11	ZEHNER, JIMMIE
SE¼ NW¼	1000	IR	4.300	11	BURDETT, DAN P
SE¼ NW¼	1100	IR	8.500	11	BLEILE, ROBERT E
SE¼ NW¼	201	IR	2.700	11	BUETTNER, STEVE
SE¼ NW¼	300	IR	2.800	11	BROWN, DONALD E
SE¼ NW¼	400	IR	2.000	11	SCHNEIDER, BLAINE
SE¼ NW¼	900	IR	4.400	11	BURDETT, DAN P
NW¼ SW¼	700	IR	16.500	11	REDMOND, CITY OF
NW¼ SW¼	702	IR	1.000	11	ST. THOMAS CATHOLIC CHURCH
NW¼ SW¼	704	IR	1.400	11	ST. THOMAS CATHOLIC CHURCH
SW¼ SW¼	700	IR	8.200	11	REDMOND, CITY OF
SW¼ SW¼	704	IR	7.400	11	ST. THOMAS CATHOLIC CHURCH
SW¼ SW¼	800	IR	21.000	11	PHILLIPS, FRANK
SE¼ SW¼	2000	IR	4.400	11	SCOTT, NORMAN S
SE¼ SW¼	700	IR	15.500	11	REDMOND, CITY OF
NE¼ SE¼	100	IR	1.000	11	DOAN, HOWARD
NE¼ SE¼	1000	IR	0.500	11	PIONEER PUP FUELING
NE¼ SE¼	200	IR	1.000	11	KUPER, LEO
NE¼ SE¼	400	IR	0.700	11	SPRUELL, JEWEL
NE¼ SE¼	500	IR	1.300	11	SPRUELL, JEWEL
NE¼ SE¼	600	IR	3.520	11	CENTRAL ELECTRIC CO-OP
NE¼ SE¼	700	IR	3.290	11	CENTRAL ELECTRIC CO-OP
NW¼ SE¼	100	IR	4.500	11	CRAWFORD, JAMES
NW¼ SE¼	200	IR	3.700	11	STURZA, ED A
SW¼ SE¼	100	IR	8.000	11	NEWTON, BERTHA M
SW¼ SE¼	200	IR	9.000	11	LEHNERTZ, WALLY
SE¼ SE¼	200	IR	4.500	11	MILLER, BOZARTH AND BOZARTH
SE¼ SE¼	300	IR	6.500	11	BENZ, MICHAEL E
SE¼ SE¼	400	IR	9.000	11	BOZARTH, RON &
SE¼ SE¼	800	IR	0.650	11	IVANCOVICH HOME SALES
SE¼ SE¼	900	IR	0.600	11	IVANCOVICH HOME SALES

Section 4

NE¼ NE¼	105	IR	12.300	11	USHER, ROBERT E
NW¼ NE¼	100	IR	4.500	11	JOHNSON, L A
NW¼ NE¼	105	IR	29.200	11	USHER, ROBERT E
SW¼ NE¼	401	IR	28.800	11	DE MEYER, JOE
SE¼ NE¼	200	IR	19.000	11	VON WELLER, SYLVIA S
SE¼ NE¼	300	IR	7.000	11	PROCTOR, FREEMAN
SE¼ NE¼	302	IR	4.500	11	VOLZ, CHARLES G
NE¼ NW¼	500	IR	3.000	11	HENDERSON, DEBORAH SUE
NE¼ NW¼	600	IR	28.000	11	LERWILL, MARVIN D
NW¼ NW¼	700	IR	18.000	11	BABCOCK, NORMAN P
NW¼ NW¼	701	IR	11.300	11	HARVEY, NEAL
NW¼ NW¼	702	IR	4.700	11	KLINGLE, DONALD E
SW¼ NW¼	801	IR	5.700	11	WELLS, KEVIN D
SW¼ NW¼	802	IR	5.000	11	CARPENTER, THOMAS
SW¼ NW¼	803	IR	18.000	11	JONES, DENNIS
SW¼ NW¼	804	IR	2.350	11	DAVIS, KURT B
SE¼ NW¼	800	IR	15.700	11	ROBISON, GLENN

SE¼ NW¼	800	PND	0.400	11	ROBISON, GLENN
SE¼ NW¼	804	IR	18.400	11	DAVIS, KURT B
NE¼ SW¼	900	IR	25.200	11	MALOTT, RAY
NW¼ SW¼	900	IR	30.200	11	MALOTT, RAY
SW¼ SW¼	1000	IR	4.500	11	RUBLE, GORDON L
SW¼ SW¼	1001	IR	4.500	11	SKILES, JOHN C
SW¼ SW¼	1002	IR	4.900	11	PICKLES, JOHN
SW¼ SW¼	1003	IR	4.500	11	EDWARDS, MARK A
SW¼ SW¼	1004	IR	8.500	11	RANK, LEONARD
SW¼ SW¼	1005	IR	4.500	11	SKILES, JOHN C
SW¼ SW¼	1006	IR	4.600	11	PICKLES, JOHN
SE¼ SW¼	900	IR	27.100	11	MALOTT, RAY
NE¼ SE¼	300	IR	18.500	11	PROCTOR, FREEMAN
NE¼ SE¼	301	IR	19.000	11	JAQUA, DAVE
NW¼ SE¼	400	IR	4.600	11	DE MEYER, JOE
NW¼ SE¼	402	IR	4.690	11	WEBER, G C
NW¼ SE¼	403	IR	25.600	11	DE MEYER, JOE
SW¼ SE¼	1100	IR	18.000	11	HODSON, BRIAN W ET AL
SW¼ SE¼	1101	IR	3.600	11	GROVER, DEAN B
SW¼ SE¼	1102	IR	4.300	11	WEAVER, WILLIAM A
SW¼ SE¼	1103	IR	4.770	11	WEBER, G C
SW¼ SE¼	1104	IR	4.290	11	JENSON, DAN C
SE¼ SE¼	1100	IR	19.000	11	HODSON, BRIAN W ET AL
SE¼ SE¼	1200	IR	6.400	11	CLARK, DAVID E
SE¼ SE¼	1300	IR	4.150	11	HUNTER, EDWARD D
SE¼ SE¼	1300	PND	1.000	11	HUNTER, EDWARD D
SE¼ SE¼	1400	IR	3.100	11	HUNTER, EDWARD D
SE¼ SE¼	1401	IR	2.200	11	HUNTER, EDWARD D
SE¼ SE¼	1402	IR	2.550	11	HUNTER, EDWARD D

Section 5

NE¼ NE¼	100	IR	4.240	11	ERIKSON, JOHNNIE C
NE¼ NE¼	101	IR	7.000	11	LEDBETTER, THOMAS
NE¼ NE¼	3900	IR	3.930	11	MCBRIDE, BRIAN ET AL
NE¼ NE¼	4000	IR	4.240	11	BURNETT, DAVID C
NE¼ NE¼	4100	IR	2.250	11	HOLCOMBE, WILLIAM E
NE¼ NE¼	4200	IR	2.490	11	HAAGENSTAD, LOLA V
NE¼ NE¼	4300	IR	2.930	11	SEARLE, BILL G JR
NW¼ NE¼	200	IR	13.400	11	BREWER, JIM
NW¼ NE¼	4900	IR	6.100	11	BREWER, JIM
SE¼ NE¼	3100	IR	3.730	11	BROWN, JANET
SE¼ NE¼	3200	IR	4.600	11	ERICKSON, JERRY
SE¼ NE¼	3300	IR	4.490	11	MCKINLEY, CARL K
SE¼ NE¼	3400	IR	4.360	11	WINTERS, THOMAS
SE¼ NE¼	3500	IR	4.040	11	MOORE, DORIS M
SE¼ NE¼	3600	IR	4.020	11	DILLEY, PATRICK W
SE¼ NE¼	3700	IR	4.520	11	MOULTON, GLEN L
SE¼ NE¼	3800	IR	3.910	11	STUBBLEFIELD, R JOE
NE¼ NW¼	200	IR	1.000	11	MCEWEN, LONNY
SW¼ NW¼	400	IR	7.700	11	WHITAKER, ELBERT
SE¼ NW¼	500	IR	2.000	11	HALL, ALICE F
SE¼ NW¼	600	IR	2.000	11	HAMMACK, DOUGLAS V
SE¼ NW¼	700	IR	1.000	11	DAVIS, CLIFF L, ET AL
SE¼ NW¼	800	IR	2.000	11	SALINAS, MARLENE
SE¼ NW¼	900	IR	4.000	11	MAYO, PAMELA LOUISE
NE¼ SW¼	1000	IR	5.500	11	WHITAKER, R L
NE¼ SW¼	1100	IR	8.500	11	WHITAKER, ELBERT
NE¼ SW¼	1200	IR	2.000	11	KERSHNER, CHRISTOPHER I
NW¼ SW¼	400	IR	30.500	11	WHITAKER, ELBERT
SW¼ SW¼	1700	IR	18.000	11	BRATLEY, CHARLES M

SE¼ SW¼	1300	IR	2.000	11	VEENKER, GEORGE F
SE¼ SW¼	1400	IR	5.000	11	WHITE, MARSHALL S
SE¼ SW¼	1500	IR	7.000	11	KILIAN, KIRBY M
SE¼ SW¼	1600	IR	5.800	11	MARSHALL, JAMES E
SE¼ SW¼	1601	IR	6.000	11	TERRY, FRANK
NW¼ SE¼	7200	IR	15.000	11	STOTTS, HELEN C
SW¼ SE¼	7000	IR	5.400	11	WALKER, JOHN MICHAEL ET AL
SW¼ SE¼	7001	IR	7.000	11	RUTLEDGE, CHESTER F
SW¼ SE¼	7100	IR	2.400	11	RAMSEY, MICHAEL L
SW¼ SE¼	7101	IR	2.300	11	RAMSEY, MICHAEL L
SE¼ SE¼	6900	IR	8.000	11	LEEDS, DOUGLAS T
SE¼ SE¼	6901	IR	4.500	11	GARRETT, FRANK L
SE¼ SE¼	7300	IR	5.250	11	WETER, O B
SE¼ SE¼	7400	IR	4.750	11	NORMAN, BRETT ET. AL.

Section 6

NE¼ NE¼	3200	IR	10.500	11	MCGILLIVRAY, THOMAS G
NE¼ NE¼	3201	IR	2.300	11	SCHRADER, LAWRENCE G
NE¼ NE¼	3202	IR	1.000	11	JUSTICE, DONALD R
NE¼ NE¼	3300	IR	4.660	11	NORDMAN, SHEILA ANN
NW¼ NE¼	100	IR	7.700	11	HAVENS, GREGORY D
NW¼ NE¼	101	IR	4.300	11	CHANDLER, CHRISTEN M, ET AL
NW¼ NE¼	201	IR	5.000	11	SMITH, DANIEL K
NW¼ NE¼	203	IR	6.000	11	WOOLLEY, ROBERT H
SW¼ NE¼	200	IR	4.500	11	REED, PATRICIA R &
SW¼ NE¼	202	IR	20.500	11	FRISCHKNECHT, W DEAN
NE¼ NW¼	301	IR	8.500	11	BOTHUM, MARVIN
NE¼ NW¼	304	IR	1.500	11	WILLIAMS, JULIE A
NE¼ NW¼	400	IR	3.000	11	AYRES, S DALE
NE¼ NW¼	401	IR	2.000	11	MATHEWS, MARGARET & JOHN
SE¼ NW¼	500	IR	23.000	11	GRIFFITHS, JAMES
NE¼ SW¼	500	IR	26.200	11	GRIFFITHS, JAMES
NW¼ SW¼	500	IR	18.800	11	GRIFFITHS, JAMES
SW¼ SW¼	700	IR	2.450	11	HIGBEE, MAX W DMD --
SW¼ SW¼	701	IR	3.100	11	HIGBEE, MAX W
SW¼ SW¼	702	IR	7.700	11	HIGBEE, MAX W
SE¼ SW¼	800	IR	2.000	11	HALL, CAROLE G
SE¼ SW¼	801	IR	2.000	11	MURRELL, NOLAN JR
SE¼ SW¼	803	IR	4.000	11	BARNETT, ROBERT W
SE¼ SW¼	804	IR	7.000	11	DELANO, THOMAS A
SE¼ SW¼	805	IR	8.000	11	LARKIN, DEAN R
NE¼ SE¼	1100	IR	5.200	11	SCHULTZ, ARTHUR R
NE¼ SE¼	1101	IR	6.000	11	LEITHAUSER, FRANK P
NE¼ SE¼	1200	IR	7.000	11	BESEL, BEA
NE¼ SE¼	1202	IR	6.000	11	PLATT, PHILLIP E
NW¼ SE¼	1000	IR	4.000	11	HOLMES, CATHARINE A
SW¼ SE¼	900	IR	25.000	11	PICK, DUSTIN L
SE¼ SE¼	1301	IR	4.000	11	VELTMAN, KIM A
SE¼ SE¼	1303	IR	3.000	11	WOLF, GEORGIA L
SE¼ SE¼	1304	IR	1.000	11	MAYO, JAMES
SE¼ SE¼	1305	IR	5.470	11	STEED, SANDRA L
SE¼ SE¼	1306	IR	2.400	11	BROOKS, DONNA J

Section 7

NE¼ NE¼	100	IR	1.000	11	HAMEL, JERRY H
NE¼ NE¼	103	IR	2.000	11	SMITH, WILLIAM
NE¼ NE¼	104	IR	2.000	11	PRESTON, DEWEY A
NE¼ NE¼	200	IR	2.000	11	DIGUA, JAY B
NE¼ NE¼	300	IR	5.900	11	LASH, ALVIN
NE¼ NE¼	301	IR	0.500	11	ELLISON, CHARLES J

NE¼ NE¼	302	IR	4.000	11	CHRISTIANSEN, DANIEL J
NE¼ NE¼	303	IR	3.700	11	KELM, MILTON D
NE¼ NE¼	304	IR	2.600	11	KELM, MILTON D
NE¼ NE¼	400	IR	8.600	11	LASH, ALVIN
NW¼ NE¼	802	IR	18.500	11	WEAVER, WILLIAM A
NW¼ NE¼	804	IR	18.700	11	BETTESWORTH, JAY
NW¼ NE¼	804	PND	0.800	11	BETTESWORTH, JAY
SW¼ NE¼	800	IR	26.100	11	PENHOLLOW, CLYDE ET AL
SW¼ NE¼	801	IR	2.000	11	PENHOLLOW, C D
SW¼ NE¼	803	IR	9.900	11	PENHOLLOW, CLYDE ET AL
SE¼ NE¼	100	IR	9.000	11	PAVLICEK, JOHN J
SE¼ NE¼	600	IR	19.300	11	CENTRAL CASCADE LTD
NE¼ NW¼	1000	IR	1.500	11	MCCORMICK, MRS DENNEY
NE¼ NW¼	1001	IR	7.100	11	GEORGE, HAROLD
NE¼ NW¼	1002	IR	23.500	11	MCCORMACK, DONNA C
NE¼ NW¼	1100	IR	0.800	11	BARNES, FRANCES
NE¼ NW¼	1200	IR	1.100	11	GEORGE, HAROLD
NW¼ NW¼	1300	IR	6.000	11	DOWSE, RHEA E
NW¼ NW¼	1400	IR	20.000	11	RANK, LEONARD
SW¼ NW¼	1401	IR	4.700	11	KREHBIEL, THOMAS D
SW¼ NW¼	1402	IR	4.700	11	CAMPBELL, EDWARD W
SW¼ NW¼	1403	IR	19.500	11	KREHBIEL, SHIRLEY
SW¼ NW¼	1404	IR	8.100	11	KREHBIEL, SHIRLEY
SW¼ NW¼	1404	PND	0.300	11	KREHBIEL, SHIRLEY
SE¼ NW¼	1000	IR	8.000	11	MCCORMICK, MRS DENNEY
SE¼ NW¼	1001	IR	10.800	11	GEORGE, HAROLD
SE¼ NW¼	1002	IR	15.000	11	MCCORMACK, DONNA C
SE¼ NW¼	900	IR	2.000	11	WOODWARD, VAN E ET AL
NE¼ SW¼	1501	IR	7.000	11	HERITAGE CHAPEL, INC
NE¼ SW¼	1502	IR	0.600	11	HALL, FRED
NE¼ SW¼	1503	IR	0.200	11	THOMPSON, DONALD G
NE¼ SW¼	1504	IR	1.400	11	HANSEN, STANLEY
NE¼ SW¼	1505	IR	1.300	11	POSEY, ROBERT E
NE¼ SW¼	1507	IR	5.300	11	NIERMANN, AL
NE¼ SW¼	1510	IR	2.600	11	IRVIN, DONALD W
NE¼ SW¼	1514	IR	3.170	11	VAN WERT, ELDRIT E
NW¼ SW¼	1500	IR	14.000	11	COLLIER, LORETTA
NW¼ SW¼	1502	IR	2.930	11	HALL, FRED
NW¼ SW¼	1503	IR	3.300	11	THOMPSON, DONALD G
NW¼ SW¼	1505	IR	1.400	11	POSEY, ROBERT E
NW¼ SW¼	1506	IR	3.750	11	MALOTT, RAY
NW¼ SW¼	1508	IR	3.500	11	MALOTT, RAY
NW¼ SW¼	1512	IR	0.250	11	MALOTT, RAY
NW¼ SW¼	1513	IR	0.800	11	WATERS, THOMAS D
SW¼ SW¼	1600	IR	4.000	11	TOWELL, P DELBERT
SW¼ SW¼	1601	IR	4.000	11	HOCKETT, DEBORAH A
SW¼ SW¼	1800	IR	4.000	11	ELSTER, PETER A
SW¼ SW¼	1900	IR	3.500	11	CHURCHILL, MARY K
SW¼ SW¼	1901	IR	3.500	11	BMC PROPERTIES, INC.
SW¼ SW¼	2000	IR	3.000	11	MILLER, PAUL J
SW¼ SW¼	2001	IR	7.000	11	GULLO, SAM J
SE¼ SW¼	2100	IR	0.800	11	GOWEN, BOBB
SE¼ SW¼	2101	IR	4.600	11	DALESSI, MIKE J
SE¼ SW¼	2102	IR	9.500	11	KILLPACK, BARBARA L
SE¼ SW¼	2103	IR	9.500	11	FRANCIS, FRANK
SE¼ SW¼	2104	IR	2.500	11	BLANKEVOORT, HENRY
SE¼ SW¼	2105	IR	0.400	11	BJORVIK, RODNEY L
SE¼ SW¼	2106	IR	4.300	11	BJORVIK, RODNEY L
SE¼ SW¼	2107	IR	1.100	11	DALESSI, MIKE J
SE¼ SW¼	2108	IR	2.300	11	DALESSI, MIKE J

NE¼ SE¼	8800	IR	2.000	11	PRESBYTERIAN CHURCH
NE¼ SE¼	8900	IR	8.000	11	PRESBYTERIAN CHURCH
NW¼ SE¼	2300	IR	18.100	11	WAKEFIELD, VIRGINIA
NW¼ SE¼	2300	PND	0.900	11	WAKEFIELD, VIRGINIA
NW¼ SE¼	2301	IR	1.480	11	WAGNER, STEPHEN K
NW¼ SE¼	2302	IR	18.520	11	REDMOND ESTATES PARTNERS
SW¼ SE¼	2200	IR	4.500	11	HILL, DUEWAN K
SW¼ SE¼	2201	IR	27.000	11	REDMOND ESTATES PARTNERS
SW¼ SE¼	2202	IR	4.500	11	CASE, ELVA MAE, ET AL
SE¼ SE¼	2401	IR	6.300	11	PETERSON, DALE R
SE¼ SE¼	2404	IR	1.700	11	WILLIQUETTE, CARL B
SE¼ SE¼	2500	IR	7.500	11	REDMOND, CITY OF
SE¼ SE¼	2500	IR	16.500	11	REDMOND SCHOOL DISTRICT

Section 8

NE¼ NE¼	100	IR	1.700	11	CENTRAL OREGON DIST HOSP
NE¼ NE¼	101	IR	0.800	11	CENTRAL OREGON DIST HOSP
NE¼ NE¼	1900	IR	0.800	11	HORIZON HOMES INC,OF OREGON
NE¼ NE¼	300	IR	1.200	11	UNGER, DR R L
NE¼ NE¼	301	IR	0.820	11	UNGER, DR R L
NE¼ NE¼	400	IR	0.600	11	UNGER, DR R L
NE¼ NE¼	500	IR	0.670	11	TYSON, WILLIAM
NW¼ NE¼	600	IR	2.200	11	WHITTIER, R D
SW¼ NE¼	200	IR	1.800	11	STACK, DR ROGER
SW¼ NE¼	200	PND	0.150	11	STACK, DR ROGER
SW¼ NE¼	300	IR	1.000	11	BURTON, MICHAEL A
SW¼ NE¼	400	IR	0.250	11	BURTON, MICHAEL A
SE¼ NE¼	0	IND	9.300	11	DESCHUTES COUNTY
SE¼ NE¼	0	IND	25.000	11	CENTRAL OREGON IRRIGATION
SE¼ NE¼	1000	IR	1.000	11	ANDERSON, JAMES A
SE¼ NE¼	1802	IR	1.300	11	JUSSILA, JEANNE
SE¼ NE¼	701	IR	0.500	11	PURI, SATISH M
SE¼ NE¼	801	IR	1.000	11	ARNETT, JOHN ET AL
SE¼ NE¼	804	IR	1.150	11	BENDER, HELEN
SE¼ NE¼	900	IR	1.500	11	BENDER, HELEN
NW¼ NW¼	200	IR	7.100	11	HOLCOMB, RAYMOND A
NW¼ NW¼	203	IR	3.500	11	ALACANO, CRAIG
NW¼ NW¼	205	IR	2.000	11	BASSETT, RICHARD
NW¼ NW¼	206	IR	1.900	11	WESTENDORF, JAMES R
NW¼ NW¼	207	IR	1.740	11	NICKELL, RICK E
NW¼ NW¼	208	IR	1.810	11	THRASHER, GARY N
NW¼ NW¼	209	IR	2.000	11	SCOTT, RICHARD L
NW¼ NW¼	300	IR	1.000	11	PHILLIPS, FRANK
NW¼ NW¼	400	IR	8.000	11	CUMMINGS, DON
SW¼ NW¼	500	IR	23.650	11	TENNANT DEVELOPMENT
SW¼ NW¼	501	IR	0.800	11	WHEATON, KEN
SW¼ NW¼	505	IR	8.000	11	TENNANT DEVELOPMENT
SE¼ NW¼	500	IR	7.400	11	TENNANT DEVELOPMENT
SE¼ NW¼	502	IR	0.200	11	STACK, DR ROGER
SE¼ NW¼	503	IR	18.000	11	MCDONALD, IRA W ET AL
NE¼ SW¼	101	IR	15.000	11	MCDONALD, IRA W ET AL
NE¼ SW¼	200	IR	7.000	11	REDMOND, CITY OF
SW¼ SW¼	1300	IR	4.500	11	MALLERY LIVING TRUST
SW¼ SW¼	1400	IR	4.900	11	KITTELSON, CARL A
SW¼ SW¼	1400	PND	0.400	11	KITTELSON, CARL A
SW¼ SW¼	1500	IR	1.700	11	SMITH, FORREST H
SW¼ SW¼	1600	IR	1.800	11	WATKINS, RICHARD R
SW¼ SW¼	1700	IR	1.500	11	CASE, JIM
SW¼ SW¼	1800	IR	2.200	11	ASSEMBLY OF GOD CHURCH
SW¼ SW¼	200	IR	6.000	11	DUNN, DON R

SW¼ SW¼	400	IR	0.500	11	MULASKEY, DENNIS M
SW¼ SW¼	500	IR	0.800	11	MULASKEY, DENNIS M
SE¼ SW¼	1702	IR	2.000	11	REDMOND, CITY OF
SE¼ SW¼	1801	IR	2.900	11	EGGLESTON, HEATHER SCOTT
SE¼ SW¼	1900	IR	0.500	11	EGGLESTON, HEATHER SCOTT
SE¼ SW¼	2000	IR	0.500	11	BANTZ, JOHN
NE¼ SE¼	800	IR	2.400	11	SPROAT, ARTHUR

Section 9

NW¼ NE¼	200	IR	6.000	11	GNAGY, WALTER
SW¼ NE¼	1100	IR	2.000	11	BEDWELL, HARRY V ET AL
SW¼ NE¼	900	IR	1.000	11	SOUTHERN, DOUGLAS E ET AL
NE¼ NW¼	100	IR	12.700	11	PARTIN, JOHN-STURZA, ED &
NE¼ NW¼	101	IR	7.000	11	MAHONEY, JOHN A
NE¼ NW¼	102	IR	15.300	11	AQUA-TRONICS, INC
NW¼ NW¼	200	IR	3.700	11	POVEY, MRS TED
NW¼ NW¼	201	IR	14.300	11	POVEY, MRS TED
NW¼ NW¼	302	IR	0.800	11	BULTER, RICHARD L
SW¼ NW¼	300	IR	2.400	11	BULTER, RICHARD L
SW¼ NW¼	500	IR	8.800	11	DEAN, PAT C
SW¼ NW¼	600	IR	18.500	11	SCHLOSSER, PHILLIP D ET AL
SE¼ NW¼	700	IR	34.000	11	SCHLOSSER, PHILLIP D
NE¼ SW¼	100	IR	4.700	11	WIPRUD, WILLIAM L DEFINED-
NE¼ SW¼	101	IR	1.300	11	WIPRUD, WILLIAM L DEFINED-
NE¼ SW¼	200	IR	6.600	11	MADDOX, CLARK
NE¼ SW¼	201	IR	2.000	11	CROWN PACIFIC LEASING
NE¼ SW¼	202	IND	14.000	11	CROWN PACIFIC LEASING
NE¼ SW¼	300	IND	6.000	11	CROWN PACIFIC LEASING
NW¼ SW¼	100	IR	0.300	11	HULL, JAMES C
NW¼ SW¼	1000	IND	0.250	11	CROWN PACIFIC LEASING
NW¼ SW¼	200	IR	0.700	11	HULL, JAMES C
NW¼ SW¼	300	IR	1.700	11	S-4 PROPERTIES
NW¼ SW¼	301	IR	0.750	11	MCCLELLAN, GRANT
NW¼ SW¼	800	IR	2.800	11	HUDSON, ARTHUR
NW¼ SW¼	800	PND	0.200	11	HUDSON, ARTHUR
NW¼ SW¼	900	IR	14.660	11	MADDOX, CLARK
SE¼ SW¼	100	IND	4.000	11	CROWN PACIFIC LEASING
SE¼ SW¼	1000	IR	0.200	11	CROWN PACIFIC LEASING
SE¼ SW¼	1100	IR	1.800	11	CROWN PACIFIC LEASING
SE¼ SW¼	500	IR	0.100	11	COGBURN, DANNY H, ET AL
SE¼ SW¼	600	IR	0.200	11	COGBURN, DANNY H, ET AL
SE¼ SW¼	700	IR	0.100	11	COGBURN, DANNY H, ET AL
SE¼ SW¼	800	IR	0.250	11	COGBURN, DANNY H, ET AL
SE¼ SW¼	900	IR	0.100	11	COGBURN, DANNY H, ET AL

Section 10

SE¼ NW¼	600	IR	0.500	11	JUNIPER GOLF CLUB
NE¼ SW¼	300	IR	16.300	11	JUNIPER GOLF CLUB
NE¼ SW¼	300	PND	2.400	11	JUNIPER GOLF CLUB
NW¼ SW¼	300	IR	1.300	11	JUNIPER GOLF CLUB
SW¼ SW¼	300	IR	23.400	11	JUNIPER GOLF CLUB
SW¼ SW¼	300	PND	3.900	11	JUNIPER GOLF CLUB
SE¼ SW¼	300	IR	18.100	11	JUNIPER GOLF CLUB
NW¼ SE¼	300	IR	0.800	11	JUNIPER GOLF CLUB
SW¼ SE¼	300	IR	0.300	11	JUNIPER GOLF CLUB

Section 15

REDMOND	000	MUN	766.957	11	REDMOND, CITY OF
NW¼ NW¼	1100	IR	2.500	11	SCRIVNER, J KEITH
NW¼ NW¼	1200	IR	1.250	11	LANDIS, TED

NW¼ NW¼	1301	IR	0.260	11	DUNN, DON R
NW¼ NW¼	402	IR	1.000	11	SEITZ, PETER
SW¼ SW¼	1700	IR	1.000	11	POPISH, CHARLES
NE¼ SE¼	400	IR	2.500	11	REDMOND, CITY OF
NE¼ SE¼	400	PND	10.500	11	REDMOND, CITY OF
NW¼ SE¼	1601	IR	0.500	11	DESCHUTES CO FAIR BOARD
NW¼ SE¼	1900	IR	8.900	11	DESCHUTES CO FAIR BOARD
NW¼ SE¼	900	IR	8.300	11	DESCHUTES CO FAIR BOARD
SW¼ SE¼	300	IR	8.300	11	DESCHUTES CO FAIR BOARD
SE¼ SE¼	100	IR	2.200	11	JUNIPER GOLF CLUB

Section 16

NE¼ NE¼	100	IR	1.500	11	REDMOND SCHOOL DISTRICT
NE¼ NE¼	101	IR	27.000	11	REDMOND SCHOOL DISTRICT
NW¼ NE¼	100	IR	0.300	11	ALLEN, SUSAN E
NW¼ NE¼	200	IR	4.700	11	CHURCH OF THE NAZARENE
NW¼ NE¼	300	IR	2.500	11	FREEMAN, PHILIP H
NW¼ NE¼	400	IR	1.500	11	CORK, NORMAN
NW¼ NE¼	500	IR	1.700	11	CORK, NORMAN
SE¼ NE¼	1502	IR	17.500	11	REDMOND SCHOOL DISTRICT
SE¼ NE¼	1600	IR	1.300	11	TOEVS, DR SAMUEL
NE¼ NW¼	1000	IR	0.540	11	DAWSON, JAMES B
NE¼ NW¼	1001	IR	0.400	11	STRATTON, CLARENCE H
NE¼ NW¼	101	IR	2.500	11	BARNUM, TOMMY J
NE¼ NW¼	1100	IR	0.650	11	MULL, ROBERT
NE¼ NW¼	200	IR	1.000	11	EVES, DONALD
NE¼ NW¼	300	IR	2.000	11	DAHL, MRS VICKI
NE¼ NW¼	400	IR	3.000	11	HAMBY, ARCHIE
NE¼ NW¼	500	IR	2.000	11	PAYTON, ALBERT
NE¼ NW¼	700	IR	1.000	11	MISNER, BRIAN L
NE¼ NW¼	800	IR	16.000	11	IVANCOVICH, IVAN JR
NW¼ NW¼	1300	IR	18.000	11	HAWKINS, EARL
NW¼ NW¼	1302	IR	6.700	11	KRALY, KEVIN A
NW¼ NW¼	1304	IR	2.000	11	SCORZA, RICHARD A
NW¼ NW¼	1306	IR	1.000	11	MENG, MRS EVELYN
NW¼ NW¼	1307	IR	4.000	11	JOHNNIE, ROBERT
NW¼ NW¼	1308	IR	0.300	11	MILLER, STANLEY GILBERT
SW¼ NW¼	3400	IR	4.740	11	WHITAKER, ELBERT
SW¼ NW¼	3500	IR	2.000	11	MARTIN, A W
SE¼ NW¼	3300	IR	5.200	11	WHITAKER, ELBERT
NE¼ SW¼	2900	IR	10.600	11	JONAS, WAYNE
NE¼ SW¼	2903	IR	2.330	11	JONES, THOMAS J
NE¼ SW¼	2904	IR	1.670	11	MILLS, E.R. 'MAX'
NE¼ SW¼	2910	IR	15.700	11	MILLS, E.R. 'MAX'
NW¼ SW¼	2900	IR	4.400	11	JONAS, WAYNE
NW¼ SW¼	2910	IR	35.000	11	MILLS, E.R. 'MAX'
SW¼ SW¼	2900	IR	33.600	11	JONAS, WAYNE
SE¼ SW¼	2900	IR	5.100	11	JONAS, WAYNE
SE¼ SW¼	2907	IR	26.400	11	CENTRAL CASCADE CORP.
NE¼ SE¼	1500	IR	24.000	11	NOLAN, FRANKLIN
NW¼ SE¼	2905	IR	8.700	11	CLARK, DENNIS
NW¼ SE¼	2906	IR	3.800	11	CLARK, DENNIS
SW¼ SE¼	2901	IR	11.000	11	ARLIS TRUST
SW¼ SE¼	2905	IR	6.600	11	CLARK, DENNIS
SW¼ SE¼	2906	IR	6.930	11	CLARK, DENNIS
SW¼ SE¼	3000	IR	1.600	11	ARLIS TRUST
SW¼ SE¼	3001	IR	2.400	11	ARLIS TRUST
SE¼ SE¼	3100	IR	34.610	11	FIELDS, THOMAS REVOC.TRUST
SE¼ SE¼	3100	PND	0.800	11	FIELDS, THOMAS REVOC.TRUST

Section 17

NE¼ NE¼	101	IR	3.000	11	KNORR, DALE
NE¼ NE¼	102	IR	1.000	11	BLAIR, RONALD J
NE¼ NE¼	104	IR	0.820	11	BLAIR, DEAN
NW¼ NE¼	201	IR	7.000	11	RICHARDSON, PATRICIA MAE
NW¼ NE¼	300	IR	6.000	11	WEILAGE, JOYCE A
NW¼ NE¼	400	IR	4.030	11	HALE, DELBERT
NW¼ NE¼	401	IR	1.970	11	WEILAGE, JOYCE A
NW¼ NE¼	500	IR	2.000	11	BRITT, RODNEY D
NW¼ NE¼	600	IR	5.500	11	KRISTENSEN, PAUL A
NW¼ NE¼	601	IR	2.000	11	ERB, STEPHEN R
SW¼ NE¼	1800	IR	34.350	11	RUSSELL, JOSEPH L
NE¼ NW¼	1001	IR	3.800	11	POESKE, JAMES
NE¼ NW¼	1002	IR	6.500	11	MORRISON, PHILLIP
NE¼ NW¼	1003	IR	5.000	11	MORRISON, JAY P
NE¼ NW¼	700	IR	4.000	11	JOHNSON, DONALD R
NE¼ NW¼	800	IR	5.700	11	GRAVES, STEVEN M
NE¼ NW¼	900	IR	1.500	11	MARSHALL, URAL
NW¼ NW¼	1100	IR	17.000	11	BORCHARD, WILLIAM E
SW¼ NW¼	1200	IR	2.000	11	HARTLEY, JACK W
SW¼ NW¼	1201	IR	1.800	11	O'BERRY, BARBARA J
SW¼ NW¼	1202	IR	1.820	11	ROSS, KEITH R
SW¼ NW¼	2400	IR	0.300	11	CLARK, ROBERT
SE¼ NW¼	1300	IR	6.200	11	TROUTMAN, A D
SE¼ NW¼	1400	IR	0.800	11	GOULD, RICHARD &
SE¼ NW¼	1500	IR	3.100	11	FLINT, RUSSELL
SE¼ NW¼	1600	IR	7.400	11	FLINT, RUSSELL
SE¼ NW¼	1700	IR	6.500	11	TROUTMAN INVESTMENT CO
SE¼ NW¼	1701	IR	0.300	11	TROUTMAN INVESTMENT CO
SE¼ NW¼	2400	IR	0.900	11	CLARK, ROBERT
NE¼ SW¼	100	IR	2.440	11	MOORE, TERRY L
NE¼ SW¼	101	IR	1.500	11	JARMS, ALDEN H
NE¼ SW¼	102	IR	3.500	11	GOAD, DARRELL G
NE¼ SW¼	200	IR	8.900	11	BUDKE, PATRICK J
NE¼ SW¼	200	PND	0.100	11	BUDKE, PATRICK J
NE¼ SW¼	2400	IR	1.300	11	CLARK, ROBERT
NE¼ SW¼	301	IR	5.000	11	COLLINS, JOHN
NE¼ SW¼	400	IR	3.800	11	SPAULDING, WILLIAM
NE¼ SW¼	500	IR	1.200	11	SPAULDING, WILLIAM
NE¼ SW¼	600	IR	1.000	11	LUNSFORD, ROBERT
NW¼ SW¼	2400	IR	19.900	11	CLARK, ROBERT
SW¼ SW¼	2500	IR	11.000	11	BAPTISTA, MANUEL P
SW¼ SW¼	2501	IR	16.000	11	EVERY, CHARLES R
SW¼ SW¼	2600	IR	1.000	11	CARPENTER, MICHAEL L
SE¼ SW¼	2301	IR	7.100	11	JININGS, RONALD W
SE¼ SW¼	2303	IR	2.900	11	MORGAN, VERNON
SE¼ SW¼	2309	IR	2.100	11	MORGAN, VERNON
SE¼ SW¼	2700	IR	5.000	11	PARK, LINDA A
SE¼ SW¼	2701	IR	2.900	11	JININGS, RONALD W
SE¼ SW¼	2703	IR	2.000	11	MCKAY, LOUISE
SE¼ SW¼	2706	IR	3.000	11	WILSON, LAWRENCE C ET AL
SE¼ SW¼	2707	IR	2.000	11	LANGLAND, DAVID G
NE¼ SE¼	1900	IR	8.000	11	JONAS, WAYNE
NE¼ SE¼	1901	IR	4.500	11	FIRST CHRISTIAN CHURCH
NE¼ SE¼	2000	IR	10.000	11	ALEXANDER, BIDWELL
NW¼ SE¼	2100	IR	6.280	11	HALL, TOM
NW¼ SE¼	2101	IR	12.380	11	PERRY, MICHAEL R
NW¼ SE¼	2102	IR	8.070	11	RENZ, MICHAEL M
SW¼ SE¼	2800	IR	6.000	11	CARNAHAN, J MICHAEL
SW¼ SE¼	2801	IR	3.000	11	DIEFENDERFER, JAMES A

SW¼ SE¼	2802	IR	3.740	11	HENDRICKS, LORRAINE
SW¼ SE¼	2803	IR	1.700	11	BOWMAN, HARLEY
SW¼ SE¼	2804	IR	3.000	11	DIEFENDERFER, JAMES A
SW¼ SE¼	2805	IR	4.000	11	CROTWELL, CLINTON
SW¼ SE¼	2806	IR	4.000	11	HOLCOMB, JOHN F
SW¼ SE¼	2807	IR	8.000	11	DIEFENDERFER, JAMES A
SW¼ SE¼	2809	IR	0.260	11	HENDRICKS, LORRAINE
SE¼ SE¼	1900	IR	13.500	11	JONAS, WAYNE
SE¼ SE¼	2900	IR	16.000	11	LINE, ALLYN

Section 18

NE¼ NE¼	703	IR	15.670	11	TRENHOLM, ROBERTA ET AL
NE¼ NE¼	705	IR	12.830	11	GALE, BILLIE W
NE¼ NE¼	706	IR	3.800	11	WILSON, MARTIN L
NW¼ NE¼	100	IR	31.000	11	WELCH, MRS T R
SW¼ NE¼	600	IR	2.600	11	PALMER, RICHARD R
SW¼ NE¼	704	IR	12.000	11	KNOX, GARY W
SE¼ NE¼	702	IR	16.000	11	KINYON, GEORGE
SE¼ NE¼	800	IR	10.800	11	GREEN, AUBRY O ET AL
SE¼ NE¼	800	PND	0.200	11	GREEN, AUBRY O ET AL
NE¼ NW¼	200	IR	3.000	11	SAGE, LYNN
NE¼ NW¼	300	IR	3.500	11	LATTA, CLYDE
NE¼ NW¼	503	IR	25.500	11	SAGE, LYNN
NW¼ NW¼	400	IR	20.000	11	MARTIN, WALTER
SW¼ NW¼	500	IR	3.500	11	HULL, GARY
SW¼ NW¼	504	IR	32.200	11	DORTON, LLYOD A
SE¼ NW¼	1002	IR	0.600	11	RUTLEDGE, WESLEY
SE¼ NW¼	500	IR	7.500	11	HULL, GARY
SE¼ NW¼	501	IR	1.000	11	SIMPSON, RICHARD S
SE¼ NW¼	504	IR	3.300	11	DORTON, LLYOD A
SE¼ NW¼	600	IR	1.400	11	PALMER, RICHARD R
SE¼ NW¼	701	IR	4.000	11	JARVIS, LYLE
NE¼ SW¼	1000	IR	1.000	11	TURNAGE, JAY C
NE¼ SW¼	1001	IR	1.600	11	ROSEBROOK, MELVIN R
NE¼ SW¼	1002	IR	0.400	11	RUTLEDGE, WESLEY
NE¼ SW¼	1003	IR	2.000	11	RASMUSSEN, ROBERT T
NE¼ SW¼	1004	IR	1.000	11	FLEWELLING, TIMOTHY W
NE¼ SW¼	1006	IR	0.200	11	VARCOE, RONALD E
NW¼ SW¼	1100	IR	0.800	11	WM. & NORMA GRAVES TRUST
NW¼ SW¼	1101	IR	6.600	11	NELSON, RONALD O
NW¼ SW¼	1102	IR	3.600	11	WM. & NORMA GRAVES TRUST
NW¼ SW¼	1102	IR	4.400	11	WM. & NORMA GRAVES TRUST
NW¼ SW¼	1102	PND	1.200	11	CENTRAL OREGON IRRIGATION
NW¼ SW¼	1201	IR	4.000	11	NEEL, JUDY D
SW¼ SW¼	1100	IR	3.600	11	WM. & NORMA GRAVES TRUST
SW¼ SW¼	1200	IR	15.000	11	HAMMOND, VIOLET

Section 19

NE¼ NE¼	1400	IR	1.500	11	JOHNSON, MARTIN
NE¼ NE¼	2100	IR	3.750	11	ALLEN, JAMES
NE¼ NE¼	2202	IR	0.400	11	STAFFORD, KATHERINE P
SW¼ NE¼	1300	IR	0.350	11	DOUGHERTY, MICHAEL L
SW¼ NE¼	1500	IR	0.400	11	MANLEY, JAMES P
SW¼ NE¼	1600	IR	0.800	11	BANNON, RHONDA D
SW¼ NE¼	1700	IR	0.650	11	BENDER, F ROBERT
SW¼ NE¼	1800	IR	0.700	11	LARKIN, THIMOTHY D
SW¼ NE¼	1900	IR	0.650	11	GRIMES, WAYNE
SW¼ NE¼	2000	IR	0.500	11	DOTSON, GARY L
SW¼ NE¼	2100	IR	0.700	11	MCDONALD, GREGORY S
SW¼ NE¼	2200	IR	0.700	11	BOWMAN, AARON T ET AL

SW¼ NE¼	2700	IR	0.800	11	HINTON, JAMES
SW¼ NE¼	2800	IR	0.800	11	BYRAM, ROBERT
SW¼ NE¼	2900	IR	0.800	11	GALLOWWAY, JAMES W
SW¼ NE¼	3000	IR	0.350	11	GLOVER, JAMES
SW¼ NE¼	3400	IR	0.800	11	SCHULT, DALE
SW¼ NE¼	3500	IR	0.800	11	EARP, GROVER
SW¼ NE¼	3700	IR	0.380	11	RINGGENBERG, HAROLD G
SW¼ NE¼	4200	IR	0.300	11	DOOLEY, WESLEY J
SE¼ NE¼	3500	IR	1.000	11	ROTH, JOHN CARLTON
SE¼ NE¼	4100	IR	4.650	11	POOL, ODIE
SE¼ NE¼	5100	IR	0.360	11	HATHAWAY, RONALD E
SE¼ NE¼	5500	IR	1.500	11	YOUNG, VERN
SE¼ NE¼	5600	IR	2.000	11	NEUSCHWANDER, DAVID M
NW¼ NW¼	201	IR	8.500	11	WATSON, ROBERT H & VIRGINIA
NW¼ NW¼	204	IR	0.200	11	WATSON, ROBERT H & VIRGINIA
SW¼ NW¼	4000	IR	5.000	11	HAYDEN ENTERPRISES, INC
SE¼ NW¼	3100	IR	1.000	11	REDMOND, CITY OF
NE¼ SW¼	101	IR	1.250	11	ETTER, RANDALL LEE
NE¼ SW¼	102	IR	2.100	11	EASLON, CHARLES W
NE¼ SW¼	4800	IR	0.880	11	KRIBS, RICHARD
NE¼ SW¼	4900	IR	0.500	11	TRETHEWAY, DAVID M
NE¼ SW¼	5000	IR	0.500	11	PILLING, JONATHAN P
NE¼ SW¼	5100	IR	1.000	11	TASSIE, ARTHUR
NE¼ SW¼	5300	IR	0.500	11	STURZA, EVAN
NE¼ SW¼	5400	IR	0.500	11	DIETZ, DEWEY
NE¼ SW¼	6000	IR	0.900	11	SAYLER, GREGORY C
NE¼ SW¼	6400	IR	2.000	11	STEARNS, GERRY M
NE¼ SW¼	6500	IR	1.900	11	PRIAN, JOHN L
NW¼ SW¼	1002	IR	2.000	11	LOVING, MARGARET E
SW¼ SW¼	1800	IR	2.000	11	DRAHN, CURTIS
SW¼ SW¼	1900	IR	1.000	11	WHISENHUNT, SARAH J
NE¼ SE¼	1200	IR	1.000	11	RANK, JEFF W
NE¼ SE¼	1300	IR	1.000	11	HALLADEY, PAMELA L
NE¼ SE¼	1400	IR	2.280	11	MONG, JOHN R
NE¼ SE¼	1500	IR	0.400	11	DEPATIE, DAVID H
NE¼ SE¼	1501	IR	2.330	11	DEPATIE, DAVID H
NE¼ SE¼	1700	IR	0.600	11	ELROD, WILLIAM E
NE¼ SE¼	3300	IR	1.550	11	LANTZ, VALE
NE¼ SE¼	3500	IR	0.450	11	TOMSETH, PETER E
NE¼ SE¼	3501	IR	0.250	11	TOMSETH, PETER E
NE¼ SE¼	3801	IR	0.150	11	LITCHY, LANCE & SADEWIC, C.
NW¼ SE¼	2400	IR	0.800	11	KUPER, ANTHONY
NW¼ SE¼	3300	IR	0.500	11	SHORT, SARAH L
NW¼ SE¼	4200	IR	0.400	11	HOFFMAN, JOHN A
NW¼ SE¼	4300	IR	0.500	11	RIVARD, HAROLD
NW¼ SE¼	4400	IR	0.250	11	NELSON, JOHN R
NW¼ SE¼	4500	IR	0.250	11	MCCARTHY, JOHN D
NW¼ SE¼	4900	IR	0.180	11	COOLEY, MICHAEL A
NW¼ SE¼	5200	IR	0.500	11	GIBSON, CLOYD
NW¼ SE¼	5300	IR	0.300	11	STILLWELL, BRET H
NW¼ SE¼	5800	IR	0.150	11	LESKO, MARK
NW¼ SE¼	6000	IR	0.150	11	LESKO, MARK
NW¼ SE¼	6100	IR	1.500	11	JACKSON, DANIEL W
NW¼ SE¼	6200	IR	0.400	11	EVAN, MATTHEW D
NW¼ SE¼	6400	IR	0.500	11	PRESCOTT, MIKE D.
SW¼ SE¼	6000	IR	3.500	11	CLARK, DARWIN
SW¼ SE¼	8300	IR	0.300	11	STEINHOFF, ANDREW L
SE¼ SE¼	1100	IR	0.750	11	HYLTON, ROSS
SE¼ SE¼	300	IR	0.630	11	MYERS, KENNETH D
SE¼ SE¼	500	IR	0.500	11	TURNER, MICHAEL A

SE¼ SE¼	600	IR	0.720	11	MADDEN, PATRICK
SE¼ SE¼	602	IR	0.110	11	MADDEN, PATRICK
SE¼ SE¼	700	IR	1.300	11	JOHNSON, GLADDEN B

Section 20

SW¼ NW¼	200	IR	0.250	11	LARUSSO, THOMAS J
SW¼ NW¼	2001	IR	0.600	11	STEELE, FRED
SW¼ NW¼	2800	IR	0.350	11	LARUSSO, THOMAS J
SW¼ NW¼	2900	IR	0.250	11	LARUSSO, THOMAS J
SW¼ NW¼	300	IR	0.250	11	LARUSSO, THOMAS J
SW¼ NW¼	3100	IR	1.000	11	SMITH, CLEO
SW¼ NW¼	3200	IR	0.500	11	MANSFIELD, GEORGE
SE¼ NW¼	2000	IR	0.150	11	STEELE, FRED
SE¼ NW¼	2001	IR	0.900	11	STEELE, FRED
NW¼ SW¼	1200	IR	0.700	11	MILLIGAN, ROBERT C
SW¼ SW¼	2300	IR	0.500	11	MCPHERSONFAMILY, W H, INC

Section 21

NW¼ NW¼	1500	IR	6.400	11	JUNIPER GOLF CLUB

Section 22

NE¼ NE¼	3400	IR	0.370	11	MCLAREN, NANALINE
NW¼ NE¼	1100	IR	0.550	11	BRILL, DARRELL J
NW¼ NE¼	1400	IR	0.700	11	JONES, JESSE LEE
NW¼ NE¼	1500	IR	0.750	11	FREE METHODIST CHURCH
SW¼ NE¼	300	IR	1.000	11	THE GREENS AT REDMOND
SW¼ NE¼	310	IR	0.200	11	KNOX, WALTER
SW¼ NE¼	320	IR	2.000	11	THE GREENS AT REDMOND
SW¼ NE¼	320	PND	1.300	11	THE GREENS AT REDMOND
SW¼ NE¼	321	IR	2.200	11	THE GREENS AT REDMOND
SW¼ NE¼	321	PND	3.000	11	THE GREENS AT REDMOND
NE¼ NW¼	100	IR	0.750	11	CALIF. ORE. BROADCASTING
NE¼ NW¼	101	IR	4.400	11	BROOKHART, RONALD C
NE¼ NW¼	102	IR	3.800	11	BROOKHART, RONALD C
NE¼ NW¼	105	IR	12.000	11	FUNKNER, VIRGINIA
NE¼ NW¼	200	IR	9.100	11	REDMOND, CITY OF
NW¼ NW¼	200	IR	3.100	11	REDMOND, CITY OF
SE¼ NW¼	200	IR	0.900	11	REDMOND, CITY OF
SE¼ NW¼	320	IR	0.300	11	THE GREENS AT REDMOND
SE¼ NW¼	321	IR	0.400	11	THE GREENS AT REDMOND
SE¼ NW¼	500	IR	3.100	11	THE GREENS AT REDMOND
NE¼ SW¼	321	IR	0.200	11	THE GREENS AT REDMOND
NE¼ SW¼	500	IR	15.800	11	THE GREENS AT REDMOND
NE¼ SW¼	500	PND	3.000	11	THE GREENS AT REDMOND
NW¼ SW¼	1419	IR	0.400	11	KIMMEL, DAVID L
NW¼ SW¼	500	IR	1.800	11	THE GREENS AT REDMOND
NW¼ SW¼	500	PND	1.400	11	THE GREENS AT REDMOND
NW¼ SW¼	703	IR	1.500	11	BEACH, CLIFFORD H
NW¼ SW¼	704	IR	5.500	11	KIMMEL, DAVID L
NW¼ SE¼	400	IR	6.000	11	HODECKER, JOHN F, ET AL

Section 29

NW¼ NW¼	900	IR	10.000	11	GARDNER, GRETCHEN E
NW¼ NW¼	902	IR	3.000	11	LOY, LANCE A
NW¼ NW¼	904	IR	5.600	11	ATKINSON, JUDY TOTTEN
NW¼ NW¼	905	IR	6.800	11	STIREWALT, JAMES M II
SW¼ NW¼	1000	IR	8.000	11	STOKES, DANIEL E
SW¼ NW¼	1001	IR	9.000	11	GOLDSMITH, ROBERT
SW¼ NW¼	1002	IR	9.000	11	WILLIAMS, BILL
SW¼ NW¼	1003	IR	9.000	11	RASMUSSEN, ARLON J

NE¼ SW¼	1401	IR	12.000	11	DAVIS, CRAIG
NE¼ SW¼	1408	IR	2.000	11	TOUCHON, THOMAS
NE¼ SW¼	1411	IR	10.600	11	CUNNINGHAME, BRIAN
NE¼ SW¼	1414	IR	0.400	11	POST, DOUGLAS W
NW¼ SW¼	1100	IR	25.000	11	HANNA, BARBARA J
SW¼ SW¼	1300	IR	28.000	11	HALL, CLAYTON C
SE¼ SW¼	1500	IR	35.000	11	NORTON, THOMAS E
NE¼ SE¼	1402	IR	4.500	11	BRANNON, KATHERINE N
NE¼ SE¼	1405	IR	2.200	11	BIDWELL, BEN
NE¼ SE¼	1418	IR	1.000	11	EBERHARD, RICHARD F
NE¼ SE¼	1419	IR	3.400	11	KIMMEL, DAVID L
NE¼ SE¼	704	IR	0.700	11	KIMMEL, DAVID L
NW¼ SE¼	1405	IR	0.300	11	BIDWELL, BEN
NW¼ SE¼	1412	IR	11.000	11	CURTIS, WILLIAM &
NW¼ SE¼	1413	IR	9.500	11	KRANCE, ROBERT C ET AL
SW¼ SE¼	1500	IR	28.000	11	NORTON, THOMAS E
SW¼ SE¼	1501	IR	6.250	11	BAUER, BRENDA K
SE¼ SE¼	1600	IR	1.750	11	ANDERSON, PHILLIP C
SE¼ SE¼	1700	IR	28.000	11	ROSEBROOK, CLARENCE

Section 30

NE¼ NE¼	1100	IR	22.100	11	ERICKSON, KEITH L
NE¼ NE¼	1100	PND	0.150	11	ERICKSON, KEITH L
NE¼ NE¼	1100	PND	0.300	11	ERICKSON, KEITH L
NW¼ NE¼	1000	IR	2.800	11	CRAYCROFT, DAVID
NW¼ NE¼	1100	IR	13.250	11	ERICKSON, KEITH L
NW¼ NE¼	1200	IR	6.740	11	BRILL, DARRELL J
NW¼ NE¼	1201	IR	5.900	11	RUCKER, RONNIE A
NW¼ NE¼	1202	IR	6.660	11	WINSLOW, MARK A
SW¼ NE¼	704	IR	38.000	11	ANDRES, JEROL E ET AL
SE¼ NE¼	704	IR	16.000	11	ANDRES, JEROL E ET AL
NE¼ NW¼	100	IR	11.000	11	MCMAHON, ROBERT W
NE¼ NW¼	101	IR	2.000	11	EDWARDS, CHARLES T
NE¼ NW¼	102	IR	8.000	11	SMYTHE, DAVID
NE¼ NW¼	103	IR	4.800	11	JENKINS, VIOLA
NE¼ NW¼	103	PND	0.200	11	JENKINS, VIOLA
NE¼ NW¼	104	IR	6.200	11	CRAYCROFT, DAVID
NW¼ NW¼	200	IR	18.100	11	HALL, FREDRIC
NW¼ NW¼	202	IR	6.500	11	HALL, FREDRIC
NW¼ NW¼	203	IR	3.300	11	HALL, FREDRIC
NW¼ NW¼	204	IR	2.100	11	HALL, FREDRIC
SW¼ NW¼	205	IR	21.000	11	HALL, FREDRIC
SE¼ NW¼	700	IR	16.000	11	ANDRES, JEROL E
SE¼ NW¼	702	IR	6.300	11	DIX, M L
SE¼ NW¼	703	IR	8.500	11	MARJAMA, MARVIN
NE¼ SW¼	306	IR	18.800	11	ANDRES, JEROL E
NE¼ SW¼	600	IR	11.400	11	ANDRES, JEROL E
NE¼ SW¼	601	IR	2.600	11	ANDRES, JEROL E
NW¼ SW¼	300	IR	1.300	11	LINDSEY, SAMUEL
NW¼ SW¼	305	IR	4.000	11	MILLS, GRANT E
NW¼ SW¼	306	IR	6.600	11	ANDRES, JEROL E
SW¼ SW¼	300	IR	3.300	11	LINDSEY, SAMUEL
SW¼ SW¼	302	IR	3.000	11	DUNLAP, BONNIE
SW¼ SW¼	304	IR	1.000	11	DUNLAP, RONNIE
SE¼ SW¼	400	IR	17.500	11	HOWARD, WILLIAM R
SE¼ SW¼	401	IR	3.000	11	HOWARD, WILLIAM R
SE¼ SW¼	402	IR	10.500	11	HOWARD, WILLIAM R
NE¼ SE¼	705	IR	6.000	11	SMITH, DAVID W
NW¼ SE¼	705	IR	39.000	11	SMITH, DAVID W
SW¼ SE¼	500	IR	35.000	11	HART, M H TRUSTEE

SE¼ SE¼	500	IR	3.300	11	HART, M H TRUSTEE
SE¼ SE¼	900	IR	3.000	11	SHANNON, ROBERT L

Section 31

NW¼ NW¼	300	IR	5.000	11	HOFFINGER, SUSAN & JEROME G

Section 32

Township 15 South, Range 13 East, W.M.

NW¼ NE¼	200	IR	28.500	1	HOUSTON LAKE CO
SW¼ NE¼	200	IR	19.200	1	HOUSTON LAKE CO
NE¼ NW¼	200	IR	14.700	1	HOUSTON LAKE CO
NW¼ NW¼	300	IR	22.200	1	RACHOR, ELIZABETH ET AL
SW¼ NW¼	300	IR	34.600	1	RACHOR, ELIZABETH ET AL
SE¼ NW¼	200	IR	16.600	1	HOUSTON LAKE CO
NE¼ SW¼	600	IR	14.400	1	TSCHANTRE, DUKE
SW¼ SW¼	500	IR	8.000	1	BOWEN, TOM
SW¼ SW¼	501	IR	7.500	1	HOGUE, ROY R-FLEMING, PATRICIA
SW¼ SW¼	501	PND	0.500	1	HOGUE, ROY R-FLEMING, PATRICIA
SW¼ SW¼	502	IR	15.500	1	WISE, YVONNE M
SE¼ SW¼	600	IR	26.000	1	TSCHANTRE, DUKE
NE¼ SE¼	801	IR	18.000	1	PIERSON, ROBERT
NW¼ SE¼	700	IR	8.000	1	RIZZARDINI, MARCUS B
NW¼ SE¼	701	IR	26.100	1	TSCHANTRE, DUKE
SW¼ SE¼	701	IR	16.800	1	TSCHANTRE, DUKE
SW¼ SE¼	702	IR	15.700	1	TSCHANTRE, DUKE
SE¼ SE¼	800	IR	3.000	1	TSCHANTRE, DUKE

Section 1

NE¼ NE¼	100	IR	15.000	1	RACHOR, ELIZABETH ET AL
NW¼ NE¼	200	IR	26.000	1	CAIN, MILT & SON
SW¼ NE¼	200	IR	40.000	1	CAIN, MILT & SON
SE¼ NE¼	101	IR	1.000	1	RACHOR, ELIZABETH ET AL
SE¼ NE¼	101	PND	1.700	1	RACHOR, ELIZABETH ET AL
NE¼ NW¼	300	IR	33.000	1	CAIN, MILT & SON
NW¼ NW¼	300	IR	38.570	1	CAIN, MILT & SON
SW¼ NW¼	200	IR	40.000	1	CAIN, MILT & SON
SE¼ NW¼	200	IR	25.200	1	CAIN, MILT & SON
SE¼ NW¼	300	IR	0.800	1	CAIN, MILT & SON
NE¼ SW¼	200	IR	6.000	1	CAIN, MILT & SON
NW¼ SW¼	200	IR	39.000	1	CAIN, MILT & SON
SW¼ SW¼	200	IR	26.430	1	CAIN, MILT & SON
SE¼ SW¼	200	IR	20.000	1	CAIN, MILT & SON
NE¼ SE¼	400	IR	30.000	1	WERTH, GRACE
NW¼ SE¼	400	IR	32.600	1	WERTH, GRACE
SW¼ SE¼	401	IR	31.800	1	WERTH, GRACE
SE¼ SE¼	402	IR	28.600	1	WERTH, GRACE

Section 2

NE¼ SE¼	2500	IR	21.300	1	FLOYD, LARRY J
NE¼ SE¼	2500	PND	1.300	1	FLOYD, LARRY J
SW¼ SE¼	2501	IR	9.800	1	FLOYD, LARRY J
SE¼ SE¼	2500	IR	2.300	1	FLOYD, LARRY J
SE¼ SE¼	2501	IR	31.400	1	FLOYD, LARRY J

Section 10

NE¼ NE¼	100	IR	4.000	1	WAMPLER & WERTH
NE¼ NE¼	101	IR	2.600	1	KIMBALL, JOHN R
NE¼ NE¼	112	IR	1.800	1	HEIN, MARLEN G
NE¼ NE¼	113	IR	1.600	1	KOLLEN, ALLEN D
NW¼ NE¼	100	IR	2.500	1	WAMPLER & WERTH

NE¼ NW¼	201	IR	18.700	1	KENNEDY, BOBBY SR
SW¼ NW¼	200	IR	13.300	1	PETERSON, DONALD L
SE¼ NW¼	200	IR	0.700	1	PETERSON, DONALD L
SE¼ NW¼	201	IR	7.300	1	KENNEDY, BOBBY SR
SE¼ SW¼	107	IR	5.300	1	WAMPLER & WERTH
SE¼ SE¼	110	IR	0.500	1	WAMPLER & WERTH
SE¼ SE¼	600	IR	2.700	1	WILLIAMS, CHARLES
SE¼ SE¼	600	PND	0.300	1	WILLIAMS, CHARLES

Section 11

NE¼ NE¼	100	IR	8.000	1	LEONARD, LEO L
NW¼ NE¼	100	IR	28.200	1	LEONARD, LEO L
SW¼ NE¼	400	IR	7.000	1	GAGE, JOHN
SW¼ NE¼	401	IR	17.500	1	LEONARD, LEO L
SE¼ NE¼	401	IR	29.000	1	LEONARD, LEO L
NE¼ NW¼	201	IR	33.500	1	MCCALL, ROBERT C
NW¼ NW¼	200	IR	35.000	1	SMITH, RONALD
SW¼ NW¼	300	IR	1.600	1	ONDER, GEORGE D
SE¼ NW¼	300	IR	20.400	1	ONDER, GEORGE D
SE¼ NW¼	301	IR	2.000	1	COATS, D DALE
NE¼ SW¼	302	IR	24.000	1	FRENCH, JAMES R
SW¼ SW¼	700	IR	38.000	1	KIDD, MARY H
SE¼ SW¼	700	IR	24.000	1	KIDD, MARY H
NE¼ SE¼	501	IR	11.000	1	SWINDLE, JAMES C
NW¼ SE¼	500	IR	23.600	1	GIBSON, AL
SE¼ SE¼	900	IR	19.000	1	DAVIS, RICHARD K

Section 12

NE¼ NE¼	100	IR	25.700	1	EVANS RANCH
NW¼ NE¼	201	IR	33.900	1	SPROAT, MELINDA J &
SW¼ NE¼	202	IR	34.300	1	JAPPERT, ROBERT
SE¼ NE¼	100	IR	30.300	1	EVANS RANCH
NE¼ NW¼	200	IR	31.900	1	DODSON, ANDY J
NW¼ NW¼	300	IR	36.700	1	BRIDGES, MICHAEL
SW¼ NW¼	300	IR	36.300	1	BRIDGES, MICHAEL
SE¼ NW¼	200	IR	32.000	1	DODSON, ANDY J
NE¼ SW¼	400	IR	35.000	1	HILDERBRAND, DENNIS L
NW¼ SW¼	401	IR	34.500	1	CURRY, DAREN E
SW¼ SW¼	600	IR	39.000	1	LIVRAN, HENRY
SE¼ SW¼	206	IR	37.000	1	WRIGHT, EDWIN
NE¼ SE¼	204	IR	31.600	1	CONNER, PATRICK L, M.D.
NW¼ SE¼	203	IR	34.400	1	BUSH, ALEX M
SW¼ SE¼	205	IR	29.700	1	RONALD T. SALTMARSH TRUST
SW¼ SE¼	207	IR	6.800	1	RONALD T. SALTMARSH TRUST
SE¼ SE¼	205	IR	38.000	1	RONALD T. SALTMARSH TRUST

Section 13

SE¼ NE¼	102	IR	3.700	1	WAMPLER & WERTH
NE¼ NW¼	201	IR	38.400	1	ROHRER, DANIEL F
NE¼ NW¼	201	PND	1.000	1	ROHRER, DANIEL F
NW¼ NW¼	200	IR	4.000	1	ZAPF, ROBERT M
NW¼ NW¼	200	PND	1.000	1	ZAPF, ROBERT M
NW¼ NW¼	201	IR	32.600	1	ROHRER, DANIEL F
SW¼ NW¼	301	IR	37.800	1	HORNER, JAMES G
SW¼ NW¼	301	PND	0.200	1	HORNER, JAMES G
SE¼ NW¼	305	IR	39.000	1	HORNER, JAMES G
NE¼ SW¼	405	IR	20.800	1	MEYERS, DAVID B
NW¼ SW¼	300	IR	0.500	1	MEDEIROS, LOUIS J JR
NW¼ SW¼	302	IR	29.000	1	DEAN, MIKE
SW¼ SW¼	400	IR	25.000	1	PETTYJOHN, DEAN

SW¼ SW¼	404	IR	5.500	1	WIEDEN, GLORIA
SW¼ SW¼	500	IR	1.500	1	WIEDEN, GLORIA
SE¼ SW¼	401	IR	30.000	1	SIMMONS, JERALD N
NE¼ SE¼	102	IR	34.600	1	WAMPLER & WERTH
NW¼ SE¼	102	IR	23.100	1	WAMPLER & WERTH
SW¼ SE¼	600	IR	4.000	1	ROGERS, MICHAEL
SW¼ SE¼	601	IR	30.000	1	FITZGERALD, THOMAS J
SE¼ SE¼	700	IR	32.500	1	LIVRAN, HENRY
SE¼ SE¼	701	IR	2.500	1	WELLS, BILLY J
				Section 14	
NE¼ NE¼	100	IR	34.000	1	FLOYD, LARRY J
NE¼ NE¼	100	PND	0.500	1	FLOYD, LARRY J
NW¼ NE¼	100	IR	30.100	1	FLOYD, LARRY J
SW¼ NE¼	300	IR	37.000	1	RADER, JAMES H
SE¼ NE¼	101	IR	26.800	1	FLOYD, LARRY J
SE¼ NE¼	101	PND	0.600	1	FLOYD, LARRY J
NE¼ NW¼	100	IR	1.900	1	FLOYD, LARRY J
SW¼ NW¼	200	IR	18.100	1	HASKELL, ALBERT W
SE¼ NW¼	301	IR	38.000	1	BOURLAND, BEN C
NE¼ SW¼	302	IR	35.100	1	SCHWERT, MORGAN F
NE¼ SW¼	302	PND	0.900	1	SCHWERT, MORGAN F
NW¼ SW¼	200	IR	27.900	1	HASKELL, ALBERT W
SE¼ SW¼	700	IR	24.700	1	MCDONALD, CLIFTON
NE¼ SE¼	500	IR	16.000	1	PRIDAY, RAYMOND
NW¼ SE¼	400	IR	25.600	1	BAXTER, DONALD J JR
SW¼ SE¼	701	IR	30.000	1	HEATH, DR WILLIAM D
SE¼ SE¼	600	IR	21.000	1	CRABTREE, ERVIN
				Section 15	
NE¼ NE¼	100	IR	25.300	1	MCDONALD, CLIFTON
SE¼ NE¼	200	IR	4.000	1	HARRISON PROPERTIES, INC
SE¼ NE¼	201	IR	13.750	1	HARRISON PROPERTIES, INC
NE¼ SE¼	300	IR	20.000	1	ROBINS, MRS DON
SW¼ SE¼	400	IR	1.600	1	ROSETTI, DANIEL C
SE¼ SE¼	400	IR	6.500	1	ROSETTI, DANIEL C
SE¼ SE¼	401	IR	26.000	1	COSTA, RICHARD M
				Section 21	
NE¼ NE¼	100	IR	12.000	1	ATKINS, HUGH E
NE¼ NE¼	101	IR	11.000	1	NORMAN D MALEY &
NW¼ NE¼	200	IR	6.000	1	AMIS, BILL
NW¼ NE¼	201	IR	3.000	1	OWINGS, TERRY M
NW¼ NE¼	202	IR	9.000	1	MANSFIELD, HAROLD
NW¼ NE¼	204	IR	6.000	1	TOFELL, BRUCE
SW¼ NE¼	700	IR	38.400	1	WEIGAND RANCHES INC
SW¼ NE¼	700	PND	0.600	1	WEIGAND RANCHES INC
SE¼ NE¼	800	IR	38.300	1	ALEXANDER, THOMAS
NE¼ NW¼	300	IR	30.000	1	MCDONALD, CLIFTON
NW¼ NW¼	400	IR	32.000	1	MCDONALD, CLIFTON
SW¼ NW¼	500	IR	4.000	1	HARRISON PROPERTIES, INC
SW¼ NW¼	501	IR	33.000	1	HARRISON PROPERTIES, INC
SE¼ NW¼	600	IR	37.500	1	FOLLOSE, MICHAEL W
SE¼ NW¼	600	PND	0.100	1	FOLLOSE, MICHAEL W
NE¼ SW¼	1102	IR	38.700	1	SMITH LOGGING
NW¼ SW¼	1200	IR	34.400	1	FOLLOSE, WALTER
SW¼ SW¼	1100	IR	34.800	1	RICH, PAUL
SE¼ SW¼	1100	IR	27.200	1	RICH, PAUL
SE¼ SW¼	1102	IR	7.300	1	SMITH LOGGING
NE¼ SE¼	900	IR	32.000	1	LEWIS, DARRYL C
NE¼ SE¼	902	IR	2.000	1	WELCH, JOHN

NW¼ SE¼	1000	IR	36.000	1	STUMP, STEVEN P
SW¼ SE¼	1101	IR	37.000	1	BROWN, WILBUR L
SE¼ SE¼	1101	IR	38.000	1	BROWN, WILBUR L

Section 22

NE¼ NE¼	101	IR	21.700	1	BARTELS, RICHARD L
NW¼ NE¼	101	IR	35.000	1	BARTELS, RICHARD L
SW¼ NE¼	100	IR	25.300	1	MCCRIGHT, MILO B
SE¼ NE¼	1001	IR	37.700	1	BARTELS, RICHARD L
NE¼ NW¼	200	IR	9.400	1	WELCH, HARRY
NE¼ NW¼	204	IR	14.000	1	SAULSBURY, JAY M
NE¼ NW¼	207	IR	7.800	1	JOSTEN, CLARENCE
NW¼ NW¼	300	IR	39.700	1	ALEXANDER, THOMAS
SW¼ NW¼	300	IR	35.500	1	ALEXANDER, THOMAS
SE¼ NW¼	203	IR	8.500	1	EBY, KATHLEEN L
SE¼ NW¼	205	IR	8.500	1	ROGERS, LEONARD B
SE¼ NW¼	207	IR	16.540	1	JOSTEN, CLARENCE
NE¼ SW¼	206	IR	38.800	1	MORRISON, KENNETH L
NE¼ SW¼	206	PND	0.200	1	MORRISON, KENNETH L
NW¼ SW¼	202	IR	39.800	1	ALEXANDER, THOMAS
SW¼ SW¼	201	IR	11.800	1	MEADOWS, JOHN W
SW¼ SW¼	202	IR	26.700	1	ALEXANDER, THOMAS
SE¼ SW¼	201	IR	37.200	1	MEADOWS, JOHN W
SE¼ SW¼	401	IR	0.200	1	BASSETT, GLENN E
SE¼ SW¼	402	IR	0.200	1	BASSETT, GLENN E
SE¼ SW¼	500	IR	0.100	1	BASSETT, GLENN E
NE¼ SE¼	1001	IR	24.500	1	BARTELS, RICHARD L
NE¼ SE¼	1002	IR	12.800	1	BARTELS, RICHARD L
NW¼ SE¼	901	IR	36.000	1	WALKING S RANCH
SW¼ SE¼	600	IR	0.400	1	TAYLOR, EDYTH
SW¼ SE¼	800	IR	0.820	1	CENTRAL OREGON IRRIGATION
SW¼ SE¼	900	IR	0.180	1	CENTRAL OREGON IRRIGATION
SW¼ SE¼	901	IR	34.500	1	WALKING S RANCH
SE¼ SE¼	1000	IR	1.500	1	WEIGAND RANCHES INC
SE¼ SE¼	1001	IR	10.000	1	BARTELS, RICHARD L
SE¼ SE¼	1002	IR	25.500	1	BARTELS, RICHARD L

Section 23

NE¼ NE¼	100	IR	29.700	1	RONALD T. SALTMARSH TRUST
NW¼ NE¼	100	IR	29.700	1	RONALD T. SALTMARSH TRUST
SW¼ NE¼	101	IR	38.900	1	SALTMARSH, RONALD T
SE¼ NE¼	800	IR	38.500	1	SALTMARSH, RONALD T
NE¼ NW¼	300	IR	36.000	1	FOX, DALE E
NW¼ NW¼	300	IR	34.400	1	FOX, DALE E
SW¼ NW¼	300	IR	31.600	1	FOX, DALE E
SE¼ NW¼	300	IR	30.700	1	FOX, DALE E
SE¼ NW¼	400	IR	0.300	1	FOX, DALE E
NE¼ SW¼	300	IR	36.000	1	FOX, DALE E
NE¼ SW¼	701	IR	2.000	1	CHRISTMAN, RICHARD W
NW¼ SW¼	300	IR	40.000	1	FOX, DALE E
SW¼ SW¼	500	IR	1.800	1	MAC DONALD, LAWRENCE J
SW¼ SW¼	501	IR	32.700	1	WAIBEL, JOSEPH W
SW¼ SW¼	600	IR	1.500	1	ROTHENBUCHER, ALAN
SE¼ SW¼	700	IR	33.000	1	CHRISTMAN, RICHARD W
NE¼ SE¼	800	IR	33.400	1	SALTMARSH, RONALD T
NW¼ SE¼	800	IR	35.100	1	SALTMARSH, RONALD T
SW¼ SE¼	800	IR	37.000	1	SALTMARSH, RONALD T
SE¼ SE¼	800	IR	33.400	1	SALTMARSH, RONALD T

Section 24

NE¼ NE¼	100	IR	38.000	1	LANDRUS, DALE
NW¼ NE¼	100	IR	30.200	1	LANDRUS, DALE
SW¼ NE¼	100	IR	38.480	1	LANDRUS, DALE
SE¼ NE¼	100	IR	32.000	1	LANDRUS, DALE
NE¼ NW¼	201	IR	27.800	1	DENTON, DENNIS E
NW¼ NW¼	201	IR	38.200	1	DENTON, DENNIS E
SW¼ NW¼	200	IR	19.600	1	DE POLO, THEODORE C
SW¼ NW¼	202	IR	8.100	1	DE POLO, THEODORE C
SE¼ NW¼	200	IR	34.800	1	DE POLO, THEODORE C
NE¼ SW¼	300	IR	32.510	1	HARRISON PROPERTIES, INC
NW¼ SW¼	300	IR	17.000	1	HARRISON PROPERTIES, INC
SW¼ SW¼	300	IR	14.600	1	HARRISON PROPERTIES, INC
SW¼ SW¼	301	IR	20.200	1	HEPPERLE, DON
SE¼ SW¼	300	IR	1.140	1	HARRISON PROPERTIES, INC
SE¼ SW¼	301	IR	30.800	1	HEPPERLE, DON
NE¼ SE¼	100	IR	34.220	1	LANDRUS, DALE
NW¼ SE¼	100	IR	27.700	1	LANDRUS, DALE
SW¼ SE¼	100	IR	16.600	1	LANDRUS, DALE

Section 25

NE¼ NE¼	100	IR	34.100	1	GRINDSTAFF, DAVID C
NW¼ NE¼	200	IR	3.000	1	BURSON, PATRICIA
NW¼ NE¼	201	IR	18.000	1	STAFFORD, JAMES-ESTATE
NW¼ NE¼	202	IR	1.000	1	FLOHR, RUSSEL A
NW¼ NE¼	300	IR	11.000	1	CROOK COUNTY SCHOOL DIST
SW¼ NE¼	201	IR	39.000	1	STAFFORD, JAMES-ESTATE
SE¼ NE¼	100	IR	38.900	1	GRINDSTAFF, DAVID C
NE¼ NW¼	400	IR	27.100	1	BROWN, WILBUR L &
NE¼ NW¼	401	IR	10.500	1	POWELL BUTTE COMM CHURCH
NW¼ NW¼	404	IR	31.650	1	BROWN, WILBUR L &
NW¼ NW¼	404	PND	0.200	1	BROWN, WILBUR L &
NW¼ NW¼	406	IR	4.350	1	BROWN, MICHAEL A
SW¼ NW¼	404	IR	20.200	1	BROWN, WILBUR L &
SW¼ NW¼	405	IR	19.200	1	BROWN, WILBUR L &
SE¼ NW¼	400	IR	39.700	1	BROWN, WILBUR L &
SE¼ NW¼	400	PND	0.300	1	BROWN, WILBUR L &
NE¼ SW¼	400	IR	40.000	1	BROWN, WILBUR L &
NW¼ SW¼	400	IR	30.600	1	BROWN, WILBUR L &
NW¼ SW¼	405	IR	9.200	1	BROWN, WILBUR L &
SW¼ SW¼	700	IR	39.000	1	RAU, WESLEY
SE¼ SW¼	800	IR	38.650	1	DUNN, J MICHAEL
NE¼ SE¼	800	IR	39.000	1	DUNN, J MICHAEL
NW¼ SE¼	800	IR	40.000	1	DUNN, J MICHAEL
SW¼ SE¼	800	IR	38.350	1	DUNN, J MICHAEL
SE¼ SE¼	800	IR	28.000	1	DUNN, J MICHAEL
SE¼ SE¼	801	IR	1.000	1	COPLEY, DON

Section 26

NE¼ NE¼	101	IR	36.900	1	WISBY, DENNIS E
NW¼ NE¼	200	IR	6.300	1	BURKE, THOMAS
NW¼ NE¼	201	IR	5.000	1	KUCZEK, MARK D
NW¼ NE¼	202	IR	8.800	1	BURKE, THOMAS
NW¼ NE¼	203	IR	12.000	1	VAN DOMELEN, RONALD W
SW¼ NE¼	800	IR	27.100	1	UNITED STATES OF AMERICA
SW¼ NE¼	801	IR	9.000	1	BURKE, THOMAS
SE¼ NE¼	101	IR	38.500	1	WISBY, DENNIS E
SE¼ NE¼	101	PND	0.500	1	WISBY, DENNIS E
NE¼ NW¼	300	IR	36.100	1	BURKE, THOMAS
NW¼ NW¼	400	IR	36.000	1	AVILA, DON ET AL
SW¼ NW¼	500	IR	39.000	1	NIXON, ROBERT L

SE¼ NW¼	300	IR	37.800	1	BURKE, THOMAS
NE¼ SW¼	700	IR	38.800	1	PANCAKE, GLENDA L
NW¼ SW¼	600	IR	37.000	1	RICHTER, ROBERT D
NW¼ SW¼	601	IR	1.000	1	CHRISTOFFERSON, STEVE
SW¼ SW¼	600	IR	36.000	1	RICHTER, ROBERT D
SE¼ SW¼	1000	IR	38.800	1	MCFARLANE, JIM
NE¼ SE¼	102	IR	39.000	1	WISBY, DENNIS E
NW¼ SE¼	800	IR	38.900	1	UNITED STATES OF AMERICA
SW¼ SE¼	900	IR	38.400	1	WISBY, DENNIS E
SE¼ SE¼	100	IR	38.000	1	WISBY, DENNIS E

Section 27

NE¼ NE¼	100	IR	32.600	1	ROSETTI, DANIEL C
NE¼ NE¼	100	PND	1.300	1	ROSETTI, DANIEL C
NW¼ NE¼	100	IR	2.300	1	ROSETTI, DANIEL C
NW¼ NE¼	100	PND	0.700	1	ROSETTI, DANIEL C
SW¼ NE¼	201	IR	16.400	1	NIXON, ROBERT L
SE¼ NE¼	201	IR	37.900	1	NIXON, ROBERT L
NE¼ SE¼	201	IR	39.000	1	NIXON, ROBERT L
NW¼ SE¼	201	IR	14.700	1	NIXON, ROBERT L
SW¼ SE¼	201	IR	15.100	1	NIXON, ROBERT L
SW¼ SE¼	400	IR	6.000	1	HALL, RON E
SE¼ SE¼	201	IR	38.900	1	NIXON, ROBERT L

Section 28

NE¼ NE¼	100	IR	37.800	1	HORSELL, ARTHUR
NW¼ NE¼	200	IR	36.000	1	LOVELAND, ROSS
SW¼ NE¼	200	IR	34.000	1	LOVELAND, ROSS
SE¼ NE¼	100	IR	38.000	1	HORSELL, ARTHUR
SE¼ NE¼	100	PND	0.200	1	HORSELL, ARTHUR
SE¼ NW¼	400	IR	20.500	1	WEIGAND RANCHES INC
NE¼ SW¼	400	IR	28.000	1	WEIGAND RANCHES INC
NE¼ SW¼	400	PND	1.000	1	WEIGAND RANCHES INC
SE¼ SW¼	500	IR	33.600	1	CONDRON, DAVID A
NE¼ SE¼	400	IR	34.000	1	WEIGAND RANCHES INC
NE¼ SE¼	401	IR	5.000	1	WEIGAND RANCHES INC
NW¼ SE¼	400	IR	40.000	1	WEIGAND RANCHES INC
SW¼ SE¼	500	IR	39.700	1	CONDRON, DAVID A
SE¼ SE¼	400	IR	36.500	1	WEIGAND RANCHES INC

Section 33

NE¼ NE¼	100	IR	37.000	1	HARGRAVE, DONALD
NW¼ NE¼	100	IR	39.500	1	HARGRAVE, DONALD
SW¼ NE¼	500	IR	38.500	1	FOX, DALE
SE¼ NE¼	100	IR	35.800	1	HARGRAVE, DONALD
SE¼ NE¼	100	PND	0.700	1	HARGRAVE, DONALD
NE¼ NW¼	200	IR	38.200	1	MCFARLANE, JIM
NW¼ NW¼	300	IR	36.600	1	HORSELL, ARTHUR
NW¼ NW¼	300	PND	0.400	1	HORSELL, ARTHUR
SW¼ NW¼	400	IR	35.000	1	BOWEN, DARRELL G
SE¼ NW¼	500	IR	38.900	1	FOX, DALE
NE¼ SW¼	600	IR	38.000	1	DIRKS, BARBARA I
NE¼ SW¼	600	PND	0.300	1	DIRKS, BARBARA I
NW¼ SW¼	400	IR	38.500	1	BOWEN, DARRELL G
SW¼ SW¼	700	IR	34.590	1	BUSSETT, JAMES
SE¼ SW¼	700	IR	14.200	1	BUSSETT, JAMES
SE¼ SW¼	701	IR	22.850	1	BUSSETT, JAMES
NE¼ SE¼	602	IR	38.060	1	HARRISON PROPERTIES, INC
NW¼ SE¼	600	IR	14.700	1	DIRKS, BARBARA I
SE¼ SE¼	601	IR	30.400	1	HARRISON PROPERTIES, INC

Section 34

NW¼ NE¼	100	IR	6.000	1	O'NEIL, TIM
NE¼ NW¼	200	IR	18.320	1	FLOCK, HAZEL
NW¼ NW¼	300	IR	15.700	1	EASLON, KENNETH
NW¼ NW¼	301	IR	19.000	1	SURPLUS, ROBERT
SW¼ NW¼	300	IR	3.300	1	EASLON, KENNETH
SE¼ NW¼	200	IR	4.000	1	FLOCK, HAZEL

Section 35

Township 15 South, Range 14 East, W.M.

NE¼ NW¼	1301	IR	5.900	1	MCNABB, E L
NW¼ NW¼	1301	IR	32.100	1	MCNABB, E L
SW¼ NW¼	1301	IR	22.900	1	MCNABB, E L
SE¼ NW¼	1301	IR	21.300	1	MCNABB, E L

Section 4

NE¼ NE¼	1301	IR	27.700	1	MCNABB, E L
NW¼ NE¼	1301	IR	5.900	1	MCNABB, E L
SW¼ NE¼	1301	IR	6.500	1	MCNABB, E L
SE¼ NE¼	1301	IR	15.300	1	MCNABB, E L
NW¼ NW¼	101	IR	4.000	1	MORGAN, CHARLES
SW¼ NW¼	101	IR	18.000	1	MORGAN, CHARLES
NE¼ SW¼	300	IR	15.200	1	MCCALL, ROBERT C
NW¼ SW¼	102	IR	6.500	1	RUSSELL, ROBERT R
NW¼ SW¼	102	PND	0.500	1	RUSSELL, ROBERT R
NW¼ SW¼	200	IR	17.600	1	GOODMAN, GARY M
SW¼ SW¼	200	IR	3.400	1	GOODMAN, GARY M
SE¼ SW¼	300	IR	10.000	1	MCCALL, ROBERT C

Section 5

NE¼ NE¼	100	IR	21.200	1	MORGAN, CHARLES
NW¼ NE¼	200	IR	34.100	1	PETERSON, DAVID L
SW¼ NE¼	100	IR	19.700	1	MORGAN, CHARLES
NE¼ NW¼	300	IR	36.800	1	MORGAN, CHARLES
SW¼ NW¼	400	IR	25.600	1	MORGAN, CHARLES
SE¼ NW¼	400	IR	33.800	1	MORGAN, CHARLES
NE¼ SW¼	401	IR	39.600	1	MORGAN, CHARLES
NW¼ SW¼	401	IR	32.700	1	MORGAN, CHARLES
SW¼ SW¼	600	IR	29.400	1	LEONARD, LEO L
SE¼ SW¼	600	IR	34.200	1	LEONARD, LEO L
NE¼ SE¼	500	IR	9.000	1	WENRICH, HOWARD B
NE¼ SE¼	501	IR	0.600	1	ANDERSON, BRUCE
NE¼ SE¼	502	IR	8.800	1	CURRY, ROSS
NE¼ SE¼	504	IR	7.700	1	ANDERSON, BRUCE
NE¼ SE¼	505	IR	9.700	1	SHIVERS, RICHARD
NW¼ SE¼	503	IR	37.500	1	BAILEY, CHARLES M
SW¼ SE¼	600	IR	18.900	1	LEONARD, LEO L
SE¼ SE¼	700	IR	33.000	1	BURRELL, H CURTISS

Section 6

NW¼ NE¼	200	IR	17.700	1	LEONARD, LEO L
SW¼ NE¼	200	IR	29.000	1	LEONARD, LEO L
NE¼ NW¼	300	IR	26.000	1	LEONARD, LEO L
NW¼ NW¼	300	IR	9.500	1	LEONARD, LEO L
SW¼ NW¼	300	IR	30.000	1	LEONARD, LEO L
SE¼ NW¼	300	IR	32.600	1	LEONARD, LEO L
SW¼ SW¼	400	IR	6.700	1	MORGAN, CHARLES
NE¼ SE¼	401	IR	9.800	1	O'LEARY, JOHN K
SE¼ SE¼	401	IR	22.700	1	O'LEARY, JOHN K

Section 7

NW¼ NW¼	100	IR	14.000	1	CRAWFORD, JAMES
SW¼ NW¼	101	IR	9.600	1	CRAWFORD, JAMES
NW¼ SW¼	102	IR	18.300	1	CRAWFORD, JAMES
SW¼ SW¼	103	IR	19.100	1	CRAWFORD, JAMES

Section 8

SW¼ NW¼	100	IR	5.700	1	HODDER, RICHARD G
NE¼ SW¼	100	IR	1.700	1	HODDER, RICHARD G
NW¼ SW¼	100	IR	29.950	1	HODDER, RICHARD G
SW¼ SW¼	100	IR	35.900	1	HODDER, RICHARD G
SE¼ SW¼	100	IR	25.800	1	HODDER, RICHARD G
NE¼ SE¼	200	IR	11.600	1	HODDER, RICHARD G
NW¼ SE¼	200	IR	13.000	1	HODDER, RICHARD G
SW¼ SE¼	200	IR	15.700	1	HODDER, RICHARD G
SE¼ SE¼	200	IR	24.600	1	HODDER, RICHARD G

Section 17

NE¼ NE¼	100	IR	27.700	1	SHERRELL, JIMY M
NW¼ NE¼	100	IR	35.500	1	SHERRELL, JIMY M
SW¼ NE¼	200	IR	24.450	1	ALLEN, CLARENCE
SE¼ NE¼	200	IR	19.800	1	ALLEN, CLARENCE
NE¼ NW¼	304	IR	17.400	1	WAIBEL, JOE
NW¼ NW¼	301	IR	21.000	1	BRECK, LEONARD H
SW¼ NW¼	301	IR	12.000	1	BRECK, LEONARD H
SE¼ NW¼	300	IR	2.000	1	MICHEL, R W
SE¼ NW¼	304	IR	18.300	1	WAIBEL, JOE
NE¼ SW¼	302	IR	35.000	1	SIMON, SUSAN M
NW¼ SW¼	400	IR	22.400	1	BEERS, MICHAEL E
SW¼ SW¼	400	IR	32.700	1	BEERS, MICHAEL E
SE¼ SW¼	302	IR	39.900	1	SIMON, SUSAN M
SE¼ SW¼	302	PND	0.100	1	SIMON, SUSAN M
NE¼ SE¼	500	IR	34.600	1	HANNA ENTERPRISES TRUST
NE¼ SE¼	500	PND	0.500	1	HANNA ENTERPRISES TRUST
NW¼ SE¼	500	IR	36.200	1	HANNA ENTERPRISES TRUST
SW¼ SE¼	500	IR	39.700	1	HANNA ENTERPRISES TRUST
SE¼ SE¼	600	IR	37.500	1	ROBINSON, DOROTHY M

Section 18

NE¼ NE¼	100	IR	33.600	1	SPILLMAN, BUD PAUL
NW¼ NE¼	100	IR	31.700	1	SPILLMAN, BUD PAUL
SW¼ NE¼	100	IR	38.500	1	SPILLMAN, BUD PAUL
SE¼ NE¼	100	IR	36.200	1	SPILLMAN, BUD PAUL
NE¼ NW¼	200	IR	39.600	1	SALTMARSH, RONALD T
NW¼ NW¼	200	IR	37.200	1	SALTMARSH, RONALD T
SW¼ NW¼	200	IR	36.400	1	SALTMARSH, RONALD T
SE¼ NW¼	200	IR	39.700	1	SALTMARSH, RONALD T
NE¼ SW¼	300	IR	39.700	1	RONALD T. SALTMARSH TRUST
NW¼ SW¼	300	IR	30.100	1	RONALD T. SALTMARSH TRUST
SW¼ SW¼	300	IR	33.800	1	RONALD T. SALTMARSH TRUST
SE¼ SW¼	300	IR	38.400	1	RONALD T. SALTMARSH TRUST
NE¼ SE¼	400	IR	30.700	1	RONALD T. SALTMARSH TRUST
NW¼ SE¼	400	IR	28.300	1	RONALD T. SALTMARSH TRUST
SW¼ SE¼	401	IR	38.000	1	LANG, JOHN R
SE¼ SE¼	402	IR	26.000	1	LANG, JOHN R

Section 19

NE¼ NE¼	100	IR	16.200	1	STAFFORD, WILLIS
NW¼ NE¼	102	IR	30.800	1	STAFFORD, WILLIS

SE¼ NE¼	100	IR	10.000	1	STAFFORD, WILLIS
SE¼ NE¼	101	IR	29.600	1	WAIBEL, JOSEPH W
NE¼ NW¼	200	IR	18.000	1	ALLEN, BRIAN J
NE¼ NW¼	301	IR	15.000	1	ALLEN, CLARENCE
NW¼ NW¼	300	IR	19.400	1	ALLEN, CLARENCE
NW¼ NW¼	301	IR	8.400	1	ALLEN, CLARENCE
SW¼ NW¼	201	IR	35.800	1	SWAIN, DELTON W
SE¼ NW¼	201	IR	39.200	1	SWAIN, DELTON W
NE¼ SW¼	401	IR	39.000	1	EVANS RANCH
NW¼ SW¼	400	IR	33.100	1	STAFFORD, JAMES-ESTATE
NW¼ SW¼	401	IR	3.800	1	EVANS RANCH
SW¼ SW¼	400	IR	9.900	1	STAFFORD, JAMES-ESTATE
SW¼ SW¼	401	IR	23.500	1	EVANS RANCH
SE¼ SW¼	401	IR	31.700	1	EVANS RANCH
NE¼ SE¼	500	IR	36.500	1	OSU FOUNDATION
NW¼ SE¼	501	IR	39.000	1	OSU FOUNDATION
SW¼ SE¼	501	IR	34.800	1	OSU FOUNDATION
SE¼ SE¼	500	IR	32.700	1	OSU FOUNDATION
			Section 20		
NE¼ NW¼	100	IR	7.300	1	WAIBEL, JOSEPH W
SW¼ NW¼	100	IR	27.000	1	WAIBEL, JOSEPH W
SE¼ NW¼	100	IR	22.500	1	WAIBEL, JOSEPH W
NE¼ SW¼	100	IR	30.000	1	WAIBEL, JOSEPH W
NW¼ SW¼	100	IR	39.100	1	WAIBEL, JOSEPH W
SW¼ SW¼	100	IR	32.000	1	WAIBEL, JOSEPH W
SE¼ SW¼	100	IR	4.800	1	WAIBEL, JOSEPH W
			Section 21		
NE¼ NE¼	100	IR	13.200	1	CURRIER, ARTHUR J
NE¼ NE¼	105	IR	13.000	1	BALK, EARL
NE¼ NE¼	106	IR	7.000	1	MATTIODA, MARC
NW¼ NE¼	103	IR	10.300	1	DEAN, TERRANCE
NW¼ NE¼	106	IR	20.000	1	MATTIODA, MARC
NE¼ NW¼	103	IR	34.600	1	DEAN, TERRANCE
NW¼ NW¼	200	IR	33.200	1	DEAN, TERRANCE
SW¼ NW¼	108	IR	15.400	1	DEAN, TERRANCE
SE¼ NW¼	109	IR	2.500	1	DEAN, TERRANCE
			Section 30		
			Township 15 South, Range 15 East, W.M.		
SE¼ NE¼	109	IR	0.500	11	CHRISTIANSEN, STEVEN K
SE¼ NE¼	200	IR	2.400	11	WALLACE, WILLIAM F
SW¼ NW¼	200	IR	4.000	11	GARDNER, JAMES W
SE¼ NW¼	303	IR	4.300	11	REYNOLDS, PAUL R
NE¼ SW¼	1000	IR	0.800	11	KLINK, PATSY JEAN
NE¼ SW¼	1200	IR	4.400	11	STEARNS, MARK
NE¼ SW¼	303	IR	0.700	11	REYNOLDS, PAUL R
NE¼ SW¼	600	IR	6.000	11	LUTZ, HENRY J
NE¼ SW¼	700	IR	3.500	11	DARMS, DONALD P
NE¼ SW¼	701	IR	1.000	11	WHORTON, SAMUEL
NE¼ SW¼	800	IR	2.000	11	MOYER, OLEN E
NE¼ SW¼	901	IR	2.300	11	CALVERT, LYLE L
NW¼ SW¼	1000	IR	1.000	11	KLINK, PATSY JEAN
NW¼ SW¼	301	IR	2.000	11	CRANE, JIM D
NW¼ SW¼	302	IR	3.000	11	LEE, FRANCES
NW¼ SW¼	400	IR	2.600	11	DART, JEFFREY R
NW¼ SW¼	500	IR	5.600	11	LEE, ROBERT E
NW¼ SW¼	900	IR	3.500	11	BOND, KENNETH L
NW¼ SW¼	901	IR	1.200	11	CALVERT, LYLE L

SW¼ SW¼	1000	IR	1.000	11	KLINK, PATSY JEAN
SW¼ SW¼	1100	IR	9.000	11	FARRIER, DONALD
SW¼ SW¼	1202	IR	15.500	11	BUSH, W ED
SW¼ SW¼	400	IR	0.400	11	DART, JEFFREY R
SE¼ SW¼	1000	IR	0.200	11	KLINK, PATSY JEAN
SE¼ SW¼	1200	IR	10.600	11	STEARNS, MARK
SE¼ SW¼	1201	IR	9.500	11	TOWERY, HUGH D
SE¼ SW¼	1202	IR	3.000	11	BUSH, W ED
NE¼ SE¼	109	IR	1.200	11	CHRISTIANSEN, STEVEN K
NE¼ SE¼	200	IR	0.100	11	WALLACE, WILLIAM F

Section 1

SW¼ NE¼	200	IR	3.000	11	LYNDS, R E
SW¼ NE¼	300	IR	3.000	11	BRINTON, GARY W
SE¼ NE¼	100	IR	2.900	11	THOMPSON, GETTA
SE¼ NE¼	400	IR	1.400	11	STONES, ROBERT C
SE¼ NE¼	500	IR	1.350	11	SUMMERS, JEFFERY L
SE¼ NW¼	100	IR	4.500	11	BRANDER, ALEX
NE¼ SW¼	700	IR	10.000	11	VANDER ZANDEN, BRUCE A
NE¼ SW¼	701	IR	2.500	11	MASTERSON, ARCHIE
NE¼ SW¼	900	IR	3.200	11	JONES, JOSEPH P
NW¼ SW¼	501	IR	1.000	11	LEEP, KAREN
NW¼ SW¼	600	IR	21.000	11	CORBET, MARK R
SW¼ SW¼	800	IR	20.000	11	LASH, BRIAN J
SE¼ SW¼	1000	IR	1.000	11	BURNETTE, WILLIAM J
SE¼ SW¼	900	IR	18.300	11	JONES, JOSEPH P
SE¼ SW¼	900	PND	0.500	11	JONES, JOSEPH P
NE¼ SE¼	100	IR	1.800	11	THOMPSON, GETTA
NE¼ SE¼	1000	IR	3.640	11	FLECK, DUAYNE G
NE¼ SE¼	1201	IR	4.000	11	SELK, OBERT J JR
NE¼ SE¼	400	IR	0.300	11	STONES, ROBERT C
NE¼ SE¼	500	IR	1.250	11	SUMMERS, JEFFERY L
NE¼ SE¼	600	IR	3.000	11	REED, WADE J &
NE¼ SE¼	701	IR	3.500	11	FRANKE, DAVID B
NE¼ SE¼	801	IR	3.500	11	KAUFFMAN, KENNETH H
NE¼ SE¼	901	IR	4.190	11	MULLENBURG, CAROLYN I
NW¼ SE¼	1500	IR	0.700	11	ROBERTS, JACK O
NW¼ SE¼	1800	IR	4.500	11	SWEET, KEVIN C
NW¼ SE¼	1900	IR	4.000	11	GALLANT, STEVEN H
NW¼ SE¼	200	IR	2.200	11	LYNDS, R E
NW¼ SE¼	2000	IR	4.400	11	HAYES, JESSE DUANE
NW¼ SE¼	201	IR	5.000	11	WILLIAMS, CHRIS
NW¼ SE¼	2100	IR	4.500	11	WILLCUT, MARK
NW¼ SE¼	2200	IR	4.400	11	FORBIS, LAWRENCE B
NW¼ SE¼	300	IR	2.200	11	BRINTON, GARY W
SW¼ SE¼	1400	IR	2.500	11	SPENCER, CHARLES J
SW¼ SE¼	1401	IR	2.500	11	DAVIS, TERRY L
SW¼ SE¼	1402	IR	4.000	11	WICKHAM, RICHARD A
SW¼ SE¼	1403	IR	3.000	11	PATRICK, JAMES C
SW¼ SE¼	1500	IR	1.900	11	ROBERTS, JACK O
SW¼ SE¼	1600	IR	8.000	11	HOLMER, ROGER A TRUSTEE
SW¼ SE¼	1700	IR	2.000	11	OLSON, PHILLIP
SE¼ SE¼	1300	IR	28.000	11	WOLF, CHARLES
SE¼ SE¼	1301	IR	3.600	11	NEWMAN, MARY F ET AL

Section 2

NE¼ SE¼	1400	IR	6.000	11	CONKLIN, KARL F
SE¼ SE¼	1400	IR	23.000	11	CONKLIN, KARL F
SE¼ SE¼	1500	IR	9.500	11	ECKER, M.& CONKLIN, F.

Section 9

NE¼ NE¼	101	IR	29.400	11	SMITH, DAVID A. FAMILY TRUST
NW¼ NE¼	101	IR	11.600	11	SMITH, DAVID A. FAMILY TRUST
SW¼ NE¼	101	IR	6.300	11	SMITH, DAVID A. FAMILY TRUST
SE¼ NE¼	101	IR	19.100	11	SMITH, DAVID A. FAMILY TRUST
NW¼ SW¼	700	IR	0.500	11	CHANDLER COMMUNITY PROP.
SW¼ SW¼	902	IR	12.550	11	GUSS, RICHARD
SW¼ SW¼	903	IR	22.750	11	ULLRICH, DAVID C
SE¼ SW¼	900	IR	14.000	11	TESCONI, THEODORE F
SE¼ SW¼	901	IR	15.500	11	WEIRBACH, JUDD A
SE¼ SW¼	902	IR	7.300	11	GUSS, RICHARD
SW¼ SE¼	1000	IR	4.600	11	PIEKARSKI, DENNIS L
SW¼ SE¼	1100	IR	4.400	11	FOLLETT, LYNN PATRICK
SW¼ SE¼	1200	IR	4.400	11	JOHNSON, GERALD W
SW¼ SE¼	1300	IR	3.600	11	GRABE, TED M
SW¼ SE¼	600	IR	4.600	11	SUMNER, JAMES W
SW¼ SE¼	700	IR	4.300	11	BROWN, COREY A
SW¼ SE¼	800	IR	4.400	11	HERSHEY, DEBORAH L
SW¼ SE¼	900	IR	4.500	11	REDMOND, CITY OF
SE¼ SE¼	1400	IR	4.300	11	VEELLE, RODNEY
SE¼ SE¼	1600	IR	8.400	11	TABER, JERRY R
SE¼ SE¼	1700	IR	4.500	11	PANKEY, LARRY
SE¼ SE¼	200	IR	4.600	11	DAVIDS, DARWIN
SE¼ SE¼	300	IR	4.600	11	EWALT, TIMOTHY
SE¼ SE¼	400	IR	4.000	11	BUSH, FRANK
SE¼ SE¼	500	IR	3.600	11	RICE, KENNETH W

Section 10

NE¼ NE¼	1100	IR	10.500	11	ISAACSON, RONALD
NE¼ NE¼	1300	IR	2.500	11	LINDSEY, JOHN D
NE¼ NE¼	1301	IR	8.090	11	CURTIS & AYLOR
NE¼ NE¼	1302	IR	1.100	11	WEBB LIVING TRUST
NW¼ NE¼	1300	IR	9.700	11	LINDSEY, JOHN D
NW¼ NE¼	1301	IR	0.500	11	CURTIS & AYLOR
NW¼ NE¼	1302	IR	9.200	11	WEBB LIVING TRUST
NW¼ NE¼	1400	IR	14.000	11	BRADLEY, ROBERT
SW¼ NE¼	101	IR	3.000	11	ATCHINSON, J B
SW¼ NE¼	105	IR	11.600	11	HANSON, DAVID L
SW¼ NE¼	106	IR	12.350	11	HANSON, DAVID L
SW¼ NE¼	107	IR	0.400	11	HANSON, DAVID L
SE¼ NE¼	100	IR	7.400	11	ARTHUR, RAYMOND
SE¼ NE¼	104	IR	13.600	11	HANSON, DAVID L
SE¼ NE¼	105	IR	3.800	11	HANSON, DAVID L
NE¼ NW¼	201	IR	8.000	11	MCGOWAN, MICHAEL J
NE¼ NW¼	208	IR	8.000	11	PETERSEN, KENNETH L ET AL
NW¼ NW¼	200	IR	24.400	11	HEIERMAN, DAN
NW¼ NW¼	206	IR	4.850	11	TURNER, STEVEN
NW¼ NW¼	207	IR	4.850	11	SPURGEON, MICHAEL
SW¼ NW¼	300	IR	2.500	11	GRAHAM, KEITH A
SW¼ NW¼	400	IR	19.100	11	HEGARDT, ADELE
SW¼ NW¼	401	IR	2.200	11	PETERSEN ROCK GARDENS INC
SE¼ NW¼	204	IR	16.000	11	SORUM, PETRA O
SE¼ NW¼	205	IR	14.200	11	SORUM, PETRA O
NE¼ SW¼	400	IR	6.700	11	HEGARDT, ADELE
NE¼ SW¼	500	IR	1.300	11	CASEBEER, JOHNNY LEE
NE¼ SW¼	800	IR	24.000	11	DAVIDSON, ROBERT
NW¼ SW¼	400	IR	19.000	11	HEGARDT, ADELE
NW¼ SW¼	401	IR	7.000	11	PETERSEN ROCK GARDENS INC
NW¼ SW¼	500	IR	4.700	11	CASEBEER, JOHNNY LEE
NW¼ SW¼	501	IR	4.500	11	YOUEL, GERALD E

SW¼ SW¼	600	IR	13.000	11	GILLETTE, JOHN P
SE¼ SW¼	800	IR	27.000	11	DAVIDSON, ROBERT
NE¼ SE¼	100	IR	4.300	11	ARTHUR, RAYMOND
NE¼ SE¼	102	IR	17.650	11	MAHANEY, STEPHEN M
NE¼ SE¼	103	IR	8.000	11	HANSON, DAVID L
NE¼ SE¼	104	IR	3.600	11	HANSON, DAVID L
NE¼ SE¼	105	IR	1.000	11	HANSON, DAVID L
NW¼ SE¼	102	IR	0.350	11	MAHANEY, STEPHEN M
NW¼ SE¼	103	IR	7.500	11	HANSON, DAVID L
NW¼ SE¼	105	IR	3.000	11	HANSON, DAVID L
NW¼ SE¼	106	IR	8.600	11	HANSON, DAVID L
NW¼ SE¼	107	IR	19.400	11	HANSON, DAVID L
SE¼ SE¼	1000	IR	14.500	11	PRUSAK, ANDREW

Section 11

NE¼ NE¼	105	IR	4.500	11	GROSHONG, MILO J
NE¼ NE¼	106	IR	4.000	11	JONES, FLOYD M
NE¼ NE¼	109	IR	8.000	11	BJORVIK, DONALD G
NE¼ NE¼	110	IR	7.800	11	CRAWFORD, DONNIE J
NE¼ NE¼	110	PND	0.200	11	CRAWFORD, DONNIE J
NW¼ NE¼	101	IR	1.800	11	CAMPBELL, GARY W
NW¼ NE¼	104	IR	6.000	11	MCCORD, CHARLES E
NW¼ NE¼	105	IR	0.700	11	GROSHONG, MILO J
NW¼ NE¼	108	IR	4.200	11	CAMPBELL, GARY W
NW¼ NE¼	112	IR	0.300	11	HARDWICK, JANET P
NW¼ NE¼	200	IR	10.000	11	DOWNS, ROBERT L
SW¼ NE¼	103	IR	8.000	11	GILBERT, THAREL
SW¼ NE¼	107	IR	3.000	11	BRIANT, SHARRI
SW¼ NE¼	111	IR	3.900	11	TOWNER, ANABETH ET AL
SW¼ NE¼	112	IR	0.600	11	HARDWICK, JANET P
SW¼ NE¼	113	IR	4.000	11	DICKSON, RONALD L
SE¼ NE¼	1000	IR	5.000	11	LINDBECK, MELVIN
SE¼ NE¼	102	IR	5.000	11	MURRIETA, LOUIE
SE¼ NE¼	112	IR	0.300	11	HARDWICK, JANET P
SE¼ NE¼	115	IR	8.000	11	LA DUKE, JAMES
NE¼ NW¼	300	IR	23.900	11	NEWMAN, MARY F ET AL
NW¼ NW¼	301	IR	29.000	11	MILLARD, DAVID
SW¼ NW¼	302	IR	21.000	11	SERRINS, PHILLIP ET AL
SE¼ NW¼	400	IR	12.900	11	KLEBE, LAURA V
SE¼ NW¼	402	IR	1.900	11	HYDER, LYNN C
SE¼ NW¼	403	IR	10.500	11	LINDH-HAMILTON, CHRISTINE M
NE¼ SW¼	400	IR	0.600	11	KLEBE, LAURA V
NE¼ SW¼	401	IR	14.000	11	MCFARLANE, BILL
NE¼ SW¼	402	IR	16.100	11	HYDER, LYNN C
NW¼ SW¼	503	IR	5.000	11	AVERY, RANDALL S
SW¼ SW¼	500	IR	0.990	11	MARSHALL, DENNIS G
SW¼ SW¼	504	IR	2.000	11	MILLSPAUGH, THEODORE E
SE¼ SW¼	600	IR	7.500	11	RAYNER, CHARLES V
SE¼ SW¼	601	IR	4.300	11	BAISE, RAYMOND H
SE¼ SW¼	602	IR	4.500	11	KIRKPATRICK, RONALD
SE¼ SW¼	604	IR	9.000	11	ALOT, ANDREW W
SE¼ SW¼	605	IR	1.800	11	HOUGHTON, MICHAEL R
SE¼ SW¼	606	IR	4.000	11	HOUGHTON, MICHAEL R
NE¼ SE¼	1100	IR	16.400	11	DAVIS, JEAN S
NE¼ SE¼	1101	IR	2.000	11	MEGLITSCH, WILLIAM
NE¼ SE¼	1102	IR	4.600	11	DAVIS, JEAN S
SW¼ SE¼	700	IR	4.600	11	KIRKPATRICK, RONALD
SW¼ SE¼	701	IR	3.000	11	AGRICULTURAL INVESTMENT
SW¼ SE¼	702	IR	3.700	11	KIRKHORN, BRUCE
SW¼ SE¼	703	IR	0.500	11	MCDANIEL, CHARLES W

SW¼ SE¼	801	IR	2.100	11	BRECKEL, ELMER

Section 12

NE¼ NE¼	101	IR	15.600	11	HALLIGAN RANCH, INC
NW¼ NE¼	100	IR	8.000	11	HEDING, LYLE E &
NW¼ NE¼	101	IR	0.200	11	HALLIGAN RANCH, INC
NW¼ NE¼	200	IR	0.700	11	WILLIAMS, WALTER A
NW¼ NE¼	201	IR	3.000	11	WILLIAMS, CAROL J
SE¼ NE¼	101	IR	11.700	11	HALLIGAN RANCH, INC
NE¼ NW¼	300	IR	6.900	11	WILLIAMS, WALTER A
NE¼ NW¼	301	IR	1.000	11	HEDING, LYLE E &
NE¼ NW¼	302	IR	7.300	11	WILLIAMS, WALTER A
NE¼ NW¼	303	IR	5.100	11	WILLIAMS, WALTER A
NW¼ NW¼	401	IR	8.450	11	NICKESON, LORI
NW¼ NW¼	402	IR	0.550	11	NICKESON, LORI
NW¼ NW¼	504	IR	12.000	11	ROY, ALFRED J
SW¼ NW¼	500	IR	13.800	11	SEARS, SUZANNE
SW¼ NW¼	505	IR	11.000	11	INGLIS, GUY M
SW¼ NW¼	508	IR	4.000	11	INGLIS, GUY M
SE¼ NW¼	500	IR	7.200	11	SEARS, SUZANNE
SE¼ NW¼	501	IR	17.700	11	HEDING, LYLE E &
SE¼ NW¼	503	IR	2.800	11	HEDING, LYLE E &
SE¼ NW¼	507	IR	4.000	11	MEIGHAN, REN C
NE¼ SW¼	503	IR	30.500	11	HEDING, LYLE E &

Section 13

NE¼ NE¼	100	IR	6.500	11	MOYER, DALE
NE¼ NE¼	200	IR	7.000	11	ONODA, HAJIME
NE¼ NE¼	300	IR	4.000	11	MILLS, STEVE
NE¼ NE¼	301	IR	4.000	11	ROCKWOOD, TORRENCE L
NE¼ NE¼	400	IR	3.000	11	MOIR, DONALD S
NW¼ NE¼	602	IR	9.900	11	GRIFFIN, G. W.
SW¼ NE¼	601	IR	9.050	11	ADAMS, JOHN C
SE¼ SW¼	101	IR	2.000	11	DEVEREAUX, HAROLD
SE¼ SW¼	102	IR	2.000	11	LEHTO, PAUL ANDREW
SE¼ SW¼	104	IR	1.000	11	HERRON, ROSEMARY
SE¼ SW¼	105	IR	1.000	11	SIMS, EDWARD
SE¼ SW¼	106	IR	1.000	11	SHAW, DARCY & FREAD, JOY
SE¼ SW¼	900	IR	1.280	11	MCKILLOP, ARCHIE &
SE¼ SE¼	100	IR	1.000	11	JOHNSTON, ALEX E
SE¼ SE¼	200	IR	3.150	11	WEST, ALFRED JAMES
SE¼ SE¼	300	IR	0.750	11	GRUDT, STEVEN CRAIG
SE¼ SE¼	301	IR	2.150	11	WEST, ALFRED JAMES
SE¼ SE¼	302	IR	0.750	11	RASH, DONNA J
SE¼ SE¼	400	IR	3.000	11	DULLEY, FREDERICK C
SE¼ SE¼	500	IR	4.000	11	CRENSHAW, FERN
SE¼ SE¼	600	IR	3.500	11	RAETHER, BETTY JO
SE¼ SE¼	700	IR	3.900	11	RAETHER, BETTY JO
SE¼ SE¼	800	IR	1.500	11	BURROUGHS, STEVEN D
SE¼ SE¼	900	IR	3.000	11	SKOOG, RONALD A

Section 14

NW¼ NE¼	300	IR	11.600	11	CASTRO, JAMES
NW¼ NE¼	400	IR	12.000	11	JAMES, HAROLD
NW¼ NE¼	500	IR	1.000	11	NUNEMAKER, JOHN
NW¼ NE¼	501	IR	2.000	11	FOLLETT, LYNN PATRICK
NW¼ NE¼	502	IR	0.800	11	SCARCELLA, JAYNE A
NE¼ NW¼	600	IR	13.500	11	DUNNING, G ANDREW
NE¼ NW¼	700	IR	18.000	11	HINGLEY, GARY
NW¼ NW¼	800	IR	17.000	11	CLIFTON, ALBERT O

NW¼ NW¼	900	IR	19.000	11	PUTNAM, ELWYN L ET AL
SW¼ NW¼	1001	IR	4.000	11	HARGIS, JAMES

Section 15

NW¼ NE¼	200	IR	22.000	11	VANSOOY, LANCE W
SW¼ NE¼	300	IR	5.900	11	JACCARD, LELAND F
SW¼ NE¼	306	IR	6.200	11	KIRZY, CHUCK
NE¼ NW¼	100	IR	1.000	11	AMARAL, GREGORY T
NE¼ NW¼	101	IR	1.000	11	OWENS, HAZEL E
NE¼ NW¼	102	IR	1.000	11	LONIEN, DARYL
NE¼ NW¼	103	IR	1.000	11	LEONARD, RICHARD H
NE¼ NW¼	104	IR	1.000	11	DICKERSON-GLIETZ, DALEYNE
NE¼ NW¼	105	IR	1.000	11	MARTIN, JOE ET AL
NE¼ NW¼	106	IR	1.000	11	MARTIN, JOE ET AL
NE¼ SE¼	302	IR	5.200	11	BOWERS, JAMES L
NE¼ SE¼	303	IR	23.800	11	DENNISON, LOUIS
NW¼ SE¼	301	IR	2.700	11	FAIR, ROBERT C &
NW¼ SE¼	303	IR	5.700	11	DENNISON, LOUIS
NW¼ SE¼	305	IR	0.200	11	FAIR, ROBERT C &
NW¼ SE¼	306	IR	6.300	11	KIRZY, CHUCK
SE¼ SE¼	303	IR	12.000	11	DENNISON, LOUIS
SE¼ SE¼	600	IR	4.000	11	ERICKSON, JEFF S

Section 23

SW¼ NW¼	12300	IR	19.060	11	REID, RANDALL R

Section 25

NE¼ NE¼	400	IR	1.900	11	REID, RANDALL R
NE¼ NE¼	401	IR	14.500	11	ERICKSON, JEFF S
NW¼ NE¼	200	IR	17.600	11	DUPONT, ROBERT
NW¼ NE¼	201	IR	8.800	11	DUPONT, ROBERT
NW¼ NE¼	401	IR	1.500	11	ERICKSON, JEFF S
SW¼ NE¼	104	IR	0.100	11	NELSON, JOHNNY M
SW¼ NE¼	201	IR	5.200	11	DUPONT, ROBERT
SW¼ NE¼	202	IR	4.200	11	DUPONT, ROBERT
SW¼ NE¼	300	IR	21.800	11	HOLT, JACK
SE¼ NE¼	104	IR	4.400	11	NELSON, JOHNNY M
SE¼ NE¼	300	IR	5.200	11	HOLT, JACK
SE¼ NE¼	400	IR	20.400	11	REID, RANDALL R
NE¼ NW¼	101	IR	1.800	11	CARSEY, EUGENE
NE¼ NW¼	200	IR	4.400	11	DUPONT, ROBERT
NE¼ NW¼	201	IR	2.200	11	DUPONT, ROBERT
NE¼ NW¼	300	IR	4.500	11	LINK, DAVID L &
NE¼ NW¼	302	IR	1.200	11	CARRELL, BRADFORD L
NE¼ NW¼	303	IR	1.300	11	RAY, CAMERON
SW¼ NW¼	500	IR	8.000	11	FAGEN, HARRY J
SW¼ NW¼	600	IR	2.000	11	MEYER, MIRRA
SE¼ NW¼	201	IR	2.000	11	DUPONT, ROBERT
SE¼ NW¼	202	IR	10.600	11	DUPONT, ROBERT
SE¼ NW¼	800	IR	12.900	11	CARSEY, EUGENE
SE¼ NW¼	801	IR	3.800	11	TOWELL, RON
NE¼ SW¼	101	IR	0.100	11	ELROD, WILLIAM
NE¼ SW¼	102	IND	1.000	11	CASCASE MATERIALS, INC.
NE¼ SW¼	202	IR	2.000	11	DUPONT, ROBERT
SW¼ SW¼	301	IND	2.000	11	CASCASE MATERIALS, INC.
SE¼ SW¼	105	IR	1.600	11	ELROD, WILLIAM
SE¼ SW¼	400	IR	0.500	11	ROGERS, KATHARINA L
SE¼ SW¼	401	IR	0.250	11	ROGERS, KATHARINA L
NE¼ SE¼	100	IR	3.900	11	NELSON, JOHNNY M
NE¼ SE¼	104	IR	6.400	11	NELSON, JOHNNY M

NW¼ SE¼	104	IR	2.450	11	NELSON, JOHNNY M
NW¼ SE¼	200	IR	0.500	11	ELROD, WILLIAM
NW¼ SE¼	300	IR	4.000	11	HOLT, JACK
NW¼ SE¼	301	IR	10.900	11	ELROD, WILLIAM
NW¼ SE¼	303	IR	0.200	11	ELROD, WILLIAM
SW¼ SE¼	301	IR	0.700	11	ELROD, WILLIAM

Section 26

NE¼ SW¼	100	IR	2.000	11	AKINS, ROBERT
NE¼ SW¼	1000	IR	0.200	11	THOMPSON, LARRY T
NE¼ SW¼	1100	IR	0.400	11	BOSS, ROBERT D
NE¼ SW¼	1200	IR	0.400	11	JOHNSON, RAYMOND VERNON
NE¼ SW¼	1300	IR	0.200	11	VAN TASSELL, ROY
NE¼ SW¼	200	IR	0.500	11	CUNNINGHAM, DEAN A
NE¼ SW¼	300	IR	1.000	11	COLMES, ANDREA
NE¼ SW¼	3100	IR	2.000	11	THOMPSON, LARRY T
NE¼ SW¼	3200	IR	2.000	11	PENNY, STEVEN O
NE¼ SW¼	3300	IR	2.000	11	HARTMAN, CINDY S
NE¼ SW¼	3400	IR	1.500	11	BARBER, ROBERT
NE¼ SW¼	3500	IR	1.000	11	GAROUTTE, GERALD M
NE¼ SW¼	3600	IR	0.500	11	PRICE, JOANNE
NE¼ SW¼	3700	IR	0.600	11	HOLMAN, KURT
NE¼ SW¼	400	IR	1.000	11	COLMES, ANDREA
NE¼ SW¼	500	IR	1.500	11	COLMES, ANDREA
NE¼ SW¼	600	IR	0.500	11	COLMES, ANDREA
NE¼ SW¼	601	IR	2.000	11	WHITT, WILLIAM R
NE¼ SW¼	700	IR	2.000	11	WHEELER, RONALD A
NE¼ SW¼	800	IR	1.000	11	ADAMSON, DE VERNE
NE¼ SW¼	900	IR	1.400	11	HALL, DANIEL L
SE¼ SW¼	1000	IR	2.300	11	THOMPSON, LARRY T
SE¼ SW¼	1100	IR	0.600	11	BOSS, ROBERT D
SE¼ SW¼	1200	IR	0.100	11	JOHNSON, RAYMOND VERNON
SE¼ SW¼	1300	IR	0.200	11	VAN TASSELL, ROY
SE¼ SW¼	1400	IR	1.500	11	MOON, RICHARD
SE¼ SW¼	1500	IR	1.000	11	AUSTIN, ALBERT
SE¼ SW¼	1600	IR	1.260	11	ALLISON, CARL
SE¼ SW¼	1800	IR	2.800	11	KOCHAN, KARI GAIL
SE¼ SW¼	1900	IR	1.700	11	HILL, JOHN
SE¼ SW¼	2000	IR	1.000	11	STEVENS, NITA
SE¼ SW¼	2100	IR	1.500	11	WILLIAMS, ROBERT A
SE¼ SW¼	2200	IR	2.000	11	MILLER, HERMAN
SE¼ SW¼	2300	IR	2.000	11	CHESS, HARRY R
SE¼ SW¼	2400	IR	1.000	11	RODGERS, MARK A
SE¼ SW¼	900	IR	0.100	11	HALL, DANIEL L-

Section 27

SW¼ NW¼	302	IR	12.000	11	MCCOWAN, DONALD
SW¼ NW¼	305	IR	9.000	11	REED, CARL R &
SW¼ NW¼	306	IR	11.000	11	MARTIN, HUGH B III
NW¼ SE¼	100	IR	2.000	11	BEITELSPACHER, WAYNE
NW¼ SE¼	1000	IR	12.000	11	DESULLY, CHARLES J
NW¼ SE¼	1100	IR	2.000	11	HERFORD, P C
NW¼ SE¼	200	IR	2.000	11	JOB, CLARENCE
NW¼ SE¼	300	IR	2.000	11	WAGENBLAST, DAVID MIKE
NW¼ SE¼	400	IR	2.000	11	URELL, RICHARD L
NW¼ SE¼	500	IR	1.500	11	SPENCER, ELLA LORRAINE
NW¼ SE¼	600	IR	2.100	11	THORNTON, BUCK
NW¼ SE¼	700	IR	0.900	11	THORNTON, BUCK
NW¼ SE¼	800	IR	1.000	11	MT VISTA MOBILE HM PK INC
NW¼ SE¼	900	IR	0.500	11	SPENCER, ELLA LORRAINE

Section 28

SW¼ NE¼	501	IR	4.700	11	MCDOUGAL, IONA JOY
SE¼ NE¼	400	IR	6.900	11	ASHFORD, HAROLD J
SE¼ NE¼	501	IR	0.100	11	MCDOUGAL, IONA JOY
SE¼ NE¼	502	IR	5.600	11	DEUBEL, PETER K
SE¼ NW¼	600	IR	8.000	11	G. H. B. CO.
NE¼ SW¼	900	IR	30.000	11	GARDNER, LISA
NW¼ SW¼	700	IR	17.500	11	ELLIS, LUCIAN F
SW¼ SW¼	700	IR	22.500	11	ELLIS, LUCIAN F
NE¼ SE¼	1500	IR	15.000	11	HOLMBERG, DAVID
NE¼ SE¼	1600	IR	0.700	11	JOHNSON, KARL W
NE¼ SE¼	1701	IR	5.300	11	CREAGER, CLAYTON J, ET AL
NW¼ SE¼	1000	IR	5.700	11	HIGHLAND, ROGER J
NW¼ SE¼	1200	IR	7.800	11	PROCTOR, CLIFFORD
NW¼ SE¼	1300	IR	5.500	11	ENGLES, RAYMOND J
SW¼ SE¼	1700	IR	4.000	11	HOLMBERG, DAVID
SE¼ SE¼	1600	IR	1.300	11	JOHNSON, KARL W
SE¼ SE¼	1700	IR	10.000	11	HOLMBERG, DAVID
SE¼ SE¼	1701	IR	14.700	11	CREAGER, CLAYTON J, ET AL

Section 35

Township 16 South, Range 12 East, W.M.

SE¼ NW¼	100	IR	1.200	11	NASCIMENTO, ROGER K
NE¼ SW¼	100	IR	13.800	11	NASCIMENTO, ROGER K

Section 6

NW¼ SW¼	700	IR	15.200	11	HALLIGAN RANCH, INC
SW¼ SW¼	700	IR	11.560	11	HALLIGAN RANCH, INC

Section 18

Township 16 South, Range 13 East, W.M.

SW¼ NW¼	400	IR	33.100	1	HARRISON PROPERTIES, INC
SE¼ NW¼	400	IR	36.000	1	HARRISON PROPERTIES, INC
NE¼ SW¼	400	IR	26.400	1	HARRISON PROPERTIES, INC
NW¼ SW¼	400	IR	29.100	1	HARRISON PROPERTIES, INC

Section 2

SW¼ NW¼	701	IR	7.000	1	SCHERER, ROBERT K

Section 3

SW¼ NE¼	300	IR	32.700	1	CONDRON, DAVID A
SE¼ NE¼	200	IR	31.000	1	KELLER, ALAN C
SE¼ NW¼	400	IR	28.600	1	WARD, GARY
NE¼ SW¼	400	IR	39.400	1	WARD, GARY
NW¼ SW¼	600	IR	8.000	1	WARD, GARY
SW¼ SW¼	601	IR	4.000	1	WRIGHT, BRUCE
SW¼ SW¼	602	IR	5.900	1	VAUGHAN, MICHAEL R
SW¼ SW¼	603	IR	8.500	1	SCHERER, ROBERT K
SE¼ SW¼	603	IR	34.000	1	SCHERER, ROBERT K
SE¼ SW¼	700	IR	3.000	1	LENT, STEVEN L
NE¼ SE¼	900	IR	35.220	1	UMBARGER, MICHAEL
NW¼ SE¼	801	IR	40.000	1	COMMINS, GERALD E
SW¼ SE¼	800	IR	8.700	1	BORGAARD, NORMAN
SW¼ SE¼	800	PND	0.300	1	BORGAARD, NORMAN
SW¼ SE¼	801	IR	28.300	1	COMMINS, GERALD E
SE¼ SE¼	900	IR	26.300	1	UMBARGER, MICHAEL
SE¼ SE¼	901	IR	4.700	1	UMBARGER, MICHAEL

Section 4

NE¼ NE¼	100	IR	9.300	1	DEAN, TERRANCE
NW¼ NE¼	100	IR	0.800	1	DEAN, TERRANCE
SW¼ NE¼	100	IR	8.400	1	DEAN, TERRANCE
SE¼ NE¼	100	IR	18.100	1	DEAN, TERRANCE
NE¼ SE¼	100	IR	18.300	1	DEAN, TERRANCE
NW¼ SE¼	100	IR	5.800	1	DEAN, TERRANCE
SW¼ SE¼	200	IR	26.500	1	KNUTZ, LARRY
SE¼ SE¼	100	IR	32.600	1	DEAN, TERRANCE

Section 8

NE¼ NE¼	100	IR	32.700	1	MCCASLAND, ROBERT
NW¼ NE¼	200	IR	28.300	1	TIMMERMAN, LAURENCE &
NW¼ NE¼	202	IR	7.800	1	TIMMERMAN, LAURENCE &
SW¼ NE¼	201	IR	37.900	1	TIMMERMAN, LAURENCE &
SE¼ NE¼	100	IR	26.900	1	MCCASLAND, ROBERT
NE¼ NW¼	201	IR	38.300	1	TIMMERMAN, LAURENCE &
NW¼ NW¼	401	IR	28.610	1	VAUGHAN, MICHAEL R
SW¼ NW¼	500	IR	30.500	1	AVILA, CLARENCE J
SE¼ NW¼	201	IR	39.600	1	TIMMERMAN, LAURENCE &
NE¼ SW¼	600	IR	32.500	1	AVILA, CLARENCE J
NW¼ SW¼	600	IR	32.000	1	AVILA, CLARENCE J
SW¼ SW¼	700	IR	31.000	1	DEAN, TERRANCE
SE¼ SW¼	700	IR	33.900	1	DEAN, TERRANCE
NE¼ SE¼	601	IR	31.800	1	AVILA, CLARENCE J
NW¼ SE¼	600	IR	29.800	1	AVILA, CLARENCE J
NW¼ SE¼	601	IR	2.400	1	AVILA, CLARENCE J
SW¼ SE¼	600	IR	7.400	1	AVILA, CLARENCE J
SW¼ SE¼	601	IR	25.700	1	AVILA, CLARENCE J
SE¼ SE¼	601	IR	29.600	1	AVILA, CLARENCE J

Section 9

NE¼ SW¼	504	IR	32.800	1	AVILA, CLARENCE J
NW¼ SW¼	504	IR	31.100	1	AVILA, CLARENCE J
SW¼ SW¼	504	IR	32.600	1	AVILA, CLARENCE J
SE¼ SW¼	504	IR	31.200	1	AVILA, CLARENCE J
NW¼ SE¼	504	IR	33.200	1	AVILA, CLARENCE J
SW¼ SE¼	504	IR	31.800	1	AVILA, CLARENCE J

Section 10

NW¼ NW¼	601	IR	0.500	1	CROOK COUNTY CEMETERY DIST
SW¼ NW¼	501	IR	0.500	1	CROOK COUNTY CEMETERY DIST

Section 11

NE¼ NW¼	504	IR	32.400	1	AVILA, CLARENCE J
NW¼ NW¼	504	IR	30.250	1	AVILA, CLARENCE J
SW¼ NW¼	504	IR	32.400	1	AVILA, CLARENCE J
SE¼ NW¼	504	IR	30.250	1	AVILA, CLARENCE J
NE¼ SW¼	0	QMUNI	7.000	1	POWELL BUTTE VIEW ESTATES
NW¼ SW¼	0	QMUNI	0.000	1	POWELL BUTTE VIEW ESTATES
SW¼ SW¼	0	QMUNI	0.000	1	POWELL BUTTE VIEW ESTATES
SE¼ SW¼	0	QMUNI	0.000	1	POWELL BUTTE VIEW ESTATES
NE¼ SE¼	0	QMUNI	0.000	1	POWELL BUTTE VIEW ESTATES
NW¼ SE¼	0	QMUNI	0.000	1	POWELL BUTTE VIEW ESTATES
SW¼ SE¼	0	QMUNI	0.000	1	POWELL BUTTE VIEW ESTATES
SE¼ SE¼	0	QMUNI	0.000	1	POWELL BUTTE VIEW ESTATES

Section 15

NE¼ NE¼	100	IR	27.900	1	LUNDQUIST, LYNN
NW¼ NE¼	100	IR	36.300	1	LUNDQUIST, LYNN
SW¼ NE¼	100	IR	37.300	1	LUNDQUIST, LYNN

SE¼ NE¼	100	IR	25.100	1	LUNDQUIST, LYNN
NE¼ NW¼	100	IR	3.300	1	LUNDQUIST, LYNN
NE¼ NW¼	101	IR	13.900	1	DEAN, TERRANCE
NW¼ NW¼	101	IR	26.900	1	DEAN, TERRANCE
SW¼ NW¼	101	IR	21.300	1	DEAN, TERRANCE
SE¼ NW¼	100	IR	24.300	1	LUNDQUIST, LYNN
SE¼ NW¼	101	IR	0.700	1	DEAN, TERRANCE
NW¼ SW¼	200	IR	18.600	1	BOVEE, ALAN
NW¼ SW¼	201	IR	2.600	1	BOVEE, ALAN
SW¼ SW¼	200	IR	2.000	1	BOVEE, ALAN
SW¼ SW¼	202	IR	7.500	1	TIMMERMAN, GARY
SW¼ SW¼	203	IR	4.500	1	BENNINK, RONALD
SW¼ SW¼	204	IR	4.500	1	BENNINK, RONALD

Section 16

NE¼ NE¼	100	IR	25.300	1	DEAN, TERRANCE
NW¼ NE¼	200	IR	22.500	1	KNUTZ, LARRY
SW¼ NE¼	200	IR	24.400	1	KNUTZ, LARRY
SE¼ NE¼	200	IR	37.600	1	KNUTZ, LARRY
NE¼ SE¼	400	IR	36.400	1	SKIDGEL, DAVE
NW¼ SE¼	301	IR	25.300	1	BUCE, LILLIAN A
SW¼ SE¼	301	IR	25.700	1	BUCE, LILLIAN A
SE¼ SE¼	400	IR	33.600	1	SKIDGEL, DAVE

Section 17

NE¼ NE¼	100	IR	33.000	1	WHITSETT, LYLE
NW¼ NE¼	400	IR	38.000	1	MILLER, PAT
SW¼ NE¼	400	IR	37.000	1	MILLER, PAT
SE¼ NE¼	200	IR	4.000	1	DUNAWAY, JIM
SE¼ NE¼	201	IR	2.500	1	AVILA, CLARENCE J
SE¼ NE¼	202	IR	30.500	1	LEMENS, THOMAS J
SE¼ NE¼	202	PND	0.500	1	LEMENS, THOMAS J
NE¼ NW¼	400	IR	18.900	1	MILLER, PAT
SE¼ NW¼	400	IR	15.000	1	MILLER, PAT
NE¼ SW¼	400	IR	32.700	1	MILLER, PAT
SE¼ SW¼	400	IR	34.500	1	MILLER, PAT
NE¼ SE¼	201	IR	28.500	1	AVILA, CLARENCE J
NW¼ SE¼	400	IR	27.200	1	MILLER, PAT
SW¼ SE¼	400	IR	22.700	1	MILLER, PAT

Section 20

NW¼ NW¼	200	IR	17.370	1	MARSHALL, CARL A
NW¼ NW¼	201	IR	6.630	1	REED, ELLA L
SW¼ NW¼	300	IR	30.000	1	WENDT, GUY ALLEN JR &
NE¼ SW¼	400	IR	5.000	1	BUTTE VALLEY RANCH
NW¼ SW¼	400	IR	28.300	1	BUTTE VALLEY RANCH
SW¼ SW¼	400	IR	30.000	1	BUTTE VALLEY RANCH
SE¼ SW¼	400	IR	19.000	1	BUTTE VALLEY RANCH
NE¼ SE¼	2800	IR	28.100	1	BUTTE VALLEY RANCH
NW¼ SE¼	2800	IR	34.700	1	BUTTE VALLEY RANCH
SW¼ SE¼	2800	IR	20.000	1	BUTTE VALLEY RANCH
SE¼ SE¼	2800	IR	3.200	1	BUTTE VALLEY RANCH

Section 21

NE¼ NE¼	0	QMUNI	0.000	1	POWELL BUTTE VIEW ESTATES
NW¼ NE¼	0	QMUNI	0.000	1	POWELL BUTTE VIEW ESTATES
SW¼ NE¼	0	QMUNI	0.000	1	POWELL BUTTE VIEW ESTATES
SE¼ NE¼	0	QMUNI	0.000	1	POWELL BUTTE VIEW ESTATES

Section 22

NW¼ NW¼	0	QMUNI	0.000	1	POWELL BUTTE VIEW ESTATES
SW¼ NW¼	0	QMUNI	0.000	1	POWELL BUTTE VIEW ESTATES

Section 23

SW¼ SW¼	200	IR	17.200	1	BUTTE VALLEY RANCH

Section 27

NE¼ NW¼	200	IR	6.000	1	MEISNER, RONALD
NE¼ NW¼	201	IR	23.000	1	STELLE, GARY E
NW¼ NW¼	201	IR	37.000	1	STELLE, GARY E
NE¼ SE¼	500	IR	16.900	1	BUTTE VALLEY RANCH
NW¼ SE¼	500	IR	10.100	1	BUTTE VALLEY RANCH
SW¼ SE¼	500	IR	4.100	1	BUTTE VALLEY RANCH
SE¼ SE¼	500	IR	10.200	1	BUTTE VALLEY RANCH

Section 28

NE¼ NE¼	100	IR	17.000	1	WARD, HOWARD
NW¼ NE¼	200	IR	20.000	1	LUNDY, DWAIN C
SW¼ NE¼	200	IR	4.100	1	LUNDY, DWAIN C
NE¼ NW¼	200	IR	4.900	1	LUNDY, DWAIN C

Section 29

NE¼ NW¼	100	IR	9.000	1	SALE, LAWRENCE E
NW¼ NW¼	200	IR	11.200	1	BUTTE VALLEY RANCH
SE¼ NW¼	100	IR	23.500	1	SALE, LAWRENCE E
SE¼ NW¼	100	PND	1.500	1	SALE, LAWRENCE E

Section 34

Township 16 South, Range 14 East, W.M.

NE¼ NE¼	100	IR	25.600	11	JUHL, THEODORE CARL
NW¼ NE¼	100	IR	28.600	11	JUHL, THEODORE CARL
NW¼ NE¼	200	IR	2.000	11	WILSON, THEODORE R JR
NW¼ NE¼	201	IR	2.000	11	HERRIG, CRAIG R
NW¼ NE¼	202	IR	2.800	11	JUHL, THEODORE CARL
SW¼ NE¼	401	IR	5.000	11	KENT, ALAN R
SW¼ NE¼	403	IR	8.000	11	COURT, ROBERT
SW¼ NE¼	405	IR	7.100	11	KIRK, RICHARD F
SW¼ NE¼	406	IR	4.100	11	SERPA, JULIA A ET AL
SW¼ NE¼	407	IR	3.800	11	KOENIG, ARNOLD J
SE¼ NE¼	400	IR	21.000	11	DE GRUCHY, DON C JR
SE¼ NE¼	409	IR	1.200	11	DE GRUCHY, DONALD C
SE¼ NE¼	411	IR	7.630	11	DE GRUCHY, DONALD C
NE¼ SW¼	500	IR	28.000	11	SMITH, TRACIE LEE
SE¼ SW¼	502	IR	2.000	11	BURTIS, RAYMOND
NE¼ SE¼	409	IR	3.900	11	DE GRUCHY, DONALD C
NE¼ SE¼	704	IR	5.000	11	MURPHY, MICHAEL
NE¼ SE¼	706	IR	4.500	11	DE GRUCHY, DONALD C
NW¼ SE¼	410	IR	3.720	11	PARIS, PATRICIA J
NW¼ SE¼	707	IR	1.700	11	KENT, ALAN R
NW¼ SE¼	712	IR	4.640	11	JOHNSON, MARION E
SW¼ SE¼	600	IR	1.500	11	IVIE, EDWARD
SW¼ SE¼	601	IR	1.500	11	WILLIAMS, CARL
SW¼ SE¼	602	IR	1.500	11	DAY, DREENA
SW¼ SE¼	603	IR	1.500	11	MEEKO, JOAN J & POWER, KIM
SW¼ SE¼	604	IR	1.500	11	GEORGE & BETTY WITTMER
SW¼ SE¼	605	IR	1.500	11	HARRIS, LISA
SW¼ SE¼	606	IR	3.000	11	WORRELL, JANIS M
SW¼ SE¼	607	IR	3.000	11	SHRODE, WILLIAM L

Section 2

NW¼ NE¼	200	IR	3.500	11	PANGLE, KEVIN L
NW¼ NE¼	201	IR	5.000	11	CRIBBINS, A J
NW¼ NE¼	202	IR	6.100	11	HAIDER, MAY D
NW¼ NE¼	203	IR	4.900	11	HAIDER, MAY D
NW¼ NE¼	204	IR	1.500	11	IPOCK, STANLEY V
SW¼ NE¼	301	IR	18.000	11	HAIDER, MAY D
SW¼ NE¼	302	IR	19.600	11	HAIDER, MAY D
NE¼ NW¼	600	IR	5.200	11	MARTHALLER, FRANCIS
NE¼ NW¼	601	IR	5.000	11	BREMER, DEWAYNE M
SE¼ NW¼	500	IR	4.000	11	MAYES, STEVE D
SE¼ NW¼	502	IR	2.000	11	BLACK, JAMES
SE¼ NW¼	503	IR	4.000	11	JOKI, RYOHEI
NE¼ SW¼	800	IR	6.000	11	RICHTER, CHARLES P
NE¼ SW¼	802	IR	5.000	11	CAHILL, PAUL C
NE¼ SW¼	803	IR	16.000	11	CUTTER, DANIEL H
SE¼ SW¼	801	IR	18.000	11	CHESHIRE, MICHAEL
SE¼ SW¼	900	IR	5.000	11	JOHNSON, MARK L &
SE¼ SW¼	901	IR	5.000	11	MCCAY, RICHARD H
NW¼ SE¼	303	IR	8.500	11	PRODEHL. PHILIP G
NW¼ SE¼	304	IR	17.110	11	HAIDER, MAY D
NW¼ SE¼	305	IR	5.200	11	HAIDER, MAY D
SW¼ SE¼	300	IR	14.000	11	DAVIS, KEITH E
SW¼ SE¼	306	IR	15.000	11	SERGEANT, JAMES CARL

Section 11

SE¼ SW¼	500	IR	32.000	1	HOLLIDAY, EUGENE M
NW¼ SE¼	301	IR	6.000	1	WHITE, WILLIAM R
NW¼ SE¼	311	IR	1.000	1	GRAHAM, HENRY
NW¼ SE¼	313	IR	2.000	1	ADAMS, ALAN C
SW¼ SE¼	303	IR	7.500	1	PESTKA, VERNE
SW¼ SE¼	305	IR	2.500	1	HANSEN, SALLY JO &
SW¼ SE¼	307	IR	4.000	1	PAULSON, DARWIN J
SW¼ SE¼	308	IR	4.000	1	JACOBS, CLINT R
SW¼ SE¼	309	IR	2.000	1	STEPHENS, BARBARA J

Section 12

NE¼ NE¼	100	IR	21.170	1	COOK, GEORGE
NW¼ NE¼	101	IR	2.000	1	CRAMER, ROBERT G
NW¼ NE¼	102	IR	2.000	1	GREENE, JEFFREY
NW¼ NE¼	103	IR	2.000	1	RODERICK, STEPHEN C
NW¼ NE¼	104	IR	3.250	1	POWELL, GERALD
NW¼ NE¼	113	IR	4.250	1	POWELL, GERALD
NW¼ NE¼	114	IR	2.000	1	O'GRADY, KELLY
NW¼ NE¼	115	IR	2.000	1	GOULD, CHARLES H
NW¼ NE¼	116	IR	2.000	1	PRICE, STEVEN D ET AL
SW¼ NE¼	105	IR	3.600	1	COOK, GEORGE
SW¼ NE¼	106	IR	2.000	1	BUTCHER, MARK
SW¼ NE¼	107	IR	2.000	1	HAGER, MICHAEL F
SW¼ NE¼	108	IR	2.000	1	SALA, BENNETT MATTHEW
SW¼ NE¼	109	IR	2.000	1	JACOBS, BRENT E
SW¼ NE¼	110	IR	2.000	1	HAYNES, RUTH A
SW¼ NE¼	111	IR	2.000	1	WHITEMAN, ROGER
SW¼ NE¼	112	IR	2.000	1	SCOTT, CHARLES A
SE¼ NE¼	100	IR	36.000	1	COOK, GEORGE
SE¼ NE¼	700	IR	1.000	1	TARBET, DALE
NE¼ NW¼	200	IR	12.000	1	DALEY, DOUGLAS G
NE¼ NW¼	202	IR	11.500	1	WONZER, NORMAN E
NW¼ NW¼	302	IR	5.000	1	POARCH, CHARLES E
NW¼ NW¼	303	IR	2.800	1	PARSONS, REV DAVID E
NW¼ NW¼	305	IR	3.000	1	ZETTERBURG, NIKLAS

NW¼ NW¼	308	IR	2.900	1	PARSONS, REV DAVID E
NW¼ NW¼	308	PND	0.300	1	PARSONS, REV DAVID E
NW¼ NW¼	313	IR	3.000	1	HUGHES, BARBARA
NW¼ NW¼	314	IR	3.000	1	EVANS, HAROLD B
SW¼ NW¼	301	IR	4.000	1	RUSSELL, RICHARD A
SW¼ NW¼	307	IR	3.000	1	HASSEY, WILLIAM K
SW¼ NW¼	309	IR	3.000	1	LEFOR, WALTER J
SW¼ NW¼	310	IR	3.000	1	BALLENGER, HAROLD C
SW¼ NW¼	311	IR	3.000	1	KENOYER, SAMUEL F
SW¼ NW¼	312	IR	3.000	1	NOLAN, ROBERT
SE¼ NW¼	202	IR	0.500	1	WONZER, NORMAN E
SE¼ NW¼	203	IR	12.000	1	HERMAN, GLENN C
SE¼ NW¼	204	IR	12.000	1	DRAKE, RANDELL E
NE¼ SW¼	401	IR	38.300	1	NELSON, BERTIL
NW¼ SW¼	401	IR	37.800	1	NELSON, BERTIL
NW¼ SW¼	401	PND	0.200	1	NELSON, BERTIL
SW¼ SW¼	402	IR	36.000	1	NELSON, BERTIL
SW¼ SW¼	500	IR	1.000	1	HARGRAVE, DONALD
SE¼ SW¼	400	IR	29.500	1	NELSON, BERTIL
SE¼ SW¼	402	IR	0.200	1	NELSON, BERTIL
NE¼ SE¼	700	IR	13.500	1	TARBET, DALE
NE¼ SE¼	800	IR	4.000	1	BUNDY, WILLIAM
NE¼ SE¼	901	IR	5.000	1	BUNDY, WILLIAM
NW¼ SE¼	601	IR	18.000	1	FLEMING, JAMES
NW¼ SE¼	602	IR	9.000	1	FLEMING, JAMES
NW¼ SE¼	604	IR	1.400	1	MARTINEZ, VICTOR A
NW¼ SE¼	606	IR	6.600	1	MARTINEZ, VICTOR A
SW¼ SE¼	600	IR	13.000	1	KURTZ, DEVON
SW¼ SE¼	605	IR	16.000	1	COATS, ERIC W
SE¼ SE¼	902	IR	4.000	1	BOUCHARD, ROGER H
SE¼ SE¼	903	IR	3.700	1	STRONG, ROBERT
SE¼ SE¼	904	IR	1.700	1	NORGORDEN, NELS
SE¼ SE¼	905	IR	7.000	1	ROSE, RAY A
SE¼ SE¼	907	IR	5.400	1	GAGE, DANIEL M
SE¼ SE¼	908	IR	5.800	1	LOWE, GAYLE A
SE¼ SE¼	909	IR	6.700	1	FISHER, ROBERT W

Section 13

NW¼ NE¼	200	IR	3.000	11	JOHNSON, DAVID
NW¼ NE¼	400	IR	4.250	11	OLDS, DOUG
NW¼ NE¼	600	IR	3.000	11	JEFFERS, CYNTHIA LYNN
SW¼ NE¼	100	IR	4.700	11	GORDON, RICHARD L
SW¼ NE¼	200	IR	4.000	11	HENDERSON, MARION
SW¼ NE¼	201	IR	1.800	11	HENDERSON, MARION
SW¼ NE¼	300	IR	3.000	11	CENIGA, KELLY
SW¼ NE¼	500	IR	2.600	11	HURST, WILLIAM J
SW¼ NE¼	800	IR	2.500	11	CROFOOT, LEONARD V
SE¼ NE¼	200	IR	1.000	1	SMITH, NANCY K
SE¼ NE¼	300	IR	2.000	1	HERMANN, JOHN
SE¼ NE¼	400	IR	0.500	1	MANSUR, MRS AVALON V
SE¼ NE¼	500	IR	2.000	1	FULLER, KRISTI J
NE¼ NW¼	100	IR	4.000	11	CONTI, GLORIA
NE¼ NW¼	200	IR	2.000	11	INGRAM, DON
NE¼ NW¼	300	IR	8.000	11	HOWARD, JAMES D
NE¼ NW¼	400	IR	1.200	11	SCHASSBERGER, HERMAN
NE¼ NW¼	500	IR	8.000	11	SCHASSBERGER, HERMAN
SW¼ NW¼	400	IR	2.700	11	CANFIELD, FRED C
SW¼ NW¼	500	IR	3.000	11	HOLT, MARILYN S
SW¼ NW¼	700	IR	1.500	11	BRIGHT, JON
SW¼ NW¼	800	IR	3.150	11	SEQUEIRA, MICHAEL A

SE¼ NW¼	100	IR	2.700	11	SUMMERS, OMER
SE¼ NW¼	200	IR	2.300	11	SUMMERS, OMER
SE¼ NW¼	400	IR	4.750	11	JOLOKAI, GEORGE A &
SE¼ NW¼	500	IR	0.920	11	MILES, ELMO M
SE¼ NW¼	600	IR	4.500	11	WAGNER, MICHAEL R
SE¼ NW¼	700	IR	2.000	11	WARREN, ROY B JR
SE¼ NW¼	800	IR	7.500	11	CROFOOT, LEONARD V
NE¼ SW¼	100	IR	1.900	11	SANTUCCI, BRADLEY L
NE¼ SW¼	200	IR	2.000	11	REID, ELSIE ZEHR
NE¼ SW¼	300	IR	7.000	11	WHITEHEAD, CECIL
NE¼ SW¼	400	IR	2.400	11	LAHEY, MICHAEL J
NE¼ SW¼	401	IR	4.600	11	MASTERSON, DEAN W
NE¼ SW¼	500	IR	6.000	11	CROFOOT, LEONARD V
NW¼ SW¼	100	IR	3.000	11	PAULSEN, STEVEN M
NW¼ SW¼	1000	IR	1.000	11	HOEPER, DENNIS E
NW¼ SW¼	1001	IR	1.000	11	HOEPER, DENNIS E
NW¼ SW¼	300	IR	1.300	11	SHACKELL, SIMON T
NW¼ SW¼	400	IR	1.200	11	WESLEY, LEONARD
NW¼ SW¼	500	IR	1.250	11	MADISON, ROGER
NW¼ SW¼	600	IR	1.000	11	MADISON, ROGER
NW¼ SW¼	700	IR	4.250	11	FERRIN, WILLIAM M
NW¼ SW¼	800	IR	1.600	11	SEQUEIRA, MICHAEL A
NW¼ SW¼	800	IR	1.500	11	SWEENEY, HARRIET E
NW¼ SW¼	900	IR	3.500	11	STOWERS, MARIANNE YVONNE
SW¼ SW¼	100	IR	3.000	11	MERGEL, WILLIAM B
SW¼ SW¼	1000	IR	0.970	11	THOMPSON, JAMES R
SW¼ SW¼	200	IR	1.000	11	SEARCY, BONNIE E
SW¼ SW¼	301	IR	2.000	11	GUZMAN, RENE J
SW¼ SW¼	300	IR	2.460	11	WALSH, ALAN J
SW¼ SW¼	400	IR	4.970	11	TROSCLAIR, ROY V
SW¼ SW¼	500	IR	0.500	11	BOSCH, JOHN
SW¼ SW¼	600	IR	1.000	11	SCHWARZ, HANS H
SW¼ SW¼	700	IR	2.000	11	FRANK, DELORES
SW¼ SW¼	800	IR	1.670	11	BOSCH, JOHN MCKENNA JR
SW¼ SW¼	900	IR	1.500	11	BOSCH, JOHN
SE¼ SW¼	100	IR	9.000	1	GIANOTTI, WILTON A
SE¼ SW¼	200	IR	2.100	1	CROFOOT, LEONARD V
SE¼ SW¼	300	IR	2.100	1	CROFOOT, LEONARD V
SE¼ SW¼	500	IR	1.000	1	MEDLEY, KENNETH D
SE¼ SW¼	600	IR	3.800	1	PAGE, JERRY LYNN
SE¼ SW¼	700	IR	3.500	1	WALKER, CLARENCE
SE¼ SW¼	800	IR	3.500	1	PRICE, DANNY R
NE¼ SE¼	800	IR	7.000	1	PHILLIPS, HOYLE DAVID
NE¼ SE¼	802	IR	0.500	1	DE WITT, MRS ANNIE
NE¼ SE¼	803	IR	0.500	1	MENDONCA, EDWARD D
NE¼ SE¼	805	IR	2.600	1	DYER, BOYD J
NE¼ SE¼	806	IR	15.700	1	DYER, BRUCE
NW¼ SE¼	100	IR	1.100	11	SANTUCCI, BRADLEY L
NW¼ SE¼	500	IR	10.400	1	HURST, WILLIAM J
SW¼ SE¼	700	IR	22.000	1	POOL, PAUL
SW¼ SE¼	701	IR	3.000	1	BECK, CYNTHIA L
SE¼ SE¼	806	IR	33.900	1	DYER, BRUCE

Section 14

NE¼ NE¼	204	IR	0.200	11	GISLER, VINCENT E
NW¼ NE¼	204	IR	0.300	11	GISLER, VINCENT E
SW¼ NE¼	100	IR	1.000	11	TURNER, MORLEY R
SW¼ NE¼	201	IR	3.900	11	GISLER, JOEL T
SW¼ NE¼	203	IR	0.900	11	GISLER, PATRICK M
SW¼ NE¼	204	IR	17.800	11	GISLER, VINCENT E

SW¼ NE¼	600	IR	0.900	11	ROGEN, DUWAYNE
SE¼ NE¼	202	IR	21.200	11	GISLER, KATHRYN Y
SE¼ NE¼	204	IR	6.300	11	GISLER, VINCENT E
SE¼ NW¼	201	IR	15.100	11	GISLER, JOEL T
SE¼ NW¼	203	IR	13.000	11	GISLER, PATRICK M
NE¼ SW¼	200	IR	1.000	11	PERREAULT, JEFF
NE¼ SW¼	300	IR	1.000	11	HANSEN, HANS C
NE¼ SW¼	400	IR	1.000	11	ANDERSON, ERIC C
NE¼ SW¼	600	IR	3.750	11	HISKEY, ROGER
SE¼ SW¼	100	IR	4.700	11	PUDDY, MICHAEL M
SE¼ SW¼	200	IR	3.700	11	DEITRICK, RICKARD R
SE¼ SW¼	300	IR	2.000	11	CROCKER, ARTHUR
SE¼ SW¼	400	IR	1.900	11	ATWOOD, JAMES D
SE¼ SW¼	500	IR	1.600	11	CRABB, RUSSELL
SE¼ SW¼	600	IR	2.000	11	BASSLER, RICHARD H
SE¼ SW¼	700	IR	1.500	11	STENKAMP, ROBERT M
SE¼ SW¼	800	IR	3.500	11	WHITEHURST, NOLAN
SE¼ SW¼	900	IR	6.000	11	MORAN, MATTHEW P
NE¼ SE¼	100	IR	0.500	11	SCOTT, NORMAN P
NE¼ SE¼	1000	IR	1.250	11	ROBERTS, KEN M
NE¼ SE¼	1100	IR	0.500	11	COMBS, MARVIN F
NE¼ SE¼	1200	IR	2.000	11	SERBUS, FRANK
NE¼ SE¼	1300	IR	1.000	11	DONOVAN, D F
NE¼ SE¼	1400	IR	0.500	11	BOEMI, HENRY
NE¼ SE¼	1500	IR	0.500	11	MUNSON, DAIVD A
NE¼ SE¼	200	IR	1.500	11	ANDERSON, ELMA
NE¼ SE¼	400	IR	0.500	11	HERSHEY, RUBY IRENE
NE¼ SE¼	600	IR	0.500	11	TIDWELL, GORDON G
NE¼ SE¼	700	IR	0.500	11	SMITH, DUANE E
NE¼ SE¼	800	IR	1.500	11	SAUNDERS FAMILY REVOC. TRST
NE¼ SE¼	900	IR	0.500	11	MURRIETA, LOUIE
NW¼ SE¼	1100	IR	1.500	11	STEWART, ALAN C
NW¼ SE¼	1200	IR	0.300	11	SCHOENFIELD, HAROLD P
NW¼ SE¼	1500	IR	1.680	11	MACRITCHIE, BRIAN
NW¼ SE¼	1600	IR	0.500	11	WESTCOTT, HEATH
NW¼ SE¼	1700	IR	2.150	11	PING, LAMAR ALAN
NW¼ SE¼	1800	IR	1.000	11	BATEMAN, DAVID K
NW¼ SE¼	200	IR	1.000	11	CARDON, ERNEST F
NW¼ SE¼	300	IR	1.000	11	LASNIEWSKI, DOUGLAS
NW¼ SE¼	400	IR	1.000	11	FUERSENAU, DUANE
NW¼ SE¼	500	IR	1.250	11	BECKER, E LEWIS II
NW¼ SE¼	600	IR	0.600	11	ROGEN, DUWAYNE
NW¼ SE¼	700	IR	1.500	11	VERNON, GREG T
NW¼ SE¼	800	IR	1.000	11	TIPTON, TRACY V
NW¼ SE¼	900	IR	1.000	11	ECHELBERGER, GARY L
SE¼ SE¼	100	IR	1.800	11	CRENSHAW, FERN L
SE¼ SE¼	1000	IR	1.000	11	JOHNSON, CRAIG
SE¼ SE¼	1100	IR	1.000	11	SAINT FRANCIS OF ASSISI
SE¼ SE¼	1300	IR	0.770	11	ROBINSON, JOAN J
SE¼ SE¼	1500	IR	1.000	11	CONGLETON TRUST
SE¼ SE¼	1600	IR	1.000	11	NELSON, RICHARD
SE¼ SE¼	200	IR	1.000	11	PINO, TONY
SE¼ SE¼	400	IR	2.000	11	MCCORMICK, BOB
SE¼ SE¼	500	IR	1.000	11	WALTERS, FRED H
SE¼ SE¼	600	IR	0.700	11	JOHNSON, WILLIAM B
SE¼ SE¼	700	IR	1.000	11	SCOTT, BRADLEY R
SE¼ SE¼	800	IR	1.000	11	SMITH, DUANE E

Section 15

NE¼ SW¼	102	IR	3.069	10	RIVER'S EDGE INVESTMENTS

NW¼ SW¼	102	IR	3.545	10	RIVER'S EDGE INVESTMENTS
SW¼ SW¼	102	IR	4.055	10	RIVER'S EDGE INVESTMENTS
SE¼ SW¼	102	IR	15.678	10	RIVER'S EDGE INVESTMENTS
SW¼ SE¼	4800	IR	11.000	10	RIVER'S EDGE INVESTMENTS

Section 20

NE¼ SW¼	1000	IR	1.700	1	CHOFFEL, LEONARD K
NE¼ SW¼	1100	IR	3.800	1	DAVIS, MARIE
NE¼ SW¼	1200	IR	10.000	1	BENNETT, RAYMOND
NE¼ SW¼	1300	IR	3.000	1	JUDGE, THOMAS R
NE¼ SW¼	1400	IR	4.400	1	PETE, T M ENTERPRISES
SE¼ SW¼	1000	IR	2.300	1	CHOFFEL, LEONARD K
SE¼ SW¼	1100	IR	0.200	1	DAVIS, MARIE
SE¼ SW¼	1400	IR	0.600	1	PETE, T M ENTERPRISES
SW¼ SE¼	200	IR	1.500	1	SPERLING, DAVID
SW¼ SE¼	300	IR	3.500	1	SPERLING, DAVID
SE¼ SE¼	2200	IR	12.800	1	HOLT, JACK N ET AL

Section 22

NE¼ NE¼	100	IR	0.700	1	HAMBY, DELLA
NE¼ NE¼	102	IR	6.000	1	CARTER, GRACE CHANGE ET AL
NE¼ NE¼	104	IR	9.000	1	HUEBNER, STEVE
NE¼ NE¼	106	IR	6.800	1	FOUTS, DANIEL K
NE¼ NE¼	111	IR	3.000	1	WATERMAN, FRED G
NE¼ NE¼	112	IR	1.000	1	LECHNER, GERALD
NE¼ NE¼	113	IR	1.500	1	WHALEN, DAVID T
NW¼ NE¼	100	IR	2.000	1	CRENSHAW, KENNETH E
NW¼ NE¼	200	IR	2.300	1	COOPER, CHARLENE
NW¼ NE¼	300	IR	1.700	1	COOPER, CHARLENE
NW¼ NE¼	600	IR	1.700	1	COOPER, CHARLENE
NW¼ NE¼	700	IR	1.000	1	COOPER, CHARLENE
NW¼ NE¼	800	IR	3.000	1	RUDIN, MARK L
NW¼ NE¼	900	IR	9.300	1	COOPER, CHARLENE
SW¼ NE¼	300	IR	0.800	1	MACGURN, DAVID F
SW¼ NE¼	301	IR	2.000	1	LADUKE, BRENDA
SW¼ NE¼	400	IR	3.700	1	SUCHY, ARTHUR
SW¼ NE¼	401	IR	5.100	1	CERULLO, LAWRENCE J
SW¼ NE¼	402	IR	6.200	1	FARNHAM, TERRY L
SE¼ NE¼	102	IR	2.000	1	CARTER, GRACE CHANGE ET AL
SE¼ NE¼	103	IR	0.750	1	WOOD, LUCY H
SE¼ NE¼	105	IR	1.000	1	SMITH, GENE
SE¼ NE¼	110	IR	1.500	1	BUTTS, DANIEL
SE¼ NE¼	115	IR	8.000	1	CHANG-SEARS PARTNERSHIP
SE¼ NE¼	116	IR	12.500	1	VINEYARD CHRISTIAN FELLOWSHIP
SE¼ NE¼	200	IR	5.970	1	SHORT, JOHN F
NE¼ NW¼	700	IR	7.000	1	CURL, H J
NE¼ NW¼	703	IR	2.000	1	WARNER, EMILY M
NE¼ NW¼	704	IR	3.800	1	CURL, H J
NE¼ NW¼	706	IR	2.500	1	LOVELY,JAMES P
NE¼ NW¼	707	IR	7.200	1	CURL, H J
NE¼ NW¼	708	IR	0.500	1	PEDERSEN, CLIFFORD A
NE¼ NW¼	710	IR	1.500	1	ARCHULETA, GEORGE
SE¼ NW¼	701	IR	1.800	1	HELGESSON, LEONARD A TRUSTEE
SE¼ NW¼	702	IR	5.000	1	WICK, AGNES
SE¼ NW¼	705	IR	2.200	1	HELGESSON, LEONARD A TRUSTEE
SE¼ NW¼	708	IR	1.000	1	PEDERSEN, CLIFFORD A
SE¼ NW¼	709	IR	1.500	1	HEATH, MICHAEL A
SE¼ NW¼	712	IR	1.200	1	FAHRENTHOLD, KARL V
SE¼ NW¼	713	IR	6.000	1	REYNOLDS, JEFFREY E
NE¼ SW¼	1400	IR	22.000	1	TURNER, NOLAN

NW¼ SW¼	1000	IR	0.800	1	COOK, RONALD LEE
NW¼ SW¼	1001	IR	0.700	1	COOK, RONALD LEE
NW¼ SW¼	200	IR	1.170	1	MCCOOK, A TUDOR
NW¼ SW¼	300	IR	0.400	1	MCCOOK, A TUDOR
NW¼ SW¼	600	IR	0.500	1	PURTZER, JOHN W
NW¼ SW¼	800	IR	1.000	1	HESS, K LARRY
NW¼ SW¼	900	IR	1.000	1	PALMER, KEITH M
SW¼ SW¼	1000	IR	0.500	1	PETERSEN, JOHN E
SW¼ SW¼	300	IR	2.000	1	BIBLER, JON
SW¼ SW¼	400	IR	1.500	1	ALDRICH, MICHAEL A
SW¼ SW¼	500	IR	2.000	1	MERRICK, GEORGE
SW¼ SW¼	600	IR	1.000	1	SIGMUND, VOLNEY
SW¼ SW¼	700	IR	1.500	1	SIGMUND, VOLNEY
SE¼ SW¼	100	IR	1.000	1	MOLLER, ROLF E
SE¼ SW¼	200	IR	2.000	1	CONNOLLY, TIMOTHY M
NE¼ SE¼	100	IR	0.319	1	THOMPSON, STEVEN E
NE¼ SE¼	1000	IR	0.319	1	CHANDLER, BERNICE
NE¼ SE¼	1200	IR	0.319	1	HAYES, JERRY D
NE¼ SE¼	1300	IR	0.319	1	MORTON, DENNIS
NE¼ SE¼	1400	IR	0.319	1	ABERNATHY, CHARLES T
NE¼ SE¼	1500	IR	0.319	1	FLEMING, ARTHUR
NE¼ SE¼	1600	IR	0.319	1	POOL, HERBERT H
NE¼ SE¼	1800	IR	0.319	1	BISSET, DANIEL D
NE¼ SE¼	1802	IR	0.319	1	MATHEWS FAMILY LIVNG TRST
NE¼ SE¼	1900	IR	0.319	1	WILLIS, KENNETH G
NE¼ SE¼	1902	IR	0.319	1	LIBERDA, THEADOR
NE¼ SE¼	1903	IR	0.319	1	UTTON, CURTIS J
NE¼ SE¼	1904	IR	0.319	1	FRASER, SANDY L
NE¼ SE¼	200	IR	0.319	1	FERNS, TIMOTHY J
NE¼ SE¼	2000	IR	0.319	1	CLONTZ, ALVIE
NE¼ SE¼	2100	IR	0.319	1	MARTINO, ALAN L
NE¼ SE¼	2200	IR	0.319	1	STILES, ROBERT L
NE¼ SE¼	2300	IR	0.319	1	EDDINGTON, BRIGHAM Z
NE¼ SE¼	2400	IR	0.319	1	HUNTLEY, LARRY L
NE¼ SE¼	2500	IR	0.319	1	VICK, RONALD E
NE¼ SE¼	2600	IR	0.319	1	SCHILLING, BILL
NE¼ SE¼	2700	IR	0.319	1	ELLIOTT, DONNA M
NE¼ SE¼	2800	IR	0.319	1	FREEMAN, JEFF G
NE¼ SE¼	2900	IR	0.319	1	ERSKINE, JAMES E
NE¼ SE¼	3000	IR	0.319	1	HOENER, JEFFREY E
NE¼ SE¼	3100	IR	0.319	1	SIMMONS, ROBERT
NE¼ SE¼	3200	IR	0.319	1	DAVIS, GEOFFREY
NE¼ SE¼	3300	IR	0.319	1	PARDEE, CHARLES I
NE¼ SE¼	3400	IR	0.319	1	WHITEID, TROY D
NE¼ SE¼	3500	IR	0.319	1	PARR, RICHARD L
NE¼ SE¼	3600	IR	0.319	1	MOLDENHAUER, MICHAEL
NE¼ SE¼	3700	IR	0.319	1	BASSLER, RICHARD H
NE¼ SE¼	3800	IR	0.319	1	MARKEY, BRIAN L
NE¼ SE¼	3900	IR	0.319	1	KOFFLER, BEVERLY G
NE¼ SE¼	400	IR	0.319	1	SHOTWELL, SCOTT
NE¼ SE¼	4000	IR	0.319	1	KOESTER, ERIC R
NE¼ SE¼	4100	IR	0.319	1	STEVENS, LINDSAY
NE¼ SE¼	4200	IR	0.319	1	HOWEY, DAVID H
NE¼ SE¼	4300	IR	0.319	1	HICKMANN, RICHARD L
NE¼ SE¼	4400	IR	0.319	1	MCGOWEN, DAVID LEE
NE¼ SE¼	4500	IR	0.319	1	RINEHART, RICHARD J
NE¼ SE¼	4600	IR	0.319	1	SEEMS, RAYMOND M
NE¼ SE¼	4700	IR	0.319	1	MURPHY, JAMES K
NE¼ SE¼	4800	IR	0.319	1	ICENHOWER, TONI
NE¼ SE¼	4900	IR	0.319	1	SHERMAN, ROBERT J

NE¼ SE¼	500	IR	0.150	1	SHOTWELL, SCOTT
NE¼ SE¼	5000	IR	0.319	1	BALZER, GEORGE E
NE¼ SE¼	5100	IR	0.319	1	PAGE, JERRY L
NE¼ SE¼	5200	IR	0.319	1	GORDON, KATHRYN N &
NE¼ SE¼	5300	IR	0.319	1	GANGSTEE, ROLAND P
NE¼ SE¼	5400	IR	0.319	1	VANDEHEY, DAIVD M
NE¼ SE¼	5500	IR	0.319	1	BOE, KEVIN V
NE¼ SE¼	5600	IR	0.319	1	WOLF, DAVID G
NE¼ SE¼	5700	IR	0.319	1	COULTER, LYNN M
NE¼ SE¼	5800	IR	0.319	1	BERGSTRAIN, MARY KATHLEEN
NE¼ SE¼	5900	IR	0.319	1	LANHAM, RAYMOND G
NE¼ SE¼	600	IR	0.319	1	TATE, JAY STEVEN
NE¼ SE¼	6000	IR	0.319	1	SEGERSTROM, RICHARD V
NE¼ SE¼	6100	IR	0.319	1	THOMPSON, REBECCA TAYLOR
NE¼ SE¼	6200	IR	0.319	1	ARNOLD, LORRAINE K
NE¼ SE¼	6300	IR	0.319	1	DOUGHERTY, JILL ELAINE
NE¼ SE¼	700	IR	0.319	1	MITCHELL, HAROLD C
NE¼ SE¼	800	IR	0.319	1	WAGGONER, JULL L
NE¼ SE¼	900	IR	0.319	1	MONTGOMERY, JERRY A
NW¼ SE¼	1500	IR	3.500	1	HOLLY, WILLIAM J
NW¼ SE¼	1501	IR	7.500	1	STEWART, JACK D
NW¼ SE¼	1502	IR	2.000	1	FORCUM, RICHARD
NW¼ SE¼	1503	IR	3.000	1	GUENTHER, EDGAR T JR
NW¼ SE¼	1504	IR	1.700	1	HOLT, JESSE R
NW¼ SE¼	1505	IR	3.900	1	UPTEGROVE, MELVIN
NW¼ SE¼	1506	IR	8.500	1	STEWART, JACK D
SW¼ SE¼	100	IR	0.600	1	JOHNSON, VERNON
SW¼ SE¼	1000	IR	0.520	1	JOHNSON, VERNON
SW¼ SE¼	1100	IR	1.000	1	DEKALE, JACQUES A
SW¼ SE¼	1200	IR	1.000	1	CRABTREE, EDSEL D
SW¼ SE¼	1300	IR	1.000	1	COOLEY, JOHN R
SW¼ SE¼	1400	IR	0.500	1	BOUCHER, WALTER
SW¼ SE¼	1500	IR	0.900	1	OWEN, JUNIOR M
SW¼ SE¼	1600	IR	1.000	1	SWANSON, JOHN
SW¼ SE¼	1700	IR	0.600	1	CORLEY, LES E
SW¼ SE¼	1800	IR	0.500	1	JOHNSON, VERNON
SW¼ SE¼	1900	IR	0.500	1	MILLER, GERALD EUGENE
SW¼ SE¼	200	IR	0.940	1	KANE TRUST
SW¼ SE¼	2000	IR	0.400	1	CASHWELL, C GREGORY
SW¼ SE¼	2100	IR	0.400	1	SHORES, LYNN A
SW¼ SE¼	2200	IR	0.500	1	CIRCLE, CHERYL LYNN
SW¼ SE¼	2300	IR	0.500	1	SAMPLES, HAZEL E ET AL
SW¼ SE¼	2400	IR	0.600	1	JOHNSON, VERNON
SW¼ SE¼	2500	IR	0.500	1	BERGEN, JAMES V
SW¼ SE¼	2600	IR	0.500	1	MASSINGILL, DAVID JENSSEN
SW¼ SE¼	2700	IR	0.500	1	BARNETT, MICHAEL J
SW¼ SE¼	2800	IR	0.500	1	PARRISH, KRISTY
SW¼ SE¼	2900	IR	0.500	1	LOVRIEN, MICHELLE K
SW¼ SE¼	300	IR	0.500	1	CARPENTER, KENNETH
SW¼ SE¼	3000	IR	0.500	1	JOHNSON, ROBERT D
SW¼ SE¼	3100	IR	0.400	1	GEURTS, CARLTON
SW¼ SE¼	400	IR	0.500	1	MCCOLL, REBECCA
SW¼ SE¼	500	IR	0.500	1	GILMAN, AL N
SW¼ SE¼	600	IR	0.750	1	LAUDE, DOUGLAS J
SW¼ SE¼	700	IR	1.000	1	FARLOW, DANNY
SW¼ SE¼	800	IR	0.750	1	MATTHEWS, RANDALL K
SW¼ SE¼	900	IR	0.500	1	HANCOCK, MARY K
SE¼ SE¼	1700	IR	35.000	1	J BAR J BOYS RANCH

Section 23

NE¼ NE¼	100	IR	3.000	1	HARTJE, KEVIN ET AL
NE¼ NE¼	101	IR	27.500	1	PARR, RICHARD
NW¼ NE¼	201	IR	1.830	1	MCVAY, SHAWN T
SE¼ NE¼	205	IR	6.400	1	CULVER, CHARLES
NE¼ NW¼	300	IR	3.100	1	RONNE, LEONARD P
NE¼ NW¼	301	IR	4.500	1	FRICK, BOB
NE¼ NW¼	302	IR	11.100	1	FRICK, BOB
NE¼ NW¼	302	PND	0.300	1	FRICK, BOB
NE¼ NW¼	304	IR	4.900	1	STANDIFORD, BRIAN
NE¼ NW¼	305	IR	5.900	1	FRICK, BOB
NE¼ NW¼	305	PND	0.200	1	FRICK, BOB
NW¼ NW¼	400	IR	4.000	1	HAMBY, DELLA
NW¼ NW¼	401	IR	19.650	1	ODEGARD, THOMAS
NW¼ NW¼	403	IR	6.500	1	RODERICK, JACK RAY
NW¼ NW¼	405	IR	4.500	1	PEVERIERI, LEONARD
SW¼ NW¼	404	IR	37.400	1	DIAMOND-BEND DEVELOPMENT CO.
SE¼ NW¼	303	IR	11.600	1	DIAMOND-BEND DEVELOPMENT CO.
SE¼ NW¼	304	IR	0.500	1	STANDIFORD, BRIAN
SE¼ NW¼	402	IR	1.500	1	DIAMOND-BEND DEVELOPMENT CO.
NE¼ SW¼	400	IR	1.760	1	RILEY, THOMAS C
NE¼ SW¼	401	IR	1.550	1	PRUITT, MAURICE
NE¼ SW¼	600	IR	1.000	1	REDWINE, DEBRA H
NE¼ SW¼	700	IR	1.000	1	WAMPLER, NOAH L
NE¼ SW¼	800	IR	2.000	1	BROWNSON, W ORREN
NW¼ SW¼	1000	IR	3.200	1	SHEPARDSON, STANLEY
NW¼ SW¼	1100	IR	2.600	1	HOGUE, TOMMY DALE
NW¼ SW¼	1200	IR	0.200	1	BINGHAM, ROBERT J
NW¼ SW¼	400	IR	9.000	1	PATTERSON, GLENN A JR
NW¼ SW¼	401	IR	3.200	1	PRUITT, MAURICE
NW¼ SW¼	900	IR	2.200	1	SHEPARDSON, STANLEY
SW¼ SW¼	1200	IR	3.000	1	BINGHAM, ROBERT J
SW¼ SW¼	1300	IR	1.700	1	SMITH, TRACIE LEE
SW¼ SW¼	1400	IR	0.800	1	ADAMS, E M
SW¼ SW¼	1800	IR	1.000	1	STORY, TAYLOR L
SW¼ SW¼	1900	IR	1.000	1	JONES, AUDREY H TRUSTEE
SW¼ SW¼	2000	IR	0.500	1	RATZ, ALFRED
SE¼ SW¼	2500	IR	1.000	1	JOHNSON, WILLIAM M
SE¼ SW¼	2900	IR	1.000	1	JEFF SHEA LIVING TRUST
SE¼ SW¼	3000	IR	1.000	1	THOMPSON, RODNEY D
SE¼ SW¼	3200	IR	1.000	1	ENGSTROM, PAUL E
NE¼ SE¼	100	IR	5.000	1	KOSINSKI, THOMAS R
NE¼ SE¼	1600	IR	1.000	1	THOBURN, SCOTT R
NE¼ SE¼	1800	IR	3.750	1	REILL, DWAYNE A
NW¼ SE¼	200	IR	1.900	1	SHARPE, DEAN R
NW¼ SE¼	300	IR	1.250	1	CANTOR, ARTHUR S
NW¼ SE¼	300	PND	0.500	1	CENTRAL OREGON IRRIGATION
NW¼ SE¼	400	IR	1.340	1	RILEY, THOMAS C
NW¼ SE¼	600	IR	0.500	1	CLUSTER, ALVIN P
SW¼ SE¼	1000	IR	1.000	1	MIERJESKI, EDWARD &
SW¼ SE¼	800	IR	2.000	1	JOHNSON, KENNETH R
SE¼ SE¼	1400	IR	4.250	1	WALKER, JERRY

Section 24

NE¼ NE¼	101	IR	6.500	1	WHITE, CARROLL E
NE¼ NE¼	102	IR	14.100	1	COUCH, LEEROY E
NE¼ NE¼	103	IR	7.600	1	STONE, JERRY D
SE¼ NE¼	100	IR	3.500	1	BOUSQUET, LAWRENCE ED
SE¼ NE¼	103	IR	9.800	1	STONE, JERRY D
SE¼ NE¼	104	IR	0.800	1	PRICE, WESLEY B
SE¼ NE¼	105	IR	6.200	1	PRICE, WESLEY B

SE¼ NE¼	106	IR	0.400	1	COSTLEY, DELIA JILL
SE¼ NE¼	107	IR	0.500	1	BOUSQUET, LAWRENCE ED
SE¼ NE¼	108	IR	3.600	1	COSTLEY, DELIA JILL
NW¼ NW¼	2601	IR	5.000	1	STRUNK, JAMES W
SW¼ NW¼	2600	IR	13.500	1	BOE, STEPHEN L
SW¼ NW¼	2700	IR	14.500	1	BOE, STEPHEN L
NE¼ SE¼	600	IR	32.000	1	FRANKLIN, GEORGE

Section 25

NE¼ NE¼	100	IR	2.000	1	WHIPP, RAY P JR
NE¼ NE¼	101	IR	3.000	1	KARL, VERNETTE
NE¼ NE¼	102	IR	3.000	1	BOICHEL, ALEX
NE¼ NE¼	103	IR	1.250	1	EPPERS, DON R JR
NE¼ NE¼	104	IR	2.500	1	RIES, DARREL R
NE¼ NE¼	105	IR	1.250	1	PATTERSON, EUGENE
NE¼ NE¼	106	IR	2.500	1	MORRISSEY, ROBERT S
NE¼ NE¼	107	IR	5.750	1	BURCH, JERRY L
NE¼ NE¼	109	IR	2.500	1	FUQUA, DONALD K
NW¼ NE¼	300	IR	8.000	1	JOHNSON, LYLE H
NW¼ NE¼	303	IR	9.000	1	PATTERSON, EUGENE
NW¼ NE¼	304	IR	3.000	1	JOHNSON, PATTY
SW¼ NE¼	204	IR	3.000	1	PURCELL, MARY LOU &
SW¼ NE¼	205	IR	0.100	1	PURCELL, MARY LOU &
SW¼ NE¼	3400	IR	0.600	1	LAZY RIVER PROPERTIES
SW¼ NE¼	3500	IR	0.150	1	LAZY RIVER PROPERTIES
SE¼ NE¼	203	IR	3.500	1	HOGUE, JAMES D
SE¼ NE¼	204	IR	12.300	1	PURCELL, MARY LOU &
SE¼ NE¼	205	IR	16.600	1	PURCELL, MARY LOU &
SE¼ NE¼	3400	IR	0.100	1	LAZY RIVER PROPERTIES
SE¼ NE¼	3500	IR	0.150	1	LAZY RIVER PROPERTIES
NE¼ NW¼	401	IR	2.500	1	CLIFFORD, ELISABETH L
NE¼ NW¼	402	IR	2.000	1	MARRONE, SAM
NE¼ NW¼	403	IR	4.000	1	PEZAS, FLORENCE
NE¼ NW¼	404	IR	2.500	1	ROLLER-MCKAY, ELVA P
NE¼ NW¼	405	IR	2.000	1	BROOKS, RAY C
NE¼ NW¼	406	IR	1.400	1	WYLLIE, GARY A
NE¼ NW¼	407	IR	3.370	1	SMITH, GILLIAN M
NE¼ NW¼	408	IR	1.300	1	TRAHAN, MARK A
NE¼ NW¼	409	IR	2.000	1	LA CLAIR, WILLIAM J
NE¼ NW¼	410	IR	2.000	1	HIGHT, RICHARD B
NE¼ NW¼	411	IR	1.700	1	FOSTER, DOUGLAS R
NE¼ NW¼	412	IR	1.500	1	HUITT, GARRY D
NE¼ NW¼	413	IR	2.700	1	BEAVER, E W
NE¼ NW¼	414	IR	0.500	1	SHINE, TERRY N
NE¼ NW¼	415	IR	0.400	1	WYLLIE, GARY A
NW¼ NW¼	2600	IR	1.500	1	CORNELL, JACK R
NW¼ NW¼	2700	IR	0.500	1	CORNELL, JACK R
NW¼ NW¼	2800	IR	5.000	1	WILSON, ROBERT E
NW¼ NW¼	3100	IR	3.000	1	FISCHER, RICHELLE L
SW¼ NW¼	3100	IR	0.600	1	FISCHER, RICHELLE L
SW¼ NW¼	504	IR	0.500	1	RAPUE, KARON
SW¼ NW¼	505	IR	0.400	1	FISCHER, RICHELLE L
SW¼ NW¼	506	IR	4.200	1	KATTER, LYLE
SW¼ NW¼	511	IR	1.000	1	BRILEY, DOROTHY
SW¼ NW¼	512	IR	0.500	1	BURKE, CARL
SW¼ NW¼	513	IR	0.800	1	KATTER, LYLE
SE¼ NW¼	201	IR	24.000	1	HARKEY/YOUNG INVESTMENTS
NE¼ SW¼	700	IR	7.000	1	ROSS, MAX
NE¼ SW¼	701	IR	3.790	1	MC CUSKER, MICHAEL
NE¼ SW¼	702	IR	4.500	1	PATTERSON, ROBERT D

NE¼ SW¼	703	IR	4.500	1	THOMAS, WILLIAM B
NE¼ SW¼	704	IR	4.000	1	DRAMEN, DR ARTHUR
NE¼ SW¼	705	IR	5.000	1	BARTLEY, VERN
NE¼ SW¼	706	IR	1.000	1	JESSE E & HELEN M LIVING TRUST
NW¼ SW¼	2000	IR	5.000	1	BAILEY, HELEN
SE¼ SW¼	100	IR	2.000	1	HAVNIEAR, LARRY D
SE¼ SW¼	300	IR	5.200	1	O'NEAL, DEAN
SE¼ SW¼	400	IR	2.400	1	EASTMONT CHURCH
NE¼ SE¼	200	IR	1.500	1	GIANOTTI, MICHAEL A
NE¼ SE¼	2100	IR	2.500	1	HORTON, DALE W
NE¼ SE¼	2200	IR	1.000	1	BOSLAND-BRUNO LIVING TRUST
NE¼ SE¼	2300	IR	1.000	1	MCBURNETT, M STEVEN
NE¼ SE¼	2500	IR	0.750	1	PATRICK, RYAN
NE¼ SE¼	2600	IR	0.250	1	WILLIAMS, RANDALL R
NE¼ SE¼	2700	IR	5.000	1	SCHULZ, GERALD A
NE¼ SE¼	300	IR	0.250	1	ANDERSON TRUST
NE¼ SE¼	400	IR	0.500	1	DRUTMAN, JEFFREY
NE¼ SE¼	500	IR	0.250	1	SOTH, PHILLIP G
NW¼ SE¼	2800	IR	3.000	1	LARRANETA, MICHAEL J
NW¼ SE¼	3000	IR	2.000	1	WHEELER, GEORGE A
NW¼ SE¼	3100	IR	2.500	1	PAYNE, WALTER
NW¼ SE¼	3101	IR	2.000	1	DUNDAS, ROBERT S
NW¼ SE¼	3102	IR	0.500	1	DUNDAS, ROBERT S
NW¼ SE¼	3200	IR	3.500	1	MCALLISTER, ETIENNE E
NW¼ SE¼	3300	IR	3.500	1	HEIMBUCH, HOWARD
NW¼ SE¼	3400	IR	4.000	1	ROOKS, MARK W
NW¼ SE¼	3500	IR	4.000	1	DAVIS, LEE R
SW¼ SE¼	3800	IR	2.400	1	REINHART, ARNOLD D
SW¼ SE¼	3900	IR	1.600	1	SMARTT, MICHAEL W
SW¼ SE¼	4000	IR	1.400	1	CLAUSEN, GARY L
SW¼ SE¼	4100	IR	2.100	1	CLAUSEN, GARY L
SW¼ SE¼	4200	IR	2.000	1	ULLEDAHL, JOEL H
SW¼ SE¼	4301	IR	2.500	1	ZITNIK, JOACHIM
SW¼ SE¼	4302	IR	2.500	1	ZITNIK, JOACHIM
SW¼ SE¼	4400	IR	1.500	1	MCWHORTON, ROBERT K
SW¼ SE¼	4500	IR	1.800	1	NIMMO, ROBERT
SW¼ SE¼	4502	IR	1.900	1	BIRCH, JOHN
SE¼ SE¼	1000	IR	0.250	1	MCCLURE, WILLIAM
SE¼ SE¼	1100	IR	0.250	1	O'BRIEN, EDWARD &
SE¼ SE¼	1300	IR	0.500	1	SKOVBORG, LAWRENCE D
SE¼ SE¼	1500	IR	0.500	1	DONLEY, MICHAEL
SE¼ SE¼	1600	IR	1.500	1	DERTINGER, ALAN L &
SE¼ SE¼	1800	IR	0.250	1	KERR, DENNIS C
SE¼ SE¼	1900	IR	0.250	1	PARKS, JERRY K
SE¼ SE¼	2000	IR	0.250	1	SMITH, DONALD
SE¼ SE¼	600	IR	1.000	1	BROWN, PATRICK
SE¼ SE¼	700	IR	0.250	1	SMITH, CRAIG G
SE¼ SE¼	800	IR	0.250	1	TISHER, KENNETH R

Section 26

SE¼ NW¼	500	IR	5.500	1	BRIGGS, RICHARD
SE¼ NW¼	600	IR	1.600	1	RIPPY, FRANKIE G &
SE¼ NW¼	603	IR	1.400	1	RIPPY, FRANKIE G &
SE¼ NW¼	800	IR	3.590	1	BERNHARDT CONSTRUCTION
SW¼ SW¼	4000	IR	1.300	1	BROWN, DANIEL F
SW¼ SW¼	4100	IR	3.000	1	LEE, WILLIAM RICHARD
SW¼ SW¼	5001	IR	1.000	1	DE ALICANTE, MARCEL R
SW¼ SW¼	5100	IR	1.000	1	CONARD, MARSHALL
SW¼ SW¼	5104	IR	1.750	1	CONARD, MARSHALL
SW¼ SW¼	5200	IR	1.000	1	NELSON, REED

SE¼ SW¼	4000	IR	1.400	1	BROWN, DANIEL F
SE¼ SW¼	4000	PND	0.300	1	BROWN, DANIEL F
SE¼ SW¼	4100	IR	6.000	1	LEE, WILLIAM RICHARD
SW¼ SE¼	1200	IR	3.200	1	SISTERS OF ST JOSEPH
SW¼ SE¼	1200	PND	1.800	1	SISTERS OF ST JOSEPH
SW¼ SE¼	1201	IR	0.500	1	SISTERS OF ST JOSEPH
SE¼ SE¼	1200	IR	1.500	1	SISTERS OF ST JOSEPH

Section 27

NE¼ NE¼	5200	IR	1.000	1	OSBORNE, GLENN
NE¼ NE¼	5700	IR	0.500	1	TAYLOR, JEFFREY W
NE¼ NE¼	5800	IR	0.900	1	ANDERSON, LOREN R
SW¼ NE¼	1001	IR	0.500	1	CHILD, GARY F
SW¼ NE¼	400	IR	1.000	1	CARDER, BERT
SW¼ NE¼	500	IR	1.500	1	THALHOFER, JOSEPH
SW¼ NE¼	700	IR	2.200	1	MCCOOL, ROBERT J
SW¼ NE¼	828	IR	0.360	1	STEINERT, KIRK B
SW¼ NE¼	900	IR	0.700	1	SWANSON, DONALD H
SE¼ NE¼	9200	IR	1.500	1	CHURCH OF JESUS CHRIST
SE¼ NE¼	9300	IR	0.500	1	HOOVER, LYNN
SE¼ NW¼	5500	IR	2.000	1	MIDSTATE CHILD DEVELOPMENT INC
SE¼ NW¼	7800	IR	0.400	1	COYNER, CRAIG
SE¼ NW¼	8000	IR	0.100	1	CAMPBELL, THOMAS E
SE¼ NW¼	8000	PND	0.500	1	CAMPBELL, THOMAS E
NE¼ SW¼	102	IR	0.560	1	RAUCH, LARRY A
NE¼ SW¼	1100	IR	2.020	1	COUCH, MAHLON
NE¼ SW¼	200	IR	1.860	1	CLEVELAND, GEORGE
NE¼ SW¼	400	IR	1.900	1	COYLE, GEORGE
NE¼ SW¼	500	IR	2.140	1	MODJESKI, R JOSEPH
NE¼ SW¼	702	IR	2.500	1	MIX, MARVIN
NE¼ SW¼	703	IR	0.500	1	MIX, MARVIN
NE¼ SW¼	801	IR	0.500	1	HARDCASTLE, JEFFREY M
NE¼ SW¼	900	IR	0.500	1	ANDREWS, THOMAS M
NE¼ SE¼	4900	IR	0.900	1	BEND METRO PARK & REC.
NE¼ SE¼	4901	IR	1.680	1	BEND METRO PARK & REC.
NE¼ SE¼	4902	IR	5.100	1	BEND METRO PARK & REC.
NW¼ SE¼	100	IR	0.150	1	MULROONEY, MICHAEL
NW¼ SE¼	1100	IR	0.800	1	SMITH, INGRID K
NW¼ SE¼	1200	IR	0.800	1	ALLEN, JIM
NW¼ SE¼	1201	IR	1.100	1	ROSE, CLIFFORD
NW¼ SE¼	1300	IR	1.300	1	CLOWERS, GORDON W
NW¼ SE¼	200	IR	0.800	1	JENSEN, LOWELL
NW¼ SE¼	300	IR	1.000	1	BLACKWELL, TERRY
NW¼ SE¼	301	IR	1.000	1	JENSEN, ROBERT L
NW¼ SE¼	400	IR	0.700	1	DUBEROW, B G
NW¼ SE¼	500	IR	1.400	1	PIERATT, TOM
NW¼ SE¼	501	IR	1.400	1	PIERATT, TOM
NW¼ SE¼	600	IR	0.380	1	KOZAK, MICHAEL
NW¼ SE¼	601	IR	0.750	1	KOZAK, MICHAEL
NW¼ SE¼	700	IR	0.390	1	ELLIS, DR WILLIAM
NW¼ SE¼	701	IR	0.150	1	ELLIS, DR WILLIAM
NW¼ SE¼	800	IR	0.700	1	ELLIS, DR WILLIAM
NW¼ SE¼	801	IR	0.450	1	ELLIS, DR WILLIAM
NW¼ SE¼	900	IR	0.520	1	ELLIS, DR WILLIAM
NW¼ SE¼	901	IR	2.300	1	ELLIS, DR WILLIAM

Section 28

NE¼ NE¼	600	IR	0.600	10	RIVER'S EDGE INVESTMENTS
NE¼ NE¼	604	IR	0.200	10	RIVER'S EDGE INVESTMENTS
NW¼ NE¼	604	IR	8.100	10	RIVER'S EDGE INVESTMENTS

NW¼ NE¼	606	IR	1.200	10	RIVER'S EDGE INVESTMENTS
SW¼ NE¼	604	IR	3.600	10	RIVER'S EDGE INVESTMENTS
SW¼ NE¼	606	IR	0.900	10	RIVER'S EDGE INVESTMENTS
SE¼ NE¼	606	IR	1.400	10	RIVER'S EDGE INVESTMENTS
NE¼ NW¼	102	IR	1.400	10	RIVER'S EDGE INVESTMENTS
NE¼ NW¼	103	IR	10.646	10	RIVER'S EDGE INVESTMENTS
NW¼ NW¼	103	IR	4.637	10	RIVER'S EDGE INVESTMENTS
SW¼ NW¼	103	IR	2.799	10	RIVER'S EDGE INVESTMENTS
SE¼ NW¼	102	IR	4.100	10	RIVER'S EDGE INVESTMENTS
SE¼ NW¼	103	IR	7.071	10	RIVER'S EDGE INVESTMENTS
				Section 29	
SE¼ SE¼	5600	IR	0.600	3	BEND METRO PARK & REC.
SE¼ SE¼	600	IR	1.100	3	BEND METRO PARK & REC.
SE¼ SE¼	700	IR	0.400	3	BEND METRO PARK & REC.
				Section 31	
NW¼ NE¼	4001	IR	1.100	7	BEND METRO PARK & REC.
NW¼ NE¼	5100	IR	4.200	7 & 8	BEND METRO PARK & REC.
SW¼ NW¼	4200	IR	0.600	6	BEND METRO PARK & REC.
SW¼ NW¼	4700	IR	6.100	4 & 5	BEND METRO PARK & REC.
SW¼ NW¼	4800	IR	4.100	6	BEND METRO PARK & REC.
SE¼ NW¼	7100	IR	3.100	4 & 5	BEND METRO PARK & REC.
SW¼ NW¼	000	MUN	15.000	4	CITY OF BEND
NW¼ SW¼	4700	IR	2.700	4 & 5	BEND METRO PARK & REC.
SW¼ SW¼	19000	IR	0.500	2	FIFTEEN SW COLORADO
SE¼ SW¼	19000	IR	0.100	2	FIFTEEN SW COLORADO
				Section 32	
NE¼ NE¼	100	IR	0.500	1	BEND SCHOOL DIST
NE¼ NE¼	104	IR	3.100	1	BEND SCHOOL DIST
				Section 33	
SW¼ NE¼	1200	IR	1.400	1	WILLIAMSON, E W
NE¼ NW¼	900	IR	3.000	1	SU, AMBROSE
NW¼ NW¼	1803	IR	2.800	1	BEND SCHOOL DIST
NW¼ NW¼	1804	IR	0.900	1	BEND SCHOOL DIST
NE¼ SW¼	2000	IR	0.800	1	ARNETT, SHELDON
NE¼ SW¼	2002	IR	0.400	1	ARNETT, SHELDON
NE¼ SW¼	2003	IR	0.100	1	ARNETT, SHELDON
SW¼ SW¼	100	IR	1.000	1	MERRITT, DOTSON
SW¼ SW¼	400	IR	3.000	1	MERRITT, DOTSON
SW¼ SW¼	500	IR	0.500	1	FURLOTT, CLIFFORD D
SE¼ SW¼	400	IR	3.000	1	LANCET, A LINCOLN
NW¼ SE¼	1200	IR	11.200	1	WILLIAMSON, E W
NW¼ SE¼	1200	PND	2.600	1	WILLIAMSON, E W
NW¼ SE¼	1205	IR	0.250	1	WILLIAMSON, E W
SW¼ SE¼	1100	IR	0.500	1	BARNCORD, ROBERT R
SW¼ SE¼	1200	IR	1.590	1	MILLS, MICHAEL W
SW¼ SE¼	1300	IR	1.500	1	LOWERY, LARRY
SW¼ SE¼	1400	IR	2.350	1	STOKES, TOM A
SW¼ SE¼	1500	IR	1.810	1	CLARK, ALVIN
SW¼ SE¼	1600	IR	0.500	1	BANGS, LARRY G
SW¼ SE¼	1601	IR	1.500	1	BANGS, LARRY G
SW¼ SE¼	1602	IR	0.900	1	PENHOLLOW, TERRY
SW¼ SE¼	1603	IR	0.500	1	PENHOLLOW, TERRY
SW¼ SE¼	1800	IR	2.400	1	JENSEN, RONALD L
SW¼ SE¼	700	IR	1.750	1	WILLIVER, STERLING
SW¼ SE¼	1900	IR	1.500	1	GREGORY, JOHN R
SW¼ SE¼	701	IR	1.000	1	BREITENSTEIN, RONALD

SW¼ SE¼	801	IR	0.900	1	JONES, WALTER
SE¼ SE¼	1000	IR	5.600	1	SCOTT, STEVE C
SE¼ SE¼	1200	IR	1.400	1	EMICK, JACK L ET AL
SE¼ SE¼	1300	IR	3.500	1	WESTERMEYER, DANIEL M
SE¼ SE¼	900	IR	0.800	1	BLACKBURN, WILLIAM

Section 34

NW¼ NE¼	1702	IR	2.000	1	MEECE, BRIAN
SE¼ NE¼	1300	IR	17.000	1	MORRIS, ALAN G
SE¼ NE¼	1301	IR	6.000	1	ROGERSON, RICK
SW¼ NW¼	200	IR	6.500	1	VVI LTD LIABILITY COMPANY
SW¼ NW¼	201	IR	7.500	1	SCHLIEP, STANLEY R TRUSTEE
SW¼ NW¼	202	IR	0.700	1	VVI LTD LIABILITY COMPANY
NE¼ SW¼	600	IR	0.300	1	KIRK, RUSSELL A
NE¼ SW¼	801	IR	0.700	1	KIRK, RUSSELL A
NE¼ SW¼	802	IR	3.600	1	JONES, DAVID
NE¼ SW¼	803	IR	3.000	1	ENGLISH, GARY S
NE¼ SW¼	880	IR	3.600	1	ENGLISH, GARY S
NE¼ SW¼	890	IR	1.500	1	HUNT, DEAN
NE¼ SW¼	891	IR	1.500	1	HUNT, DEAN
SW¼ SW¼	402	IR	3.000	1	LITCHFIELD, RALPH
SW¼ SW¼	403	IR	2.000	1	BEND CHRISTIAN CENTER
SW¼ SW¼	404	IR	1.500	1	BRADETICH, PHILIP
SW¼ SW¼	407	IR	1.500	1	SLATE, CARL
SE¼ SW¼	500	IR	1.000	1	ENGLISH, GARY S
SE¼ SW¼	501	IR	5.000	1	JONES, DAVID A
SE¼ SW¼	503	IR	0.700	1	SHERMAN, GERALD
SE¼ SW¼	504	IR	4.000	1	NIPPER, ROBERT L
SE¼ SW¼	505	IR	8.000	1	ENGLISH, GARY S
SE¼ SW¼	506	IR	4.000	1	BEND FREE METHODIST CHURCH
SE¼ SW¼	508	IR	0.300	1	YACKLEY, BECKY JOANN
SE¼ SW¼	509	IR	1.100	1	WILSON, JANE
NE¼ SE¼	1401	IR	1.000	1	DULIN, GLENN
NE¼ SE¼	1402	IR	1.500	1	WIRGES, MARJORIE M
NE¼ SE¼	1403	IR	4.000	1	MAYER, WILLIAM D
NW¼ SE¼	1100	IR	1.000	1	SHOLES, FORREST
NW¼ SE¼	1205	IR	1.500	1	LEGG, GALEN L
NW¼ SE¼	900	IR	6.000	1	LEE, JANET KAY
SW¼ SE¼	1500	IR	9.250	1	ENSWORTH, JOHN
SW¼ SE¼	1500	PND	9.750	1	ENSWORTH, JOHN
SE¼ SE¼	1600	IR	23.000	1	BOESE, RALPH
SE¼ SE¼	1601	IR	2.000	1	RAPPLEYEA, LENOMA LYNN

Section 35

NW¼ NW¼	600	IR	1.000	1	CARR, RICHARD
NE¼ SW¼	801	IR	4.000	1	CHRISTIAN LIFE CENTER
SW¼ SE¼	1300	IR	0.700	1	CROWN EQUITY, INC
SW¼ SE¼	1301	IR	9.700	1	WESTON, GLORIA
SW¼ SE¼	1302	IR	4.800	1	WESTON, GLORIA
SE¼ SE¼	1400	IR	2.800	1	IZO, FRANK
SE¼ SE¼	1401	IR	3.800	1	CROWN EQUITY, INC
SE¼ SE¼	1402	IR	2.500	1	SPENCE, KENNY R
SE¼ SE¼	1403	IR	5.200	1	CROWN EQUITY, INC
SE¼ SE¼	1404	IR	3.500	1	GETZ, MELVILLE J TRUST

Section 36

Township 17 South, Range 12 East, W.M.

SW¼ SE¼	300	IR	3.000	1	THE MOORE FAMILY TRUST
SW¼ SE¼	400	IR	4.500	1	KELLY, MICHAEL P
SW¼ SE¼	500	IR	2.000	1	COVEY, PHILLIP R. ESTATE

SW¼ SE¼	600	IR	2.000	1	MAHONEY, GLENDA MAUREEN
SW¼ SE¼	700	IR	9.000	1	MADDUX, THOMAS

Section 17

SW¼ NW¼	700	IR	10.000	1	OLIVER, STANLEY
SW¼ NW¼	701	IR	1.500	1	TARBET, DALE
NW¼ SW¼	800	IR	16.500	1	UMSTED, JERRY
NW¼ SW¼	802	IR	6.000	1	TRIPLETT, GUY H III
SW¼ SW¼	1000	IR	5.800	1	BULLIS, HARRY
SW¼ SW¼	900	IR	2.200	1	BULLIS, HARRY
SW¼ SW¼	901	IR	10.000	1	ZIMMER, MONA
NE¼ SE¼	100	IR	11.900	1	SMEAD, IRENE L
NE¼ SE¼	200	IR	15.100	1	SMEAD, IRENE L
NW¼ SE¼	400	IR	1.000	1	A'NEAL, WAYNE W
NW¼ SE¼	401	IR	3.000	1	LANE, WILLIAM H
NW¼ SE¼	402	IR	3.000	1	MERRELL, DONALD L
NW¼ SE¼	403	IR	1.000	1	KIRKPATRICK, JEFFERY D
SW¼ SE¼	1200	IR	1.000	1	CALLAHAN, DONALD A
SW¼ SE¼	1300	IR	1.000	1	HIGHAM, MICHAEL E
SW¼ SE¼	1400	IR	1.000	1	WILKE, DAVID M
SW¼ SE¼	1500	IR	2.000	1	WILKE, LAWRENCE G SR
SW¼ SE¼	1600	IR	1.000	1	AMBERSON, MARK W
SW¼ SE¼	1700	IR	1.000	1	BARTEL, MARVIN R
SW¼ SE¼	1800	IR	1.000	1	HANSEN, STEPHEN G
SW¼ SE¼	1900	IR	1.000	1	PULZONE, JAMES M
SW¼ SE¼	2000	IR	1.000	1	PELHAM, JACKIE LEE
SW¼ SE¼	201	IR	1.500	1	SHAW, GEORGE E
SW¼ SE¼	2100	IR	1.000	1	SEARS, KENNETH W
SW¼ SE¼	2200	IR	1.000	1	WILLIAMSON, WILLIAM TUCKER
SW¼ SE¼	2300	IR	1.000	1	CURRY, MICHAEL J
SW¼ SE¼	2400	IR	1.000	1	STOWE, RONALD
SW¼ SE¼	2500	IR	1.000	1	HAMILTON, DAVID J &
SW¼ SE¼	300	IR	1.000	1	MAGNUSON, VYRLEE
SE¼ SE¼	202	IR	6.800	1	ASCHOFF, MARK
SE¼ SE¼	203	IR	2.200	1	WATERMAN, ROBERT
SE¼ SE¼	204	IR	13.000	1	SMEAD, IRENE L

Section 18

NE¼ NE¼	102	IR	18.000	1	BRILEY, ROBERT R
NE¼ NE¼	103	IR	2.500	1	SCHMIDT, AUGUST W
NE¼ NE¼	104	IR	0.440	1	GARZINI, RONALD A
NE¼ NE¼	105	IR	2.000	1	DANIELS, EDNA
NE¼ NE¼	112	IR	0.500	1	KREPS, JILL L
NE¼ NE¼	113	IR	0.400	1	COOK, STANLEY
NE¼ NE¼	114	IR	0.380	1	MAROLD, ROBERT E
NE¼ NE¼	116	IR	3.000	1	CHESTER, WILLIAM R
NE¼ NE¼	117	IR	0.620	1	HODSON, KENNETH W
NE¼ NE¼	119	IR	5.000	1	BRILEY, ROBERT R
NW¼ NE¼	101	IR	3.000	1	CARR, ROBERT F
NW¼ NE¼	104	IR	2.160	1	GARZINI, RONALD A
NW¼ NE¼	106	IR	1.000	1	YOUNGBLOOD, ANDREW
NW¼ NE¼	107	IR	2.000	1	WILLEY, BRIAN H
NW¼ NE¼	108	IR	2.000	1	JUHL, THEODORE CARL
NW¼ NE¼	109	IR	4.400	1	ROSENBROCK, MICHAEL & BARBARA
NW¼ NE¼	110	IR	1.000	1	COURTNEY, JOYCE A
NW¼ NE¼	110	IR	1.000	1	COURTNEY, RAYMOND H
NW¼ NE¼	111	IR	0.750	1	SCOTT, HOWARD LEE
NW¼ NE¼	112	IR	1.000	1	KREPS, JILL L
NW¼ NE¼	113	IR	0.350	1	COOK, STANLEY
NW¼ NE¼	114	IR	0.370	1	MAROLD, ROBERT E

NW¼ NE¼	115	IR	0.750	1	HEUSTON, B H
NW¼ NE¼	117	IR	0.880	1	HODSON, KENNETH W
NW¼ NE¼	118	IR	3.000	1	EMERSON, RALPH
SW¼ NE¼	1101	IR	3.500	1	CROSSAN, TERRY G
SW¼ NE¼	1102	IR	10.500	1	WAMPLER, JOSEPH
SW¼ NE¼	1103	IR	4.000	1	GIBSON, STEVEN J
SW¼ NE¼	1104	IR	3.000	1	POOL, HERBERT H
SW¼ NE¼	1105	IR	5.000	1	FIELD, KEVIN
SE¼ NE¼	1100	IR	8.700	1	CRONEN, DARYL C, ET AL
SE¼ NE¼	1106	IR	5.000	1	BUCKNER, ORVILLE K II ET AL
SE¼ NE¼	1107	IR	7.100	1	HUGHES, GARY D
NE¼ NW¼	200	IR	12.130	1	ECKSTEIN, JAMES
NE¼ NW¼	201	IR	12.000	1	KULYIK, STEPHEN J
NW¼ NW¼	300	IR	1.500	1	MOSLEY, MAX
NW¼ NW¼	301	IR	7.500	1	CUTTER, DOLORES
NW¼ NW¼	400	IR	1.500	1	JOHANSEN, GARY
NW¼ NW¼	401	IR	0.500	1	CUTTER, MATTHEW D
SW¼ NW¼	500	IR	2.000	1	REUBER, WALTHER J
SW¼ NW¼	502	IR	2.500	1	CHASE, DANIEL G
SW¼ NW¼	600	IR	1.500	1	HEINRICH, RALPH J
SW¼ NW¼	601	IR	3.000	1	BUTLER, BILLIE L
SW¼ NW¼	700	IR	10.000	1	COATS, GOLDIE &
SE¼ NW¼	1000	IR	3.000	1	FLOYD, JAMES S
SE¼ NW¼	800	IR	13.000	1	BOWE, DEBRA J
SE¼ NW¼	900	IR	9.000	1	ZULLO, SAM J
SE¼ NW¼	901	IR	8.000	1	HOBSON, HENRY C
NE¼ SW¼	1301	IR	4.000	1	DAVIS, KENNETH I
NE¼ SW¼	1303	IR	6.450	1	FLACK, CHARLES N
NE¼ SW¼	1304	IR	1.550	1	PAGE, DONALD L &
NE¼ SW¼	1306	IR	3.500	1	DAVIS, KENNETH I
NE¼ SW¼	1308	IR	1.000	1	TUCKER, NORMA A
NE¼ SW¼	1309	IR	1.000	1	THOMPSON, DANIEL P
NE¼ SW¼	1310	IR	6.500	1	MAGNUSON, MICHAEL L
NE¼ SW¼	1311	IR	3.000	1	MUELLER, PATRICIA A
NW¼ SW¼	1400	IR	23.000	1	CRONEN, CONLEY
SW¼ SW¼	1500	IR	5.000	1	NEWER, ROBERT J
SW¼ SW¼	1501	IR	8.000	1	VERTNER, VICTOR D
SW¼ SW¼	1502	IR	6.000	1	WORLEIN, JOSEPH
SW¼ SW¼	1503	IR	3.000	1	VAN LIEW, DONALD
SW¼ SW¼	1504	IR	3.000	1	SCHMITT, LOUIS G
SE¼ SW¼	1600	IR	4.000	1	WYMAN, RICHARD S III
SE¼ SW¼	1601	IR	5.700	1	KABER, SCOTT D
SE¼ SW¼	1602	IR	8.500	1	WILKE, LAWRENCE G SR
SE¼ SW¼	1603	IR	9.500	1	WYMAN, RICHARD S III
SE¼ SW¼	1604	IR	4.800	1	POOL, HERBERT H
NE¼ SE¼	1200	IR	14.600	1	BOYD, DOUGLAS C
NE¼ SE¼	1201	DUST	0.400	1	HENLEY, GARY C
NE¼ SE¼	1201	IR	19.600	1	HENLEY, GARY C
NE¼ SE¼	1202	IR	1.400	1	BOYD, DOUGLAS C
NW¼ SE¼	1300	IR	2.000	1	TORBETT, DONALD L
NW¼ SE¼	1302	IR	12.700	1	JOHNSON, J VERNON
NW¼ SE¼	1312	IR	8.000	1	BIANCHI, LOUIS A
SW¼ SE¼	1700	IR	18.000	1	WOODS, GLENN
SW¼ SE¼	1702	IR	6.000	1	SHORT, JOHN A
SW¼ SE¼	1704	IR	6.000	1	LEONE, DANIEL J &
SE¼ SE¼	1800	IR	18.000	1	SPEAR, STEVE &
SE¼ SE¼	1801	IR	18.000	1	YORK, DAVID

Section 19

NE¼ NE¼	104	IR	20.000	1	MARACCINI, VESTA LEE TRUSTEE

NW¼ NE¼	101	IR	18.000	1	THE MOORE FAMILY TRUST
SW¼ NE¼	102	IR	20.000	1	ROGERS, DEAN L
SE¼ NE¼	100	IR	11.000	1	THERRIAULT, DONA RAE
SE¼ NE¼	105	IR	14.000	1	FLOYD, JAMES S
SE¼ NW¼	200	PND	2.500	1	CITY OF BEND
NE¼ SW¼	400	IR	29.900	1	GIBSON, MARJORIE
NE¼ SW¼	400	PND	3.700	1	GIBSON, MARJORIE
NW¼ SW¼	400	IR	23.400	1	GIBSON, MARJORIE
NW¼ SW¼	401	IR	14.500	1	CITY OF BEND
SW¼ SW¼	500	IR	28.600	1	DAVIS, RICHARD NEIL
SE¼ SW¼	500	IR	31.400	1	DAVIS, RICHARD NEIL
NE¼ SE¼	1000	IR	3.000	1	DOUGHERTY, ROBERT
NE¼ SE¼	1101	IR	3.000	1	WARREN, DAVID S
NE¼ SE¼	1102	IR	1.400	1	FINE, MATHEW R
NE¼ SE¼	1103	IR	1.700	1	ROCK, FRED
NE¼ SE¼	1105	IR	3.000	1	WHYBRA, MARC STEPHEN
NE¼ SE¼	1106	IR	1.600	1	FINE, MATHEW R
NE¼ SE¼	1201	IR	1.800	1	NIGHTINGALE, JAMES A.S.
NE¼ SE¼	801	IR	1.000	1	HARTMAN, GREGORY
NE¼ SE¼	802	IR	2.500	1	ALDRICH, PERRY
NE¼ SE¼	803	IR	1.000	1	O'TOOLE, PAT
NE¼ SE¼	901	IR	6.000	1	REED, LOUIS C
NW¼ SE¼	700	IR	27.500	1	ELSHOFF, CAL
NW¼ SE¼	700	PND	0.500	1	ELSHOFF, CAL
SE¼ SE¼	1103	IR	0.300	1	ROCK, FRED
SE¼ SE¼	1104	IR	2.000	1	DICK, TERRY
SE¼ SE¼	1201	IR	1.200	1	NIGHTINGALE, JAMES A.S.
SE¼ SE¼	1300	IR	5.000	1	SANTA CRUZ, CAROLYN
SE¼ SE¼	1400	IR	3.000	1	SCHMIDLING, CLIFFORD E
SE¼ SE¼	1500	IR	0.200	1	PHILLIPS, MARC ALLAN
SE¼ SE¼	1700	IR	7.000	1	GILBIRDS, RALPH
SE¼ SE¼	1800	IR	1.800	1	PHILLIPS, MARC ALLAN

Section 20

SW¼ NE¼	200	IR	17.000	1	PREWITT, WILLIAM
SW¼ NE¼	201	IR	13.000	1	PREWITT, WILLIAM
NW¼ NW¼	500	IR	8.000	1	HOOVER, PETER J
NW¼ NW¼	700	IR	14.500	1	WELBOURN, DENNIS J
SW¼ NW¼	1000	IR	5.000	1	CUMMINS, DEWEY
SW¼ NW¼	1001	IR	8.000	1	SPORALSKY, KENNETH F
SW¼ NW¼	1100	IR	4.300	1	WHITSON, HOWARD
SW¼ NW¼	900	IR	5.000	1	GRECH, LARRY
NE¼ SW¼	1300	IR	2.000	1	LEGUM, KEITH J ET AL
NE¼ SW¼	1301	IR	2.000	1	CRESS, DANIEL B
SE¼ SW¼	1302	IR	2.000	1	MATSUKADO, WILLIAM M
NW¼ SE¼	1400	IR	6.000	1	PREWITT, WILLIAM

Section 21

NW¼ NE¼	203	IR	30.000	1	JONES, REBECCA L
NE¼ NW¼	203	IR	18.000	1	JONES, REBECCA L
NE¼ NW¼	204	IR	7.000	1	GUAJARDO, FRED
NE¼ NW¼	205	IR	5.000	1	RAY, CRAIG S
NW¼ NW¼	200	IR	0.600	1	STORLIE, TERRY
NW¼ NW¼	201	IR	7.500	1	NICKERSON, SHARON L
NW¼ NW¼	202	IR	4.000	1	COOK, KENNETH L
NW¼ NW¼	206	IR	7.000	1	GUAJARDO, FRED
NW¼ NW¼	300	IR	10.000	1	BROSINSKY, JACK
SW¼ NW¼	100	IR	1.900	1	STORLIE, ORVILLE
SW¼ NW¼	1000	IR	1.500	1	BUCK, STEVEN C
SW¼ NW¼	1100	IR	1.500	1	RAUSCHER, CHARLES L

SW¼ NW¼	1200	IR	1.000	1	GRAYBEAL, HAROLD D
SW¼ NW¼	1300	IR	1.500	1	CANTRELL, MORGAN
SW¼ NW¼	1400	IR	1.500	1	BONDURANT, CURTIS D
SW¼ NW¼	1500	IR	1.500	1	TENNENT, JOHN D
SW¼ NW¼	200	IR	1.500	1	WONSER, FRANKLIN D
SW¼ NW¼	300	IR	1.500	1	MOSS, SELDON D
SW¼ NW¼	400	IR	1.500	1	LARSEN, KAJ E
SW¼ NW¼	500	IR	1.500	1	STENKAMP, PAUL R
SW¼ NW¼	600	IR	1.500	1	ELBERT, SCOTT
SW¼ NW¼	700	IR	1.500	1	HARMESON, JANET
SW¼ NW¼	800	IR	1.500	1	DAVIS, REBECCA E
SW¼ NW¼	900	IR	1.500	1	COLE, JEFFREY H

Section 22

NW¼ NW¼	100	IR	2.000	1	HILLMAN, GORDON
NW¼ NW¼	1300	IR	2.000	1	BARGAS, BARBARA A
NW¼ NW¼	1400	IR	2.000	1	VIERRA, LAWRENCE
NW¼ NW¼	1500	IR	2.000	1	MURPHY, GLENN E
NW¼ NW¼	1600	IR	2.000	1	LACKEY, DAVID E
NW¼ NW¼	200	IR	2.000	1	KOEHLER, JAMES R
NW¼ NW¼	201	IR	2.000	1	KOEHLER, JAMES R
NW¼ NW¼	300	IR	3.000	1	GRANT, CHARLIE III, ET AL
NW¼ NW¼	400	IR	2.000	1	WILSON, BOBBIE JEAN
SW¼ NW¼	1000	IR	2.000	1	WINTERS, JAMES G
SW¼ NW¼	1100	IR	3.000	1	ANGLAND, MAURICE P
SW¼ NW¼	1200	IR	2.000	1	WHITAKER, JAMES L
SW¼ NW¼	500	IR	2.000	1	WILSON, CHARLES R ET AL ESTATE
SW¼ NW¼	600	IR	2.000	1	FAGEN, HARRY J
SW¼ NW¼	700	IR	1.000	1	HOLLOWELL, HERMAN
SW¼ NW¼	800	IR	2.000	1	BOWMAN, TERESA
SW¼ NW¼	900	IR	4.000	1	CORNETT, EARL
NE¼ SW¼	100	IR	10.000	1	DE PONZI, GEORGE
NE¼ SW¼	200	IR	7.000	1	SMITH, LAWRENCE M
NE¼ SW¼	300	IR	2.000	1	CLOUSE, CAROL LEE
NE¼ SW¼	400	IR	2.000	1	CLOUSE, CAROL LEE
NE¼ SW¼	500	IR	3.200	1	STYSKEL, EDWARD W
NE¼ SW¼	600	IR	0.700	1	WELLS, NANCY D ET AL
NE¼ SW¼	900	IR	0.500	1	CRAWFORD, GLENN A
NW¼ SW¼	1001	IR	3.000	1	BARTHOLOMEW, WILLIAM S JR
NW¼ SW¼	1100	IR	3.500	1	MARTIN, WADE C
NW¼ SW¼	500	IR	0.800	1	STYSKEL, EDWARD W
NW¼ SW¼	600	IR	1.300	1	WELLS, NANCY D ET AL
NW¼ SW¼	700	IR	2.000	1	NEELEY FAMILY TRUST
NW¼ SW¼	701	IR	3.000	1	SEIFERT, DAVID
NW¼ SW¼	702	IR	3.000	1	PAXTON, GUY
NW¼ SW¼	703	IR	2.000	1	BRADFORD, CHARLES A
NW¼ SW¼	900	IR	1.500	1	CRAWFORD, GLENN A
SE¼ SW¼	1500	IR	1.000	1	KAESCHE, WAYNE CURTIS TRUST
SW¼ SE¼	3400	IR	37.000	1	KAESCHE, WAYNE CURTIS TRUST

Section 27

NE¼ NE¼	100	IR	2.000	1	LYON, RICHARD L JR
NE¼ NE¼	200	IR	2.000	1	RASSMUSSEN, THOMAS H
NW¼ NE¼	400	IR	6.000	1	LEWIS, RICHARD L
NW¼ NE¼	500	IR	5.600	1	YOUNG, STEVE
SW¼ NE¼	500	IR	12.400	1	YOUNG, STEVE
SW¼ NE¼	800	IR	6.000	1	JACOBS, ALAN D
SW¼ NE¼	900	IR	7.000	1	JACOBS, ALAN D
SE¼ NE¼	1000	IR	3.500	1	KOMADINA, KEVIN
SE¼ NE¼	600	IR	4.400	1	EASLEY, JAMES

SE¼ NE¼	601	IR	7.940	1	EASLEY, JAMES
SE¼ NE¼	700	IR	6.500	1	HEILMEYER, JOHN T
SE¼ NW¼	1900	IR	3.000	1	MORGAN, BRECK & EVANS, KERRI
SE¼ NW¼	2000	IR	10.500	1	BROUILLETTE, THOMAS W
SE¼ NW¼	2100	IR	7.500	1	CLEAVENGER, MICHAEL J
SE¼ NW¼	2200	IR	9.500	1	WHITE, JOHN F III
NE¼ SW¼	100	IR	2.000	1	ASHENBRENNER, BONITA
NE¼ SW¼	101	IR	2.000	1	MCPHEETERS, RODNEY
NE¼ SW¼	102	IR	2.000	1	SHRUM, BILL
NE¼ SW¼	103	IR	4.000	1	HARLING, TERRY
NE¼ SW¼	200	IR	3.000	1	SNIDER, BRUCE H
NE¼ SW¼	300	IR	3.000	1	WILSON, GORDON K
NE¼ SW¼	400	IR	3.000	1	ALLEN, RON
NE¼ SW¼	501	IR	3.000	1	GIBSON, DARRELL
SW¼ SW¼	1401	IR	19.000	1	CHRISTMAN, JANEL
SW¼ SW¼	1407	IR	5.000	1	SCHROEDER, JAMES R JR
SE¼ SW¼	1100	IR	7.000	1	HOOD, ANDREW P
SE¼ SW¼	1200	IR	3.000	1	SCOVILLE, TERRY A
SE¼ SW¼	1300	IR	3.000	1	SLAUGHTER, BARRY H
SE¼ SW¼	600	IR	3.000	1	CALIANNO, DANIEL
SE¼ SW¼	700	IR	3.000	1	MANN, PATRICIA WENICK
SE¼ SW¼	800	IR	3.000	1	DAVEY, JEROME
SE¼ SW¼	900	IR	2.000	1	CRAWFORD, PATRICK
NE¼ SE¼	1100	IR	8.200	1	BENSON, CLIFFORD D
NE¼ SE¼	1402	IR	2.700	1	NEELEY, LEROY
NE¼ SE¼	1403	IR	9.800	1	NEELEY, LEROY
NE¼ SE¼	1405	IR	2.600	1	LEONE, ANACLETO III
NW¼ SE¼	1300	IR	18.760	1	CAREY, DONALD L
NW¼ SE¼	1301	IR	3.300	1	HOPPER, ROBIN E
SW¼ SE¼	1301	IR	0.700	1	HOPPER, ROBIN E
SW¼ SE¼	1700	IR	3.000	1	BRINKLEY, ROBERT B
SW¼ SE¼	1800	IR	1.000	1	GOODSTEIN, ROBERT C
SE¼ SE¼	1401	IR	4.260	1	WILLS, ELLEN M &
SE¼ SE¼	1404	IR	9.100	1	GILLESPIE, CLIFFORD W
SE¼ SE¼	1405	IR	6.300	1	LEONE, ANACLETO III
SE¼ SE¼	1500	IR	7.100	1	FISHER, LEONARD

Section 28

NW¼ NW¼	300	IR	31.400	1	DAVIS, RICHARD NEIL
NW¼ SW¼	400	IR	23.000	1	VAN BLOKLAND, CRAIG A &
NW¼ SW¼	401	IR	7.000	1	STOGSDILL, JEFFREY D
SW¼ SW¼	500	IR	14.000	1	BOURGEOIS, TERRY A
SW¼ SW¼	501	IR	14.000	1	FAULKNER, BARRY M

Section 29

NE¼ NE¼	100	IR	29.200	1	FORD, LAVERNE
NW¼ NE¼	101	IR	37.000	1	BUCHANAN, FRED M
SW¼ NE¼	1600	IR	10.000	1	LARSON, RICHARD G
SE¼ NE¼	100	IR	29.800	1	FORD, LAVERNE
NE¼ NW¼	201	IR	5.000	1	TSOURMAS, JAMES
NE¼ NW¼	202	IR	5.000	1	BIANCULLI, JOE
NE¼ NW¼	203	IR	3.000	1	HAMMER, LEO R
NE¼ NW¼	204	IR	1.000	1	MCHONE, DONALD R
NE¼ NW¼	205	IR	4.000	1	MOERSCHELL, KATHLEEN E
NW¼ NW¼	200	IR	17.400	1	ROBINSON, RONALD J JR
NW¼ NW¼	206	IR	17.600	1	ROBINSON, RONALD J JR
SW¼ NW¼	500	IR	9.000	1	ROBINSON, RONALD J JR
SW¼ NW¼	501	IR	4.000	1	FRANKLIN, WILLIAM
SW¼ NW¼	502	IR	4.500	1	EGGLESTON, PAUL H
SW¼ NW¼	503	IR	4.000	1	BRADBURY, STEVEN

SW¼ NW¼	504	IR	4.500	1	JOHNSON, ROBERT E
SW¼ NW¼	600	IR	8.000	1	MOYER, KENNETH M
SE¼ NW¼	400	IR	0.800	1	CARTY, JAMES R, ET AL
NE¼ SW¼	400	IR	15.800	1	CARTY, JAMES R, ET AL
SW¼ SW¼	1000	IR	2.000	1	MCCALL, JOHN
SW¼ SW¼	1100	IR	3.000	1	BRADBURY, LOIS
SW¼ SW¼	1201	IR	2.000	1	COBOS, TOMMY D
SW¼ SW¼	1300	IR	1.000	1	POSEY, JOHN R
SW¼ SW¼	1400	IR	3.000	1	DAVIS, RICHARD LYLE
SW¼ SW¼	800	IR	2.000	1	ANDERSON, GENE A
SW¼ SW¼	900	IR	2.000	1	DEGARMO, SAM JR
SE¼ SW¼	1500	IR	12.500	1	PAULSON, RENEE' J
SE¼ SW¼	1501	IR	12.000	1	HANSON, ARNOLD E
NE¼ SE¼	1700	IR	10.000	1	CAINE, PETER
NE¼ SE¼	1701	IR	14.000	1	SLAUGHTER, DOUGLAS J
NW¼ SE¼	1601	IR	23.000	1	ADLETA, THOMAS L
SW¼ SE¼	1602	IR	12.000	1	ADLETA, THOMAS L
SE¼ SE¼	1800	IR	10.250	1	TYE, MICHAEL
SE¼ SE¼	1801	IR	5.700	1	JACKSON, STEVEN A
SE¼ SE¼	1802	IR	4.450	1	TYE, MICHAEL
SE¼ SE¼	1804	IR	1.000	1	LARSON, RONALD H
SE¼ SE¼	2000	IR	1.600	1	LARSON, RONALD H

Section 30

NE¼ NE¼	100	IR	2.000	1	WALDROP, DANIEL J
NE¼ NE¼	1000	IR	2.000	1	RADTKE, DONALD E
NE¼ NE¼	1003	IR	2.000	1	SMITH, CLYDE WM II ET AL
NE¼ NE¼	1004	IR	0.500	1	STENKAMP, BERNARD
NE¼ NE¼	1011	IR	1.000	1	HALL, DON
NE¼ NE¼	1012	IR	1.500	1	THOMPSON, KELLY J ET AL
NE¼ NE¼	1013	IR	0.650	1	ROBERTS, WILLIAM P
NE¼ NE¼	1015	IR	0.500	1	AVERILL, JO
NE¼ NE¼	103	IR	2.000	1	HARRIS, FREDERICK M
NE¼ NE¼	105	IR	2.000	1	RALPH, GORDON D
NW¼ NE¼	1010	IR	0.100	1	PARKER, WALTER M.K. SR
NW¼ NE¼	1013	IR	0.500	1	ROBERTS, WILLIAM P
NW¼ NE¼	103	IR	3.000	1	HARRIS, FREDERICK M
NW¼ NE¼	200	IR	1.900	1	SEVERS, DONALD
NW¼ NE¼	300	IR	4.500	1	DAVIS, LARRY G
SW¼ NE¼	1001	IR	5.000	1	MORRIS, DARRELL J
SW¼ NE¼	1005	IR	2.000	1	MAZZOLA, CHARLES T
SW¼ NE¼	1006	IR	4.500	1	PAXTON, LESTER
SW¼ NE¼	1007	IR	0.500	1	REAL, HOLLIS
SW¼ NE¼	101	IR	1.000	1	SPITTLER, LAURA LEE
SW¼ NE¼	1010	IR	3.700	1	PARKER, WALTER M.K. SR
SW¼ NE¼	1013	IR	0.150	1	ROBERTS, WILLIAM P
SW¼ NE¼	1016	IR	2.000	1	REAL, HOLLIS
SW¼ NE¼	1017	IR	2.000	1	LINK, AVIS
SW¼ NE¼	102	IR	0.500	1	REAL, EMMA
SW¼ NE¼	200	IR	0.100	1	SEVERS, DONALD
SE¼ NE¼	1000	IR	1.000	1	RADTKE, DONALD E
SE¼ NE¼	1002	IR	1.000	1	HURLEY, STEVE
SE¼ NE¼	1008	IR	3.000	1	BARANY, LARRY J
SE¼ NE¼	1009	IR	4.000	1	MOORE, JOHN
SE¼ NE¼	1010	IR	0.200	1	PARKER, WALTER M.K. SR
SE¼ NE¼	1013	IR	0.700	1	ROBERTS, WILLIAM P
SE¼ NE¼	1017	IR	1.000	1	LINK, AVIS
SE¼ NE¼	1019	IR	5.000	1	HANSEN, RUSSELL A
NE¼ NW¼	400	IR	4.600	1	CLONTZ, ALVIE
NE¼ NW¼	401	IR	3.500	1	VOGELSANG, CHRISTOPHER

NE¼ NW¼	402	IR	9.000	1	HOBLIT, W C
NE¼ NW¼	404	IR	4.000	1	KINSEY, JAMES
NE¼ NW¼	405	IR	3.500	1	CRANDALL, DONALD
NE¼ NW¼	406	IR	1.400	1	CLONTZ, ALVIE
NE¼ NW¼	407	IR	4.700	1	HARGOUS, PETE
NE¼ NW¼	407	PND	0.300	1	HARGOUS, PETE
NW¼ NW¼	500	IR	1.700	1	DEWEY, DAVID L
NW¼ NW¼	503	IR	2.300	1	DEWEY, DAVID L
SW¼ NW¼	600	IR	8.850	1	BARNETT, DAVID
SE¼ NW¼	403	IR	8.000	1	FULLER, KERRY
SE¼ NW¼	800	IR	8.500	1	WHIDDON, JOE L
SE¼ NW¼	801	IR	5.000	1	KETRENOS, HARRY
SE¼ NW¼	802	IR	4.500	1	CLINKINBEARD, JAMES E
SE¼ NW¼	803	IR	3.000	1	FLEMING, WALTER T
NE¼ SW¼	100	IR	8.000	1	KOOK, JOSEPH JR
NE¼ SW¼	200	IR	19.400	1	ELLINGSON, MRS GEORGIA
NW¼ SW¼	300	IR	1.000	1	BODIE, JAMES W
NW¼ SW¼	500	IR	2.000	1	KINGSMITH, JOHN
NW¼ SW¼	600	IR	5.000	1	ENGLISH, GARY S
SW¼ SW¼	1000	IR	1.000	1	BREHM, VANCE W
SW¼ SW¼	1100	IR	1.000	1	WALTERS, H T
SW¼ SW¼	1200	IR	1.000	1	KNAPP, STEVEN
SW¼ SW¼	1300	IR	1.000	1	KNAPP, STEVEN L
SW¼ SW¼	1400	IR	1.000	1	TABOR, MICHAEL
SW¼ SW¼	1500	IR	2.000	1	BLOMQUIST, RANDALL J
SW¼ SW¼	1600	IR	1.000	1	DAUCSAVAGE, BRUCE
SW¼ SW¼	1700	IR	1.000	1	LEWIS, EDWARD E
SW¼ SW¼	1800	IR	1.400	1	GITTHENS, CHRISTIN LYNN
SW¼ SW¼	1900	IR	1.600	1	PENTECOSTAL CHURCH OF GOD
SW¼ SW¼	700	IR	1.000	1	BLANCHARD, JOHN M
SW¼ SW¼	800	IR	1.000	1	KEPHART, DAVID W
SW¼ SW¼	900	IR	2.000	1	HORNE, DAVID L
SE¼ SW¼	2000	IR	15.700	1	WATSON, RICHARD C
SE¼ SW¼	2001	IR	18.300	1	MEYER, CHARLOTTE
NE¼ SE¼	1100	IR	6.800	1	MCELRATH, THOMAS
NE¼ SE¼	1103	IR	5.500	1	REYNOLDS, MARK P
NW¼ SE¼	1101	IR	5.000	1	STROBEL, RONALD
NW¼ SE¼	1104	IR	5.000	1	HEEREN, KARL C
NW¼ SE¼	1200	IR	2.000	1	HANSHEW, SHIRLEY J
NW¼ SE¼	1901	IR	2.000	1	TORKELSON, RICHARD
NW¼ SE¼	1904	IR	3.820	1	TORKELSON, CLARENCE
SW¼ SE¼	1904	IR	12.180	1	TORKELSON, CLARENCE
SE¼ SE¼	1902	IR	3.000	1	BASHIAN, LARRY

Section 31

NE¼ NE¼	100	IR	13.000	1	KENNEDY, TIMOTHY M
NE¼ NE¼	101	IR	11.000	1	BURNSIDE, BOB
NW¼ NE¼	200	IR	3.000	1	CURRY, ROBERT CHARLES
NW¼ NE¼	300	IR	2.000	1	BENDER, BOB
NW¼ NE¼	400	IR	7.500	1	STRAWN, DALE
NW¼ NE¼	500	IR	3.000	1	METZEN, PENELOPE MARIN
NW¼ NE¼	600	IR	1.400	1	LUNNY, RUSSELL J
NW¼ NE¼	800	IR	0.600	1	LUNNY, RUSSELL J
SW¼ NE¼	900	IR	2.000	1	NEWMAN, STEVEN W
SW¼ NE¼	901	IR	11.000	1	NICHOLS, GARY W
SW¼ NE¼	902	IR	10.000	1	CHAMBERS, STEVEN M
SW¼ NE¼	903	IR	9.000	1	TITUS, LEWIS H
SE¼ NE¼	1000	IR	19.000	1	BURNSIDE, BOB
NE¼ NW¼	100	IR	2.000	1	BOWERS, WAYNE E
NE¼ NW¼	1800	IR	1.750	1	GAFFNEY, THOMAS P

NE¼ NW¼	1900	IR	1.400	1	MULVIHILL, BRAD
NE¼ NW¼	2000	IR	2.770	1	HORNER, CLARANCE D
NE¼ NW¼	2100	IR	1.710	1	PARTRIDGE, ALLYN B
NE¼ NW¼	2200	IR	0.520	1	ANDERSON, WALDO G
NE¼ NW¼	2300	IR	1.200	1	GARCIA, LEE D
NE¼ NW¼	2400	IR	1.400	1	DUGGINS, DARRELL R
NE¼ NW¼	3700	IR	0.200	1	HALL, LLOYD L
NE¼ NW¼	3800	IR	1.750	1	DAVIS, LEON
NE¼ NW¼	3900	IR	2.000	1	ROSHAK, GEORGE T
NE¼ NW¼	4000	IR	1.500	1	NEWELL, DOUGLAS W
NE¼ NW¼	4100	IR	3.000	1	ROBIRTS, JOHN T
NE¼ NW¼	4200	IR	2.310	1	HECKMAN, ROBERT J
NW¼ NW¼	1400	IR	2.000	1	MITCHELL, CHESTER A L
NW¼ NW¼	1500	IR	3.000	1	ALDRICH, PATRICK H
NW¼ NW¼	1600	IR	2.000	1	CAMBELL, JOSEPHINE A &
NW¼ NW¼	1700	IR	2.000	1	MCNAMEE, CECILIA A
NW¼ NW¼	200	IR	2.000	1	BRYANT, WADE L
NW¼ NW¼	300	IR	2.000	1	BEX, MARSHALL L III
NW¼ NW¼	400	IR	3.500	1	DECKARD, STEPHEN
NW¼ NW¼	500	IR	1.000	1	COLLINS, JOHN F
NW¼ NW¼	501	IR	1.000	1	NAYE, WILLIAM T
SW¼ NW¼	1000	IR	1.000	1	GILLARD, QUENTIN
SW¼ NW¼	1100	IR	1.500	1	RODNEY, MURIEL ET AL
SW¼ NW¼	1200	IR	2.500	1	BARANY, LARRY J
SW¼ NW¼	1300	IR	3.000	1	MCADAM, LAURIE G
SW¼ NW¼	600	IR	2.400	1	PHILLIPS, JERRY
SW¼ NW¼	700	IR	3.000	1	CLOTHIER, GEORGE H
SW¼ NW¼	800	IR	2.000	1	HURST, PHILLIP M
SW¼ NW¼	900	IR	2.000	1	BIBLER, MARVIN
SE¼ NW¼	2200	IR	1.480	1	ANDERSON, WALDO G
SE¼ NW¼	2300	IR	0.300	1	GARCIA, LEE D
SE¼ NW¼	2500	IR	1.750	1	BROWNE, NANCY E
SE¼ NW¼	2600	IR	0.820	1	HOMAN, ANDREW
SE¼ NW¼	2700	IR	1.950	1	GLASS, JOHN M
SE¼ NW¼	2800	IR	1.300	1	YOUNG, DOUGLAS W
SE¼ NW¼	2900	IR	0.900	1	RAGO, CHARLES M
SE¼ NW¼	3000	IR	2.000	1	FUCHS, KURT L
SE¼ NW¼	3100	IR	2.640	1	MACASKILL, WAYNE
SE¼ NW¼	3300	IR	0.350	1	ZINIKER, ED
SE¼ NW¼	3400	IR	2.000	1	BASHFORD, ROBERT F
SE¼ NW¼	3500	IR	2.000	1	PLAGMANN, GARY L
SE¼ NW¼	3600	IR	1.500	1	DAWN, JEFFERSON

Section 32

NE¼ NE¼	100	IR	22.000	1	LAGOMARSINO, JOHN
NW¼ NE¼	200	IR	5.000	1	GERRY, ANDREW J
NW¼ NE¼	201	IR	10.000	1	BAIN, NORMAN
SW¼ NE¼	700	IR	3.500	1	GREENSTREET, ROBERT H
SE¼ NE¼	1000	IR	2.000	1	ALFORD, ROBERT H
SE¼ NE¼	1001	IR	5.700	1	THAYER, DAVID T
NE¼ NW¼	100	IR	8.000	1	BEST, GILBERT D
NE¼ NW¼	200	IR	3.000	1	CRABTREE, MICHAEL DEAN
NE¼ NW¼	201	IR	0.500	1	CRABTREE, MICHAEL DEAN
NE¼ NW¼	300	IR	5.000	1	CRABTREE, MICHAEL DEAN
NE¼ NW¼	400	IR	6.000	1	SCHRAM, GERALD D
NW¼ NW¼	1400	IR	2.500	1	DEBONS, ALBERT F
NW¼ NW¼	1500	IR	3.500	1	DEBONS, ALBERT F
NW¼ NW¼	1600	IR	1.500	1	COURTOIS, GARY A
NW¼ NW¼	1700	IR	5.500	1	FREEBORN, DONNA SUE
NW¼ NW¼	500	IR	5.000	1	BROWN, CHARLES W

NW¼ NW¼	700	IR	3.000	1	COURTOIS, GARY A
NW¼ NW¼	800	IR	3.000	1	OSMOND, EDWARD
NW¼ NW¼	900	IR	4.000	1	HERTZBERG, WILLARD JR
SW¼ NW¼	1103	IR	7.500	1	VAGO, GEORGE
SW¼ NW¼	1104	IR	1.500	1	WEGENER, ROBERT D
SW¼ NW¼	1105	IR	2.000	1	REED, MELINDA
SW¼ NW¼	1107	IR	2.500	1	NAMES, WALTER D
SW¼ NW¼	1303	IR	0.500	1	FLAHERTY, JOHN
SE¼ NW¼	1300	IR	1.000	1	HAMILTON, LESLIE B
SE¼ NW¼	1302	IR	3.500	1	FLAHERTY, JOHN
NE¼ SW¼	100	IR	2.000	1	MURPHY, BRYAN P
NE¼ SW¼	101	IR	2.000	1	WILDER, DONALD R
NE¼ SW¼	201	IR	6.500	1	HATCHER, JAMES E
NE¼ SW¼	400	IR	2.000	1	WILLIAMS, GREGORY H
NE¼ SW¼	500	IR	2.000	1	MELLON, SERGE J
NE¼ SW¼	601	IR	2.000	1	DRISCOLL, HARRY
NW¼ SW¼	1000	IR	2.000	1	STIFFLER, MORRIS C
NW¼ SW¼	1100	IR	2.000	1	WILLIAMS, JOHN K
NW¼ SW¼	702	IR	2.500	1	NEWTON, CLIFTON E
NW¼ SW¼	704	IR	2.000	1	COON, DALLAS
NW¼ SW¼	800	IR	3.000	1	THOMPSON, ROGER WILLIAM
NW¼ SW¼	900	IR	2.000	1	STENZEL, GENE
NW¼ SW¼	901	IR	3.000	1	HAMMONS, JIM L
NW¼ SW¼	902	IR	2.000	1	SOUHRADA, JOHN C
NW¼ SW¼	903	IR	2.000	1	HAMMONS, JIM L
SW¼ SW¼	1200	IR	3.500	1	STEIN, RICHARD T
SW¼ SW¼	1300	IR	2.000	1	HANSON, WILLIAM
SW¼ SW¼	1400	IR	2.000	1	ARTHUR, JAMES D
SW¼ SW¼	1500	IR	2.000	1	RIPER, ETHEL A
SW¼ SW¼	1600	IR	3.000	1	MCGILL, ROBERT
SW¼ SW¼	701	IR	4.000	1	BOATMAN, TERRY GENE
SW¼ SW¼	705	IR	2.000	1	HATCHER, SCOTT
SE¼ SW¼	1900	IR	2.000	1	SHEELEY, RUSSELL D
SE¼ SW¼	2000	IR	2.000	1	HUMPHREY, GERALD R
SE¼ SW¼	2100	IR	2.600	1	NEWTON, FRED
SE¼ SW¼	2200	IR	6.600	1	NEWTON, FRED
NE¼ SE¼	100	IR	9.900	1	BISCHOFF, CHRIS & MARCIA
NE¼ SE¼	400	IR	14.000	1	PURCELL, CLYDE
NW¼ SE¼	100	IR	0.100	1	BISCHOFF, CHRIS & MARCIA
NW¼ SE¼	200	IR	12.000	1	FIX, ROBERT
NW¼ SE¼	300	IR	12.300	1	PURCELL, CLYDE
SW¼ SE¼	500	IR	15.500	1	PURCELL, CLYDE
SW¼ SE¼	600	IR	18.100	1	PURCELL, CLYDE
SE¼ SE¼	700	IR	14.400	1	PURCELL, CLYDE
SE¼ SE¼	800	IR	12.900	1	PURCELL, CLYDE

Section 33

SW¼ SW¼	700	IR	8.000	1	SPEAR, TRACEY
SW¼ SW¼	800	IR	2.000	1	DOBSON, DALE E JR
SE¼ SW¼	300	IR	4.000	1	MENGLE, LEWIS
SE¼ SW¼	400	IR	4.000	1	DOLF, WILLIAM B
SE¼ SW¼	500	IR	4.000	1	WHITWORTH, THOMAS
SE¼ SW¼	600	IR	4.000	1	WEST, ROBERT D
SW¼ SE¼	100	IR	6.400	1	LONIEN, JOHN
SW¼ SE¼	101	IR	3.600	1	LONIEN, JOHN
SW¼ SE¼	200	IR	8.000	1	JESSIMAN, ROBERT

Section 34

Township 17 South, Range 13 East, W.M.

NE¼ SW¼	903	IR	5.000	1	WOGMAN, LARRY J

NW¼ SW¼	903	IR	31.000	1	WOGMAN, LARRY J
SW¼ SW¼	900	IR	33.300	1	RANTZ, BILLY L ET AL
SE¼ SW¼	900	IR	2.700	1	RANTZ, BILLY L ET AL
				Section 2	
SE¼ NE¼	200	IR	8.800	1	RUFKAHR, DAVID J
NE¼ SE¼	200	IR	35.500	1	RUFKAHR, DAVID J
SE¼ SE¼	200	IR	31.700	1	RUFKAHR, DAVID J
				Section 3	
NE¼ NE¼	800	IR	17.000	1	MILTENBERGER, DONALD
SE¼ NE¼	800	IR	21.800	1	MILTENBERGER, DONALD
NE¼ SE¼	800	IR	26.400	1	MILTENBERGER, DONALD
SE¼ SE¼	800	IR	20.300	1	MILTENBERGER, DONALD
				Section 10	
SW¼ NE¼	902	IR	9.000	1	SCHWAB, ALAN L
NE¼ NW¼	904	IR	12.300	1	SCHWAB, ALAN L
NW¼ NW¼	904	IR	23.700	1	SCHWAB, ALAN L
SW¼ SW¼	800	IR	32.500	1	MILTENBERGER, DONALD
NE¼ SE¼	902	IR	8.000	1	SCHWAB, ALAN L
SW¼ SE¼	1002	IR	2.000	1	JOHNSON, JOHN R
				Section 11	
NW¼ NW¼	201	IR	6.500	1	SMITH, JAMES C
SW¼ NW¼	300	IR	31.200	1	SINGHOSE, WAYNE
NE¼ SW¼	500	IR	13.000	1	AUSTON, PAUL E JR
NW¼ SW¼	300	IR	40.000	1	SINGHOSE, WAYNE
SW¼ SW¼	400	IR	37.000	1	G.M. INDTRIES, INC
SE¼ SW¼	501	IR	36.500	1	GANTENBEIN, JOHN
SW¼ SE¼	600	IR	16.000	1	ASCHOFF, QUENTIN
SW¼ SE¼	700	IR	17.700	1	LATHROP, CHARLES E
SE¼ SE¼	800	IR	11.000	1	PALMER, ANTHONY
				Section 13	
NE¼ NE¼	100	IR	26.000	1	ASHER, MELVIN D
NW¼ NE¼	200	IR	28.500	1	STEELHAMMER, DAN
SW¼ NE¼	400	IR	36.600	1	MILTENBERGER, KENNETH
SE¼ NE¼	1100	IR	27.700	1	SINGHOSE, WAYNE
NE¼ NW¼	400	IR	18.600	1	MILTENBERGER, KENNETH
NE¼ NW¼	401	IR	2.000	1	MILTENBERGER, ORVILLE
NW¼ NW¼	500	IR	37.400	1	MILTENBERGER, DONALD
SW¼ NW¼	500	IR	37.700	1	MILTENBERGER, DONALD
SE¼ NW¼	400	IR	34.500	1	MILTENBERGER, KENNETH
NE¼ SW¼	1000	IR	27.700	1	MILTENBERGER, KENNETH
NE¼ SW¼	900	IR	10.000	1	GREGORY, KEITH B
NW¼ SW¼	600	IR	37.500	1	GREGORY, KEITH B
SW¼ SW¼	700	IR	36.500	1	WILLIAMS, DONALD J
SE¼ SW¼	800	IR	31.700	1	SINGHOSE, WAYNE
NE¼ SE¼	1100	IR	39.200	1	SINGHOSE, WAYNE
NW¼ SE¼	1000	IR	31.000	1	MILTENBERGER, KENNETH
SW¼ SE¼	800	IR	34.100	1	SINGHOSE, WAYNE
SE¼ SE¼	1200	IR	40.000	1	BARTNIK, GLENN
				Section 14	
NE¼ NE¼	100	IR	0.500	1	JONES, HAZEL G
NE¼ NE¼	200	IR	26.500	1	FLEMING, MERVIN K
SE¼ NE¼	300	IR	3.000	1	MCKENZIE, KENNETH J
SE¼ NE¼	400	IR	0.500	1	MCKENZIE, KENNETH J
SE¼ NE¼	500	IR	5.000	1	BEAN, DARCY

SE¼ NE¼	600	IR	5.000	1	GAVRILOFF, MARTIN A
SE¼ NE¼	700	IR	3.000	1	GREGG, JAMES A
SE¼ NE¼	800	IR	2.700	1	SMITH, LEROY
NE¼ SE¼	100	IR	29.000	1	BYRNES, ROSEMARY A
SE¼ SE¼	100	IR	23.000	1	BYRNES, ROSEMARY A

Section 15

NE¼ SE¼	10500	IR	7.700	1	ELLINGTON, GARY G
SE¼ SE¼	9000	IR	3.200	1	WOLKAU, RICHARD J

Section 21

NE¼ NE¼	100	IR	9.700	1	PSHIGODA, DAVID M
NE¼ NE¼	100	PND	0.200	1	PSHIGODA, DAVID M
NE¼ NE¼	200	IR	4.100	1	PSHIGODA, DAVID M
SW¼ NE¼	700	IR	9.400	1	MOORE, BAXTER
SE¼ NE¼	800	IR	25.000	1	CORCORAN, ROSEMARY
SE¼ NE¼	801	IR	8.900	1	STUART, CHARLES S
NE¼ SW¼	700	IR	31.900	1	MOORE, BAXTER
NW¼ SW¼	10500	IR	4.000	1	ELLINGTON, GARY G
SW¼ SW¼	1301	IR	10.030	1	TYE, WILLIAM R
SW¼ SW¼	1302	IR	17.000	1	TYE, WILLIAM R
SE¼ SW¼	1300	IR	37.000	1	TYE, WILLIAM R
NE¼ SE¼	801	IR	36.100	1	STUART, CHARLES S
NW¼ SE¼	700	IR	36.700	1	MOORE, BAXTER
SW¼ SE¼	1200	IR	37.000	1	CUNNINGHAM, JERRY L
SE¼ SE¼	1000	IR	6.610	1	WHITE, DAVID L JR
SE¼ SE¼	1001	IR	1.150	1	CENTRAL ELECTRIC CO-OP
SE¼ SE¼	1100	IR	17.000	1	LUCKMAN, DALE G
SE¼ SE¼	900	IR	7.000	1	KENTNER, LESTER

Section 22

NE¼ NE¼	100	IR	35.000	1	BARTNIK, GLENN
NW¼ NE¼	300	IR	31.700	1	SINGHOSE, WAYNE
SW¼ NE¼	800	IR	38.600	1	ENGLUND, WALTER F
SE¼ NE¼	1000	IR	18.000	1	HINOJOSA, RUDOLFO
SE¼ NE¼	1001	IR	18.750	1	HINOJOSA, RUDOLFO
NE¼ NW¼	300	IR	34.100	1	SINGHOSE, WAYNE
NW¼ NW¼	500	IR	36.400	1	WILLIAMS, RICK A
SW¼ NW¼	600	IR	27.500	1	GOOD, JERRY A
SW¼ NW¼	602	IR	8.000	1	WEATHERS, GARY L
SE¼ NW¼	800	IR	36.100	1	ENGLUND, WALTER F
NE¼ SW¼	800	IR	36.400	1	ENGLUND, WALTER F
NW¼ SW¼	700	IR	35.700	1	WATERS, PATTY JO
SW¼ SW¼	1300	IR	14.000	1	HARMON, NADINE
SW¼ SW¼	1400	IR	17.000	1	COULTER, MELVIN
SE¼ SW¼	1201	IR	36.700	1	LEWIS, HENRY G
SE¼ SW¼	1500	IR	1.000	1	LEWIS, HENRY
NW¼ SE¼	800	IR	40.000	1	ENGLUND, WALTER F
SW¼ SE¼	1200	IR	16.250	1	LEWIS, HENRY
SW¼ SE¼	1202	IR	19.050	1	LEWIS, HENRY
SE¼ SE¼	1100	IR	2.300	1	BARTON, SUSAN &
SE¼ SE¼	1101	IR	34.600	1	HANNEN, MICHAEL S
SE¼ SE¼	1102	IR	2.100	1	AVERY, KENNETH R

Section 23

NE¼ NE¼	100	IR	36.000	1	BIERLEY, HUBERT F
NW¼ NE¼	200	IR	25.000	1	JOHNSON, GARY
NW¼ NE¼	201	IR	9.000	1	VOSS, RICHARD R
SW¼ NE¼	700	IR	8.000	1	SAMPLES, JACK H
SW¼ NE¼	701	IR	7.400	1	ELMER, CARL

SW¼ NE¼	800	IR	14.000	1	CRAWFORD, MICKEL M
SE¼ NE¼	100	IR	25.000	1	BIERLEY, HUBERT F
NE¼ NW¼	300	DUST	0.200	1	KERSLAKE, WILLIAM
NE¼ NW¼	300	IR	37.800	1	KERSLAKE, WILLIAM
NW¼ NW¼	400	IR	23.000	1	G.M. INDTRIES, INC
SW¼ NW¼	500	IR	36.000	1	STULTZ, PAUL D
SE¼ NW¼	1300	IR	17.000	1	HINOJOSA, RUDOLFO
SE¼ NW¼	600	IR	15.250	1	HINOJOSA, RUDOLFO
NE¼ SW¼	1200	IR	35.000	1	ASHCRAFT, CAROL
NW¼ SW¼	1400	IR	33.000	1	CELEBRADO FAMILY TRUST
SW¼ SW¼	1500	IR	18.200	1	BARTON, SUSAN &
SW¼ SW¼	1501	IR	17.800	1	AVERY, KENNETH R
SE¼ SW¼	1600	IR	29.000	1	HANNEN, MICHAEL S
NE¼ SE¼	900	IR	34.900	1	BIERLEY, HUBERT F
NW¼ SE¼	1000	IR	28.600	1	SMITH, TRACIE LEE
NW¼ SE¼	1100	IR	9.700	1	SMITH, TRACIE LEE
SW¼ SE¼	1100	IR	17.700	1	SMITH, TRACIE LEE
SW¼ SE¼	1700	DUST	1.000	1	THOMPSON, KENNETH
SW¼ SE¼	1700	IR	8.500	1	THOMPSON, KENNETH
SW¼ SE¼	1701	IR	10.000	1	SMITH, TRACIE LEE
SE¼ SE¼	900	IR	31.000	1	BIERLEY, HUBERT F

Section 24

NW¼ NE¼	102	IR	3.700	1	JONAS, C WAYNE
SW¼ NE¼	101	IR	18.700	1	GEMAEHLICH, ROBERT L
SW¼ NE¼	104	IR	12.000	1	GEMAEHLICH, ROBERT L
SE¼ NE¼	101	IR	26.800	1	GEMAEHLICH, ROBERT L
NE¼ NW¼	200	IR	12.000	1	TATE, ROBERT D
NE¼ NW¼	300	IR	15.600	1	POLLMAN, DEAN W
NW¼ NW¼	400	IR	11.800	1	POLLMAN, DEAN W
NW¼ NW¼	500	IR	23.300	1	POLLMAN, DEAN W
SW¼ NW¼	400	IR	5.000	1	POLLMAN, DEAN W
SW¼ NW¼	500	IR	9.300	1	POLLMAN, DEAN W
SE¼ NW¼	200	IR	7.000	1	TATE, ROBERT D
SE¼ NW¼	300	IR	5.000	1	POLLMAN, DEAN W
NW¼ SW¼	600	IR	7.300	1	JONAS, C WAYNE
SW¼ SW¼	600	IR	1.600	1	JONAS, C WAYNE
SW¼ SW¼	600	PND	0.100	1	JONAS, C WAYNE
SE¼ SW¼	600	PND	2.300	1	JONAS, C WAYNE
NE¼ SE¼	700	IR	33.600	1	SINGHOSE, WAYNE
NW¼ SE¼	701	IR	13.100	1	SINGHOSE, WAYNE
SW¼ SE¼	901	IR	4.800	1	SINGHOSE, WAYNE
SE¼ SE¼	800	IR	2.200	1	SINGHOSE, WAYNE
SE¼ SE¼	901	IR	7.540	1	SINGHOSE, WAYNE

Section 25

NW¼ NE¼	200	IR	28.000	1	AMERSON, GUR V
SW¼ NE¼	1000	IR	4.500	1	HOUGHTON, HARRY
NE¼ NW¼	300	IR	2.600	1	CENTRAL OREGON IRRIGATION
NE¼ NW¼	400	IR	1.500	1	GREEN, ALFRED G
NE¼ NW¼	500	IR	4.000	1	ALFALFA COMMUNITY HALL
NE¼ NW¼	600	IR	18.500	1	HUGHES, GARY D
NW¼ NW¼	600	IR	36.600	1	HUGHES, GARY D
SW¼ NW¼	600	IR	33.500	1	HUGHES, GARY D
SE¼ NW¼	700	IR	29.100	1	HUGHES, GARY D
NW¼ SW¼	1200	IR	28.940	1	BORLEN, ROBERT
SW¼ SW¼	1200	IR	3.400	1	BORLEN, ROBERT

Section 26

NE¼ NE¼	1800	IR	3.500	1	CHILDS, RICK K II, ET AL

NE¼ NE¼	1900	IR	4.000	1	FARRER, KEVIN E
NE¼ NE¼	300	IR	8.000	1	MCMILLAN, THOMAS
NE¼ NE¼	400	IR	4.500	1	SISSEL, GERALD STEVE
NE¼ NE¼	401	IR	3.500	1	REAMES, JOHN B & MAXINE
NE¼ NE¼	500	IR	8.000	1	STAFFORD, KURT
NW¼ NE¼	1100	IR	24.000	1	REAMES, JOHN B & MAXINE
SE¼ NE¼	600	IR	8.000	1	GLENN, LARRY R &
SE¼ NE¼	700	IR	8.000	1	PENNI, THOMAS M
SE¼ NE¼	800	IR	8.500	1	HANNA, MARK M
SE¼ NE¼	800	PND	0.100	1	HANNA, MARK M
SE¼ NE¼	900	IR	6.400	1	HANNA, LEONA M
NE¼ NW¼	1101	IR	37.000	1	REAMES, JOHN B
NW¼ NW¼	1102	IR	31.000	1	ALVES, ROBERT G
SW¼ NW¼	1200	IR	32.000	1	BURNS, JOHN B
SE¼ NW¼	1200	IR	34.000	1	BURNS, JOHN B
NE¼ SW¼	1300	IR	36.400	1	STULTZ, PAUL D
NW¼ SW¼	1300	IR	17.600	1	STULTZ, PAUL D
NW¼ SW¼	1301	IR	16.000	1	ANDREWS, PAMELA HULSE
SW¼ SW¼	1400	IR	35.600	1	O'KULA, DONALD
SE¼ SW¼	1400	IR	29.400	1	O'KULA, DONALD
SE¼ SW¼	1401	IR	1.500	1	GREGG, JAMES M
NE¼ SE¼	1600	IR	3.500	1	KRUGER, EDWARD W
NE¼ SE¼	1601	IR	3.500	1	KRUGER, EDWARD W
NE¼ SE¼	1602	IR	4.000	1	SOLITZ, THOMAS J
SE¼ SE¼	1700	IR	19.000	1	JONAS, C WAYNE

Section 27

NE¼ NE¼	100	IR	30.000	1	BRADER, DONALD M
NE¼ NE¼	101	IR	1.000	1	LEE, CAROLYN&CARLSON, CHARLES
NW¼ NE¼	200	IR	2.000	1	PETERSON, ARTHUR
NW¼ NE¼	2301	IR	7.000	1	JENO, DONALD V
SE¼ NE¼	2300	IR	34.000	1	BRADER, DONALD M
NE¼ SW¼	2701	IR	2.500	1	GOODMONSON, PETER I
NE¼ SW¼	2703	IR	2.310	1	GOODMONSON, SHARON B
NE¼ SW¼	2704	IR	5.960	1	SMITH, JOELLE M
SE¼ SW¼	2701	IR	8.740	1	GOODMONSON, PETER I
SE¼ SW¼	2702	IR	17.000	1	SCOBEE, ROBERT W
SE¼ SW¼	2704	IR	7.770	1	SMITH, JOELLE M
NE¼ SE¼	2900	IR	35.200	1	HERRON, ROSEMARY
NW¼ SE¼	2900	IR	17.800	1	HERRON, ROSEMARY
SW¼ SE¼	2900	IR	32.200	1	HERRON, ROSEMARY
SE¼ SE¼	2900	IR	22.800	1	HERRON, ROSEMARY

Section 28

NE¼ NE¼	100	IR	28.000	1	MAY, LES
NW¼ NE¼	200	IR	4.000	1	ALBERDING, FRED
NE¼ NW¼	300	IR	6.000	1	HIATT, LARRY
NE¼ NW¼	301	IR	8.000	1	BOOSER, JOANNA &

Section 33

NE¼ NW¼	8700	IR	29.700	1	ZEMLICKA, JANICE L
NW¼ NW¼	8702	IR	29.700	1	DOUGHERTY, STEVE
SW¼ NW¼	8701	IR	21.200	1	HULSEY, MICHAEL R
SE¼ NW¼	8701	IR	17.100	1	HULSEY, MICHAEL R

Section 34

SW¼ NE¼	8900	PND	3.000	1	U.S. BLM

Section 35

NE¼ NE¼	8900	PND	1.000	1	U.S. BLM

Section 36
Township 17 South, Range 14 East, W.M.

SW¼ NW¼	700	IR	27.000	1	BIERLEY, HUBERT F
NW¼ SW¼	700	IR	27.000	1	BIERLEY, HUBERT F
SW¼ SW¼	700	IR	25.600	1	BIERLEY, HUBERT F
SE¼ SW¼	800	IR	30.600	1	SINGHOSE, WAYNE
SW¼ SE¼	900	IR	31.800	1	SINGHOSE, WAYNE

Section 19

NW¼ SW¼	1300	IR	25.100	1	SINGHOSE, WAYNE
NW¼ SW¼	1301	IR	9.900	1	SINGHOSE, WAYNE
SW¼ SW¼	1300	IR	33.500	1	SINGHOSE, WAYNE

Section 29

SW¼ NW¼	800	IR	9.900	1	SINGHOSE, WAYNE
SE¼ NW¼	1500	IR	4.500	1	SINGHOSE, WAYNE
NE¼ SW¼	1600	IR	39.100	1	SINGHOSE, WAYNE
NW¼ SW¼	1600	IR	15.800	1	SINGHOSE, WAYNE
SW¼ SW¼	1600	IR	17.200	1	SINGHOSE, WAYNE
SE¼ SW¼	1600	IR	25.900	1	SINGHOSE, WAYNE
NE¼ SE¼	1600	IR	33.600	1	SINGHOSE, WAYNE
NW¼ SE¼	1600	IR	33.800	1	SINGHOSE, WAYNE
SE¼ SE¼	1600	IR	34.739	1	SINGHOSE, WAYNE

Section 30
Township 17 South, Range 15 East, W.M.

NE¼ NE¼	100	IR	2.800	1	COURT, MARTY
NE¼ NE¼	200	IR	21.000	1	GRUND, GARY
NW¼ NE¼	300	IR	21.000	1	WALLACE, CARL
NW¼ NE¼	400	IR	1.000	1	WALLACE, ZELMA M
NW¼ NE¼	500	IR	1.000	1	WALLACE, JOHN
NW¼ NE¼	600	IR	6.000	1	NEWTON, SHARI L
SE¼ NE¼	200	IR	8.800	1	GRUND, GARY
NE¼ NW¼	100	IR	0.800	1	BURROWS, JULIA D
NE¼ NW¼	200	IR	0.800	1	HART, HAROLD E
NE¼ NW¼	2500	IR	0.560	1	HANSON, LLOYD W
NE¼ NW¼	2600	IR	0.800	1	OSBORN, SHARON M
NE¼ NW¼	2700	IR	1.400	1	JACKSON, NAOMI LOUISE
NE¼ NW¼	2800	IR	0.900	1	URBANEK, PAUL L
NE¼ NW¼	2900	IR	0.800	1	MANOS, TOM
NE¼ NW¼	300	IR	0.800	1	DEWITT, ROB N &
NE¼ NW¼	3000	IR	0.700	1	MATESKI, JAMES
NE¼ NW¼	3100	IR	0.690	1	HILLIARD, DAISEY L
NE¼ NW¼	3200	IR	0.900	1	NELSON, ALAN D
NE¼ NW¼	3300	IR	0.800	1	PAULSON, DARCEL V
NE¼ NW¼	3400	IR	0.800	1	LINDA OLSON TRUST
NE¼ NW¼	400	IR	1.000	1	PARKER, MERRY A
NE¼ NW¼	500	IR	0.800	1	EARWICKER, PAUL
NE¼ NW¼	600	IR	0.800	1	LOONEY, EMMA A
NE¼ NW¼	6300	IR	0.410	1	OLSON, ERMELINDA
NE¼ NW¼	6400	IR	0.820	1	MAIN, ROBERT F
NE¼ NW¼	6500	IR	0.950	1	MAYER, WILMA ARDELL
NE¼ NW¼	6600	IR	1.200	1	BORCHIN, MICHAEL C
NE¼ NW¼	6700	IR	1.200	1	FORTNER, RICHARD L
NE¼ NW¼	6800	IR	0.890	1	COURTNEY, RONALD K
NE¼ NW¼	6900	IR	0.810	1	MAYER, WILMA ARDELL
NE¼ NW¼	700	IR	0.800	1	LANDERS, MARK A
NE¼ NW¼	7000	IR	0.450	1	OWENS, GEORGE A
NE¼ NW¼	800	IR	0.500	1	VERGARI, MARGHERITA L

NE¼ NW¼	8200	IR	0.610	1	BURLEIGH, DAVID R
NE¼ NW¼	8300	IR	0.930	1	STALKER, DAVID B
NE¼ NW¼	8400	IR	0.800	1	CEGELKA, VINCE
NE¼ NW¼	8500	IR	0.860	1	BURGESS, OTIS
NE¼ NW¼	8600	IR	0.880	1	STEVENS, DALE R
NE¼ NW¼	8700	IR	0.560	1	STITZMAN, JERRY A
NW¼ NW¼	4300	IR	1.360	1	ANKER, HAROLD R
NW¼ NW¼	5700	IR	0.670	1	SCHUTLE, JEROLYN D
NW¼ NW¼	5800	IR	0.410	1	CONRAD, KURT J
NW¼ NW¼	5900	IR	0.670	1	MATHEWS, ERIC W
NW¼ NW¼	6000	IR	0.900	1	VANDERFORD, JOHN C
NW¼ NW¼	6100	IR	1.280	1	DODD, HAROLD
NW¼ NW¼	6200	IR	1.050	1	DODD, GARY MARTIN
NW¼ NW¼	6300	IR	0.570	1	OLSON, ERMELINDA
NW¼ NW¼	7000	IR	0.400	1	OWENS, GEORGE A
NW¼ NW¼	7100	IR	0.690	1	MCJUNKIN, ROGER M
NW¼ NW¼	7200	IR	1.060	1	ZAROSINSKI, RAYMOND F
NW¼ NW¼	7300	IR	0.970	1	GOSHORN, KARL W JR
NW¼ NW¼	7400	IR	1.860	1	SCHMIERBACK, GLENDA V
NW¼ NW¼	7500	IR	1.240	1	HOLDEN, LYNETTE I
NW¼ NW¼	7600	IR	1.490	1	CAVERHILL, NORMAN E
NW¼ NW¼	7700	IR	1.850	1	CHURCH, NELS A
NW¼ NW¼	7800	IR	1.860	1	KLER LIVING TRUST
NW¼ NW¼	7900	IR	1.590	1	VOGT, KENDRA M
NW¼ NW¼	8000	IR	0.780	1	MYERS TRUST
NW¼ NW¼	8100	IR	0.650	1	NELSON, ERIC D
NW¼ NW¼	8200	IR	0.230	1	BURLEIGH, DAVID R
NW¼ NW¼	8700	IR	0.600	1	STITZMAN, JERRY A
NW¼ NW¼	8800	IR	1.000	1	PERRINE, DAVID M
NW¼ NW¼	8900	IR	0.920	1	ANDERSON, JOHN H
NW¼ NW¼	9000	IR	1.510	1	LODWICK, JOHN D
SW¼ NW¼	1500	IR	0.750	1	LLEWELLYN, VERN
SW¼ NW¼	1600	IR	1.000	1	CARR, LESLIE
SW¼ NW¼	1700	IR	2.000	1	HILL, HELEN
SW¼ NW¼	1800	IR	1.500	1	THWAITS, RAYMOND
SW¼ NW¼	1900	IR	1.700	1	NELSON, GARY S
SW¼ NW¼	2000	IR	1.070	1	DONALD & MARY FORKS TRUST
SW¼ NW¼	4100	IR	2.400	1	ANKER, HAROLD R
SW¼ NW¼	4200	IR	0.900	1	ANKER, HAROLD R
SW¼ NW¼	4300	IR	1.600	1	ANKER, HAROLD R
SW¼ NW¼	4500	IR	0.800	1	DREWES, JAMES E
SW¼ NW¼	4600	IR	0.910	1	JARSCKE, DAVID L
SW¼ NW¼	4700	IR	0.930	1	HADDON, WILLIAM F
SW¼ NW¼	4800	IR	1.300	1	JONES, FRANK K
SW¼ NW¼	4900	IR	0.840	1	KATTER, DUANE
SW¼ NW¼	5000	IR	1.000	1	ANKER, HAROLD R
SW¼ NW¼	5100	IR	1.300	1	HICKMAN, EUGENE
SW¼ NW¼	5200	IR	1.000	1	WINSLOW, GARY
SW¼ NW¼	5300	IR	1.000	1	JOHNSON, WILLIAM
SW¼ NW¼	5400	IR	2.000	1	KRUGER, CASEY A
SW¼ NW¼	5500	IR	0.600	1	FREEMAN, HAROLD
SW¼ NW¼	5600	IR	0.900	1	WARKENTIN, BILL R
SW¼ NW¼	5700	IR	0.300	1	SCHUTLE, JEROLYN D
SW¼ NW¼	5800	IR	0.350	1	CHAPMAN, DENNIS R
SW¼ NW¼	5900	IR	0.300	1	MATHEWS, ERIC W
SE¼ NW¼	1000	IR	1.500	1	HUSTON, GERALD
SE¼ NW¼	1100	IR	1.330	1	SZMANSKI, RONALD
SE¼ NW¼	1200	IR	1.660	1	SCHLOER, WALTER C
SE¼ NW¼	1300	IR	2.140	1	LEGG, GALEN L
SE¼ NW¼	1400	IR	1.870	1	BERGSETTER, JOHN E

SE¼ NW¼	1500	IR	0.460	1	LLEWELLYN, VERN
SE¼ NW¼	2000	IR	0.720	1	DONALD & MARY FORKS TRUST
SE¼ NW¼	2100	IR	1.340	1	FRANCIS C BUCK TRUST
SE¼ NW¼	2200	IR	0.810	1	BEILING, ELLA RUTH
SE¼ NW¼	2300	IR	1.340	1	NYQUIST, DONOVAN
SE¼ NW¼	2400	IR	0.830	1	KAPS, ROBERT M
SE¼ NW¼	2500	IR	0.240	1	HANSON, LLOYD W
SE¼ NW¼	3100	IR	0.010	1	HILLIARD, DAISEY L
SE¼ NW¼	3500	IR	0.800	1	TURNER, GARY D
SE¼ NW¼	3600	IR	0.800	1	KINCH, JAMES N
SE¼ NW¼	3700	IR	0.700	1	BRIDGE, EDINA F
SE¼ NW¼	3800	IR	0.700	1	BUNGER, GARY
SE¼ NW¼	3900	IR	0.660	1	PRITCHARD, CRYSTAL J
SE¼ NW¼	4000	IR	0.750	1	PRITCHARD, CRYSTAL J
SE¼ NW¼	4100	IR	1.000	1	ANKER, HAROLD R
SE¼ NW¼	800	IR	0.610	1	VERGARI, MARGHERITA L
SE¼ NW¼	900	IR	1.500	1	FIELDER, ROGER J
NW¼ SW¼	200	IR	1.000	1	CONNERS, THOMAS EDWARD
NW¼ SW¼	300	IR	0.690	1	BOESE, R WILLIAM
NW¼ SW¼	400	IR	5.000	1	MYHRE, SHEILA BUSH

Section 1

NE¼ NE¼	100	IR	2.000	1	PACK, MICHAEL R
NE¼ NE¼	101	IR	2.000	1	KING, RICHARD
NE¼ NE¼	1302	IR	1.380	1	ROONEY, JOHN C
NE¼ NE¼	1303	IR	8.050	1	BROWN, RICHARD
NE¼ NE¼	1304	IR	3.000	1	ANDERSON, RUSSELL D
NE¼ NE¼	1306	IR	1.500	1	WALTON, MRS FRANCIS
NE¼ NE¼	1307	IR	3.300	1	WEISS, JOHANN
NE¼ NE¼	1310	IR	1.370	1	BLADT, JACOB A
NE¼ NE¼	1311	IR	1.000	1	DRAGT, GREGORY L
NW¼ NE¼	200	IR	8.000	1	SULLIVAN, CHARLES
NW¼ NE¼	201	IR	13.800	1	MARKEN, HAROLD
NW¼ NE¼	202	IR	1.000	1	LITTLE, CHARLES E
SW¼ NE¼	201	IR	22.200	1	MARKEN, HAROLD
SE¼ NE¼	1309	IR	3.000	1	HANES, HAROLD
SE¼ NE¼	1312	IR	10.000	1	EASTERN CASCADE MODEL RR CLUB
SE¼ NE¼	1313	IR	3.000	1	HICKMAN, RAYMOND R
SE¼ NE¼	1314	IR	2.000	1	BALDERSTON, DALE V
SE¼ NE¼	1315	IR	5.400	1	HICKMAN, RAYMOND R
NE¼ NW¼	300	IR	0.300	1	KERNS, MARK C
NE¼ NW¼	302	IR	3.000	1	WILSON, ROBERT
NE¼ NW¼	303	IR	12.260	1	SEELEY, DONALD
NE¼ NW¼	304	IR	1.020	1	SNYDER, DARRELL W
NE¼ NW¼	305	IR	0.670	1	COLCLOUGH, CHARLES
NE¼ NW¼	306	IR	2.000	1	MARSH, DANIEL P
NE¼ NW¼	307	IR	2.500	1	YATES, DELL
NE¼ NW¼	308	IR	1.500	1	SUNDERLIN, PAUL L
NW¼ NW¼	1000	IR	1.800	1	NILL, ROBERT G
NW¼ NW¼	1100	IR	1.300	1	SINDELAR, RANDOLPH D
NW¼ NW¼	1200	IR	1.200	1	VALLANS, PETER
NW¼ NW¼	1300	IR	1.500	1	DOUVILLE, RICHARD D
NW¼ NW¼	1400	IR	1.000	1	JARVIS, MARK S
NW¼ NW¼	1500	IR	1.000	1	JARVIS, MARK S
NW¼ NW¼	1600	IR	1.500	1	VAN CISE, GLENN J
NW¼ NW¼	1700	IR	1.200	1	SMUIN, ALVIN C
NW¼ NW¼	1800	IR	1.500	1	HUBLER, MARK J
NW¼ NW¼	1900	IR	1.500	1	FIRKUS, EDWARD W &
NW¼ NW¼	200	IR	0.600	1	BREEDLOVE, ELDON
NW¼ NW¼	2000	IR	0.100	1	FIRKUS, GERALD J

NW¼ NW¼	300	IR	1.900	1	KIRKPATRICK, ELLIS L
NW¼ NW¼	400	IR	0.900	1	FULTON, KEVIN
NW¼ NW¼	500	IR	1.500	1	FULTON, KEVIN
NW¼ NW¼	600	IR	1.000	1	CANTRELL, RALPH
NW¼ NW¼	700	IR	1.300	1	CANTRELL, RALPH
NW¼ NW¼	800	IR	1.200	1	STANTON, MICHAEL W
NW¼ NW¼	900	IR	1.600	1	MYERS, RICHARD C ET AL
SW¼ NW¼	1000	IR	1.200	1	FISHER, RANDALL G
SW¼ NW¼	1100	IR	1.400	1	FISHER, RANDALL G
SW¼ NW¼	1200	IR	1.000	1	PUGH, RONALD W
SW¼ NW¼	1300	IR	1.250	1	ROSENGARTH, ANTHONY
SW¼ NW¼	1400	IR	0.900	1	ROGERSON, LOUIS
SW¼ NW¼	1500	IR	0.780	1	ROGERSON, LOUIS
SW¼ NW¼	1600	IR	1.120	1	OESTMAN, WARREN C
SW¼ NW¼	1700	IR	0.700	1	CUTTING, GEORGE T
SW¼ NW¼	1800	IR	0.800	1	HELLERUD, SHERMAN A
SW¼ NW¼	1900	IR	1.400	1	BIEGHLER, ROY W
SW¼ NW¼	200	IR	0.900	1	DEFOE, DONALD ROSS
SW¼ NW¼	2000	IR	1.200	1	FIRKUS, GERALD J
SW¼ NW¼	300	IR	0.600	1	MUTCHIE, SCOTT W
SW¼ NW¼	400	IR	0.800	1	SOLIZ, VONDA L
SW¼ NW¼	500	IR	0.400	1	FULTON, KEVIN
SW¼ NW¼	500	IR	0.630	1	PENINGTON, ROBERT
SW¼ NW¼	501	IR	0.370	1	PENINGTON, ROBERT
SW¼ NW¼	600	IR	0.300	1	CANTRELL, RALPH
SW¼ NW¼	700	IR	0.300	1	CANTRELL, RALPH
SW¼ NW¼	700	IR	1.100	1	HURWORTH, ROBERT W
SW¼ NW¼	800	IR	1.500	1	SMITH, GORDON B
SW¼ NW¼	900	IR	0.850	1	SMITH, GORDON B
SE¼ NW¼	1001	IR	7.000	1	PYTKOWICZ, RICARDO
SE¼ NW¼	1003	IR	20.100	1	SPRINGER, A R
SE¼ NW¼	1004	IR	0.900	1	SPRINGER, A R
NE¼ SW¼	1005	IR	1.500	1	QUICK, MICHAEL
NW¼ SW¼	500	IR	0.800	1	RICE, VERN E
NW¼ SW¼	502	IR	1.800	1	COCCO, CHESTER R
NW¼ SW¼	502	PND	0.200	1	COCCO, CHESTER R
NW¼ SW¼	503	IR	1.000	1	COCCO, CHESTER R
NW¼ SW¼	600	IR	4.000	1	WOOD, ELLIE
SW¼ SW¼	900	IR	4.000	1	STRAWN, MARTHA
SW¼ SW¼	901	IR	4.000	1	TURNBULL, DAVID B
SW¼ SW¼	902	IR	1.000	1	PETERMAN, KEVIN E
SW¼ SW¼	903	IR	0.500	1	TAYLOR, OAKLEY D
SW¼ SW¼	904	IR	1.600	1	ROBERTS, NEAL
SW¼ SW¼	905	IR	1.000	1	CALLAHAN, FRANK
SW¼ SW¼	906	IR	5.400	1	ROBERTS, NEAL
SW¼ SW¼	907	IR	3.000	1	HURITA, ROBERT E
SW¼ SW¼	909	IR	1.000	1	GRUND, GARY
SW¼ SW¼	910	IR	0.700	1	YORK, DAVID
SE¼ SW¼	1401	IR	2.000	1	LAKE, JAMES
SE¼ SW¼	1402	IR	4.500	1	KISER, WALTER
SE¼ SW¼	1405	IR	2.000	1	KNIGHT, HAYNIE G
SE¼ SW¼	1407	IR	0.500	1	PIERATT, TOM
NE¼ SE¼	1300	IR	6.300	1	BOESE, RALPH
NE¼ SE¼	1308	IR	0.400	1	PRIDAY, GORDON
NE¼ SE¼	1317	IR	2.000	1	BOESE, RALPH
NE¼ SE¼	1318	IR	1.000	1	OSTRANDER, MARY K
NE¼ SE¼	1319	IR	3.500	1	ARRASMITH, MICHAEL H
NE¼ SE¼	1320	IR	0.700	1	BODELL, RONALD D
NE¼ SE¼	1321	IR	1.000	1	SUMMER, DAVID ANDREW
NW¼ SE¼	1100	IR	3.000	1	NELSON, HARRY RUSSELL

NW¼ SE¼	1101	IR	1.000	1	WARREN, TONY R
NW¼ SE¼	1102	IR	3.000	1	NELSON, HARRY RUSSELL
NW¼ SE¼	1103	IR	1.000	1	RUSSELL, MICHAEL T
NW¼ SE¼	1104	IR	3.000	1	GIBSON, LYNN E
NW¼ SE¼	1105	IR	3.000	1	NELSON, HARRY RUSSELL
NW¼ SE¼	1107	IR	3.500	1	NELSON, H.R. & M.E. TRUSTEES
NW¼ SE¼	1108	IR	3.500	1	WIBEL, MICHAEL
SW¼ SE¼	1200	IR	1.500	1	HUETTL, LEELAND
SW¼ SE¼	1202	IR	3.000	1	LOMAX, THOMAS A
SW¼ SE¼	1203	IR	2.000	1	SCHAEFFER, JOHN M &
SW¼ SE¼	1204	IR	3.000	1	LAKE, JAMES
SW¼ SE¼	1205	IR	2.000	1	REAM, GARRY
SW¼ SE¼	1206	IR	2.500	1	SAWYER, KEVIN T
SE¼ SE¼	1308	IR	14.600	1	PRIDAY, GORDON

Section 2

NE¼ NE¼	1000	IR	0.500	1	FRONABARGER, PEGGY J
NE¼ NE¼	104	IR	0.660	1	SPAULDING, GERALD L
NE¼ NE¼	1200	IR	0.570	1	CARTER, ALTA
NE¼ NE¼	1300	IR	2.000	1	HOLMES, WILLIAM
NE¼ NE¼	1400	IR	2.500	1	GIROUX, ERNEST R CONSERVATOR
NE¼ NE¼	1500	IR	1.500	1	ROBERTS, RICHARD
NE¼ NE¼	1600	IR	4.500	1	LEWIS, JANICE C
NE¼ NE¼	1700	IR	2.000	1	LEWIS, JANICE C
NE¼ NE¼	1800	IR	1.000	1	VAN LANDUYT, LANCE M
NE¼ NE¼	1900	IR	1.000	1	GUSTAFSON, EUGENE
NE¼ NE¼	200	IR	1.500	1	CENTRAL OREGON IRRIGATION
NE¼ NE¼	500	IR	0.685	1	VAN ORDEN, GALEN D
NE¼ NE¼	600	IR	0.535	1	UPTEGROVE, PAUL D
NE¼ NE¼	601	IR	0.535	1	MORSE, CLAIR E
NE¼ NE¼	700	IR	1.070	1	DUENO, ELMER E
NE¼ NE¼	900	IR	0.430	1	JOHNSTON, DALE
NE¼ NE¼	901	IR	0.250	1	JOHNSTON, DALE
NW¼ NE¼	100	IR	0.250	1	SMITH, CLIFFORD R
NW¼ NE¼	1000	IR	0.125	1	CUBERO, EDWARD C
NW¼ NE¼	1100	IR	0.500	1	NICKERSON, GARY
NW¼ NE¼	1200	IR	0.500	1	GERAGHTY, EDWARD P
NW¼ NE¼	1300	IR	6.700	1	DAVIS, ANNA E
NW¼ NE¼	1602	IR	0.200	1	NEFF, JAMES R
NW¼ NE¼	1700	IR	4.000	1	DIXON, BARBARA ANN
NW¼ NE¼	2000	IR	4.900	1	FIELDS, JAMES E JR
NW¼ NE¼	300	IR	0.125	1	DUNCAN, JUDITH A
NW¼ NE¼	400	IR	0.125	1	DAY, WILLIAM B
NW¼ NE¼	600	IR	0.250	1	NEWSOME, RICHARD M
NW¼ NE¼	700	IR	0.500	1	WIENS, CONNIE L
NW¼ NE¼	800	IR	0.500	1	KERAMIDIS, BILL
NW¼ NE¼	900	IR	0.250	1	KESSEL, DONALD W
SW¼ NE¼	100	IR	2.800	1	FIELDS, JAMES E JR
SW¼ NE¼	1000	IR	0.125	1	PETERS, SCOTT A
SW¼ NE¼	1100	IR	0.125	1	BOOTH, EARL S
SW¼ NE¼	1200	IR	0.125	1	HENNEOUS, DONALD
SW¼ NE¼	1300	IR	0.125	1	DANIEL, FORREST M
SW¼ NE¼	1400	IR	0.125	1	IPOCK, JACK M
SW¼ NE¼	1500	IR	0.125	1	MINAHAN, ROBERT D
SW¼ NE¼	1600	IR	0.125	1	LOVISONE, CLAY D
SW¼ NE¼	1700	IR	0.125	1	KRISTIANSEN, VILS O
SW¼ NE¼	1800	IR	0.250	1	BRASIER, THOMAS H
SW¼ NE¼	1900	IR	0.125	1	FERGUSON, MAXINE I ET AL
SW¼ NE¼	200	IR	0.500	1	JENSEN, KIRK A
SW¼ NE¼	2000	IR	0.125	1	ORSULICH, JOANN

SW¼ NE¼	2100	IR	0.125	1	MCGUIRE, MARY JANE
SW¼ NE¼	2200	IR	0.125	1	KAUTH, DAVID P
SW¼ NE¼	2300	IR	0.125	1	DAVIS, GARY R
SW¼ NE¼	2400	IR	0.125	1	CARLSON, RICHARD E
SW¼ NE¼	2500	IR	0.125	1	RHODES, LARRY J
SW¼ NE¼	2600	IR	0.125	1	BURSON, CRAIG L
SW¼ NE¼	400	IR	0.125	1	GLENVA M CHOTARD, TRUST
SW¼ NE¼	500	IR	0.125	1	MADDOX, STEVEN P
SW¼ NE¼	600	IR	0.125	1	PAAP, MARK A ETAL
SW¼ NE¼	700	IR	0.125	1	WICKS, TRACE
SW¼ NE¼	800	IR	0.125	1	VOOS, SUSAN I
SW¼ NE¼	900	IR	0.125	1	STARIKA, GEORGE E
SE¼ NE¼	100	IR	1.000	1	WOLFE, GLENNIS
SE¼ NE¼	1000	IR	2.500	1	HENRY, WILLIAM JR FAMILY TRUST
SE¼ NE¼	1200	IR	2.000	1	REID, ORION
SE¼ NE¼	1300	IR	1.000	1	HOGUE, TOM D
SE¼ NE¼	1400	IR	0.500	1	BENNETT, TODD D
SE¼ NE¼	200	IR	1.000	1	DAVIS, MARVIN
SE¼ NE¼	300	IR	2.000	1	GUSTAFSON, EUGENE
SE¼ NE¼	400	IR	1.500	1	SODERBURG, ROBERT
SE¼ NE¼	500	IR	1.500	1	HARRISON, DENNIS
SE¼ NE¼	600	IR	1.000	1	ST. JOHN, JAMES B
SE¼ NE¼	700	IR	0.900	1	ANDERSON, MILTON
SE¼ NE¼	701	IR	0.500	1	KLOOS, CHARLES H
SE¼ NE¼	702	IR	0.750	1	ZABLE, DAVID K
SE¼ NE¼	703	IR	0.500	1	SLEVIN, JOHN M
SE¼ NE¼	704	IR	0.900	1	KENNEDY, LARRY G
SE¼ NE¼	705	IR	0.600	1	DECLERCK, ALBERT
SE¼ NE¼	800	IR	1.000	1	PIERATT, DEAN
SE¼ NE¼	900	IR	3.000	1	THOMAS, RALPH S
NE¼ NW¼	100	IR	0.125	1	STONE, JAMES HOYT
NE¼ NW¼	1000	IR	0.250	1	WINITZKY, WALTER
NE¼ NW¼	1001	IR	0.125	1	HOYT, JAMES R
NE¼ NW¼	1002	IR	0.125	1	SOLIZ, RENE
NE¼ NW¼	1101	IR	0.250	1	DONNELLY, RAE L
NE¼ NW¼	200	IR	0.250	1	WILLIAMSON, ROGER
NE¼ NW¼	302	IR	0.125	1	MOODY, DONALD T
NE¼ NW¼	303	IR	0.125	1	BOWDEN, H STANLEY
NE¼ NW¼	304	IR	0.125	1	LEA, DOUGLAS
NE¼ NW¼	305	IR	0.125	1	MCGINNIS, FRANK O
NE¼ NW¼	307	IR	0.125	1	WOLF, MABEL
NE¼ NW¼	308	IR	0.125	1	MOORE, JERRY
NE¼ NW¼	309	IR	0.125	1	BEDINGER, MARK G
NE¼ NW¼	310	IR	0.125	1	PREMSELAAR, LEONARD
NE¼ NW¼	311	IR	0.125	1	CUBERO, LOUIS A
NE¼ NW¼	312	IR	0.125	1	VANDERWAL, PHILIP H
NE¼ NW¼	318	IR	0.125	1	SALTZMAN, DELLA
NE¼ NW¼	319	IR	0.125	1	FARLEY, RAYMOND F
NE¼ NW¼	322	IR	0.125	1	TROZERA FAMILY TRUST
NE¼ NW¼	324	IR	0.125	1	R & R ENTERPRISES
NE¼ NW¼	325	IR	0.125	1	VIRGIN, RICHARD T
NE¼ NW¼	327	IR	0.125	1	DE BARATHY, MARJORIE
NE¼ NW¼	331	IR	0.125	1	BROWNING, GARY D
NE¼ NW¼	332	IR	0.125	1	DALE, EUGENE T
NE¼ NW¼	333	IR	0.125	1	REUSSE, WOLFGANG A
NE¼ NW¼	334	IR	0.125	1	NASHLUND, ROBYN A
NE¼ NW¼	335	IR	0.125	1	MANNING LOVING TRUST
NE¼ NW¼	338	IR	0.125	1	RUMGAY, RICHARD
NE¼ NW¼	341	IR	0.125	1	BRINES, MICHAEL J
NE¼ NW¼	400	IR	0.125	1	BARRETT LOVING TRUST

NE¼ NW¼	502	IR	0.125	1	COLEMAN, GREGORY A
NE¼ NW¼	504	IR	0.100	1	WILLIAMS, GREGORY H
NE¼ NW¼	505	IR	0.125	1	MIZE, LEROY T
NE¼ NW¼	506	IR	0.125	1	GAGE, THOMAS M
NE¼ NW¼	508	IR	0.200	1	WEIBLE, KENT A ETAL
NE¼ NW¼	510	IR	0.125	1	HARVEY, PATRICK L
NE¼ NW¼	511	IR	0.125	1	CARROLL, ATTIE SUE
NE¼ NW¼	512	IR	0.110	1	GATES, JUDITH
NE¼ NW¼	514	IR	0.125	1	ONGLEY FAMILY TRUST
NE¼ NW¼	515	IR	0.125	1	VERLEY, ROBERT J
NE¼ NW¼	516	IR	0.125	1	MARSDEN, VIRGINIA
NE¼ NW¼	517	IR	0.125	1	KARTCHNER, DENNY B
NE¼ NW¼	518	IR	0.125	1	LUSSIER, JANE E
NE¼ NW¼	519	IR	0.125	1	BARO, STEVE C
NE¼ NW¼	520	IR	0.109	1	WEAR, JOHN W
NE¼ NW¼	521	IR	0.125	1	MANLEY, MICHAEL H
NE¼ NW¼	522	IR	0.125	1	FLORANCE, BLAINE EDWIN
NE¼ NW¼	523	IR	0.125	1	WAAK, LONNIE
NE¼ NW¼	524	IR	0.125	1	MORRIS, CLIFF M
NE¼ NW¼	525	IR	0.125	1	SCHIMKE, TIMM D
NE¼ NW¼	526	IR	0.125	1	BOTTLE, CHRISTINA M
NE¼ NW¼	527	IR	0.100	1	RUSSELL, DAVID R
NE¼ NW¼	528	IR	0.125	1	STUCKE, MABEL V ETAL
NE¼ NW¼	529	IR	0.125	1	PLAGMAN, CHERYL B
NE¼ NW¼	530	IR	0.125	1	RIVERMAN, TERRANCE J
NE¼ NW¼	531	IR	0.125	1	ROHDE, TERRY LEE
NE¼ NW¼	532	IR	0.100	1	HUFF, MARGRETTA B
NE¼ NW¼	533	IR	0.125	1	MERRILL, LARRY W
NE¼ NW¼	534	IR	0.125	1	EPPERS JR, DON P
NE¼ NW¼	535	IR	0.125	1	KELLY, DONALD J
NE¼ NW¼	536	IR	0.100	1	WILLIAMS, GREGORY H
NE¼ NW¼	538	IR	0.250	1	HILLESLAND, GORDON K
NE¼ NW¼	539	IR	0.125	1	WHITEHURST, TIMOTHY P
NE¼ NW¼	540	IR	0.100	1	WILLIAMS, GREGORY H
NE¼ NW¼	542	IR	0.125	1	CURRIE, ELAYNE LOGAN
NE¼ NW¼	543	IR	0.125	1	MILLER, LORIMEN H
NE¼ NW¼	600	IR	0.125	1	ELDRED, MALVIN C
NE¼ NW¼	601	IR	0.250	1	DE LATEUR, DEBORAH L
NE¼ NW¼	700	IR	0.125	1	MARTIN, LESLIE K
NE¼ NW¼	800	IR	0.125	1	LOGAN, PAUL B
NE¼ NW¼	900	IR	0.125	1	WINITZKY, WARREN G
NE¼ NW¼	901	IR	0.125	1	BURROWS, JULIA D
NE¼ NW¼	903	IR	0.125	1	LOGAN, PAUL
NE¼ NW¼	904	IR	0.125	1	LEVAGE, ALAN B
NW¼ NW¼	3001	IR	0.300	1	DUDLEY, DUANE E
NW¼ NW¼	3100	IR	0.700	1	DUDLEY, DUANE E
SW¼ NW¼	1400	IR	0.125	1	SPENCER, JOHN C
SW¼ NW¼	2500	IR	0.125	1	REED, IMOGENE R
SW¼ NW¼	2600	IR	0.105	1	HOTALING, LARRY E
SW¼ NW¼	2900	IR	1.000	1	SCALISE, SERAFINO A
SW¼ NW¼	3000	IR	0.125	1	GLASSOW, MADGE G
SE¼ NW¼	1000	IR	0.125	1	WALLACE, ROLAND
SE¼ NW¼	101	IR	0.125	1	LOUTH FAMILY REV LIVING TRUST
SE¼ NW¼	1100	IR	0.125	1	RALSTON, S R
SE¼ NW¼	1300	IR	0.125	1	WICK, SEVIN P
SE¼ NW¼	1500	IR	0.125	1	MCCOY, JOHN A
SE¼ NW¼	1600	IR	0.125	1	BARCROFT, SANDRA M
SE¼ NW¼	1700	IR	0.125	1	BAUCH, VERNON C
SE¼ NW¼	1800	IR	0.125	1	FLEMING, RICHARD A
SE¼ NW¼	2000	IR	0.125	1	FREWING, DAVID W

SE¼ NW¼	201	IR	0.125	1	RHOADS, OLAF LEROY
SE¼ NW¼	2100	IR	0.125	1	HORN, DARRYL R
SE¼ NW¼	2200	IR	0.125	1	WORDELL, DOUGLAS RAY
SE¼ NW¼	2300	IR	0.125	1	HUSER, MARY JEAN
SE¼ NW¼	2400	IR	0.125	1	LUTHER, ERIC M
SE¼ NW¼	2600	IR	0.020	1	HOTALING, LARRY E
SE¼ NW¼	2900	IR	0.250	1	ROA, MICHAEL ANTHONY
SE¼ NW¼	300	IR	0.125	1	KELLY, IOLA M
SE¼ NW¼	3200	IR	0.125	1	HANSEN, TIM S
SE¼ NW¼	3300	IR	0.125	1	HUSSER, GWENDOLYN GAYLE
SE¼ NW¼	3400	IR	0.125	1	PIPES, DARREL D
SE¼ NW¼	3500	IR	0.125	1	HELMS, DENNIS W
SE¼ NW¼	3600	IR	0.125	1	MARTIN, ALVAN E
SE¼ NW¼	3900	IR	0.125	1	FRIER, DENNIS E
SE¼ NW¼	4000	IR	0.125	1	COOK, DAVID K
SE¼ NW¼	4100	IR	0.125	1	ERICKSON, GEORGE E
SE¼ NW¼	4700	IR	0.400	1	CECIL D ANDERSON TRUST
SE¼ NW¼	500	IR	0.125	1	NELSON, LYLE C
SE¼ NW¼	5600	IR	0.250	1	HARRIS, KENNETH A
SE¼ NW¼	5800	IR	0.250	1	FOWLER, GREGG G
SE¼ NW¼	600	IR	0.125	1	WISHERED, IONA J
SE¼ NW¼	6000	IR	0.250	1	DAVIS, WILLIAM F
SE¼ NW¼	6100	IR	0.250	1	FOXHOVEN, WILLIAM M
SE¼ NW¼	6200	IR	0.250	1	COCHRAN, PARTRICK H
SE¼ NW¼	6300	IR	0.250	1	PORTER, EDGAR N
SE¼ NW¼	6600	IR	0.250	1	WILSON, BRUCE D
SE¼ NW¼	6700	IR	0.250	1	WILLIAMS, DONALD R
SE¼ NW¼	6800	IR	0.250	1	BLAYLOCK, GLEN D
SE¼ NW¼	6900	IR	0.250	1	DIEHL, KERRY G
SE¼ NW¼	700	IR	0.125	1	CHAUNCEY, JAMES R
SE¼ NW¼	900	IR	0.125	1	FARSTVEDT, RAY MARTIN
NE¼ SE¼	100	IR	0.500	1	KIRKPATRICK, LEO
NE¼ SE¼	1000	IR	0.250	1	BENEFIEL, ARTHUR N
NE¼ SE¼	102	IR	1.000	1	KIRKPATRICK, LEO
NE¼ SE¼	200	IR	4.200	1	WARRINGTON, ERNEST
NE¼ SE¼	201	IR	2.400	1	WARRINGTON, ERNEST
NE¼ SE¼	202	IR	2.200	1	PACKEBUSH, WARREN M
NE¼ SE¼	400	IR	2.000	1	PEDERSON, MICHEAL
NE¼ SE¼	500	IR	2.500	1	SPONGBERG, RAYMOND
NE¼ SE¼	600	IR	1.500	1	SPONGBERG, RAYMOND
NE¼ SE¼	801	IR	0.250	1	LUNDGREN, GERALD E
NW¼ SE¼	100	IR	0.250	1	WYKES, R THOMAS
NW¼ SE¼	1000	IR	0.250	1	MACLEAN, NANCY M
NW¼ SE¼	1200	IR	0.250	1	KENT, RALPH J
NW¼ SE¼	1300	IR	0.250	1	KENNISTON, STANLEY L
NW¼ SE¼	1400	IR	0.250	1	CARPENTER, BRUCE L
NW¼ SE¼	1500	IR	0.250	1	TURNER, SCOTT M
NW¼ SE¼	1600	IR	0.250	1	ADAMS, KENNETH D
NW¼ SE¼	1700	IR	0.250	1	NOBLE, JOHN D
NW¼ SE¼	1800	IR	0.250	1	THE FIKE FAMILY TRUST
NW¼ SE¼	1900	IR	0.250	1	SHORKEY, SCOTT
NW¼ SE¼	200	IR	0.250	1	COOPER, ROD L
NW¼ SE¼	2000	IR	0.250	1	SPENCER, VIRGIL R
NW¼ SE¼	2100	IR	0.250	1	SANDERSON, LARRY L
NW¼ SE¼	2200	IR	0.250	1	WESTMORELAND, DONALD C
NW¼ SE¼	2300	IR	0.250	1	WALTERS, RICHARD J
NW¼ SE¼	2400	IR	0.375	1	CORAY, EDWARD A
NW¼ SE¼	2700	IR	0.250	1	EVANS, WILLIAM R
NW¼ SE¼	2800	IR	0.250	1	LANGELIERS, RONALD G
NW¼ SE¼	2900	IR	0.250	1	PURDOM, RANDY G

NW¼ SE¼	300	IR	0.250	1	EDGAR, HENRY M & MAUDE E
NW¼ SE¼	3000	IR	0.250	1	KABER, KEITH F
NW¼ SE¼	3100	IR	0.250	1	PUTMAN, CHARLES DALE
NW¼ SE¼	3200	IR	0.250	1	HORN, THOMAS E
NW¼ SE¼	3300	IR	0.250	1	KENNEDY, LEON
NW¼ SE¼	3400	IR	0.250	1	TRUE, RONALD E
NW¼ SE¼	3500	IR	0.250	1	WHITNEY, SHARON KAE
NW¼ SE¼	3700	IR	0.680	1	RAMSEY, FREDERIC M
NW¼ SE¼	3800	IR	0.250	1	ALGER, RICHARD B
NW¼ SE¼	3900	IR	0.250	1	UFFELMAN, TONI T
NW¼ SE¼	400	IR	0.250	1	STACY, FLOYD R
NW¼ SE¼	4000	IR	0.250	1	ELDRIGE, RICHARD S
NW¼ SE¼	4100	IR	0.250	1	THE KERR FAMILY TRUST
NW¼ SE¼	4300	IR	0.375	1	MOSES, JAMES DENNIS
NW¼ SE¼	4400	IR	0.375	1	LAFON, RUTH E
NW¼ SE¼	4600	IR	0.250	1	CLONTZ, GREG D
NW¼ SE¼	500	IR	0.250	1	HOMAN, ALVIN H
NW¼ SE¼	5200	IR	0.250	1	WELSH, JENNIFER E
NW¼ SE¼	5300	IR	0.125	1	KIRK, ROBERT J
NW¼ SE¼	5700	IR	0.125	1	OWENS, CLIFFORD W
NW¼ SE¼	5800	IR	0.125	1	ZIEGLER, MEAD
NW¼ SE¼	5900	IR	0.250	1	TURPIN, MICHAEL S
NW¼ SE¼	600	IR	0.250	1	GOLDSMITH, KATHRYN
NW¼ SE¼	6000	IR	0.250	1	DECKER, CURTIS M
NW¼ SE¼	6100	IR	0.250	1	AKERS, KEVIN J
NW¼ SE¼	6200	IR	0.125	1	NEWER, ROBERT J
NW¼ SE¼	6300	IR	0.125	1	WILLIAMS, MICHAEL L
NW¼ SE¼	6400	IR	0.250	1	CONNELL, MICHAEL D
NW¼ SE¼	6500	IR	0.250	1	TURNBULL, DAVID L
NW¼ SE¼	700	IR	0.250	1	KLECKER, KENNETH
NW¼ SE¼	800	IR	0.500	1	PENCE, DON P
NW¼ SE¼	900	IR	0.250	1	ROTUNDI, RICHARD J
SW¼ SE¼	1000	IR	0.250	1	DAVIS, MARY ANN
SW¼ SE¼	1200	IR	0.220	1	LINDFORS, RALPH V
SW¼ SE¼	1300	IR	0.125	1	SMITH, EUGENIE PITTMAN
SW¼ SE¼	1400	IR	0.250	1	CANTELMO, THOMAS MICHAEL
SW¼ SE¼	1500	IR	0.250	1	OLSON, JAMES B
SW¼ SE¼	1800	IR	0.250	1	CARPENTER, MITCHEAL E
SW¼ SE¼	1900	IR	0.250	1	ROGERS, WILLIAM MICHAEL
SW¼ SE¼	200	IR	0.250	1	GRADY, WILLIAM RUSSELL
SW¼ SE¼	2000	IR	0.250	1	DAMON, JANE E
SW¼ SE¼	2100	IR	0.250	1	PERIN, DAVID
SW¼ SE¼	2200	IR	0.250	1	YANKOVICH, LOUIS G
SW¼ SE¼	2300	IR	0.250	1	MAHONEY, TIMOTHY
SW¼ SE¼	2400	IR	0.250	1	TAYLOR, DENNIS W
SW¼ SE¼	2500	IR	0.250	1	KIPP, THOMAS B
SW¼ SE¼	2600	IR	0.250	1	BEAUCHESNE, PAUL R
SW¼ SE¼	2700	IR	0.250	1	WHITING, GEOFFREY M
SW¼ SE¼	2800	IR	0.300	1	CARMICHAEL, WILLIAM F
SW¼ SE¼	2900	IR	0.250	1	BRAMALL, JOHN ROBERT
SW¼ SE¼	300	IR	0.125	1	MAYBURY, JOHN
SW¼ SE¼	3000	IR	0.250	1	HOSKINS, WILLIAM C
SW¼ SE¼	3100	IR	0.250	1	KLOBAS, MARIE A
SW¼ SE¼	3200	IR	0.250	1	MILLER, JOSEPH W
SW¼ SE¼	3201	IR	0.250	1	HOLLER, O J
SW¼ SE¼	3300	IR	0.250	1	MELLON, SERGE
SW¼ SE¼	3400	IR	0.250	1	HESS, WILLIAM A
SW¼ SE¼	3500	IR	0.250	1	DUNN, DONALD L
SW¼ SE¼	3600	IR	0.250	1	PROCTOR, JAMES F
SW¼ SE¼	3700	IR	0.250	1	WILEY, CLEO

SW¼ SE¼	3800	IR	0.250	1	SIMONIS, CAROLINE A
SW¼ SE¼	3900	IR	0.250	1	MCINTYRE, NATHAN A
SW¼ SE¼	400	IR	0.125	1	CORDIS, RICHARD L
SW¼ SE¼	4000	IR	0.250	1	ALVIS, GARY C
SW¼ SE¼	4100	IR	0.250	1	STENKAMP, MICHAEL D
SW¼ SE¼	4200	IR	0.250	1	JANE CORLISS BAILEY REV TRUST
SW¼ SE¼	4300	IR	0.250	1	ELLIOTT, ROBERT C
SW¼ SE¼	4400	IR	0.250	1	MILLER, PARKE N
SW¼ SE¼	4500	IR	0.250	1	BELL, ORVILLE M
SW¼ SE¼	4600	IR	0.250	1	RUFENER, J MICHAEL
SW¼ SE¼	4700	IR	0.250	1	DOSER, DARRYL W
SW¼ SE¼	4900	IR	0.250	1	BRYAN, RODNEY D
SW¼ SE¼	5000	IR	0.250	1	KOLLEN, HAROLD
SW¼ SE¼	5100	IR	0.250	1	MARX, STEVEN DUANE
SW¼ SE¼	5200	IR	0.250	1	REIF, MICHAEL D
SW¼ SE¼	5300	IR	0.250	1	DUDLEY STEPHEN H
SW¼ SE¼	5400	IR	0.250	1	BROWN, WILLIAM R
SW¼ SE¼	5500	IR	0.250	1	BIRD, RICHARD E
SW¼ SE¼	5600	IR	0.250	1	BULOW, FREDERICK A
SW¼ SE¼	5700	IR	0.250	1	JEUCK, JOHN M
SW¼ SE¼	5800	IR	0.250	1	WISBECK, STEVEN W
SW¼ SE¼	5900	IR	0.250	1	SPADARO, STEVE ETAL
SW¼ SE¼	6000	IR	0.250	1	RICKMAN, JEFFREY J
SW¼ SE¼	6100	IR	0.250	1	HILL, GARRY
SW¼ SE¼	6200	IR	0.250	1	JANSEN, DAVID P
SW¼ SE¼	6300	IR	0.250	1	BAKER, MICHAEL C
SW¼ SE¼	6400	IR	0.250	1	KREGAR, DAVID M
SW¼ SE¼	700	IR	0.125	1	DAVIDSON, D DEWAIN
SW¼ SE¼	800	IR	0.125	1	BLOCK, LANCE D
SE¼ SE¼	1200	IR	0.300	1	DICK, KENNETH R
SE¼ SE¼	200	IR	1.800	1	KAYS, WILLIAM KEITH
SE¼ SE¼	3200	IR	0.500	1	HENDERSON, VICTOR L
SE¼ SE¼	3500	IR	1.100	1	STRECKER, JON K
SE¼ SE¼	3600	IR	0.650	1	BOYER, SHARRON SUE
SE¼ SE¼	3700	IR	2.000	1	THE NORTHWEST YEARLY
SE¼ SE¼	400	IR	1.000	1	BISHOP, PAUL C
SE¼ SE¼	500	IR	1.100	1	ENGSTROM, MICHAEL D
SE¼ SE¼	600	IR	1.000	1	SMILEY, JIM

Section 3

SW¼ SW¼	1600	IR	0.500	1	MCCOY, DWIGHT
SW¼ SW¼	1700	IR	0.500	1	WILLS, ELLEN M
SW¼ SW¼	1800	IR	1.500	1	BORDEN, MARIA M
SW¼ SW¼	2001	IR	1.000	1	PALMER, KEVIN
SW¼ SW¼	2002	IR	2.000	1	SETTLER'S CORNER, INC.
SE¼ SW¼	100	IR	5.000	1	HANCOCK, DAVID M ET AL
SE¼ SW¼	200	IR	1.300	1	LOONEY, WILLIAM
SE¼ SW¼	300	IR	0.200	1	LOONEY, WILLIAM
SE¼ SW¼	500	IR	0.340	1	BRIGHT, LAWRENCE
SE¼ SW¼	600	IR	0.300	1	KULPINSKI, DIANE J
SE¼ SW¼	700	IR	0.330	1	ANDERSON, CHARLES W
SE¼ SW¼	800	IR	0.250	1	CASE, ALISTAIR R
SE¼ SW¼	900	IR	0.330	1	MCARDLE, JAMES
SW¼ SE¼	1200	IR	10.000	1	OLDAKER, SAM

Section 4

NW¼ NW¼	109	IR	2.900	2	FIFTEEN SW COLORADO
SE¼ SW¼	2600	IR	0.200	1	WALKER, MERLYN
SE¼ SW¼	2700	IR	0.200	1	WALKER, MERLYN
SE¼ SW¼	2800	IR	0.200	1	WALKER, MERLYN

SE¼ SW¼	2900	IR	0.200	1	WALKER, MERLYN
SW¼ SE¼	1000	IR	0.700	1	SMITH, LUCILLE
SW¼ SE¼	1001	IR	0.300	1	SMITH, LUCILLE
SE¼ SE¼	1400	IR	4.000	1	HIGGINSON, GALE

Section 5

SW¼ NE¼	800	IR	1.000	1	CENTRAL OREGON IRRIGATION
SW¼ NE¼	801	IR	1.700	1	CENTRAL OREGON IRRIGATION
SE¼ NE¼	800	IR	1.600	1	CENTRAL OREGON IRRIGATION
SE¼ NW¼	801	IR	0.200	1	CENTRAL OREGON IRRIGATION
SW¼ SW¼	300	IR	1.600	1	CENTRAL OREGON IRRIGATION
SE¼ SW¼	800	IR	0.900	1	CENTRAL OREGON IRRIGATION
NW¼ SE¼	800	IR	0.200	1	CENTRAL OREGON IRRIGATION

Section 7

NE¼ NW¼	100	IR	1.000	1	DIAZ, RICHARD E
NE¼ NW¼	1000	IR	1.700	1	GERLICHER, CATHIE
NE¼ NW¼	1001	IR	1.700	1	GERLICHER, CATHIE
NE¼ NW¼	101	IR	1.000	1	TONGE, W MASSEY JR
NE¼ NW¼	200	IR	2.800	1	LANNEN, WAYNE
NE¼ NW¼	300	IR	2.000	1	LANNEN, WAYNE
NE¼ NW¼	301	IR	0.200	1	LANNEN, WAYNE
NE¼ NW¼	302	IR	1.000	1	LANNEN, WAYNE
NE¼ NW¼	400	IR	0.500	1	SHINE, ANTHONY
NE¼ NW¼	900	IR	2.900	1	VILVEN, ALAN C
NW¼ NW¼	400	IR	1.800	1	SHINE, ANTHONY
NW¼ NW¼	500	IR	2.500	1	LISLE, JAMES W
NW¼ NW¼	702	IR	0.600	1	EVANS, GREGORY J
NW¼ NW¼	703	IR	1.400	1	CLIFF & LUCILLE THOMPSON TRUST
NW¼ NW¼	704	IR	0.500	1	DEROCHER, LORA
NW¼ NW¼	706	IR	1.000	1	HOLLOWAY, ANDREW F
NW¼ NW¼	708	IR	2.000	1	ELLIOTT, JAMES C
NW¼ NW¼	711	IR	2.000	1	FIGGINS, ARTHUR
NW¼ NW¼	713	IR	1.000	1	HITE, DONALD E
NW¼ NW¼	714	IR	1.100	1	FRANKLIN, KENDALL
NW¼ NW¼	715	IR	0.650	1	GALL, RONALD W
NW¼ NW¼	716	IR	0.650	1	SHIELDS, JERALD C
NW¼ NW¼	801	IR	0.900	1	CENTRAL OREGON IRRIGATION
SW¼ NW¼	703	IR	0.600	1	CLIFF & LUCILLE THOMPSON TRUST
SW¼ NW¼	801	IR	0.900	1	CENTRAL OREGON IRRIGATION

Section 8

NW¼ NW¼	1000	IR	0.300	1	MEISNER, FRANCES FRANKLIN-ET
NW¼ NW¼	1100	IR	7.630	1	SETTLER'S CORNER, INC.

Section 9

NE¼ NE¼	200	IR	1.000	1	LOVING, LEWEY L
NE¼ NE¼	3603	IR	0.200	1	KRUGER, CASEY A
NE¼ NE¼	401	IR	1.750	1	MOUNTAIN VISTA PARTNERS
NW¼ NE¼	2300	IR	0.100	1	REID, ORION
NW¼ NE¼	2400	IR	0.400	1	REID, ORION
NW¼ NE¼	2500	IR	0.500	1	REID, ORION
NW¼ NE¼	2600	IR	0.400	1	REID, ORION
NW¼ NE¼	2700	IR	0.400	1	REID, ORION
NW¼ NE¼	2800	IR	0.200	1	REID, ORION
NW¼ NE¼	500	IR	3.700	1	REID, ORION
NW¼ NE¼	500	PND	1.300	1	REID, ORION
NW¼ NE¼	5300	IR	0.200	1	REID, ORION
NW¼ NE¼	5400	IR	0.200	1	REID, ORION
NW¼ NE¼	5500	IR	0.200	1	REID, ORION

SW¼ NE¼	1600	IR	0.200	1	REID, ORION
SW¼ NE¼	1700	IR	0.300	1	REID, ORION
SW¼ NE¼	1800	IR	0.200	1	REID, ORION
SW¼ NE¼	1900	IR	0.200	1	REID, ORION
SW¼ NE¼	2000	IR	0.200	1	REID, ORION
SW¼ NE¼	2100	IR	0.300	1	REID, ORION
SW¼ NE¼	2300	IR	0.200	1	REID, ORION
SW¼ NE¼	2400	IR	0.100	1	REID, ORION
SW¼ NE¼	2500	IR	0.200	1	REID, ORION
SW¼ NE¼	2600	IR	0.200	1	REID, ORION
SW¼ NE¼	2700	IR	0.100	1	REID, ORION
SW¼ NE¼	3200	IR	0.100	1	REID, ORION
SW¼ NE¼	3300	IR	0.100	1	REID, ORION
SW¼ NE¼	3400	IR	0.100	1	REID, ORION
SW¼ NE¼	3500	IR	0.050	1	REID, ORION
SW¼ NE¼	3600	IR	0.070	1	REID, ORION
SW¼ NE¼	3700	IR	0.080	1	REID, ORION
SW¼ NE¼	500	IR	15.700	1	REID, ORION
SW¼ NE¼	500	PND	1.600	1	REID, ORION
SW¼ NE¼	600	IR	0.600	1	REID, ORION
SW¼ NE¼	700	IR	0.200	1	REID, ORION
SW¼ NE¼	800	IR	0.100	1	REID, ORION
SE¼ NE¼	401	IR	3.350	1	MOUNTAIN VISTA PARTNERS
SE¼ NE¼	404	IR	4.900	1	MOUNTAIN VISTA PARTNERS
NE¼ NW¼	6400	IR	0.100	1	REID, ORION
NE¼ NW¼	6500	IR	0.100	1	REID, ORION
NE¼ NW¼	6600	IR	0.100	1	REID, ORION
NE¼ NW¼	6700	IR	0.100	1	REID, ORION
NE¼ NW¼	6800	IR	0.100	1	REID, ORION
SE¼ SW¼	300	IR	1.000	1	ARATA, MICHELLE E
SE¼ SW¼	400	IR	0.500	1	DELORE, GARY
SE¼ SW¼	500	IR	0.350	1	CHAFFIN, GARY A
NW¼ SE¼	6200	IR	1.700	1	SHOLES, LEONARD
NW¼ SE¼	6300	IR	0.400	1	SHOLES, LEONARD
SW¼ SE¼	6200	IR	0.400	1	SHOLES, LEONARD

Section 10

NW¼ NW¼	0	IND	3.000	1	DESCHUTES COUNTY
NW¼ NW¼	0	IND	22.350	1	CENTRAL OREGON IRRIGATION

Section 11

Township 18 South, Range 12 East, W.M.

SW¼ SW¼	200	IR	17.000	1	GOODRICH, LEWIS SCOTT

Section 1

NE¼ SW¼	300	IR	9.000	1	WOHLERS, RUSSELL F
NW¼ SW¼	300	IR	11.200	1	WOHLERS, RUSSELL F
SW¼ SW¼	300	IR	31.000	1	WOHLERS, RUSSELL F
SE¼ SW¼	300	IR	28.800	1	WOHLERS, RUSSELL F
NE¼ SE¼	100	IR	2.500	1	COVEY, BURLEY
NE¼ SE¼	101	IR	2.000	1	COVEY, BURLEY
NE¼ SE¼	102	IR	3.000	1	ERICKSEN, ROBERT W
NW¼ SE¼	200	IR	2.500	1	SAWYER, DOUG
NW¼ SE¼	201	IR	1.000	1	SAWYER, DOUG
SW¼ SE¼	500	IR	1.300	1	PRICE, FRANK
SE¼ SE¼	500	IR	2.200	1	PRICE, FRANK

Section 2

NE¼ NE¼	100	IR	17.000	1	MORRIS-READE, STEPHEN A
NW¼ NE¼	101	IR	13.500	1	GARDNER, JERALD

NW¼ NE¼	200	IR	6.500	1	SHERIDAN, WALTER D
SW¼ NE¼	101	IR	7.000	1	GARDNER, JERALD
SW¼ NE¼	300	IR	5.750	1	LARSON, DALE
SW¼ NE¼	400	IR	1.500	1	PROSCH, ELROY
SW¼ NE¼	500	IR	4.000	1	FINLEY, GARRY A &
SW¼ NE¼	501	IR	9.500	1	POLLY, RANDALL D
SE¼ NE¼	600	IR	1.600	1	CENTRAL OREGON IRRIGATION
NE¼ NW¼	1600	IR	1.000	1	FOSTER, DICK
NE¼ NW¼	1601	IR	2.000	1	MARSDEN, JOHN H
NE¼ NW¼	1602	IR	1.000	1	DUNAGAN, JON K
NE¼ NW¼	1603	IR	1.000	1	TENBRINK, ROBERT E JR
NE¼ SW¼	1500	IR	2.000	1	WILSON, JAMES M
NE¼ SW¼	1501	IR	0.500	1	SCHULTZ, ROGER L
NE¼ SW¼	1502	IR	0.220	1	MCCLUNG, THOMAS J
NW¼ SW¼	1100	IR	3.000	1	ROBINSON, JAMES
NW¼ SW¼	1200	IR	11.000	1	COCHRAN, WILLIAM
NW¼ SW¼	1300	IR	4.000	1	LARWIN, DANIEL
NW¼ SW¼	1400	IR	5.000	1	ARNOLD, G STEPHEN
SW¼ SW¼	1000	IR	7.600	1	CENTRAL OREGON IRRIGATION
SE¼ SW¼	1000	IR	0.800	1	CENTRAL OREGON IRRIGATION
SE¼ SW¼	1502	IR	0.280	1	MCCLUNG, THOMAS J
NE¼ SE¼	601	IR	3.500	1	DAVIS, LARRY G
NE¼ SE¼	603	IR	3.500	1	DAVIS, CLINTON B
NE¼ SE¼	604	IR	1.500	1	DAVIS, JOE
SW¼ SE¼	100	IR	3.400	1	KARAMI, HOSSAIN
SE¼ SE¼	100	IR	4.400	1	KARAMI, HOSSAIN

Section 3

NE¼ NE¼	100	IR	10.200	1	FENNELL, HORACE
NE¼ NE¼	109	IR	0.200	1	MORRISON, KYLE T
NE¼ NE¼	110	IR	1.600	1	FENNELL, HORACE
NW¼ NE¼	101	IR	8.000	1	TURNER, TED R
NW¼ NE¼	102	IR	6.000	1	KLINK, GARY
NW¼ NE¼	103	IR	7.000	1	LEE, KEITH
NW¼ NE¼	104	IR	9.400	1	MARKS, THEODORE J
SW¼ NE¼	105	IR	11.700	1	WARD, KIM D & CO.
SW¼ NE¼	107	IR	17.000	1	WARD, KIM D & CO.
SE¼ NE¼	100	IR	0.200	1	FENNELL, HORACE
SE¼ NE¼	106	IR	2.900	1	FENNELL, HORACE
SE¼ NE¼	108	IR	16.300	1	WARD, KIM D & CO.
SE¼ NE¼	109	IR	6.800	1	MORRISON, KYLE T
SE¼ NE¼	110	IR	5.400	1	FENNELL, HORACE
NE¼ NW¼	900	IR	23.100	1	WELBOURN, JAMES
NW¼ NW¼	900	IR	18.100	1	WELBOURN, JAMES
SW¼ NW¼	801	IR	0.780	1	COBB, DAVID & LINK, LINDA C
SE¼ NW¼	200	IR	19.600	1	CONNER, PATRICK L, M.D.
SE¼ NW¼	600	IR	2.000	1	KEMNITZ, ROBERT
SE¼ NW¼	606	IR	0.160	1	VAN OSDEL, RICHARD
SE¼ NW¼	700	IR	2.460	1	VAN OSDEL, RICHARD
SE¼ NW¼	702	IR	2.200	1	COBB, DAVID & LINK, LINDA C
NE¼ SW¼	500	IR	4.730	1	THE EDITH WILSON CRUISE TRUST
NE¼ SW¼	600	IR	2.100	1	KEMNITZ, ROBERT
NE¼ SW¼	600	PND	0.600	1	KEMNITZ, ROBERT
NE¼ SW¼	601	IR	1.800	1	STONEMAN, SUSAN E
NE¼ SW¼	602	IR	3.500	1	HILL, JAMES R
NE¼ SW¼	603	IR	3.670	1	HILL, JAMES R
NE¼ SW¼	604	IR	2.000	1	STOCKTON, JOHN &
NE¼ SW¼	605	IR	2.000	1	ROLLINS, RONALD
NE¼ SW¼	606	IR	0.680	1	VAN OSDEL, RICHARD
NE¼ SW¼	700	IR	2.500	1	VAN OSDEL, RICHARD

NE¼ SW¼	701	IR	1.000	1	CAMPBELL, LESLIE R
NE¼ SW¼	702	IR	0.900	1	COBB, DAVID & LINK, LINDA C
NE¼ SW¼	703	IR	1.500	1	VEHLEN, ARTHUR H
NE¼ SW¼	704	IR	2.120	1	STONEMAN, SUSAN E
SE¼ SW¼	400	IR	10.000	1	HOAR, ROBERT K
SE¼ SW¼	407	IR	3.000	1	HOAR, ROBERT K
SE¼ SW¼	408	IR	2.000	1	ACUFF, LARRY L JR
SW¼ SE¼	401	IR	2.000	1	EDWARDS, ALAN ESTATE
SW¼ SE¼	402	IR	2.000	1	EDWARDS, ALAN ESTATE
SW¼ SE¼	405	IR	4.350	1	WOLFINGER, SCOTT DIXON
SW¼ SE¼	406	IR	5.150	1	EDWARDS, ALAN ESTATE

Section 4

NE¼ NE¼	100	IR	13.800	1	WELBOURN, JAMES
NW¼ NE¼	400	IR	9.200	1	MCCANDLISH, CURTIS P
SW¼ NE¼	1300	IR	10.600	1	JOHNSON, ROBERT B
SW¼ NE¼	300	IR	8.000	1	JOHNSON, ROBERT B
SW¼ NE¼	400	IR	1.000	1	MCCANDLISH, CURTIS P
NE¼ NW¼	600	IR	10.500	1	GRAY, DOUGLAS K
NW¼ NW¼	800	IR	12.900	1	FASSETT, MICHAEL
NW¼ NW¼	801	IR	15.100	1	FINLEY, RICHARD G
NW¼ NW¼	802	IR	2.000	1	FASSETT, MICHAEL
SW¼ NW¼	900	IR	6.000	1	RAGAN, WILLIAM V JR
SW¼ NW¼	901	IR	17.200	1	ROATS, WILLIAM K
SE¼ NW¼	301	IR	6.000	1	GUZMAN, RENE
SE¼ NW¼	600	IR	1.500	1	GRAY, DOUGLAS K
SE¼ NW¼	602	IR	10.500	1	SHANNON, ROBERT L
SE¼ NW¼	700	IR	10.000	1	LEISZ, BRUCE K
NE¼ SW¼	700	IR	27.600	1	LEISZ, BRUCE K
NE¼ SW¼	701	IR	0.100	1	LEISZ, BRUCE K
NW¼ SW¼	1000	IR	3.000	1	CARICO, CELESTE
NW¼ SW¼	1100	IR	6.900	1	DASH. BARRETT C
NW¼ SW¼	1101	IR	7.000	1	ENDICOTT, CHARLES N
SW¼ SW¼	1100	IR	2.100	1	DASH. BARRETT C
SW¼ SW¼	1103	IR	1.500	1	PAGE FAMILY TRUST
SE¼ SW¼	700	IR	0.400	1	LEISZ, BRUCE K
SE¼ SW¼	701	IR	10.900	1	LEISZ, BRUCE K
SE¼ SW¼	702	IR	11.000	1	BANEY, CURTIS A
NW¼ SE¼	1300	IR	4.900	1	JOHNSON, ROBERT B
NW¼ SE¼	1400	IR	8.700	1	GREENHOE, DUANE F
NW¼ SE¼	1500	IR	3.150	1	PETERS, MARK W
SW¼ SE¼	1500	IR	6.700	1	PETERS, MARK W
SW¼ SE¼	1600	IR	7.500	1	YOUNG, GEORGE W

Section 5

NE¼ NE¼	100	IR	5.300	1	TUMA, BEN
NE¼ NE¼	101	IR	10.700	1	TUMA, BEN
NE¼ NE¼	200	IR	2.000	1	BELEW, JOHN M
NW¼ NE¼	300	IR	3.000	1	BOYLE, ORVAL
NW¼ NE¼	400	IR	6.000	1	FRAZIER, EARL
SW¼ NE¼	1300	IR	29.000	1	CROSS, HOWARD
SE¼ NE¼	1400	IR	2.000	1	PEACOCK, HOWARD
NE¼ NW¼	500	IR	18.000	1	SCHILLING, JOHN
NE¼ NW¼	600	IR	6.000	1	HUNT, G D
NW¼ NW¼	1001	IR	4.000	1	BRUSCA, RANDOLPH ROBERT ET AL
NW¼ NW¼	700	IR	8.300	1	HORTON, DAVID E
NW¼ NW¼	701	IR	0.700	1	HORTON, DAVID E
NW¼ NW¼	800	IR	14.000	1	HADLEY, LORETTA
NW¼ NW¼	901	IR	1.200	1	COURT, MARTY
SW¼ NW¼	1001	IR	8.100	1	BRUSCA, RANDOLPH ROBERT ET AL

SW¼ NW¼	1002	IR	2.300	1	LICITRA, TONY
SE¼ NW¼	1002	IR	13.700	1	LICITRA, TONY
NE¼ SW¼	1002	IR	1.400	1	LICITRA, TONY

Section 6

NW¼ NE¼	200	IR	2.700	1	ELSEY, ANITA
NE¼ NW¼	300	IR	3.300	1	GIBSON, CYNTHIA I

Section 8

NE¼ NE¼	100	IR	0.400	1	SHERIDAN, DOUGLAS J
SW¼ NE¼	100	IR	3.700	1	SHERIDAN, DOUGLAS J
SE¼ NE¼	100	IR	15.900	1	SHERIDAN, DOUGLAS J
NE¼ NW¼	601	IR	7.000	1	EICHER, JEFFREY L

Section 9

NE¼ NE¼	100	IR	16.300	1	KARAMI, HOSSAIN
NE¼ NE¼	102	IR	0.300	1	LEE, BILL
NW¼ NE¼	100	IR	9.500	1	KARAMI, HOSSAIN
NW¼ NE¼	101	IR	9.800	1	PAULLIN, KENNETH M
NW¼ NE¼	301	IR	0.900	1	STUCKI, HANS R
NW¼ NE¼	302	IR	0.100	1	STUCKI, HANS R
SW¼ NE¼	101	IR	0.200	1	PAULLIN, KENNETH M
SE¼ NE¼	100	IR	9.700	1	KARAMI, HOSSAIN
SE¼ NE¼	102	IR	8.700	1	LEE, BILL
NE¼ NW¼	300	IR	3.500	1	MUHLEMAN, CHRIS D
NE¼ NW¼	301	IR	2.100	1	STUCKI, HANS R
NE¼ NW¼	302	IR	5.400	1	STUCKI, HANS R
NE¼ NW¼	400	IR	10.000	1	GRIBSKOV, CRAIG
NW¼ NW¼	501	IR	4.000	1	SHERIDAN, DOUGLAS J
SW¼ NW¼	600	IR	6.100	1	NEILL, DONALD T/KAISER, DALE A
SW¼ NW¼	700	IR	3.900	1	NEILL, DONALD T/KAISER, DALE A
SW¼ NW¼	800	IR	8.700	1	KENNEL, DEL
SE¼ NW¼	1000	IR	1.400	1	KENNEL, DEL
SE¼ NW¼	800	IR	12.900	1	KENNEL, DEL
SE¼ NW¼	900	IR	12.000	1	BURNS, GEORGE
NE¼ SE¼	200	IR	31.000	1	KERRON, DONALD M
NW¼ SE¼	200	IR	39.000	1	KERRON, DONALD M

Section 10

NE¼ NE¼	100	IR	15.000	1	HICKS, ZELLNAR
NE¼ NE¼	200	IR	15.000	1	GROGAN, LANIE
NW¼ NE¼	300	IR	20.000	1	KARAMI, HOSSAIN
SW¼ NE¼	400	IR	30.800	1	KARAMI, HOSSAIN
SE¼ NE¼	400	IR	28.800	1	KARAMI, HOSSAIN
NW¼ NW¼	400	IR	3.500	1	KARAMI, HOSSAIN
SW¼ NW¼	400	IR	37.300	1	KARAMI, HOSSAIN
SE¼ NW¼	400	IR	36.300	1	KARAMI, HOSSAIN
NE¼ SW¼	600	IR	14.100	1	CRONEN, DARYL C
NE¼ SW¼	700	IR	15.670	1	CRONEN, DARYL C
NE¼ SW¼	701	IR	0.800	1	HOLLIBAUGH, QUINN
NW¼ SW¼	1200	IR	2.000	1	KERRON, DONALD M
NW¼ SW¼	700	IR	2.000	1	CRONEN, DARYL C
NW¼ SW¼	701	IR	3.500	1	HOLLIBAUGH, QUINN
NW¼ SW¼	702	IR	3.480	1	CRONEN, DARYL C

Section 11

NE¼ NE¼	100	IR	32.800	1	ROBINSON, WILLIAM
NW¼ NE¼	200	IR	9.700	1	CENTRAL OREGON IRRIGATION
SW¼ NE¼	100	IR	3.600	1	ROBINSON, WILLIAM
SW¼ NE¼	101	IR	12.000	1	MARSDEN, JOHN H JR

SE¼ NE¼	100	IR	6.800	1	ROBINSON, WILLIAM
SE¼ NE¼	101	IR	11.000	1	MARSDEN, JOHN H JR
NE¼ NW¼	301	IR	1.300	1	ADAMS, GARY L
NE¼ NW¼	302	IR	18.200	1	ADAMS, GARY L
NE¼ NW¼	303	IR	1.200	1	BRAATZ, RONALD W
NE¼ NW¼	401	IR	0.800	1	BRAATZ, RONALD W
NW¼ NW¼	300	IR	3.000	1	MARTIN, THOM
NW¼ NW¼	303	IR	19.700	1	BRAATZ, RONALD W
NW¼ NW¼	304	IR	3.000	1	WILHELM, JAMES H
NW¼ NW¼	401	IR	1.800	1	BRAATZ, RONALD W
SW¼ NW¼	500	IR	29.000	1	EVERITT, LEON
SE¼ NW¼	501	IR	22.500	1	GOULD, RAY C
SE¼ NW¼	502	IR	3.500	1	GOULD, RAY C
NW¼ SW¼	601	IR	4.000	1	NORMAN, REBECCA J
NW¼ SW¼	602	IR	1.500	1	FINCK, STEVEN
NE¼ SE¼	700	IR	29.000	1	WILLIAMSEN, KENNETH
NW¼ SE¼	702	IR	31.750	1	HOWE-MERLIN, LINDA
SW¼ SE¼	701	IR	0.300	1	WILLIAMSEN, KENNETH
SW¼ SE¼	702	IR	1.250	1	HOWE-MERLIN, LINDA
SW¼ SE¼	703	IR	23.000	1	KING, ROBERT H
SE¼ SE¼	700	IR	1.200	1	WILLIAMSEN, KENNETH
SE¼ SE¼	701	IR	13.500	1	WILLIAMSEN, KENNETH

Section 12

Township 18 South, Range 13 East, W.M.

NW¼ NE¼	400	IR	16.700	1	GERHARDT, WILLIAM C
SW¼ NE¼	300	IR	14.600	1	GERHARDT, WILLIAM C
SW¼ NE¼	400	IR	8.000	1	GERHARDT, WILLIAM C
SE¼ NE¼	200	IR	19.700	1	GERHARDT, WILLIAM C
SE¼ NE¼	300	IR	0.100	1	GERHARDT, WILLIAM C
NW¼ NW¼	500	IR	8.400	1	ROBINSON, WILLIAM
SW¼ NW¼	500	IR	3.400	1	ROBINSON, WILLIAM
NE¼ SW¼	300	IR	7.700	1	GERHARDT, WILLIAM C
NW¼ SW¼	600	IR	2.400	1	BRADETICH, JERI LEE
NE¼ SE¼	200	IR	5.300	1	GERHARDT, WILLIAM C
NE¼ SE¼	300	IR	0.300	1	GERHARDT, WILLIAM C
NE¼ SE¼	900	IR	12.000	1	MORIARTY, LEE ET AL
NE¼ SE¼	901	IR	16.500	1	MORIARTY, LEE ET AL
NW¼ SE¼	300	IR	5.900	1	GERHARDT, WILLIAM C
NW¼ SE¼	800	IR	15.700	1	MORIARTY, LEE ET AL
NW¼ SE¼	900	IR	0.400	1	MORIARTY, LEE ET AL
SW¼ SE¼	800	IR	4.000	1	MORIARTY, LEE ET AL
SW¼ SE¼	900	IR	11.300	1	MORIARTY, LEE ET AL
SE¼ SE¼	900	IR	13.500	1	MORIARTY, LEE ET AL
SE¼ SE¼	901	IR	17.200	1	MAESNER, GERALD

Section 7

SE¼ NE¼	1201	IR	11.000	1	BOUCHE, PARRIS
NE¼ SW¼	1001	IR	27.000	1	MCBRIDE, HAROLD C
NW¼ SW¼	903	IR	25.190	1	BOULET, CURTIS REVOCABLE TRUST
SW¼ SW¼	904	IR	20.910	1	WETHERELL, RICHARD
SE¼ SW¼	1000	IR	13.500	1	BUSSARD, RONALD R
NE¼ SE¼	1100	IR	37.000	1	KNIGHT, GORDON
NW¼ SE¼	1101	IR	15.300	1	PENLAND, STANLEY K
NW¼ SE¼	1105	IR	15.000	1	WINCKLER, CHARLES W
SW¼ SE¼	1102	IR	14.000	1	PHILLIPS, MARK
SW¼ SE¼	1103	IR	3.000	1	FORTIN, RICHARD P
SW¼ SE¼	1104	IR	5.500	1	PHILLIPS, MARK
SW¼ SE¼	1105	IR	6.000	1	WINCKLER, CHARLES W
SE¼ SE¼	1100	IR	27.000	1	KNIGHT, GORDON

SE¼ SE¼	1102	IR	8.500	1	PHILLIPS, MARK

Section 8

NE¼ NW¼	301	IR	7.500	1	CLARNO CATTLE COMPANY
NW¼ NW¼	301	IR	1.600	1	CLARNO CATTLE COMPANY
SW¼ NW¼	1202	IR	27.300	1	CLARNO CATTLE COMPANY
SE¼ NW¼	301	IR	7.900	1	CLARNO CATTLE COMPANY
NW¼ SW¼	1202	IR	37.200	1	CLARNO CATTLE COMPANY
SW¼ SW¼	1200	IR	16.400	1	CLARNO, BRADLEY R
SW¼ SW¼	1202	IR	19.800	1	CLARNO CATTLE COMPANY

Section 9

NW¼ NW¼	1200	IR	10.000	1	CLARNO, BRADLEY R

Section 16

NE¼ NE¼	100	PND	2.000	1	U.S. BLM

Section 18
Township 18 South, Range 14 East, W.M.

A description of the place of use for which proof was made pursuant to ORS 540.510 to 540.530 and to which that portion of the right is appurtenant is as follows:

NW¼ NE¼	200	IR	2.000	9	PARR REVOCABLE TRUST
NW¼ NE¼	301	IR	2.000	9	JACOBS, ALBERT

Section 24
Township 17 South, Range 11 East, W.M.

SW¼ SW¼	500	IR	0.180	9	LAMARCHE, H.H. ET UX
SW¼ SW¼	2500	IR	0.300	9	LAURION, R.B. & B.J., CO-TRUSTEES
SW¼ SW¼	2700	IR	0.330	9	WORTHINGTON, J. & DIXON, S.
SW¼ SW¼	2900	IR	0.580	9	HEMMERQUIST, J.C. & K.C.
SW¼ SW¼	3000	IR	0.270	9	MARSH, DAVID K.
SW¼ SW¼	3100	IR	0.470	9	KING, LARRY A.
SW¼ SW¼	3200	IR	0.540	9	CREASEY, DOUGLAS K. & KAREN L.
SW¼ SW¼	3400	IR	0.050	9	RIMROCK ASSOC. OF BEND, INC.
SW¼ SW¼	4100	IR	0.120	9	RIMROCK ASSOC. OF BEND, INC.
SE¼ SW¼	100	IR	0.120	9	RONNING, E.R. & SURGENOR, D.
SE¼ SW¼	2500	IR	0.200	9	LAURION, R.B. & B.J., CO-TRUSTEES
SE¼ SW¼	3300	IR	0.070	9	RIMROCK ASSOC. OF BEND, INC.
SE¼ SW¼	3400	IR	0.030	9	RIMROCK ASSOC. OF BEND, INC.
SE¼ SW¼	3500	IR	0.260	9	GEHLERT, FRED A., TRUSTEE
SE¼ SW¼	3800	IR	0.220	9	RIMROCK ASSOC. OF BEND, INC.
SE¼ SW¼	4000	IR	0.520	9	RIMROCK ASSOC. OF BEND, INC.
SE¼ SW¼	4100	IR	0.300	9	RIMROCK ASSOC. OF BEND, INC.
SE¼ SW¼	4500	IR	0.320	9	FANCHER, HAL R. & IRENE W.

Section 17

NE¼ NE¼	300	IR	1.000	9	ANDERSON, THOMAS & KAREN
NE¼ NW¼	500	IR	1.000	9	DOORN, EDD L. & V. DAWN
NE¼ NW¼	800	IR	0.200	9	PLESTINA, RICHARD J.
NW¼ NW¼	800	IR	0.100	9	PLESTINA, RICHARD J.
NW¼ NW¼	900	IR	0.600	9	SCHNEIDER, ROGER A. & JOYCE E.
NW¼ NW¼	1000	IR	0.400	9	SCHNEIDER, ROGER A. & JOYCE E.

Section 19

NE¼ NW¼	100	IR	0.280	9	RONNING, E.R. & SURGENOR, D.
NE¼ NW¼	800	IR	0.330	9	KRUSE, LEONE J. TRUSTEE
NE¼ NW¼	900	IR	0.240	9	HANSON, LLOYD E. & ROSELL M.
NE¼ NW¼	1000	IR	0.200	9	HEBERLEIN, JAMES E. & SUSAN L.
NE¼ NW¼	1700	IR	0.150	9	RENWICK, BEVERLEY A.

NE¼ NW¼	1800	IR	0.030	9	SHORT, WALTER JOHN
NE¼ NW¼	2200	IR	0.080	9	BARRIE, BETTY J. & COX, SUSAN
NE¼ NW¼	2400	IR	0.140	9	BRAINERD, HAROLD G. ET UX
NE¼ NW¼	2500	IR	0.330	9	BIANUCCI, JOHN ET AL
NE¼ NW¼	2700	IR	0.190	9	CURL, ANITA G.
NE¼ NW¼	2900	IR	0.120	9	THOMSON, G.J. & OTTENFELD, D.
NE¼ NW¼	3000	IR	0.200	9	BOLLMAN, A.W., TRUSTEE
NE¼ NW¼	3101	IR	0.200	9	DE KAT, GARY H. & VIRGINIA A.
NE¼ NW¼	3300	IR	1.710	9	RIMROCK ASSOC. OF BEND, INC.
NE¼ NW¼	3800	IR	1.170	9	RIMROCK ASSOC. OF BEND, INC.
NW¼ NW¼	500	IR	0.350	9	LAMARCHE, H.J. ET UX
NW¼ NW¼	600	IR	0.520	9	NASH, DONAL B. & DEBORAH L.
NW¼ NW¼	700	IR	0.310	9	HEISTUMAN, T. & LAMBERT, S.
NW¼ NW¼	2700	IR	0.180	9	CURL, ANITA G.
NW¼ NW¼	3200	IR	0.030	9	CREASEY, DOUGLAS K. & KAREN L.

Section 20
Township 17 South, Range 12 East, W.M.

This certificate is issued to confirm changes in use and place of use approved by an order of the Water Resources Department Director entered 12/6/99, approving the Central Oregon Irrigation District petition for water rights mapping under ORS 541.325 to 541.331 and confirms those changes in place of use and points of diversion approved by orders of the Water Resources Director entered May 9, 1980; January 19, 1981; January 19, 1990; and May 9, 1990, not eligible for inclusion in the district water rights mapping petition.

This certificate supersedes certificate of water right numbered 29052.

The right to the use of the water for the above purpose is restricted to beneficial use on the lands or place of use described and is subject to all other conditions and limitations contained in said decrees.

WITNESS the signature of the Water Resources Director, affixed 12/6/99.

Martha O. Pagel
Martha O. Pagel, Director

Instream lease #306 7-02/10-02
#307 7-02/10-02
#297 7-02/10-02
#325 8-02/10-02
#326 8-02/10-02
#327 8-02/10-02
#259 8-02/10-02
#298 7-02/10-02
#262 6-02/10-02
#261 6-02/10-02
#265 6-02/10-02

HB3111.bwb

Recorded in State Record of Water Right Certificates numbered 76358.

STATE OF OREGON

COUNTY OF DESCHUTES

CERTIFICATE OF WATER RIGHT

THIS CERTIFICATE ISSUED TO

SUPERSEDED BY
CERT. NO. 83571

CENTRAL OREGON IRRIGATION DISTRICT
2598 N HIGHWAY 97
REDMOND, OREGON 97756

confirms the right to use the waters of THE DESCHUTES RIVER, a tributary of THE COLUMBIA RIVER, for IRRIGATION OF ACRES 43,746.93 ACRES, 781.957 ACRES/EQUIVALENT FOR MUNICIPAL USE, 158.01 ACRES/EQUIVALENT FOR POND MAINTENANCE, 87.10 ACRES/EQUIVALENT FOR INDUSTRIAL USE, 7.0 ACRES/EQUIVALENT FOR QUASI-MUNICIPAL USE, 2.80 ACRES/EQUIVALENT FOR DUST ABATEMENT, STOCK WATER, AND DOMESTIC USE.

This right was confirmed by decree of the Circuit Court of the State of Oregon for DESCHUTES County. The decree is of record at Salem, in the Order Record of the WATER RESOURCES DIRECTOR, in Volume 12, at Page 282 and in Volume 16, at pages 1 and 390. The dates of priority are OCTOBER 31, 1900 FOR 985.0 CUBIC FEET PER SECOND, AND DECEMBER 2, 1907 FOR THE BALANCE ALLOWED BY DECREE.

The amount of water used for irrigation, together with the amount secured under any other right existing for the same lands, is limited to a diversion of not to exceed the quantity determined by decree of the Circuit Court for Deschutes County, dated March 24, 1933, being:

April 1 to May 1 and Oct. 1 to Nov. 1	1 cfs to 80.0 acres
May 1 to May 15 and Sept. 15 to Oct. 1	1 cfs to 60.0 acres
May 15 to Sept. 15	1 cfs to 32.4 acres

for each acre irrigated by the Central Oregon Irrigation District main canal systems during the irrigation season of each year, not to exceed 9.91 acre-feet for each acre irrigated during the irrigation season as measured at the diversion from the source. The quantities reflect a 45% transmission loss as determined by decree of the Circuit Court for Deschutes County, dated March 24, 1933. Those lands not served from the district main canal systems but by direct pumping from the Deschutes River will not be allowed the 45% transmission loss.

The points of diversion are located as follows:

1. Central Oregon Canal: SW¼ NE¼, Section 13, T. 18 S., R. 11 E., W.M.; 1520 feet south and 1535 feet west from the NE Corner of Section 13.

2. Smith Properties, Inc.: Lot 4 (NW¼ NW¼), Section 5, T. 18 S., R. 12 E., W.M.; 440 feet south and 970 feet east from the NW Corner of Section 5.

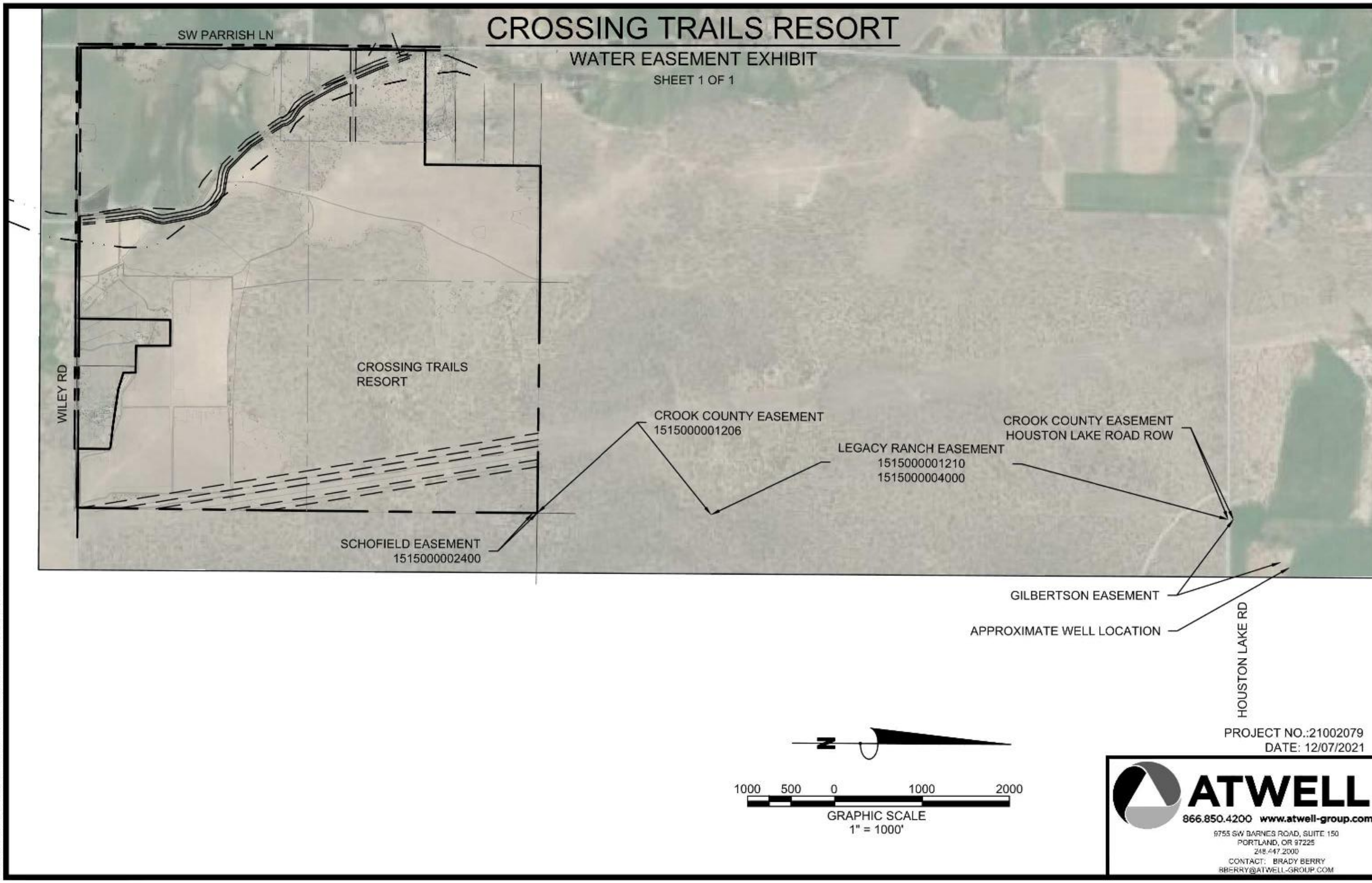
3. Columbia Park: SE¼ SE¼, Section 31, T. 17 S., R. 12 E., W.M.; 740 feet north and 490 feet west from the SE Corner of Section 31.

4. Drake Park South: NE¼ SE¼, Section 31, T. 17 S., R. 12 E., W.M.; 700 feet north and 120 feet west from the SE Corner of NE¼ SE¼, Section 31.

5. Drake Park North: SW¼ NW¼, Section 32, T. 17 S., R. 12 E., W.M.; 2150 feet south and 750 feet east from the NW Corner of Section 32.

6. Harmon Park: SW¼ NW¼, Section 32, T. 17 S., R. 12 E., W.M.; 700 feet south and 680 feet west from the NE Corner of SW¼ NW¼, Section 32.

Appendix 22


CROSSING TRAILS RESORT
WATER EASEMENT EXHIBIT
SHEET 1 OF 1
SW PARRISH LN
WILEY RD
CROSSING TRAILS RESORT
CROOK COUNTY EASEMENT
1515000001206
LEGACY RANCH EASEMENT
1515000001210
1515000004000
CROOK COUNTY EASEMENT
HOUSTON LAKE ROAD ROW
SCHOFIELD EASEMENT
1515000002400
GILBERTSON EASEMENT
APPROXIMATE WELL LOCATION
HOUSTON LAKE RD
N
1000 500 0 1000 2000
GRAPHIC SCALE
1" = 1000'
PROJECT NO.:21002079
DATE: 12/07/2021
ATWELL
866.850.4200 www.atwell-group.com
9755 SW BARNES ROAD, SUITE 150
PORTLAND, OR 97225
248.447.2000
CONTACT: BRADY BERRY
BBERRY@ATWELL-GROUP.COM

Appendix 23

Crook County Onsite Sewage Treatment System Application

300 NE 3rd St, Rm 12
Prineville, Or 97754
541-447-3211

State of Oregon Department of Environmental Quality

For DEQ Use Only:	Date Stamp
Date received ______	
Fee paid ______	
Receipt number ______	
Application number ______	
Date of 1st response ______	
Date of 2nd response ______	
Date of final response ______	
Date of completion ______	
Scanned Data Entry	

A. Property Owner Information

Name	Mailing Address (Street or PO Box, City, State, Zip Code)	Phone Number
Gene Gramzow	21059 Avery Lane, Bend, OR 97702	

B. Legal Property Description

Township	Range	Section	Tax Lot	Tax Account Number	Acreage or Lot Size
15 S	15 E	17	100,106,109,110		580.58 AC

County	Subdivision Name	Lot	Block
Crook	N/A		

SW Parrish Lane & Wiley Road   Crook County   OR

26 to Wiley Road, West on Wiley Road to BPA lines

☐ ☐ ☐
☑ Well
☑ Vacant Land   ☑ Resort

☑ ☐ ☐

Brady Berry   Digitally signed by Brady Berry DN: E=bberry@atwell-group.com, CN=Brady Berry, O="Atwell, LLC", L=Southfield, S=Michigan, C=US Date: 2021.12.08 11:08:39-08'00'   12/7/2021

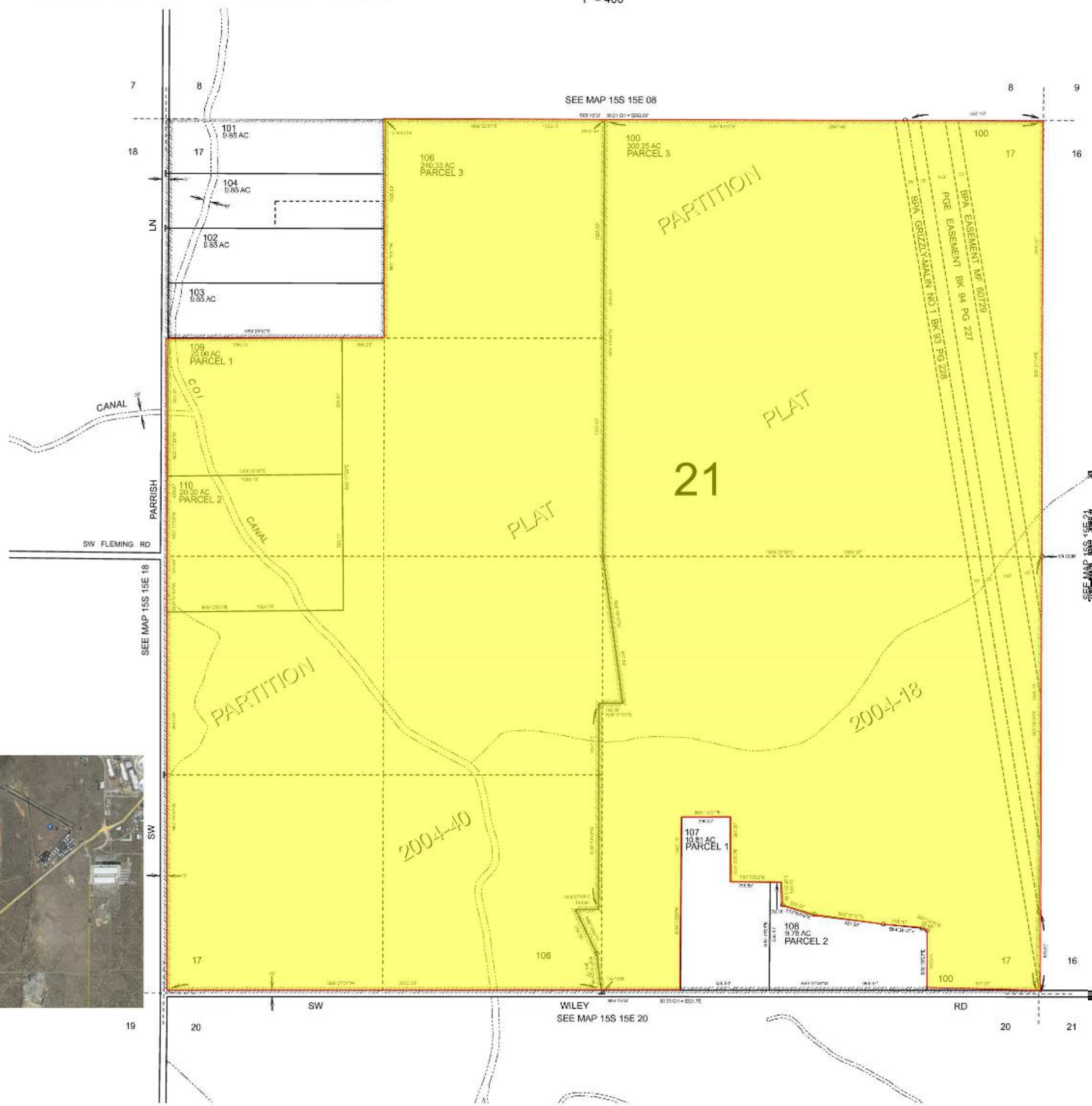
Atwell, LLC - Brady Berry, PE   971.334.8962   bberry@atwell-group.com

9755 SW Barnes Road, Ste 150, Portland, OR 97225

☐ ☑ ☐
☑

THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSE ONLY

SECTION 17 T.15S. R.15E. W.M.
CROOK COUNTY
1" = 400'



Vicinity Map

Gene Gramzoew

SW Parrish Ln/Wiley Road

Crook

15 S

15 E

17

100,106,109,11

580.6

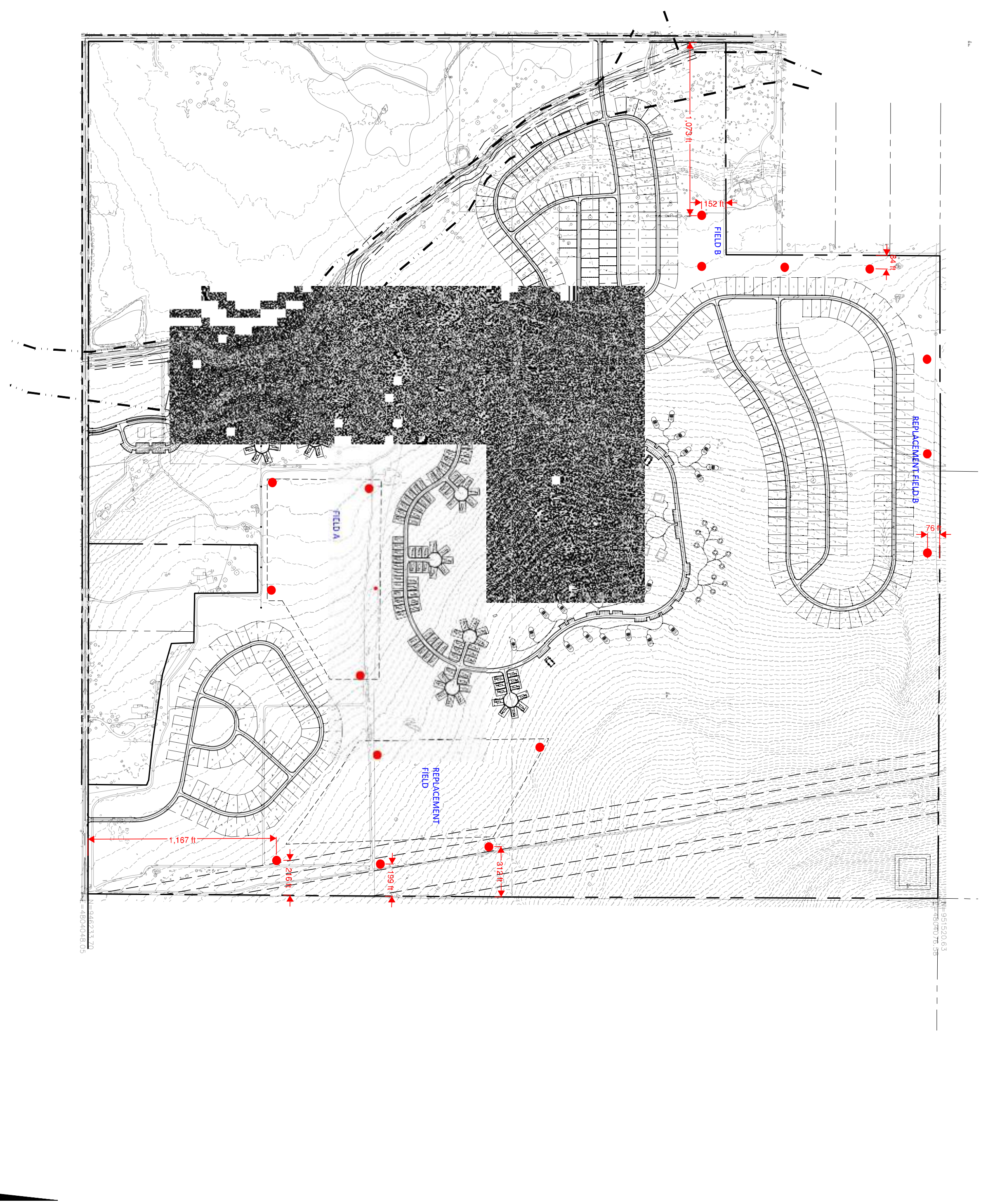
N/Q

300

See attached Utility plan

Brady Berry, PE

12/7/2021



CLIENT

SUN COMMUNITIES, INC.

CROSSING TRAILS RESORT
CROOK COUNTY OREGON

PRELIMINARY PLANS
LAND USE SUBMITTAL
COMPOSITE UTILITY PLAN

DATE 01/12/2022

REVISIONS

DR.	JWA	CH.	BB
P.M.	BRADY BERRY		
JOB	21002079		
SHEET NO.	C300		

SUN CO...
2777 FRANKL...
SOUTHF...
(24...
DEVELOPE...

...TWELL
...0.4200 www.atwell-group.com
...755 SW BARNES ROAD, SUITE 150
PORTLAND, OR 97225
248.447.2000

Know what's below. Call before you dig.
811

CAD FILE: 21002079-CU.DWG

TABLE 1
OAR 340-071-0220

MINIMUM SEPARATION DISTANCES

Items Requiring Setback	From Subsurface Absorption Area Including Replacement Area	From Septic Tank and Other Treatment Units, Effluent Sewer and Distribution Units
1. Groundwater Supplies and Wells.	*100'	50'
2. Springs:		
• Upgradient.	50'	50'
• Downgradient.	100'	50'
**3. Surface Public Waters:		
• Year round.	100'	50'
• Seasonal.	50'	50'
4. Intermittent Streams:		
• Piped (watertight not less than 25' from any part of the on-site system).	20'	20'
• Unpiped.	50'	50'
5. Groundwater Interceptors:		
• On a slope of 3% or less.	20'	10'
• On a slope greater than 3%:		
• Upgradient.	10'	5'
• Downgradient.	50'	10'
6. Irrigation Canals:		
• Lined (watertight canal).	25'	25'
• Unlined:		
• Upgradient.	25'	25'
• Downgradient.	50'	50'
7. Cuts Manmade in Excess of 30 Inches (top of downslope cut):		
• Which Intersect Layers that Limit Effective Soil Depth Within 48 Inches of Surface.	50'	25'
• Which Do Not Intersect Layers that Limit Effective Soil Depth.	25'	10'
8. Escarpments:		
• Which Intersect Layers that Limit Effective Soil Depth.	50'	10'
• Which Do Not Intersect Layers that Limit Effective Soil Depth.	25'	10'
9. Property Lines.	10'	5'
10. Water Lines.	10'	10'
11. Foundation Lines of any Building, Including Garages and Out Buildings.	10'	5'
12. Underground Utilities.	10'	—

* 50-foot setback for wells constructed with special standards granted by WRD.

**This does not prevent stream crossings of pressure effluent sewers.

Appendix 24

CROSSING TRAILS TRANSPORTATION IMPACT ANALYSIS

CROOK COUNTY, OR

January 2022

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Crossing Trails Transportation Impact Analysis

Crook County, OR

REGISTERED PROFESSIONAL ENGINEER
96958PE
OREGON
JANUARY 12, 2021
JACQUELINE ANN GULCZYNSKI

EXPIRES: 06/30/2023

Prepared for:
Sun Crossing Trails, LLC
27777 Franklin Road, Suite 200
Southfield, Michigan 48034

Prepared by:
Kittelson & Associates, Inc.
1001 SW Emkay Drive, Suite 140
Bend, OR 97702
541.312.8300

Project Manager:
Jacqueline Gulczynski, PE

Project Principal:
Marc Butorac, PE

Project Number 26648

January 2022

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Section 1
Executive Summary

EXECUTIVE SUMMARY

This Transportation Impact Analysis (TIA) was developed for the proposed 580-acre Crossing Trails Destination Resort located in Crook County, Oregon. It was developed in accordance with the Crook County Transportation Impact Analysis requirements found in Chapter 18.180 in the County Code.

This report documents the methodology, findings, and mitigation recommendations of the TIA prepared for the proposed destination resort. Key findings and recommendations are summarized below:

- The proposed site plan has been modified from the originally approved traditional destination resort to an affordable, family friendly, outdoor living experience. The resort includes recreational activities and open space for guests and full-time occupants, workforce housing for employees on the resort and within the surrounding community, upscale manufactured homes/cabins, and overnight villas and resort rentals.
- Several planning documents have been completed or updated since the original approval of the site including the Crook County and Prineville Transportation System Plans and the OR Highway 126 Corridor Facility Plan. These documents no longer recommend grade separated interchanges at key intersections such as OR126/Tom McCall Road and OR126/Powell Butte Highway, but instead recommend at-grade improvements such as roundabouts.
- A traffic study for a destination resort at this site was completed in 2008 with a similar dwelling unit count but different site plan. The anticipated volumes on OR126 are lower than anticipated in the 2008 traffic study, therefore reducing the study area from the original study.
- The site is anticipated to generate 3,567 total daily trips, 278 weekday PM peak hour trips and 317 Saturday midday peak hour trips.
- None of the study intersections exceeded 90th percentile crash rates, critical crash rates, or were identified on the Statewide Priority Index System for the review period of 2015-2019.
- Two study intersections are expected to exceed mobility targets in the existing condition: OR126/Powell Butte Highway and OR126/Tom McCall Road.
- The neighboring developing/approved destination resort vested trips were included in the background conditions analysis. Powell Butte/Alfalfa Market Road is not expected to meet mobility targets in the 2026 background condition.
- OR126/Parrish Lane is the primary access to the development and is expected to exceed mobility targets in the 2026 build-out condition.
- Clear sight lines are provided at all anticipated site access locations.
- This report complies with the Crook County Destination Resort Overlay Code Requirements as presented in section 18.116.100.6 for the 20-year horizon year.

Upon review of the findings above, key recommendations to support the surrounding transportation infrastructure include:

- Construct eastbound and southbound left turn lanes at OR126/Parrish Lane – the primary access to the development.
- Participate proportionally to completing the following off-site improvements to mitigate impacts to the state and county system:
  - Hidden Canyon shall construct a multilane roundabout at OR126/Powell Butte Highway to include two lanes in the eastbound and westbound directions and a northbound right turn yield bypass lane.
  - ODOT/The City of Prineville shall consider widening the OR126/Tom McCall Road roundabout. Based on current and projected volumes, two lanes may be required for the eastbound and southbound approaches along with a northbound right turn yield bypass lane.

  - Crook County shall construct a single lane roundabout at Powell Butte Highway/Alfalfa Road as this is a primary route for both Brasada Rach and Hidden Canyon and is impacted by site trips to and from Bend.

- Contribute the following pro-rata shares to offset the impacts to the regional network comparable to the level of impact, including:
  - OR126/Powell Butte Highway: 4%, $120,000
  - OR126/Tom McCall Road: 5%, $50,000
  - Powell Butte Highway/Alfalfa Market Road: 5%, $75,000

  The total pro-rata payment is equal to $275,000.

Section 2
Introduction

INTRODUCTION

Sun Communities, Inc. is updating the previously approved 580-acre destination resort in Crook County. The location of the destination resort is shown in Figure 1. This section documents the project background history and other relevant planning documents relevant to the project area.

PROJECT BACKGROUND

A Transportation Impact Analysis (TIA) was completed for a destination resort on the same 580-acre site in 2008 by Ferguson & Associates, Inc (see Appendix A). The destination resort was to include 735 units (490 single family dwelling units and 245 rental units), a golf course, and other recreational amenities. In 2009, the application was approved by the County and ODOT and the property was included in the County's Destination Resort Overlay Zone. The conditioned approval required off site mitigations as identified in the TIA. Mitigation measures were negotiated and agreed upon with the support of a supplementary transportation analysis completed by OTAK (see Appendix B) that included proportionate shares for several surrounding off-site intersections. The conditioned off-site transportation improvement mitigation cost was $754,950 (in 2008 dollars).

The conditions and proportionate shares at each location were agreed upon by the County and ODOT along with the following obligations assigned to the applicant[1]:

- The applicant must pay the proportionate share of the Powell Butte Hwy/OR126 and Veterans Way/OR126 improvements prior to construction of Phase 1 (a total of $289,250).
- Prior to the first building permit, the applicant must construct or cause to have constructed improvements at Parrish Lane/OR126 and shall cause to have constructed modifications to close Wiley Road/OR126.
- The applicant must pay the proportionate share of the Tom McCall/Hwy126, Hwy126/Hwy26, and Reif Road/Hwy126 improvements (a total of $215,700) no later than three years after the Phase 1 plat is recorded.

. The approval conditions and costs reflected the 2008 traffic study and supplemental analysis. Since the approval, several of the identified projects have changed or been completed. Additionally, the conditions of approval included a clause that increases costs with inflation. With the updated s2021/2022 site plan and an approved traffic study from over 10 years prior, ODOT and Crook County requested an updated traffic study to reflect today's conditions

CHANGES TO SURROUNDING TRANSPORTATION SYSTEM

The conditions of approval were agreed to 2009, however, the developer has not proceeded with permitting and construction on the site. Since then, several planning documents have been updated, relevant corridor and transportation system plans have been approved, and various transportation improvements have been constructed within the study area.

Planning Documents and Findings

The following planning documents are relevant to the study area. OR Highway 126 Corridor Facility Plan (2012)

- Prineville Transportation System Plan (2013)

[1] See Appendix B

- Crook County Transportation System Plan (2017)

Each plan is briefly described below.

OR Highway 126 Corridor Facility Plan

The OR Highway 126 Corridor Facility Plan "establishes a long-term vision for OR Highway 126 and provides a series of strategies aimed at addressing corridor congestion, improving safety, supporting economic development and expected population growth in Crook County and Prineville, and serving statewide mobility needs."[2] The plan extends from the Deschutes/Crook County line to the west to the "Y" intersection (OR126/US26) to the east.

Table 1 summarizes the relevant projects identified in the implementation plan, cost estimates, and status of the projects.

Table 1. Summary of OR Highway 126 Corridor Facility Plan Projects

Project Name	Project Description	Project Cost[1]	Project Status
Crook County Line to Millican Road	Long term: Shoulder Widening	$7.8M	Incomplete
Powell Butte Highway/OR126	Short term: single roundabout Long term: multilane roundabout	$3.7M	Incomplete
Airport Way/Millican Road/OR126	Short term: extend storage for left turn lanes Medium term: Closure/consolidation with Tom McCall Road	Included in Tom McCall / OR126 Roundabout	Complete (frontage to Tom McCall and circulation improvements)
Tom McCall Road/ OR126	Short term: Install/extend turn lanes, signalize intersection Medium term: frontage road connections, widen to 5-lane section Long term: construct interchange	$17.4M (includes build out of short-, medium- and long-term projects including full interchange)	Complete (constructed as single lane roundabout. Awarded bid cost was $3.3M)

[1]Cost as reflected in the Corridor Plan

Prineville Transportation System Plan

The City of Prineville updated their Transportation System Plan (TSP) in 2013. The purpose of the TSP is to provide the City, County and ODOT with guidance for operating and improving the multimodal transportation system within the Prineville Urban Growth Boundary. The TSP identified the need for an intersection improvement at Tom McCall Road/OR126. *A single lane roundabout was constructed and completed at the Tom McCall Road/OR126 in 2018.*

Crook County Transportation System Plan

The Crook County TSP was updated in 2017. It provides a 20-year plan of the long-range vision for the transportation system in the County. It includes prioritized projects and costs, summarizes current funding, and provides recommendations for future potential funding sources. Table 2 summarizes the projects identified in the TSP within the study area, cost estimates, and current project status.

[2] *OR Highway 126 Corridor Facility Plan, 2012*

Table 2. Summary of Crook County TSP Projects in Crossing Trails Study Area

Project Name	Project Description	Project Cost[1]	Project Status
Powell Butte Highway/OR126	Construct a roundabout	$3.5M	Incomplete
Secondary Prineville Airport Access	Add roadway to connect Airport Road to Tom McCall Road. This is a City roadway and is planned as part of the Tom McCall Road/OR 126 intersection improvement project. The project is funded (and therefore not included in the cost estimates) and construction is expected in early 2018.	$3.3M[2] (Included in Tom McCall / OR126 Roundabout)	Complete
Williams Road and OR 126 Intersection	Convert existing intersection to two offset T intersections by relocating the access on the southern side of OR 126.	$5M	Incomplete
OR 126 access closure from Wiley Road	Close the public access point from the minor road to OR 126.	$5k	Incomplete
Powell Butte Highway realignment	Realign the 90 degree turns at Alfalfa Road and Shumway Road by continuing Powell Butte Highway south along Shumway Road and using an appropriate 50 mph curve to connect back to the existing Powell Butte Highway alignment.	Visionary	Incomplete
Powell Butte Highway reconstruction at Deschutes County Line	Reconstruct Powell Butte Highway at the Deschutes County line to remove the sight distance restriction caused by the blind hill. Deschutes and Crook Counties should enter into cooperative agreement to complete this project.	$750k	Incomplete
Powell Butte Road horizontal curves pavement markings[3]	Add or enhance curve warning signs and pavement markings per recommendation of ODOT's Roadway Departure Plan.	$2k	Incomplete
Powell Butte (OR 126) traffic calming/speed reductions	Install/maintain speed feedback signs and narrow lane striping to 11-ft lanes to reduce vehicle travel speeds on OR 126.	$34k	Incomplete
OR 126 systemic safety treatments	Install edgeline and centerline rumble strips on OR 126. As vehicle fleet technology changes in the future to provide warnings when drivers cross center and edgeline, the use of these treatments may begin to decrease. However, it will take many years for the vehicle fleet turnover to be complete; therefore, rumble strips continue to serve as effective safety treatments.	$50k	Partially complete
Systemic safety intersection treatment on OR 126[4]	Upgrade unsignalized intersection signs at intersections of OR 126 and Reif Road as well as OR 126 and Copley Road with enhanced signage and pavement markings to increase intersection visibility and awareness.	$3k	Incomplete

OR 126 enhanced pedestrian crossing in Powell Butte	Install an enhanced pedestrian crossing with a rectangular rapid flashing beacon (RRFB) on OR 126 within Powell Butte. Due to the proximity to the existing flashing warning sign, replace the flashing "School: Speed 20 When Flashing" signs with "School Speed Limit 20, 7:30-8:30 AM 2:30- 3:30 PM" signs.	$20k	Incomplete
OR 126 paved shoulders	Widen paved shoulders to bring OR 126 up to future bicycle route standards. OR 126 provides local connectivity between Prineville and Powell Butte and provides regional connectivity between Prineville and Redmond. It is also part of the national bikeway corridor. The OR 126 Plan also recommends shoulder widening on OR 126 to better facilitate vehicle recovery, emergency stops, and service vehicles, and to allow wide loads and farming equipment to traverse the highway more safely	$6.5M	Incomplete

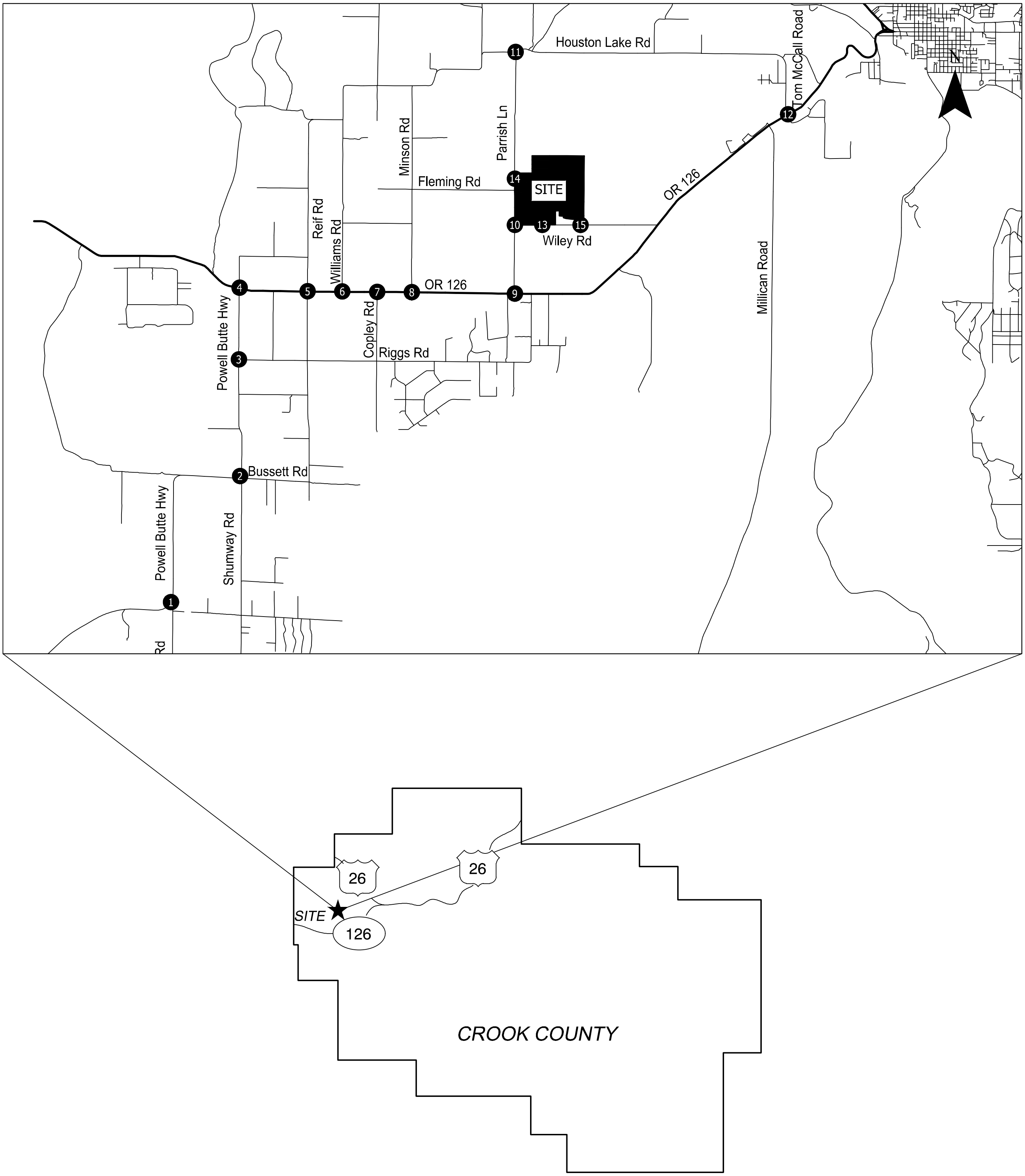
[1]Cost as reflected in the TSP
[2]Bid cost of Tom McCall/OR126 Roundabout project
[3]Project identified as part of the ODOT All Roads Transportation Safety Program
[4]Project identified as part of the ODOT Intersection safety Implementation Plan

PROJECT DESCRIPTION AND STUDY AREA

Since the original approval, the site plan has been modified and includes updates to the uses and general purpose of the resort. The new plan transitions from a traditional destination resort to an affordable, family friendly, outdoor living experience. The site plan includes recreational activities and open space for guests and full-time occupants, workforce housing for employees on the resort and within the surrounding community, upscale manufactured homes/cabins, and overnight villas and resort rentals. Figure 2 illustrates the proposed site plan.

There are three proposed access points identified on the site plan including:

- Primary Access on Wiley Road (proposed as full-access, stop-controlled, T-intersection)
- Approximately 0.5 mile east of Wiley Road/Parrish Lane intersection
- Secondary Access on Parrish Lane (proposed as full-access, stop-controlled, T-intersection)
- Approximately 0.6 mile north of Wiley Road/Parrish Lane intersection
- Workforce Housing Access (proposed as full-access, stop-controlled, T-intersection)
- Approximately 0.9 mile east of Wiley Road/Parrish Lane intersection



Site Vicinity Map
Crook County, Oregon

Figure 1

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SCOPE AND ANALYSIS METHODOLOGY

A scoping memorandum was completed and submitted to ODOT, Crook County, and the City of Prineville November 12th, 2021. The memorandum summarized the project assumptions for the TIA such as trip generation and distribution, analysis scenarios, analysis tools, and study assumptions. The scoping memorandum is provided in Appendix C. Several key analysis assumptions are summarized below:

STUDY YEARS

The study should evaluate the existing traffic conditions (2021), the build out year background traffic conditions (includes the regional growth but no site development traffic), and the buildout year total traffic conditions (includes background traffic plus site generated trips).

TIME PERIODS AND DATA COLLECTION

Turning movement count data was collected in November 2021. The study periods included in the analysis were for the weekday PM peak hour (4:00-6:00pm) and the Saturday midday peak hour (12:00-4:00pm). A review of morning peak hour trips shows the weekday a.m. peak hour trip generation was approximately 75% of the weekday p.m. peak hour. The site primarily attracts recreational users who are likely to travel on the weekend. Given the high recreational use of OR126 (particularly on the weekends), a Saturday analysis period captures this demand.

The weekday PM system peak hour was 4:10-5:10pm and the Saturday midday peak hour was 12:25pm-1:25pm.

STUDY INTERSECTIONS

As shown in the scoping memorandum, the following intersections were included in the traffic study:

1. Powell Butte Highway/Alfalfa Road
2. Powell Butte Highway/Bussett Road
3. Powell Butte Highway/Riggs Road
4. Powell Butte Highway/OR126
5. Reif Road/OR126
6. Williams Road/OR126
7. Copley Road/OR126
8. Minson Road/OR126
9. Parrish Lane/OR126
10. Parrish Lane/Wiley Road
11. Parrish Lane/Houston Lake Road
12. Tom McCall Road/OR126

ANALYSIS TOOLS AND MOBILITY TARGETS

The intersection operational analysis will be performed using the *Highway Capacity Manual (HCM), 6th Edition* analysis procedures. To ensure that this analysis is based on a reasonable worst-case scenario, the peak 15-minute flow rate during the weekday p.m. peak hour and Saturday midday peak hour were used in the evaluation of all intersection level-of-service (LOS) and volume-to-capacity (V/C) ratios. The stop-controlled intersection operations analyses were completed using Synchro 11 software and SIDRA was used for the roundabout analysis.

ODOT Mobility Targets

ODOT assesses intersection operations based on established mobility targets (as defined by the volume-to-capacity (v/c) ratio). Table 6 of the *Oregon Highway Plan* (OHP) provides the mobility targets for facilities outside the Portland Metro area. There is one state facility within the study area: OR126 – Ochoco Highway. OR126 is designed by the OHP as a Statewide Freight Route and an Expressway.

Table 6 of the OHP states that a freight route on a statewide highway and an expressway outside of an urban growth boundary in an unincorporated community should maintain a mobility target v/c ratio less than 0.70. However, the OHP states that non-state highway unsignalized intersection approaches should adhere to the volume to capacity ratio for District/Local Interest Roads. Therefore, the mobility standard for the side street approaches to OR126 intersections within the study area is a v/c ratio less than 0.80.

As part of the intersection study completed for the roundabout at OR126/Tom McCall Road, an alternative mobility target was used to allow for the construction of the existing single-lane roundabout. This target allowed for a v/c ratio of 0.90 for all approach. This target was used for the analysis presented in this report.

County Mobility Targets

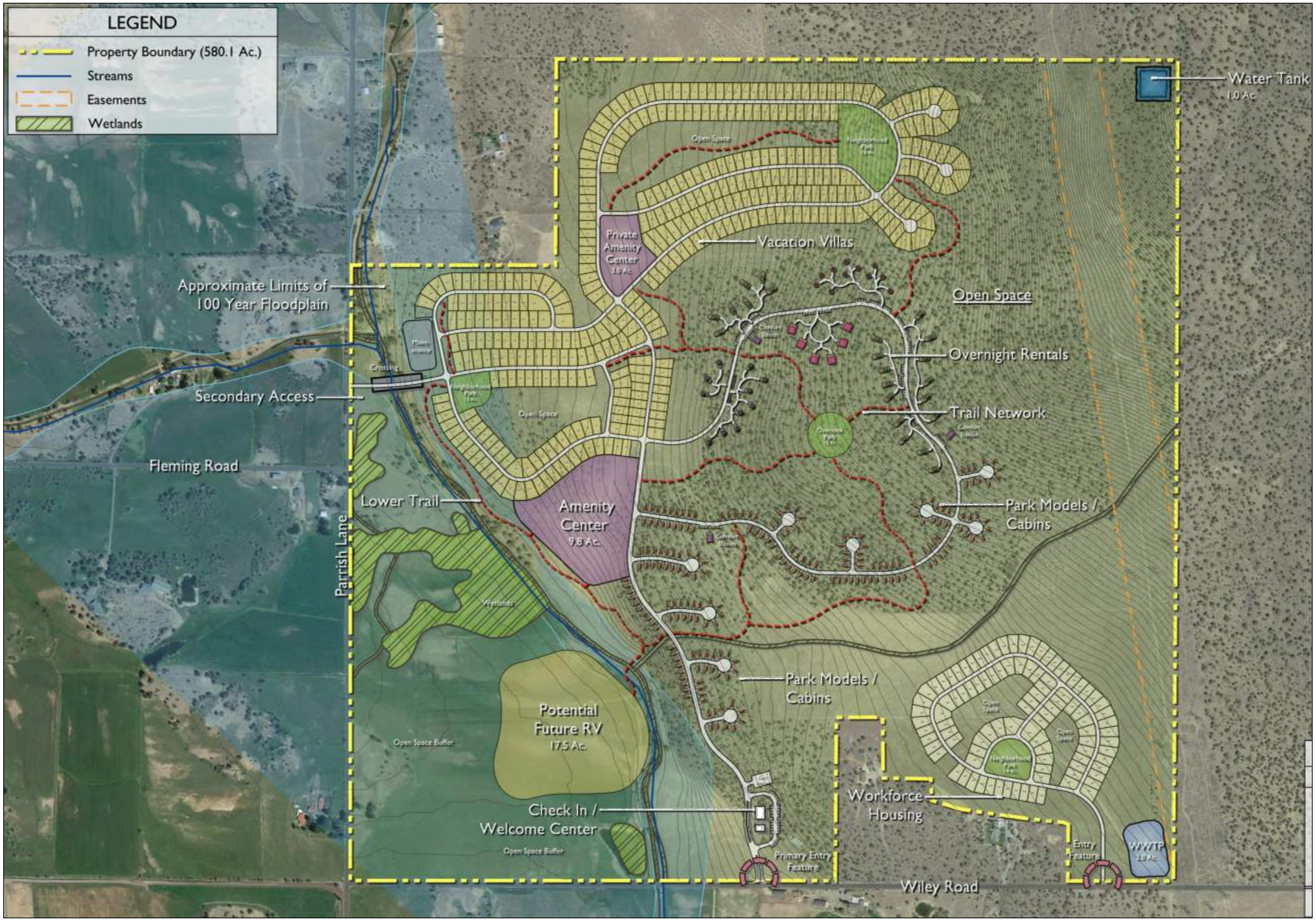
Crook County intersection mobility targets adhere to a v/c ratio and Level of Service (LOS) threshold. For unsignalized intersections, the mobility target is a v/c ratio less than 0.95 and a LOS E or F.

Mobility Target Summary

Table 4 summarizes the mobility targets for the proposed study intersections.

Table 3. Study Intersection Control and Mobility Target

Study Int. #	Intersection	Classification / Jurisdiction	Intersection Control	Mobility Target
1	Powell Butte Highway/Alfalfa Road	County	Stop Controlled	LOS E/F and v/c<0.95
2	Powell Butte Highway/Bussett Road	County	Stop Controlled	LOS E/F and v/c<0.95
3	Powell Butte Hwy/ Riggs Road	County	Stop Controlled	LOS E/F and v/c<0.95
4	Powell Butte Highway/OR126	ODOT	Stop Controlled	Side-Street: OHP: v/c<0.80 Mainline: OHP: v/c<0.70:
5	Reif Road/OR126	ODOT	Stop Controlled	Side-Street: OHP: v/c<0.80 Mainline: OHP: v/c<0.70:
6	Williams Road/OR126	ODOT	Stop Controlled	Side-Street: OHP: v/c<0.80 Mainline: OHP: v/c<0.70:
7	Copley Road/OR126	ODOT	Stop Controlled	Side-Street: OHP: v/c<0.80 Mainline: OHP: v/c<0.70:
8	Minson Road/OR126	ODOT	Stop Controlled	Side-Street: OHP: v/c<0.80 Mainline: OHP: v/c<0.70:
9	Parrish Lane/OR126	ODOT	Stop Controlled	Side-Street: OHP: v/c<0.80 Mainline: OHP: v/c<0.70:
10	Parrish Lane/Wiley Road	County	Stop Controlled	LOS E/F and v/c<0.95
11	Parrish Lane/Houston Lake Road	County	Stop Controlled	LOS E/F and v/c<0.95
12	Tom McCall Road/OR126	ODOT	Roundabout	Side-Street: OHP: v/c<0.90 Mainline: OHP: v/c<0.90:



Proposed Site Plan
Crook County, Oregon

Figure 2

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Section 3
Existing Conditions

EXISTING CONDITIONS

The existing conditions analysis identifies the site conditions and the current operational and geometric characteristics of roadways within the study area. The purpose of this section is to provide a basis for comparison to future conditions.

The site and surrounding study area was visited and inventoried in December 2021. At that time, information was collected regarding site conditions, adjacent land uses, existing traffic operations, and transportation facilities in the study area.

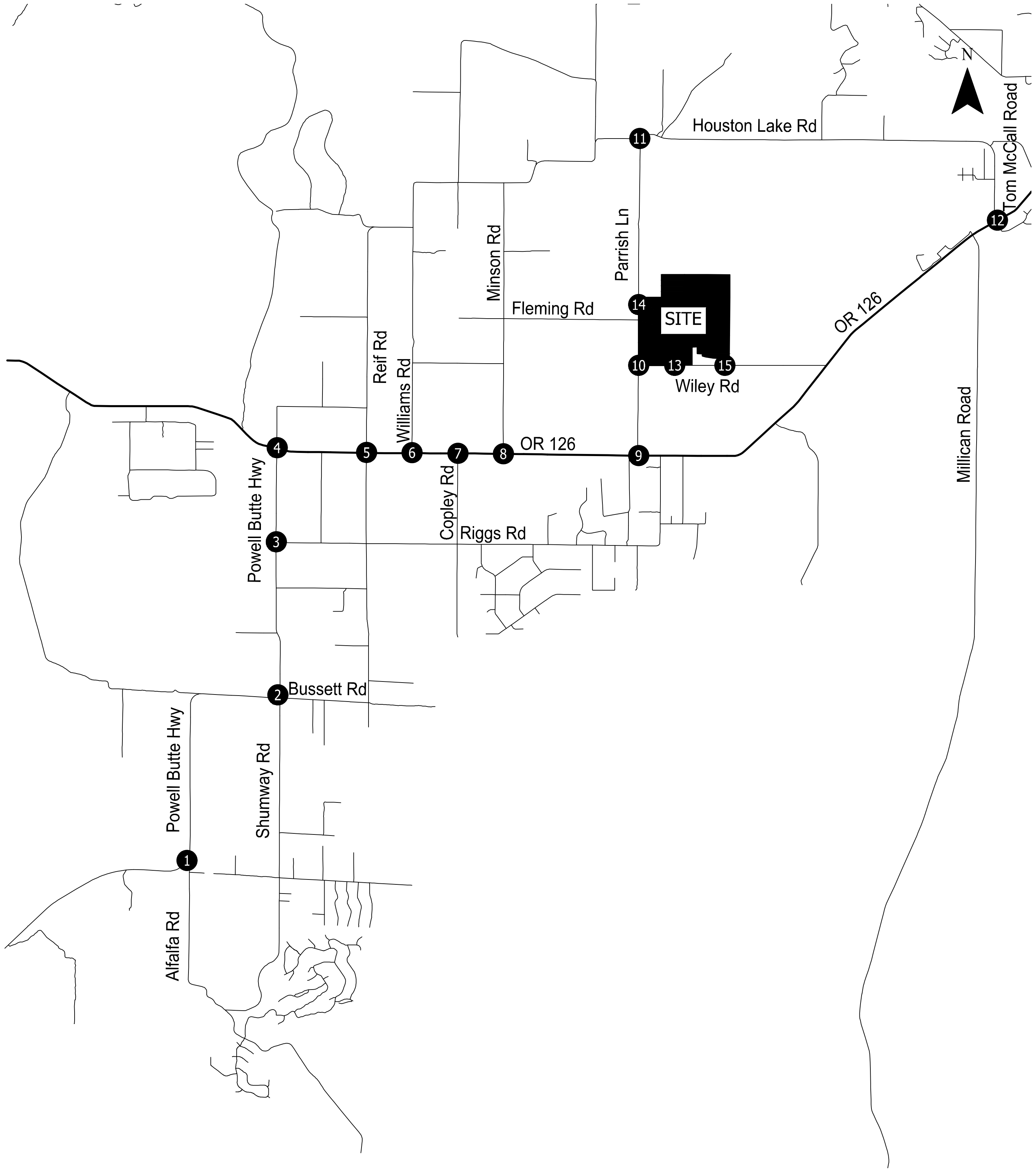
TRANSPORTATION FACILITIES

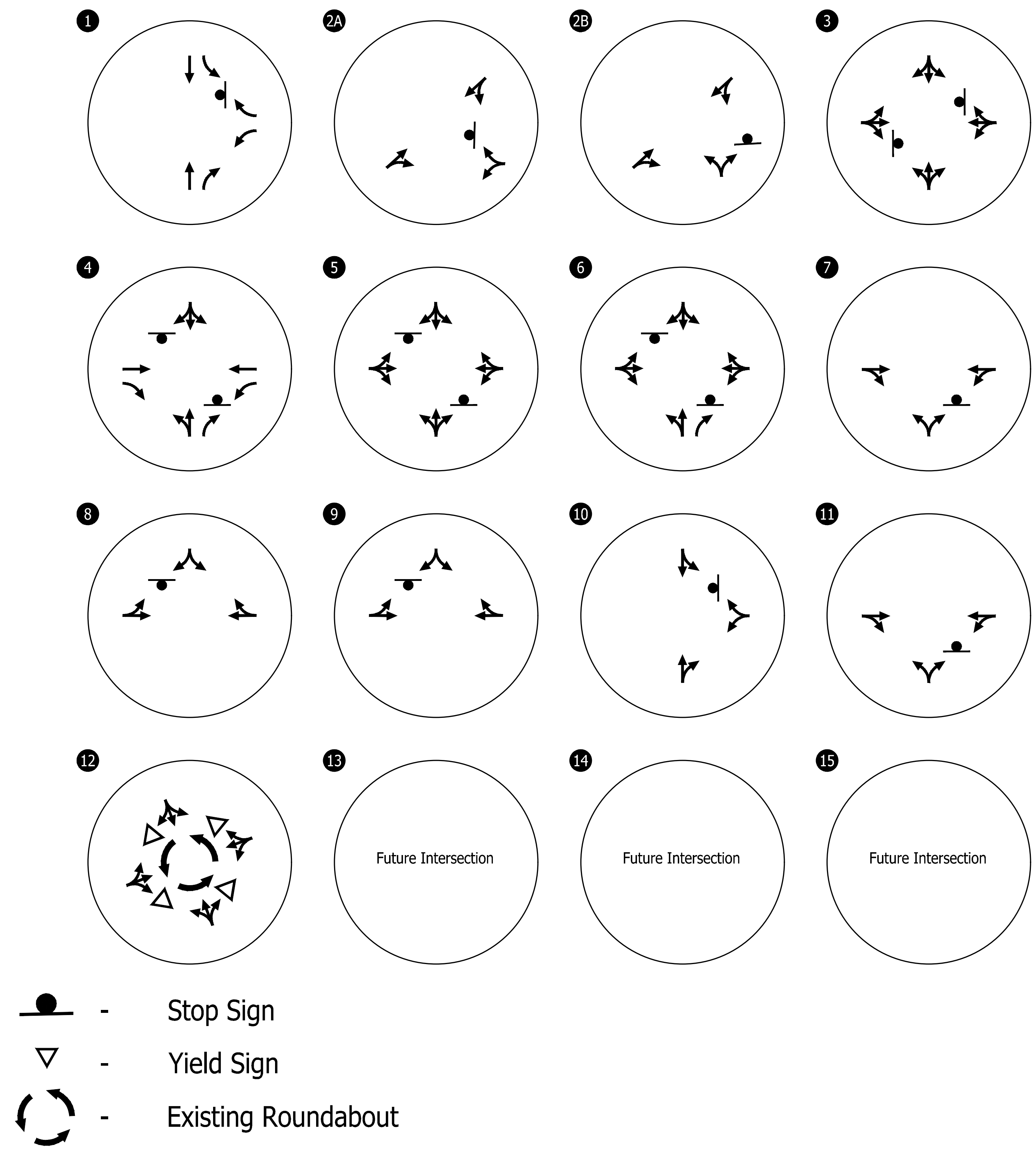
Table 3 provides a summary of transportation facilities (including pedestrian and bicycle facilities) in the site vicinity. Figure 4 illustrates the existing lane configurations and traffic control devices at the identified study intersections.

Table 4: Existing Transportation Facilities

Roadway	Jurisdiction	Classification[1]	Cross Section	Speed Limit (mph)[2]
Powell Butte Highway	Crook County	Minor Arterial	2 lane	55
Alfalfa Road	Crook County	Major Collector	2 lane	N.P.
Bussett Road	Crook County	Major Collector	2 lane	N.P.
Riggs Road	Crook County	Major Collector	2 lane	N.P.
OR-126	ODOT	Principal Arterial	2 lane	40-55
Reif Road	Crook County	Major Collector	2 lane	N.P.
Williams Road	Crook County	Minor Collector	2 lane	N.P.
Copley Road	Crook County	Minor Collector	2 lane	N.P.
Minson Road	Crook County	Minor Collector	2 lane	N.P.
Parrish Lane	Crook County	Minor Collector	2 lane	N.P.
Wiley Road	Crook County	Local Road	2 lane	N.P.
Houston Lake Road	Crook County	Major Collector	2 lane	N.P.
Tom McCall Road	Crook County	Major Collector	2 lane	N.P.

[1] Based on the Oregon Highway Plan Classification and the Crook County TSP Classification
[2]N.P. = Not Posted





Existing Lane Configurations and Traffic Control Devices

Crook County, Oregon

Figure 3

TRANSIT FACILITIES

Cascades East Transit has a transit line between Redmond and Prineville along OR126. The route includes stops at the Redmond Transit Hub, OR126/Williams Road (Powell Butte Church), and three stops in downtown Prineville. The Powell Butte Church stop is only operational Monday-Friday with westbound service in the mornings and eastbound service in the evenings. A dial-a ride service is provided in Prineville City Limits between 7:00am-5:30pm Monday-Friday. No other services are provided other than private charter or ride share services.

PEDESTRIAN AND BICYCLE FACILITIES

None of the study roadways have dedicated pedestrian or bicycle facilities. The Crook County TSP identifies the need for an enhanced multimodal network for both recreational and commuter users. The TSP recommends enhancing the marked crossing on OR126 at Williams Road and installing pedestrian level lighting. It also recommends widening the shoulders on County Roads including Alfalfa Road, Shumway Road, Powell Butte Highway, and Houston Lakes Road as well as OR126.

TRAFFIC VOLUMES

Turning movement counts were collected at the study intersections for both the weekday PM peak period (4:00 to 6:00 PM) and the Saturday midday peak period (12:00 PM to 4:00 PM). *The traffic count sheets are included in Appendix D.* Counts were seasonally adjusted per ODOT Analysis Procedure Manual (APM) methodologies from the Automatic Traffic Recorder (ATR) 07-002 located on OR126 at milepost 3.23.

CURRENT INTERSECTION OPERATIONS

Figures 4 and 5 summarize the level-of-service, delay, and capacity analysis results for the study intersections under existing traffic conditions during the weekday PM and Saturday midday peak hours, respectively. *Appendix E includes the existing conditions level-of-service worksheets.*

The following intersections do not meet mobility targets in the existing condition:

- OR126/Powell Butte Highway, Weekday PM Peak Hour
- OR126/Tom McCall Road, Weekday PM Peak Hour

OR126/Powell Butte Highway

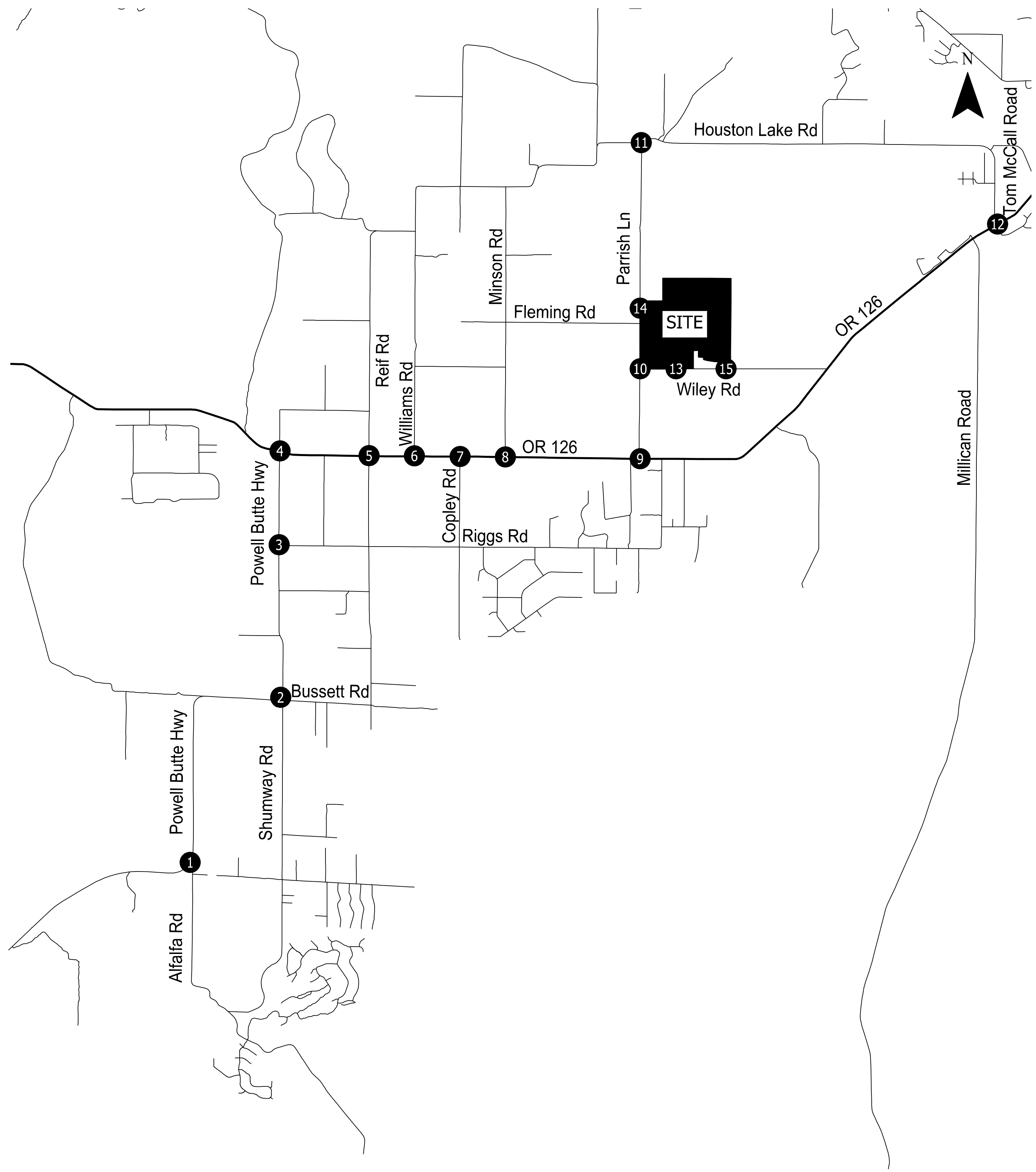
The northbound approach of Powell Butte Highway does not meet ODOT mobility targets in the Weekday PM peak hour condition. The high speeds and volumes on OR126 make turning movements from Powell Butte Highway onto OR126 a challenging movement. The Crook County TSP and the OR Highway 126 Corridor Facility Plan acknowledge the need for an improvement at this intersection. Hidden Canyon Resort is conditioned to construct this roundabout prior to occupancy of the 251st dwelling unit or provide funds equivalent to the construction if the roundabout is constructed prior to reaching occupancy levels.

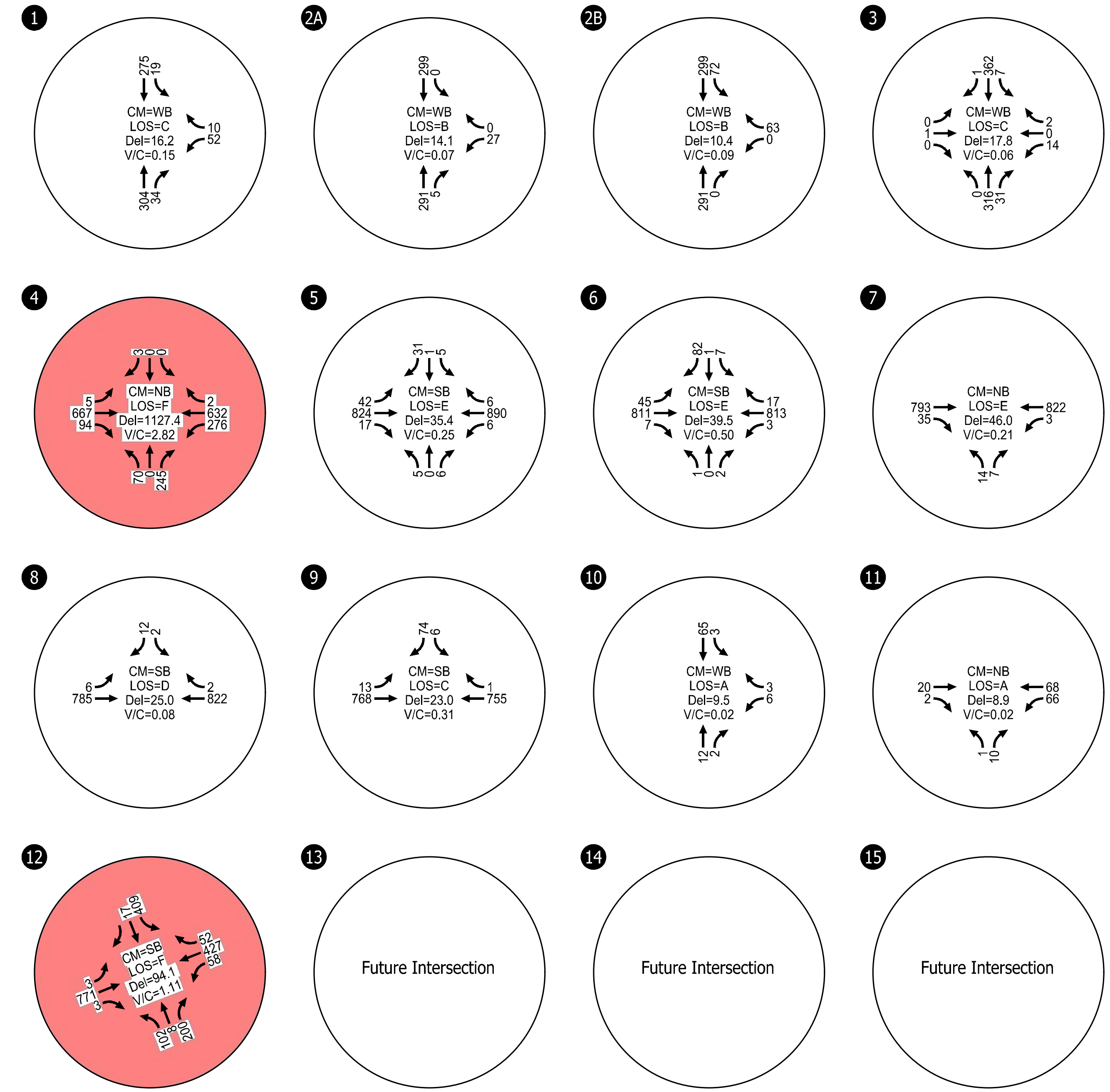
OR126/Tom McCall Road

The roundabout at OR126/Tom McCall was completed in 2018 with alternative mobility targets agreed upon by ODOT. According to the traffic analysis completed in 2016, ODOT and the City of Prineville agreed upon a modified v/c target of 0.90 at the roundabout. *The traffic analysis is provided in Appendix F*. The traffic study acknowledges the anticipated need for a future expansion of the roundabout from a single lane to a multilane.

Since the 2016 traffic study, substantial development has occurred near the intersection of OR126/Tom McCall Road. Large data centers have been constructed and expansions to the existing data centers are currently under construction – particularly the Facebook/Meta site north of the intersection. According to the City of Prineville, there are approximately 1,000-2,000 daily weekday construction trips on the northside of Tom McCall Road serving the data centers. This additional traffic significantly impacts the operations of the roundabout. Based on a field visit counting vehicles leaving the construction site on December 15, 2021, there are approximately 600 weekday PM peak hour construction trips departing from the data centers and traveling southbound on Tom McCall Road through the roundabout. A sensitivity analysis was completed to identify the impact of the construction trips during the weekday PM peak hour. The results indicate that the roundabout would operate acceptably in the existing condition without the construction traffic. Operational results from the sensitivity analysis are provided in Appendix G.

According to the City, the duration of construction and temporary access to the data centers is unknown. The City anticipates site traffic after construction to be comparable to the construction traffic experienced today based on data center maintenance needs. Therefore, the future conditions analysis at the roundabout *will* include the construction traffic to provide a conservative estimate for traffic volumes on all the roundabout approaches.





CM = CRITICAL MOVEMENT (UNSIGNALIZED)
LOS = CRITICAL MOVEMENT LEVEL OF SERVICE (SIGNALIZED)/CRITICAL MOVEMENT LEVEL OF SERVICE (UNSIGNALIZED)
Del = INTERSECTION AVERAGE CONTROL DELAY (SIGNALIZED)/CRITICAL MOVEMENT CONTROL DELAY (UNSIGNALIZED)
V/C = CRITICAL VOLUME-TO-CAPACITY RATIO

\- INTERSECTION DOES NOT MEET MOBILITY TARGETS

Existing Traffic Conditions
Weekday PM Peak Hour
Crook County, Oregon

Figure
4

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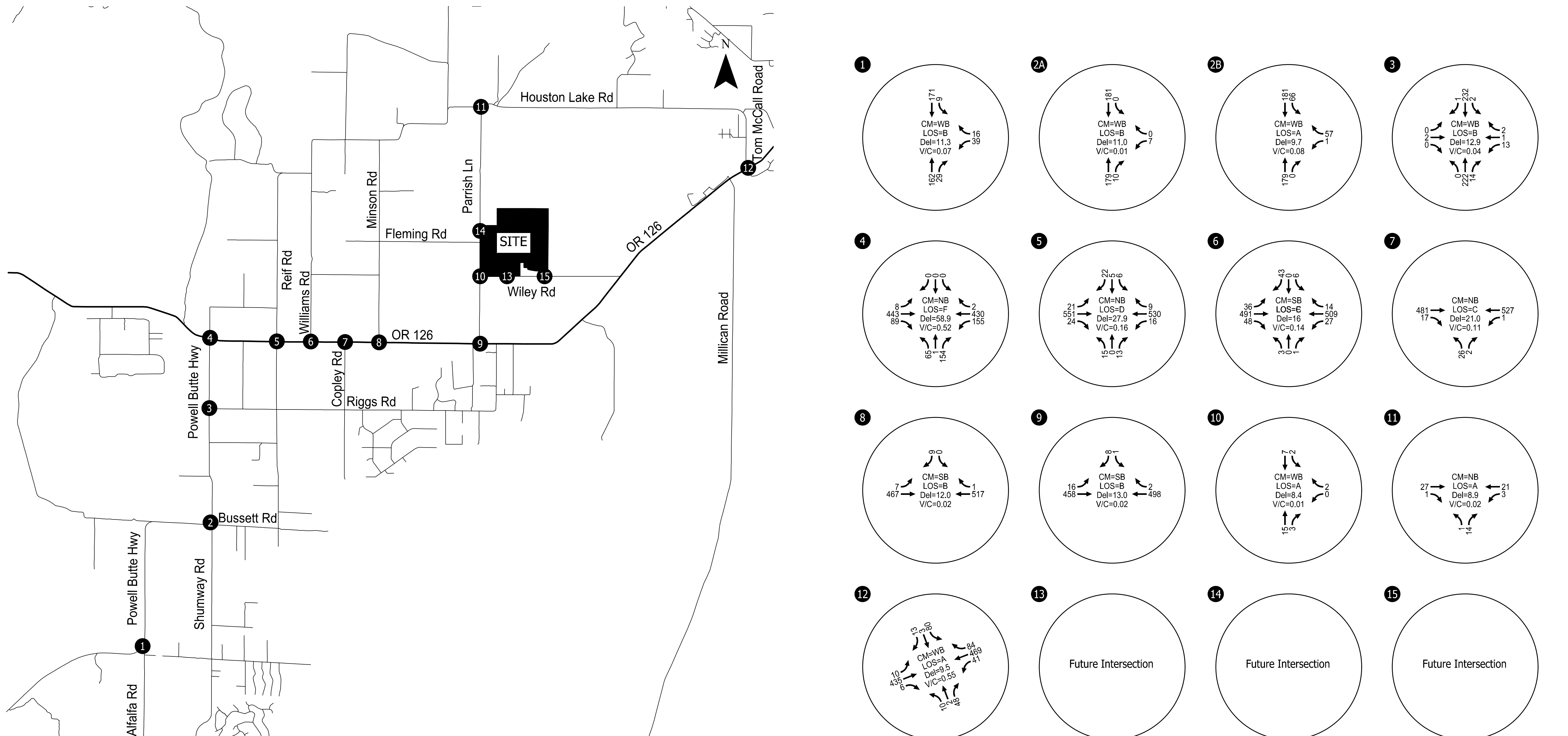

CM = CRITICAL MOVEMENT (UNSIGNALIZED)
LOS = CRITICAL MOVEMENT LEVEL OF SERVICE (SIGNALIZED)/CRITICAL MOVEMENT LEVEL OF SERVICE (UNSIGNALIZED)
Del = INTERSECTION AVERAGE CONTROL DELAY (SIGNALIZED)/CRITICAL MOVEMENT CONTROL DELAY (UNSIGNALIZED)
V/C = CRITICAL VOLUME-TO-CAPACITY RATIO

- INTERSECTION DOES NOT MEET MOBILITY TARGETS

Existing Traffic Volumes
Saturday Peak Hour
Crook County, Oregon

Figure
5

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KITTELSON & ASSOCIATES

SAFETY REVIEW

A safety review was conducted at the study intersections and reviews historical crash data and ODOT's Safety Priority Index System (SPIS). Safety data is presented below.

CRASH HISTORY

Data for reported crashes was obtained from ODOT for the five-year period from January 1, 2015 to December 31, 2019. Table 5 summarizes the findings from the study intersections. *Appendix C contains the ODOT crash data.*

Table 5. Historic Crash Data Summary

Intersection	Crash Type						Crash Severity			Total Crashes
	Angle	Turning Movement	Fixed Object	Rear End	Ped/ Bike	Other	PDO	Injury	Fatal	
Powell Butte Hwy/ Alfalfa Rd	0	0	1	0	0	1	1	1	0	2
Powell Butte Hwy/ Bussett Rd	0	0	2	1	0	2	3	2	0	5
Powell Butte Hwy/ Riggs Rd	0	1	0	0	0	1	1	1	0	2
Powell Butte Hwy/ OR126	0	9	0	6	0	0	4	11	0	15
Powell Butte Hwy/ Reif Rd	0	1	0	4	0	0	1	4	0	5
Williams Rd/OR126	0	0	1	5	0	0	4	2	0	6
Copley Road/ OR126	1	0	2	2	0	0	2	3	0	5
Minson Road/ OR126	0	0	0	2	0	2	1	3	0	4
Parrish Ln/OR126	0	0	1	3	0	0	0	4	0	4
Parrish Ln/Wiley Rd	0	0	0	0	0	0	0	0	0	0
Parrish Ln/Houston Lake Rd	0	0	0	0	0	0	0	0	0	0
Tom McCall Rd/OR126	0	0	0	4	0	0	1	3	0	4

The observed crash rate was calculated and compared with the 90th percentile crash rates and the critical crash rates in accordance with the APM. Table 6 summarizes the crash rate comparison. As shown, none of the study intersections exceed the 90th percentile crash rate or critical crash rate. The intersection of OR126/Tom McCall Road was improved to a single-lane roundabout in 2018. Therefore, the crash data from the five-year study period does not reflect the current conditions. The observed crash rate shown in Table 6 reflects years since the intersection has been upgraded.

Table 6. Crash Rate Comparison

Intersection	Observed Crash Rate[1]	90th Percentile Crash Rate	Over 90th Percentile Crash Rate?	Critical Crash Rate	Over Critical Crash Rate?
Powell Butte Hwy/Alfalfa Rd	0.18	0.475	No	0.46	No
Powell Butte Hwy/Bussett Rd	0.44	0.475	No	0.46	No
Powell Butte Hwy/Riggs Rd	0.17	0.475	No	0.45	No
Powell Butte Hwy/OR126	0.48	1.080	No	0.64	No
Powell Butte Hwy/Reif Rd	0.15	1.080	No	0.64	No
Williams Rd/OR126	0.21	1.080	No	0.35	No
Copley Road/OR126	0.19	1.080	No	0.36	No
Minson Road/OR126	0.16	0.475	No	0.36	No
Parrish Ln/OR126	0.16	0.475	No	0.36	No
Parrish Ln/Wiley Rd	0.00	1.080	No	1.15	No
Parrish Ln/Houston Lake Rd	0.00	0.475	No	1.28	No
Tom McCall Rd/OR126	0.28	0.408	N/A	0.63	No

[1] Calculated using the equation for intersection crash rate per million entering vehicles from the ODOT APM. Average Annual Daily Traffic was estimated based on weekday PM peak hour traffic volumes

SPIS SITE REVIEW

ODOT's Safety Priority Index System (SPIS) rating evaluates the potential safety issues on state highways through a review of crash frequency, crash rate, and crash severity. There are no intersections or roadway segments in the study area with a score in the top 10%.

Section 4
Background Conditions

BACKGROUND CONDITIONS

The background traffic analysis identifies how the study area's transportation system will operate without the proposed development when the development opens. These background traffic volumes include changes due to added trips from approved developments affecting the study intersections as well as general regional growth. The site is anticipated to be built out by 2026.

APPROVED NEIGHBORING DESTINATION RESORTS

There are several entitled destination resorts within the surrounding Crook County and Deschutes County that will increase the traffic within the study area, particularly along OR126. These resorts are described below along with their current status and remaining vested trips provided in Table 7. There are approximately 4,800 approved units that are vested but not yet on the transportation system.

Pronghorn

Pronghorn Resort is located south of OR126 and traffic to/from the resort accesses OR126 via the Powell Butte Highway. The 640-acre resort is approved and under development. Approximately 75% of Pronghorn has been platted and/or built out.

Brasada Ranch

Brasada Ranch is an 1,800-acre destination resort community that includes single family homes, overnight lodging, a golf course, and recreational amenities located in Crook County approximately 10 miles northeast of Bend. The site was originally approved in 2004. Since approval, it has developed 13 phases for a total of 997.9-acres. Brasada Ranch was recently approved to begin Phase 14 (34.63-acres).

Hidden Canyon

Hidden Canyon is a 4,200-acre property east of Brasada Ranch approximately 5 miles south of OR126. The application was approved in 2019 and has not yet broken ground for Phase 1. Among other improvements not impacted by the Crossing Trails study area, the conditions of approval require Hidden Canyon to construct a single-lane roundabout at Powell Butte Highway/OR126 upon build out of the 251st dwelling unit.

Remington Ranch

Remington Ranch is a 2,080-acre approved destination resort approximately 2.5-miles north of OR126. The Ranch was first approved and incorporated into the Destination Resort Overlay Zone in 2007. Since then, the ownership of the property changed, and the applicant requested a modification to the original site plan. The modification reduced the number of units from 0.58 units/acre to 0.22 units/acre and reduced the number of golf courses at the resort.

Table 7. List of Approved Neighboring Destination Resorts

Name of Development	Size	Current Status	Unbuilt Vested Units as of 2021
Pronghorn	700 Units	Under development (531 units occupied)	169
Hidden Canyon	3,675 Units	Construction not started	3,675
Remington Ranch	450 Units	Construction not started	450
Brasada Ranch	1,125 Units	Under development (624 units occupied)	501
		Total	**4,795**

Planned Transportation Improvements

As stated in the Project Background section of this report, there are several transportation improvements identified within the study area. In addition, neighboring destination resorts are conditioned to pay proportionate share fees at several intersections within the scope of this study that do not meet future mobility targets. The improvements identified in other destination resort studies result from the vested or approved trips. Therefore, the conditioned traffic control improvements from the other studies are included in the background traffic assumptions and analysis. These improvements include:

- Construct a single-lane roundabout at Powell Butte Highway/OR126 with an eastbound and northbound right turn yield bypass lane.
- Reconstruct Powell Butte/Shumway-Bussett Road to create a single perpendicular intersection at the apex of the curve.

Figure 6 shows the assumed lane configurations and traffic control devices at the study intersections with the planned improvements. The lane configuration at Powell Butte Highway/OR126 reflects a roundabout configuration as described in the Hidden Canyon TIA (this is the roundabout conditioned on Hidden Canyon for construction).

BACKGROUND TRAFFIC ANALYSIS

Year 2026 future traffic volumes were developed for the weekday PM and Saturday midday peak hour conditions by increasing the year 2021 existing traffic volumes using a 1.6-percent annual growth rate and then adding the trips associated with the unbuilt units of the approved neighboring destination resort.

Figures 7 and 8 summarize the year 2026 background traffic operations analysis results at the study intersections for the weekday PM and Saturday midday peak hours, respectively. Generally, the highest traffic volumes and delays continue to occur during the weekday PM peak hour.

Appendix H includes the 2026 Background conditions level-of-service worksheets.

The following intersections do not meet mobility targets in the 2026 background condition:

- OR126/Powell Butte Highway, Weekday PM Peak Hour and Saturday Midday Peak Hour
- OR126/Tom McCall Road, Weekday PM Peak Hour
- Powell Butte Highway/Alfalfa Market Road, Weekday PM Peak Hour and Saturday Midday Peak Hour

OR126/Powell Butte Highway

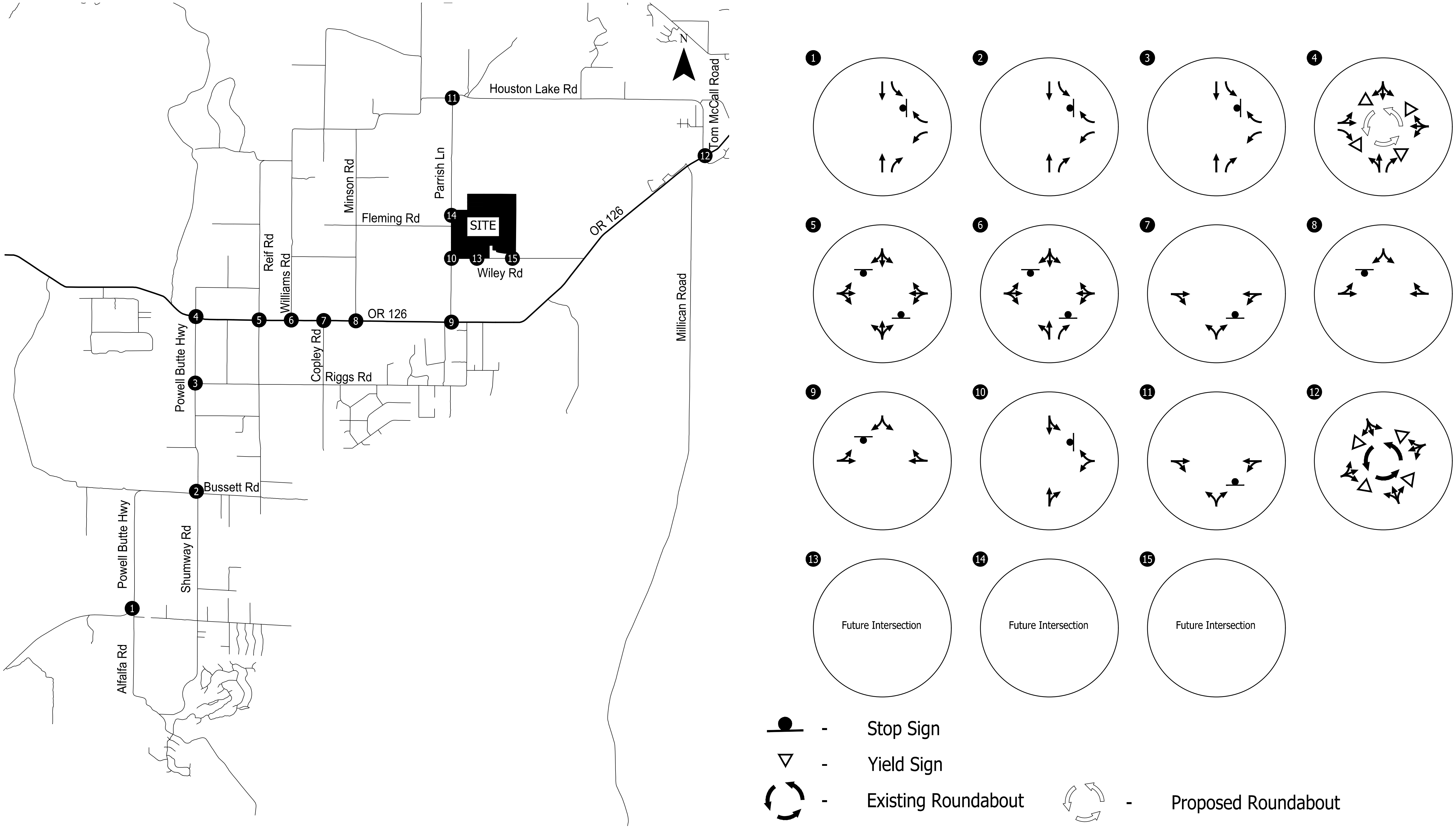
The Hidden Canyon Destination Resort TIA completed in 2018 concluded a single-lane roundabout with eastbound and northbound right-turn yield bypass lanes would accommodate traffic at the intersection while meeting ODOT mobility targets in 2036. Updated traffic volumes and projections indicate 46% higher volumes westbound on OR126 and 17% higher volumes eastbound on OR126 compared to the 2036 Hidden Canyon build-out volumes. The increase in highway volumes means the right-turn bypass lanes does not facilitate enough capacity for OR126. Like the roundabout concept presented in the OR Highway 126 Facility Plan, two lanes on the highway approaches and a northbound right yield bypass lane would be required to meet mobility targets. *The operational results of the sensitivity analysis for the 2026 background condition for the configuration described is provided in Appendix I.*

OR126/Tom McCall Road

A single-lane roundabout continues to exceed capacity in the 2026 background condition during the weekday PM peak hour, as under existing conditions. To reduce the approach v/c ratios below the modified mobility target threshold of 0.90, northbound and southbound right-turn yield bypass lanes and a second eastbound lane are necessary. *The operational results of the sensitivity analysis for the 2026 background condition for the configuration described is provided in Appendix J.*

Powell Butte Highway/Alfalfa Market Road

The intersection of Powell Butte Highway/Alfalfa Market Road is the primary access for Brasada Ranch, and one of the primary accesses for Hidden Canyon. The inclusion of the vested destination resort trips results in the intersection exceeding County mobility targets. The Hidden Canyon TIA similarly concluded the impacts of the resorts would result in exceeding mobility targets and recommended a single lane roundabout as a mitigation strategy. While a roundabout is not identified at this location in the Crook County TSP, the Hidden Canyon TIA recommended a roundabout at this intersection to improve capacity and safety. A single-lane roundabout would improve the operations of the intersection and meet mobility targets. *The operational results of the sensitivity analysis for the 2026 background condition for the single lane roundabout is provided in Appendix K.*

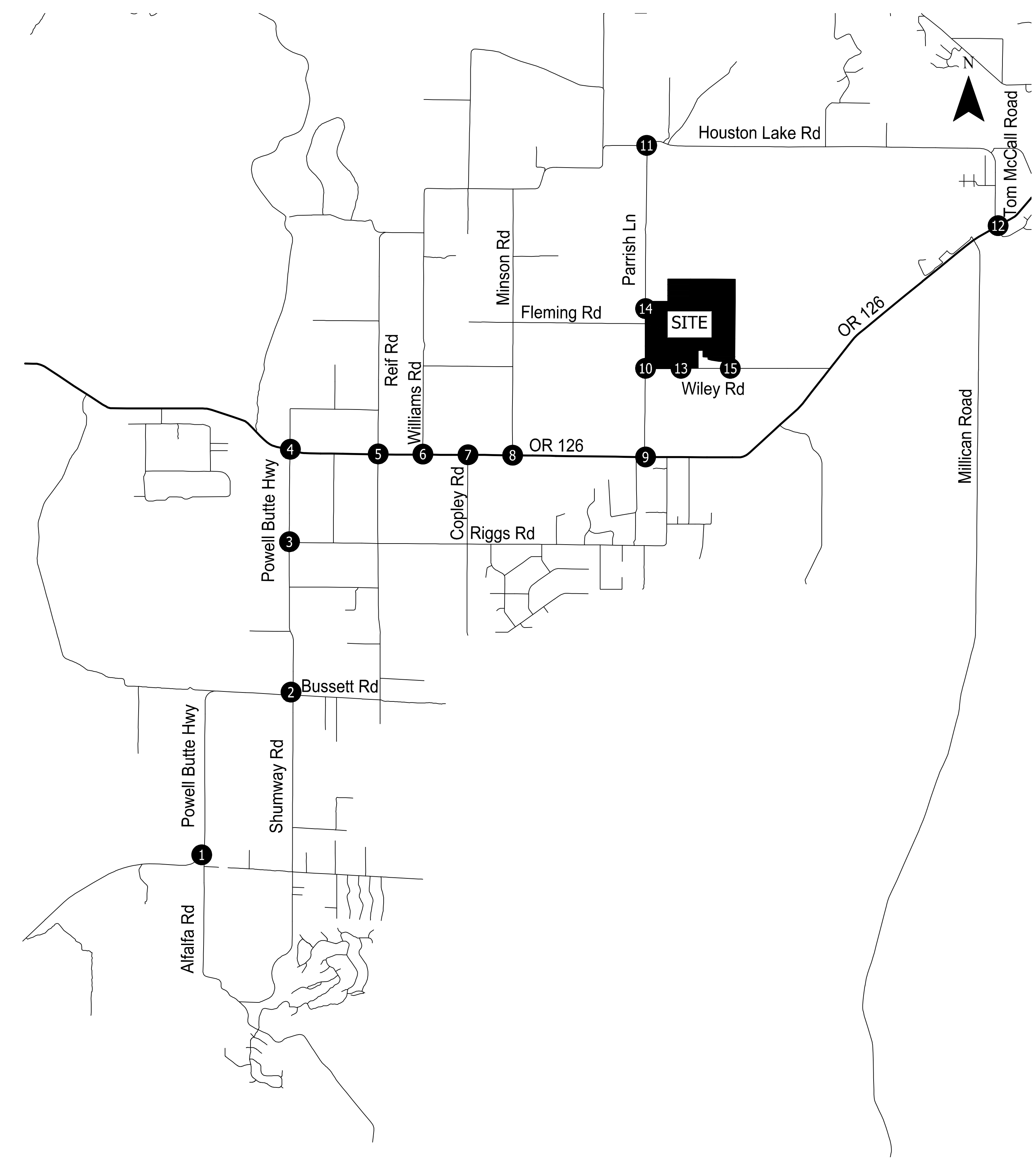


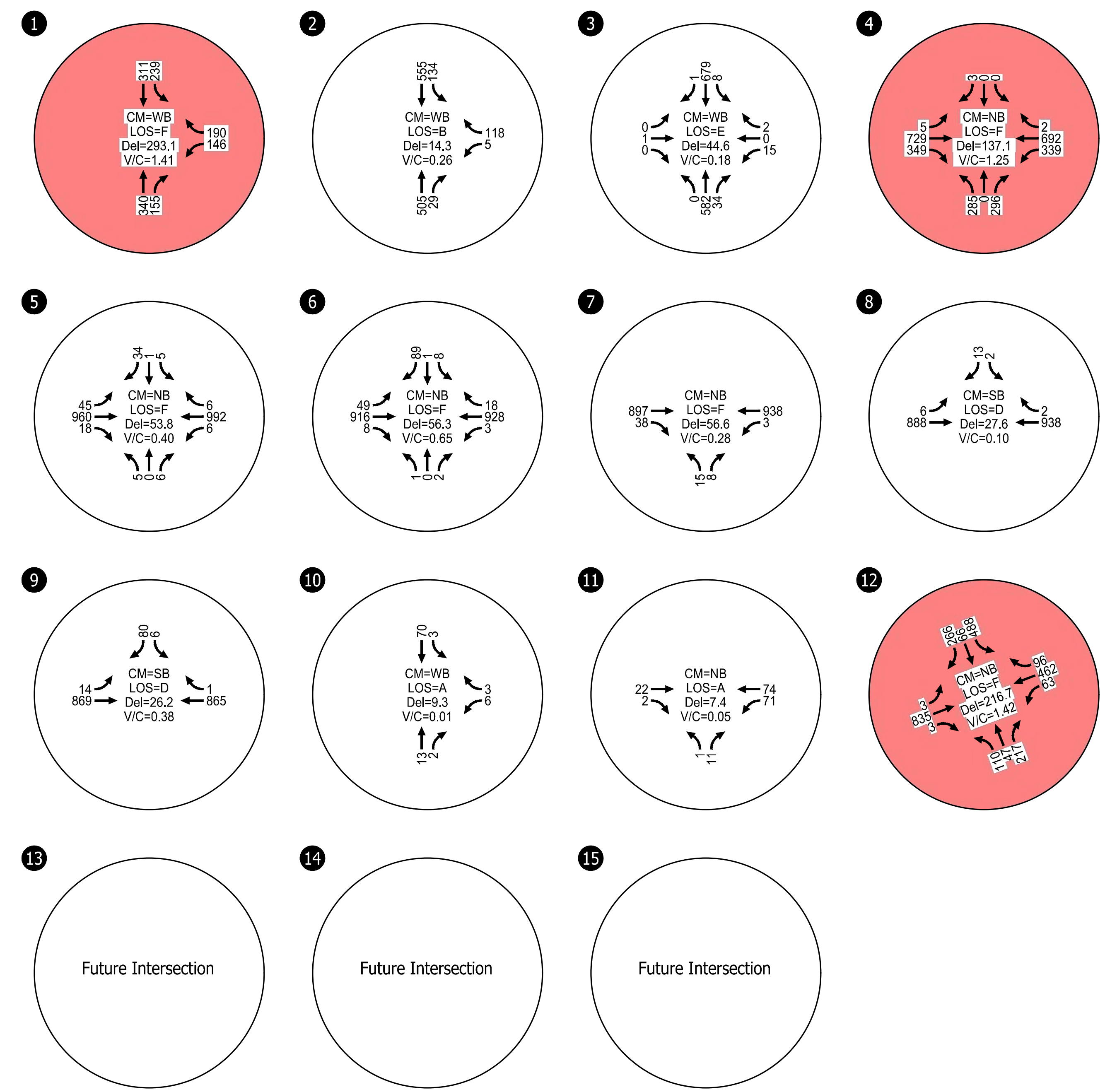
Assumed 2026 Lane Configurations and Traffic Control Devices

Crook County, Oregon

Figure 6

KITTELSON & ASSOCIATES





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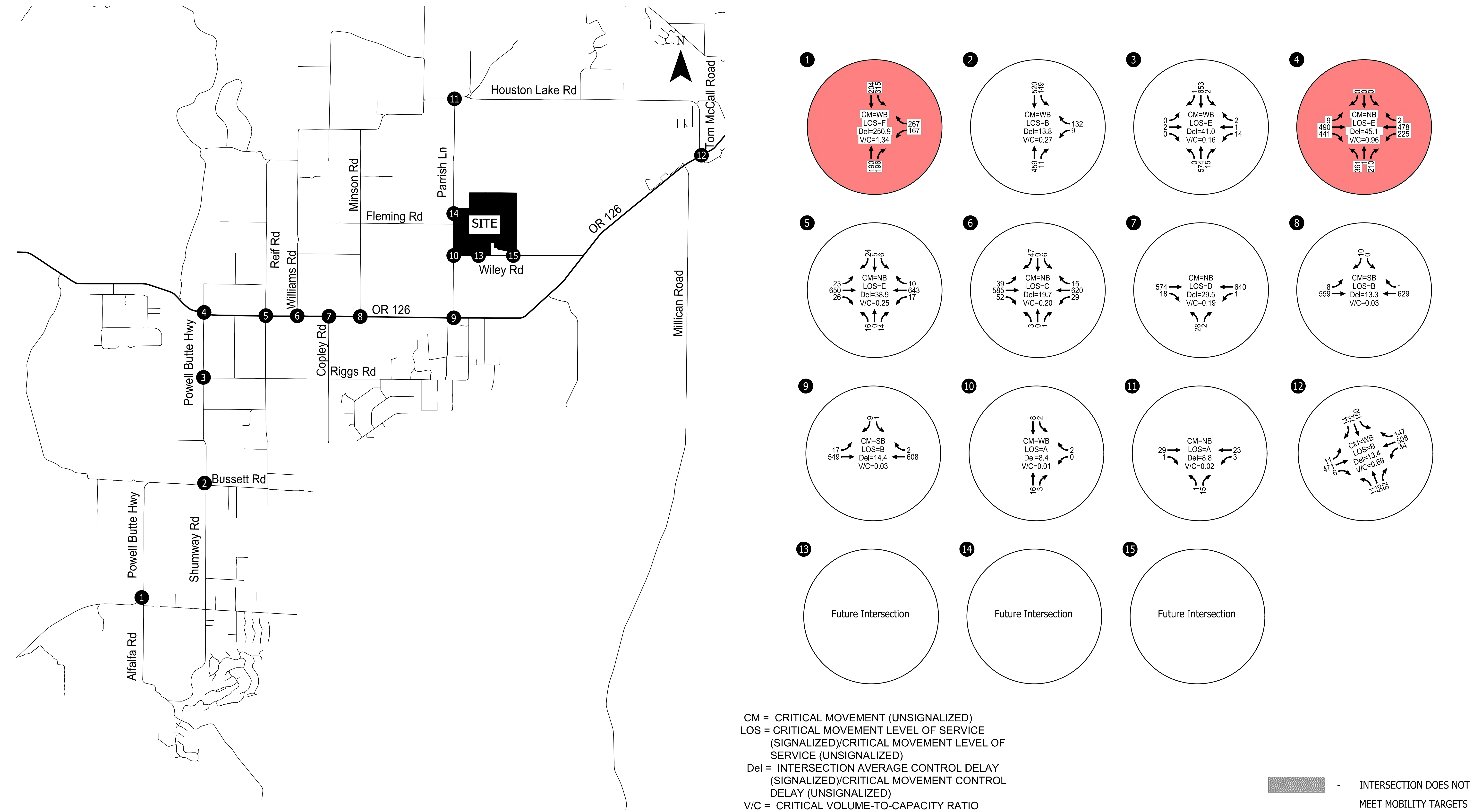
V/C = CRITICAL VOLUME-TO-CAPACITY RATIO

- INTERSECTION DOES NOT MEET MOBILITY TARGETS

Year 2026 Background Traffic Conditions
Weekday PM Peak Hour
Crook County, Oregon

Figure 7



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- INTERSECTION DOES NOT MEET MOBILITY TARGETS

Year 2026 Background Traffic Conditions
Saturday Peak Hour
Crook County, Oregon

Figure 8

Section 5
Total Traffic Conditions

TOTAL TRAFFIC CONDITIONS

The total traffic conditions identify how the study intersections will operate with the inclusion of the Crossing Trails trips in the developments build-out year (2026). It includes the 2026 background traffic (including background growth and vested trips from neighboring destination resorts) and site-generated trips.

PROPOSED DEVELOPMENT

The property is currently approved for a 735-unit destination resort, as is shown in the original traffic study provided in Appendix A. The developer has recently proposed a new site plan for the property, including updating the uses and general purpose of the resort. The new plan transitions from a traditional destination resort to an affordable, family friendly, outdoor living experience. The site plan includes recreational activities and open space for guests and full-time occupants, workforce housing for employees on the resort and within the surrounding community, upscale manufactured homes, RV sites, and overnight villas. The proposed development includes 100 workforce housing units, 50 overnight resort units, 400 vacation villas, and 200 manufactured homes/cabins.

TRIP GENERATION

The proposed development includes 100 workforce housing units, 50 overnight resort units, 400 vacation villas, and 200 manufactured homes/cabins. Trip generation rates for the destination resort portion of the site were developed from a 2006 ODOT approved trip generation study that looked at trip data associated with several Central Oregon destination resorts. *This report is provided in Appendix L.* The weekday p.m. peak hour trip rate was 0.32 trips/unit, the Saturday midday peak hour trip rate was 0.44 trips/unit, and the daily trip rate was 3.2 daily trips/unit. The approved destination resort trip rates were applied to the overnight/vacation rentals, while the ITE 11th Edition Trip Generation rates for single-family homes were applied to the workforce housing units.

The workforce housing area is separated from the overnight/vacation rentals and is intended to provide convenient housing for employees of the resort. While employment at the resort cannot be conditioned to occupants of the resort, it was assumed a conservative 25% internalization of peak hour trips between the workforce housing and the resort.

Trip generation rates from the ITE 11th Edition Trip Generation Manual were compared to the ODOT approved destination resort rates. The weekday p.m. trip rates are similar and the Saturday midday trip rates from the ODOT study are approximately 10% higher than the ITE rates. *Comparison trip generation tables are provided in Appendix M.* Given that the destination resort rates in the ODOT study are based on local data, have been accepted by ODOT and local agencies, and are slightly more conservative, these rates were used to develop the trip generation shown in Table 8.

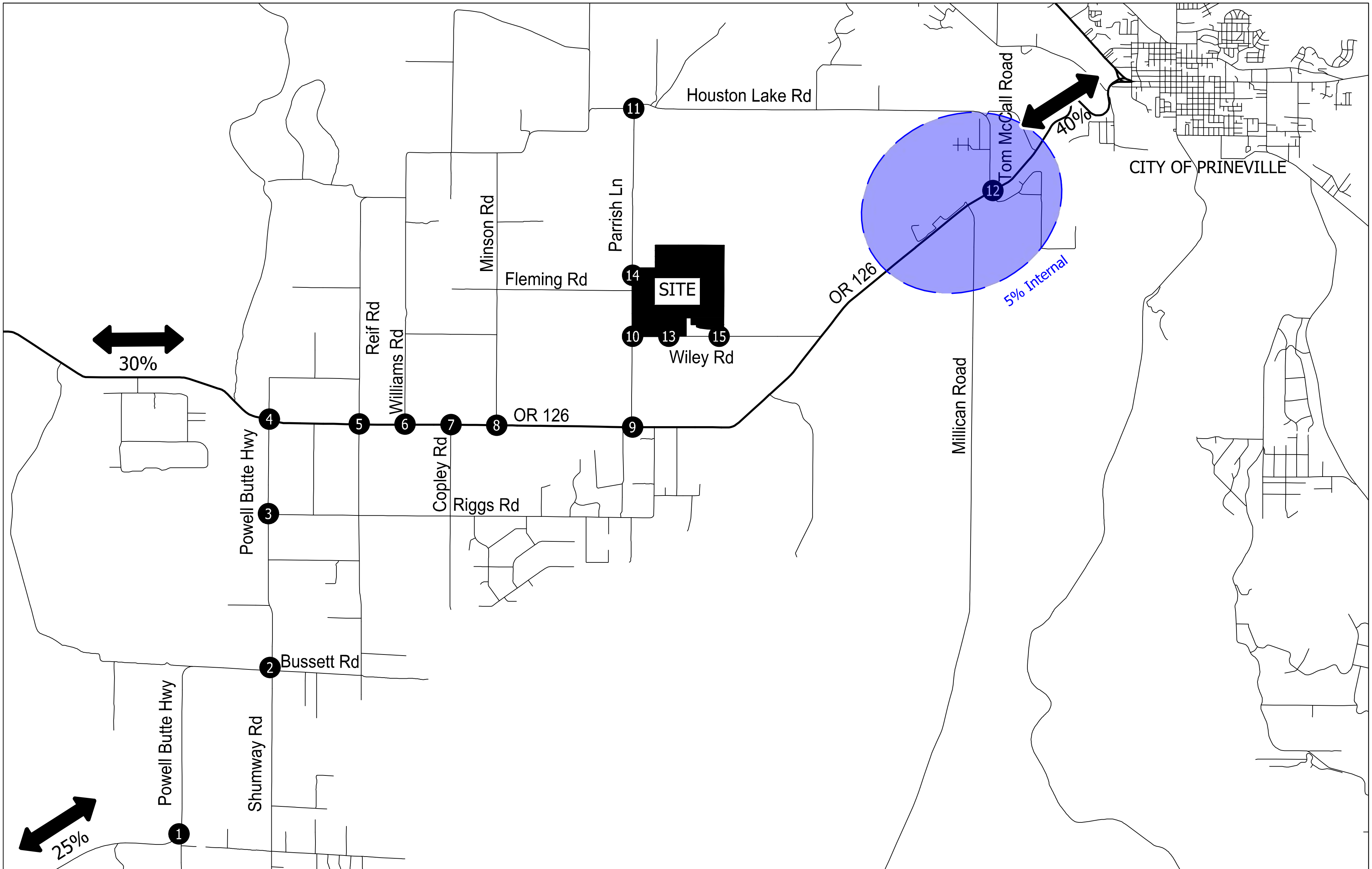
Table 8. Estimated Trip Generation

Land Use	ITE Code	Units	Daily	Weekday PM Peak Hour			Saturday Midday Peak Hour		
				Total	In	Out	Total	In	Out
Workforce Housing	210	100 Dwelling Units	943	94	59	35	41	21	20
Destination Resort	N/A	650 Dwelling Units	2,080	208	131	77	286	143	143
Workforce Housing Internalization (25%)			236	48	24	24	20	10	10
Total New Trips			**2,787**	**254**	**166**	**88**	**307**	**154**	**153**

TRIP DISTRIBUTION

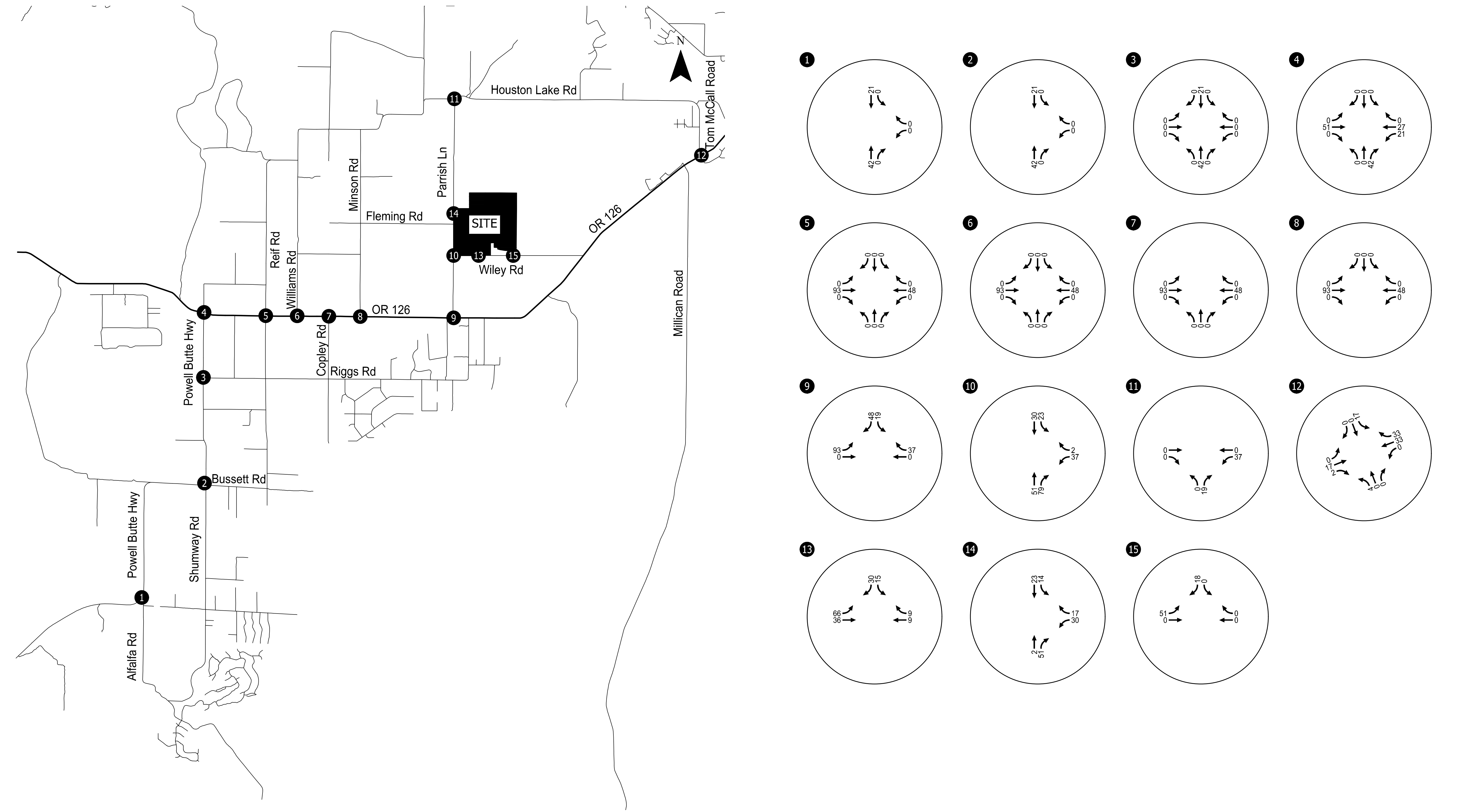
The site generated trips are expected to distribute onto the local and regional network based on existing travel patterns. The proposed distribution is shown in Figure 9. The distribution pattern from the 2008 approved traffic study was consulted, however, the distribution shown in Figure 9 accounts for employer generators near OR126/Tom McCall intersection (i.e., Facebook, Apple, the Airport are shown as 5% internal), and travel times/patterns from out-of-town guests coming to the development from west of the Cascade Mountains.

Trip Assignment figures are shown in Figure 10 and Figure 11 for the weekday PM peak and Saturday midday peak hour, respectively. The workforce housing trips going to the destination resort are shown as accessing the resort by traveling to and from on Wiley Road.



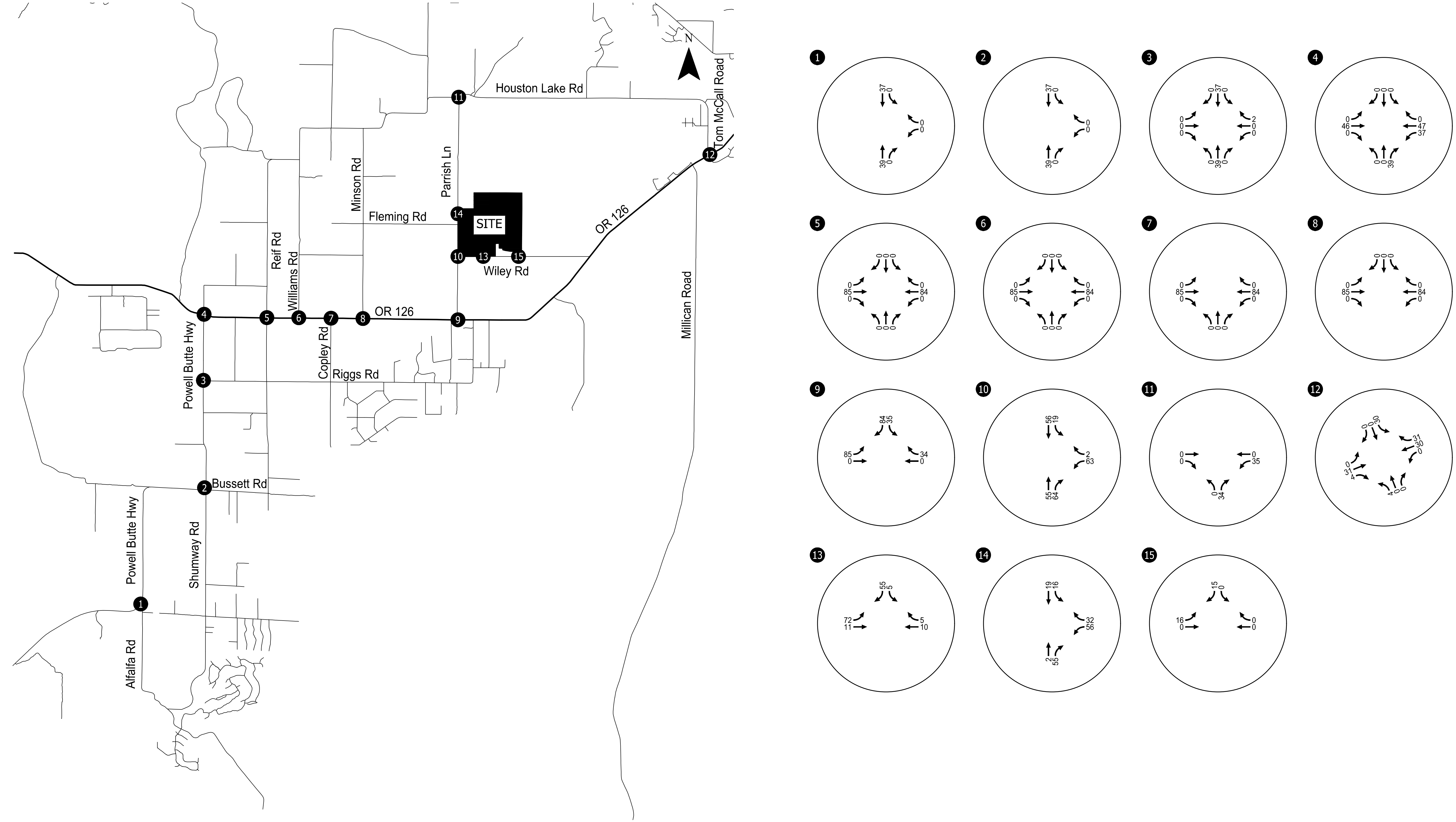
Trip Distribution
Crook County, Oregon

Figure
9



Trip Assignment
Weekday PM Peak Hour
Crook County, Oregon

Figure 10



Trip Assignment
Saturday Peak Hour
Crook County, Oregon

Figure
11

2026 TOTAL TRAFFIC CONDITIONS

Total traffic volumes and operational results for the study intersections are provided in Figures 12 and 13 for the weekday PM peak hour and Saturday midday peak hour, respectively. *Appendix N includes the 2026 Build-out conditions level-of-service worksheets.*

The following intersections continue to exceed mobility targets in the buildout condition with the development of Crossing Trails:

- OR126/Powell Butte Highway, Weekday PM Peak Hour and Saturday Midday Peak Hour
- OR126/Tom McCall Road, Weekday PM Peak Hour
- Powell Butte Highway/Alfalfa Market Road, Weekday PM Peak Hour and Saturday Midday Peak Hour

In addition, OR126/Parrish Lane exceeds mobility targets with the site-generated trips.

OR126/Powell Butte Highway

The OR126/Powell Butte Highway intersection continues to exceed mobility targets with the site generated trips, as under background and existing conditions. The addition of the site trips increases the already exceeded v/c ratio from 1.25 to 1.30. There are 117 weekday PM peak hour trips generated from the site through the intersection. This is approximately 4% of the weekday PM peak hour total volume under 2026 total traffic conditions. A multilane roundabout with two through lanes in each direction on OR 126 and a northbound right-turn yield bypass lane would enable operations to meet the modified 0.90 v/c threshold, as is required to mitigate operations under background conditions.

OR126/Tom McCall Road

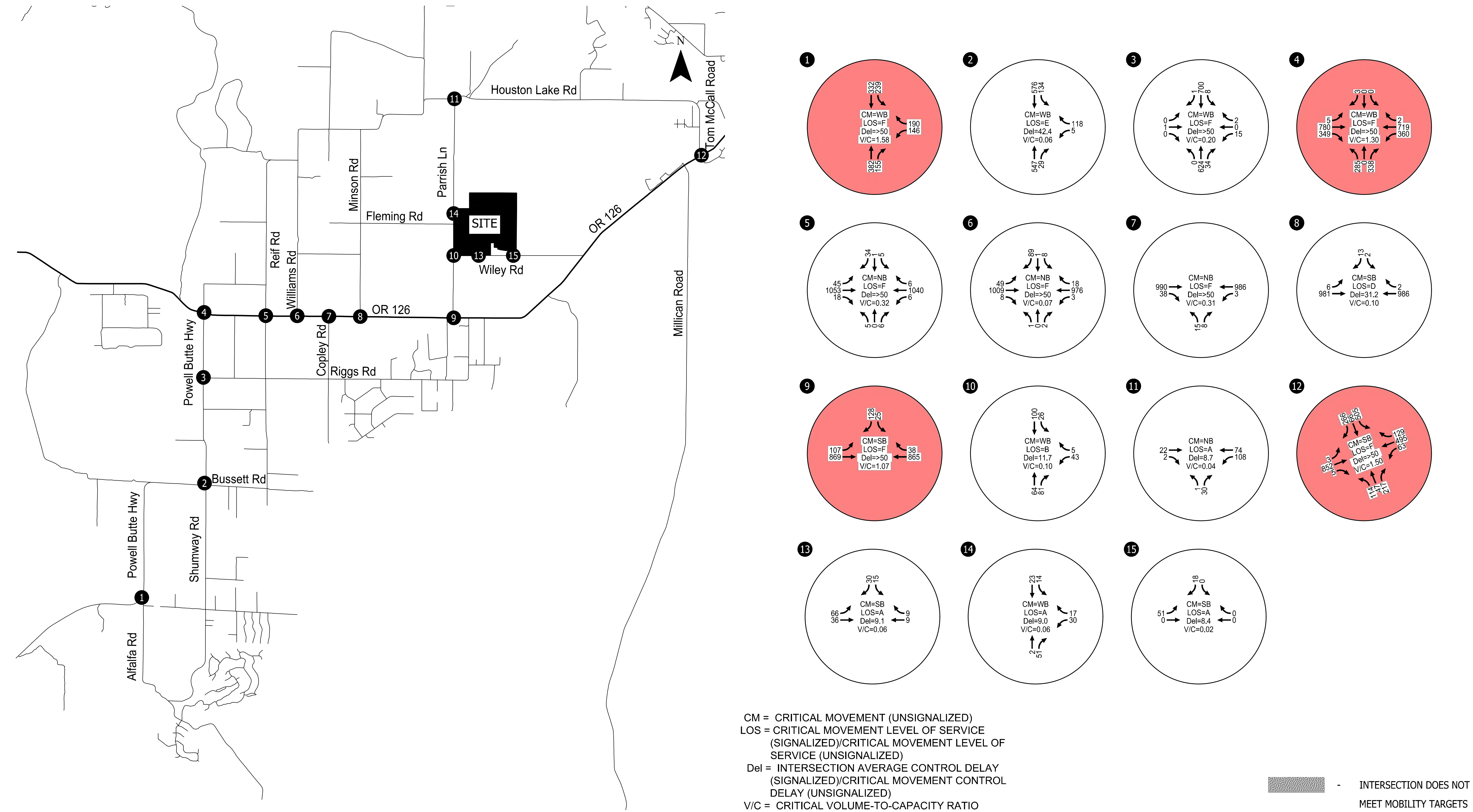
The OR126/Tom McCall Road roundabout continues to exceed mobility targets under total traffic conditions, as under existing and background conditions. The high demand on the north leg of the roundabout would require two southbound lanes – a left-turn and shared through- right to meet modified mobility targets. *The demand needs are the same in the background and build-out scenario – the v/c ratio is increased from 1.42 to 1.50 with the site generated trips.* There are 154 weekday PM peak hour trips generated from the site through the intersection. This is approximately 5% of the weekday PM peak hour total volume under 2026 total traffic conditions.

Powell Butte Highway/Alfalfa Market Road

The intersection continues to exceed mobility targets under total traffic conditions, as under background conditions. The intersection would, however, meet mobility targets with a single-lane roundabout. *The demand needs are the same in the background and build-out scenario.* The v/c increases from 1.41 to 1.58 with the site generated trips. There are 69 weekday PM peak hour trips generated from the site through the intersection. This is approximately 5% of the weekday PM peak hour total volume under 2026 total traffic conditions.

OR126/Parrish Lane

OR126/Parrish Lane is the primary access route to/from the development. With the addition of site generated trips, the intersection does not meet mobility targets. The eastbound left-turn demand creates capacity and potential safety concerns as a shared lane (e.g., vehicles stopping on the highway to turn left onto Parrish Lane). To improve mobility and safety, it is recommended that an eastbound left-turn lane be constructed at the intersection. In addition, a southbound left-turn lane is recommended to improve the southbound capacity and reduce queues.



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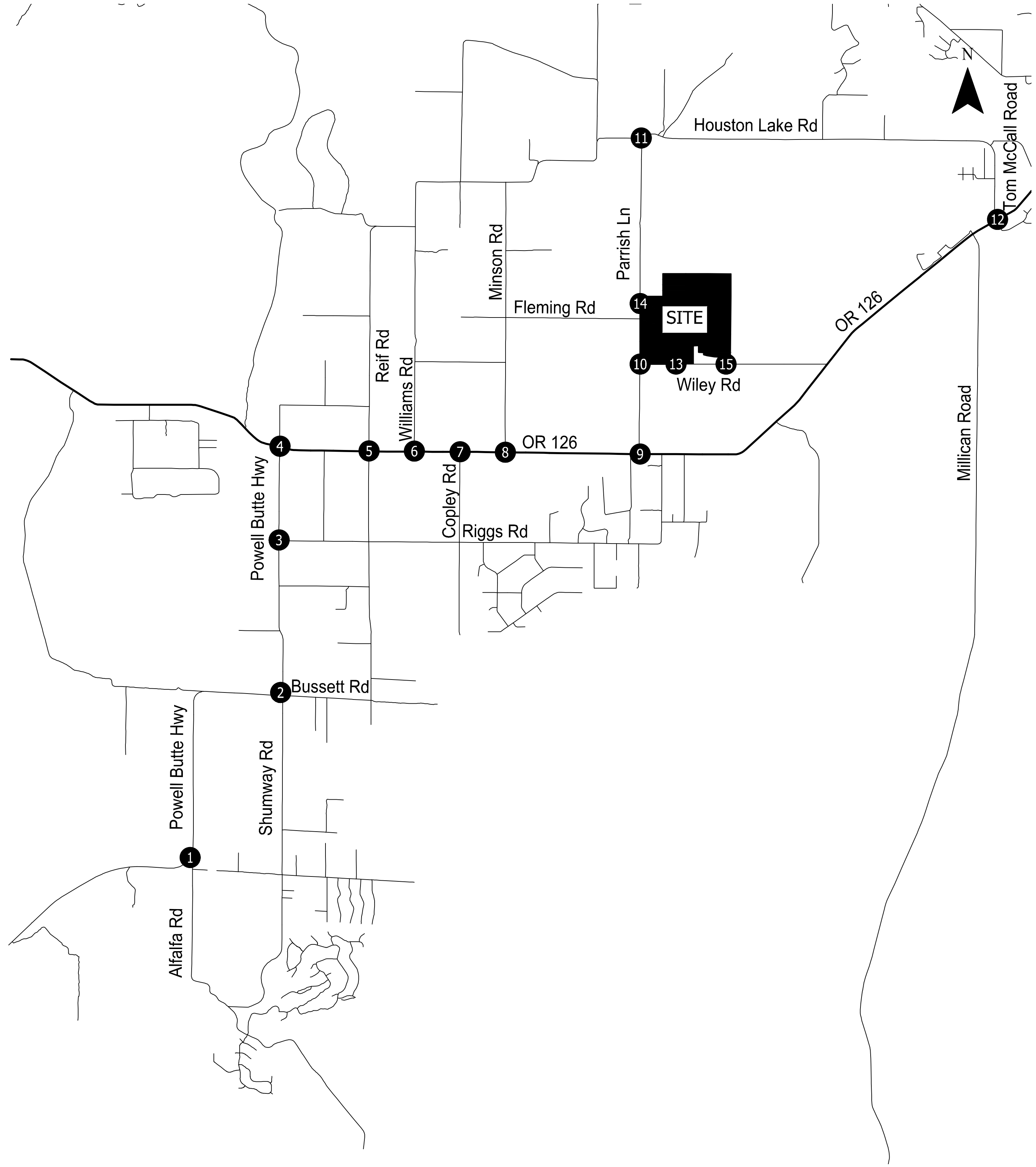
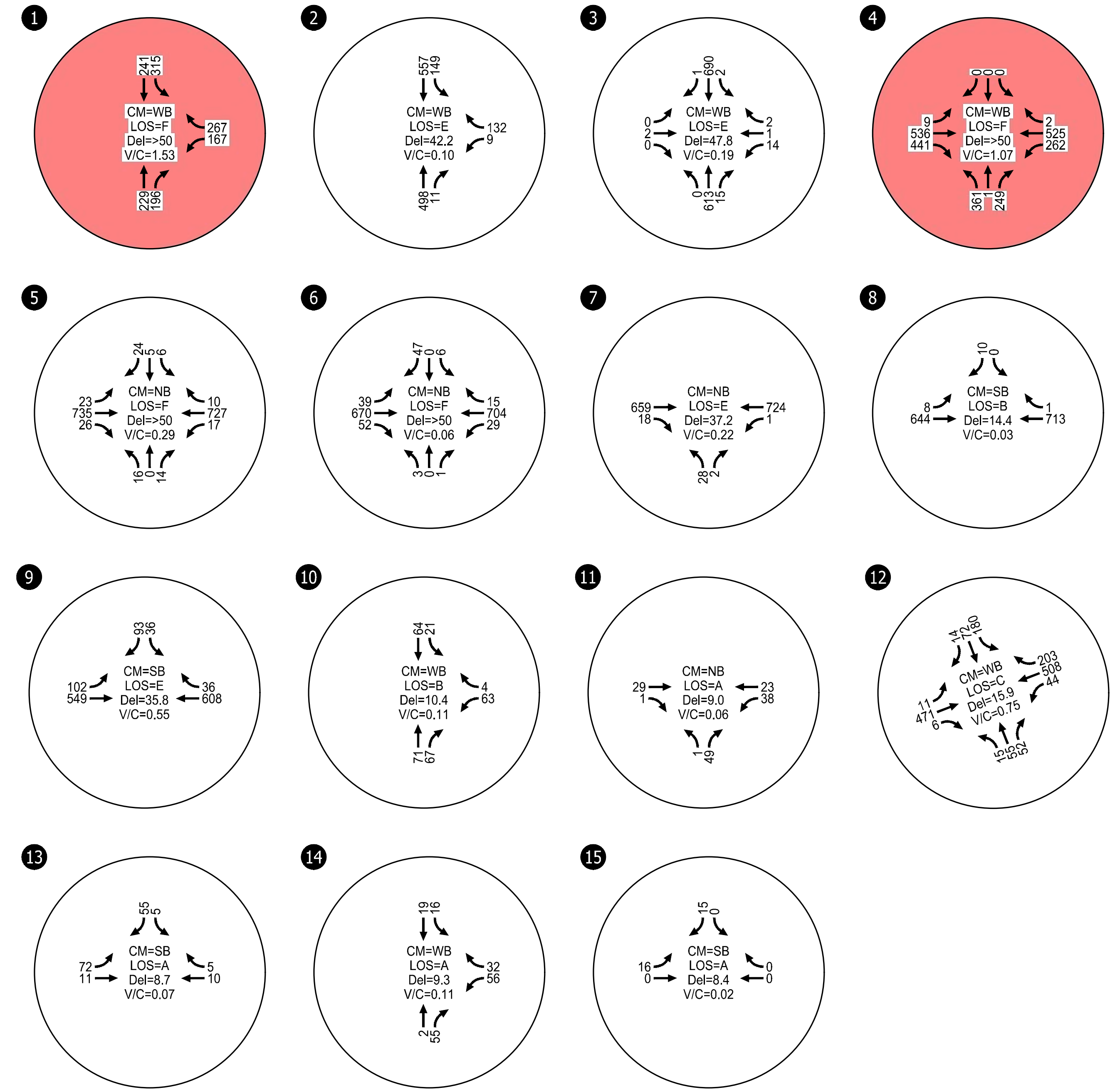
\- INTERSECTION DOES NOT MEET MOBILITY TARGETS

Year 2026 Total Traffic Conditions
Weekday PM Peak Hour
Crook County, Oregon

Figure
12





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[shaded] - INTERSECTION DOES NOT MEET MOBILITY TARGETS

Year 2026 Total Traffic Conditions
Saturday Peak Hour
Crook County, Oregon

Figure
13

OPERATIONS SUMMARY AND MIGRATION RECOMMENDATIONS

A summary of the off-site mitigation requirements and pro-rata calculations is shown in Table 9. This approach is consistent with Oregon Revised Statue 197.460 (4) which states: "If the site is west of the summit of the Coast Range and within 10 miles of an urban growth boundary, or if the site is east of the summit of the Coast Range and within 25 miles of an urban growth boundary, the county shall require the applicant to submit a traffic impact analysis of the proposed development that includes measures to avoid or mitigate a proportionate share of adverse effects of transportation on state highways and other transportation facilities affected by the proposed development, including transportation facilities in the county and in cities whose urban growth boundaries are within the distance specified in this subsection."

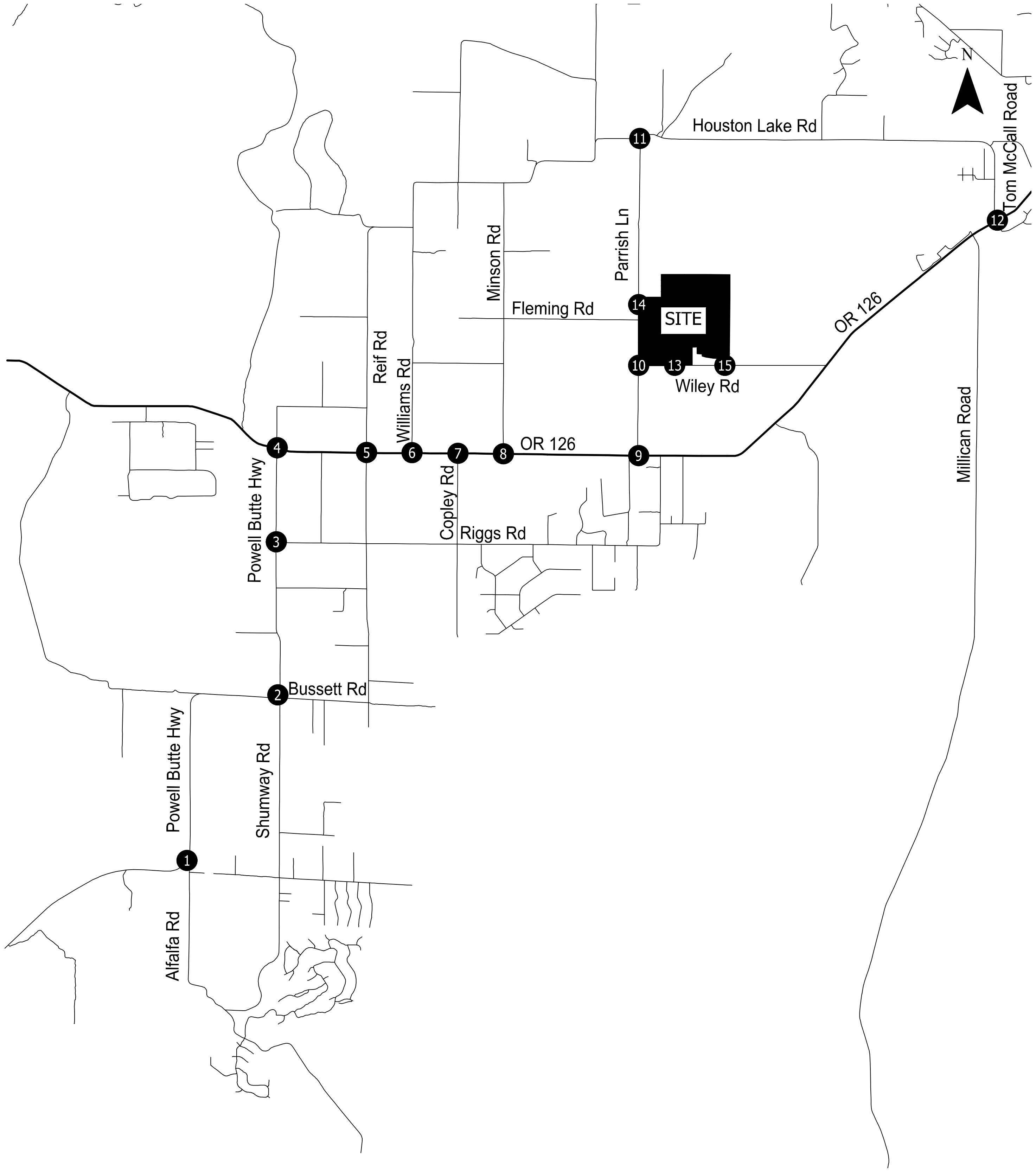
Intersections not listed meet mobility targets in the existing, background, and total traffic scenarios and therefore, no mitigation is recommended as part of this development application. Figure 14 demonstrates the operational results of the proposed mitigated improvements. The results reported show the weekday PM peak hour as it is the critical volume period. *Mitigation operational analysis result sheets are provided in Appendix O.* Cost estimates are based on average construction costs of recent similar construction projects throughout ODOT Region 4.

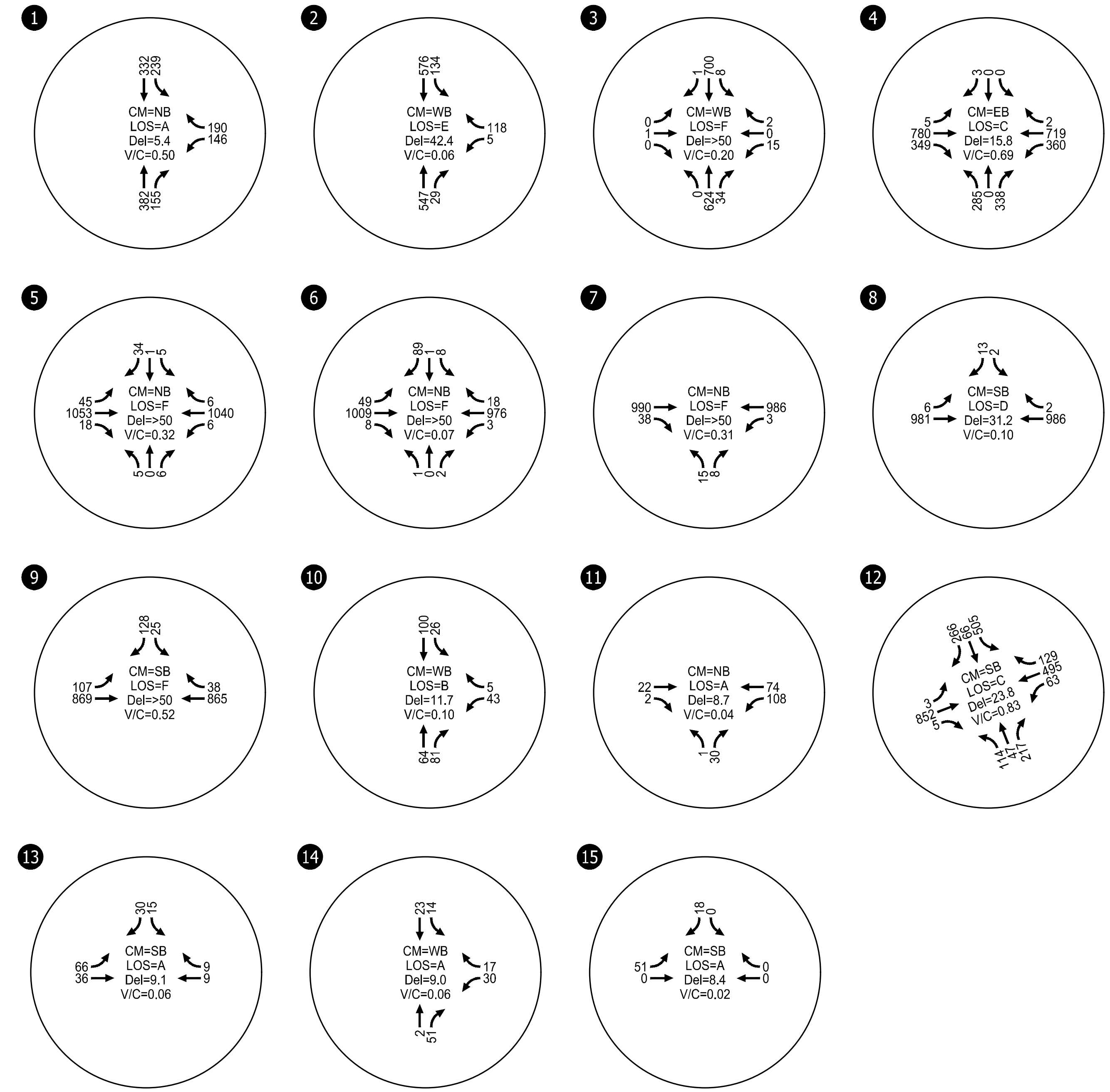
OR126/Parrish Lane is the primary access to the site and does not require mitigation without the proposed development. Therefore, it is recommended that the development be conditioned for the cost to construct the safety and capacity improvements for the intersection. All other intersections are minorly impacted by the site and do not directly result in intersections exceeding mobility targets but instead add trips to those that are already exceeded. Therefore, providing proportionate share contributions to those intersections is recommended.

Table 9. Summary of Conditions, Mitigation, and Proportionate Share Cost

Intersection (ID)	Existing	Back-ground	Total	Recommended Mitigation and Cost	Proportional Share Impact and Cost
OR126/Powell Butte Highway (4)				Multilane Roundabout (Estimated Cost = $3M)	4% of total volume (117 site generated trips) - $120,000
OR126/Tom McCall Road (12)				Widen Roundabout (Estimated Cost = $1M)	5% of total volume (154 site generated trips)- $50,000
OR126/Parrish Lane (9)				Southbound and eastbound left turn lane (Estimate Cost = $400K)	Construct full improvement (Conditioned on developer)
Powell Butte Highway/Alfalfa Market Road (1)				Single Lane Roundabout (Estimated Cost = $1.5M)	5% of total volume (69 site generated trips) - $75,000
				Total Proportionate Share Cost	$245,000

Green Cells indicate meeting mobility targets and Red Cells indicate exceeding mobility targets





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- INTERSECTION DOES NOT MEET MOBILITY TARGETS

Year 2026 Total Traffic Volumes - Mitigation
Weekday PM Peak Hour
Crook County, Oregon

Figure
14

DESTINATION RESORT OVERLAY COMPLIANCE

2036 Horizon Year

This traffic study is a modification to the original study completed in 2008. The horizon year for the original study was 2028 and included background traffic, surrounding destination resort forecasts, and regional growth approximately 10 years after the original proposed build out of the site (original site build out was 2018). Since then, several destination resort applications have expired or eliminated reducing the once anticipated demand on the regional network.

Table 10 provides a comparison of the available Average Daily Traffic (ADT) from the original traffic study 10 year forecast to traffic counts obtained by ODOT in 2019. While volumes along the OR126 have increased, they have not outpaced the volumes forecasted in the original traffic analysis. The 2019 ODOT ADT data is approximately half of the anticipated volumes on OR126 both with and without the Crossing Trails trips.

Table 10. OR126 Volume Comparison

Intersection	Forecasted 2018 ADT W/O Crossing Trails	Forecasted 2018 ADT With Crossing Trails	ODOT 2019 ADT Data
Powell Butte	20,400	22,000	12,100
Tom McCall	25,300	26,000	13,400
Reif Rd	20,000	21,700	11,800
Parrish	19,300	21,200	11,300

The Crook County Transportation System Plan (TSP) Horizon Year for future growth is 2036. The TSP, as was assumed in this analysis, used a 1.6% annual growth rate for future volumes. A sensitivity analysis was completed to compare the volumes from the TSP forecast year (2036) to the background condition (2026) with full build out of the neighboring destination resorts documented herein. The sensitivity analysis evaluated the total entering volume at Powell Butte Highway/OR126 intersection. Using the 2036 horizon year, there are estimated to be 2,500 weekday PM peak hour vehicles at the intersection compared to 2,700 weekday PM Peak hour vehicles documented in the background 2026 condition. Therefore, the volumes used for the purposes of updating the analysis are more conservative than the TSP horizon year, and as such, the operations and mitigation presented will operate at or below ODOT and County mobility targets in the horizon year 2036.

Code Compliance

Section 18.116 of the Crook County Code provides information pertaining to destination resort compliance throughout the County. The development is located within a destination overlay zone per the original traffic study. While the original study documented compliance to the code, this section demonstrates compliance to the approval criteria for the updated site plan as presented in section 18.116.100.6:

The development will not have a significant adverse impact on fish and wildlife, considering mitigation measures.

(a) The traffic study required by CCC 18.116.080(3)(g) illustrates that the proposed development will not significantly affect a transportation facility. A resort development will significantly affect a transportation facility for purposes of this approval criterion if it would, at any point within a 20-year planning period:

(i) Change the functional classification of the transportation facility;

No functional classification changes are proposed as part of this application.

(ii) Result in levels of travel or access which are inconsistent with the functional classification of the transportation facility; or

All impacts to the surrounding transportation system are compliant with the functional classification of the facilities.

(iii) Reduce the performance standards of the transportation facility below the minimum acceptable level identified in the applicable transportation system plan (TSP).

All impacts to the transportation system and proposed mitigation meet ODOT and County operational standards in the 2036 horizon year and are supported in the analysis from this report.

(b) If the traffic study required by CCC 18.116.080(3)(g) illustrates that the proposed development will significantly affect a transportation facility, the applicant for the destination resort shall assure that the development will be consistent with the identified function, capacity, and level of service of the facility through one or more of the following methods:

(i) Limiting the development to be consistent with the planned function, capacity and level of service of the transportation facility;

The size of the development has been previously approved. All proposed mitigation to the surrounding transportation system improves operations and safety or are intersections identified for improvements in other planning documents.

(ii) Providing transportation facilities adequate to support the proposed development consistent with Chapter 660 OAR, Division 12; or

No additional transportation facilities are recommended as part of this application.

(iii) Altering land use densities, design requirements or using other methods to reduce demand for automobile travel and to meet travel needs through other modes.

Land use alternations are not included in this application; however, the inclusion of workforce housing provides on-site opportunities for workers that would otherwise require use of the surrounding regional network.

(c) Where the option of providing transportation facilities is chosen in accordance with subsection (6)(b)(ii) of this section, the applicant shall be required to provide the transportation facilities to the full standards of the affected authority as a condition of approval. Timing of such improvements shall be based upon the timing of the impacts created by the development, as determined by the traffic study or the recommendations of the affected road authority.

Mitigation recommendations were presented and approved in the 2008 study. This report provided supporting mitigation strategies for intersections exceeding capacity with and without the proposed resort.

Section 6
Transportation Facilities

TRANSPORTATION FACILITIES

INTERSECTION SIGHT DISTANCE

Crook County applies the minimum recommended sight distance criteria included in *A Policy on Geometric Design of Highways and Streets, 6th Edition* published by the American Association of State Highway and Transportation Officials (AASHTO) in 2018 (commonly referred to as the *Green Book*). This reference provides the recommended sight distances as measured from a height of 3.5 feet and 14.5 feet from the edge of travel way at the access point, based on the speed of the roadway.

The AASHTO reference is based on conflicts between vehicles traveling along the roadway and vehicles completing movements at the site access. Sight distance was reviewed and estimated at the proposed site access driveways, based on the available sight distance for movements on the stop-controlled approach, and is summarized in Table 11. Both Parrish Lane and Wiley Road do not currently have a posted speed limit. Under the Oregon Speed Zone Manual, the statutory speed limit on public rural highways under Crook County's jurisdiction outside of residential and business districts is 55 miles per hour.

Figures 15-20 show photographs taken at the proposed site access driveways. Landscaping, above ground utilities, and signing should be located and maintained in a manner that preserves adequate intersection sight distance.

Table 11. Sight Distance Review

Location	Direction of view	Required Sight Distance	Available Sight Distance
Site Access #1 / Wiley Road	Looking east	530 feet	>530 feet
	Looking west	610 feet	>1,000 feet
Site Access #2 / Wiley Road	Looking south	530 feet	>1,000 feet
	Looking north	610 feet	>610 feet
Parrish Lane/Site Access #3	Looking south	530 feet	>530 feet
	Looking north	610 feet	>1,000 feet


Figure 15. View from proposed Site Access #1 facing Wiley Road East; 14.5 feet from edge of curb


Figure 16. View from proposed Site Access #1 facing Wiley Road West; 14.5 feet from edge of curb

Figure 17. View from proposed Site Access #2 facing Wiley Road East; 14.5 feet from edge of curb

Figure 18. View from proposed Site Access #2 facing Wiley Road West; 14.5 feet from edge of curb

Figure 19. View from proposed Site Access #3 facing Parrish Lane South; 14.5 feet from edge of curb

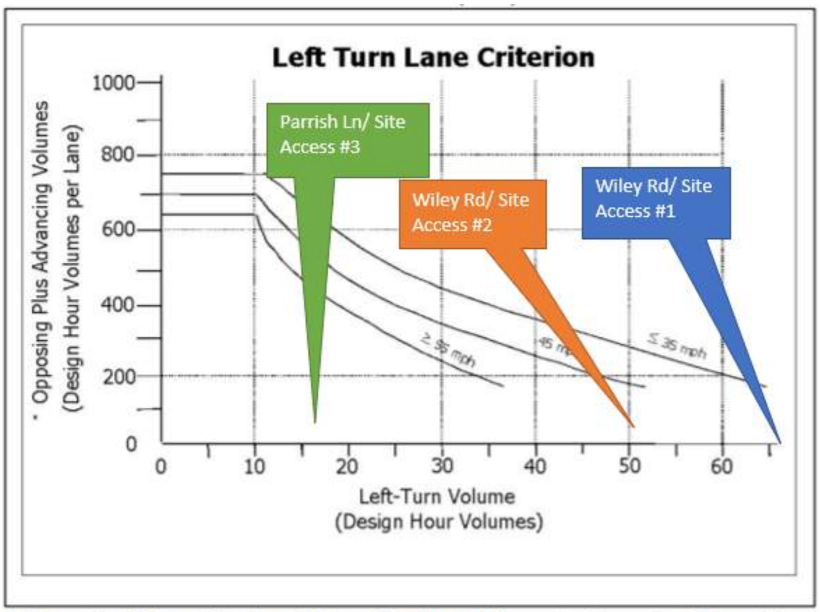
Figure 20. View from proposed Site Access #3 facing Parrish Lane North; 14.5 feet from edge of curb

TURN LANE WARRANT

Section 5h in the Crook County Development Code requires the analysis for turn lanes at the site access driveways. Turn lane warrant criterion from the ODOT APM Chapter 12 – Unsignalized Intersection Analysis was used to determine whether turn lanes from the mainline to the minor street would be necessary to improve both capacity and safety for oncoming and turning vehicles.

Site Access Review

The site has three proposed access locations – two on Wiley Road and one on Parrish Lane. ODOT's left turn lane criterion was used to determine whether left turn lanes into the site should be considered. Figure 21 shows the graph of the intersection 2026 weekday PM peak build-out volumes. As shown, the volumes on both Wiley Road and Parrish Lane are not high enough to warrant turn lanes. While turning volumes may exceed 50 vehicles, the low through volumes should allow ample time for vehicles to complete turning movements.



*(Advancing Volume/Number of Advancing Through Lanes) + (Opposing Volume/Number of Opposing Through Lanes)
Opposing left turns are not counted as opposing volumes

Figure 21. Left Turn Lane Criterion for Site Access Driveways

Section 7
Findings and Recommendations

FINDINGS AND RECOMMENDATIONS

The following findings summarize the changes to the site plan and environment since the original Crossing Trails Traffic Study and the key findings from the transportation analysis:

- The proposed site plan has been modified from the originally approved traditional destination resort to an affordable, family friendly, outdoor living experience. The resort includes recreational activities and open space for guests and full-time occupants, workforce housing for employees on the resort and within the surrounding community, upscale manufactured homes/cabins, and overnight villas and resort rentals.
- Several planning documents have been completed or updated since the original approval of the site including the Crook County and Prineville Transportation System Plans and the OR Highway 126 Corridor Facility Plan. These documents no longer recommend grade separated interchanges at key intersections such as OR126/Tom McCall Road and OR126/Powell Butte Highway, but instead recommend at-grade improvements such as roundabouts.
- A traffic study for a destination resort at this site was completed in 2008 with a similar dwelling unit count but different site plan. The anticipated volumes on OR126 are lower than anticipated in the 2008 traffic study, therefore reducing the study area from the original study.
- The site is anticipated to generate 3,567 total daily trips, 278 weekday PM peak hour trips and 317 Saturday midday peak hour trips.
- None of the study intersections exceeded 90th percentile crash rates, critical crash rates, or were identified on the Statewide Priority Index System for the review period of 2015-2019.
- Two study intersections are expected to exceed mobility targets in the existing condition: OR126/Powell Butte Highway and OR126/Tom McCall Road.
- The neighboring developing/approved destination resort vested trips were included in the background conditions analysis. Powell Butte/Alfalfa Market Road is not expected to meet mobility targets in the 2026 background condition.
- OR126/Parrish Lane is the primary access to the development and is expected to exceed mobility targets in the 2026 build-out condition.
- Clear sight lines are provided at all anticipated site access locations.
- This report complies with the Crook County Destination Resort Overlay Code Requirements as presented in section 18.116.100.6 for the 20-year horizon year.

Upon review of the findings above, key recommendations to support the surrounding transportation infrastructure include:

- Construct eastbound and southbound left turn lanes at OR126/Parrish Lane – the primary access to the development.
- Participate proportionally to completing the following off-site improvements to mitigate impacts to the state and county system:
  - Hidden Canyon shall construct a multilane roundabout at OR126/Powell Butte Highway to include two lanes in the eastbound and westbound directions and a northbound right turn yield bypass lane.
  - ODOT/The City of Prineville shall consider widening the OR126/Tom McCall Road roundabout. Based on current and projected volumes, two lanes may be required for the eastbound and southbound approaches along with a northbound right turn yield bypass lane.
  - Crook County shall construct a single lane roundabout at Powell Butte Highway/Alfalfa Road as this is a primary route for both Brasada Rach and Hidden Canyon and is impacted by site trips to and from Bend.

- Contribute the following pro-rata shares to offset the impacts to the regional network comparable to the level of impact, including:

- OR126/Powell Butte Highway: 4%, $120,000
- OR126/Tom McCall Road: 5%, $50,000
- Powell Butte Highway/Alfalfa Market Road: 5%, $75,000

The total pro-rata payment is equal to $275,000.

APPENDIX A – FERGUSON AND ASSOCIATES, 2008 ORIGINAL CROSSING TRAILS TRANSPORTATION IMPACT ANALYSIS

TRANSPORTATION

ANALYSIS

Project: Seven Peak Resort
Location: Parrish Lane – Powell Butte, Oregon
Client: Powell Butte LLC
Date: July 2, 2007

REGISTERED PROFESSIONAL ENGINEER
66840 PE
OREGON
JUL. 9, 2001
GATHEL SCOTT FERGUSON
7/2/07
EXPIRATION DATE: 12/31/07

FERGUSON & ASSOCIATES, INC.
Transportation Planning / Traffic Engineering

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EXECUTIVE SUMMARY

This study addresses the traffic impacts of a proposed destination resort, Seven Peaks that would include up to 735 units. The 735 units would include 490 single family dwelling units and 245 rental units. The 245 rental units include 101 Golf Casitas and 48 townhouses (each with three rental units). The resort is expected to be built in nine phases with completion of phase nine occurring by the year 2018. The application is for a destination resort which in Crook County requires an approval of a Destination Resort Overlay Zone. As such, this traffic study addresses both the requirements of Section 7.1.7 Transportation Impact Analysis Requirements plus a 20-year analysis.

To meet the first of these requirements, this study focuses on p.m. peak hour and Saturday peak hour traffic operations at the site access and nearby higher-order (collector and arterial streets) intersections. This near-term analysis was conducted for the years 2008 and 2018 for conditions with and without the proposed project. To meet the requirements of the TPR, traffic conditions were examined for a 20-year horizon. The 20-year analysis involved comparing relative traffic conditions between the proposed project scenario and a reasonable-worst case scenario under the existing zoning.

STUDY AREA

The site for the proposed development is a total of 580 acres and is located in Powell Butte, north of Highway 126, east of Parrish Lane, as shown in Figure 1. The following intersections were included in the study area:

- Powell Butte Highway & Alfalfa Road;
- Powell Butte Highway & Shumway/Bussett Roads;
- Powell Butte Highway & Riggs Road;
- Powell Butte Highway & Highway 126;
- Veterans Way & Highway 126;
- Reif Road & Highway 126;
- Minson Road & Highway 126;
- Parrish Lane & Highway 126;
- Stillman (Riggs) Road & Highway 126;
- Highway 126 & Wiley Road;
- Millican Road & Highway 126;
- Tom McCall Road & Highway 126;
- Highway 26 & Highway 126;
- Parrish Lane & Wiley Road; and
- Parrish Lane & Site Access.

FINDINGS AND CONCLUSIONS

The proposed Seven Peaks Resort would have up to 735 units. At build-out the resort was forecast to generate 235 p.m. peak hour trips, 325 Saturday peak hour trips and 2,352 daily trips.

There were ten study intersections that were forecast to exceed Crook County operation standards or ODOT mobility standards in at least one of the analysis years included in this report, as summarized in Table E-1.

TABLE E-1 – INTERSECTION FORECAST TO NOT MEET OPERATION STANDARDS

INTERSECTION	STANDARD	SCENARIO (with all Pending Area development)	STANDARD MET? 2008	2018	2028
Powell Butte Highway and Highway 126	Both	no Project	No	No	No
		with Project	No	No	No
Tom McCall Road and Highway 126	Both	no Project	No	No	No
		with Project	No	No	No
Highway 126 and Highway 26 – SB	Both	no Project	No	No	No
		with Project	No	No	No
Millican Road and Highway 126	Both	no Project	No	No	No
		with Project	No	No	No
Highway 126 and Highway 26 – NB	Both	no Project	No	No	No
		with Project	No	No	No
Veterans Way and Highway 126	Both	no Project	No	No	No
		with Project	No	No	No
Highway 126 and Wiley Road	Both	no Project	Yes	Yes	Yes
		with Project	Yes	No	No
Powell Butte Highway and Alfalfa Road	Crook County	no Project	Yes	No	No
		with Project	Yes	No	No
Reif Road and Highway 126	Both	no Project	Yes	Yes	No
		with Project	Yes	Yes	No
Stillman Road and Highway 126	Both	no Project	Yes	Yes	No
		with Project	Yes	Yes	No

The mitigation for each of the intersections impacted by trips from the proposed Seven Peaks Resort is summarized in Table E-2.

TABLE E-2 – INTERSECTION MITIGATION

INTERSECTION	MITIGATION	COMMENTS
Powell Butte Highway and Highway 126	Interchange	Interchange is listed in the Crook County TSP. It would be needed sometime before all of the approved and pending development is built. The proposed Seven Peaks Resort does not cause the need for the improvement
Tom McCall Road and Highway 126	Interchange	Interchange is listed in the Crook County TSP. It would be needed sometime before all of the approved and pending development is built. The proposed Seven Peaks Resort does not cause the need for the improvement
Millican Road and Highway 126	Interchange	Interchange is listed in the Crook County TSP. It would be needed sometime before all of the approved and pending development is built. The proposed Seven Peaks Resort does not cause the need for the improvement
Veterans Way and Highway 126	Traffic Signal	The intersection would meet the peak hour traffic signal warrant in the year 2008 for conditions with the approved and pending in-process development but without the proposed project. The City of Redmond TSP lists a traffic signal at this location.
Highway 126 and Wiley Road	Restrict Turns	The intersection is planned to be closed when Highway 126 is widened to four lanes. Until such time that the intersection is closed, turns could be restricted to right-in, right-out. A turn restriction at Wiley Road would likely increase the number of turns at Tom McCall Road. The planned interchange at that intersection could be designed to accommodate the additional traffic.
Powell Butte Highway and Alfalfa Road	Interchange	No improvement listed in the Crook County TSP. The peak hour traffic signal warrant would be met in the year 2018 for conditions without the proposed project. A traffic signal would not be a desirable improvement at this location due to its rural nature.
Reif Road and Highway 126	Restrict Turns	The intersection would not meet operation standards in the year 2028. The intersection would not meet the peak hour traffic signal warrant at that time. Turns could be restricted and an east-west connection to the planned Powell Butte Highway interchange could be provided.

Existing operations are not nearly as congested as indicated by what is shown in a 2008 analysis. The reason for this is that 2008 forecasts include 10 or more year's growth from already approved projects. While this is not a universal approach to forecasting traffic, ODOT prefers to include the build-out traffic of other projects even if these projects will not be built and occupied for 10 or more years. The philosophy behind this approach is that approved projects (in-effect) "reserved" available capacity over the next 10 years or so by virtue of being an early applicant. The reality, however, is that the failures identified will not occur until sometime beyond 2008 in most cases. Rather than providing speculative analysis to determine when improvements need to be constructed, the following guidance is suggested. In the case of interchanges, the planning and construction can take some time. A 3 to 5 year minimum lead time is anticipated to address all planning requirements, secure ROW and funding, and then to engineer and construct the interchanges; thus, with a 10-year build out for the approved/planning destination resorts in would be prudent to begin this process within the next five years. For traffic signal needs, it is suggested that traffic flow be monitored and that the signal not be constructed until such time that traffic signal warrants are met.

The AASHTO guidelines for intersection sight distance and stopping sight distance would be met at the site access intersection off Parrish Lane and at the two locations were the site generated traffic would enter the highway system.

The guideline for adding a left-turn lane would be met at each intersection with Highway 126 under existing conditions (counted traffic only).

INTRODUCTION

This study addresses the traffic impacts of a proposed destination resort, Seven Peaks. The proposed resort would include up to 735 units. The 735 units would include 490 single family dwelling units and 245 rental units. The 245 rental units include 101 Golf Casitas and 48 townhouses (each with three rental units). The resort is expected to be built in nine phases with completion of phase nine occurring by the year 2018. The application is for a destination resort which in Crook County requires approval of a Destination Resort Overlay zone. The Destination Resort Overlay zone requires that a 20-year analysis be prepared. As such, this traffic study addresses both the requirements of Crook County Transportation Systems Plan (TSP) Section 7.1.7 Transportation Impact Analysis Requirements plus a 20-year analysis.

To meet the first of these requirements, this study focuses on p.m. peak hour and Saturday peak hour traffic operations at the site access and nearby higher-order (collector and arterial streets) intersections. This near-term analysis was conducted for the years 2008 and 2018 for conditions with and without the proposed project. To meet the requirements of the Destination Resort Overlay Zone, traffic conditions were examined for a 20-year horizon. The 20-year analysis involved comparing relative traffic conditions between the proposed project scenario and a reasonable-worst case scenario under the existing zoning.

PURPOSE AND OBJECTIVES

This study has been performed for submission to Crook County and is based on the requirements of Crook County TSP Section 7.1.7 Transportation Impact Analysis Requirements and input from ODOT, Crook County staffand their consultants. The policy provides a general guide on transportation study requirements. One purpose of the policy is to provide a means of identifying significant off-site impacts as well as less significant and longer-range traffic operational conditions for the purpose of planning (programming and prioritizing) future street improvements. The Transportation Impact Analysis Requirements apply to new development and expansions of existing development going through the County's land use approval process. Requirements for approval of the Destination Resort Overlay Zone were also addressed.

PROPOSED DEVELOPMENT

The proposed project would include up to 490 single family residential units and up to 245 rental units for a total of 735 units. The proposed project would be completed in nine phases with completion of phase nine expected by the year 2018.

Site Location and Study Area

The site for the proposed development is a total of 580 acres and is located in Powell Butte, north of Highway 126, east of Parrish Lane, as shown in Figure 1. The Transportation Impact Analysis Policy requires that the study area include, at a minimum, all site access points and intersections (signalized and unsignalized) adjacent to the proposed site. Beyond the minimum study area, the transportation impact analysis shall evaluate all intersections that received site generated trips that comprise at least 10 percent or more of the total intersection volume. In addition, the County Roadmaster or her designee shall determine any additional intersections.

As such per correspondence with County staff and ODOT staff, the following intersections were included in the study area:

- Powell Butte Highway & Alfalfa Road;
- Powell Butte Highway & Shumway/Bussett Roads;
- Powell Butte Highway & Riggs Road;
- Powell Butte Highway & Highway 126;
- Veterans Way & Highway 126;
- Reif Road & Highway 126;
- Minson Road & Highway 126;
- Parrish Lane & Highway 126;
- Stillman (Riggs) Road & Highway 126;
- Highway 126 & Wiley Road;
- Millican Road & Highway 126;
- Tom McCall Road & Highway 126;
- Highway 26 & Highway 126;
- Parrish Lane & Wiley Road; and
- Parrish Lane & Site Access.

Project Phasing and Land Use Assumptions

The proposed project was assumed to be completed in nine phases with completion of the final phase by the year 2018.

Site Access

The site would be accessed off Parrish Lane, as shown in Figure 2. There will also be an emergency office located off Wiley Road.

Figure 1 – Site Location

Figure 2 – Site Plan

AREA CONDITIONS

The characteristics of the surrounding street network, existing uses, and current zoning are presented in this section. Transportation Impact Analysis Policy requires that nearby development that has been approved by the County but is not currently constructed and occupied, be considered in a traffic operations analysis. This approved area development is also presented in this section. Finally, relevant policies and plans for future street improvements in the vicinity of the proposed project are discussed.

EXISTING LAND USES

The site does not have any structures located on it.

EXISTING ZONING

The 580 acre site is currently zoned EFU- 3: Exclusive Farm Use (Powell Butte Area). The proposed zoning would include a Destination Resort Overlay zone.

EXISTING STREET NETWORK

This report analyzes traffic impacts on Powell Butte Highway, Alfalfa Road, Shumway Road, Bussett Road, Riggs Road, Highway 126, Veterans Way, Reif Road, Minson Road, Parrish Lane, Stillman (Riggs) Road, Wiley Road, Millican Road, Tom McCall and Highway 26. See Table 1 for existing street characteristics. Existing lane configurations and intersection controls at the study intersections are illustrated in Figure 3.

Figure 3 – Lane Configuration and Intersection Controls

TABLE 1 – STREET CHARACTERISTICS

STREET	CLASS	LANES	POSTED SPEED (MPH)	CURBS	SIDE-WALKS	BIKE LANE	ON STREET PARKING
Powell Butte Highway	Minor Arterial	2/3	45/55	No	No	No	No
Alfalfa Road	Major Collector	2	Not Posted	No	No	No	No
Shumway Road	Major Collector	2	Not Posted	No	No	No	No
Bussett Road	County Road	2	Not Posted	No	No	No	No
Riggs Road	Major Collector	2	Not Posted	No	No	No	No
Highway 126	State Highway	2/3	55/45	No	No	No	No
Veterans Way	Minor Arterial	2	45	No	No	No	No
Reif Road	Major Collector	2	Not Posted	No	No	No	No
Minson Road	Minor Collector	2	Not Posted	No	No	No	No
Parrish Lane	County Road	2	Not Posted	No	No	No	No
Stillman Road	Major Collector	2	Not Posted	No	No	No	No
Wiley Road	County Road	2	Not Posted	No	No	No	No
Millican Road	Major Collector	2	Not Posted	No	No	No	No
Tom McCall Road	Major Collector	2	45	No	No	No	No
Highway 26	State Highway	4	45	Partial	Partial	No	Partial

EXISTING TRAFFIC FLOW AND CONDITIONS

Traffic counts were conducted at the study intersections in 15 minute intervals between 4:00 p.m. and 6:00 p.m. As per correspondence with County staff and ODOT staff, there are two time periods to be analyzed for this study: the weekday p.m. peak hour and the Saturday peak hour. The weekday p.m. peak hour flow is defined as the highest one-hour of traffic flow between 4:00 p.m. and 6:00 p.m. The Saturday peak hour flow is defined as the highest one-hour of traffic flow between 12:00 p.m. and 4:00 p.m.

PM Peak Hour - The p.m. peak hour existing traffic flows were conducted over the last twelve months by Matchless Data, Inc. and by Quality Counts. The intersection count summaries can be found in Appendix A. Since the counts were conducted over the last twelve month during different months, the counts were factored up and balanced (as appropriate) to create a June 2007 existing traffic flow. The calculations can be found in Appendix A. The year 2007 p.m. peak hour traffic flow is shown in Figure 4. The traffic flow shown in Figure 4 does not include trips expected to be generated by approved projects in the area or any adjustment for peak month flows.

Saturday Peak Hour - The Saturday peak hour existing traffic flows were conducted in June 2007. The Saturday peak hour traffic flow is shown in Figure 5. The traffic flow shown in Figure 5 also does not include trips expected to be generated by approved projects in the area or any adjustment for peak month flows.

IN-PROCESS DEVELOPMENT

The study considered a number of other development projects which are constructed but not fully occupied, currently under construction, approved, or planned. A list of approved and pending developments was compiled. Considering the large size of some of the approved and pending developments, two in-process development scenarios were created: approved developments only and all pending developments (which includes all approved development). For each year and each time-period there is a scenario with approved development only and a scenario with pending development (which includes all approved development). Trip generation data and traffic assignments for each project can be found in Appendix B.

Approved Development – Developments shown in Table 2 were identified by Crook County as approved developments. Traffic forecast to be generated by each development was added to the approved area development only scenarios. In order to obtain a conservative (high) forecast of traffic conditions all of the trips forecast from the approved development were added at each intersection. The p.m. peak hour trips forecast to be generated by the approved development is illustrated in Figure 6.

TABLE 2 – APPROVED DEVELOPMENT ONLY

No.	Name of Development	Total PM Peak Hour Forecast	Percent Developed	Remaining Trips*
1	Iron Horse	2,290	0	2,290
2	Anglers Canyon	1480	0	1,480
3	Pronghorn	305	0	305
4	Remington Ranch	410	0	410
5	Brasada Ranch	450	0	450
TOTAL		**4,935**		**4,935**

Notes: *The remaining trips have been added to the p.m. peak hour traffic flows.

Figure 4 – Year 2007 PM Peak Hour Traffic Flow

Figure 5 – Year 2007 Saturday Peak Hour Traffic Flow

Figure 6 – PM Peak Hour Trips from Approved Developments only

Data collected in Central Oregon on trip generation rates of destination resorts, has shown that the resorts tend to generate more trip on Saturdays than during the p.m. peak hour. The developments considered in this report did not include a Saturday peak hour analysis scenario therefore the trips forecast to be generated by the p.m. peak hour were factored to forecast trip generation on Saturday afternoons. Calculations can be found in Appendix B. The Saturday peak hour trips forecast to be generated by the approved development is illustrated in Figure 7.

Pending Development – Developments shown in Table 3 were identified by Crook County as pending developments, some have been approved, as shown above, and others have not been approved but are likely to be approved before the proposed Seven Peaks Resort is fully constructed. In order to obtain a conservative (high) forecast of traffic conditions all of the trips forecast from the approved development were added at each intersection. The trips forecast to be generated by the pending development (which includes all of the approved development) is illustrated in Figure 8.

As noted above, a factor was applied to the p.m. peak hour trip generation of the pending projects to account for Saturday afternoon trip generation. Calculations can be found in Appendix B. The Saturday peak hour trips forecast to be generated by the approved development is illustrated in Figure 9.

TABLE 3 – PENDING & APPROVED DEVELOPMENT

NO.	NAME OF DEVELOPMENT	TOTAL PM PEAK HOUR FORECAST	PERCENT DEVELOPED	REMAINING TRIPS*
1	Iron Horse	2,290	0	2,290
2	Anglers Canyon	1480	0	1480
3	Rivergate Resort	175	0	175
4	Pronghorn	305	0	305
5	Hidden Canyon	1215	0	1215
6	Remington Ranch	410	0	410
7	Brasada Ranch	450	0	450
TOTAL		**6,325**		**6,325**

Notes: *The remaining trips have been added to the p.m. peak hour traffic flows.

Figure 7 – Saturday Peak Hour Trips from Approved Developments Only

Figure 8 – PM Peak Hour Trips from Pending Developments

Figure 9 – Saturday Peak Hour Trips from Pending Developments

Committed or Planned Street Improvements

The Crook County Transportation System Plan (TSP) defines the long term (20-year) transportation network. The Capital Improvement Plan (CIP) lists the projects planned and funded for the next five years. A list of planned and funded near-term transportation improvements was requested from Crook County. Since no response was received, this study assumed the existing transportation network for all analysis years.

Local and State Programs, Policies, and Regulations

There are adopted Transportation Plans and policies that regulate transportation facilities in Crook County and that apply to the portions of the transportation system evaluated in this study: Crook County Transportation System Plan, the Oregon Highway Plan, and ODOT Development Review Guidelines.

The Crook County Transportation System Plan (TSP) - is the long range planning document that sets out the future roadway network and standards for new streets and for retrofitting existing streets. It is required that new local streets, when constructed, must include sidewalks and new major collector and major/minor arterials must include sidewalks and bike lanes. The City may require right-of-way dedication to make necessary improvements. Also included in the Crook County TSP are the requirements for Transportation Impact Analysis studies (section 7.1.7). This section of the TSP sets the criteria used to review traffic impact studies (see Appendix C) and defines the minimum requirements for a traffic study for a new development or a zone change and the Level of Service Policy.

The ODOT Highway Plan - sets the acceptable mobility standards for all state highways and streets. When the mobility standard is not met, ODOT typically requests that the developer provide mitigation that would improve traffic conditions to what they would be without the project. The Crook County has the authority in land use decisions such as building approvals and in this type of land use action ODOT's role is that of a commenting agency. ODOT has authority over access to its state highway system. When it comes to a question of access to the state highway, ODOT has the final decision authority.

The ODOT Development Review Guidelines - set the criteria used to review traffic impact studies and defines the minimum requirements for a traffic study for a new development or a zone change. The guidelines can be found in Appendix D.

TRAFFIC FORECAST

The analysis scenarios were selected in consultation with County staff and ODOT staff, modified to eliminate analysis scenarios that would not contribute to the understanding of traffic operations. As such, the analysis time periods were limited to the peak of the roadway and the peak of the resort. An a.m. peak hour analysis was not conducted since recent counts have shown that a.m. peak hour on Highway 126 to be slightly lower than the commuter peak; plus, the trip generation for destination resorts is about 15 percent lower during the a.m. peak than the p.m. peak hour. Likewise, while the resort peaks on Saturday, the traffic flow on the highway system in this area is significantly lower than during the commuter peak. For this reason, only the entry point to the transportation system were considered on Saturday (these are the locations were the impact of the project would be greatest).

Since the proposed project is projected to be built in multiple phases, County and ODOT staff suggested an analysis for each phase plus a 20-year forecast. Since a multi-phased project would require a significant number of scenarios to be analyzed, this process was simplified. The analysis was limited to three horizon years: current conditions, the year of project build-out and a 20-year forecast for the Destination Resort Overlay Zone. The following scenarios were analyzed:

- Current year traffic conditions with in-process development (Year 2008 without Project);
- Current year traffic conditions with in-process development and the proposed project (Year 2008 with project);
- Traffic conditions after the completion of the project without the proposed project (Year 2018 without Project);
- Traffic conditions after completion of the project with the proposed project Year 2018 with Project);
- Traffic conditions in 20-year horizon under existing zoning (Year 2028 without Project – includes build-out of the existing zoning); and,
- Traffic conditions in 20-year horizon with proposed destination resort (Year 2028 with Project).

Each horizon year includes two in-process development scenarios: with approved development only and with pending and approved development; and an appropriate growth factor. The section concludes with a table showing the percentage increase in traffic at the study intersections due to the proposed development.

TRAFFIC FLOW FORECAST WITHOUT PROJECT

Traffic flow was forecast for the study-year horizons without the addition of traffic from the proposed development. The purpose of the no-project scenarios is to allow one to compare the operational characteristics between a with-project and a no-project scenario so that the relative impacts of the proposed project may be understood. Calculations for the p.m. peak hour and the Saturday hour traffic volumes can be found in Appendix E.

PM Peak Hour – As stated above, the p.m. peak hour is the highest one-hour of traffic flow between the hours of 4 p.m. and 6 p.m. on the average weekday. Traffic is forecast for each year for the two in-process development scenarios are discussed below.

Year 2008 Flow without Project Forecast with Approved Development - Year 2008 traffic flow without the project, as illustrated in Figure 10, was forecast by factoring up the June 2007 volumes by 2.4 percent annual growth rate and then applying the peak month factor of 4.4 percent for Highway 126 and adding the p.m. peak hour trips forecast to be generated by the approved development.

The growth rate for Highway 126 was calculated using traffic volumes published by ODOT for the year 2005 and the year 2025. These two years were used because 2026 forecast volumes are not yet published. Growth rate calculations can be found in Appendix F.

The peak month or seasonal adjustment factor of 4.4 percent was calculated using the Trend Summary data published by ODOT for ATR 07-001, located to the east of Prineville on Highway 26. Since all of the counted volumes were adjusted to June, the seasonal adjustment from June to July was used. Calculations for determining the seasonal adjustment factor can also be found in Appendix F.

Year 2008 Flow without Project Forecast with Pending Development - Year 2008 traffic flow without the project, as illustrated in Figure 11, was forecast by factoring up the June 2007 volumes by 2.4 percent and then applying the peak month factor of 4.4 percent for Highway 126 and adding the p.m. peak hour trips forecast to be generated by the pending development.

Year 2018 Flow without Project Forecast with Approved Development- Year 2018 traffic flow without the project, as illustrated in Figure 12, was forecast by factoring the June 2007 volumes up by 2.4 percent per year (for 11 years, 29.8 percent) and then applying the seasonal adjustment

Figure 10 – PM Peak Hour Traffic (with Approved Development) – Year 2008 without Project

Figure 11 – PM Peak Hour Traffic (with Pending Development) – Year 2008 without Project

Figure 12 – PM Peak Hour Traffic (with Approved Development) – Year 2018 without Project

factor, 4.4 percent and adding the p.m. peak hour trips forecast to be generated by the approved development.

Year 2018 Flow without Project Forecast with Pending Development - Year 2018 traffic flow without the project, as illustrated in Figure 13, was forecast by factoring the June 2007 volumes up by 2.4 percent per year (for 11 years, 29.8 percent) and then applying the seasonal adjustment factor, 4.4 percent and adding the p.m. peak hour trips forecast to be generated by the pending development.

Year 2028 Flow without Project Forecast with Approved Development - Year 2028 traffic flow without the project, as illustrated in Figure 14, was forecast by factoring the June 2007 volumes up by 2.4 percent per year (for 21 years, 64.5 percent) and then applying the seasonal adjustment factor, 4.4 percent and adding the p.m. peak hour trips forecast to be generated by the approved development. The Crook County TSP assumed that the parcel for the proposed development was zoned EFU-3 therefore it was assumed the that 2028 forecast traffic volumes include trips expected to be generated by build-out of the parcel.

Year 2028 Flow without Project Forecast with Pending Development - Year 2028 traffic flow without the project, as illustrated in Figure 15, was forecast by factoring the June 2007 volumes up by 2.4 percent per year (for 21 years, 64.5 percent) and then applying the seasonal adjustment factor, 4.4 percent and adding the p.m. peak hour trips forecast to be generated by the pending development. The Crook County TSP assumed that the parcel for the proposed development was zoned EFU-3 therefore it was assumed the that 2028 forecast traffic volumes include trips expected to be generated by build-out of the parcel.

Saturday Peak Hour – The Saturday peak hour occurs sometime between the hours of 12 p.m. and 4 p.m. Traffic forecast for each year for the two in-process development scenarios are discussed below

Year 2008 Flow without Project Forecast with Approved Development - Year 2008 traffic flow without the project, as illustrated in Figure 16, was forecast by factoring up the June 2007 volumes by 2.4 percent and then applying the peak month factor of 4.4 percent for Highway 126 and adding the Saturday peak hour trips forecast to be generated by the approved development.

Year 2008 Flow without Project Forecast with Pending Development - Year 2008 traffic flow without the project, as illustrated in Figure 17, was forecast by factoring up the June 2007 volumes by 2.4 percent and then applying the peak month factor of 4.4 percent for Highway 126 and

Figure 13 – PM Peak Hour Traffic (with Pending Development) – Year 2018 without Project

Figure 14 – PM Peak Hour Traffic (with Approved Development) – Year 2028 without Project

Figure 15 – PM Peak Hour Traffic (with Pending Development) – Year 2028 without Project

Figure 16 – Saturday Peak Hour Traffic (with Approved Development) – Year 2008 without Project

Figure 17 – Saturday Peak Hour Traffic (with Pending Development) – Year 2008 without Project

adding the Saturday peak hour trips forecast to be generated by the pending development.

Year 2018 Flow without Project Forecast with Approved Development- Year 2018 traffic flow without the project, as illustrated in Figure 18, was forecast by factoring the June 2007 volumes up by 2.4 percent per year (for 11 years, 29.8 percent) and then applying the seasonal adjustment factor, 4.4 percent and adding the Saturday peak hour trips forecast to be generated by the approved development.

Year 2018 Flow without Project Forecast with Pending Development - Year 2018 traffic flow without the project, as illustrated in Figure 19, was forecast by factoring the June 2007 volumes up by 2.4 percent per year (for 11 years, 29.8 percent) and then applying the seasonal adjustment factor, 4.4 percent and adding the Saturday peak hour trips forecast to be generated by the pending development.

Year 2028 Flow without Project Forecast with Approved Development - Year 2028 traffic flow without the project, as illustrated in Figure 20, was forecast by factoring the June 2007 volumes up by 2.4 percent per year (for 21 years, 64.5 percent) and then applying the seasonal adjustment factor, 4.4 percent and adding the Saturday peak hour trips forecast to be generated by the approved development. The Crook County TSP assumed that the parcel for the proposed development was zoned EFU-3 therefore it was assumed the that 2028 forecast traffic volumes include trips expected to be generated by build-out of the parcel.

Year 2028 Flow without Project Forecast with Pending Development - Year 2028 traffic flow without the project, as illustrated in Figure 21, was forecast by factoring the June 2007 volumes up by 2.4 percent per year (for 21 years, 64.5 percent) and then applying the seasonal adjustment factor, 4.4 percent and adding the p.m. peak hour trips forecast to be generated by the pending development. The Crook County TSP assumed that the parcel for the proposed development was zoned EFU-3 therefore it was assumed the that 2028 forecast traffic volumes include trips expected to be generated by build-out of the parcel.

SITE GENERATED TRAFFIC

Daily, p.m. peak hour and Saturday peak hour trips generated by the proposed project were forecast. The forecast considered pass-by trips and modal split. The p.m. peak hour and the Saturday peak hour trips from the proposed project were then distributed and assigned to the study area network. Details are presented below.

Figure 18 – Saturday Peak Hour Traffic (with Approved Development) – Year 2018 without Project

Figure 19 – Saturday Peak Hour Traffic (with Pending Development) – Year 2018 without Project

Figure 20 – Saturday Peak Hour Traffic (with Approved Development) – Year 2028 without Project

Figure 21 – Saturday Peak Hour Traffic (with Pending Development) – Year 2028 without Project

Trip Generation Proposed Development - The proposed Seven Peaks resort would include up to 735 total units. Of the 735 units, 490 would be single family residential units and 235 would be rental units. The development would also include a golf course, clubhouse with restaurant, conference center, pool facilities and a convenience store with gas pumps. All of these amenities are commonly found at destination resorts in Central Oregon. Future trips generated by the project were forecast using trip generation rates calculated by Kittelson and Associates, Inc. for Resorts in Central Oregon (memo to ODOT can be found in Appendix G).

Future trips forecast to be generated on Saturday were calculated using three different methodologies (Appendix G). The result was that the Saturday peak hour trip rate was about 1.38 percent higher than the p.m. peak hour trip rate. The Saturday peak hour trip generation rate was 0.44 (0.32 * 1.38 = 0.44). The proposed development was forecast to generate 235 p.m. peak hour trips, 325 Saturday peak hour trips and 2,352 daily trips, as shown in Table 4.

TABLE 4 – TRIP GENERATION FORECAST PROPOSED DEVELOPMENT

PERIOD	TRIP RATE	UNITS	IN/OUT SPLIT	TRIP END GENERATION IN	OUT	TOTAL
PM Peak Hour	0.32	735	50/50	117	118	235
Saturday Peak Hour	0.44	735	50/50	162	163	325
Daily	3.2	735	50/50	1,176	1,176	2,352

Notes: *Source: Trip Generation for Central Oregon Resorts, Memo to ODOT (Kittelson and Associates, Inc.; September 12, 2006).

Trip Distribution and Assignment - PM peak hour trips generated by the proposed project were distributed and assigned to the roadway system as shown in Figure 22. The Saturday peak hour trips forecast to be generated by the proposed development were also distributed and assigned to the roadway system, as shown in Figure 23. Distribution percentages are derived from turning movements documented in traffic counts performed for this report combined with a general knowledge of traffic distribution patterns in Crook County and information from previously approved studies. The traffic operations calculations presented within this report are not highly sensitive to distribution assumptions, given the relatively small percentage increase in total intersection traffic at higher-order street intersections.

Pass-by Trips - Very few destination resort trips are pass-by trips; thus, no reduction in trip generation was made to account for pass-by trips.

Modal Split - No reduction in vehicle trips was made to account for a potential shift away from the automobile. ITE trip rates are based on observed vehicle trip patterns at each land use and thereby account for a basic amount of non-auto travel.

Figure 22 – PM Peak Hour Trip Distribution & Assignment

Figure 23 – Saturday Peak Hour Trip Distribution & Assignment

Trip Generation Potential with Existing Zoning

The site for the proposed resort development is zoned EFU - 3 as shown in the Crook County GIS website (last visited June 20, 2007). As per the Transportation Impact Analysis Requirements, traffic analysis for a zone change requires that the relative difference between the potential trip generation under the existing zoning and the forecast trip generation under the proposed zoning. The following analysis presents a worst-case build out scenario which assumes the maximum development allowed under EFU- 3 zoning. The maximum density allowed under EFU-3 zoning is outlined in the Crook County Code, Chapter 18.24 (Appendix H).

Worst-case Trip Generation scenario - a worst-case build-out of the 580 acre site under EFU-3 zoning would allow for up to three 160-acre farm units. Each farm unit is allowed to have a primary residence and a second dwelling unit for a relative of the farm owner or hired employee. This worst-case build-out would result in a total of six single family dwelling units.

Trips were forecast for the existing zoning using a reasonable build-out scenario, six single family residential units. Trip generation rates found in the 7th Edition of *Trip Generation* (ITE, 2003) land use code 210, Single Family Residential, was used to forecast the trip generation. As shown in Table 5, the forecast trip generation would be 6 p.m. peak hour trips and 58 daily trips.

Table 5 – Trip Generation Forecast (IL Zoning – Reasonable Scenario)

ITE Land Use*	Trip Ends Rate (trips per student)		In/Out Split (percent)	Units	PM Peak Hour Trip Ends			Daily
	Daily	PM Peak Hour			In	Out	Total	
210	1.01	6.97	63/37	6	4	2	6	58

Notes: *Source: Trip Generation (ITE, 7th Edition, 2003), land use code 110, light industrial.

Incremental Change in Trip Generation - The change in zoning of the 580 acre site from EFU – 3 to EFU – 3 with a Destination Resort Overlay would result in a net increase in p.m. peak hour trips and daily trips. There would be a net increase of 229 p.m. peak hour trips and 2,296 daily trips with the current site plan application, as shown in Table 6. Since the number of trips expected to be generated by the existing zoning is relatively small, the 20-year forecast with project scenarios assumed entire trip generation of the project rather than the incremental difference which is typically used in 20-year forecast analysis scenarios. This provides a more conservative (high) estimate of future traffic flows.

TABLE 6 – INCREMENTAL CHANGE IN TRIP GENERATION

ZONING	PM PEAK HOUR TRIPS	DAILY TRIPS
Existing EFU-3 Zoning	6	58
Proposed Overlay Zone	235	2,352
INCREMENTAL CHANGE	**229**	**2,296**

TRAFFIC FLOW FORECAST WITH PROJECT

Peak hour traffic flow generated by the proposed project was added to the without project scenarios as discussed below.

PM Peak Hour - Traffic forecast for each year with the trips generated by the proposed development for the two in-process development scenarios are discussed below.

Year 2008 Flow with Project Forecast with Approved Development - Year 2008 flow with project forecast, as illustrated in Figure 24, was derived by adding the project trips to the year 2008 without project forecast flow.

Year 2008 Flow with Project Forecast with Pending Development - Year 2008 flow with project forecast, as illustrated in Figure 25, was derived by adding the project trips to the year 2008 without project forecast flow.

Year 2018 Flow with Project Forecast with Approved Development - The year 2018 flow with project forecast, as illustrated in Figure 26 was derived by adding the project trips to the year 2018 without project forecast flow.

Year 2018 Flow with Project Forecast with Pending Development - The year 2018 flow with project forecast, as illustrated in Figure 27 was derived by adding the project trips to the year 2018 without project forecast flow

Year 2028 Flow with Project Forecast with Approved Development - The year 2028 flow with project forecast, as illustrated in Figure 28 was derived by adding the project trips to the year 2028 without project forecast flow.

Year 2028 Flow with Project Forecast with Approved Development - The year 2028 flow with project forecast, as illustrated in Figure 29 was derived by adding the project trips to the year 2028 without project forecast flow.

Saturday Peak Hour - Traffic forecast for each year with the trips from the proposed development for the two in-process development scenarios are discussed below.

Year 2008 Flow with Project Forecast with Approved Development - Year 2008 flow with project forecast, as illustrated in Figure 30, was derived by adding the project trips to the year 2008 without project forecast flow.

Figure 24 – PM Peak Hour Traffic (with Approved Development) – Year 2008 without Project

Figure 25 – PM Peak Hour Traffic (with Pending Development) – Year 2008 with Project

Figure 26 – PM Peak Hour Traffic (with Approved Development) – Year 2018 with Project

Figure 27 – PM Peak Hour Traffic (with Pending Development) – Year 2018 with Project

Figure 28 – PM Peak Hour Traffic (with Approved Development) – Year 2028 with Project

Figure 29 – PM Peak Hour Traffic (with Pending Development) – Year 2028 with Project

Figure 30 – Saturday Peak Hour Traffic (with Approved Development) – Year 2008 with Project

Year 2008 Flow with Project Forecast with Pending Development – Year 2008 flow with project forecast, as illustrated in Figure 31, was derived by adding the project trips to the year 2008 without project forecast flow.

Year 2018 Flow with Project Forecast with Approved Development - The year 2018 flow with project forecast, as illustrated in Figure 32 was derived by adding the project trips to the year 2018 without project forecast flow

Year 2018 Flow with Project Forecast with Pending Development - The year 2018 flow with project forecast, as illustrated in Figure 33 was derived by adding the project trips to the year 2018 without project forecast flow.

Year 2028 Flow with Project Forecast with Approved Development - The year 2028 flow with project forecast, as illustrated in Figure 34 was derived by adding the project trips to the year 2028 without project forecast flow.

Year 2028 Flow with Project Forecast with Approved Development - The year 2028 flow with project forecast, as illustrated in Figure 35 was derived by adding the project trips to the year 2028 without project forecast flow.

SITE TRAFFIC CONTRIBUTION

After built and occupied, the proposed project would result in an overall increase in the number of vehicles traveling in the area. The impact at each of the study area intersections for the p.m. peak hour traffic contribution (with approved development only) is shown in Table 7 expressed as a percentage of total traffic. The impact at each of the study area intersections for the p.m. peak hour traffic contribution (with pending and approved development) is shown in Table 8 expressed as a percentage of total traffic. The impact at each of the study area intersections for the Saturday peak hour traffic contribution (with approved development only) is shown in Table 9 expressed as a percentage of total traffic. The impact at each of the study area intersections for the Saturday peak hour traffic contribution (with pending and approved development) is shown in Table 10 expressed as a percentage of total traffic.

Figure 31 – Saturday Peak Hour Traffic (with Pending Development) – Year 2008 with Project

Figure 32 – Saturday Peak Hour Traffic (with Approved Development) – Year 2018 with Project

Figure 33 – Saturday Peak Hour Traffic (with Pending Development) – Year 2018 with Project

Figure 34 – Saturday Peak Hour Traffic (with Approved Development) – Year 2028 with Project

Figure 35 – Saturday Peak Hour Traffic (with Pending Development) – Year 2028 with Project

TABLE 7 – SITE TRAFFIC CONTRIBUTION PM PEAK HOUR (WITH APPROVED ONLY)

INTERSECTION	PM PEAK HOUR TRAFFIC								
	YEAR 2008			YEAR 2018			YEAR 2028		
	PROJECT TOTAL (VPH)*	INTERSECTION TOTAL (VPH)*	PERCENT OF TOTAL	PROJECT TOTAL (VPH)*	INTERSECTION TOTAL (VPH)*	PERCENT OF TOTAL	PROJECT TOTAL (VPH)*	INTERSECTION TOTAL (VPH)*	PERCENT OF TOTAL
Powell Butte Highway & Alfalfa Road	82	1,265	6	82	1,384	6	82	1,535	5
Powell Butte Highway & Riggs Road	82	1,100	7	82	1,222	7	82	1,380	6
Powell Butte Highway & Highway 126	164	2,261	7	164	2,593	6	164	3,012	5
Veterans Way & Highway 126	82	1,750	5	82	1,999	4	82	2,315	4
Reif Road & Highway 126	165	1,884	9	165	2,192	8	165	2,588	6
Minson Road & Highway 126	165	1,764	9	165	2,076	8	165	2,439	7
Parrish Lane & Highway 126	165	1,792	9	165	2,167	8	165	2,438	7
Stillman (Riggs) Road & Highway 126	0	1,661	0	0	1,955	0	0	2,329	0
Highway 126 & Wiley Road	70	1,730	4	70	2,026	3	70	2,398	3
Millican Road & Highway 126	70	1,806	4	70	2,123	3	70	2,520	3
Tom McCall Road & Hwy126	70	1,895	4	70	2,234	3	70	2,665	3
Hwy 26 & Hwy 126 - SB	35	1,260	3	35	1,482	2	35	1,761	2
Hwy 26 & Hwy 126 - NB	35	1,000	4	35	1,210	3	35	1,476	2
Parrish Lane & Wiley Road	235	256	92	235	256	92	235	270	87
Parrish Lane & Site Access	235	243	97	235	243	97	235	248	95

Notes: *Total traffic includes proposed project traffic.

TABLE 8 – SITE TRAFFIC CONTRIBUTION PM PEAK HOUR (WITH ALL PENDING)

INTERSECTION	PM PEAK HOUR TRAFFIC								
	YEAR 2008			YEAR 2018			YEAR 2028		
	PROJECT TOTAL (VPH)*	INTERSECTION TOTAL (VPH)*	PERCENT OF TOTAL	PROJECT TOTAL (VPH)*	INTERSECTION TOTAL (VPH)*	PERCENT OF TOTAL	PROJECT TOTAL (VPH)*	INTERSECTION TOTAL (VPH)*	PERCENT OF TOTAL
Powell Butte Highway & Alfalfa Road	82	1,667	5	82	1,786	5	82	1,937	4
Powell Butte Highway & Riggs Road	82	1,616	5	82	1,738	5	82	1,896	4
Powell Butte Highway & Highway 126	164	2,722	6	164	2,857	6	164	3,473	5
Veterans Way & Highway 126	82	2,220	4	82	2,469	3	82	2,785	2
Reif Road & Highway 126	165	1,929	9	165	2,238	7	165	2,633	6
Minson Road & Highway 126	165	1,837	9	165	2,121	8	165	2,484	7
Parrish Lane & Highway 126	165	1,837	9	165	2,122	8	165	2,483	7
Stillman (Riggs) Road & Highway 126	0	1,706	0	0	2,000	0	0	1,237	0
Highway 126 & Wiley Road	70	1,775	4	70	2,071	3	70	2,443	3
Millican Road & Highway 126	70	2,216	3	70	2,533	3	70	2,930	2
Tom McCall Road & Hwy 126	70	2,305	3	70	2,644	3	70	3,075	2
Hwy 26 & Hwy 126 - SB	35	1,336	3	35	1,558	2	35	1,837	2
Hwy 26 & Hwy 126 - NB	35	1,198	3	35	1,408	2	35	1,674	2
Parrish Lane & Wiley Road	235	256	92	235	260	90	235	270	87
Parrish Lane & Site Access	235	243	97	235	245	96	235	248	95

Notes: *Total traffic includes proposed project traffic.

TABLE 9 – SITE TRAFFIC CONTRIBUTION SAT. PEAK HOUR (WITH APPROVED ONLY)

INTERSECTION	SATURDAY PEAK HOUR TRAFFIC								
	YEAR 2008			YEAR 2018			YEAR 2028		
	PROJECT TOTAL (VPH)*	INTERSECTION TOTAL (VPH)*	PERCENT OF TOTAL	PROJECT TOTAL (VPH)*	INTERSECTION TOTAL (VPH)*	PERCENT OF TOTAL	PROJECT TOTAL (VPH)*	INTERSECTION TOTAL (VPH)*	PERCENT OF TOTAL
Parrish Lane & Highway 126	227	1,670	14	227	1,851	12	227	2,078	11
Highway 126 & Wiley Road	98	1,524	6	98	1,698	6	98	1,922	5
Parrish Lane & Wiley Road	325	354	92	325	364	89	325	371	88
Parrish Lane & Site Access	325	325	100	325	325	100	325	325	100

Notes: *Total traffic includes proposed project traffic.

TABLE 10 – SITE TRAFFIC CONTRIBUTION SAT. PEAK HOUR (WITH ALL PENDING)

INTERSECTION	SATURDAY PEAK HOUR TRAFFIC								
	YEAR 2008			YEAR 2018			YEAR 2028		
	PROJECT TOTAL (VPH)*	INTERSECTION TOTAL (VPH)*	PERCENT OF TOTAL	PROJECT TOTAL (VPH)*	INTERSECTION TOTAL (VPH)*	PERCENT OF TOTAL	PROJECT TOTAL (VPH)*	INTERSECTION TOTAL (VPH)*	PERCENT OF TOTAL
Parrish Lane & Highway 126	227	1,732	14	227	1,913	12	227	2,140	11
Highway 126 & Wiley Road	98	1,586	6	98	1,760	6	98	1,984	5
Parrish Lane & Wiley Road	325	354	92	325	364	89	325	371	88
Parrish Lane & Site Access	325	325	100	325	325	100	325	325	100

Notes: *Total traffic includes proposed project traffic.

TRAFFIC ANALYSIS

This section of the report presents the intersection operations analysis and the findings from other analysis conducted for the study. The operations analysis is essentially a means of assessing the quality of traffic flow at the key study intersections and is used to determine if Crook County operations standards and ODOT mobility standards are met. Other issues are also addressed, including: the potential need for traffic signals; the need for new turn lanes; and, intersection sight distance. Finally, where needs are identified, potential mitigation actions are presented.

INTERSECTION OPERATIONS

Average vehicle delay and volume-capacity ratios were calculated at the study intersections for the peak one-hour during the p.m. peak period and the one-hour during the Saturday peak period. Existing and future scenarios without traffic from the project were analyzed and compared with scenarios where project traffic was added. Average delay and volume-capacity ratios reflect conditions for the peak peak period. A discussion of concepts and methodologies for operational standards used in this analysis is found in Appendix I. Level of service calculations are found in Appendix J.

As per section 10 b. of the Crook County Transportation Impact Analysis Requirements, the minimum acceptable level of service for signalized intersections and all-way stop intersections is LOS 'D'. The minimum acceptable level of service for two-way stop-controlled intersections is LOS 'E' of LOS 'F' with a v/c ratio of 0.95 or less for the critical movement.

As per the 1990 Oregon Highway Plan (revised 2005 and adopted 2005), Highway 126 is classified as a statewide expressway therefore ODOT mobility standards for statewide expressway highways outside an Urban Growth Boundary (UGB) would apply. The mobility standard on this type of facility is a volume-capacity ratio of less than or equal to 0.70. This volume-capacity ratio would apply at signalized intersections and uncontrolled approaches to intersections. A volume-capacity ratio of 0.80 would apply to all stop-controlled approaches to intersections.

ODOT also requests that more conservative analysis assumptions be used. To accommodate this standard request, saturation flow rates were lowered to 1,800 vehicles per hour, rather than the HCM 2000 default value of 1,900 and a peak-hour factor was introduced (which is standard by the HCM, but excluded by the

City). Because of these two different standards, two sets of results are provided at intersections that are of interest to ODOT.

A summary of the study intersections that were forecast to operate below either the Crook County operation standards or ODOT mobility standards for at least one of the scenarios presented in this report (with the approved and pending area development) is shown in Table 11.

TABLE 11 – INTERSECTION FORECAST TO NOT MEET OPERATION STANDARDS

INTERSECTION	STANDARD	SCENARIO (with all Pending Area development)	STANDARD MET? 2008	2018	2028
Powell Butte Highway and Highway 126	Both	no Project	No	No	No
		with Project	No	No	No
Tom McCall Road and Highway 126	Both	no Project	No	No	No
		with Project	No	No	No
Highway 126 and Highway 26 – SB	Both	no Project	No	No	No
		with Project	No	No	No
Millican Road and Highway 126	Both	no Project	No	No	No
		with Project	No	No	No
Highway 126 and Highway 26 – NB	Both	no Project	No	No	No
		with Project	No	No	No
Veterans Way and Highway 126	Both	no Project	No	No	No
		with Project	No	No	No
Highway 126 and Wiley Road	Both	no Project	Yes	Yes	Yes
		with Project	Yes	No	No
Powell Butte Highway and Alfalfa Road	Crook County	no Project	Yes	No	No
		with Project	Yes	No	No
Reif Road and Highway 126	Both	no Project	Yes	Yes	No
		with Project	Yes	Yes	No
Stillman Road and Highway 126	Both	no Project	Yes	Yes	No
		with Project	Yes	Yes	No

PM Peak Hour Intersection Operations - Year 2008 without Project (with Approved Development) – Thirteen of the study intersection were forecast to meet Crook County operation standards and ODOT mobility standards in the year 2008(with the approved area development only) for conditions without the proposed project, as shown in Table 12.

There are three intersections, as shown in Table 12 that would not meet the Crook County operation standards or the ODOT mobility standards in this scenario:

- Powell Butte Highway and Highway 126;
- Tom McCall Road and Highway 126; and,
- Highway 126 and Highway 26 – SB (in Prineville).

TABLE 12– PM PEAK HOUR INTERSECTION OPERATIONS - YEAR 2008 WITHOUT PROJECT (WITH APPROVED DEVELOPMENT)

INTERSECTION	MOVEMENT	LEVEL OF SERVICE	VOLUME - CAPACITY RATIO (V/C)	CROOK COUNTY OPERATION STANDARDS MET?	ODOT MOBILITY STANDARDS MET?
Powell Butte Hwy & Alfalfa Rd	SB – Left WB – Left WB – Right	A C B	<0.50 0.55 <0.50	Yes	Yes
Powell Butte Hwy & Riggs Rd	NB – Left SB – Left EB – Right WB – Approach	A A B C	<0.50 <0.50 <0.50 <0.50	Yes	Yes
Powell Butte Hwy & Hwy 126	NB – Left NB – Right SB – Approach EB – Left WB – Left	F F B A B	>1.00 >1.00 <0.50 <0.50 <0.50	No	No
Veterans Wy & Hwy 126*	NB – Approach WB – Left	E A	0.80 <0.50	Meets Redmond Standards	Yes
Reif Rd & Hwy 126	NB – Approach SB – Right EB – Left WB – Left	F D A B	<0.50 <0.50 <0.50 <0.50	Yes	Yes
Minson Rd & Hwy 126	EB – Left	A	<0.50	Yes	Yes
Parrish Ln & Hwy 126	SB – Right EB – Left	B A	<0.50 <0.50	Yes	Yes
Stillman (Riggs) Rd & Hwy 126	NB – Approach WB – Left	C A	<0.50 <0.50	Yes	Yes
Hwy 126 & Wiley Rd	SB – Left EB – Left WB – Approach	A F C	<0.50 <0.50 <0.50	Yes	Yes
Millican Rd & Hwy 126	NB – Approach SB – Approach WB – Left	D F B	<0.50 <0.50 <0.50	Yes	Yes
Tom McCall Rd & Hwy 126	NB – Approach SB – Approach EB – Left WB – Left	F F A B	0.64 >1.00 <0.50 <0.50	No	No
Hwy 26 & Hwy 126 - SB	SB – Approach	F	>1.00	No	No
Hwy 26 & Hwy 126 – NB	NB – Approach	D	<0.50	Yes	Yes
Parrish Ln & Wiley Rd	EB – Approach WB – Approach	A A	<0.50 <0.50	Yes	N/A
Parrish Ln & Site Access			Not Built		

Notes: *City of Redmond standards apply and ODOT standards within an UGB.

PM Peak Hour Intersection Operations - Year 2008 with Project (with Approved Development) – Eleven of the study intersection were forecast to meet Crook County operation standards and ODOT mobility standards in the year 2008 (with the approved area development only) for conditions with the proposed project, as shown in Table 13.

There are four intersections, as shown in Table 13 that would not meet the Crook County operation standards or the ODOT mobility standards in this scenario:

- Powell Butte Highway and Highway 126;
- Millican Road and Highway 126;
- Tom McCall Road and Highway 126; and,
- Highway 126 and Highway 26 – SB (in Prineville).

The intersection of Veterans Way and Highway 126 is in the City of Redmond. This intersection would not meet the ODOT mobility standards (volume-capacity ratio of 0.80 or better) in the year 2008 (with the approved area development only) for conditions with the proposed project, as shown in Table 13.

TABLE 13– PM PEAK HOUR INTERSECTION OPERATIONS - YEAR 2008 WITH PROJECT (WITH APPROVED DEVELOPMENT)

INTERSECTION	MOVEMENT	LEVEL OF SERVICE	VOLUME - CAPACITY RATIO (V/C)	CROOK COUNTY OPERATION STANDARDS MET?	ODOT MOBILITY STANDARDS MET?
Powell Butte Hwy & Alfalfa Rd	SB – Left WB – Left WB – Right	A D B	<0.50 0.65 <0.50	Yes	Yes
Powell Butte Hwy & Riggs Rd	NB – Left SB – Left EB – Right WB – Approach	A A B C	<0.50 <0.50 <0.50 <0.50	Yes	Yes
Powell Butte Hwy & Hwy 126	NB – Left NB – Right SB – Approach EB – Left WB – Left	F F B A B	>1.00 >1.00 <0.50 <0.50 <0.50	No	No
Veterans Wy & Hwy 126*	NB – Approach WB – Left	E B	0.85 <0.50	Would meet Redmond Standards	No
Reif Rd & Hwy 126	NB – Approach SB – Right EB – Left WB – Left	F E A B	<0.50 <0.50 <0.50 <0.50	Yes	Yes
Minson Rd & Hwy 126	EB – Left	A	<0.50	Yes	Yes
Parrish Ln & Hwy 126	SB – Right EB – Left	C A	<0.50 <0.50	Yes	Yes
Stillman (Riggs) Rd & Hwy 126	NB – Approach WB – Left	C A	<0.50 <0.50	Yes	Yes
Hwy 126 & Wiley Rd	SB – Left EB – Left WB – Approach	A F C	<0.50 0.70 <0.50	Yes	Yes
Millican Rd & Hwy 126	NB – Approach SB – Approach WB – Left	E F B	>1.00 >1.00 <0.50	No	No
Tom McCall Rd & Hwy 126	NB – Approach SB – Approach EB – Left WB – Left	F F A A	>1.00 >1.00 <0.50 <0.50	No	No
Hwy 26 & Hwy 126 - SB	SB – Approach	F	>1.00	No	No
Hwy 26 & Hwy 126 – NB	NB – Approach	D	<0.50	Yes	Yes
Parrish Ln & Wiley Rd	NB – Left SB – Left EB – Approach WB – Approach	A A A A	<0.50 <0.50 <0.50 <0.50	Yes	N/A
Parrish Ln & Site Access	EB – Approach	A	<0.50	Yes	N/A

Notes: *City of Redmond standards apply and ODOT standards within an UGB.

PM Peak Hour Intersection Operations - Year 2008 without Project (with Pending & Approved Development) – Ten of the study intersection were forecast to meet Crook County operation standards and ODOT mobility standards in the year 2008 (with the pending and approved area development) for conditions without the proposed project, as shown in Table 14.

There are five intersections, as shown in Table 14 that would not meet the Crook County operation standards or the ODOT mobility standards in this scenario:

- Powell Butte Highway and Highway 126;
- Millican Road and Highway 126;
- Tom McCall Road and Highway 126;
- Highway 126 and Highway 26 – SB (in Prineville); and,
- Highway 126 and Highway 26 – NB (in Prineville).

The intersection of Veterans Way and Highway 126 is in the City of Redmond. This intersection would not meet the ODOT mobility standards (volume-capacity ratio of 0.80 or better) in the year 2008 (with the pending and approved area development) for conditions without the proposed project, as shown in Table 14.

TABLE 14– PM PEAK HOUR INTERSECTION OPERATIONS - YEAR 2008 WITHOUT PROJECT (WITH PENDING & APPROVED DEVELOPMENT)

INTERSECTION	MOVEMENT	LEVEL OF SERVICE	VOLUME - CAPACITY RATIO (V/C)	CROOK COUNTY OPERATION STANDARDS MET?	ODOT MOBILITY STANDARDS MET?
Powell Butte Hwy & Alfalfa Rd	SB – Left WB – Left WB – Right	A E B	<0.50 0.66 <0.50	Yes	Yes
Powell Butte Hwy & Riggs Rd	NB – Left SB – Left EB – Right WB – Approach	A A B E	<0.50 <0.50 <0.50 <0.50	Yes	Yes
Powell Butte Hwy & Hwy 126	NB – Left NB – Right SB – Right EB – Left WB – Left	F E B A B	>1.00 0.89 <0.50 <0.50 <0.50	No	No
Veterans Wy & Hwy 126*	NB – Approach WB – Left	F B	>1.00 <0.50	Would not meet Redmond Standards	No
Reif Rd & Hwy 126	NB – Approach SB – Right EB – Left WB – Left	F D A B	<0.50 <0.50 <0.50 <0.50	Yes	Yes
Minson Rd & Hwy 126	EB – Left	A	<0.50	Yes	Yes
Parrish Ln & Hwy 126	SB – Right EB – Left	B A	<0.50 <0.50	Yes	Yes
Stillman (Riggs) Rd & Hwy 126	NB – Approach WB – Left	C B	<0.50 <0.50	Yes	Yes
Hwy 126 & Wiley Rd	EB – Left WB – Right	F C	<0.50 <0.50	Yes	Yes
Millican Rd & Hwy 126	NB – Approach SB – Approach WB – Left	F F B	>1.00 >1.00 <0.50	No	No
Tom McCall Rd & Hwy 126	NB – Approach SB – Approach EB – Left WB – Left	F F B B	>1.00 >1.00	No	No
Hwy 26 & Hwy 126 - SB	SB - Approach	F	>1.00	No	No
Hwy 26 & Hwy 126 – NB	NB – Approach	F	>1.00	No	No
Parrish Ln & Wiley Rd	EB – Approach WB – Approach	A A	<0.50 <0.50	Yes	N/A
Parrish Ln & Site Access			Not Built		

Notes: *City of Redmond standards apply and ODOT standards within an UGB.

PM Peak Hour Intersection Operations - Year 2008 with Project (with Pending & Approved Development) – Ten of the study intersection were forecast to meet Crook County operation standards and ODOT mobility standards in the year 2008 (with the pending and approved area development) for conditions with the proposed project, as shown in Table 15.

There are five intersections, as shown in Table 15 that would not meet the Crook County operation standards or the ODOT mobility standards in this scenario:

- Powell Butte Highway and Highway 126;
- Millican Road and Highway 126;
- Tom McCall Road and Highway 126;
- Highway 126 and Highway 26 – SB (in Prineville); and,
- Highway 126 and Highway 26 – NB (in Prineville)

The intersection of Veterans Way and Highway 126 is in the City of Redmond. This intersection would not meet the ODOT mobility standards (volume-capacity ratio of 0.80 or better) in the year 2008 (with the pending and approved area development) for conditions with the proposed project, as shown in Table 15.

Table 15– PM Peak Hour Intersection Operations - Year 2008 with Project (with Pending & Approved Development)

Intersection	Movement	Level of Service	Volume - Capacity Ratio (v/c)	Crook County Operations Standards Met?	ODOT Mobility Standards Met?
Powell Butte Hwy & Alfalfa Rd	SB – Left WB – Left WB – Right	A E B	<0.50 0.66 <0.50	Yes	Yes
Powell Butte Hwy & Riggs Rd	NB – Left SB – Left EB – Right WB – Approach	A A B F	<0.50 <0.50 <0.50 <0.50	Yes	Yes
Powell Butte Hwy & Hwy 126	NB – Left NB – Right SB – Right EB – Left WB – Left	F F B A C	>1.00 >1.00 <0.50 <0.50 0.53	No	No
Veterans Wy & Hwy 126*	NB – Approach WB – Left	F B	>1.00 <0.50	Would not meet Redmond Standards	No
Reif Rd & Hwy 126	NB – Approach SB – Right EB – Left WB – Left	F E A B	<0.50 <0.50 <0.50 <0.50	Yes	Yes
Minson Rd & Hwy 126	EB – Left	A	<0.50	Yes	Yes
Parrish Ln & Hwy 126	SB – Right EB – Left	C A	<0.50 <0.50	Yes	Yes
Stillman (Riggs) Rd & Hwy 126	NB – Approach WB – Left	C B	<0.50 <0.50	Yes	Yes
Hwy 126 & Wiley Rd	EB – Left WB – Right	F C	0.75 <0.50	Yes	Yes
Millican Rd & Hwy 126	NB – Approach SB – Approach WB – Left	F F B	>1.00 >1.00 <0.50	No	No
Tom McCall Rd & Hwy 126	NB – Approach SB – Approach EB – Left WB – Left	F F B B	>1.00 >1.00 <0.50 <0.50	No	No
Hwy 26 & Hwy 126 - SB	SB – Approach	F	>1.00	No	No
Hwy 26 & Hwy 126 – NB	NB – Approach	F	>1.00	No	No
Parrish Ln & Wiley Rd	NB – Left SB – Left EB – Approach WB – Approach	A A A A	<0.50 <0.50 <0.50 <0.50	Yes	N/A
Parrish Ln & Site Access	EB – Approach	A	<0.50	Yes	N/A

Notes: *City of Redmond standards apply and ODOT standards within an UGB.

Saturday Peak Hour Intersection Operations - Year 2008 without Project (with Approved Development) – All of the study intersection, as shown in Table 16, were forecast to meet Crook County operation standards and ODOT mobility standards in the year 2008 with the approved area development only for conditions without the proposed project.

TABLE 16– SATURDAY PEAK HOUR INTERSECTION OPERATIONS - YEAR 2008 WITHOUT PROJECT (WITH APPROVED DEVELOPMENT)

INTERSECTION	MOVEMENT	LEVEL OF SERVICE	VOLUME - CAPACITY RATIO (V/C)	CROOK COUNTY OPERATION STANDARDS MET?	ODOT MOBILITY STANDARDS MET?
Parrish Ln & Hwy 126	SB – Approach EB – Left	C A	<0.50 <0.50	Yes	Yes
Hwy 126 & Wiley Rd	SB – Left EB – Approach	A C	<0.50 <0.50	Yes	Yes
Parrish Ln & Wiley Rd	EB – Right WB – Left	A A	<0.50 <0.50	Yes	N/A
Parrish Ln & Site Access			Not Built		

Saturday Peak Hour Intersection Operations - Year 2008 with Project (with Approved Development) – All of the study intersection, as shown in Table 17, were forecast to meet Crook County operation standards and ODOT mobility standards in the year 2008 with the approved area development only for conditions with the proposed project.

TABLE 17– SATURDAY PEAK HOUR INTERSECTION OPERATIONS - YEAR 2008 WITH PROJECT (WITH APPROVED DEVELOPMENT)

INTERSECTION	MOVEMENT	LEVEL OF SERVICE	VOLUME - CAPACITY RATIO (V/C)	CROOK COUNTY OPERATIONS STANDARDS MET?	ODOT MOBILITY STANDARDS MET?
Parrish Ln & Hwy 126	SB – Approach EB – Left	C A	<0.50 <0.50	Yes	Yes
Hwy 126 & Wiley Rd	SB – Left EB – Approach	A E	<0.50 <0.50	Yes	Yes
Parrish Ln & Wiley Rd	NB – Left SB – Left EB – Right WB – Approach	A A B A	<0.50 <0.50 <0.50 <0.50	Yes	N/A
Parrish Ln & Site Access	WB – Approach	A	<0.50	Yes	N/A

Saturday Peak Hour Intersection Operations - Year 2008 without Project (with Pending Development) – All of the study intersection, as shown in Table 18, were forecast to meet Crook County operation standards and ODOT mobility standards in the year 2008 with the pending and approved area development only for conditions without the proposed project.

TABLE 18 – SATURDAY PEAK HOUR INTERSECTION OPERATIONS - YEAR 2008 WITHOUT PROJECT (WITH PENDING & APPROVED DEVELOPMENT)

INTERSECTION	MOVEMENT	LEVEL OF SERVICE	VOLUME - CAPACITY RATIO (V/C)	CROOK COUNTY OPERATION STANDARDS MET?	ODOT MOBILITY STANDARDS MET?
Parrish Ln & Hwy 126	SB – Approach EB – Left	C A	<0.50 <0.50	Yes	Yes
Hwy 126 & Wiley Rd	SB – Left EB – Approach	A C	<0.50 <0.50	Yes	Yes
Parrish Ln & Wiley Rd	EB – Right WB – Left	A A	<0.50 <0.50	Yes	N/A
Parrish Ln & Site Access			Not Built		

Saturday Peak Hour Intersection Operations - Year 2008 with Project (with Pending Development) – All of the study intersections, as shown in Table 19, were forecast to meet Crook County operation standards and ODOT mobility standards in the year 2008 with the pending and approved area development only for conditions with the proposed project.

TABLE 19 – SATURDAY PEAK HOUR INTERSECTION OPERATIONS - YEAR 2008 WITH PROJECT (WITH PENDING & APPROVED DEVELOPMENT)

INTERSECTION	MOVEMENT	LEVEL OF SERVICE	VOLUME - CAPACITY RATIO (V/C)	CROOK COUNTY OPERATIONS STANDARDS MET?	ODOT MOBILITY STANDARDS MET?
Parrish Ln & Hwy 126	SB – Approach EB – Left	C A	<0.50 <0.50	Yes	Yes
Hwy 126 & Wiley Rd	SB – Left EB – Approach	A F	<0.50 <0.50	Yes	Yes
Parrish Ln & Wiley Rd	NB – Left SB – Left EB – Right WB – Approach	A A B A	<0.50 <0.50 <0.50 <0.50	Yes	N/A
Parrish Ln & Site Access	WB –Left	A	<0.50	Yes	N/A

PM Peak Hour Intersection Operations - Year 2018 without Project (with Approved Development) – Twelve of the study intersections, as shown in Table 20, were forecast to meet Crook County operation standards and ODOT mobility standards in the year 2018 (with the approved area development only) for conditions without the proposed project.

There are three intersections, as shown in Table 20 that would not meet the Crook County operation standards or the ODOT mobility standards in this scenario:

- Powell Butte Highway and Highway 126;

- Tom McCall Road and Highway 126; and,
- Highway 126 and Highway 26 – SB (in Prineville).

The intersection of Veterans Way and Highway 126 is in the City of Redmond. This intersection would not meet the ODOT mobility standards (volume-capacity ratio of 0.80 or better) in the year 2018 (with the approved area development) for conditions without the proposed project, as shown in Table 19.

TABLE 20 – PM PEAK HOUR INTERSECTION OPERATIONS - YEAR 2018 WITHOUT PROJECT (WITH APPROVED DEVELOPMENT)

INTERSECTION	MOVEMENT	LEVEL OF SERVICE	VOLUME - CAPACITY RATIO (V/C)	CROOK COUNTY OPERATIONS STANDARDS MET?	ODOT MOBILITY STANDARDS MET?
Powell Butte Hwy & Alfalfa Rd	SB – Left WB – Left WB – Right	A E B	<0.50 0.66 <0.50	Yes	Yes
Powell Butte Hwy & Riggs Rd	NB – Left SB – Left EB – Right WB – Approach	A A B D	<0.50 <0.50 <0.50 <0.50	Yes	Yes
Powell Butte Hwy & Hwy 126	NB – Left NB – Right SB – Left EB – Left WB – Left	F F B A B	>1.00 >1.00 <0.50 <0.50 <0.50	No	No
Veterans Wy & Hwy 126*	NB – Approach WB – Left	F B	0.90 <0.50	Meets Redmond Standard	No
Reif Rd & Hwy 126	NB – Approach SB – Right EB – Left WB – Left	F E A A	0.52 <0.50 <0.50 <0.50	Yes	Yes
Minson Rd & Hwy 126	EB – Left	A	<0.50	Yes	Yes
Parrish Ln & Hwy 126	SB – Right EB – Left	C A	<0.50 <0.50	Yes	Yes
Stillman (Riggs) Rd & Hwy 126	NB – Approach WB – Left	D B	<0.50 <0.50	Yes	Yes
Hwy 126 & Wiley Rd	EB – Left WB – Right	F A	0.23 <0.50	Yes	Yes
Millican Rd & Hwy 126	NB – Approach SB – Approach WB – Left	F F B	>0.51 <0.50 <0.50	Yes	Yes
Tom McCall Rd & Hwy 126	NB – Approach SB – Approach EB – Left WB – Left	F F B B	>1.00 >1.00 <0.50 <0.50	No	No
Hwy 26 & Hwy 126 - SB	NB – Approach	F	>1.00	No	No
Hwy 26 & Hwy 126 – NB	SB – Approach	F	0.64	Yes	Yes
Parrish Ln & Wiley Rd	NB – Left EB – Approach WB – Approach	A A A	<0.50 <0.50 <0.50	Yes	N/A
Parrish Ln & Site Access			Not Built		

Notes: *City of Redmond standards apply and ODOT standards within an UGB.

PM Peak Hour Intersection Operations - Year 2018 with Project (with Approved Development) – Eleven of the study intersections, as shown in Table 21, were forecast to meet Crook County operation standards and ODOT mobility standards in the year 2018 (with the approved area development only) for conditions with the proposed project.

There are four intersections, as shown in Table 21, that would not meet the Crook County operation standards or the ODOT mobility standards in this scenario:

- Powell Butte Highway and Highway 126;
- Highway 126 and Wiley Road;
- Tom McCall Road and Highway 126; and,
- Highway 126 and Highway 26 – SB (in Prineville).

The intersection of Veterans Way and Highway 126 is in the City of Redmond. This intersection would not meet the ODOT mobility standards (volume-capacity ratio of 0.80 or better) in the year 2018 (with the approved area development only) for conditions with the proposed project, as shown in Table 21.

TABLE 21 – PM PEAK HOUR INTERSECTION OPERATIONS - YEAR 2018 WITH PROJECT (WITH APPROVED DEVELOPMENT)

INTERSECTION	MOVEMENT	LEVEL OF SERVICE	VOLUME - CAPACITY RATIO (V/C)	CROOK COUNTY OPERATION STANDARDS MET?	ODOT MOBILITY STANDARDS MET?
Powell Butte Hwy & Alfalfa Rd	SB – Left WB – Left WB – Right	B F C	<0.50 0.74 0.56	Yes	Yes
Powell Butte Hwy & Riggs Rd	NB – Left SB – Left EB – Right WB – Approach	A A B D	<0.50 <0.50 <0.50 <0.50	Yes	Yes
Powell Butte Hwy & Hwy 126	NB – Left NB – Right SB – Left EB – Left WB – Left	F F B A B	>1.00 >1.00 <0.50 <0.50 <0.50	No	No
Veterans Wy & Hwy 126*	NB – Approach WB – Left	F B	0.94 <0.50	Meets Redmond Standards	No
Reif Rd & Hwy 126	NB – Approach SB – Left EB – Left WB – Left	F F B B	0.67 <0.50 <0.50 <0.50	Yes	Yes
Minson Rd & Hwy 126	EB – Left	B	<0.50	Yes	Yes
Parrish Ln & Hwy 126	SB – Right EB – Left	C B	<0.50 <0.50	Yes	Yes
Stillman (Riggs) Rd & Hwy 126	NB – Approach WB – Left	D B	<0.50 <0.50	Yes	Yes
Hwy 126 & Wiley Rd	EB – Left WB – Right	F C	>1.00 <0.50	No	No
Millican Rd & Hwy 126	NB – Approach SB – Approach WB – Left	F F B	0.55 0.45 <0.50	Yes	Yes
Tom McCall Rd & Hwy 126	NB – Approach SB – Approach EB – Left WB – Left	F F B B	>1.00 >1.00 <0.50 <0.50	No	No
Hwy 26 & Hwy 126 - SB	NB – Approach	F	>1.00	No	No
Hwy 26 & Hwy 126 – NB	SB – Approach	F	0.67	Yes	Yes
Parrish Ln & Wiley Rd	NB – Left SB – Left EB – Approach WB – Approach	A A A A	<0.50 <0.50 <0.50 <0.50	Yes	N/A
Parrish Ln & Site Access	WB – Left	A	<0.50	Yes	N/A

Notes: *City of Redmond standards apply and ODOT standards within an UGB.

PM Peak Hour Intersection Operations - Year 2018 without Project (with Pending & Approved Development) – Nine of the study intersections, as shown in Table 22, were forecast to meet Crook County operation standards and ODOT mobility standards in the year 2018 (with the pending and approved area development) for conditions without the proposed project.

There are six intersections, as shown in Table 22 that would not meet the Crook County operation standards or the ODOT mobility standards in this scenario:

- Powell Butte Highway and Alfalfa Road;
- Powell Butte Highway and Highway 126;
- Millican Road and Highway 126;
- Tom McCall Road and Highway 126;
- Highway 126 and Highway 26 – SB (in Prineville); and,
- Highway 126 and Highway 26 – NB (in Prineville).

The intersection of Veterans Way and Highway 126 is in the City of Redmond, this intersection would not meet the ODOT mobility standards (volume-capacity ratio of 0.80 or better) in the year 2018 (with the pending and approved area development) for conditions without the proposed project, as shown in Table 22.

Table 22 – PM Peak Hour Intersection Operations - Year 2018 without Project (with Pending & Approved Development)

Intersection	Movement	Level of Service	Volume - Capacity Ratio (v/c)	Crook County Operation Standards Met?	ODOT Mobility Standards Met?
Powell Butte Hwy & Alfalfa Rd	SB – Left WB – Left WB – Right	B F C	<0.50 >1.00 <0.50	No	No
Powell Butte Hwy & Riggs Rd	NB – Left SB – Left EB – Right WB – Approach	A A B F	<0.50 <0.50 <0.50 <0.50	Yes	Yes
Powell Butte Hwy & Hwy 126	NB – Left NB – Right SB – Left EB – Left WB – Left	F F B A B	>1.00 >1.00 <0.50 <0.50 <0.50	No	No
Veterans Wy & Hwy 126*	NB – Approach WB – Left	F B	>1.00 <0.50	Would not meet Redmond Standards	No
Reif Rd & Hwy 126	NB – Approach SB – Left EB – Left WB – Left	F E A A	0.55 <0.50 <0.50 <0.50	Yes	Yes
Minson Rd & Hwy 126	EB – Left	A	<0.50	Yes	Yes
Parrish Ln & Hwy 126	SB – Right EB – Left	C A	<0.50 <0.50	Yes	Yes
Stillman (Riggs) Rd & Hwy 126	NB – Approach WB – Left	D B	<0.50 <0.50	Yes	Yes
Hwy 126 & Wiley Rd	EB – Left WB – Right	F C	<0.50 <0.50	Yes	Yes
Millican Rd & Hwy 126	NB – Approach SB – Approach WB – Left	F F B	>1.00 >1.00 <0.50	No	No
Tom McCall Rd & Hwy 126	NB – Approach SB – Approach EB – Left WB – Left	F F B B	>1.00 >1.00 <0.50 <0.50	No	No
Hwy 26 & Hwy 126 - SB	NB – Approach	F	>1.00	No	No
Hwy 26 & Hwy 126 – NB	SB – Approach	F	>1.00	No	No
Parrish Ln & Wiley Rd	NB – Left SB – Left EB – Approach WB – Approach	A A A A	<0.50 <0.50 <0.50 <0.50	Yes	N/A
Parrish Ln & SiteAccess			Not Built		

Notes: *City of Redmond standards apply and ODOT standards within an UGB.

PM Peak Hour Intersection Operations - Year 2018 with Project (with Pending & Approved Development) – Eight of the study intersections, as shown in Table 23, were forecast to meet Crook County operation standards and ODOT mobility standards in the year 2018 (with the pending and approved area development) for conditions with the proposed project.

There are six intersections, as shown in Table 23 that would not meet the Crook County operation standards or the ODOT mobility standards in this scenario:

- Powell Butte Highway and Alfalfa Road;
- Powell Butte Highway and Highway 126;
- Highway 126 and Wiley Road;
- Millican Road and Highway 126;
- Tom McCall Road and Highway 126;
- Highway 126 and Highway 26 – SB (in Prineville); and,
- Highway 126 and Highway 26 – NB (in Prineville).

The intersection of Veterans Way and Highway 126 is in the City of Redmond. This intersection would not meet the ODOT mobility standards in the year 2018 (with the pending and approved area development) for conditions with the proposed project, as shown in Table 23.

TABLE 23 – PM PEAK HOUR INTERSECTION OPERATIONS - YEAR 2018 WITH PROJECT (WITH PENDING & APPROVED DEVELOPMENT)

INTERSECTION	MOVEMENT	LEVEL OF SERVICE	VOLUME - CAPACITY RATIO (V/C)	CROOK COUNTY OPERATION STANDARDS MET?	ODOT MOBILITY STANDARDS MET?
Powell Butte Hwy & Alfalfa Rd	SB – Left WB – Left WB – Right	B F C	<0.50 >1.00 0.51	No	No
Powell Butte Hwy & Riggs Rd	NB – Left SB – Left EB – Right WB – Approach	A A C F	<0.50 <0.50 <0.50 <0.50	Yes	Yes
Powell Butte Hwy & Hwy 126	NB – Left NB – Right SB – Left EB – Left WB – Left	F F B A B	>1.00 >1.00 <0.50 <0.50 <0.50	No	No
Veterans Wy & Hwy 126*	NB – Approach WB – Left	F B	>1.00 <0.50	Would not meet Redmond Standards	No
Reif Rd & Hwy 126	NB – Approach SB – Left EB – Left WB – Left	F F B B	>0.73 <0.50 <0.50 <0.50	Yes	Yes
Minson Rd & Hwy 126	EB – Left	A	<0.50	Yes	Yes
Parrish Ln & Hwy 126	SB – Right EB – Left	C A	<0.50 <0.50	Yes	Yes
Stillman (Riggs) Rd & Hwy 126	NB – Approach WB – Left	D B	<0.50 <0.50	Yes	Yes
Hwy 126 & Wiley Rd	EB – Left WB – Right	F C	>1.00 <0.50	No	No
Millican Rd & Hwy 126	NB – Approach SB – Approach WB – Left	F F B	>1.00 >1.00 <0.50	No	No
Tom McCall Rd & Hwy 126	NB – Approach SB – Approach EB – Left WB – Left	F F B B	>1.00 >1.00 <0.50 <0.50	No	No
Hwy 26 & Hwy 126 - SB	SB – Approach	F	>1.00	No	No
Hwy 26 & Hwy 126 – NB	NB – Approach	F	>1.00	No	No
Parrish Ln & Wiley Rd	NB – Left SB – Left EB – Approach WB – Approach	A A A A	<0.50 <0.50 <0.50 <0.50	Yes	N/A
Parrish Ln & SiteAccess	EB – Approach	A	<0.50	Yes	N/A

Notes: *City of Redmond standards apply and ODOT standards within an UGB.

Saturday Peak Hour Intersection Operations - Year 2018 without Project (with Approved Development) – All of the study intersections, as shown in Table 24, were forecast to meet Crook County operation standards and ODOT mobility standards in the year 2018 with the approved area development only for conditions without the proposed project.

TABLE 24 – SATURDAY PEAK HOUR INTERSECTION OPERATIONS - YEAR 2018 WITHOUT PROJECT (WITH APPROVED DEVELOPMENT)

INTERSECTION	MOVEMENT	LEVEL OF SERVICE	VOLUME - CAPACITY RATIO (V/C)	CROOK COUNTY OPERATION STANDARDS MET?	ODOT MOBILITY STANDARDS MET?
Parrish Ln & Hwy 126	SB – Approach EB – Left	D A	<0.50 <0.50	Yes	Yes
Hwy 126 & Wiley Rd	EB – Approach	D	<0.50	Yes	Yes
Parrish Ln & Wiley Rd	EB – Left WB – Right	A A	<0.50 <0.50	Yes	N/A
Parrish Ln & Site Access			Not Built		

Saturday Peak Hour Intersection Operations (with Approved Development) - Year 2018 with Project – All of the study intersections, as shown in Table 25, were forecast to meet Crook County operation standards and ODOT mobility standards in the year 2018 with the approved area development only for conditions with the proposed project.

TABLE 25 – SATURDAY PEAK HOUR INTERSECTION OPERATIONS (WITH APPROVED DEVELOPMENT) - YEAR 2018 WITH PROJECT

INTERSECTION	MOVEMENT	LEVEL OF SERVICE	VOLUME - CAPACITY RATIO (V/C)	CROOK COUNTY OPERATION STANDARDS MET?	ODOT MOBILITY STANDARDS MET?
Parrish Ln & Hwy 126	SB – Approach EB – Left	C B	<0.50 <0.50	Yes	Yes
Hwy 126 & Wiley Rd	EB – Approach	F	0.56	Yes	Yes
Parrish Ln & Wiley Rd	SB – Left EB – Right WB – Left	A B A	<0.50 <0.50 <0.50	Yes	N/A
Parrish Ln & Site Access	EB – Left	A	<0.50	Yes	N/A

Saturday Peak Hour Intersection Operations - Year 2018 without Project (with Pending Development) – All of the study intersections, as shown in Table 26, were forecast to meet Crook County operation standards and ODOT mobility standards in the year 2018 with the pending and approved area development only for conditions without the proposed project.

TABLE 26 – SATURDAY PEAK HOUR INTERSECTION OPERATIONS - YEAR 2018 WITHOUT PROJECT (WITH PENDING DEVELOPMENT)

INTERSECTION	MOVEMENT	LEVEL OF SERVICE	VOLUME - CAPACITY RATIO (V/C)	CROOK COUNTY OPERATION STANDARDS MET?	ODOT MOBILITY STANDARDS MET?
Parrish Ln & Hwy 126	SB – Approach EB – Left	D A	<0.50 <0.50	Yes	Yes
Hwy 126 & Wiley Rd	EB – Approach	D	<0.50	Yes	Yes
Parrish Ln & Wiley Rd	EB – Right WB – Left	A A	<0.50 <0.50	Yes	N/A
Parrish Ln & Site Access			Not Built		

Saturday Peak Hour Intersection Operations - Year 2018 with Project (with Pending Development) – All of the study intersections, as shown in Table 27, were forecast to meet Crook County operation standards and ODOT mobility standards in the year 2018 with the pending and approved area development only for conditions with the proposed project.

TABLE 27 – SATURDAY PEAK HOUR INTERSECTION OPERATIONS (WITH PENDING DEVELOPMENT) - YEAR 2018 WITH PROJECT

INTERSECTION	MOVEMENT	LEVEL OF SERVICE	VOLUME - CAPACITY RATIO (V/C)	CROOK COUNTY OPERATION STANDARDS MET?	ODOT MOBILITY STANDARDS MET?
Parrish Ln & Hwy 126	SB – Approach EB – Left	D B	<0.50 <0.50	Yes	Yes
Hwy 126 & Wiley Rd	SB – Left EB – Approach	A F	<0.50 0.62	Yes	Yes
Parrish Ln & Wiley Rd	NB – Left SB – Left EB – Right WB – Approach	A A B A	<0.50 <0.50 <0.50 <0.50	Yes	N/A
Parrish Ln & Site Access	WB – Left	A	<0.50	Yes	N/A

PM Peak Hour Intersection Operations - Year 2028 without Project (with Approved Development) – Ten of the study intersections, as shown in Table 28, were forecast to meet Crook County operation standards and ODOT mobility standards in the year 2028 (with the approved area development) for conditions without the proposed project.

There are five intersections, as shown in Table 28 that would not meet the Crook County operation standards or the ODOT mobility standards in this scenario:

- Reif Road and Highway 126;
- Millican Road and Highway 126;
- Tom McCall Road and Highway 126;

- Highway 126 and Highway 26 – SB (in Prineville); and,
- Highway 126 and Highway 26 – NB (in Prineville).

The intersection of Veterans Way and Highway 126 is in the City of Redmond. This intersection would not meet the ODOT mobility standards in the year 2028 (with the approved area development) for conditions without the proposed project, as shown in Table 28.

TABLE 28 – PM PEAK HOUR INTERSECTION OPERATIONS - YEAR 2028 WITHOUT PROJECT (WITH APPROVED DEVELOPMENT)

INTERSECTION	MOVEMENT	LEVEL OF SERVICE	VOLUME - CAPACITY RATIO (V/C)	CROOK COUNTY OPERATION STANDARDS MET?	ODOT MOBILITY STANDARDS MET?
Powell Butte Hwy & Alfalfa Rd	SB – Left WB – Left WB – Right	A F B	<0.50 0.84 <0.50	Yes	Yes
Powell Butte Hwy & Riggs Rd	NB – Left SB – Left EB – Right WB – Approach	B B B D	<0.50 <0.50 <0.50 <0.50	Yes	Yes
Powell Butte Hwy & Hwy 126	NB – Left NB – Right SB – Left EB – Left WB – Left	F F B A C	>1.00 >1.00 <0.50 <0.50 0.60	Yes	Yes
Veterans Wy & Hwy 126*	NB – Approach WB – Left	F B	>1.00 <0.50	Would not meet Redmond standards	No
Reif Rd & Hwy 126	NB – Approach SB – Right EB – Left WB – Left	F F B B	>1.00 <0.50 <0.50 <0.50	No	No
Minson Rd & Hwy 126	EB – Left	B	<0.50	Yes	Yes
Parrish Ln & Hwy 126	SB – Right EB – Left	C B	<0.50 <0.50	Yes	Yes
Stillman (Riggs) Rd & Hwy 126	NB – Approach WB – Left	F B	<0.50 <0.50	Yes	Yes
Hwy 126 & Wiley Rd	EB – Left WB – Right	F F	0.54 <0.50	Yes	Yes
Millican Rd & Hwy 126	NB – Approach SB – Approach WB – Left	F F B	>1.00 >1.00 <0.50	No	No
Tom McCall Rd & Hwy 126	NB – Approach SB – Approach EB – Left WB – Left	F F B B	>1.00 >1.00 <0.50 <0.50	No	No
Hwy 26 & Hwy 126 - SB	SB – Approach	F	>1.00	No	No
Hwy 26 & Hwy 126 – NB	NB – Approach	F	>1.00	No	No
Parrish Ln & Wiley Rd	NB – Left EB – Approach WB – Approach	A A A	<0.50 <0.50 <0.50	Yes	Yes
Parrish Ln & Site Access			Not Built		

Notes: *City of Redmond standards apply and ODOT standards within an UGB.

PM Peak Hour Intersection Operations - Year 2028 with Project (with Approved Development) – Seven of the study intersections, as shown in Table 29, were forecast to meet Crook County operation standards and ODOT mobility standards in the year 2028 (with the approved area development) for conditions without the proposed project.

There are eight intersections, as shown in Table 29 that would not meet the Crook County operation standards or the ODOT mobility standards in this scenario:

- Powell Butte Highway and Alfalfa Road;
- Powell Butte Highway and Highway 126;
- Reif Road and Highway 126;
- Highway 126 and Wiley Road;
- Millican Road and Highway 126;
- Tom McCall Road and Highway 126;
- Highway 126 and Highway 26 – SB (in Prineville); and,
- Highway 126 and Highway 26 – NB (in Prineville).

The intersection of Veterans Way and Highway 126 is in the City of Redmond, this intersection would not meet the ODOT mobility standards in the year 2028 (with the approved area development) for conditions with the proposed project, as shown in Table 29.

TABLE 29 – PM PEAK HOUR INTERSECTION OPERATIONS - YEAR 2028 WITH PROJECT (WITH APPROVED DEVELOPMENT)

INTERSECTION	MOVEMENT	LEVEL OF SERVICE	VOLUME - CAPACITY RATIO (V/C)	CROOK COUNTY OPERATION STANDARDS MET?	ODOT MOBILITY STANDARDS MET?
Powell Butte Hwy & Alfalfa Rd	SB – Left WB – Left WB – Right	A F F	<0.50 0.95 >1.00	No	No
Powell Butte Hwy & Riggs Rd	NB – Left SB – Left EB – Right WB – Approach	A A B E	<0.50 <0.50 <0.50 <0.50	Yes	Yes
Powell Butte Hwy & Hwy 126	NB – Left NB – Right SB – Left EB – Left WB – Left	F F B A C	>1.00 >1.00 <0.50 <0.50 0.70	No	No
Veterans Wy & Hwy 126*	NB – Approach WB – Left	F B	>1.00 <0.50	No	No
Reif Rd & Hwy 126	NB – Approach SB – Right EB – Left WB – Left	F F B B	>1.00 <0.50 <0.50 <0.50	No	No
Minson Rd & Hwy 126	EB – Left	B	<0.50	Yes	Yes
Parrish Ln & Hwy 126	SB – Right EB – Left	D B	<0.50 <0.50	Yes	Yes
Stillman (Riggs) Rd & Hwy 126	NB – Approach WB – Left	F B	<0.50 <0.50	Yes	Yes
Hwy 126 & Wiley Rd	EB – Left WB – Right	F C	>1.00 <0.50	No	No
Millican Rd & Hwy 126	NB – Approach SB – Approach WB – Left	F F B	>1.00 >1.00 <0.50	No	No
Tom McCall Rd & Hwy 126	NB – Approach SB – Approach EB – Left WB – Left	F F B B	>1.00 >1.00 <0.50 <0.50	No	No
Hwy 26 & Hwy 126 - SB	SB – Approach	F	>1.00	No	No
Hwy 26 & Hwy 126 – NB	NB – Approach	F	>1.00	No	No
Parrish Ln & Wiley Rd	NB – Left SB - Left EB – Approach WB – Approach	A A A A	<0.50 <0.50 <0.50 <0.50	Yes	Yes
Parrish Ln & SiteAccess	WB – Left	A	<0.50	Yes	Yes

Notes: *City of Redmond standards apply and ODOT standards within an UGB.

PM Peak Hour Intersection Operations (with Pending & Approved Development): Year 2028 without Project – Seven of the study intersections, as shown in Table 30, were forecast to meet Crook County operation standards and ODOT mobility standards in the year 2028 (with the pending and approved area development) for conditions without the proposed project.

There are eight intersections, as shown in Table 30 that would not meet the Crook County operation standards or the ODOT mobility standards in this scenario:

- Powell Butte Highway and Alfalfa Road;
- Powell Butte Highway and Highway 126;
- Reif Road and Highway 126;
- Stillman (Riggs) Road and Highway 126;
- Millican Road and Highway 126;
- Tom McCall Road and Highway 126;
- Highway 126 and Highway 26 – SB (in Prineville); and,
- Highway 126 and Highway 26 – NB (in Prineville).

The intersection of Veterans Way and Highway 126 is in the City of Redmond. This intersection would not meet the ODOT mobility standards in the year 2028 (with the pending and approved area development) for conditions without the proposed project, as shown in Table 30.

TABLE 30 – PM PEAK HOUR INTERSECTION OPERATIONS (WITH PENDING & APPROVED DEVELOPMENT) - YEAR 2028 WITHOUT PROJECT

INTERSECTION	MOVEMENT	LEVEL OF SERVICE	VOLUME - CAPACITY RATIO (V/C)	CROOK COUNTY OPERATION STANDARDS MET?	ODOT MOBILITY STANDARDS MET?
Powell Butte Hwy & Alfalfa Rd	SB – Left WB – Left WB – Right	B F C	<0.50 >1.00 0.53	No	No
Powell Butte Hwy & Riggs Rd	NB – Left SB – Left EB – Right WB – Approach	A B C F	<0.50 <0.50 <0.50 <0.50	Yes	Yes
Powell Butte Hwy & Hwy 126	NB – Left NB – Right SB – Left EB – Left WB – Left	F F B A D	>1.00 >1.00 <0.50 <0.50 0.75	No	No
Veterans Wy & Hwy 126*	NB – Approach WB – Left	F C	>1.00 0.55	Would not meet Redmond standards	No
Reif Rd & Hwy 126	NB – Approach SB – Right EB – Left WB – Left	F F B B	>1.00 <0.50 <0.50 <0.50	No	No
Minson Rd & Hwy 126	EB – Left	B	<0.50	Yes	Yes
Parrish Ln & Hwy 126	SB – Right EB – Left	C B	<0.50 <0.50	Yes	Yes
Stillman (Riggs) Rd & Hwy 126	NB – Approach WB – Left	F F	>1.00 >1.00	No	No
Hwy 126 & Wiley Rd	EB – Left WB – Right	F C	0.58 <0.50	Yes	Yes
Millican Rd & Hwy 126	NB – Approach SB – Approach WB – Left	F F C	>1.00 >1.00 <0.50	No	No
Tom McCall Rd & Hwy 126	NB – Approach SB – Approach EB – Left WB – Left	F F B B	>1.00 >1.00 <0.50 <0.50	No	No
Hwy 26 & Hwy 126 - SB	SB – Approach	F	>1.00	No	No
Hwy 26 & Hwy 126 – NB	NB – Approach	F	>1.00	No	No
Parrish Ln & Wiley Rd	NB – Left EB – Approach WB – Approach	A A A	<0.50 <0.50 <0.50	Yes	N/A
Parrish Ln & SiteAccess			Not Built		

Notes: *City of Redmond standards apply and ODOT standards within an UGB.

PM Peak Hour Intersection Operations (with Pending & Approved Development): Year 2028 with Project – Six of the study intersections, as shown in Table 31, were forecast to meet Crook County operation standards and ODOT mobility standards in the year 2028 (with the pending and approved area development) for conditions with the proposed project.

There are nine intersections, as shown in Table 31 that would not meet the Crook County operation standards or the ODOT mobility standards in this scenario:

- Powell Butte Highway and Alfalfa Road;
- Powell Butte Highway and Highway 126;
- Reif Road and Highway 126;
- Stillman (Riggs) Road and Highway 126;
- Highway 126 and Wiley Road;
- Millican Road and Highway 126;
- Tom McCall Road and Highway 126;
- Highway 126 and Highway 26 – SB (in Prineville); and,
- Highway 126 and Highway 26 – NB (in Prineville).

The intersection of Veterans Way and Highway 126 is in the City of Redmond. This intersection would not meet the ODOT mobility standards in the year 2028 (with the pending and approved area development) for conditions with the proposed project, as shown in Table 31.

TABLE 31 – PM PEAK HOUR INTERSECTION OPERATIONS (WITH PENDING & APPROVED DEVELOPMENT) - YEAR 2028 WITH PROJECT

INTERSECTION	MOVEMENT	LEVEL OF SERVICE	VOLUME - CAPACITY RATIO (V/C)	CROOK COUNTY OPERATION STANDARDS MET?	ODOT MOBILITY STANDARDS MET?
Powell Butte Hwy & Alfalfa Rd	SB – Left WB – Left WB – Right	B F C	<0.50 >1.00 0.56	No	No
Powell Butte Hwy & Riggs Rd	NB – Left SB – Left EB – Right WB – Approach	A A B F	<0.50 <0.50 <0.50 0.51	Yes	Yes
Powell Butte Hwy & Hwy 126	NB – Left NB – Right SB – Left EB – Left WB – Left	F F B A E	>1.00 >1.00 <0.50 <0.50 0.87	No	No
Veterans Wy & Hwy 126*	NB – Approach WB – Left	F C	>1.00 0.57	Would not meet Redmond standards	No
Reif Rd & Hwy 126	NB – Approach SB – Right EB – Left WB – Left	F F B B	>1.00 >1.00 <0.50 <0.50	No	No
Minson Rd & Hwy 126	EB – Left	B	<0.50	Yes	Yes
Parrish Ln & Hwy 126	SB – Right EB – Left	D B	<0.50 <0.50	Yes	Yes
Stillman (Riggs) Rd & Hwy 126	NB – Approach WB – Left	F F	>1.00 >1.00	No	No
Hwy 126 & Wiley Rd	EB – Left WB – Right	F C	>1.00 <0.50	No	No
Millican Rd & Hwy 126	NB – Approach SB – Approach WB – Left	F F C	>1.00 >1.00 <0.50	No	No
Tom McCall Rd & Hwy 126	NB – Approach SB – Approach EB – Left WB – Left	F F B B	>1.00 >1.00 <0.50 <0.50	No	No
Hwy 26 & Hwy 126 - SB	SB – Approach	F	>1.00	No	No
Hwy 26 & Hwy 126 – NB	NB – Approach	F	>1.00	No	No
Parrish Ln & Wiley Rd	NB – Left EB – Approach WB – Approach	A A A	<0.50 <0.50 <0.50	Yes	N/A
Parrish Ln & Site Access	WB – Left	A	<0.50	Yes	N/A

Notes: *City of Redmond standards apply and ODOT standards within an UGB.

Saturday Peak Hour Intersection Operations (with Approved Development) - Year 2028 without Project – All of the study intersections, as shown in Table 32, were forecast to meet Crook County operation standards and ODOT mobility standards in the year 2028 with the approved area development only for conditions without the proposed project.

TABLE 32 – SATURDAY PEAK HOUR INTERSECTION OPERATIONS - YEAR 2028 WITHOUT PROJECT (WITH APPROVED DEVELOPMENT)

INTERSECTION	MOVEMENT	LEVEL OF SERVICE	VOLUME - CAPACITY RATIO (V/C)	CROOK COUNTY OPERATION STANDARDS MET?	ODOT MOBILITY STANDARDS MET?
Parrish Ln & Hwy 126	SB – Approach EB – Left	F B	<0.50 <0.50	Yes	Yes
Hwy 126 & Wiley Rd	SB – Left EB – Approach	A E	<0.50 <0.50	Yes	Yes
Parrish Ln & Wiley Rd	NB – Left EB – Right WB – Left	A A A	<0.50 <0.50 <0.50	Yes	Yes
Parrish Ln & Site Access			Not Built		

Saturday Peak Hour Intersection Operations - Year 2028 with Project (with Approved Development) – All of the study intersections, as shown in Table 33, were forecast to meet Crook County operation standards and ODOT mobility standards in the year 2028 with the approved area development only for conditions with the proposed project.

TABLE 33 – SATURDAY PEAK HOUR INTERSECTION OPERATIONS - YEAR 2028 WITH PROJECT (WITH APPROVED DEVELOPMENT)

INTERSECTION	MOVEMENT	LEVEL OF SERVICE	VOLUME - CAPACITY RATIO (V/C)	CROOK COUNTY OPERATION STANDARDS MET?	ODOT MOBILITY STANDARDS MET?
Parrish Ln & Hwy 126	SB – Approach EB – Left	F B	0.68 <0.50	Yes	Yes
Hwy 126 & Wiley Rd	SB – Left EB – Approach	A F	<0.50 0.94	Yes	Yes
Parrish Ln & Wiley Rd	NB – Left SB – Left EB – Right WB – Approach	A A B A	<0.50 <0.50 <0.50 <0.50	Yes	Yes
Parrish Ln & Site Access	WB – Left	A	<0.50	Yes	Yes

Saturday Peak Hour Intersection Operations - Year 2028 without Project (with Pending Development) - All of the study intersections, as shown in Table 34, were forecast to meet Crook County operation standards and ODOT mobility standards in the year 2028 with the pending and approved area development only for conditions without the proposed project.

TABLE 34 – SATURDAY PEAK HOUR INTERSECTION OPERATIONS (WITH PENDING DEVELOPMENT) - YEAR 2028 WITHOUT PROJECT

INTERSECTION	MOVEMENT	LEVEL OF SERVICE	VOLUME - CAPACITY RATIO (V/C)	CROOK COUNTY OPERATION STANDARDS MET?	ODOT MOBILITY STANDARDS MET?
Parrish Ln & Hwy 126	SB – Approach EB – Left	E A	<0.50 <0.50	Yes	Yes
Hwy 126 & Wiley Rd	SB – Left EB – Approach	A E	<0.50 <0.50	Yes	Yes
Parrish Ln & Wiley Rd	NB – Left EB – Right WB – Approach	A A A	<0.50 <0.50 <0.50	Yes	Yes
Parrish Ln & Site Access			Not Built		

Saturday Peak Hour Intersection Operations (with Pending Development) - Year 2028 with Project – All of the study intersections, as shown in Table 35, were forecast to meet Crook County operation standards and ODOT mobility standards in the year 2028 with the pending and approved area development only for conditions with the proposed project.

TABLE 35 – SATURDAY PEAK HOUR INTERSECTION OPERATIONS (WITH PENDING DEVELOPMENT) - YEAR 2028 WITH PROJECT

INTERSECTION	MOVEMENT	LEVEL OF SERVICE	VOLUME - CAPACITY RATIO (V/C)	CROOK COUNTY OPERATION STANDARDS MET?	ODOT MOBILITY STANDARDS MET?
Parrish Ln & Hwy 126	SB – Approach EB – Left	E B	0.64 <0.50	Yes	Yes
Hwy 126 & Wiley Rd	SB – Left EB – Approach	A F	<0.50 0.87	Yes	Yes
Parrish Ln & Wiley Rd	NB – Left SB – Left EB – Right WB – Approach	A A B A	<0.50 <0.50 <0.50 <0.50	Yes	Yes
Parrish Ln & Site Access	WB – Left	A	<0.50	Yes	Yes

SEGMENT ANALYSIS

As requested by ODOT and Crook County a segment analysis was preformed to ascertain whether or not the existing two lanes on Highway 126 would accommodate future traffic flow. This project forecast a traffic flow of over 1,200 vehicles in the highest direction on many segments during peak periods. At this level of traffic flow (about one vehicle every three seconds on the average), the following is anticipated:

- It would be very difficult for vehicles to enter or cross the highway from a stop-controlled approach during peak periods.
- If there are slow moving vehicles, there will be long-queues behind.
- At intersections where there are large left-turn flows from the highway, it will be difficult to find a gap to make the turn.

The implication is that there will be a need for a four-lane section Highway 126, grade separated interchanges, turn restrictions at intermediate intersections between grade-separated interchanges, and desirably connecting streets that run parallel to the highway. Except for the last item, this is consistent with the the Crook County TSP.

TRAFFIC SIGNAL WARRANTS

There are a number of traffic signal warrants, of which at least one must be met to justify the installation of a new traffic signal. These warrants reflect a minimum threshold under which a traffic signal should not be installed. In general, unwarranted traffic signals can lead to increased delay, more accidents, and unnecessary spending. For all of these reasons, unwarranted traffic signals are highly discouraged.

There are ten intersections that were forecast to exceed the Crook County operation standards or the ODOT mobility standards in one of the years analyzed for this report. The peak hour traffic signal warrant was checked at each of the following intersections (Calculations in Appendix K) presented by scenario under which each intersection is forecast to no longer meet operation standards:

Year 2008 (with approved development only) without the proposed project -

- Powell Butte Highway and Highway 126;
- Tom McCall Road and Highway 126; and,
- Highway 26 and Highway 126 – SB

All three intersections would meet the peak hour traffic signal warrant in the year 2008 (with approved area development only) for conditions without the proposed project.

Year 2008 (with all pending development) without the proposed project -

- Millican Road and Highway 126 and
- Veterans Way and Highway 126

The intersection of Millican Road and Highway 126 would not meet the peak hour traffic signal warrant in any of the years analyzed in this report.

The intersection of Veterans Way and Highway 126 would meet the peak hour traffic signal warrant in this scenario.

Year 2018 (with approved development only) with proposed project -

- Highway 126 and Wiley Road

The intersection would not meet the peak hour traffic signal warrant in the year 2018 (with approved development only) for conditions with the proposed project.

Year 2018 (with all pending development) without proposed project -

- Powell Butte Highway and Alfalfa Road; and
- Highway 26 and Highway 126 – NB

Both intersections would meet the peak hour traffic signal warrant.

Year 2028 (with approved development only) without proposed project -

- Reif Road and Highway 126

The intersection of Reif Road and Highway 126 would not meet the peak hour traffic signal warrant in the year 2028 for conditions without the proposed project.

Year 2028 (with all pending development) without proposed project -

- Stillman Road and Highway 126

The intersection of Stillman Road and Highway 126 would not meet the peak hour traffic signal warrant in the year 2028 for conditions without the proposed project.

SIGHT DISTANCE

Sight distance is a measure of how far a driver can see the road and/or other vehicles from various points in the roadway. Sight distance is measured in different ways and acceptable sight distance varies, depending on the type of sight distance that is important for a particular segment of road or intersection.

Stopping Sight Distance Guidelines - Stopping sight distance is the minimum required distance for a vehicle to stop before reaching a stationary object in its path. The standard assumptions used to determine minimum stopping sight distance are: Wet pavement, a driver's vision height of 3.5 feet, and a stationary object 2.0 feet high (A Policy on Geometric Design of Highways and Streets, AASHTO, 2004). Table 36 shows the AASHTO guidelines for stopping sight distance at a given speed.

Intersection Sight Distance Guidelines - Intersection sight distance is the distance a driver can see from a stop-controlled approach to an intersection. The measurement is typically taken from a point about 14.4 feet back from the edge of the travel-way at a height of 3.5 feet to a height of 3.5 feet in the travel lane. The AASHTO intersection sight distance guidelines, as shown in Table 36 reflect the minimum distance that a driver needs to be able to see while stopped at an intersection so that the driver may proceed without slowing vehicles on the main street by more than 15 percent. The distance required for a left-turn is slightly longer than the distance for a right-turn.

Table 36 – AASHTO Guidelines for Stopping and Intersection Sight Distance

Design Speed	Stopping Sight Distance (ft.)	Intersection Sight Distance for Left-Turns from Stop (ft.) (1)	Intersection Sight Distance for Right-turns from Stop and Crossing Maneuver (ft.) (2)
15	80	170	145
20	115	225	195
25	155	280	240
30	200	335	290
35	250	390	335
40	305	445	385
45	360	500	430
50	425	555	480
55	495	610	530
60	570	665	575
65	645	720	625
70	730	775	670
75	820	830	720
80	910	885	765

Source: A Policy on Geometric Design of Highways and Streets, AASHTO 2004
(1) Minimum distance to the right from the stopped approach
(2) Minimum distance to the left for the right turn movements and in both directions for the stopped movement.

Sight Distance at Study Intersections - Stopping sight distance and intersection sight distance was measured at the following study intersections:

- Parrish Lane and Highway 126;
- Highway 126 and Wiley Road;
- Parrish Lane and Wiley Road; and,
- The Main Site Access off Parrish Lane.

A summary of the measured sight distance is shown in Table 37. Field measurements at the study intersections can be found in Appendix L.

TABLE 37 – MEASURED SIGHT DISTANCE

INTERSECTION	MEASUREMENTS AND GUIDELINES	MEASURED DISTANCE			
		STOPPING SIGHT DISTANCE		INTERSECTION SIGHT DISTANCE	
		TO RIGHT	TO LEFT	TO RIGHT	TO LEFT
Parrish Lane & Highway 126	Measured Sight Distance	>1,000	1,280	>1,000	1,280
	Meets Guideline for 55 mph?	Yes	Yes	Yes	Yes
Highway 126 & Wiley Road	Measured Sight Distance	1,060	1,270	1,060	1,270
	Meets Guideline for 55 mph?	Yes	Yes	Yes	Yes
Parrish Lane & Wiley Road*	Measured Sight Distance	>1,000	>1,000	>1,000	>1,000
	Meets Guideline for 55 mph?	Yes	Yes	Yes	Yes
The Main Site Access off Parrish Lane*	Measured Sight Distance	>1,000	>1,000	>1,000	>1,000
	Meets Guideline for 55 mph?	Yes	Yes	Yes	Yes

Notes: *Speed Limit is not posted, assumed 55 miles per hour.

SPEED CHANGE LANES

Speed-change lanes (acceleration/deceleration lanes) are auxiliary lanes that accommodate traffic entering or leaving a roadway. Speed-change lanes are used primarily on high-speed, limited access roadways. Speed-change lanes are not typically constructed on the City's arterial/collector streets.

LEFT-TURN WARRANTS

The purpose of a left-turn storage lane is to provide a waiting area for vehicles to turn left while waiting for a gap so that through vehicles do not stack behind the left turning vehicles. The analysis applies to traffic on a major street that is not controlled by a traffic signal or stop sign while turning left to a minor street. When warrants are met, the left-turn lane can improve capacity and safety.

The guideline for adding a left-turn lane was checked at all study intersections that do not have an existing left-turn lane on the uncontrolled approach:

- Powell Butte Highway and Riggs Road;
- Veterans Way and Highway 126;
- Reif Road and Highway 126;
- Minson Road and Highway 126;
- Parrish Lane and Highway 126;
- Highway 126 and Wiley Road;
- Millican Road and Highway 126, and

- Tom McCall Road and Highway 126.

All of the intersections except Powell Butte Highway and Riggs Road would meet the guideline for adding a left-turn lane on Highway 126 (the uncontrolled approaches) under existing conditions (counted traffic only). The calculations can be found in Appendix M.

The intersection of Powell Butte Highway and Riggs Road would meet the guideline for adding a left-turn lane in the year 2008 (with approved development only) for conditions without the proposed project.

Mitigation Measures

Mitigation measures are explored as possible strategies for resolving existing or future operational deficiencies that were identified in this analysis. The following are strategies listed in the Crook County Transportation System Plan, proposed in transportation impact analyses prepared for other recent development or have been identified by Ferguson & Associates, Inc.

As noted above, there are ten study intersections that would not meet either the Crook County operation standards or the ODOT mobility standards in one of the analysis scenarios included in this report. The intersections are summarized in Table 38.

TABLE 38 – INTERSECTION FORECAST TO NOT MEET OPERATION STANDARDS

INTERSECTION	STANDARD	SCENARIO (with all Pending Area development)	STANDARD MET		
			2008	2018	2028
Powell Butte Highway and Highway 126	Both	no Project	No	No	No
		with Project	No	No	No
Tom McCall Road and Highway 126	Both	no Project	No	No	No
		with Project	No	No	No
Highway 126 and Highway 26 – SB	Both	no Project	No	No	No
		with Project	No	No	No
Millican Road and Highway 126	Both	no Project	No	No	No
		with Project	No	No	No
Highway 126 and Highway 26 – NB	Both	no Project	No	No	No
		with Project	No	No	No
Veterans Way and Highway 126	Both	no Project	No	No	No
		with Project	No	No	No
Highway 126 and Wiley Road	Both	no Project	Yes	Yes	Yes
		with Project	Yes	No	No
Powell Butte Highway and Alfalfa Road	Crook County	no Project	Yes	No	No
		with Project	Yes	No	No
Reif Road and Highway 126	Both	no Project	Yes	Yes	No
		with Project	Yes	Yes	No
Stillman Road and Highway 126	Both	no Project	Yes	Yes	No
		with Project	Yes	Yes	No

Powell Butte Highway and Highway 126 – The planned mitigation for this intersection, as listed in the Crook County TSP and in other transportation impact analysis reports, is an interchange. ODOT and Crook County are currently working out the funding mechanism for this improvement. The proposed interchange is planned to be under construction by the year 2012. Since the project is in the preliminary design phase, it was assumed that the new interchange would be designed to accommodate the forecast traffic flows.

Tom McCall Road and Highway 126 - The planned mitigation for this intersection, as listed in the Crook County TSP and in other transportation impact analysis reports, is an interchange that also incorporates the intersection of Millican Road and Highway 126.

Millcan Road and Highway 126 - The planned mitigation for this intersection, as listed in the Crook County TSP and in other transportation impact analysis reports, is an interchange that also incorporates the intersection of Millican Road and Highway 126.

Highway 126 and Highway 26 (Prineville) – The proposed project was forecast to add less than 50 p.m. peak hour trips to this intersection.

Veterans Way and Highway 126 – This intersection was forecast to not meet the City of Redmond operation standards or the ODOT mobility standards in the year 2008 for conditions with the approved and pending area development without the proposed project. The intersection was forecast to meet the peak hour traffic signal warrant under this scenario. As noted in the Traffic Impact Analysis for Hidden Canyon Resort (Kittelson & Associates, Inc; August 2006), a traffic signal planned for this intersection as per the City of Redmond TSP.

Highway 126 and Wiley Road – This intersection would exceed both the Crook County operation standards and the ODOT mobility standards in the year 2018 for conditions with the proposed project. When Highway 126 is widened to four lanes, this intersection is planned to be closed. By the year 2018, it would be desirable to restrict turns to right-in, right-out until the intersection is closed completely. The closure of this intersection is likely to increase eastbound left-turns at Tom McCall Road and Highway 126. The planned interchange at that location could be designed and constructed to accommodate this additional traffic.

Powell Butte Highway and Alfalfa Road – The intersection of Powell Butte Highway and Alfalfa Road is planned to be improved during the summer of 2007. This analysis assumed that the construction would be completed by August 2007 (as has been assumed for other studies as per direction from Crook County staff). The Transportation Impact Analysis Hidden Canyon Resort (Kittelson & Associates, Inc; August 2006) states that the intersection will operate acceptably with the improvements in place (page 32). The level of service calculations found in the Appendix of the Hidden Canyon Resort TIA, shows that the intersection would operation at LOS F with a volume-capacity ratio of 0.94. Although this does meet the Crook County operation standard, the intersection would not operate acceptably by any reasonable person regardless of the standard. Volume-capacity ratios do not correlate well with Levels of Service.

The intersection of Powell Butte Highway and Alfalfa Road would meet the peak hour traffic signal warrant in the year 2018 for conditions without the proposed project, as noted on page 89. A traffic signal tends to be an urban solution so would not be a desirable improvement at this rural intersection. Other mitigation options include a roundabout or an interchange. Another solution would be for Hidden Canyon Resort (which has not been approved as of the writing of this report) to provide additional access locations to decrease its impact at the intersection of Powell Butte Highway and Alfalfa Road and at the intersection of Millican Road and Highway 126.

Reif Road and Highway 126 – This intersection would not meet the Crook County operation standards or the ODOT mobility standards in the year 2028 for conditions with or without the proposed project. The intersection would not meet the peak hour traffic signal warrant and it is relatively close to the planned interchange at Powell Butte Highway and Highway 126. Turns at this intersection could be restricted to right-in, right-out. At the time that the turns are restricted, some east-west connection on the north side of Powell Butte could be provided to connect to the new intersection.

Stillman Road and Highway 126 – The proposed project would not add any p.m. peak hour or Saturday peak hour trips to this intersection.

As shown above, mitigation measure would be needed at the above listed study intersections. A summary of the needed mitigation by intersection is shown in Table 39.

TABLE 39 – INTERSECTION MITIGATION

INTERSECTION	MITIGATION	COMMENTS
Powell Butte Highway and Highway 126	Interchange	Interchange is listed in the Crook County TSP. It would be needed sometime before all of the approved and pending development is built. The proposed Seven Peaks Resort does not cause the need for the improvement
Tom McCall Road and Highway 126	Interchange	Interchange is listed in the Crook County TSP. It would be needed sometime before all of the approved and pending development is built. The proposed Seven Peaks Resort does not cause the need for the improvement
Millican Road and Highway 126	Interchange	Interchange is listed in the Crook County TSP. It would be needed sometime before all of the approved and pending development is built. The proposed Seven Peaks Resort does not cause the need for the improvement
Veterans Way and Highway 126	Traffic Signal	The intersection would meet the peak hour traffic signal warrant in the year 2008 for conditions with the approved and pending in-process development but without the proposed project. The City of Redmond TSP lists a traffic signal at this location.
Highway 126 and Wiley Road	Restrict Turns	The intersection is planned to be closed when Highway 126 is widened to four lanes. Until such time that the intersection is closed, turns could be restricted to right-in, right-out. A turn restriction at Wiley Road would likely increase the number of turns at Tom McCall Road. The planned interchange at that intersection could be designed to accommodate the additional traffic.
Powell Butte Highway and Alfalfa Road	Interchange	No improvement listed in the Crook County TSP. The peak hour traffic signal warrant would be met in the year 2018 for conditions without the proposed project. A traffic signal would not be a desirable improvement at this location due to its rural nature.
Reif Road and Highway 126	Restrict Turns	The intersection would not meet operation standards in the year 2028. The intersection would not meet the peak hour traffic signal warrant at that time. Turns could be restricted and an east-west connection to the planned Powell Butte Highway interchange could be provided.

FINDINGS AND CONCLUSIONS

The proposed Seven Peaks Resort would have up to 735 units. At build-out the resort was forecast to generate 235 p.m. peak hour trips, 325 Saturday peak hour trips and 2,352 daily trips.

There were ten study intersections that were forecast to exceed Crook County operation standards or ODOT mobility standards in at least one of the analysis years included in this report, as shown above.

Existing operations are not nearly as congested as indicated by what is shown in a 2008 analysis. The reason for this is that 2008 forecasts include 10 or more year's growth from already approved projects. While this is not a universal approach to forecasting traffic, ODOT prefers to include the build-out traffic of other projects even if these projects will not be built and occupied for 10 or more years. The philosophy behind this approach is that approved projects (in-effect) "reserved" available capacity over the next 10 years or so by virtue of being an early applicant. The reality, however, is that the failures identified will not occur until sometime beyond 2008 in most cases. Rather than providing speculative analysis to determine when improvements need to be constructed, the following guidance is suggested. In the case of interchanges, the planning and construction can take some time. A 3 to 5 year minimum lead time is anticipated to address all planning requirements, secure ROW and funding, and then to engineer and construct the interchanges; thus, with a 10-year build out for the approved/planning destination resorts in would be prudent to begin this process within the next five years. For traffic signal needs, it is suggested that traffic flow be monitored and that the signal not be constructed until such time that traffic signal warrants are met.

The AASHTO guidelines for intersection sight distance and stopping sight distance would be met at the site access intersection off Parrish Lane and at the two locations were the site generated traffic would enter the highway system.

The guideline for adding a left-turn lane would be met at each intersection with Highway 126 under existing conditions (counted traffic only).

APPENDIX B – OTAK 2008 ANALYSIS OF TRAFFIC IMPACTS TO STATE HIGHWAYS FROM THE PROPOSED CROSSING TRAILS DESTINATION RESORT

Memorandum

otak

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To:	Bill Zelenka, Planning Director Heidi Bauer, Land Use Counsel and Planner
From:	Duncan Brown, Senior Planner
Copies:	file
Date:	July 1, 2008
Subject:	Analysis of Traffic Impacts to State Highways from the Proposed Crossing Trails Destination Resort
Project No.:	14031C

The purposes of this memorandum are to guide the Planning Commission in identifying traffic impacts to State Highways that are projected to be generated by the development of the Crossing Trails Destination Resort using Crook County Code approval criteria, determine if the mitigation costs requested by the Oregon Department of Transportation (ODOT) are proportional to the level of impacts generated, and if the mitigation costs are not proportional, what is an appropriate proportional cost.

Crook County Approval Criteria Relating to Traffic Impacts

The applicable sections under which traffic impacts must be measured by the County are contained 18.116.100(6), which state:

> **18.116.100 Approval criteria.**
> **The planning commission or county court shall approve a development plan for a destination resort if it determines that all of the following criteria are met:**
> ...
> **(6) The development will not have a significant adverse impact on fish and wildlife, taking into account mitigation measures.**
> **(a) The traffic study required by CCC 18.116.080(3)(g) illustrates that the proposed development will not significantly affect a transportation facility. A resort development will significantly affect a transportation facility for purposes of this approval criterion if it would, at any point within a 20-year planning period:**
> **(i) Change the functional classification of the transportation facility;**
> **(ii) Result in levels of travel or access which are inconsistent with the functional classification of the transportation facility; or**
> **(iii) Reduce the performance standards of the transportation facility below the minimum acceptable level identified in the applicable transportation system plan (TSP).**
> ...

The Oregon Department of Transportation notes in a June 3, 2008 letter to the Planning Director that the State "...bases its traffic operation standards based on volume to capacity (v/c) ratio and not level of service..." This approach has been incorporated into the Crook County *Transportation System Plan*, which states:

> **"The Oregon Department of Transportation bases its traffic operation standards based on volume to capacity (v/c) ratio and not level of service. For ODOT facilities, each type of facility has its own standard. Table 4-1 summarizes the v/c standard by ODOT facility type. The standard documented in Table 4-1 is from the *1999 Oregon Highway Plan.*"**
> (Crook County *Transportation System Plan*, December 2005, Subsection 4.2. Intersection Levels of Service and V/C Ratio Analysis).

The Oregon Department of Transportation not only identifies the v/c ratio as the performance standard, but further states:

> **"Regarding (iii), the applicable TSP is the OHP, because ODOT owns the highway, and because the county's TSP defers to the OHP. The TPR states that any reduction below the "minimum acceptable performance standard identified in the TSP" would be a "significant effect." The OHP's performance standard, under Policy 1F.6 is to avoid further degradation. We believe that the county's standard refers to the "minimum acceptable level," not a specific performance level, and that applicable standard would be the OHP standard to "avoid further degredation." So the minimum acceptable level identified in the applicable transportation system plan, for purposes of the county's section 18.116.080(6)(a)(iii) would be to "avoid further degredation" as stated in the OHP policy."**
> (Oregon Department of Transportation letter to the Crook County Planning Director, June 3, 2008, p.4, para. 8)

This interpretation by ODOT appears to conflict with the *Crook County Code* and literal reading of the *1999 Oregon Highway Plan* in three major areas:

1. Neither the *Crook County Development Code* nor the *Transportation System Plan* "defers" to the *1999 Oregon Highway Plan* (OHP) for State-owned or controlled highways. It simply acknowledges that the State uses the v/c ratio as the performance standard instead of the more commonly-accepted Level of Service and allows it to be used in analyzing traffic impacts.

2. The County identifies the v/c ratio for minimum acceptable performance standard as the County standard for State-owned or controlled highways (*Transportation System Plan* pp 4-1 – 4-3). These ratios are identical to those identified by ODOT (ODOT letter to the Crook County Planning Director, June 3, 2008, p.3, Table 4-1). No other standards are listed in either the *Crook County Development Code* or *Transportation System Plan* for evaluation of State-owned or

controlled highways. It is only these performance standards that the County must use to evaluate traffic impacts from development to State-owned or controlled highways.

3. The *1999 Oregon Highway Plan* Policy 1F6 states in part:

> **Action 1F.6**
> **For purposes of evaluating amendments to transportation system plans, acknowledged comprehensive plans and land use regulations subject to OAR 660- 12-060, in situations where the volume to capacity ratio for a highway segment, intersection or interchange is above the standards in Table 6 or Table 7, or those otherwise approved by the Commission, and transportation improvements are not planned within the planning horizon to bring performance to standard, the performance standard is to avoid further degradation. If an amendment to a transportation system plan, acknowledged comprehensive plan or land use regulation increases the volume to capacity ratio further, it will significantly affect the facility.**
> (emphasis added)
> (1999 *Oregon Highway Plan* p. 82)

The land use review before the Crook County Planning Commission is for a Destination Resort (Conditional Use) and not an amendment to a Transportation System Plan, acknowledged Comprehensive Plan, or land use regulation. Use of this policy and the incorporated standard to "avoid further degradation" by ODOT is not appropriate for this land use review by the County.

Standard by Which Traffic Impacts Should Be Measured

As noted previously, the v/c ratio identified in the *Crook County Transportation System Plan* is the appropriate standard by which the County should determine traffic impacts. State Highway 126 and Highway 26 are both identified as receiving traffic impacts from the proposed destination resort. Both are designated Statewide Highways and Freight Routes, so the "minimal acceptable level" required by the Crook County Code and identified in the Crook County Transportation System Plan is a v/c ratio of 0.70 for both unincorporated communities and rural lands (*Crook County Transportation System Plan*, Table 4-1).

Development Assumptions on Which Traffic Impacts Are Determined

Traffic impacts at identified intersections have been analyzed for the years 2008, 2018, and 2028, assuming three levels of Crook County development: without the project but with all other pending and approved development, with the project and only approved (not pending) development, and with the project and all other pending and approved development. To retain consistency with the traffic levels generated by non-Crossing Trails land uses, the comparison of impacts assuming all approved and proposed development is appropriate.

Differences in Traffic Impacts Attributable to the Destination Resort

Following is a summary table for the projected v/c ratios for turning movements at the intersections identified by ODOT for the years 2008, 2018, and 2028 with and without the proposed project.

Table 1
Impact of Crossing Trails on the Volume/Capacity (v/c) Ratio for Selected Intersections

Intersection	Movement	Projected v/c Ratio (with pending and approved development)						v/c Ratio Standard Exceeded	
		2008		2018		2028			
		without project	with project	without project	with project	without project	with project	without project	due to project
Powell Butte Hwy and Hwy 126	NB-left	**>1.00**	**>1.00**	**>1.00**	**>1.00**	**>1.00**	**>1.00**	2008, 2018, 2028	no
	NB-right	**0.89**	**>1.00**	**>1.00**	**>1.00**	**>1.00**	**>1.00**	2008, 2018, 2028	no
	SB-right	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	no	no
	EB-left	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	no	no
	WB-left	<0.50	0.53	<0.50	<0.50	**0.75**	**0.87**	2028	no
Veterans Wy and Hwy 126	NB-approach	**>1.00**	**>1.00**	**>1.00**	**>1.00**	**>1.00**	**>1.00**	2008, 2018, 2028	no
	WB-left	<0.50	<0.50	<0.50	<0.50	0.55	0.57	no	no
Reif Road and Hwy 126	NB-approach	<0.50	<0.50	0.55	**0.73**	**>1.00**	**>1.00**	2028	**2018**
	SB-right	<0.50	<0.50	<0.50	<0.50	<0.50	**>1.00**	no	**2028**
	EB-left	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	no	no
	WB-left	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	no	no
Parrish Ln and Hwy 126*	SB-right	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	no	no
	EB-left	<0.50	**>0.70**	<0.50	**>0.70**	<0.50	**>0.70**	no	**2008**
Millican Rd and Hwy 126	NB-approach	**>1.00**	**>1.00**	**>1.00**	**>1.00**	**>1.00**	**>1.00**	2008, 2018, 2028	no
	SB-approach	**>1.00**	**>1.00**	**>1.00**	**>1.00**	**>1.00**	**>1.00**	2008, 2018, 2028	no
	WB-left	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	no	no
Tom McCall Rd and Hwy 126	NB-approach	n.a.	**>1.00**	**>1.00**	**>1.00**	**>1.00**	**>1.00**	2008, 2018, 2028	**2018, 2028****
	SB-approach	**>1.00**	**>1.00**	**>1.00**	**>1.00**	**>1.00**	**>1.00**	2008, 2018, 2028	no
	EB-left	**>1.00**	<0.50	<0.50	<0.50	<0.50	<0.50	2008?	no
	WB-left	n.a.	<0.50	<0.50	<0.50	<0.50	<0.50	no	no
Hwy 26 and Hwy 126 SB	SB-approach	**>1.00**	**>1.00**	**>1.00**	**>1.00**	**>1.00**	**>1.00**	2008, 2018, 2028	no
	NB-approach	**>1.00**	**>1.00**	**>1.00**	**>1.00**	**>1.00**	**>1.00**	2008, 2018, 2028	no
Wiley Rd and Hwy 126***			**>0.70**		**>0.70**		**>0.70**	no	**2008**

* The initial traffic impact analysis by Ferguson and Associates identified the v/c ratio at this intersection remaining less than 0.50 for the full planning period (2028). However, a subsequent analysis by Group MacKenzie concluded that the v/c ratio would exceed the 0.70 standard because of the project.

** Unknown if the intersection turning movement exceeds the v/c ratio standard in 2008 because of lack of data for 2008.

*** The initial traffic impact analysis by Ferguson and Associates did not include this intersection. However, a subsequent analysis by Group MacKenzie concluded that the v/c ratio would exceed the 0.70 standard because of the project.

The Crossing Trails destination resort development will have a measurable traffic impact on the identified intersections, but to differing degrees. Of the six selected intersections (12 of a total of 22 turning movements) that exceed or will exceed the County (and State) v/c ratio standard by the year 2028, only the intersections of Reif Road and Highway 126, Parish Lane and Highway 126, and Wiley Road and Highway 126 are directly and fully attributable to the proposed destination resort.

Costs Assigned By ODOT Compared to Impacts Attributed to the Destination Resort

Following is a summary of the proposed mitigation measures and costs for the identified intersections:

Table 2
Identified intersections and Mitigation Measures

Intersection	v/c Ratio Standard Exceeded On or Before 2028		Vehicles Attributed to the Project and Contributing to the Impact*		Mitigation	
	without project	due to project	number	percent of total	measure**	cost***
Powell Butte Hwy and Hwy 126	yes	no	164	4.7	interchange	$6,000,000
Veterans Wy and Hwy 126	yes	no	82	2.9	traffic signal	$250,000
Reif Road and Hwy 126	yes	yes	165	6.3	closure	$50,000
Parrish Ln and Hwy 126	no	yes	165	100.0	left turn lane	$200,000
Millican Rd. Tom McCall Rd, and Hwy 126	yes	no	70	2.4	interchange	$5,400,000
Hwy 26 and Hwy 126	yes	no	35	1.9	roundabout	$1,900,000
Wiley Rd and Hwy 126****	no	yes	70	100.0	closure	$50,000
Total			731	3.1		$13,850,000

* Estimated by Group MacKenzie.

** Identified by ODOT.

*** Estimated by ODOT.

**** The initial traffic impact analysis by Ferguson and Associates did not include this intersection. However, a subsequent analysis by Group MacKenzie concluded that the v/c ratio would exceed the 0.70 standard because of the project.

Total mitigation costs are estimated by ODOT at $13,850,000, which represents 100 percent of the total mitigation costs for all identified intersections.

Analysis of Mitigation Costs Assigned by ODOT

There appear to be two situations regarding traffic impacts to identified intersections and related mitigation costs. Following is a brief summary of them, followed by suggested approaches to determine a proportional mitigation share:

1. **Intersections where vehicles from the project contribute to a portion of the impact that causes the v/c ratio standard to be exceeded prior to the time that it would be exceeded without the project.** The intersection of Reif Road and Highway 126 is in this category, with the v/c ratio standard being exceeded in 2018 with the project instead of 2028 that is projected without the project. The intersections of Parish Way and Highway 126, and Wiley Road and Highway 126, will also experience a v/c ratio of greater than 0.70 that is directly attributable to the project, according to the most recent traffic impact analysis. Because exceeding the standard is directly attributable to traffic generated by the destination resort, full mitigation costs for mitigation at these intersections being born by the project appear to be appropriate.

2. **Intersections that presently exceed the v/c ratio standard and will continue to exceed it with or without the project.** The intersections of Powell Butte Highway and Highway 126, Veterans Way and Highway 126, Millican Road, Tom McCall Road, and Highway 126, Highway 26 and Highway 126 are included in this category. The destination resort does not cause the v/c ratio standard to be exceeded, but is a contributing factor to the overall traffic volume that will pass through it. A proportional share in mitigation costs based on traffic generation would appear to be appropriate.

Summary and Conclusion

Crook County is required to assess traffic impacts generated by destination resort development, and require mitigation for those impacts that cause the transportation system to exceed County standards. For State-owned or controlled highways the standard adopted by the County is the volume/capacity (v/c) ratio of 0.70. If this v/c ratio is not exceeded, the County standard is met. If it is exceeded, the County must require mitigation measures, but only to the amount that is roughly proportional to the degree of impact that the project generates.

Traffic impacts from Crossing Trails will have varying impacts to highway intersections. Some intersections will exceed the adopted standard because of the additional traffic generated by this project, and some already exceed the standard without the project. Mitigation costs should be based on the proportional impact of the development. Following is a summary of suggested proportional contribution for measures necessary to mitigate for traffic impacts attributable to Crossing Trails:

Table 3
Summary of Recommended Proportional Mitigation Costs By Intersection

Intersection	Mitigation		V/C Ratio Standard Exceeded On or Before 2028		Traffic Attributed to the Project and Contributing to the Impact	Suggested Proportional Share of Mitigation Cost by Intersection	
	measure*	cost**	without project	due to project	percent of total***	percent of cost	cost
Powell Butte Hwy and Hwy 126	interchange	$6,000,000	yes	no	4.7	4.7	$282,000
Veterans Wy and Hwy 126	traffic signal	$250,000	yes	no	2.9	2.9	$7,250
Reif Road and Hwy 126	closure	$50,000	yes	yes	6.3	100.0	$50,000
Parrish Ln and Hwy 126	left turn lane	$200,000	no	yes	100.0	100.0	$200,000
Millican Rd. Tom McCall Rd, and Hwy 126	interchange	$5,400,000	yes	no	2.4	2.4	$129,600
Hwy 26 and Hwy 126	roundabout	$1,900,000	yes	no	1.9	1.9	$36,100
Wiley Rd and Hwy 126	closure	$50,000		yes	100.0	100.0	$50,000
Total		$13,850,000					$754,950

* Identified by ODOT
** Estimated by ODOT
*** Estimated by Group MacKenzie

APPENDIX C – 2021 SCOPING MEMORANDUM

KITTELSON & ASSOCIATES
1001 SW Emkay Drive, Suite 140
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P 541.312.8300

Technical Memorandum

November 12, 2021 Project# 26648

To: Oregon Department of Transportation – Region 4
Crook County Community Development
City of Prineville Community Development

From: Jacki Gulczynski, PE & Marc Butorac, PE

RE: Crossing Trails Destination Resort – Crook County, OR

SCOPING MEMORANDUM

This memorandum documents the scope and summarizes the assumptions for the Transportation Impact Analysis (TIA) for the proposed Crossing Trails Destination Resort located in Crook County. Figure 1 shows the site vicinity and the project boundaries.

A Preliminary Recommendations Report was provided to ODOT, Crook County, and the City of Prineville on August 18, 2021. This report highlighted the project history, existing relevant planning documents, and current approved developments and conditions.

The information presented in this memorandum was developed based on previous discussions with ODOT, Crook County, and the City of Prineville pertaining to the approved 580-acre destination resort. As the original approval was granted in 2009, the agencies have requested an updated transportation analysis to document offsite impacts to the transportation system.

The scoping memorandum addresses the following items:

- Project Description
- Estimated Trip Generation and Distribution
- Historic Crash Data Summary
- Analysis Scenarios and Study Assumptions
- Analysis Tools

Project Description

Sun Communities, Inc. is proposing an updated site plan to an approved 580-acre destination resort located on the northeast corner of Parrish Lane and Wiley Road in Crook County. The original destination resort was to include 735 units (490 single family dwelling units and 245 rental units), a golf course, and other recreational amenities. The resort was expected to be completed in nine-phases. In 2009, the application was approved by the County and ODOT and the property was included in the County's Destination Resort Overlay Zone.

Since the original approval, the site plan has been modified and includes updates to the uses and general purpose of the resort. The new plan transitions from a traditional destination resort to an affordable, family friendly, outdoor living experience. The site plan includes recreational activities and open space for guests and full-time occupants, workforce housing for employees on the resort and within the surrounding community, upscale manufactured homes/cabins, and overnight villas and resort rentals. Figure 2 illustrates the proposed site plan.

There are three proposed access points identified on the site plan including:

- Primary Access on Wiley Road (proposed as full-access stop controlled)
  - Approximately 0.5 mile east of Wiley Road/Parrish Lane intersection
- Secondary Access on Parrish Lane (proposed as full-access stop controlled)
  - Approximately 0.6 mile north of Wiley Road/Parrish Lane intersection
- Workforce Housing Access (proposed as full-access stop controlled)
  - Approximately 0.9 mile east of Wiley Road/Parrish Lane intersection

Site Vicinity Map
Crook County, OR

Figure 01

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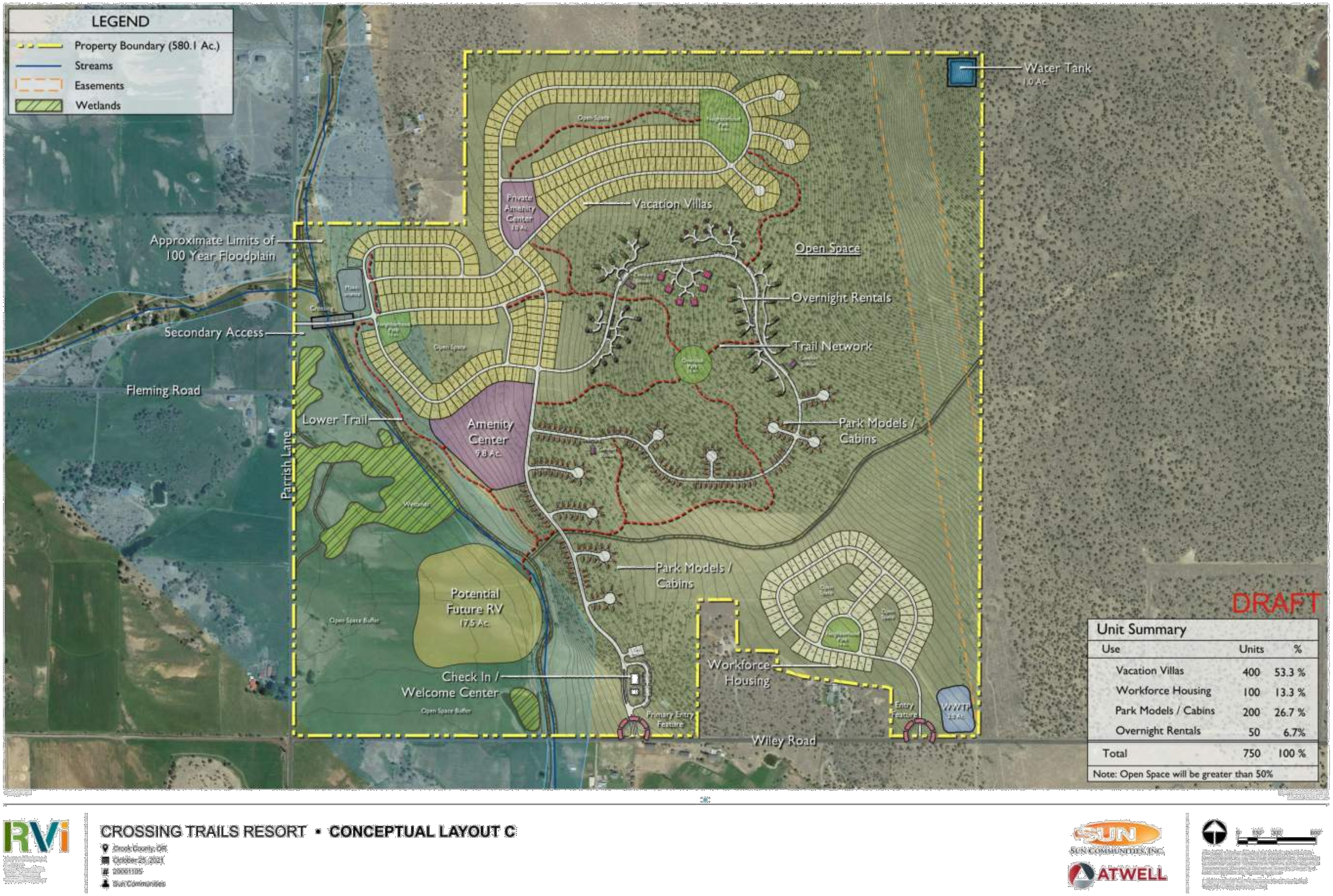

Site Plan (As of November 2, 2021)
Crook County, OR

Figure
02

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Estimated Trip Generation

The proposed development includes 100 workforce housing units, 50 overnight resort units, 400 vacation villas, and 200 manufactured homes/cabins. Trip generation rates were generated from a 2006 ODOT approved trip generation study that looked at trip data associated with several Central Oregon destination resorts. The weekday p.m. peak hour trip rate was 0.32 trips/unit, the Saturday peak hour trip rate was 0.44 trips/unit and the daily trip rate was 3.2 daily trips/unit. The approved destination resort trip rates were applied to the overnight/vacation rentals, while the ITE 11th Edition Trip Generation rates for single family homes were applied to the workforce housing units.

The workforce housing area is separated from the overnight/vacation rentals and is intended to provide convenient housing for employees of the resort. While employment at the resort cannot be conditioned to occupants of the resort, it was assumed a conservative 25% internalization of peak hour trips between the workforce housing and the resort.

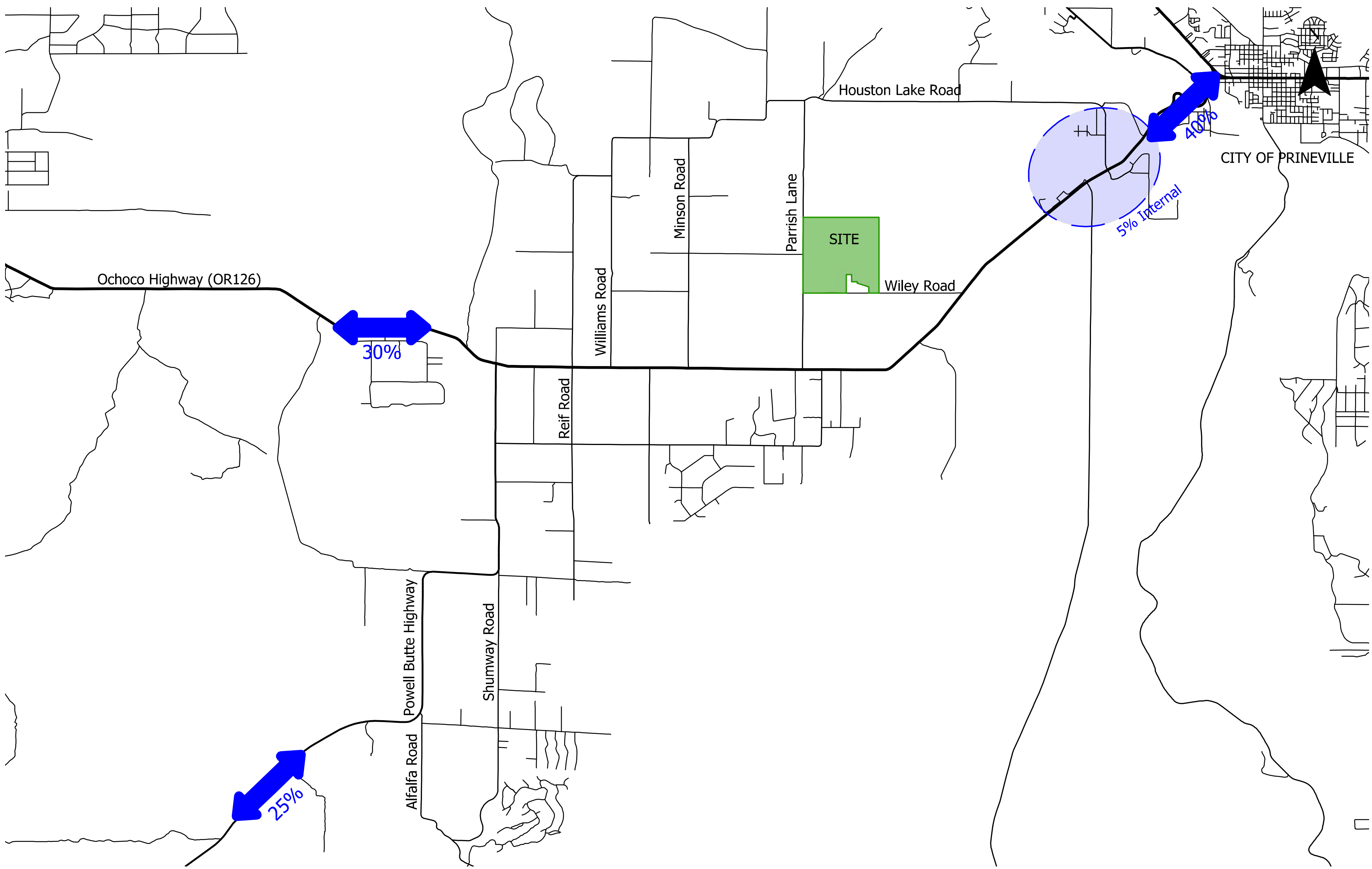
Trip generation rates from the land uses associated with the ITE 11th Edition Trip Generation Manual were compared to the ODOT approved destination resort rates. Both the weekday p.m. and Saturday conditions resulted in similar total trips where the Saturday destination totals were approximately 10% more conservative that the ITE totals. *Comparison trip generation tables are provided in Appendix A.* Given that the destination resort rates are local data, have been accepted by ODOT and local agencies, and are slightly more conservative, these rates were used to develop the trip generation shown in Table 1.

Table 1. Estimated Trip Generation

Land Use	ITE Code	Units	Daily	Weekday AM Peak Hour			Weekday PM Peak Hour			Saturday Peak Hour		
				Total	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**
Workforce Housing	210	100 Dwelling Unit	943	70	18	52	94	59	35	41	21	20
Destina-tion Resort	N/A	650 Dwelling Unit	2,860	156	78	78	208	104	104	286	143	143
Workforce Housing Internalization (25%)			236	18	5	13	24	15	9	10	5	5
Total New Trips			**3,567**	**208**	**91**	**117**	**278**	**175**	**103**	**317**	**159**	**158**

Trip Distribution and Assignment

The site generated trips are expected to distribute onto the local and regional network similar to existing travel patterns. The proposed distribution is shown in Figure 3. The distribution pattern from the approved traffic study was consulted, however, the distribution shown in Figure 3 accounts for employer generators near OR126/Tom McCall (i.e. Facebook, Apple, the Airport), and travel times/patterns from out of town guests coming to the development from west of the Cascade Mountains. *The site trips were distributed onto the network* and *are provided in Appendix B.*



Trip Distribution
Crook County, OR

Figure
03

Preliminary Crash History Assessment

The most recent five-year crash history was collected from the ODOT crash database. Table 2 summarizes the crash data. None of the proposed study intersections are within the top 5% or 10% of ODOT's Safety Priority Index System (SPIS). Additional safety evaluation will be completed as part of the TIA as traffic volume data is collected. This will include a comparison to 90th percentile crash rates and critical crash rates. Any locations where the rates are exceeded, we will identify potential countermeasures using the ODOT All Roads Transportation Safety (ARTS) crash reduction factors.

Table 2. Historic Crash Data

Intersection	Crash Type						Crash Severity			Total
	Angle	Turning Movement	Fixed Object	Rear End	Pedestrian/ Bicycle	Other	PDO	Injury	Fatal	
Powell Butte Hwy/Alfalfa Rd	0	0	1	0	0	1	1	1	0	**2**
Powell Butte Hwy/Bussett Rd	0	0	2	1	0	2	3	2	0	**5**
Powell Butte Hwy/Riggs Rd	0	1	0	0	0	1	1	1	0	**2**
Powell Butte Hwy/OR126	0	9	0	6	0	0	4	11	0	**15**
Williams Rd/OR126	0	0	1	5	0	0	4	2	0	**6**
Copley Road/OR126	1	0	2	2	0	0	2	3	0	**5**
Minson Road/OR126	0	0	0	2	0	2	1	3	0	**4**
Parrish Ln/OR126	0	0	1	3	0	0	0	4	0	**4**
Parrish Ln/Wiley Rd	0	0	0	0	0	0	0	0	0	**0**
Parrish Ln/Houston Lake Rd	0	0	0	0	0	0	0	0	0	**0**
Tom McCall Rd/OR126	0	0	0	4	0	0	1	3	0	**3**

[1]A roundabout was constructed in September 2018. The presented crashes occurred after construction

Analysis Scenarios & Study Assumptions

The proposed assumptions are based on the TIA standards for Crook County as presented in Code Section 18.180. Per code requirements, the analysis will include:

STUDY YEARS

The study should evaluate the existing traffic conditions (2021), the build out year background traffic conditions (includes the regional growth but no site development traffic), and the buildout year total traffic conditions (includes background traffic plus site generated trips).

TIME PERIODS AND DATA COLLECTION

Per Crook County Code 18.180, the morning and evening weekday peak hours should be analyzed. Turning movement count data should be collected during a typical midweek peak period.

We propose analyzing the weekday p.m. peak hour (4:00-6:00pm) and the Saturday peak hour (12:00-4:00pm). An initial review of morning peak hour trips shows the weekday a.m. peak hour trip generation is approximately 75% of the weekday p.m. peak hour. The site primarily attracts recreational users who are likely to travel on the weekend. Given the high recreational use of OR126 (particularly on the weekends), a Saturday analysis period captures this demand.

STUDY INTERSECTIONS

County Code states that the TIA should evaluate intersections that receive site-generated trips that comprise at least 10 percent or more of the total intersection volume. The trip assignment volumes were compared to ODOT historic traffic volumes. The weekday p.m. peak hour trips were multiplied by 10 (A commonly used factor to estimate daily volumes from compare p.m. peak hour volumes) to compare the peak hour trips to the ODOT segment volumes. *The volumes from both 2019 were reviewed and are shown in Appendix C.*

The original conditions of approval included closures at OR126/Wiley Road and OR126/Reif Road for safety purposes. Assuming the condition remains applicable, we propose not including those intersections in the study. Additionally, Millican Road was recently upgrades as part of the Tom McCall roundabout and no longer allows for full turning movements. Therefore, it was also not included as a study intersection.

The proposed intersections shown below are locations experiencing a 10-percent increase in volumes as is required in the Code:

1. Powell Butte Highway/Alfalfa Road
2. Powell Butte Highway/Bussett Road
3. Powell Butte Highway/Riggs Road
4. Powell Butte Highway/OR126
5. Williams Road/OR126
6. Copley Road/OR126
7. Minson Road/OR126
8. Parrish Lane/OR126
9. Parrish Lane/Wiley Road
10. Parrish Lane/Houston Lake Road
11. Tom McCall Road/OR126

BACKGROUND GROWTH RATE

Growth factors were developed using ODOT's historical trends method, which relies on traffic volumes from previous years to develop a growth pattern for use in projected future volumes. ODOT maintains Future Volumes Tables that summarize current and future year traffic volumes for state roadways throughout the

State. Locations near the proposed study locations were used to develop a growth rate. Table 3 shows the ODOT Future Volumes Table and the respective values.

Table 3. ODOT Future Growth Table

HWY	MP	DIR	Location	2014	2036	RSQ[1]	Growth Rate
041	2.32	1	At east city limits of Redmond	10000	13700	MODEL[3]	1.5%
041	6.82	1	0.02 mile west of Powell Butte Highway	9800	12100	0.8181	1.0%
041	6.86	1	0.02 mile east of Powell Butte Highway	11800	15000	0.8495	1.1%
041	15.75	1	0.01 mile west of Tom McCall Road	12900	18900	MODEL[3]	1.8%
041	17.90	1	0.02 mile west of O'Neil Highway	13600	20400	MODEL[3]	1.9%
041	17.94	1	0.02 mile east of O'Neil Highway, 0.23 mile west of Madras-Prineville Highway (US26)	15400	21800	MODEL[3]	1.7%
						Average Growth	1.5%

[1] RSQ=R-squared value, describing the fit of the data to the line
[3]MODEL = data was obtained from the Transportation Planning Analysis Unit (TPAU) Travel Demand Model

A review of the Crook County TSP reveals a 1.6% growth rate was applied to all county roads. Given the nearly identical growth rates, **we propose a growth rate of 1.6% to evaluate the future traffic volumes for all intersection turning movements on ODOT and County facilities.**

IN-PROCESS AND APPROVED NEIGHBORING DEVELOPMENTS

As presented in the Preliminary Recommendations report, there are several destination resorts within the area that are under development or approved for development. These include:

- Pronghorn (Under Development)
- Brasada Ranch (Under Development)
- Hidden Canyon (Approved)
- Remington Ranch (Approved)

All of the forecasted vested trips are unlikely to be developed by the time the Crossing Trails property is built out. The TIA will review the traffic studies and trip assumptions for the neighboring destination resorts and apply an annualized trip rate for each resort onto the system to capture estimated trips on the system at the build-out year and the forecast year. Kittelson will contact Crook County, Deschutes County, the City of Prineville and the City of Redmond to identify any other in-process developments to include in background growth.

Conditions of Approval

Several of the neighboring destination resorts are conditioned for transportation improvements on the regional network within the study area. These conditions are as follows:

- Hidden Canyon
  - Design and construct the OR126/Powell Butte Highway Roundabout upon occupancy of the 251st dwelling unit. If the roundabout is constructed by others, proportionate share costs should be distributed to other impacted intersections as documented in the Memorandum of Understanding (MOU).
  - The MOU requires an intersection improvement at Powell Butte Highway/Shumway Road/Bussett Road to create a single intersection at the apex of the curve on Powell Butte Highway. This improvement is required upon build out of the 600th resort unit.

- Remington Ranch
  - Proportionate share contributions should be allocated to the OR126/Powell Butte Highway based upon the percentage of projected resort trips traveling through the intersection.

ACCESS SPACING AND NEEDS

Access spacing will be evaluated with respect to the Crook Count access spacing requirements and verified during a field visit. Additionally, intersection control devices and turn lane evaluations will be conducted at the site accesses and off-site facilities. Turn lane warrants and evaluations will be conducted using the ODOT Analysis Procedure Manual (APM) methodologies.

Analysis Tools and Mobility Targets

The intersection operational analysis will be performed using the *Highway Capacity Manual (HCM), 6th Edition* analysis procedures. To ensure that this analysis is based on a reasonable worst-case scenario, the peak 15-minute flow rate during the weekday p.m. peak hour and Saturday peak hour will be used in the evaluation of all intersection level-of-service (LOS) and volume-to-capacity (V/C) ratios. The stop-controlled intersection operations analyses will be completed using Synchro 11 software, HCS 7 software will be used for the roundabout analysis.

ODOT MOBILITY TARGETS

ODOT assesses intersection operations based on established mobility targets (as defined by the volume-to-capacity (v/c) ratio). Table 6 of the *Oregon Highway Plan* (OHP) provides the mobility targets for facilities outside the Portland Metro area. There is one state facility within the study area: OR126 – Ochoco Highway. OR126 is designed by the OHP as a Statewide Freight Route and an Expressway.

Table 6 of the OHP states that a freight route on a statewide highway and an expressway outside of an urban growth boundary in an unincorporated community should maintain a mobility target v/c ratio less than 0.70. However, the OHP states that non-state highway unsignalized intersection approaches should adhere to the volume to capacity ratio for District/Local Interest Roads. Therefore, the mobility standard for the side street approaches to OR126 intersections within the study area is a v/c ratio less than 0.80.

COUNTY MOBILITY TARGETS

Crook County intersection mobility targets adhere to a v/c ratio and Level of Service (LOS) threshold. For unsignalized intersections, the mobility target is a v/c ratio less than 0.95 and a LOS E or F.

MOBILITY TARGET SUMMARY

Table 4 summarizes the mobility targets for the proposed study intersections.

Table 4. Study Intersection Control and Mobility Target

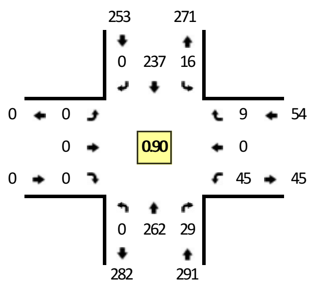
Study Int. #	Intersection	Classification / Jurisdiction	Intersection Control	Mobility Target
1	Powell Butte Highway/Alfalfa Road	County	Stop Controlled	LOS E/F and v/c<0.95
2	Powell Butte Highway/Bussett Road	County	Stop Controlled	LOS E/F and v/c<0.95
3	Powell Butte Hwy/ Riggs Road	County	Stop Controlled	LOS E/F and v/c<0.95
4	Powell Butte Highway/OR126	ODOT	Stop Controlled	Side-Street: OHP: v/c<0.80 Mainline: OHP: v/c<0.70:
5	Williams Road/OR126	ODOT	Stop Controlled	Side-Street: OHP: v/c<0.80 Mainline: OHP: v/c<0.70:
6	Copley Road/OR126	ODOT	Stop Controlled	Side-Street: OHP: v/c<0.80 Mainline: OHP: v/c<0.70:
7	Minson Road/OR126	ODOT	Stop Controlled	Side-Street: OHP: v/c<0.80 Mainline: OHP: v/c<0.70:
8	Parrish Lane/OR126	ODOT	Stop Controlled	Side-Street: OHP: v/c<0.80 Mainline: OHP: v/c<0.70:
9	Parrish Lane/Wiley Road	County	Stop Controlled	LOS E/F and v/c<0.95
10	Parrish Lane/Houston Lake Road	County	Stop Controlled	LOS E/F and v/c<0.95
11	Tom McCall Road/OR126	ODOT	Roundabout	Side-Street: OHP: v/c<0.80 Mainline: OHP: v/c<0.70:

Next Steps

We request ODOT, Crook County, and the City of Prineville review this scoping memo and provide a response on the assumptions to proceed with the TIA. Please contact Jacki Gulczynski (541-639-8617 or jgulczynski@kittelson.com) if you have any questions or comments on the information presented in this memorandum.

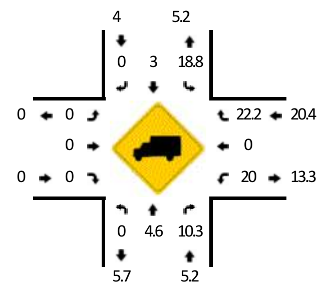
APPENDIX D – TRAFFIC COUNT DATA

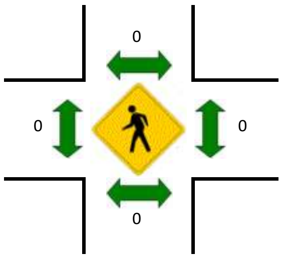
LOCATION: Powell Butte Hwy -- Alfalfa Rd | **QC JOB #:** 15624401
CITY/STATE: Crook, OR | **DATE:** Tue, Nov 16 2021

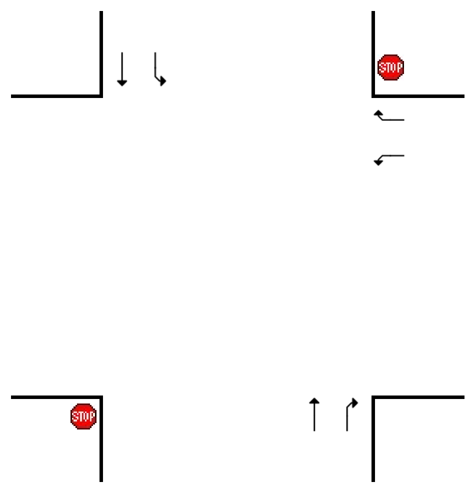


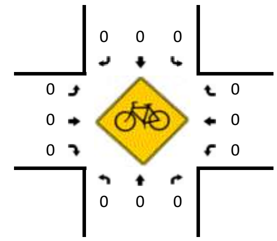
Peak-Hour: 4:10 PM -- 5:10 PM
Peak 15-Min: 4:25 PM -- 4:40 PM

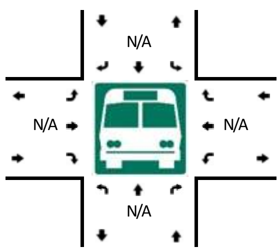
Quality Counts
DATA THAT DRIVES COMMUNITIES

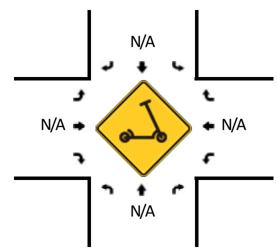












5-Min Count Period Beginning At	Powell Butte Hwy (Northbound)				Powell Butte Hwy (Southbound)				Alfalfa Rd (Eastbound)				Alfalfa Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	18	1	0	0	18	0	0	0	0	0	0	4	0	0	0	41	
4:05 PM	0	17	3	0	0	17	0	0	0	0	0	0	2	0	0	0	39	
4:10 PM	0	18	1	0	0	14	0	0	0	0	0	0	7	0	2	0	42	
4:15 PM	0	22	5	0	3	16	0	0	0	0	0	0	5	0	2	0	53	
4:20 PM	0	34	2	0	0	11	0	0	0	0	0	0	4	0	0	0	51	
4:25 PM	0	26	3	0	2	18	0	0	0	0	0	0	2	0	1	0	52	
4:30 PM	0	25	1	0	1	15	0	0	0	0	0	0	3	0	0	0	45	
4:35 PM	0	27	3	0	0	33	0	0	0	0	0	0	5	0	1	0	69	
4:40 PM	0	11	5	0	2	16	0	0	0	0	0	0	1	0	0	0	35	
4:45 PM	0	19	3	0	1	18	0	0	0	0	0	0	4	0	0	0	45	
4:50 PM	0	22	1	0	1	25	0	0	0	0	0	0	3	0	1	0	53	
4:55 PM	0	17	1	0	2	26	0	0	0	0	0	0	1	0	0	0	47	572
5:00 PM	0	18	2	0	2	21	0	0	0	0	0	0	6	0	1	0	50	581
5:05 PM	0	23	2	0	2	24	0	0	0	0	0	0	4	0	1	0	56	598
5:10 PM	0	17	2	0	1	15	0	0	0	0	0	0	6	0	1	0	42	598
5:15 PM	0	28	2	0	0	9	0	0	0	0	0	0	2	0	0	0	41	586
5:20 PM	0	20	4	0	3	15	0	0	0	0	0	0	0	0	0	0	42	577
5:25 PM	0	35	2	0	1	13	0	0	0	0	0	0	1	0	2	0	54	579
5:30 PM	0	19	3	0	0	10	0	0	0	0	0	0	0	0	0	0	32	566
5:35 PM	0	22	5	0	1	10	0	0	0	0	0	0	3	0	0	0	41	538
5:40 PM	0	18	6	0	0	11	0	0	0	0	0	0	1	0	0	0	36	539
5:45 PM	0	26	5	0	0	3	0	0	0	0	0	0	2	0	0	0	36	530
5:50 PM	0	10	2	0	0	6	0	0	0	0	0	0	1	0	1	0	20	497
5:55 PM	0	12	0	0	3	9	0	0	0	0	0	0	1	0	2	0	27	477

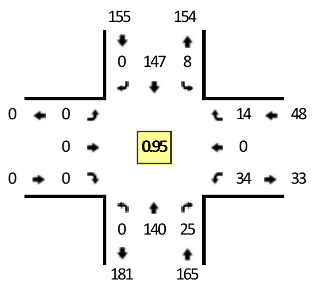
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	312	28	0	12	264	0	0	0	0	0	0	40	0	8	0	664
Heavy Trucks	0	12	4		8	16	0		0	0	0		0	0	0		40
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

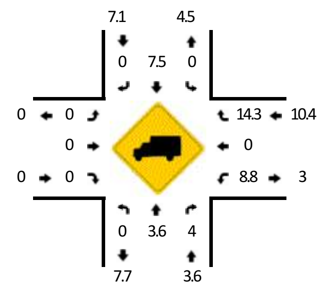
Comments:

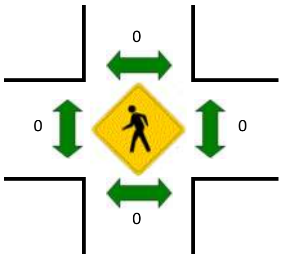
Type of peak hour being reported: Intersection Peak — Method for determining peak hour: Total Entering Volume

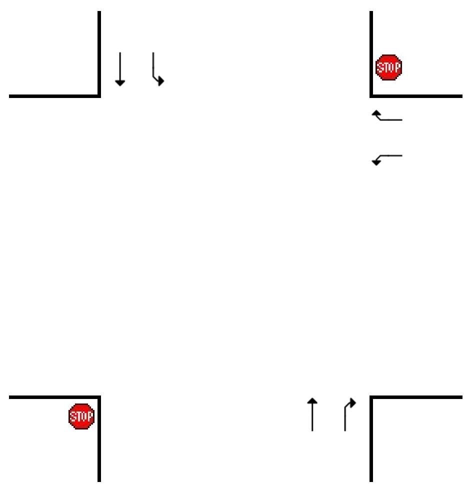
LOCATION: Powell Butte Hwy -- Alfalfa Rd — **QC JOB #:** 15624402
CITY/STATE: Crook, OR — **DATE:** Sat, Nov 13 2021

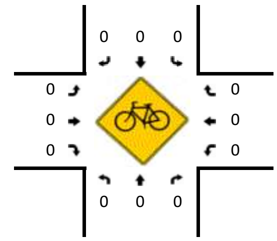
Peak-Hour: 12:25 PM -- 1:25 PM
Peak 15-Min: 12:25 PM -- 12:40 PM

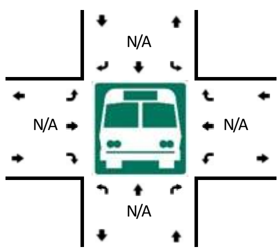


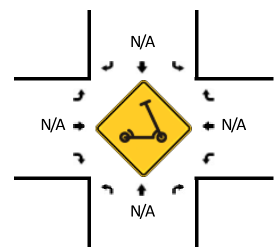












5-Min Count Period Beginning At	Powell Butte Hwy (Northbound)				Powell Butte Hwy (Southbound)				Alfalfa Rd (Eastbound)				Alfalfa Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
12:00 PM	0	10	2	0	0	3	0	0	0	0	0	0	4	0	1	0	20	
12:05 PM	0	6	6	0	0	7	0	0	0	0	0	0	3	0	0	0	22	
12:10 PM	0	14	3	0	2	10	0	0	0	0	0	0	1	0	2	0	32	
12:15 PM	0	6	4	0	0	8	0	0	0	0	0	0	0	0	1	0	19	
12:20 PM	0	9	0	0	0	7	0	0	0	0	0	0	3	0	1	0	20	
12:25 PM	0	13	3	0	0	9	0	0	0	0	0	0	6	0	1	0	32	
12:30 PM	0	16	1	0	0	10	0	0	0	0	0	0	3	0	4	0	34	
12:35 PM	0	14	3	0	0	12	0	0	0	0	0	0	1	0	1	0	31	
12:40 PM	0	11	1	0	3	14	0	0	0	0	0	0	1	0	0	0	30	
12:45 PM	0	14	2	0	1	10	0	0	0	0	0	0	1	0	2	0	30	
12:50 PM	0	13	2	0	1	6	0	0	0	0	0	0	5	0	1	0	28	
12:55 PM	0	9	5	0	0	12	0	0	0	0	0	0	1	0	1	0	28	326
1:00 PM	0	11	1	0	2	12	0	0	0	0	0	0	4	0	0	0	30	336
1:05 PM	0	16	1	0	0	12	0	0	0	0	0	0	6	0	1	0	36	350
1:10 PM	0	13	0	0	0	15	0	0	0	0	0	0	0	0	0	0	28	346
1:15 PM	0	4	2	0	0	13	0	0	0	0	0	0	4	0	1	0	24	351
1:20 PM	0	6	4	0	1	22	0	0	0	0	0	0	2	0	2	0	37	368
1:25 PM	0	13	2	0	0	7	0	0	0	0	0	0	4	0	1	0	27	363
1:30 PM	0	4	0	0	1	13	0	0	0	0	0	0	1	0	0	0	19	348
1:35 PM	0	13	1	0	1	12	0	0	0	0	0	0	0	0	1	0	28	345
1:40 PM	0	7	2	0	0	19	0	0	0	0	0	0	2	0	0	0	30	345
1:45 PM	0	13	4	0	1	13	0	0	0	0	0	0	1	0	0	0	32	347
1:50 PM	0	10	3	0	0	6	0	0	0	0	0	0	2	0	3	0	24	343
1:55 PM	0	12	1	0	0	11	0	0	0	0	0	0	1	0	1	0	26	341
2:00 PM	0	7	5	0	1	10	0	0	0	0	0	0	0	0	2	0	25	336
2:05 PM	0	9	1	0	0	7	0	0	0	0	0	0	3	0	1	0	21	321
2:10 PM	0	7	1	0	0	11	0	0	0	0	0	0	4	0	2	0	25	318
2:15 PM	0	13	0	0	1	14	0	0	0	0	0	0	2	0	0	0	30	324
2:20 PM	0	17	2	0	0	13	0	0	0	0	0	0	3	0	0	0	35	322
2:25 PM	0	9	0	0	0	15	0	0	0	0	0	0	1	0	1	0	26	321
2:30 PM	0	15	6	0	0	22	0	0	0	0	0	0	0	0	0	0	43	345
2:35 PM	0	16	1	0	0	17	0	1	0	0	0	0	1	0	1	0	37	354
2:40 PM	0	5	0	0	0	7	0	0	0	0	0	0	2	0	0	0	14	338
2:45 PM	0	18	3	0	2	7	0	0	0	0	0	0	1	0	1	0	32	338
2:50 PM	0	16	2	0	2	9	0	0	0	0	0	0	0	0	0	0	29	343
2:55 PM	0	11	1	0	1	9	0	0	0	0	0	0	2	0	0	0	24	341
3:00 PM	0	13	1	0	1	13	0	0	0	0	0	0	1	0	1	0	30	346
3:05 PM	0	7	1	0	0	16	0	0	0	0	0	0	2	0	0	0	26	351

5-Min Count Period Beginning At	Powell Butte Hwy (Northbound)				Powell Butte Hwy (Southbound)				Alfalfa Rd (Eastbound)				Alfalfa Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:10 PM	0	12	3	0	0	7	0	0	0	0	0	0	0	0	0	0	22	348
3:15 PM	0	7	2	0	2	13	0	0	0	0	0	0	3	0	2	0	29	347
3:20 PM	0	10	0	0	0	11	0	0	0	0	0	0	3	0	2	0	26	338
3:25 PM	0	7	6	0	0	10	0	0	0	0	0	0	3	0	1	0	27	339
3:30 PM	0	4	1	0	1	18	0	0	0	0	0	0	5	0	0	0	29	325
3:35 PM	0	10	4	0	0	10	0	0	0	0	0	0	1	0	0	0	25	313
3:40 PM	0	9	5	0	2	11	0	0	0	0	0	0	1	0	0	0	28	327
3:45 PM	0	3	1	0	0	15	0	0	0	0	0	0	1	0	0	0	20	315
3:50 PM	0	15	2	0	1	10	0	0	0	0	0	0	1	0	0	0	29	315
3:55 PM	0	10	2	0	1	10	0	0	0	0	0	0	2	0	1	0	26	317

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	172	28	0	0	124	0	0	0	0	0	0	40	0	24	0	388
Heavy Trucks	0	12	0		0	0	0		0	0	0		0	0	0		12
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

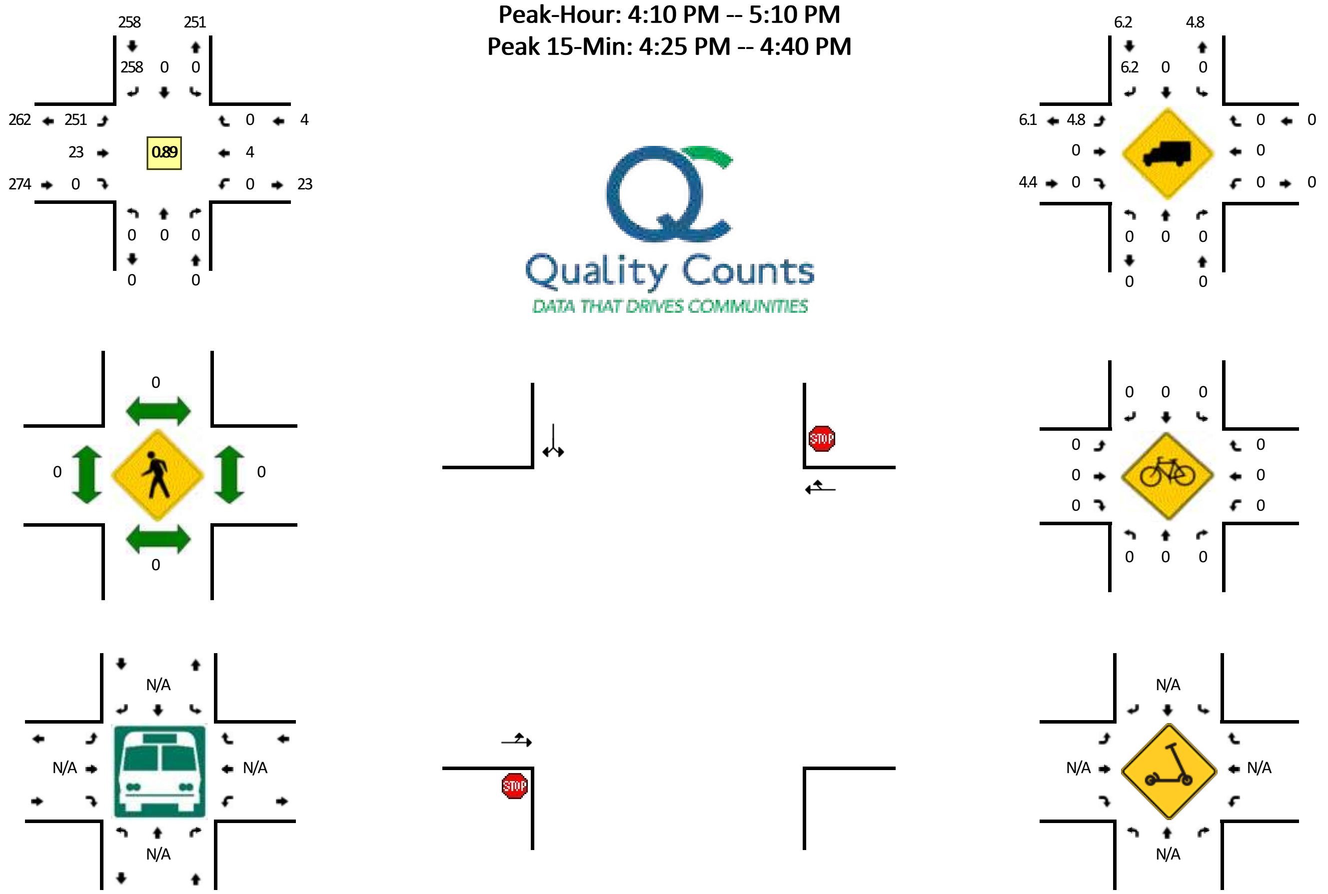
Comments:

Report generated on 11/29/2021 4:10 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

LOCATION: Powell Butte Hwy -- Bussett Rd (West) | **QC JOB #:** 15624403
CITY/STATE: Crook, OR | **DATE:** Tue, Nov 16 2021

Peak-Hour: 4:10 PM -- 5:10 PM
Peak 15-Min: 4:25 PM -- 4:40 PM



5-Min Count Period Beginning At	Powell Butte Hwy (Northbound) Left	Thru	Right	U	Powell Butte Hwy (Southbound) Left	Thru	Right	U	Bussett Rd (West) (Eastbound) Left	Thru	Right	U	Bussett Rd (West) (Westbound) Left	Thru	Right	U	Total	Hourly Totals
4:00 PM	0	0	0	0	0	0	17	0	21	2	0	0	0	0	0	0	40	
4:05 PM	0	0	0	0	0	0	12	0	16	1	0	0	0	0	0	0	29	
4:10 PM	0	0	0	0	0	0	18	0	22	0	0	0	0	1	0	0	41	
4:15 PM	0	0	0	0	0	0	19	0	15	3	0	0	0	1	0	0	38	
4:20 PM	0	0	0	0	0	0	13	0	32	1	0	0	0	0	0	0	46	
4:25 PM	0	0	0	0	0	0	20	0	26	2	0	0	0	0	0	0	48	
4:30 PM	0	0	0	0	0	0	21	0	23	2	0	0	0	0	0	0	46	
4:35 PM	0	0	0	0	0	0	30	0	25	2	0	0	0	0	0	0	57	
4:40 PM	0	0	0	0	0	0	18	0	23	3	0	0	0	0	0	0	44	
4:45 PM	0	0	0	0	0	0	23	0	6	1	0	0	0	0	0	0	30	
4:50 PM	0	0	0	0	0	0	24	0	19	4	0	0	0	0	0	0	47	
4:55 PM	0	0	0	0	0	0	27	0	21	1	0	0	0	0	0	0	49	515
5:00 PM	0	0	0	0	0	0	23	0	18	2	0	0	0	1	0	0	44	519
5:05 PM	0	0	0	0	0	0	22	0	21	2	0	0	0	1	0	0	46	536
5:10 PM	0	0	0	0	0	0	10	0	12	2	0	0	0	1	0	0	25	520
5:15 PM	0	0	0	0	0	0	11	0	30	0	0	0	0	0	0	0	41	523
5:20 PM	0	0	0	0	0	0	17	0	18	1	0	0	0	0	0	0	36	513
5:25 PM	0	0	0	0	0	0	15	0	30	2	0	0	0	0	0	0	47	512
5:30 PM	0	0	0	0	0	0	10	0	26	3	0	0	0	0	0	0	39	505
5:35 PM	0	0	0	0	0	0	8	0	19	1	0	0	0	0	0	0	28	476
5:40 PM	0	0	0	0	0	0	9	0	19	1	0	0	0	0	0	0	29	461
5:45 PM	0	0	0	0	0	0	6	0	20	1	0	0	0	0	0	0	27	458
5:50 PM	0	0	0	0	0	0	12	0	21	0	0	0	0	0	0	0	33	444
5:55 PM	0	0	0	0	0	0	7	0	13	0	0	0	0	0	0	0	20	415

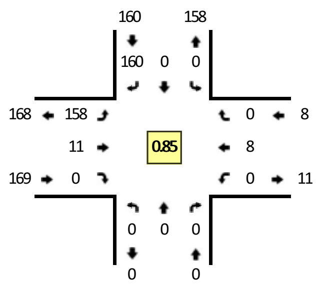
Peak 15-Min Flowrates	Northbound Left	Thru	Right	U	Southbound Left	Thru	Right	U	Eastbound Left	Thru	Right	U	Westbound Left	Thru	Right	U	Total
All Vehicles	0	0	0	0	0	0	284	0	296	24	0	0	0	0	0	0	604
Heavy Trucks	0	0	0		0	0	28		12	0	0		0	0	0		40
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

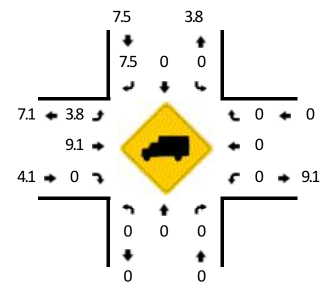
Report generated on 11/29/2021 4:10 PM

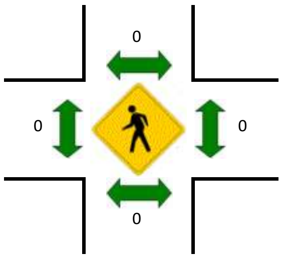
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

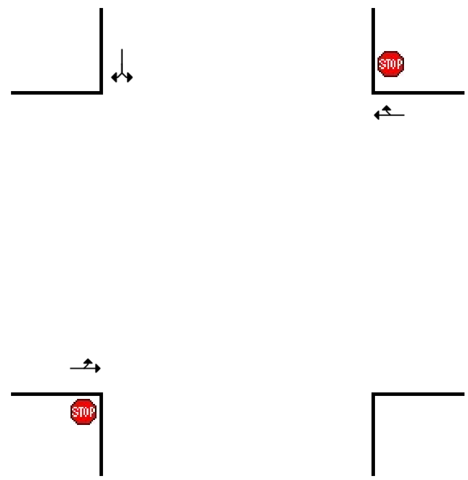
LOCATION: Powell Butte Hwy -- Bussett Rd (West) | **QC JOB #:** 15624404
CITY/STATE: Crook, OR | **DATE:** Sat, Nov 13 2021

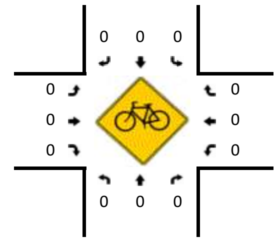


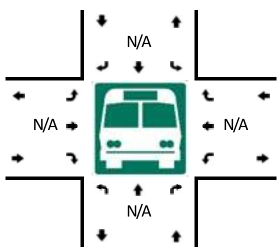
Peak-Hour: 2:10 PM -- 3:10 PM
Peak 15-Min: 2:25 PM -- 2:40 PM

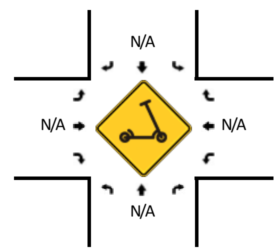












5-Min Count Period Beginning At	Powell Butte Hwy (Northbound)				Powell Butte Hwy (Southbound)				Bussett Rd (West) (Eastbound)				Bussett Rd (West) (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
12:00 PM	0	0	0	0	0	0	6	0	12	1	0	0	0	0	0	0	19	
12:05 PM	0	0	0	0	0	0	9	0	5	0	0	0	0	0	0	0	14	
12:10 PM	0	0	0	0	0	0	12	0	14	2	0	0	0	0	0	0	28	
12:15 PM	0	0	0	0	0	0	9	0	7	0	0	0	0	0	0	0	16	
12:20 PM	0	0	0	0	0	0	5	0	9	0	0	0	0	0	0	0	14	
12:25 PM	0	0	0	0	0	0	6	0	17	0	0	0	0	0	0	0	23	
12:30 PM	0	0	0	0	0	0	15	0	16	1	0	0	0	0	0	0	32	
12:35 PM	0	0	0	0	0	0	17	0	17	1	0	0	0	0	0	0	35	
12:40 PM	0	0	0	0	0	0	14	0	9	1	0	0	0	1	0	0	25	
12:45 PM	0	0	0	0	0	0	10	0	17	0	0	0	0	0	0	0	27	
12:50 PM	0	0	0	0	0	0	10	0	12	1	0	0	0	0	0	0	23	
12:55 PM	0	0	0	0	0	0	9	0	13	0	0	0	0	0	0	0	22	278
1:00 PM	0	0	0	0	0	0	14	0	11	1	0	0	0	3	0	0	29	288
1:05 PM	0	0	0	0	0	0	16	0	14	1	0	0	0	1	0	0	32	306
1:10 PM	0	0	0	0	0	0	13	0	13	0	0	0	0	0	0	0	26	304
1:15 PM	0	0	0	0	0	0	16	0	9	3	0	0	0	0	0	0	28	316
1:20 PM	0	0	0	0	0	0	16	0	6	0	0	0	0	1	0	0	23	325
1:25 PM	0	0	0	0	0	0	8	0	9	0	0	0	0	0	0	0	17	319
1:30 PM	0	0	0	0	0	0	14	0	10	0	0	0	0	2	0	0	26	313
1:35 PM	0	0	0	0	0	0	12	0	11	0	0	0	0	1	0	0	24	302
1:40 PM	0	0	0	0	0	0	18	0	11	0	0	0	0	2	0	0	31	308
1:45 PM	0	0	0	0	0	0	7	0	6	1	0	0	0	0	0	0	14	295
1:50 PM	0	0	0	0	0	0	12	0	11	1	0	0	0	1	0	0	25	297
1:55 PM	0	0	0	0	0	0	9	0	15	0	0	0	0	3	0	0	27	302
2:00 PM	0	0	0	0	0	0	4	0	11	1	0	0	0	0	0	0	16	289
2:05 PM	0	0	0	0	0	0	7	0	8	1	0	0	0	1	0	0	17	274
2:10 PM	0	0	0	0	0	0	13	0	15	0	0	0	0	3	0	0	31	279
2:15 PM	0	0	0	0	0	0	11	0	9	0	0	0	0	0	0	0	20	271
2:20 PM	0	0	0	0	0	0	15	0	19	2	0	0	0	1	0	0	37	285
2:25 PM	0	0	0	0	0	0	25	0	10	0	0	0	0	0	0	0	35	303
2:30 PM	0	0	0	0	0	0	13	0	10	0	0	0	0	2	0	0	25	302
2:35 PM	0	0	0	0	0	0	16	0	20	3	0	0	0	0	0	0	39	317
2:40 PM	0	0	0	0	0	0	9	0	10	2	0	0	0	0	0	0	21	307
2:45 PM	0	0	0	0	0	0	8	0	13	1	0	0	0	0	0	0	22	315
2:50 PM	0	0	0	0	0	0	11	0	17	0	0	0	0	0	0	0	28	318
2:55 PM	0	0	0	0	0	0	13	0	8	2	0	0	0	0	0	0	23	314
3:00 PM	0	0	0	0	0	0	15	0	16	1	0	0	0	2	0	0	34	332
3:05 PM	0	0	0	0	0	0	11	0	11	0	0	0	0	0	0	0	22	337

5-Min Count Period Beginning At	Powell Butte Hwy (Northbound)				Powell Butte Hwy (Southbound)				Bussett Rd (West) (Eastbound)				Bussett Rd (West) (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:10 PM	0	0	0	0	0	0	13	0	8	1	0	0	0	0	0	0	22	328
3:15 PM	0	0	0	0	0	0	9	0	13	0	0	0	0	1	0	0	23	331
3:20 PM	0	0	0	0	0	0	9	0	4	3	0	0	0	2	0	0	18	312
3:25 PM	0	0	0	0	0	0	17	0	9	0	0	0	0	1	0	0	27	304
3:30 PM	0	0	0	0	0	0	10	0	9	1	0	0	0	1	0	0	21	300
3:35 PM	0	0	0	0	0	0	10	0	6	1	0	0	0	2	0	0	19	280
3:40 PM	0	0	0	0	0	0	12	0	9	1	0	0	0	0	0	0	22	281
3:45 PM	0	0	0	0	0	0	15	0	8	0	0	0	0	0	0	0	23	282
3:50 PM	0	0	0	0	0	0	13	0	13	2	0	0	0	1	0	0	29	283
3:55 PM	0	0	0	0	0	0	6	0	8	3	0	0	0	0	0	0	17	277

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	0	0	216	0	160	12	0	0	0	8	0	0	396
Heavy Trucks	0	0	0		0	0	8		12	0	0		0	0	0		20
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

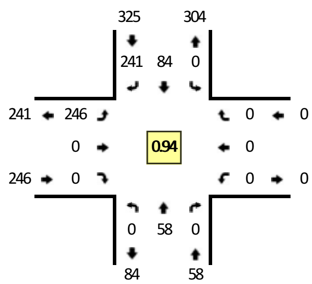
Report generated on 11/29/2021 4:10 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

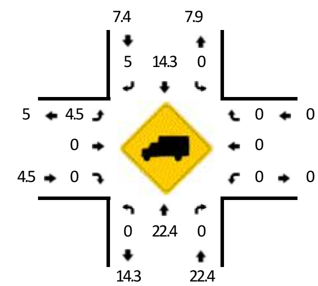
LOCATION: Powell Butte Hwy -- Bussett Rd (North) | **QC JOB #:** 15624405

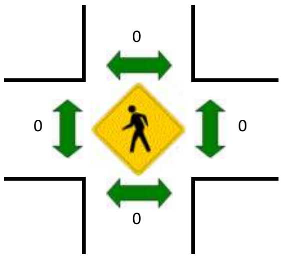
CITY/STATE: Crook, OR | **DATE:** Tue, Nov 16 2021

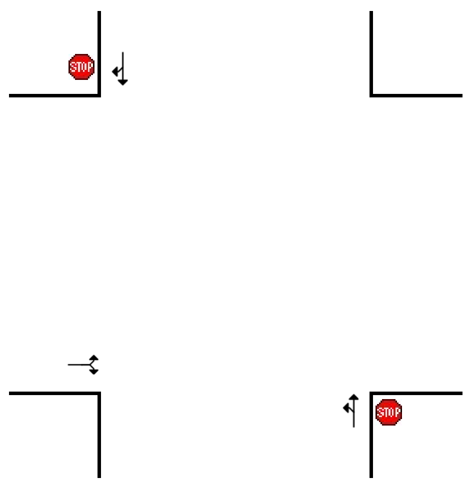


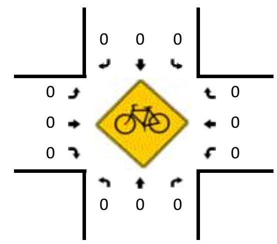
Peak-Hour: 4:30 PM -- 5:30 PM

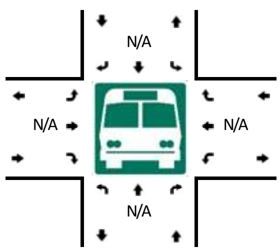
Peak 15-Min: 5:15 PM -- 5:30 PM

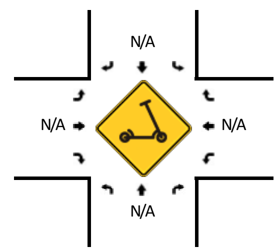












5-Min Count Period Beginning At	Powell Butte Hwy (Northbound)				Powell Butte Hwy (Southbound)				Bussett Rd (North) (Eastbound)				Bussett Rd (North) (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	7	0	0	0	3	17	0	21	0	0	0	0	0	0	0	48	
4:05 PM	0	2	0	0	0	4	12	0	16	0	0	0	0	0	0	0	34	
4:10 PM	0	10	0	0	0	2	18	0	22	0	0	0	0	0	0	0	52	
4:15 PM	0	2	0	0	0	4	19	0	15	0	0	0	0	0	0	0	40	
4:20 PM	0	6	0	0	0	9	13	0	32	0	0	0	0	0	0	0	60	
4:25 PM	0	5	0	0	0	2	20	0	26	0	0	0	0	0	0	0	53	
4:30 PM	0	6	0	0	0	3	21	0	23	0	0	0	0	0	0	0	53	
4:35 PM	0	4	0	0	0	1	30	0	25	0	0	0	0	0	0	0	60	
4:40 PM	0	2	0	0	0	8	18	0	23	0	0	0	0	0	0	0	51	
4:45 PM	0	4	0	0	0	11	23	0	6	0	0	0	0	0	0	0	44	
4:50 PM	0	3	0	0	0	6	24	0	19	0	0	0	0	0	0	0	52	
4:55 PM	0	2	0	0	0	8	27	0	21	0	0	0	0	0	0	0	58	605
5:00 PM	0	8	0	0	0	4	23	0	18	0	0	0	0	0	0	0	53	610
5:05 PM	0	2	0	0	0	4	22	0	21	0	0	0	0	0	0	0	49	625
5:10 PM	0	6	0	0	0	14	10	0	12	0	0	0	0	0	0	0	42	615
5:15 PM	0	7	0	0	0	5	11	0	30	0	0	0	0	0	0	0	53	628
5:20 PM	0	12	0	0	0	5	17	0	18	0	0	0	0	0	0	0	52	620
5:25 PM	0	2	0	0	0	15	15	0	30	0	0	0	0	0	0	0	62	629
5:30 PM	0	6	0	0	0	9	10	0	26	0	0	0	0	0	0	0	51	627
5:35 PM	0	4	0	0	0	3	8	0	19	0	0	0	0	0	0	0	34	601
5:40 PM	0	4	0	0	0	7	9	0	19	0	0	0	0	0	0	0	39	589
5:45 PM	0	3	0	0	0	1	6	0	20	0	0	0	0	0	0	0	30	575
5:50 PM	0	0	0	0	0	3	12	0	21	0	0	0	0	0	0	0	36	559
5:55 PM	0	0	0	0	0	2	7	0	13	0	0	0	0	0	0	0	22	523

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	84	0	0	0	100	172	0	312	0	0	0	0	0	0	0	668
Heavy Trucks	0	20	0		0	16	4		20	0	0		0	0	0		60
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

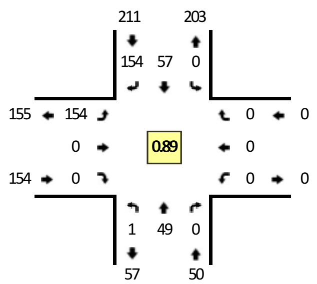
Report generated on 11/29/2021 4:10 PM

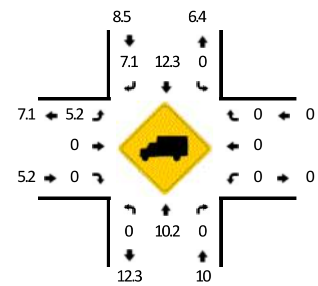
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

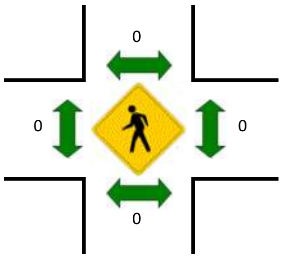
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

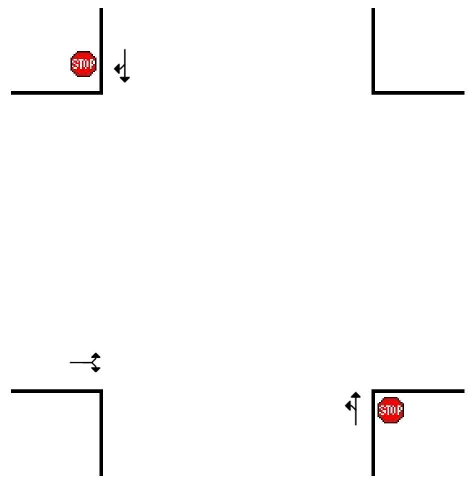
LOCATION: Powell Butte Hwy -- Bussett Rd (North) | **QC JOB #:** 15624406
CITY/STATE: Crook, OR | **DATE:** Sat, Nov 13 2021

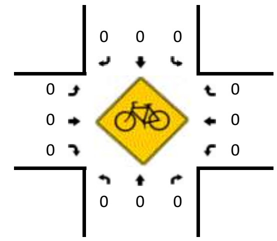
Peak-Hour: 12:25 PM -- 1:25 PM
Peak 15-Min: 12:35 PM -- 12:50 PM

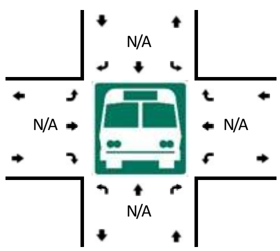


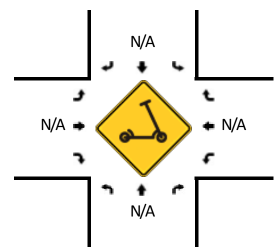












5-Min Count Period Beginning At	Powell Butte Hwy (Northbound)				Powell Butte Hwy (Southbound)				Bussett Rd (North) (Eastbound)				Bussett Rd (North) (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
12:00 PM	0	3	0	0	0	4	6	0	10	0	0	0	0	0	0	0	23	
12:05 PM	0	5	0	0	0	2	9	0	7	0	0	0	0	0	0	0	23	
12:10 PM	0	3	0	0	0	4	12	0	13	0	0	0	0	0	0	0	32	
12:15 PM	0	4	0	0	0	4	8	0	8	0	0	0	0	0	0	0	24	
12:20 PM	0	1	0	0	0	4	6	0	9	0	0	0	0	0	0	0	20	
12:25 PM	0	5	0	0	0	2	5	0	17	0	0	0	0	0	0	0	29	
12:30 PM	0	4	0	0	0	3	16	0	16	0	0	0	0	0	0	0	39	
12:35 PM	0	4	0	0	0	8	16	0	17	0	0	0	0	0	0	0	45	
12:40 PM	0	7	0	0	0	1	14	0	8	0	0	0	0	0	0	0	30	
12:45 PM	0	3	0	0	0	12	10	0	16	0	0	0	0	0	0	0	41	
12:50 PM	0	7	0	0	0	4	10	0	14	0	0	0	0	0	0	0	35	
12:55 PM	1	4	0	0	0	2	8	0	13	0	0	0	0	0	0	0	28	369
1:00 PM	0	4	0	0	0	2	14	0	11	0	0	0	0	0	0	0	31	377
1:05 PM	0	6	0	0	0	5	16	0	14	0	0	0	0	0	0	0	41	395
1:10 PM	0	4	0	0	0	3	13	0	13	0	0	0	0	0	0	0	33	396
1:15 PM	0	1	0	0	0	10	16	0	9	0	0	0	0	0	0	0	36	408
1:20 PM	0	0	0	0	0	5	16	0	6	0	0	0	0	0	0	0	27	415
1:25 PM	0	4	0	0	0	4	8	0	8	0	0	0	0	0	0	0	24	410
1:30 PM	0	4	0	0	0	3	15	0	10	0	0	0	0	0	0	0	32	403
1:35 PM	0	3	0	0	0	7	12	0	12	0	0	0	0	0	0	0	34	392
1:40 PM	0	4	0	0	0	1	18	0	11	0	0	0	0	0	0	0	34	396
1:45 PM	0	1	0	0	0	8	7	0	5	0	0	0	0	0	0	0	21	376
1:50 PM	0	1	0	0	0	4	12	0	12	0	0	0	0	0	0	0	29	370
1:55 PM	0	1	0	0	0	6	9	0	15	0	0	0	0	0	0	0	31	373
2:00 PM	0	2	0	0	0	2	4	0	11	0	0	0	0	0	0	0	19	361
2:05 PM	0	4	0	0	0	7	7	0	8	0	0	0	0	0	0	0	26	346
2:10 PM	0	2	0	0	0	4	13	0	15	0	0	0	0	0	0	0	34	347
2:15 PM	0	4	0	0	0	1	12	0	6	0	0	0	0	0	0	0	23	334
2:20 PM	1	2	0	0	0	4	13	0	19	0	0	0	0	0	0	0	39	346
2:25 PM	0	1	0	0	0	6	25	0	8	0	0	0	0	0	0	0	40	362
2:30 PM	0	3	0	0	0	6	13	0	12	0	0	0	0	0	0	0	34	364
2:35 PM	0	5	0	0	0	4	16	0	20	0	0	0	0	0	0	0	45	375
2:40 PM	0	8	0	0	0	4	9	0	10	0	0	0	0	0	0	0	31	372
2:45 PM	0	2	0	0	0	5	8	0	13	0	0	0	0	0	0	0	28	379
2:50 PM	0	1	0	0	0	2	11	0	17	0	0	0	0	0	0	0	31	381
2:55 PM	0	1	0	0	0	1	13	0	8	0	0	0	0	0	0	0	23	373
3:00 PM	0	4	0	0	0	2	15	0	14	0	0	0	0	0	0	0	35	389
3:05 PM	0	2	0	0	0	3	11	0	13	0	0	0	0	0	0	0	29	392

5-Min Count Period Beginning At	Powell Butte Hwy (Northbound)				Powell Butte Hwy (Southbound)				Bussett Rd (North) (Eastbound)				Bussett Rd (North) (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:10 PM	0	7	0	0	0	1	13	0	8	0	0	0	0	0	0	0	29	387
3:15 PM	0	7	0	0	0	2	9	0	13	0	0	0	0	0	0	0	31	395
3:20 PM	0	1	0	0	0	2	10	0	4	0	0	0	0	0	0	0	17	373
3:25 PM	0	6	0	0	0	6	16	0	9	0	0	0	0	0	0	0	37	370
3:30 PM	0	2	0	0	0	3	10	0	9	0	0	0	0	0	0	0	24	360
3:35 PM	0	4	0	0	0	8	10	0	6	0	0	0	0	0	0	0	28	343
3:40 PM	0	1	0	0	0	5	12	0	8	0	0	0	0	0	0	0	26	338
3:45 PM	0	6	0	0	0	4	15	0	8	0	0	0	0	0	0	0	33	343
3:50 PM	0	4	0	0	0	3	13	0	13	0	0	0	0	0	0	0	33	345
3:55 PM	0	4	0	0	0	4	6	0	8	0	0	0	0	0	0	0	22	344

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	56	0	0	0	84	160	0	164	0	0	0	0	0	0	0	464
Heavy Trucks	0	4	0		0	8	16		12	0	0		0	0	0		40
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

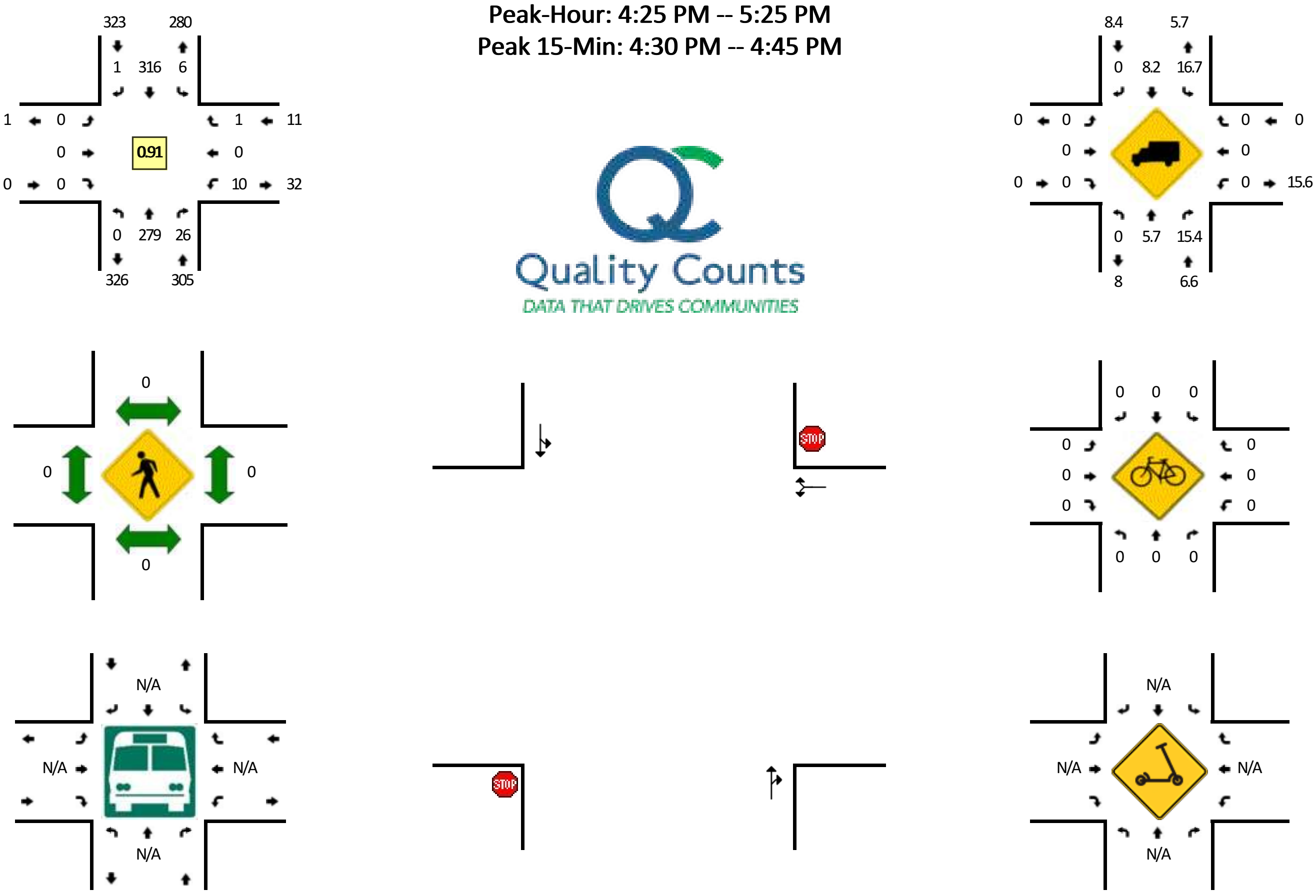
Report generated on 11/29/2021 4:10 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak — Method for determining peak hour: Total Entering Volume

LOCATION: Powell Butte Hwy -- Riggs Rd — **QC JOB #:** 15624407
CITY/STATE: Crook, OR — **DATE:** Tue, Nov 16 2021

Peak-Hour: 4:25 PM -- 5:25 PM
Peak 15-Min: 4:30 PM -- 4:45 PM



5-Min Count Period Beginning At	Powell Butte Hwy (Northbound)				Powell Butte Hwy (Southbound)				Riggs Rd (Eastbound)				Riggs Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	24	1	0	0	17	0	0	0	0	0	0	2	0	0	0	44	
4:05 PM	0	18	3	0	0	17	0	0	0	0	0	0	0	0	0	0	38	
4:10 PM	0	23	3	0	0	16	0	0	0	1	0	0	2	0	0	0	45	
4:15 PM	0	20	2	0	0	19	0	0	0	0	0	0	1	0	0	0	42	
4:20 PM	0	28	1	0	0	24	0	0	0	0	0	0	4	0	1	0	58	
4:25 PM	0	35	2	0	2	17	0	0	0	0	0	0	1	0	1	0	58	
4:30 PM	0	29	5	0	1	33	1	0	0	0	0	0	1	0	0	0	70	
4:35 PM	0	20	0	0	0	24	0	0	0	0	0	0	0	0	0	0	44	
4:40 PM	0	26	3	0	1	30	0	0	0	0	0	0	2	0	0	0	62	
4:45 PM	0	14	0	0	1	37	0	0	0	0	0	0	1	0	0	0	53	
4:50 PM	0	18	1	0	0	27	0	0	0	0	0	0	0	0	0	0	46	
4:55 PM	0	23	2	0	0	32	0	0	0	0	0	0	0	0	0	0	57	617
5:00 PM	0	15	5	0	1	28	0	0	0	0	0	0	0	0	0	0	49	622
5:05 PM	0	21	3	0	0	25	0	0	0	0	0	0	0	0	0	0	49	633
5:10 PM	0	26	0	0	0	16	0	0	0	0	0	0	0	0	0	0	42	630
5:15 PM	0	20	3	0	0	23	0	0	0	0	0	0	3	0	0	0	49	637
5:20 PM	0	32	2	0	0	24	0	0	0	0	0	0	2	0	0	0	60	639
5:25 PM	0	27	4	0	1	20	0	0	0	0	0	0	2	0	0	0	54	635
5:30 PM	0	31	6	0	0	19	0	0	0	0	0	0	1	0	0	0	57	622
5:35 PM	0	21	1	0	1	13	0	0	0	0	0	0	1	0	0	0	37	615
5:40 PM	0	23	3	0	1	8	0	0	0	0	0	0	0	0	1	0	36	589
5:45 PM	0	18	0	0	1	7	0	0	0	0	0	0	0	0	0	0	26	562
5:50 PM	0	23	4	0	0	16	0	0	0	0	0	0	1	0	0	0	44	560
5:55 PM	0	11	0	0	0	14	0	0	0	0	0	0	0	0	0	0	25	528

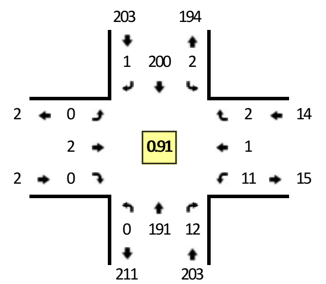
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	300	32	0	8	348	4	0	0	0	0	0	12	0	0	0	704
Heavy Trucks	0	8	8		4	24	0		0	0	0		0	0	0		44
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

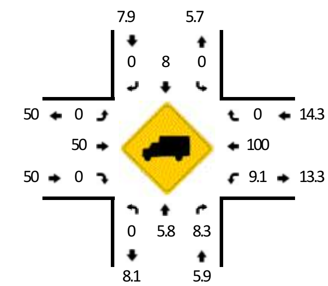
Report generated on 11/29/2021 4:10 PM — SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

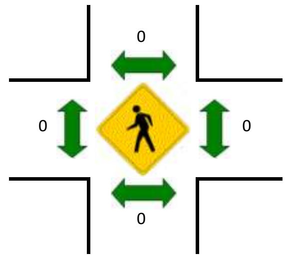
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

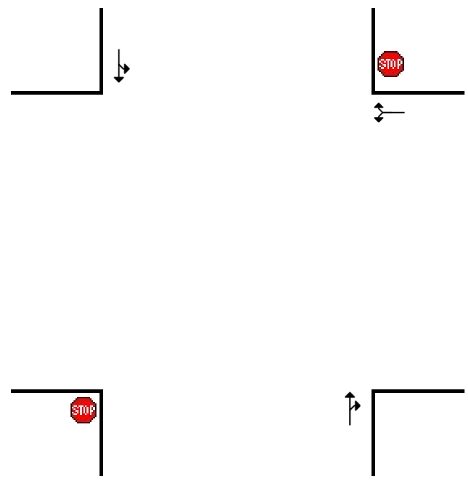
LOCATION: Powell Butte Hwy -- Riggs Rd | **QC JOB #:** 15624408
CITY/STATE: Crook, OR | **DATE:** Sat, Nov 13 2021

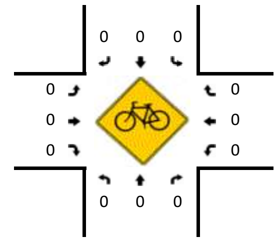


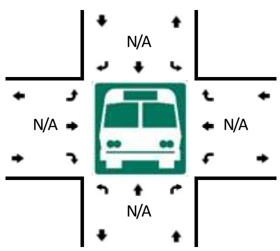
Peak-Hour: 12:25 PM -- 1:25 PM
Peak 15-Min: 12:30 PM -- 12:45 PM

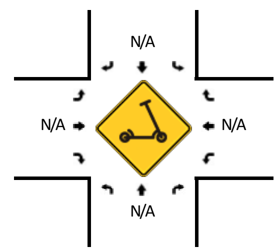












5-Min Count Period Beginning At	Powell Butte Hwy (Northbound)				Powell Butte Hwy (Southbound)				Riggs Rd (Eastbound)				Riggs Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
12:00 PM	0	13	0	0	0	10	0	0	0	0	0	0	1	0	0	0	24	
12:05 PM	0	13	0	0	1	18	0	0	0	0	0	0	0	0	0	0	32	
12:10 PM	0	10	0	0	1	9	0	0	0	0	0	0	0	0	0	0	20	
12:15 PM	0	19	0	0	0	11	0	0	0	0	0	0	0	0	1	0	31	
12:20 PM	0	11	0	0	0	12	0	0	0	0	0	0	0	0	0	0	23	
12:25 PM	0	15	0	0	1	9	0	0	0	0	0	0	2	0	1	0	28	
12:30 PM	0	17	1	0	0	19	0	0	0	0	0	0	1	0	0	0	38	
12:35 PM	0	16	1	0	0	24	1	0	0	0	0	0	1	1	0	0	44	
12:40 PM	0	19	1	0	0	12	0	0	0	0	0	0	2	0	0	0	34	
12:45 PM	0	19	0	0	0	16	0	1	0	1	0	0	1	0	0	0	38	
12:50 PM	0	22	1	0	0	14	0	0	0	1	0	0	1	0	0	0	39	
12:55 PM	0	18	2	0	0	11	0	0	0	0	0	0	0	0	0	0	31	382
1:00 PM	0	16	1	0	0	16	0	0	0	0	0	0	0	0	0	0	33	391
1:05 PM	0	13	2	0	0	17	0	0	0	0	0	0	1	0	0	0	33	392
1:10 PM	0	16	1	0	0	23	0	0	0	0	0	0	1	0	0	0	41	413
1:15 PM	0	12	2	0	0	23	0	0	0	0	0	0	1	0	1	0	39	421
1:20 PM	0	8	0	0	0	16	0	0	0	0	0	0	0	0	0	0	24	422
1:25 PM	0	6	0	0	0	15	0	0	0	0	0	0	0	0	0	0	21	415
1:30 PM	0	20	1	0	0	11	0	0	1	0	0	0	1	0	0	0	34	411
1:35 PM	0	5	1	0	0	25	0	0	0	0	0	0	1	0	0	0	32	399
1:40 PM	0	14	3	0	0	13	0	0	0	0	0	0	0	0	0	0	30	395
1:45 PM	0	11	0	0	0	13	0	0	0	0	0	0	3	0	1	0	28	385
1:50 PM	0	11	0	0	0	12	0	0	0	0	0	0	3	0	0	0	26	372
1:55 PM	0	14	0	0	0	13	0	0	0	0	0	0	1	0	1	0	29	370
2:00 PM	0	15	0	0	0	11	0	0	0	0	0	0	2	0	0	0	28	365
2:05 PM	0	13	0	0	0	10	0	0	0	0	0	0	4	0	0	0	27	359
2:10 PM	0	12	1	0	1	15	0	0	0	0	0	0	1	0	1	0	31	349
2:15 PM	0	12	0	0	0	13	0	0	0	0	0	0	0	0	0	0	25	335
2:20 PM	0	11	0	0	0	21	0	0	0	0	0	0	1	0	0	0	33	344
2:25 PM	0	20	1	0	1	25	0	0	0	0	0	0	0	0	0	0	47	370
2:30 PM	0	12	0	0	0	24	0	0	0	0	0	0	0	0	1	0	37	373
2:35 PM	0	20	1	0	0	12	0	0	0	0	0	0	0	0	1	0	34	375
2:40 PM	0	17	3	0	0	15	0	0	0	0	0	0	0	0	0	0	35	380
2:45 PM	0	15	0	0	0	13	0	0	0	0	0	0	1	0	0	0	29	381
2:50 PM	0	20	1	0	1	13	0	0	0	0	0	0	0	0	1	0	36	391
2:55 PM	0	10	0	0	1	10	0	0	0	0	0	0	1	0	1	0	23	385
3:00 PM	0	13	1	0	0	17	0	0	0	0	0	0	2	0	0	0	33	390
3:05 PM	0	17	0	0	0	7	0	0	0	0	0	0	1	0	0	0	25	388

5-Min Count Period Beginning At	Powell Butte Hwy (Northbound)				Powell Butte Hwy (Southbound)				Riggs Rd (Eastbound)				Riggs Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:10 PM	0	9	0	0	0	15	0	0	0	0	0	0	1	0	0	0	25	382
3:15 PM	0	23	0	0	0	16	0	0	0	0	0	0	0	0	0	0	39	396
3:20 PM	0	9	0	0	1	15	0	0	0	0	0	0	0	0	0	0	25	388
3:25 PM	0	10	0	0	1	15	0	0	0	0	0	0	2	0	0	0	28	369
3:30 PM	0	15	2	0	0	15	0	0	0	0	0	0	0	0	0	0	32	364
3:35 PM	0	6	0	0	0	21	1	0	0	0	0	0	0	0	0	0	28	358
3:40 PM	0	11	2	0	0	17	0	0	0	0	0	0	1	0	0	0	31	354
3:45 PM	0	12	0	0	0	13	0	0	0	0	0	0	1	0	0	0	26	351
3:50 PM	0	7	1	0	0	17	0	0	0	0	0	0	1	0	0	0	26	341
3:55 PM	0	17	0	0	1	10	0	0	0	0	0	0	1	0	0	0	29	347

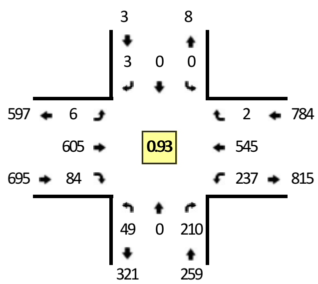
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	208	12	0	0	220	4	0	0	0	0	0	16	4	0	0	464
Heavy Trucks	0	16	0		0	20	0		0	0	0		4	4	0		44
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

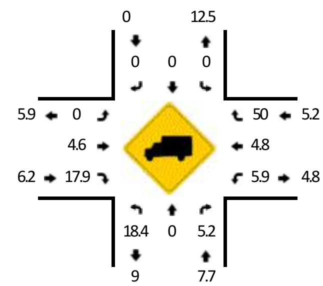
Report generated on 11/29/2021 4:10 PM

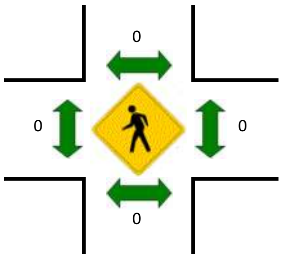
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

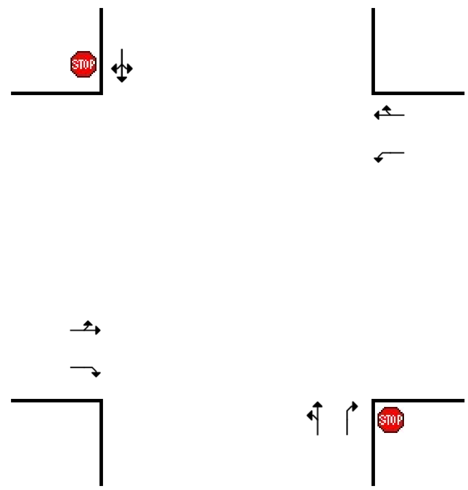
LOCATION: Powell Butte Hwy -- OR-126
CITY/STATE: Crook, OR
QC JOB #: 15624409
DATE: Tue, Nov 16 2021

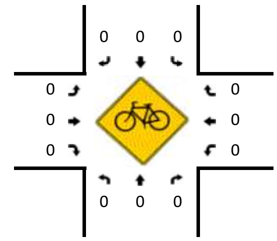


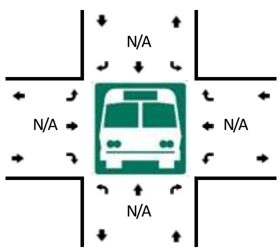
Peak-Hour: 4:20 PM -- 5:20 PM
Peak 15-Min: 4:45 PM -- 5:00 PM

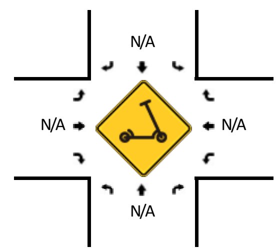












5-Min Count Period Beginning At	Powell Butte Hwy (Northbound)				Powell Butte Hwy (Southbound)				OR-126 (Eastbound)				OR-126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	11	0	22	0	0	0	0	0	0	43	2	0	14	26	0	0	118	
4:05 PM	8	0	13	0	0	0	0	0	0	30	3	0	15	32	0	0	101	
4:10 PM	5	0	13	0	0	0	0	0	0	48	9	0	14	44	0	0	133	
4:15 PM	9	0	16	0	0	0	0	0	0	45	6	0	13	29	0	0	118	
4:20 PM	5	0	20	0	0	0	0	0	0	53	4	0	19	37	1	0	139	
4:25 PM	4	0	16	0	0	0	0	0	1	58	3	0	16	49	0	0	147	
4:30 PM	6	0	35	0	0	0	2	0	0	44	6	0	30	44	1	0	168	
4:35 PM	3	0	20	0	0	0	1	0	0	47	3	0	22	45	0	0	141	
4:40 PM	4	0	23	0	0	0	0	0	0	44	8	0	19	50	0	0	148	
4:45 PM	2	0	12	0	0	0	0	0	1	62	10	0	23	64	0	0	174	
4:50 PM	9	0	8	0	0	0	0	0	0	38	10	0	22	40	0	0	127	
4:55 PM	2	0	21	0	0	0	0	0	1	46	9	0	27	59	0	0	165	1679
5:00 PM	4	0	12	0	0	0	0	0	1	46	3	0	23	38	0	0	127	1688
5:05 PM	7	0	15	0	0	0	0	0	0	44	10	0	10	46	0	0	132	1719
5:10 PM	2	0	24	0	0	0	0	0	2	46	6	0	12	41	0	0	133	1719
5:15 PM	1	0	4	0	0	0	0	0	0	77	12	0	14	32	0	0	140	1741
5:20 PM	11	0	34	0	0	0	0	0	0	38	12	0	10	30	0	0	135	1737
5:25 PM	8	0	21	0	0	0	0	0	0	38	8	0	12	32	0	0	119	1709
5:30 PM	7	0	26	0	0	0	0	0	0	48	6	0	9	39	0	0	135	1676
5:35 PM	3	0	19	0	0	0	1	0	1	40	5	0	11	38	0	0	118	1653
5:40 PM	1	0	17	0	0	0	0	0	0	41	2	0	8	31	0	0	100	1605
5:45 PM	4	0	20	0	0	1	0	0	1	35	2	0	6	29	0	0	98	1529
5:50 PM	2	1	20	0	0	0	0	0	0	27	6	0	6	21	0	0	83	1485
5:55 PM	1	0	11	0	0	0	0	0	0	33	5	0	9	8	0	0	67	1387

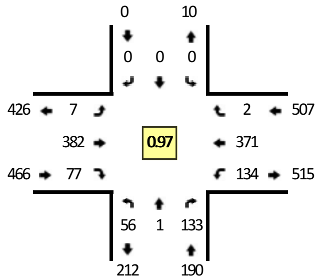
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	52	0	164	0	0	0	0	0	8	584	116	0	288	652	0	0	1864
Heavy Trucks	12	0	12		0	0	0		0	16	20		20	28	0		108
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

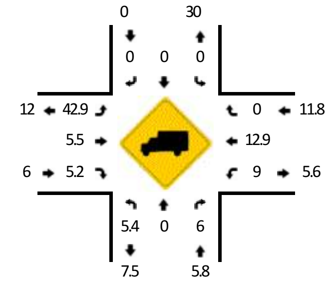
Report generated on 11/29/2021 4:10 PM
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

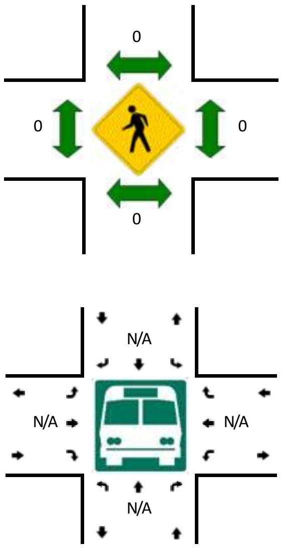
Type of peak hour being reported: Intersection Peak　　　　Method for determining peak hour: Total Entering Volume

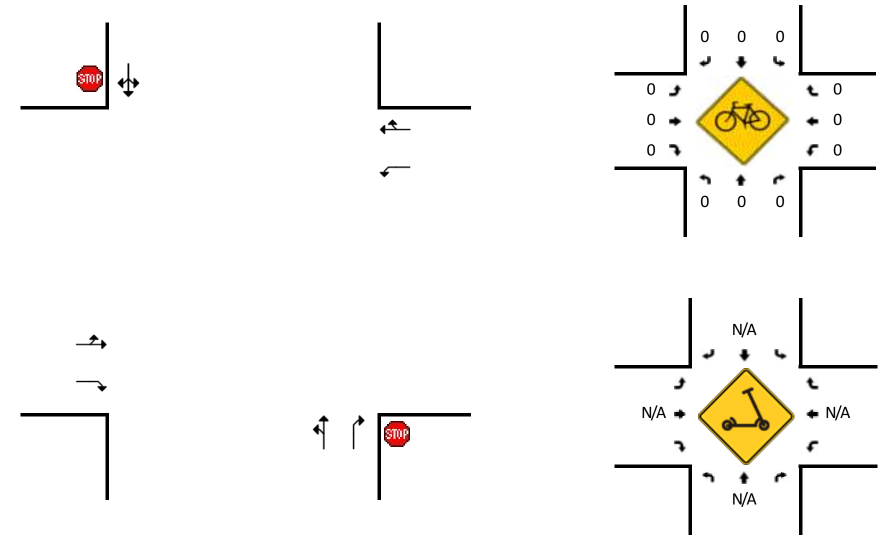
LOCATION: Powell Butte Hwy -- OR-126　　　　**QC JOB #:** 15624410
CITY/STATE: Crook, OR　　　　**DATE:** Sat, Nov 13 2021



Peak-Hour: 12:25 PM -- 1:25 PM
Peak 15-Min: 12:25 PM -- 12:40 PM







5-Min Count Period Beginning At	Powell Butte Hwy (Northbound)				Powell Butte Hwy (Southbound)				OR-126 (Eastbound)				OR-126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
12:00 PM	3	0	10	0	0	0	0	0	1	29	3	0	5	22	0	0	73	
12:05 PM	8	0	10	0	0	0	0	0	1	24	6	0	10	23	0	0	82	
12:10 PM	2	0	4	0	0	0	0	0	0	36	2	0	10	34	0	0	88	
12:15 PM	8	0	11	0	0	0	1	0	0	29	8	0	9	25	0	0	91	
12:20 PM	8	0	7	0	0	0	0	0	1	25	4	0	6	24	0	0	75	
12:25 PM	1	0	9	0	0	0	0	0	0	31	3	0	8	49	0	0	101	
12:30 PM	5	0	16	0	0	0	0	0	0	28	9	0	19	30	0	0	107	
12:35 PM	5	0	9	0	0	0	0	0	2	38	7	0	9	22	0	0	92	
12:40 PM	5	0	20	0	0	0	0	0	0	33	7	0	9	27	0	0	101	
12:45 PM	4	0	7	0	0	0	0	0	1	38	8	0	7	36	0	0	101	
12:50 PM	6	1	16	0	0	0	0	0	0	40	3	0	10	18	0	0	94	
12:55 PM	5	0	10	1	0	0	0	0	0	24	4	0	10	44	0	0	98	1103
1:00 PM	2	0	10	0	0	0	0	0	1	22	6	0	10	27	0	0	78	1108
1:05 PM	9	0	8	0	0	0	0	0	2	24	8	0	11	37	0	0	99	1125
1:10 PM	2	0	14	0	0	0	0	0	0	30	11	0	15	31	0	0	103	1140
1:15 PM	8	0	8	0	0	0	0	0	0	41	4	0	15	17	0	0	93	1142
1:20 PM	3	0	6	0	0	0	0	0	1	33	7	0	11	33	2	0	96	1163
1:25 PM	2	0	5	0	0	0	0	0	0	31	5	0	12	19	0	0	74	1136
1:30 PM	6	0	13	0	0	1	0	0	0	27	5	0	9	27	0	0	88	1117
1:35 PM	3	0	2	0	0	0	0	0	0	31	5	0	14	28	0	0	83	1108
1:40 PM	2	0	8	0	0	0	0	0	0	17	4	0	10	30	0	0	71	1078
1:45 PM	5	1	10	0	0	0	0	0	0	29	10	0	10	30	0	0	95	1072
1:50 PM	3	0	9	0	0	0	0	0	0	31	2	0	5	30	0	0	80	1058
1:55 PM	5	0	12	0	0	0	0	0	0	30	3	0	13	25	0	0	88	1048
2:00 PM	4	0	10	0	0	0	1	0	0	28	9	0	3	32	0	0	87	1057
2:05 PM	2	0	9	0	0	0	0	0	0	32	6	0	7	30	0	0	86	1044
2:10 PM	3	0	5	0	0	0	0	0	0	32	4	0	13	28	0	0	85	1026
2:15 PM	3	1	14	0	0	0	0	0	0	30	1	0	12	34	0	0	95	1028
2:20 PM	5	0	6	0	0	0	1	0	2	19	9	0	15	16	0	0	73	1005
2:25 PM	2	0	12	0	1	2	2	0	0	29	9	0	20	18	0	0	95	1026
2:30 PM	3	0	4	0	0	0	0	0	0	36	9	0	13	29	0	0	94	1032
2:35 PM	3	0	8	0	0	0	0	0	0	39	6	0	12	39	0	0	107	1056
2:40 PM	5	1	15	0	0	0	0	0	0	29	6	0	12	37	0	0	105	1090
2:45 PM	4	0	6	0	0	0	0	0	1	30	7	0	8	38	0	0	94	1089
2:50 PM	1	0	10	0	0	0	0	0	1	30	7	0	11	32	0	0	92	1101
2:55 PM	0	0	12	0	0	0	0	0	0	18	2	0	8	23	0	0	63	1076
3:00 PM	2	0	8	0	0	0	1	0	0	25	5	0	10	16	0	0	67	1056
3:05 PM	5	0	11	0	0	0	0	0	1	24	0	0	11	31	0	0	83	1053

5-Min Count Period Beginning At	Powell Butte Hwy (Northbound)				Powell Butte Hwy (Southbound)				OR-126 (Eastbound)				OR-126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:10 PM	1	0	10	0	0	0	0	0	1	26	5	0	10	19	0	0	72	1040
3:15 PM	5	0	11	0	0	0	0	0	0	35	0	0	13	16	0	0	80	1025
3:20 PM	5	0	11	0	0	0	1	0	0	29	4	0	14	37	0	0	101	1053
3:25 PM	2	0	6	0	0	0	0	0	0	24	2	0	12	31	0	0	77	1035
3:30 PM	6	0	9	0	0	0	0	0	1	30	8	0	10	40	0	0	104	1045
3:35 PM	3	0	6	0	0	0	0	0	0	30	9	0	11	27	0	0	86	1024
3:40 PM	4	0	3	0	0	0	0	0	1	44	4	0	14	25	0	0	95	1014
3:45 PM	2	0	11	0	0	0	1	0	1	29	1	0	8	21	0	0	74	994
3:50 PM	4	0	5	0	0	0	0	0	0	25	5	0	12	25	0	0	76	978
3:55 PM	1	0	14	0	0	0	0	0	0	19	3	0	7	36	0	0	80	995

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	44	0	136	0	0	0	0	0	8	388	76	0	144	404	0	0	1200
Heavy Trucks	4	0	8		0	0	0		0	20	4		12	52	0		100
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

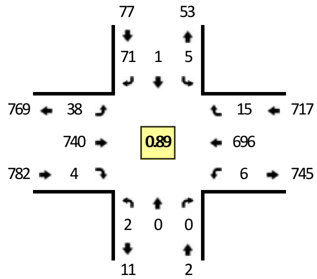
Comments:

Report generated on 11/29/2021 4:10 PM

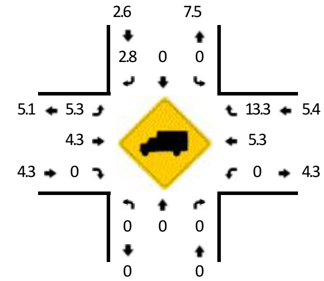
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

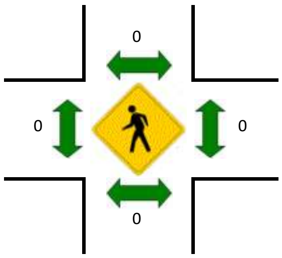
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

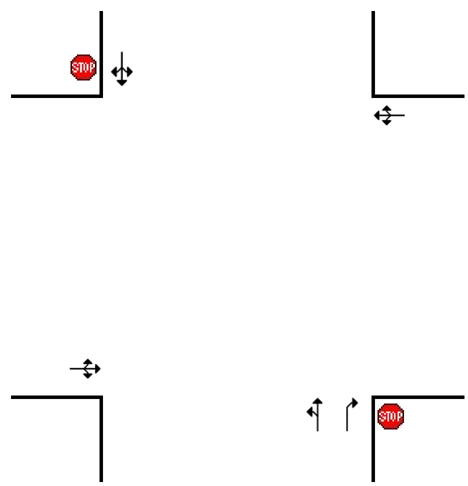
LOCATION: Williams Rd -- OR-126 | **QC JOB #:** 15624411
CITY/STATE: Crook, OR | **DATE:** Tue, Nov 16 2021

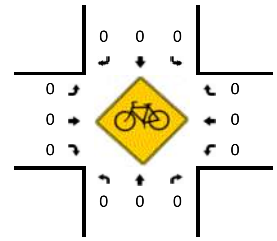


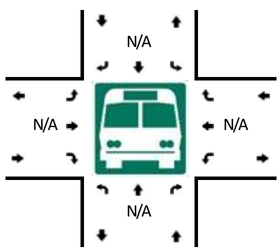
Peak-Hour: 4:20 PM -- 5:20 PM
Peak 15-Min: 4:35 PM -- 4:50 PM

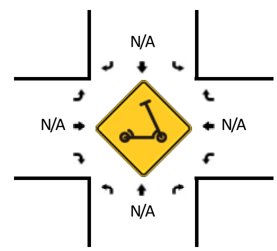












5-Min Count Period Beginning At	Williams Rd (Northbound)				Williams Rd (Southbound)				OR-126 (Eastbound)				OR-126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	1	0	1	0	3	0	4	0	4	47	0	0	0	40	0	0	100	
4:05 PM	1	0	1	0	0	0	2	0	4	49	1	0	0	42	0	0	100	
4:10 PM	0	0	1	0	0	0	3	0	0	46	1	0	0	55	0	0	106	
4:15 PM	0	0	1	0	1	0	5	0	4	53	1	0	0	33	2	0	100	
4:20 PM	1	0	0	0	0	0	1	0	1	57	0	0	0	57	0	0	117	
4:25 PM	0	0	0	0	0	0	4	0	5	70	1	0	0	63	1	0	144	
4:30 PM	0	0	0	0	2	0	4	0	5	66	0	0	0	67	1	0	145	
4:35 PM	0	0	0	0	0	0	9	0	3	63	1	0	1	56	2	0	135	
4:40 PM	0	0	0	0	1	0	9	0	4	63	1	0	0	75	2	0	155	
4:45 PM	0	0	0	0	0	0	15	0	6	69	0	0	0	58	3	0	151	
4:50 PM	0	0	0	0	0	1	6	0	3	47	0	0	1	63	1	0	122	
4:55 PM	0	0	0	0	2	0	7	0	3	53	1	0	0	69	2	0	137	1512
5:00 PM	0	0	0	0	0	0	6	0	2	64	0	0	0	53	1	0	126	1538
5:05 PM	0	0	0	0	0	0	2	0	3	48	0	0	1	52	0	0	106	1544
5:10 PM	1	0	0	0	0	0	5	0	0	61	0	0	3	46	2	0	118	1556
5:15 PM	0	0	0	0	0	0	3	0	3	79	0	0	0	37	0	0	122	1578
5:20 PM	1	0	0	0	1	0	4	0	3	67	1	0	0	40	0	0	117	1578
5:25 PM	0	0	0	0	0	0	7	0	4	61	1	0	1	46	1	0	121	1555
5:30 PM	0	0	0	0	1	0	3	0	2	55	1	0	1	36	0	0	99	1509
5:35 PM	0	0	0	0	0	0	4	0	3	60	1	0	2	36	1	0	107	1481
5:40 PM	0	0	0	0	1	0	1	0	4	51	1	0	1	34	0	0	93	1419
5:45 PM	0	0	0	0	0	0	2	0	4	51	0	0	2	33	0	0	92	1360
5:50 PM	0	0	1	0	0	0	1	0	3	48	1	0	3	23	0	0	80	1318
5:55 PM	1	0	1	0	0	0	1	0	2	41	4	0	0	17	0	0	67	1248

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	4	0	132	0	52	780	8	0	4	756	28	0	1764
Heavy Trucks	0	0	0		0	0	4		4	28	0		0	44	8		88
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

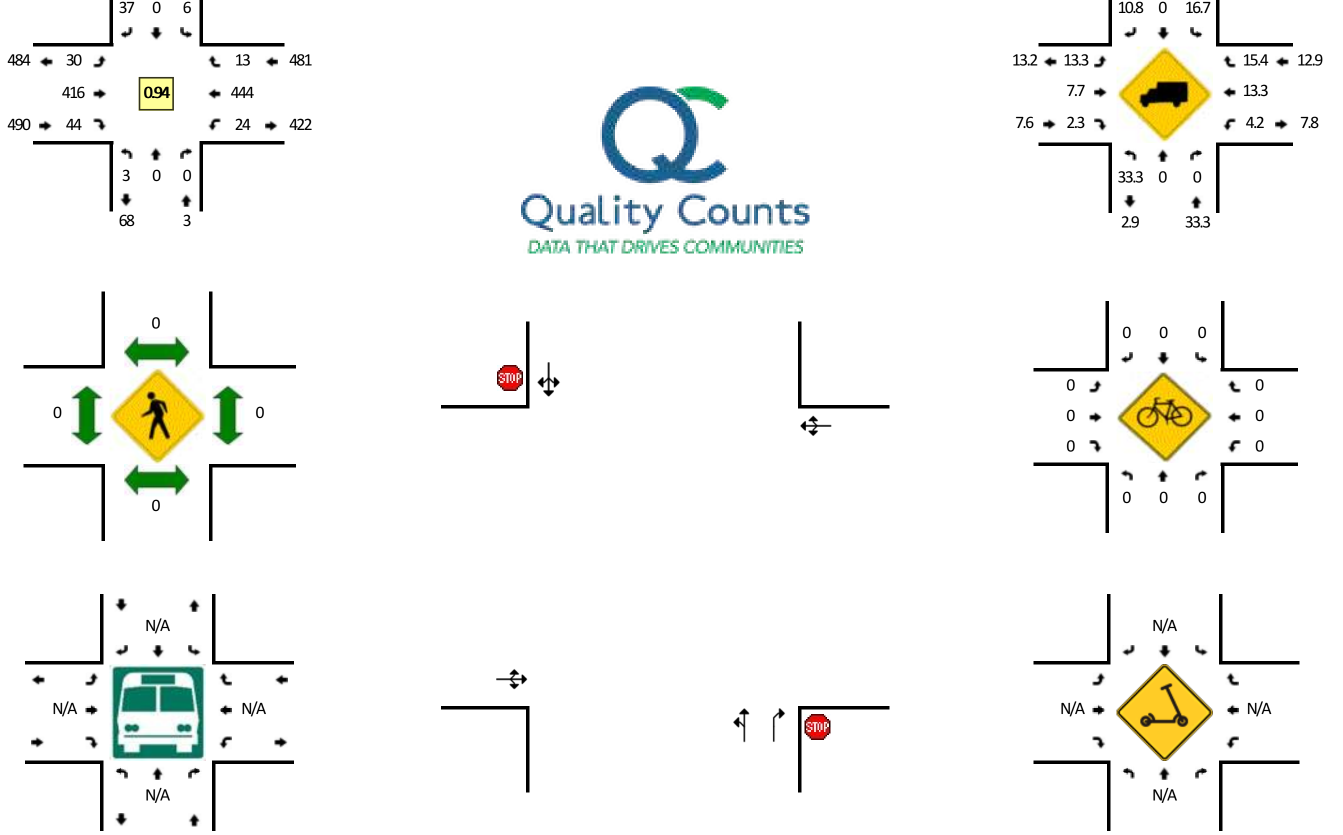
Comments:

Report generated on 11/29/2021 4:10 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

LOCATION: Williams Rd -- OR-126 **QC JOB #:** 15624412
CITY/STATE: Crook, OR **DATE:** Sat, Nov 13 2021

Peak-Hour: 12:20 PM -- 1:20 PM
Peak 15-Min: 12:40 PM -- 12:55 PM



5-Min Count Period Beginning At	Williams Rd (Northbound) Left	Thru	Right	U	Williams Rd (Southbound) Left	Thru	Right	U	OR-126 (Eastbound) Left	Thru	Right	U	OR-126 (Westbound) Left	Thru	Right	U	Total	Hourly Totals
12:00 PM	1	0	2	0	0	0	2	0	3	25	4	0	1	29	0	0	67	
12:05 PM	0	0	1	0	0	0	2	0	1	34	1	0	1	27	2	0	69	
12:10 PM	0	0	0	0	1	0	1	0	4	36	4	0	1	39	0	0	86	
12:15 PM	0	0	0	0	2	1	1	0	3	23	4	0	3	33	0	0	70	
12:20 PM	0	0	0	0	1	0	5	0	3	26	3	0	1	35	1	0	75	
12:25 PM	1	0	0	0	0	0	2	0	1	32	1	0	0	48	0	0	85	
12:30 PM	1	0	0	0	0	0	1	0	5	38	3	0	6	38	1	0	93	
12:35 PM	0	0	0	0	1	0	4	0	2	35	10	0	2	30	0	0	84	
12:40 PM	0	0	0	0	0	0	2	0	2	34	9	0	3	37	2	0	89	
12:45 PM	0	0	0	0	0	0	4	0	2	32	11	0	7	29	1	0	86	
12:50 PM	0	0	0	0	0	0	2	0	0	43	6	0	3	39	2	0	95	
12:55 PM	0	0	0	0	1	0	4	0	7	31	0	0	2	35	2	0	82	981
1:00 PM	0	0	0	0	1	0	1	0	3	38	0	0	0	46	0	0	89	1003
1:05 PM	0	0	0	0	0	0	4	0	1	27	1	0	0	40	1	0	74	1008
1:10 PM	0	0	0	0	1	0	1	0	1	38	0	0	0	32	1	0	74	996
1:15 PM	1	0	0	0	1	0	7	0	3	42	0	0	0	35	2	0	91	1017
1:20 PM	0	0	1	0	0	0	5	0	4	33	0	0	0	30	0	0	73	1015
1:25 PM	0	0	0	0	1	0	5	0	2	31	0	0	0	31	0	0	70	1000
1:30 PM	0	0	0	0	0	0	4	0	2	33	0	0	0	35	1	0	75	982
1:35 PM	0	1	0	0	0	0	1	0	2	32	0	0	0	37	1	0	74	972
1:40 PM	0	0	0	0	2	0	1	0	2	30	0	0	0	34	1	0	70	953
1:45 PM	0	0	0	0	0	0	5	0	0	32	1	0	1	35	0	0	74	941
1:50 PM	0	0	1	0	0	0	6	0	4	32	0	0	0	32	0	0	75	921
1:55 PM	0	0	1	0	1	0	2	0	2	32	1	0	0	23	0	0	62	901
2:00 PM	0	0	1	0	3	0	2	0	3	44	1	0	0	30	0	0	84	896
2:05 PM	0	0	0	0	0	0	2	0	2	32	0	0	0	32	0	0	68	890
2:10 PM	0	0	0	0	1	0	3	0	1	36	0	0	0	41	0	0	82	898
2:15 PM	1	0	0	0	1	0	4	0	2	41	0	0	0	29	0	0	78	885
2:20 PM	0	0	0	0	2	0	2	0	2	26	0	0	0	34	0	0	66	878
2:25 PM	0	0	0	0	0	0	2	0	4	31	0	0	0	32	0	0	69	877
2:30 PM	2	0	1	0	3	0	4	0	3	35	0	0	0	43	2	0	93	895
2:35 PM	11	0	16	0	0	0	7	0	5	36	0	0	0	40	0	0	115	936
2:40 PM	6	0	6	0	1	0	3	0	1	52	0	0	0	27	1	0	97	963
2:45 PM	2	0	5	0	1	0	4	0	3	29	0	0	0	42	0	0	86	975
2:50 PM	1	0	1	0	2	0	5	0	2	27	0	0	0	28	1	0	67	967
2:55 PM	4	0	3	0	0	0	2	0	5	25	0	0	0	25	1	0	65	970
3:00 PM	2	0	0	0	1	0	2	0	2	28	0	0	0	31	0	0	66	952
3:05 PM	2	1	3	0	0	0	0	0	1	33	0	0	0	33	0	0	73	957

5-Min Count Period Beginning At	Williams Rd (Northbound)				Williams Rd (Southbound)				OR-126 (Eastbound)				OR-126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:10 PM	1	0	0	0	1	0	5	0	1	32	0	0	0	21	0	0	61	936
3:15 PM	2	0	0	0	1	0	2	0	2	38	0	0	0	29	1	0	75	933
3:20 PM	3	0	0	0	3	0	6	0	2	42	0	0	0	49	0	0	105	972
3:25 PM	1	0	0	0	1	0	3	0	4	25	0	0	0	35	1	0	70	973
3:30 PM	1	0	1	0	0	0	6	0	3	30	0	0	0	42	1	0	84	964
3:35 PM	2	0	0	0	0	0	3	0	4	38	0	0	0	30	0	0	77	926
3:40 PM	1	0	0	0	1	0	4	0	0	42	0	0	0	36	0	0	84	913
3:45 PM	1	0	0	0	0	0	3	0	2	30	0	0	0	28	0	0	64	891
3:50 PM	1	0	0	0	0	0	2	0	1	31	0	0	0	38	1	0	74	898
3:55 PM	0	0	2	0	0	0	3	0	3	34	0	0	0	26	1	0	69	902

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	0	0	32	0	16	436	104	0	52	420	20	0	1080
Heavy Trucks	0	0	0		0	0	4		0	36	0		0	64	4		108
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

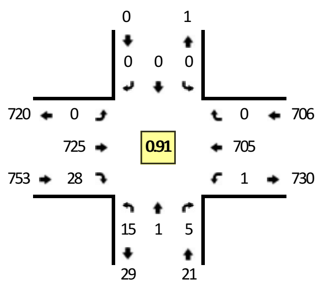
Comments:

Report generated on 11/29/2021 4:10 PM

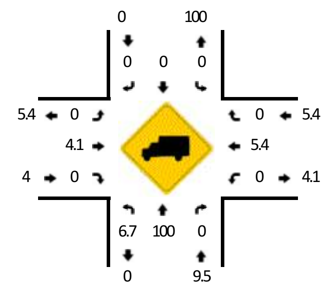
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

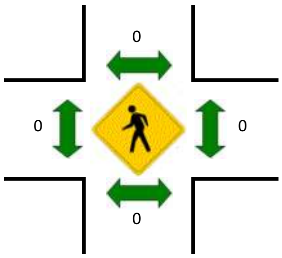
Type of peak hour being reported: Intersection Peak   Method for determining peak hour: Total Entering Volume

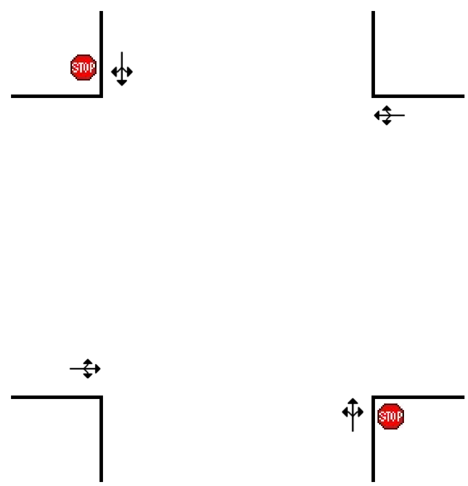
LOCATION: Copley Rd -- OR-126   **QC JOB #:** 15624413
CITY/STATE: Crook, OR   **DATE:** Tue, Nov 16 2021

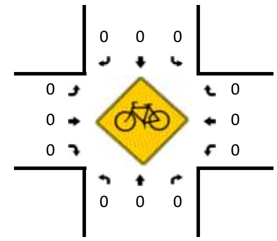


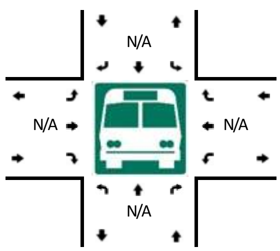
Peak-Hour: 4:25 PM -- 5:25 PM
Peak 15-Min: 4:25 PM -- 4:40 PM

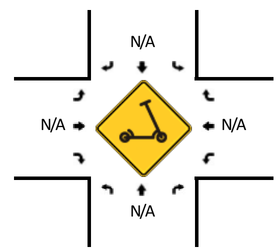












5-Min Count Period Beginning At	Copley Rd (Northbound)				Copley Rd (Southbound)				OR-126 (Eastbound)				OR-126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	1	0	0	0	0	0	0	0	0	53	2	0	0	36	0	0	92	
4:05 PM	4	0	1	0	0	0	0	0	0	48	1	0	0	54	0	0	108	
4:10 PM	1	0	1	0	0	0	0	0	0	49	2	0	1	43	0	0	97	
4:15 PM	1	0	1	0	0	0	0	0	0	56	0	0	0	44	0	0	102	
4:20 PM	1	0	0	0	0	0	0	0	0	52	3	0	1	52	0	0	109	
4:25 PM	0	0	1	0	0	0	0	0	0	61	6	0	0	78	0	0	146	
4:30 PM	1	0	1	0	0	0	0	0	0	68	2	0	0	61	0	0	133	
4:35 PM	1	0	0	0	0	0	0	0	0	59	3	0	0	65	0	0	128	
4:40 PM	2	1	0	0	0	0	0	0	0	58	1	0	0	70	0	0	132	
4:45 PM	0	0	1	0	0	0	0	0	0	67	5	0	0	71	0	0	144	
4:50 PM	1	0	0	0	0	0	0	0	0	51	1	0	1	68	0	0	122	
4:55 PM	2	0	0	0	0	0	0	0	0	48	3	0	0	64	0	0	117	1430
5:00 PM	1	0	0	0	0	0	0	0	0	63	0	0	0	55	0	0	119	1457
5:05 PM	1	0	1	0	0	0	0	0	0	52	4	0	0	38	0	0	96	1445
5:10 PM	3	0	1	0	0	0	0	0	0	56	2	0	0	58	0	0	120	1468
5:15 PM	1	0	0	0	0	0	0	0	0	72	0	0	0	38	0	0	111	1477
5:20 PM	2	0	0	0	0	0	0	0	0	70	1	0	0	39	0	0	112	1480
5:25 PM	3	0	0	0	0	0	0	0	0	55	2	0	0	50	0	0	110	1444
5:30 PM	1	0	1	0	0	0	0	0	0	57	1	0	0	37	0	0	97	1408
5:35 PM	2	0	0	0	0	0	0	0	0	58	0	0	0	31	0	0	91	1371
5:40 PM	0	0	0	0	0	0	0	0	0	51	3	0	0	39	0	0	93	1332
5:45 PM	0	0	0	0	0	0	0	0	0	56	2	0	0	37	0	0	95	1283
5:50 PM	0	0	0	0	0	0	0	0	0	41	1	0	0	24	0	0	66	1227
5:55 PM	1	0	0	0	0	0	0	0	0	48	2	0	0	18	0	0	69	1179

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	8	0	8	0	0	0	0	0	0	752	44	0	0	816	0	0	1628
Heavy Trucks	0	0	0		0	0	0		0	48	0		0	32	0		80
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 11/29/2021 4:10 PM   SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

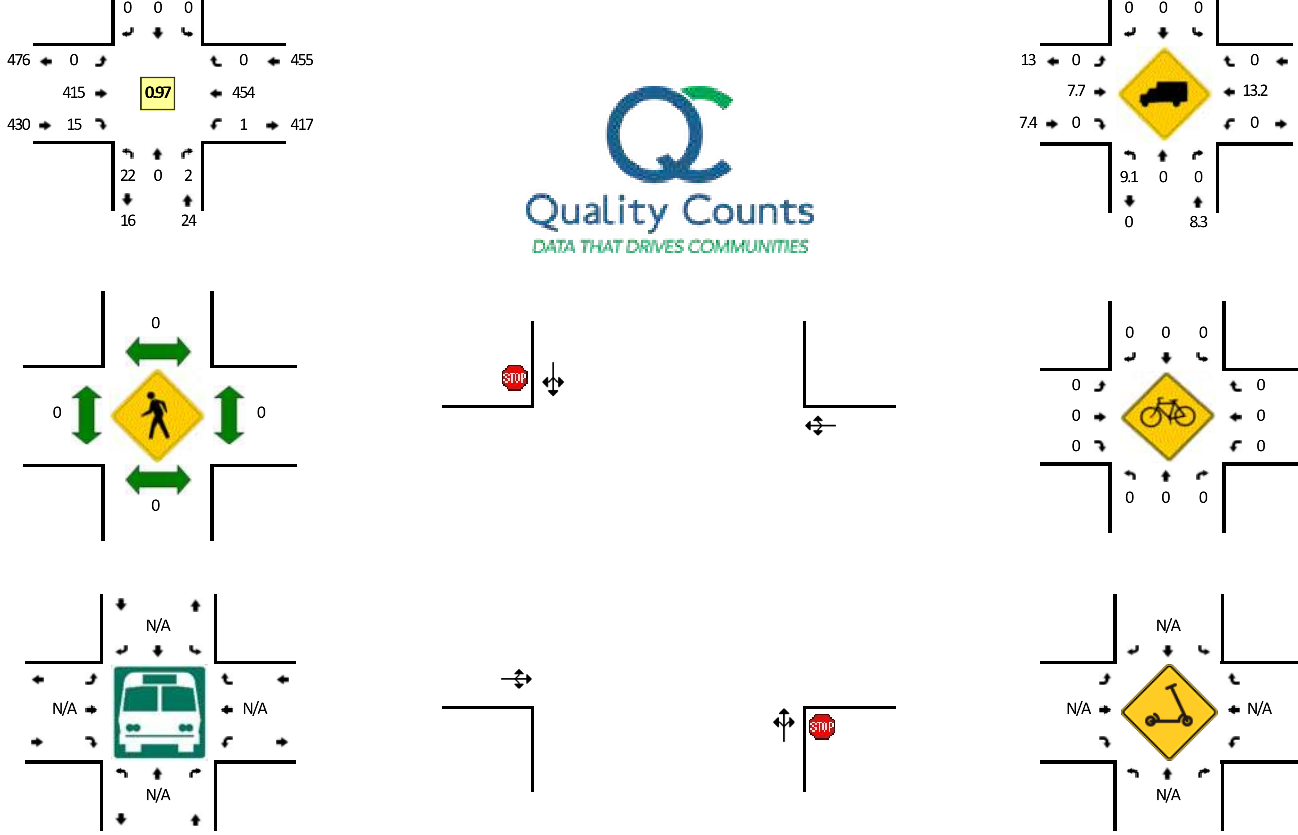
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

LOCATION: Copley Rd -- OR-126 | **QC JOB #:** 15624414

CITY/STATE: Crook, OR | **DATE:** Sat, Nov 13 2021

Peak-Hour: 12:25 PM -- 1:25 PM

Peak 15-Min: 12:25 PM -- 12:40 PM



5-Min Count Period Beginning At	Copley Rd (Northbound)				Copley Rd (Southbound)				OR-126 (Eastbound)				OR-126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
12:00 PM	2	0	0	0	0	0	0	0	0	23	2	0	0	28	0	0	55	
12:05 PM	1	0	1	0	0	0	0	0	0	29	1	0	0	36	0	0	68	
12:10 PM	2	0	0	0	0	0	0	0	0	41	4	0	0	37	0	0	84	
12:15 PM	4	0	0	0	0	0	0	0	0	27	1	0	0	35	0	0	67	
12:20 PM	1	0	0	0	0	0	0	0	0	20	4	0	0	39	0	0	64	
12:25 PM	2	0	0	0	0	0	0	0	0	36	1	0	0	51	0	0	90	
12:30 PM	2	0	1	0	0	0	0	0	0	38	1	0	0	35	0	0	77	
12:35 PM	5	0	0	0	0	0	0	0	0	31	1	0	0	31	0	0	68	
12:40 PM	2	0	0	0	0	0	0	0	0	33	0	0	0	34	0	0	69	
12:45 PM	4	0	0	0	0	0	0	0	0	37	2	0	0	38	0	0	81	
12:50 PM	3	0	0	0	0	0	0	0	0	26	2	0	0	46	0	0	77	
12:55 PM	1	0	0	0	0	0	0	0	0	41	2	0	0	32	0	0	76	876
1:00 PM	1	0	0	0	0	0	0	0	0	32	1	0	0	46	0	0	80	901
1:05 PM	2	0	0	0	0	0	0	0	0	28	2	0	0	39	0	0	71	904
1:10 PM	0	0	0	0	0	0	0	0	0	28	2	0	0	40	0	0	70	890
1:15 PM	0	0	0	0	0	0	0	0	0	47	1	0	0	32	0	0	80	903
1:20 PM	0	0	1	0	0	0	0	0	0	38	0	0	1	30	0	0	70	909
1:25 PM	3	0	0	0	0	0	0	0	0	35	1	0	0	33	0	0	72	891
1:30 PM	1	0	0	0	0	0	0	0	0	36	1	0	0	31	0	0	69	883
1:35 PM	4	0	0	0	0	0	0	0	0	35	0	0	0	41	0	0	80	895
1:40 PM	2	0	1	0	0	0	0	0	0	30	1	0	0	35	0	0	69	895
1:45 PM	1	0	0	0	0	0	0	0	0	34	1	0	0	32	0	0	68	882
1:50 PM	1	0	0	0	0	0	0	0	0	24	4	0	0	34	0	0	63	868
1:55 PM	3	0	1	0	0	0	0	0	0	32	1	0	0	23	0	0	60	852
2:00 PM	0	0	0	0	0	0	0	0	0	43	3	0	0	37	0	0	83	855
2:05 PM	0	0	0	0	0	0	0	0	0	36	2	0	1	31	0	0	70	854
2:10 PM	2	0	0	0	0	0	0	0	0	31	1	0	0	41	0	0	75	859
2:15 PM	1	0	0	0	0	0	0	0	0	40	1	0	0	26	0	0	68	847
2:20 PM	0	0	0	0	0	1	0	0	0	30	2	0	0	36	0	0	69	846
2:25 PM	1	0	0	0	0	0	0	0	0	34	0	0	0	37	0	0	72	846
2:30 PM	2	0	0	0	0	0	0	0	0	34	1	0	0	34	0	0	71	848
2:35 PM	3	0	0	0	0	0	0	0	0	48	6	0	0	36	0	0	93	861
2:40 PM	0	0	0	0	0	0	0	0	0	50	5	0	0	33	0	0	88	880
2:45 PM	3	0	0	0	0	0	0	0	0	38	1	0	0	48	0	0	90	902
2:50 PM	1	0	0	0	0	0	0	0	0	28	1	0	0	25	0	0	55	894
2:55 PM	0	0	0	0	0	0	0	0	0	29	4	0	0	21	0	0	54	888
3:00 PM	1	0	0	0	0	0	0	0	0	24	1	0	0	40	0	0	66	871
3:05 PM	0	1	0	0	0	0	0	0	0	36	0	0	0	31	0	0	68	869

5-Min Count Period Beginning At	Copley Rd (Northbound)				Copley Rd (Southbound)				OR-126 (Eastbound)				OR-126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:10 PM	0	0	0	0	0	0	1	0	0	33	2	0	2	22	0	0	60	854
3:15 PM	1	0	1	0	0	0	0	0	0	35	1	0	0	36	0	0	74	860
3:20 PM	1	0	0	0	0	0	0	0	0	43	0	0	0	49	0	0	93	884
3:25 PM	2	0	0	0	0	0	0	0	0	30	0	0	0	42	0	0	74	886
3:30 PM	1	0	0	0	0	0	0	0	0	22	1	0	0	36	0	0	60	875
3:35 PM	2	0	0	0	0	0	1	0	0	44	2	0	0	30	0	0	79	861
3:40 PM	1	0	1	0	0	0	0	0	0	40	1	0	0	33	0	0	76	849
3:45 PM	0	0	0	0	0	0	0	0	0	27	2	0	0	30	0	0	59	818
3:50 PM	0	0	0	0	0	0	0	0	0	37	1	0	0	38	0	0	76	839
3:55 PM	1	0	0	0	0	0	0	0	0	32	3	0	0	26	0	0	62	847

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	36	0	4	0	0	0	0	0	0	420	12	0	0	468	0	0	940
Heavy Trucks	4	0	0		0	0	0		0	32	0		0	56	0		92
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 11/29/2021 4:10 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

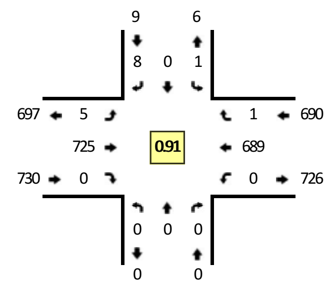
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

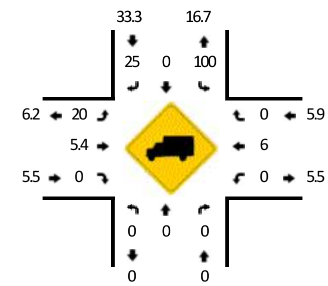
LOCATION: Minson Rd -- OR-126 | **QC JOB #:** 15624415

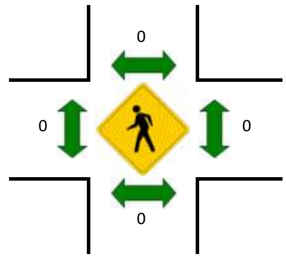
CITY/STATE: Crook, OR | **DATE:** Tue, Nov 16 2021

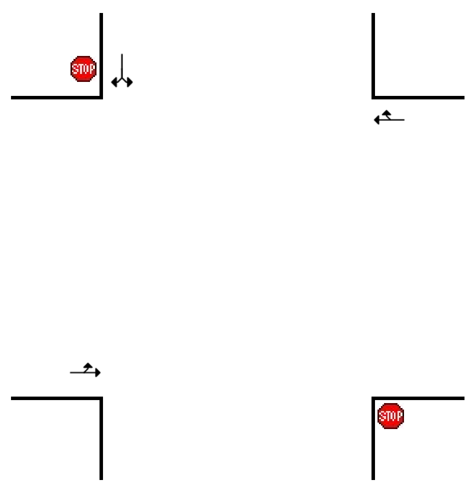
Peak-Hour: 4:25 PM -- 5:25 PM

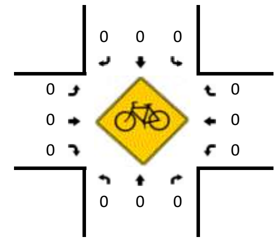
Peak 15-Min: 4:25 PM -- 4:40 PM

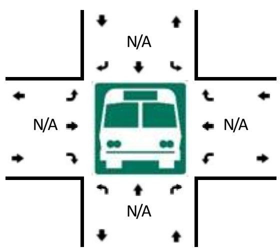


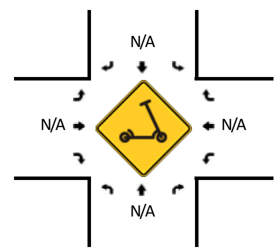












5-Min Count Period Beginning At	Minson Rd (Northbound)				Minson Rd (Southbound)				OR-126 (Eastbound)				OR-126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	0	0	1	0	0	55	0	0	0	35	0	0	91	
4:05 PM	0	0	0	0	0	0	0	0	0	47	0	0	0	57	0	0	104	
4:10 PM	0	0	0	0	0	0	0	0	1	52	0	0	0	39	1	0	93	
4:15 PM	0	0	0	0	1	0	2	0	0	48	0	0	0	50	1	0	102	
4:20 PM	0	0	0	0	0	0	0	0	0	56	0	0	0	54	0	0	110	
4:25 PM	0	0	0	0	0	0	0	0	1	57	0	0	0	79	0	0	137	
4:30 PM	0	0	0	0	0	0	2	0	1	70	0	0	0	53	0	0	126	
4:35 PM	0	0	0	0	0	0	1	0	1	62	0	0	0	66	0	0	130	
4:40 PM	0	0	0	0	1	0	0	0	0	57	0	0	0	71	0	0	129	
4:45 PM	0	0	0	0	0	0	0	0	0	66	0	0	0	68	0	0	134	
4:50 PM	0	0	0	0	0	0	2	0	0	53	0	0	0	68	0	0	123	
4:55 PM	0	0	0	0	0	0	1	0	1	42	0	0	0	66	0	0	110	1389
5:00 PM	0	0	0	0	0	0	1	0	0	64	0	0	0	51	0	0	116	1414
5:05 PM	0	0	0	0	0	0	1	0	0	50	0	0	0	44	0	0	95	1405
5:10 PM	0	0	0	0	0	0	0	0	0	59	0	0	0	44	1	0	104	1416
5:15 PM	0	0	0	0	0	0	0	0	1	71	0	0	0	40	0	0	112	1426
5:20 PM	0	0	0	0	0	0	0	0	0	74	0	0	0	39	0	0	113	1429
5:25 PM	0	0	0	0	0	0	1	0	1	52	0	0	0	49	0	0	103	1395
5:30 PM	0	0	0	0	0	0	0	0	0	55	0	0	0	41	0	0	96	1365
5:35 PM	0	0	0	0	0	0	0	0	0	61	0	0	0	32	0	0	93	1328
5:40 PM	0	0	0	0	0	0	1	0	2	49	0	0	0	38	0	0	90	1289
5:45 PM	0	0	0	0	0	0	0	0	0	53	0	0	0	30	1	0	84	1239
5:50 PM	0	0	0	0	0	0	1	0	3	43	0	0	0	24	0	0	71	1187
5:55 PM	0	0	0	0	0	0	0	0	1	43	0	0	0	16	0	0	60	1137

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	0	0	12	0	12	756	0	0	0	792	0	0	1572
Heavy Trucks	0	0	0		0	0	4		4	56	0		0	36	0		100
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 11/29/2021 4:10 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

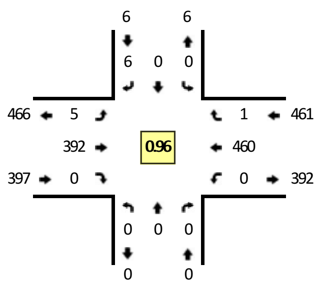
Type of peak hour being reported: Intersection Peak　　Method for determining peak hour: Total Entering Volume

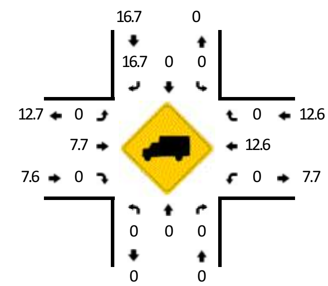
LOCATION: Minson Rd -- OR-126　　**QC JOB #:** 15624416

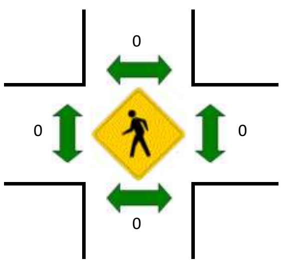
CITY/STATE: Crook, OR　　**DATE:** Sat, Nov 13 2021

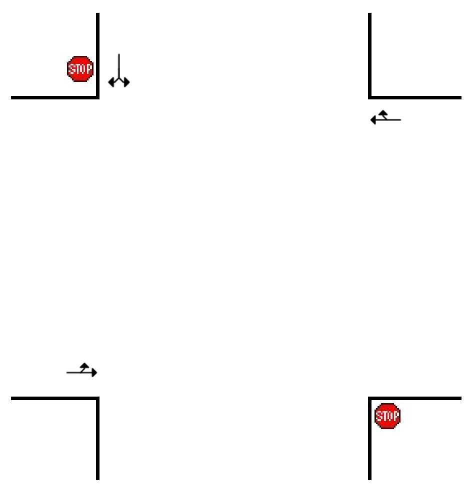
Peak-Hour: 12:20 PM -- 1:20 PM

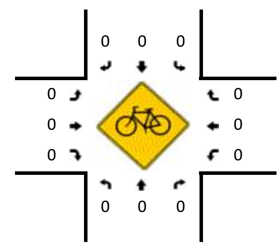
Peak 15-Min: 12:20 PM -- 12:35 PM

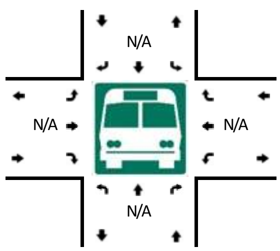


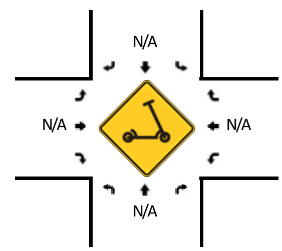












5-Min Count Period Beginning At	Minson Rd (Northbound)				Minson Rd (Southbound)				OR-126 (Eastbound)				OR-126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
12:00 PM	0	0	0	0	0	0	0	0	0	20	0	0	0	31	0	0	51	
12:05 PM	0	0	0	0	0	0	1	0	0	30	0	0	0	37	0	0	68	
12:10 PM	0	0	0	0	0	0	0	0	0	42	0	0	0	37	0	0	79	
12:15 PM	0	0	0	0	0	0	0	0	0	23	0	0	0	31	0	0	54	
12:20 PM	0	0	0	0	0	0	0	0	0	26	0	0	0	39	0	0	65	
12:25 PM	0	0	0	0	0	0	1	0	0	33	0	0	0	56	0	0	90	
12:30 PM	0	0	0	0	0	0	2	0	1	38	0	0	0	30	0	0	71	
12:35 PM	0	0	0	0	0	0	1	0	1	28	0	0	0	29	0	0	59	
12:40 PM	0	0	0	0	0	0	2	0	0	35	0	0	0	31	0	0	68	
12:45 PM	0	0	0	0	0	0	0	0	0	35	0	0	0	43	0	0	78	
12:50 PM	0	0	0	0	0	0	0	0	0	28	0	0	0	41	1	0	70	
12:55 PM	0	0	0	0	0	0	0	0	1	38	0	0	0	39	0	0	78	831
1:00 PM	0	0	0	0	0	0	0	0	0	31	0	0	0	39	0	0	70	850
1:05 PM	0	0	0	0	0	0	0	0	1	30	0	0	0	40	0	0	71	853
1:10 PM	0	0	0	0	0	0	0	0	0	26	0	0	0	39	0	0	65	839
1:15 PM	0	0	0	0	0	0	0	0	1	44	0	0	0	34	0	0	79	864
1:20 PM	0	0	0	0	0	0	2	0	1	37	0	0	0	25	0	0	65	864
1:25 PM	0	0	0	0	0	0	0	0	0	38	0	0	0	31	0	0	69	843
1:30 PM	0	0	0	0	0	0	0	0	0	30	0	0	0	42	0	0	72	844
1:35 PM	0	0	0	0	0	0	0	0	0	42	0	0	0	31	0	0	73	858
1:40 PM	0	0	0	0	0	0	0	0	0	29	0	0	0	36	0	0	65	855
1:45 PM	0	0	0	0	0	0	0	0	0	28	0	0	0	31	0	0	59	836
1:50 PM	0	0	0	0	0	0	0	0	0	33	0	0	0	33	0	0	66	832
1:55 PM	0	0	0	0	0	0	0	0	0	31	0	0	0	25	0	0	56	810
2:00 PM	0	0	0	0	1	0	0	0	1	44	0	0	0	38	1	0	85	825
2:05 PM	0	0	0	0	0	0	0	0	0	28	0	0	0	35	0	0	63	817
2:10 PM	0	0	0	0	0	0	0	0	1	38	0	0	0	40	0	0	79	831
2:15 PM	0	0	0	0	0	0	0	0	0	34	0	0	0	22	0	0	56	808
2:20 PM	0	0	0	0	0	0	0	0	3	29	0	0	0	36	0	0	68	811
2:25 PM	0	0	0	0	0	0	1	0	0	28	0	0	0	41	0	0	70	812
2:30 PM	0	0	0	0	0	0	0	0	0	36	0	0	0	28	0	0	64	804
2:35 PM	0	0	0	0	0	0	1	0	0	43	0	0	0	37	0	0	81	812
2:40 PM	0	0	0	0	0	0	0	0	0	59	0	0	0	36	0	0	95	842
2:45 PM	0	0	0	0	0	0	1	0	0	36	0	0	0	44	0	0	81	864
2:50 PM	0	0	0	0	1	0	0	0	0	32	0	0	0	24	0	0	57	855
2:55 PM	0	0	0	0	0	0	3	0	0	25	0	0	0	26	0	0	54	853
3:00 PM	0	0	0	0	0	0	1	0	1	27	0	0	0	35	0	0	64	832
3:05 PM	0	0	0	0	0	0	0	0	0	36	0	0	0	29	0	0	65	834

5-Min Count Period Beginning At	Minson Rd (Northbound)				Minson Rd (Southbound)				OR-126 (Eastbound)				OR-126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:10 PM	0	0	0	0	0	0	0	0	1	31	0	0	0	27	1	0	60	815
3:15 PM	0	0	0	0	0	0	0	0	1	32	0	0	0	38	0	0	71	830
3:20 PM	0	0	0	0	0	0	1	0	0	43	0	0	0	43	0	0	87	849
3:25 PM	0	0	0	0	0	0	0	0	0	30	0	0	0	47	0	0	77	856
3:30 PM	0	0	0	0	0	0	0	0	0	21	0	0	0	30	0	0	51	843
3:35 PM	0	0	0	0	0	0	0	0	0	45	0	0	0	27	0	0	72	834
3:40 PM	0	0	0	0	0	0	2	0	0	40	0	0	0	34	0	0	76	815
3:45 PM	0	0	0	0	0	0	0	0	0	31	0	0	0	31	0	0	62	796
3:50 PM	0	0	0	0	0	0	0	0	0	36	0	0	0	34	0	0	70	809
3:55 PM	0	0	0	0	0	0	0	0	0	33	0	0	0	35	0	0	68	823

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	0	0	12	0	4	388	0	0	0	500	0	0	904
Heavy Trucks	0	0	0		0	0	4		0	36	0		0	48	0		88
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

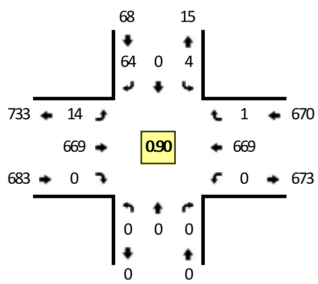
Comments:

Report generated on 11/29/2021 4:10 PM

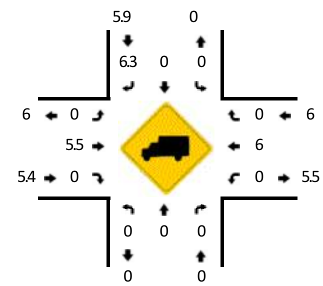
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak — Method for determining peak hour: Total Entering Volume

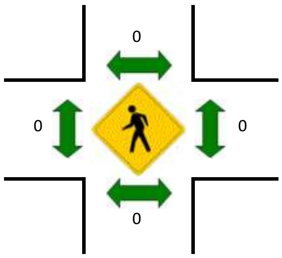
LOCATION: Parrish Ln -- OR-126 — **QC JOB #:** 15624417
CITY/STATE: Crook, OR — **DATE:** Tue, Nov 16 2021

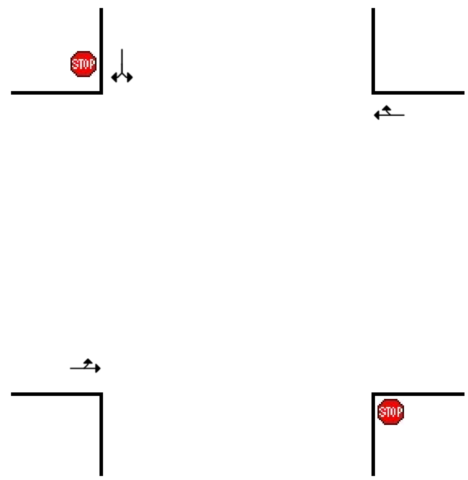


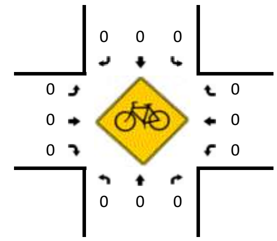
Peak-Hour: 4:05 PM -- 5:05 PM
Peak 15-Min: 4:25 PM -- 4:40 PM

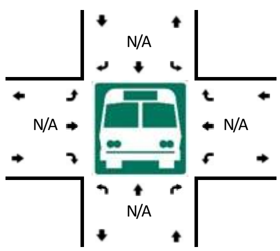


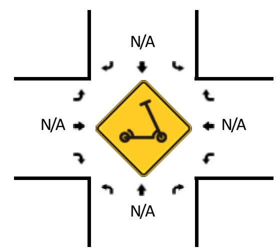
Quality Counts
DATA THAT DRIVES COMMUNITIES











5-Min Count Period Beginning At	Parrish Ln (Northbound)				Parrish Ln (Southbound)				OR-126 (Eastbound)				OR-126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	0	0	0	0	2	44	0	0	0	35	0	0	81	
4:05 PM	0	0	0	0	0	0	1	0	3	57	0	0	0	63	0	0	124	
4:10 PM	0	0	0	0	0	0	2	0	0	44	0	0	0	31	0	0	77	
4:15 PM	0	0	0	0	0	0	3	0	3	52	0	0	0	52	0	0	110	
4:20 PM	0	0	0	0	1	0	1	0	1	55	0	0	0	56	0	0	114	
4:25 PM	0	0	0	0	0	0	8	0	2	45	0	0	0	68	1	0	124	
4:30 PM	0	0	0	0	1	0	4	0	0	60	0	0	0	59	0	0	124	
4:35 PM	0	0	0	0	0	0	10	0	3	82	0	0	0	52	0	0	147	
4:40 PM	0	0	0	0	1	0	13	0	1	47	0	0	0	60	0	0	122	
4:45 PM	0	0	0	0	1	0	6	0	0	67	0	0	0	52	0	0	126	
4:50 PM	0	0	0	0	0	0	12	0	0	59	0	0	0	60	0	0	131	
4:55 PM	0	0	0	0	0	0	2	0	0	43	0	0	0	66	0	0	111	1391
5:00 PM	0	0	0	0	0	0	2	0	1	58	0	0	0	50	0	0	111	1421
5:05 PM	0	0	0	0	1	0	1	0	0	50	0	0	0	45	0	0	97	1394
5:10 PM	0	0	0	0	0	0	2	0	1	57	0	0	0	38	0	0	98	1415
5:15 PM	0	0	0	0	0	0	1	0	1	58	0	0	0	36	0	0	96	1401
5:20 PM	0	0	0	0	0	0	0	0	0	77	0	0	0	46	0	0	123	1410
5:25 PM	0	0	0	0	0	0	2	0	1	59	0	0	0	42	0	0	104	1390
5:30 PM	0	0	0	0	0	0	0	0	0	44	0	0	0	41	0	0	85	1351
5:35 PM	0	0	0	0	0	0	0	0	2	70	0	0	0	35	0	0	107	1311
5:40 PM	0	0	0	0	0	0	2	0	2	45	0	0	0	38	0	0	87	1276
5:45 PM	0	0	0	0	0	0	0	0	1	48	0	0	0	29	0	0	78	1228
5:50 PM	0	0	0	0	0	0	1	0	0	40	0	0	0	19	0	0	60	1157
5:55 PM	0	0	0	0	0	0	0	0	2	49	0	0	0	16	0	0	67	1113

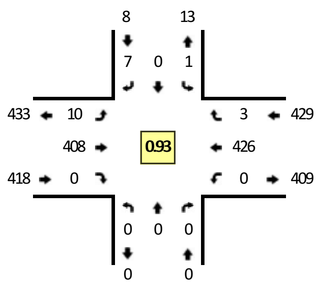
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	4	0	88	0	20	748	0	0	0	716	4	0	1580
Heavy Trucks	0	0	0		0	0	4		0	52	0		0	28	0		84
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

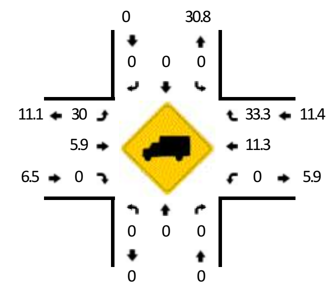
Report generated on 11/29/2021 4:10 PM — SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

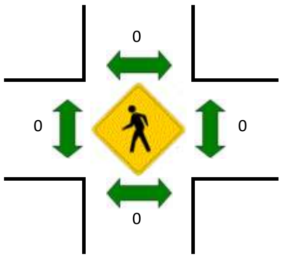
LOCATION: Parrish Ln -- OR-126
CITY/STATE: Crook, OR

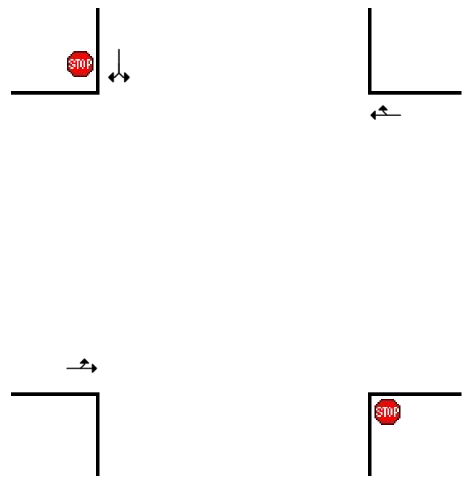
QC JOB #: 15624418
DATE: Sat, Nov 13 2021

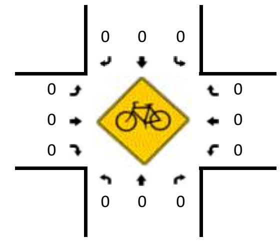


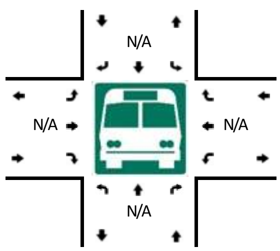
Peak-Hour: 12:40 PM -- 1:40 PM
Peak 15-Min: 12:45 PM -- 1:00 PM

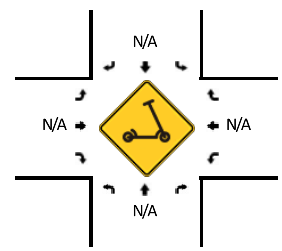












5-Min Count Period Beginning At	Parrish Ln (Northbound)				Parrish Ln (Southbound)				OR-126 (Eastbound)				OR-126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
12:00 PM	0	0	0	0	0	0	1	0	0	20	0	0	0	30	0	0	51	
12:05 PM	0	0	0	0	0	0	1	0	1	33	0	0	0	39	3	0	77	
12:10 PM	0	0	0	0	0	0	0	0	0	31	0	0	0	34	0	0	65	
12:15 PM	0	0	0	0	0	0	1	0	1	27	0	0	0	32	1	0	62	
12:20 PM	0	0	0	0	0	0	1	0	0	32	0	0	0	45	1	0	79	
12:25 PM	0	0	0	0	0	0	1	0	3	24	0	0	0	43	0	0	71	
12:30 PM	0	0	0	0	0	0	0	0	0	32	0	0	0	27	0	0	59	
12:35 PM	0	0	0	0	0	0	1	0	1	35	0	0	0	34	0	0	71	
12:40 PM	0	0	0	0	0	0	1	0	1	29	0	0	0	32	0	0	63	
12:45 PM	0	0	0	0	0	0	1	0	1	40	0	0	0	40	0	0	82	
12:50 PM	0	0	0	0	0	0	0	0	1	27	0	0	0	39	0	0	67	
12:55 PM	0	0	0	0	0	0	0	0	2	40	0	0	0	39	1	0	82	829
1:00 PM	0	0	0	0	0	0	0	0	0	27	0	0	0	38	0	0	65	843
1:05 PM	0	0	0	0	0	0	0	0	2	26	0	0	0	44	1	0	73	839
1:10 PM	0	0	0	0	0	0	2	0	2	32	0	0	0	32	0	0	68	842
1:15 PM	0	0	0	0	1	0	1	0	0	36	0	0	0	35	0	0	73	853
1:20 PM	0	0	0	0	0	0	0	0	1	47	0	0	0	26	0	0	74	848
1:25 PM	0	0	0	0	0	0	0	0	0	35	0	0	0	32	1	0	68	845
1:30 PM	0	0	0	0	0	0	2	0	0	29	0	0	0	32	0	0	63	849
1:35 PM	0	0	0	0	0	0	0	0	0	40	0	0	0	37	0	0	77	855
1:40 PM	0	0	0	0	1	0	0	0	1	22	0	0	0	35	0	0	59	851
1:45 PM	0	0	0	0	0	0	3	0	2	26	0	0	0	27	0	0	58	827
1:50 PM	0	0	0	0	0	0	2	0	1	38	0	0	0	24	0	0	65	825
1:55 PM	0	0	0	0	0	0	0	0	0	33	0	0	0	38	0	0	71	814
2:00 PM	0	0	0	0	0	0	1	0	1	40	0	0	0	32	0	0	74	823
2:05 PM	0	0	0	0	0	0	1	0	1	32	0	0	0	38	0	0	72	822
2:10 PM	0	0	0	0	0	0	0	0	1	34	0	0	0	32	0	0	67	821
2:15 PM	0	0	0	0	0	0	1	0	0	30	0	0	0	26	0	0	57	805
2:20 PM	0	0	0	0	0	0	0	0	2	35	0	0	0	37	0	0	74	805
2:25 PM	0	0	0	0	0	0	3	0	0	16	0	0	0	37	0	0	56	793
2:30 PM	0	0	0	0	0	0	2	0	0	41	0	0	0	27	0	0	70	800
2:35 PM	0	0	0	0	0	0	0	0	1	30	0	0	0	37	0	0	68	791
2:40 PM	0	0	0	0	0	0	0	0	0	61	0	0	0	37	0	0	98	830
2:45 PM	0	0	0	0	0	0	1	0	2	38	0	0	0	39	0	0	80	852
2:50 PM	0	0	0	0	0	0	0	0	2	32	0	0	0	23	0	0	57	844
2:55 PM	0	0	0	0	0	0	0	0	1	34	0	0	0	22	0	0	57	830
3:00 PM	0	0	0	0	0	0	0	0	0	27	0	0	0	41	0	0	68	824
3:05 PM	0	0	0	0	0	0	1	0	0	31	0	0	0	25	0	0	57	809

5-Min Count Period Beginning At	Parrish Ln (Northbound)				Parrish Ln (Southbound)				OR-126 (Eastbound)				OR-126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:10 PM	0	0	0	0	1	0	2	0	0	32	0	0	0	29	0	0	64	806
3:15 PM	0	0	0	0	0	0	2	0	0	31	0	0	0	41	0	0	74	823
3:20 PM	0	0	0	0	0	0	1	0	1	41	0	0	0	34	0	0	77	826
3:25 PM	0	0	0	0	0	0	1	0	1	33	0	0	0	43	0	0	78	848
3:30 PM	0	0	0	0	1	0	2	0	1	24	0	0	0	23	1	0	52	830
3:35 PM	0	0	0	0	0	0	0	0	0	37	0	0	0	39	0	0	76	838
3:40 PM	0	0	0	0	0	0	0	0	2	30	0	0	0	31	0	0	63	803
3:45 PM	0	0	0	0	0	0	1	0	1	44	0	0	0	34	0	0	80	803
3:50 PM	0	0	0	0	0	0	2	0	0	35	0	0	0	29	0	0	66	812
3:55 PM	0	0	0	0	0	0	0	0	0	21	0	0	0	33	0	0	54	809

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	0	0	4	0	16	428	0	0	0	472	4	0	924
Heavy Trucks	0	0	0		0	0	0		4	24	0		0	72	0		100
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

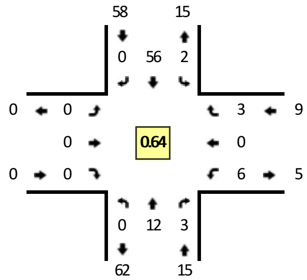
Report generated on 11/29/2021 4:10 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

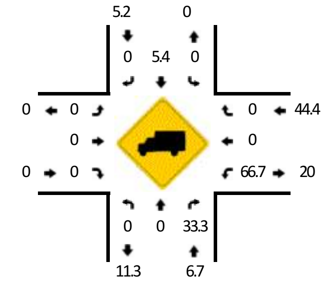
LOCATION: Parrish Ln -- Wiley Rd | **QC JOB #:** 15624419

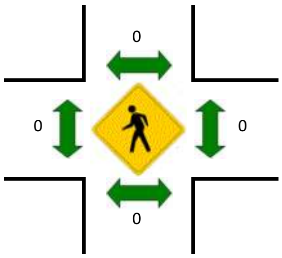
CITY/STATE: Crook, OR | **DATE:** Tue, Nov 16 2021

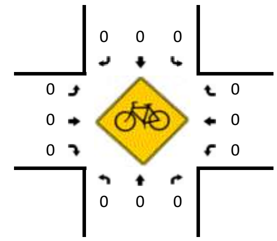


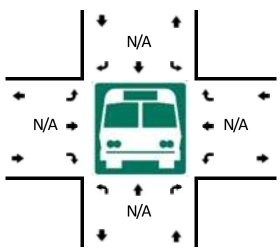
Peak-Hour: 4:05 PM -- 5:05 PM

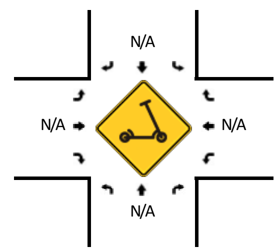
Peak 15-Min: 4:35 PM -- 4:50 PM











5-Min Count Period Beginning At	Parrish Ln (Northbound)				Parrish Ln (Southbound)				Wiley Rd (Eastbound)				Wiley Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
4:05 PM	0	2	1	0	0	1	0	0	0	0	0	0	1	0	1	0	6	
4:10 PM	0	0	0	0	0	3	0	0	0	0	0	0	1	0	0	0	4	
4:15 PM	0	3	0	0	0	2	0	0	0	0	0	0	0	0	1	0	6	
4:20 PM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3	
4:25 PM	0	0	1	0	0	7	0	0	0	0	0	0	0	0	0	0	8	
4:30 PM	0	2	0	0	0	4	0	0	0	0	0	0	0	0	0	0	6	
4:35 PM	0	2	0	0	0	8	0	0	0	0	0	0	2	0	0	0	12	
4:40 PM	0	1	0	0	0	9	0	0	0	0	0	0	0	0	1	0	11	
4:45 PM	0	0	0	0	1	8	0	0	0	0	0	0	0	0	0	0	9	
4:50 PM	0	0	1	0	0	8	0	0	0	0	0	0	0	0	0	0	9	
4:55 PM	0	0	0	0	1	2	0	0	0	0	0	0	1	0	0	0	4	79
5:00 PM	0	1	0	0	0	2	0	0	0	0	0	0	1	0	0	0	4	82
5:05 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	3	79
5:10 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	77
5:15 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	73
5:20 PM	0	0	1	0	0	2	0	0	0	0	0	0	0	0	1	0	4	74
5:25 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	68
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	63
5:35 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	2	53
5:40 PM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3	45
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	37
5:50 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	29
5:55 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	27

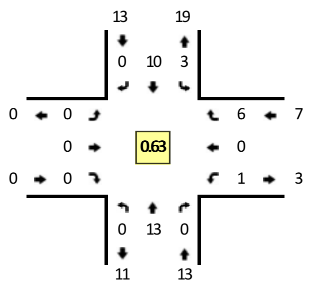
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	12	0	0	4	100	0	0	0	0	0	0	8	0	4	0	128
Heavy Trucks	0	0	0		0	0	0		0	0	0		4	0	0		4
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

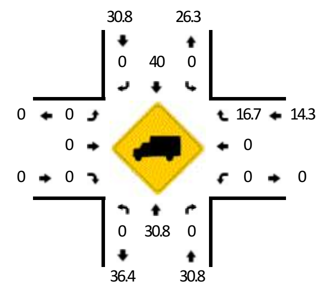
Report generated on 11/29/2021 4:10 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

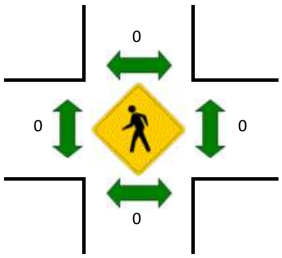
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

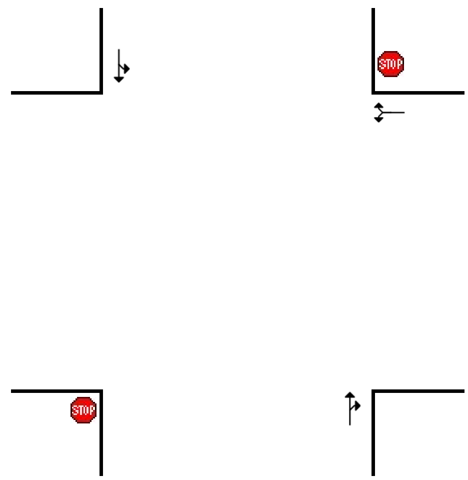
LOCATION: Parrish Ln -- Wiley Rd | **QC JOB #:** 15624420
CITY/STATE: Crook, OR | **DATE:** Sat, Nov 13 2021

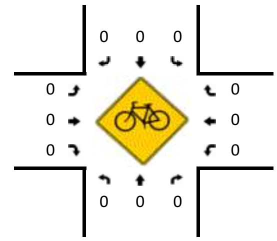


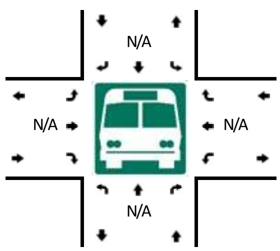
Peak-Hour: 12:55 PM -- 1:55 PM
Peak 15-Min: 1:40 PM -- 1:55 PM

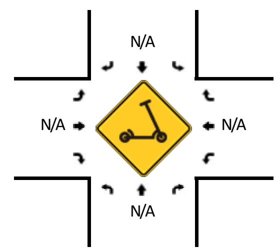












5-Min Count Period Beginning At	Parrish Ln (Northbound)				Parrish Ln (Southbound)				Wiley Rd (Eastbound)				Wiley Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
12:00 PM	0	0	0	0	1	2	0	0	0	0	0	0	0	0	1	0	4	
12:05 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	
12:10 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4	
12:15 PM	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3	
12:20 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	
12:25 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:35 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
12:40 PM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3	
12:45 PM	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
12:50 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
12:55 PM	0	2	0	0	1	0	0	0	0	0	0	0	0	0	1	0	4	30
1:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	28
1:05 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	29
1:10 PM	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4	29
1:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	27
1:20 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	26
1:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	25
1:30 PM	0	1	0	0	0	2	0	0	0	0	0	0	1	0	0	0	4	29
1:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
1:40 PM	0	1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	4	29
1:45 PM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	2	0	6	31
1:50 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	3	33
1:55 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	30
2:00 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	3	31
2:05 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	3	31
2:10 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	28
2:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	28
2:20 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	29
2:25 PM	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	5	33
2:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	30
2:35 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	31
2:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
2:45 PM	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3	24
2:50 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	23
2:55 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	23
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
3:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	19

5-Min Count Period Beginning At	Parrish Ln (Northbound)				Parrish Ln (Southbound)				Wiley Rd (Eastbound)				Wiley Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:10 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	19
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	20
3:20 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	20
3:25 PM	0	1	0	0	0	2	0	0	0	0	0	0	1	0	0	0	4	19
3:30 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	3	21
3:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	21
3:40 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	22
3:45 PM	0	2	0	0	0	1	0	0	0	0	0	0	1	0	1	0	5	24
3:50 PM	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	2	24
3:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	16	0	0	4	20	0	0	0	0	0	0	0	0	12	0	52
Heavy Trucks	0	4	0		0	12	0		0	0	0		0	0	0		16
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

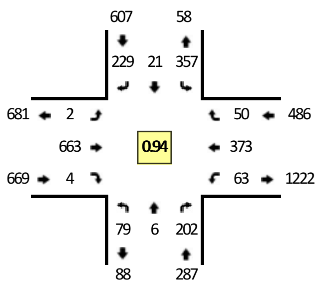
Comments:

Report generated on 11/29/2021 4:10 PM

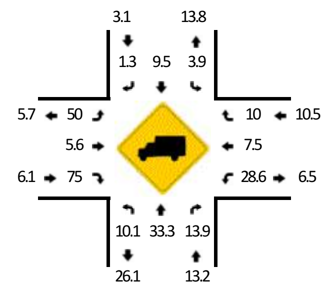
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

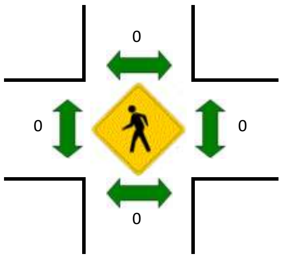
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

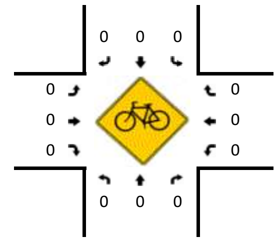
LOCATION: Tom McCall Rd -- OR-126 **QC JOB #:** 15624421
CITY/STATE: Prineville, OR **DATE:** Tue, Nov 16 2021

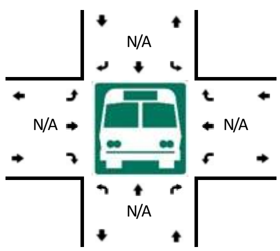


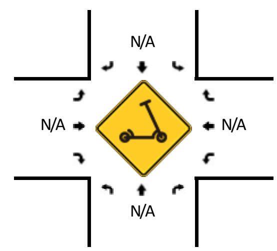
Peak-Hour: 4:00 PM -- 5:00 PM
Peak 15-Min: 4:40 PM -- 4:55 PM











5-Min Count Period Beginning At	Tom McCall Rd (Northbound)				Tom McCall Rd (Southbound)				OR-126 (Eastbound)				OR-126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	9	0	26	0	24	6	22	0	1	57	1	0	8	40	7	0	201	
4:05 PM	3	3	36	0	16	1	7	0	0	40	0	0	8	28	5	0	147	
4:10 PM	3	0	19	0	11	3	10	0	0	61	0	0	10	36	5	0	158	
4:15 PM	10	1	17	0	20	1	25	0	0	45	0	0	6	31	5	0	161	
4:20 PM	3	0	10	0	35	1	26	0	0	54	1	0	7	25	2	0	164	
4:25 PM	6	1	13	0	35	2	22	0	0	46	0	0	5	30	6	0	166	
4:30 PM	4	0	11	0	43	3	26	0	0	55	0	0	2	25	4	0	173	
4:35 PM	8	1	18	0	39	1	18	0	0	55	1	0	2	32	3	0	178	
4:40 PM	3	0	11	0	52	1	17	0	0	54	0	0	5	33	3	0	179	
4:45 PM	12	0	10	0	37	2	19	0	0	61	0	0	4	31	2	0	178	
4:50 PM	3	0	12	0	28	0	24	0	1	72	1	0	3	39	3	0	186	
4:55 PM	15	0	19	0	17	0	13	0	0	63	0	0	3	23	5	0	158	2049
5:00 PM	15	3	25	0	16	1	5	0	0	48	0	0	1	34	4	0	152	2000
5:05 PM	6	1	7	0	20	0	7	0	2	51	0	0	2	29	3	0	128	1981
5:10 PM	1	0	5	0	6	1	6	0	1	65	0	0	5	32	7	0	129	1952
5:15 PM	5	0	7	0	5	0	4	0	2	32	0	0	6	38	2	0	101	1892
5:20 PM	2	1	4	0	4	0	2	0	1	68	0	0	3	37	4	0	126	1854
5:25 PM	8	0	11	0	7	0	1	0	0	83	0	0	3	35	1	0	149	1837
5:30 PM	5	0	13	0	7	0	3	0	0	64	0	0	2	28	3	0	125	1789
5:35 PM	7	0	7	0	3	1	4	0	0	52	0	2	2	31	2	0	111	1722
5:40 PM	3	0	5	0	2	0	5	0	3	64	0	0	2	19	2	0	105	1648
5:45 PM	1	1	2	0	1	0	2	0	3	46	1	0	1	19	8	0	85	1555
5:50 PM	2	0	7	0	2	0	2	0	2	42	0	0	2	13	0	0	72	1441
5:55 PM	1	1	5	0	0	0	0	0	0	49	0	0	5	20	2	0	83	1366

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	72	0	132	0	468	12	240	0	4	748	4	0	48	412	32	0	2172
Heavy Trucks	8	0	20		20	4	4		0	28	0		12	24	4		124
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

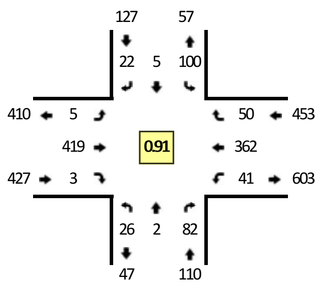
Comments:

Report generated on 11/29/2021 4:10 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

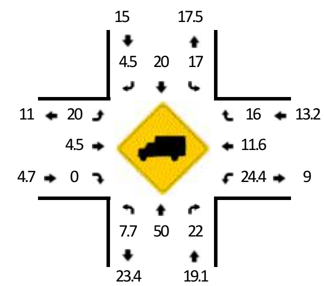
Type of peak hour being reported: Intersection Peak — Method for determining peak hour: Total Entering Volume

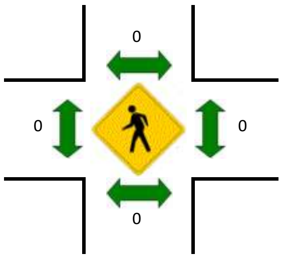
LOCATION: Tom McCall Rd -- OR-126 — **QC JOB #:** 15624422

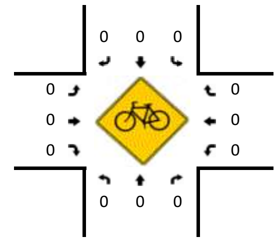
CITY/STATE: Prineville, OR — **DATE:** Sat, Nov 13 2021

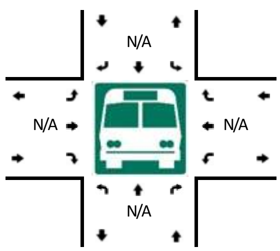


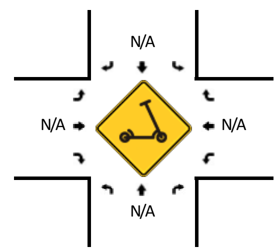
Peak-Hour: 2:35 PM -- 3:35 PM
Peak 15-Min: 2:35 PM -- 2:50 PM











5-Min Count Period Beginning At	Tom McCall Rd (Northbound)				Tom McCall Rd (Southbound)				OR-126 (Eastbound)				OR-126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
12:00 PM	2	0	7	0	10	0	0	0	1	42	0	0	6	40	4	0	112	
12:05 PM	0	1	5	0	6	0	3	0	0	22	0	0	4	31	6	0	78	
12:10 PM	0	0	5	0	3	1	2	0	0	30	0	0	4	37	15	0	97	
12:15 PM	0	0	1	0	7	0	1	0	0	31	0	0	0	42	6	0	88	
12:20 PM	2	0	3	0	5	1	1	0	0	30	1	0	3	44	9	0	99	
12:25 PM	0	0	1	0	7	1	1	0	1	30	0	0	3	24	4	0	72	
12:30 PM	1	0	3	0	10	0	1	0	2	23	0	0	3	31	8	0	82	
12:35 PM	0	0	2	0	5	0	0	0	2	28	0	0	0	32	6	0	75	
12:40 PM	0	0	6	0	6	0	1	0	0	34	0	0	3	40	2	0	92	
12:45 PM	0	1	3	0	2	0	2	0	1	27	0	0	4	38	10	0	88	
12:50 PM	1	0	5	0	8	1	1	0	0	47	1	0	4	38	6	0	112	
12:55 PM	1	0	2	0	5	0	1	0	0	28	0	0	1	45	6	0	89	1084
1:00 PM	1	0	2	0	7	1	1	0	0	43	1	0	3	32	8	0	99	1071
1:05 PM	2	1	4	0	3	0	0	0	1	23	1	0	3	34	7	0	79	1072
1:10 PM	1	0	7	0	7	0	1	0	0	22	0	0	5	29	3	0	75	1050
1:15 PM	0	0	2	0	6	0	2	0	0	35	1	0	3	27	8	0	84	1046
1:20 PM	2	0	4	0	3	0	0	0	2	35	1	0	3	34	4	0	88	1035
1:25 PM	0	0	4	0	4	0	4	0	0	47	0	0	3	25	6	0	93	1056
1:30 PM	1	0	9	0	5	0	0	0	0	34	0	0	4	36	4	0	93	1067
1:35 PM	1	0	3	0	5	0	2	0	0	36	0	0	4	40	4	0	95	1087
1:40 PM	0	0	5	0	9	1	4	0	1	34	0	0	4	20	8	0	86	1081
1:45 PM	1	0	1	0	4	0	0	0	2	28	0	0	2	30	6	0	74	1067
1:50 PM	0	0	6	0	4	0	1	0	2	27	0	0	0	34	3	0	77	1032
1:55 PM	0	0	1	0	4	0	1	0	0	36	0	0	4	37	0	0	83	1026
2:00 PM	1	0	3	0	6	1	2	0	0	29	0	0	4	34	6	0	86	1013
2:05 PM	0	0	1	0	6	0	0	0	0	40	0	0	3	36	6	0	92	1026
2:10 PM	0	1	4	0	5	0	1	0	0	40	0	0	5	26	9	1	92	1043
2:15 PM	1	0	4	0	4	1	4	0	0	27	1	0	6	35	4	0	87	1046
2:20 PM	3	0	4	0	6	0	5	0	0	30	1	0	3	30	5	0	87	1045
2:25 PM	1	0	3	0	9	0	3	0	0	41	0	0	2	29	4	1	93	1045
2:30 PM	1	0	10	0	13	0	6	0	0	16	0	0	0	28	1	0	75	1027
2:35 PM	1	0	5	0	16	0	6	0	1	34	0	0	1	32	5	0	101	1033
2:40 PM	2	1	5	0	9	0	4	0	1	31	1	0	4	35	5	2	100	1047
2:45 PM	0	0	9	0	8	0	1	0	0	62	0	0	1	20	5	0	106	1079
2:50 PM	1	0	5	0	4	0	2	0	0	35	0	0	6	24	6	0	83	1085
2:55 PM	1	1	4	0	6	0	1	0	1	31	0	0	3	39	2	0	89	1091
3:00 PM	1	0	10	0	11	1	1	0	0	31	1	0	3	22	4	0	85	1090
3:05 PM	1	0	6	0	11	0	2	0	0	24	0	0	1	25	1	0	71	1069

5-Min Count Period Beginning At	Tom McCall Rd (Northbound)				Tom McCall Rd (Southbound)				OR-126 (Eastbound)				OR-126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:10 PM	1	0	5	0	11	2	3	0	0	29	0	0	5	35	6	0	97	1074
3:15 PM	3	0	10	0	3	1	0	0	1	36	0	0	3	37	5	0	99	1086
3:20 PM	11	0	6	0	9	0	1	0	0	36	0	0	3	33	3	0	102	1101
3:25 PM	2	0	6	0	7	1	0	0	0	33	1	0	5	23	4	0	82	1090
3:30 PM	2	0	11	0	5	0	1	0	1	37	0	0	4	37	4	0	102	1117
3:35 PM	0	0	0	0	4	0	3	0	1	19	0	0	3	28	4	0	62	1078
3:40 PM	0	1	8	0	2	1	0	0	0	41	0	0	1	35	5	0	94	1072
3:45 PM	1	0	3	0	9	1	1	0	0	26	0	0	3	30	3	0	77	1043
3:50 PM	1	0	8	0	4	0	2	0	1	45	0	0	7	32	2	0	102	1062
3:55 PM	1	0	3	0	4	0	2	0	1	30	0	1	2	25	2	0	71	1044

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	12	4	76	0	132	0	44	0	8	508	4	0	24	348	60	8	1228
Heavy Trucks	0	4	16		20	0	0		0	28	0		12	44	4		128
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

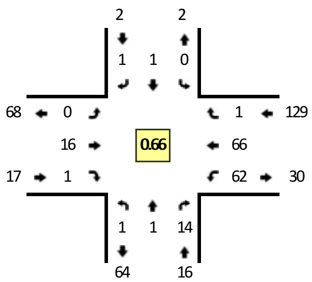
Comments:

Report generated on 11/29/2021 4:10 PM

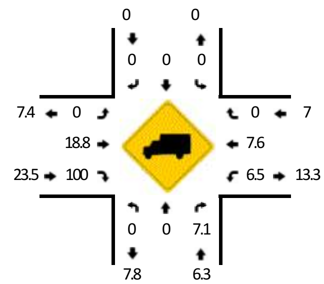
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

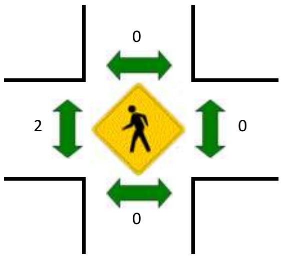
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

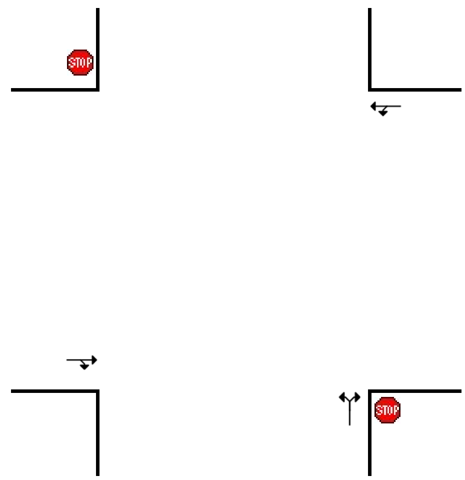
LOCATION: Parrish Ln -- Houston Lake Rd | **QC JOB #:** 15624423
CITY/STATE: Crook, OR | **DATE:** Tue, Nov 16 2021

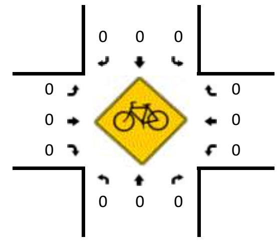


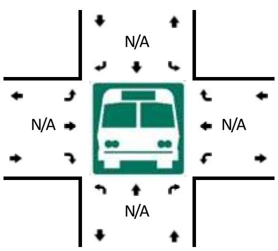
Peak-Hour: 4:00 PM -- 5:00 PM
Peak 15-Min: 4:35 PM -- 4:50 PM

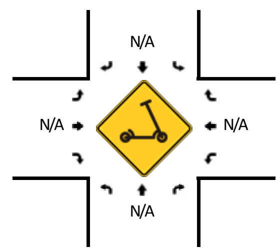












5-Min Count Period Beginning At	Parrish Ln (Northbound)				Parrish Ln (Southbound)				Houston Lake Rd (Eastbound)				Houston Lake Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	1	4	0	0	7	
4:05 PM	0	0	3	0	0	0	0	0	0	2	0	0	5	8	0	0	18	
4:10 PM	0	0	1	0	0	0	0	0	0	1	0	0	5	5	1	0	13	
4:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	1	2	0	0	4	
4:20 PM	1	0	2	0	0	0	0	0	0	2	0	0	6	5	0	0	16	
4:25 PM	0	0	1	0	0	0	0	0	0	2	0	0	4	7	0	0	14	
4:30 PM	0	1	2	0	0	0	0	0	0	2	1	0	8	4	0	0	18	
4:35 PM	0	0	0	0	0	0	0	0	0	2	0	0	8	7	0	0	17	
4:40 PM	0	0	2	0	0	0	0	0	0	1	0	0	9	9	0	0	21	
4:45 PM	0	0	1	0	0	0	1	0	0	2	0	0	13	7	0	0	24	
4:50 PM	0	0	0	0	0	0	0	0	0	1	0	0	2	4	0	0	7	
4:55 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0	5	164
5:00 PM	0	0	0	0	0	0	0	0	0	2	1	0	0	3	0	0	6	163
5:05 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	4	149
5:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	4	140
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	140
5:20 PM	0	0	1	0	1	0	0	0	0	1	0	0	2	0	0	0	5	129
5:25 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2	117
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	100
5:35 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	3	86
5:40 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2	67
5:45 PM	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	4	47
5:50 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	4	0	0	5	45
5:55 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	43

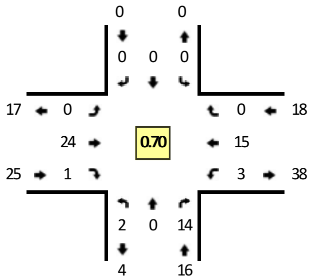
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	12	0	0	0	4	0	0	20	0	0	120	92	0	0	248
Heavy Trucks	0	0	0		0	0	0		0	0	0		4	0	0		4
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

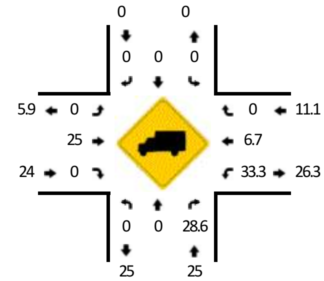
Comments:

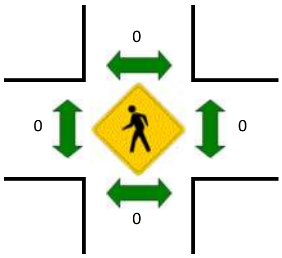
Type of peak hour being reported: Intersection Peak — Method for determining peak hour: Total Entering Volume

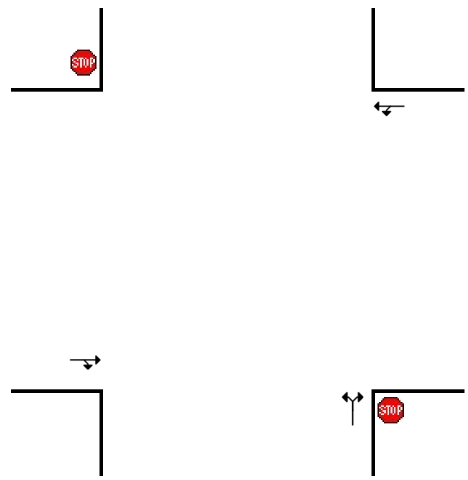
LOCATION: Parrish Ln -- Houston Lake Rd — **QC JOB #:** 15624424
CITY/STATE: Crook, OR — **DATE:** Sat, Nov 13 2021

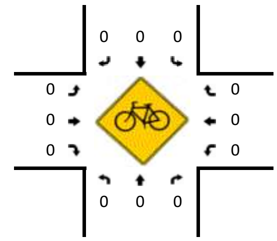
Peak-Hour: 12:15 PM -- 1:15 PM
Peak 15-Min: 1:00 PM -- 1:15 PM

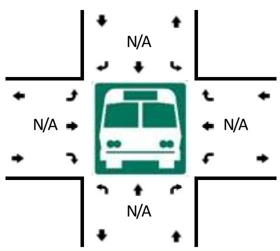


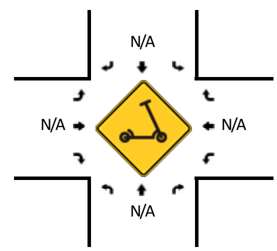












5-Min Count Period Beginning At	Parrish Ln (Northbound)				Parrish Ln (Southbound)				Houston Lake Rd (Eastbound)				Houston Lake Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:05 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	
12:10 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	3	
12:15 PM	1	0	2	0	0	0	0	0	0	1	0	0	0	1	0	0	5	
12:20 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	
12:25 PM	0	0	0	0	0	0	0	0	0	5	0	0	0	2	0	0	7	
12:30 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2	
12:35 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	2	0	0	6	
12:40 PM	0	0	0	0	0	0	0	0	0	2	0	0	3	2	0	0	7	
12:45 PM	0	0	1	0	0	0	0	0	0	2	0	0	0	1	0	0	4	
12:50 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	3	
12:55 PM	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	3	43
1:00 PM	1	0	2	0	0	0	0	0	0	3	0	0	0	0	0	0	6	49
1:05 PM	0	0	2	0	0	0	0	0	0	1	0	0	0	5	0	0	8	55
1:10 PM	0	0	3	0	0	0	0	0	0	2	1	0	0	1	0	0	7	59
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	56
1:20 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3	58
1:25 PM	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	3	54
1:30 PM	0	0	1	0	0	0	0	0	0	1	0	0	1	2	0	0	5	57
1:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	53
1:40 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	4	50
1:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	2	3	0	0	6	52
1:50 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	51
1:55 PM	0	0	1	0	0	0	0	0	0	2	0	0	0	3	0	0	6	54
2:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	3	51
2:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	46
2:10 PM	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	41
2:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	3	42
2:20 PM	0	0	0	0	0	0	0	0	0	2	0	0	1	2	0	0	5	44
2:25 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	3	44
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	41
2:35 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3	42
2:40 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3	41
2:45 PM	0	0	1	0	0	0	0	0	0	3	0	0	3	3	0	0	10	45
2:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	45
2:55 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4	43
3:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3	43
3:05 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	42

5-Min Count Period Beginning At	Parrish Ln (Northbound)				Parrish Ln (Southbound)				Houston Lake Rd (Eastbound)				Houston Lake Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	42
3:15 PM	0	0	0	0	0	0	0	0	0	3	0	0	2	3	0	0	8	47
3:20 PM	0	0	0	0	0	0	0	0	0	2	0	0	1	5	0	0	8	50
3:25 PM	0	0	2	0	0	0	0	0	0	2	0	0	2	2	0	0	8	55
3:30 PM	0	0	1	0	0	0	0	0	0	2	0	0	0	1	0	0	4	57
3:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	55
3:40 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	3	55
3:45 PM	0	0	2	0	0	0	0	0	0	1	0	0	1	1	0	0	5	50
3:50 PM	2	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	6	54
3:55 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0	5	55

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	4	0	28	0	0	0	0	0	0	24	4	0	0	24	0	0	84
Heavy Trucks	0	0	16		0	0	0		0	8	0		0	4	0		28
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

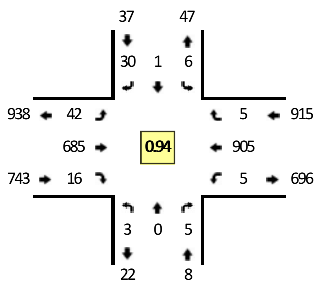
Comments:

Report generated on 11/29/2021 4:10 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

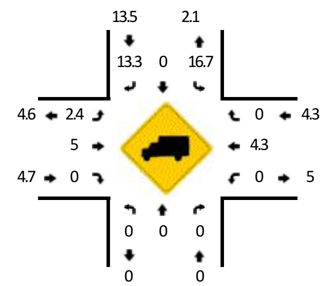
LOCATION: SW Reif Rd -- OR 126 — **QC JOB #:** 15640701

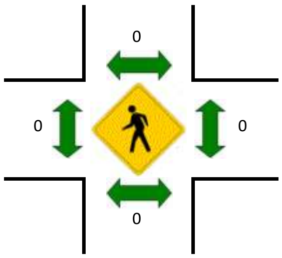
CITY/STATE: Crook, OR — **DATE:** Wed, Dec 1 2021

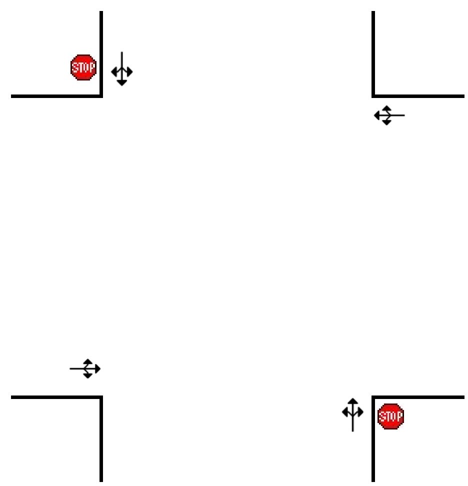


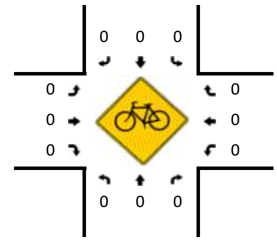
Peak-Hour: 4:15 PM -- 5:15 PM

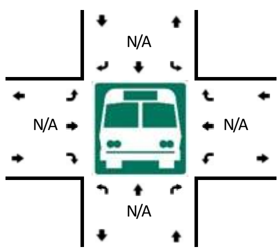
Peak 15-Min: 4:30 PM -- 4:45 PM

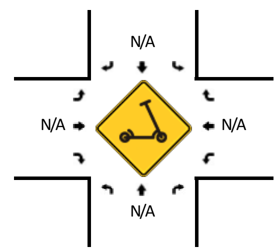












5-Min Count Period Beginning At	SW Reif Rd (Northbound)				SW Reif Rd (Southbound)				OR 126 (Eastbound)				OR 126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	1	0	1	0	3	0	1	61	3	0	1	48	0	0	119	
4:05 PM	0	0	0	0	0	0	2	0	1	52	1	0	0	54	1	0	111	
4:10 PM	1	0	0	0	0	0	0	0	0	41	0	0	0	60	1	0	103	
4:15 PM	0	0	1	0	0	0	0	0	1	54	4	0	0	66	0	0	126	
4:20 PM	0	0	0	0	0	0	1	0	1	52	0	0	0	74	0	0	128	
4:25 PM	0	0	0	0	0	0	3	0	1	59	0	0	0	74	1	0	138	
4:30 PM	2	0	1	0	0	0	4	0	2	75	3	0	1	73	2	0	163	
4:35 PM	0	0	0	0	0	0	3	0	5	57	1	0	2	80	0	0	148	
4:40 PM	1	0	0	0	0	0	1	0	3	55	1	0	0	83	0	0	144	
4:45 PM	0	0	0	0	1	0	2	0	5	55	1	0	0	82	0	0	146	
4:50 PM	0	0	2	0	0	1	3	0	5	47	2	0	0	73	0	0	133	
4:55 PM	0	0	0	0	1	0	4	0	5	62	3	0	0	71	1	0	147	1606
5:00 PM	0	0	1	0	0	0	1	0	4	42	0	0	1	91	0	0	140	1627
5:05 PM	0	0	0	0	2	0	5	0	4	51	0	0	1	78	0	0	141	1657
5:10 PM	0	0	0	0	2	0	3	0	6	76	1	0	0	60	1	0	149	1703
5:15 PM	1	0	0	0	0	0	4	0	2	48	2	0	0	38	0	0	95	1672
5:20 PM	0	0	0	0	0	0	0	0	3	76	2	0	1	57	0	0	139	1683
5:25 PM	0	0	0	0	0	0	2	0	3	56	2	0	0	44	0	0	107	1652
5:30 PM	0	0	0	0	0	0	1	0	4	57	1	0	0	41	0	0	104	1593
5:35 PM	0	2	0	0	0	0	1	0	0	50	1	0	0	33	0	0	87	1532
5:40 PM	1	0	0	0	0	0	0	0	3	46	3	0	1	23	1	0	78	1466
5:45 PM	0	0	0	0	0	0	1	0	1	56	1	0	1	31	0	0	91	1411
5:50 PM	0	1	0	0	0	0	0	0	2	51	0	0	0	21	1	0	76	1354
5:55 PM	0	0	1	0	0	0	1	0	2	50	0	0	0	25	0	0	79	1286

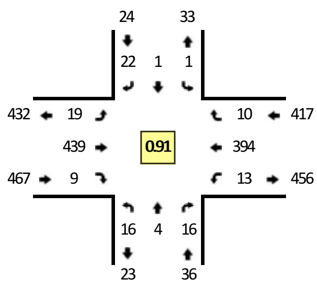
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	12	0	4	0	0	0	32	0	40	748	20	0	12	944	8	0	1820
Heavy Trucks	0	0	0		0	0	0		0	28	0		0	36	0		64
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Type of peak hour being reported: Intersection Peak — Method for determining peak hour: Total Entering Volume

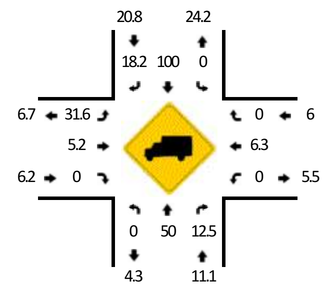
LOCATION: SW Reif Rd -- OR 126 — **QC JOB #:** 15640702

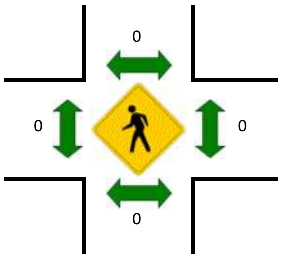
CITY/STATE: Crook, OR — **DATE:** Sat, Dec 4 2021

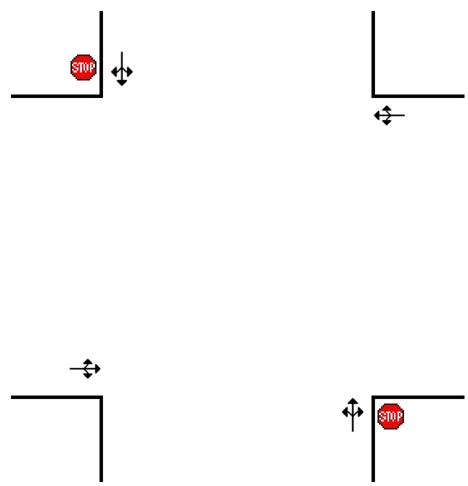


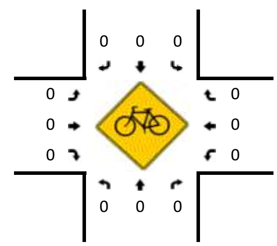
Peak-Hour: 1:35 PM -- 2:35 PM

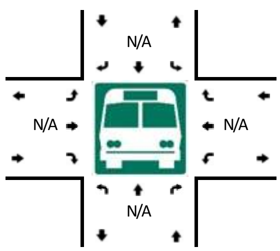
Peak 15-Min: 2:20 PM -- 2:35 PM

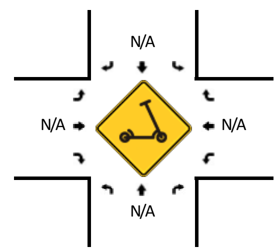












5-Min Count Period Beginning At	SW Reif Rd (Northbound)				SW Reif Rd (Southbound)				OR 126 (Eastbound)				OR 126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
12:00 PM	2	0	2	0	0	0	0	0	0	32	1	0	3	39	0	0	79	
12:05 PM	2	0	2	0	1	0	0	0	1	24	0	0	0	32	0	0	62	
12:10 PM	1	0	1	0	0	2	2	0	1	42	2	0	3	42	0	0	96	
12:15 PM	3	1	0	0	0	0	1	0	0	34	1	0	0	36	1	0	77	
12:20 PM	1	0	0	0	0	1	2	0	0	29	0	0	1	36	0	0	70	
12:25 PM	0	0	3	0	2	0	3	0	2	23	1	0	0	40	1	0	75	
12:30 PM	0	0	3	0	0	0	4	0	0	34	3	0	1	38	1	0	84	
12:35 PM	0	0	1	0	0	1	1	0	1	39	4	0	0	44	1	0	92	
12:40 PM	0	0	0	0	0	1	3	0	2	33	2	0	2	26	0	0	69	
12:45 PM	2	0	1	0	0	0	1	0	0	33	1	0	1	28	0	0	67	
12:50 PM	3	0	0	0	0	0	0	0	4	32	2	0	1	30	0	0	72	
12:55 PM	1	0	0	0	1	0	2	0	1	29	0	0	1	21	2	0	58	901
1:00 PM	1	0	1	0	0	1	0	0	0	30	3	0	0	38	1	0	75	897
1:05 PM	1	0	1	0	1	1	2	0	1	25	1	0	1	36	1	0	71	906
1:10 PM	1	0	1	0	1	0	1	0	4	27	3	0	3	43	0	0	84	894
1:15 PM	4	0	0	0	0	0	1	0	3	31	0	0	2	49	1	0	91	908
1:20 PM	0	0	0	0	0	0	1	0	0	27	1	0	2	38	0	0	69	907
1:25 PM	0	0	2	0	0	0	2	0	0	37	2	0	0	26	1	0	70	902
1:30 PM	2	0	3	0	1	0	1	0	0	39	1	0	1	35	0	0	83	901
1:35 PM	1	0	2	0	0	0	2	0	2	39	0	0	1	32	2	0	81	890
1:40 PM	2	0	1	0	0	0	2	0	2	35	1	0	2	32	2	0	79	900
1:45 PM	2	0	2	0	0	0	2	0	0	38	0	0	2	33	2	0	81	914
1:50 PM	0	0	3	0	0	0	1	0	1	32	0	0	3	27	0	0	67	909
1:55 PM	0	0	2	0	0	0	2	0	0	33	0	0	0	23	0	0	60	911
2:00 PM	0	2	0	0	0	0	2	0	4	33	1	0	0	31	2	0	75	911
2:05 PM	2	1	1	0	0	0	3	0	4	43	1	0	0	28	0	0	83	923
2:10 PM	1	1	1	0	0	0	2	0	0	31	2	0	1	26	0	0	65	904
2:15 PM	2	0	1	0	0	0	4	0	0	37	0	0	2	45	2	0	93	906
2:20 PM	4	0	1	0	0	0	0	0	0	35	3	0	1	49	0	0	93	930
2:25 PM	2	0	1	0	0	1	2	0	3	31	1	0	1	29	0	0	71	931
2:30 PM	0	0	1	0	1	0	0	0	3	52	0	0	0	39	0	0	96	944
2:35 PM	0	0	0	0	0	0	3	0	2	27	0	0	1	33	0	0	66	929
2:40 PM	5	0	1	0	1	0	4	0	0	31	1	0	1	36	0	0	80	930
2:45 PM	2	0	0	0	1	0	2	0	0	28	1	0	0	25	0	0	59	908
2:50 PM	1	0	1	0	0	0	0	0	2	25	0	0	1	34	0	0	64	905
2:55 PM	3	0	0	0	0	0	1	0	1	44	0	0	2	39	0	0	90	935
3:00 PM	1	0	1	0	1	0	2	0	1	30	0	0	0	30	1	0	67	927
3:05 PM	4	0	0	0	0	0	3	0	0	35	1	0	0	30	0	0	73	917

5-Min Count Period Beginning At	SW Reif Rd (Northbound)				SW Reif Rd (Southbound)				OR 126 (Eastbound)				OR 126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:10 PM	0	0	0	0	0	0	1	0	1	39	0	0	0	38	0	0	79	931
3:15 PM	0	1	1	0	1	0	2	0	3	29	3	0	1	57	0	0	98	936
3:20 PM	0	0	0	0	0	0	1	0	0	39	0	0	1	37	1	0	79	922
3:25 PM	0	0	2	0	0	0	0	0	0	32	3	0	0	42	0	0	79	930
3:30 PM	1	0	1	0	2	0	0	0	1	44	1	0	0	34	1	0	85	919
3:35 PM	2	0	0	0	0	1	1	0	1	26	0	0	0	33	2	0	66	919
3:40 PM	1	0	1	0	0	0	1	0	1	38	0	0	0	22	0	0	64	903
3:45 PM	1	0	0	0	0	0	1	0	0	20	0	0	1	33	1	0	57	901
3:50 PM	0	0	0	0	0	0	1	0	0	32	0	0	1	39	0	0	73	910
3:55 PM	0	0	0	0	0	0	0	0	0	27	1	0	1	38	0	0	67	887

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	24	0	12	0	4	4	8	0	24	472	16	0	8	468	0	0	1040
Heavy Trucks	0	0	0		0	4	4		4	20	0		0	16	0		48
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 12/10/2021 2:46 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

12/15	4:10	4:25	Empire/Don McCall	SBT

non-truck vehicle	hvy truck
40	0
80	
120	
136	
136	

12/15	4:25	4:40	Empire/Tom McCall	SBT

non-truck vehicle	4 ÷ 1 truck
40 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 80 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 120 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 160 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 172 𝍸 𝍸 II 172 173	1

12/15	4:40	4:55	Empire/tom McCall	SBT

	non-truck vehicle	hvy trucks
40	𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸	0
80	𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸	
120	𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸	
→	𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 I 151	

queue
to
here
4:50

12/15 | 4:55 | 5:10 | Empire/Tom McCall SBT

non-truck vehicle	hvy truck
40	0
63	

Q past int @ 4:55

Q gone by 5:00

$$\frac{\overset{\nearrow 523}{136+173+151+63}}{(173\times 4)} = 0.76$$

PHF

$$\frac{1}{136+173+151+63} = 0.2\%$$

TRK

APPENDIX E – EXISTING CONDITIONS OPERATIONAL ANALYSIS WORKSHEET

Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	52	10	304	34	19	275
Future Vol, veh/h	52	10	304	34	19	275
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	150	170	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	20	22	5	10	19	3
Mvmt Flow	58	11	338	38	21	306

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	686	338	0	0	376	0
Stage 1	338	-	-	-	-	-
Stage 2	348	-	-	-	-	-
Critical Hdwy	6.6	6.42	-	-	4.29	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.68	3.498	-	-	2.371	-
Pot Cap-1 Maneuver	387	661	-	-	1095	-
Stage 1	684	-	-	-	-	-
Stage 2	677	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	380	661	-	-	1095	-
Mov Cap-2 Maneuver	380	-	-	-	-	-
Stage 1	684	-	-	-	-	-
Stage 2	664	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.3	0	0.5
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	380	661	1095	-
HCM Lane V/C Ratio	-	-	0.152	0.017	0.019	-
HCM Control Delay (s)	-	-	16.2	10.5	8.4	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0.1	0.1	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	27	0	291	5	0	299
Future Vol, veh/h	27	0	291	5	0	299
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	0	327	6	0	336

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	666	330	0	0	333	0
Stage 1	330	-	-	-	-	-
Stage 2	336	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	425	712	-	-	1226	-
Stage 1	728	-	-	-	-	-
Stage 2	724	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	425	712	-	-	1226	-
Mov Cap-2 Maneuver	425	-	-	-	-	-
Stage 1	728	-	-	-	-	-
Stage 2	724	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	425	1226	-
HCM Lane V/C Ratio	-	-	0.071	-	-
HCM Control Delay (s)	-	-	14.1	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1	0	14	0	2	0	316	31	7	362	1
Future Vol, veh/h	0	1	0	14	0	2	0	316	31	7	362	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	8	0	0	0	8	15	17	8	0
Mvmt Flow	0	1	0	16	0	2	0	372	36	8	426	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	834	851	427	833	833	390	427	0	0	408	0	0
Stage 1	443	443	-	390	390	-	-	-	-	-	-	-
Stage 2	391	408	-	443	443	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.18	6.5	6.2	4.1	-	-	4.27	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.18	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.18	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.572	4	3.3	2.2	-	-	2.353	-	-
Pot Cap-1 Maneuver	290	299	632	281	307	663	1143	-	-	1074	-	-
Stage 1	598	579	-	622	611	-	-	-	-	-	-	-
Stage 2	637	600	-	582	579	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	287	296	632	278	304	663	1143	-	-	1074	-	-
Mov Cap-2 Maneuver	287	296	-	278	304	-	-	-	-	-	-	-
Stage 1	598	573	-	622	611	-	-	-	-	-	-	-
Stage 2	635	600	-	575	573	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.2	17.8	0	0.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1143	-	-	296	300	1074	-	-
HCM Lane V/C Ratio	-	-	-	0.004	0.063	0.008	-	-
HCM Control Delay (s)	0	-	-	17.2	17.8	8.4	0	-
HCM Lane LOS	A	-	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Intersection	
Int Delay, s/veh	44.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	667	94	276	632	2	70	0	245	0	0	3
Future Vol, veh/h	5	667	94	276	632	2	70	0	245	0	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	90	170	-	-	-	-	125	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	6	15	5	6	50	15	0	5	0	0	0
Mvmt Flow	5	725	102	300	687	2	76	0	266	0	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	689	0	0	827	0	0	2025	2024	725	2207	2125	688
Stage 1	-	-	-	-	-	-	735	735	-	1288	1288	-
Stage 2	-	-	-	-	-	-	1290	1289	-	919	837	-
Critical Hdwy	4.1	-	-	4.15	-	-	7.25	6.5	6.25	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.25	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.25	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.245	-	-	3.635	4	3.345	3.5	4	3.3
Pot Cap-1 Maneuver	915	-	-	791	-	-	~ 39	59	420	32	51	450
Stage 1	-	-	-	-	-	-	392	428	-	203	237	-
Stage 2	-	-	-	-	-	-	189	236	-	328	385	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	915	-	-	791	-	-	~ 27	36	420	8	31	450
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 27	36	-	8	31	-
Stage 1	-	-	-	-	-	-	388	424	-	201	147	-
Stage 2	-	-	-	-	-	-	116	147	-	119	381	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	3.7	271.8	13.1
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	27	420	915	-	-	791	-	-	450
HCM Lane V/C Ratio	2.818	0.634	0.006	-	-	0.379	-	-	0.007
HCM Control Delay (s)	$ 1127.4	27.3	9	0	-	12.3	-	-	13.1
HCM Lane LOS	F	D	A	A	-	B	-	-	B
HCM 95th %tile Q(veh)	9.2	4.3	0	-	-	1.8	-	-	0

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	824	17	6	890	6	5	0	6	5	1	31
Future Vol, veh/h	42	824	17	6	890	6	5	0	6	5	1	31
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	3	5	0	0	4	0	0	0	0	0	0	15
Mvmt Flow	45	877	18	6	947	6	5	0	6	5	1	33

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	953	0	0	895	0	0	1955	1941	886	1941	1947	950
Stage 1	-	-	-	-	-	-	976	976	-	962	962	-
Stage 2	-	-	-	-	-	-	979	965	-	979	985	-
Critical Hdwy	4.13	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.35
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.227	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.435
Pot Cap-1 Maneuver	717	-	-	767	-	-	49	66	346	50	65	298
Stage 1	-	-	-	-	-	-	305	332	-	310	337	-
Stage 2	-	-	-	-	-	-	304	336	-	304	329	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	717	-	-	767	-	-	38	57	346	44	56	298
Mov Cap-2 Maneuver	-	-	-	-	-	-	38	57	-	44	56	-
Stage 1	-	-	-	-	-	-	267	291	-	271	331	-
Stage 2	-	-	-	-	-	-	265	330	-	261	288	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.1	62.6	35.4
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	74	717	-	-	767	-	-	157
HCM Lane V/C Ratio	0.158	0.062	-	-	0.008	-	-	0.251
HCM Control Delay (s)	62.6	10.4	0	-	9.7	0	-	35.4
HCM Lane LOS	F	B	A	-	A	A	-	E
HCM 95th %tile Q(veh)	0.5	0.2	-	-	0	-	-	0.9

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	811	7	3	813	17	1	0	2	7	1	82
Future Vol, veh/h	45	811	7	3	813	17	1	0	2	7	1	82
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	90	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	5	5	0	0	6	13	0	0	0	0	0	4
Mvmt Flow	51	922	8	3	924	19	1	0	2	8	1	93

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	943	0	0	930	0	0	2015	1977	926	1969	1972	934
Stage 1	-	-	-	-	-	-	1028	1028	-	940	940	-
Stage 2	-	-	-	-	-	-	987	949	-	1029	1032	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.336
Pot Cap-1 Maneuver	715	-	-	744	-	-	44	63	329	48	63	319
Stage 1	-	-	-	-	-	-	285	314	-	319	345	-
Stage 2	-	-	-	-	-	-	300	342	-	285	313	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	715	-	-	744	-	-	27	53	329	42	53	319
Mov Cap-2 Maneuver	-	-	-	-	-	-	27	53	-	42	53	-
Stage 1	-	-	-	-	-	-	243	268	-	272	342	-
Stage 2	-	-	-	-	-	-	210	339	-	241	267	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0	58.7	39.5
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	27	329	715	-	-	744	-	-	203
HCM Lane V/C Ratio	0.042	0.007	0.072	-	-	0.005	-	-	0.504
HCM Control Delay (s)	144.1	16	10.4	0	-	9.9	0	-	39.5
HCM Lane LOS	F	C	B	A	-	A	A	-	E
HCM 95th %tile Q(veh)	0.1	0	0.2	-	-	0	-	-	2.5

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	793	35	3	822	14	7
Future Vol, veh/h	793	35	3	822	14	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	5	0	0	6	0	0
Mvmt Flow	891	39	3	924	16	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	930	0	1841	911
Stage 1	-	-	-	-	911	-
Stage 2	-	-	-	-	930	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	744	-	84	335
Stage 1	-	-	-	-	395	-
Stage 2	-	-	-	-	387	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	744	-	83	335
Mov Cap-2 Maneuver	-	-	-	-	83	-
Stage 1	-	-	-	-	395	-
Stage 2	-	-	-	-	384	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	46
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	111	-	-	744	-
HCM Lane V/C Ratio	0.213	-	-	0.005	-
HCM Control Delay (s)	46	-	-	9.9	0
HCM Lane LOS	E	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	785	822	2	2	12
Future Vol, veh/h	6	785	822	2	2	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	20	6	6	50	50	20
Mvmt Flow	7	882	924	2	2	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	926	0	-	0	1821	925
Stage 1	-	-	-	-	925	-
Stage 2	-	-	-	-	896	-
Critical Hdwy	4.3	-	-	-	6.9	6.4
Critical Hdwy Stg 1	-	-	-	-	5.9	-
Critical Hdwy Stg 2	-	-	-	-	5.9	-
Follow-up Hdwy	2.38	-	-	-	3.95	3.48
Pot Cap-1 Maneuver	669	-	-	-	64	302
Stage 1	-	-	-	-	319	-
Stage 2	-	-	-	-	330	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	669	-	-	-	63	302
Mov Cap-2 Maneuver	-	-	-	-	63	-
Stage 1	-	-	-	-	312	-
Stage 2	-	-	-	-	330	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	25
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	669	-	-	-	196
HCM Lane V/C Ratio	0.01	-	-	-	0.08
HCM Control Delay (s)	10.4	0	-	-	25
HCM Lane LOS	B	A	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Intersection						
Int Delay, s/veh	1.2					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	13	768	755	1	6	74
Future Vol, veh/h	13	768	755	1	6	74
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	6	6	0	0	5
Mvmt Flow	15	873	858	1	7	84

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	859	0	-	0	1762	859
Stage 1	-	-	-	-	859	-
Stage 2	-	-	-	-	903	-
Critical Hdwy	4.1	-	-	-	6.4	6.25
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.345
Pot Cap-1 Maneuver	791	-	-	-	94	352
Stage 1	-	-	-	-	418	-
Stage 2	-	-	-	-	399	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	791	-	-	-	91	352
Mov Cap-2 Maneuver	-	-	-	-	91	-
Stage 1	-	-	-	-	403	-
Stage 2	-	-	-	-	399	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	23
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	791	-	-	-	290
HCM Lane V/C Ratio	0.019	-	-	-	0.313
HCM Control Delay (s)	9.6	0	-	-	23
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	1.3

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	3	12	2	3	65
Future Vol, veh/h	6	3	12	2	3	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	62	62	62	62	62	62
Heavy Vehicles, %	60	0	0	50	0	5
Mvmt Flow	10	5	19	3	5	105

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	136	21	0	0	22	0
Stage 1	21	-	-	-	-	-
Stage 2	115	-	-	-	-	-
Critical Hdwy	7	6.2	-	-	4.1	-
Critical Hdwy Stg 1	6	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-
Follow-up Hdwy	4.04	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	738	1062	-	-	1607	-
Stage 1	871	-	-	-	-	-
Stage 2	784	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	736	1062	-	-	1607	-
Mov Cap-2 Maneuver	736	-	-	-	-	-
Stage 1	871	-	-	-	-	-
Stage 2	782	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	820	1607	-
HCM Lane V/C Ratio	-	-	0.018	0.003	-
HCM Control Delay (s)	-	-	9.5	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	20	2	66	68	1	10
Future Vol, veh/h	20	2	66	68	1	10
Conflicting Peds, #/hr	0	0	0	0	2	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	60	60	60	60	60	60
Heavy Vehicles, %	12	50	2	12	0	11
Mvmt Flow	33	3	110	113	2	17

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	36	0	370	35
Stage 1	-	-	-	-	35	-
Stage 2	-	-	-	-	335	-
Critical Hdwy	-	-	4.12	-	6.4	6.31
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.218	-	3.5	3.399
Pot Cap-1 Maneuver	-	-	1575	-	634	1013
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	729	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1575	-	585	1013
Mov Cap-2 Maneuver	-	-	-	-	585	-
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	673	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.7	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	950	-	-	1575	-
HCM Lane V/C Ratio	0.019	-	-	0.07	-
HCM Control Delay (s)	8.9	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.2	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	25	25	25	25	25	25
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	4	0	-	0	4	4
Stage 1	-	-	-	-	4	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1631	-	-	-	1023	1085
Stage 1	-	-	-	-	1024	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1631	-	-	-	1023	1085
Mov Cap-2 Maneuver	-	-	-	-	1023	-
Stage 1	-	-	-	-	1024	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1631	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection						
Int Delay, s/veh	0					

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	25	25	25	25	25	25
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	4	0	0	0	0	0
Stage 1	0	-	-	-	-	-
Stage 2	4	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	1023	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	1024	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1023	-	-	-	-	-
Mov Cap-2 Maneuver	1023	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	1024	-	-	-	-	-

Approach	WB		NB		SB	
HCM Control Delay, s	0		0		0	
HCM LOS	A					

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	-	-

Intersection						
Int Delay, s/veh	0					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	25	25	25	25	25	25
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	4	0	-	0	4	4
Stage 1	-	-	-	-	4	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1631	-	-	-	1023	1085
Stage 1	-	-	-	-	1024	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1631	-	-	-	1023	1085
Mov Cap-2 Maneuver	-	-	-	-	1023	-
Stage 1	-	-	-	-	1024	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1631	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection						
Int Delay, s/veh	1.7					

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	63	291	0	72	299
Future Vol, veh/h	0	63	291	0	72	299
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	67	310	0	77	318

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	782	310	0	0	310	0
Stage 1	310	-	-	-	-	-
Stage 2	472	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	363	730	-	-	1250	-
Stage 1	744	-	-	-	-	-
Stage 2	628	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	336	730	-	-	1250	-
Mov Cap-2 Maneuver	336	-	-	-	-	-
Stage 1	744	-	-	-	-	-
Stage 2	581	-	-	-	-	-

Approach	WB		NB		SB	
HCM Control Delay, s	10.4		0		1.6	
HCM LOS	B					

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	730	1250	-
HCM Lane V/C Ratio	-	-	0.092	0.061	-
HCM Control Delay (s)	-	-	10.4	8.1	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.2	-

Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	39	16	162	29	9	171
Future Vol, veh/h	39	16	162	29	9	171
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	150	170	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	9	14	4	4	0	7
Mvmt Flow	41	17	171	31	9	180

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	369	171	0	0	202	0
Stage 1	171	-	-	-	-	-
Stage 2	198	-	-	-	-	-
Critical Hdwy	6.49	6.34	-	-	4.1	-
Critical Hdwy Stg 1	5.49	-	-	-	-	-
Critical Hdwy Stg 2	5.49	-	-	-	-	-
Follow-up Hdwy	3.581	3.426	-	-	2.2	-
Pot Cap-1 Maneuver	618	843	-	-	1382	-
Stage 1	842	-	-	-	-	-
Stage 2	819	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	614	843	-	-	1382	-
Mov Cap-2 Maneuver	614	-	-	-	-	-
Stage 1	842	-	-	-	-	-
Stage 2	813	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.7	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	614	843	1382	-
HCM Lane V/C Ratio	-	-	0.067	0.02	0.007	-
HCM Control Delay (s)	-	-	11.3	9.4	7.6	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.1	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	0	179	10	0	181
Future Vol, veh/h	7	0	179	10	0	181
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	0	195	11	0	197

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	398	201	0	0	206	0
Stage 1	201	-	-	-	-	-
Stage 2	197	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	607	840	-	-	1365	-
Stage 1	833	-	-	-	-	-
Stage 2	836	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	607	840	-	-	1365	-
Mov Cap-2 Maneuver	607	-	-	-	-	-
Stage 1	833	-	-	-	-	-
Stage 2	836	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	607	1365	-
HCM Lane V/C Ratio	-	-	0.013	-	-
HCM Control Delay (s)	-	-	11	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	2	0	13	1	2	0	222	14	2	232	1
Future Vol, veh/h	0	2	0	13	1	2	0	222	14	2	232	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	50	0	9	100	0	0	6	8	0	8	0
Mvmt Flow	0	2	0	14	1	2	0	244	15	2	255	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	513	519	256	513	512	252	256	0	0	259	0	0
Stage 1	260	260	-	252	252	-	-	-	-	-	-	-
Stage 2	253	259	-	261	260	-	-	-	-	-	-	-
Critical Hdwy	7.1	7	6.2	7.19	7.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	6	-	6.19	6.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	6	-	6.19	6.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.45	3.3	3.581	4.9	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	475	400	788	461	351	792	1321	-	-	1317	-	-
Stage 1	749	613	-	737	551	-	-	-	-	-	-	-
Stage 2	756	614	-	729	546	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	472	399	788	458	350	792	1321	-	-	1317	-	-
Mov Cap-2 Maneuver	472	399	-	458	350	-	-	-	-	-	-	-
Stage 1	749	612	-	737	551	-	-	-	-	-	-	-
Stage 2	752	614	-	725	545	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.1	12.9	0	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1321	-	-	399	474	1317	-	-
HCM Lane V/C Ratio	-	-	-	0.006	0.037	0.002	-	-
HCM Control Delay (s)	0	-	-	14.1	12.9	7.7	0	-
HCM Lane LOS	A	-	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	443	89	155	430	2	65	1	154	0	0	0
Future Vol, veh/h	8	443	89	155	430	2	65	1	154	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	90	170	-	-	-	-	125	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	43	5	5	9	13	0	5	0	6	0	0	0
Mvmt Flow	8	457	92	160	443	2	67	1	159	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	445	0	0	549	0	0	1237	1238	457	1363	1329	444
Stage 1	-	-	-	-	-	-	473	473	-	764	764	-
Stage 2	-	-	-	-	-	-	764	765	-	599	565	-
Critical Hdwy	4.53	-	-	4.19	-	-	7.15	6.5	6.26	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.587	-	-	2.281	-	-	3.545	4	3.354	3.5	4	3.3
Pot Cap-1 Maneuver	929	-	-	986	-	-	151	177	595	126	156	618
Stage 1	-	-	-	-	-	-	566	562	-	399	416	-
Stage 2	-	-	-	-	-	-	392	415	-	492	511	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	929	-	-	986	-	-	131	146	595	80	129	618
Mov Cap-2 Maneuver	-	-	-	-	-	-	131	146	-	80	129	-
Stage 1	-	-	-	-	-	-	559	555	-	394	349	-
Stage 2	-	-	-	-	-	-	328	348	-	355	504	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	2.5	26.9	0
HCM LOS			D	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	131	595	929	-	-	986	-	-	-
HCM Lane V/C Ratio	0.519	0.267	0.009	-	-	0.162	-	-	-
HCM Control Delay (s)	58.9	13.2	8.9	0	-	9.4	-	-	0
HCM Lane LOS	F	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	2.5	1.1	0	-	-	0.6	-	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	551	24	16	530	9	15	0	13	6	5	22
Future Vol, veh/h	21	551	24	16	530	9	15	0	13	6	5	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	5	5	0	0	6	13	0	0	0	0	0	4
Mvmt Flow	23	605	26	18	582	10	16	0	14	7	5	24

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	592	0	0	631	0	0	1302	1292	618	1294	1300	587
Stage 1	-	-	-	-	-	-	664	664	-	623	623	-
Stage 2	-	-	-	-	-	-	638	628	-	671	677	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.336
Pot Cap-1 Maneuver	969	-	-	961	-	-	139	165	493	141	163	506
Stage 1	-	-	-	-	-	-	453	461	-	477	481	-
Stage 2	-	-	-	-	-	-	468	479	-	449	455	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	969	-	-	961	-	-	122	154	493	130	153	506
Mov Cap-2 Maneuver	-	-	-	-	-	-	122	154	-	130	153	-
Stage 1	-	-	-	-	-	-	436	444	-	459	468	-
Stage 2	-	-	-	-	-	-	428	466	-	420	438	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.3	27.9	20.4
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	188	969	-	-	961	-	-	270
HCM Lane V/C Ratio	0.164	0.024	-	-	0.018	-	-	0.134
HCM Control Delay (s)	27.9	8.8	0	-	8.8	0	-	20.4
HCM Lane LOS	D	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.6	0.1	-	-	0.1	-	-	0.5

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	36	491	48	27	509	14	3	0	1	6	0	43
Future Vol, veh/h	36	491	48	27	509	14	3	0	1	6	0	43
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	90	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	10	7	2	4	13	17	33	0	0	20	0	11
Mvmt Flow	38	522	51	29	541	15	3	0	1	6	0	46

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	556	0	0	573	0	0	1254	1238	548	1231	1256	549
Stage 1	-	-	-	-	-	-	624	624	-	607	607	-
Stage 2	-	-	-	-	-	-	630	614	-	624	649	-
Critical Hdwy	4.2	-	-	4.14	-	-	7.43	6.5	6.2	7.3	6.5	6.31
Critical Hdwy Stg 1	-	-	-	-	-	-	6.43	5.5	-	6.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.43	5.5	-	6.3	5.5	-
Follow-up Hdwy	2.29	-	-	2.236	-	-	3.797	4	3.3	3.68	4	3.399
Pot Cap-1 Maneuver	976	-	-	990	-	-	128	177	540	142	173	518
Stage 1	-	-	-	-	-	-	425	481	-	454	489	-
Stage 2	-	-	-	-	-	-	421	486	-	444	469	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	976	-	-	990	-	-	108	159	540	131	156	518
Mov Cap-2 Maneuver	-	-	-	-	-	-	108	159	-	131	156	-
Stage 1	-	-	-	-	-	-	400	453	-	428	468	-
Stage 2	-	-	-	-	-	-	367	465	-	417	442	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.4	32.4	16
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	108	540	976	-	-	990	-	-	380
HCM Lane V/C Ratio	0.03	0.002	0.039	-	-	0.029	-	-	0.137
HCM Control Delay (s)	39.3	11.7	8.8	0	-	8.7	0	-	16
HCM Lane LOS	E	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0	0.1	-	-	0.1	-	-	0.5

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	481	17	1	527	26	2
Future Vol, veh/h	481	17	1	527	26	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	8	0	0	13	9	0
Mvmt Flow	496	18	1	543	27	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	514	0	1050	505
Stage 1	-	-	-	-	505	-
Stage 2	-	-	-	-	545	-
Critical Hdwy	-	-	4.1	-	6.49	6.2
Critical Hdwy Stg 1	-	-	-	-	5.49	-
Critical Hdwy Stg 2	-	-	-	-	5.49	-
Follow-up Hdwy	-	-	2.2	-	3.581	3.3
Pot Cap-1 Maneuver	-	-	1062	-	244	571
Stage 1	-	-	-	-	592	-
Stage 2	-	-	-	-	567	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1062	-	244	571
Mov Cap-2 Maneuver	-	-	-	-	244	-
Stage 1	-	-	-	-	592	-
Stage 2	-	-	-	-	566	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	21
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	254	-	-	1062	-
HCM Lane V/C Ratio	0.114	-	-	0.001	-
HCM Control Delay (s)	21	-	-	8.4	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	467	517	1	0	9
Future Vol, veh/h	7	467	517	1	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	17	8	13	0	0	12
Mvmt Flow	7	486	539	1	0	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	540	0	-	0	1040	540
Stage 1	-	-	-	-	540	-
Stage 2	-	-	-	-	500	-
Critical Hdwy	4.27	-	-	-	6.4	6.32
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.353	-	-	-	3.5	3.408
Pot Cap-1 Maneuver	957	-	-	-	257	523
Stage 1	-	-	-	-	588	-
Stage 2	-	-	-	-	613	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	957	-	-	-	254	523
Mov Cap-2 Maneuver	-	-	-	-	254	-
Stage 1	-	-	-	-	582	-
Stage 2	-	-	-	-	613	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	12
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	957	-	-	-	523
HCM Lane V/C Ratio	0.008	-	-	-	0.018
HCM Control Delay (s)	8.8	0	-	-	12
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	458	498	2	1	8
Future Vol, veh/h	16	458	498	2	1	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	29	6	12	50	0	14
Mvmt Flow	17	498	541	2	1	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	543	0	-	0	1074	542
Stage 1	-	-	-	-	542	-
Stage 2	-	-	-	-	532	-
Critical Hdwy	4.39	-	-	-	6.4	6.34
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.461	-	-	-	3.5	3.426
Pot Cap-1 Maneuver	903	-	-	-	246	518
Stage 1	-	-	-	-	587	-
Stage 2	-	-	-	-	593	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	903	-	-	-	240	518
Mov Cap-2 Maneuver	-	-	-	-	240	-
Stage 1	-	-	-	-	572	-
Stage 2	-	-	-	-	593	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	13
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	903	-	-	-	459
HCM Lane V/C Ratio	0.019	-	-	-	0.021
HCM Control Delay (s)	9.1	0	-	-	13
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	15	3	2	7
Future Vol, veh/h	0	2	15	3	2	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	72	72	72	72	72	72
Heavy Vehicles, %	0	0	23	33	0	0
Mvmt Flow	0	3	21	4	3	10

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	39	23	0	0	25	0
Stage 1	23	-	-	-	-	-
Stage 2	16	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	978	1060	-	-	1603	-
Stage 1	1005	-	-	-	-	-
Stage 2	1012	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	976	1060	-	-	1603	-
Mov Cap-2 Maneuver	976	-	-	-	-	-
Stage 1	1005	-	-	-	-	-
Stage 2	1010	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.4	0	1.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1060	1603	-
HCM Lane V/C Ratio	-	-	0.003	0.002	-
HCM Control Delay (s)	-	-	8.4	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	27	1	3	21	1	14
Future Vol, veh/h	27	1	3	21	1	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	69	69	69	69	69	69
Heavy Vehicles, %	22	0	33	11	0	33
Mvmt Flow	39	1	4	30	1	20

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	40	0	78	40
Stage 1	-	-	-	-	40	-
Stage 2	-	-	-	-	38	-
Critical Hdwy	-	-	4.43	-	6.4	6.53
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.497	-	3.5	3.597
Pot Cap-1 Maneuver	-	-	1392	-	930	950
Stage 1	-	-	-	-	988	-
Stage 2	-	-	-	-	990	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1392	-	927	950
Mov Cap-2 Maneuver	-	-	-	-	927	-
Stage 1	-	-	-	-	988	-
Stage 2	-	-	-	-	987	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	948	-	-	1392	-
HCM Lane V/C Ratio	0.023	-	-	0.003	-
HCM Control Delay (s)	8.9	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	25	25	25	25	25	25
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	4	0	-	0	4	4
Stage 1	-	-	-	-	4	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1631	-	-	-	1023	1085
Stage 1	-	-	-	-	1024	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1631	-	-	-	1023	1085
Mov Cap-2 Maneuver	-	-	-	-	1023	-
Stage 1	-	-	-	-	1024	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1631	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	25	25	25	25	25	25
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	4	0	0	0	0	0
Stage 1	0	-	-	-	-	-
Stage 2	4	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	1023	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	1024	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1023	-	-	-	-	-
Mov Cap-2 Maneuver	1023	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	1024	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	25	25	25	25	25	25
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	4	0	-	0	4	4
Stage 1	-	-	-	-	4	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1631	-	-	-	1023	1085
Stage 1	-	-	-	-	1024	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1631	-	-	-	1023	1085
Mov Cap-2 Maneuver	-	-	-	-	1023	-
Stage 1	-	-	-	-	1024	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1631	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection						
Int Delay, s/veh	2.2					

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	57	179	0	66	181
Future Vol, veh/h	1	57	179	0	66	181
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	62	195	0	72	197

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	536	195	0	0	195	0
Stage 1	195	-	-	-	-	-
Stage 2	341	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	505	846	-	-	1378	-
Stage 1	838	-	-	-	-	-
Stage 2	720	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	475	846	-	-	1378	-
Mov Cap-2 Maneuver	475	-	-	-	-	-
Stage 1	838	-	-	-	-	-
Stage 2	678	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.7	0	2.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	835	1378	-
HCM Lane V/C Ratio	-	-	0.076	0.052	-
HCM Control Delay (s)	-	-	9.7	7.8	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.2	-

MOVEMENT SUMMARY

Site: 101 [Powell Butte-126 Existing PM (Site Folder: PM Peak)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Powell Butte Hwy														
3	L2	70	15.0	76	15.0	0.588	18.0	LOS C	4.0	105.2	0.79	0.98	1.36	28.7
8	T1	1	0.0	1	0.0	0.588	17.1	LOS C	4.0	105.2	0.79	0.98	1.36	29.0
18	R2	245	5.0	266	5.0	0.588	17.4	LOS C	4.0	105.2	0.79	0.98	1.36	28.2
Approach		316	7.2	343	7.2	0.588	17.5	LOS C	4.0	105.2	0.79	0.98	1.36	28.3
East: OR126														
1	L2	276	5.0	300	5.0	0.835	20.2	LOS C	11.5	301.6	0.75	0.43	0.75	27.9
6	T1	632	6.0	687	6.0	0.835	20.3	LOS C	11.5	301.6	0.75	0.43	0.75	27.9
16	R2	2	50.0	2	50.0	0.835	21.5	LOS C	11.5	301.6	0.75	0.43	0.75	26.6
Approach		910	5.8	989	5.8	0.835	20.3	LOS C	11.5	301.6	0.75	0.43	0.75	27.9
North: Powell Butte Hwy														
7	L2	1	0.0	1	0.0	0.012	8.4	LOS A	0.0	1.1	0.69	0.61	0.69	33.0
4	T1	1	0.0	1	0.0	0.012	8.4	LOS A	0.0	1.1	0.69	0.61	0.69	32.9
14	R2	3	0.0	3	0.0	0.012	8.4	LOS A	0.0	1.1	0.69	0.61	0.69	32.0
Approach		5	0.0	5	0.0	0.012	8.4	LOS A	0.0	1.1	0.69	0.61	0.69	32.4
West: OR126														
5	L2	5	0.0	5	0.0	0.893	30.1	LOS D	26.9	711.7	1.00	1.63	2.60	25.4
2	T1	667	6.0	725	6.0	0.893	30.3	LOS D	26.9	711.7	1.00	1.63	2.60	25.2
12	R2	94	15.0	102	15.0	0.893	30.7	LOS D	26.9	711.7	1.00	1.63	2.60	24.6
Approach		766	7.1	833	7.1	0.893	30.4	LOS D	26.9	711.7	1.00	1.63	2.60	25.2
All Vehicles		1997	6.5	2171	6.5	0.893	23.7	LOS C	26.9	711.7	0.85	0.97	1.56	26.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Powell Butte-126 Existing Sat (Site Folder: SAT Peak)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Powell Butte Hwy														
3	L2	65	5.0	71	5.0	0.311	8.3	LOS A	1.4	36.0	0.61	0.59	0.61	32.6
8	T1	1	0.0	1	0.0	0.311	8.1	LOS A	1.4	36.0	0.61	0.59	0.61	32.7
18	R2	154	6.0	167	6.0	0.311	8.3	LOS A	1.4	36.0	0.61	0.59	0.61	31.6
Approach		220	5.7	239	5.7	0.311	8.3	LOS A	1.4	36.0	0.61	0.59	0.61	31.9
East: OR126														
1	L2	155	9.0	168	9.0	0.566	10.0	LOS B	3.9	106.7	0.38	0.20	0.38	31.9
6	T1	430	13.0	467	13.0	0.566	10.1	LOS B	3.9	106.7	0.38	0.20	0.38	31.8
16	R2	2	0.0	2	0.0	0.566	9.8	LOS A	3.9	106.7	0.38	0.20	0.38	31.2
Approach		587	11.9	638	11.9	0.566	10.1	LOS B	3.9	106.7	0.38	0.20	0.38	31.8
North: Powell Butte Hwy														
7	L2	1	0.0	1	0.0	0.005	5.9	LOS A	0.0	0.5	0.60	0.44	0.60	33.9
4	T1	1	0.0	1	0.0	0.005	5.9	LOS A	0.0	0.5	0.60	0.44	0.60	33.8
14	R2	1	0.0	1	0.0	0.005	5.9	LOS A	0.0	0.5	0.60	0.44	0.60	32.9
Approach		3	0.0	3	0.0	0.005	5.9	LOS A	0.0	0.5	0.60	0.44	0.60	33.5
West: OR126														
5	L2	8	43.0	9	43.0	0.543	11.1	LOS B	3.7	95.3	0.54	0.38	0.54	31.6
2	T1	443	5.0	482	5.0	0.543	9.9	LOS A	3.7	95.3	0.54	0.38	0.54	32.7
12	R2	89	5.0	97	5.0	0.543	9.9	LOS A	3.7	95.3	0.54	0.38	0.54	31.8
Approach		540	5.6	587	5.6	0.543	9.9	LOS A	3.7	95.3	0.54	0.38	0.54	32.5
All Vehicles		1350	8.3	1467	8.3	0.566	9.7	LOS A	3.9	106.7	0.48	0.34	0.48	32.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Alfalfa-Powell Butte Existing PM (Site Folder: PM Peak)]

Alfalfa-Powell Butte Existing PM
Site Category: (None)
Roundabout

Vehicle Movement Performance															
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Alfalfa Rd														
21	L2	52	20.0	55	20.0	0.066	5.6	LOS A	0.3	2.7	0.44	0.57	0.44	53.0
23	R2	10	22.0	11	22.0	0.066	10.6	LOS B	0.3	2.7	0.44	0.57	0.44	54.0
Approach		62	20.3	65	20.3	0.066	6.4	LOS A	0.3	2.7	0.44	0.57	0.44	53.2
NorthEast: Powell Butte Hwy														
24	L2	19	19.0	20	19.0	0.210	4.2	LOS A	1.2	8.3	0.15	0.40	0.15	54.2
25	T1	275	3.0	289	3.0	0.210	4.3	LOS A	1.2	8.3	0.15	0.40	0.15	56.1
Approach		294	4.0	309	4.0	0.210	4.3	LOS A	1.2	8.3	0.15	0.40	0.15	56.0
SouthWest: Powell Butte Hwy														
31	T1	304	5.0	320	5.0	0.223	4.2	LOS A	1.4	10.4	0.09	0.42	0.09	56.0
32	R2	34	10.0	36	10.0	0.223	8.9	LOS A	1.4	10.4	0.09	0.42	0.09	55.7
Approach		338	5.5	356	5.5	0.223	4.7	LOS A	1.4	10.4	0.09	0.42	0.09	56.0
All Vehicles		694	6.2	731	6.2	0.223	4.7	LOS A	1.4	10.4	0.14	0.43	0.14	55.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Alfalfa-Powell Butte Existing Sat (Site Folder: SAT Peak)]

Alfalfa-Powell Butte Existing PM
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Alfalfa Rd														
21	L2	39	9.0	41	9.0	0.051	4.8	LOS A	0.2	1.9	0.34	0.54	0.34	53.3
23	R2	16	14.0	17	14.0	0.051	9.8	LOS A	0.2	1.9	0.34	0.54	0.34	54.2
Approach		55	10.5	58	10.5	0.051	6.3	LOS A	0.2	1.9	0.34	0.54	0.34	53.5
NorthEast: Powell Butte Hwy														
24	L2	9	0.0	9	0.0	0.132	4.0	LOS A	0.7	5.0	0.13	0.40	0.13	54.9
25	T1	171	7.0	180	7.0	0.132	4.3	LOS A	0.7	5.0	0.13	0.40	0.13	56.1
Approach		180	6.7	189	6.7	0.132	4.3	LOS A	0.7	5.0	0.13	0.40	0.13	56.1
SouthWest: Powell Butte Hwy														
31	T1	162	4.0	171	4.0	0.132	4.2	LOS A	0.7	5.3	0.10	0.44	0.10	55.8
32	R2	29	4.0	31	4.0	0.132	8.8	LOS A	0.7	5.3	0.10	0.44	0.10	55.7
Approach		191	4.0	201	4.0	0.132	4.9	LOS A	0.7	5.3	0.10	0.44	0.10	55.8
All Vehicles		426	6.0	448	6.0	0.132	4.8	LOS A	0.7	5.3	0.14	0.43	0.14	55.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [TM Existing PM (Site Folder: PM Peak)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance															
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Tom McCall Rd															
3	L2	102	7.0	112	7.0	0.970	75.1	LOS F	11.9	324.6	0.95	1.78	3.87	16.5
8	T1	8	14.0	9	14.0	0.970	75.7	LOS F	11.9	324.6	0.95	1.78	3.87	16.5
18	R2	200	14.0	220	14.0	0.970	75.7	LOS F	11.9	324.6	0.95	1.78	3.87	16.2
Approach		310	11.7	341	11.7	0.970	75.5	LOS F	11.9	324.6	0.95	1.78	3.87	16.3
East: OR126															
1	L2	52	24.0	57	24.0	0.535	10.1	LOS B	3.5	94.6	0.45	0.28	0.45	32.1
6	T1	427	7.0	469	7.0	0.535	9.6	LOS A	3.5	94.6	0.45	0.28	0.45	32.6
16	R2	58	13.0	64	13.0	0.535	9.7	LOS A	3.5	94.6	0.45	0.28	0.45	31.6
Approach		537	9.3	590	9.3	0.535	9.6	LOS A	3.5	94.6	0.45	0.28	0.45	32.4
North: Tom McCall Rd															
7	L2	409	4.0	449	4.0	1.114	94.2	LOS F	44.2	1129.6	1.00	2.81	6.41	14.5
4	T1	17	13.0	19	13.0	1.114	94.7	LOS F	44.2	1129.6	1.00	2.81	6.41	14.5
14	R2	246	0.0	270	0.0	1.114	94.0	LOS F	44.2	1129.6	1.00	2.81	6.41	14.4
Approach		672	2.8	738	2.8	1.114	94.1	LOS F	44.2	1129.6	1.00	2.81	6.41	14.5
West: OR126															
5	L2	3	33.0	3	33.0	1.111	90.2	LOS F	53.5	1406.6	1.00	2.93	6.11	15.1
2	T1	771	6.0	847	6.0	1.111	89.0	LOS F	53.5	1406.6	1.00	2.93	6.11	15.3
12	R2	3	67.0	3	67.0	1.111	91.7	LOS F	53.5	1406.6	1.00	2.93	6.11	14.8
Approach		777	6.3	854	6.3	1.111	89.0	LOS F	53.5	1406.6	1.00	2.93	6.11	15.3
All Vehicles		2296	6.7	2523	6.7	1.114	70.1	LOS F	53.5	1406.6	0.86	2.12	4.57	17.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [TM Existing Sat (Site Folder: SAT Peak)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance															
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Tom McCall Rd														
3	L2	10	33.0	11	33.0	0.108	7.8	LOS A	0.4	10.4	0.58	0.53	0.58	32.7
8	T1	2	0.0	2	0.0	0.108	6.2	LOS A	0.4	10.4	0.58	0.53	0.58	33.7
18	R2	48	17.0	53	17.0	0.108	7.0	LOS A	0.4	10.4	0.58	0.53	0.58	32.3
Approach		60	19.1	66	19.1	0.108	7.2	LOS A	0.4	10.4	0.58	0.53	0.58	32.4
East: OR126														
1	L2	41	20.0	45	20.0	0.554	9.7	LOS A	3.9	107.1	0.20	0.07	0.20	32.3
6	T1	469	13.0	515	13.0	0.554	9.5	LOS A	3.9	107.1	0.20	0.07	0.20	32.6
16	R2	84	15.0	92	15.0	0.554	9.6	LOS A	3.9	107.1	0.20	0.07	0.20	31.6
Approach		594	13.8	653	13.8	0.554	9.5	LOS A	3.9	107.1	0.20	0.07	0.20	32.4
North: Tom McCall Rd														
7	L2	80	26.0	88	26.0	0.186	8.8	LOS A	0.6	18.3	0.60	0.60	0.60	30.7
4	T1	3	33.0	3	33.0	0.186	9.1	LOS A	0.6	18.3	0.60	0.60	0.60	30.8
14	R2	13	18.0	14	18.0	0.186	8.4	LOS A	0.6	18.3	0.60	0.60	0.60	30.2
Approach		96	25.1	105	25.1	0.186	8.7	LOS A	0.6	18.3	0.60	0.60	0.60	30.6
West: OR126														
5	L2	10	0.0	11	0.0	0.451	8.0	LOS A	2.7	71.3	0.46	0.31	0.46	33.7
2	T1	435	6.0	478	6.0	0.451	8.2	LOS A	2.7	71.3	0.46	0.31	0.46	33.5
12	R2	6	0.0	7	0.0	0.451	8.0	LOS A	2.7	71.3	0.46	0.31	0.46	32.6
Approach		451	5.8	496	5.8	0.451	8.2	LOS A	2.7	71.3	0.46	0.31	0.46	33.5
All Vehicles		1201	11.9	1320	11.9	0.554	8.9	LOS A	3.9	107.1	0.35	0.22	0.35	32.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

APPENDIX F – 2016 OR126 AT TOM MCCALL ROAD TRAFFIC ANALYSIS TRAFFIC CONTROL ALTERNATIVES EVALUATION

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TECHNICAL MEMORANDUM

OR 126 at Tom McCall Road Traffic Analysis

Traffic Control Alternatives Evaluation

Date: July 11, 2016 Project #: 13823

To: Mike Darling, ODOT

From: Scott Beaird, PE

This memorandum summarizes a comparison of operational, safety, and right-of-way impacts associated with traffic control alternatives for the OR 126/Tom McCall Road intersection in Prineville, Oregon. The alternatives were developed to address safety and operational needs identified in the OR 126 Corridor Facility Plan and City of Prineville Transportation System Plan (TSP). Roundabout and traffic signal intersection forms were evaluated, in addition to the existing stop-controlled scenario.

This memo is organized into the following sections.

Background.....1
Intersection Operational Analysis.....2
Alternative Design Concepts.....8
Alternative Design Evaluations.....10
Evaluation Summary.....14
Conclusion.....15

BACKGROUND

The OR 126 Corridor Facility Plan, adopted in 2012, identified the need for increased capacity at the OR 126/Tom McCall Road intersection to accommodate 2030 forecast traffic volumes. The Facility Plan identified a signal or roundabout as viable options, but did not include a comparison of the options.

The Prineville TSP, adopted in 2013, identified the need for improvements at the intersection to provide "safe and effective long-term access to industrial lands" and support economic growth. The TSP cited safety concerns at the OR 126/Tom McCall Road intersection due to recent expansion of data centers and industrial uses near the airport, coupled with a high-speed, rural environment along the highway. The TSP recommended the realignment of Millican Road-Airport Way to Tom McCall Road and the construction of a signal or roundabout at the OR 126/Tom McCall Road intersection.

To maintain consistency with the recommendations of the OR 126 Corridor Facility Plan and the Prineville TSP, this study evaluated a roundabout and signal alternative at the OR 126/Tom McCall Road intersection and assumed realignment of Airport Way and Millican Road to Tom McCall Road.

INTERSECTION OPERATIONAL ANALYSIS

All unsignalized level-of-service analyses were performed in accordance with the procedures stated in the 2010 version of the *Highway Capacity Manual (HCM)* and signalized analyses were performed in accordance with the 2000 version. The analyses reflect the peak 15-minute flow rate during the p.m. peak hours. Using the peak 15-minute flow rate ensures that this analysis is based on a reasonable worst-case scenario.

PERFORMANCE THRESHOLDS

ODOT uses volume-to-capacity (V/C) ratio targets to assess intersection operations. Table 6 of the *Oregon Highway Plan* (OHP) provides the peak hour mobility targets for all signalized and unsignalized intersections outside the Portland Metro area. The OHP target for OR 126, which is designated as an *Expressway,* is a V/C of 0.80.

The City's performance targets were also considered when determining the appropriate number of lanes for each alternative. The City of Prineville operational standards are summarized in Table 1.

Table 1 City of Prineville Intersection Operations Performance Standards

Traffic Control	Volume-to-Capacity Ratio Standard	Delay Standard (seconds)	95th Percentile Queuing Standard
Two-Way Stop Control (TWSC)	≤1.0	≤50[1]	Storage Capacity
Signal	≤0.90	≤80[2]	Storage Capacity
Roundabout	≤0.85[1]	N/A	N/A

[1] evaluated by lane group
[2] average for intersection

Based on discussion with ODOT and City staff, a modified V/C target of 0.90 was developed to determine the number of lanes required for the roundabout alternative. This target was selected based on guidance in *NCHRP Report 672, Roundabouts: An Informational Guide, Second Edition*, which identifies a V/C of 0.90 as the approximate upper threshold for satisfactory operation. In addition, a target V/C of 0.90 has been used when planning for other roundabout projects on the State system within the region. Finally, the use of an alternative mobility target reduces the potential for a mulitlane roundabout. A single-lane roundabout, with the potential for future expansion, is preferable for the following reasons:

- A single-lane roundabout results in fewer potential conflict points than a multilane roundabout, which empirical evidence shows results in better safety performance.
- Given this would be the first roundabout in the City of Prineville and Crook County, driver understanding is likely to be higher for a single-lane roundabout than a multilane roundabout.
- The freight industry has expressed a general preference for single-lane roundabouts over multilane roundabouts when possible to minimize conflicts with non-commercial vehicles.

Based on these considerations, the following mobility targets were applied to each of the evaluated alternatives:

- Roundabout form: V/C = 0.90 (by approach)
- Signalized intersection form: V/C = 0.80 (overall intersection)

EXISTING TRAFFIC VOLUMES AND PEAK HOUR ANALYSIS RESULTS

The existing traffic conditions analysis is documented in Technical Memorandum #1 (3/16/15). Performance measures considered in the analysis include volume-to-capacity (V/C) ratio, delay, level of service, and 95th-percentile vehicle queue lengths.

Exhibit 1 summarizes the existing weekday p.m. peak hour volumes (4:15 to 5:15 p.m.) and existing conditions operations.

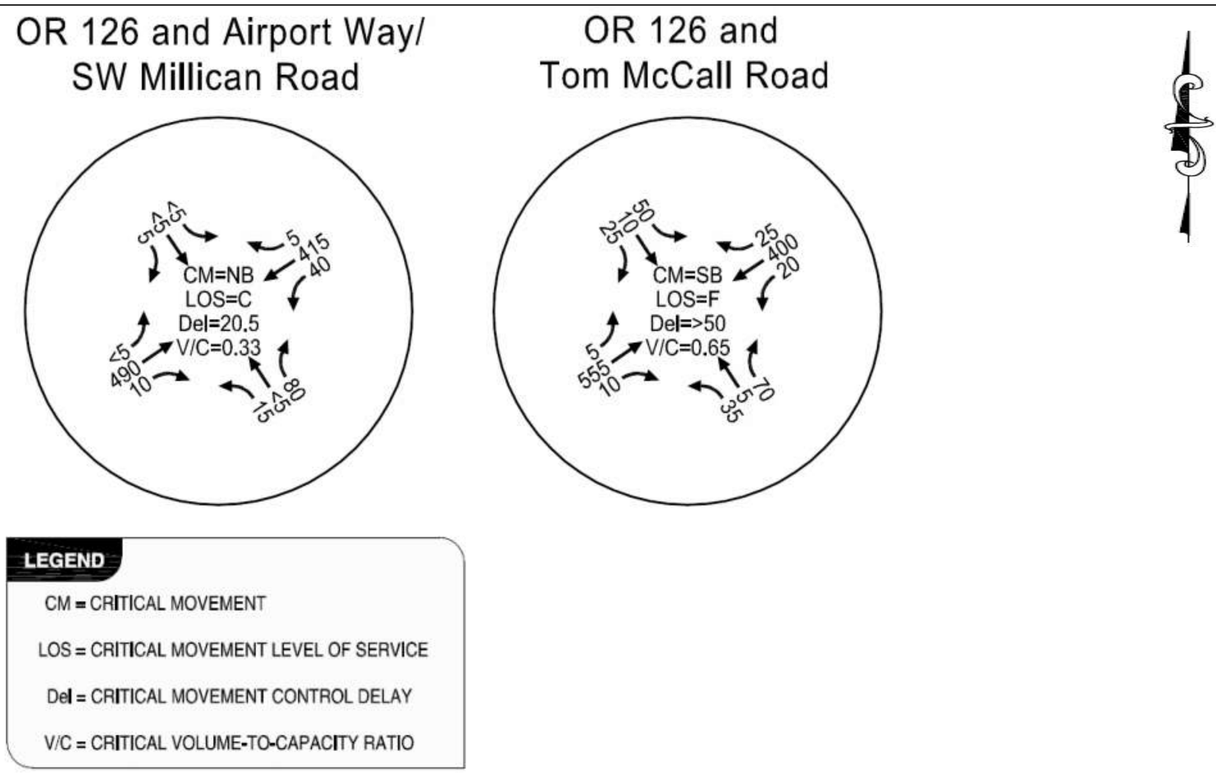


Exhibit 1: Existing Traffic Conditions, Weekday P.M. Peak Hour

As shown in Exhibit 1, the OR 126/Tom McCall Road intersection is operating at LOS "F" during the weekday p.m. peak hour. Therefore, the intersection does not meet City of Prineville operational standards under existing weekday p.m. peak hour traffic conditions.

The Airport Way/SW Millican Road intersection operates acceptably under ODOT and City performance targets during the weekday p.m. peak hour.

FUTURE YEAR TRAFFIC VOLUMES AND PEAK HOUR ANALYSIS RESULTS

Forecast traffic volumes were developed for the study intersections based on the existing traffic counts and forecast volumes from the City of Prineville's travel demand model documented in the Prineville TSP. Opening year 2018 and design year 2035 traffic volumes are provided in Exhibit 2 and Exhibit 3, respectively.

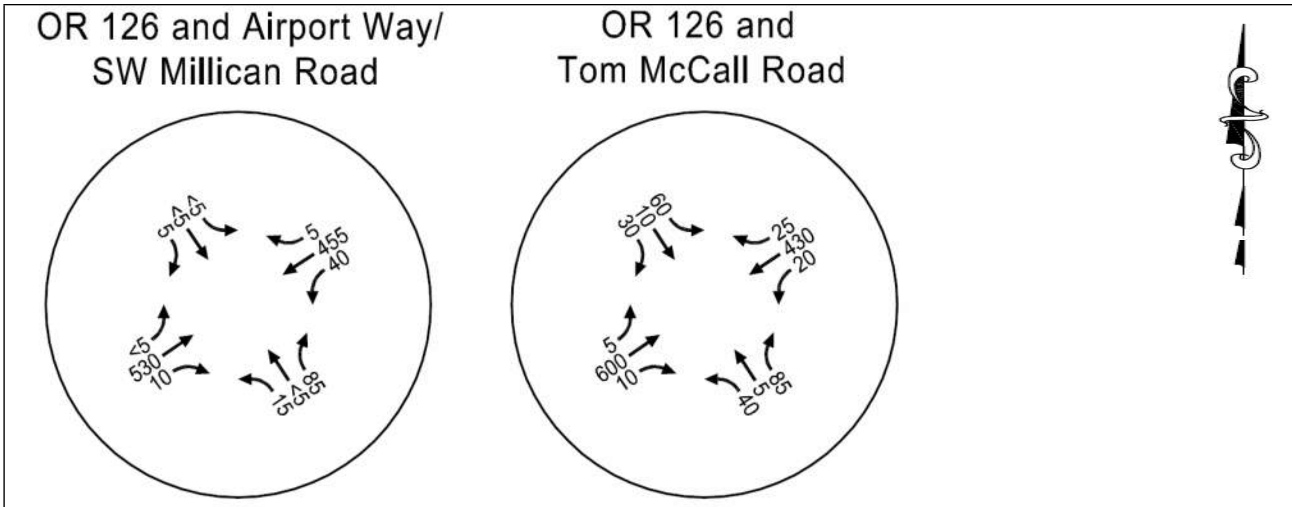


Exhibit 2: 2018 Weekday PM Peak Hour Traffic Volumes

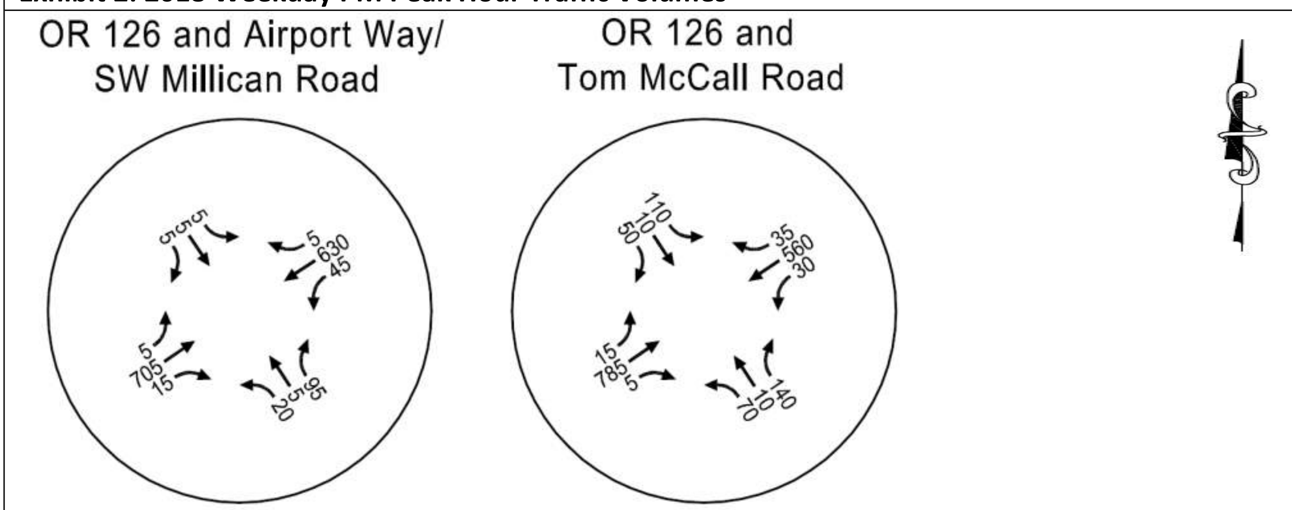


Exhibit 3: 2035 Weekday PM Peak Hour Traffic Volumes

Peak hour factors of 0.95 and 0.80 were applied to the 2035 forecasts on OR 126 and minor street approaches, respectively. These peak hour factors are based on guidance provided in the ODOT APM and take into account industrial employment characteristics reflected in existing peak hour factors.

The future conditions analysis identifies how the OR 126/Tom McCall Road intersection is forecast to operate in opening year 2018 and design year 2035. Two volume scenarios were evaluated for each build alternative:

- Scenario #1 (no Airport Way/Millican Road Reroute) assumes traffic from Airport Way and Millican Road access OR 126 directly at the existing stop-controlled intersection.
- Scenario #2 (Airport Way/Millican Road Reroute) assumes traffic from Airport Way and Millican Road reroute to a single intersection at Tom McCall Road. *(Note: Under this scenario, the existing Airport Way/Millican Road connections to OR 126 may be retained in some form to facilitate specific turning movements and/or over-dimensional freight activity.)*

Operational analysis of the OR 126/Tom McCall Road intersection was conducted for the following alternatives:

- No Build Stop-Controlled Alternative
- Signal Build Alternative
- Roundabout Build Alternative

The future year conditions analysis for each of the three alternatives is documented in Technical Memorandum #1 (3/16/15) and summarized below.

No-Build Alternative

The year 2018 and 2035 no-build traffic analysis identifies how the OR 126/Tom McCall Road intersection is forecast to operate if no improvements are made to the existing intersection. A summary of 2018 and 2035 no-build operations by approach is provided in Table 2.

Table 2 Future No-Build, Stop-Controlled Weekday PM Peak Hour Operations

Evaluation Year	Stop-Controlled Approaches	LOS	V/C	Delay (sec)	95th Percentile Queue (ft)
OR 126 and Tom McCall Road					
2018	Northbound	E	0.62	43.9	100
	Southbound*	**F**	**>1.0**	**>80**	200
2035	Northbound	**F**	**>1.0**	**>80**	>500
	Southbound*	**F**	**>1.0**	**>80**	>500
OR 126 and Airport Way/SW Millican Road					
2018	Northbound*	C	0.38	23.2	50
	Southbound	C	0.04	21.5	25
2035	Northbound*	E	0.65	46.5	100
	Southbound	**F**	0.22	**59.9**	25

* Critical Approach

As shown in Table 2, the intersection at Tom McCall Road and OR 126 will continue to exceed the City of Prineville LOS standards and will exceed the ODOT volume-to-capacity (V/C) targets through 2035. The OR 126/Airport Way/SW Millican Road is forecast to operate acceptably in 2018, but is predicted to operate at LOS “F” in 2035.

Signal Build Alternative

The signal was evaluated under year 2018 and 2035 p.m. peak hour conditions to identify the most efficient lane configurations that would provide capacity to accommodate the forecast traffic volumes. The recommended lane configuration is shown in Exhibit 4. Table 4 summarizes the forecast operations for the intersection under signalized control.

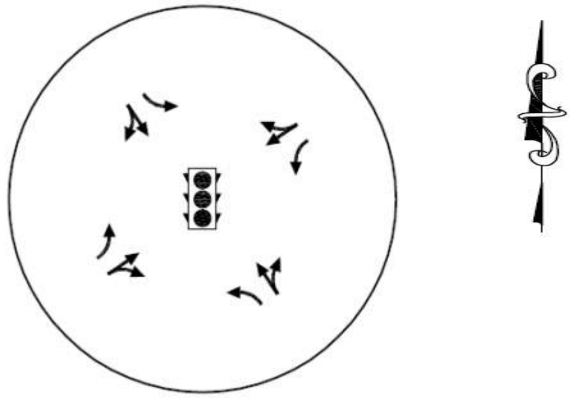


Exhibit 4: Signalized Lane Configuration at OR 126/Tom McCall Road – 2018 and 2035

Roundabout Build Alternative

The roundabout build alternative was evaluated to identify the necessary number of lanes and lane configurations to accommodate opening year 2018 and design year 2035 forecast traffic volumes. Two roundabout analysis methodologies were applied to reflect a range of driver performance. The capacity models utilized include the Highway Capacity Manual (HCM) 2010 procedures and the HCM 2010 model with a calibration by the City of Bend. The HCM 2010 methodologies are specifically developed to allow for calibration to local driver characteristics. A few jurisdictions in the U.S. have taken the step to develop a locally calibrated model, including the City of Bend. The City of Bend found higher capacities than the HCM 2010 as part of their local calibration effort. There are a variety of potential reasons for the observed local capacity being higher than the national average including more aggressive driver characteristics, driver familiarity, and increased use of turn signals. KAI recommends consideration of the calibrated model when looking at future conditions to estimate potential increases in capacity that might be realized by increased driver familiarity.

2018 Opening Year Roundabout Alternative

A single-lane roundabout with no turn lanes is forecast to provide sufficient capacity for the opening year 2018 volumes with a substantial reduction in delay and vehicle queuing relative to the existing unsignalized intersection configuration.

2035 Design Year Roundabout Alternative

A variety of roundabout configurations were evaluated to identify the number of lanes on each approach and lane configurations needed to accommodate the forecast 2035 design traffic volumes. The analysis, summarized in Table 3, indicates the lane configurations necessary to satisfy the ODOT and City of Prineville mobility targets vary between volume scenarios #1 and #2.

Table 3 2035 Design Year Roundabout Analysis

	2035 Design Year (Volume Scenario #1 - no Airport Way/ Millican Road Reroute)				2035 Design Year (Volume Scenario #2 - with Airport Way/ Millican Road Reroute)			
Approach	**Lane Configurations**	**Volume to Capacity Ratio[1]**	**Delay (sec)[1]**	**95th Percentile Queue (ft)[1]**	**Lane Configurations**	**Volume to Capacity Ratio[1]**	**Delay (sec)[1]**	**95th Percentile Queue (veh)[1]**
HCM 2010								
Eastbound	LT, TR	0.50	10.5	75	LTR	0.90	33.7	325
Westbound	LTR	0.70	15.5	150	LTR	0.84	26.8	275
Northbound	LTR	0.55	20.0	100	LT,R	0.68	31.3	125
Southbound	LTR	0.41	13.8	50	LTR	0.52	18.7	75
HCM 2010 (with City of Bend Calibration)								
Eastbound	LTR	0.77	16.9	200	LTR	0.72	15.2	175
Westbound	LTR	0.57	10.0	100	LTR	0.68	14.0	150
Northbound	LTR	0.50	16.6	75	LTR	0.71	24.7	150
Southbound	LTR	0.29	8.4	50	LTR	0.36	10.3	50

[1] Reported for the critical lane for multilane approaches
LTR = Single lane approach; LT,TR = Left/through and Through/right lanes; LT,R = Left/through and right lanes

As shown in Table 3, under the uncalibrated model and assuming volume scenario #2, the roundabout is forecast to need a northbound right-turn lane to meet the mobility targets. In addition, with the volumes modeled, the eastbound approach is to forecast to operate at the mobility target of a V/C of 0.90. Given the potential need for multilane approaches in the future, it is recommended that ODOT, the City, and the County reserve right-of-way for potential future expansion of the roundabout. In addition, future developments that generate new trips impacting the OR 126/Tom McCall Road intersection should be evaluated to determine whether the development should be responsible for expansion of the roundabout.

2035 Weekday PM Peak Hour Operations Comparison

As described, the evaluated traffic control alternatives can meet the ODOT and City operational performance measures in 2018 and 2035. Table 4 provides a side-by-side comparison of 2035 weekday p.m. peak hour operations for the alternatives. This analysis assumes Scenario #2 volumes for the build condition.

Table 4 Weekday PM Peak Hour Operations Comparison at OR 126/Tom McCall Road (Scenario #2)

	2035 Weekday P.M. Peak Hour			
	No-Build	Signal	Roundabout (HCM 2010)	Roundabout (City of Bend Calibration)
95th Percentile Queue (ft)				
Eastbound OR 126	25	650	325	175
Westbound OR 126	25	500	275	150
Northbound Tom McCall Rd	>500	100	125	150
Southbound Tom McCall Rd	>500	125	75	50
Approach Capacity (v/c)				
Eastbound OR 126	0.02	0.78	0.90	0.72
Westbound OR 126	0.04	0.69	0.84	0.68
Northbound Tom McCall Rd	>1.0	0.58	0.68[1]	0.71
Southbound Tom McCall Rd	>1.0	0.65	0.52	0.36
Approach Delay (s)				
Overall Intersection	*>80*	*25.9*	*28.3*	*16.0*
Eastbound OR 126	0.5	22.7	33.7	15.2
Westbound OR 126	1.1	16.8	26.8	14.0
Northbound Tom McCall Rd	>80	40.4	31.3	24.7
Southbound Tom McCall Rd	>80	36.6	18.7	10.3
Level of Service (LOS)				
Overall Intersection	*F*	*C*	*D*	*C*
Eastbound OR 126	A	*C*	D	C
Westbound OR 126	A	B	D	B
Northbound Tom McCall Rd	F	D	D	C
Southbound Tom McCall Rd	F	*D*	C	B

[1] Assumes the addition of a northbound right-turn lane.

As shown, constructing a signal or roundabout at the OR 126/Tom McCall Road intersection will allow the intersection to operate at or below City of Prineville and ODOT performance targets assuming traffic from Airport Way/Millican Road is rerouted through the Tom McCall Road intersection.

ALTERNATIVE DESIGN CONCEPTS

Preliminary roundabout and traffic signal concepts were prepared to accommodate forecast demand and reduce crash potential at the unsignalized OR 126/Tom McCall Road intersection. Technical Memorandum #2: Initial Design Concept Options (5/21/15) and Technical Memorandum #3: Refined Scoping Concepts (9/1/15) document the concept development and the design parameters reflected in the concepts.

Speed-reduction treatments are proposed for any traffic control alternative that requires major-street vehicles to stop or yield, given the intersection is in a rural, high-speed environment. Reducing speed in advance of the intersection and providing advanced warning of the need to stop or yield is critical to minimizing crash potential at the intersection. Horizontal curvature and extended medians are two methods proposed for both traffic control alternatives to reduce speeds on the OR 126 approaches to Tom McCall Road. Additional treatments vary by traffic control, as described below.

The design concepts were focused at the intersection. The intersection footprints for the roundabout and signalized intersections tie into the existing roadway alignment prior to the connection points for Airport Way and Millican Road. Therefore, the potential rerouting of Airport Way and Millican Road are not depicted in the concepts.

ROUNDABOUT INTERSECTION

Concept 1, shown in *Appendix A*, shows a single-lane roundabout. Reducing vehicle speeds entering the intersection is one of the fundamental design criteria for roundabouts. The roundabout design was developed based upon the fastest path criteria from *NCHRP Report 672* to maintain fastest path speeds entering the roundabout of less than 25 mph for all single-lane approaches.

Key design features include:

- A single-lane roundabout, which results in simplified operations and fewer potential conflict points in the near term. Consideration should be made for potential future expansion (e.g., right-of-way reservation).
- Inscribed circle diameter (ICD) of 175 feet, which exceeds the minimum of 165 feet established in Table 8-4 of the 2012 ODOT Highway Design Manual (HDM).
- Speed-reduction treatments, including splitter islands and a series of successive horizontal curves with progressively smaller radii on the OR 126 approaches, to transition from the posted speed to the design circulating speed.
- Curb radii that accommodate the design vehicle, WB-67.
- The center of the roundabout is offset approximately 15 feet to the north of the OR 126 centerline to avoid impact to the private property in the southeast quadrant of the intersection.
- Approach and circulatory lane widths range from 15 to 20 feet, consistent with guidance in the ODOT HDM and *NCHRP Report 672.*
- Bicycle ramps are provided on each approach, leading to 10-foot multi-use paths within all four quadrants.

SIGNALIZED INTERSECTION

Concept 2, shown in *Appendix A*, illustrates the signalized intersection concept. This concept is centered on the existing intersection and includes left-turn lanes on all approaches. The initial design concept was developed based on design fundamentals in the ODOT Traffic Signal Design Manual and Chapter 7 (Rural Highway Design) and Chapter 8 (Intersections) of the Highway Design Manual (HDM). The concept reflects key design features, including:

- Figure 8-9 of the HDM was used as guidance for development of the left-turn lane channelization.
- On the Tom McCall Road approaches, the left-turn lanes were designed with 100 feet of storage, which is the minimum length identified in the HDM.
- The OR 126 approaches were developed to accommodate the forecast 95th-percentile left-turn queues and allow for adequate deceleration before vehicles reach the back of queue.
- Eastbound and westbound splitter islands extend from the intersection to introduce horizontal geometry to reduce speeds upstream of the signal.
- All right-of-way impacts are constrained to right of way currently owned by Crook County.

ALTERNATIVE DESIGN EVALUATIONS

SAFETY EVALUATION

Crash reports for a five-year period from January 1, 2009 through December 31, 2013 at the study intersections were obtained from the ODOT crash database. Table 5 summarizes the crashes at each intersection by crash type and severity.

Table 5 Intersection Crash Summary (2009-2013)

OR 126 Intersection	Crash Type								Crash Severity			5-Year Total
	Angle	Turning	Rear End	Over -turn	Head On	Side Swipe	Bike/ Ped	Fixed Object/ Other	PDO *	Injury **	Fatal	
Tom McCall Road	1	1	4	0	0	2	0	2	5	5	0	10
Airport Way-SW Millican Road	1	0	1	1	0	1	0	1	2	3	0	5
Total	**2**	**1**	**5**	**1**	**0**	**3**	**0**	**3**	**7**	**8**	**0**	**15**

* PDO = Property Damage Only
** Includes all levels of injury severity

Table 5 shows a total of 15 crashes were reported over the five-year period. Eight crashes resulted in injury and seven crashes resulted in property damage only. As documented in Technical Memorandum #1, the crash rate at the OR 126/Tom McCall Road intersection exceeds the statewide 90th-percentile crash rate for similar intersection types.

Based on observed crash history and crash prediction methods from the *Highway Safety Manual* (HSM), 3.4 fatal or injury (FI) crashes and a total of 6.5 crashes are forecast to occur every five years at the OR 126/Tom McCall Road intersection. The HSM prediction models were calibrated to Oregon conditions using factors developed for rural, four-leg, stop-controlled intersections in Oregon by ODOT.

The estimated change in crashes associated with converting a stop-controlled intersection to a single or multilane roundabout on a high-speed, rural road is summarized in Table 6, based on quantitative research conducted nationally. As shown in Table 6, the conversion to a roundabout is expected to reduce the number of crashes at the OR 126/Tom McCall Road intersection by approximately 2.9 fatal and injury crashes and a total of 4.6 crashes over a 5-year period, assuming daily volumes remain relatively similar to 2014 levels.

Table 6 Crash Prediction Results for Converting to a Roundabout

Intersection	No-Build		Roundabout		Crashes Reduced		Percent Reduction	
	Fatal and Injury Crashes	All Crashes	Fatal and Injury Crashes	All Crashes	Fatal and Injury Crashes	All Crashes	Fatal and Injury Crashes	All Crashes
Annual	0.7	1.3	0.1	0.4	0.6	0.9	87%	71%
5-year Total	3.4	6.5	0.4	1.9	2.9	4.6		

Note: 5-year crash reduction totals are calculated as the percent reduction applied to no-build crash frequency.

The estimated change in crashes associated with converting a stop-controlled intersection to a signal is summarized in Table 7. As shown in Table 7, the conversion to a signal is expected to reduce the number of crashes at the intersection by approximately 0.1 fatal and injury crashes and a total of 2.9 crashes over a 5-year period, assuming daily volumes remain relatively similar to 2014 levels. While overall crashes are forecast to be reduced with the installation of a signal, experience shows that rear-end crashes will likely increase due to the installation of a traffic signal.

Table 7 Crash Prediction Results for Converting to a Signal

Intersection	No-Build		Signal		Crashes Reduced		Percent Reduction	
	Fatal and Injury Crashes	All Crashes	Fatal and Injury Crashes	All Crashes	Fatal and Injury Crashes	All Crashes	Fatal and Injury Crashes	All Crashes
Annual	0.7	1.3	0.7	0.7	<0.1	0.6	3%	44% [1]
5-year Total	3.4	6.5	3.3	3.6	0.1	2.9		

[1] The Highway Safety Manual (citing Harkey et al., 2008) indicates that the installation of a traffic signal will result in an ***increase*** of approximately 58% in rear-end crashes.

Crash prediction worksheets and a summary of crash modification factors used are provided in *Appendix B.*

If Airport Way/Millican Road is rerouted to Tom McCall Road, the no-build crash frequency is expected to increase by 30 percent, relative to the volume increase, but the percent reduction associated with each alternative will not change.

FREIGHT MOBILITY

OR 126 and Millican Road serve a critical function carrying freight, including many oversize, overweight loads. KAI obtained single-use permit information for overdimensional freight on OR 126, for the years 2007 through 2012, and Millican Road, for the years 2013 and 2014. The longest combination truck length permitted was 267 feet; there were three permits (two on OR 126 and one on Millican Road) issued for this length. The widest load permitted was 23 feet and 6 inches.

Trucks over 18 feet tall may require removal of signal heads. On Millican Road a total of 12 permitted loads had a height of 18 feet or more. On OR 126, a total of 4 permitted loads had a height of 18 feet or more. Continuous Trip (Annual) Permits issued by ODOT Motor Carrier Division do not exceed these dimensions.

Roundabout Design and Accommodation Vehicle

The roundabout geometry has been designed for circulation of a WB-67 Interstate Truck design vehicle on all movements. Specific design elements, including a traversable truck apron within the central island, provide the additional width required by the design vehicle while maintaining speed control for passenger cars. Illustrations of the design vehicle paths for the roundabout concept are provided in Technical Memorandum #3: Refined Scoping Concepts (9/1/15).

As described in Technical Memorandum #2, if a roundabout is selected as the preferred alternative, a truck bypass to accommodate overdimensional loads will be considered during the design phase of this project. With the concept shown, which centers the roundabout within 15 feet of the existing intersection, the overdimensional bypass would likely be constructed to the north of the intersection. An alternate strategy would be to shift the roundabout to the north and use the existing OR 126 alignment as the overdimensional bypass. Either strategy could use the overdimensional bypass as part of the construction staging strategy to allow the roundabout to be built not under traffic.

Signalized Intersection Design and Accommodation Vehicle

The curb radii have been designed to allow for right-turns by the design vehicle (WB-67) under the signalized intersection concept. In addition to the horizontal geometry, accommodation of overdimensional loads under the signalized intersection concept must also consider vertical constraints (i.e., overhead signal mast arms). Signal mast arms are typically located at approximately 18 feet in height to maintain the signal heads within the driver’s field of vision. As noted above, loads over 18 feet in height have been permitted on both OR 126 and Millican Road. Accommodation of overdimensional vehicles at the signalized intersection could occur similar to either of the bypass options presented for the roundabout concept. Alternatively, signal mast arms could be removed or traffic signal heads rotated as required to accommodate overdimensional loads. This process could incur significant costs and potentially introduce maintenance issues each time an overheight load passes through the intersection.

PEDESTRIAN AND BICYCLE ACCOMMODATIONS

The estimated theoretical speed for the roundabout at the exit leg crosswalk is 32-34 mph. This estimate is based on an assumed acceleration rate of 6.9 ft/s^2 over a distance measured from the middle of the circulating path radius (R2) to the crosswalk. These speeds reflect the roundabout's geometric design elements (Inscribed Circle Diameter and exit radii) that were established to accommodate large vehicles at the intersection.

Two factors indicate less crossing risk at the roundabout relative to crossings that would occur under the existing stop-controlled condition. First, crossings at the roundabout are anticipated to occur with speeds of less than 34 mph compared to 55 mph or higher under the existing condition. Second, crossings at the roundabout can be conducted in two stages, crossing one lane at a time with a refuge in the splitter island.

COST ESTIMATES

Conceptual cost estimates were prepared using planning-level unit prices. The cost estimates include an itemized breakdown of major earthwork, pavement structure, and other identifiable major components, (e.g., signing and pavement marking, street lighting). Groups of items (such as traffic control) are presented as lump sum items and the estimates provided are based on similar work for other projects. Assumed unit costs and estimated quantities are provided in *Appendix C*.

The following factors have the greatest influence on the roundabout costs:

- Assume all new pavement starting at splitter island nose (includes base plus 11-inch pavement)
- Splitter islands are 8 to 10 feet wide
- No sidewalk and no curb on outside of roadway
- Construction cost includes 15% engineering

The following factors have the greatest influence on the signal costs:

- Assume all new pavement from beginning of widening for turn lanes (includes base plus 11-inch pavement)
- Signal equipment estimated at $275,000
- Construction cost includes 15% engineering

Based on these assumptions, the preliminary construction cost and project cost estimates are summarized in Table 8.

Table 8 Preliminary Construction Cost Estimates for Alternatives

Performance Measure	Signal	Roundabout
Construction Cost	$2,200,000	$2,104,000
Professional Fees (15%)	$330,000	$316,000
Contingency (30%)	$759,000	$726,000
Project Cost (including contingency)	**$3,289,000**	**$3,146,000**

The costs shown in Table 8 do not include rerouting of Millican Road or Airport Way to Tom McCall Road, as those connections are not reflected in the concept designs.

EVALUATION SUMMARY

The evaluations of each alternative, as described in the previous sections, were related to one another in terms of the relative level of improvement provided. The summary is provided in Table 9. The alternatives with the best possible outcome are indicated by a solid circle and those with the least favorable outcome are indicated by an open circle. The alternatives with neutral outcomes are indicated by a half-filled circle.

Table 9 Relative Comparison of Alternatives

Alternative	Operations	Safety	Cost	Freight	Access	Pedestrian/ Bicycle	Overall
No Build	○	○	●	●	○	○	○
Signal	●	◒	◒	◒	●	◒	◒
Roundabout	●	●	◒	◒	●	◒	●

***Operations* -** The signal and roundabout alternatives provide additional capacity needed to accommodate 2035 forecast volumes.

Safety – The roundabout alternative provides the greatest potential for crash reduction. A signal is expected to reduce crashes, relative to a no-build scenario.

Cost – Both alternatives are estimated to cost approximately $3 million, including 30% contingency. The signal is estimated to cost slightly more than the roundabout since the length of the splitter islands on each of the OR 126 approaches at a signal include storage length for the left-turn lanes.

Freight – The no-build scenario does not require freight to stop on OR 126, but a signal and roundabout will. Both a signal and roundabout can accommodate all freight movements.

Access – Access to OR 126 from the side streets at Millican Road-Airport Way and Tom McCall is difficult during peak periods under the existing, no-build scenario. Given the longer start-up times from a stop for commercial vehicles, freight movements are particularly impacted by the current condition. Installation of either a roundabout or a traffic signal will improve access to and from the industrial area.

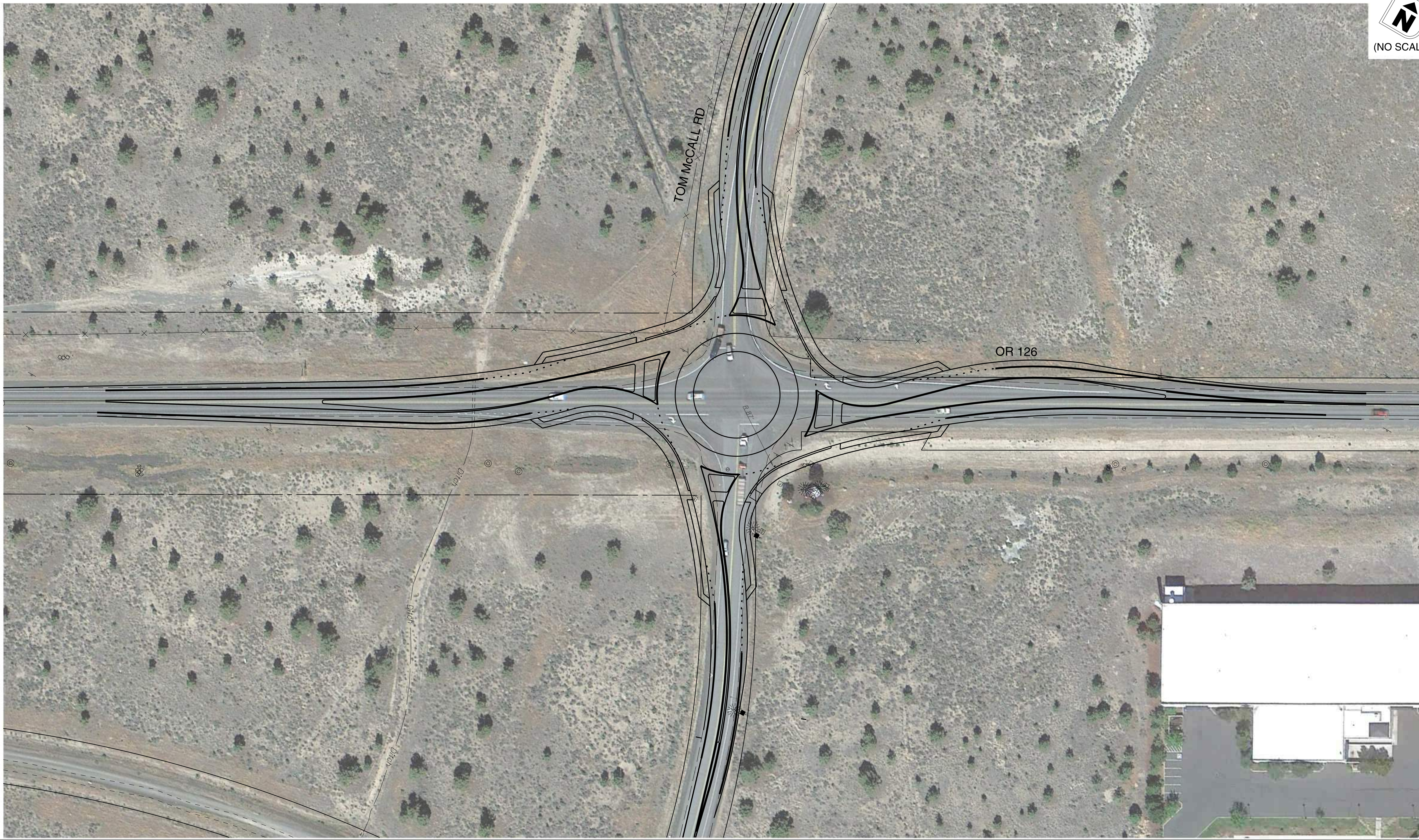
Pedestrian/Bicycle – The no-build option does not provide any crossing enhancements, but the signal and roundabout will provide speed reduction and marked crossings.

Overall – The safety benefits of a roundabout exceed that of a signal and all other categories are relatively similar to a signal. Therefore, a roundabout is the recommended alternative for design.

CONCLUSION

The evaluation indicates that either a signal or roundabout could: provide adequate capacity and minimize delay under 2035 traffic conditions, accommodate freight movements, and accommodate bicycle and pedestrian users. However, the roundabout is expected to provide the greatest potential for crash reduction and is, therefore, the recommended alternative.

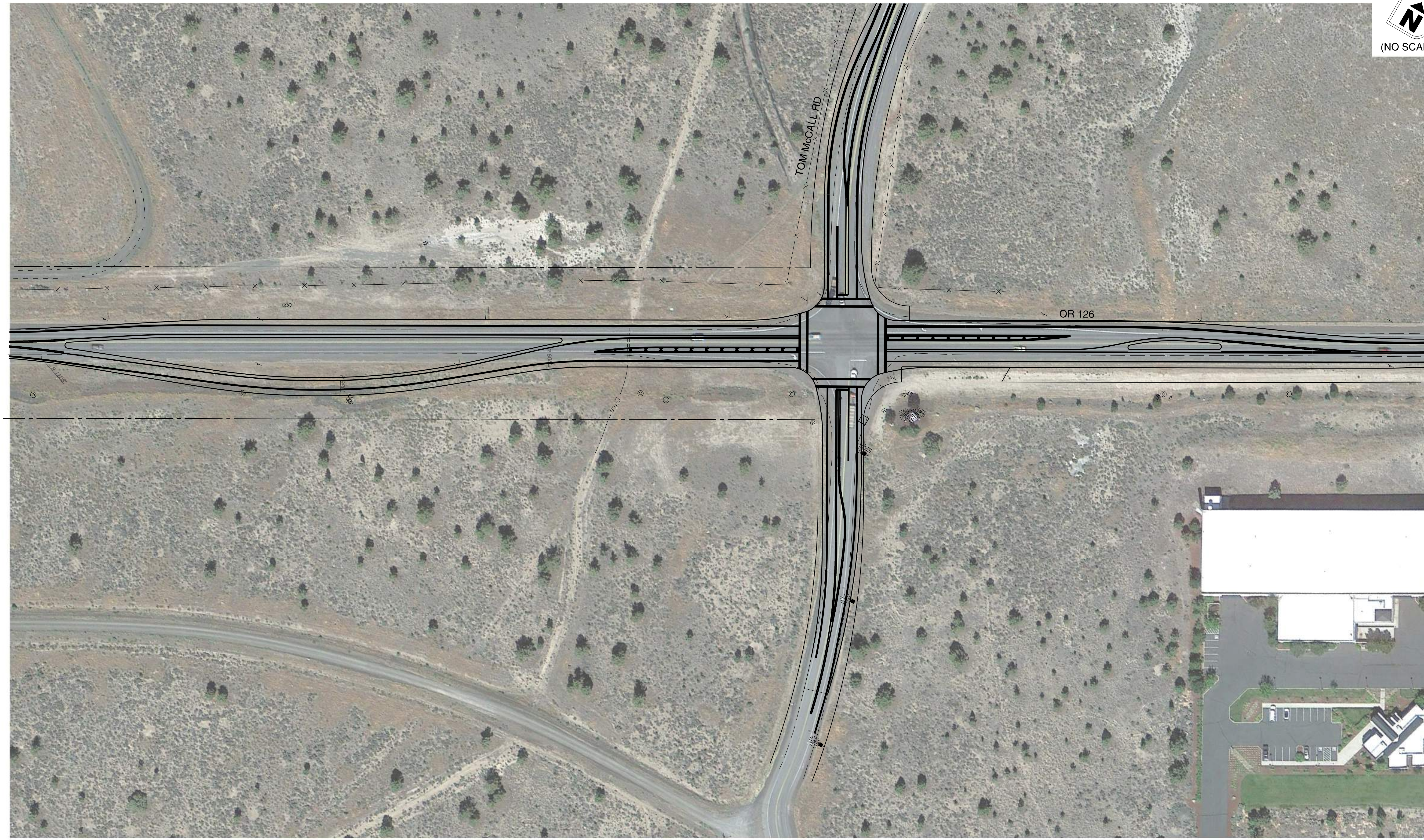
Appendix A Conceptual Alternatives



KAI_FILE_MODEL_DATE_TIME

PRELIMINARY ROUNDABOUT CONCEPT
OR 126/ TOM McCALL RD
PRINEVILLE, OREGON

FIGURE
A1



REFINED SIGNAL CONCEPT
OR 126/ TOM McCALL RD
PRINEVILLE, OREGON

FIGURE
A2

KAI_FILE_MODEL_DATE_TIME

Appendix B Crash Prediction Worksheets

Worksheet 2A -- General Information and Input Data for Rural Two-Lane Two-Way Roadway Intersections

General Information		Location Information	
Analyst	CRB	Roadway	Tom McCall
Agency or Company	KAI	Intersection	OR 126 at Tom McCall Road
Date Performed	06/06/15	Jurisdiction	Prineville, OR
		Analysis Year	2014

Input Data		Base Conditions	Site Conditions
Intersection type (3ST, 4ST, 4SG)		--	4ST
$AADT_{major}$ (veh/day)	$AADT_{MAX}$ = 14,700 (veh/day)	--	11,645
$AADT_{minor}$ (veh/day)	$AADT_{MAX}$ = 3,500 (veh/day)	--	1,635
Intersection skew angle (degrees) [If 4ST, does skew differ for minor legs?]	No	0	Skew for Leg 1 (All): 0 Skew for Leg 2 (4ST only): 0
Number of signalized or uncontrolled approaches with a left-turn lane (0, 1, 2, 3, 4)		0	0
Number of signalized or uncontrolled approaches with a right-turn lane (0, 1, 2, 3, 4)		0	2
Intersection lighting (present/not present)		Not Present	Not Present
Calibration Factor, C_i		1.00	0.31

Worksheet 2B -- Crash Modification Factors for Rural Two-Lane Two-Way Roadway Intersections

(1) CMF for Intersection Skew Angle CMF_{1i} from Equations 10-22 or 10-23	(2) CMF for Left-Turn Lanes CMF_{2i} from Table 10-13	(3) CMF for Right-Turn Lanes CMF_{3i} from Table 10-14	(4) CMF for Lighting CMF_{4i} from Equation 10-24	(5) Combined CMF CMF_{COMB} (1)*(2)*(3)*(4)
1.00	1.00	0.74	1.00	0.74

Worksheet 2C -- Intersection Crashes for Rural Two-Lane Two-Way Roadway Intersections

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Crash Severity Level	$N_{spf\ 3ST,\ 4ST\ or\ 4SG}$	Overdispersion Parameter, k	Crash Severity Distribution	$N_{spf\ 3ST,\ 4ST\ or\ 4SG}$ by Severity Distribution	Combined CMFs	Calibration Factor, C_i	Predicted average crash frequency, $N_{predicted\ int}$
	from Equations 10-8, 10-9, or 10-10	from Section 10.6.2	from Table 10-5	$(2)_{TOTAL}$ * (4)	from (5) of Worksheet 2B		(5)*(6)*(7)
Total	4.812	0.24	1.000	4.812	0.74	0.31	1.104
Fatal and Injury (FI)	--	--	0.518	2.493	0.74	0.31	0.572
Property Damage Only (PDO)	--	--	0.482	2.320	0.74	0.31	0.532

Worksheet 2D -- Crashes by Severity Level and Collision Type for Rural Two-Lane Two-Way Road Intersections

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Collision Type	**Proportion of Collision $Type_{(TOTAL)}$**	**$N_{predicted\ int\ (TOTAL)}$ (crashes/year)**	**Proportion of Collision $Type_{(FI)}$**	**$N_{predicted\ int\ (FI)}$ (crashes/year)**	**Proportion of Collision $Type_{(PDO)}$**	**$N_{predicted\ int\ (PDO)}$ (crashes/year)**
	from Table 10-6	$(8)_{TOTAL}$ from Worksheet 2C	from Table 10-6	$(8)_{FI}$ from Worksheet 2C	from Table 10-6	$(8)_{PDO}$ from Worksheet 2C
Total	0.999	1.104	1.002	0.572	1.000	0.532
		$(2)x(3)_{TOTAL}$		$(4)x(5)_{FI}$		$(6)x(7)_{PDO}$
SINGLE-VEHICLE						
Collision with animal	0.001	0.001	0.000	0.000	0.003	0.002
Collision with bicycle	0.011	0.012	0.020	0.011	0.000	0.000
Collision with pedestrian	0.009	0.010	0.018	0.010	0.000	0.000
Overturned	0.009	0.010	0.013	0.007	0.006	0.003
Ran off road	0.044	0.049	0.030	0.017	0.059	0.031
Other single-vehicle collision	0.004	0.004	0.008	0.005	0.000	0.000
Total single-vehicle crashes	0.078	0.086	0.089	0.051	0.068	0.036

MULTIPLE-VEHICLE						
Angle collision	0.359	0.396	0.422	0.241	0.288	0.153
Head-on collision	0.005	0.006	0.008	0.005	0.003	0.002
Rear-end collision	0.189	0.209	0.177	0.101	0.203	0.108
Sideswipe collision	0.003	0.003	0.005	0.003	0.000	0.000
Other multiple-vehicle collision	0.365	0.403	0.301	0.172	0.438	0.233
Total multiple-vehicle crashes	0.921	1.017	0.913	0.522	0.932	0.496

Worksheet 2E -- Summary Results for Rural Two-Lane Two-Way Road Intersections

(1)	(2)	(3)
Crash severity level	**Crash Severity Distribution** (proportion)	**Predicted average crash frequency (crashes / year)**
	(4) from Worksheet 2C	(8) from Worksheet 2C
Total	1.000	1.1
Fatal and Injury (FI)	0.518	0.6
Property Damage Only (PDO)	0.482	0.5

Worksheet 3A -- Predicted and Observed Crashes by Severity and Site Type Using the Site-Specific EB Method

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Site type	**Predicted average crash frequency (crashes/year)**			**Observed crashes,** $N_{observed}$ (crashes/year)	**Overdispersion Parameter, k**	**Weighted adjustment, w**	**Expected average crash frequency,** $N_{expected}$
	$N_{predicted}$ (TOTAL)	$N_{predicted}$ (FI)	$N_{predicted}$ (PDO)			Equation A-5 from Part C Appendix	Equation A-4 from Part C Appendix
ROADWAY SEGMENTS							
Segment 1						1.000	0.0
Segment 2						1.000	0.0
Segment 3						1.000	0.0
Segment 4						1.000	0.0
Segment 5						1.000	0.0
Segment 6						1.000	0.0
Segment 7						1.000	0.0
Segment 8						1.000	0.0
INTERSECTIONS							
Intersection 1	1.104	0.572	0.532	2	0.240	0.791	1.3
Intersection 2						1.000	0.0
Intersection 3						1.000	0.0
Intersection 4						1.000	0.0
Intersection 5						1.000	0.0
Intersection 6						1.000	0.0
Intersection 7						1.000	0.0
Intersection 8						1.000	0.0
COMBINED (sum of column)	1.104	0.572	0.532	2	--	--	1.3

Worksheet 3B -- Site-Specific EB Method Summary Results

(1)	(2)	(3)
Crash severity level	$N_{predicted}$	$N_{expected}$
Total	$(2)_{COMB}$ from Worksheet 3A	$(8)_{COMB}$ from Worksheet 3A
	1.104	1.3
Fatal and Injury (FI)	$(3)_{COMB}$ from Worksheet 3A	$(3)_{TOTAL} * (2)_{FI} / (2)_{TOTAL}$
	0.572	0.7
Property Damage Only (PDO)	$(4)_{COMB}$ from Worksheet 3A	$(3)_{TOTAL} * (2)_{PDO} / (2)_{TOTAL}$
	0.532	0.6

CRASH MODIFICATION FACTORS CLEARINGHOUSE

CMF Comparison

Below you will find comparisons for the CMFs you chose.
Please note that the rows highlighted in **light blue** contain the differences in the selected CMFs.

Countermeasure Name	Convert intersection with minor-road stop control to modern roundabout	Convert intersection with minor-road stop control to modern roundabout
CMF ID	229	230
CMF	0.29	0.13
Study Reference	Rodegerdts et al., 2007	Rodegerdts et al., 2007
Unadjusted Standard Error CMF	0.04	0.03
CMFunction		
Star Rating	★★★★★	★★★★★
Crash Type	All	All
Crash Severity	All	Serious Injury,Minor Injury
Crash Time of Day		
Area Type	Rural	Rural
Road Division Type		
Road Type	Not Specified	Not Specified
Number of Lanes	1	1
Intersection Type	Roadway/roadway (not interchange related)	Roadway/roadway (not interchange related)
Intersection Geometry	4-leg	4-leg
Traffic Control	Stop-controlled	Stop-controlled
Speed Limit		
Study Type	Before/after using empirical Bayes or full Bayes	Before/after using empirical Bayes or full Bayes
Years From		
Years To		
Traffic Volume Unit	Unit Unknown	Unit Unknown
Min Traffic Volume		
Max Traffic Volume		
Min Major Rd Volume		
Max Major Rd Volume		
Min Minor Rd Volume		
Max Minor Rd Volume		
Avg Traffic Volume		
Avg Major Rd Volume		
Avg Minor Rd Volume		
State of Origin		
Municipality		

Country		
Comments	Countermeasure name changed from "convert two-way stop-controlled intersection to roundabout" to match HSM	Countermeasure name changed from "convert two-way stop-controlled intersection to roundabout" to match HSM

This site is funded by the U.S. Department of Transportation Federal Highway Administration and maintained by the University of North Carolina Highway Safety Research Center

For more information, contact **Karen Scurry,** *FHWA Office of Safety Programs* 609-637-4207

Table 3. Crash modification factors for conversion from stop control to signal control.

Area Type	Number of Legs	Crash Type	Crash Severity	CMF Value	Std. Error	N [2]	Issues [3]	Comment (Source[1])
Mix	Any	Total	All	1.00	--	518	A, C, E	Based on crash rate. (b)
			FI	0.97	--	518	A, C, E	Based on crash rate. (b)
			PDO	1.06	--	518	A, C, E	Based on crash rate. (b)
		Right angle	All	0.69	--	518	A, C, E	Based on crash rate. (b)
			FI	--	--	--	--	--
			PDO	--	--	--	--	--
		Rear end	All	1.82	--	518	A, C, E	Based on crash rate. (b)
			FI	--	--	--	--	--
			PDO	--	--	--	--	--
		Left turn	All	0.77	--	518	A, C, E	Based on crash rate. (b)
			FI	--	--	--	--	--
			PDO	--	--	--	--	--
Rural	Any	Total	All	0.63	--	283	A, C	Based on crash rate. (b)
				0.56	0.03	45	A, D	(d)
			FI	--	--	--	--	--
			PDO	--	--	--	--	--
		Right angle	All	0.23	0.02	45	A, D	(d)
			FI	--	--	--	--	--
			PDO	--	--	--	--	--
		Rear end	All	1.58	0.14	45	A, D	(d)
			FI	--	--	--	--	--
			PDO	--	--	--	--	--
		Left turn	All	0.40	0.05	45	A, D	(d)
			FI	--	--	--	--	--
			PDO	--	--	--	--	--

Notes:

1 – Sources:

a – McGee et al. (2003). b – Pernia et al. (2002). c – Davis and Aul (2007). d – Harkey et al. (2008).

2 – N: number of intersections evaluated.

3 – Issues: A – number of legs not addressed. C- regression-to-the-mean artifacts not addressed. D – change in geometric design elements or traffic control features not addressed. E – influence of urban versus rural area type not addressed.

"--" - not available.

Appendix C Cost Estimation Worksheets

CONSTRUCTION COST ESTIMATE - 2015 BID ITEMS
OR126 at Tom McCall Rd intersection - Roundabout Option
GRADING, DRAINAGE, PAVING, ILLUMINATION, SIGNING, AND STRIPING
PREPARED BY: KITTELSON & ASSOCIATES

BID ITEM NO.	ITEM DESCRIPTION	BID UNIT	QUANTITY	UNIT COST	TOTAL COST
TEMPORARY FEATURES AND APPURTENANCES		**TOTAL FOR GROUP**		**$353,237**	**$353,237**
0210-0100000A	MOBILIZATION	LS	All	10.0% Biddable	$163,446
0225-0100000A	TEMPORARY PROTECTION AND DIRECTION OF TRAFFIC	LS	All	10.0% Biddable	$163,446
0280-0114030E	INLET PROTECTION, TYPE 3	EACH		$200	$0
0280-0115030F	SEDIMENT BARRIER, TYPE 3	FOOT	5,000	$2	$10,000
0280-0100000A	EROSION CONTROL	LS	All	1.0% Biddable	$16,345
ROADWORK		**TOTAL FOR GROUP**		**$172,172**	**$172,172**
0305-0100000A	CONSTRUCTION SURVEY WORK	LS	All	1.5% Biddable	$24,517
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	All	1.0% Biddable	$16,345
0320-0100000A	CLEARING AND GRUBBING	LS	1	$5,000	$5,000
0330-0105000K	GENERAL EXCAVATION	CUYD	9,750	$12	$117,000
0350-0105000J	SUBGRADE GEOTEXTILE	SQYD	7,310	$1	$7,310
0390-0105000K	LOOSE RIPRAP, CLASS 50	CUYD	40	$50	$2,000
DRAINAGE AND SEWERS		**TOTAL FOR GROUP**		**$52,600**	**$52,600**
0445-030012BF	12 INCH SANITARY SEWER PIPE, 10 FT DEPTH	FOOT	400	$80	
0430-0100120F	12 INCH DRAIN PIPE	FOOT	200	$50	$10,000
0430-0100180F	18 INCH DRAIN PIPE	FOOT	200	$75	$15,000
0470-0101000E	CONCRETE STORM SEWER MANHOLES	EACH	4	$3,500	$14,000
0470-0307000E	CONCRETE INLETS, TYPE CG-2	EACH	8	$1,700	$13,600
BASES		**TOTAL FOR GROUP**		**$280,000**	**$280,000**
0640-0100000M	AGGREGATE BASE	TON	14,000	$20	$280,000
WEARING SURFACES		**TOTAL FOR GROUP**		**$1,032,790**	**$1,032,790**
0745-0402000M	LEVEL 4, 1/2 INCH ACP	TON	10,000	$65	$650,000
0759-0103000F	CONCRETE CURBS, CURB AND GUTTER	FOOT	3,090	$15	$46,350
0759-0110000F	CONCRETE CURBS, STANDARD CURB	FOOT	4,275	$14	$59,850
0759-0106000F	CONCRETE CURBS, LOW PROFILE MOUNTABLE CURB	FOOT		$18	$0
0759-0112000F	CONCRETE CURBS, STANDARD CURB, MODIFIED	FOOT		$30	$0
0759-0122000J	CONCRETE ISLANDS	SQFT	20,000	$8	$160,000
0759-0128000J	CONCRETE WALKS	SQFT	10,268	$5	$51,340
0759-0147000J	PATTERNED CONCRETE SURFACING	SQFT	7,250	$9	$65,250
PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES		**TOTAL FOR GROUP**		**$40,000**	**$40,000**
851, 855, 860, 865, 867	PAVEMENT MARKINGS	LS	1	$40,000	$40,000
PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS		**TOTAL FOR GROUP**		**$40,000**	**$40,000**
905, 910, 920, 930, 940	Signs & Posts. Removal & Relocation.	LS	1	$30,000	$30,000
970	Street Illumination	LS	1	$10,000	$10,000
RIGHT OF WAY DEVELOPMENT AND CONTROL		**TOTAL FOR GROUP**		**$133,161**	**$133,161**
1030, 1040	Landscaping	LS	All	5.0% Biddable	$85,401
1030-0108000R	Permanent Seeding	ACRE	2	$3,000	$6,000
1040-0101000K	Biofilter Mix, Topsoil	CUYD	928	$45	$41,760
SUBTOTAL, BIDDABLE ITEMS					**$2,103,959**
CONSTRUCTION ENGINEERING		**TOTAL FOR GROUP**		**$315,594**	
	Engineering			15.0% of Subtotal	$315,594
ESTIMATED COST					**$2,419,552**
CONTINGENCIES				30% of Estimate	**$725,866**
ESTIMATED TOTAL					**$3,145,418**

CONSTRUCTION COST ESTIMATE - 2015 BID ITEMS
OR126 at Tom McCall Rd intersection - Signalized Option

GRADING, DRAINAGE, PAVING, SIGNAL, ILLUMINATION, SIGNING, AND STRIPING
PREPARED BY: KITTELSON & ASSOCIATES

BID ITEM NO.	ITEM DESCRIPTION	BID UNIT	QUANTITY	UNIT COST	TOTAL COST
TEMPORARY FEATURES AND APPURTENANCES		**TOTAL FOR GROUP**		**$368,892**	**$368,892**
0210-0100000A	MOBILIZATION	LS	All	10.0% Biddable	$170,901
0225-0100000A	TEMPORARY PROTECTION AND DIRECTION OF TRAFFIC	LS	All	10.0% Biddable	$170,901
0280-0114030E	INLET PROTECTION, TYPE 3	EACH		$200	$0
0280-0115030F	SEDIMENT BARRIER, TYPE 3	FOOT	5,000	$2	$10,000
0280-0100000A	EROSION CONTROL	LS	All	1.0% Biddable	$17,090
ROADWORK		**TOTAL FOR GROUP**		**$184,825**	**$184,825**
0305-0100000A	CONSTRUCTION SURVEY WORK	LS	All	1.5% Biddable	$25,635
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	All	1.0% Biddable	$17,090
0320-0100000A	CLEARING AND GRUBBING	LS	1	$5,000	$5,000
0330-0105000K	GENERAL EXCAVATION	CUYD	9,750	$12	$117,000
0350-0105000J	SUBGRADE GEOTEXTILE	SQYD	18,100	$1	$18,100
0390-0105000K	LOOSE RIPRAP, CLASS 50	CUYD	40	$50	$2,000
DRAINAGE AND SEWERS		**TOTAL FOR GROUP**		**$52,600**	**$52,600**
0445-030012BF	12 INCH SANITARY SEWER PIPE, 10 FT DEPTH	FOOT	400	$80	
0430-0100120F	12 INCH DRAIN PIPE	FOOT	200	$50	$10,000
0430-0100180F	18 INCH DRAIN PIPE	FOOT	200	$75	$15,000
0470-0101000E	CONCRETE STORM SEWER MANHOLES	EACH	4	$3,500	$14,000
0470-0307000E	CONCRETE INLETS, TYPE CG-2	EACH	8	$1,700	$13,600
BASES		**TOTAL FOR GROUP**		**$347,000**	**$347,000**
0640-0100000M	AGGREGATE BASE	TON	17,350	$20	$347,000
WEARING SURFACES		**TOTAL FOR GROUP**		**$994,550**	**$994,550**
0745-0402000M	LEVEL 4, 1/2 INCH ACP	TON	10,760	$65	$699,400
0759-0103000F	CONCRETE CURBS, CURB AND GUTTER	FOOT	1,235	$15	$18,525
0759-0110000F	CONCRETE CURBS, STANDARD CURB	FOOT	1,200	$14	$16,800
0759-0106000F	CONCRETE CURBS, LOW PROFILE MOUNTABLE CURB	FOOT		$18	$0
0759-0112000F	CONCRETE CURBS, STANDARD CURB, MODIFIED	FOOT		$30	$0
0759-0122000J	CONCRETE ISLANDS	SQFT	24,600	$8	$196,800
0759-0128000J	CONCRETE WALKS	SQFT	12,605	$5	$63,025
0759-0147000J	PATTERNED CONCRETE SURFACING	SQFT		$9	$0
PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES		**TOTAL FOR GROUP**		**$75,000**	**$75,000**
851, 855, 860, 865, 867	PAVEMENT MARKINGS	LS	1	$75,000	$75,000
PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS		**TOTAL FOR GROUP**		**$40,000**	**$40,000**
905, 910, 920, 930, 940	Signs & Posts. Removal & Relocation.	LS	1	$30,000	$30,000
970	Street Illumination	LS	1	$10,000	$10,000
0990-0101000A	TRAFFIC SIGNAL INSTALLATION	LS	1	$275,000	$275,000
RIGHT OF WAY DEVELOPMENT AND CONTROL		**TOTAL FOR GROUP**		**$137,056**	**$137,056**
1030, 1040	Landscaping	LS	All	5.0% Biddable	$89,296
1030-0108000R	Permanent Seeding	ACRE	2	$3,000	$6,000
1040-0101000K	Biofilter Mix, Topsoil	CUYD	928	$45	$41,760
SUBTOTAL, BIDDABLE ITEMS					**$2,199,923**
CONSTRUCTION ENGINEERING		**TOTAL FOR GROUP**		**$329,988**	
	Engineering			15.0% of Subtotal	$329,988
ESTIMATED COST					**$2,529,912**
CONTINGENCIES				30% of Estimate	**$758,973**
ESTIMATED TOTAL					**$3,288,885**

APPENDIX G – EXISTING CONDITIONS SENSITIVITY ANALYSIS AT OR126/TOM MCCALL ROAD

MOVEMENT SUMMARY

Site: 101 [TM Existing PM - Sens (Site Folder: Sensitivity)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Tom McCall Rd														
3	L2	102	7.0	112	7.0	0.769	33.9	LOS D	6.0	164.9	0.85	1.23	2.10	23.6
8	T1	8	14.0	9	14.0	0.769	34.4	LOS D	6.0	164.9	0.85	1.23	2.10	23.6
18	R2	200	14.0	220	14.0	0.769	34.4	LOS D	6.0	164.9	0.85	1.23	2.10	23.1
Approach		310	11.7	341	11.7	0.769	34.2	LOS D	6.0	164.9	0.85	1.23	2.10	23.3
East: OR126														
1	L2	52	24.0	57	24.0	0.536	10.1	LOS B	3.5	94.7	0.45	0.28	0.45	32.1
6	T1	427	7.0	469	7.0	0.536	9.6	LOS A	3.5	94.7	0.45	0.28	0.45	32.6
16	R2	58	13.0	64	13.0	0.536	9.8	LOS A	3.5	94.7	0.45	0.28	0.45	31.5
Approach		537	9.3	590	9.3	0.536	9.7	LOS A	3.5	94.7	0.45	0.28	0.45	32.4
North: Tom McCall Rd														
7	L2	90	4.0	99	4.0	0.247	8.5	LOS A	1.0	26.3	0.65	0.65	0.65	31.9
4	T1	4	13.0	4	13.0	0.247	9.0	LOS A	1.0	26.3	0.65	0.65	0.65	31.7
14	R2	55	0.0	60	0.0	0.247	8.3	LOS A	1.0	26.3	0.65	0.65	0.65	31.1
Approach		149	2.8	164	2.8	0.247	8.4	LOS A	1.0	26.3	0.65	0.65	0.65	31.6
West: OR126														
5	L2	3	33.0	3	33.0	0.789	19.3	LOS C	17.9	470.1	0.79	0.84	1.28	28.5
2	T1	771	6.0	847	6.0	0.789	18.4	LOS C	17.9	470.1	0.79	0.84	1.28	29.1
12	R2	3	67.0	3	67.0	0.789	20.3	LOS C	17.9	470.1	0.79	0.84	1.28	27.4
Approach		777	6.3	854	6.3	0.789	18.4	LOS C	17.9	470.1	0.79	0.84	1.28	29.1
All Vehicles		1773	7.9	1948	7.9	0.789	17.7	LOS C	17.9	470.1	0.69	0.73	1.12	28.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

APPENDIX H – 2026 BACKGROUND CONDITIONS OPERATIONAL ANALYSIS WORKSHEETS

Intersection	
Int Delay, s/veh	34.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	146	190	340	155	239	311
Future Vol, veh/h	146	190	340	155	239	311
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	150	170	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	20	22	5	10	19	3
Mvmt Flow	166	216	386	176	272	353

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1283	386	0	0	562	0
Stage 1	386	-	-	-	-	-
Stage 2	897	-	-	-	-	-
Critical Hdwy	6.6	6.42	-	-	4.29	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.68	3.498	-	-	2.371	-
Pot Cap-1 Maneuver	167	620	-	-	930	-
Stage 1	649	-	-	-	-	-
Stage 2	370	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 118	620	-	-	930	-
Mov Cap-2 Maneuver	~ 118	-	-	-	-	-
Stage 1	649	-	-	-	-	-
Stage 2	262	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	135.2	0	4.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	118	620	930	-
HCM Lane V/C Ratio	-	-	1.406	0.348	0.292	-
HCM Control Delay (s)	-	-	293.1	13.9	10.5	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	11.4	1.6	1.2	-

Notes
~: Volume exceeds capacity $: Delay exceeds 300s   +: Computation Not Defined   *: All major volume in platoon

Intersection						
Int Delay, s/veh	2.3					

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	118	505	29	134	555
Future Vol, veh/h	5	118	505	29	134	555
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	100	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	5	0	0	6
Mvmt Flow	6	134	574	33	152	631

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1509	574	0	0	607	0
Stage 1	574	-	-	-	-	-
Stage 2	935	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	134	522	-	-	981	-
Stage 1	567	-	-	-	-	-
Stage 2	385	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	113	522	-	-	981	-
Mov Cap-2 Maneuver	113	-	-	-	-	-
Stage 1	567	-	-	-	-	-
Stage 2	325	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.3	0	1.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	113	522	981	-
HCM Lane V/C Ratio	-	-	0.05	0.257	0.155	-
HCM Control Delay (s)	-	-	38.5	14.3	9.3	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	1	0.5	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1	0	15	0	2	0	582	34	8	679	1
Future Vol, veh/h	0	1	0	15	0	2	0	582	34	8	679	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	8	0	0	0	8	15	17	8	0
Mvmt Flow	0	1	0	17	0	2	0	661	39	9	772	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1473	1491	773	1472	1472	681	773	0	0	700	0	0
Stage 1	791	791	-	681	681	-	-	-	-	-	-	-
Stage 2	682	700	-	791	791	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.18	6.5	6.2	4.1	-	-	4.27	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.18	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.18	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.572	4	3.3	2.2	-	-	2.353	-	-
Pot Cap-1 Maneuver	106	125	402	102	128	454	851	-	-	831	-	-
Stage 1	386	404	-	431	453	-	-	-	-	-	-	-
Stage 2	443	444	-	374	404	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	104	123	402	100	126	454	851	-	-	831	-	-
Mov Cap-2 Maneuver	104	123	-	100	126	-	-	-	-	-	-	-
Stage 1	386	396	-	431	453	-	-	-	-	-	-	-
Stage 2	441	444	-	366	396	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	34.5	44.6	0	0.1
HCM LOS	D	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	851	-	-	123	110	831	-	-
HCM Lane V/C Ratio	-	-	-	0.009	0.176	0.011	-	-
HCM Control Delay (s)	0	-	-	34.5	44.6	9.4	0	-
HCM Lane LOS	A	-	-	D	E	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.6	0	-	-

Intersection	
Int Delay, s/veh	1250.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	729	349	339	692	2	285	0	296	0	0	3
Future Vol, veh/h	5	729	349	339	692	2	285	0	296	0	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	90	170	-	-	-	-	125	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	6	15	5	6	50	15	0	5	0	0	0
Mvmt Flow	5	792	379	368	752	2	310	0	322	0	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	754	0	0	1171	0	0	2293	2292	792	2642	2670	753
Stage 1	-	-	-	-	-	-	802	802	-	1489	1489	-
Stage 2	-	-	-	-	-	-	1491	1490	-	1153	1181	-
Critical Hdwy	4.1	-	-	4.15	-	-	7.25	6.5	6.25	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.25	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.25	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.245	-	-	3.635	4	3.345	3.5	4	3.3
Pot Cap-1 Maneuver	865	-	-	586	-	-	~ 25	40	384	16	23	413
Stage 1	-	-	-	-	-	-	359	399	-	156	189	-
Stage 2	-	-	-	-	-	-	~ 144	189	-	242	266	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	865	-	-	586	-	-	~ 12	15	384	1	8	413
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 12	15	-	1	8	-
Stage 1	-	-	-	-	-	-	352	391	-	153	70	-
Stage 2	-	-	-	-	-	-	~ 53	70	-	38	261	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	6.9	$ 5800.6	13.8
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	12	384	865	-	-	586	-	-	413
HCM Lane V/C Ratio	25.815	0.838	0.006	-	-	0.629	-	-	0.008
HCM Control Delay (s)	$ 11775.7	47.6	9.2	0	-	21	-	-	13.8
HCM Lane LOS	F	E	A	A	-	C	-	-	B
HCM 95th %tile Q(veh)	40.1	7.8	0	-	-	4.4	-	-	0

Notes

~: Volume exceeds capacity $: Delay exceeds 300s   +: Computation Not Defined   *: All major volume in platoon

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	960	18	6	992	6	5	0	6	5	1	34
Future Vol, veh/h	45	960	18	6	992	6	5	0	6	5	1	34
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	85	85	85	85	85	85
Heavy Vehicles, %	3	5	0	0	4	0	0	0	0	0	0	15
Mvmt Flow	47	1011	19	6	1044	6	6	0	7	6	1	40

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1050	0	0	1030	0	0	2195	2177	1021	2177	2183	1047
Stage 1	-	-	-	-	-	-	1115	1115	-	1059	1059	-
Stage 2	-	-	-	-	-	-	1080	1062	-	1118	1124	-
Critical Hdwy	4.13	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.35
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.227	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.435
Pot Cap-1 Maneuver	659	-	-	682	-	-	33	47	289	34	47	261
Stage 1	-	-	-	-	-	-	255	286	-	274	304	-
Stage 2	-	-	-	-	-	-	267	303	-	254	283	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	659	-	-	682	-	-	23	38	289	28	38	261
Mov Cap-2 Maneuver	-	-	-	-	-	-	23	38	-	28	38	-
Stage 1	-	-	-	-	-	-	212	238	-	228	298	-
Stage 2	-	-	-	-	-	-	220	297	-	206	236	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.1	111.4	53.8
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	46	659	-	-	682	-	-	119
HCM Lane V/C Ratio	0.281	0.072	-	-	0.009	-	-	0.395
HCM Control Delay (s)	111.4	10.9	0	-	10.3	0	-	53.8
HCM Lane LOS	F	B	A	-	B	A	-	F
HCM 95th %tile Q(veh)	1	0.2	-	-	0	-	-	1.7

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	916	8	3	928	18	1	0	2	8	1	89
Future Vol, veh/h	49	916	8	3	928	18	1	0	2	8	1	89
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	90	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	85	85	85	85	85	85
Heavy Vehicles, %	5	5	0	0	6	13	0	0	0	0	0	4
Mvmt Flow	52	964	8	3	977	19	1	0	2	9	1	105

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	996	0	0	972	0	0	2118	2074	968	2066	2069	987
Stage 1	-	-	-	-	-	-	1072	1072	-	993	993	-
Stage 2	-	-	-	-	-	-	1046	1002	-	1073	1076	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.336
Pot Cap-1 Maneuver	683	-	-	717	-	-	37	54	311	41	55	298
Stage 1	-	-	-	-	-	-	269	299	-	298	326	-
Stage 2	-	-	-	-	-	-	278	323	-	269	298	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	683	-	-	717	-	-	20	45	311	35	45	298
Mov Cap-2 Maneuver	-	-	-	-	-	-	20	45	-	35	45	-
Stage 1	-	-	-	-	-	-	224	249	-	249	323	-
Stage 2	-	-	-	-	-	-	178	320	-	223	249	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0	76.5	56.3
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	20	311	683	-	-	717	-	-	178
HCM Lane V/C Ratio	0.059	0.008	0.076	-	-	0.004	-	-	0.648
HCM Control Delay (s)	196	16.7	10.7	0	-	10	0	-	56.3
HCM Lane LOS	F	C	B	A	-	B	A	-	F
HCM 95th %tile Q(veh)	0.2	0	0.2	-	-	0	-	-	3.7

Intersection						
Int Delay, s/veh	0.8					

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	897	38	3	938	15	8
Future Vol, veh/h	897	38	3	938	15	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	85	85
Heavy Vehicles, %	5	0	0	6	0	0
Mvmt Flow	944	40	3	987	18	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	984	0	1957	964
Stage 1	-	-	-	-	964	-
Stage 2	-	-	-	-	993	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	710	-	71	312
Stage 1	-	-	-	-	373	-
Stage 2	-	-	-	-	362	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	710	-	70	312
Mov Cap-2 Maneuver	-	-	-	-	70	-
Stage 1	-	-	-	-	373	-
Stage 2	-	-	-	-	359	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	56.6
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	96	-	-	710	-
HCM Lane V/C Ratio	0.282	-	-	0.004	-
HCM Control Delay (s)	56.6	-	-	10.1	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	1.1	-	-	0	-

Intersection						
Int Delay, s/veh	0.3					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	888	938	2	2	13
Future Vol, veh/h	6	888	938	2	2	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	85	85
Heavy Vehicles, %	20	6	6	50	50	20
Mvmt Flow	6	935	987	2	2	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	989	0	-	0	1935	988
Stage 1	-	-	-	-	988	-
Stage 2	-	-	-	-	947	-
Critical Hdwy	4.3	-	-	-	6.9	6.4
Critical Hdwy Stg 1	-	-	-	-	5.9	-
Critical Hdwy Stg 2	-	-	-	-	5.9	-
Follow-up Hdwy	2.38	-	-	-	3.95	3.48
Pot Cap-1 Maneuver	632	-	-	-	54	277
Stage 1	-	-	-	-	296	-
Stage 2	-	-	-	-	310	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	632	-	-	-	53	277
Mov Cap-2 Maneuver	-	-	-	-	53	-
Stage 1	-	-	-	-	290	-
Stage 2	-	-	-	-	310	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	27.6
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	632	-	-	-	177
HCM Lane V/C Ratio	0.01	-	-	-	0.1
HCM Control Delay (s)	10.8	0	-	-	27.6
HCM Lane LOS	B	A	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	869	865	1	6	80
Future Vol, veh/h	14	869	865	1	6	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	85	85
Heavy Vehicles, %	0	6	6	0	0	5
Mvmt Flow	15	915	911	1	7	94

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	912	0	-	0	1857	912
Stage 1	-	-	-	-	912	-
Stage 2	-	-	-	-	945	-
Critical Hdwy	4.1	-	-	-	6.4	6.25
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.345
Pot Cap-1 Maneuver	755	-	-	-	82	328
Stage 1	-	-	-	-	395	-
Stage 2	-	-	-	-	381	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	755	-	-	-	79	328
Mov Cap-2 Maneuver	-	-	-	-	79	-
Stage 1	-	-	-	-	379	-
Stage 2	-	-	-	-	381	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	26.2
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	755	-	-	-	269
HCM Lane V/C Ratio	0.02	-	-	-	0.376
HCM Control Delay (s)	9.9	0	-	-	26.2
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	1.7

Intersection						
Int Delay, s/veh	1.1					

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	3	13	2	3	70
Future Vol, veh/h	6	3	13	2	3	70
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	60	0	0	50	0	5
Mvmt Flow	7	4	15	2	4	82

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	106	16	0	0	17	0
Stage 1	16	-	-	-	-	-
Stage 2	90	-	-	-	-	-
Critical Hdwy	7	6.2	-	-	4.1	-
Critical Hdwy Stg 1	6	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-
Follow-up Hdwy	4.04	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	769	1069	-	-	1613	-
Stage 1	875	-	-	-	-	-
Stage 2	806	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	767	1069	-	-	1613	-
Mov Cap-2 Maneuver	767	-	-	-	-	-
Stage 1	875	-	-	-	-	-
Stage 2	804	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	847	1613	-
HCM Lane V/C Ratio	-	-	0.013	0.002	-
HCM Control Delay (s)	-	-	9.3	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↱			↰	Y	
Traffic Vol, veh/h	22	2	71	74	1	11
Future Vol, veh/h	22	2	71	74	1	11
Conflicting Peds, #/hr	0	0	0	0	2	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	12	50	2	12	0	11
Mvmt Flow	26	2	84	87	1	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	28	0	284	27
Stage 1	-	-	-	-	27	-
Stage 2	-	-	-	-	257	-
Critical Hdwy	-	-	4.12	-	6.4	6.31
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.218	-	3.5	3.399
Pot Cap-1 Maneuver	-	-	1585	-	710	1023
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	791	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1585	-	669	1023
Mov Cap-2 Maneuver	-	-	-	-	669	-
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	745	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.6	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	980	-	-	1585	-
HCM Lane V/C Ratio	0.014	-	-	0.053	-
HCM Control Delay (s)	8.7	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0.2	-

Intersection						
Int Delay, s/veh	0					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	1	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1635	-	-	-	1027	1090
Stage 1	-	-	-	-	1028	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1635	-	-	-	1027	1090
Mov Cap-2 Maneuver	-	-	-	-	1027	-
Stage 1	-	-	-	-	1028	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1635	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection						
Int Delay, s/veh	0					

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1	0	0	0	0	0
Stage 1	0	-	-	-	-	-
Stage 2	1	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	1027	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	1028	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1027	-	-	-	-	-
Mov Cap-2 Maneuver	1027	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	1028	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	1	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1635	-	-	-	1027	1090
Stage 1	-	-	-	-	1028	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1635	-	-	-	1027	1090
Mov Cap-2 Maneuver	-	-	-	-	1027	-
Stage 1	-	-	-	-	1028	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1635	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	36

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	167	267	190	196	315	204
Future Vol, veh/h	167	267	190	196	315	204
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	150	170	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	9	14	4	4	0	7
Mvmt Flow	190	303	216	223	358	232

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1164	216	0	0	439	0
Stage 1	216	-	-	-	-	-
Stage 2	948	-	-	-	-	-
Critical Hdwy	6.49	6.34	-	-	4.1	-
Critical Hdwy Stg 1	5.49	-	-	-	-	-
Critical Hdwy Stg 2	5.49	-	-	-	-	-
Follow-up Hdwy	3.581	3.426	-	-	2.2	-
Pot Cap-1 Maneuver	208	795	-	-	1132	-
Stage 1	804	-	-	-	-	-
Stage 2	366	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 142	795	-	-	1132	-
Mov Cap-2 Maneuver	~ 142	-	-	-	-	-
Stage 1	804	-	-	-	-	-
Stage 2	250	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	104.1	0	5.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	142	795	1132	-
HCM Lane V/C Ratio	-	-	1.336	0.382	0.316	-
HCM Control Delay (s)	-	-	250.9	12.3	9.6	-
HCM Lane LOS	-	-	F	B	A	-
HCM 95th %tile Q(veh)	-	-	11.9	1.8	1.4	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	132	459	11	149	520
Future Vol, veh/h	9	132	459	11	149	520
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	100	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	10	150	522	13	169	591

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1451	522	0	0	535	0
Stage 1	522	-	-	-	-	-
Stage 2	929	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	145	559	-	-	1043	-
Stage 1	599	-	-	-	-	-
Stage 2	388	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	122	559	-	-	1043	-
Mov Cap-2 Maneuver	122	-	-	-	-	-
Stage 1	599	-	-	-	-	-
Stage 2	325	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.3	0	2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	122	559	1043	-
HCM Lane V/C Ratio	-	-	0.084	0.268	0.162	-
HCM Control Delay (s)	-	-	37.2	13.8	9.1	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	1.1	0.6	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	2	0	14	1	2	0	574	15	2	653	1
Future Vol, veh/h	0	2	0	14	1	2	0	574	15	2	653	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	50	0	9	100	0	0	6	8	0	8	0
Mvmt Flow	0	2	0	16	1	2	0	652	17	2	742	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1409	1416	743	1409	1408	661	743	0	0	669	0	0
Stage 1	747	747	-	661	661	-	-	-	-	-	-	-
Stage 2	662	669	-	748	747	-	-	-	-	-	-	-
Critical Hdwy	7.1	7	6.2	7.19	7.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	6	-	6.19	6.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	6	-	6.19	6.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.45	3.3	3.581	4.9	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	117	109	418	112	88	466	873	-	-	931	-	-
Stage 1	408	357	-	440	338	-	-	-	-	-	-	-
Stage 2	454	390	-	394	304	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	115	109	418	110	88	466	873	-	-	931	-	-
Mov Cap-2 Maneuver	115	109	-	110	88	-	-	-	-	-	-	-
Stage 1	408	356	-	440	338	-	-	-	-	-	-	-
Stage 2	450	390	-	390	303	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	38.7	41	0	0
HCM LOS	E	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	873	-	-	109	119	931	-	-
HCM Lane V/C Ratio	-	-	-	0.021	0.162	0.002	-	-
HCM Control Delay (s)	0	-	-	38.7	41	8.9	0	-
HCM Lane LOS	A	-	-	E	E	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.6	0	-	-

Intersection	
Int Delay, s/veh	417.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	490	441	225	478	2	361	1	210	0	0	0
Future Vol, veh/h	9	490	441	225	478	2	361	1	210	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	90	170	-	-	-	-	125	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	43	5	5	9	13	0	5	0	6	0	0	0
Mvmt Flow	10	533	479	245	520	2	392	1	228	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	522	0	0	1012	0	0	1564	1565	533	1918	2043	521
Stage 1	-	-	-	-	-	-	553	553	-	1011	1011	-
Stage 2	-	-	-	-	-	-	1011	1012	-	907	1032	-
Critical Hdwy	4.53	-	-	4.19	-	-	7.15	6.5	6.26	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.587	-	-	2.281	-	-	3.545	4	3.354	3.5	4	3.3
Pot Cap-1 Maneuver	865	-	-	658	-	-	~ 89	113	539	52	57	559
Stage 1	-	-	-	-	-	-	512	518	-	291	320	-
Stage 2	-	-	-	-	-	-	~ 285	319	-	333	313	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	865	-	-	658	-	-	~ 62	69	539	21	35	559
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 62	69	-	21	35	-
Stage 1	-	-	-	-	-	-	497	502	-	282	201	-
Stage 2	-	-	-	-	-	-	~ 179	200	-	186	304	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	4.4	$ 1611	0
HCM LOS			F	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	62	539	865	-	-	658	-	-	-
HCM Lane V/C Ratio	6.346	0.423	0.011	-	-	0.372	-	-	-
HCM Control Delay (s)	$ 2536	16.5	9.2	0	-	13.7	-	-	0
HCM Lane LOS	F	C	A	A	-	B	-	-	A
HCM 95th %tile Q(veh)	44.7	2.1	0	-	-	1.7	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	650	26	17	643	10	16	0	14	6	5	24
Future Vol, veh/h	23	650	26	17	643	10	16	0	14	6	5	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	5	5	0	0	6	13	0	0	0	0	0	4
Mvmt Flow	24	684	27	18	677	11	17	0	15	6	5	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	688	0	0	711	0	0	1480	1470	698	1472	1478	683
Stage 1	-	-	-	-	-	-	746	746	-	719	719	-
Stage 2	-	-	-	-	-	-	734	724	-	753	759	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.336
Pot Cap-1 Maneuver	892	-	-	898	-	-	105	129	444	106	127	446
Stage 1	-	-	-	-	-	-	409	424	-	423	436	-
Stage 2	-	-	-	-	-	-	415	433	-	405	418	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	892	-	-	898	-	-	90	119	444	97	117	446
Mov Cap-2 Maneuver	-	-	-	-	-	-	90	119	-	97	117	-
Stage 1	-	-	-	-	-	-	391	405	-	404	422	-
Stage 2	-	-	-	-	-	-	374	419	-	374	399	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.2	37.2	24.5
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	143	892	-	-	898	-	-	221
HCM Lane V/C Ratio	0.221	0.027	-	-	0.02	-	-	0.167
HCM Control Delay (s)	37.2	9.1	0	-	9.1	0	-	24.5
HCM Lane LOS	E	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.8	0.1	-	-	0.1	-	-	0.6

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	585	52	29	620	15	3	0	1	6	0	47
Future Vol, veh/h	39	585	52	29	620	15	3	0	1	6	0	47
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	90	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	10	7	2	4	13	17	33	0	0	20	0	11
Mvmt Flow	41	616	55	31	653	16	3	0	1	6	0	49

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	669	0	0	671	0	0	1474	1457	644	1449	1476	661
Stage 1	-	-	-	-	-	-	726	726	-	723	723	-
Stage 2	-	-	-	-	-	-	748	731	-	726	753	-
Critical Hdwy	4.2	-	-	4.14	-	-	7.43	6.5	6.2	7.3	6.5	6.31
Critical Hdwy Stg 1	-	-	-	-	-	-	6.43	5.5	-	6.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.43	5.5	-	6.3	5.5	-
Follow-up Hdwy	2.29	-	-	2.236	-	-	3.797	4	3.3	3.68	4	3.399
Pot Cap-1 Maneuver	884	-	-	910	-	-	89	131	476	99	127	447
Stage 1	-	-	-	-	-	-	371	433	-	390	434	-
Stage 2	-	-	-	-	-	-	360	430	-	389	420	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	884	-	-	910	-	-	72	115	476	89	111	447
Mov Cap-2 Maneuver	-	-	-	-	-	-	72	115	-	89	111	-
Stage 1	-	-	-	-	-	-	343	401	-	361	411	-
Stage 2	-	-	-	-	-	-	303	407	-	359	389	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.4	46.1	19.3
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	72	476	884	-	-	910	-	-	307
HCM Lane V/C Ratio	0.044	0.002	0.046	-	-	0.034	-	-	0.182
HCM Control Delay (s)	57.3	12.6	9.3	0	-	9.1	0	-	19.3
HCM Lane LOS	F	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0	0.1	-	-	0.1	-	-	0.7

Intersection						
Int Delay, s/veh	0.7					

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	574	18	1	640	28	2
Future Vol, veh/h	574	18	1	640	28	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	8	0	0	13	9	0
Mvmt Flow	604	19	1	674	29	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	623	0	1290	614
Stage 1	-	-	-	-	614	-
Stage 2	-	-	-	-	676	-
Critical Hdwy	-	-	4.1	-	6.49	6.2
Critical Hdwy Stg 1	-	-	-	-	5.49	-
Critical Hdwy Stg 2	-	-	-	-	5.49	-
Follow-up Hdwy	-	-	2.2	-	3.581	3.3
Pot Cap-1 Maneuver	-	-	968	-	174	496
Stage 1	-	-	-	-	527	-
Stage 2	-	-	-	-	493	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	968	-	174	496
Mov Cap-2 Maneuver	-	-	-	-	174	-
Stage 1	-	-	-	-	527	-
Stage 2	-	-	-	-	492	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	28.9
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	182	-	-	968	-
HCM Lane V/C Ratio	0.174	-	-	0.001	-
HCM Control Delay (s)	28.9	-	-	8.7	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0	-

Intersection						
Int Delay, s/veh	0.2					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	559	629	1	0	10
Future Vol, veh/h	8	559	629	1	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	17	8	13	0	0	12
Mvmt Flow	8	588	662	1	0	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	663	0	-	0	1267	663
Stage 1	-	-	-	-	663	-
Stage 2	-	-	-	-	604	-
Critical Hdwy	4.27	-	-	-	6.4	6.32
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.353	-	-	-	3.5	3.408
Pot Cap-1 Maneuver	859	-	-	-	188	444
Stage 1	-	-	-	-	516	-
Stage 2	-	-	-	-	550	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	859	-	-	-	185	444
Mov Cap-2 Maneuver	-	-	-	-	185	-
Stage 1	-	-	-	-	509	-
Stage 2	-	-	-	-	550	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	13.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	859	-	-	-	444
HCM Lane V/C Ratio	0.01	-	-	-	0.024
HCM Control Delay (s)	9.2	0	-	-	13.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	17	549	608	2	1	9
Future Vol, veh/h	17	549	608	2	1	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	29	6	12	50	0	14
Mvmt Flow	18	578	640	2	1	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	642	0	-	0	1255	641
Stage 1	-	-	-	-	641	-
Stage 2	-	-	-	-	614	-
Critical Hdwy	4.39	-	-	-	6.4	6.34
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.461	-	-	-	3.5	3.426
Pot Cap-1 Maneuver	826	-	-	-	191	454
Stage 1	-	-	-	-	528	-
Stage 2	-	-	-	-	544	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	826	-	-	-	185	454
Mov Cap-2 Maneuver	-	-	-	-	185	-
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	544	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	14.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	826	-	-	-	396
HCM Lane V/C Ratio	0.022	-	-	-	0.027
HCM Control Delay (s)	9.5	0	-	-	14.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection						
Int Delay, s/veh	1					

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	16	3	2	8
Future Vol, veh/h	0	2	16	3	2	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	23	33	0	0
Mvmt Flow	0	2	19	4	2	9

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	34	21	0	0	23	0
Stage 1	21	-	-	-	-	-
Stage 2	13	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	984	1062	-	-	1605	-
Stage 1	1007	-	-	-	-	-
Stage 2	1015	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	983	1062	-	-	1605	-
Mov Cap-2 Maneuver	983	-	-	-	-	-
Stage 1	1007	-	-	-	-	-
Stage 2	1014	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.4	0	1.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1062	1605	-
HCM Lane V/C Ratio	-	-	0.002	0.001	-
HCM Control Delay (s)	-	-	8.4	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection						
Int Delay, s/veh	2.3					

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	29	1	3	23	1	15
Future Vol, veh/h	29	1	3	23	1	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	22	0	33	11	0	33
Mvmt Flow	34	1	4	27	1	18

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	35	0	70	35
Stage 1	-	-	-	-	35	-
Stage 2	-	-	-	-	35	-
Critical Hdwy	-	-	4.43	-	6.4	6.53
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.497	-	3.5	3.597
Pot Cap-1 Maneuver	-	-	1398	-	939	956
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	993	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1398	-	936	956
Mov Cap-2 Maneuver	-	-	-	-	936	-
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	990	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	955	-	-	1398	-
HCM Lane V/C Ratio	0.02	-	-	0.003	-
HCM Control Delay (s)	8.8	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	1	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1635	-	-	-	1027	1090
Stage 1	-	-	-	-	1028	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1635	-	-	-	1027	1090
Mov Cap-2 Maneuver	-	-	-	-	1027	-
Stage 1	-	-	-	-	1028	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1635	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1	0	0	0	0	0
Stage 1	0	-	-	-	-	-
Stage 2	1	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	1027	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	1028	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1027	-	-	-	-	-
Mov Cap-2 Maneuver	1027	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	1028	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	-	-

Intersection						
Int Delay, s/veh	0					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	1	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1635	-	-	-	1027	1090
Stage 1	-	-	-	-	1028	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1635	-	-	-	1027	1090
Mov Cap-2 Maneuver	-	-	-	-	1027	-
Stage 1	-	-	-	-	1028	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1635	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

MOVEMENT SUMMARY

Site: 101 [Powell Butte-126 Background Transight PM (Site Folder: PM Peak)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Powell Butte Hwy														
3	L2	285	15.0	310	15.0	0.544	16.3	LOS C	3.0	84.2	0.73	0.90	1.26	27.8
8	T1	1	0.0	1	0.0	0.544	15.4	LOS C	3.0	84.2	0.73	0.90	1.26	28.1
18	R2	296	5.0	322	5.0	0.511	14.1	LOS B	2.9	76.5	0.74	0.87	1.16	29.9
Approach		582	9.9	633	9.9	0.544	15.2	LOS C	3.0	84.2	0.74	0.89	1.21	28.8
East: OR126														
1	L2	339	5.0	368	5.0	1.246	137.1	LOS F	102.4	2677.5	1.00	3.80	7.62	11.5
6	T1	692	6.0	752	6.0	1.246	137.1	LOS F	102.4	2677.5	1.00	3.80	7.62	11.5
16	R2	2	50.0	2	50.0	1.246	138.8	LOS F	102.4	2677.5	1.00	3.80	7.62	11.3
Approach		1033	5.8	1123	5.8	1.246	137.1	LOS F	102.4	2677.5	1.00	3.80	7.62	11.5
North: Powell Butte Hwy														
7	L2	1	0.0	1	0.0	0.015	10.1	LOS B	0.1	1.3	0.74	0.70	0.74	32.2
4	T1	1	0.0	1	0.0	0.015	10.1	LOS B	0.1	1.3	0.74	0.70	0.74	32.1
14	R2	3	0.0	3	0.0	0.015	10.1	LOS B	0.1	1.3	0.74	0.70	0.74	31.2
Approach		5	0.0	5	0.0	0.015	10.1	LOS B	0.1	1.3	0.74	0.70	0.74	31.6
West: OR126														
5	L2	5	0.0	5	0.0	0.793	19.5	LOS C	16.4	430.2	0.84	1.16	1.77	28.8
2	T1	729	6.0	792	6.0	0.793	19.7	LOS C	16.4	430.2	0.84	1.16	1.77	28.7
12	R2	349	15.0	379	15.0	0.409	8.6	LOS A	1.8	50.5	0.50	0.41	0.50	32.1
Approach		1083	8.9	1177	8.9	0.793	16.1	LOS C	16.4	430.2	0.73	0.92	1.36	29.7
All Vehicles		2703	7.9	2938	7.9	1.246	62.1	LOS F	102.4	2677.5	0.84	2.02	3.72	18.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Powell Butte-126 Background Transight Sat (Site Folder: SAT Peak)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Powell Butte Hwy														
3	L2	361	5.0	392	5.0	0.491	11.2	LOS B	3.1	80.7	0.68	0.78	0.96	29.9
8	T1	1	0.0	1	0.0	0.491	11.0	LOS B	3.1	80.7	0.68	0.78	0.96	29.9
18	R2	210	6.0	228	6.0	0.284	7.7	LOS A	1.2	30.2	0.58	0.56	0.58	32.7
Approach		572	5.4	622	5.4	0.491	9.9	LOS A	3.1	80.7	0.64	0.70	0.82	30.8
East: OR126														
1	L2	225	9.0	245	9.0	0.959	45.0	LOS E	29.3	800.5	1.00	2.05	3.58	21.4
6	T1	478	13.0	520	13.0	0.959	45.1	LOS E	29.3	800.5	1.00	2.05	3.58	21.4
16	R2	2	0.0	2	0.0	0.959	44.6	LOS E	29.3	800.5	1.00	2.05	3.58	21.1
Approach		705	11.7	766	11.7	0.959	45.1	LOS E	29.3	800.5	1.00	2.05	3.58	21.4
North: Powell Butte Hwy														
7	L2	1	0.0	1	0.0	0.009	9.6	LOS A	0.0	0.7	0.73	0.65	0.73	32.1
4	T1	1	0.0	1	0.0	0.009	9.6	LOS A	0.0	0.7	0.73	0.65	0.73	32.0
14	R2	1	0.0	1	0.0	0.009	9.6	LOS A	0.0	0.7	0.73	0.65	0.73	31.2
Approach		3	0.0	3	0.0	0.009	9.6	LOS A	0.0	0.7	0.73	0.65	0.73	31.8
West: OR126														
5	L2	9	43.0	10	43.0	0.516	10.8	LOS B	3.0	77.2	0.55	0.44	0.55	31.7
2	T1	490	5.0	533	5.0	0.516	9.6	LOS A	3.0	77.2	0.55	0.44	0.55	32.9
12	R2	441	5.0	479	5.0	0.452	8.4	LOS A	2.4	63.3	0.51	0.40	0.51	32.4
Approach		940	5.4	1022	5.4	0.516	9.0	LOS A	3.0	77.2	0.53	0.42	0.53	32.6
All Vehicles		2220	7.4	2413	7.4	0.959	20.7	LOS C	29.3	800.5	0.71	1.01	1.58	27.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [TM Background PM (Site Folder: PM Peak)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	INPUT VOLUMES HV] %	DEMAND FLOWS [Total veh/h	DEMAND FLOWS HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	95% BACK OF QUEUE Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Tom McCall Rd														
3	L2	110	7.0	120	7.0	1.092	106.8	LOS F	22.5	615.1	1.00	2.40	5.81	13.4
8	T1	47	14.0	51	14.0	1.092	107.4	LOS F	22.5	615.1	1.00	2.40	5.81	13.4
18	R2	217	14.0	236	14.0	1.092	107.4	LOS F	22.5	615.1	1.00	2.40	5.81	13.2
Approach		374	11.9	407	11.9	1.092	107.3	LOS F	22.5	615.1	1.00	2.40	5.81	13.3
East: OR126														
1	L2	63	24.0	68	24.0	0.639	12.9	LOS B	4.7	126.0	0.58	0.41	0.58	30.8
6	T1	462	7.0	502	7.0	0.639	12.4	LOS B	4.7	126.0	0.58	0.41	0.58	31.3
16	R2	96	13.0	104	13.0	0.639	12.6	LOS B	4.7	126.0	0.58	0.41	0.58	30.4
Approach		621	9.7	675	9.7	0.639	12.4	LOS B	4.7	126.0	0.58	0.41	0.58	31.1
North: Tom McCall Rd														
7	L2	488	4.0	530	4.0	1.418	216.8	LOS F	98.2	2523.1	1.00	4.59	11.93	8.2
4	T1	66	13.0	72	13.0	1.418	217.3	LOS F	98.2	2523.1	1.00	4.59	11.93	8.2
14	R2	266	0.0	289	0.0	1.418	216.5	LOS F	98.2	2523.1	1.00	4.59	11.93	8.1
Approach		820	3.4	891	3.4	1.418	216.7	LOS F	98.2	2523.1	1.00	4.59	11.93	8.2
West: OR126														
5	L2	3	33.0	3	33.0	1.219	131.4	LOS F	74.4	1954.3	1.00	3.66	8.15	11.9
2	T1	835	6.0	908	6.0	1.219	130.2	LOS F	74.4	1954.3	1.00	3.66	8.15	12.0
12	R2	3	67.0	3	67.0	1.219	132.9	LOS F	74.4	1954.3	1.00	3.66	8.15	11.7
Approach		841	6.3	914	6.3	1.219	130.2	LOS F	74.4	1954.3	1.00	3.66	8.15	12.0
All Vehicles		2656	7.0	2887	7.0	1.418	126.2	LOS F	98.2	2523.1	0.90	3.01	7.22	12.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [TM Background Sat (Site Folder: SAT Peak)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Tom McCall Rd														
3	L2	11	33.0	12	33.0	0.223	10.4	LOS B	0.8	22.5	0.65	0.65	0.65	32.0
8	T1	55	0.0	60	0.0	0.223	8.6	LOS A	0.8	22.5	0.65	0.65	0.65	32.9
18	R2	52	17.0	57	17.0	0.223	9.5	LOS A	0.8	22.5	0.65	0.65	0.65	31.7
Approach		118	10.6	128	10.6	0.223	9.2	LOS A	0.8	22.5	0.65	0.65	0.65	32.3
East: OR126														
1	L2	44	20.0	48	20.0	0.686	13.6	LOS B	5.6	154.1	0.45	0.25	0.45	30.6
6	T1	508	13.0	552	13.0	0.686	13.4	LOS B	5.6	154.1	0.45	0.25	0.45	30.9
16	R2	147	15.0	160	15.0	0.686	13.5	LOS B	5.6	154.1	0.45	0.25	0.45	30.0
Approach		699	13.9	760	13.9	0.686	13.4	LOS B	5.6	154.1	0.45	0.25	0.45	30.7
North: Tom McCall Rd														
7	L2	150	26.0	163	26.0	0.483	15.3	LOS C	2.4	71.8	0.70	0.85	1.10	28.5
4	T1	72	33.0	78	33.0	0.483	15.7	LOS C	2.4	71.8	0.70	0.85	1.10	28.7
14	R2	14	18.0	15	18.0	0.483	14.9	LOS B	2.4	71.8	0.70	0.85	1.10	28.1
Approach		236	27.7	257	27.7	0.483	15.4	LOS C	2.4	71.8	0.70	0.85	1.10	28.5
West: OR126														
5	L2	11	0.0	12	0.0	0.591	12.4	LOS B	5.6	146.7	0.71	0.79	1.05	31.6
2	T1	471	6.0	512	6.0	0.591	12.6	LOS B	5.6	146.7	0.71	0.79	1.05	31.4
12	R2	6	0.0	7	0.0	0.591	12.4	LOS B	5.6	146.7	0.71	0.79	1.05	30.7
Approach		488	5.8	530	5.8	0.591	12.6	LOS B	5.6	146.7	0.71	0.79	1.05	31.4
All Vehicles		1541	13.2	1675	13.2	0.686	13.1	LOS B	5.6	154.1	0.59	0.54	0.76	30.7

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

APPENDIX I – 2026 BACKGROUND CONDITIONS SENSITIVITY ANALYSIS AT OR126/POWELL BUTTE HIGHWAY

MOVEMENT SUMMARY

Site: 101 [Powell Butte-126 Background Mitigation PM (Site Folder: PM Peak)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Powell Butte Hwy														
3	L2	285	15.0	310	15.0	0.517	14.8	LOS B	2.7	74.9	0.70	0.85	1.17	28.3
8	T1	1	0.0	1	0.0	0.517	14.0	LOS B	2.7	74.9	0.70	0.85	1.17	28.6
18	R2	296	5.0	322	5.0	0.486	12.9	LOS B	2.6	68.3	0.70	0.82	1.08	30.4
Approach		582	9.9	633	9.9	0.517	13.8	LOS B	2.7	74.9	0.70	0.84	1.12	29.3
East: OR126														
1	L2	339	5.0	368	5.0	0.582	11.6	LOS B	5.2	136.6	0.66	0.72	0.96	30.4
6	T1	692	6.0	752	6.0	0.582	11.7	LOS B	5.2	136.6	0.66	0.72	0.96	31.5
16	R2	2	50.0	2	50.0	0.582	13.3	LOS B	5.2	136.1	0.66	0.72	0.96	30.0
Approach		1033	5.8	1123	5.8	0.582	11.7	LOS B	5.2	136.6	0.66	0.72	0.96	31.1
North: Powell Butte Hwy														
7	L2	1	0.0	1	0.0	0.014	9.6	LOS A	0.0	1.1	0.73	0.72	0.73	32.4
4	T1	1	0.0	1	0.0	0.014	9.6	LOS A	0.0	1.1	0.73	0.72	0.73	32.3
14	R2	3	0.0	3	0.0	0.014	9.6	LOS A	0.0	1.1	0.73	0.72	0.73	31.5
Approach		5	0.0	5	0.0	0.014	9.6	LOS A	0.0	1.1	0.73	0.72	0.73	31.8
West: OR126														
5	L2	5	0.0	5	0.0	0.643	13.4	LOS B	7.0	183.2	0.72	0.87	1.20	31.2
2	T1	729	6.0	792	6.0	0.643	13.7	LOS B	7.0	183.2	0.71	0.87	1.20	30.9
12	R2	349	15.0	379	15.0	0.643	14.3	LOS B	6.6	180.3	0.69	0.86	1.20	29.6
Approach		1083	8.9	1177	8.9	0.643	13.9	LOS B	7.0	183.2	0.70	0.87	1.20	30.5
All Vehicles		2703	7.9	2938	7.9	0.643	13.0	LOS B	7.0	183.2	0.69	0.81	1.09	30.5

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

APPENDIX J – 2026 BACKGROUND CONDITIONS SENSITIVITY ANALYSIS AT OR126/TOM MCCALL ROAD

MOVEMENT SUMMARY

Site: 101 [TM Background - Mitigation PM (Site Folder: PM Peak)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Tom McCall Rd														
3	L2	110	7.0	120	7.0	0.476	21.1	LOS C	1.9	50.4	0.82	0.95	1.29	26.9
8	T1	47	14.0	51	14.0	0.476	21.7	LOS C	1.9	50.4	0.82	0.95	1.29	26.8
18	R2	217	14.0	236	14.0	0.686	33.9	LOS D	3.4	94.1	0.87	1.13	1.84	23.5
Approach		374	11.9	407	11.9	0.686	28.6	LOS D	3.4	94.1	0.85	1.06	1.61	24.8
East: OR126														
1	L2	63	24.0	68	24.0	0.651	13.4	LOS B	6.1	164.5	0.61	0.50	0.71	30.6
6	T1	462	7.0	502	7.0	0.651	12.9	LOS B	6.1	164.5	0.61	0.50	0.71	31.1
16	R2	96	13.0	104	13.0	0.651	13.1	LOS B	6.1	164.5	0.61	0.50	0.71	30.1
Approach		621	9.7	675	9.7	0.651	13.0	LOS B	6.1	164.5	0.61	0.50	0.71	30.9
North: Tom McCall Rd														
7	L2	488	4.0	530	4.0	0.882	35.9	LOS E	13.8	360.0	0.95	1.59	2.87	22.8
4	T1	66	13.0	72	13.0	0.882	36.4	LOS E	13.8	360.0	0.95	1.59	2.87	22.7
14	R2	266	0.0	289	0.0	0.373	9.2	LOS A	1.8	45.9	0.66	0.69	0.76	32.1
Approach		820	3.4	891	3.4	0.882	27.3	LOS D	13.8	360.0	0.85	1.30	2.19	25.1
West: OR126														
5	L2	3	33.0	3	33.0	0.657	19.1	LOS C	5.5	143.1	0.79	1.04	1.52	28.7
2	T1	835	6.0	908	6.0	0.657	17.8	LOS C	5.5	143.1	0.79	1.04	1.52	29.4
12	R2	3	67.0	3	67.0	0.657	20.8	LOS C	5.4	143.1	0.79	1.04	1.52	27.5
Approach		841	6.3	914	6.3	0.657	17.8	LOS C	5.5	143.1	0.79	1.04	1.52	29.4
All Vehicles		2656	7.0	2887	7.0	0.882	21.1	LOS C	13.8	360.0	0.78	0.99	1.55	27.5

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [TM Background PM - Sens (Site Folder: Sensitivity)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Tom McCall Rd														
3	L2	110	7.0	120	7.0	1.089	105.8	LOS F	22.2	609.4	1.00	2.39	5.78	13.5
8	T1	47	14.0	51	14.0	1.089	106.4	LOS F	22.2	609.4	1.00	2.39	5.78	13.5
18	R2	217	14.0	236	14.0	1.089	106.4	LOS F	22.2	609.4	1.00	2.39	5.78	13.3
Approach		374	11.9	407	11.9	1.089	106.2	LOS F	22.2	609.4	1.00	2.39	5.78	13.4
East: OR126														
1	L2	63	24.0	68	24.0	0.646	13.2	LOS B	4.8	128.6	0.58	0.41	0.59	30.7
6	T1	462	7.0	502	7.0	0.646	12.7	LOS B	4.8	128.6	0.58	0.41	0.59	31.2
16	R2	96	13.0	104	13.0	0.646	12.9	LOS B	4.8	128.6	0.58	0.41	0.59	30.2
Approach		621	9.7	675	9.7	0.646	12.8	LOS B	4.8	128.6	0.58	0.41	0.59	31.0
North: Tom McCall Rd														
7	L2	181	4.0	197	4.0	0.516	14.4	LOS B	3.3	83.2	0.76	0.89	1.16	29.5
4	T1	8	13.0	9	13.0	0.516	14.9	LOS B	3.3	83.2	0.76	0.89	1.16	29.3
14	R2	109	0.0	118	0.0	0.516	14.1	LOS B	3.3	83.2	0.76	0.89	1.16	28.8
Approach		298	2.8	324	2.8	0.516	14.3	LOS B	3.3	83.2	0.76	0.89	1.16	29.2
West: OR126														
5	L2	3	33.0	3	33.0	0.956	41.0	LOS E	39.0	1023.2	1.00	1.88	3.14	22.4
2	T1	835	6.0	908	6.0	0.956	40.0	LOS E	39.0	1023.2	1.00	1.88	3.14	22.8
12	R2	3	67.0	3	67.0	0.956	42.2	LOS E	39.0	1023.2	1.00	1.88	3.14	21.8
Approach		841	6.3	914	6.3	0.956	40.0	LOS E	39.0	1023.2	1.00	1.88	3.14	22.8
All Vehicles		2134	7.8	2320	7.8	1.089	40.1	LOS E	39.0	1023.2	0.85	1.40	2.58	22.5

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

APPENDIX K – 2026 BACKGROUND CONDITIONS SENSITIVITY ANALYSIS AT POWELL BUTTE HIGHWAY/ALFALFA MARKET ROAD

MOVEMENT SUMMARY

Site: 101 [Alfalfa-Powell Butte Background Mitigation PM (Site Folder: PM Peak)]

Alfalfa-Powell Butte Existing PM
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Alfalfa Rd														
21	L2	146	20.0	154	20.0	0.384	6.5	LOS A	2.6	21.3	0.63	0.72	0.63	51.1
23	R2	190	22.0	200	22.0	0.384	11.5	LOS B	2.6	21.3	0.63	0.72	0.63	52.0
Approach		336	21.1	354	21.1	0.384	9.3	LOS A	2.6	21.3	0.63	0.72	0.63	51.6
NorthEast: Powell Butte Hwy														
24	L2	239	19.0	252	19.0	0.485	5.4	LOS A	3.9	29.8	0.53	0.54	0.53	52.8
25	T1	311	3.0	327	3.0	0.485	5.3	LOS A	3.9	29.8	0.53	0.54	0.53	54.6
Approach		550	10.0	579	10.0	0.485	5.4	LOS A	3.9	29.8	0.53	0.54	0.53	53.8
SouthWest: Powell Butte Hwy														
31	T1	340	5.0	358	5.0	0.458	5.7	LOS A	3.6	26.3	0.57	0.61	0.57	53.4
32	R2	155	10.0	163	10.0	0.458	10.4	LOS B	3.6	26.3	0.57	0.61	0.57	53.0
Approach		495	6.6	521	6.6	0.458	7.2	LOS A	3.6	26.3	0.57	0.61	0.57	53.3
All Vehicles		1381	11.5	1454	11.5	0.485	7.0	LOS A	3.9	29.8	0.57	0.61	0.57	53.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

APPENDIX L – 2006 CENTRAL OREGON DESTINATION RESORT TRIP GENERATION STUDY

NAME	**CALCULATIONS**	**RATIO**
Recreational home (ITE Land Use code 260) Ratio	PM Peak Hour trip rate = 0.26 Saturday Peak Hour trip rate = 0.36	0.36/0.26 = 1.384
Hwy 20 Total Traffic Ratio	Average PM Peak Hour Weekday August Traffic compared to Average Saturday Peak Hour traffic on Hwy 20 in 2006 (peak month)	1009/843 = 1.1969
BBR Kittelson counts Ratio		
BBR Ferguson Counts Ratio	Compare Memorial Day weekend trip generation counts conducted 2007 with ATR data for Hwy 20 for Memorial Day weekend year 2006	263/170 = 1.547
Average of Ratios		$\frac{(1.384+1.197+1.547)}{3}$ =1.3759

FERGUSON & ASSOCIATES, INC.

Transportation Planning/Traffic Engineering
Phone 541.617.9352 • FAX 541.610.1504

CALCULATION/DESIGN RECORD

DATE ____ PROJECT# ____

PROJECT NAME ____

SUBJECT ____

BY ____ SHEET# ____ OF ____

Summarize hwy 126 counts
figure out Saturday trip generation forecast
- Figure out traffic flow on hwy 20 for count days.
- Calculate peak hour trips as percentage of ADT.
- Calculate P.H ADT
- Calculate a factor.

0.44 trips/unit.
Sat trip gen will be 1.38 higher ~~than~~ pm peak.

---

① get ATR data – all tues
wed
thurs
friday
saturday
in ~~[illegible]~~ august

Compare average for each day to ~~BBR~~ counted trip generation. RATIO 3

RATIO 1. Compare average weekday p.m peak to saturday peak hour

② get ATR data for ~~[illegible]~~ Memorial Day last year. Compare to our Memorial Day counts from this year.

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION PLANNING/TRAFFIC ENGINEERING
610 SW ALDER, SUITE 700 • PORTLAND, OR 97205 • (503) 228-5230 • FAX (503) 273-8169

September 12, 2006

Project #: 7905.0

Jim Bryant, ODOT Region 4
David Boyd, ODOT Region 4
63085 N Hwy 97, Suite 107
Bend, Oregon 97701

RE: Central Oregon Resort Trip Generation Study

Dear Jim:

In August, we conducted trip generation studies at two Central Oregon Resort sites in Deschutes County, Oregon to better understand the trip generation characteristics of resorts and to verify previous data collection efforts at the Eagle Crest Resort. This letter presents the results of daily and peak hour counts at the Black Butte Ranch and Eagle Crest Resort during the summertime peak in August 2006. This information can be used to verify the trip generation rates used in recent transportation impact studies for resorts proposed in Crook County. This information will also be useful as part of upcoming discussions regarding needed mitigation measures and potential proportionate share costs.

INTRODUCTION

Traffic engineers and local and state review agencies commonly rely upon information contained in the Institute of Traffic Engineers (ITE) *Trip Generation* manual (Reference 1) for estimating trip generation rates of proposed land uses. Although the ITE data is typically used as a standard reference for traffic impacts, it is based on national studies that may not represent specific developments or local conditions. In some instances, it is preferable to collect field data to better measure and represent the local environment. Site-specific data is most reliable when it is collected from developments that closely match the development for which it would be applied.

Within the ITE manual, the data related to resorts is fairly limited and dated. The most similar land use category, *Recreational Homes*, contains data from two studies, one in Oregon conducted in 1977 and another in New York conducted in 1985. In several prior studies for resorts in Central Oregon, data from the Recreational Home category was combined with data associated with Golf Courses and Single Family Homes to forecast the traffic impacts associated with a resort. Until 2003, local resort data was not collected due to the limited number of fully built resorts in the area.

In 2003, Crook County recognized that the resort experience is sufficient to establish a database of local trip generation characteristics. As part of the Brasada land use case, the County requested that trip generation data be collected at the Eagle Crest Resort in Deschutes County. This local data was used as the basis for conditioning Brasada's proportionate share of transportation improvement costs for the resort (as outlined in the Memorandum of Understanding between ODOT, the County, and Brasada).

As documented in the Brasada land use case, ingress and egress at Eagle Crest Resort in Deschutes County was measured in August 2003 from 3:00 – 6:00 p.m. The results of the p.m. peak hour (4:30 – 5:30 p.m.) counts are shown in Table 1. The p.m. peak hour represented the highest traffic volume on the roadway system when combining both the existing roadway volumes with the resort traffic.

Table 1 Eagle Crest Trip Generation (August Weekday PM Peak Hour)

Driveway Location	Total Trips	Inbound	Outbound
North Driveway/ Cline Falls Highway	55	20	35
Main Driveway/ Cline Falls Highway	308	161	147
North Driveway/ Oregon 126	4	3	1
Total	367	184	183

According to data provided by Eagle Crest representatives, there were 1,103 constructed units (single family homes, condominiums, and hotel rooms) in addition to golf courses, recreational amenities, and limited retail at the resort at the time of the counts. Based on the data contained in Table 1, this equates to an overall resort trip rate of 0.33 weekday summertime p.m. peak hour trips per unit (367 trips/1,103 units), with half of the trips inbound and half outbound. This local data was used in the analysis of subsequent Central Oregon resort projects to date.

2006 Central Oregon Resort Trip Generation Study

In recent land use applications, staff from the Oregon Department of Transportation (ODOT) and Crook County requested that additional data be collected at local resorts to verify the data collected in 2003. A summary of studies conducted in August 2006 is presented below.

Data Collection Efforts

Two pieces of data were collected to capture the trip generating characteristics at existing Central Oregon resorts. These include:

- 24-hour tube counts were conducted on three consecutive weekdays at each of the ingress/egress routes. The purpose of the tube counts was to measure daily resort trip rates and to compare the relative change in resort trip generation over the course of a weekday.
- Peak period turning movement counts were conducted on three consecutive days at each of the ingress/egress routes. These counts were conducted between 3:00 p.m. and 7:00 p.m. to capture the summertime weekday p.m. peak commute hour.

Traffic counts were conducted in mid- to late August to capture the peak resort trips and to coincide with the peak travel season on the adjacent roadways.

Study Sites

Selection of study sites for the trip generation study was based on three primary criteria:

1. The resorts should be located within Central Oregon and include typical resort amenities (golf, swimming, tennis, bicycle and hiking trails).
2. The resorts should include a mix of primary and secondary residences.
3. The resorts should have been in operation for at least ten years.

Based on these criteria, two resorts were identified for inclusion in a trip generation study: the Black Butte Ranch, which is located along US 20 west of Sisters, and the Eagle Crest Resort, which is located along the Cline Falls Highway immediately south of Oregon 126 and west of Redmond. These resorts contain typical recreational amenities and activities for the region, as further discussed below.

Black Butte Ranch

The Black Butte Ranch has been in operation for over 30 years. The resort includes approximately 1,800 acres, and is located eight miles west of Sisters, Oregon and immediately south of US 20. The resort contains 33 miles of roads, 18 miles of bicycle trails, two 18-hole championship golf courses, 19 tennis courts, four swimming pools, three restaurants, shops, and a general store. The resort includes 1,251 homesites of which only 34 are undeveloped. The 1,217 constructed residential units are comprised of 1,141 single-family residences and 76 condominiums.

Based on discussions with Black Butte Ranch staff, the peak resort season extends from Memorial Day through Labor Day.

Daily Resort Trip Generation

The 24-hour trip generation results of the Black Butte Ranch are shown in Illustration 1 and Table 2. The daily trip profiles were collected using the tube counts at each of the resort access locations.

Illustration 1 Black Butte Ranch Daily Traffic Volume Profile

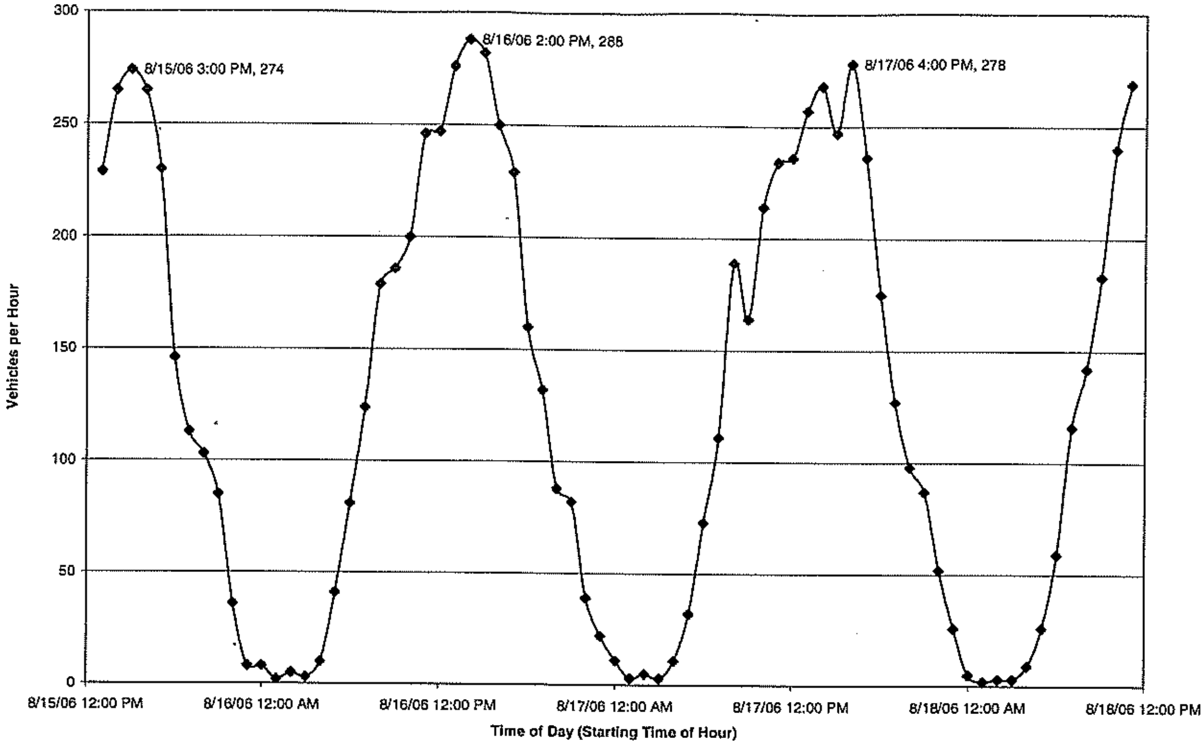


Table 2 Black Butte Ranch Daily Traffic Volumes

Weekday	24-Hour Traffic Volume (Vehicles per day)	24-Hour Trip Generation Rate (Trips/Residential Unit)
Tuesday August 15, 2006	-	-
Wednesday August 16, 2006	3,180	2.61
Thursday August 17, 2006	3,137	2.58
Average	***3,159***	***2.60***

As shown in Table 2, the average daily trip rate for Black Butte Ranch is 2.6 trips per residential unit.

Peak Hour Trip Generation

As shown in Table 3, the peak of the resort occurs between 2:00 and 3:00 p.m. although between the hours of 1:00 p.m. and 5:00 p.m. the hourly trip generation rate is fairly consistent at the resort.

Table 3 Black Butte Ranch Average Hourly Trip Rates

Time of Day	Hourly Traffic Volumes	% of Daily Trips	Hourly Trip Generation Rate
7:00 to 8:00 AM	111	3.5%	0.09
8:00 to 9:00 AM	189	6.0%	0.15
9:00 to 10:00 AM	164	5.2%	0.13
10:00 to 11:00 AM	214	6.8%	0.18
11:00 to 12:00 PM	234	7.4%	0.19
12:00 to 1:00 PM	236	7.5%	0.19
1:00 to 2:00 PM	254	8.0%	0.21
2:00 to 3:00 PM	274	8.7%	0.23
3:00 to 4:00 PM	268	8.5%	0.22
4:00 to 5:00 PM	264	8.4%	0.22
5:00 to 6:00 PM	232	7.3%	0.19
6:00 to 7:00 PM	160	5.1%	0.13
7:00 to 8:00 PM	124	3.9%	0.10
8:00 to 9:00 PM	96	3.0%	0.08

Eagle Crest Resort

Eagle Crest Resort is located on more than 1,700 acres. The resort is located approximately six miles west of Redmond, Oregon and eight miles from the Redmond Airport along both sides of the Cline Falls Highway. Construction at the Eagle Crest resort started in 1984 and is still on-going.

The Eagle Crest Resort includes a mix of single family homes, condominiums, hotel rooms, and cluster cabins. Available amenities include three 18-hole championship golf courses, an 18-hole putting course, four outdoor tennis courts, two indoor tennis courts, three outdoor and two indoor swimming pools, an art gallery, four restaurants, 11 miles of bicycle trails, and 1.5 miles of hiking trails. At the time of the data collection efforts, significant construction activity was on-going at the resort with 1,527 completed residential units and 215 units under construction. Accordingly, it is expected that traffic data from the Eagle Crest Resort will be higher than a typical resort due to the inclusion of significant construction activities.

Daily Resort Trip Generation

The 24-hour trip generation results of the Eagle Crest Resort are shown in Illustration 2 and Table 4. The daily trip profiles were collected using the tube counts at each of the resort access locations. At the Cline Falls/Falcons Crest-Coopers Hawk intersection through trips were proportioned out of the tube counts based on data from the turning movement counts collected during the evening commute period.

Illustration 2 Eagle Crest Resort Daily Traffic Volume Profile

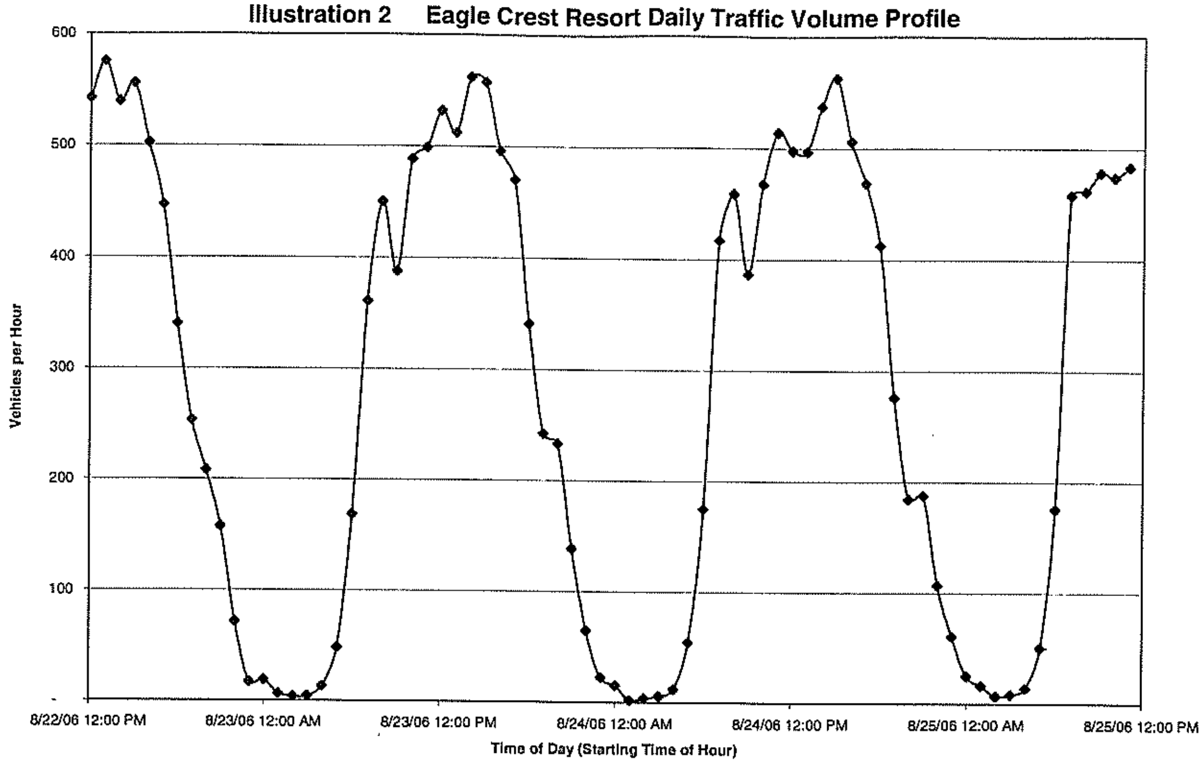


Table 4 Eagle Crest Resort Daily Traffic Volumes

Weekday	24-Hour Traffic Volume (Vehicles per day)	24-Hour Trip Generation Rate (Trips/Residential Unit)
Tuesday August 22, 2006	-	-
Wednesday August 23, 2006	6,621	4.34
Thursday August 24, 2006	6,811	4.46
Average	***6,716***	***4.40***

As shown in Table 4, the average daily trip rate for the Eagle Crest Resort range is 4.40 trips per unit.

Peak Hour Trip Generation

Table 5 shows a profile of the hourly trip rate at the Eagle Crest Resort.

Table 5 Eagle Crest Resort Hourly Trip Rates

Time of Day	Hourly Traffic Volumes	% of Daily Trips	Hourly Trip Generation Rate
7:00 to 8:00 AM	409	6.1%	0.27
8:00 to 9:00 AM	456	6.8%	0.30
9:00 to 10:00 AM	433	6.5%	0.28
10:00 to 11:00 AM	481	7.2%	0.32
11:00 to 12:00 PM	491	7.3%	0.32
12:00 to 1:00 PM	524	7.8%	0.34
1:00 to 2:00 PM	528	7.9%	0.35
2:00 to 3:00 PM	546	8.1%	0.36
3:00 to 4:00 PM	559	8.3%	0.37
4:00 to 5:00 PM	501	7.5%	0.33
5:00 to 6:00 PM	462	6.9%	0.30
6:00 to 7:00 PM	365	5.4%	0.24
7:00 to 8:00 PM	257	3.8%	0.17
8:00 to 9:00 PM	209	3.1%	0.14

As shown in Table 5, the peak of the resort occurs between the hours of 3:00 and 4:00 p.m., and the resort trip rate remains high between the hours of 10:00 a.m. and 6:00 p.m. It is expected that a portion of the traffic is attributable to the on-going construction activity.

Calculation of Weekday PM Peak Hour Rates

As discussed above, both resorts have the highest hourly trip generation prior to the highest hourly weekday traffic volume on the adjacent roadway. Table 6 provides a comparison of the peaking characteristics of the resort to the peaking of the surrounding roadway system. This analysis was performed using the turning movement counts collected at the Powell Butte Highway/Oregon 126 intersection in 2003 and 2006.

Table 6 Trip Generation Comparison

Time of Day	Black Butte Ranch	Eagle Crest Resort	Powell Butte Hwy/ Oregon 126 TEV	Intersection Plus Black Butte Volumes	Intersection Plus Eagle Crest Volumes
3:00 to 4:00 PM	266	538	910	1,176	1,448
3:30 to 3:45 PM	283	559	935	1,218	1,494
4:00 to 5:00 PM	270	510	1,054	1,324	1,564
4:30 to 5:30 PM	246	483	1,129	1,375	1,612
5:00 to 6:00 PM	232	468	1,077	1,309	1,545

TEV: Total Entering Vehicles

As shown in Table 6, although the resort traffic has an earlier peak than the adjacent street, the combination of the roadway plus the resort volumes is higher during the roadway peak hour than during the resort peak hour. Therefore, it is most appropriate to use the peak hour rate of the adjacent street. From 4:30 – 5:30 p.m., the 2006 rates are 0.20 trips per unit per hour at Black Butte Ranch and 0.32 trips per unit per hour at Eagle Crest. The 2003 data collected for Eagle Crest indicated a 0.33 trip generation rate for this same period.

Recommendations for Future Central Oregon Resorts

As discussed above, the rates collected at Eagle Crest are higher than those collected at Black Butte Ranch. This could be attributable to the significant construction activity that is still ongoing at Eagle Crest as well as other potential differences such as the percentage of permanent versus secondary residences at the two locations.

To ensure conservative analyses of future Central Oregon Resorts, we recommend the continued use of the Eagle Crest data rather than an average of the two resort experiences. These rates are:

- 4.40 daily trips per residential unit
- 0.32 summertime weekday p.m. peak hour trips per residential unit

These represent total trip generation rates and are inclusive of the golf courses, restaurants, retail and other amenities present at the resort.

As more resorts mature in Central Oregon, additional traffic studies should be collected to supplement the trip generation information.

Please contact us if you have any questions.

Sincerely,
KITTELSON & ASSOCIATES, INC.

Julia Kuhn, P.E.
Principal Engineer

Joe Bessman
Engineering Associate

Cc: Marc Butorac, Kittelson & Associates
Tom Walker, W&H Pacific
Kristin Udvari, Ball Janik
Bill Zelenka, Crook County
Dennis Pahlisch, Pahlisch Homes
John Shaw, Remington Ranch LLC

References

1. Institute of Transportation Engineers. *Trip Generation, Seventh Edition. 2003.*

APPENDIX H

CROOK COUNTY DEVELOPMENT CODE – CHAPTER 18.24: EXCLUSIVE FARM USE – 3 (POWELL BUTTE AREA)

Chapter 18.24
EXCLUSIVE FARM USE ZONE, EFU-3 (POWELL BUTTE AREA)

Sections:

18.24.005 Regulations designated.
18.24.010 Uses permitted outright.
18.24.020 Conditional uses permitted.
18.24.030 Goal 5 conditional uses subject to planning commission review.
18.24.040 Limitations of specific conditional uses.
18.24.050 Use limitation.
18.24.060 Farm dwelling.
18.24.070 Land divisions.
18.24.080 Limitations on nonfarm residential uses.
18.24.090 Dimensional standards.
18.24.100 Yards.
18.24.110 Signs.
18.24.120 Special nonfarm parcel criteria.
18.24.130 Parcel size exception.

18.24.005 Regulations designated.

In an EFU-3 zone, the following regulations shall apply. (Ord. 18 § 3.030, 2003)

18.24.010 Uses permitted outright.

In an EFU-3 zone, the following uses and accessory uses thereof are permitted outright:

(1) Farm use, as defined in ORS 215.203(2), except a use specified in CCC 18.24.020.

(2) Propagation or harvesting of a forest product.

(3) Utility facilities necessary for public service, except commercial facilities for the purpose of generating power for public use by sale and transmission towers less than 200 feet in height or siting on a colocation facility shall be by site plan review based upon the standards contained within CCC 18.124.110.

(4) A dwelling on real property used for farm use if the dwelling is:

(a) Located on the same lot or parcel as the dwelling of the farm operator; and

(b) Occupied by a relative, which means grandparents, parent, child, brother or sister of the farm operator or the farm operator's spouse, whose assistance in the management of the farm use is or will be required by the farm operator subject to CCC 18.24.060.

(5) The dwellings and other buildings customarily provided in conjunction with farm use, except a use specified in CCC 18.24.020. In order to be in conjunction with farm use, the property must:

(a) Meet the minimum lot size standard for a farm unit under CCC 18.24.070 and 18.24.090; and

(b) Be currently cultivated or in active farm use as defined in ORS 215.203. Land is not in farm use unless the day-to-day activities on the subject land are principally directed to the farm use of the land consistent with accepted farming practices.

(6) Climbing and passing lanes within the right-of-way existing as of July 1, 1987.

(7) Reconstruction or modification of public roads and highways, not including the addition of travel lanes, where no removal or displacement of buildings would occur, or no new land parcels result.

(8) Temporary public road and highway detours that will be abandoned and restored to original condition or use at such time as no longer needed.

(9) A replacement dwelling to be used in conjunction with farm use if the existing dwelling has been listed in a county inventory as historic property as defined in ORS 358.480.

(10) Creation of, restoration of or enhancement of wetlands.

(11) Minor betterment of existing public roads and highway-related facilities such as maintenance yards, weight stations and rest areas, within right-of-way existing as of July 1, 1987, and contiguous public-owned property utilized to support the operation and maintenance of public roads and highways.

(12) Excavation of sand, gravel, clay, rock or other similar materials conducted by the landowner or tenant on the landowner's or tenant's property for the primary purpose of reconstruction or maintenance of access roads and excavation or grading operations conducted in the process of farming or cemetery operations, on-site road construction or on-site construction.

(13) Transmission towers less than 200 feet in height or siting on a colocation facility shall be by site plan review based upon the standards contained within CCC 18.124.110.

(14) Land application of reclaimed water, agricultural or industrial process water or biosolids for agricultural, or silviculture production, or for new facilities or uses involving the land application of reclaimed

water, agricultural or industrial process of water, or biosolids permitted by the Department of Environmental Quality. This chapter also applies to renewal or modification of licenses, permits, and other approvals by DEQ, where a land use compatibility statement is required under Chapter 340 OAR.

(a) The planning director is to determine whether the proposed application satisfies the requirements that substance being applied to the land is for agricultural, horticultural or silvicultural production, or for irrigation in connection with another use allowed in the zone, such as a golf course or park.

(b) The applicant shall provide sufficient information to the county describing the operation, legal description, size of operation, expansion areas, if any, type of crops or land to be irrigated. This includes facilities, including buildings and equipment, aerated and nonaerated water impoundments, pumps and other irrigation equipment that are necessary to and reasonably necessary for the land application to occur on the subject site, or off the subject site if with a public right-of-way; or other land with written landowner consent and the owner of the facility complies with ORS 215.275.4. The site is required to have a determination by the Department of Environmental Quality, that the application rates and site management practices of the applied substance ensure continued agricultural, horticultural or silvicultural production and does not reduce the productivity of the tract.

(i) The DEQ determination may be provided at time of application, or if not, is required as part of the local approval for the signing of the land use compatibility (LUCS).

(c) Upon receipt of an application, the planning director shall cause to have a property owner notice and public hearing notice of the proposal as provided for under Chapter 18.172 CCC.

(i) The notice shall be mailed and published after the director has deemed the application complete.

(ii) The notice shall provide opportunity for a pubic hearing. The public hearing shall be conducted to obtain comments as to other alternative solutions and/or locations to the proposed use.

(iii) The notice shall also state that Chapter 18.160 CCC, Conditional Uses, does not apply, nor do standards from ORS 215.296.

(d) If a public hearing has been asked for, and possible alternatives have been raised at the hearing, the applicant will be required to consider such comments and explain in writing how it considered them. These comments shall be provided to the county and available to the general public prior to the final county determination on the application. Failure to provide these written comments is cause for appeal to the Crook County court and land use board of appeals.

(e) The determination by the planning director, or commission, shall contain the following conditions and limitations:

(i) DEQ provide site suitability determination, if not provided for in the initial application.

(ii) Buildings and equipment for the treatment of reclaimed water, agricultural or industrial process water of biosolids shall be prohibited. The establishment and use of facility service lines allowed under ORS 215.283(y) are also prohibited.

(iii) The use of the tract of land for land application may not be changed unless: the tract of land is included within the Prineville UGB; the tract is rezoned to other than EFU zone; the tract is used for farm use as defined in ORS 215.213.

(iv) The tract of land for land application may not be divided below minimum lot size established for farm use. (Ord. 18 § 3.030(1), 2003)

18.24.020 Conditional uses permitted.

In an EFU-3 zone, the following use and their accessory uses are permitted when authorized in accordance with the requirements of Chapter 18.160 CCC and this chapter.

(1) Manufactured dwelling for workers customarily provided in conjunction with farm use when located on the same lot or parcel as the farm operator and located within one-half mile of a dwelling not owned by applicant subject to CCC 18.24.060. In order to be in conjunction with farm use the property must:

(a) Meet the minimum lot size standards for a farm unit under CCC 18.24.070 and 18.24.090; and

(b) Be currently cultivated or in active farm use as defined in ORS 215.203. Land is not in farm use unless the day-to-day activities on the subject land are principally directed to the farm use of the land consistent with accepted farming practices.

(2) Public or private schools, including all buildings essential to the operation of a school.

(3) Churches.

(4) The breeding, boarding and training of horses for profit.

(5) Seasonal farm-worker housing as defined in ORS 197.675.

(6) Commercial activities that are in conjunction with farm use.

(7) Public and private parks, playgrounds, hunting and fishing preserves and campgrounds, and community centers owned and operated by a governmental agency or a nonprofit community organization.

(8) Golf courses.

(9) Commercial utility facilities for the purpose of generating power for public use by sale.

(10) Personal-use airports for airplanes and helicopter pads, including associated hangar, maintenance and service facilities. A "personal-use airport" as used in this chapter means an airstrip restricted, except for aircraft emergencies, to use by the owner, and, on an infrequent and occasional basis, by invited guests, and

by agricultural operations. No aircraft may be based on a personal-use airport other than those owned or controlled by the owner of the airstrip.

(11) A facility for the primary processing of forest products; provided, that such facility is found to not seriously interfere with accepted farming practices and is compatible with farm uses described in ORS 215.203(2). Such a facility may be approved for a one-year period, which is renewable. These facilities are intended to be only portable or temporary in nature. The "primary processing of a forest product," as used in this chapter, means the use of a portable chipper or stud mill or other similar methods of initial treatment of a forest product in order to enable its shipment to market. "Forest products," as used in this chapter, means timber grown upon a parcel of land or contiguous land where the primary processing facility is located.

(12) Home occupations subject to the criteria within CCC 18.160.050(7).

(13) One manufactured dwelling in conjunction with an existing dwelling as a temporary use for the term of a hardship suffered by the existing resident or a relative of the resident.

(14) Single-family residential dwelling not in conjunction with farm use subject to CCC 18.24.080.

(15) New transmission towers over 200 feet in height are subject to the criteria within CCC 18.124.110 and 18.160.050(17).

(16) Residential homes as defined in ORS 197.660, in existing dwellings.

(17) Reconstruction or modification of public roads and highways involving the removal or displacement of buildings but not resulting in the creation of new land parcels.

(18) Room and board arrangements for a maximum of five unrelated persons in existing residences.

(19) Improvements of public roads and highway-related facilities, such as maintenance yards, weight stations and rest areas, where additional property or right-of-way is required but not resulting in the creation of new land parcels.

(20) Construction of additional passing and travel lanes requiring the acquisition of right-of-way but not resulting in the creation of new land parcels.

(21) Operations conducted for the exploration of geothermal resources as defined by ORS 522.005 and oil and gas as defined by ORS 520.005.

(22) A site for the disposal of solid waste for which a permit has been granted under ORS 459.245 by the Department of Environmental Quality together with equipment, facilities or buildings necessary for its operation.

(23) Destination resorts may be allowed as a conditional use, subject to all applicable standards of the DRO zone, Chapter 18.116 CCC. (Ord. 18 § 3.030(2), 2003)

18.24.030 Goal 5 conditional uses subject to planning commission review.

See uses and procedures described in Chapter 18.144 CCC. (Ord. 18 § 3.030(3), 2003)

18.24.040 Limitations of specific conditional uses.

In addition to the general standards and conditions that may be attached to the approval of a conditional use as provided by Chapter 18.160 CCC, the following limitations shall apply to a conditional use permitted in CCC 18.24.020. A use allowed under CCC 18.24.020 may be approved where the county finds that the use will not:

(1) Force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; or

(2) Significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use.

An applicant for a use allowed under CCC 18.24.020 may demonstrate that the standards under subsections (1) and (2) of this section will be satisfied through the imposition of conditions. Any conditions so imposed shall be clear and objective. (Ord. 18 § 3.030(4), 2003)

18.24.050 Use limitation.

No conflicting use shall be allowed in any Goal 5 mining impact area designated in the comprehensive plan without first obtaining approval under the standards and criteria set forth in this section.

(1) Review and Approval Criteria. An application for review shall be required for a conflicting use in an impact area prior to commencement of construction of the use. The approving authority shall review and approve the application provided:

(a) The proposed use is consistent with the ESEE analysis in the comprehensive plan; and

(b) The proposed use will not prevent the adjacent aggregate operator from meeting the standards and conditions set forth in Chapter 18.144 CCC.

(2) Waiver of Remonstrance. The applicant for site plan approval of a conflicting use in the Goal 5 mining impact area shall sign and record in the Crook County book of records, a statement declaring that the applicant and his or her successors will not now or in the future complain about the allowed surface mining activities on the adjacent surface mining site.

(3) Development Agreement and Performance Bond. As a condition of approval, the applicant may be required to execute a development agreement with the county and performance bond or other form of

security approved by the county to ensure full and faithful performance of any required improvements. Any bond shall be for 100 percent of the dollar amount of the improvement cost. (Ord. 18 § 3.030(5), 2003)

18.24.060 Farm dwelling.

The resource dwellings identified in CCC 18.24.010 and 18.24.020 may be approved for a commercial farm or ranch based upon the following:

(1) The size of the entire resource unit including all contiguous land in the same ownership; the types of farm crops and acreage for each type; operational requirements for the particular farm activity; the number of other permanent or temporary dwellings on or serving the entire farm or ranch unit (permanent or seasonal); the extent and nature of the work to be performed by occupants of the proposed dwelling.

(2) The dwelling will be situated on a parcel currently employed for farm use as defined in ORS 215.203. Land is not in farm use unless the day-to-day activities on the subject land are principally directed to the farm use of the land consistent with accepted farming practices.

(3) Notice of the proposed administrative approval of a dwelling in conjunction with farm use as provided for in CCC 18.24.010 shall be mailed to adjoining property owners. Within 10 days following notice to adjoining property owners, the application shall be considered for approval by the planning director. An objection by an adjoining property owner shall result in a review of the application by the planning commission as a conditional use permit.

(4) Farm Hand or Secondary Resource Dwelling. When determining whether a proposed farm hand or secondary dwelling may be provided, the farm owner or operator shall demonstrate that an occupant of the proposed dwelling is required to assist in the commercial farm or ranch operation.

(5) Commercial Resource Determination. When determining whether an existing or proposed parcel is a commercial farm or ranch unit, the standards of this section shall be met and the following factors shall be considered:

(a) Soil productivity; drainage; terrain, special soil and land conditions; availability of water; type and acreage of crops grown; crop yields; number and type of livestock; processing and marketing practices; and the amount of land needed to constitute a commercial agricultural enterprise as defined in CCC 18.08.030. (Ord. 18 § 3.030(6), 2003)

18.24.070 Land divisions.

Divisions of land shall be only allowed when consistent with the requirements of CCC 18.24.090, the land development ordinance and the following:

(1) Farm Parcels. Division of land for farm parcels shall be appropriate for the continuation of the existing commercial agricultural operations in the area, but shall not be less than the minimum parcel size established in ORS 215.780 and CCC 18.24.090.

(2) Nonfarm Parcels. Division of land for nonfarm parcels shall comply with the following requirements including CCC 18.24.080:

(a) Nonfarm dwellings have been approved for the proposed parcels pursuant to CCC 18.24.020(14);

(b) The parcels for the nonfarm dwellings are divided from a lot or parcel that was lawfully created prior to July 1, 2001;

(c) Two nonfarm parcels may be created as long as the remainder of the original parcel meets or exceeds the minimum standards established by CCC 18.24.090;

(d) For those existing parcels that are below the minimum size established by CCC 18.24.090, but are greater than 40 acres, compliance with CCC 18.24.120 is required.

(3) Minimum lot size shall be 320 acres within the elk wintering range as designated in the county's comprehensive plan, Goal 5 element. Minimum lot size for critical deer winter range shall be 40 acres, as designated by the county's comprehensive plan, Goal 5 element. Minimum lot size for general winter range shall be 40 acres.

(4) A land division for a nonfarm dwelling may be approved only if the nonfarm dwelling has first been approved under CCC 18.24.020. (Ord. 18 § 3.030(7), 2003)

18.24.080 Limitations on nonfarm residential uses.

The county may approve a nonfarm residential dwelling upon a finding that the proposed dwelling:

(1) Accepted Farm or Forest Practices. Will not seriously interfere with or force a significant change in accepted farm or forest practices, as defined in ORS 215.203(2)(C), on nearby or adjacent lands devoted to farm or forest use, including but not limited to increasing the costs of accepted farm or forest practices on nearby lands devoted to farm use.

(2) Land Use Pattern. The dwelling will not materially alter the stability of the overall land use pattern of the area. In determining whether a proposed nonfarm dwelling will alter the stability of the land use pattern in the area, the county shall consider the cumulative impacts of new nonfarm dwellings on other lots or parcels in the area. If the application involves the creation of a new parcel for the nonfarm dwelling, the county shall consider whether creation of the parcel will lead to the creation of other nonfarm parcels, to the detriment of agriculture in the nonfarm parcels, to the detriment of agriculture in the area. To address this standard, the

applicant shall:

(a) Identify a study area representative of the surrounding agricultural area including adjacent and nearby land zoned for exclusive farm use. Nearby lands zoned for rural residential or other urban or nonresource uses shall not be included;

(b) Identify the types and sizes of all farm and nonfarm uses and the stability of the existing land use pattern within the identified study area; and

(c) Explain how the introduction of the proposed nonfarm dwelling will not materially alter the stability of the land use pattern in the identified study area.

The applicant's evidence shall be sufficient to enable the county to make findings on these as well as other applicable requirements.

(3) Unsuitability for Agriculture.

(a) The dwelling is situated upon a lot or parcel, or a portion of a lot or parcel, that is generally unsuitable land for the production of farm crops and livestock, considering the terrain, adverse soil or land conditions, drainage and flooding, vegetation, location and size of the tract. A lot or parcel shall not be considered unsuitable solely because of size or location if it can reasonably be put to farm use in conjunction with other land. A lot or parcel is not "generally unsuitable" simply because it is too small to be farmed profitably by itself. If a lot or parcel can be sold, leased, rented or otherwise managed as a part of a commercial farm or ranch, it is not "generally unsuitable." A lot or parcel is presumed to be suitable if it is composed predominantly of Class I – VI soils. Just because a lot or parcel is unsuitable for one farm use does not mean it is not suitable for another farm use.

(b) If the parcel is under forest assessment, the dwelling shall be situated upon generally unsuitable land for the production of merchantable tree species recognized by the forest practices rules, considering the terrain, adverse soil or land conditions, drainage and flooding, vegetation, location and size of the parcel. If a lot or parcel is under forest assessment, the area is not "generally unsuitable" simply because it is too small to be managed for forest production profitably by itself. If a lot or parcel is under forest assessment, it is presumed suitable if it is composed predominantly of soils capable of producing 20 cubic feet of wood fiber per acre per year. If a lot or parcel is under forest assessment, to be found compatible and not seriously interfere with forest uses or surrounding land it must not force a significant change in forest practices or significantly increase the cost of those practices on the surrounding land.

(4) Other Conditions Deemed Necessary. Complies with such other conditions as the county considers necessary.

(5) Creation of Lot. The dwelling will be sited on a lot or parcel created before January 1, 1983, or on a lot or parcel created after January 1, 1993, pursuant to CCC 18.24.070(4) or 18.20.070(4).

(6) Disqualification from Farm Deferral. Prior to final approval of a building permit for a use governed by this section, the entire lot or parcel upon which the nonfarm dwelling will be located must be disqualified for farm assessments pursuant to ORS 215.236. (Ord. 18 § 3.030(8), 2003)

18.24.090 Dimensional standards.

In an EFU-3 zone, the following dimensional standards shall apply:

(1) The lot or parcel of 160 acres or more shall be considered a farm unit.

(2) A lot or parcel of less than 160 acres, but equal to or greater than the minimum lot size established by ORS 215.780 may be approved as a farm unit pursuant to the administrative review procedures under Chapter 18.172 CCC, when found to comply with the following.

(a) Any proposed parcel below 160 acres shall have usable water right and water availability of adequate quantity to ensure the operation of irrigated farming techniques of commercial levels;

(b) The proposed parcels must be of a size and shape that is efficient for the use of farm machinery including: cultivating, harvesting, and spraying equipment. The proposed division shall not materially alter the stability of the overall land use pattern of the area.

(3) The minimum lot area for all nonfarm uses listed under CCC 18.24.020 (except dwellings) shall not be larger than the minimum necessary for the use.

(4) A land division for a nonfarm dwelling may be approved only if the nonfarm dwelling has first been approved under CCC 18.24.040. (Ord. 18 § 3.030(9), 2003)

18.24.100 Yards.

In an EFU-3 zone, the minimum yard setback requirements shall be as follows:

(1) In the exclusive farm use zone (EFU) the minimum setback of a residence or habitable structure from a property line shall be 100 feet.

(a) If a parcel in the EFU zone is nonbuildable as a result of the habitable structure setback requirements, the commission may consider a conditional use application from the landowner to adjust the setback requirements to make the parcel buildable.

(2) The minimum setbacks for all accessory structures are:

(a) Front yard setbacks shall be 20 feet for property fronting on a local minor collector or marginal access street, 30 feet from a property line fronting on a major collector ROW, and 80 feet from an arterial ROW unless other provisions for combining accesses are provided and approved by the county.

(b) Each side yard shall be a minimum of 20 feet, except on corner lots or parcels where the side yard on the street side shall be a minimum of 30 feet.

(c) Rear yards shall be a minimum of 25 feet. (Ord. 18 § 3.030(10), 2003)

18.24.110 Signs.

Whereas signs have been a problem in this community, and it is not the intent of this title to restrict creativity, no specific standards shall be imposed. However, the commission may order the removal of any sign when petitioned to do so by a majority of property owners of lands immediately adjacent to the property on which a sign is located, or a majority of property owners living within one-quarter mile of said sign. (Ord. 18 § 3.030(11), 2003)

18.24.120 Special nonfarm parcel criteria.

Standards for land divisions for parcels equal to or below minimum size as established by ORS 215.780.

(1) A parcel may be divided into two nonfarm parcels each to contain one dwelling not in conjunction with farm use upon a finding that:

(a) Nonfarm dwellings have been approved pursuant to CCC 18.24.080;

(b) Parcel was lawfully created prior to July 1, 2001;

(c) The original parcel size is larger than 40 acres;

(d) Parcels are not capable of producing at least 20 cubic feet per acre of wood fiber;

(e) There are not any established water rights for irrigation;

(f) Composed of 90 percent Class VII and VIII soils;

(g) Composed of 90 percent Class VI through VIII soils and complying with subsection (2) of this section.

(2) Parcels identified in subsection (1)(g) of this section must demonstrate that the sites are not capable of producing adequate herbaceous forage for grazing livestock. These findings shall include the following:

(a) Whether the parcel is in open range or a livestock district;

(b) Whether the parcel is currently fenced;

(c) Whether livestock water is available;

(d) Size of the parcel;

(e) AUM's availability determined by on-site study by qualified independent party such as a Crook County soil and water conservation representative or USDA Natural Resources Conservation Representative, or in the private sector, a range consultant or professional in rangeland management certified by the Society of Range Management. The study shall use accepted practices in the identification of herbaceous forage, using best management practices in determining the parcel's capability for herbaceous forage production. The study shall include the total pounds for current year dry matter herbaceous forage on site.

(f) Each site shall have not more than 13,000 pounds current year dry matter herbaceous forage on site.

(3) Parcels approved pursuant to subsections (1) and (2) of this section shall have the following conditions imposed to minimize any impacts to adjacent farming practices.

(a) A conservation plan to be submitted prior to the issuance of building permit for a nonfarm dwelling addressing animal management, weed control, juniper/fire issues, and erosion control measure if located on sloped land.

(b) Nonfarm parcels are to be removed from farm deferral, if on program, prior to final plat approval and recording.

(c) Letter of nonremonstrance agreeing not to object to accepted farm practices in the area. (Ord. 18 § 3.030(12), 2003)

18.24.130 Parcel size exception.

Whereas land sections in the area of the county subject to this section are commonly affected by survey adjustments, requirements relative to farm or lot sizes shall be considered as standard metes and bounds land section divisions, i.e., 160, 80, 40, 20, etc. Therefore, lot sizes may be reduced by five percent due to a survey adjustment or other manmade barriers such as roads or major canals over which the applicant has had no control. (Ord. 18 § 3.030(13), 2003)

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APPENDIX I

LEVEL OF SERVICE CONCEPTS

LEVEL OF SERVICE CONCEPTS

HIGHWAY CAPACITY MANUAL 2000

The Transportation Research Board's *Highway Capacity Manual* (HCM) provides transportation practitioners and researchers with a consistent system of techniques for the evaluation of the quality of service on highway and street facilities. The HCM does not set policies regarding a desirable or appropriate quality of service for various facilities, systems, regions, or circumstances. The HCM is intended to provide a systematic and consistent basis for assessing the capacity and level of service for elements of the surface transportation system and also for systems that involve a series or combination of individual facilities. The manual is the primary source document embodying research findings on capacity and quality of service and presenting methods for analyzing the operations of streets and highways and pedestrian and bicycle facilities.

The following discussions in this appendix are from the HCM 2000.

LEVEL OF SERVICE

Level of service (LOS) is a concept that uses qualitative measures that characterize operational conditions within a traffic stream and their *perception* by motorists and passengers. The following factors are considered when determining the level of service: speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience.

Signalized Intersections - Level of service for signalized intersections is defined in terms of control delay, which is a measure of driver discomfort, frustration, fuel consumption, and increased travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions: in the absence of traffic control, geometric delay, any incidents, and any other vehicles. Specifically, LOS criteria for traffic signals are stated in terms of the average control delay per vehicle, typically for a 15-minute analysis period. Delay is a complex measure and depends on a number of variables, including the quality of progression, the cycle length, the green ratio, and the v/c ratio for the lane group. Table A illustrates the operational characteristics as well as correlates control delay to LOS for a signalized intersection.

The critical v/c ratio is an approximate indicator of the overall sufficiency of an intersection. The critical v/c ratio depends on the conflicting critical lane flow rates and the signal phasing.

The average back of queue is another performance measure that is used to analyze a signalized intersection. The back of queue is the number of vehicles that are queued depending on arrival patterns of vehicles and vehicles that do not clear the intersection during a given green phase.

TABLE A - LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

LEVEL OF SERVICE	OPERATIONAL CHARACTERISTICS
A	Operations with low control delay, up to 10 s/veh. This LOS occurs when progression is extremely favorable and most vehicles arrive during the green phase. Many vehicles do not stop at all. Short cycle lengths may tend to contribute to low delay values.
B	Operations with control delay greater than 10 and up to 20 s/veh. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.
C	Operations with control delay greater 20 and up to 35 s/veh. These higher delays may result from only fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. Cycle failure occurs when a given green phase does not serve queued vehicles, and overflows occur. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.
D	Operations with control delay greater than 35 and up tp 55 s/veh. At LOS D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, and high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	Operations with control delay greater than 55 and up to 80 s/veh. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are noticeable.
F	Operations with control delay in excess of 80 s/veh. This level, considered unacceptable to most drivers, often occurs with over saturation, that is, when arrival flow rates exceed the capacity of lane groups. It may also occur at high v/c ratios with many individual cycle failures. Poor progression and long cycle lengths may also contribute significantly to high delay levels.

Delays in the range of LOS F (unacceptable) can occur while the v/c ratio is below 1.0. Very high delays can occur at such v/c ratios when some combination of the following conditions exists: the cycle length is long, the lane group in question is disadvantaged by the signal timing (has a long red time), and the signal progression for the subject movements is poor. The reverse is also possible (for a limited duration): a saturated lane group (i.e., v/c ratio greater than 1.0) may have low delays if the cycle length is short or the signal progression is favorable, or both.

Thus, the designation LOS F does not automatically imply that intersection, approach, or lane group is over capacity, nor does an LOS better than E automatically imply that unused capacity is available.

Two-Way Stop Control Intersections - LOS for a two-way stop control (TWSC) intersection is determined by the computed or measured control delay and is defined for each minor movement. LOS is not defined for the intersection as a whole. The LOS criteria for TWSC intersections are somewhat different from the criteria for signalized intersections primarily because different transportation facilities create different driver perceptions. The expectation is that a signalized intersection is designed to carry higher traffic volumes and experience greater delay than an unsignalized intersection. Table B shows the correlation between control delay and LOS at a two-way stop control intersection.

All-Way Stop Control Intersections - The criteria for all-way stop control (AWSC) intersections have different threshold values than do those for signalized intersections primarily because drivers expect different levels of performance from distinct types of transportation facilities. The expectation is that a signalized intersection is designed to carry higher traffic volumes than an AWSC intersection. Thus a higher level of control delay is acceptable at a signalized intersection for the same LOS. Table B shows the correlation between control delay and LOS at an all-way stop control intersection.

TABLE B - LEVEL OF SERVICE CRITERIA FOR TWSC AND AWSC INTERSECTIONS

LEVEL OF SERVICE	AVERAGE CONTROL DELAY (SECONDS/VEHICLE)
A	0-10
B	>10-15
C	>15-25
D	>25-35
E	>35-50
F	>50

Roundabout Control Intersections - Roundabouts have been used successfully in cities throughout the world and are being used increasingly in the United States.

Although extensive literature on roundabout modeling has evolved worldwide, there is limited experience with their application in North America. Accordingly, a comprehensive methodology for all situations is not offered by the HCM. The procedure described by the HCM makes the best use of the limited field data collected at roundabouts in the United States to modify the operating parameters of established performance analysis techniques. Whereas it should be used with care until additional research is conducted, the procedure does provide the U.S. practitioner with basic guidelines concerning the capacity of a roundabout.

APPENDIX M – TRIP GENERATION RATE COMPARISON

Appendix A

ITE Tri Generation Rates

Name	Land Use	ITE Code	Units	Size	Daily Rate	Weekday Daily	AM Peak Rate	Weekday AM Peak Hour			PM Peak Rate	Weekday PM Peak Hour			SAT Peak Rate	Satruday Peak Hour		
								Total	In	Out		Total	In	Out		Total	In	Out
Workforce Housing	Single Family Detached Housing	210	welling Un	100	9.43	943	0.70	70	18	52	0.94	94	59	35	0.41	41	21	20
Park Models/Cabins/ Overnight Rentals	Resort Hotel	330	Rooms	250	4.1	1,025	0.32	80	58	22	0.41	103	44	59	0.39	98	47	51
Vacation Villas	Recreation Homes	260	welling Un	400	3.55	1,420	0.22	88	48	40	0.29	116	53	63	0.39	156	75	81
Workforce Housing Internalization (25%)								18	5	13	-	24	15	9	-	10	5	5
Net Proposed Trips						**3,388**		**220**	**119**	**101**		**289**	**141**	**148**		**285**	**138**	**147**

Destination Resort Trip Rate

Land Use	ITE Code	Units	Size	Daily Rate	Daily	SAT Peak Rate	Saturday Peak Hour			PM Peak Rate	Weekday PM Peak Hour			Weekday AM Peak Hour		
							Total	In	Out		Total	In	Out	Total	In	Out
Workforce Housing	210	Dwelling Units	100	9.43	943	0.41	41	21	20	0.94	94	59	35	70	18	52
Destination Resort	N/A	welling Un	650	4.4	2860	0.44	286	143	143	0.32	208	104	104	156	78	78
Workforce Housing Internalization (25%)					236		10	5	5		24	15	9	18	5	13
Net Proposed Trips					**3567**		**317**	**159**	**158**		**278**	**148**	**130**	**208**	**91**	**117**

APPENDIX N – 2026 BUILD-OUT CONDITIONS OPERATIONAL ANALYSIS WORKSHEETS

MOVEMENT SUMMARY

Site: 101 [Powell Butte-126 Build Transight PM (Site Folder: PM Peak)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Powell Butte Hwy														
3	L2	285	15.0	310	15.0	0.574	18.1	LOS C	3.2	90.5	0.75	0.94	1.36	27.3
8	T1	1	0.0	1	0.0	0.574	17.2	LOS C	3.2	90.5	0.75	0.94	1.36	27.5
18	R2	338	5.0	367	5.0	0.616	18.3	LOS C	4.1	107.4	0.79	0.99	1.44	28.3
Approach		624	9.6	678	9.6	0.616	18.2	LOS C	4.1	107.4	0.77	0.97	1.40	27.8
East: OR126														
1	L2	360	5.0	391	5.0	1.304	161.0	LOS F	118.0	3085.9	1.00	4.16	8.45	10.3
6	T1	719	6.0	782	6.0	1.304	161.0	LOS F	118.0	3085.9	1.00	4.16	8.45	10.3
16	R2	2	50.0	2	50.0	1.304	162.7	LOS F	118.0	3085.9	1.00	4.16	8.45	10.1
Approach		1081	5.7	1175	5.7	1.304	161.0	LOS F	118.0	3085.9	1.00	4.16	8.45	10.3
North: Powell Butte Hwy														
7	L2	1	0.0	1	0.0	0.015	10.1	LOS B	0.1	1.3	0.74	0.70	0.74	32.2
4	T1	1	0.0	1	0.0	0.015	10.1	LOS B	0.1	1.3	0.74	0.70	0.74	32.1
14	R2	3	0.0	3	0.0	0.015	10.1	LOS B	0.1	1.3	0.74	0.70	0.74	31.2
Approach		5	0.0	5	0.0	0.015	10.1	LOS B	0.1	1.3	0.74	0.70	0.74	31.6
West: OR126														
5	L2	5	0.0	5	0.0	0.852	24.2	LOS C	22.4	585.4	0.93	1.41	2.21	27.2
2	T1	780	6.0	848	6.0	0.852	24.4	LOS C	22.4	585.4	0.93	1.41	2.21	27.0
12	R2	349	15.0	379	15.0	0.411	8.6	LOS A	1.8	50.7	0.51	0.42	0.51	32.1
Approach		1134	8.7	1233	8.7	0.852	19.6	LOS C	22.4	585.4	0.80	1.10	1.68	28.4
All Vehicles		2844	7.8	3091	7.8	1.304	73.0	LOS F	118.0	3085.9	0.87	2.24	4.19	16.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Powell Butte-126 Build Transight Sat (Site Folder: SAT Peak)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Powell Butte Hwy														
3	L2	361	5.0	392	5.0	0.515	12.2	LOS B	3.4	87.3	0.70	0.83	1.06	29.5
8	T1	1	0.0	1	0.0	0.515	11.9	LOS B	3.4	87.3	0.70	0.83	1.06	29.6
18	R2	249	6.0	271	6.0	0.353	9.0	LOS A	1.5	40.3	0.62	0.64	0.66	32.1
Approach		611	5.4	664	5.4	0.515	10.9	LOS B	3.4	87.3	0.67	0.75	0.90	30.5
East: OR126														
1	L2	262	9.0	285	9.0	1.073	75.1	LOS F	50.6	1382.1	1.00	2.75	5.26	16.7
6	T1	525	13.0	571	13.0	1.073	75.3	LOS F	50.6	1382.1	1.00	2.75	5.26	16.7
16	R2	2	0.0	2	0.0	1.073	74.7	LOS F	50.6	1382.1	1.00	2.75	5.26	16.5
Approach		789	11.6	858	11.6	1.073	75.2	LOS F	50.6	1382.1	1.00	2.75	5.26	16.7
North: Powell Butte Hwy														
7	L2	1	0.0	1	0.0	0.009	10.0	LOS A	0.0	0.8	0.74	0.66	0.74	32.0
4	T1	1	0.0	1	0.0	0.009	10.0	LOS A	0.0	0.8	0.74	0.66	0.74	31.9
14	R2	1	0.0	1	0.0	0.009	10.0	LOS A	0.0	0.8	0.74	0.66	0.74	31.0
Approach		3	0.0	3	0.0	0.009	10.0	LOS A	0.0	0.8	0.74	0.66	0.74	31.6
West: OR126														
5	L2	9	43.0	10	43.0	0.576	12.2	LOS B	4.9	128.0	0.61	0.59	0.79	31.1
2	T1	536	5.0	583	5.0	0.576	11.0	LOS B	4.9	128.0	0.61	0.59	0.79	32.2
12	R2	441	5.0	479	5.0	0.463	8.7	LOS A	2.5	64.4	0.54	0.44	0.54	32.2
Approach		986	5.3	1072	5.3	0.576	10.0	LOS A	4.9	128.0	0.58	0.52	0.68	32.2
All Vehicles		2389	7.4	2597	7.4	1.073	31.8	LOS D	50.6	1382.1	0.74	1.32	2.25	24.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [TM Build PM (Site Folder: PM Peak)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Tom McCall Rd														
3	L2	114	7.0	124	7.0	1.097	108.3	LOS F	23.1	632.2	1.00	2.43	5.90	13.3
8	T1	47	14.0	51	14.0	1.097	108.9	LOS F	23.1	632.2	1.00	2.43	5.90	13.3
18	R2	217	14.0	236	14.0	1.097	108.9	LOS F	23.1	632.2	1.00	2.43	5.90	13.1
Approach		378	11.9	411	11.9	1.097	108.7	LOS F	23.1	632.2	1.00	2.43	5.90	13.2
East: OR126														
1	L2	63	24.0	68	24.0	0.710	15.3	LOS C	9.4	251.9	0.66	0.59	0.86	29.9
6	T1	495	7.0	538	7.0	0.710	14.8	LOS B	9.4	251.9	0.66	0.59	0.86	30.3
16	R2	129	13.0	140	13.0	0.710	15.0	LOS B	9.4	251.9	0.66	0.59	0.86	29.4
Approach		687	9.7	747	9.7	0.710	14.9	LOS B	9.4	251.9	0.66	0.59	0.86	30.1
North: Tom McCall Rd														
7	L2	505	4.0	549	4.0	1.511	257.7	LOS F	111.5	2863.2	1.00	4.96	13.30	7.1
4	T1	66	13.0	72	13.0	1.511	258.2	LOS F	111.5	2863.2	1.00	4.96	13.30	7.1
14	R2	266	0.0	289	0.0	1.511	257.4	LOS F	111.5	2863.2	1.00	4.96	13.30	7.1
Approach		837	3.4	910	3.4	1.511	257.6	LOS F	111.5	2863.2	1.00	4.96	13.30	7.1
West: OR126														
5	L2	3	33.0	3	33.0	1.231	135.8	LOS F	78.3	2057.7	1.00	3.74	8.31	11.6
2	T1	852	6.0	926	6.0	1.231	134.6	LOS F	78.3	2057.7	1.00	3.74	8.31	11.7
12	R2	5	67.0	5	67.0	1.231	137.3	LOS F	78.3	2057.7	1.00	3.74	8.31	11.4
Approach		860	6.4	935	6.4	1.231	134.6	LOS F	78.3	2057.7	1.00	3.74	8.31	11.7
All Vehicles		2762	7.1	3002	7.1	1.511	138.6	LOS F	111.5	2863.2	0.91	3.15	7.64	11.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [TM Build Sat (Site Folder: SAT Peak)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance															
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Tom McCall Rd														
3	L2	15	33.0	16	33.0	0.242	11.2	LOS B	0.9	24.3	0.66	0.66	0.66	31.6
8	T1	55	0.0	60	0.0	0.242	9.2	LOS A	0.9	24.3	0.66	0.66	0.66	32.5
18	R2	52	17.0	57	17.0	0.242	10.2	LOS B	0.9	24.3	0.66	0.66	0.66	31.3
Approach		122	11.3	133	11.3	0.242	9.9	LOS A	0.9	24.3	0.66	0.66	0.66	31.9
East: OR126														
1	L2	44	20.0	48	20.0	0.745	16.1	LOS C	6.7	185.7	0.52	0.29	0.52	29.6
6	T1	508	13.0	552	13.0	0.745	15.9	LOS C	6.7	185.7	0.52	0.29	0.52	29.9
16	R2	203	15.0	221	15.0	0.745	15.9	LOS C	6.7	185.7	0.52	0.29	0.52	29.0
Approach		755	13.9	821	13.9	0.745	15.9	LOS C	6.7	185.7	0.52	0.29	0.52	29.6
North: Tom McCall Rd														
7	L2	180	26.0	196	26.0	0.547	17.4	LOS C	3.0	92.0	0.72	0.92	1.27	27.7
4	T1	72	33.0	78	33.0	0.547	17.8	LOS C	3.0	92.0	0.72	0.92	1.27	27.9
14	R2	14	18.0	15	18.0	0.547	17.0	LOS C	3.0	92.0	0.72	0.92	1.27	27.3
Approach		266	27.5	289	27.5	0.547	17.5	LOS C	3.0	92.0	0.72	0.92	1.27	27.7
West: OR126														
5	L2	11	0.0	12	0.0	0.617	13.5	LOS B	6.2	161.1	0.74	0.89	1.19	31.1
2	T1	471	6.0	512	6.0	0.617	13.8	LOS B	6.2	161.1	0.74	0.89	1.19	30.9
12	R2	6	0.0	7	0.0	0.617	13.5	LOS B	6.2	161.1	0.74	0.89	1.19	30.2
Approach		488	5.8	530	5.8	0.617	13.7	LOS B	6.2	161.1	0.74	0.89	1.19	30.9
All Vehicles		1631	13.5	1773	13.5	0.745	15.1	LOS C	6.7	185.7	0.63	0.60	0.86	29.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Intersection	
Int Delay, s/veh	41.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	146	190	382	155	239	332
Future Vol, veh/h	146	190	382	155	239	332
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	150	170	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	20	22	5	10	19	3
Mvmt Flow	166	216	434	176	272	377

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1355	434	0	0	610	0
Stage 1	434	-	-	-	-	-
Stage 2	921	-	-	-	-	-
Critical Hdwy	6.6	6.42	-	-	4.29	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.68	3.498	-	-	2.371	-
Pot Cap-1 Maneuver	~ 151	582	-	-	891	-
Stage 1	617	-	-	-	-	-
Stage 2	360	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 105	582	-	-	891	-
Mov Cap-2 Maneuver	~ 105	-	-	-	-	-
Stage 1	617	-	-	-	-	-
Stage 2	250	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	170.6	0	4.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	105	582	891	-
HCM Lane V/C Ratio	-	-	1.58	0.371	0.305	-
HCM Control Delay (s)	-	-	$ 373.3	14.8	10.8	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	12.6	1.7	1.3	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s   +: Computation Not Defined   *: All major volume in platoon

Intersection	
Int Delay, s/veh	2.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	118	547	29	134	576
Future Vol, veh/h	5	118	547	29	134	576
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	100	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	6	134	622	33	152	655

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1581	622	0	0	655	0
Stage 1	622	-	-	-	-	-
Stage 2	959	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	121	490	-	-	942	-
Stage 1	539	-	-	-	-	-
Stage 2	375	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	102	490	-	-	942	-
Mov Cap-2 Maneuver	102	-	-	-	-	-
Stage 1	539	-	-	-	-	-
Stage 2	315	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.2	0	1.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	102	490	942	-
HCM Lane V/C Ratio	-	-	0.056	0.274	0.162	-
HCM Control Delay (s)	-	-	42.4	15.1	9.6	-
HCM Lane LOS	-	-	E	C	A	-
HCM 95th %tile Q(veh)	-	-	0.2	1.1	0.6	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1	0	15	0	2	0	624	34	8	700	1
Future Vol, veh/h	0	1	0	15	0	2	0	624	34	8	700	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	8	0	0	0	8	15	17	8	0
Mvmt Flow	0	1	0	17	0	2	0	709	39	9	795	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1544	1562	796	1543	1543	729	796	0	0	748	0	0
Stage 1	814	814	-	729	729	-	-	-	-	-	-	-
Stage 2	730	748	-	814	814	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.18	6.5	6.2	4.1	-	-	4.27	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.18	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.18	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.572	4	3.3	2.2	-	-	2.353	-	-
Pot Cap-1 Maneuver	95	113	390	91	116	426	835	-	-	797	-	-
Stage 1	375	394	-	405	431	-	-	-	-	-	-	-
Stage 2	417	423	-	363	394	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	93	111	390	89	114	426	835	-	-	797	-	-
Mov Cap-2 Maneuver	93	111	-	89	114	-	-	-	-	-	-	-
Stage 1	375	386	-	405	431	-	-	-	-	-	-	-
Stage 2	415	423	-	355	386	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	37.8	50.5	0	0.1
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	835	-	-	111	98	797	-	-
HCM Lane V/C Ratio	-	-	-	0.01	0.197	0.011	-	-
HCM Control Delay (s)	0	-	-	37.8	50.5	9.6	0	-
HCM Lane LOS	A	-	-	E	F	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.7	0	-	-

Intersection	
Int Delay, s/veh	1807.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	780	349	360	719	2	285	0	338	0	0	3
Future Vol, veh/h	5	780	349	360	719	2	285	0	338	0	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	90	170	-	-	-	-	125	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	6	15	5	6	50	15	0	5	0	0	0
Mvmt Flow	5	848	379	391	782	2	310	0	367	0	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	784	0	0	1227	0	0	2425	2424	848	2796	2802	783
Stage 1	-	-	-	-	-	-	858	858	-	1565	1565	-
Stage 2	-	-	-	-	-	-	1567	1566	-	1231	1237	-
Critical Hdwy	4.1	-	-	4.15	-	-	7.25	6.5	6.25	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.25	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.25	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.245	-	-	3.635	4	3.345	3.5	4	3.3
Pot Cap-1 Maneuver	843	-	-	558	-	-	~ 20	33	~ 357	12	19	397
Stage 1	-	-	-	-	-	-	334	376	-	141	174	-
Stage 2	-	-	-	-	-	-	~ 130	174	-	219	250	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	843	-	-	558	-	-	~ 8	10	~ 357	-	6	397
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 8	10	-	-	6	-
Stage 1	-	-	-	-	-	-	327	368	-	138	52	-
Stage 2	-	-	-	-	-	-	~ 39	52	-	-	245	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	8.4	$ 8228.6	
HCM LOS			F	-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	8	357	843	-	-	558	-	-	-
HCM Lane V/C Ratio	38.723	1.029	0.006	-	-	0.701	-	-	-
HCM Control Delay (s)	$ 17880.3	90.3	9.3	0	-	25.2	-	-	-
HCM Lane LOS	F	F	A	A	-	D	-	-	-
HCM 95th %tile Q(veh)	40.6	12.4	0	-	-	5.6	-	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	1053	18	6	1040	6	5	0	6	5	1	34
Future Vol, veh/h	45	1053	18	6	1040	6	5	0	6	5	1	34
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	3	5	0	0	4	0	0	0	0	0	0	15
Mvmt Flow	47	1108	19	6	1095	6	5	0	6	5	1	36

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1101	0	0	1127	0	0	2341	2325	1118	2325	2331	1098
Stage 1	-	-	-	-	-	-	1212	1212	-	1110	1110	-
Stage 2	-	-	-	-	-	-	1129	1113	-	1215	1221	-
Critical Hdwy	4.13	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.35
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.227	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.435
Pot Cap-1 Maneuver	630	-	-	627	-	-	26	38	254	26	37	244
Stage 1	-	-	-	-	-	-	225	257	-	256	287	-
Stage 2	-	-	-	-	-	-	250	286	-	224	255	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	630	-	-	627	-	-	18	30	254	21	29	244
Mov Cap-2 Maneuver	-	-	-	-	-	-	18	30	-	21	29	-
Stage 1	-	-	-	-	-	-	180	205	-	205	280	-
Stage 2	-	-	-	-	-	-	207	279	-	175	204	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.1	146.7	68
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	36	630	-	-	627	-	-	97
HCM Lane V/C Ratio	0.322	0.075	-	-	0.01	-	-	0.434
HCM Control Delay (s)	146.7	11.2	0	-	10.8	0	-	68
HCM Lane LOS	F	B	A	-	B	A	-	F
HCM 95th %tile Q(veh)	1.1	0.2	-	-	0	-	-	1.8

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	1009	8	3	976	18	1	0	2	8	1	89
Future Vol, veh/h	49	1009	8	3	976	18	1	0	2	8	1	89
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	90	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	5	5	0	0	6	13	0	0	0	0	0	4
Mvmt Flow	52	1062	8	3	1027	19	1	0	2	8	1	94

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1046	0	0	1070	0	0	2260	2222	1066	2214	2217	1037
Stage 1	-	-	-	-	-	-	1170	1170	-	1043	1043	-
Stage 2	-	-	-	-	-	-	1090	1052	-	1171	1174	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.336
Pot Cap-1 Maneuver	654	-	-	659	-	-	29	44	273	32	44	278
Stage 1	-	-	-	-	-	-	237	269	-	280	309	-
Stage 2	-	-	-	-	-	-	263	306	-	237	268	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	654	-	-	659	-	-	16	35	273	27	35	278
Mov Cap-2 Maneuver	-	-	-	-	-	-	16	35	-	27	35	-
Stage 1	-	-	-	-	-	-	190	216	-	225	306	-
Stage 2	-	-	-	-	-	-	172	303	-	189	215	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0	94	68
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	16	273	654	-	-	659	-	-	152
HCM Lane V/C Ratio	0.066	0.008	0.079	-	-	0.005	-	-	0.679
HCM Control Delay (s)	245.3	18.3	11	0	-	10.5	0	-	68
HCM Lane LOS	F	C	B	A	-	B	A	-	F
HCM 95th %tile Q(veh)	0.2	0	0.3	-	-	0	-	-	3.9

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	990	38	3	986	15	8
Future Vol, veh/h	990	38	3	986	15	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	0	0	6	0	0
Mvmt Flow	1042	40	3	1038	16	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1082	0	2106	1062
Stage 1	-	-	-	-	1062	-
Stage 2	-	-	-	-	1044	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	652	-	57	274
Stage 1	-	-	-	-	335	-
Stage 2	-	-	-	-	342	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	652	-	56	274
Mov Cap-2 Maneuver	-	-	-	-	56	-
Stage 1	-	-	-	-	335	-
Stage 2	-	-	-	-	338	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	71.9
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	77	-	-	652	-
HCM Lane V/C Ratio	0.314	-	-	0.005	-
HCM Control Delay (s)	71.9	-	-	10.5	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	1.2	-	-	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	981	986	2	2	13
Future Vol, veh/h	6	981	986	2	2	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	20	6	6	50	50	20
Mvmt Flow	6	1033	1038	2	2	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1040	0	-	0	2084	1039
Stage 1	-	-	-	-	1039	-
Stage 2	-	-	-	-	1045	-
Critical Hdwy	4.3	-	-	-	6.9	6.4
Critical Hdwy Stg 1	-	-	-	-	5.9	-
Critical Hdwy Stg 2	-	-	-	-	5.9	-
Follow-up Hdwy	2.38	-	-	-	3.95	3.48
Pot Cap-1 Maneuver	604	-	-	-	43	259
Stage 1	-	-	-	-	278	-
Stage 2	-	-	-	-	276	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	604	-	-	-	42	259
Mov Cap-2 Maneuver	-	-	-	-	42	-
Stage 1	-	-	-	-	272	-
Stage 2	-	-	-	-	276	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	31.2
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	604	-	-	-	153
HCM Lane V/C Ratio	0.01	-	-	-	0.103
HCM Control Delay (s)	11	0	-	-	31.2
HCM Lane LOS	B	A	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Intersection						
Int Delay, s/veh	12					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	107	869	865	38	25	128
Future Vol, veh/h	107	869	865	38	25	128
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	6	6	0	0	5
Mvmt Flow	113	915	911	40	26	135

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	951	0	-	0	2072	931
Stage 1	-	-	-	-	931	-
Stage 2	-	-	-	-	1141	-
Critical Hdwy	4.1	-	-	-	6.4	6.25
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.345
Pot Cap-1 Maneuver	730	-	-	-	60	319
Stage 1	-	-	-	-	387	-
Stage 2	-	-	-	-	307	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	730	-	-	-	41	319
Mov Cap-2 Maneuver	-	-	-	-	41	-
Stage 1	-	-	-	-	265	-
Stage 2	-	-	-	-	307	-

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	151.8
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	730	-	-	-	151
HCM Lane V/C Ratio	0.154	-	-	-	1.067
HCM Control Delay (s)	10.8	0	-	-	151.8
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0.5	-	-	-	8.4

Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	43	5	64	81	26	100
Future Vol, veh/h	43	5	64	81	26	100
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	60	0	0	50	0	5
Mvmt Flow	51	6	75	95	31	118

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	303	123	0	0	170	0
Stage 1	123	-	-	-	-	-
Stage 2	180	-	-	-	-	-
Critical Hdwy	7	6.2	-	-	4.1	-
Critical Hdwy Stg 1	6	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-
Follow-up Hdwy	4.04	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	583	933	-	-	1420	-
Stage 1	777	-	-	-	-	-
Stage 2	729	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	570	933	-	-	1420	-
Mov Cap-2 Maneuver	570	-	-	-	-	-
Stage 1	777	-	-	-	-	-
Stage 2	712	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.7	0	1.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	594	1420	-
HCM Lane V/C Ratio	-	-	0.095	0.022	-
HCM Control Delay (s)	-	-	11.7	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	4.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	22	2	108	74	1	30
Future Vol, veh/h	22	2	108	74	1	30
Conflicting Peds, #/hr	0	0	0	0	2	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	12	50	2	12	0	11
Mvmt Flow	26	2	127	87	1	35

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	28	0	370	27
Stage 1	-	-	-	-	27	-
Stage 2	-	-	-	-	343	-
Critical Hdwy	-	-	4.12	-	6.4	6.31
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.218	-	3.5	3.399
Pot Cap-1 Maneuver	-	-	1585	-	634	1023
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	723	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1585	-	579	1023
Mov Cap-2 Maneuver	-	-	-	-	579	-
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	661	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.4	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	998	-	-	1585	-
HCM Lane V/C Ratio	0.037	-	-	0.08	-
HCM Control Delay (s)	8.7	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.3	-

Intersection						
Int Delay, s/veh	5.4					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	66	36	9	9	15	30
Future Vol, veh/h	66	36	9	9	15	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	78	42	11	11	18	35

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	22	0	-	0	215	17
Stage 1	-	-	-	-	17	-
Stage 2	-	-	-	-	198	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1607	-	-	-	778	1068
Stage 1	-	-	-	-	1011	-
Stage 2	-	-	-	-	840	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1607	-	-	-	739	1068
Mov Cap-2 Maneuver	-	-	-	-	739	-
Stage 1	-	-	-	-	960	-
Stage 2	-	-	-	-	840	-

Approach	EB	WB	SB
HCM Control Delay, s	4.8	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1607	-	-	-	930
HCM Lane V/C Ratio	0.048	-	-	-	0.057
HCM Control Delay (s)	7.4	0	-	-	9.1
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.2

Intersection	
Int Delay, s/veh	3.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	17	2	51	14	23
Future Vol, veh/h	30	17	2	51	14	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	35	20	2	60	16	27

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	91	32	0	0	62	0
Stage 1	32	-	-	-	-	-
Stage 2	59	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	914	1048	-	-	1554	-
Stage 1	996	-	-	-	-	-
Stage 2	969	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	905	1048	-	-	1554	-
Mov Cap-2 Maneuver	905	-	-	-	-	-
Stage 1	996	-	-	-	-	-
Stage 2	959	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	2.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	952	1554	-
HCM Lane V/C Ratio	-	-	0.058	0.011	-
HCM Control Delay (s)	-	-	9	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	51	0	0	0	0	18
Future Vol, veh/h	51	0	0	0	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	60	0	0	0	0	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	121	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	120	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1635	-	-	-	879	1090
Stage 1	-	-	-	-	1028	-
Stage 2	-	-	-	-	910	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1635	-	-	-	846	1090
Mov Cap-2 Maneuver	-	-	-	-	846	-
Stage 1	-	-	-	-	990	-
Stage 2	-	-	-	-	910	-

Approach	EB	WB	SB
HCM Control Delay, s	7.3	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1635	-	-	-	1090
HCM Lane V/C Ratio	0.037	-	-	-	0.019
HCM Control Delay (s)	7.3	0	-	-	8.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	44.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	167	267	229	196	315	241
Future Vol, veh/h	167	267	229	196	315	241
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	150	170	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	9	14	4	4	0	7
Mvmt Flow	190	303	260	223	358	274

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1250	260	0	0	483	0
Stage 1	260	-	-	-	-	-
Stage 2	990	-	-	-	-	-
Critical Hdwy	6.49	6.34	-	-	4.1	-
Critical Hdwy Stg 1	5.49	-	-	-	-	-
Critical Hdwy Stg 2	5.49	-	-	-	-	-
Follow-up Hdwy	3.581	3.426	-	-	2.2	-
Pot Cap-1 Maneuver	~ 185	750	-	-	1090	-
Stage 1	767	-	-	-	-	-
Stage 2	349	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 124	750	-	-	1090	-
Mov Cap-2 Maneuver	~ 124	-	-	-	-	-
Stage 1	767	-	-	-	-	-
Stage 2	235	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	138.2	0	5.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	124	750	1090	-
HCM Lane V/C Ratio	-	-	1.53	0.405	0.328	-
HCM Control Delay (s)	-	-	$ 338.4	13	9.9	-
HCM Lane LOS	-	-	F	B	A	-
HCM 95th %tile Q(veh)	-	-	13.5	2	1.4	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	132	498	11	149	557
Future Vol, veh/h	9	132	498	11	149	557
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	100	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	10	150	566	13	169	633

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1537	566	0	0	579	0
Stage 1	566	-	-	-	-	-
Stage 2	971	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	129	528	-	-	1005	-
Stage 1	572	-	-	-	-	-
Stage 2	370	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	107	528	-	-	1005	-
Mov Cap-2 Maneuver	107	-	-	-	-	-
Stage 1	572	-	-	-	-	-
Stage 2	308	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.3	0	2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	107	528	1005	-
HCM Lane V/C Ratio	-	-	0.096	0.284	0.168	-
HCM Control Delay (s)	-	-	42.2	14.5	9.3	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	1.2	0.6	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	2	0	14	1	2	0	613	15	2	690	1
Future Vol, veh/h	0	2	0	14	1	2	0	613	15	2	690	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	50	0	9	100	0	0	6	8	0	8	0
Mvmt Flow	0	2	0	16	1	2	0	697	17	2	784	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1496	1503	785	1496	1495	706	785	0	0	714	0	0
Stage 1	789	789	-	706	706	-	-	-	-	-	-	-
Stage 2	707	714	-	790	789	-	-	-	-	-	-	-
Critical Hdwy	7.1	7	6.2	7.19	7.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	6	-	6.19	6.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	6	-	6.19	6.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.45	3.3	3.581	4.9	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	102	96	396	97	76	439	843	-	-	895	-	-
Stage 1	387	340	-	416	320	-	-	-	-	-	-	-
Stage 2	429	370	-	373	288	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	100	96	396	95	76	439	843	-	-	895	-	-
Mov Cap-2 Maneuver	100	96	-	95	76	-	-	-	-	-	-	-
Stage 1	387	339	-	416	320	-	-	-	-	-	-	-
Stage 2	425	370	-	369	287	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	43.4	47.8	0	0
HCM LOS	E	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	843	-	-	96	103	895	-	-
HCM Lane V/C Ratio	-	-	-	0.024	0.188	0.003	-	-
HCM Control Delay (s)	0	-	-	43.4	47.8	9	0	-
HCM Lane LOS	A	-	-	E	E	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.7	0	-	-

Intersection	
Int Delay, s/veh	603.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	536	441	262	525	2	361	1	249	0	0	0
Future Vol, veh/h	9	536	441	262	525	2	361	1	249	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	90	170	-	-	-	-	125	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	43	5	5	9	13	0	5	0	6	0	0	0
Mvmt Flow	10	583	479	285	571	2	392	1	271	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	573	0	0	1062	0	0	1745	1746	583	2121	2224	572
Stage 1	-	-	-	-	-	-	603	603	-	1142	1142	-
Stage 2	-	-	-	-	-	-	1142	1143	-	979	1082	-
Critical Hdwy	4.53	-	-	4.19	-	-	7.15	6.5	6.26	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.587	-	-	2.281	-	-	3.545	4	3.354	3.5	4	3.3
Pot Cap-1 Maneuver	826	-	-	630	-	-	~ 66	87	505	37	44	523
Stage 1	-	-	-	-	-	-	481	492	-	246	278	-
Stage 2	-	-	-	-	-	-	~ 240	277	-	304	296	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	826	-	-	630	-	-	~ 42	46	505	11	23	523
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 42	46	-	11	23	-
Stage 1	-	-	-	-	-	-	465	475	-	238	152	-
Stage 2	-	-	-	-	-	-	~ 131	152	-	136	286	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	5.1	$ 2348.6	0
HCM LOS			F	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	42	505	826	-	-	630	-	-	-
HCM Lane V/C Ratio	9.369	0.536	0.012	-	-	0.452	-	-	-
HCM Control Delay (s)	$ 3950.2	20.1	9.4	0	-	15.3	-	-	0
HCM Lane LOS	F	C	A	A	-	C	-	-	A
HCM 95th %tile Q(veh)	47.1	3.1	0	-	-	2.3	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	735	26	17	727	10	16	0	14	6	5	24
Future Vol, veh/h	23	735	26	17	727	10	16	0	14	6	5	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	5	5	0	0	6	13	0	0	0	0	0	4
Mvmt Flow	24	774	27	18	765	11	17	0	15	6	5	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	776	0	0	801	0	0	1658	1648	788	1650	1656	771
Stage 1	-	-	-	-	-	-	836	836	-	807	807	-
Stage 2	-	-	-	-	-	-	822	812	-	843	849	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.336
Pot Cap-1 Maneuver	827	-	-	831	-	-	79	100	394	80	99	397
Stage 1	-	-	-	-	-	-	364	385	-	378	397	-
Stage 2	-	-	-	-	-	-	371	395	-	361	380	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	827	-	-	831	-	-	66	91	394	72	90	397
Mov Cap-2 Maneuver	-	-	-	-	-	-	66	91	-	72	90	-
Stage 1	-	-	-	-	-	-	345	365	-	358	382	-
Stage 2	-	-	-	-	-	-	330	380	-	329	360	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.2	51.6	30.8
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	108	827	-	-	831	-	-	176
HCM Lane V/C Ratio	0.292	0.029	-	-	0.022	-	-	0.209
HCM Control Delay (s)	51.6	9.5	0	-	9.4	0	-	30.8
HCM Lane LOS	F	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	1.1	0.1	-	-	0.1	-	-	0.8

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	670	52	29	704	15	3	0	1	6	0	47
Future Vol, veh/h	39	670	52	29	704	15	3	0	1	6	0	47
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	90	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	10	7	2	4	13	17	33	0	0	20	0	11
Mvmt Flow	41	705	55	31	741	16	3	0	1	6	0	49

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	757	0	0	760	0	0	1651	1634	733	1626	1653	749
Stage 1	-	-	-	-	-	-	815	815	-	811	811	-
Stage 2	-	-	-	-	-	-	836	819	-	815	842	-
Critical Hdwy	4.2	-	-	4.14	-	-	7.43	6.5	6.2	7.3	6.5	6.31
Critical Hdwy Stg 1	-	-	-	-	-	-	6.43	5.5	-	6.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.43	5.5	-	6.3	5.5	-
Follow-up Hdwy	2.29	-	-	2.236	-	-	3.797	4	3.3	3.68	4	3.399
Pot Cap-1 Maneuver	819	-	-	843	-	-	66	102	424	74	99	398
Stage 1	-	-	-	-	-	-	330	394	-	348	396	-
Stage 2	-	-	-	-	-	-	321	392	-	346	383	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	819	-	-	843	-	-	51	87	424	65	85	398
Mov Cap-2 Maneuver	-	-	-	-	-	-	51	87	-	65	85	-
Stage 1	-	-	-	-	-	-	301	359	-	317	371	-
Stage 2	-	-	-	-	-	-	263	367	-	315	349	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.4	63.5	23.3
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	51	424	819	-	-	843	-	-	252
HCM Lane V/C Ratio	0.062	0.002	0.05	-	-	0.036	-	-	0.221
HCM Control Delay (s)	80.2	13.5	9.6	0	-	9.4	0	-	23.3
HCM Lane LOS	F	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.2	0	0.2	-	-	0.1	-	-	0.8

Intersection						
Int Delay, s/veh	0.8					
Movement	**EBT**	**EBR**	**WBL**	**WBT**	**NBL**	**NBR**
Lane Configurations						
Traffic Vol, veh/h	659	18	1	724	28	2
Future Vol, veh/h	659	18	1	724	28	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	8	0	0	13	9	0
Mvmt Flow	694	19	1	762	29	2
Major/Minor	**Major1**		**Major2**		**Minor1**	
Conflicting Flow All	0	0	713	0	1468	704
Stage 1	-	-	-	-	704	-
Stage 2	-	-	-	-	764	-
Critical Hdwy	-	-	4.1	-	6.49	6.2
Critical Hdwy Stg 1	-	-	-	-	5.49	-
Critical Hdwy Stg 2	-	-	-	-	5.49	-
Follow-up Hdwy	-	-	2.2	-	3.581	3.3
Pot Cap-1 Maneuver	-	-	896	-	136	440
Stage 1	-	-	-	-	478	-
Stage 2	-	-	-	-	448	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	896	-	136	440
Mov Cap-2 Maneuver	-	-	-	-	136	-
Stage 1	-	-	-	-	478	-
Stage 2	-	-	-	-	447	-
Approach	**EB**		**WB**		**NB**	
HCM Control Delay, s	0		0		37.2	
HCM LOS					E	

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	143	-	-	896	-
HCM Lane V/C Ratio	0.221	-	-	0.001	-
HCM Control Delay (s)	37.2	-	-	9	0
HCM Lane LOS	E	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	644	713	1	0	10
Future Vol, veh/h	8	644	713	1	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	17	8	13	0	0	12
Mvmt Flow	8	678	751	1	0	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	752	0	-	0	1446	752
Stage 1	-	-	-	-	752	-
Stage 2	-	-	-	-	694	-
Critical Hdwy	4.27	-	-	-	6.4	6.32
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.353	-	-	-	3.5	3.408
Pot Cap-1 Maneuver	794	-	-	-	147	394
Stage 1	-	-	-	-	469	-
Stage 2	-	-	-	-	499	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	794	-	-	-	145	394
Mov Cap-2 Maneuver	-	-	-	-	145	-
Stage 1	-	-	-	-	461	-
Stage 2	-	-	-	-	499	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	14.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	794	-	-	-	394
HCM Lane V/C Ratio	0.011	-	-	-	0.027
HCM Control Delay (s)	9.6	0	-	-	14.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	102	549	608	36	36	93
Future Vol, veh/h	102	549	608	36	36	93
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	29	6	12	50	0	14
Mvmt Flow	107	578	640	38	38	98

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	678	0	-	0	1451	659
Stage 1	-	-	-	-	659	-
Stage 2	-	-	-	-	792	-
Critical Hdwy	4.39	-	-	-	6.4	6.34
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.461	-	-	-	3.5	3.426
Pot Cap-1 Maneuver	800	-	-	-	145	443
Stage 1	-	-	-	-	518	-
Stage 2	-	-	-	-	450	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	800	-	-	-	116	443
Mov Cap-2 Maneuver	-	-	-	-	116	-
Stage 1	-	-	-	-	416	-
Stage 2	-	-	-	-	450	-

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	35.8
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	800	-	-	-	248
HCM Lane V/C Ratio	0.134	-	-	-	0.548
HCM Control Delay (s)	10.2	0	-	-	35.8
HCM Lane LOS	B	A	-	-	E
HCM 95th %tile Q(veh)	0.5	-	-	-	3

Intersection	
Int Delay, s/veh	3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	63	4	71	67	21	64
Future Vol, veh/h	63	4	71	67	21	64
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	23	33	0	0
Mvmt Flow	74	5	84	79	25	75

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	249	124	0	0	163	0
Stage 1	124	-	-	-	-	-
Stage 2	125	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	744	932	-	-	1428	-
Stage 1	907	-	-	-	-	-
Stage 2	906	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	731	932	-	-	1428	-
Mov Cap-2 Maneuver	731	-	-	-	-	-
Stage 1	907	-	-	-	-	-
Stage 2	890	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.4	0	1.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	741	1428	-
HCM Lane V/C Ratio	-	-	0.106	0.017	-
HCM Control Delay (s)	-	-	10.4	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-

Intersection	
Int Delay, s/veh	5.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	29	1	38	23	1	49
Future Vol, veh/h	29	1	38	23	1	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	22	0	33	11	0	33
Mvmt Flow	34	1	45	27	1	58

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	35	0	152	35
Stage 1	-	-	-	-	35	-
Stage 2	-	-	-	-	117	-
Critical Hdwy	-	-	4.43	-	6.4	6.53
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.497	-	3.5	3.597
Pot Cap-1 Maneuver	-	-	1398	-	844	956
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	913	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1398	-	816	956
Mov Cap-2 Maneuver	-	-	-	-	816	-
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	883	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.8	9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	953	-	-	1398	-
HCM Lane V/C Ratio	0.062	-	-	0.032	-
HCM Control Delay (s)	9	-	-	7.7	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	72	11	10	5	5	55
Future Vol, veh/h	72	11	10	5	5	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	85	13	12	6	6	65

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	18	0	-	0	198	15
Stage 1	-	-	-	-	15	-
Stage 2	-	-	-	-	183	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1612	-	-	-	795	1070
Stage 1	-	-	-	-	1013	-
Stage 2	-	-	-	-	853	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1612	-	-	-	753	1070
Mov Cap-2 Maneuver	-	-	-	-	753	-
Stage 1	-	-	-	-	959	-
Stage 2	-	-	-	-	853	-

Approach	EB	WB	SB
HCM Control Delay, s	6.4	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1612	-	-	-	1034
HCM Lane V/C Ratio	0.053	-	-	-	0.068
HCM Control Delay (s)	7.4	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.2

Intersection	
Int Delay, s/veh	5.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	56	32	2	55	16	19
Future Vol, veh/h	56	32	2	55	16	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	66	38	2	65	19	22

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	95	35	0	0	67	0
Stage 1	35	-	-	-	-	-
Stage 2	60	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	909	1044	-	-	1547	-
Stage 1	993	-	-	-	-	-
Stage 2	968	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	898	1044	-	-	1547	-
Mov Cap-2 Maneuver	898	-	-	-	-	-
Stage 1	993	-	-	-	-	-
Stage 2	956	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	3.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	946	1547	-
HCM Lane V/C Ratio	-	-	0.109	0.012	-
HCM Control Delay (s)	-	-	9.3	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Intersection						
Int Delay, s/veh	7.5					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	0	0	0	0	15
Future Vol, veh/h	16	0	0	0	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	19	0	0	0	0	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	39	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	38	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1635	-	-	-	978	1090
Stage 1	-	-	-	-	1028	-
Stage 2	-	-	-	-	990	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1635	-	-	-	966	1090
Mov Cap-2 Maneuver	-	-	-	-	966	-
Stage 1	-	-	-	-	1016	-
Stage 2	-	-	-	-	990	-

Approach	EB	WB	SB
HCM Control Delay, s	7.2	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1635	-	-	-	1090
HCM Lane V/C Ratio	0.012	-	-	-	0.016
HCM Control Delay (s)	7.2	0	-	-	8.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

APPENDIX O – 2026 MITIGATION OPERATIONAL ANALYSIS WORKSHEETS

Intersection	
Int Delay, s/veh	44.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	167	267	229	196	315	241
Future Vol, veh/h	167	267	229	196	315	241
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	150	170	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	9	14	4	4	0	7
Mvmt Flow	190	303	260	223	358	274

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1250	260	0	0	483	0
Stage 1	260	-	-	-	-	-
Stage 2	990	-	-	-	-	-
Critical Hdwy	6.49	6.34	-	-	4.1	-
Critical Hdwy Stg 1	5.49	-	-	-	-	-
Critical Hdwy Stg 2	5.49	-	-	-	-	-
Follow-up Hdwy	3.581	3.426	-	-	2.2	-
Pot Cap-1 Maneuver	~ 185	750	-	-	1090	-
Stage 1	767	-	-	-	-	-
Stage 2	349	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 124	750	-	-	1090	-
Mov Cap-2 Maneuver	~ 124	-	-	-	-	-
Stage 1	767	-	-	-	-	-
Stage 2	235	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	138.2	0	5.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	124	750	1090	-
HCM Lane V/C Ratio	-	-	1.53	0.405	0.328	-
HCM Control Delay (s)	-	-	$ 338.4	13	9.9	-
HCM Lane LOS	-	-	F	B	A	-
HCM 95th %tile Q(veh)	-	-	13.5	2	1.4	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	132	498	11	149	557
Future Vol, veh/h	9	132	498	11	149	557
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	100	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	10	150	566	13	169	633

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1537	566	0	0	579	0
Stage 1	566	-	-	-	-	-
Stage 2	971	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	129	528	-	-	1005	-
Stage 1	572	-	-	-	-	-
Stage 2	370	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	107	528	-	-	1005	-
Mov Cap-2 Maneuver	107	-	-	-	-	-
Stage 1	572	-	-	-	-	-
Stage 2	308	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.3	0	2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	107	528	1005	-
HCM Lane V/C Ratio	-	-	0.096	0.284	0.168	-
HCM Control Delay (s)	-	-	42.2	14.5	9.3	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	1.2	0.6	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	2	0	14	1	2	0	613	15	2	690	1
Future Vol, veh/h	0	2	0	14	1	2	0	613	15	2	690	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	50	0	9	100	0	0	6	8	0	8	0
Mvmt Flow	0	2	0	16	1	2	0	697	17	2	784	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1496	1503	785	1496	1495	706	785	0	0	714	0	0
Stage 1	789	789	-	706	706	-	-	-	-	-	-	-
Stage 2	707	714	-	790	789	-	-	-	-	-	-	-
Critical Hdwy	7.1	7	6.2	7.19	7.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	6	-	6.19	6.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	6	-	6.19	6.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.45	3.3	3.581	4.9	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	102	96	396	97	76	439	843	-	-	895	-	-
Stage 1	387	340	-	416	320	-	-	-	-	-	-	-
Stage 2	429	370	-	373	288	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	100	96	396	95	76	439	843	-	-	895	-	-
Mov Cap-2 Maneuver	100	96	-	95	76	-	-	-	-	-	-	-
Stage 1	387	339	-	416	320	-	-	-	-	-	-	-
Stage 2	425	370	-	369	287	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	43.4	47.8	0	0
HCM LOS	E	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	843	-	-	96	103	895	-	-
HCM Lane V/C Ratio	-	-	-	0.024	0.188	0.003	-	-
HCM Control Delay (s)	0	-	-	43.4	47.8	9	0	-
HCM Lane LOS	A	-	-	E	E	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.7	0	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	735	26	17	727	10	16	0	14	6	5	24
Future Vol, veh/h	23	735	26	17	727	10	16	0	14	6	5	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	5	5	0	0	6	13	0	0	0	0	0	4
Mvmt Flow	24	774	27	18	765	11	17	0	15	6	5	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	776	0	0	801	0	0	1658	1648	788	1650	1656	771
Stage 1	-	-	-	-	-	-	836	836	-	807	807	-
Stage 2	-	-	-	-	-	-	822	812	-	843	849	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.336
Pot Cap-1 Maneuver	827	-	-	831	-	-	79	100	394	80	99	397
Stage 1	-	-	-	-	-	-	364	385	-	378	397	-
Stage 2	-	-	-	-	-	-	371	395	-	361	380	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	827	-	-	831	-	-	66	91	394	72	90	397
Mov Cap-2 Maneuver	-	-	-	-	-	-	66	91	-	72	90	-
Stage 1	-	-	-	-	-	-	345	365	-	358	382	-
Stage 2	-	-	-	-	-	-	330	380	-	329	360	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.2	51.6	30.8
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	108	827	-	-	831	-	-	176
HCM Lane V/C Ratio	0.292	0.029	-	-	0.022	-	-	0.209
HCM Control Delay (s)	51.6	9.5	0	-	9.4	0	-	30.8
HCM Lane LOS	F	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	1.1	0.1	-	-	0.1	-	-	0.8

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	670	52	29	704	15	3	0	1	6	0	47
Future Vol, veh/h	39	670	52	29	704	15	3	0	1	6	0	47
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	90	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	10	7	2	4	13	17	33	0	0	20	0	11
Mvmt Flow	41	705	55	31	741	16	3	0	1	6	0	49

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	757	0	0	760	0	0	1651	1634	733	1626	1653	749
Stage 1	-	-	-	-	-	-	815	815	-	811	811	-
Stage 2	-	-	-	-	-	-	836	819	-	815	842	-
Critical Hdwy	4.2	-	-	4.14	-	-	7.43	6.5	6.2	7.3	6.5	6.31
Critical Hdwy Stg 1	-	-	-	-	-	-	6.43	5.5	-	6.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.43	5.5	-	6.3	5.5	-
Follow-up Hdwy	2.29	-	-	2.236	-	-	3.797	4	3.3	3.68	4	3.399
Pot Cap-1 Maneuver	819	-	-	843	-	-	66	102	424	74	99	398
Stage 1	-	-	-	-	-	-	330	394	-	348	396	-
Stage 2	-	-	-	-	-	-	321	392	-	346	383	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	819	-	-	843	-	-	51	87	424	65	85	398
Mov Cap-2 Maneuver	-	-	-	-	-	-	51	87	-	65	85	-
Stage 1	-	-	-	-	-	-	301	359	-	317	371	-
Stage 2	-	-	-	-	-	-	263	367	-	315	349	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.4	63.5	23.3
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	51	424	819	-	-	843	-	-	252
HCM Lane V/C Ratio	0.062	0.002	0.05	-	-	0.036	-	-	0.221
HCM Control Delay (s)	80.2	13.5	9.6	0	-	9.4	0	-	23.3
HCM Lane LOS	F	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.2	0	0.2	-	-	0.1	-	-	0.8

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	659	18	1	724	28	2
Future Vol, veh/h	659	18	1	724	28	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	8	0	0	13	9	0
Mvmt Flow	694	19	1	762	29	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	713	0	1468	704
Stage 1	-	-	-	-	704	-
Stage 2	-	-	-	-	764	-
Critical Hdwy	-	-	4.1	-	6.49	6.2
Critical Hdwy Stg 1	-	-	-	-	5.49	-
Critical Hdwy Stg 2	-	-	-	-	5.49	-
Follow-up Hdwy	-	-	2.2	-	3.581	3.3
Pot Cap-1 Maneuver	-	-	896	-	136	440
Stage 1	-	-	-	-	478	-
Stage 2	-	-	-	-	448	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	896	-	136	440
Mov Cap-2 Maneuver	-	-	-	-	136	-
Stage 1	-	-	-	-	478	-
Stage 2	-	-	-	-	447	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	37.2
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	143	-	-	896	-
HCM Lane V/C Ratio	0.221	-	-	0.001	-
HCM Control Delay (s)	37.2	-	-	9	0
HCM Lane LOS	E	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0	-

Intersection						
Int Delay, s/veh	0.2					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	644	713	1	0	10
Future Vol, veh/h	8	644	713	1	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	17	8	13	0	0	12
Mvmt Flow	8	678	751	1	0	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	752	0	-	0	1446	752
Stage 1	-	-	-	-	752	-
Stage 2	-	-	-	-	694	-
Critical Hdwy	4.27	-	-	-	6.4	6.32
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.353	-	-	-	3.5	3.408
Pot Cap-1 Maneuver	794	-	-	-	147	394
Stage 1	-	-	-	-	469	-
Stage 2	-	-	-	-	499	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	794	-	-	-	145	394
Mov Cap-2 Maneuver	-	-	-	-	145	-
Stage 1	-	-	-	-	461	-
Stage 2	-	-	-	-	499	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	14.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	794	-	-	-	394
HCM Lane V/C Ratio	0.011	-	-	-	0.027
HCM Control Delay (s)	9.6	0	-	-	14.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	102	549	608	36	36	93
Future Vol, veh/h	102	549	608	36	36	93
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	100
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	29	6	12	50	0	14
Mvmt Flow	107	578	640	38	38	98

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	678	0	-	0	1451	659
Stage 1	-	-	-	-	659	-
Stage 2	-	-	-	-	792	-
Critical Hdwy	4.39	-	-	-	6.4	6.34
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.461	-	-	-	3.5	3.426
Pot Cap-1 Maneuver	800	-	-	-	145	443
Stage 1	-	-	-	-	518	-
Stage 2	-	-	-	-	450	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	800	-	-	-	126	443
Mov Cap-2 Maneuver	-	-	-	-	126	-
Stage 1	-	-	-	-	449	-
Stage 2	-	-	-	-	450	-

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	23.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	800	-	-	-	126	443
HCM Lane V/C Ratio	0.134	-	-	-	0.301	0.221
HCM Control Delay (s)	10.2	-	-	-	45.4	15.4
HCM Lane LOS	B	-	-	-	E	C
HCM 95th %tile Q(veh)	0.5	-	-	-	1.2	0.8

Intersection						
Int Delay, s/veh	3					

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	63	4	71	67	21	64
Future Vol, veh/h	63	4	71	67	21	64
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	23	33	0	0
Mvmt Flow	74	5	84	79	25	75

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	249	124	0	0	163	0
Stage 1	124	-	-	-	-	-
Stage 2	125	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	744	932	-	-	1428	-
Stage 1	907	-	-	-	-	-
Stage 2	906	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	731	932	-	-	1428	-
Mov Cap-2 Maneuver	731	-	-	-	-	-
Stage 1	907	-	-	-	-	-
Stage 2	890	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.4	0	1.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	741	1428	-
HCM Lane V/C Ratio	-	-	0.106	0.017	-
HCM Control Delay (s)	-	-	10.4	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-

Intersection	
Int Delay, s/veh	5.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	29	1	38	23	1	49
Future Vol, veh/h	29	1	38	23	1	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	22	0	33	11	0	33
Mvmt Flow	34	1	45	27	1	58

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	35	0	152	35
Stage 1	-	-	-	-	35	-
Stage 2	-	-	-	-	117	-
Critical Hdwy	-	-	4.43	-	6.4	6.53
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.497	-	3.5	3.597
Pot Cap-1 Maneuver	-	-	1398	-	844	956
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	913	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1398	-	816	956
Mov Cap-2 Maneuver	-	-	-	-	816	-
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	883	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.8	9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	953	-	-	1398	-
HCM Lane V/C Ratio	0.062	-	-	0.032	-
HCM Control Delay (s)	9	-	-	7.7	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	72	11	10	5	5	55
Future Vol, veh/h	72	11	10	5	5	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	85	13	12	6	6	65

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	18	0	-	0	198	15
Stage 1	-	-	-	-	15	-
Stage 2	-	-	-	-	183	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1612	-	-	-	795	1070
Stage 1	-	-	-	-	1013	-
Stage 2	-	-	-	-	853	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1612	-	-	-	753	1070
Mov Cap-2 Maneuver	-	-	-	-	753	-
Stage 1	-	-	-	-	959	-
Stage 2	-	-	-	-	853	-

Approach	EB	WB	SB
HCM Control Delay, s	6.4	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1612	-	-	-	1034
HCM Lane V/C Ratio	0.053	-	-	-	0.068
HCM Control Delay (s)	7.4	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.2

Intersection	
Int Delay, s/veh	5.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	56	32	2	55	16	19
Future Vol, veh/h	56	32	2	55	16	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	66	38	2	65	19	22

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	95	35	0	0	67	0
Stage 1	35	-	-	-	-	-
Stage 2	60	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	909	1044	-	-	1547	-
Stage 1	993	-	-	-	-	-
Stage 2	968	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	898	1044	-	-	1547	-
Mov Cap-2 Maneuver	898	-	-	-	-	-
Stage 1	993	-	-	-	-	-
Stage 2	956	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	3.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	946	1547	-
HCM Lane V/C Ratio	-	-	0.109	0.012	-
HCM Control Delay (s)	-	-	9.3	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Intersection						
Int Delay, s/veh	7.5					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	0	0	0	0	15
Future Vol, veh/h	16	0	0	0	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	19	0	0	0	0	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	39	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	38	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1635	-	-	-	978	1090
Stage 1	-	-	-	-	1028	-
Stage 2	-	-	-	-	990	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1635	-	-	-	966	1090
Mov Cap-2 Maneuver	-	-	-	-	966	-
Stage 1	-	-	-	-	1016	-
Stage 2	-	-	-	-	990	-

Approach	EB	WB	SB
HCM Control Delay, s	7.2	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1635	-	-	-	1090
HCM Lane V/C Ratio	0.012	-	-	-	0.016
HCM Control Delay (s)	7.2	0	-	-	8.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	41.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	146	190	382	155	239	332
Future Vol, veh/h	146	190	382	155	239	332
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	150	170	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	20	22	5	10	19	3
Mvmt Flow	166	216	434	176	272	377

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1355	434	0	0	610	0
Stage 1	434	-	-	-	-	-
Stage 2	921	-	-	-	-	-
Critical Hdwy	6.6	6.42	-	-	4.29	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.68	3.498	-	-	2.371	-
Pot Cap-1 Maneuver	~ 151	582	-	-	891	-
Stage 1	617	-	-	-	-	-
Stage 2	360	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 105	582	-	-	891	-
Mov Cap-2 Maneuver	~ 105	-	-	-	-	-
Stage 1	617	-	-	-	-	-
Stage 2	250	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	170.6	0	4.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	105	582	891	-
HCM Lane V/C Ratio	-	-	1.58	0.371	0.305	-
HCM Control Delay (s)	-	-	$ 373.3	14.8	10.8	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	12.6	1.7	1.3	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	118	547	29	134	576
Future Vol, veh/h	5	118	547	29	134	576
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	100	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	6	134	622	33	152	655

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1581	622	0	0	655	0
Stage 1	622	-	-	-	-	-
Stage 2	959	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	121	490	-	-	942	-
Stage 1	539	-	-	-	-	-
Stage 2	375	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	102	490	-	-	942	-
Mov Cap-2 Maneuver	102	-	-	-	-	-
Stage 1	539	-	-	-	-	-
Stage 2	315	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.2	0	1.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	102	490	942	-
HCM Lane V/C Ratio	-	-	0.056	0.274	0.162	-
HCM Control Delay (s)	-	-	42.4	15.1	9.6	-
HCM Lane LOS	-	-	E	C	A	-
HCM 95th %tile Q(veh)	-	-	0.2	1.1	0.6	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1	0	15	0	2	0	624	34	8	700	1
Future Vol, veh/h	0	1	0	15	0	2	0	624	34	8	700	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	8	0	0	0	8	15	17	8	0
Mvmt Flow	0	1	0	17	0	2	0	709	39	9	795	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1544	1562	796	1543	1543	729	796	0	0	748	0	0
Stage 1	814	814	-	729	729	-	-	-	-	-	-	-
Stage 2	730	748	-	814	814	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.18	6.5	6.2	4.1	-	-	4.27	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.18	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.18	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.572	4	3.3	2.2	-	-	2.353	-	-
Pot Cap-1 Maneuver	95	113	390	91	116	426	835	-	-	797	-	-
Stage 1	375	394	-	405	431	-	-	-	-	-	-	-
Stage 2	417	423	-	363	394	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	93	111	390	89	114	426	835	-	-	797	-	-
Mov Cap-2 Maneuver	93	111	-	89	114	-	-	-	-	-	-	-
Stage 1	375	386	-	405	431	-	-	-	-	-	-	-
Stage 2	415	423	-	355	386	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	37.8	50.5	0	0.1
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	835	-	-	111	98	797	-	-
HCM Lane V/C Ratio	-	-	-	0.01	0.197	0.011	-	-
HCM Control Delay (s)	0	-	-	37.8	50.5	9.6	0	-
HCM Lane LOS	A	-	-	E	F	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.7	0	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	1053	18	6	1040	6	5	0	6	5	1	34
Future Vol, veh/h	45	1053	18	6	1040	6	5	0	6	5	1	34
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	3	5	0	0	4	0	0	0	0	0	0	15
Mvmt Flow	47	1108	19	6	1095	6	5	0	6	5	1	36

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1101	0	0	1127	0	0	2341	2325	1118	2325	2331	1098
Stage 1	-	-	-	-	-	-	1212	1212	-	1110	1110	-
Stage 2	-	-	-	-	-	-	1129	1113	-	1215	1221	-
Critical Hdwy	4.13	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.35
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.227	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.435
Pot Cap-1 Maneuver	630	-	-	627	-	-	26	38	254	26	37	244
Stage 1	-	-	-	-	-	-	225	257	-	256	287	-
Stage 2	-	-	-	-	-	-	250	286	-	224	255	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	630	-	-	627	-	-	18	30	254	21	29	244
Mov Cap-2 Maneuver	-	-	-	-	-	-	18	30	-	21	29	-
Stage 1	-	-	-	-	-	-	180	205	-	205	280	-
Stage 2	-	-	-	-	-	-	207	279	-	175	204	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.1	146.7	68
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	36	630	-	-	627	-	-	97
HCM Lane V/C Ratio	0.322	0.075	-	-	0.01	-	-	0.434
HCM Control Delay (s)	146.7	11.2	0	-	10.8	0	-	68
HCM Lane LOS	F	B	A	-	B	A	-	F
HCM 95th %tile Q(veh)	1.1	0.2	-	-	0	-	-	1.8

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	1009	8	3	976	18	1	0	2	8	1	89
Future Vol, veh/h	49	1009	8	3	976	18	1	0	2	8	1	89
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	90	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	5	5	0	0	6	13	0	0	0	0	0	4
Mvmt Flow	52	1062	8	3	1027	19	1	0	2	8	1	94

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1046	0	0	1070	0	0	2260	2222	1066	2214	2217	1037
Stage 1	-	-	-	-	-	-	1170	1170	-	1043	1043	-
Stage 2	-	-	-	-	-	-	1090	1052	-	1171	1174	-
Critical Hdwy	4.15	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.245	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.336
Pot Cap-1 Maneuver	654	-	-	659	-	-	29	44	273	32	44	278
Stage 1	-	-	-	-	-	-	237	269	-	280	309	-
Stage 2	-	-	-	-	-	-	263	306	-	237	268	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	654	-	-	659	-	-	16	35	273	27	35	278
Mov Cap-2 Maneuver	-	-	-	-	-	-	16	35	-	27	35	-
Stage 1	-	-	-	-	-	-	190	216	-	225	306	-
Stage 2	-	-	-	-	-	-	172	303	-	189	215	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0	94	68
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	16	273	654	-	-	659	-	-	152
HCM Lane V/C Ratio	0.066	0.008	0.079	-	-	0.005	-	-	0.679
HCM Control Delay (s)	245.3	18.3	11	0	-	10.5	0	-	68
HCM Lane LOS	F	C	B	A	-	B	A	-	F
HCM 95th %tile Q(veh)	0.2	0	0.3	-	-	0	-	-	3.9

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	990	38	3	986	15	8
Future Vol, veh/h	990	38	3	986	15	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	0	0	6	0	0
Mvmt Flow	1042	40	3	1038	16	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1082	0	2106	1062
Stage 1	-	-	-	-	1062	-
Stage 2	-	-	-	-	1044	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	652	-	57	274
Stage 1	-	-	-	-	335	-
Stage 2	-	-	-	-	342	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	652	-	56	274
Mov Cap-2 Maneuver	-	-	-	-	56	-
Stage 1	-	-	-	-	335	-
Stage 2	-	-	-	-	338	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	71.9
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	77	-	-	652	-
HCM Lane V/C Ratio	0.314	-	-	0.005	-
HCM Control Delay (s)	71.9	-	-	10.5	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	1.2	-	-	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	981	986	2	2	13
Future Vol, veh/h	6	981	986	2	2	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	20	6	6	50	50	20
Mvmt Flow	6	1033	1038	2	2	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1040	0	-	0	2084	1039
Stage 1	-	-	-	-	1039	-
Stage 2	-	-	-	-	1045	-
Critical Hdwy	4.3	-	-	-	6.9	6.4
Critical Hdwy Stg 1	-	-	-	-	5.9	-
Critical Hdwy Stg 2	-	-	-	-	5.9	-
Follow-up Hdwy	2.38	-	-	-	3.95	3.48
Pot Cap-1 Maneuver	604	-	-	-	43	259
Stage 1	-	-	-	-	278	-
Stage 2	-	-	-	-	276	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	604	-	-	-	42	259
Mov Cap-2 Maneuver	-	-	-	-	42	-
Stage 1	-	-	-	-	272	-
Stage 2	-	-	-	-	276	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	31.2
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	604	-	-	-	153
HCM Lane V/C Ratio	0.01	-	-	-	0.103
HCM Control Delay (s)	11	0	-	-	31.2
HCM Lane LOS	B	A	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Intersection						
Int Delay, s/veh	3.8					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	107	869	865	38	25	128
Future Vol, veh/h	107	869	865	38	25	128
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	100
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	6	6	0	0	5
Mvmt Flow	113	915	911	40	26	135

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	951	0	-	0	2072	931
Stage 1	-	-	-	-	931	-
Stage 2	-	-	-	-	1141	-
Critical Hdwy	4.1	-	-	-	6.4	6.25
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.345
Pot Cap-1 Maneuver	730	-	-	-	60	319
Stage 1	-	-	-	-	387	-
Stage 2	-	-	-	-	307	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	730	-	-	-	51	319
Mov Cap-2 Maneuver	-	-	-	-	51	-
Stage 1	-	-	-	-	327	-
Stage 2	-	-	-	-	307	-

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	42.4
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	730	-	-	-	51	319
HCM Lane V/C Ratio	0.154	-	-	-	0.516	0.422
HCM Control Delay (s)	10.8	-	-	-	134.8	24.3
HCM Lane LOS	B	-	-	-	F	C
HCM 95th %tile Q(veh)	0.5	-	-	-	2	2

Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	43	5	64	81	26	100
Future Vol, veh/h	43	5	64	81	26	100
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	60	0	0	50	0	5
Mvmt Flow	51	6	75	95	31	118

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	303	123	0	0	170	0
Stage 1	123	-	-	-	-	-
Stage 2	180	-	-	-	-	-
Critical Hdwy	7	6.2	-	-	4.1	-
Critical Hdwy Stg 1	6	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-
Follow-up Hdwy	4.04	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	583	933	-	-	1420	-
Stage 1	777	-	-	-	-	-
Stage 2	729	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	570	933	-	-	1420	-
Mov Cap-2 Maneuver	570	-	-	-	-	-
Stage 1	777	-	-	-	-	-
Stage 2	712	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.7	0	1.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	594	1420	-
HCM Lane V/C Ratio	-	-	0.095	0.022	-
HCM Control Delay (s)	-	-	11.7	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection						
Int Delay, s/veh	4.5					

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	22	2	108	74	1	30
Future Vol, veh/h	22	2	108	74	1	30
Conflicting Peds, #/hr	0	0	0	0	2	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	12	50	2	12	0	11
Mvmt Flow	26	2	127	87	1	35

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	28	0	370	27
Stage 1	-	-	-	-	27	-
Stage 2	-	-	-	-	343	-
Critical Hdwy	-	-	4.12	-	6.4	6.31
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.218	-	3.5	3.399
Pot Cap-1 Maneuver	-	-	1585	-	634	1023
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	723	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1585	-	579	1023
Mov Cap-2 Maneuver	-	-	-	-	579	-
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	661	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.4	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	998	-	-	1585	-
HCM Lane V/C Ratio	0.037	-	-	0.08	-
HCM Control Delay (s)	8.7	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.3	-

Intersection						
Int Delay, s/veh	5.4					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	66	36	9	9	15	30
Future Vol, veh/h	66	36	9	9	15	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	78	42	11	11	18	35

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	22	0	-	0	215	17
Stage 1	-	-	-	-	17	-
Stage 2	-	-	-	-	198	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1607	-	-	-	778	1068
Stage 1	-	-	-	-	1011	-
Stage 2	-	-	-	-	840	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1607	-	-	-	739	1068
Mov Cap-2 Maneuver	-	-	-	-	739	-
Stage 1	-	-	-	-	960	-
Stage 2	-	-	-	-	840	-

Approach	EB	WB	SB
HCM Control Delay, s	4.8	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1607	-	-	-	930
HCM Lane V/C Ratio	0.048	-	-	-	0.057
HCM Control Delay (s)	7.4	0	-	-	9.1
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.2

Intersection						
Int Delay, s/veh	3.8					

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	17	2	51	14	23
Future Vol, veh/h	30	17	2	51	14	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	35	20	2	60	16	27

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	91	32	0	0	62	0
Stage 1	32	-	-	-	-	-
Stage 2	59	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	914	1048	-	-	1554	-
Stage 1	996	-	-	-	-	-
Stage 2	969	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	905	1048	-	-	1554	-
Mov Cap-2 Maneuver	905	-	-	-	-	-
Stage 1	996	-	-	-	-	-
Stage 2	959	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	2.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	952	1554	-
HCM Lane V/C Ratio	-	-	0.058	0.011	-
HCM Control Delay (s)	-	-	9	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	51	0	0	0	0	18
Future Vol, veh/h	51	0	0	0	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	60	0	0	0	0	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	121	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	120	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1635	-	-	-	879	1090
Stage 1	-	-	-	-	1028	-
Stage 2	-	-	-	-	910	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1635	-	-	-	846	1090
Mov Cap-2 Maneuver	-	-	-	-	846	-
Stage 1	-	-	-	-	990	-
Stage 2	-	-	-	-	910	-

Approach	EB	WB	SB
HCM Control Delay, s	7.3	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1635	-	-	-	1090
HCM Lane V/C Ratio	0.037	-	-	-	0.019
HCM Control Delay (s)	7.3	0	-	-	8.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

MOVEMENT SUMMARY

Site: 101 [TM Build - Mitigation Sat (Site Folder: SAT Peak)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Tom McCall Rd														
3	L2	15	33.0	16	33.0	0.113	7.9	LOS A	0.4	9.9	0.57	0.56	0.57	33.0
8	T1	55	0.0	60	0.0	0.113	6.3	LOS A	0.4	9.9	0.57	0.56	0.57	34.0
18	R2	52	17.0	57	17.0	0.091	6.8	LOS A	0.3	7.7	0.55	0.54	0.55	32.9
Approach		122	11.3	133	11.3	0.113	6.7	LOS A	0.4	9.9	0.56	0.55	0.56	33.4
East: OR126														
1	L2	44	20.0	48	20.0	0.745	16.1	LOS C	6.7	185.7	0.52	0.29	0.52	29.6
6	T1	508	13.0	552	13.0	0.745	15.9	LOS C	6.7	185.7	0.52	0.29	0.52	29.9
16	R2	203	15.0	221	15.0	0.745	15.9	LOS C	6.7	185.7	0.52	0.29	0.52	29.0
Approach		755	13.9	821	13.9	0.745	15.9	LOS C	6.7	185.7	0.52	0.29	0.52	29.6
North: Tom McCall Rd														
7	L2	180	26.0	196	26.0	0.468	13.7	LOS B	2.2	65.9	0.66	0.79	1.02	28.9
4	T1	72	33.0	78	33.0	0.468	14.0	LOS B	2.2	65.9	0.66	0.79	1.02	29.1
14	R2	14	18.0	15	18.0	0.023	5.6	LOS A	0.1	2.0	0.52	0.41	0.52	33.4
Approach		266	27.5	289	27.5	0.468	13.4	LOS B	2.2	65.9	0.65	0.77	1.00	29.2
West: OR126														
5	L2	11	0.0	12	0.0	0.286	6.7	LOS A	1.2	32.1	0.52	0.45	0.52	34.3
2	T1	471	6.0	512	6.0	0.286	6.9	LOS A	1.2	32.1	0.52	0.45	0.52	34.1
12	R2	6	0.0	7	0.0	0.286	6.7	LOS A	1.2	32.1	0.52	0.45	0.52	33.3
Approach		488	5.8	530	5.8	0.286	6.9	LOS A	1.2	32.1	0.52	0.45	0.52	34.1
All Vehicles		1631	13.5	1773	13.5	0.745	12.1	LOS B	6.7	185.7	0.54	0.44	0.60	31.0

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [TM Build PM - Sens (Site Folder: Sensitivity)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Tom McCall Rd														
3	L2	114	7.0	124	7.0	1.135	122.4	LOS F	26.0	713.2	1.00	2.59	6.52	12.3
8	T1	47	14.0	51	14.0	1.135	123.0	LOS F	26.0	713.2	1.00	2.59	6.52	12.3
18	R2	217	14.0	236	14.0	1.135	123.0	LOS F	26.0	713.2	1.00	2.59	6.52	12.1
Approach		378	11.9	411	11.9	1.135	122.8	LOS F	26.0	713.2	1.00	2.59	6.52	12.2
East: OR126														
1	L2	63	24.0	68	24.0	0.712	15.4	LOS C	9.0	241.1	0.65	0.56	0.82	29.8
6	T1	495	7.0	538	7.0	0.712	14.9	LOS B	9.0	241.1	0.65	0.56	0.82	30.3
16	R2	129	13.0	140	13.0	0.712	15.1	LOS C	9.0	241.1	0.65	0.56	0.82	29.4
Approach		687	9.7	747	9.7	0.712	15.0	LOS B	9.0	241.1	0.65	0.56	0.82	30.1
North: Tom McCall Rd														
7	L2	191	4.0	208	4.0	0.564	16.2	LOS C	3.8	96.8	0.79	0.95	1.29	28.8
4	T1	8	13.0	9	13.0	0.564	16.7	LOS C	3.8	96.8	0.79	0.95	1.29	28.6
14	R2	115	0.0	125	0.0	0.564	16.0	LOS C	3.8	96.8	0.79	0.95	1.29	28.1
Approach		314	2.8	341	2.8	0.564	16.2	LOS C	3.8	96.8	0.79	0.95	1.29	28.5
West: OR126														
5	L2	3	33.0	3	33.0	0.990	48.7	LOS E	45.0	1182.0	1.00	2.07	3.58	20.8
2	T1	852	6.0	926	6.0	0.990	47.7	LOS E	45.0	1182.0	1.00	2.07	3.58	21.2
12	R2	5	67.0	5	67.0	0.990	49.9	LOS E	45.0	1182.0	1.00	2.07	3.58	20.3
Approach		860	6.4	935	6.4	0.990	47.8	LOS E	45.0	1182.0	1.00	2.07	3.58	21.2
All Vehicles		2239	7.8	2434	7.8	1.135	45.9	LOS E	45.0	1182.0	0.86	1.54	2.91	21.2

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [TM Build PM - Sen Mitigation (Site Folder: Sensitivity)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Tom McCall Rd														
3	L2	114	7.0	124	7.0	0.401	15.5	LOS C	1.6	43.7	0.76	0.85	1.06	28.7
8	T1	47	14.0	51	14.0	0.401	16.1	LOS C	1.6	43.7	0.76	0.85	1.06	28.6
18	R2	217	14.0	236	14.0	0.563	21.9	LOS C	2.7	75.0	0.80	0.98	1.42	26.9
Approach		378	11.9	411	11.9	0.563	19.3	LOS C	2.7	75.0	0.78	0.92	1.27	27.7
East: OR126														
1	L2	63	24.0	68	24.0	0.724	16.1	LOS C	11.2	301.6	0.69	0.69	1.02	29.5
6	T1	495	7.0	538	7.0	0.724	15.6	LOS C	11.2	301.6	0.69	0.69	1.02	30.0
16	R2	129	13.0	140	13.0	0.724	15.8	LOS C	11.2	301.6	0.69	0.69	1.02	29.1
Approach		687	9.7	747	9.7	0.724	15.7	LOS C	11.2	301.6	0.69	0.69	1.02	29.8
North: Tom McCall Rd														
7	L2	191	4.0	208	4.0	0.571	16.6	LOS C	3.9	98.6	0.79	0.96	1.31	28.6
4	T1	8	13.0	9	13.0	0.571	17.2	LOS C	3.9	98.6	0.79	0.96	1.31	28.5
14	R2	115	0.0	125	0.0	0.571	16.4	LOS C	3.9	98.6	0.79	0.96	1.31	28.0
Approach		314	2.8	341	2.8	0.571	16.6	LOS C	3.9	98.6	0.79	0.96	1.31	28.4
West: OR126														
5	L2	3	33.0	3	33.0	0.990	48.7	LOS E	45.0	1182.0	1.00	2.07	3.58	20.8
2	T1	852	6.0	926	6.0	0.990	47.7	LOS E	45.0	1182.0	1.00	2.07	3.58	21.2
12	R2	5	67.0	5	67.0	0.990	49.9	LOS E	45.0	1182.0	1.00	2.07	3.58	20.3
Approach		860	6.4	935	6.4	0.990	47.8	LOS E	45.0	1182.0	1.00	2.07	3.58	21.2
All Vehicles		2239	7.8	2434	7.8	0.990	28.7	LOS D	45.0	1182.0	0.84	1.30	2.09	25.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [TM Build - Mitigation PM (Site Folder: PM Peak)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Tom McCall Rd														
3	L2	114	7.0	124	7.0	0.505	22.8	LOS C	2.0	54.4	0.84	0.97	1.35	26.3
8	T1	47	14.0	51	14.0	0.505	23.5	LOS C	2.0	54.4	0.84	0.97	1.35	26.3
18	R2	217	14.0	236	14.0	0.709	36.8	LOS E	3.6	99.2	0.88	1.16	1.93	22.8
Approach		378	11.9	411	11.9	0.709	30.9	LOS D	3.6	99.2	0.86	1.08	1.68	24.2
East: OR126														
1	L2	63	24.0	68	24.0	0.724	16.1	LOS C	11.2	301.6	0.69	0.69	1.02	29.5
6	T1	495	7.0	538	7.0	0.724	15.6	LOS C	11.2	301.6	0.69	0.69	1.02	30.0
16	R2	129	13.0	140	13.0	0.724	15.8	LOS C	11.2	301.6	0.69	0.69	1.02	29.1
Approach		687	9.7	747	9.7	0.724	15.7	LOS C	11.2	301.6	0.69	0.69	1.02	29.8
North: Tom McCall Rd														
7	L2	505	4.0	549	4.0	0.827	30.1	LOS D	10.3	265.8	0.91	1.39	2.39	24.1
4	T1	66	13.0	72	13.0	0.537	14.6	LOS B	3.4	86.9	0.75	0.89	1.19	30.6
14	R2	266	0.0	289	0.0	0.537	13.9	LOS B	3.4	86.9	0.75	0.89	1.19	29.9
Approach		837	3.4	910	3.4	0.827	23.8	LOS C	10.3	265.8	0.85	1.19	1.91	26.1
West: OR126														
5	L2	3	33.0	3	33.0	0.689	21.9	LOS C	5.8	152.9	0.80	1.08	1.64	27.8
2	T1	852	6.0	926	6.0	0.689	19.6	LOS C	6.0	157.6	0.80	1.07	1.63	28.7
12	R2	5	67.0	5	67.0	0.689	21.8	LOS C	6.0	157.6	0.79	1.07	1.62	27.1
Approach		860	6.4	935	6.4	0.689	19.7	LOS C	6.0	157.6	0.80	1.07	1.63	28.7
All Vehicles		2762	7.1	3002	7.1	0.827	21.5	LOS C	11.2	301.6	0.79	1.02	1.57	27.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [TM Background - Mitigation Sat (Site Folder: SAT Peak)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance															
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Tom McCall Rd															
3	L2	11	33.0	12	33.0	0.102	7.5	LOS A	0.3	8.9	0.55	0.54	0.55	33.3
8	T1	55	0.0	60	0.0	0.102	5.9	LOS A	0.3	8.9	0.55	0.54	0.55	34.3
18	R2	52	17.0	57	17.0	0.088	6.6	LOS A	0.3	7.5	0.54	0.52	0.54	33.0
Approach		118	10.6	128	10.6	0.102	6.4	LOS A	0.3	8.9	0.55	0.53	0.55	33.6
East: OR126															
1	L2	44	20.0	48	20.0	0.686	13.6	LOS B	5.6	154.1	0.45	0.25	0.45	30.6
6	T1	508	13.0	552	13.0	0.686	13.4	LOS B	5.6	154.1	0.45	0.25	0.45	30.9
16	R2	147	15.0	160	15.0	0.686	13.5	LOS B	5.6	154.1	0.45	0.25	0.45	30.0
Approach		699	13.9	760	13.9	0.686	13.4	LOS B	5.6	154.1	0.45	0.25	0.45	30.7
North: Tom McCall Rd															
7	L2	150	26.0	163	26.0	0.411	12.3	LOS B	1.7	51.1	0.64	0.73	0.87	29.5
4	T1	72	33.0	78	33.0	0.411	12.6	LOS B	1.7	51.1	0.64	0.73	0.87	29.7
14	R2	14	18.0	15	18.0	0.023	5.6	LOS A	0.1	2.0	0.52	0.41	0.52	33.5
Approach		236	27.7	257	27.7	0.411	12.0	LOS B	1.7	51.1	0.63	0.71	0.85	29.8
West: OR126															
5	L2	11	0.0	12	0.0	0.276	6.3	LOS A	1.2	31.0	0.49	0.41	0.49	34.5
2	T1	471	6.0	512	6.0	0.276	6.6	LOS A	1.2	31.0	0.49	0.41	0.49	34.3
12	R2	6	0.0	7	0.0	0.276	6.3	LOS A	1.2	31.0	0.49	0.41	0.49	33.4
Approach		488	5.8	530	5.8	0.276	6.5	LOS A	1.2	31.0	0.49	0.41	0.49	34.3
All Vehicles		1541	13.2	1675	13.2	0.686	10.5	LOS B	5.6	154.1	0.50	0.39	0.53	31.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [TM Bkgd PM - Sen Mitigation (Site Folder: Sensitivity)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Tom McCall Rd														
3	L2	110	7.0	120	7.0	0.381	14.6	LOS B	1.5	40.8	0.75	0.82	1.01	29.1
8	T1	47	14.0	51	14.0	0.381	15.1	LOS C	1.5	40.8	0.75	0.82	1.01	29.0
18	R2	217	14.0	236	14.0	0.547	20.7	LOS C	2.6	72.4	0.78	0.96	1.37	27.3
Approach		374	11.9	407	11.9	0.547	18.2	LOS C	2.6	72.4	0.77	0.90	1.22	28.0
East: OR126														
1	L2	63	24.0	68	24.0	0.651	13.4	LOS B	6.1	164.5	0.61	0.50	0.71	30.6
6	T1	462	7.0	502	7.0	0.651	12.9	LOS B	6.1	164.5	0.61	0.50	0.71	31.1
16	R2	96	13.0	104	13.0	0.651	13.1	LOS B	6.1	164.5	0.61	0.50	0.71	30.1
Approach		621	9.7	675	9.7	0.651	13.0	LOS B	6.1	164.5	0.61	0.50	0.71	30.9
North: Tom McCall Rd														
7	L2	181	4.0	197	4.0	0.519	14.5	LOS B	3.3	83.9	0.77	0.90	1.17	29.4
4	T1	8	13.0	9	13.0	0.519	15.0	LOS B	3.3	83.9	0.77	0.90	1.17	29.3
14	R2	109	0.0	118	0.0	0.519	14.2	LOS B	3.3	83.9	0.77	0.90	1.17	28.7
Approach		298	2.8	324	2.8	0.519	14.4	LOS B	3.3	83.9	0.77	0.90	1.17	29.2
West: OR126														
5	L2	3	33.0	3	33.0	0.956	41.0	LOS E	39.0	1023.2	1.00	1.88	3.14	22.4
2	T1	835	6.0	908	6.0	0.956	40.0	LOS E	39.0	1023.2	1.00	1.88	3.14	22.8
12	R2	3	67.0	3	67.0	0.956	42.2	LOS E	39.0	1023.2	1.00	1.88	3.14	21.8
Approach		841	6.3	914	6.3	0.956	40.0	LOS E	39.0	1023.2	1.00	1.88	3.14	22.8
All Vehicles		2134	7.8	2320	7.8	0.956	24.8	LOS C	39.0	1023.2	0.81	1.17	1.82	26.5

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Alfalfa-Powell Butte Build Mitigation Sat (Site Folder: SAT Peak)]

Alfalfa-Powell Butte Existing PM
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Alfalfa Rd														
21	L2	167	9.0	176	9.0	0.435	5.8	LOS A	3.2	24.6	0.60	0.68	0.60	51.4
23	R2	267	14.0	281	14.0	0.435	10.8	LOS B	3.2	24.6	0.60	0.68	0.60	52.3
Approach		434	12.1	457	12.1	0.435	8.9	LOS A	3.2	24.6	0.60	0.68	0.60	52.0
NorthEast: Powell Butte Hwy														
24	L2	315	0.0	332	0.0	0.495	5.3	LOS A	4.0	29.0	0.58	0.58	0.58	53.3
25	T1	241	7.0	254	7.0	0.495	5.7	LOS A	4.0	29.0	0.58	0.58	0.58	54.5
Approach		556	3.0	585	3.0	0.495	5.5	LOS A	4.0	29.0	0.58	0.58	0.58	53.8
SouthWest: Powell Butte Hwy														
31	T1	229	4.0	241	4.0	0.424	6.2	LOS A	3.1	22.4	0.62	0.67	0.62	52.8
32	R2	196	4.0	206	4.0	0.424	10.8	LOS B	3.1	22.4	0.62	0.67	0.62	52.7
Approach		425	4.0	447	4.0	0.424	8.3	LOS A	3.1	22.4	0.62	0.67	0.62	52.8
All Vehicles		1415	6.1	1489	6.1	0.495	7.4	LOS A	4.0	29.0	0.60	0.64	0.60	52.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Alfalfa-Powell Butte Build Mitigation PM (Site Folder: PM Peak)]

Alfalfa-Powell Butte Existing PM
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Alfalfa Rd														
21	L2	146	20.0	154	20.0	0.393	6.7	LOS A	2.6	21.9	0.65	0.74	0.65	51.0
23	R2	190	22.0	200	22.0	0.393	11.7	LOS B	2.6	21.9	0.65	0.74	0.65	51.9
Approach		336	21.1	354	21.1	0.393	9.5	LOS A	2.6	21.9	0.65	0.74	0.65	51.5
NorthEast: Powell Butte Hwy														
24	L2	239	19.0	252	19.0	0.502	5.5	LOS A	4.2	31.7	0.54	0.55	0.54	52.7
25	T1	332	3.0	349	3.0	0.502	5.4	LOS A	4.2	31.7	0.54	0.55	0.54	54.5
Approach		571	9.7	601	9.7	0.502	5.4	LOS A	4.2	31.7	0.54	0.55	0.54	53.8
SouthWest: Powell Butte Hwy														
31	T1	382	5.0	402	5.0	0.495	5.8	LOS A	4.0	29.7	0.60	0.61	0.60	53.3
32	R2	155	10.0	163	10.0	0.495	10.5	LOS B	4.0	29.7	0.60	0.61	0.60	53.0
Approach		537	6.4	565	6.4	0.495	7.1	LOS A	4.0	29.7	0.60	0.61	0.60	53.2
All Vehicles		1444	11.1	1520	11.1	0.502	7.0	LOS A	4.2	31.7	0.59	0.62	0.59	53.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Alfalfa-Powell Butte Background Mitigation Sat (Site Folder: SAT Peak)]

Alfalfa-Powell Butte Existing PM
Site Category: (None)
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
SouthEast: Alfalfa Rd														
21	L2	167	9.0	176	9.0	0.415	5.5	LOS A	3.0	23.3	0.55	0.65	0.55	51.6
23	R2	267	14.0	281	14.0	0.415	10.5	LOS B	3.0	23.3	0.55	0.65	0.55	52.5
Approach		434	12.1	457	12.1	0.415	8.6	LOS A	3.0	23.3	0.55	0.65	0.55	52.1
NorthEast: Powell Butte Hwy														
24	L2	315	0.0	332	0.0	0.462	5.3	LOS A	3.6	25.9	0.56	0.57	0.56	53.4
25	T1	204	7.0	215	7.0	0.462	5.7	LOS A	3.6	25.9	0.56	0.57	0.56	54.6
Approach		519	2.8	546	2.8	0.462	5.4	LOS A	3.6	25.9	0.56	0.57	0.56	53.9
SouthWest: Powell Butte Hwy														
31	T1	190	4.0	200	4.0	0.386	6.1	LOS A	2.7	19.5	0.60	0.67	0.60	52.8
32	R2	196	4.0	206	4.0	0.386	10.7	LOS B	2.7	19.5	0.60	0.67	0.60	52.7
Approach		386	4.0	406	4.0	0.386	8.4	LOS A	2.7	19.5	0.60	0.67	0.60	52.7
All Vehicles		1339	6.1	1409	6.1	0.462	7.3	LOS A	3.6	25.9	0.56	0.63	0.56	53.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Powell Butte-126 Build Mitigation Sat (Site Folder: SAT Peak)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Powell Butte Hwy														
3	L2	361	5.0	392	5.0	0.496	11.4	LOS B	3.0	78.6	0.67	0.78	0.99	29.8
8	T1	1	0.0	1	0.0	0.496	11.2	LOS B	3.0	78.6	0.67	0.78	0.99	29.9
18	R2	249	6.0	271	6.0	0.340	8.5	LOS A	1.4	35.9	0.59	0.60	0.60	32.3
Approach		611	5.4	664	5.4	0.496	10.2	LOS B	3.0	78.6	0.64	0.71	0.83	30.7
East: OR126														
1	L2	262	9.0	285	9.0	0.497	10.6	LOS B	3.1	85.0	0.62	0.66	0.82	30.7
6	T1	525	13.0	571	13.0	0.497	10.8	LOS B	3.1	85.0	0.61	0.66	0.82	31.8
16	R2	2	0.0	2	0.0	0.497	10.3	LOS B	3.1	84.3	0.61	0.66	0.82	31.5
Approach		789	11.6	858	11.6	0.497	10.7	LOS B	3.1	85.0	0.62	0.66	0.82	31.4
North: Powell Butte Hwy														
7	L2	1	0.0	1	0.0	0.007	8.2	LOS A	0.0	0.6	0.69	0.61	0.69	32.8
4	T1	1	0.0	1	0.0	0.007	8.2	LOS A	0.0	0.6	0.69	0.61	0.69	32.7
14	R2	1	0.0	1	0.0	0.007	8.2	LOS A	0.0	0.6	0.69	0.61	0.69	31.8
Approach		3	0.0	3	0.0	0.007	8.2	LOS A	0.0	0.6	0.69	0.61	0.69	32.4
West: OR126														
5	L2	9	43.0	10	43.0	0.528	11.4	LOS B	3.7	97.0	0.59	0.55	0.71	31.5
2	T1	536	5.0	583	5.0	0.528	10.1	LOS B	3.7	97.3	0.59	0.55	0.71	32.6
12	R2	441	5.0	479	5.0	0.528	10.1	LOS B	3.7	97.3	0.59	0.55	0.71	31.4
Approach		986	5.3	1072	5.3	0.528	10.1	LOS B	3.7	97.3	0.59	0.55	0.71	32.1
All Vehicles		2389	7.4	2597	7.4	0.528	10.3	LOS B	3.7	97.3	0.61	0.63	0.78	31.5

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Powell Butte-126 Build Mitigation PM (Site Folder: PM Peak)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Powell Butte Hwy														
3	L2	285	15.0	310	15.0	0.543	16.2	LOS C	2.9	80.1	0.72	0.89	1.26	27.9
8	T1	1	0.0	1	0.0	0.543	15.4	LOS C	2.9	80.1	0.72	0.89	1.26	28.1
18	R2	338	5.0	367	5.0	0.584	16.3	LOS C	3.6	94.8	0.75	0.93	1.33	29.0
Approach		624	9.6	678	9.6	0.584	16.3	LOS C	3.6	94.8	0.74	0.91	1.30	28.5
East: OR126														
1	L2	360	5.0	391	5.0	0.609	12.3	LOS B	6.0	157.4	0.68	0.77	1.05	30.1
6	T1	719	6.0	782	6.0	0.609	12.4	LOS B	6.0	157.4	0.68	0.77	1.05	31.2
16	R2	2	50.0	2	50.0	0.609	14.0	LOS B	6.0	156.9	0.68	0.77	1.05	29.8
Approach		1081	5.7	1175	5.7	0.609	12.4	LOS B	6.0	157.4	0.68	0.77	1.05	30.8
North: Powell Butte Hwy														
7	L2	1	0.0	1	0.0	0.015	10.1	LOS B	0.0	1.1	0.75	0.74	0.75	32.2
4	T1	1	0.0	1	0.0	0.015	10.1	LOS B	0.0	1.1	0.75	0.74	0.75	32.1
14	R2	3	0.0	3	0.0	0.015	10.1	LOS B	0.0	1.1	0.75	0.74	0.75	31.3
Approach		5	0.0	5	0.0	0.015	10.1	LOS B	0.0	1.1	0.75	0.74	0.75	31.6
West: OR126														
5	L2	5	0.0	5	0.0	0.687	15.2	LOS C	8.5	221.4	0.76	0.99	1.40	30.4
2	T1	780	6.0	848	6.0	0.687	15.6	LOS C	8.5	221.4	0.75	0.99	1.41	30.2
12	R2	349	15.0	379	15.0	0.687	16.2	LOS C	8.0	218.3	0.73	0.98	1.41	28.9
Approach		1134	8.7	1233	8.7	0.687	15.8	LOS C	8.5	221.4	0.75	0.99	1.41	29.8
All Vehicles		2844	7.8	3091	7.8	0.687	14.6	LOS B	8.5	221.4	0.72	0.89	1.24	29.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Powell Butte-126 Background Mitigation Sat (Site Folder: SAT Peak)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance															
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Powell Butte Hwy														
3	L2	361	5.0	392	5.0	0.474	10.6	LOS B	2.8	72.8	0.64	0.74	0.90	30.1
8	T1	1	0.0	1	0.0	0.474	10.3	LOS B	2.8	72.8	0.64	0.74	0.90	30.2
18	R2	210	6.0	228	6.0	0.274	7.3	LOS A	1.1	27.7	0.55	0.53	0.55	32.9
Approach		572	5.4	622	5.4	0.474	9.4	LOS A	2.8	72.8	0.61	0.66	0.77	31.1
East: OR126														
1	L2	225	9.0	245	9.0	0.444	9.6	LOS A	2.3	63.0	0.59	0.59	0.68	31.2
6	T1	478	13.0	520	13.0	0.444	9.8	LOS A	2.3	63.0	0.59	0.58	0.68	32.2
16	R2	2	0.0	2	0.0	0.444	9.3	LOS A	2.3	62.4	0.59	0.58	0.68	31.9
Approach		705	11.7	766	11.7	0.444	9.7	LOS A	2.3	63.0	0.59	0.58	0.68	31.9
North: Powell Butte Hwy														
7	L2	1	0.0	1	0.0	0.007	7.5	LOS A	0.0	0.5	0.66	0.57	0.66	33.1
4	T1	1	0.0	1	0.0	0.007	7.5	LOS A	0.0	0.5	0.66	0.57	0.66	33.0
14	R2	1	0.0	1	0.0	0.007	7.5	LOS A	0.0	0.5	0.66	0.57	0.66	32.1
Approach		3	0.0	3	0.0	0.007	7.5	LOS A	0.0	0.5	0.66	0.57	0.66	32.7
West: OR126														
5	L2	9	43.0	10	43.0	0.484	10.2	LOS B	2.7	69.8	0.53	0.42	0.53	32.0
2	T1	490	5.0	533	5.0	0.484	9.0	LOS A	2.7	70.2	0.53	0.42	0.53	33.1
12	R2	441	5.0	479	5.0	0.484	9.0	LOS A	2.7	70.2	0.53	0.42	0.53	31.9
Approach		940	5.4	1022	5.4	0.484	9.0	LOS A	2.7	70.2	0.53	0.42	0.53	32.5
All Vehicles		2220	7.4	2413	7.4	0.484	9.3	LOS A	2.8	72.8	0.57	0.54	0.64	31.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Appendix 25

KELLINGTON LAW GROUP, PC

Wendie L. Kellington
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Lake Oswego, OR 97034

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December 8, 2021

Via Electronic Mail
njeffries@sunriseland.com

Nikki Jeffries
Sun Communities, Inc.
27777 Franklin Rd., Suite 200
Southfield, MI 48034

RE: Analysis of Definition of "Overnight Lodgings" in Destination Resort Statutes

Dear Nikki:

You indicate that the county has raised a concern whether Park Model Recreational Vehicles ("PMRVs" or "Park Models"), are overnight lodgings at the proposed destination resort. We have analyzed the applicable statutory definitions and relevant legislative history and conclude that there is no reason that the so-called Park Models would not qualify as "overnight lodgings."

1. Introduction

Under the state destination resort statutes, ORS 197.445(4)(b)(A) provides that for destination resorts in Eastern Oregon a "total of 150 units of overnight lodging must be provided." ORS 197.435(5)(b) defines "overnight lodgings" as:

> "With respect to lands in eastern Oregon, as defined in ORS 321.805, *permanent, separately rentable accommodations that are not available for residential use, including hotel or motel rooms, cabins and time-share units.* Individually owned units may be considered overnight lodgings if they are available for overnight rental use by the general public for at least 38 weeks per calendar year through a central reservation system operated by the destination resort or by a real estate property manager, as defined in ORS 696.010. *Tent sites, recreational vehicle parks, manufactured dwellings, dormitory rooms and similar accommodations do not qualify as overnight lodgings for the purpose of this definition.*" (Emphasis supplied).

The Crook County Code (CCC) provisions for destination resorts similarly define "overnight lodgings" as:

"*[P]ermanent, separately rentable accommodations, which are not available for residential use. Overnight lodgings include hotel rooms, lodges, cabins and time-share units.* Individually owned units may be considered overnight lodgings if they are available for overnight rental use by the general public for at least 45 weeks per calendar year through a central reservation and check-in service. *Tent sites, recreational vehicle parks, manufactured dwellings, dormitory rooms and similar accommodations do not qualify as overnight lodgings for the purpose of this definition.*" CCC 18.116.030(5) (Emphasis supplied).

The import of these definitions is that in order to qualify as "overnight lodgings", the accommodations must be "permanent" and "separately rentable". Further, the accommodations cannot be, among other things, "recreational vehicle parks", "manufactured dwellings" or "similar accommodations".

For the reasons that follow, the Park Models qualify as "overnight lodgings".

2. The Park Models are "permanent" and "separately rentable".

Neither state statute nor the County's code define the term "permanent", therefore, dictionary definitions should guide the County's interpretation of the term. Merriam-Webster's Online Dictionary defines "permanent" as "continuing or enduring without fundamental or marked change : STABLE".[1] Dictionary.com defines "permanent" as "existing perpetually; everlasting, especially without significant change" and "intended to exist or function for a long, indefinite period without regard to unforeseeable conditions".[2]

As an initial matter, it is important to understand what a "Park Model" is in order to determine whether it would be considered "permanent" accommodation. "Park Models" are commonly described as "tiny homes":

[1] https://www.merriam-webster.com/dictionary/permanent (last accessed October 25, 2021).
[2] https://www.dictionary.com/browse/permanent (last accessed October 25, 2021).

Although they have the ability to be towed by vehicle to different destinations and used as temporary dwellings or for seasonal or recreational use, Park Models here would be permanently sited in a single location and secured to foundations of cinder block piers.

The Recreational Vehicle Industry Association (RVIA) defines "Park Models" as "unique towable RV[s] designed to provide temporary living quarters for recreational, seasonal, camping or travel use", that are "built on a single trailer chassis, mounted on wheels and have a gross trailer area not exceeding 400 square feet", and "are certified by their manufacturers to comply with the American National Standards Institute (ANSI) A119.5 Park Model Recreational Vehicle Standard."[3]

[3] https://www.rvia.org/advocacy/policies/park-model-rvs (last accessed October 29, 2021).

Oregon has also recently adopted a definition for Park Model RVs that is similar to RVIA's definition, at ORS 803.036(1)(b):[4]

> "(b) 'Park model recreational vehicle' means a recreational vehicle, as defined in ORS 174.101, that:
>
> "(A) Is designed for use as temporary living quarters;
>
> "(B) Is built on a single chassis mounted on wheels;
>
> "(C) Has a gross trailer area that does not exceed 400 square feet;
>
> "(D) Is more than eight and one-half feet wide;
>
> "(E) Complies with any manufacturing standards that the Director of Transportation recognizes as being in widespread use and applicable to park model recreational vehicles; and
>
> "(F) Meets any other requirements imposed by the director by rule."

"Recreational vehicle" is defined by ORS 174.101(3) as "a vehicle with or without motive power that is designed for use as temporary living quarters and as further defined by rule by the Director of Transportation." The Oregon Department of Transportation (ODOT) has defined Park Model to be a recreational vehicle that has all of the above characteristics and that "[i]s certified by the manufacturer or builder * * * as complying with the version of the ANSI A119.5 standard for the construction of park model recreational vehicles that was in effect at the time of manufacture." OAR 735-022-0140(5). Accordingly, if Sun Communities' Park Models meet the above definition and are certified as complying with ANSI standards, they are considered "Park model recreational vehicles" under the statute.

Notwithstanding that the RVIA and statutory definitions describe Park Models as "temporary" living quarters, they are "permanent" accommodations for the temporary use of destination resort visitors under the relevant statutes. In this regard, just as hotel and motel rooms, cabins and other visitor-oriented accommodations are not intended for full-time residency, Park Models are permanent structures that serve as temporary living quarters too. The destination resort statute's use of the term "permanent" cannot reasonably be interpreted to refer to the *use* of a structure, but rather to the nature of the structure itself. This is plain by the nature of the inquiry - what are "overnight lodgings?" which is inherently a transitory use of a permanent structure, as here. Park Models are "permanent" structures because Sun Communities intends to secure them on foundations with cinder block piers to remain indefinitely at the destination resort and will not be moved. The Park Models are not, by contrast, "temporary" shelters, such as tents and the like, that are designed to be set up for each use and then taken down when unoccupied or easily moved to another location. Under the

[4] This statute deals with the optional titling of park model RVs by the Oregon Department of Motor Vehicles, but is the only definition of "park model recreational vehicle" in state statute and will likely be considered a relevant definition of the term "Park Model" for determining whether Park Models are excluded from the definition of "overnight lodgings".

dictionary definitions the County should support a determination that the Park Models are "permanent" accommodations.

The Park Models are also "separately rentable" accommodations. Each Park Model constitutes a separate unit of accommodation complete with living, sleeping, cooking and toilet facilities, that is separately available for rent by the destination resort's visitors. The County should support a determination that the Park Models are "separately rentable".

3. The Park Models are "cabins".

There is no principled reason why the Park Models should not be considered "cabins", which are an expressly allowed form of overnight lodging under the statute. There is no definition of "cabin" in state statutes or the County code, so again, dictionary definitions guide the interpretation of the term. "Cabin" is defined, in relevant part, in Merriam-Webster's Online Dictionary as "a small one-story dwelling usually of simple construction".[5] Similarly, Dictionary.com defines "cabin", in relevant part, as "a small house or cottage, usually of simple design and construction."[6] Park Models are small - typically 400 sq. ft. or smaller in size -- and composed of relatively simple design and construction - typically an open living and cooking area, bathroom, and bedroom and/or sleeping loft. There is no reason why Park Models are not "cabins" within the dictionary definitions of that term. Nothing in the definitions suggest that a cabin cannot be constructed elsewhere, be transported to the destination resort site, and be placed on and secured to a foundation. The County should support a determination that the Park Models are "cabins".

4. The Park Models should not be considered a "recreational vehicle park".

Although the Park Models would be considered "recreational vehicles" under RVIA and the state's definitions, they alone or with others are not a "recreational vehicle *park*" (which is specifically excluded from the definition of "overnight lodgings") for the purposes of the destination resort statutes. ORS 197.492(3)[7] provides that the term "recreational vehicle park" has the following meaning:

> "(a) [A] *place* where two or more recreational vehicles are located within 500 feet of one another on a lot, tract or parcel of land under common ownership and having as its primary purpose:
>
> "(A) The renting of *space* and related facilities for a charge or fee; or

---

[5] https://www.merriam-webster.com/dictionary/cabin (last accessed December 6, 2021).
[6] https://www.dictionary.com/browse/cabin (last accessed December 6, 2021).
[7] Although ORS 197.492 states that the definitions are "[a]s used in this section and ORS 197.493" and do not specifically refer to the destination resort statutes, there are no other definitions of "recreational vehicle park" in statutes or regulations or in the County code. Therefore, the definition at ORS 197.492(3) is likely to be viewed as informing the meaning of "recreational vehicle park".

"(B) The *provision of space* for free in connection with securing the patronage of a person.

"(b) Does not mean:

"(A) An area designated only for picnicking or overnight camping; or

"(B) A manufactured dwelling park or mobile home park." (Emphasis supplied.)

Key to this definition is that a "recreational vehicle *park*" has as its "primary purpose" the renting or provision of "*space*". Sun Communities overnight lodgings would not be renting or providing "space" for visitors to park their own RVs. Rather, Sun Communities would own the Park Model units themselves and rent them out to destination resort visitors. Because the primary purpose of the Park Model units is not renting or provision of space for visitors to park their own RVs, rather they are the permanent overnight lodgings; they are not properly considered a "recreational vehicle park".

This interpretation is supported by the adoption history of the amendments to Goal 8 authorizing destination resorts and ORS 197.435(5)(b). In a 1984 memo, the director of DLCD explained that overnight lodgings should mean "separately rentable units with complete toilet facilities, in permanent structures" and that "recreational vehicle *pads*" should not qualify. The Park Models will be separately rentable permanent structures with not only complete toilet facilities, but complete sleeping and cooking facilities as well. Sun Communities would not count bare "recreational vehicle pads" as "overnight lodgings". Accordingly, the County should support a determination that the Park Models are not a "recreational vehicle park".

5. The Park Models are not "manufactured dwellings".

Oregon statutes provide two similar definitions of "manufactured dwelling", one of which expressly excludes "recreational vehicles" from the definition and another which expressly excludes structures constructed under the state's "Small Home Specialty Code". Both definitions should be relevant to the County's interpretation of the term. ORS 446.003 states that it provides definitions for, among others, ORS Chapter 197, which includes the destination resort statutes, "except as provided in ORS 446.007", and provides the following definition of "manufactured dwelling":

"(21)(a) 'Manufactured dwelling' means a residential trailer, mobile home or manufactured home.

"(b) 'Manufactured dwelling' does not include any building or structure constructed to conform to the State of Oregon Structural Specialty Code, the Low-Rise Residential Dwelling Code adopted pursuant to ORS 455.100 to 455.450 and 455.610 to 455.630 *or the Small Home Specialty Code adopted under*

> *section 2, chapter 401, Oregon Laws 2019.*" (Emphasis supplied).

ORS 446.007 states that "[n]otwithstanding ORS 446.003", it also provides definitions for ORS Chapter 197, and provides the following definition of "manufactured dwelling":

> "(3) 'Manufactured dwelling':
>
> "(a) Means a residential trailer, mobile home or manufactured home.
>
> "(b) Does not include any building or structure constructed to conform to the State of Oregon Structural Specialty Code or the Low-Rise Residential Dwelling Code adopted pursuant to ORS 455.100 to 455.450 and 455.610 to 455.630 *or any unit identified as a recreational vehicle by the manufacturer.*" (Emphasis supplied).

The Crook County Code defines "manufactured dwelling" in the same manner as the latter statute, expressly excluding "recreational vehicles" identified as such by the manufacturer:

> "'Manufactured dwelling' means a residential trailer, mobile home or manufactured home. It does not include any building or structure constructed to conform to the State of Oregon Structural Specialty Code or the Low-Rise Residential Dwelling Code adopted pursuant to Oregon Revised Statutes, or any unit identified as a recreational vehicle by the manufacturer." CCC 18.08.130.

Accordingly, under the statutes and the County code, "manufactured dwelling" is an umbrella term that encompasses "residential trailers", "mobile homes" and "manufactured homes", but excludes "recreational vehicles" and structures constructed under the state's Small Home Specialty Code. There should be no concern that Park Models would fall under the definition of "manufactured dwellings".

The three categories of "manufactured dwellings" all have essentially the same meaning, distinguished only by when they were built. "Residential trailers" are built before 1962,[8] "mobile homes" are built between 1962 and 1976,[9] and "manufactured homes" are built after 1976.[10]

[8] ORS 446.003(30).
[9] ORS 446.003(27).
[10] ORS 446.003(23).

Because the Park Models will be newly constructed, the only possible question is whether they could be considered "manufactured homes". ORS 446.003(23) defines "manufactured home", in relevant part, as:

> "[A] structure constructed for movement on the public highways that has sleeping, cooking and plumbing facilities, that is intended for human occupancy, that is being used for residential purposes *and* that was constructed in accordance with *federal manufactured housing construction and safety standards and regulations in effect at the time of construction.*" (Emphasis supplied).

Based on the above definition, whether the Park Models are considered "manufactured homes" will turn on whether they are constructed under "federal manufactured housing construction standards and regulations" that are in effect at the time of construction.

a. "Constructed in accordance with federal manufactured housing construction and safety standards and regulations"

The federal Department of Housing and Urban Development (HUD) regulates the construction of manufactured homes through its Manufactured Home Construction and Safety Standards. Park Models are specifically exempt from regulation by HUD as they are considered "recreational vehicles" and not "manufactured homes". HUD defines "recreational vehicle" as "[a] vehicle or vehicular structure not certified as a manufactured home" that is "[d]esigned only for recreational use and not as a primary residence or for permanent occupancy" and that is "[b]uilt and certified in accordance with either NFPA 1192 or ANSI A119.5". 24 CFR § 3282.15. Accordingly, where the Park Models are designed only for recreational use and are build to ANSI A119.5 standards, then they are exempt from federal HUD manufactured housing construction and safety standards. Thus, if the Park Models qualify as "recreational vehicles" under the HUD regulations they are exempt from HUD regulation, and are not considered "manufactured dwellings" under Oregon's statutory definition.

b. Park Models are not "manufactured homes" if they are constructed under Oregon's Small Home Specialty Code.

Park Models are also not considered "manufactured dwellings" if they are constructed under the state's "Small Home Specialty Code". ORS 446.003(21)(b).

ORS 446.003(21)(b) specifically excludes from the definition of "manufactured dwelling", structures constructed under the state's "Small Home Specialty Code". A "small home" is defined as "a dwelling that is not more than 400 square feet in size." ORS 455.616. The Small Home Specialty Code requires that the 2018 International Residential Code, including but not limited to Appendix Q (Tiny Houses), be used for the design and construction of small homes.[11] Sec. 2(2), chapter 401, Oregon Laws 2019. This exclusion is a result of a 2019

[11] https://codes.iccsafe.org/content/IRC2018/appendix-q-tiny-houses (last accessed October 29, 2021).

Oregon law (HB 2423) that was adopted to address the state's housing crisis and the need for alternative types of housing. Accordingly, if the Park Models are 400 sq. ft. or less and are built to the Small Home Specialty Code, they are not considered "manufactured dwellings" under ORS 446.003.

6. The Park Models should not be considered "similar accommodations".

The statute and County code definition of "overnight lodgings" excludes "[t]ent sites, recreational vehicle parks, manufactured dwellings, dormitory rooms and *similar accommodations*". (Emphasis supplied). We understand that the county expressed concern that even if the Park Models are not "recreational vehicle parks" and are statutorily excluded from the definition of "manufactured dwellings", they could nevertheless be considered accommodations that are "similar" to such and thus not qualify as "overnight lodgings". However, this position is not supported by the purpose policy or context of the standard or in particular the legislative history of the adoption of the definition of "overnight lodgings".

To explain, during the proceedings that led up to the adoption of the destination resort criteria in the 1980s, one commenter suggested that the then-undefined term "overnight lodgings" was too broad. That commenter suggested that: "An enterprising schemer trying to meet the 150-unit criteria might try to say that a unit is also a tent, a cubicle in a dormitory or barracks, or possibly a small single-wide trailer specially designed to meet this criteria." DLCD took this comment to heart and recommended that the definition of "overnight lodgings" should be revised to indicate that the term means "separately rentable units with complete toilet facilities, in permanent structures" and that "tent sites, recreational vehicle pads, mobile homes, dormitory rooms and similar accommodations" should not qualify as "overnight lodgings".

DLCD's reasoning for the exclusions was "to ensure that resorts sited under [Goal 8] are at the same high level of quality the Oregonian's [*sic*] associate with existing destination resorts." DLCD recognized that legislating "quality development" through clear and objective standards would be difficult and so, instead, adopted the list of excluded accommodation types it deemed would not meet the high level of quality that was expected of destination resorts. The disconnect with the legislative intent is that at the time of the adoption of the destination resort criteria in the 1980s, "single-wide trailers" and "mobile homes" were not constructed to the high-quality level of craftsmanship that they are today, (in fact, there was very little regulation from the government over their construction), and there was a public perception of these types of accommodations being dingy or low-quality. Today, nearly 40 years later, these types of accommodations, and Park Models especially, are constructed to high-quality levels of craftsmanship, their construction is regulated by the government, and they are extremely popular and highly sought-after forms of accommodation. It's no surprise that Airbnb has an entire category of "unique stays" that feature tiny homes, container homes, treehouses and yurts, among others. For these reasons, the County should support a determination that Sun Communities' proposed high-quality Park Models are not "similar" to tent sites, RV parks, manufactured dwellings, and dorm rooms, in light of the legislative intent of the destination resort criteria to ensure "high quality" accommodations.

Conclusion

For the foregoing reasons, the County should support a determination that Sun Communities' proposed destination resort Park Models are "cabins" and are not "tent sites, recreational vehicle parks, manufactured dwellings, dormitory rooms" or "similar accommodations" that are excluded from the definition of "overnight lodgings". The Park Models are not a "recreational vehicle *park*". The Park Models are not "manufactured dwellings" if they are "recreational vehicles" constructed to ANSI standards or if they are constructed to the state's Small Home Specialty Code. The Park Models are also not "similar" to manufactured dwellings, or any of the other excluded types of accommodations, in light of the legislative history of the adoption of the destination resort criteria that establishes the intent of the adopting body was to ensure a "high quality" level of accommodations. Accordingly, the County should support a determination that the Park Models qualify as "overnight lodgings".

It is certainly possible that an opponent to the project could complain about the demographic of Sun Communities' high quality product that markets, and is affordable to, all Oregonians like teachers, grocery clerks and emergency first responders. But the destination resort statutes are not designed to ensure destination resorts are accessible only to the rich. They are simply designed to ensure that destination resorts are high quality facilities with specific elements. As demonstrated by its history elsewhere Sun will certainly deliver a high quality product with all of the required elements. I would expect Crook County to enthusiastically welcome Sun and its product.

Please let us know if you have any questions.

Very truly yours,

Wendie L. Kellington

Wendie L. Kellington

WLK:wlk
CC: Client

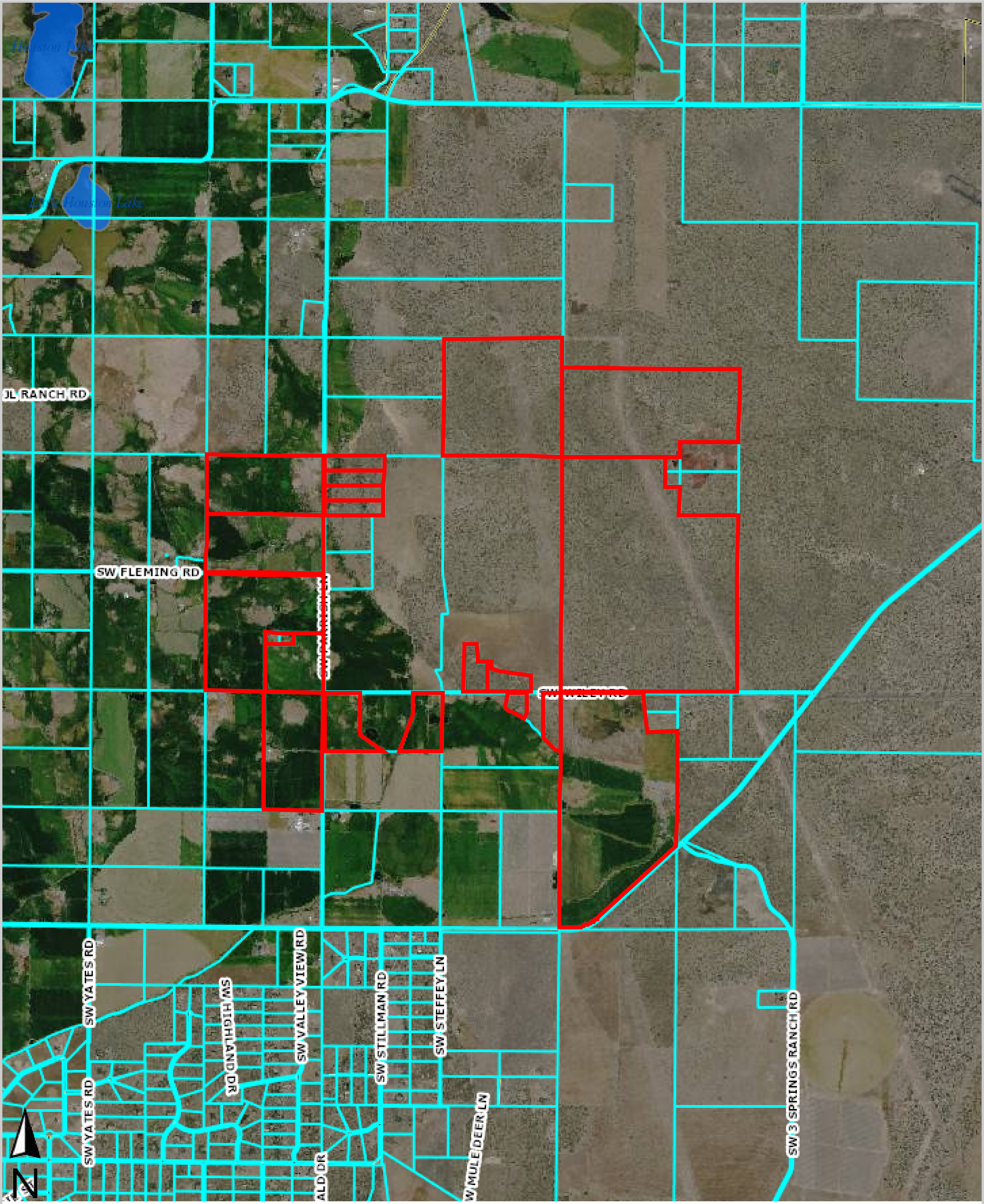
Appendix 26

Rough Order of Magnitude Costs:

The estimate of construction costs for the site amenities have been based on the Applicant past construction costs. The estimated costs are as follows:

Description	Units	Unit Cost	Total
Commercial/Overnight Accommodations			
Micro Retail Buildings	1 Lump Sum	$4,000,000	**$4,000,000**
Eating Facilities for 100 Persons Minimum	100 People	*Located in Clubhouse*	
Meeting Space for 100 Persons	100 People	*Located in Clubhouse*	
Main Street Plaza	12,500 SF	$ 7.50	$93,750
Overnight Rentals/Cabins	200 Each	$150,000	**$30,000,000**
Subtotal			***$34,093,750***
Recreation Areas			
Clubhouse with Outdoor Covered Area	9,900 SF	$ 450	$4,455,000
Open-Air Shade Structures (Grill & Seating)	1 Lump Sum	$300,000	$300,000
Pool with Cabanas	1 Lump Sum	$850,000	$850,000
Spas	2 Each	$75,000	$150,000
Event Lawn	1 Lump Sum	$200,000	$200,000
Outdoor Grill Kitchen with Seating	1 Lump Sum	$225,000	$225,000
Trail (8’ wide)	10,000 SF	$7.50	$75,000
Pickleball Courts	6 Each	$65,000	$390,000
Basketball Court	1 Each	$110,000	$110,000
Playground	1 Lump Sum	$185,000	$185,000
Retaining Walls	16,000 SF	$30	$480,000
Parking Area	17,000 SF	$45	$765,000
Landscaping and Irrigation (clubhouse area)	1 Lump Sum	$900,000	$900,000
Signage/Monument Signs/Pavement Marking	1 Lump Sum	$100,0000	$100,000
Subtotal			**$9,185,000**
Total			***$43,278,750***
Contingency	*15%*		***$6,491,810***
Contractor Overhead & Profit	*12%*		***$5,193,450***
Construction Management	*6.5%*		***$2,813,120***
Total Estimated Development Costs:			**$57,777,131**

Appendix 27



Western Title & Escrow

This map/plat is being furnished as an aid in locating the herein described land in relation to adjoining streets, natural boundaries and other land, and is not a survey of the land depicted. Except to the extent a policy of title insurance is expressly modified by endorsement, if any, the company does not insure dimensions, distances, location of easements, acreage or other matters shown thereon.

Appendix 28

ParcelId	OwnerNameLabelFormat	OwnerAddr	OwnerCityNm	OwnerState	OwnerZIP	OwnerOccupiedInd	SiteAddr	SiteCity	SiteState	SiteZIP	SaleAmt	DocRcrdgDt	MktTtlVal	LegalDsc	TaxAcctNum
1151	James Crawford	3008 SE Tolman St	Portland	OR	97202	FALSE			OR	97753	$24,500.00	01/01/1987	$800.00	Township: 15S, Range: 15E, Section: 08	1515080000200
1158	Mike Brock	60749 River Bend Dr	Bend	OR	97702	FALSE			OR	97753	$170,000.00	01/01/1995	$785,120.00	Township: 15S, Range: 15E, Section: 16	1515000002400
1194	Carole Hancock	2924 SW Parrish Ln	Powell Butte	OR	97753	TRUE	2924 SW Parrish Ln	Powell Butte	OR	97753	$90,000.00	01/01/1993	$358,090.00	Township: 15S, Range: 15E, Section: 17	1515170000101
1195	Whispering Winds Enterprises LLC	PO Box 1687	Prineville	OR	97754	FALSE			OR	97753	$136,000.00	07/10/2017	$200,410.00	Township: 15S, Range: 15E, Section: 17	1515170000102
1196	Alisha Bennett	915 SW Rimrock Way Suite 201-149	Redmond	OR	97756	FALSE	3174 SW Parrish Ln	Powell Butte	OR	97753	$397,000.00	06/21/2017	$537,240.00	Township: 15S, Range: 15E, Section: 17	1515170000103
1197	Steven & Dianna Brauchler	3092 SW Parrish Ln	Powell Butte	OR	97753	TRUE	3092 SW Parrish Ln	Powell Butte	OR	97753	$142,000.00	01/01/1995	$526,180.00	Township: 15S, Range: 15E, Section: 17	1515170000104
1199	David Fisher Jr	3093 SW Parrish Ln	Powell Butte	OR	97753	TRUE	3093 SW Parrish Ln	Powell Butte	OR	97753	$775,000.00	08/19/2014	$619,690.00	Prineville Ranch Lot: 11, Township: 15S, Range: 15E, Section: 18	1515180000100
1200	Benny Allen	8011 NE Meadow Ridge Rd	Prineville	OR	97754	FALSE	10091 SW Fleming Rd	Powell Butte	OR	97753	$0.00	01/07/2021	$211,980.00	Township: 15S, Range: 15E, Section: 18	1515180000200
1204	Danielle Paul	4893 NE Ochoco Hwy	Prineville	OR	97754	FALSE	10402 SW Fleming Rd	Powell Butte	OR	97753	$1,395,000.00	05/28/2021	$828,770.00	Township: 15S, Range: 15E, Section: 18	1515180000500
1214	Brian & Neva Allen	9022 SW Wiley Road	Powell Butte	OR	97753	TRUE	9022 SW Wiley Rd	Powell Butte	OR	97753	$50,000.00	01/01/1989	$337,620.00	Township: 15S, Range: 15E, Section: 20	1515200000200
1216	Penelope Allen	9022 SW Wiley Rd	Powell Butte	OR	97753	FALSE			OR	97753			$20,660.00	Township: 15S, Range: 15E, Section: 20	1515200000300
13249	Crook County	300 NE Third St	Prineville	OR	97754	FALSE			OR	97753			$125,100.00	Township: 15S, Range: 15E, Section: 09	1515000001206
13517	Mt Grizzly	PO Box 4	Prineville	OR	97754	FALSE			OR	97753			$221,180.00	Township: 15S, Range: 15E, Section: 09	1515000001206
14400	Samuel Stafford	8600 SW Wiley Rd	Powell Butte	OR	97753	FALSE	8300 SW Wiley Rd	Powell Butte	OR	97753	$0.00	08/07/2014	$1,169,310.00	Lot: 36, Block: 95, Township: 15S, Range: 15E, Section: 20	1515200000103
16701	Michael & Sue Dunn	8565 SW Wiley Rd	Powell Butte	OR	97753	TRUE	8565 SW Wiley Rd	Powell Butte	OR	97753	$176,000.00	04/03/2015	$758,150.00	Lot: 18, Block: 4, Township: 15S, Range: 15E, Section: 17	1515170000107
16702	Jason & Denise Wilkins	8351 SW Wiley Rd	Powell Butte	OR	97753	TRUE	8351 SW Wiley Rd	Powell Butte	OR	97753	$437,000.00	01/01/2009	$1,025,610.00	Lot: 18, Block: 4, Township: 15S, Range: 15E, Section: 17	1515170000108
19136	Waibel Joseph & Thelma Rev Living Trust	7305 SW Hwy 126	Powell Butte	OR	97753	TRUE	7305 SW Hwy 126	Powell Butte	OR	97753			$896,670.00	Township: 15S, Range: 15E, Section: 21	1515210000100
19613	Robinson, Dorothy M Trust	4271 SW Parrish Ln	Powell Butte	OR	97753	TRUE	4271 SW Parrish Ln	Powell Butte	OR	97753			$357,740.00	Township: 15S, Range: 15E, Section: 18	1515180000600
19959	Kori Urell	7111 SW Highland Dr	Powell Butte	OR	97753	FALSE	8004 SW Wiley Rd	Powell Butte	OR	97753	$159,000.00	06/04/2019	$197,780.00	Township: 15S, Range: 15E, Section: 20	1515200000105
19989	Malott Mark And Ann LLC	PO Box 127	Powell Butte	OR	97753	FALSE	4781 SW Parrish Ln	Powell Butte	OR	97753	$0.00	01/01/2010	$412,230.00	Township: 15S, Range: 15E, Section: 19	1515190000101

Appendix 29

James Crawford
3008 SE Tolman St
Portland OR 97202

Mike Brock
60749 River Bend Dr
Bend OR 97702

Carole Hancock
2924 SW Parrish Ln
Powell Butte OR 97753

Whispering Winds Enterprises LLC
PO Box 1687
Prineville OR 97754

Alisha Bennett
915 SW Rimrock Way Suite 201-149
Redmond OR 97756

Steven & Dianna Brauchler
3092 SW Parrish Ln
Powell Butte OR 97753

David Fisher Jr
3093 SW Parrish Ln
Powell Butte OR 97753

Benny Allen
8011 NE Meadow Ridge Rd
Prineville OR 97754

Danielle Paul
4893 NE Ochoco Hwy
Prineville OR 97754

Brian & Neva Allen
9022 SW Wiley Road
Powell Butte OR 97753

Penelope Allen
9022 SW Wiley Rd
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Crook County
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Mt Grizzly
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Powell Butte OR 97753

Michael & Sue Dunn
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Powell Butte OR 97753

Jason & Denise Wilkins
8351 SW Wiley Rd
Powell Butte OR 97753

Waibel Family
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Powell Butte OR 97753

Robinson Family
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Kori Urell
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