

Figure 2: Groundwater Flow Paths

(Source: USGS, https://pubs.usgs.gov/circ/circ1139/htdocs/natural_processes_of_ground.htm)

SITE GEOLOGY AND HYDROGEOLOGY

The Site is located on the western edge of the Willamette Basin near the eastern edge of the Chehalem Mountains. Locally, the Site is located within the Chehalem Creek Valley, a broad alluvial drainage that forms an embayment of the Willamette Valley extending north and northwest into the Chehalem Mountains.

The *Engineering Geology of the Tualatin Valley Region, Oregon* (Schlicker and Deacon 1967) and *Groundwater in the Newberg Area, Northern Willamette Valley, Oregon* (United State Geological Survey [USGS] 1978) provide detailed descriptions of the geologic units found near the Site. For the purposes of this memorandum geologic units of interest are, from oldest to youngest, summarized as follows:

- **Columbia River Basalt Group (CRBG);** is the **dominant groundwater source** in the Newberg area (USGS 1978). The CRBG forms the bedrock of the Chehalem Mountains. The CRBG consists of a series of individual basalt lava flows which range from 40 to 100 feet thick and may locally exceed 200 feet (Oregon Water Resources Department [OWRD] 2002). The CRBG has been deformed through faulting and folding, being uplifted into the Chehalem Mountains and underlying the Willamette Valley, including the Site. Between basalt flows there are zones of breccia, ash, and broken rock called interflow zones which are the main aquifers in the CRBG. The CRBG can produce anywhere from 15 to over 1,000 gallons a minute (gpm) but in recent years declines have been observed as recharge to the deep basalt aquifer is limited (OWRD 2002).
- **Helvetia and Troutdale Formations/Basin Fill Sediments;** the Helvetia Formation consists of reddish-brown sand, silt and clay. These deposits are often difficult to distinguish from the residual soils derived from weathered CRBG. The Troutdale Formation consists mostly of silt and clay with beds of fine sand and gravel. Aquifers hosted by these strata typically have low yields so production wells are not commonly found in them (OWRD 2002).
- **Willamette Silt;** is Missoula flood silt deposits. The Willamette Silt is found in the lowlands and flanks of bordering hills up to elevations of about 250 feet above sea level. The Willamette Silt has low

permeability but high porosity and is able to sustain low yield domestic wells (OWRD 2002). The Willamette Silt can store large amounts of groundwater in the winter releasing it in the spring as seeps and shallow groundwater discharge to streams and wetlands. However, because of the low permeability it acts as a confining layer inhibiting movement of groundwater into deeper aquifers (OWRD 2002).

Based on the reports reviewed for this memorandum the primary aquifer underlying the Site is found in CRBG interflow zones and consists of one or more confined interval approximately 100 feet or more below ground surface. These confined zones are separated from the surface by low permeability dense basalt, weathered basalt, basalt altered to clay and Willamette Silt.

OXBERG WELL LOG

It is our understanding that Oxbergs concerns focus on two wells used for water supply to the adjacent property. We were able to only locate one well log in the OWRD well log database. That well log, designated YAMH 2385, is reproduced in Attachment A.

Well YAMH 2385 is reported to have been completed in December 1986. It also is reported to consist of a 12-inch-diameter borehole drilled to 30 feet below ground surface (bgs) and an 8-inch borehole drilled to 200 feet bgs. Eight-inch casing is reported to have been installed from 1 foot above the surface to 162 feet bgs and 6-inch liner with perforations is reported to have been installed from 162 to 200 feet bgs. Per the *2004 Source Water Assessment Report for Oxberg Water System Newberg, Oregon PWS #4105308* (Oregon Department of Human Services and Oregon Department of Environmental Quality [DHS and DEQ]) the cement seal from 0 to 30 feet bgs is adequate and no visible well construction deficiencies were noted.

The *2004 Source Water Assessment* indicates that well is drilled and screened in the CRBG (DHS and DEQ), producing from a 15-foot interval in the perforated liner between 162 and 200 feet bgs. Following well completion, the static depth to water was between 21 and 29 feet bgs which is many tens of feet above the water producing interval, suggesting the well is open to a confined aquifer in the CRBG, and not shallow unconfined water near the ground surface.

WELLS NEAR-BY

In addition to reviewing information about the Oxberg well we also reviewed information about other water wells near the Site. OWRD's online well database shows at least 64 water wells within $\frac{3}{4}$ quarters of a mile of the Site. Of these, 25 are less than 150 feet deep and 39 are more than 150 feet deep. Well construction, depth, water levels and pumping capacity reported for these wells is provided in Table 1 and summarized in Table 2. There are likely other wells in close proximity that are not identified during this OWRD search.



TABLE 2: SUMMARY OF NEAR-BY WELL DETAILS

	Wells <150 Feet Deep	Wells >150 Feet Deep
Number of wells	25	39
Average Constructed Depth	110.8	212.1
Average Depth of First Water (feet)	76.5	137.5
Post Drilling Static Water Level (feet)	31.7	56.9

Information source: https://apps.wrd.state.or.us/apps/gw/well_log/Default.aspx

We interpret the information shown on these well logs, and listed on Tables 1 and 2, to indicate that most of the area wells (including the Oxberg well) are in the CRBG, that these CRBG wells display evidence of confined conditions (final water levels are higher than the producing intervals), and there may be multiple groundwater producing intervals in the CRBG, one approximately 70 to 100 feet bgs and the other greater than approximately 125 feet bgs. **Based on that interpretation Oxberg well likely is completed in, and producing water from, a deeper confined CRBG aquifer underlying the Site area.**

SITE-SPECIFIC INFILTRATION RATES

GeoEngineers conducted infiltration testing to assist in evaluating the Site for stormwater infiltration design. Testing was conducted using the encased falling head and open pit infiltration testing procedures as described in the *Crestview Crossing Development Geotechnical Engineering Report* (May 12, 2018). Field measured infiltration results were 0.0 inches/hour for the encased falling head and 0.1 inches/hour for the open pit tests. Based on the fine-grained soil conditions and very low to negligible measured infiltration rates, infiltration of stormwater was not recommended to be used as the sole method of stormwater management at this site. Given these tests, we interpret that there is limited, to essentially no capacity for surface water to percolate into the ground and through the subsurface into the underlying confined CRBG aquifers.

These infiltration rates along with the ephemeral nature of the wetlands inform the surface water and groundwater connection at site; indicating that there is almost no connection and that surface water is not contributing to the deep aquifer in which the Oxberg well is pumping from.

SOURCE WATER ASSESSMENT

In addition to aquifer recharge potential we also address the potential for the proposed development to contaminate the groundwater being pumped by the Oxberg well. The Crestview Crossing project proposed drinking and fire protection water system will be supplied from Newberg's municipal water system, so there is no additional stress on the Oxberg wells. The *2004 Source Water Assessment* (DHS and DEQ) found:



1. The Oxberg well and aquifer are not considered highly sensitive to contamination based on well construction and the sensitivity analysis. This relates to directly around the well head and well house. Construction for the proposed development is located over 550 feet and downhill from the Oxberg well, and no deep subsurface work is proposed, so there is no potential for contamination at the well head during development. The second well, whose log was not available is understood to be on the northside of the lake, opposite of the proposed development.
2. Residential land use including apartments and condominiums was determined to be a low risk during the aquifer susceptibility analysis for potential contaminant sources inside the drinking water protection area.

The development of Crestview Crossing poses a low risk for potential source water contamination to the Oxberg well as no deep subsurface work is proposed and the Oxberg well is located in a confined aquifer. Drinking water will be supplied by the Newberg municipality so no new wells are planned.

CONCLUSIONS

Based on the hydrogeologic information reviewed for the Site and adjacent property where the Oxberg well is located, we conclude that there is little to no potential for the Crestview development to:

1. Impair groundwater recharge to the nearby Oxberg wells.
2. Effect groundwater quality in the Oxberg wells.

Both of these conclusions are based on the following observations:

- The Oxberg wells are in a confined aquifer that has limited to no hydraulic connection to the Site.
- In the unlikely event that there was a hydraulic connection between the confined aquifer the Oxberg wells pump water from, measured surface infiltration (recharge) rates are extremely low to non-existent, indicating little or no local recharge to the underlying confined aquifer.

If you have any questions, please do not hesitate to contact me at your convenience.

REFERENCES

DHS and DEQ. 2004. Oregon Department of Human Services Health Services Drinking Water Program and Oregon Department of Environmental Quality Water Quality Division Drinking Water Protection. *Source Water Assessment Report Summary of Analysis Oxberg Water System Newberg, Oregon Yamhill County PWS #4105308. April.*

OWRD. 2002. "Ground Water Supplies in the Willamette Basin." Oregon Water Resource Department.

Schlicker, H.G. and R.J. Deacon. 1967. "Engineering Geology of the Tualatin Valley Region, Oregon." Oregon Department of Geology and Mineral Industries, Bulletin 60, p. 103, 4 plates, 1:62,500 scale.



USGS. 1978. "Groundwater in the Newberg Area, Northern Willamette Valley, Oregon." Water Resource Department Ground Water Report No. 27. State of Oregon. Prepared in cooperation with the United State Department of the Interior Geological Survey.

Sincerely,
GeoEngineers, Inc.



Jonathon S. Travis, RG
Staff Geologist



Kevin A. Lindsey, PhD, LHg
Principal

ASC:LAH:JST:JCV:KAL:tjh

Attachments:

Table 1. Nearby Wells

Figure 1. Proximity Map of Crestview Crossing Site to Oxberg Well

Attachment A. Well Log YAMH 2385

Disclaimer: Any electronic form, facsimile or hard copy of the original document (email, text, table, and/or figure), if provided, and any attachments are only a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record.



Table 1
Nearby Wells
Crestview Crossing
Newberg, Oregon

County	Well Number	Well Tag Number	Owner Last Name	Owner First Name	Company Name	Street	City	Zip	Depth of First Water (feet)	Depth Drilled (feet)	Completed Depth (feet)	Post Static Water Level (feet)	Date Drilling Complete	Township	Range	Section	Quarter 160	Quarter 40	Tax Lot	Street of Well	Max Well Yield (gpm)
Wells Drilled Less than 150 Feet																					
YAMH	2386		DAVIS	WOODROW		PO BOX 96	NEWBERG	97132		75	75	10	9/26/1958	3S	2W	16	NE				18
YAMH	2400		ROGERS	MR WALTER		2906 HOOVER BLVD	NEWBERG	97132		80	80	5	2/14/1961	3S	2W	16	SW	SW		SPRING BROOK JUNCTION & HWY 99 W SOUTH SIDE OF ROAD	7
YAMH	2399		MEEKER	FRANK		RT 2 BOX 100	NEWBERG	97132		81	81	18	12/22/1966	3S	2W	16					7
YAMH	3866	479			PARROTT MOUNTAIN CONSTRUCTION	16260 SW BELL RD	SHERWOOD	97140	78	81	81	5	4/11/1995	3S	2W	9	SE	NE	201	29935 NE BENJAMIN RD, NEWBERG	20
YAMH	2224		FELTY	RICHARD		RT 1 BOX 312B	NEWBERG		50	88	89	8	7/28/1982	3S	2W	9	SE	SW			75
YAMH	2273		ROWLAND	JERRY			NEWBERG		50	95	95	30	2/16/1957	3S	2W	9	SW	NW		RT 2 BOX 90	19
YAMH	51		ORTIZ	MR ROBERTO	ORTIZ, MRS ROBERTO	314 S EDWARDS	NEWBERG	97132	90	97	97	72	6/5/1990	3S	2W	9	SE	NW		DAVID COURT	50
YAMH	55625	100246	WEGTER	KEN		3872 CAMISHAUM COURT	SALEM	97305	40	99	99	26	3/24/2010	3S	2W	9	SE	SW	2800	29366 PUTNAM RD, NEWBERG	1
YAMH	56262	108231	MILLS	NANCY		14615 SPRINGBROOK RD	NEWBERG	97132	62	100	98	12	5/7/2012	3S	2W	9	SW	NE	1901	14615 SPRINGBROOK RD	21
YAMH	2395		MACDONALD	MRS J C		RT 2 BOX 331	NEWBERG	97132	87	100	100	90	5/5/1973	3S	2W	16	NW	SW			11
YAMH	2256		LOOKABILL	LYLE		ROUTE 2 BOX 32	NEWBERG	97132	79	104	102	56	5/18/1979	3S	2W	9	SE	SW			20
YAMH	2397		GLEASON	ELBERT		RT 2 BOX 326	NEWBERG	97132	35	105	105	26	6/21/1972	3S	2W	16					22
YAMH	2271				YOUNG AND PAWELSKI HOMES INC				60	107	108	30	9/22/1976	3S	2W	9	SE	NW			32
YAMH	298		BURGUSS	JOE		PO BOX 506	TUALATIN	97062	65	115	115	25	5/13/1976	3S	2W	16	NE				15
YAMH	4280		BURGUSS	JOE		PO BOX 506	TUALATIN	97062	80	115	115	35	1/13/1976	3S	2W	16		NE			12
YAMH	2213		WOOD	BILL	WOOD, CATHY	1506 N COLLEGE	NEWBERG	97132	75	118	111	30	9/21/1989	3S	2W	9	SE	SE			60
YAMH	2390		BURGUSS	JOE		PO BOX 506	TUALATIN	97062	90	122	122	34	3/6/1976	3S	2W	16	NE				15
YAMH	748		BENTLEY JR	MR JAMES E	BENTLEY JR, MRS JAMES E	PO BOX 856	NEWBERG	97132	85	125	125	15	6/17/1991	3S	2W	9	SE	NW		DAVID LANE & SPRINGBACK RD (INTERSECTION)	23
YAMH	1692		COCHRAN	MR MICHAEL J	COCHRAN, MRS MICHAEL J	35101 SW LADD HILL RD	WILSONVILLE	97070		125	125	32	4/3/1992	3S	2W	9	SE	NW		14630 NE SPRINGBROOK NEWBURG (NEXT DRIVEWAY NORTH)	15
YAMH	2272		LUCIANE	JOHN B		ROUTE 2 BOX 320	NEWBERG	97132	124	126	126	22	6/11/1973	3S	2W	9	SE	NW			10
YAMH	52152	26714	ALEXANDER	DON		1282 3RD ST 56	LAFAYETTE	97127	130	137	137	19	5/4/2000	3S	2W	16	SE	NE	1100	1217 KLIMEK DR, NEWBERG	25
YAMH	113		CARTER	MR JOHN	CARTER, MRS KELLI	10035 SW GARRETT #6	TIGARD	97223	68	143	143	32	9/13/1990	3S	2W	9	SE	NW		OFF SPRINGBROOK RD (1ST DIRT RD ON R, PAST BENJAMIN RD)	26
YAMH	2393		FORTUNE, JR	JOHN J		RT 2 BOX 321 C	NEWBERG	97132	105	145	145	65	2/27/1975	3S	2W	16	NE	NE			9
YAMH	2398		WAGNER	ED		RT 3 BOX 143	NEWBERG	97132		148	148	38	9/11/1965	3S	2W	16					10
YAMH	2383		DOANE	GARY		455 SE 32ND	HILLSBORO	97123		149	149	58	9/17/1949	3S	2W	16					18
Wells Drilled Greater than 100 Feet																					
YAMH	2396				LEAVITE AND WIDING	2712 NE SANDY	PORTLAND		63	150	150	61	12/17/1970	3S	2W	16					17
YAMH	2236		HUMPRES	JIM		3965 SW 202ND	ALOHA	97007	60	151	152	47	6/12/1975	3S	2W	9	SE				50
YAMH	299		BIXBY	ETHEL			NEWBERG	97132	87	152	152	35	5/5/1973	3S	2W	16					14
YAMH	2387		DAVIS	WOODROW W		ROUTE 2 BOX 96	NEWBERG	97132		155	155	22	8/28/1958	3S	2W	16	NE				5
YAMH	278		MILLER	TOM		1478 N SHERWOOD BLVD	SHERWOOD	97140	120	155	155	60	1/12/1987	3S	2W	9	SE	SW			20
YAMH	3901	2379	GAMBLE	MR VIC	GAMBLE, MRS VIC	10260 SW NIMBUS BLDG M1	TIGARD	97223	140	160	152	28	6/2/1995	3S	2W	9	SW	SE		0.5 MI N ON BENJAMIN RD OFF HWY 99W	100
YAMH	2269		STEELE	JAMES O		RT 2 BOX 312 A2	NEWBERG	97132	126	160	160	85	5/31/1978	3S	2W	9	SE	SW	3100		15
YAMH	2268				B & H CONSTRUCTION	222 NW 139TH ST	PORTLAND		156	162	162	90	11/14/1974	3S	2W	9	SE	NW			40
YAMH	2216		WAGNER	KARL		2301 JODI COURT	NEWBERG	97132	68	163	163	17	5/11/1987	3S	2W	9	SE	SE		29705 PUTNAM RD, NEWBERG	25
YAMH	767		WAGNER	MARY JANE		29705 PUTMAN RD NE	NEWBERG	97132	118	168	168	34	6/29/1991	3S	2W	9	SE	SE	3305	29705 PUTMAN RD NE	20

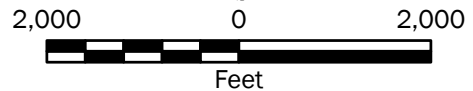
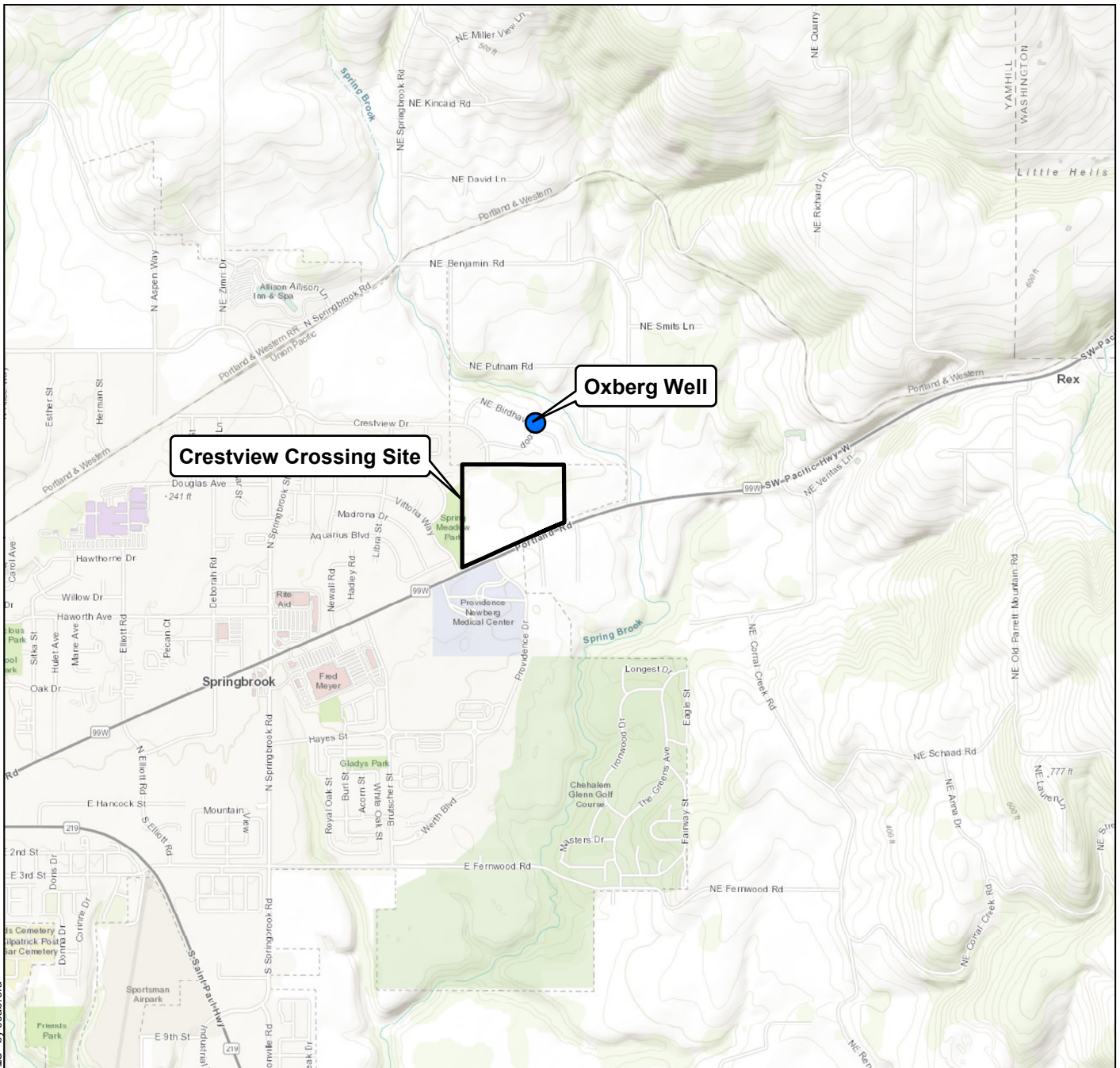
County	Well Number	Well Tag Number	Owner Last Name	Owner First Name	Company Name	Street	City	Zip	Depth of First Water (feet)	Depth Drilled (feet)	Completed Depth (feet)	Post Static Water Level (feet)	Date Drilling Complete	Township	Range	Section	Quarter 160	Quarter 40	Tax Lot	Street of Well	Max Well Yield (gpm)
YAMH	50354	8785	PECK	THOMAS		16050 PIT RD	HILLSBORO	97123	138	168		61	9/24/1996	3S	2W	9	SE	SE	4100	JUST EAST OF 29730 BENJAMIN RD, NEWBERG	120
YAMH	2389		SPANGLER	WILLIAM					92	170	170	62	1/20/1978	3S	2W	16	NW	SW			10
YAMH	2394		RETRY	ROBERT		312 N EDWARDS	NEWBERG	97132	103	170	170	50	4/8/1975	3S	2W	16					2
YAMH	3268		HOST	MR GARY A	HOST, MRS GARY A	8605 SW MANDAN DR	TUALATIN	97062	140	172	170	1	11/3/1994	3S	2W	9	SW	SE			100
YAMH	2211		BROWN	GLENN		29730 BENJAMIN RD	NEWBERG	97132	164	174	174	64	12/19/1989	3S	2W	9	SE	SE		29730 BENJAMIN RD	26
YAMH	2215		JOHNSON	EVERT	JOHNSON, ESTHER	29955 NE BENJAMIN RD	NEWBERG	97132	140	175	175	22	5/17/1989	3S	2W	9	SE	NE		29955 NE BENJAMIN RD	24
YAMH	50181	3228	DOBBINS	DAVE		29830 NE BENJAMIN	NEWBERG	97132	155	180	180	44	6/29/1996	3S	2W	9	SE	SE	3209	29830 NE BENJAMIN	100
YAMH	52308	37663	LOUIS	RON		739 CROSSBROOK DR	MORGEA	94556	115	183	183	115	8/10/2000	3S	2W	9	SW	NW	1800	3220 ZIMRI DR, NEWBERG	50
YAMH	54510	85530	NEWTON	FRED		30875 SW HEATER RD	SHERWOOD	97140	103	183	176	33	6/22/2006	3S	2W	9	SE	SE	3303	29815 SE PUTMAN, NEWBERG	90
YAMH	2219		SMITH	ROBERT D		RT 1 BOX 49	NEWBERG	97132	85	185	185	35	10/12/1982	3S	2W	9	SE		3900	RT 4 BOX 313 C; CO RD 54	50
YAMH	279		LUU	NGUAN		503 SE 47TH	PORTLAND	97215	140	195	196	66	11/3/1981	3S	2W	9	SE	SW		RT 2, NEWBERG	20
YAMH	2385				OXBERG INC.	PO BOX 467	NEWBERG	97132		200	200	29	12/11/1986	3S	2W	16				4100 E CRESTVIEW NEWBERG	45
YAMH	3169		DAMNAN	MR GARY	DAMNAN, MRS GARY	7750 SW 171ST	ALOHA	97223	145	200	200	52	8/4/1994	3S	2W	16	NE	NE			25
YAMH	2270		STEELE	JAMES O		607 N COLLEGE	NEWBERG	97132	183	203	204	51	7/12/1974	3S	2W	9	SE				30
YAMH	2391		RUBENS	CHRIS		118 W LEXINGTON	ASTORIA	97103	140	205	205	20	5/3/1977	3S	2W	16					30
YAMH	50344	8784	WISE	GEORGE	WISE, JAMIE	12287 SW LANSDOWNE LANE	TIGARD	97223	135	207	207	99	9/20/1996	3S	2W	9	SW	NE	1900	SPRINGBROOK RD	100
YAMH	3894		JACOBSEN	MRS JAN		4300 E PORTLAND RD	NEWBERG	97132	170	215	215	28	5/31/1995	3S	2W	16	SE	NW			30
YAMH	56487	106624			PROVIDENCE HEALTH SYSTEM	1001 PROVIDENCE DR	NEWBERG	97132		216	216	19	3/8/2013	3S	2W	16			1902	1001 PROVIDENCE DR; 150 YDS ON L	50
YAMH	50746	13498	ATZEN	NAN	ATZEN, TERRY	29365 NE PUTNAM RD	NEWBERG	97132	85	217	217	58	8/13/1997	3S	2W	9	SE	SW	3101	29365 NE PUTNAM RD	5
YAMH	2388		ROLOW	MR MIKE	ROLOW, MRS MIKE	RT 4 BOX 333C	NEWBERG		97	222	222	12	7/15/1985	3S	2W	16	SE	NW	100	RT 4 BOX 333C	28
YAMH	52800	51231	LYDA	JOHN		900 NE CHEHALEM DR	NEWBERG	97132	180	260	260	7	10/16/2001	3S	2W	16	SE	NE	900	1100 KLIMEK LANE	12
YAMH	2392		PETRY	ROBERT		312 N EDWARDS	NEWBERG	97132	270	290	290	50	4/14/1975	3S	2W	16					11
YAMH	138		COFFIELD	BILL		3104 ZIMIRI DRIVE	NEWBERG	97132		290	290	158	9/18/1990	3S	2W	9	SE	NW			2
YAMH	280		STIVERSON	JIM		RT 2 BOX 302C	NEWBERG	97132	274	290	290	160	11/16/1978	3S	2W	9	SE	NW			17
YAMH	55624	100245	MILLS	GLEN		15125 NE SPRINGBROOK LANE	NEWBERG	97132	138	300	300	102	3/22/2010	3S	2W	9	SE	SW	1604	NEAR 15125 NE SPRINGBROOK LANE	75
YAMH	362		BURGUSS	JOE		PO BOX 506	TUALATIN	97062	225	315	315	29	2/2/1976	3S	2W	16	NE				2
YAMH	281		MCKAY	GEORGE		RT 2 BOX 307	NEWBERG	97132	291	324	317	160	8/22/1984	3S	2W	9	SE				110
YAMH	900		PETRY	BOB		29465 NE PUTNAM RD	NEWBERG	97132	106	338	338	80	11/14/1991	3S	2W	9	SE	SE		29465 NE PUTNAM RD	7
YAMH	52306	37664	LOUIS	RON		739 CROSSBROOK DR	MORGEA	94556	62	424	424	75	8/11/2000	3S	2W	9	SW	NW	1800	3104 ZIMRI DR, NEWBERG	5

Notes:

Bold - Oxberg Well YAMH 2385

Source: Oregon Water Resource Well Log Query (https://apps.wrd.state.or.us/apps/gw/well_log/Default.aspx)

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Notes:

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: Mapbox Open Street Map, 2017
 Topo base map from ESRI.

Projection: NAD 1983 UTM Zone 10N

Proximity Map of Crestview Crossing Site to Oxberg Well

Crestview Crossing
 Newberg, Oregon



Figure 1

ATTACHMENT A
Well Log YAMH 2385

STATE OF OREGON
WELL REPORT
(as required by ORS 537.765)

WELL # 2

12/24/86

DEC 26 1986

OWNER: WATER RESOURCES DEPT.
NAME: OXBERG
Address: P.O. BOX 467
City: NEWBERG State: OREG Zip: 97132

(2) TYPE OF WORK:
 New Well Deepen Recondition Abandon

(3) DRILL METHOD
 Rotary Air Rotary Mud Cable
 Other

(4) PROPOSED USE:
 Domestic Community Industrial Irrigation
 Thermal Injection Other

(5) BORE HOLE CONSTRUCTION:
Special Construction approval Yes No Depth of Completed Well 200 ft.
Explosives used Yes No Type _____ Amount _____

HOLE		SEAL		Amount sacks or pounds
Diameter	From To	Material	From To	
12	0	139 CEMENT	0	20
8	139	200		

How was seal placed: Method A B C D E
 Other

Backfill placed from _____ ft. to _____ ft. Material _____
Gravel placed from 30 ft. to 139 ft. Size of gravel 3/4" TO 1/4"

(6) CASING/LINER:

Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing: 8	+1	162	250	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Liner: 6	160	200	160 LB	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(7) PERFORATIONS/SCREENS:
 Perforations Method MILLS KNIFE
 Screens Type _____ Material _____

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
50	162		475	1/4"		<input checked="" type="checkbox"/>	<input type="checkbox"/>
162	200		160	1/4"		<input type="checkbox"/>	<input checked="" type="checkbox"/>

(8) WELL TESTS: Minimum testing time is 1 hour
 Pump Bailer Air Flowing Artesian
Yield gal/min _____ Drawdown _____ Drill stem at _____ Time _____
45 50 1 hr.

Temperature of water _____ Depth Artesian Flow Found: _____
Was a water analysis done? Yes By whom _____
Did any strata contain water not suitable for intended use? Too little
 Salty Muddy Odor Colored Other _____
Depth of strata: _____

(9) LOCATION OF WELL by legal description:
County YAMHILL Latitude _____ Longitude _____
Township 3S N or S, Range 2W E or W, WM.
Section 16 1/4 _____ 1/4 _____
Tax Lot _____ Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) 4100 E. CRESTVIEW, NEWBERG, OREGON

(10) STATIC WATER LEVEL:
29 ft. below land surface. Date 12/11/86
Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:
Depth at which water was first found _____

From	To	Estimated Flow Rate	SWL
50	200	45	29

(12) WELL LOG: Ground elevation _____

Material	From	To	SWL
TOP SOIL	0	2	
BROWN CLAY	2	25	
SOFT DECOMPOSED BROWN ROCK WITH CLAY STREAKS	25	152	29
SOFT BROWN ROCK	152	172	29
BROWN CLAY	172	178	29
SOFT BROWN ROCK	178	200	29

Date started 11/26/86 Completed 12/11/86

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to my best knowledge and belief.
Signed _____ WWC Number _____ Date _____

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.
Signed CE Keller WWC Number 462 Date 12/24/86



Crestview Crossing Homeowners Association

**Reserve Study
2020**

**Prepared by
Blue Mountain Community Management**
17933 NW Evergreen Place, Suite 200
Beaverton, OR 97006
503-332-2047

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Property Description

Crestview Crossing Homeowners Association (herein referred to as the “community”) is a single family residential development located in Newberg, Yamhill County, Oregon. The **Crestview Crossing Homeowners Association** (herein referred to as the “Association”) shall provide repair, replacement and maintenance on all property designated as common area by the adopted community plat, recorded in Yamhill County, Oregon.

This reserve study utilizes a mix of information provided by the developer, various construction estimating and scheduling manuals/programs, and information from the **Crestview Crossing Homeowners Association** board in order to derive the useful life and replacement cost of each common item.

Funds will be accumulated in the reserve account as required by Oregon State Law based on estimates of future need for repairs and replacement of common property components. Actual expenditures, income and provisions for income taxes may vary from estimated amounts and the variations may be significant and material. Therefore, amounts accumulated in the replacement fund may not be adequate to meet future funding expectations. Please update your reserve study on an annual basis in order to maintain the best possible estimates.

If additional funds are needed for any repair, replacement or maintenance to common area properties, the Association has the right to increase regular assessments or to levy special assessments or delay repairs or replacement until funds become available.

Reserve Study & Maintenance Plan Information Section

Blue Mountain Community Management was selected by the **Crestview Crossing Homeowners Association** to conduct a Reserve Study for implementation beginning January 1, 2020. The enclosed Reserve Study and Maintenance Plan were developed in accordance with guidelines established by the Community Associations Institute and are in compliance with Oregon State Law including changes made during the 2007 legislative session to ORS Revised State Statutes, Chapters 94 and 100.

Assumptions used for inflation, interest, and other factors are detailed in the *Reserve Study Summary*. All assumptions made herein are based upon information provided by the developer and an onsite inspection of those details. This Reserve Study offers no warranties or guarantees based upon those assumptions and observations and provides an annual baseline for funding and maintaining common elements throughout the community.

All information regarding the useful lives and costs of reserve components were derived by Blue Mountain Community Management and various construction pricing and scheduling manuals.

The terms RS Means and National Construction Estimator refer to construction industry estimating databases that are used throughout the industry to establish cost estimates and useful life estimates for common building components and products. In any case, when work is to be performed, the association should obtain firm bids for these services.

Blue Mountain Community Management is not aware of any material issues that if not disclosed would cause distortion of this report.

Certain information such as the beginning balance of reserve funds and other information as detailed on the component reports were provided by Association representatives and are deemed to be reliable by Blue Mountain Community Management. This Reserve Study is a reflection of the information provided to Blue Mountain Community Management and cannot be used for the purpose of performing an audit, quality analysis, or background check for historical records. Onsite inspections are not to be considered a project audit or quality inspection of Association property.

The two most pressing responsibilities for a homeowner association board are the annual preparation of a budget and the maintenance of a reserve fund for community components identified as “common” to all members of the association. The annual operating budget reflects the association’s annual commitment to quality and service, while the reserve budget reflects the association’s desire to maintain the community for a 30-year period at a level acceptable to all members of the association.

Reserve studies, while an important guiding document for the long-term health of the community, must be maintained on an annual basis in order to continue to reflect an association’s desire to remain at a particular level of maintenance and replacement. Blue Mountain Community Management suggests remembering the following:

1. Update your Reserve Study on an annual basis. Hire a professional to refresh your Reserve Study annually and make this commitment by including a line item in your annual budget for doing so. A Reserve Study is a “snapshot in time” and its assumptions, factors and results will become skewed without annual maintenance.
2. Reserve studies are not perfect. While a paved section of road may have a useful life of 24 years, it doesn’t necessarily mean it will be replaced in 24 years. Sometimes asphalt doesn’t adhere perfectly, or the contractor makes a mistake and the road needs to be replaced in 15 years. Occasionally, the road looks just fine in 24 years and does not need replacement. Remember, an estimate is based on the best knowledge available at the time of the study.
3. This Reserve Study and its parameters are based upon information provided by the declarant, the association members, board of directors and a host of contractors, vendors and construction estimation programs. It represents an amalgamation of the best information available and relies on the information provided by several outside sources.
4. It is assumed that all assets have been designed and constructed properly unless otherwise noted.
5. This Reserve Study is provided as an aid for planning purposes and not as an accounting tool. It describes events and occurrences that have not yet occurred and there is no assurance that the results outlined in the Reserve Study will occur as described.

Funding Methods

Reserve studies are a complicated mix of assumptions and estimates used to approximate the cost of renewal/replacement of capital and non-capital assets associated with a given community's common elements. The Reserve Study User's Guide has been developed to assist homeowners, board members and declarants better understand the Reserve Study and maintenance plan they purchased.

A Reserve Study is best described as an assessment of current assets, their approximate value and their future value at the time of replacement. A Reserve Study is typically requested by the developer of a specific parcel of land that has been subdivided for condominiums or residential units for the purpose of determining the initial value of common elements like privately owned parks, pathways, clubhouses etc. In some states, reserve studies and maintenance plans have become a legal requirement in order to develop a new community.

A Reserve Study has two primary functions:

1. Establish the initial funding goals for the association as they relate to common elements and
2. Select an appropriate funding plan for those goals.

The basis for funding of reserves is to distribute the cost of the replacement over the useful life of a particular component. The ideal level of reserves is proportionate to the expected life of a component and those costs. Therefore, if a particular component has a useful life of 20 years, the expectation would be that the individual reserve for that item is spread equally over 20 years:

$$(\text{Age/Useful Life}) \times \text{Current Replacement Cost} = \text{Full Funding of Reserves}$$

Each year would equal $1/20^{\text{th}}$ of the useful life and the reserve should include $1/20^{\text{th}}$ of the value of the component over a 20-year period. If the fund meets this standard, then it is referred to as "fully funded."

Do not confuse "fully funded" with the concept that every Reserve Study has a 100% funding for all components at one time. A proper Reserve Study provides 100% funding based on expected life. If a given component fails or needs maintenance prior to its expected life cycle, the fund may become depleted or may incur a negative balance. Every Reserve Study is a "snapshot in time" based on accepted industry standards for life expectancy and costs.

There are four generally accepted funding plans from which most associations select:

1. **“Minimum Funding Method (Threshold)”**. This funding method focuses on keeping the reserve fund’s cash balance above zero. This means that while each component may not be fully funded, the cash balance overall does not drop below zero during the projected period. A large percentage of association’s use this model because of its relative lower cost and simplicity, however an association must remember that if an item prematurely expires prior to its useful life calculation, a deficit may occur in the reserve cash balance.
2. **“Capped Minimum Funding Method (Threshold +)”**. The same as the Minimum Funding model concept, however the fund balance never reaches below an arbitrarily set reserve cash balance. Instead of starting the fund with \$0, an association or developer compels the prospective homeowner to contribute an amount at time of closing in order to ensure a cushion in the reserve balance. This method is typically used by Condominium Associations who need to give rise to a large amount of money early on in order to ensure proper capital maintenance and replacement of elements.
3. **“Current Assessment Funding Method”**. Based on a cash flow funding model like the two previous methods, this model takes the current funding level of the reserve account and assumes that the amount will not change. The funding level is then projected over 30 years in order to illustrate the adequacy of current funding. This method is more regularly examined with long established associations with members who are sensitive to increased monthly dues.
4. **“Component Funding Method”**. The simplest and most conservative method. It distributes cash reserves to individual reserve components and then calculates what the reserve assessment and interest contribution should be, again by each reserve component. The current annual assessment is then determined by adding all the individual component assessments together. This is the most conservative method and leads to a fully funded reserve position at all times.

This particular Reserve Study utilizes the “Minimum Funding Method (Threshold)” based on the association’s annual cash flow. The annual balance of the fund will maintain more than \$1,000 annually at any given period for the next 30 years based on the assumptions provided in the Funding Method Summary and the additional caveat that no component fails in total prior to its expected useful life.

Funding Options

In the event a component does fail prior to its expected useful life, an association has three primary options:

1. **Acquire a loan.** Lending institutions will often loan money to an association for capital improvements using the future assets of the association as collateral for the loan. Traditionally, an additional monthly assessment for the principal and interest of the loan would be assessed against each unit for the period specified by the lender.
2. **Institute a special assessment.** Some associations may not be able to secure a loan for a component that has failed unexpectedly. Typically, the association board then turns to a special assessment. The cost of the item in need of replacement is divided equally among the homeowners and assessed against their HOA dues. This may be done as a one-time payment or as a monthly assessment for a given period of time.
3. **Defer the required repair or replacement.** This option is most commonly used and is often abused. Because it is much simpler to ignore a problem, an association will defer repair or replacement in lieu of having future funds. This usually leads to more deferred repair and replacement until eventually the entire reserve schedule is woefully behind. This method should only be used in extreme cases. Please consider all options prior to selecting deferral.

Maintenance Plan 2020

Maintenance Plan Executive Summary

Regular maintenance of common elements is necessary to insure maximum useful life and optimum performance of components. Items of particular concern are those that represent a safety hazard to residents or guests if they are not maintained properly and components that provide waterproofing or protection from other elements.

This maintenance plan is a cyclical plan that calls for maintenance at regular intervals. The frequency of maintenance and cost of the activity initially will follow a short narrative description. Every maintenance plan should be reviewed and updated on an annual basis when preparing the annual operating budget for the Association.

Information herein is coordinated from a frequently updated source, Reed Construction Data, a reputable provider of construction cost data.

Pursuant to Oregon State Statutes, Sections 94 and 100—requiring a maintenance plan as an integral part of the reserve study, the following maintenance procedures are recommended:

Concrete—Maintenance Allowance

Total Maintenance Frequency: Inspect Annually

Concrete steps, common area sidewalks, the curbs on private streets shall be kept in good condition. Any cracks, damage, or displacement should be repaired. Periodic pressure washing of the concrete steps at Tract G.

Reserve Study 2020

Funding Method Summary

Report Statistics		Report Assumptions/ Parameters	
Report Date	July 20, 2018	Inflation Factor	3.30%
Account Number	CrstVwTerrRS1	Annual Assessment Increase	3.30%
Budget Year Beginning	January 1, 2020	Interest Rate on Reserve Deposit	0.50%
Budget Year Ending	December 31, 2020	Tax Rate on Interest	0.00%
Total Units	248	Contingency	0.00%

Funding Method Notes

- The purpose of this study is to ensure that adequate replacement funds are available when components reach the end of their useful life according to a variety of assumptions. Components will be replaced as required, not necessarily in their expected replacement year. This analysis should be updated annually.
- The following items were not included in the analysis because their useful life is greater than thirty years: sanitary sewer and storm drains, telephone, cable, internet lines, grading, all other unmentioned components with a useful life deemed greater than thirty years by industry standards.
- Two funding projections are provided. The *Threshold Method Projection* establishes a reserve funding goal that keeps the reserve balance above **\$15,000**. The *Fully-Funded Projection* establishes a reserve funding goal that achieves a 100% fully-funded reserve balance by the end of the 30-year study period.

Contribution Rate Recommendation

Blue Mountain Community Management recommends that the Association adopt the contribution rates provided in the *Threshold Method Projection*.

Threshold Method Projection

This projection uses a “threshold funding” method, which establishes a reserve funding goal that keeps the reserve balance above a specified dollar or percent funded amount.

All – 248 Lots

The funding scenario for the 248 lots begins with a starting balance of **\$0.00** and an annual contribution of **\$16,425.00**. The annual contribution increases 3.3% each year for the remaining years of the study. A minimum balance of **\$15,000** is maintained from throughout the life of the study.

Summary of Calculations – All Lots

Required Annual Contribution	\$16,425.00
Required Monthly Contribution	\$1,368.75
Unit Monthly Contribution	\$5.52

Threshold Method Projection Chart – All Lots

Beginning Balance **\$0.00**

Year	Current Cost	Annual Contribution	Annual Interest	Annual Expenditures	Target Ending Reserves
2020	\$374,458	\$16,425	\$83	\$0	\$16,507
2021	\$386,815	\$16,967	\$167	\$0	\$33,642
2022	\$399,579	\$17,527	\$256	\$0	\$51,424
2023	\$412,766	\$18,105	\$321	\$5,291	\$64,560
2024	\$426,387	\$18,703	\$379	\$7,401	\$76,240
2025	\$440,458	\$19,320	\$478	\$0	\$96,038
2026	\$454,993	\$19,958	\$137	\$88,579	\$27,554
2027	\$470,007	\$20,616	\$241	\$0	\$48,411
2028	\$485,518	\$21,296	\$306	\$8,428	\$61,586
2029	\$501,540	\$21,999	\$386	\$6,429	\$77,542
2030	\$518,091	\$22,725	\$501	\$0	\$100,769
2031	\$535,188	\$23,475	\$621	\$0	\$124,865
2032	\$552,849	\$24,250	\$159	\$117,226	\$32,048
2033	\$571,093	\$25,050	\$285	\$0	\$57,384
2034	\$589,939	\$25,877	\$377	\$7,877	\$75,760
2035	\$609,407	\$26,731	\$473	\$7,812	\$95,153
2036	\$629,517	\$27,613	\$559	\$10,927	\$112,397
2037	\$650,291	\$28,524	\$705	\$0	\$141,626
2038	\$671,751	\$29,465	\$202	\$130,778	\$40,515
2039	\$693,919	\$30,438	\$355	\$0	\$71,308
2040	\$716,818	\$31,442	\$423	\$18,186	\$84,987
2041	\$740,473	\$32,480	\$540	\$9,492	\$108,515
2042	\$764,909	\$33,552	\$710	\$0	\$142,777
2043	\$790,151	\$34,659	\$887	\$0	\$178,323
2044	\$816,226	\$35,802	\$79	\$198,358	\$15,846
2045	\$843,161	\$36,984	\$264	\$0	\$53,094
2046	\$870,985	\$38,204	\$456	\$0	\$91,755
2047	\$899,728	\$39,465	\$598	\$11,533	\$120,286
2048	\$929,419	\$40,768	\$622	\$36,610	\$125,065
2049	\$960,090	\$42,113	\$836	\$0	\$168,014

Component Summary by Category

Description	Replacement Year	Useful Life	Remaining Life	Current Cost
Grounds				
Asphalt - Repair, Patch & Seal	2026	6	6	\$62,400
Asphalt - Overlay	2056	36	36	\$218,400
Concrete Sidewalk Allowance	2040	20	20	\$3,000
Fence - Chain Link	2055	35	35	\$30,608
Fitness Stations	2044	24	24	\$10,000
Benches	2048	28	28	\$3,250
Irrigation Controller, System Allowance	2026	6	6	\$5,700
Bollard Lights	2044	24	24	\$1,600
Bark Mulch	2023	3	3	\$4,800
Cedar Chips	2024	4	4	\$2,000
Retaining Wall Allowance	2034	14	14	\$2,500
Open Space/Tree Allowance	2024	4	4	\$4,500
Monument & Sign Allowance	2034	14	14	\$2,500
Mailboxes	2055	35	35	\$23,200
Total Grounds				\$374,458
Total Assets:				\$374,458

Component Summary by Group

Description	Replacement Year	Useful Life	Remaining Life	Current Cost
<i>Capital</i>				
Asphalt - Overlay	2056	35	36	\$218,400
Concrete Allowance	2040	20	20	\$3,000
Fence - Chain Link	2055	35	35	\$30,608
Fitness Stations	2044	24	24	\$10,000
Benches	2048	28	28	\$3,250
Irrigation Controller, System Allowance	2026	6	6	\$5,700
Bollard Lights	2044	24	24	\$1,600
Bark Mulch	2023	3	3	\$4,800
Cedar Chips	2024	4	4	\$2,000
Retaining Wall Allowance	2034	14	14	\$2,500
Open Space/Tree Allowance	2024	4	4	\$4,500
Monument & Sign Allowance	2034	14	14	\$2,500
Mailboxes	2055	35	35	\$23,200
Total Capital				\$312,058
Non-Capital				
Asphalt - Repair, Patch & Seal	2026	6	6	\$62,400
Total Non-Capital				\$62,400
Total Assets:				\$374,458

Annual Expenditure Detail

Description	Expenditure per Item	Expenditure per Year
<i>No replacement in 2020 - 2022</i>		
Replacement in 2023		\$5,291
Bark Mulch	\$5,291	
Replacement in 2024		\$7,401
Cedar Chips	\$2,277	
Open Space/Tree Allowance	\$5,124	
<i>No replacement in 2025</i>		
Replacement in 2026		\$88,578
Asphalt - Repair, Patch & Seal	\$75,820	
Irrigation, Controller	\$6,926	
Bark Mulch	\$5,832	
<i>No replacement in 2027</i>		
Replacement in 2028		\$8,428
Cedar Chips	\$2,593	
Open Space/Tree Allowance	\$5,835	
Replacement in 2029		\$6,429
Bark Mulch	\$6,429	
<i>No replacement in 2030 - 2031</i>		
Replacement in 2032		\$117,226
Asphalt - Repair, Patch & Seal	\$92,127	
Irrigation, Controller	\$8,415	
Bark Mulch	\$7,087	
Cedar Chips	\$2,953	
Open Space/Tree Allowance	\$6,644	
<i>No replacement in 2033</i>		
Replacement in 2034		\$7,878
Retaining Wall Allowance	\$3,939	
Monument & Sign Allowance	\$3,939	
Replacement in 2035		\$7,812
Bark Mulch	\$7,812	
Replacement in 2036		\$10,927
Cedar Chips	\$3,362	
Open Space/Tree Allowance	\$7,565	
<i>No replacement in 2037</i>		
Replacement in 2038		\$130,777
Asphalt - Repair, Patch & Seal	\$111,941	
Irrigation, Controller	\$10,225	
Bark Mulch	\$8,611	
<i>No replacement in 2039</i>		
Replacement in 2040		\$18,186
Concrete Sidewalk Allowance	\$5,743	
Cedar Chips	\$3,829	
Open Space/Tree Allowance	\$8,614	

Crestview Crossing Homeowner Association Reserve Study and Maintenance Plan 2020

Description	Expenditure per Item	Expenditure per Year
Replacement in 2041		\$9,492
Bark Mulch	\$9,492	
<i>No replacement in 2042 - 2043</i>		
Replacement in 2044		\$198,360
Asphalt - Repair, Patch & Seal	\$136,017	
Fitness Stations	\$21,798	
Irrigation, Controller	\$12,425	
Bollard Lights	\$3,488	
Bark Mulch	\$10,463	
Cedar Chips	\$4,360	
Open Space/Tree Allowance	\$9,809	
<i>No replacement in 2045 - 2046</i>		
Replacement in 2047		\$11,533
Bark Mulch	\$11,533	
Replacement in 2048		\$36,610
Benches	\$8,067	
Cedar Chips	\$4,964	
Retaining Wall Allowance	\$6,205	
Open Space/Tree Allowance	\$11,169	
Monument Allowance	\$6,205	
<i>No replacement in 2049</i>		
Total:	\$664,928	\$664,928

Detail Report by Category

Grounds

Asphalt Streets – Patch, Repair & Seal

Non-Capital: Grounds

Placed in Service:	2020	Cost Basis:	156,000 SF @ \$0.40
Useful Life:	6 years	Asset Cost:	\$62,400
Remaining Life:	6 years	Percent Replacement:	100%
Replacement Year:	2026	Replacement Year Cost:	\$75,820

This component category provides funding for the periodic application of an asphalt emulsion sealer also known as “Slurry Seal” to all asphalt surfaces maintained by the HOA. The process includes pre-cleaning of all pavement, filling of any cracks or fissures in the pavement as well as the patching of isolated, damaged pavement surfaces, followed by the application of the emulsion sealer either by hand or mechanical means.

A licensed paving contractor should perform this work and all asphalt striping (if necessary) will need to be renewed when the seal coating is applied. The component expense estimate includes the cost of this work as well the seal coating cost.

Useful life assumptions are based on accepted industry estimates established by RS Means, and/or The National Construction Estimator. The Association should obtain a bid prior to commencing work. The estimated costs obtained ranged from \$0.38 - \$0.56 per square foot with replacement every 7-8 years.

Asphalt Streets – Overlay

Capital: Grounds

Placed in Service:	2020	Cost Basis:	156,000 SF @ \$1.40
Useful Life:	36 years	Asset Cost:	\$218,400
Remaining Life:	36 years	Percent Replacement:	100%
Replacement Year:	2056	Replacement Year Cost:	\$680,399

This component category provides funding for the renewal/replacement of asphalt surfaces maintained by the HOA. Renewal/replacement of asphalt paving refers to the periodic application of bituminous asphalt overlay that is typically applied in continuous sections at a thickness of 1” to 2”, depending on the individual project specifications. The overlay is designed to renew the life of the pavement for another life cycle of equal duration to the initial life expectancy of the pavement. The new surface is to be maintained in the same fashion as the original surface.

A licensed paving contractor should perform this work and all asphalt striping (if necessary) will need to be renewed when the overlay is applied. The component expense estimate includes the cost of this work as well as the overlay cost.

Useful life assumptions are based on accepted industry estimates established by RS Means, and/or The National Construction Estimator. The Association should obtain a bid prior to commencing work.

Concrete Allowance

Capital: Grounds

Placed in Service:	2020	Cost Basis:	1 @ \$3,000
Useful Life:	20 years	Current Cost:	\$3,000
Remaining Life:	20 years	Percent Replacement:	100%
Replacement Year:	2040	Replacement Year Cost:	\$5,743

This component category provides the partial replacement and repair of common area concrete.

Because this item is outside the 30-year scope of this study, this item provides an allowance for periodic maintenance and repair every 20 years or as needed.

Fence – Chain Link

Capital: Grounds

Placed in Service:	2020	Cost Basis:	1,155 LF @ \$26.50
Useful Life:	35 years	Asset Cost:	\$30,608
Remaining Life:	35 years	Percent Replacement:	100%
Replacement Year:	2055	Replacement Year Cost:	\$95,354

This component category provides for the replacement of the chain link fence bordering the water quality facilities in the community.

Fitness Stations

Capital: Grounds

Placed in Service:	2020	Cost Basis:	5 @ \$2,000
Useful Life:	24 years	Asset Cost:	\$10,000
Remaining Life:	24 years	Percent Replacement:	100%
Replacement Year:	2044	Replacement Year Cost:	\$21,798

This component category provides funding for the replacement of the fitness stations in the community.

Benches

Capital: Grounds

Placed in Service:	2020	Cost Basis:	5 @ \$650
Useful Life:	28 years	Asset Cost:	\$3,250
Remaining Life:	28 years	Percent Replacement:	100%
Replacement Year:	2048	Replacement Year Cost:	\$8,067

This component category provides funding for the replacement of the benches located along the cedar path in Tract A.

Irrigation Controller

Capital: Grounds

Placed in Service:	2020	Cost Basis:	6 @ \$950
Useful Life:	6 years	Asset Cost:	\$5,700
Remaining Life:	6 years	Percent Replacement:	100%
Replacement Year:	2026	Replacement Year Cost:	\$6,926

This component category provides funding for the replacement of the irrigation controller and system in the common areas.

Bollard Lights

Capital: Grounds

Placed in Service:	2020	Cost Basis:	2 @ \$800
Useful Life:	24 years	Asset Cost:	\$1,600
Remaining Life:	24 years	Percent Replacement:	100%
Replacement Year:	2044	Replacement Year Cost:	\$3,488

This component category provides funding for the replenishment of the bollard style lights in the park.

Bark Mulch

Capital: Grounds

Placed in Service:	2020	Cost Basis:	10 @ \$480
Useful Life:	3 years	Asset Cost:	\$4,800
Remaining Life:	3 years	Percent Replacement:	100%
Replacement Year:	2023	Replacement Year Cost:	\$5,291

This component category provides funding for the replenishment of the bark mulch throughout the community.

Cedar Chips

Capital: Grounds

Placed in Service:	2020	Cost Basis:	4 @ \$500
Useful Life:	4 years	Asset Cost:	\$2,000
Remaining Life:	4 years	Percent Replacement:	100%
Replacement Year:	2024	Replacement Year Cost:	\$2,277

This component category provides funding for the replenishment of the cedar chip path in Tract A.

Retaining Wall Allowance

Capital: Grounds

Placed in Service:	2020	Cost Basis:	1 @ \$2,500
Useful Life:	14 years	Asset Cost:	\$2,500
Remaining Life:	14 years	Percent Replacement:	100%
Replacement Year:	2034	Replacement Year Cost:	\$3,939

This component category provides funding for the maintenance of the retaining wall.

Open Space/Tree Allowance

Capital: Grounds

Placed in Service:	2020	Cost Basis:	1 @ \$4,500
Useful Life:	4 years	Asset Cost:	\$4,500
Remaining Life:	4 years	Percent Replacement:	100%
Replacement Year:	2024	Replacement Year Cost:	\$5,124

This component category provides funding to upkeep the open space areas in Tracts A, B, C, & D.

AFTER RECORDING RETURN COPY TO:

JORDAN RAMIS, PC
2 CENTERPOINTE DR, 6TH FLOOR
LAKE OSWEGO, OR 97035
ATTN: JAMES D. HOWSLEY

DRAFT

SPACE ABOVE THIS LINE FOR RECORDER'S USE

**DECLARATION OF PRIVATE STREET
MAINTENANCE COVENANT AND AGREEMENT**

RECITALS

WHEREAS, CG Commercial, LLC, a Delaware limited liability company and VPCF Crestview, LLC, a Delaware limited liability company (“Declarants”) are the owners of the real property described in Exhibit A and depicted on Exhibit B attached hereto and incorporated by this reference (the “Private Street Tracts”).

WHEREAS, a Private Street Maintenance Covenant and Agreement (“Agreement”) is required pursuant to the City of Newberg Final Decision dated _____, 2018 approving the Crestview Crossing Subdivision (“Subdivision”) including the Private Street Tracts.

WHEREAS, the Subdivision plat will be recorded to create the Private Street Tracts.

WHEREAS, the Crestview Crossing Homeowners Association (“Association”) has been created to own, administer and maintain the Private Street Tracts, among other purposes.

AGREEMENT

NOW, THEREFORE, Declarants covenant and agree on behalf of Declarants and their successors, including the Association, that the following provisions shall constitute a covenant running with the Private Street Tracts, as more particularly described herein.

1. PURPOSE OF COVENANT AND AGREEMENT.

The purpose of this Agreement is to provide for the perpetual maintenance of the Private Street Tracts by the Association.

2. LEGAL DESCRIPTION.

The legal description of the Private Street Tracts is on Exhibit A and depicted on Exhibit

B.

3. DURATION AND NATURE OF AGREEMENT.

This Agreement shall continue in perpetuity. This Agreement is intended to and does attach to and run with the land affected herein. This Agreement is binding on the Declarant, and its successors, heirs and assigns. It is the intent of Declarants to create a continuing obligation and right of the Association as the future owner of the Private Street Tracts.

4. CONSTRUCTION OF IMPROVEMENTS.

Declarants shall design and construct the street improvements to the specifications established by the City of Newberg, at Declarants' expense.

5. OWNERSHIP.

When Declarants have conveyed a sufficient number of the lots in the Subdivision to others, it will convey ownership of the Private Street Tracts to the Association and Declarants' obligations shall terminate.

6. MAINTENANCE.

The Declarants shall maintain the Private Street Tracts through a one-year warranty period expiring on _____, 2019. Once the warranty period is complete, the Association shall maintain all improvements including asphalt pavement, concrete curbs, fire lane restriction signage and striping, to the satisfaction of the City of Newberg and/or the Fire Marshal. The Association shall ensure that no lot owner, guest, invitee, licensee, contractor, vendor or agent of an owner shall cause damage, or place upon or over the Private Street Tracts any improvement, planting or other materials which would interfere with the maintenance or operation of the Private Street Tracts.

At the direction of the Association, the Private Street Tracts shall be inspected by a licensed Civil Engineer, at no less than 5 year intervals to identify needed maintenance. The Civil Engineer will recommend the amount of maintenance needed, and the recommendations shall be considered, mutually agreed and acted on by Association.

Maintenance shall include, but not be limited to:

- a. The removal of leaves, trash or other unsightly or dangerous materials;
- b. The removal of diseased or dead trees, landscaping or natural vegetation and the replanting of replacement materials.
- c. The trimming of trees and vegetation.
- d. The removal and replacement of any broken pavement.

- e. The sealing of and/or the eventual repaving of the pavement, in a useable condition and in good repair.
- f. The repair and/or replacement of damaged or missing fire lane restriction parking signs (as applicable) to the satisfaction of the Fire Marshal.
- g. The re-painting of any and all fire lane restriction striping, including any stenciled lettering to the satisfaction of the Fire Marshal.

7. INDEMNIFICATION.

The Association shall hold harmless, defend and indemnify the Declarants, the City of Newberg and the Fire Marshal and their officers, agents and employees against all claims, demands, actions and suits, including attorneys' fees and costs brought against any of them arising out of the failure to properly design, locate, construct or maintain the Private Street Tracts which are subject to this Agreement.

All workers undertaking maintenance work within the Private Street Tracts shall have standard liability insurance in a reasonable amount from a reputable insurance company which protects the Association.

8. NOTICE.

Any notice, demand, or report required under this Agreement shall be sent to the owner of the Private Street Tracts. Any required notice of demand shall be made by hand delivery or certified mail, and shall be deemed received on actual receipt or 48 hours after being mailed whichever first occurs.

9. AMENDMENT AND TERMINATION.

The owner(s) of the Private Street Tracts may not amend, withdraw from or dissolve this Agreement without the written approval of the City of Newberg, and any such instrument shall be recorded in the deed records of Yamhill County.

10. NO DEDICATION AS PUBLIC RIGHT-OF-WAY.

Nothing in this Agreement shall be interpreted to mean the Private Street Tracts are or will be dedicated to the City of Newberg, the public, or other public agency for right-of-way purposes.

IN WITNESS WHEREOF, the Declarants have executed this Private Street Maintenance Covenant and Agreement to be effective on _____ 2018.

Signatures and acknowledgments are on the following page.

DECLARANTS

CG Commercial, LLC, a Delaware limited liability company LLC

By: _____

Title: _____

STATE OF OREGON

County of Clackamas

The above instrument was subscribed and sworn to before me this _____ day of _____.

By _____

As _____ of _____.

Notary Public – State of Oregon

My commission expires: _____

VPCF Crestview, LLC, a Delaware limited liability company

By: _____

Title: _____

STATE OF OREGON

County of Clackamas

The above instrument was subscribed and sworn to before me this _____ day of _____.

By _____

As _____ of _____.

Approved as to form

DRAFT

Joe Hannon
City Manager, City of Newberg

Exhibit A
Legal Description

Parcels of land in the northeast quarter of Section 16, Township 3 South, Range 2 West, Willamette Meridian, in the City of Newberg, Yamhill County, Oregon, more particularly described as follows.

Tracts F, G and H on the plat of Crestview Crossing, a subdivision recorded on _____, 2018 at Volume _____, Page _____, Book of Plats.

AFTER RECORDING RETURN TO:
JORDAN RAMIS, PC
2 Centerpointe Dr, 6th Floor
Lake Oswego, OR 97035
Attn: James D. Howsley

DRAFT

This space provided for recorder's use.

STORMWATER FACILITY EASEMENT AND MAINTENANCE AGREEMENT

BETWEEN: City of Newberg, a municipal corporation of the State of Oregon (“City”)

AND: CG Commercial, LLC, a Delaware limited liability company and VPCF
Crestview, LLC, a Delaware limited liability company (“Declarants”)

DATED: _____, 2018

RECITALS

- A. WHEREAS, Declarants are the owner of the real property described in Exhibit A and depicted on Exhibit B attached hereto and incorporated by this reference (the “Private Street Tracts” and the “Stormwater Tracts”).
- B. WHEREAS, this Stormwater Facility Easement and Maintenance Agreement (“Agreement”) is required pursuant to the City of Newberg Final Decision dated _____, 2018 approving the Crestview Crossing Subdivision (“Subdivision”) including the Stormwater Tracts.
- C. WHEREAS, the Subdivision plat is being recorded to create the Stormwater Tracts.
- D. WHEREAS, the Crestview Crossing Homeowners Association (“Association”) has been created to own, administer and maintain the Stormwater Tracts, among other purposes.
- E. The Stormwater Tracts were designed by a registered professional engineer to accommodate the anticipated volume of runoff, detain such runoff, and release it at a slow rate.
- F. The City desires a stormwater facility easement over a portion of the Stormwater Tracts. Declarant is willing to grant to the City a stormwater facility easement, subject to the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the following covenants and conditions, it is agreed by and between the parties hereto as follows:

1. **Easement.** Declarants hereby grant the City, its employees, independent contractors and designees, a nonexclusive easement for ingress and egress over the Private Street Tracts, and over the Stormwater Tracts for the purpose of inspection of the Stormwater Tracts as specified below. Declarants understand and agrees that this easement limits the ability of Declarants, their successors and assigns from constructing any permanent buildings, structures, or other improvements that would interfere with the functioning of the Stormwater Tracts.
2. **Declarants' Agreement to Maintain Stormwater Tracts.** Declarants agree to maintain the Stormwater Tracts consistent with operations and maintenance program described in Exhibit C attached hereto and incorporated herein by this reference. In the event that the Declarants fail to so maintain the Stormwater Tracts, City may elect to exercise all remedies available to it in law and in equity, including the right of specific performance.
3. **City's Indemnity.** The City shall indemnify, defend and hold harmless Declarants, their officers, directors, agents and employees from any and all liability, damages, expenses, attorney's fees, causes of action, suits, claims or judgments, arising out of or connected with the City's exercise of its rights under this Agreement. In addition to the indemnity provided above, the City agrees to indemnify, defend and hold harmless Declarants, its officers, directors, agents and employees from and against all damages, costs, liabilities and expenses caused by, arising out of, or in connection with, City's handling, storage, discharge, transportation or disposal of hazardous or toxic wastes or substances, pollutants, oils, materials or contaminants, as those terms are defined by federal state or local law or regulation, as amended from time to time, on or about the Stormwater Tracts. City shall not be required to indemnify, hold harmless or defend Declarant from any claim, damage, loss, liability, cost or expense arising out of Declarant's negligence or intentional conduct.
4. **Declarant's Indemnity.** Declarant shall indemnify, defend and hold harmless City, its officials, agents and employees from any and all liability, damages, expenses, attorney's fees, causes of action, suits, claims or judgments, arising out of or connected with Declarant's acts or omissions which cause result in damage to the Stormwater Tracts. In addition to the indemnity provided above, Declarant agrees to indemnify, defend and hold harmless City, its officers, directors, agents and employees from and against all damages, costs, liabilities and expenses caused by, arising out of, or in connection with, Declarant's handling, storage, discharge, transportation or disposal of hazardous or toxic wastes or substances, pollutants, oils, materials or contaminants, as those terms are defined by federal state or local law or regulation, as amended from time to time, on or about the Stormwater Tracts. Declarant shall not be required to indemnify, hold harmless or defend the City from any claim, damage, loss, liability, cost or expense arising out of City's negligence or intentional conduct.
5. **Notice.** Any notice, demand, request, or other communication (collectively referred to in this as a "notice") required or permitted to be given or made by either party to the other pursuant to this Agreement shall be in writing and shall be delivered to the other party by delivery service (including by overnight delivery service such as Federal Express) or sent postage prepaid by registered or certified U.S. or Canadian mail, as applicable, addressed

to the party at its address set forth below or such other address as may be designated by such party by written notice hereunder. Notices shall be deemed given and shall be effective on the date of delivery or, if mailed, two (2) business days following the date of mailing.

In the case of a notice or communication, all notices shall be addressed as follows:

City: City of Newberg
414 E First St
Newberg, OR 97132
Attn: City Manager

Declarant:

With a copy to: Jordan Ramis, PC
2 Centerpointe Dr, 6th Floor
Lake Oswego, OR 97035
Attn: James D. Howsley

6. **Force and Effect.** This Agreement shall constitute deed covenants running with the land and shall be binding on all owners, their heirs, successors, and assigns.
7. **Amendments.** The terms of this Agreement may be amended by mutual agreement of the parties. Any amendments shall be in writing and shall refer specifically to this Agreement and shall be valid only when executed by both parties to this Agreement and duly recorded.
8. **Breach.** In the event either party breaches this Agreement, the nonbreaching party may elect to exercise all remedies available in law and equity.
9. **Prevailing Party.** In any action brought by either party to enforce the terms of this Agreement, or to foreclose any lien provided for herein, the prevailing party shall be entitled to recover all costs, including reasonable attorney fees as may be determined by the court having jurisdiction, including any appeal therefrom.
10. **Severability.** The invalidity of any section, clause, sentence, or provision of this Agreement shall not affect the validity of any other part of this Agreement, which can be given effect without such invalid part or parts.
11. **Duration.** This agreement shall continue in perpetuity unless otherwise terminated and released by the parties hereto or their respective heirs, successors or assigns. In the event that the Declarant fails to use the Stormwater Tracts for a period of twenty-four (24) consecutive months, then this Agreement shall terminate and the parties hereto shall execute a termination of this Agreement and record the same in the real estate records of Yamhill County, Oregon. At the time of such termination, the Stormwater Tracts shall revert to Declarant.

12. **Recording.** This Agreement shall be recorded in the deed records of Yamhill County, Oregon.

13. **Exhibits.** All Exhibits attached hereto are incorporated herein by this reference.

14. **Recitals Contractual.** The Recitals in this Agreement are contractual.

IN WITNESS WHEREOF, Declarant has set his hand and seal the day and year first above written, and City has caused these presents to be signed in its name by its City Manager, attesting to the day and year first above written.

DECLARANTS

CG Commercial, LLC, a Delaware limited liability company LLC

By: _____

Title: _____

STATE OF OREGON
County of Clackamas

The above instrument was subscribed and sworn to before me this ____ day of _____.

By _____

As _____ of _____.

Notary Public – State of Oregon

My commission expires: _____

VPCF Crestview, LLC, a Delaware limited liability company

By: _____

Title: _____

STATE OF OREGON
County of Clackamas

The above instrument was subscribed and sworn to before me this ____ day of _____.

By _____

As _____ of _____.

CITY:

CITY OF NEWBERG, a municipal corporation of the State of Oregon

By: _____
Joe Hannon, City Manager

STATE OF OREGON)
) ss.
COUNTY OF)

This instrument was acknowledged before me on _____, 2018 by Joe Hannon as City Manager of the City of Newberg.

Notary Public for Oregon
My commission expires: _____

Exhibit A
Legal Description of Property

Parcels of land in the northeast quarter of Section 16, Township 3 South, Range 2 West, Willamette Meridian, in the City of Newberg, Yamhill County, Oregon, more particularly described as follows.

Private Street Tracts

Tracts F, G and H on the plat of Crestview Crossing, a subdivision recorded on _____, 2018 at Volume _____, Page _____, Book of Plats.

Stormwater Tracts

Tracts B and C on the plat of Crestview Crossing, a subdivision recorded on _____, 2018 at Volume _____, Page _____, Book of Plats.

Exhibit B Map of Private Street and Stormwater Tracts

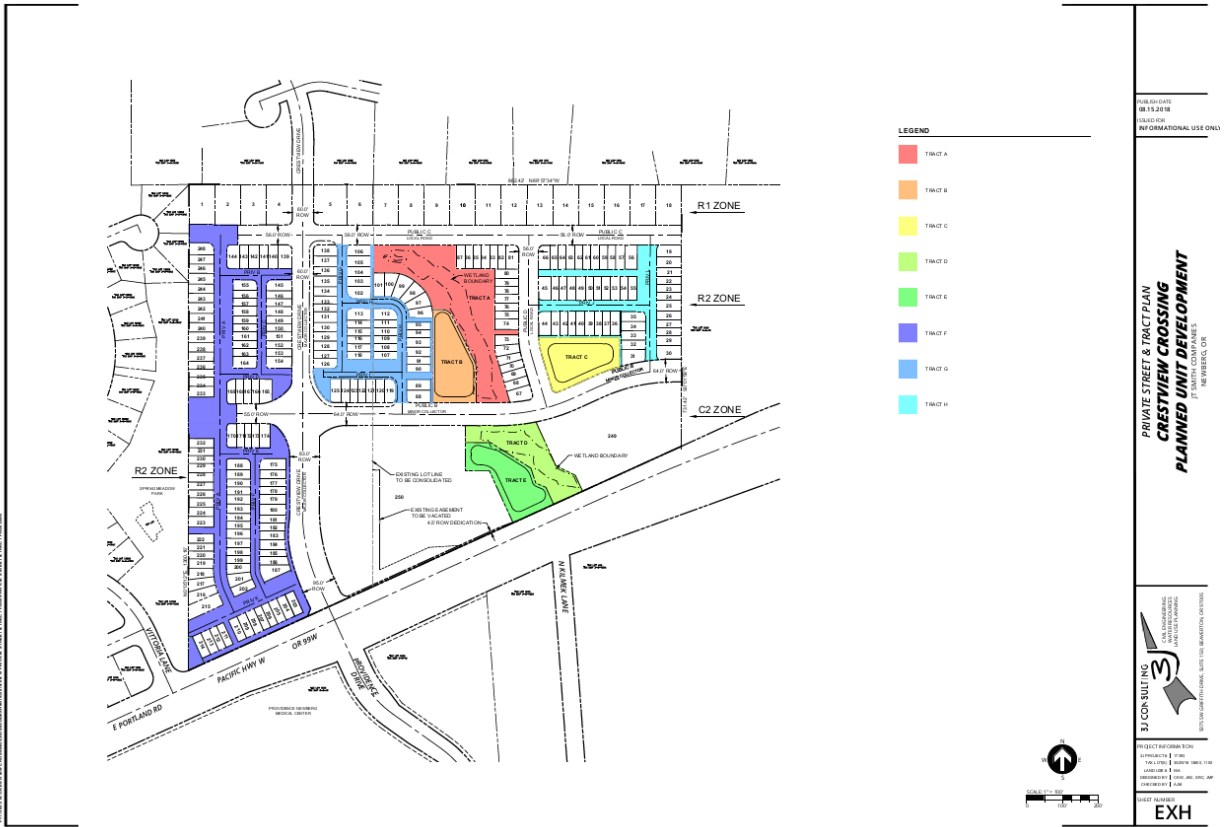


EXHIBIT C

Maintenance Requirement for Stormwater Tracts B and C

1. Stormwater Tracts shall be mowed regularly to maintain a maximum grass height of 6 inches or less. Side slopes that are planted shall be maintained to prevent erosion. Bare soil shall be replanted as needed to maintain sufficient ground coverage.
2. The Stormwater Tracts access gates shall remain free of obstructions at all times allowing access by the City’s Public Works Department for inspection, maintenance, and repair, if necessary. The access gate shall remain locked at all times. The lock shall be accessible by both Declarant and the City.
3. The fence enclosing the Stormwater Tracts shall be maintained to remain structurally competent. Debris that accumulates along the fence and within the Stormwater Tracts shall be removed quarterly.
4. Inspect the Stormwater Tracts per the following table and stormwater retention basin inspection maintenance checklist.

Table 1 Routine Maintenance Activities for Retention Basins		
No.	Maintenance Task	Frequency of Task
1	Conduct annual vegetation management during the summer, removing weeds and harvesting vegetation. Remove all grass cuttings and other green waste.	Once a year
2	Trim vegetation at beginning and end of wet season to prevent establishment of woody vegetation, and for aesthetics and mosquito control.	Twice a year (spring and fall)
3	Evaluate health of vegetation and remove and replace any dead or dying plants. Remove all green waste and dispose of properly.	Twice a year
4	If turf grass is included in basin design, conduct regular mowing and remove all grass cuttings. Avoid producing ruts when mowing.	Maintain less than 6-inches
5	Remove sediment when the sediment level reaches the level shown on the fixed vertical sediment marker and dispose of sediment properly.	As needed
6	Remove accumulated sediment and regrade when the accumulated sediment volume reduces the infiltration rate or impedes the outfall pipe and dispose of sediment properly.	Every 2-5 years, or as needed to maintain min. clearance below outlet
7	Remove accumulated trash and debris from the extended detention basin at the middle and end of the wet season and dispose of trash and debris properly.	Twice a year (January and April)
8	Irrigate during dry weather.	As needed
9	Inspect extended detention basin using the attached inspection checklist.	Quarterly, or as needed

MEMORANDUM

Date: August 15, 2018

Project #: 21709

To: Jesse Nemec
JT Smith Companies
5285 Meadows Road, Suite 171
Lake Oswego, OR 97035

From: Diego Arguea and Matt Hughart

Project: Crestview Crossing Development

Subject: 6-Party Agreement Transportation Considerations

Pursuant to your request, we have reviewed the *Crestview Improvement Project (From Robin Court to Highway 99W Alignment Exploration)* that was referenced in a six-party agreement (Yamhill County Board Order 06-265) executed in April 2006. The purpose of this agreement was to begin the process to amend the 2005 Newberg Transportation System Plan (TSP) and reclassify the Crestview Drive extension from a Minor Arterial to a Major Collector designation.

The current development proposed by JT Smith Companies will be required to construct a portion of the Crestview Improvement Project, connecting Highway 99W to the existing terminus of Crestview Drive at the southern boundary of the Oxberg Lake and MeadowWood subdivisions.

EXECUTIVE SUMMARY

Our assessment of the six-party agreement (Agreement) concludes that the proposed Crestview Drive alignment, intersection treatments, and cross-sectional elements are consistent with the guiding principles established in the Agreement, and as such, provides equivalent transportation infrastructure as that identified in the Agreement. Additional details are provided herein.

SIX-PARTY AGREEMENT BACKGROUND

In April 2006, the Yamhill County Board of Commissioners accepted an agreement to begin the amendment of the then-current 2005 TSP. The agreement's purpose authorized the City to conduct an amendment to the 2005 TSP that would designate Crestview Drive as a Major Collector roadway and identify a general design and alignment of the Crestview Drive extension (Reference 1, Agreement, #3). A traffic study was prepared by JRH Engineering concluding the change in classification of Crestview Drive

to a Major Collector would not measurably affect the City's transportation network. The TSP was subsequently amended to reflect Crestview Drive as a Major Collector.

Conceptual Alignment

The alignment identified in the Agreement extends Robin Court to Highway 99W and includes one roundabout intersection (located approximately 380 feet from 99W) and one traffic calming circle located approximately 850 feet north of the roundabout location. As stated in the Agreement, this represents a ***“general design and alignment”*** to provide direction for future development. Site-specific characteristics, unforeseen challenges, and street connectivity and layout were not addressed in the Agreement, and turn lanes, if required, were to be determined at a later date. The general design and alignment shown in the Agreement Exhibit A is shown below in Figure 1.

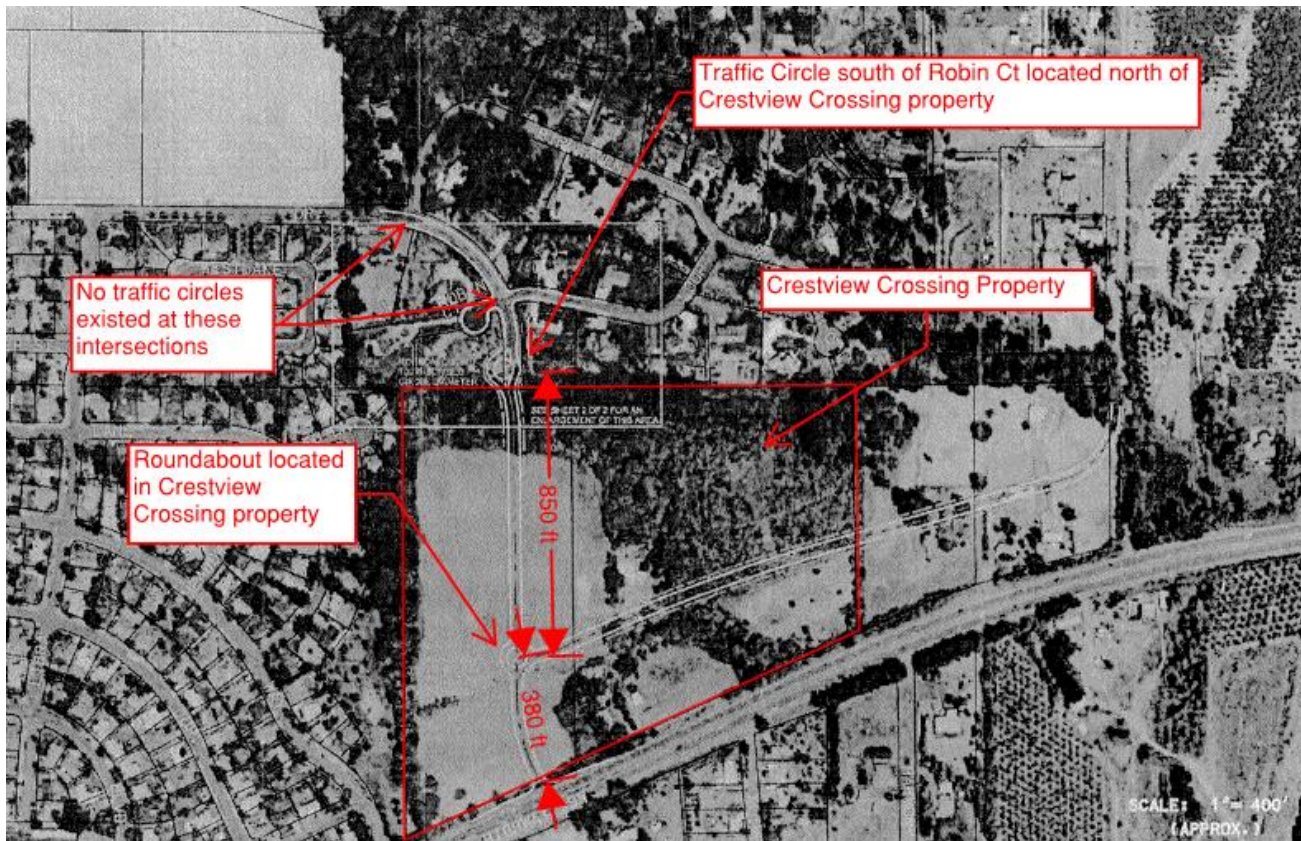


Figure 1. 6-Party Agreement Exhibit A

As shown above, the Agreement identifies a general alignment with two intersection treatments addressing intersection operations and traffic calming. As stated in the Agreement, the alignment should be *designed to encourage a 25 mph speed limit.*

PROPOSED DEVELOPMENT

The proposed residential application acknowledges responsibility to construct the extension of Crestview Drive, connecting from Robin Court to Highway 99W, and has developed an alignment consistent with that shown in the 2006 Agreement.

Constructed To-Date

As shown in Figure 1, Crestview Drive, from Birdhaven Loop to the northern edge of Crestview Crossing, was reconstructed in 2011/2012 to include two intersection traffic calming traffic circles on Crestview Drive at Birdhaven Loop and Robin Court, depicted in Figure 2 below.



Figure 2. Traffic Calming Treatments along Crestview Drive

Neither of these traffic calming circles were identified in the Agreement. The traffic calming circles were constructed after the 2006 Agreement was adopted and are recognized to have a traffic calming effect to limit speeds to 25 mph.

PROPOSED ALIGNMENT

The June 2018 Crestview Crossing Traffic Impact Analysis (TIA) evaluated the impacts of the proposed development and identified recommended mitigation measures. The mitigation measures were selected considering anticipated traffic volumes along Crestview Drive and include the number and configuration travel lanes on the southbound approach to 99W, turn lane storage lengths, as well as transition tapers approaching the roundabout.

Roundabout Intersection

In accordance with the Agreement, construction of a roundabout is proposed to serve traffic into the residential areas north of Highway 99W, and connect to the future Benjamin Road Realignment (a Minor Collector). The roundabout location was determined based on the required queue storage length as an outcome of the TIA as well as roundabout design parameters, including entry deflection angles and transition tapers. As shown in Crestview Crossing site plan application, the roundabout is located approximately 545 feet north of Highway 99W (measured from the center of roundabout to the stop bar at Highway 99W). A southbound left-turn lane on Crestview Drive approaching Highway 99W provides 250 feet of storage and requires at least 50 feet of transition. The northbound transition taper into the roundabout is approximately 200 feet, and has been designed to accommodate all turning movements including u-turns. A detailed exhibit illustrates these distances and is included as an attachment to this memorandum.

The Public Improvement Standards of the Newberg Development Code (Chapter 15.505) were also reviewed to ensure consistency with Collector Roadway spacing standards (400 feet for a Major Collector designation). As such, the location of the roundabout has been designed to comply with the Newberg Development Code and the 6-Party Agreement in the context of the projected traffic operations while recognizing site-specific design considerations and constraints.

Two-way Stop Controlled Intersection

To provide efficient connectivity to adjacent residential development, a two-way stop-controlled intersection (Public Street C) has been designed approximately 500 feet north of the proposed roundabout. The location of this intersection is influenced by intersection spacing on a Major Collector (greater than 400 feet minimum spacing requirement), location of wetlands (site constraints), meeting minimum intersection sight distance requirements, and ability to provide an east-west roadway serving the proposed large lot homes of the Development. The location of this intersection is approximately 410 feet south of Robin Court, the closest public street intersection to the north.

Additional Considerations

Consideration was given to the 6-Party Agreement and the spacing between traffic calming devices during the roadway and site design process. The intersection spacing shown in the conceptual alignment of the 6-Party Agreement and the proposed alignment is shown in a detailed exhibit included as an attachment to this memorandum

As shown in the attachment and in Figure 1, the conceptual spacing shown in the Agreement between the roundabout and traffic calming circle is approximately 850 feet. The proposed site layout and intersection design maintains similar distance between the proposed roundabout and the constructed traffic calming circle on Robin Court (approximately 910 feet). We conclude that the difference in spacing (60 feet) will not impact travel speeds and that the 25 mph roadway design speed is consistent with the 6-Party Agreement.

6-PARTY AGREEMENT CONSISTENCY

In summary, we conclude the proposed alignment and intersection treatments are consistent with and satisfy the terms of the 6-Party Agreement for the following reasons.

1. The purpose of the Agreement is to re-designate Crestview Drive from a Minor Arterial to a Major Collector designation. The re-designation was successfully incorporated into the City's Transportation System Plan based in part on the JRH traffic study.
2. The current Crestview Crossing development proposal acknowledges the Agreement and proposes a roadway extension design consistent with City Major Collector requirements as well as key Agreement elements.
3. The spacing difference between the proposed roundabout and the recently constructed traffic calming circle at Robin Court is not expected to impact travel speeds on Crestview Drive extension and thus is consistent with the traffic calming south in the 6-Party Agreement.
4. With construction of the proposed roundabout, there will be a total of three traffic calming intersection treatments along Crestview Drive between Highway 99W and Birdhaven Loop. This is a greater amount of traffic calming than originally identified in the Agreement, indicating consistency in design and fulfillment of intent by the Applicant.

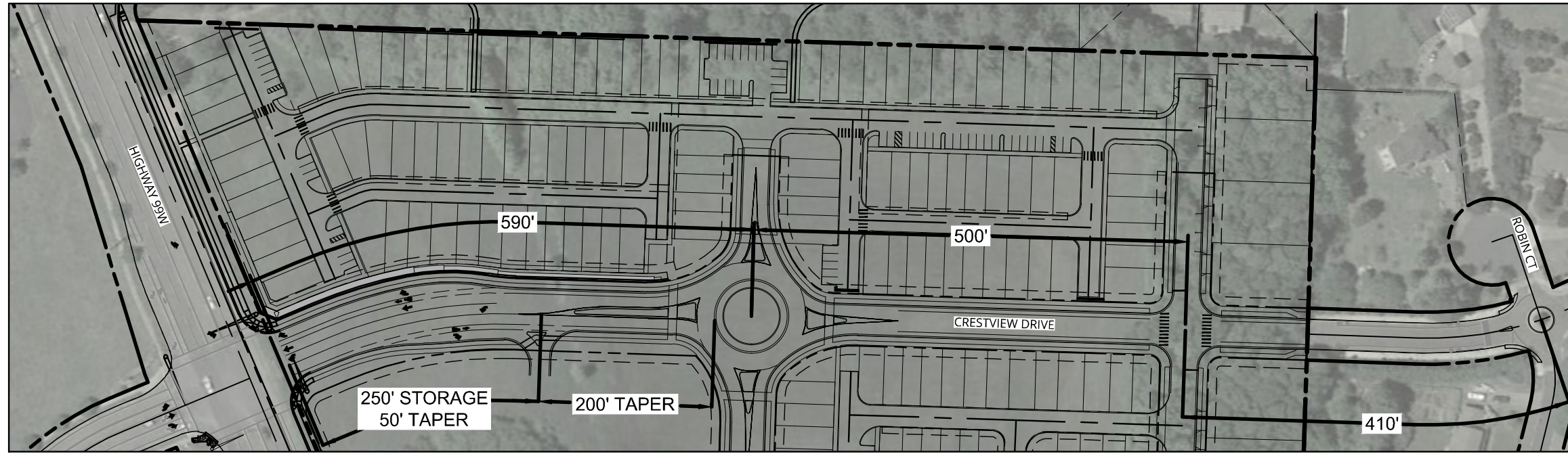
We trust this memorandum demonstrates consistency with the 6-Party Agreement.

REFERENCES

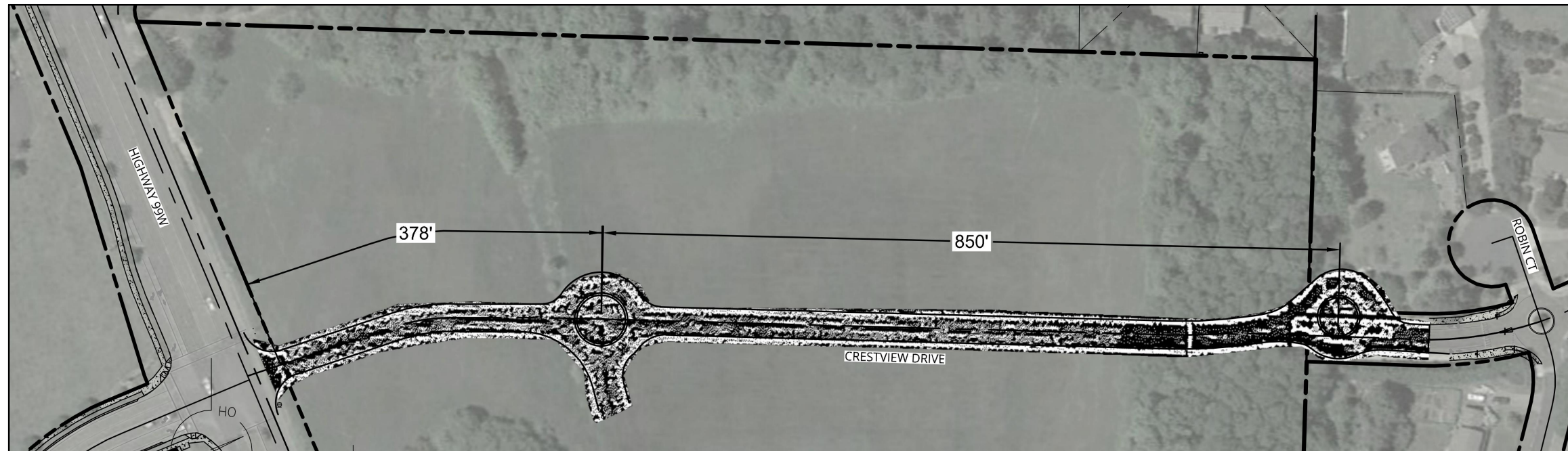
1. Yamhill County Board of Commissioners. *6-Party Agreement, Crestview Improvement Project (From Robin Court to Highway 99W Alignment Exploration)*. Board Order #06-265. April 19, 2006.

ATTACHMENT

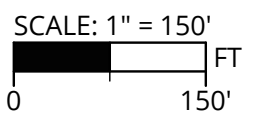
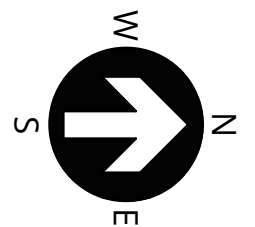
Crestview Drive Exhibit: Intersection Spacing Distances



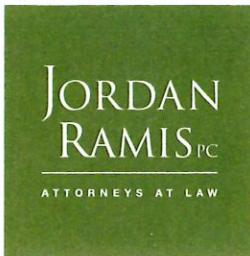
CRESTVIEW DRIVE DESIGN, PROPOSED



CRESTVIEW DRIVE GENERAL DESIGN AND ALIGNMENT, SIX-PARTY AGREEMENT 2006



08/15/18



Lake Oswego

Two Centerpointe Dr., 6th Floor
Lake Oswego, OR 97035
503-598-7070
www.jordanramis.com

Vancouver

1499 SE Tech Center Pl., #380
Vancouver, WA 98683
360-567-3900

Bend

360 SW Bond St., Suite 510
Bend, OR 97702
541-550-7900

Via E-Mail:
doug.rux@newbergoregon.gov

September 13, 2018

City of Newberg
Planning Commission
c/o Doug Rux, Community Development Director
414 E First Street
Newberg, OR 97132

Re: ***Crestview Crossing – Planning Commission Hearing***

Dear Planning Commissioners:

Thank you for continuing the hearing until September in order to allow for the application materials to be enhanced and circulated for review prior to the public testimony. This extra time has benefited all parties. With the capable assistance of your staff, new information was developed in recent weeks. This letter will explain that information and address the concerns expressed by the rural neighbors in Oxberg Lake and other neighbors.

Several new and updated items were delivered to the City on August 17th, to allow time for them to be distributed within the City departments and to other agencies, including ODOT. These items include:

- Kittelson memorandum on compliance with the six party agreement
- Updated Kittelson traffic study
- Two alternate plats
- Parking configuration plan
- Private street maintenance agreement
- Stormwater operations and maintenance agreement
- Phasing plan
- Renderings of the Hwy 99W and Crestview entrances
- Hydrogeology report regarding Oxberg Lake wells
- Revised application narrative

The revised staff report of September 13 considered this new information and shows compliance with each criterion. The application should be approved, notwithstanding the objections of our rural neighbors, which are addressed below. As a preliminary matter, it is important to bear in mind the scope of this quasi-judicial review for needed housing in the City

Planning Commissioners
September 13, 2018
Page 2

of Newberg. The purposes of the Newberg Development Code are set forth in Section 15.05.020 and include:

The purpose of this code is to coordinate **city** regulations governing the development and use of land and to implement the Newberg comprehensive plan. B. The Newberg development code constitutes the development and land use regulations for the incorporated area of the **city**. Such regulations are designed to achieve the following objectives: to implement the comprehensive plan for the **city**; to advance the position of the **city** as a regional center of commerce, industry, recreation and culture; to provide for desirable, appropriately located living areas in a variety of dwelling types and at a suitable range of population densities, with adequate provision for sunlight, fresh air and usable open spaces; ...to promote safe, fast and efficient movement of people and goods without sacrificing the quality of the **city's** environment, minimize street congestion, and to provide for adequate off-street parking; to achieve excellence and originality of design in all future developments and preserve the natural beauty of the **city's** setting; ... and to preserve and enhance the quality of the **city's** environment. [Emphasis Added].

"City" means the incorporated territory of the City of Newberg. NDC 15.05.030. The theme of the objections from our rural neighbors is that this proposed development within the city is not compatible with their rural residential properties in Yamhill County. Just so. The city is different from the county, and there are completely separate land use regulations for each. There is no basis for county residents to demand changes to a city development to reflect rural preferences. (The converse is also true, and city residents lack a basis for demanding that rural uses show compatibility with urban properties and uses.) We respect the desires of Oxberg Lake residents to enjoy a rural residential lifestyle. However, there is no legal authority in support of their demands that urban development in the City of Newberg cannot be allowed to affect their preferred views, their preferred level of traffic, their preferred use of a private water system, or other aspects of rural living.

Newberg is building a city in accordance with urban land use regulations, including needed housing as the DLCDC emphasizes. The rural neighbors often speak as if this application should remove the property from the city to allow development of more 1 acre rural residential lots. The Planning Commission should bear in mind that the application satisfies the applicable city land use regulations, as explained in the detailed staff report.

Planning Commissioners
September 13, 2018
Page 3

Six Party Agreement

Rural neighbors in Oxberg Lake insist that the proposed location of the roundabout “will not have the traffic-calming effects within Oxberg Lake for which it was duly negotiated and agreed by the parties.” There are several defects in that argument. First, none of the application criteria require installation of traffic calming devices for benefit of county right-of-way or compliance with the six party agreement.

Second, the location of roundabouts has been substantially altered since the agreement was executed. There is no record evidence of why the intersection locations changed, however they were moved substantial distances and therefore the six-party agreement exhibit no longer controls. In contract law, if a contract is not implemented as originally planned, the parties have accepted the former changes to the street design, and are now estopped from demanding that this one roundabout be installed where shown in the agreement. There are other legal defects in Oxberg Lake’s position which can be addressed by the Circuit Court. Strict compliance with the six party agreement would require demolition and relocation of the recently constructed roundabouts in Yamhill County, work that is well outside the scope of this application.

The demands of Oxberg Lake are not relevant to the approval criteria, and its remedy for the alleged contractual breach would lie in the Circuit Court. Traffic calming for county right-of-way for the benefit of properties outside the city is not a requirement for the PUD and CUP approvals. The Planning Commission lacks authority to interpret or implement the six party agreement in the course of this application, and we respectfully ask that it refrain from doing so.

Oxberg Lake's arguments also fail in substance. The assertion of a defect in traffic calming is not supported by substantial evidence in the record. Mr. Clemow's letter asserts traffic calming “is now necessary with the proposed extension of Crestview Drive to OR 99W.” Mr. Clemow does not reference any land use criterion or public works standard in support of the assertion, because there are none. Crestview Dr. is classified as a collector in the TSP, as shown on Figure 14. The TSP also confirms that the speed limit on collectors is 25 mph. (See Attached). Mr. Clemow attempts to make the developer responsible for motorists who exceed the posted speed, however there is no authority in the land use criteria or public works standards to compel traffic calming on Crestview Dr.

The August 14, 2018 Kittelson memo concludes the proposed design “provides functionally equivalent transportation infrastructure.” The memo explains that as constructed, Crestview Dr within Oxberg Lakes is “recognized to have a traffic calming effect to limit speeds to 25 mph.” In other words, the desired traffic calming infrastructure is already in place within the Oxberg Lake subdivision, and operating effectively.

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Oxberg Lake Water System

There is an existing 8 inch public water line running through Oxberg Lake (in the Crestview Dr. right-of-way), however the rural neighbors apparently prefer not to connect to this water. Rather, Oxberg Lake alleges the project fails to address purported impacts to its private water system, without explaining how that allegation relates to an approval criterion. Protection of rural water systems is not a requirement of the Newberg Development Code.

Not only do Oxberg Lake's comments by the Pacific Groundwater Group lack any technical basis, but they also directly contradict the state's conclusions. Any determinations involving the nature and management of the confined aquifer should be made by affected state agencies including the Oregon Water Resources Department.

Please note that the recent GeoEngineers hydrogeology report, dated August 9, 2018, explains why the proposed project does not pose any risk to the Oxberg Lake well or the aquifer in which it is completed. The GeoEngineers' report examined data from 64 wells around the project area, including the Oxberg Lake well. It examined new boring data from dozens of locations on the Crestview Crossing site. It readily concludes that the Oxberg Lake well utilizes a confined aquifer; the same conclusion reached by both the Oregon Department of Human Services' Drinking Water Program ("DHS") and the Oregon Department of Environmental Quality ("DEQ") in their joint 2004 Source Water Assessment Report. Such findings are also consistent with those of the Oregon Water Resources Department ("OWRD") which limits the use of the Oxberg Lake well through the administration of a 5-year renewal period for the Oxberg Lake groundwater permit.

OWRD so limits the appropriation of groundwater by the Oxberg Lake well for the very reason that it is completed in a confined aquifer. As a confined aquifer, it does not enjoy the ability to recharge on a seasonal basis through seepage from local precipitation and existing surface water. It is because of this lack of recharge capacity as a confined aquifer that OWRD will only issue a periodic permit to Oxberg Lake. Hence, for Oxberg Lake's consultants to claim there is a material connection, much less any connection, between surface land uses and the stability of the underlying confined aquifer from which Oxberg Lake receives its water supply is in direct contrast to the very restriction that OWRD imposes on Oxberg Lake's ability to appropriate ground water under its conditional permit. As the Planning Commission may know, Oxberg Lake's existing groundwater permit expires October 31 of this year and is subject to a discretionary renewal determination by OWRD. In addressing such renewal, OWRD will not consider whether the aquifer in which the Oxberg Lake well is completed was previously, is currently, or will remain a confined aquifer. Nor is it likely that Oxberg Lake will seek to challenge OWRD's decades-old determination that the aquifer is confined when it seeks renewal of its groundwater permit.

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There is no evidence of a hydrogeological connection between the wetlands or other surface waters on the project site and the Oxberg wells, nor can there be any risk that the quality of the groundwater in the confined aquifer can or will be impaired by the proposed project. Notably, the primary water quality risks to the Oxberg Lake well derive from land uses and activities closer to the well and which occur within the boundaries of the Oxberg Lake subdivision itself.

As shown by Figures 2 and 3 of the Oregon DHS' and Oregon DEQ's joint 2004 Source Water Assessment Report, there are two items of Moderate Relative Risk within the 1 year time of travel radius to the Oxberg Well, both of which are entirely located within the Oxberg Lake subdivisions. Furthermore, as identified on Table 1 of Appendix C to that report, the numerous septic systems within the Oxberg Lake subdivision are expressly identified as a "potential source of microbial contamination". The best way to protect water quality for Oxberg Lake is for those specified lots to scrupulously maintain their septic systems and to ensure the wellheads are protected from other contaminants such as pesticides.

The September 6, 2018 letter from Glenn Wallace makes breathtaking arguments about the water issue, from a desktop in Seattle. His letter directly contradicts the conclusions of the State of Oregon in their 2004 report on the confined aquifer. The attorney for the rural neighbors in Oxberg Lake states in his September 6, 2018 memo that Mr. Wallace was hired "to review the underlying file materials". GeoEngineers bored dozens of soil samples throughout the Crestview Crossing site and their data is in the record. However, Mr. Wallace's letter acknowledges "[t]he report documenting the field infiltration these [sic] tests was not reviewed" by his firm.

Mr. Wallace closes by stating his services were performed in accordance with generally accepted hydrogeologic practices. Challenging the report of another geologist, and challenging the findings of the State of Oregon, without examining either the data from dozens of on-site borings or the report summarizing those borings is not a generally accepted professional practice in geology or any other science. A professional scientist hired to "review the underlying file materials" that declines to do so before drawing conclusions is not following accepted practice. The Planning Commission should disregard Mr. Wallace's letter nor his paid for conclusion.

Because the Oxberg Lake wells draw from a confined aquifer, Crestview Crossing's proposed project will have no effect on the quantity or quality of water available to serve those wells. Oxberg Lake is encouraged to follow the restrictions on their water permit to ensure the availability of water for their wells. Their alleged concerns about water quantity are best addressed to the OWRD during the upcoming renewal of their water permit, which expires on October 31, 2018. Their alleged concerns about protection of their wellheads from contamination are best addressed by considering the risks created by activities on lots within the Oxberg Lake subdivision itself as expressly highlighted by DHS and DEQ in their joint 2004 Source Water Assessment Report.

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Wetlands

Oxberg Lake argues that “[g]iven the prominence of wetlands on the property, we cannot know what an approvable delineation would look like *vis-à-vis* the current proposal, and whether the development as proposed is feasible in the first place.” It fails to connect this argument with a standard or criterion that applies to this application. The City’s codes do not require the applicant to address wetlands within an application for a PUD or a conditional use permit.

If Oxberg Lake disagrees with the pending wetland delineation or the future fill permit, it has the opportunity to participate in the DSL/COE joint permit application process.

Needed Housing

Crestview Crossing will provide much needed housing for Newberg, and the site is zoned for residential and mixed residential and commercial use. We speak of “needed housing” in both the practical sense, and in the technical sense, as that term is defined in Oregon law. ORS 197.303. Section V.B.1 of the Newberg Comprehensive Plan explains housing and residential land needs, with reference to the 2004 Housing Needs Analysis prepared by its consultant. “That analysis examined the demographic, housing cost and household income data for the City of Newberg to determine the need for specific housing types: single family, multi-family, and manufactured homes.” Table V-7 of the Comprehensive Plan tables demonstrates a shortage of 380 acres of buildable residential land through 2025.

This project includes 18 single family homes on large lots (carefully designed to buffer the rural neighbors), 230 cottage homes on smaller lots, and 51 apartments. Twelve of the cottage homes are designated for affordable housing pursuant to the Affordable Housing Action Plan. In other words, there are four primary housing types, at price ranges and rent levels affordable to households with a variety of incomes, consistent with the acknowledged need for specific housing types shown in the Housing Needs Analysis in the Comprehensive Plan. Therefore the project satisfies the statutory definition of “needed housing” (ORS 197.303(1)(a)).

Comprehensive Plan

The attorney for the rural neighbors argues the application is not consistent with the comprehensive plan, including that the C-2 district is incompatible with residential zoning districts. The code and comprehensive plan state the opposite. The argument is that residential use is being substituted for commercial; however residential use is allowed as a conditional use in the zone. NDC 15.302.032.G indicates: “[t]he C-2 district is intended to be consistent with the commercial (COM) and mixed use (MIX) designations of the comprehensive plan.” Comprehensive Plan Section III.1 Mixed Use (MX) states: “[t]he objective of this designation is to provide a compatible mixture of commercial, office,

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employment and high density residential uses.” The plain text of the code and the comprehensive plan permit residential use in the C-2 zone.

The rural neighbors reference Commercial Areas policies 3b and 3c on providing adequate neighborhood commercial areas and clustering of commercial development. The following neighborhood commercial businesses are currently located within about one half mile of the site.

Providence Newberg Medical Center
Women’s Healthcare Associates
Newberg Ford
Columbia Bank
Newberg Veterinary Hospital
From Russia With Love
Easy 2 Wash Touchless Car Wash
Chevron
United States Post Office
Jiffy Lube
Taco Bell
Wendy’s
Fred Meyer
The UPS Store
Dollar Tree
Just Pho You
Safeway

In addition, 4.4 acres of the site is being set aside for commercial use. The evidence is clear that there is ample neighborhood commercial land within the immediate area.

The 2008 Development Agreement

Some rural neighbors argue that this agreement is not satisfied by this application. As with the six party agreement, compliance is not required in this application. The applicant will comply with the agreement during development; however, there is no need to show compliance in this pre-development procedure.

The agreement is a private contract between abutting neighbors. It is not part of the Newberg Development Code or the Comprehensive Plan, which contain the only criteria applicable to this application. The City of Newberg is not a party to the agreement, and the Planning Commission should refrain from attempting to implement, enforce or otherwise rely on the agreement in the course of this quasi-judicial application.

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Access to Crestview Drive

The Oxberg Lake neighbors argue the application cannot be approved because an access permit to Crestview Drive has not been obtained, and because the six party agreement makes it unlikely such a permit could be obtained. These arguments are without merit.

First, NDC 15.505.030.R.9 only governs private sidewalk and driveway access to county right-of-way. See NDC 15.05.030. This application does not propose private access, but rather a connection of city right-of-way to county right-of-way.

Moreover, the Newberg Transportation System Plan clearly shows the proposed extension of Crestview Dr. through the property to Hwy 99W. The extension is identified as Expansion Project E14 on Figure 24: Roadway Expansion Projects, where it is classified as a "Likely Funded Project". The Crestview Dr. Extension is also listed on Table 6: Transportation Improvement Projects, where it is classified as a "project that would add capacity to the transportation system". Where the extension meets Hwy 99W, the intersection is identified as Intersection Project I12 on Figure 26: Intersection Projects, where it is classified as "Likely Funded". The Crestview Dr. and Hwy 99W intersection is also listed on Table 6: Transportation Improvement Projects, where it is also classified as a "project that would add capacity to the transportation system."

The Crestview Dr. extension is not only feasible, it is mandated by the Transportation System Plan. Any argument to the contrary mistakenly conflates the code requirement for private driveway permits with the extension of a public right-of-way, and is not supported by substantial evidence. This project does not include any private access to county right-of-way, and therefore NDC 15.505.030.R.9 does not apply.

Response to Other Neighbor Comments

Several residents of the rural residential Oxberg Lake subdivision submitted comments, which are addressed in the responses to comments made through their attorney, Mr. Kleinman. Other interested neighbors commented as well. Cooper Foushee wrote to say the "houses on the backend of the lot shouldn't be built and the natural trees should be kept and uses for a walking trail." The north edge of the site is zoned for residential use and will be developed for that purpose. Terry Coss indicates that the highest and best use of the property would be a condominium type retirement village, and that the city could trade a portion of the park on Vittoria for wetlands. A condominium type retirement village could possibly be developed on the remaining commercial portion of the site, and the development team has not received any indication of support from the City for the land swap concept. Beth Bernier, a neighbor to the northwest, is primarily concerned about visual impacts, and a landscaped buffer is being provided behind lots 245 through 248 where the project meets the Bernier property.

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Conditions of Approval


The staff report correctly finds that this very large application satisfies all the criteria, and spells out 58 specific conditions, plus specifications for the timing and content of future permits and documentation. The applicant agrees with the vast majority of the proposed conditions. As is customary on a project of this scope, there are several that could benefit from refinement. These are described in the attached Revisions to Conditions of Approval, and we ask the Planning Commission to adopt the revised conditions in the attachment.

Conclusion

We thank the Planning Commission for taking the time to analyze and weigh the large volume of information regarding Crestview Crossing. We recognize the importance of this large site at the gateway to Newberg, and respect your responsibility to ensure its successful development. In the end, we know the staff conclusion is correct, and trust that you will agree.

Very truly yours,

JORDAN RAMIS, PC



James D. Howsley
Admitted in Oregon and Washington
Jamie.howsley@jordanramis.com
OR Direct Dial (503) 598-5590
WA Direct Dial (360) 567-3913

Roadways

Within Newberg, roadways are under the jurisdiction of the City, Yamhill County and ODOT. Roadways are organized by **functional classifications**, which provide a hierarchy of intended purposes (as shown in Figure 8). Roadways with a higher intended usage generally have a classification and related standards that promote more efficient vehicle movement through the City, while roadways with lower intended usage are classified to provide greater access to local destinations such as businesses or residences.

The City of Newberg has two classifications for arterials: Major Arterials and Minor Arterials. The only Major Arterial in the city is Highway 99W. Highway 99W has by far the highest traffic volumes in Newberg. Some of the Minor Arterials in Newberg are OR 219, Springbrook Drive, Mountainview Drive, and OR 240. These Minor Arterials also carry some of the higher volumes of any roadway in the city and are used by residents to connect to locations outside the city, as well as provide major connections within the city. The posted speed limits on along arterials in Newberg vary from 55 miles per hour as you enter to the city to as low as 25 miles per hour through the downtown core.



Traffic on 99W During the PM Peak

Roadways that connect neighborhoods and major activity generators to arterials are generally classified as collectors. They provide greater accessibility to neighborhoods than arterials and provide moderately efficient through movement for local traffic. The City of Newberg has two classifications for collectors: Major Collectors and Minor Collectors. Villa Road and Haworth Avenue are examples of Major Collector streets that provide connections between the commercial areas of town and the neighborhoods. Collectors have a posted speed of 25 miles per hour within Newberg.

Roadways that provide more direct access to residences are typically classified as local streets. This classification is typically a low volume street, often lined with residences. All local City streets are posted at 25 miles per hour.

Condition A.2 require trees retention along the north edge of the site, in the same location where a privacy wall and stormwater improvements are planned. These items inherently conflict. As written, the condition is subjective, and therefore confusing. We request a change to A.2 as follows.

A.2 In compliance with Resolution 2006-15, the applicant shall retain as many mature trees as possible within ten feet (10') of the north property boundary. Tree removal as necessary to construct the boundary wall and stormwater improvements is allowed. The applicant shall supplement the tree buffer with new trees where necessary to provide a continuous vegetative buffer.

Condition B.1 requires the private street sidewalks to be five feet wide as shown on the cross section detail on sheet C300. We propose the following clarification:

B.1 The applicant shall follow the city engineer requirement for sidewalks along private streets to be 5-feet wide, with a 12 inch wide, six inch high mountable curb. The private street width shall be measured from the back of the 12 in curb.

Condition B.7 requires the Crestview Dr. extension to be built to collector street standards, which will provide capacity for the northeast area of the city. It is TSP Project E14 and a "qualified public improvement" under NMC 13.050.130, and SDC creditable. The condition should be revised to add a sentence to the end, as follows.

E14 1.83 million 100% SDC creditable

B.7 The E Crestview Drive roadway is to consist of the following: 1-foot from back of walk to right-of-way, 5-foot sidewalk, 5.5-foot planter*, 0.5-foot curb, 6-foot bike lane, 12-foot travel lane, 12-foot travel lane, 6-foot bike lane, 0.5-foot curb, 5.5-foot planter, 5-foot sidewalk, 1-foot from back of walk to right-of-way. The applicant is required to dedicate sufficient right-of-way (minimum of 60-feet) to construct E Crestview Drive, to construct a roundabout meeting FHWA Standards at the E Crestview Drive/Public Street B intersection, and to construct improvements related to modifying the traffic signal at the E Crestview Drive/Providence Drive/E Portland Road intersection meeting City of Newberg, Yamhill County, and Oregon Department of Transportation requirements. Improvements related to the upsizing of Crestview Dr to collector standards shall be eligible for SDC credits.

Condition B.11 is for widening of Portland Road, a major arterial, where it meets a collector street, Crestview Dr. As noted in the TSP, this improvement adds capacity to the transportation system, and is TSP Project S36. Because it adds surplus capacity to the transportation system beyond what is required for Crestview Crossing, it is eligible for partial SDC credits. The condition should be revised to add a sentence to the end, as follows.

S36 \$ 270,000 28.40% SDC creditable

B.11 The applicant will be required to dedicate additional right-of-way on E Portland Road necessary to meet requirements set forth by the Oregon Department of Transportation to meet Highway Design Manual standards to construct the westbound right-turn lane. The widening improvement for the turn lane shall be eligible for partial SDC credits.

Condition B.16 requires a 6 foot bike lane along Portland Rd, a major arterial. As noted in the TSP, this improvement adds capacity to the transportation system, and is TSP Project S36. The capacity increase is SDC creditable. The condition should be revised to add a sentence to the end, as follows. *includes bikeland*
S36 \$270,000 23.04%

B.16 The applicant is required to install a 6-foot bike lane along E Portland Road to match the City's Transportation System Plan cross-section. The bike lane improvement shall be eligible for SDC credits.

Condition B.17 is for center turn lanes at the Crestview Dr. and Portland Rd intersection. This capacity upgrade exceeds what is necessary for Crestview Crossing and thus is SDC creditable. The condition should be revised to add a sentence to the end, as follows. *I12 - \$380,000 33.86% eligible - north leg improvement only*

B.17 The City will require the southbound and northbound center turn lanes at the E Crestview Drive/E Portland Drive intersection to be a minimum of 12-feet wide. The turn lanes for this intersection of a collector with an arterial shall be eligible for SDC credits.

Condition B.29 is for extension of the city's non-potable water system. This public improvement will provide extra capacity for the system, and is a "qualified public improvement" under NMC 13.050.130 and SDC creditable. The condition should be revised to add a sentence confirming SDC creditability, as follows.

B.29 The applicant will need to submit construction plans and obtain a Public Improvement Permit to install the water system and non-potable water system pursuant to the requirements of the City's Public Works Design and Construction Standards. Utility designs and alignments will be reviewed as part of the Public Improvement Permit. Non-potable water lines are required in public streets and may be required in private streets to provide non-potable water to any landscaping area maintained by the PUD. Improvements related to the upsizing of the non-potable water system beyond the irrigation requirements for public right-of-way irrigation within Crestview Crossing shall be eligible for SDC credits.

Condition B.31 regards the Fernwood Road pump station and other off-site sanitary sewer infrastructure that will increase capacity for service of other properties in the future. The improvements include Wastewater Master Plan Project C3.c and thus are a "qualified public improvement" under NMC 13.050.130 and SDC creditable. The condition should be revised to add a sentence confirming SDC creditability, as follows.

B.31 The applicant will be required to conduct a sewer sizing analysis that includes the upstream basin, verify the capacity of the Fernwood Road sanitary sewer pump and upsize if necessary, evaluate downstream impacts, submit construction plans, and obtain a Public Improvement Permit to install the wastewater system pursuant to the requirements of the City's Design and Construction Standards. Utility designs and alignments will be reviewed as part of the Public Improvement Permit. Any improvements related to the upsizing of infrastructure to the Fernwood Road facilities which exceed the capacity required for Crestview Crossing shall be eligible for SDC credits.

COA from annexation always this

Condition B-38 requires permanent maintenance access via a paved road within 10 feet of stormwater facility structures within the stormwater tracts. The site design allows storm control manholes, where maintenance primarily occurs, to be located within 10-feet of paved access. The condition can be changed to:

B.38 Permanent maintenance access via a paved road within 10 feet of stormwater control manholes is required. *Revise to 4.6.6.VI. of PWDLS*

Condition D1 allows just one year to achieve final plan submittal. Due to the scale and phasing of Crestview Crossing, this condition should be revised to 3 years.

Keith Leonard

From: Jamie Howsley <jamie.howsley@jordanramis.com>
Sent: Friday, September 28, 2018 10:22 AM
To: Keith Leonard; Doug Rux; Kleinmanjl
Cc: Joseph Schaefer; Jesse Nemec; Aaron Murphy; Andrew Tull; Diego Arguea; Matt Hughart; Kristen Svicarovich; Brett Musick
Subject: Kittelson Memo
Attachments: 21709traffic calming_final.pdf

Keith, Doug and Jeff:

Here is the Memorandum from Kittelson that you requested. Kittelson made one change per Jeff's request which is reflected in the document. Jeff can confirm this is where we landed.

Please let me know if there is anything else you need. I will be around at my desk all day today. 360-567-3913. And again thank you for your patience while the parties work getting alignment.

Best,

Jamie

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Date: September 27, 2018 Project #: 21709

To: Jamie Howsley, Jordan Ramis PC

From: Diego Arguea, P.E. and Matt Hughart, AICP

Project: Crestview Crossing Residential Development

Subject: Planning Commission Hearing Response – Traffic Calming

In accordance with the request from the representatives of the Oxberg Lake Estates neighborhood association, this memorandum confirms the agreed-upon traffic calming treatment for the new section of Crestview Drive, to be constructed between Highway 99W and the Oxberg Lake Estates neighborhood.

PROPOSED TRAFFIC CALMING

National transportation resources, federal research, and industry-standard guidebooks¹ indicate that the presence of the following roadway features can reduce vehicular travel speeds in certain applications::

- Presence of bicycle lanes;
- Sidewalk and landscape strip;
- Street trees;
- Buildings and lot lines against the edge of the right-of-way; and,
- Crosswalk striping.

The above elements are all design features of Newberg's Collector roadway standard and have been included in the design of Crestview Drive through the proposed Crestview Crossing development.

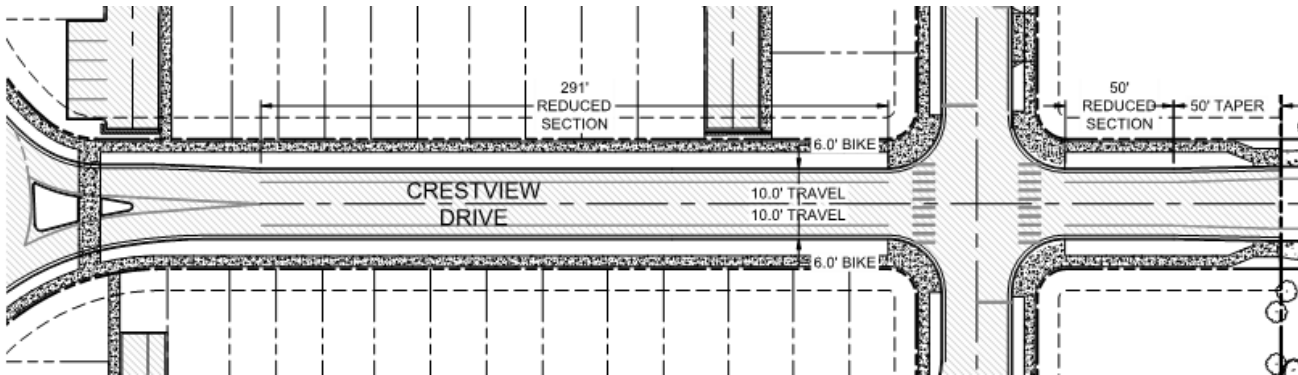
Testimony provided by representatives of Oxberg Lake Estates at the September 13, 2018 Planning Commission Hearing included the desire to provide additional traffic calming between the proposed Crestview Drive roundabout and the north property boundary of the Crestview Crossing development. Various traffic calming treatments were identified as acceptable such as curb extensions, narrower travel lanes, and median islands.

¹ Federal Highway Administration (FHWA), American Association of State Highway Officials (AASHTO), National Association of City Transportation Officials (NACTO), United States Department of Transportation (USDOT)

To accommodate this request, the Crestview Crossing development team proposed to narrow the northbound and southbound Crestview Crossing travel lanes from 12 feet to 10 feet². In subsequent testimony, the Oxberg Lakes Estates representatives agreed that narrowing the travel lane width from 12 feet to 10 feet meets the traffic calming intent of the 6-Party Agreement. City of Newberg staff corroborated the traffic calming design approach and its applicability to meeting the intent of the 6-Party Agreement.

A graphical illustration of the proposed Crestview Drive roadway segment with the narrower 10-foot travel lanes is provided in Exhibit 1 below.

Exhibit 1. Proposed Lane Width Reduction Segment



The proposed design shown in Exhibit 1 is consistent with the agreed-upon approach by City of Newberg, Mr. Christopher Clemow, and Mr. Jeffrey Kleinman.

Further, the approach has been validated and is recommended by agencies and experts in the transportation industry:

“Lane widths of 10 feet are appropriate in urban areas and have a positive impact on a street’s safety without impacting traffic operations.” -NACTO

“Especially in residential areas, wide streets may not be necessary or desirable. Wide traffic lanes encourage faster motor vehicle speeds. Consideration should be given to the review of cross-sections for all street classifications to determine whether roadway lane widths can be reduced

² Curb extensions and median islands were also reviewed and by the Crestview Crossing development team. Curb extensions were not considered an appropriate design treatment as on-street parking is not being proposed along the planned extension of Crestview Crossing. Median treatments were not considered further as it was determined that the existing proposed width of Crestview Crossing and other design treatments would adequately address the desire for additional traffic calming.

(within AASHTO guidelines) so more area can be dedicated to bicycle and pedestrian use and associated traffic calming facilities.” -FHWA

“...a reduction in the width or number of vehicular travel lanes and reallocate that space for other uses such as bicycle lanes, pedestrian crossing islands...” -USDOT

The proposed design of Crestview Drive and the reduction in typical lane width thus provides the traffic calming design elements that meet the desires of the neighbors of the Oxberg Lake Estates to “be designed to encourage a 25 mile-per-hour speed limit” per the language in the 6-Party Agreement (Reference 1, Page 2).

SUPPLEMENTAL EMPIRICAL SPEED DATA

The existing mini-roundabout at Robin Court, shown in Exhibit 2 below, is anticipated to have a traffic calming effect on future northbound traffic on the new segment of Crestview Drive prior to entering the Oxberg Lake Estates neighborhood.

The northbound lane approaching this mini-roundabout is approximately 12 feet wide with bicycle lanes and sidewalks. The distance from the property line to the south and the entrance to this mini-roundabout is approximately 240 feet, also shown in Exhibit 2.



Exhibit 2. Crestview Drive and Crestview Crossing Property Boundary

As shown above, this segment of Crestview Crossing has been constructed and is located outside of the Applicant's property.

To quantify the potential traffic calming effect of this existing mini-roundabout, a speed study was conducted at a nearby location with an identical traffic calming treatment and similar roadway characteristics. This location, also along Crestview Drive, includes 12-foot wide lanes with bicycle lanes and sidewalks.

Travel speeds were observed for every motor vehicle for a period of 24 hours during a typical mid-week day in September 2018 at the following two locations on Crestview Drive:

1. Location A: Approximately 50 feet east of the Westlake Loop (13-foot lane width); and,
2. Location B: Approximately 50 feet west of the entrance to the mini-roundabout at Birdhaven Loop (12-foot lane width).

These locations are shown below in Exhibit 3.

Exhibit 3. Speed Observation Locations and 85th Percentile Speed



Also highlighted in Exhibit 3 are the observed 85th percentile speeds over the course of the surveyed 24-hour period. The 85th percentile speed represents the speed at or below which 85 percent of all vehicles are observed to travel under free-flowing conditions past a monitored point and is measurement typically used when documenting travel speeds. As shown, the 85th percentile speed reduces from 30 miles per hour to 22 miles per hour upon approaching the mini-roundabout.

The complete data is summarized below in Table 1 and the raw data is included as an attachment to this memorandum.

Table 1 Speed Observation Summary

Location	Direction of Travel	Average Speed (MPH)	85 th Percentile Speed (MPH)
Location A: 50 feet east of the Westlake Loop	Eastbound	25 MPH	30 MPH
	Westbound	26 MPH	33 MPH
Location B: Approximately 50 feet west of the entrance to the mini-roundabout at Birdhaven Loop	Eastbound	17 MPH	22 MPH
	Westbound	18 MPH	22 MPH

SUMMARY

The existing mini-roundabout constructed at the Crestview Drive/Robin Court intersection (shown in Exhibit 2) is expected to have similar traffic calming on future northbound traffic as those measured at a nearly identical location nearby (summarized in Exhibit 3 and Table 1). The 240-foot segment shown in Exhibit 2 is located between the existing traffic calming mini-roundabout at Robin Court and the proposed 10-foot wide narrow section of the new Crestview Drive designed as a Collector Roadway.

We trust this memorandum adequately documents that the existing and proposed geometric features along Crestview Drive supports the traffic calming desired by the Oxberg Lake Estates residents and the representative land use attorney and traffic engineer.

REFERENCES

1. City of Newberg, Yamhill County, Oxberg Lake Homeowners Association, Ken and Joan Austin, JT Smith Companies, MeadowWood Development LLC. *6-Party Agreement*. Yamhill County Board of Commissioners, Board Order 06-265. April 19, 2006.

ATTACHMENT

24-hour Speed Study Data



LOCATION: Crestview Dr 50' west of Birdhaven Loop SPECIFIC LOCATION: Crestview Dr 50' west of Birdhaven Loop CITY/STATE: Newberg, OR															QC JOB #: 14794701 DIRECTION: WB DATE: Sep 12 2018			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0	
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0	
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0	
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0	
4:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	16-25	1	
5:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	11-20	1	
6:00 AM	0	4	1	0	0	0	0	0	0	0	0	0	0	0	5	17-26	4	
7:00 AM	1	6	2	0	0	0	0	0	0	0	0	0	0	0	9	16-25	8	
8:00 AM	1	5	5	1	0	0	0	0	0	0	0	0	0	0	12	16-25	10	
9:00 AM	1	7	1	0	0	0	0	0	0	0	0	0	0	0	9	16-25	7	
10:00 AM	0	5	5	0	0	0	0	0	0	0	0	0	0	0	10	16-25	10	
11:00 AM	2	3	2	0	0	0	0	0	0	0	0	0	0	0	7	16-25	5	
12:00 PM	3	4	2	0	0	0	0	0	0	0	0	0	0	0	9	16-25	6	
1:00 PM	1	2	2	0	0	0	0	0	0	0	0	0	0	0	5	16-25	4	
2:00 PM	2	6	2	0	0	0	0	0	0	0	0	0	0	0	10	16-25	8	
3:00 PM	0	1	3	1	0	0	0	0	0	0	0	0	0	0	5	16-25	4	
4:00 PM	0	6	1	0	0	0	0	0	0	0	0	0	0	0	7	16-25	6	
5:00 PM	0	4	3	0	0	0	0	0	0	0	0	0	0	0	7	17-26	6	
6:00 PM	1	7	2	1	0	0	0	0	0	0	0	0	0	0	11	16-25	8	
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0	
8:00 PM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3	16-25	3	
9:00 PM	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3	16-25	3	
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0	
11:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	11-20	1	
Day Total	12	65	35	3	0	0	0	0	0	0	0	0	0	0	115	16-25	100	
Percent	10.4%	56.5%	30.4%	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
ADT 115																		
AM Peak Volume	11:00 AM	9:00 AM	8:00 AM	8:00 AM												8:00 AM		
	2	7	5	1												12		
PM Peak Volume	12:00 PM	6:00 PM	3:00 PM	3:00 PM												6:00 PM		
	3	7	3	1												11		
<i>Comments:</i>																		

LOCATION: Crestview Dr 50' west of Birdhaven Loop														QC JOB #: 14794701			
SPECIFIC LOCATION: Crestview Dr 50' west of Birdhaven Loop														DIRECTION: WB			
CITY/STATE: Newberg, OR														DATE: Sep 12 2018			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
Grand Total	12	65	35	3	0	0	0	0	0	0	0	0	0	0	115	16-25	100
Percent	10.4%	56.5%	30.4%	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
Cumulative Percent	10.4%	67.0%	97.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
ADT 115															85th Percentile 22 MPH Mean Speed(Average): 18 MPH Median 18 MPH Mode: 18 MPH		
<i>Comments:</i>																	



LOCATION: Crestview Dr 50' west of Birdhaven Loop SPECIFIC LOCATION: Crestview Dr 50' west of Birdhaven Loop CITY/STATE: Newberg, OR															QC JOB #: 14794701 DIRECTION: EB DATE: Sep 12 2018					
Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Pace Speed	Number in Pace			
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0			
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0			
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0			
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0			
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	11-20	1			
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0			
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0			
7:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3	16-25	3			
8:00 AM	3	3	1	0	0	0	0	0	0	0	0	0	0	0	7	11-20	4			
9:00 AM	2	7	2	1	0	0	0	0	0	0	0	0	0	0	12	16-25	8			
10:00 AM	2	3	0	0	0	0	0	0	0	0	0	0	0	0	5	15-24	3			
11:00 AM	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3	15-24	2			
12:00 PM	1	3	4	0	0	0	0	0	0	0	0	0	0	0	8	16-25	7			
1:00 PM	4	5	2	0	0	0	0	0	0	0	0	0	0	0	11	16-25	7			
2:00 PM	3	3	1	0	0	0	0	0	0	0	0	0	0	0	7	11-20	4			
3:00 PM	0	12	4	1	0	0	0	0	0	0	0	0	0	0	17	16-25	16			
4:00 PM	0	2	3	0	0	0	0	0	0	0	0	0	0	0	5	18-27	4			
5:00 PM	0	5	5	0	0	0	0	0	0	0	0	0	0	0	10	16-25	10			
6:00 PM	1	5	2	0	0	0	0	0	0	0	0	0	0	0	8	16-25	7			
7:00 PM	1	2	1	0	0	0	0	0	0	0	0	0	0	0	4	16-25	3			
8:00 PM	0	5	1	0	0	0	0	0	0	0	0	0	0	0	6	16-25	5			
9:00 PM	0	4	0	1	0	0	0	0	0	0	0	0	0	0	5	11-20	4			
10:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	11-20	2			
11:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	16-25	1			
Day Total	18	66	28	3	0	0	0	0	0	0	0	0	0	0	115	16-25	93			
Percent	15.7%	57.4%	24.3%	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%						
ADT 115																				
AM Peak Volume	8:00 AM	9:00 AM	9:00 AM	9:00 AM														9:00 AM		
	3	7	2	1														12		
PM Peak Volume	1:00 PM	3:00 PM	5:00 PM	3:00 PM														3:00 PM		
	4	12	5	1														17		
<i>Comments:</i>																				

LOCATION: Crestview Dr 50' west of Birdhaven Loop														QC JOB #: 14794701			
SPECIFIC LOCATION: Crestview Dr 50' west of Birdhaven Loop														DIRECTION: EB			
CITY/STATE: Newberg, OR														DATE: Sep 12 2018			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
Grand Total	18	66	28	3	0	0	0	0	0	0	0	0	0	0	115	16-25	93
Percent	15.7%	57.4%	24.3%	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
Cumulative Percent	15.7%	73.0%	97.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
ADT 115															85th Percentile 22 MPH Mean Speed(Average): 17 MPH Median 17 MPH Mode: 18 MPH		
<i>Comments:</i>																	



LOCATION: Crestview Dr 50' east of Westlake Loop SPECIFIC LOCATION: Crestview Dr 50' east of Westlake Loop CITY/STATE: Newberg, OR															QC JOB #: 14794702 DIRECTION: WB DATE: Sep 12 2018		
Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Pace Speed	Number in Pace
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0
4:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	21-30	1
5:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	21-30	1
6:00 AM	0	0	1	2	3	0	0	0	0	0	0	0	0	0	6	28-37	4
7:00 AM	1	1	1	6	0	0	0	0	0	0	0	0	0	0	9	21-30	7
8:00 AM	3	0	3	3	2	2	0	0	0	0	0	0	0	0	13	26-35	5
9:00 AM	0	1	7	0	0	1	0	0	0	0	0	0	0	0	9	16-25	8
10:00 AM	0	0	2	5	3	0	0	0	0	0	0	0	0	0	10	26-35	7
11:00 AM	0	0	3	3	0	1	0	0	0	0	0	0	0	0	7	22-31	5
12:00 PM	0	3	5	1	1	0	0	0	0	0	0	0	0	0	10	16-25	8
1:00 PM	0	0	1	1	2	0	0	0	0	0	0	0	0	0	4	26-35	3
2:00 PM	1	1	3	3	2	2	0	0	0	0	0	0	0	0	12	26-35	5
3:00 PM	0	0	1	1	1	1	1	0	0	0	0	0	0	0	5	36-45	2
4:00 PM	0	0	2	2	2	1	0	0	0	0	0	0	0	0	7	26-35	4
5:00 PM	0	0	2	4	1	0	0	0	0	0	0	0	0	0	7	21-30	6
6:00 PM	0	1	3	3	3	0	1	0	0	0	0	0	0	0	11	27-36	5
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0
8:00 PM	0	0	2	1	0	0	0	0	0	0	0	0	0	0	3	21-30	3
9:00 PM	0	1	0	1	1	0	0	0	0	0	0	0	0	0	3	26-35	2
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0
11:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	16-25	1
Day Total	5	8	37	38	21	8	2	0	0	0	0	0	0	0	119	21-30	74
Percent	4.2%	6.7%	31.1%	31.9%	17.6%	6.7%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
ADT 119																	
AM Peak Volume	8:00 AM	7:00 AM	9:00 AM	7:00 AM	6:00 AM	8:00 AM	8:00 AM								13		
PM Peak Volume	2:00 PM	12:00 PM	12:00 PM	5:00 PM	6:00 PM	2:00 PM	3:00 PM	12									
<i>Comments:</i>																	

LOCATION: Crestview Dr 50' east of Westlake Loop														QC JOB #: 14794702			
SPECIFIC LOCATION: Crestview Dr 50' east of Westlake Loop														DIRECTION: WB			
CITY/STATE: Newberg, OR														DATE: Sep 12 2018 - Sep 12 2018			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
Grand Total	5	8	37	38	21	8	2	0	0	0	0	0	0	0	119	21-30	74
Percent	4.2%	6.7%	31.1%	31.9%	17.6%	6.7%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
Cumulative Percent	4.2%	10.9%	42.0%	73.9%	91.6%	98.3%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
ADT 119															85th Percentile 33 MPH Mean Speed(Average): 26 MPH Median 26 MPH Mode: 28 MPH		
<i>Comments:</i>																	



LOCATION: Crestview Dr 50' east of Westlake Loop SPECIFIC LOCATION: Crestview Dr 50' east of Westlake Loop CITY/STATE: Newberg, OR															QC JOB #: 14794702 DIRECTION: EB DATE: Sep 12 2018			
Start Time	15	16	21	26	31	36	41	46	51	56	61	66	71	76	Total	Pace Speed	Number in Pace	
	15	20	25	30	35	40	45	50	55	60	65	70	75	999				
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0	
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0	
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0	
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0	
4:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	21-30	1	
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0	
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1-10	0	
7:00 AM	1	1	1	2	0	0	0	0	0	0	0	0	0	0	5	21-30	3	
8:00 AM	0	2	2	2	0	1	0	0	0	0	0	0	0	0	7	21-30	4	
9:00 AM	0	1	7	2	1	0	0	0	0	0	0	0	0	0	11	21-30	8	
10:00 AM	0	2	1	2	0	0	0	0	0	0	0	0	0	0	5	21-30	3	
11:00 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	16-25	3	
12:00 PM	0	1	1	3	3	0	0	0	0	0	0	0	0	0	8	27-36	5	
1:00 PM	2	0	3	4	0	1	0	0	0	0	0	0	0	0	10	21-30	7	
2:00 PM	1	1	2	4	0	1	0	0	0	0	0	0	0	0	9	21-30	6	
3:00 PM	0	0	4	10	2	1	0	0	0	0	0	0	0	0	17	21-30	14	
4:00 PM	0	0	1	3	1	0	0	0	0	0	0	0	0	0	5	21-30	4	
5:00 PM	0	1	1	6	3	0	0	0	0	0	0	0	0	0	11	26-35	9	
6:00 PM	1	0	2	5	0	0	0	0	0	0	0	0	0	0	8	21-30	7	
7:00 PM	0	0	1	2	1	0	0	0	0	0	0	0	0	0	4	26-35	3	
8:00 PM	0	0	3	2	1	0	0	0	0	0	0	0	0	0	6	21-30	5	
9:00 PM	0	0	2	2	0	0	1	0	0	0	0	0	0	0	5	21-30	4	
10:00 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	21-30	2	
11:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	26-35	1	
Day Total	5	9	34	52	13	4	1	0	0	0	0	0	0	0	118	21-30	86	
Percent	4.2%	7.6%	28.8%	44.1%	11.0%	3.4%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
ADT 118																		
AM Peak Volume	7:00 AM	8:00 AM	9:00 AM	7:00 AM	9:00 AM	8:00 AM									9:00 AM			
	1	2	7	2	1	1									11			
PM Peak Volume	1:00 PM	12:00 PM	3:00 PM	3:00 PM	12:00 PM	1:00 PM	9:00 PM									3:00 PM		
	2	1	4	10	3	1	1									17		
<i>Comments:</i>																		

LOCATION: Crestview Dr 50' east of Westlake Loop														QC JOB #: 14794702			
SPECIFIC LOCATION: Crestview Dr 50' east of Westlake Loop														DIRECTION: EB			
CITY/STATE: Newberg, OR														DATE: Sep 12 2018 - Sep 12 2018			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
Grand Total	5	9	34	52	13	4	1	0	0	0	0	0	0	0	118	21-30	86
Percent	4.2%	7.6%	28.8%	44.1%	11.0%	3.4%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
Cumulative Percent	4.2%	11.9%	40.7%	84.7%	95.8%	99.2%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
ADT 118															85th Percentile 30 MPH Mean Speed(Average): 25 MPH Median 26 MPH Mode: 28 MPH		
<i>Comments:</i>																	



Attachment 2: Agency Comments

Keith Leonard

From: CARY Dan <dan.cary@state.or.us>
Sent: Monday, July 30, 2018 1:54 PM
To: Keith Leonard
Cc: Doug Rux; BROWN Jevra
Subject: RE: File No.PUD18-0001/CUP18-0004 Yamhill County Tax Map and Lot Numbers 3216-13800 & 3216-01100

Keith,

I am told by the applicant that there is a new revised application coming but I have not seen it. I am not reviewing any application at this time. They are in an extension of my permit decision deadline until August 31, 2018. They will likely need to request another extension to maintain this file number since I still haven't received a new application. From the informal plans I have seen the project has changed significantly and it will go back out for public review and restart the clock for the whole process when I get a complete application. That is all I have.

Dan

Dan Cary, PWS
Aquatic Resource Coordinator Columbia and Clatsop Counties
Aquatic Resource Management Program
Oregon Department of State Lands
775 Summer Street NE, Suite 100
Salem OR 97301-1279
Phone: (503) 986-5302
DSL websites: www.oregon.gov/dsl; www.statelandsonline.com

From: BROWN Jevra
Sent: Monday, July 30, 2018 12:11 PM
To: 'Keith Leonard'
Cc: CARY Dan ; Doug Rux
Subject: RE: File No.PUD18-0001/CUP18-0004 Yamhill County Tax Map and Lot Numbers 3216-13800 & 3216-01100

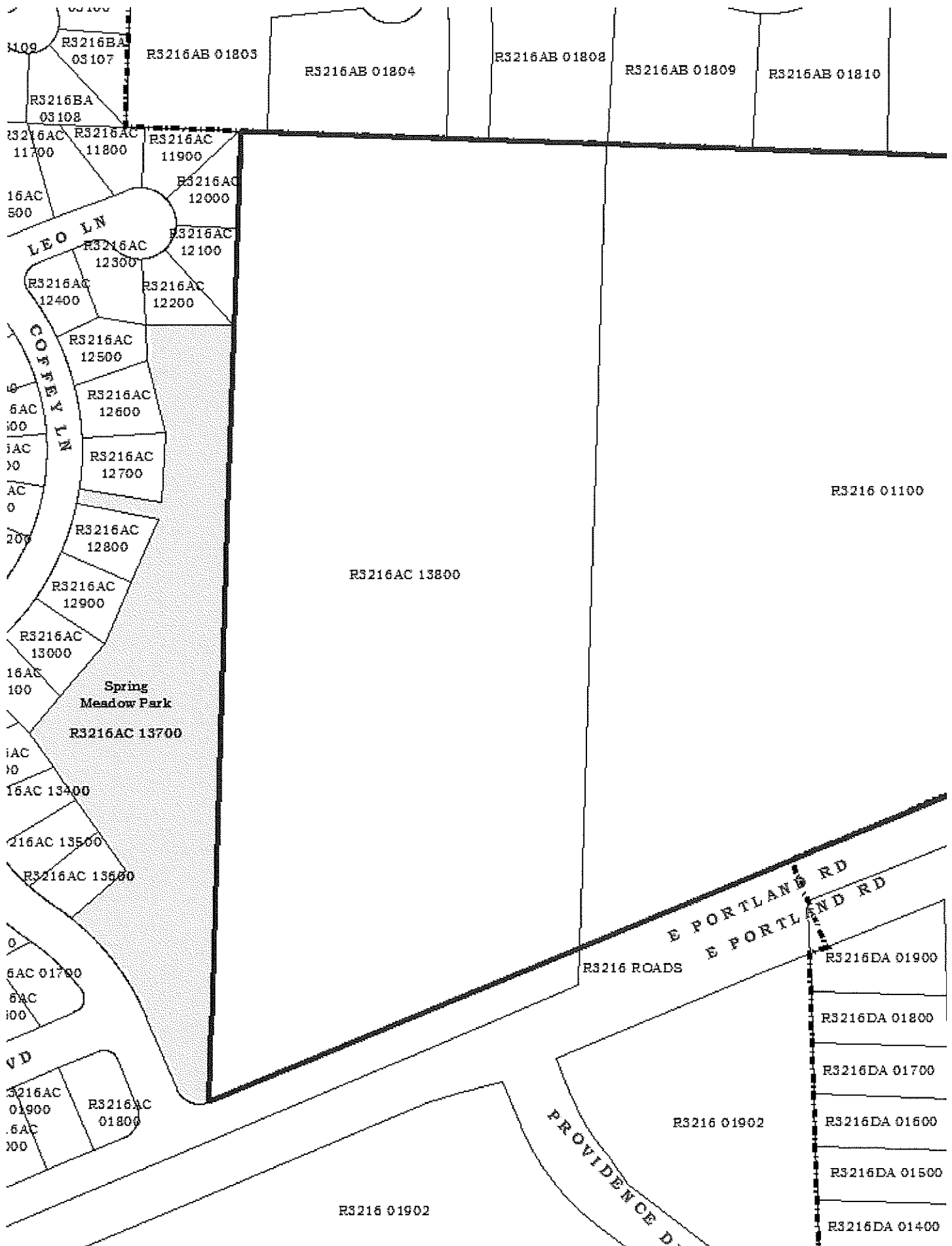
WD2013-0148, delineation, is for tax lots 1100 & 13800. This is still active for a few more months. Technically delineations expire after five years unless 1) there is a request for reissuance within one year of the expiration date (November 8, 2018) or 2) it is associated with an active authorization.
From there I leave it to Dan...

Jevra Brown, Aquatic Resource Planner
Department of State Lands
Office 503-986-5297 (M, T, W); cell: 503-580-3172 (Th, F); fax 503-378-4844
jevra.brown@state.or.us <http://www.oregon.gov/DSL/pages/index.aspx>
Messages to and from this e-mail address may be available to the public under Oregon Public Record Law.

From: Keith Leonard <Keith.Leonard@newbergoregon.gov>
Sent: Friday, July 27, 2018 6:00 AM
To: BROWN Jevra <jevra.brown@dsl.state.or.us>
Cc: CARY Dan <dan.cary@dsl.state.or.us>; Doug Rux <Doug.Rux@newbergoregon.gov>
Subject: RE: File No.PUD18-0001/CUP18-0004 Yamhill County Tax Map and Lot Numbers 3216-13800 & 3216-01100

Hello,

To verify, the property owner does not have a wetlands delineation permit in review for either tax lots 1100 or 13800 due to expiration? Please let me know what time would be good to call Mr. Cary. I am in the office and would like to talk to you regarding this project. Thanks!



Keith Leonard, AICP | Associate Planner
City of Newberg
(503) 537-1215
keith.leonard@newbergoregon.gov



From: BROWN Jevra [<mailto:jevra.brown@state.or.us>]
Sent: Thursday, July 26, 2018 6:36 PM
To: Keith Leonard <Keith.Leonard@newbergoregon.gov>
Cc: CARY Dan <dan.cary@state.or.us>
Subject: File No.PUD18-0001/CUP18-0004 Yamhill County Tax Map and Lot Numbers 3216-13800 & 3216-01100

RE <https://www.newbergoregon.gov/cd/page/crestview-crossing-planned-unit-development>

Hi Keith,

A database search returned the following:

Expired delineation WD2000-0260 for tax lot 1100

Expired delineation WD2006-0698 associated with administratively closed permits 40337-RF and 48735-RF for Crestview Crossing – Part 1.

Crestview Crossing – Part 2 WD2013-0148, administratively closed application 57027-RF, 58464-RF application on extension.

No Wetland Land Use Notices

Dan Cary is reviewing the permit, I have copied him if you have questions.

You may check the status of permits and delineations in review here:

<http://www.statelandsonline.com/index.cfm?fuseaction=Home.home>

Best,

Jevra Brown, Aquatic Resource Planner
Planning and Policy Unit, Aquatic Resource Management Program
Department of State Lands
775 Summer St. NE Suite 100, Salem, Oregon, 97301
Office (M-W) 503-986-5297; **cell** (Th-F) 503-580-3172; fax 503-378-4844
jevra.brown@state.or.us

<http://www.oregon.gov/DSL/pages/index.aspx>

Messages to and from this e-mail address may be available to the public under Oregon Public Record Law.

City of Newberg
414 E. First Street
P.O. Box 970
Newberg, OR 97132



City Manager
(503) 538-9421
(503) 538-5013 Fax

Community Development Department - Planning Division
P.O. Box 970 - 414 E. First Street - Newberg, Oregon 97132 - (503) 537-1240 - Fax (503) 537-1272

REFERRAL TO: PGE, Service & Design

The enclosed material has been referred to you for your information and comment. Any comments you wish to make should be returned to the Community Development Department prior to July 20, 2018. Please refer questions and comments to Keith Leonard.

NOTE: Full size plans are available at the Community Development Department Office.

APPLICANT: 3J Consulting, Inc., Andrew Tull
REQUEST: Crestview Crossing Planned Unit Development & Conditional Use Permit
SITE ADDRESS: 4505 E Portland Rd
LOCATION: Newberg
TAX LOT: R3216 01100
FILE NO: PUD18-0001 / CUP18-0004
ZONE: COM, MDR, LDR
HEARING DATE: 08/09/2018

- Reviewed; no conflict.
- Reviewed; recommend denial for the following reasons:
- Require additional information to review. (Please list information required)
- Meeting requested.
- Comments. (Attach additional pages as needed)

Development cost per current tariff and service requirements. 10' PUE required on all front street lots.

Tom Schuller

Reviewed By:

7/19/18

Date:

Keith Leonard

From: Rick Schiedler <Rick.Schiedler@pgn.com>
Sent: Tuesday, July 24, 2018 12:58 PM
To: Keith Leonard
Subject: RE: Crestview Crossing-Newberg

Keith,

Tell them that they need 10 ft. PUEs along all street frontages.

Thanks Rick

From: Keith Leonard [mailto:Keith.Leonard@newbergoregon.gov]
Sent: Thursday, July 19, 2018 2:55 PM
To: Rick Schiedler
Subject: RE: Crestview Crossing-Newberg

Please take care when opening links, attachments or responding to this email as it originated outside of PGE.

Thank you! I have forwarded your comment to the applicant, I see they have 8' PUEs along internal streets.

Keith Leonard, AICP | Associate Planner
City of Newberg
(503) 537-1215
keith.leonard@newbergoregon.gov



From: Rick Schiedler [mailto:Rick.Schiedler@pgn.com]
Sent: Thursday, July 19, 2018 1:55 PM
To: Keith Leonard <Keith.Leonard@newbergoregon.gov>
Subject: Crestview Crossing-Newberg

Keith Leonard

From: FRICKE Daniel L <Daniel.L.FRICKE@odot.state.or.us>
Sent: Monday, July 23, 2018 8:21 AM
To: Keith Leonard
Cc: KNECHT Casey; EARL Robert
Subject: ODOT Comments on PUD 18-0001/CUP 18-0004 - Crestview Crossing
Attachments: Crestview Crossing (Newberg) - ODOT TIA Review Comments

Keith –

Thank you for providing the Oregon Department of Transportation (ODOT) with an opportunity to review and comment on the subject application. The project site fronts on OR 99W and proposes to connect a new city street (Crestview Drive) to the highway at the existing signalized intersection at Providence Drive. ODOT staff have reviewed the project plans and the transportation impact analysis that have been submitted to the city. Our comments and recommendations are as follows.

TIA Review

The TIA has been reviewed by Region 2 Traffic – comments and recommendations are included in the attached document. Questions on the TIA comments should be directed to Fahad Alhajri (503-986-2996 or fahad.alhajri@odot.state.or.us). Note that ODOT supports all improvements identified in the TIA necessary to meet operational standards.

Roadway Improvements

The following roadway improvements have been identified

- Installation of a westbound right-turn deceleration lane on OR 99W approaching Crestview Drive
- At the northeast corner of the OR 99W/Crestview Drive intersection, the sidewalk will need to connect to the highway shoulder with an “End of Walk” ADA compliant connection (ODOT Standard Drawing RD 754).
- The crosswalk on the east leg of the intersection (across OR 99W) must be reinstalled along with appropriate modifications to the traffic signal (signal modifications are addressed in more detail below)
- The required roadway and signal improvements will trigger the need to assess all curb ramps and push buttons at OR 99W/Crestview Drive. Any non-compliant curb ramps shall be remediated to meet State ADA standards.

The following condition of approval is proposed to address required roadway improvements:

Prior to the issuance of the first grading or building permit, the applicant shall submit plans and specifications for all improvements/construction within ODOT right-of-way for review and approval by ODOT District 3 and issuance of a permit to construct within ODOT right-of-way. ODOT shall certify that all construction activities have been completed pursuant to the approved plans and specifications prior to the issuance of the first certificate of use and occupancy, or the city's equivalent.

Signal Modifications

It is likely that the entire signal installation will need to be replaced to accommodate the Crestview Drive leg being added to the existing intersection. The following is a list of the minimum modifications that are anticipated to be necessary:

- The existing signal poles on the north side of the intersection will need to be replaced to accommodate the new Crestview Drive
- A new mast arm will be needed in the southwest quadrant of the intersection to signalize the new Crestview Drive leg.
- New pedestrian signal and push-button pedestal for the pedestrian crossing on the east leg of the intersection.

- New detection will be needed depending on how new ADA ramps affect crosswalk locations (note that Region 2 is using radar detection)

The following condition if approval is proposed to address the required signal modification:

Prior to issuance of the first grading or building permit, the applicant shall submit signal modification plans for the review of the ODOT Region 2 Traffic Engineer and the review and approval of the State Traffic Engineer. ODOT shall certify that all required signal modifications have been completed and the signal operational prior to the issuance of the first certificate of use and occupancy, or the city's equivalent.

This should be included in the record as ODOT testimony. ODOT should be considered a party to the hearing and be entitled to notices of future hearings, or hearing continuances or extensions. Please provide me with a copy of the City's decision, including findings and conditions of approval.

**Dan Fricke, Senior Transportation Planner
Oregon Department of Transportation
Region 2**

455 Airport Road SE Building B

Salem, OR 97301-5395

Ph: 503-986-2663

e-mail: daniel.l.fricke@odot.state.or.us



Oregon

Kate Brown, Governor

Department of Transportation

Region 2 Tech Center

455 Airport Road SE, Building A

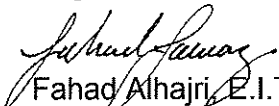
Salem, Oregon 97301-5397

Telephone (503) 986-2990

Fax (503) 986-2839

DATE: July 19, 2018

TO: Dan Fricke
Region 2 Senior Planner

FROM: 
Fahad Alhajri, E.I.T.
Region 2 Traffic Analyst

SUBJECT: Crestview Crossing (Newberg) – Outright Use
TIA Review Comments

ODOT Region 2 Traffic has completed our review of the submitted traffic impact analysis (dated June 2018) to address traffic impacts due to development of a 33.13-acre property consisting of 260 single family homes and 48 apartment units in Newberg. The property is located north of OR 99W between Vittoria Way and Benjamin Road. The TIA will be reviewed with respect to consistency and compliance with current versions of ODOT's *Analysis Procedures Manual (APM)*. Both versions of the *APM* were most recently updated in January 2018. Current versions are consistently published online at: <http://www.oregon.gov/ODOT/TD/TP/Pages/APM.aspx>. As a result, we submit the following comments for the consideration of Region Development Review and the City:

Analysis items to note:

- This study has utilized Highway Capacity Software (HCS) 2010 version 6.9 for roundabout analysis. However, a newer version HCS 7 is available and utilizes the updated Highway Capacity Manual Methodology for roundabouts.
- Region Traffic assumes all land uses and densities offered under the current zones are consistent with the City's code as cited in the report.

Analysis items to be addressed:

1. *Page 16, Saturation Flow Rate* – The base saturation flow rate was calibrated to 1,800 pcphgl, a saturation flow rate study in compliance with the guidelines within the HCM was not provided to justify the use of a higher saturation rate.
2. *Page 19, In-process trips* – ODOT received a TIA for Providence Medical Office Building (63,000 square-feet) located just south of the OR 99W/Providence Dr.

intersection and is anticipated to be constructed/occupied by year 2019. Applicant should verify with the City of Newberg that no further developments have been approved at the time of application.

3. *Per Figure 5*, A two percent annual growth rate was not applied at intersection #7. This will unlikely have impact on conclusion of the study.
4. *Figure 7, intersection #7* - ODOT will not run analyses with zero vehicles making available permitted movements. Rather, if count data does not identify any vehicles within the peak hour making a movement, we recommend assuming a low volume (1 or 2) rather than zero. The algorithms within Synchro utilize different formulas if there are zero conflicting vehicles.
5. *Synchro, Benjamin Rd/OR 99W Background condition (year 2020)* – The PM peak hour eastbound through movement volume is 1414 rather than 1441.
6. *Page 25, Table 4* – per the *Institute of Transportation Engineers (ITE)*, the proposed weekday trip generation for “Multifamily Housing” (ITE land use code 220) is 323 rather than 1,622.
7. *Figure 9*, The trip distribution pattern of 15 percent arriving/departing to the east of OR 99W appears to be significantly low when taken into account the reassigned traffic volumes in Figure 6.

According to Figure 6, at Springbrook Rd/Crestview intersection nearly half of traffic (AM peak 204 of 349) was rerouted to Libra St/Crestview Dr., then to Crestview Dr./East-West Connector and finally east from OR 99W/Providence. It appears that there is a greater than 15 percent demand for travel to/from east on OR 99W.

8. *Pages 31-32, Table 5* – When reporting the queue lengths, the reported values should be conservatively rounded **up** to the next 25 feet.

Additionally, the reported storage lengths in Table 5 should be consistent with the values modeled in SimTraffic.

9. *Per Development Review Guidelines (Chapter 3, Section 3.3)*, the analysis should evaluate impacts 5 years out from opening year in addition to opening year. Therefore, the analysis shall evaluate impacts for year 2025.

Application for State Highway Approach comments:

10. *Per 2016 SPIS Report*, the intersection of OR 99W and Providence Road is no longer a top 5% SPIS site.

Proposed mitigation comments:

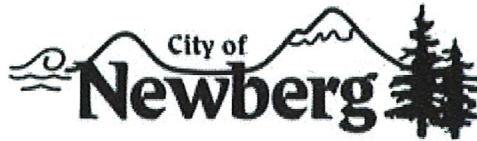
11. ODOT maintains jurisdiction of Pacific West Highway No. 91 (OR 99W) and ODOT approval shall be required for all proposed mitigation measures to this facility.
12. All proposed intersection and/or signal modifications (new installations or changes to existing phasing or timing), changes to lane configuration, and additional turn or

receiving lanes will require ODOT approval. Both the City and the applicant shall be aware no approval for any proposed mitigations have been issued at this time and proposed mitigations shall not be considered approved for installation until formal written approval has been issued. Approval request will need to be submitted to Region 2 Traffic and be accompanied by the appropriate analysis justifying such request. The approval process takes time and any approval could possibly have added features required to obtain such approval.

13. Reconfiguring the northbound Providence Drive approach to include an exclusive left, exclusive thru and exclusive right lanes, will likely not be accomplished by just restriping. Reconstructing the approach might be necessary to accommodate for adequate lane widths.

Thank you for the opportunity to review this traffic impact analysis. As the Synchro files were not provided, Region 2 Traffic has only reviewed the submitted report. The above comments will merit the need for reanalysis, we look forward to a second round of review at which time we will comment on any and all proposed mitigation measures affecting the state highway system. For any questions regarding these comments, please contact me at Fahad.Alhajri@odot.state.or.us or directly at (503) 986-2996.

City of Newberg
414 E. First Street
P.O. Box 970
Newberg, OR 97132



City Manager
(503) 538-9421
(503) 538-5013 Fax

Community Development Department - Planning Division
P.O. Box 970 - 414 E. First Street - Newberg, Oregon 97132 - (503) 537-1240 - Fax (503) 537-1272

REFERRAL TO: PGE, Service & Design

The enclosed material has been referred to you for your information and comment. Any comments you wish to make should be returned to the Community Development Department prior to July 20, 2018. Please refer questions and comments to Keith Leonard.

NOTE: Full size plans are available at the Community Development Department Office.

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REQUEST: Crestview Crossing Planned Unit Development & Conditional Use Permit
SITE ADDRESS: 4505 E Portland Rd
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 - Require additional information to review. (Please list information required)
 - Meeting requested.
 - Comments. (Attach additional pages as needed)

Development cost per current tariff and service requirements. 10' PUE required on all front street lots.

Tim Scheller

Reviewed By:

7/19/18

Date:



Oregon

Kate Brown, Governor

Department of Land Conservation and Development

Community Services Division

635 Capitol Street NE, Suite 150

Salem, Oregon 97301-2540

Phone: (503) 373-0050

Fax: (503) 378-5518

www.oregon.gov/LCD



September 13, 2018

Newberg Planning Commission
City of Newberg
414 E. First St.
Newberg, Oregon 97381

RE: Application for Crestview Crossings/Planned Unit Development and Conditional Use Permit (Local File No. PUD18-0001/CUP18-0004)

Submitted Via Email

Dear Newberg Planning Commission Members:

Thank you for the opportunity to comment on the above-referenced application which proposes a mixture of commercial use and a variety of housing including affordable housing units on 33.13 acres of land. We understand that a total of about 300 housing units will be provided once all phases are complete. The Department of Land Conservation and Development encourages cities to approve these types of proposals when they are in accordance with the Newberg Development Code, promote efficient use of land within the urban growth boundary, and provide affordable housing.

The Importance of Needed Housing

Goal 10, the statewide planning goal for housing, identifies “needed housing” as housing types determined to meet the need shown for housing within an urban growth boundary (UGB) at particular price ranges and rent levels. ¹ Oregonians face a wide variety of housing issues as the result of tightening housing markets, stagnant wages, and a shortage of affordable housing units. By providing a mix of housing types at various sizes and densities, and outright affordable housing units, cities can establish whole communities for every stage of life.

¹ OAR 660-008-0000

Multifamily housing, small-lot cottage housing, single-family attached housing, and other alternatives to the detached single family home are many times the best or preferred housing solution for people at different stages in their lives. They provide an important housing option for young people just starting out in a career or saving to buy a home, as well as for senior citizens who no longer care to maintain a single-family home, yet want to remain near their children and grandchildren. In general, many people will find that at some point in their lives they will have a need for an alternative to the detached single family home. .

Additionally, providing a variety of housing types is a key component of sustainable growth; by housing more people on less land, these types of housing developments make it possible to preserve more open space and natural features than do detached single-family housing developments. Also, they reduce development pressure on the remaining undeveloped land inside urban growth boundaries and usually require less public infrastructure, including roads, sewer and water pipes, and electricity and gas lines. Higher density types of housing development also make it financially feasible to integrate commercial and retail uses into a neighborhood, therefore creating more complete neighborhoods.

HB 4006 and DLCD Housing Planning

To make an impact on housing affordability, in 2018 the Oregon Legislature allocated \$1.73 million to the Department of Land Conservation and Development for housing planning technical assistance in HB 4006. The bill allocates funding “for the purpose of providing technical assistance to local governments in increasing the affordability of housing.” The bill directs the department to give priority to cities over 10,000 population where at least 25 percent of the renter households in the city are “severely rent-burdened.” A household is “severely rent-burdened” if the household spends more than 50 percent of the income of the household on gross rent for housing.²

The city of Newberg is one of the cities that this legislation is directly impacting. The program has hired a consultant to conduct a housing needs analysis and to develop a plan for an adequate supply of housing for Newberg, as required by Goal 10. The project will also address affordability measures for its current and future residents. From our reading of the application, the Crestview Crossing development provides some of the housing that is needed for the city today and potentially for a portion of the need for the next 20 years of growth.

Conclusion

In conclusion, it is the policy of the state to ensure that housing options be made available to all citizens of the community. Applications for such housing developments should be approved when such proposals comply with standards set forth in the Newberg Development Code. Please

² US Census Bureau, 2012-2016 5-Year American Community Survey estimates

City of Newberg
September 13, 2018

Page 3 of 3

do not hesitate to contact me if you have any questions. I am available at 503-934-0056 or angela.carnahan@state.or.us.

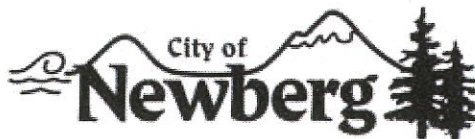
Regards,

Angela Carnahan

Angela Carnahan
Mid-Willamette Valley Regional Representative

cc: Doug Rux, Community Development Director – City of Newberg
Gordon Howard, Community Services Division Manager – DLCD
Joseph Schaefer, Land Use Planner – Jordan Ramis

City of Newberg
414 E. First Street
P.O. Box 970
Newberg, OR 97132



City Manager
(503) 538-9421
(503) 538-5013 Fax

Community Development Department - Planning Division

P.O. Box 970 - 414 E. First Street - Newberg, Oregon 97132 - (503) 537-1240 - Fax (503) 537-1272

REFERRAL To: Portland General Electric Attn: Service and Design

The enclosed material has been referred to you for your information and comment. Any comments you wish to make should be returned to the Community Development Department prior to August 31, 2018. Please refer questions and comments to Keith Leonard.

NOTE: Full size plans are available at the Community Development Department Office.

APPLICANT: Andrew Tull, 3J Consulting

REQUEST: Crestview Crossing PUD, to mixture of commercial development, single-family homes, cottage style single-family homes, affordable housing and multi-family homes. The proposed development includes 18 single-family homes on large lots, 230 cottage homes and 51 multifamily homes.

SITE ADDRESS: 4504 E Portland Rd

LOCATION:

TAX LOT: R3216-13800 & R3216-01100

FILE NO: PUD18-0001/CUP18-0004

ZONE: R-1, R-2 & C-2

HEARING DATE: September 13, 2018

RECEIVED

AUG 30 2018

Initial: _____

Reviewed; no conflict.

Reviewed; recommend denial for the following reasons:

Require additional information to review. (Please list information required)

Meeting requested.

Comments. (Attach additional pages as needed)

Development cost per current tariff and service requirements. 10' PUE required on all front street lots.

Rick Schiedler

Reviewed By:

8/24/18

Date:

Attachment 3: Public Comments

July 23, 2018

Community Development Department
P.O. Box 970
414 E. First Street
Newberg, Oregon 97132

To Whom It May Concern:

As long time residents of Oxberg Lake Estates we have several concerns about the proposed development to be located behind our property.

Our first concern is maintaining the wonderful livability of our neighborhood. We are isolated from transient vehicle and pedestrian traffic. Our neighborhood is a relaxing place to walk without concern for safety from cars. We know our neighbors and the many other people who use our streets from adjacent neighborhoods. We have a strong neighborhood watch program, but without a barrier and sound wall between our neighborhood and the new development our livability will be lowered by uncontrolled access through our properties. Trespassing and other crimes will increase without some form of restriction.

Our second, and most important concern, is protecting and maintaining our level and quality of water in our aquifer. The new development would eliminate wetlands and redirect water that normally filters into the aquifer that we use to supply our 30 homes through one well. The current wetlands and other water run-off from adjacent fields provide a critical source of water to our aquifer and must not be eliminated. This water issue must be addressed to the satisfaction of the Oxberg Water Company and the Oxberg Lake Estates Homeowner's Association.

We recognize Crestview Drive will be completed through to Highway 99, but the livability, safety, and water are critical components to our neighborhood.

Thank you,
Blake and Diane Williams
4500 NE Blue Heron Ct.
Newberg, Oregon 97132

RECEIVED

JUL 26 2018

Initial: _____

RECEIVED

AUG 06 2018

Initial: _____

July 27, 2018

Bruce Thomas
32150 SW Ladd Hill Road
Wilsonville, OR 97070

City of Newberg
Community Development Department
PO Box 970
Newberg, OR 97132

Re: Proposed New Development at 4504 E Portland Road

I own the property at the corner of Benjamin Road and Highway 99W. (4821 E. Portland Road) At the time of my property's annexation, I understood that the City of Newberg's greatest need for the property along the north end of Highway 99W was additional commercial uses and higher density housing. This proposed change to the existing zoning and land use for the subject property meets one of those criteria.

I have no objection to the proposed change, but I want to make sure that whatever access is created for the subject property will also work for access to my property, including the commercial space on my property. By removing the largest parcels of the previously annexed property from commercial uses, it is more important to preserve the remaining parcels for commercial development.

I will leave it to the City of Newberg's professional planning people to determine the best access and infrastructure design to meet the needs of not only the subject property, but also the Kimball property and my property.

Thank you for your consideration of my comments.

Bruce Thomas



Keith Leonard

From: Doug Rux
Sent: Saturday, July 21, 2018 3:49 PM
To: Keith Leonard
Cc: Andrew Tull; Michael Robinson
Subject: Fwd: Crestview Planned Housing

I revived this email Saturday on Crestview Crossing.

Doug Rux
Community Development Director
City of Newberg
503.537.1212
Doug.rux@newbergoregon.gov

Sent from my iPhone

Begin forwarded message:

From: Cooper Foushee <cooperfoushee123@gmail.com>
Date: July 21, 2018 at 1:41:09 PM PDT
To: doug.rux@newbergoregon.gov
Subject: Crestview Planned Housing

Hi I just had a few ideas for the planned neighborhood because it's still in planning. I think the houses on the backend of the lot shouldn't be built and the natural trees should be kept and used for a walking trail possibly. The natural forest we still have left in town should be completely preserved because once it's gone it's gone. Houses can always be built somewhere else too. Hopefully this is taken into consideration because other people my age at the high school don't like the idea of more trees being torn down for houses. Thank you!

Sent from Coopers iPhone

July 28 2018

Attention Newberg City Planners Re: Development @ 4504 E Portland Rd.

We are writing this in hopes you will consider the following items that are of considerable concern to us as we are directly abutting this development.

1. How this project will affect our water supply to the homes in Oxberg Lakes Estates if the wet lands are destroyed.
2. That the developer abide by the same standards set by the Springbrook Master Plan.
3. A roundabout be on Crestview at Northern part of the project.
4. The plan of the previous developer included a Wall on the Northern boundary of the project.

Sincerely;

Dale Palmer ✓ *Doris J. Palmer*
Dale & Doris Palmer
4408 Birdhaven Loop

RECEIVED

JUL 31 2018

Initial: _____

RECEIVED

AUG 01 2018

Initial: _____

August 1, 2018

Written Comments: PUD18-0001/CUP18-0004
City of Newberg
Community Development Department
P.O. Box 970
Newberg, Oregon 97132

To Members of the Planning Commission:

I am submitting these comments in connection with the Planning Commission's review of the development on the southern boundary of Oxberg Lake Estates. My name is Dick Petrone, former President of the Oxberg Lake Estates Homeowners Association. I served during the initial development of the 5-Party Agreement and was the signatory on the Agreement for the Association.

The City of Newberg, Austin Industries, and JT Smith all approved the use of Best Practices to ensure the protection of our Water source for Oxberg Lake Estates Water System which serves 30 members of the Association. With the proposal as presented, the developer has not demonstrated the use of Best Practices to protect our water supply. To be in compliance with the 5 Party Agreement the developer must demonstrate how it is using Best Practices to protect our water supply as the development is in our well's recharge zone.

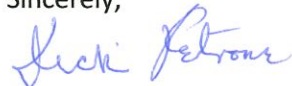
My second concern is the use of traffic calming devices to maintain vehicle speeds of 25 MPH on Crestview Drive. In the original plan for the development, the plan included a roundabout south of the Oxberg Lake Boundary Line. Without the planned roundabout traffic will leave HWY 99 and will race up to the first roundabout in Oxberg Lake Estates. The proposed plan must reflect the use of traffic calming devices such as a roundabout to hold speeds down as vehicles enter Oxberg Lake Estates. The plan also called for traffic signs indicating "No Through Trucks".

My third concern is the proposed plan does not include sound walls for the 5 lots on the southern boundary of Oxberg Lake Estates. The original plan included sound walls similar to the sound walls on Crestview Drive.

My final area of concern is the Conflict of Interest for the Legal Representative for JT Smith. During the original development of the 5 Party Agreement, our HOA employed the same attorney who is now representing JT Smith. It is obvious that there is a Conflict of Interest for the Attorney Representing JT Smith.

Thank you for allowing me to express my concerns as they have serious impacts on our Oxberg Community,

Sincerely,



Dick Petrone
4301 NE Crestview Drive
Newberg, Oregon 97132

Keith Leonard

From: Doug Rux
Sent: Monday, July 23, 2018 8:25 AM
To: Keith Leonard
Subject: RE: Saving Healthy Trees

I already sent them on to Mike and Andrew over the weekend.

Doug Rux, AICP
Community Development Director
City of Newberg
503.537.1212
Doug.Rux@newbergoregon.gov

From: Keith Leonard
Sent: Monday, July 23, 2018 6:33 AM
To: Doug Rux
Subject: Re: Saving Healthy Trees

I'll get these out to Andrew.

From: Doug Rux
Sent: Saturday, July 21, 2018 5:17:48 PM
To: Keith Leonard
Cc: Andrew Tull; Michael Robinson
Subject: Fwd: Saving Healthy Trees

Here is another comment.

Doug Rux
Community Development Director
City of Newberg
503.537.1212
Doug.rux@newbergoregon.gov

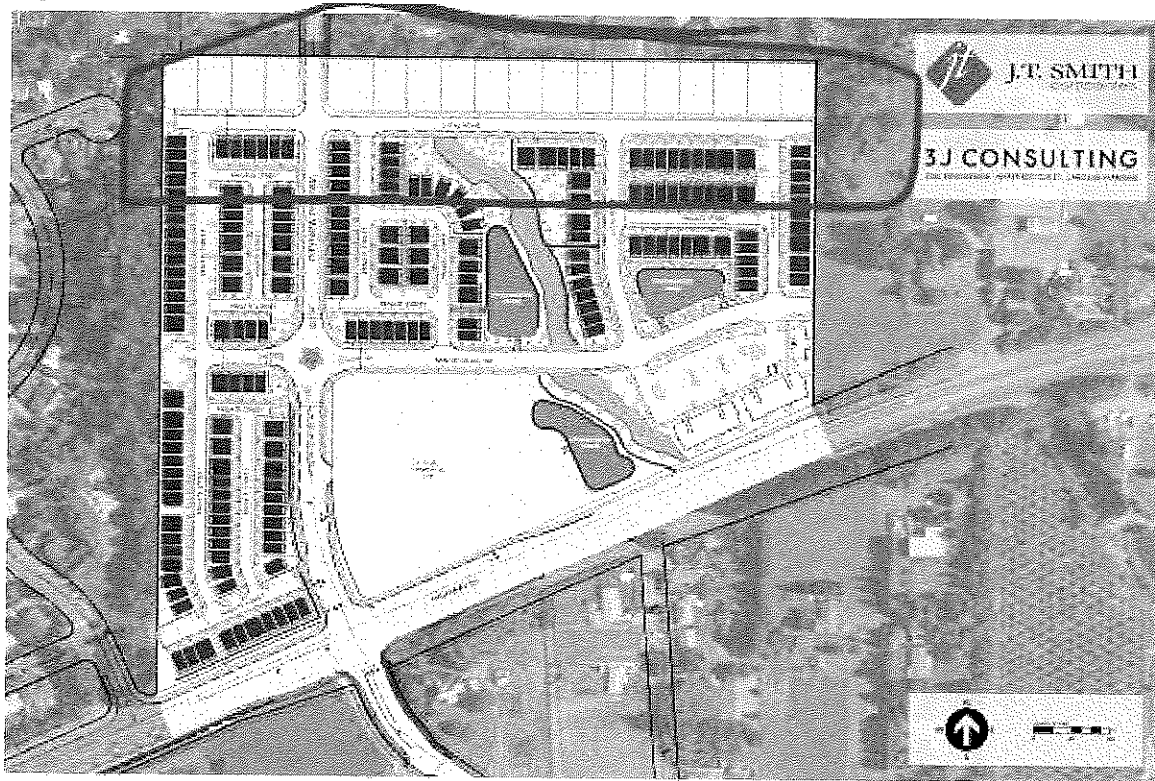
Sent from my iPhone

Begin forwarded message:

From: jessica poetzman <jepoet23@gmail.com>
Date: July 21, 2018 at 4:28:13 PM PDT
To: Doug Rux <Doug.Rux@newbergoregon.gov>
Subject: Saving Healthy Trees

Hello, I go to Newberg High School. I was looking at the planned houses after someone mentioned it and I felt the need to write with a few complaints. Recently a lot of trees have been taken down in town due to growth but I don't

think that should be the case anymore. We are lucky to live in an area with so much natural beauty and it should all be preserved.



CRESTVIEW CROSSING PLANNED DEVELOPMENT

This specific part is what I'm talking about. It looks to be only 18 homes which doesn't seem justifiable for a mini forest to be cut. Just wanted to put that out there!

Sent from my iPhone

City of Newberg
Community Development Department
PO Box 970
Newberg, OR 97132

RECEIVED
AUG 01 2018

Initial: _____

7/28/2018

To the City Council:

Some ten years ago an exceptional City Manager, Jim Bennett, touched greatness. Under his leadership problems that had plagued Newberg for decades were resolved because all the involved parties agreed to work together to solve them. Thanks to mutual good faith and hard work, the result is what is now known as "The Five Party Team" agreement.

The Team had six official members, The City, The County, Oxberg Lakes Homeowners (OLHA), and three property developers. The State was not a member, but it made inputs and provided expertise that helped with road infrastructure and traffic issues. Experts and Attorneys helped.

At the time I was President of OLHA. I testified at some 35 hearings, some of which ran until 2 AM, each time speaking in favor of developing the high value properties adjacent to us and the infrastructure needed to support Newberg's future growth.

The result was a miracle, one that was precedent-setting for Newberg, the County, and the State. Rather than the typical staff-driven piecemeal approach to cram in some development, this time all the people involved and effected got involved and drove the plan (with assistance from city and county planners) to assure the best possible outcomes.

No one got everything they wanted, but we got a plan that we could live with. It was signed by all parties. The resultant plan was published in the Newberg Graphic. One good part was a transfer of Crestview from the County to the City that did not destroy our community and met or exceeded design standards.

Newberg got the road access it wanted and the right to run a waterline down our street. We got a road we could live with **AND THE BEST PRACTICES AGREEMENT to protect the aquifer for our water system**. The latter was a proud day for everyone. It was meaningful environmental protection and very much in the spirit of the old Oregon.

There is a lot of misunderstanding about our water system. Development in Newberg has, over the years, destroyed many private wells. That's irrelevant. Our system is a State Licensed

commercial water system, one of three in the County. As such, we are required by law to protect our aquifer. In water law first is everything and our system predates the State of Oregon.

Perhaps best of all for Newberg, the Five Party Team plan was **affordable**. Having an integrated plan paid for infrastructure that allowed many developments, with many more to follow. The first phase paid for itself. Barely. The numbers were thin but workable.

Alas, what was planned never got built. Administrations changed, the economy collapsed, and except for some "shovel ready" money that built out a short section of road through OLHA, everything stopped.

It seems that now we are back to square one. I am concerned. It seems betrayal is afoot. OLHA has been forced to retain legal counsel. Several things were alarming.

Apparently, the current developer's interpretation of "Best Practices" (it was a signatory) is to fill the recharge zone for our aquifer with **dirt** (5 acres of fill, for 7 acres of wetlands!) and to divert as much of our water away as possible so they can cram in more development.

A strange off-the-record public (but not official) meeting was held by the developer in our local fire house on May 14th. This was not recorded, but the room was full, I was there, and names were taken.

You should invite all who attended to testify at length to the City Council. Suffice it to say that many issues were raised, credible answers were lacking, and the developer seems to be depending on grants of taxpayer money to generate profit and make their numbers work.

Most in the room expressed skepticism or opposition. The developer's response was that they were doing the public a favor by even having the meeting, and they were not required to tell us anything. In short, "We're going to do it anyway."

My comment at the meeting was that a piecemeal approach, like the one being pursued, would likely create more problems than it solved, and that the Five Party Team agreement and plan should be revisited. I also said that if the Best Practices Agreement was violated and our water system was threatened, my **guess** [as a private citizen and homeowner] was that OLHA would have to assert our legal rights.

Even more alarming is that when our board called our land use lawyer from a decade ago they didn't respond for a time. When they did, it was to report that a conflict existed. It seems that

OUR LAW FIRM HAS BEEN RETAINED BY THIS DEVELOPER TO REPRESENT THEM FOR THE SAME PARCEL.

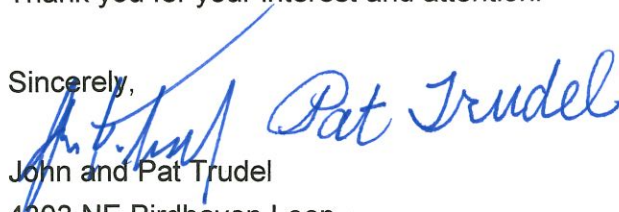
What a remarkable coincidence. Such a conflict raises all sorts of legal red flags and demonstrates either monumental incompetence or bad intent.

In summary:

- The plan we heard on May 14th was not appealing. It raised concerns.
- The developer is desperate to get this plan approved. All the other developers have distanced themselves. Follow the money and look at the numbers.
- I strongly suggest the City Council and the County should get involved, become familiar with the Five Party Team agreement, and consider other options.
- Please do not leave this to staff. Getting the infrastructure right has been a major issue for Newberg for some 40 years. This issue should not be driven by one developer and one small parcel. Get broader opinions and plans. As before, this development could be one piece of a plan, given the use of BEST PRACTICES to protect our aquifer.
- Traffic calming on the border of OLHA was also part of the Five Party Team agreement. This was implemented on our section of the road, but it still needs to be put in place on the adjacent parcel.
- Whatever you do, please do not destroy our water system.

Thank you for your interest and attention.

Sincerely,


John and Pat Trudel
4303 NE Birdhaven Loop
Newberg, OR 97132

Re: File No. PUD19-0001/CUP18-0004

RECEIVED

July 30, 2018

AUG 06 2018

Dear Newberg City Council Members,

As a resident, living in Oxberg Lake Estates, which is adjacent to the proposed Crestview Crossing Development, I would like it known that we have great concern for the watershed and wetlands that the developer, J.T. Smith, has planned to partially fill as part of their proposed construction. The water supply for approximately 30 families in our neighborhood is entirely dependent on being replenished and filled by the artesian water storage in our aquifer system. The developer has said that the net effect of diminishing the size of the wetland area will be mitigated by an exchange of wetlands in another area in the county, but this will do nothing at all to counteract the obvious effect on those of us living in Oxberg Lake Estates. The additional impervious coverage area that the proposed development is planning will result in the water having to be diverted to other areas instead of being absorbed into our aquifer as nature intended. There can be little doubt that disturbing the soil in this wetland area will certainly affect the viability of our well water and its quality. There are many years of records from our small water company, Highland Water, that will show that we have had access to safe and sufficient water with almost no treatment of any sort. It should be obvious that any negative effect on our water supply would have a large impact on our basic need for access to potable water.

It's also troubling that the most recent public presentation by J.T. Smith does not show the original location of a proposed traffic roundabout that was agreed to by the developer in the "Five Party Agreement" that was agreed upon by the Austins, J.T. Smith, Oxberg Lake HOA and others. It was agreed that a traffic calming roundabout would be located on the north side of the proposed development, near the exit to existing Crestview Road. The relocation of the roundabout will defeat the original purpose of providing a traffic calming effect. Moving the location of the roundabout closer to highway 99 will result in a long straight-away, into and out of this new development, and will encourage its use as a quick shortcut. The result of this change will cause the road to be used not as a "collector", as intended in the Master Plan, but instead, a fast way to circumvent the congested traffic at the intersections on Springbrook Road.

Please make sure that these issues are addressed before approving this proposed development.

Sincerely,



Mark Simmons

Mark Simmons
4307 NE Birdhaven Loop
Newberg, OR 97132
Mobile: 503-707-9035
Email: mark.simmons@yahoo.com

RECEIVED

JUL 31 2018

RE: File No.PUD18-0001/CUP18-0004

Initial: _____

To Whom It May Concern,

I am a resident of Oxberg Lake Estates located just north of the planned development referenced above. I would like to state for the record my concerns regarding the development as it is currently proposed.

The most pressing issue as I see it is the planned fill of the existing wetland and rerouting of the water away from the recharge zone for our well system and the eventual drainage into the city's storm water system. The HOA for this community actually operates a state licensed water company and provides safe clean drinking water for residents both within the association as well as residences located nearby. It is my belief, based on previous testimony when a development was first planned for this property, that the activity currently proposed would significantly harm our water system and jeopardize our water company.

When looking at the 5 party agreement that was signed over a decade ago and which included city, current developers and this association - it was agreed to that "best practices" would be employed when deciding how to proceed with regards to the wetland and our water supply. Just recently, I spoke on behalf of the HOA at the Springbrook Master Plan meeting in front of the planning board and stated clearly that the developers for SMP had set the gold standard for what "best practices" meant - setting aside a full 1/3rd (150 acres) of the property for water resource preservation and as such, will be left undeveloped. I implored then as I do now that the planning board accept nothing less than that standard as it pertains to the Crestview Crossing project as well.

Furthermore, the other issues with this development as I see it pertains to the issue of "traffic calming measures". Again, everyone acknowledged in the 5 party agreement that roundabouts were needed to limit both size (large tractor trailers) and speed through our community as well as neighboring communities and the placement of the roundabouts was key to achieving this. In the current proposal, the planned roundabout to the northwest is not addressed (as I

understand it, that is part of the SMP) but also in the current proposal, the roundabout which was supposed to be located "immediately to the south" of our community has been moved further south than what was previously agreed to - reducing or negating any benefit of traffic calming measures previously agreed to.

There is no question this as a direct violation of the 5 party agreement. It should be noted that the developers were made aware of the issues to both of my concerns when they unveiled the new improved proposal at a community meeting in May - and it's a shame to see neither were addressed in any meaningful manner. It's up to the planning board to seek the answers and remedies to both these issues.

Finally, the concern of a physical separation between the existing development (Oxberg) and the proposed development is still undefined. While this doesn't concern me directly, it does affect my neighbors and there needs to be specifics laid out in how the properties adjacent to the development will be separated - whether it be a wall, natural barrier or what have you.

I appreciate and applaud all the efforts by the planning board of Newberg. This is not an easy task- and while I'm sad to see we wont be getting the commercial development of prime commercial property as once was proposed - I do ask that they strongly consider rejecting the proposal as submitted. Newberg has a rich history of protecting the environment and putting the residents first and foremost ahead of any new developments.

As you look at this proposal, it doesn't meet the needs of Newberg's existing residents - some of which have called Newberg home for more than 60 years. Crestview Crossing is the gateway to the Allison and as such should be planned with the understanding that what we choose to do now will forever have an impact on the city and its long time residents. The decision to fill in wetlands with little consideration as to the impact on surrounding communities should not be taken lightly.

I ask that impartial experts review the wetland with an updated survey of the area and come to a clear understanding of the expected

impact on our aquifer, positive consent from all adjacent homeowners and traffic calming measures as agreed to installed. I would also ask that should you proceed with the development as proposed, and should there be negative impact on our aquifer to the extent that it becomes no longer viable - there needs to be a compensation package or bond agreed to by both parties.

Again, thank you for your consideration in this matter and I ask that you do what's right for Newberg in the long run and not look at the short term gain exclusively.

Mark Wagner
4403 NE Birdhaven Loop
Newberg, OR 97132

JEFFREY L. KLEINMAN
ATTORNEY AT LAW
THE AMBASSADOR
1207 S.W. SIXTH AVENUE
PORTLAND, OREGON 97204
TELEPHONE (503) 248-0808
FAX (503) 228-4529
EMAIL KleinmanJL@aol.com

M E M O R A N D U M

To: Newberg Planning Commission
From: Jeffrey L. Kleinman
Date: August 2, 2018
Re: Crestview Crossing, File No. PUD18-0001/CUP18-0004

I. INTRODUCTION

I represent Oxberg Lake Homeowners Association (the "HOA"). The HOA objects to the above application on several grounds, as set out below. For each of the specified reasons, the applicant has failed to meet the requisite burden of proof under the city's approval criteria.

II. THE SIX-PARTY AGREEMENT

On April 10, 2006, the City of Newberg, Yamhill County, Oxberg Lake Homeowners Association, Ken and Joan Austin, JT Smith Companies, and MeadowWood Development, LLC entered into an agreement (the "Agreement"), regarding the Northerly Arterial designated in the city's Transportation System Plan. A copy of the Agreement is attached for reference. Initially, the Northern Arterial was to be

Crestview Drive connecting to Highway 99W. Under the Agreement, the city agreed to amend its TSP to designate Springbrook Road as its Northern Arterial and to designate Crestview Drive as a Major Collector, instead. The general design and alignment of that road is depicted in Exhibit A to the Agreement. It was agreed that the Crestview Drive Major Collector will be posted as “no through trucks” and designed to encourage a 25 mph speed limit. To provide traffic calming for this purpose, it was agreed that a roundabout is to be placed on Crestview Drive directly south of its intersection with Robin Court, as shown on page two of Exhibit A.

The Agreement also includes as Exhibit B an engineering study completed by JRH Transportation Engineering, dated March 27, 2006. This study analyzes and supports the designation of Springbrook as the Northern Arterial and the conversion of Crestview to a Major Collector.

The Agreement is not time-limited. It is not dependent upon any particular development proposal. It remains binding upon all of the parties and their successors and assigns. Nonetheless, the within application appears to move the location of the designated roundabout on Crestview significantly further to the south. There, it may benefit traffic flow for the development itself but will not have the traffic-calming effects within Oxberg Lake for which it was duly negotiated and agreed by the parties.

Thus, approval of this development in its approved form would violate the Agreement and is simply impermissible. Moreover, Oxberg Lake Homeowners Association hereby gives notice that it intends to enforce its rights under the Agreement

both as to the city and JT Smith Companies (and any related entities and successors and assigns of JT Smith Companies), through litigation if necessary.

III. WETLANDS AND WATER SUPPLY ISSUES

The HOA provides domestic water both within and outside its boundaries through the Oxberg Water System (the “Water System”). The Water System is supplied by a single well inside those boundaries. We have provided a copy of the Source Water Assessment Report by the State of Oregon for the Oxberg Water System, prepared in April of 2004. As stated at page 2 of the report, the Oxberg Water System serves approximately 80 people through 27 connections, via one well commonly referred to as Well #2. The report states that pursuant to DHS Drinking Water Program records, “this well serves as the only permanent water source.” The thickness of the water-bearing zone in the aquifer serving the well is estimated to be only 15 feet. *Id.* at 3.

In its report, the state delineated the Drinking Water Protection Area (“DWPA”) to identify the area at the surface overlying the critical portion of the aquifer supplying groundwater to the well. *Id.* at 4. The DWPA for the Oxberg Water System well is shown in Appendix B, Figure 1 to the report. The DWPA extends through a significant portion of the applicant’s property. In addition, Figure 3 shows that a high percentage of the subject site possesses “High Soil Sensitivity,” posing “a greater risk to drinking water quality than those in areas of low sensitivity.” It was determined that the moderate Infiltration Potential score for the aquifer, the close proximity of the surface water to the well, and the presence of highly permeable soils within the DWPA contribute to a

moderate overall water system sensitivity.

The report concludes that, “[u]nder a ‘worst case’ scenario, where it is assumed that nothing is being done to protect groundwater quality at the identified potential contaminant sources, the assessment results indicate that the water system would be highly susceptible to the identified moderate-risk potential contaminant sources.” *Id.* at 12.

In 2008, the Oregon Department of State Lands (“DSL”) reviewed a wetland delineation report prepared for an earlier development proposal on the site. A copy of this report has also been provided for reference. The report identifies two unnamed tributaries of Spring Brook Creek on the property and .32 acre of PEM wetland, 1.638 acre of PFO wetland, and .29 acre of PEM/PSS wetland. The larger perennial tributary of Spring Brook Creek enters the northwest corner of Tax Lot 1100 and exits on the south side.

In addition to failing to address impacts upon the Water System, the applicant’s materials fail to properly take the above wetlands into account. More fundamentally, though, we understand that given the completely different nature of the development now proposed for the site, DSL will require an entirely new delineation for its review and approval or rejection. Given the prominence of wetlands on the property, we cannot now know what an approvable delineation would look like *vis-a-vis* the current proposal, and whether the development as proposed is feasible in the first place. LUBA has held:

“[A]s the initial feasibility of the subdivision must be shown at the preliminary plat stage, the initial feasibility of the PUD project must be shown at the preliminary development plan stage. See *Van Volkinburg v Marion County*, 2 Or LUBA 112 (1980), and *Atwood v Portland*, 2 Or LUBA 397 (1981).”

Meyer v. City of Portland, 7 Or LUBA 184, 196, *aff'd* 67 Or App 274, 678 P2d 741 (1983), *rev den*, 297 Or 82, 679 P2d 1367 (1984).

On the face of the record before this Commission, no present finding of “initial feasibility” is possible. As a result, this application must be denied.

IV. CONDITIONAL USE CRITERIA

Newberg Development Code (NDC) 15.225.060 sets out the conditional use approval standards which apply to this application:

“15.225.060 General Conditional Use Permit Criteria -Type III.

A conditional use permit may be granted through a Type III procedure only if the proposal conforms to all the following criteria:

A. The location, size, design and operating characteristics of the proposed development are such that it can be made reasonably compatible with and have minimal impact on the livability or appropriate development of abutting properties and the surrounding neighborhood, with consideration to be given to harmony in scale, bulk, coverage and density; to the availability of public facilities and utilities; to the generation of traffic and the capacity of surrounding streets, and to any other relevant impact of the development.

B. The location, design, and site planning of the proposed development will provide a convenient and functional living, working, shopping or civic environment, and will be as attractive as the nature of the use and its location and setting warrants.

C. The proposed development will be consistent with this code.”

For the reasons set out above with respect to (1) the elimination of and failure to provide the agreed traffic-calming roundabout on Crestview Drive and (2) failure to show

how or whether the Water System will be protected and remain operable, the applicant has not met its burden of proving compliance with NDC 15.225.060.A. It has not demonstrated that its proposal “can be made reasonably compatible with and have minimal impact on the livability or appropriate development of abutting properties and the surrounding neighborhood, with consideration to be given to * * * the availability of public facilities and utilities; to the generation of traffic and the capacity of surrounding streets, and to any other relevant impact of the development.”

V. PLANNED UNIT DEVELOPMENT CRITERIA

The applicant has failed to demonstrate compliance with the city’s Planned Unit Development Criteria, set out in NDC Chapter 15.240. Section 15.240.030.C requires in material part that:

“1. The proposed development is consistent with standards, plans, policies and ordinances adopted by the city; and

2. The proposed development’s general design and character, including but not limited to anticipated building locations, bulk and height, location and distribution of recreation space, parking, roads, access and other uses, will be reasonably compatible with appropriate development of abutting properties and the surrounding neighborhood * * *”

For the reasons explained above, this application does not comply with the city’s standards and ordinances. Beyond that, the applicant has failed to demonstrate compliance with the comprehensive plan goals and policies relevant to the development of so much commercially zoned land with residential uses instead.

Further, as we have set out, the proposed distribution of roads will be incompatible with development of the abutting properties and the Oxberg Lake neighborhood.

VI. STREET STANDARDS

NDC 15.505.030.R. governs “Vehicular Access Standards” and provides in material part:

“9. ODOT or Yamhill County Right-of-Way. Where a property abuts an ODOT or Yamhill County right-of-way, the applicant for any development project shall obtain an access permit from ODOT or Yamhill County.”

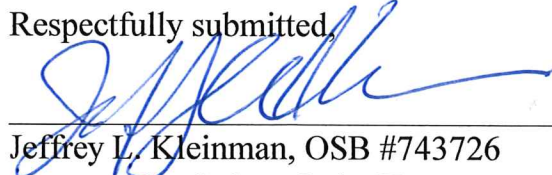
The applicant’s proposal would provide ingress and egress via the existing portion of Crestview Drive which now abuts the site on the north. Based upon all information available to us, that portion of Crestview remains Yamhill County right-of-way. The applicant has not obtained an access permit from the county or demonstrated the feasibility of obtaining one. This, too, goes to the question of whether the initial feasibility of the proposal has been proven. One or more preexisting agreements make it unlikely that such a permit could be obtained. For this reason alone, the application must be denied.

VII. CONCLUSION

For all of the reasons set out above, the applicant has not met its burden of proof to show compliance with the relevant city approval standards herein. Accordingly, this application must be denied.

Dated: August 2, 2018.

Respectfully submitted,



Jeffrey L. Kleinman, OSB #743726
Attorney for Oxberg Lake Homeowners Association

City of Newberg

"City"

Yamhill County

"County"

535 NE Fifth St.

McMinnville, OR 97128

Oxberg Lake Homeowners Association.

"Association"

Ken Austin

Joan Austin

"Austin"

JT Smith Companies

(T3S R2W Tax Lot 13800)

"JT Smith"

MeadowWood Development, LLC

(T3S R2W Tax Lots 900, 1000 and 1100)

"MeadowWood"

Dated: April 10, 2006

RECITALS

A. City's Transportation System Plan ("TSP") calls for a northerly arterial via Crestview Drive connecting to Hwy. 99W (the "TSP Northern Arterial").

B. Association has expressed its concern about a northerly arterial Crestview Drive terminating at Hwy. 99W.

C. Austin intends to submit for master plan approval for the development of an approximately 400-acre site (the "Austin Master Plan") located in the City. Austin desires a transportation system that will have adequate capacity to serve the development on the Austin Master Plan parcel.

D. County has contracted with JRH Transportation Engineering ("JRH") to determine the transportation impacts of an alternative to the TSP Northern Arterial (the "Springbrook Northern Arterial Plan"). The Springbrook Northern Arterial designates Springbrook Road between HWY 99W and Crestview as the northern arterial and amends the designation of Crestview from Springbrook to Hwy 99W as a major collector.

E. Association has requested certain stipulations on the Crestview Drive to Hwy. 99W link which are also under study by JRH.

F. The Springbrook Northern Arterial Plan is diagrammatically depicted on Exhibit "A" attached hereto.

G. The JRH study has demonstrated the feasibility and transportation system adequacy of the Springbrook Northern Arterial Plan, assuming year 2025 projections and buildout of the Austin Master Plan.

H. The purpose of this Agreement is to finalize the agreement of the parties and to begin the process of amending City's TSP to implement the Springbrook Northern Arterial Plan.

AGREEMENT

1. The parties hereto agree to accept the Springbrook Northern Arterial Plan attached hereto as Exhibit "A" and specifically accept and rely upon the JRH study attached hereto as Exhibit "B".

2. City will initiate a process to amend its TSP to designate Springbrook Road as the Northern Arterial for the City. The City Manager and City Engineer will support this effort through the Planning Commission and City Council with the intended modification to the TSP as described. All parties to this Agreement will support this designation. If the City considers amending the Northern Arterial designation of Springbrook Road in the future it will be by public process.

3. City will initiate a process to amend its TSP to designate Crestview Drive as a Major Collector, with the general design and alignment of the road as depicted in Exhibit A. The City Manager and City Engineer will support this effort through the Planning Commission and City Council with the intended modification to the TSP as described. All parties to this Agreement will support this designation. If the City considers amending the Major Collector designation of Crestview Drive in the future it will be by public process.

4. The proposed design of the Crestview Drive Major Collector will be posted as "no through trucks" and be designed to encourage a 25mph speed limit. Truck size limitation language for posted signs will be determined by JRH. City will maintain Crestview Drive as two-lane road between the roundabout immediately to the south of Robin Court extending to the western edge of the Oxberg Lake Estates property. Turn lane features, if required, will be determined at a later date.

5. Improvements on the proposed Crestview Drive Major Collector will be paid for as a capital improvement subject to City's transportation SDC program.

6. The parties agree to support an amendment to County Board Order 06-070 to delete the condition requiring a study and County approval before the City can construct a roundabout on Springbrook Road.

7. County will expeditiously initiate a process to surrender jurisdiction of that portion of Crestview Drive as originally requested by City.

8. The parties agree with the findings of the initial study that the capacity in the transportation system achieved through the Springbrook Northern Arterial Plan will have virtually no effect on Springbrook Road operations and will maintain the capacity and functionality of the City of Newberg's Transportation System Plan.

9. This agreement has no bearing on the City's consideration to annex or not annex Oxberg Lake Estates.

10. Each party hereto represents to the other parties that the party has all necessary power and authority to perform under and be bound by the terms and conditions of this Agreement.

11. All of the terms and provisions contained herein shall inure to the benefit of and shall be binding upon the parties hereto and their respective heirs, successors, and assigns.

12. Counterparts and facsimile signatures. The parties may execute this agreement in counterparts, each of which shall be deemed to be an original thereof. The parties agree that facsimile signatures shall be accepted as original signatures with respect to this agreement.

CITY OF NEWBERG

By: *JM Bennett*
Its: CITY MANAGER

OXBERG LAKE HOMEOWNERS ASSOCIATION

By: *Jack Katoona*
Its: President

JT SMITH COMPANIES

By: *[Signature]*
Its: REPRESENTATIVE

YAMHILL COUNTY

By: *Jessie A. Owens*
Its: Chair, Yamhill County Commissioners

KEN AUSTIN
JOAN AUSTIN

By: *George K. Austin J*
Its: *Joan Austin*

MEADOWWOOD DEVELOPMENT LLC

By: *[Signature]* TIMOTHY SPEAKMAN
Its: MEMBER / MANAGER

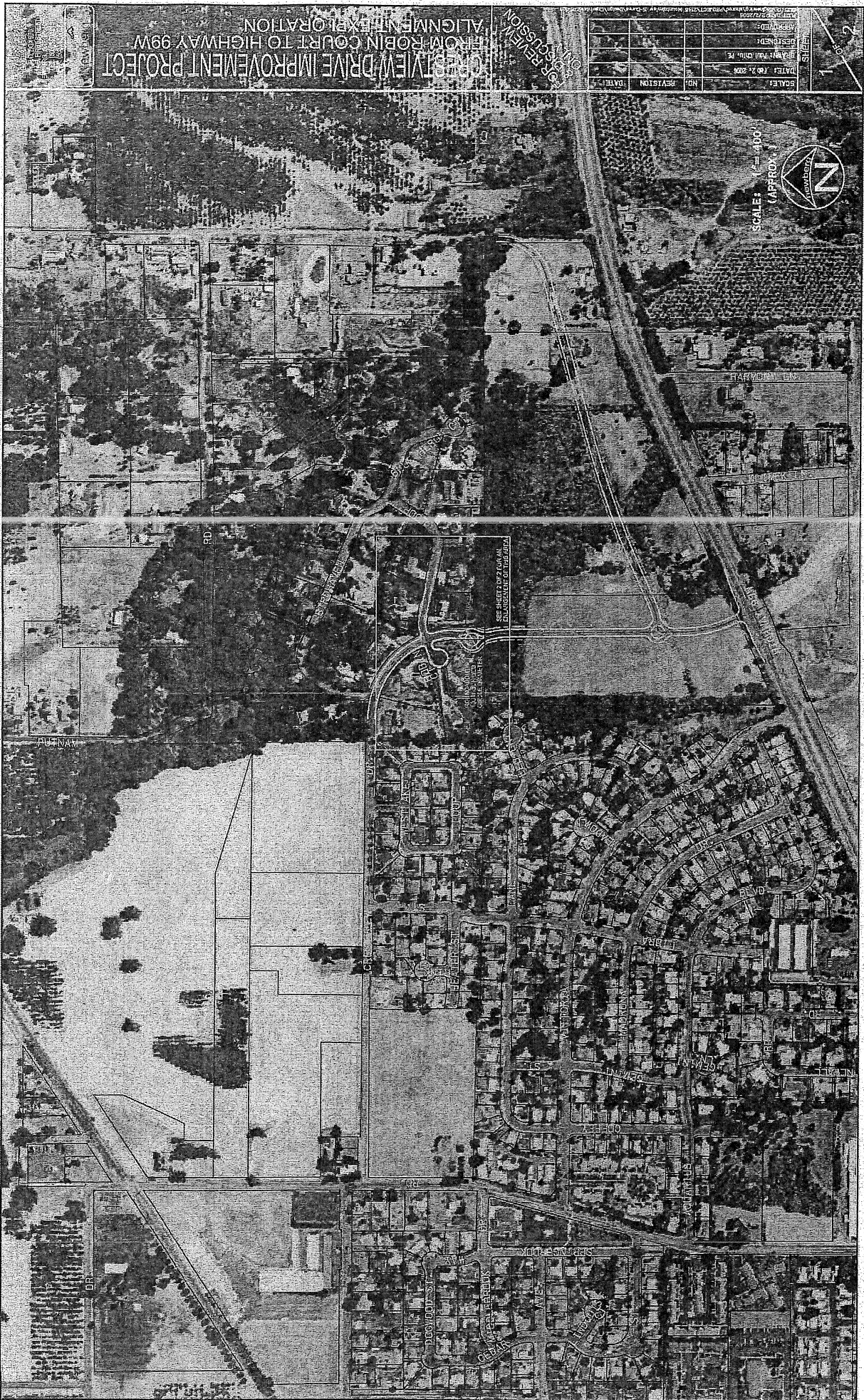
Accepted by Yamhill County Board of Commissioners on

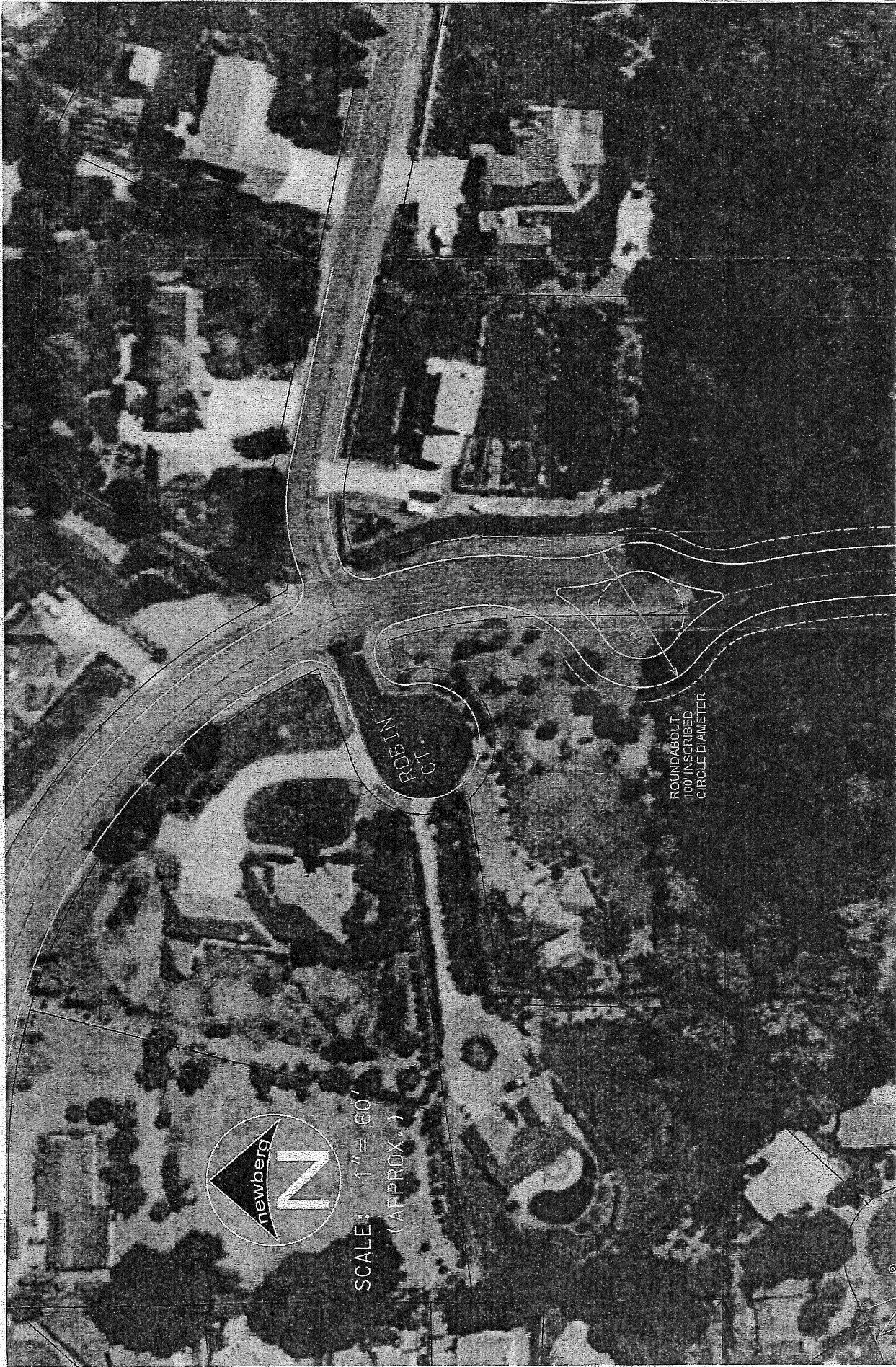
4/19/06 by Board Order

4/10/2006 02:49PM

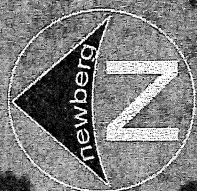
06-265

EXHIBIT A





CRESTVIEW DRIVE IMPROVEMENT PROJECT
 FROM ROBIN COURT TO HIGHWAY 99W
 ALIGNMENT EXPLORATION



SCALE: 1" = 60'
 (APPROX.)

ROUNDABOUT
 100' INSCRIBED
 CIRCLE DIAMETER

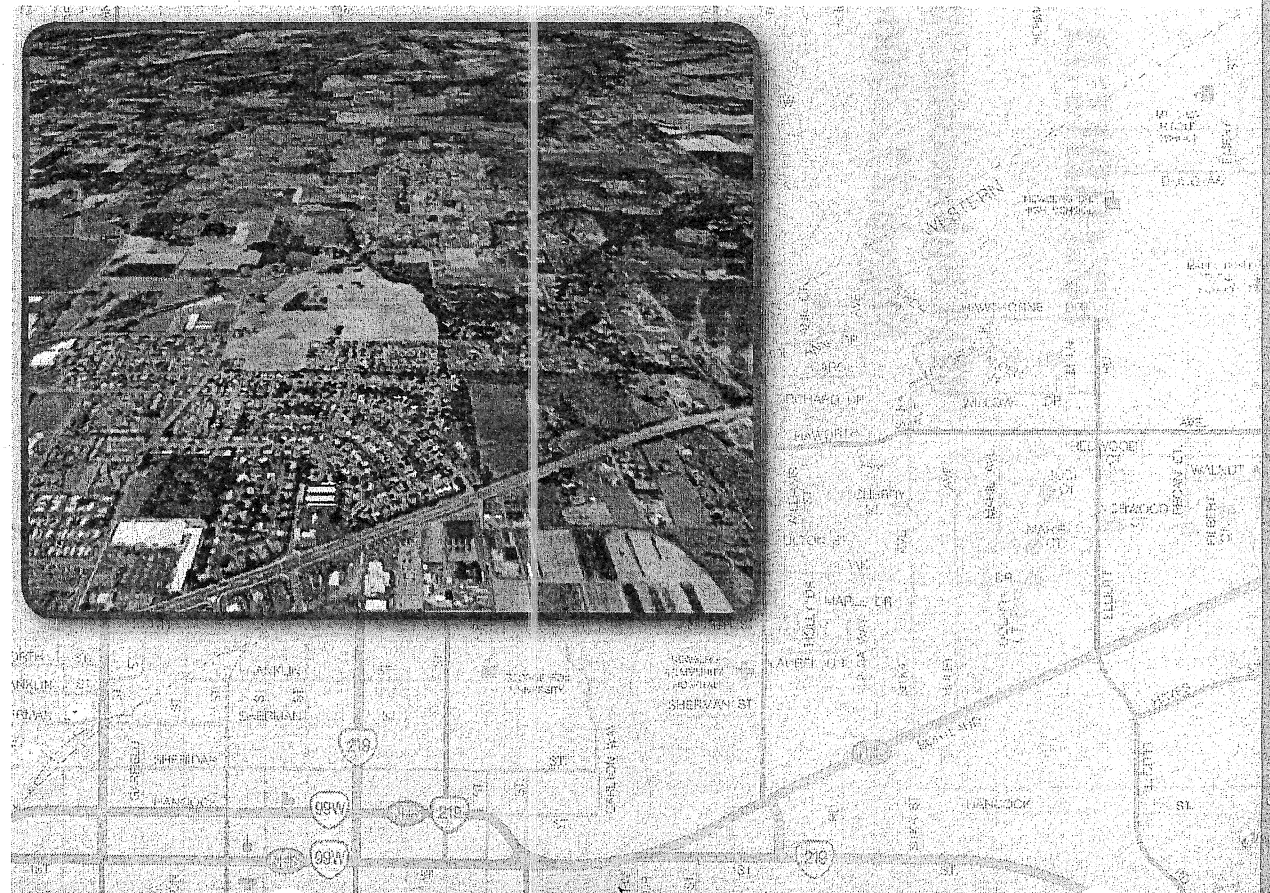
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EXHIBIT B

JRH Engineering Study
March 27, 2006

B.0.06-265

THE EFFECT ON SPRINGBROOK STREET
 OF CONVERTING THE NEWBERG NORTHERN ARTERIAL
 (CRESTVIEW DRIVE) TO A MAJOR COLLECTOR



March 27, 2006



THE EFFECT ON SPRINGBROOK STREET OF CONVERTING THE NEWBERG NORTHERN ARTERIAL (CRESTVIEW DRIVE) TO A MAJOR COLLECTOR

This memo outlines JRH Transportation Engineering's findings relating to the effect on Springbrook Street resulting from changing the Newberg Northern Arterial (Crestview Drive) from an arterial classification to a traffic-calmed major collector.

Briefly stated, the conclusions of the report are:

- 1) The physical capacity of Crestview Drive will not be materially reduced. Therefore, capacity restrictions will not divert traffic from Crestview Drive to Springbrook Street.
- 2) A ten mile per hour operating speed reduction on Crestview Drive (as might be expected from the reclassification of the street and the addition of traffic calming measures) would have virtually no effect on Springbrook Street operations.

The following contains the analysis used to develop these conclusions.

BACKGROUND

The City of Newberg Transportation System Plan envisions a northern arterial connecting Mountain View Drive at the north, crossing the railroad tracks and continuing east from Springbrook Street along the alignment of Crestview Drive to the Oxburg neighborhood, and then south to an intersection with ORE 99W. Residents along the proposed arterial are concerned that this facility would have a negative effect on the livability of their neighborhood. They have proposed that this arterial be changed to a major collector with traffic calming to reduce operating speeds to 25 miles per hour to help mitigate traffic impacts.

There is concern by others that this downgrading of classification on Crestview Drive will produce traffic spill over onto Springbrook Street. This, in turn, would require additional transportation mitigation should vacant property be developed. Our challenge is to evaluate the relative traffic demand on Springbrook, resulting from the conversion of Crestview from an arterial to a major collector.

There are two ways that this conversion might impact Springbrook. The first would be the reduction in capacity on Crestview Drive to the extent that traffic would be forced to divert from Crestview to Springbrook. The second question is, would reducing speeds on Crestview Drive make Springbrook become relatively more attractive and, thus, increase traffic volumes? This memo analyzes both effects.

EFFECT ON CRESTVIEW CAPACITY

A review of the projected traffic volumes along this collector shows that there will be adequate capacity along Crestview to meet the traffic demand. Under roadway design standards contained in the Newberg Transportation System Plan (TSP), the primary difference between a major collector and a minor arterial is that the arterial has a continuous two way left-turn lane, while the major collector has turn lanes, where appropriate, at intersections. Given the traffic volumes projected, both of these would have sufficient capacity to handle future traffic demands.

The two capacity constraints on both the original Northern Arterial as proposed in the Newberg TSP and the neighborhood proposed Crestview Drive major collector are at the intersections with Springbrook Street and at OR 99W. The geometry and thus the capacity at both intersections are not anticipated to change under either scenario. At the north end, the design of the roundabout between Springbrook and Crestview does not change with the proposed change in Crestview classification. At the south end, the design will be dictated by the needs of the commercial development along Crestview and will have more lanes than commonly associated with a major collector.

Future development may dictate that new intersections be constructed on Crestview between Springbrook and OR 99W. The design of these intersections will be subject to a traffic impact analysis to ensure the capacity is adequate to meet demands. Intersection turn lanes may be required; however, the low traffic volumes projected midway between Springbrook and OR 99W make it unlikely that even these minimal improvements will be required.

Traffic calming measures may also influence capacity; however, these impacts are more closely evaluated by examining speed reductions. This is the subject of the next portion of this report.

Because intersection geometry does not change, intersection capacity is not affected and, because capacity does not change, capacity constraints will not divert traffic from the Northern Arterial (Crestview Drive) to Springbrook Street.

EFFECT OF SPEED REDUCTION

The second way the change of classification could impact Springbrook is the result of the change in travel speed between two classifications. If the relative speed on Springbrook between Crestview diminishes, then there may be additional trips induced onto Springbrook. This report is primarily focused on determining the impacts of these induced trips. In conducting this analysis, we looked effect on the traffic volumes using two separate methodologies.

For the first methodology, we reviewed the year 2025 projections for both Crestview and Springbrook as shown in Figure 2 of the Newberg Transportation System Plan. Appendix 1 contains this figure. The amount of through traffic on Crestview was determined by subtracting existing traffic and traffic from future development along Crestview from the projected 2025 turning movement volumes on Crestview, as shown in the Transportation System Plan.

After calculating southbound traffic, similar methodology was used to develop the northbound traffic on Crestview. The number of driveways, intersections, etc., along Springbrook, makes it difficult to determine the thru traffic on Springbrook. As a result, we developed



the thru traffic volumes on Springbrook using California Department of Transportation “Freeway Diversion” curves.¹ These calculations determine relative traffic volumes along parallel routes based on differentials in time and distance. We calculated the arterial travel times along Crestview assuming a 35 MPH speed for traffic driven on that route as well as a 35 MPH speed for Springbrook. To these travel times, we placed a delay factor on Springbrook for delay at signalized intersections along OR 99W, between Springbrook and the proposed intersection between Crestview and OR 99W.

Table 1 provides the Year 2025 projected through traffic volumes for Crestview and Springbrook with Crestview as an arterial and as a collector assuming a ten MPH reduction in speed.

A ten mile per hour speed differential was selected using information contained in Appendix A “Traffic Calming, State of the Proactive”, by ITE/ FHWA. This is available on the web at <http://ite.org/traffic/tcstate.htm#tcsop>

A review of the data indicates that a ten MPH speed is a reasonable best case for effective traffic calming measures, and conservative for use in determining the impacts on Springbrook. If the speed reduction is less, then fewer cars will transfer from Crestview to Springbrook and the impacts will be less.

¹ Freeway Diversion curves, more properly, should be called parallel route diversion curves. They are using relative time and distance as variable. Appendix 4 provides the Freeway Diversion Curves.

Merely knowing the difference in numbers is not sufficient to determine the impact on Springbrook. To do this difference, we adjusted 2025 turning movements shown in the Transportation System Plan to reflect the increase in traffic on Springbrook. We then ran these adjusted traffic volumes using the SYNCHRO traffic evaluation model to determine the effect on level of service at both the Crestview intersection with ORE 99W, and the Springbrook intersection with ORE 99W. These volumes were compared with the traffic volumes in a SYNCHRO run using the unadjusted volumes representing the current classification. Both of these runs were for the year 2025. The results of this analysis are shown in Table 2. As can be seen, the traffic volumes change is so small that there is no effect in level of service or volume-to-capacity ratio at Springbrook and Highway 99 West. There is a 0.1 second increase in delay at Crestview and OR 99W due to a diversion of vehicles turning right onto Crestview changing to through traffic on OR 99W. Appendix 2 contains the outputs from the SYNCHRO runs.

TABLE 1: Year 2025 Through Traffic Volumes Crestview/Springbrook Intersection to Crestview/OR 99W Intersection

	CRESTVIEW SPEED			
	35 MPH		25 MPH	
	Northbound	Southbound	Northbound	Southbound
Crestview Drive	473	317	426	291
Springbrook Street	214	117	261	143



Analysis is based on 2025 traffic volumes in Newberg Transportation System Plan (Figure 2).

As a check to this methodology, we obtained a model run for the two alternatives for the year 2030 from ODOT's Transportation Planning Analysis Unit (TPAU). These analysis numbers allow us to directly calculate the difference in traffic volumes along the two, and furthermore, allow calculation of the volume to capacity ratios in levels of service at critical intersections potentially impacted by the reclassification. The TPAU model is based on a change in classification and roadway geometry, as well as a speed reduction. Appendix 3 contains the ODOT TPAU 2030 model runs.

Table 3 compares the entering and exiting volumes on Springbrook and Crestview at Highway 99 using the ODOT numbers with the volumes generated earlier in this report.

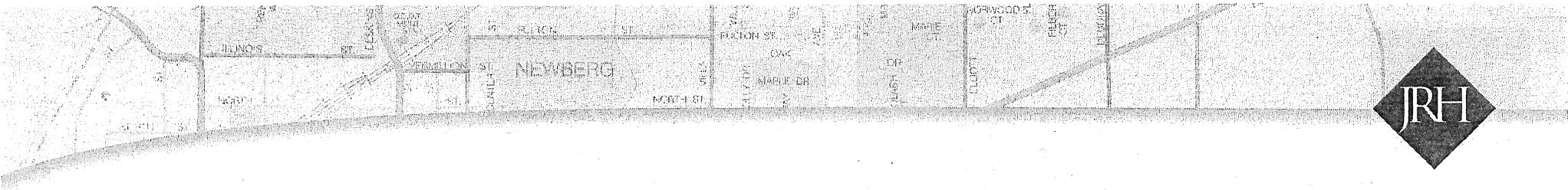
This table indicates that the regional model methodology used by ODOT and the "Freeway Diversion" curve methodology track very closely. The traffic volumes generated by JRH indicate a diversion in traffic volumes of 73 trips from Crestview to Springbrook. The TPAU Model indicates a diversion of 63 trips from Crestview and an increase in traffic to 16 trips to Springbrook. Both indicate that the traffic volumes diverted from Crestview to Springbrook as a result of the reclassification and reduction in speed is expected to not exceed more than a total of 75 trips for both the northbound and southbound movements. The methodology following the Freeway Diversion

TABLE 2: Traffic Operational Effect of Changing Crestview From Minor Arterial to Major Collector.

Functional Classification	Additional Trips To Springbrook At Highway 99		Springbrook at Highway 99		Crestview at Highway 99	
	SB Left	WB Right	Delay (seconds) (LOS)	Volume to Capacity	Delay (seconds) (LOS)	Volume to Capacity
Minor Arterial	N/A	N/A	34.4 (C)	0.83	46.4 (D)	0.85
Major Collector	26	47	34.4 (C)	0.83	46.3 (D)	0.85

TABLE 3: Comparison of Entering and Exiting Volumes On Springbrook and Crestview at Highway 99.

TPAU Model TPAU Volumes Adjustment to TSP Volumes for Diverted Traffic Total Diverted Traffic	Crestview as a Minor Arterial				Crestview as a Major Arterial			
	Springbrook at Highway 99		Crestview at Highway 99		Springbrook at Highway 99		Crestview at Highway 99	
	Entering	Exiting	Entering	Exiting	Entering	Exiting	Entering	Exiting
	719	702	396	445	719	718	370	402
	730	630	770	680				
					777	656	723	654
TPAU Model TPAU Volumes	N/A	N/A	N/A	N/A	16*	73*	69**	73**



Curve indicates a higher traffic volume estimated to be diverted and, therefore, represents a more conservative analysis.

All of the analysis in this study assumes land development in accordance with the adopted Comprehensive Plan. In discussions with ODOT staff, they indicated that this development includes full development of the Austin Industries property. It should be noted, however, that property may develop with more or less intensity than anticipated in the Plan. This should not impact the conclusions of this study, as this study is focused on the relative impact on Springbrook due to changes in the functional classification of Crestview. It is not focused on the absolute impacts on Springbrook due to any specific land use.

RECEIVED

AUG 1 2018

Initial: _____

July 31, 2018
Written Comments: PUD 18-0001/CUP18-0004
City of Newberg
Community Development Department
PO Box 970
Newberg, OR 97132

To whom it may concern,

The people of Newberg need to decide what is to be built across the street from our hospital not a for profit developer from Lake Oswego. The new Springbrook road will be the gateway to the Allison Hotel & Spa and future businesses on North Springbrook. So it is important that the Crestview crossing be as aesthetically appealing as possible.

The highest and best use for a property located across the street from a hospital, would be a condominium type retirement village with common lawns to grace our new entry into the city of Newberg. The proposed high density housing project for the Crestview crossing seems to be one that could be located elsewhere in the city, not at the gateway, perhaps along the new bypass.

In the case of an economic downturn, which is always a possibility, some of the new owners of the proposed high density housing project may default on their loans which would in turn create an absentee landlord neighborhood thus sending the gateway to Newberg into a decline and setting the tone for future developments and the economic status of Newberg.

The Lake Oswego developer proposes filling in and paving over our Newberg wetlands to make the development more profitable. A viable option would be for the city to trade a portion of the park on Vittoria for the wetlands and in turn create a park on the wetlands. Given the nature of wetlands the park need not be a conventional park with little more than grass and a basketball half court. The alternative wetland park could be a Japanese style garden with paths, bridges, benches, rock gardens, sculptured trees, tall grasses, and, of course water. This style park would be a source of beauty for the community at large.

In summary, the Lake Oswego developers should not determine the future composition of our Newberg community. The highest and best use would be a retirement community accented by an adjoining Japanese garden with the high density housing to be located along the bypass.

Sincerely,
Terry Coss

A handwritten signature in black ink, appearing to read "Terry Coss", with a long horizontal line extending to the right.

City of Newberg
Community Development Department
File NO: PUD 18-0001/cup 18-0004
August 1, 2018

Newberg Planning Commissioners,

I have concerns with the filling in of wetlands on the proposed development. There are 7 acres of wetlands on this property I understand that 5 of those acres will be filled in as the land is developed.

I have enclosed for the records a wetlands study of tax lot number 1100. This study was in the hands of the Department of State Lands for many years. Janet Morlan, Wetlands Program Manager for the State of Oregon had questions regarding this application, it is as important today as it ever was. This file is one of the reasons this land has been on hold for development for many years. Unfortunately for the developer the previous land owner had denied there were 7 acres of wetlands in public testimony.

This wetland is a tributary to Springbrook Creek. Springbrook Creek flows the entire length of our property at 30230 NE Benjamin Road, it flows under our driveway into the 1 acre pond that is part of the National Historic Wetlands. It then flows under 99W into the ponds located on the South side of 99W continuing to flow into the Willamette River. Any disturbance to the wetlands on this developed property could impact the surrounding tributary, creeks and properties. The filling in should not be allowed for this development, the wetlands should be preserved.

Also the filling of the wetlands will affect the aquifer that provides water to the Oxberg Water Company and the 39 residents that rely on the well. The cost if damaged will ultimately need to be borne by the City of Newberg and the developer.

The water impact to Oxberg's water rights, neighbors, streams corridors and creeks must be protected. Any damage could be very costly to the city.

Respectfully submitted,

Vicki Shepherd
30230 NE Benjamin Rd
Newberg, OR 97132

Enclosed: 52 page report

RECEIVED

JUL 31 2018

Initial: _____



Oregon

Theodore R. Kulongoski, Governor

Department of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279
(503) 378-3805
FAX (503) 378-4844
www.oregonstatelands.us.

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JUL 31 2018

February 4, 2008

Tim Speakman
New B. Properties, LLC
3401 SW Huber Street
Portland, OR 97219

Initial: _____

State Land Board

Theodore R. Kulongoski
Governor

Bill Bradbury
Secretary of State

Re: Wetland Delineation Report for 4505 E Portland Rd, Newberg; Yamhill
County; T 3S R 2W Sec. 16 Tax Lots 900, 1000 & 1100; WD #07-0345

Randall Edwards
State Treasurer

Dear Mr. Speakman:

The Department of State Lands has reviewed the wetland delineation report prepared by Schott and Associates for the site referenced above. Based upon the information presented in the report, we concur with the wetland and waterway boundaries as mapped in Wetland Map Pages 1 of 3 and 3 of 3 of the report. Within the study area, three wetlands (totaling approximately 2.24 acres) and two waterways within the mapped wetlands were identified. The wetlands and waterways are subject to the permit requirements of the state Removal-Fill Law. A state permit is required for cumulative fill or annual excavation of 50 cubic yards or more in the wetlands or below the ordinary high water line (OHWL) of a waterway (or the 2 year recurrence interval flood elevation if OHWL cannot be determined).

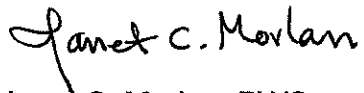
This concurrence is for purposes of the state Removal-Fill Law only. Federal or local permit requirements may apply as well. The Army Corps of Engineers will review the report and make a determination of jurisdiction for purposes of the Clean Water Act at the time that a permit application is submitted. We recommend that you attach a copy of this concurrence letter to both copies of any subsequent joint permit application to speed application review.

Please be advised that state law establishes a preference for avoidance of wetland impacts. Because measures to avoid and minimize wetland impacts may include reconfiguring parcel layout and size or development design, we recommend that you work with Department staff on appropriate site design before completing the city or county land use approval process.

This concurrence is based on information provided to the agency. The jurisdictional determination is valid for five years from the date of this letter, unless new information necessitates a revision. Circumstances under which the Department may change a determination and procedures for renewal of an expired determination are found in OAR 141-090-0045 (available on our web site or upon request). The applicant, landowner, or agent may submit a request for reconsideration of this determination in writing within 60 calendar days of the date of this letter.

Thank you for having the site evaluated. Please phone me at 503-986-5236 if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Janet C. Morlan". The signature is written in a cursive style with a large initial 'J'.

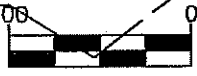
Janet C. Morlan, PWS
Wetlands Program Manager

Enclosures

cc: Claudia Steinkoenig, Schott and Associates
City of Newberg, Planning Department
Tina Teed, Corps of Engineers
Carrie Landrum, DSL

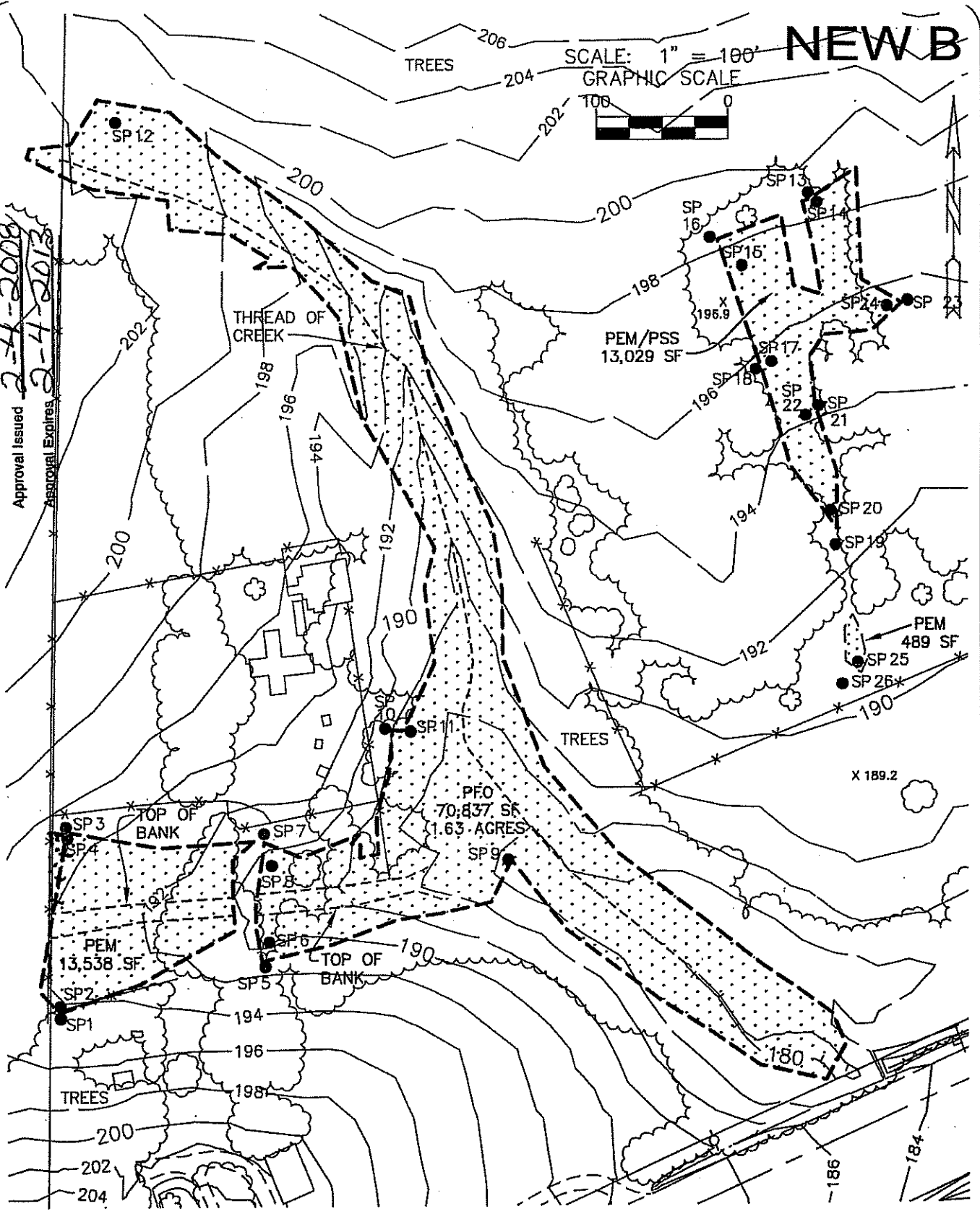
NEW B

SCALE: 1" = 100'
GRAPHIC SCALE



DSLWD # 07-6 345
Approval issued 2-11-2009
Approval Expires 2-4-2013

N:\proj\428-005\Survey\428-005 WETLAND.dwg -- SHEET: 8x11 Apr 23, 2007 -- 1:00pm mem



DRAWN BY: MEM DATE: 4-12-07
 REVIEWED BY: MRG DATE: 4-12-07
 PROJECT NO.: 0428-0005
 SCALE: 1"=100'
 WETLAND MAP PAGE 3 OF 3



Site Data Sheet

Project Name: New B.
Project Number: 1985
Date of Site Visit: February 21 & 28, 2007

Applicant: Tim Speakman
Applicant's Address: 3401 SW Huber Street
Portland, Oregon 97219

Owner(s): Same
Owner(s) Address:

State: Oregon
County: Yamhill
Site Location: East of Victoria Way, North of 99W
USGS Quadrangle: Newberg
Latitude/Longitude: 45°18.738'N / 122°55.870'W
Tax Map Information: 3S2W Sect.16 TL 1100, 1000, 900

Watershed: Willamette River
Adjacent Waterbody: Tributary of Spring Brook Creek
In the Floodplain: Yes
Topography: Gentle to moderate slopes

Site Zoning: Agriculture/Forestry Small Holding (AF-10)
Proposed Use: Residential/Commercial
Present/Past Use: Rural/farmed
Surrounding Usage: residential to the north and west/ rural to the east

Determination: 2 unnamed tributaries of Spring Brook Creek, 0.32 acre PEM
wetland, 1.63 acre PFO wetland, 0.29 acre PEM/PSS
wetland

Days Since Last Rain: 0

Mapping accuracy: Alpha Community Development, PLS

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Page i

S&A#:1985

(A) Site Description

The 30-acre project area is located on the eastern edge of Newberg in Yamhill County, Oregon (SW1/4, NE1/4 Sec. 16, T3S, R2W TL#900, 1000, 1100)(Figure 1) just outside of the city limits. The southern boundary abuts city limits. The study area is west of Benjamin Road and east of Victoria Way. Hwy 99W forms the southern property boundary. The new Providence Hospital (zoned I- Institutional) is to the southwest. The three tax lots that comprise the study area are designated as Agricultural/Forestry Small Holdings (AF-10).

For the purposes of this report, the project area will be described by tax lot. Tax lot 900 is located west of Benjamin Road and north of Highway 99 West. The lot is approximately 5.7 acres and has two homes and two large barns on it. The topography has gentle to moderate slopes to the east. The majority of the property consists of horse pasture comprised of grasses and forbs that include colonial bentgrass (*Agrostis stolonifera*), Kentucky bluegrass (*Poa pratensis*), tall fescue (*Festuca arundinacea*) and white clover (*Trifolium repens*) as dominants. Ornamental species were observed around the homes.

Tax Lot 1000 is located west of tax lot 900. It is 5.8 acres and has a vet clinic and associated buildings in the center of it. The topography slopes gently to the south, southeast. Fenced pastures are located on the south and north end of the property. Dominant vegetation includes bentgrass, Kentucky bluegrass, tall fescue and orchard grass (*Dactylis glomerata*). Groupings of Oregon Oak (*Quercus garryana*) and Douglas fir (*Pseudotsuga menziesii*) were scattered along the northern and western property perimeter.

Tax lot 1100 is 18.5 acres and located on the west end of the study area. Topography on the west end slopes gently east to two unnamed tributaries. The mid and east section of the tax lot slopes predominantly south. There is an existing residential home on the southwest end of the property and some outbuilding north of the home. A small drainage located behind the home flows to the east and joins a larger tributary of Spring Brook Creek which flows south to the Willamette River. Three meadow communities were identified on site. The first is along the western property boundary. The second is located southeast of the residence and the third is on the south end of the tax lot. The vegetation in the meadow communities consisted of grasses and forbs that included tall fescue, Kentucky bluegrass, bentgrass, orchard grass (*Dactylis glomerata*), and white clover, queen Anne's lace (*Daucus carota*) and cat's ear (*Hypochoeris radicata*) as subdominants. An upland forest community was located on the northern property boundary and included Oregon oak, Douglas fir, and bigleaf maple (*Acer macrophyllum*).

The dominant species found in the shrub layer included Service berry (*Amelanchier alnifolia*), Indian plum (*Oemleria cerasiformis*), beaked hazelnut (*Corylus cornuta*) and common snowberry (*Symphoricarpos albus*). Sword fern (*Polystichum munitum*) and English ivy (*Hedera helix*) were the dominants in the herbaceous layer.

A forested riparian area was located adjacent to the largest tributary. The tree species in the riparian forest include Oregon ash (*Fraxinus latifolia*) and willow (*Salix sp.*) Shrub communities varied from area to area along the drainage. Portions of the shrub layer consisted of a dense layer of Himalayan blackberry interspersed with dense patches of Nookta rose (*Rosa nutkana*) and Douglas spiraea (*Spiraea douglasii*). Species identified in the herbaceous layer included slough sedge (*Carex obnupta*), water parsley (*Oenanthe sarmentosa*) and bentgrass.

The National Wetland Inventory (NWI) map for Newberg shows a tributary of Spring Brook Creek on the west end of the study area. There is no Local Wetland Inventory (LWI) for the area. The Yamhill County Soil Survey indicated two mapping units on the property that include Woodburn silt loam and Amity silt loam. The topographic map shows a site gently sloping north, northeast.

Project purpose

The site is proposed for commercial development to service the new hospital across the street and the adjacent residential areas. The developer of the site is currently applying for annexation into the city of Newberg and rezoning designation to Community Commercial.

(B) Wetland Description

Based on soil, hydrology and vegetation data taken on site two unnamed tributaries of Spring Brook Creek, and four wetlands were delineated. Two of the wetlands are adjacent to the tributaries. A 0.31 acres palustrine emergent/RFT wetland is located along a short portion of the smaller tributary on the west end of the property. The second wetland is 1.63 acres palustrine forested/RFT wetland adjacent to the remaining portion of the smaller tributary and the entire length of the larger tributary. The other two wetlands are isolated and located in the north mid-section of the property. The larger wetland is 0.29 acre and classified as palustrine emergent/scrub-shrub/slope wetland. The smaller one is 0.011 acres classified as a palustrine emergent/slope wetland.

A small seasonal drainage channel enters on the southwest end of tax lot 1100. It is the extension of a drainage located on the adjoining property to the west. The hydrology of the channel is associated with stormwater runoff from the neighborhood to the west. The drainage channel is u-shaped with a varying width of 2 to 3 feet and depth of approximately 3.5 feet. It has a mud and small cobble substrate bottom. The drainage flows east and drains into a larger tributary of Spring Brook Creek. Duckweed (*Lemna*

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Page 2

S&A#:1985

minor) was observed growing in portions of the drainage. The drainage has a defined channel for approximately 250 feet and then flattens out, draining as surface and subsurface lateral flow into the tributary of Spring Brook Creek.

A larger, unnamed perennial tributary of Spring Brook Creek enters the northwest corner of tax lot 1100 and exits the property on the south side. It flows to the south joining Spring Brook Creek on the south side of Hwy 99W. Portions of the creek are confined to a single channel while other portions of the channel are braided.

Two wetlands were identified adjacent to the two tributaries. The first is a 0.31 acre palustrine emergent (PEM/RFT) wetland. It was located on the west end of the study site where the smaller drainage entered the site. The plant community in this area is a meadow comprised of grasses and forbs. The dominant species are tall fescue and bentgrass. Hydrology for the wetland on the north and south side of the drainage is associated with precipitation, a seasonal high water table and overflow from the drainage during winter high water.

The second wetland is 1.63 acres and forested (PFO/RFT). The dominant tree in the canopy is Oregon ash (*Fraxinus latifolia*). The shrub layer consists of large dense patches of Douglas spirea (*Spiraea douglasii*) and nootka rose (*Rosa nutkana*). The herbaceous layer includes large patches of slough sedge (*Carex obnupta*) and water parsley (*Oenanthe sarmentosa*). Hydrology of the wetland is associated with precipitation, a seasonal high water table and overflow from the drainage during winter high water. The southern end of the drainage is fed by a perennial spring.

The other two wetlands are isolated and located in the north mid-section of the property. The larger wetland is 0.29 acres and classified as palustrine emergent/scrub-shrub/slope wetland. The dominant vegetation in the emergent portion is meadow foxtail (*Alopecurus pratensis*) and bentgrass (*Agrostis stolonifera*). The shrubs in the scrub shrub communities were nootka rose (*Rosa nutkana*) with scattered patches of hawthorn (*Crataegus sp.*). The second isolated wetland is immediately below the first. It consists of a small depressional area with colonial bentgrass and meadow foxtail as the dominants.

The analysis of wetlands conducted on this site was based on published methods for implementing Section 404 of the Clean Water Act. The 1987 manual was used to satisfy the requirements of the COE on non-agricultural land. The manual requires three parameters to be examined: vegetation, soils, and hydrology. According to the 1987 manual, independent evidence of hydrophytic vegetation, hydric soils, and wetland hydrology must be present for an area to be declared a wetland. The analysis of wetlands on the project site was conducted by reviewing and analyzing existing site-specific literature and by field investigation.

(C) Site Analysis

The three tax lots that comprise the study area are designated as Agricultural/Forestry Small Holdings (AF-10). There was no evidence of alterations to the drainages observed onsite. The hydrology associated with the smaller drainage is stormwater runoff from the neighborhood to the west.

(D) Site Specific Methods

The Routine Onsite Determination Method (1987 manual, pp. 52-69) was used to determine the State of Oregon wetland boundaries and the Federal jurisdictional wetlands. The entire study area was walked and observed for wetland characteristics. Sample plots were dug and placed in areas determined to meet all wetland criteria. Adjacent plots were placed in the upland.

The first area investigated was located on the west end of the study site. A drainage swale located on the adjacent property to the west extended east into the study area. A delineation for the property to the west was conducted a year ago and is pending review by DSL. The area consists of a grazed meadow community with dominant grasses of bentgrass and fescue. Areas with wetland characteristics extend north and south of the drainage by approximately 30-40 feet. The source of hydrology for the wetland on the north and south side of the drainage is associated with precipitation, a seasonal high water table and overflow from the drainage during winter high water. The area had recently received days of heavy rain so that the ground water table was exceptionally high.

Along the north side of the swale the wetland boundary was determined predominantly by soil and hydrology since the vegetation in both wetland and upland were the same. On the south side of the swale the vegetation was the determining factor. The soil matrix color in the wetland varied between 10YR3/1 with redox concentrations of 10YR3/4 in sample plot 2 and 10YR3/2 with redox concentrations of 10YR3/6 in sample plot 4. Both sample plots had a depth to free water between 6 and 8 inches.

The upland area on the south side of the swale was determined by the vegetation. The topography was slightly higher and Himalayan blackberry formed a dense hedge. Some Douglas fir trees were planted in this area as well. On the north side of the swale the upland area did not have hydric soil or wetland hydrology.

Approximately 130 feet east of the property line a small berm built for vehicle access to the back barn area crosses the drainage and wetland area. The berm has been in place on the property well over fifty years. The drainage crosses the berm via a small culvert. It flows an additional 120 feet before it becomes an undefined channel and flows as broad sheet flow into the other tributary.

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Ecologists and Wetland Specialists

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The wetland continues past the berm and is located adjacent to the tributaries. The plant community on the east side of the berm slowly transitions from a meadow into a forested community that joins the riparian community along the main tributary. Soils in this portion of the wetland (Sample plot, 8, 9 & 11) predominantly have a matrix value of 10YR3/2 with redox concentrations of 10YR3/6.

The upland edge was obvious by topography as well as vegetation and hydrology. The overstory transitioned from Oregon ash into Oregon oak and Douglas fir on the north end. Further south the vegetation in the upland riparian area had Oregon ash mixed with common snowberry (*Symphoricarpos alba*), beaked hazelnut (*Corylus cornuta*) and Himalayan blackberry. Upland soils observed along the tributaries included matrix colors of 10YR3/3 (sample plot 5), from 0 to 12 inches, 10YR4/2 (sample plot 7) and (10YR3/2) (sample plot 10). No redox concentration were observed within 10 inches and no evidence of wetland hydrology was observed.

The wetland identified in the middle of tax lot 1100 consists of an emergent and scrub shrub wetland. The majority of it is located in a clearing surrounded by dense thickets of English hawthorn, Himalayan blackberry and various overgrown fruit trees. The vegetation in the northern portion of the wetland consisted of scattered dense thickets of nootka rose (*Rosa nutkana*). Meadow foxtail was the dominant grass. The soil matrix color varied between 10YR3/2 and 10YR4/2 with redox concentrations that varied in color. The hydrology of the wetland was associated with overland sheet flow and a seasonal high water table. The wetland was hummocky with slight shift in topography along the upland edge.

The vegetation in the upland area was similar to the wetland vegetation. The upland area had a predominant soil color of 10YR3/2 with no redox concentrations (sample plot 13, 16, 18, 19, 23, 26) and no wetland hydrology.

(E) Deviation

No deviations were observed. The National Wetland Inventory (NWI) map for Newberg did not show any wetlands in the project area. It did show the tributary of Spring Brook Creek on the western portion of the study area. There is no Local Wetland Inventory (LWI) for the area.

(F) Methods of Determining Other Waters of the State

No other waters of the state were observed onsite. The top of bank was defined for the smaller tributary that flow west to east. The larger tributary had the center line mapped for the main branch of the creek, because the mid section is braided.

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Ecologists and Wetland Specialists

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S&A#: 1985

(G) Additional Info

None.

(H) Statement of Mapping Accuracy

The wetland boundaries were flagged and the flags were surveyed by Alpha Community Development, PLS.

(I) Date of Investigation

The site was visited on February 21 and 28, 2007.

(J) Weather

The weather on the day of the February 21 site visit was cold and rainy. The day before 0.67 inches of rain were recorded at the Forest Grove weather station. 2.48 inches of rain were recorded for the past two weeks.

The weather on the day of the February 28 site visit was cold interspersed with periods of hail, rain and sun. There was 0.26 inches of rain the day prior to the site visit. 3.21 inches of rain were recorded for the past two weeks. This is 52 percent of the average for the entire month. A total of 36.56 inches were recorded since October 1, 2006. This is 115 percent of the water year average.

(K) Results and Conclusions

The National Wetland Inventory (NWI) map did not show any onsite wetlands however it did show a tributary of Spring Brook Creek on the west end of the site. There is no Local Wetland Inventory for the Newberg area. The Yamhill County Soil Survey mapped two soil series on the subject property: Amity silt loam and Woodburn silt loam 0 to 7 percent slopes and 7 to 12 percent slopes. The Amity series is somewhat poorly drained. This soil series is not listed as hydric however it does have hydric inclusions. Some of the soil observed on site matched the Amity series.

Based on soil, hydrology and vegetation data taken on site two unnamed tributaries of Spring Brook Creek, and four wetlands were delineated. The smaller drainage is seasonal, the larger has recently developed a perennial flow. Two of the wetlands are adjacent to the tributaries: A 0.31 acres palustrine emergent/RFT wetland is located along a short portion of the smaller tributary on the west end of the property. The second wetland is 1.63 acres palustrine forested/RFT wetland adjacent to the tributaries. The other two wetlands are isolated and located in the north mid-section of the property. The larger wetland is 0.29 acre and classified as palustrine emergent/scrub-shrub/slope wetland. The smaller one is 0.011 acres classified as a palustrine emergent/slope wetland.

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S&A#: 1985

(L) Required Disclaimer

This report documents the investigation, best professional judgment and the conclusions of the investigator. It is correct and complete to the best of my knowledge. It should be considered a Preliminary Jurisdictional Determination of wetlands and other waters and used at your own risk unless it has been reviewed and approved in writing by the Oregon Department of State lands in accordance with OAR 141-090-0005 through 141-090-0055.

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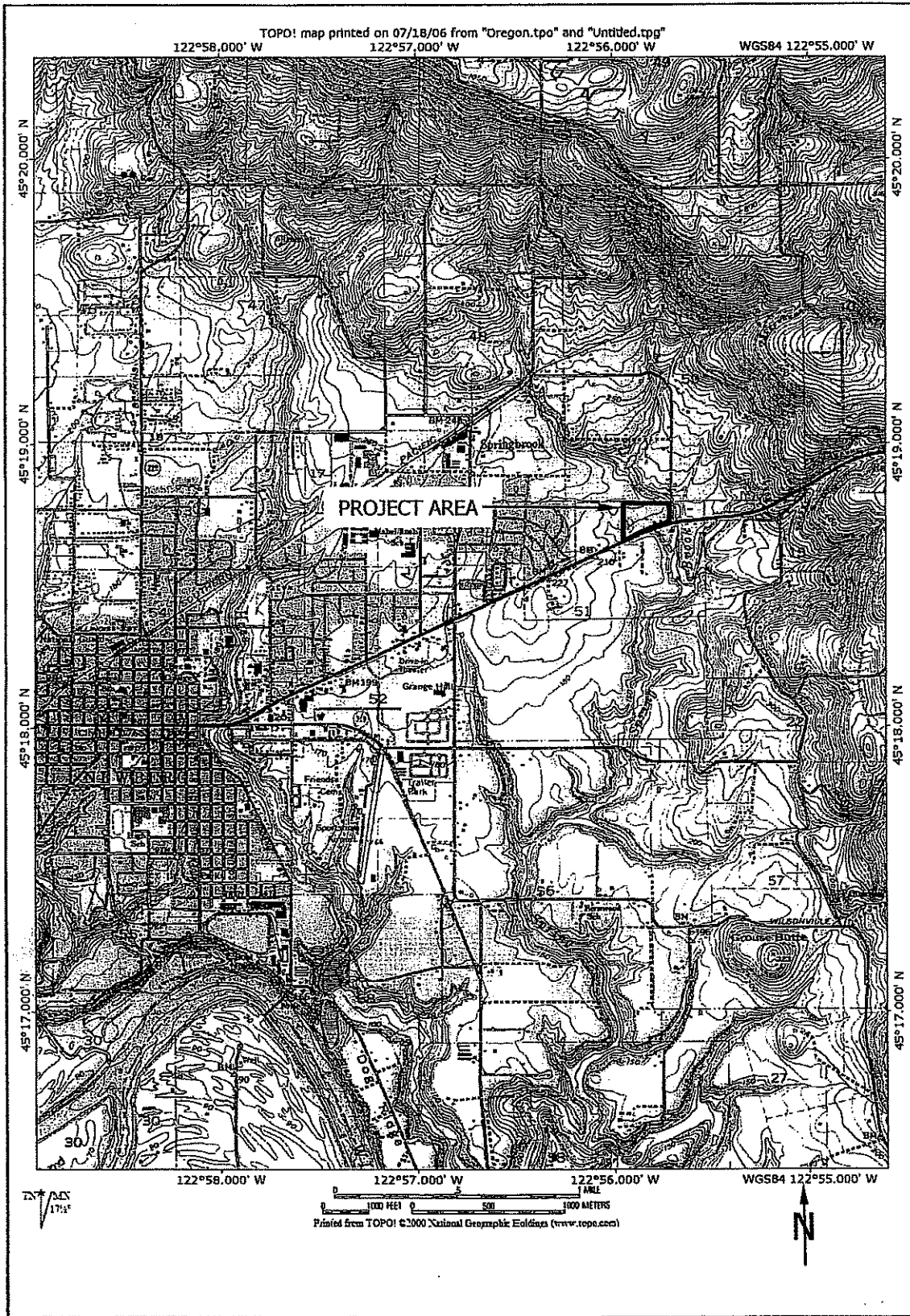


FIGURE 1. SITE VICINITY MAP
S&A #1985

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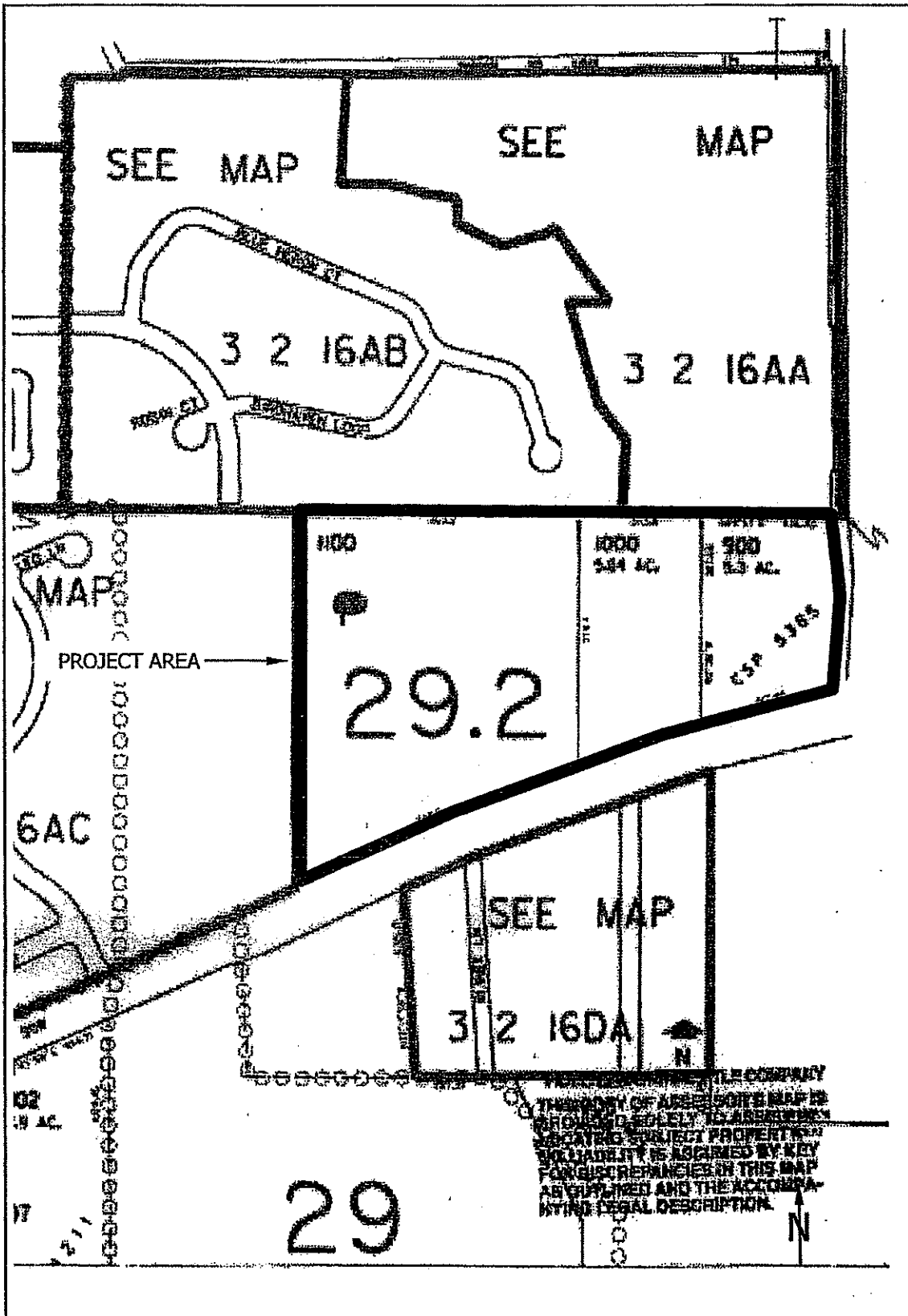
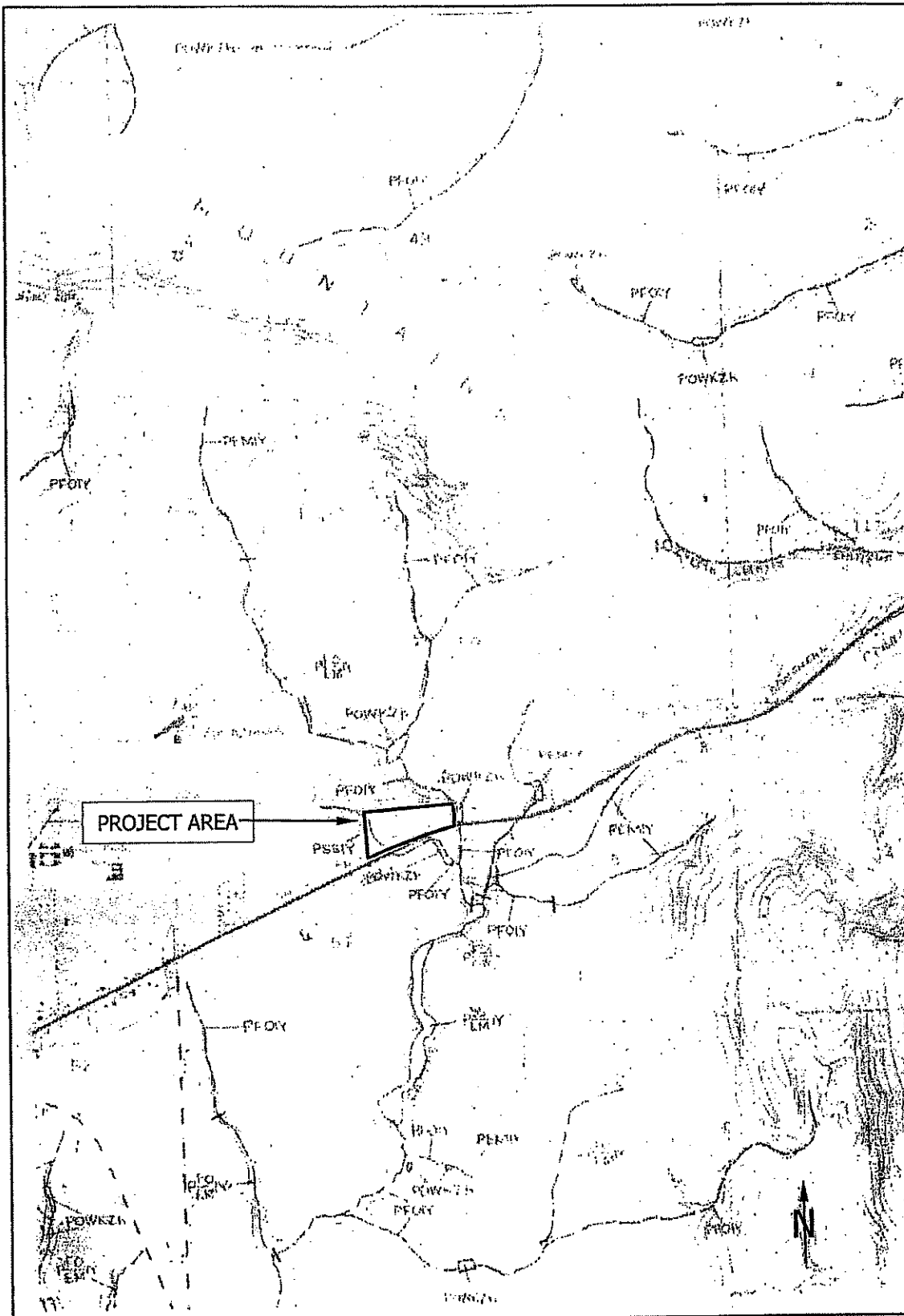


FIGURE 2. TAX MAP
S&A #1985

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<p>FIGURE 3. NEWBERG NWI S&A #1985</p>	<p>Schott & Associates P.O. Box 589 Aurora, OR. 97002 503.678.6007</p>
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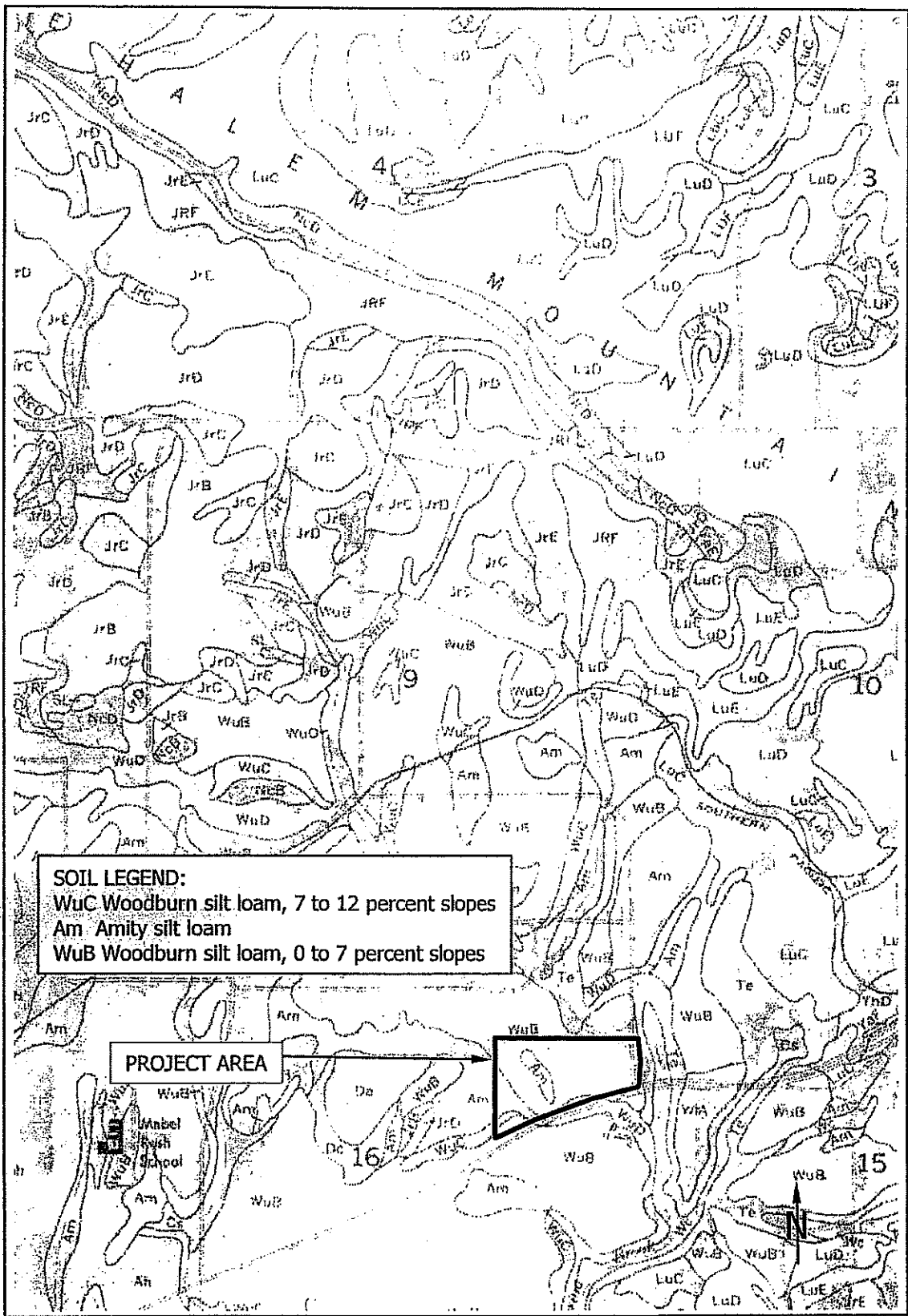


FIGURE 4. YAMHILL COUNTY SOIL SURVEY, SHEET 16
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Data Forms

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S&A#: 1985

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM - Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #: 1985
Project/Contact: NewB./CS	Det. By: C. Steinkoenig		Plot #: 1
Plant Community: meadow			
Plot Location: south side of swale			
Recent Weather: rainy and cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	If no, explain:		
Has Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> Hydrology <input type="checkbox"/>	been significantly disturbed?		
Explain:			

VEGETATION

Tree Stratum				Herb Stratum			
Total Plot Cover: 5		2.5 = 50%	1. = 20%	Total Plot Cover: 100		50 = 50%	20 = 20%
Status/Raw % Cover				Status/Raw % Cover			
1. <i>Pseudotsuga menziesii</i>		FACU 5*		1. <i>Festuca arundinacea</i>		FAC- 100*	
2.				2.			
3.				3.			
4.				4.			
5.				5.			
6.				6.			
Sapling/Shrub Stratum							
Total Plot Cover: 20		10 = 50%	4 = 20%	Status/Raw % Cover			
1. <i>Rubus discolor</i>		FACU- 20*		7.			
2.				8.			
3.				9.			
4.				10.			
5.				11.			
6.				12.			

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-): 50
Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Hydrophytic veg. not exceeding 50 percent.

SOILS

Map Unit Name: Amity silt loam
On Hydric Soil List? Yes No

Drainage Class: Somewhat poorly drained
Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-8	10YR3/1	10YR3/4 FFD		S CL
8-16	10YR3/1	10YR3/4 CMP		CL

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Reducing Conditions (tests positive)
- Gleyed or low chroma colors
- Redox features within 10" (e.g., concentrations)

- Concretions/Nodules (w/in 3", > 2mm)
- High organic content in surface (in Sandy Soils)
- Organic streaking (in Sandy Soils)
- Organic pan (in Sandy Soils)
- Listed on Hydric Soils List (and soil profile matches)
- Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
- Supplemental indicator (e.g., NRCS field indicator)

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Criteria Met? Yes No

Depth to Saturation: 10"

Depth to Free Water:

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC - Neutral Test
- Other:

Comments: Recent heavy rains and high water table.

DETERMINATION

WETLAND? YES NO Comments: Area adjacent blackberry thicket and higher topography.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #:1985
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Project/Contact: NewB./CS
 Plant Community: meadow
 Plot Location: paired with sample plot 1
 Recent Weather: rainy and cold
 Det. By: C. Steinkoenig
 Plot #:2
 Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum				Herb Stratum									
Total Plot Cover:0		0 = 50%		0 = 20%		Total Plot Cover:100		50 = 50%		20 = 20%			
Status/Raw % Cover						Status/Raw % Cover							
1.						1. <i>Agrostis stolonifera</i>						FAC 25*	
2.						2. <i>Poa pratensis</i>						FAC 10	
3.						3. MOSS						65	
4.						4.							
5.						5.							
6.						6.							
Sapling/Shrub Stratum													
Total Plot Cover:		= 50%		= 20%		Status/Raw % Cover		7.					
1.						8.							
2.						9.							
3.						10.							
4.						11.							
5.						12.							

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Hydrophytic veg. exceeds 50 percent.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-7	10YR3/1	10YR3/4 FFF		Si CL
7-16	10YR3/1	10YR3/4 CFD		CL

Hydric Soil Indicators:

- | | |
|--|--|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm) |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High organic content in surface (in Sandy Soils) |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic streaking (in Sandy Soils) |
| <input type="checkbox"/> Reducing Conditions (tests positive) | <input type="checkbox"/> Organic pan (in Sandy Soils) |
| <input checked="" type="checkbox"/> Gleyed or low chroma colors | <input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches) |
| <input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration) |
| | <input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: _____ Depth to Saturation:2" Depth to Free Water:6"

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Criteria Met? Yes No

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Comments: A lot of moss growing on ground.

DETERMINATION

WETLAND? YES NO Comments: Wetland criteria is met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM - Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #: 1985
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Project/Contact: NewB./CS
 Plant Community: meadow
 Plot Location: North side of swale
 Recent Weather: rainy and cold
 Det. By: C. Steinkoenig
 Plot #: 3

Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover: 0	0 = 50%	0 = 20%	Total Plot Cover: 100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Agrostis stolonifera</i>	FAC 80*	
2.			2. <i>Festuca arundinacea</i>	FAC- 15	
3.			3. <i>Trifolium repens</i>	FACU+ 5	
4.			4. <i>Daucus carota</i>	NOL trace	
5.			5. <i>Geranium richardsonii</i>	trace	
Sapling/Shrub Stratum			6. <i>Hypochoeris radicata</i>	trace	
Total Plot Cover:	= 50%	= 20%	Status/Raw % Cover		
1.			7.		
2.			8.		
3.			9.		
4.			10.		
5.			11.		
			12.		

Hydrophytic Vegetation Indicators:
 > 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-): 100
 Other hydrophytic vegetation indicators:
 Criteria Met? Yes No Comments: Hydrophytic veg. exceeds 50 percent.

SOILS

Map Unit Name: Arnity silt loam
 On Hydric Soil List? Yes No
 Drainage Class: Somewhat poorly drained
 Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	None		CL L
12-16	10YR4/2	10YR4/4 CCP		SI CI

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:
 Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Criteria Met? Yes No

Depth to Saturation:

Depth to Free Water:

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root-Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC - Neutral Test
- Other:

Comments: .

DETERMINATION

WETLAND? YES NO Comments: No wetland soils or hydrology.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #:1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: meadow		Plot #:4	
Plot Location: Paired with sample plot 3			
Recent Weather: rainy and cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/>		Soil <input type="checkbox"/>	
		Hydrology <input type="checkbox"/> been significantly disturbed?	
Explain:			

VEGETATION

Tree Stratum				Herb Stratum		
Total Plot Cover:0	0 = 50%	0 = 20%	Status/Raw % Cover	Total Plot Cover:100	50 = 50%	20 = 20%
				Status/Raw % Cover		
1.				1. <i>Agrostis stolonifera</i>		FAC 80*
2.				2. <i>Festuca arundinacea</i>		FAC- 15
3.				3. <i>Moss</i>		NI 20
4.				4. <i>Daucus carota</i>		NOL trace
5.				5. <i>Geranium richardsonii</i>		trace
Sapling/Shrub Stratum				6.		
Total Plot Cover:	= 50%	= 20%	Status/Raw % Cover	7.		
1.				8.		
2.				9.		
3.				10.		
4.				11.		
5.				12.		

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100
Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Hydrophytic veg. exceeds 50 percent.

SOILS

Map Unit Name: Amity silt loam
On Hydric Soil List? Yes No

Drainage Class: Somewhat poorly drained
Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	10YR3/6 FFF		CL L
12-18	10YR4/2	10YR4/6 CMD		SI CI

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|--|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:5"

Depth to Free Water:8"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
 Saturated in upper 12 inches
 Water Marks
 Drift Lines
 Sediment Deposits

- Oxidized Root Channels (upper 12")
 Water-stained leaves
 Local Soil Survey Data
 FAC – Neutral Test
 Other:

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Wetland Criteria met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #:1985
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Project/Contact: NewB./CS
 Plant Community: Scrub-shrub
 Plot Location: South side of tributary.
 Recent Weather: rainy and cold
 Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:45	22.5 = 50%	9 = 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1. <i>Malus sp.</i>	NOL 30*		1. <i>Agrostis stolonifera</i>	FAC 25*	
2. <i>Crataegus monogyna</i>	FACU+ 15*		2. <i>Festuca arundinacea</i>	FAC- 50*	
3.			3. <i>Dactylis glomerata</i>	FACU 25*	
4.			4.		
5.			5.		
Sapling/Shrub Stratum					
Total Plot Cover:20	10= 50%	4= 20%	Status/Raw % Cover	7.	
1. <i>Rubus discolor</i>			FACU- 20*	8.	
2.				9.	
3.				10.	
4.				11.	
5.				12.	

Hydrophytic Vegetation Indicators:
 > 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):40
 Other hydrophytic vegetation indicators:
Criteria Met? Yes No **Comments:** Hydrophytic veg does not exceed 50%. FEAR used as FAC veg.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/3	None		CL L
12-16	10YR3/4			SI Cl

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm) |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High organic content in surface (in Sandy Soils) |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic streaking (in Sandy Soils) |
| <input type="checkbox"/> Reducing Conditions (tests positive) | <input type="checkbox"/> Organic pan (in Sandy Soils) |
| <input type="checkbox"/> Gleyed or low chroma colors | <input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches) |
| <input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration) |
| | <input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |

Criteria Met? Yes No

HYDROLOGY

Recorded Data:
 Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: _____ Depth to Saturation: _____ Depth to Free Water: 14"

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC - Neutral Test
- Other:

Criteria Met? Yes No

Comments: Depth to free water in pit at 14 inches.

DETERMINATION

WETLAND? YES NO **Comments:** Wetland criteria not met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #:1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: meadow		Plot #:6	
Plot Location: Paired with sample plot 5			
Recent Weather: rainy and cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/>		Soil <input type="checkbox"/>	
Explain:		Hydrology <input type="checkbox"/> been significantly disturbed?	

VEGETATION

Tree Stratum				Herb Stratum			
Total Plot Cover:0		= 50%	= 20%	Total Plot Cover:100		50 = 50%	20 = 20%
Status/Raw % Cover				Status/Raw % Cover			
1.				1.	<i>Agrostis stolonifera</i>		FAC 25*
2.				2.	<i>Festuca arundinacea</i>		FAC- 50*
3.				3.	<i>Dactylis glomerata</i>		FACU 25*
4.				4.			
5.				5.			
Sapling/Shrub Stratum				6.			
Total Plot Cover:		= 50%	= 20%	Status/Raw % Cover	7.		
1.				8.			
2.				9.			
3.				10.			
4.				11.			
5.				12.			

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):66
 Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Hydrophytic veg exceeds 50%. FEAR used as FAC veg.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-11	10YR4/1	10YR4/4 FFD		Si CL
11-15	10YR3/4			SI Cl

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input checked="" type="checkbox"/> Gleyed or low chroma colors
<input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|
- Criteria Met? Yes No

HYDROLOGY

Recorded Data:
 Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: _____ Depth to Saturation: _____ Depth to Free Water: 7"

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: Wetland hydrology observed.

DETERMINATION

WETLAND? YES NO Comments: Wetland criteria is met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #:1985
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Project/Contact: NewB./CS
 Plant Community: meadow
 Plot Location: Paired w/8-N side of seasonal drainage-E. of berm
 Recent Weather: rainy and cold
 Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:0	= 50%	= 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Poa pratensis</i>		FAC 75*
2.			2. <i>Festuca arundinacea</i>		FAC- 10
3.			3. <i>Trifolium latifolia</i>		FACU+ 15
4.			4. <i>Chrysanthemum Leu.</i>		NI trace
5.			5.		
Sapling/Shrub Stratum			6.		
Total Plot Cover:	= 50%	= 20%	Status/Raw % Cover	7.	
1.				8.	
2.				9.	
3.				10.	
4.				11.	
5.				12.	

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100
 Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: FEAR (FAC-) used as FAC veg.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR4/2	None		Si CL
12-17	10YR4/2	10YR4/6 FFP		CL

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation: 10

Depth to Free Water: 12"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: Recent heavy rainfall.

DETERMINATION

WETLAND? YES NO Comments: Wetland soil criterion is not met. Subdominant veg. is upland and higher topography.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #:1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: meadow		Plot #:8	
Plot Location:			
Recent Weather: rainy and cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?			
Explain:			

VEGETATION

Tree Stratum				Herb Stratum							
Total Plot Cover:0		= 50%		= 20%		Total Plot Cover:100		50 = 50%		20 = 20%	
Status/Raw % Cover				Status/Raw % Cover							
1.				1.	<i>Poa pratensis</i>						FAC 85*
2.				2.	<i>Rumex crispus</i>						FAC+ 5
3.				3.	<i>Gernatium richardsoni</i>						FACU+ 10
4.				4.							
5.				5.							
Sapling/Shrub Stratum				6.							
Total Plot Cover:		= 50%		= 20%		Status/Raw % Cover		7.			
1.				8.							
2.				9.							
3.				10.							
4.				11.							
5.				12.							

Hydrophytic Vegetation Indicators:
 > 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100
 Other hydrophytic vegetation indicators:
 Criteria Met? Yes No Comments: .

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	10YR3/6 MFD		Si CL
12-17	10YR4/2	10YR4/4 FFD		CL

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Reducing Conditions (tests positive)	<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Gleyed or low chroma colors	<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations)	<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
	<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator)

Criteria Met? Yes No

HYDROLOGY

Recorded Data:
 Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data
 Depth of inundation: _____ Depth to Saturation:to Surface _____ Depth to Free Water:1" _____
Primary Hydrology Indicators:
 Inundated
 Saturated in upper 12 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Criteria Met? Yes No
Secondary Hydrology Indicators (2 or more required):
 Oxidized Root Channels (upper 12")
 Water-stained leaves
 Local Soil Survey Data
 FAC – Neutral Test
 Other: .
 Comments: Recent heavy rainfall and high water table.

DETERMINATION

WETLAND? YES NO Comments: Wetland criteia met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill Date: 2/21 City: Newberg File #:1985
 Project/Contact: NewB./CS Det. By: C. Steinkoenig
 Plant Community: forested Plot #:9
 Plot Location: SW side of stream
 Recent Weather: rainy and cold
 Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:100	50 = 50%	20 = 20%	Total Plot Cover:70	35 = 50%	14 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1. <i>Fraxinus latifolia</i>	FACW 100*		1. <i>Carex obnupta</i>	OBL 60*	
2.			2. <i>Oenanthe sarmentosa</i>	OBL 10	
3.			3.		
4.			4.		
5.			5.		
Sapling/Shrub Stratum			6.		
Total Plot Cover:55	27.5 = 50%	11 = 20%	Status/Raw % Cover	7.	
1. <i>Rosa nutkana</i>	FAC 10		8.		
2. <i>Crataegus monogyna</i>	FACU+ 5		9.		
3. <i>Spirea douglasii</i>	FACW 40*		10.		
4.			11.		
5.			12.		

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: .

SOILS

Map Unit Name: Amity silt loam

Drainage Class: Somewhat poorly drained

On Hydric Soil List? Yes No

Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	10YR3/6 MFD		Si CL
12-17	10YR4/2	10YR4/4 FFD		CL

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Reducing Conditions (tests positive)
- Gleyed or low chroma colors
- Redox features within 10" (e.g., concentrations)
- Concretions/Nodules (w/in 3", > 2mm)
- High organic content in surface (in Sandy Soils)
- Organic streaking (in Sandy Soils)
- Organic pan (in Sandy Soils)
- Listed on Hydric Soils List (and soil profile matches)
- Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
- Supplemental indicator (e.g., NRCS field indicator)

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation: to Surface

Depth to Free Water: 1"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: Recent heavy rainfall and high water table.

DETERMINATION

WETLAND? YES NO Comments: Wetland criteria met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #: 1985
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Project/Contact: NewB./CS
 Plant Community: forested
 Plot Location: paired with sample plot 10
 Recent Weather: rainy and cold
 Det. By: C. Steinkoenig
 Plot #: 11

Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum				Herb Stratum							
Total Plot Cover: 50		25 = 50%		10 = 20%		Total Plot Cover: 100		50 = 50%		20 = 20%	
Status/Raw % Cover				Status/Raw % Cover							
1. <i>Fraxinus latifolia</i>				1. <i>Poa pratensis</i>				FAC 50*			
2.				2. <i>Rumex crispus</i>				FAC+ 10			
3.				3. <i>Agrostis stolonifera</i>				FAC 40*			
4.				4.							
5.				5.							
Sapling/Shrub Stratum											
Total Plot Cover:		= 50%		= 20%		Status/Raw % Cover		7.			
1.				8.							
2.				9.							
3.				10.							
4.				11.							
5.				12.							

Hydrophytic Vegetation Indicators:
 > 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-): 100
 Other hydrophytic vegetation indicators:
 Criteria Met? Yes No Comments: .

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-11	10YR3/2	10YR3/6 FFF		Si CL
11-17	10YR4/2	10YR4/6 CFP		CL

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Reducing Conditions (tests positive)
- Gleyed or low chroma colors
- Redox features within 10" (e.g., concentrations)
- Concretions/Nodules (w/in 3", > 2mm)
- High organic content in surface (in Sandy Soils)
- Organic streaking (in Sandy Soils)
- Organic pan (in Sandy Soils)
- Listed on Hydric Soils List (and soil profile matches)
- Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
- Supplemental indicator (e.g., NRCS field indicator)

Criteria Met? Yes No

HYDROLOGY

Recorded Data:
 Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: _____ Depth to Saturation: 6" Depth to Free Water: 9"

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Wetland Criteria is met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #:1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: forested		Plot #:12	
Plot Location: NW end of the property			
Recent Weather: rainy and cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/>		Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?	
Explain:			

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:95	47.5 = 50%	19 = 20%	Total Plot Cover:	= 50%	= 20%
Status/Raw % Cover			Status/Raw % Cover		
1. <i>Fraxinus latifolia</i>	FACW+ 95*		1.		
2.			2.		
3.			3.		
4.			4.		
5.			5.		
Sapling/Shrub Stratum			Sapling/Shrub Stratum		
Total Plot Cover:10	5= 50%	2.5= 20%	Status/Raw % Cover	7.	
1. <i>Rubus discolor</i>	FACU 10*		8.		
2.			9.		
3.			10.		
4.			11.		
5.			12.		

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):50
Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: BPJ. Blackberry not rooted in sample plot. Dominant cover is ash

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-18	10YR2/1			Si CL

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input checked="" type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|--|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:3"

Depth to Free Water:8"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- | | |
|--|--|
| <input type="checkbox"/> Inundated
<input checked="" type="checkbox"/> Saturated in upper 12 inches
<input type="checkbox"/> Water Marks
<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Sediment Deposits | <input type="checkbox"/> Oxidized Root Channels (upper 12")
<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> FAC – Neutral Test
<input type="checkbox"/> Other: |
|--|--|

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Wetland area adjacent to the creek. Wetland characteristic are met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill Date: 2/28/07 City: Newberg File #:1985

Project/Contact: NewB./CS Det. By: C. Steinkoenig
 Plant Community: scrub-shrub/meadow Plot #:13

Plot Location: northeast side if isolated wetland
 Recent Weather: cold and wet/hail

Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum				Herb Stratum			
Total Plot Cover:		= 50%	= 20%	Total Plot Cover:100		50 = 50%	20 = 20%
Status/Raw % Cover				Status/Raw % Cover			
1.				1.	<i>Alopecurus pratensis</i>		FACW 60*
2.				2.	<i>Agrostis stolonifera</i>		FAC 40*
3.				3.			
4.				4.			
5.				5.			
Sapling/Shrub Stratum				6.			
Total Plot Cover:10		5= 50%	2.5= 20%	Status/Raw % Cover		7.	
1. <i>Rubus discolor</i>				FACU 5*			
2. <i>Rosa nutkana</i>				FAC 5*			
3.				10.			
4.				11.			
5.				12.			

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):75

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Exceeds fifty percent.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-13	10YR3/2	None		Si CL
13-18	10YR3/2	10YR3/4 FFF		CL

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Reducing Conditions (tests positive)
- Gleyed or low chroma colors
- Redox features within 10" (e.g., concentrations)
- Concretions/Nodules (w/in 3", > 2mm)
- High organic content in surface (in Sandy Soils)
- Organic streaking (in Sandy Soils)
- Organic pan (in Sandy Soils)
- Listed on Hydric Soils List (and soil profile matches)
- Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
- Supplemental indicator (e.g., NRCS field indicator)

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: Depth to Saturation:3" Depth to Free Water:6"

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: Very high water table.

DETERMINATION

WETLAND? YES NO Comments: No hydric soil, rise in topogrpahy.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
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Project/Contact: NewB./CS
 Plant Community: scrub-shrub/meadow
 Plot Location: paired w/sample plot 13
 Recent Weather: cold and wet/hail
 Det. By: C. Steinkoenig
 Plot #:14

Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum				Herb Stratum			
Total Plot Cover:0		= 50%		= 20%		Total Plot Cover:100	
				50 = 50%		20 = 20%	
Status/Raw % Cover				Status/Raw % Cover			
1.				1.	<i>Alopecurus pratensis</i>		FACW 60*
2.				2.	<i>Agrostis stolonifera</i>		FAC 40*
3.				3.			
4.				4.			
5.				5.			
Sapling/Shrub Stratum							
Total Plot Cover:10		5= 50%		2.5= 20%		Status/Raw % Cover	
						7.	
1. <i>Rubus discolor</i>						8.	
2. <i>Rosa nutkana</i>						9.	
3.						10.	
4.						11.	
5.						12.	

Hydrophytic Vegetation Indicators:
 > 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):75
 Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Exceeds fifty percent.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR4/2	10YR4/6 CFD		Si CL
12-18	10YR4/2	10YR4/4 FFF		CL

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|--|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: _____ Depth to Saturation: to surface _____ Depth to Free Water: 0.5" _____

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Criteria Met? Yes No

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Comments: .

DETERMINATION

WETLAND? YES NO Comments: All wetland criteria met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
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Project/Contact: NewB./CS Det. By: C. Steinkoenig
 Plant Community: meadow Plot #:15

Plot Location: Northwest end of wetland

Recent Weather: cold and wet/hail

Do normal environmental conditions exist? Y N If no, explain:

Has Vegetation Soil Hydrology been significantly disturbed?

Explain:

VEGETATION

Tree Stratum				Herb Stratum		
Total Plot Cover:0	= 50%	= 20%	Status/Raw % Cover	Total Plot Cover:100	50 = 50%	20 = 20%
				Status/Raw % Cover		
1.				1. <i>Alopecurus pratensis</i>		FACW 60*
2.				2. <i>Agrostis stolonifera</i>		FAC 40*
3.				3.		
4.				4.		
5.				5.		
Sapling/Shrub Stratum				6.		
Total Plot Cover:10	5= 50%	2.5= 20%	Status/Raw % Cover	7.		
1. <i>Rubus discolor</i>			FACU 5*	8.		
2. <i>Rosa nutkana</i>			FAC 5*	9.		
3.				10.		
4.				11.		
5.				12.		

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):75

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Exceeds fifty percent.

SOILS

Map Unit Name: Amity silt loam

Drainage Class: Somewhat poorly drained

On Hydric Soil List? Yes No

Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR4/2	10YR4/6 CFD		Si CL
12-18	10YR4/2	10YR4/4 FFF		CL

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|--|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation: to surface

Depth to Free Water: 0.5"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: All wetland criteria met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
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Project/Contact: NewB./CS Det. By: C. Steinkoenig
 Plant Community: meadow/scrub-shrub Plot #:16

Plot Location: Paired with sample plot 15

Recent Weather: cold and wet/hail

Do normal environmental conditions exist? Y N If no, explain:

Has Vegetation Soil Hydrology been significantly disturbed?

Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:15	7.5 = 50%	3 = 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1. <i>Quercus garryana</i>	UPL 5*		1. <i>Alopecurus pratensis</i>	FACW 40*	
2. <i>Malus sp.</i>	NOL 5*		2. <i>Agrostis stolonifera</i>	FAC 40*	
3.			3. <i>Dactylis glomerata</i>	FACU 15	
4.			4. <i>Chrysanthemum l.</i>	NOL 5	
5.			5. <i>Hypochoeris radicata</i>	FACU trace	
Sapling/Shrub Stratum			6.		
Total Plot Cover:15	7.5 = 50%	3 = 20%	Status/Raw % Cover	7.	
1. <i>Rubus discolor</i>			FACU 10*	8.	
2. <i>Crataegus sp.</i>			FAC/FACU+ 5*	9.	
3.				10.	
4.				11.	
5.				12.	

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):66

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Exceeds fifty percent. Sundominants are upland

SOILS

Map Unit Name: Amity silt loam

Drainage Class: Somewhat poorly drained

On Hydric Soil List? Yes No

Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	None		Si CL
12-18	10YR4/2	None		CL

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:6"

Depth to Free Water:9"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- | | |
|--|---|
| <input type="checkbox"/> Inundated
<input checked="" type="checkbox"/> Saturated in upper 12 inches
<input type="checkbox"/> Water Marks
<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Sediment Deposits | <input type="checkbox"/> Oxidized Root Channels (upper 12")
<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> FAC – Neutral Test
<input type="checkbox"/> Other: |
|--|---|

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Wetland soil criterion is not met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill Date: 2/28/07 City: Newberg File #:1985

Project/Contact: NewB./CS Det. By: C. Steinkoenig
 Plant Community: meadow/scrub-shrub Plot #:17
 Plot Location: west side of wetland
 Recent Weather: cold/wet
 Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:	= 50%	= 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Alopecurus pratensis</i>		FACW 30*
2.			2. <i>Agrostis stolonifera</i>		FAC 55*
3.			3. <i>Juncus patens</i>		FACW 15
4.			4. <i>Vicia americana</i>		trace
5.			5.		
Sapling/Shrub Stratum			6.		
Total Plot Cover:15	7.5= 50%	3= 20%	Status/Raw % Cover	7.	
1. <i>Rosa nutkana</i>			FAC 15*	8.	
2.				9.	
3.				10.	
4.				11.	
5.				12.	

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100
 Other hydrophytic vegetation indicators:
 Criteria Met? Yes No Comments: Mets wetland vegetation criteria.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-11	10YR3/2	10YR4/6 FFF		CL L
11-16	10YR4/1	10YR4/6 CFD		Si CL

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Reducing Conditions (tests positive)
- Gleyed or low chroma colors
- Redox features within 10" (e.g., concentrations)
- Concretions/Nodules (w/in 3", > 2mm)
- High organic content in surface (in Sandy Soils)
- Organic streaking (in Sandy Soils)
- Organic pan (in Sandy Soils)
- Listed on Hydric Soils List (and soil profile matches)
- Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
- Supplemental indicator (e.g., NRCS field indicator)

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:1.5" Depth to Free Water:1.5"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits
- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Wetland criteria met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: meadow/scrub-shrub		Plot #:18	
Plot Location: Paired w/17			
Recent Weather: cold /wet			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?			
Explain:			

VEGETATION

Tree Stratum				Herb Stratum			
Total Plot Cover:0		= 50%	= 20%	Total Plot Cover:100		50 = 50%	20 = 20%
Status/Raw % Cover				Status/Raw % Cover			
1.				1. <i>Alopecurus pratensis</i>			FACW 30*
2.				2. <i>Agrostis stolonifera</i>			FAC 55*
3.				3. <i>Juncus patens</i>			FACW 15
4.				4. <i>Vicia americana</i>			trace
5.				5.			
Sapling/Shrub Stratum							
Total Plot Cover:15		7.5= 50%	3= 20%	Status/Raw % Cover			
1. <i>Rosa nutkana</i>							FAC 15*
2.							
3.							
4.							
5.							

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100
 Other hydrophytic vegetation indicators:
 Criteria Met? Yes No Comments: Mets wetland vegetation criteria.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-13	10YR3/2	None		Si L
13-18	10YR4/2	10YR4/6 CFD		Si CL

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:4"

Depth to Free Water:4"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Slight shift in topography, no hydric soil indicators observed.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: meadow/scrub-shrub		Plot #:19	
Plot Location: South end of wetland			
Recent Weather: cold/wet			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/>		Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?	
Explain:			

VEGETATION

Tree Stratum				Herb Stratum							
Total Plot Cover:0		= 50%		= 20%		Total Plot Cover:55		27.5 = 50%		11 = 20%	
Status/Raw % Cover						Status/Raw % Cover					
1.				1. <i>Alopecurus pratensis</i>				FACW 20*			
2.				2. <i>Agrostis stolonifera</i>				FAC 35*			
3.				3.							
4.				4.							
5.				5.							
Sapling/Shrub Stratum						6.					
Total Plot Cover:60		30= 50%		6= 20%		Status/Raw % Cover		7.			
1. <i>Rubus discolor</i>				FACU 45*				8.			
2. <i>Quercus garryana</i>				UPL 5				9.			
3. <i>Crataegus sp.</i>				FAC/FACU 5				10.			
4. <i>Malus sp.</i>				NOL 5				11.			
5.								12.			

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):66

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Mets wetland vegetation criteria.

SOILS

Map Unit Name: Amity silt loam

Drainage Class: Somewhat poorly drained

On Hydric Soil List? Yes No

Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-13	10YR3/2	None		Si L
13-18	10YR4/2	10YR4/6 CFD		Si CL

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm) |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High organic content in surface (in Sandy Soils) |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic streaking (in Sandy Soils) |
| <input type="checkbox"/> Reducing Conditions (tests positive) | <input type="checkbox"/> Organic pan (in Sandy Soils) |
| <input type="checkbox"/> Gleyed or low chroma colors | <input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches) |
| <input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration) |
| | <input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:4"

Depth to Free Water:6"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Slight shift in topography, no hydric soil indicators observed.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #: 1985
Project/Contact: NewB./CS	Def. By: C. Steinkoenig		
Plant Community: meadow/scrub-shrub	Plot #: 20		
Plot Location: paired w/19			
Recent Weather: cold/wet			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/>	Soil <input type="checkbox"/>	Hydrology <input type="checkbox"/>	been significantly disturbed?
Explain:			

VEGETATION

Tree Stratum				Herb Stratum							
Total Plot Cover: 0		= 50%		= 20%		Total Plot Cover: 100		50 = 50%		20 = 20%	
Status/Raw % Cover						Status/Raw % Cover					
1.						1. <i>Alopecurus pratensis</i>					FACW 20*
2.						2. <i>Agrostis stolonifera</i>					FAC 80*
3.						3.					
4.						4.					
5.						5.					
Sapling/Shrub Stratum											
Total Plot Cover: 15		7.5 = 50%		3 = 20%		Status/Raw % Cover					
1. <i>Crataegus sp.</i>						FAC or FACU+ 15		7.			
2.								8.			
3.								9.			
4.								10.			
5.								11.			
								12.			

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-): 100

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Did not include hawthorn.

SOILS

Map Unit Name: Amity silt loam

Drainage Class: Somewhat poorly drained

On Hydric Soil List? Yes No

Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	10YR3/6 MFD		SI CL
12-18	10YR4/2	10YR4/6 CFD		SI CL

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Reducing Conditions (tests positive)
- Gleyed or low chroma colors
- Redox features within 10" (e.g., concentrations)

- Concretions/Nodules (w/in 3", > 2mm)
- High organic content in surface (in Sandy Soils)
- Organic streaking (in Sandy Soils)
- Organic pan (in Sandy Soils)
- Listed on Hydric Soils List (and soil profile matches)
- Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
- Supplemental indicator (e.g., NRCS field indicator)

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation: to surface

Depth to Free Water: 1"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: Area has patches of standing water.

DETERMINATION

WETLAND? YES NO Comments: Wetland criteria met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: meadow/scrub-shrub		Plot #:21	
Plot Location: east side if isolated wetland			
Recent Weather: cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?			
Explain:			

VEGETATION

Tree Stratum				Herb Stratum			
Total Plot Cover:0		= 50%	= 20%	Total Plot Cover:55		27.5 = 50%	11 = 20%
Status/Raw % Cover				Status/Raw % Cover			
1.				1. <i>Alopecurus pratensis</i>			FACW 20*
2.				2. <i>Agrostis stolonifera</i>			FAC 60*
3.				3. <i>Festuca aruninacea</i>			FAC- 20*
4.				4.			
5.				5.			
Sapling/Shrub Stratum							
Total Plot Cover:50		25= 50%	10= 20%	Status/Raw % Cover			
1. <i>Rubus discolor</i>				FACU 50*			
2.							
3.							
4.							
5.							

Hydrophytic Vegetation Indicators:
 > 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):75
 Other hydrophytic vegetation indicators:
 Criteria Met? Yes No Comments: Mets wetland vegetation criteria.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-13	10YR3/2	None		Si CL
13-18	10YR4/2	10YR4/6 FFD		Si CL

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|
- Criteria Met? Yes No

HYDROLOGY

Recorded Data:
 Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: _____ Depth to Saturation: _____ Depth to Free Water: _____

Primary Hydrology Indicators:
 Inundated
 Saturated in upper 12 inches
 Water Marks
 Drift Lines
 Sediment Deposits

Secondary Hydrology Indicators (2 or more required):
 Oxidized Root Channels (upper 12")
 Water-stained leaves
 Local Soil Survey Data
 FAC – Neutral Test
 Other: _____

Criteria Met? Yes No Comments: .

DETERMINATION

WETLAND? YES NO Comments: No wetland hydrology or hydric soils.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
Project/Contact: NewB./CS	Det. By: C. Steinkoenig		Plot #:22
Plant Community: meadow/scrub-shrub	Recent Weather: cold/wet		
Plot Location: Paired w/ sample plot 21	Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:		
Has Vegetation <input type="checkbox"/>	Soil <input type="checkbox"/>	Hydrology <input type="checkbox"/>	been significantly disturbed?

Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:0	= 50%	= 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Alopecurus pratensis</i>		FACW 50*
2.			2. <i>Agrostis stolonifera</i>		FAC 45*
3.			3. <i>Moss</i>		5
4.			4.		
5.			5.		
Sapling/Shrub Stratum			6.		
Total Plot Cover:5	2.5= 50%	1= 20%	Status/Raw % Cover	7.	
1. <i>Rubus discolor</i>			FACU 5 *	8.	
2.				9.	
3.				10.	
4.				11.	
5.				12.	

Hydrophytic Vegetation Indicators:
 > 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100
 Other hydrophytic vegetation indicators:
 Criteria Met? Yes No Comments: Vegetation criterion is met.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	10YR3/6 CFF		SI L
12-18	10YR4/2	10YR4/6 MFD		Si CL

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|--|---|
- Criteria Met? Yes No

HYDROLOGY

Recorded Data:
 Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: Inundated Saturated in upper 12 inches Water Marks Drift Lines Sediment Deposits
 Criteria Met? Yes No

Depth to Saturation: Saturated to the surface
 Secondary Hydrology Indicators (2 or more required):
 Oxidized Root Channels (upper 12")
 Water-stained leaves
 Local Soil Survey Data
 FAC – Neutral Test
 Other: _____
 Comments: .

Depth to Free Water: _____

DETERMINATION

WETLAND? YES NO Comments: All wetland criteria is met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #: 1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: meadow/scrub-shrub		Plot #: 23	
Plot Location:			
Recent Weather: cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/>		Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?	
Explain:			

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:0	= 50%	= 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Alopecurus pratensis</i>	FACW 20*	
2.			2. <i>Agrostis stolonifera</i>	FAC 50*	
3.			3. <i>Dactylis glomerata</i>	FACU 20*	
4.			4. <i>Chrysanthemum ;euc.</i>	NOL 5	
5.			5. <i>Aster sp.</i>	Unknown 5	
Sapling/Shrub Stratum			6.		
Total Plot Cover:35	17.5= 50%	7= 20%	Status/Raw % Cover		
1. <i>Rubus discolor</i>			FACU- 10*	7.	
2. <i>Rubus laciniatus</i>			FACU+ trace	8.	
3. <i>Rhamnus purshiana</i>			FAC- 5	9.	
4. <i>Crataegus sp</i>			FAC/FACU 20*	10.	
5.				11.	
				12.	

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):50

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Hawthorn species not included.

SOILS

Map Unit Name: Amity silt loam

Drainage Class: Somewhat poorly drained

On Hydric Soil List? Yes No

Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-13	10YR3/2	None		SI L
13-18	10YR4/2	10YR4/6 MFD		Si CL

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Reducing Conditions (tests positive)
- Gleyed or low chroma colors
- Redox features within 10" (e.g., concentrations)

- Concretions/Nodules (w/in 3", > 2mm)
- High organic content in surface (in Sandy Soils)
- Organic streaking (in Sandy Soils)
- Organic pan (in Sandy Soils)
- Listed on Hydric Soils List (and soil profile matches)
- Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
- Supplemental indicator (e.g., NRCS field indicator)

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:

Depth to Free Water: 10"

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Vegetation and soil did not met wetland criteria.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: meadow/scrub-shrub		Plot #:24	
Plot Location: Paired w/ sample plot 23			
Recent Weather: cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/>		Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?	
Explain:			

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:0	= 50%	= 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Alopecurus pratensis</i>		FACW 50*
2.			2. <i>Agrostis stolonifera</i>		FAC 45*
3.			3. <i>Moss</i>		5
4.			4.		
5.			5.		
Sapling/Shrub Stratum			6.		
Total Plot Cover:30	15= 50%	6= 20%	Status/Raw % Cover	7.	
1. <i>Rosa nutkana</i>			FAC 30*	8.	
2.				9.	
3.				10.	
4.				11.	
5.				12.	

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100
 Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Vegetation criterion is met.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-10	10YR3/2	10YR3/6 MMF		Si L
10-16	10YR4/2	10YR4/6 MFD		Si CL

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|--|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: _____ Depth to Saturation: Saturated to the surface Depth to Free Water: _____

Primary Hydrology Indicators:

- Inundated
 Saturated in upper 12 inches
 Water Marks
 Drift Lines
 Sediment Deposits

Criteria Met? Yes No

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
 Water-stained leaves
 Local Soil Survey Data
 FAC – Neutral Test
 Other:

Comments: .

DETERMINATION

WETLAND? YES NO Comments: All wetland criteria is met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
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Project/Contact: NewB./CS
 Plant Community: meadow
 Plot Location: south of isolated wetland
 Recent Weather: cold/wet
 Det. By: C. Steinkoenig
 Plot #:25

Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:0	= 50%	= 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Alopecurus pratensis</i>	FACW 20*	
2.			2. <i>Agrostis stolonifera</i>	FAC 80*	
3.			3.		
4.			4.		
5.			5.		
Sapling/Shrub Stratum			6.		
Total Plot Cover:	= 50%	= 20%	Status/Raw % Cover	7.	
1.			8.		
2.			9.		
3.			10.		
4.			11.		
5.			12.		

Hydrophytic Vegetation Indicators:
 > 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100
 Other hydrophytic vegetation indicators:
 Criteria Met? Yes No Comments: Did not include hawthorn.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	10YR3/6 MFD		SI CL
12-18	10YR4/2	10YR4/6 CFD		Si CL

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|--|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation: to surface

Depth to Free Water: 1"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: Area has patches of standing water.

DETERMINATION

WETLAND? YES NO Comments: Wetland criteria met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #: 1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: meadow		Plot #: 26	
Plot Location: Paired w/sampleplot 25			
Recent Weather: cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?			
Explain:			

VEGETATION

Tree Stratum				Herb Stratum							
Total Plot Cover: 0		= 50%		= 20%		Total Plot Cover: 100		50 = 50%		20 = 20%	
Status/Raw % Cover						Status/Raw % Cover					
1.						1. <i>Alopecurus pratensis</i>					
2.						2. <i>Agrostis stolonifera</i>					
3.						3.					
4.						4.					
5.						5.					
6.						6.					
7.						7.					
8.						8.					
9.						9.					
10.						10.					
11.						11.					
12.						12.					

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-): 66

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Mets wetland vegetation criteria.

SOILS

Map Unit Name: Amity silt loam

Drainage Class: Somewhat poorly drained

On Hydric Soil List? Yes No

Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	None		SIL
12-18	10YR4/2	10YR4/6 CFD		Si CL

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm) |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High organic content in surface (in Sandy Soils) |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic streaking (in Sandy Soils) |
| <input type="checkbox"/> Reducing Conditions (tests positive) | <input type="checkbox"/> Organic pan (in Sandy Soils) |
| <input type="checkbox"/> Gleyed or low chroma colors | <input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches) |
| <input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration) |
| | <input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation: 5"

Depth to Free Water: 5"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Soil did not met wetland criterion.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: meadow		Plot #:27	
Plot Location: Tax lot 1000 Vet Clinic			
Recent Weather: cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/>		Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?	
Explain:			

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:0	= 50%	= 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Poa pratensis</i>		FAC 45*
2.			2. <i>Agrostis stolonifera</i>		FAC 50*
3.			3. <i>Rumex crispus</i>		FAC+ trace
4.			4. <i>Chrysanthemum Leuc.</i>		UPL trace
5.			5. <i>Trifolium repens</i>		FAC 15
Sapling/Shrub Stratum			6.		
Total Plot Cover:	= 50%	= 20%	Status/Raw % Cover	7.	
1.				8.	
2.				9.	
3.				10.	
4.				11.	
5.				12.	

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: .

SOILS

Map Unit Name: Woodburn silt loam 0-7% Drainage Class: Moderately well drained

On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-16	10YR3/3	None		SI L

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:

Depth to Free Water:

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- | | |
|---|---|
| <input type="checkbox"/> Inundated
<input type="checkbox"/> Saturated in upper 12 inches
<input type="checkbox"/> Water Marks
<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Sediment Deposits | <input type="checkbox"/> Oxidized Root Channels (upper 12")
<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> FAC – Neutral Test
<input type="checkbox"/> Other: |
|---|---|

Criteria Met? Yes No

Comments:

DETERMINATION

WETLAND? YES NO Comments: No hydric soil or wetland hydrology observed.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
Project/Contact: NewB./CS	Det. By: C. Steinkoenig		
Plant Community: meadow	Plot #:28		
Plot Location: Tax lot 900	Recent Weather: cold		
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/>	Soil <input type="checkbox"/>	Hydrology <input type="checkbox"/>	been significantly disturbed?
Explain:			

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:0	= 50%	= 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Poa pratensis</i>		FAC 45*
2.			2. <i>Agrostis stolonifera</i>		FAC 50*
3.			3. <i>Rumex crispus</i>		FAC+ trace
4.			4. <i>Chrysanthemum Leuc.</i>		UPL trace
5.			5. <i>Trifolium repens</i>		FAC 15
6.					
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96.					
97.					
98.					
99.					
100.					

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: .

SOILS

Map Unit Name: Woodburn silt loam 0-7% Drainage Class: Moderately well drained

On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-17	10YR3/3	None		SI L

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:

Depth to Free Water:

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments:

DETERMINATION

WETLAND? YES NO Comments: No hydric soil or wetland hydrology observed.

Appendices

Boiler Plate Information

References

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Boiler Plate Information

Wetland Definition and Authority

The U.S. Army Corps of Engineers (COE) regulates the discharge of dredged or fill materials into waters and adjacent wetlands of the United States under authority of Section 404 of the Clean Water Act (*Federal Register*, 1986). For purposes of the Section 404 permitting program, the COE and other federal agencies define wetlands as follows (*Federal Register*, 1980, 1982):

“Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.”

In Oregon, the Department of State Lands (DSL) regulates removal/fill permitting in wetlands under ORS 196.800 to 196.990, and OAR 141-85-005 to OAR 141-85-090, and uses the same definition.

Regulatory Context

In 1987, the COE published a manual (Corps of Engineers Wetlands Delineation Manual or 1987 manual), which describes methods for determining the extent of jurisdictional wetlands under Section 404 of the Clean Water Act (Environmental Laboratory, 1987). *The Federal Manual for Identifying and Delineating Jurisdictional Wetlands* was published two years later as a collaborative effort by the COE, U.S. Fish and Wildlife Service (USFWS), U.S. Environmental Protection Agency (EPA), and U.S. Soil Conservation Service (SCS), revised the 1987 manual (Federal Interagency Committee for Wetland Delineation, or 1989 manual).

Both the COE and DSL used the 1989 manual until 1992 when the 1992 Energy and Water Development Appropriation Act went into effect. The Act limited the COE (federal permitting agency) to using the 1987 manual for determining the extent of wetlands under federal jurisdiction. Oregon continued to use the 1989 manual until March 23, 1993, when the Director of DSL signed a policy statement requiring the agency to use the 1987 manual. The policy statement was the result of the EPA agreement to use the 1987 manual.

Vegetation

Plants growing in wetlands must be specifically adapted for life under saturated or anaerobic conditions and are commonly referred to as hydrophytic vegetation. The U.S.F.W.S. in cooperation with the National and Regional Interagency Review Panels publishes regional lists estimating the probability of plant species' occurrence in wetlands (e.g., Fish and Wildlife Service, 1988). Each species is given an *indicator status*, which represents the likelihood that it will be found in a wetland. Categories defined in Table 1

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are obligate (OBL), facultative wetland (FACW), facultative (FAC), facultative upland (FACU), or upland (UPL). Plants with an indicator status of OBL, FACW, or FAC are considered adapted for life in saturated or anaerobic soil conditions.

The percent coverage of each plant species within the herb, shrub, and tree layers was estimated at each sample plot. Shrubs within a five-foot radius and trees within a 30-foot radius of the center of each plot were identified and recorded. Within the plot, all species were recorded in descending order of coverage, and dominant species were determined. The presence of wetland vegetation was determined according to the indicator status of the dominant species within each vegetative stratum. According to the manual, a sample plot is considered to have wetland vegetation if more than 50% of the number of dominant species present has an indicator status of OBL, FACW, and/or FAC. By 1987 standards, dominant species are chosen by selecting the three most dominant species from each of the four strata (herbs, saplings/shrubs, woody vines, trees). If only one or two strata are represented, then the five most dominant species from each stratum are selected.

TABLE 1: DEFINITIONS OF INDICATOR STATUS

Indicator Symbol	Definition
OBL	Obligate. Species that occur in wetlands under natural conditions with an estimated probability of greater than 99%
FACW	Facultative wetland. Species that usually occur in wetlands (estimated probability 67 to 99%), but occasionally are found in non-wetlands.
FAC	Facultative. Species that are equally likely to occur in wetlands or non-wetlands (estimated probability 34 to 66%).
FACU	Facultative upland. Species that usually occur in non-wetlands (estimated probability 67 to 99%), but occasionally are found in wetlands.
UPL	Upland. Species that occur in non-wetlands under natural conditions with an estimated probability of greater than 99%
NI	No indicator. Species for which insufficient information was available to determine an indicator status.

Sources: Federal Interagency Committee for Wetland Delineation, 1989. Environmental Laboratory, 1987. Reed, 1988.

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Soils

Hydric soils, defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part of the soil profile, are one characteristic of wetlands (USDA Soil Conservation Service, 1987). A list of hydric soils of the United States was compiled by the Soil Conservation Service (SCS), in cooperation with the National Technical Committee for Hydric Soils (NTCHS). All soils are mapped in county soil surveys. However, the mapped boundaries of SCS soil types are not at a fine enough resolution for delineating boundaries of jurisdictional wetlands. Errors of omission can occur on SCS maps. Inclusions of upland (non-wetland) soil may exist in hydric soils and uplands may have inclusions of hydric soil. Therefore, field examination of soils is important for accurately delineating the extent of hydric soils. Hydric soils exhibit certain characteristics that can be observed in the field. Field indicators include: high organic content, accumulation of sulfidic material (rotten egg odor), greenish or bluish gray color (gley formation), iron and manganese concretions, spots or blotches of color (mottling), and/or dark soil colors (low soil chroma).

A shovel, excavating down to a depth of at least 16 inches, was used to sample soil along the wetland boundary. Soil samples were checked for presence of sulfide gases; organic content was estimated visually and texturally; and soil colors were determined by using a Munsell soil color chart (Kollmorgen 1975). The Munsell soil color chart provides the standard for three attributes of color: hue, value, and chroma.

According to the 1987 manual, hydric soils are required to be inundated or saturated for seven or more consecutive days during the growing season. Soil color is examined in the horizon immediately below the A-horizon, or within 10 inches of the surface, whichever is shallower.

Hydrology

Wetlands, by their very name, must have water. Jurisdictional wetlands are characterized as having permanent or periodic inundation, or soil saturation for five percent or more of the growing season. Saturation occurs when the capillary fringe is within the major portion of the root zone (usually within 12 inches of the surface). Areas meeting one of these criteria are considered to have wetland hydrology.

Ponding or soil saturation for five percent or more of the growing season during the growing season is direct evidence of wetland hydrology. Bare soil and dried algae are evidence that a site was previously inundated. Oxidized rhizospheres along live root channels also indicate soil saturation for five percent or more of the growing season. At each sample plot, wetland hydrology was assumed if positive indicators were present.

Wetland Determination

Presence or absence of wetlands was based on soil, vegetation, and hydrology data collected at sample plots. Following procedures outlined in the 1987 manual, sample plots with homogeneous vegetation were determined to be wetlands if wetland characteristics were present or judged to be normally present (barring human or unusual natural events) for all three parameters.

Difficulties in wetland determination can arise because of disturbance or in problem areas. Both human (e.g., clearing vegetation, agriculture, filling, and excavation) and natural (e.g., mudslides, fire, and beaver dams) events have potential for obliterating field indicators of the three wetland parameters. In disturbed sites, both field and offsite data may be used to determine the presence of a wetland. Offsite information such as historical records, aerial photographs, previous soil, and vegetation surveys may indicate the presence of a jurisdictional wetland.

Some sites are difficult to evaluate because field indicators may not be present throughout the year. Field indicators may vary because of changing environmental conditions that occur seasonally and not necessarily the result of human or natural disturbance.

According to the 1987 manual, all three parameters (hydric soils, hydrophytic vegetation, and wetland hydrology) must be present for an area to be determined as wetland. Drumlins, seasonal wetlands, prairie potholes, and vegetated flats exemplify areas that are difficult to evaluate.

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REFERENCES

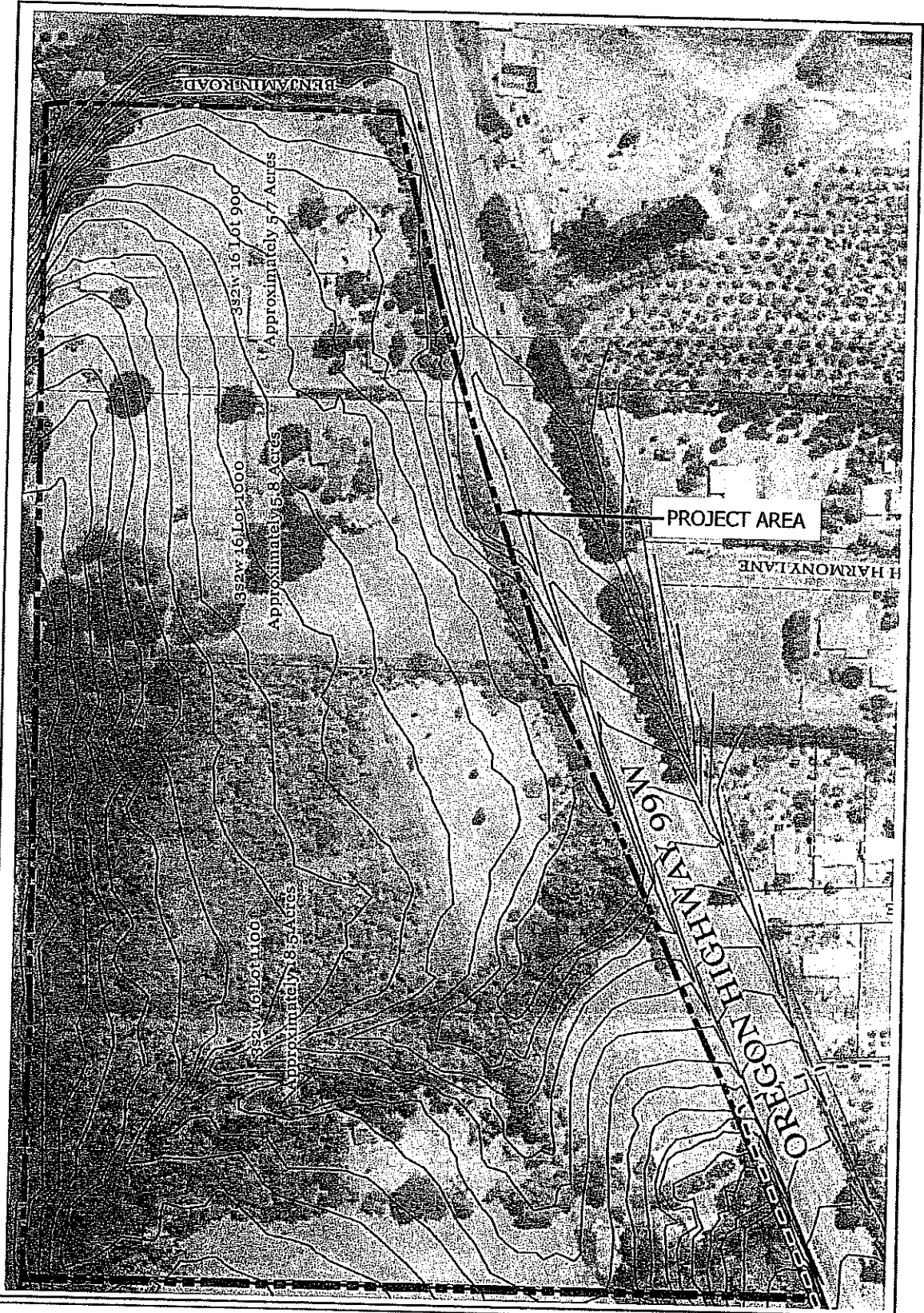
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Oregon

Theodore R. Kulongoski, Governor

Department of State Lands
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Salem, OR 97301-1279
(503) 378-3805
FAX (503) 378-4844
www.oregonstatelands.us.

RECEIVED

JUL 31 2018

February 4, 2008

Tim Speakman
New B. Properties, LLC
3401 SW Huber Street
Portland, OR 97219

Initial: _____

State Land Board
Theodore R. Kulongoski
Governor

Bill Bradbury
Secretary of State

Re: Wetland Delineation Report for 4505 E Portland Rd, Newberg; Yamhill
County; T 3S R 2W Sec. 16 Tax Lots 900, 1000 & 1100; WD #07-0345

Randall Edwards
State Treasurer

Dear Mr. Speakman:

The Department of State Lands has reviewed the wetland delineation report prepared by Schott and Associates for the site referenced above. Based upon the information presented in the report, we concur with the wetland and waterway boundaries as mapped in Wetland Map Pages 1 of 3 and 3 of 3 of the report. Within the study area, three wetlands (totaling approximately 2.24 acres) and two waterways within the mapped wetlands were identified. The wetlands and waterways are subject to the permit requirements of the state Removal-Fill Law. A state permit is required for cumulative fill or annual excavation of 50 cubic yards or more in the wetlands or below the ordinary high water line (OHWL) of a waterway (or the 2 year recurrence interval flood elevation if OHWL cannot be determined).

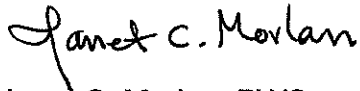
This concurrence is for purposes of the state Removal-Fill Law only. Federal or local permit requirements may apply as well. The Army Corps of Engineers will review the report and make a determination of jurisdiction for purposes of the Clean Water Act at the time that a permit application is submitted. We recommend that you attach a copy of this concurrence letter to both copies of any subsequent joint permit application to speed application review.

Please be advised that state law establishes a preference for avoidance of wetland impacts. Because measures to avoid and minimize wetland impacts may include reconfiguring parcel layout and size or development design, we recommend that you work with Department staff on appropriate site design before completing the city or county land use approval process.

This concurrence is based on information provided to the agency. The jurisdictional determination is valid for five years from the date of this letter, unless new information necessitates a revision. Circumstances under which the Department may change a determination and procedures for renewal of an expired determination are found in OAR 141-090-0045 (available on our web site or upon request). The applicant, landowner, or agent may submit a request for reconsideration of this determination in writing within 60 calendar days of the date of this letter.

Thank you for having the site evaluated. Please phone me at 503-986-5236 if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Janet C. Morlan". The signature is written in a cursive style with a large initial 'J'.

Janet C. Morlan, PWS
Wetlands Program Manager

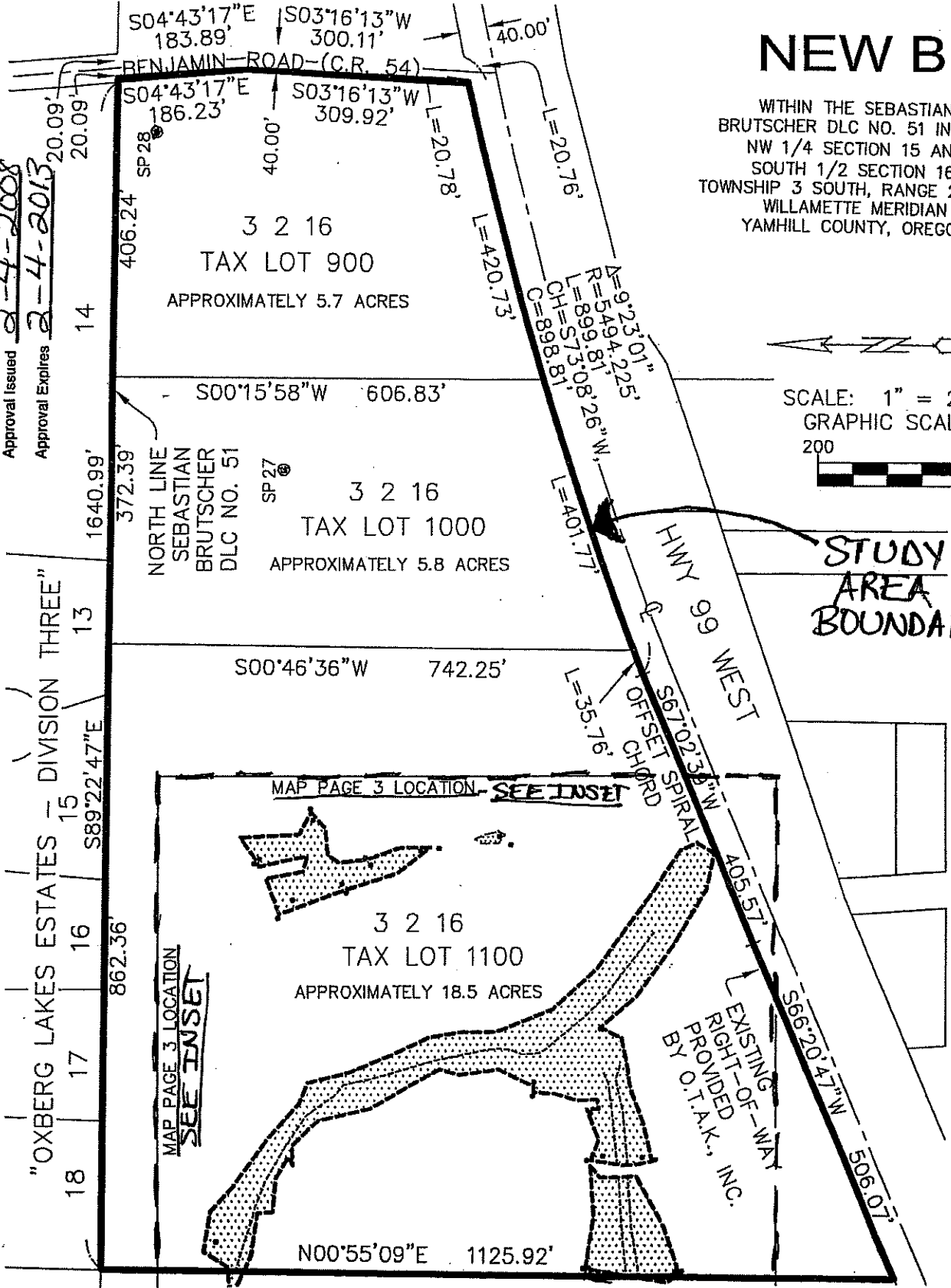
Enclosures

cc: Claudia Steinkoenig, Schott and Associates
City of Newberg, Planning Department
Tina Teed, Corps of Engineers
Carrie Landrum, DSL

DSL No. # 07-0345

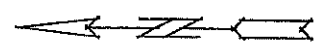
Approval Issued 2-4-2008
Approval Expires 2-4-2013

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NEW B

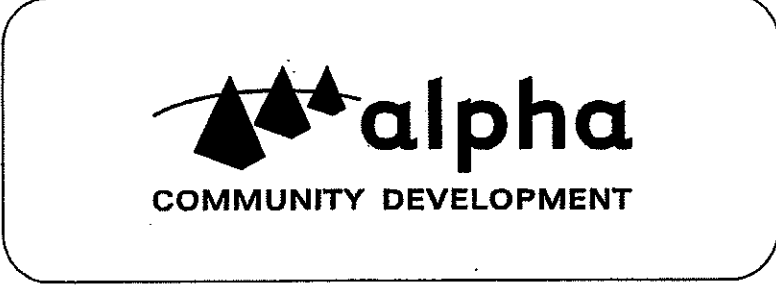
WITHIN THE SEBASTIAN BRUTSCHER DLC NO. 51 IN THE NW 1/4 SECTION 15 AND SOUTH 1/2 SECTION 16, TOWNSHIP 3 SOUTH, RANGE 2 WEST WILLAMETTE MERIDIAN YAMHILL COUNTY, OREGON



SCALE: 1" = 200'
GRAPHIC SCALE
200 0

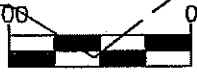
STUDY AREA BOUNDARY

DRAWN BY: MEM DATE: 4-12-07
 REVIEWED BY: MRG DATE: 4-12-07
 PROJECT NO.: 0428-0005
 SCALE: 1"=200'
 WETLAND MAP PAGE 1 OF 3



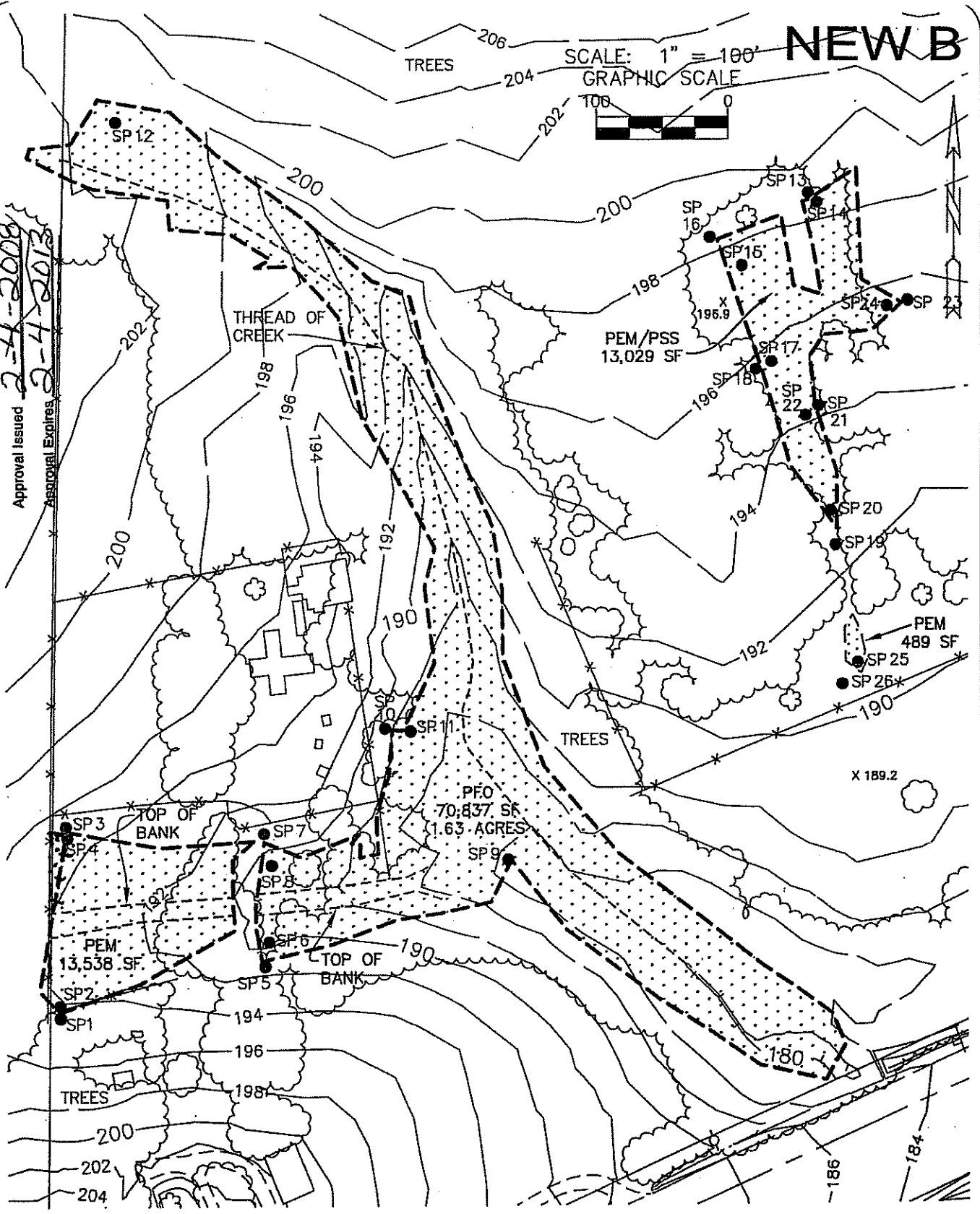
NEW B

SCALE: 1" = 100'
GRAPHIC SCALE



DSLWD # 07-6 345
Approval issued ~~2-11-2009~~
Approval Expires ~~2-4-2013~~

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DRAWN BY: MEM DATE: 4-12-07
REVIEWED BY: MRG DATE: 4-12-07
PROJECT NO.: 0428-0005
SCALE: 1"=100'
WETLAND MAP PAGE 3 OF 3



Site Data Sheet

Project Name: New B.
Project Number: 1985
Date of Site Visit: February 21 & 28, 2007

Applicant: Tim Speakman
Applicant's Address: 3401 SW Huber Street
Portland, Oregon 97219

Owner(s): Same
Owner(s) Address:

State: Oregon
County: Yamhill
Site Location: East of Victoria Way, North of 99W
USGS Quadrangle: Newberg
Latitude/Longitude: 45°18.738'N / 122°55.870'W
Tax Map Information: 3S2W Sect.16 TL 1100, 1000, 900

Watershed: Willamette River
Adjacent Waterbody: Tributary of Spring Brook Creek
In the Floodplain: Yes
Topography: Gentle to moderate slopes

Site Zoning: Agriculture/Forestry Small Holding (AF-10)
Proposed Use: Residential/Commercial
Present/Past Use: Rural/farmed
Surrounding Usage: residential to the north and west/ rural to the east

Determination: 2 unnamed tributaries of Spring Brook Creek, 0.32 acre PEM
wetland, 1.63 acre PFO wetland, 0.29 acre PEM/PSS
wetland

Days Since Last Rain: 0

Mapping accuracy: Alpha Community Development, PLS

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(A) Site Description

The 30-acre project area is located on the eastern edge of Newberg in Yamhill County, Oregon (SW1/4, NE1/4 Sec. 16, T3S, R2W TL#900, 1000, 1100)(Figure 1) just outside of the city limits. The southern boundary abuts city limits. The study area is west of Benjamin Road and east of Victoria Way. Hwy 99W forms the southern property boundary. The new Providence Hospital (zoned I- Institutional) is to the southwest. The three tax lots that comprise the study area are designated as Agricultural/Forestry Small Holdings (AF-10).

For the purposes of this report, the project area will be described by tax lot. Tax lot 900 is located west of Benjamin Road and north of Highway 99 West. The lot is approximately 5.7 acres and has two homes and two large barns on it. The topography has gentle to moderate slopes to the east. The majority of the property consists of horse pasture comprised of grasses and forbs that include colonial bentgrass (*Agrostis stolonifera*), Kentucky bluegrass (*Poa pratensis*), tall fescue (*Festuca arundinacea*) and white clover (*Trifolium repens*) as dominants. Ornamental species were observed around the homes.

Tax Lot 1000 is located west of tax lot 900. It is 5.8 acres and has a vet clinic and associated buildings in the center of it. The topography slopes gently to the south, southeast. Fenced pastures are located on the south and north end of the property. Dominant vegetation includes bentgrass, Kentucky bluegrass, tall fescue and orchard grass (*Dactylis glomerata*). Groupings of Oregon Oak (*Quercus garryana*) and Douglas fir (*Pseudotsuga menziesii*) were scattered along the northern and western property perimeter.

Tax lot 1100 is 18.5 acres and located on the west end of the study area. Topography on the west end slopes gently east to two unnamed tributaries. The mid and east section of the tax lot slopes predominantly south. There is an existing residential home on the southwest end of the property and some outbuilding north of the home. A small drainage located behind the home flows to the east and joins a larger tributary of Spring Brook Creek which flows south to the Willamette River. Three meadow communities were identified on site. The first is along the western property boundary. The second is located southeast of the residence and the third is on the south end of the tax lot. The vegetation in the meadow communities consisted of grasses and forbs that included tall fescue, Kentucky bluegrass, bentgrass, orchard grass (*Dactylis glomerata*), and white clover, queen Anne's lace (*Daucus carota*) and cat's ear (*Hypochoeris radicata*) as subdominants. An upland forest community was located on the northern property boundary and included Oregon oak, Douglas fir, and bigleaf maple (*Acer macrophyllum*).

The dominant species found in the shrub layer included Service berry (*Amelanchier alnifolia*), Indian plum (*Oemleria cerasiformis*), beaked hazelnut (*Corylus cornuta*) and common snowberry (*Symphoricarpos albus*). Sword fern (*Polystichum munitum*) and English ivy (*Hedera helix*) were the dominants in the herbaceous layer.

A forested riparian area was located adjacent to the largest tributary. The tree species in the riparian forest include Oregon ash (*Fraxinus latifolia*) and willow (*Salix sp.*) Shrub communities varied from area to area along the drainage. Portions of the shrub layer consisted of a dense layer of Himalayan blackberry interspersed with dense patches of Nookta rose (*Rosa mutkana*) and Douglas spiraea (*Spiraea douglasii*). Species identified in the herbaceous layer included slough sedge (*Carex obnupta*), water parsley (*Oenanthe sarmentosa*) and bentgrass.

The National Wetland Inventory (NWI) map for Newberg shows a tributary of Spring Brook Creek on the west end of the study area. There is no Local Wetland Inventory (LWI) for the area. The Yamhill County Soil Survey indicated two mapping units on the property that include Woodburn silt loam and Amity silt loam. The topographic map shows a site gently sloping north, northeast.

Project purpose

The site is proposed for commercial development to service the new hospital across the street and the adjacent residential areas. The developer of the site is currently applying for annexation into the city of Newberg and rezoning designation to Community Commercial.

(B) Wetland Description

Based on soil, hydrology and vegetation data taken on site two unnamed tributaries of Spring Brook Creek, and four wetlands were delineated. Two of the wetlands are adjacent to the tributaries. A 0.31 acres palustrine emergent/RFT wetland is located along a short portion of the smaller tributary on the west end of the property. The second wetland is 1.63 acres palustrine forested/RFT wetland adjacent to the remaining portion of the smaller tributary and the entire length of the larger tributary. The other two wetlands are isolated and located in the north mid-section of the property. The larger wetland is 0.29 acre and classified as palustrine emergent/scrub-shrub/slope wetland. The smaller one is 0.011 acres classified as a palustrine emergent/slope wetland.

A small seasonal drainage channel enters on the southwest end of tax lot 1100. It is the extension of a drainage located on the adjoining property to the west. The hydrology of the channel is associated with stormwater runoff from the neighborhood to the west. The drainage channel is u-shaped with a varying width of 2 to 3 feet and depth of approximately 3.5 feet. It has a mud and small cobble substrate bottom. The drainage flows east and drains into a larger tributary of Spring Brook Creek. Duckweed (*Lemna*

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minor) was observed growing in portions of the drainage. The drainage has a defined channel for approximately 250 feet and then flattens out, draining as surface and subsurface lateral flow into the tributary of Spring Brook Creek.

A larger, unnamed perennial tributary of Spring Brook Creek enters the northwest corner of tax lot 1100 and exits the property on the south side. It flows to the south joining Spring Brook Creek on the south side of Hwy 99W. Portions of the creek are confined to a single channel while other portions of the channel are braided.

Two wetlands were identified adjacent to the two tributaries. The first is a 0.31 acre palustrine emergent (PEM/RFT) wetland. It was located on the west end of the study site where the smaller drainage entered the site. The plant community in this area is a meadow comprised of grasses and forbs. The dominant species are tall fescue and bentgrass. Hydrology for the wetland on the north and south side of the drainage is associated with precipitation, a seasonal high water table and overflow from the drainage during winter high water.

The second wetland is 1.63 acres and forested (PFO/RFT). The dominant tree in the canopy is Oregon ash (*Fraxinus latifolia*). The shrub layer consists of large dense patches of Douglas spirea (*Spiraea douglasii*) and nootka rose (*Rosa nutkana*). The herbaceous layer includes large patches of slough sedge (*Carex obnupta*) and water parsley (*Oenanthe sarmentosa*). Hydrology of the wetland is associated with precipitation, a seasonal high water table and overflow from the drainage during winter high water. The southern end of the drainage is fed by a perennial spring.

The other two wetlands are isolated and located in the north mid-section of the property. The larger wetland is 0.29 acres and classified as palustrine emergent/scrub-shrub/slope wetland. The dominant vegetation in the emergent portion is meadow foxtail (*Alopecurus pratensis*) and bentgrass (*Agrostis stolonifera*). The shrubs in the scrub shrub communities were nootka rose (*Rosa nutkana*) with scattered patches of hawthorn (*Crataegus sp.*). The second isolated wetland is immediately below the first. It consists of a small depressional area with colonial bentgrass and meadow foxtail as the dominants.

The analysis of wetlands conducted on this site was based on published methods for implementing Section 404 of the Clean Water Act. The 1987 manual was used to satisfy the requirements of the COE on non-agricultural land. The manual requires three parameters to be examined: vegetation, soils, and hydrology. According to the 1987 manual, independent evidence of hydrophytic vegetation, hydric soils, and wetland hydrology must be present for an area to be declared a wetland. The analysis of wetlands on the project site was conducted by reviewing and analyzing existing site-specific literature and by field investigation.

(C) Site Analysis

The three tax lots that comprise the study area are designated as Agricultural/Forestry Small Holdings (AF-10). There was no evidence of alterations to the drainages observed onsite. The hydrology associated with the smaller drainage is stormwater runoff from the neighborhood to the west.

(D) Site Specific Methods

The Routine Onsite Determination Method (1987 manual, pp. 52-69) was used to determine the State of Oregon wetland boundaries and the Federal jurisdictional wetlands. The entire study area was walked and observed for wetland characteristics. Sample plots were dug and placed in areas determined to meet all wetland criteria. Adjacent plots were placed in the upland.

The first area investigated was located on the west end of the study site. A drainage swale located on the adjacent property to the west extended east into the study area. A delineation for the property to the west was conducted a year ago and is pending review by DSL. The area consists of a grazed meadow community with dominant grasses of bentgrass and fescue. Areas with wetland characteristics extend north and south of the drainage by approximately 30-40 feet. The source of hydrology for the wetland on the north and south side of the drainage is associated with precipitation, a seasonal high water table and overflow from the drainage during winter high water. The area had recently received days of heavy rain so that the ground water table was exceptionally high.

Along the north side of the swale the wetland boundary was determined predominantly by soil and hydrology since the vegetation in both wetland and upland were the same. On the south side of the swale the vegetation was the determining factor. The soil matrix color in the wetland varied between 10YR3/1 with redox concentrations of 10YR3/4 in sample plot 2 and 10YR3/2 with redox concentrations of 10YR3/6 in sample plot 4. Both sample plots had a depth to free water between 6 and 8 inches.

The upland area on the south side of the swale was determined by the vegetation. The topography was slightly higher and Himalayan blackberry formed a dense hedge. Some Douglas fir trees were planted in this area as well. On the north side of the swale the upland area did not have hydric soil or wetland hydrology.

Approximately 130 feet east of the property line a small berm built for vehicle access to the back barn area crosses the drainage and wetland area. The berm has been in place on the property well over fifty years. The drainage crosses the berm via a small culvert. It flows an additional 120 feet before it becomes an undefined channel and flows as broad sheet flow into the other tributary.

The wetland continues past the berm and is located adjacent to the tributaries. The plant community on the east side of the berm slowly transitions from a meadow into a forested community that joins the riparian community along the main tributary. Soils in this portion of the wetland (Sample plot, 8, 9 & 11) predominantly have a matrix value of 10YR3/2 with redox concentrations of 10YR3/6.

The upland edge was obvious by topography as well as vegetation and hydrology. The overstory transitioned from Oregon ash into Oregon oak and Douglas fir on the north end. Further south the vegetation in the upland riparian area had Oregon ash mixed with common snowberry (*Symphoricarpos alba*), beaked hazelnut (*Corylus cornuta*) and Himalayan blackberry. Upland soils observed along the tributaries included matrix colors of 10YR3/3 (sample plot 5), from 0 to 12 inches, 10YR4/2 (sample plot 7) and (10YR3/2) (sample plot 10). No redox concentration were observed within 10 inches and no evidence of wetland hydrology was observed.

The wetland identified in the middle of tax lot 1100 consists of an emergent and scrub shrub wetland. The majority of it is located in a clearing surrounded by dense thickets of English hawthorn, Himalayan blackberry and various overgrown fruit trees. The vegetation in the northern portion of the wetland consisted of scattered dense thickets of nootka rose (*Rosa nutkana*). Meadow foxtail was the dominant grass. The soil matrix color varied between 10YR3/2 and 10YR4/2 with redox concentrations that varied in color. The hydrology of the wetland was associated with overland sheet flow and a seasonal high water table. The wetland was hummocky with slight shift in topography along the upland edge.

The vegetation in the upland area was similar to the wetland vegetation. The upland area had a predominant soil color of 10YR3/2 with no redox concentrations (sample plot 13, 16, 18, 19, 23, 26) and no wetland hydrology.

(E) Deviation

No deviations were observed. The National Wetland Inventory (NWI) map for Newberg did not show any wetlands in the project area. It did show the tributary of Spring Brook Creek on the western portion of the study area. There is no Local Wetland Inventory (LWI) for the area.

(F) Methods of Determining Other Waters of the State

No other waters of the state were observed onsite. The top of bank was defined for the smaller tributary that flow west to east. The larger tributary had the center line mapped for the main branch of the creek, because the mid section is braided.

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(G) Additional Info

None.

(H) Statement of Mapping Accuracy

The wetland boundaries were flagged and the flags were surveyed by Alpha Community Development, PLS.

(I) Date of Investigation

The site was visited on February 21 and 28, 2007.

(J) Weather

The weather on the day of the February 21 site visit was cold and rainy. The day before 0.67 inches of rain were recorded at the Forest Grove weather station. 2.48 inches of rain were recorded for the past two weeks.

The weather on the day of the February 28 site visit was cold interspersed with periods of hail, rain and sun. There was 0.26 inches of rain the day prior to the site visit. 3.21 inches of rain were recorded for the past two weeks. This is 52 percent of the average for the entire month. A total of 36.56 inches were recorded since October 1, 2006. This is 115 percent of the water year average.

(K) Results and Conclusions

The National Wetland Inventory (NWI) map did not show any onsite wetlands however it did show a tributary of Spring Brook Creek on the west end of the site. There is no Local Wetland Inventory for the Newberg area. The Yamhill County Soil Survey mapped two soil series on the subject property: Amity silt loam and Woodburn silt loam 0 to 7 percent slopes and 7 to 12 percent slopes. The Amity series is somewhat poorly drained. This soil series is not listed as hydric however it does have hydric inclusions. Some of the soil observed on site matched the Amity series.

Based on soil, hydrology and vegetation data taken on site two unnamed tributaries of Spring Brook Creek, and four wetlands were delineated. The smaller drainage is seasonal, the larger has recently developed a perennial flow. Two of the wetlands are adjacent to the tributaries: A 0.31 acres palustrine emergent/RFT wetland is located along a short portion of the smaller tributary on the west end of the property. The second wetland is 1.63 acres palustrine forested/RFT wetland adjacent to the tributaries. The other two wetlands are isolated and located in the north mid-section of the property. The larger wetland is 0.29 acre and classified as palustrine emergent/scrub-shrub/slope wetland. The smaller one is 0.011 acres classified as a palustrine emergent/slope wetland.

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(L) Required Disclaimer

This report documents the investigation, best professional judgment and the conclusions of the investigator. It is correct and complete to the best of my knowledge. It should be considered a Preliminary Jurisdictional Determination of wetlands and other waters and used at your own risk unless it has been reviewed and approved in writing by the Oregon Department of State lands in accordance with OAR 141-090-0005 through 141-090-0055.

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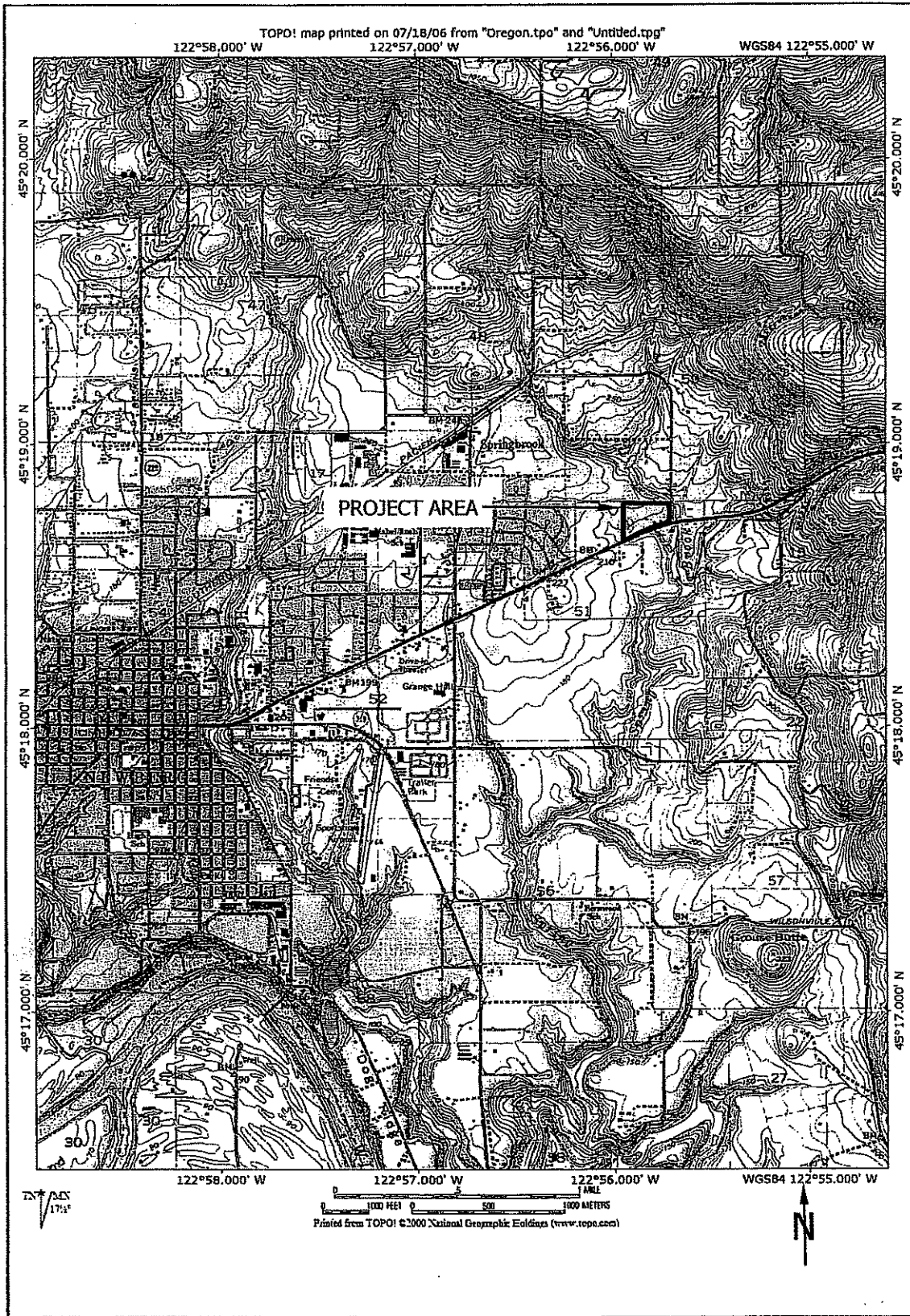


FIGURE 1. SITE VICINITY MAP
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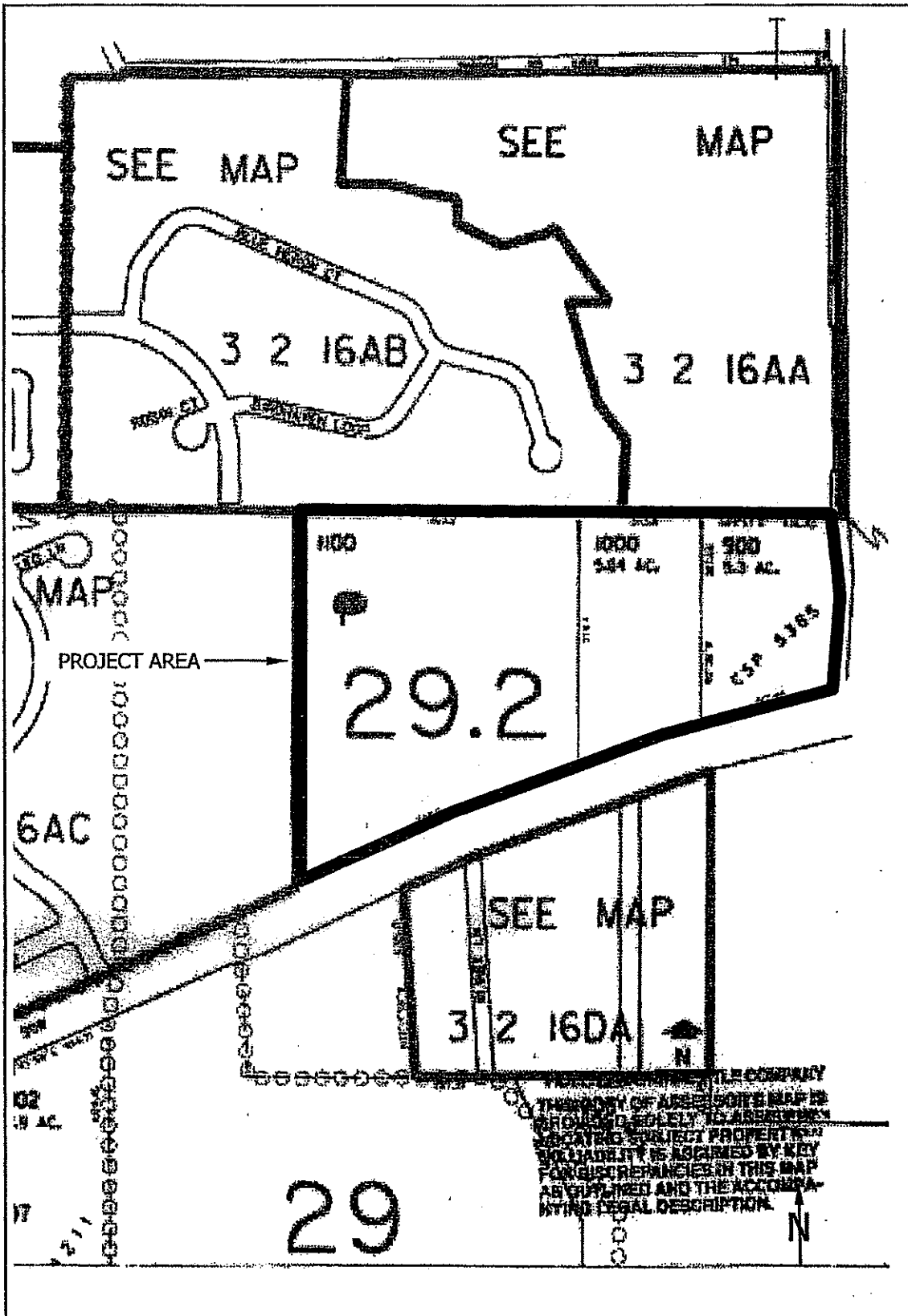


FIGURE 2. TAX MAP
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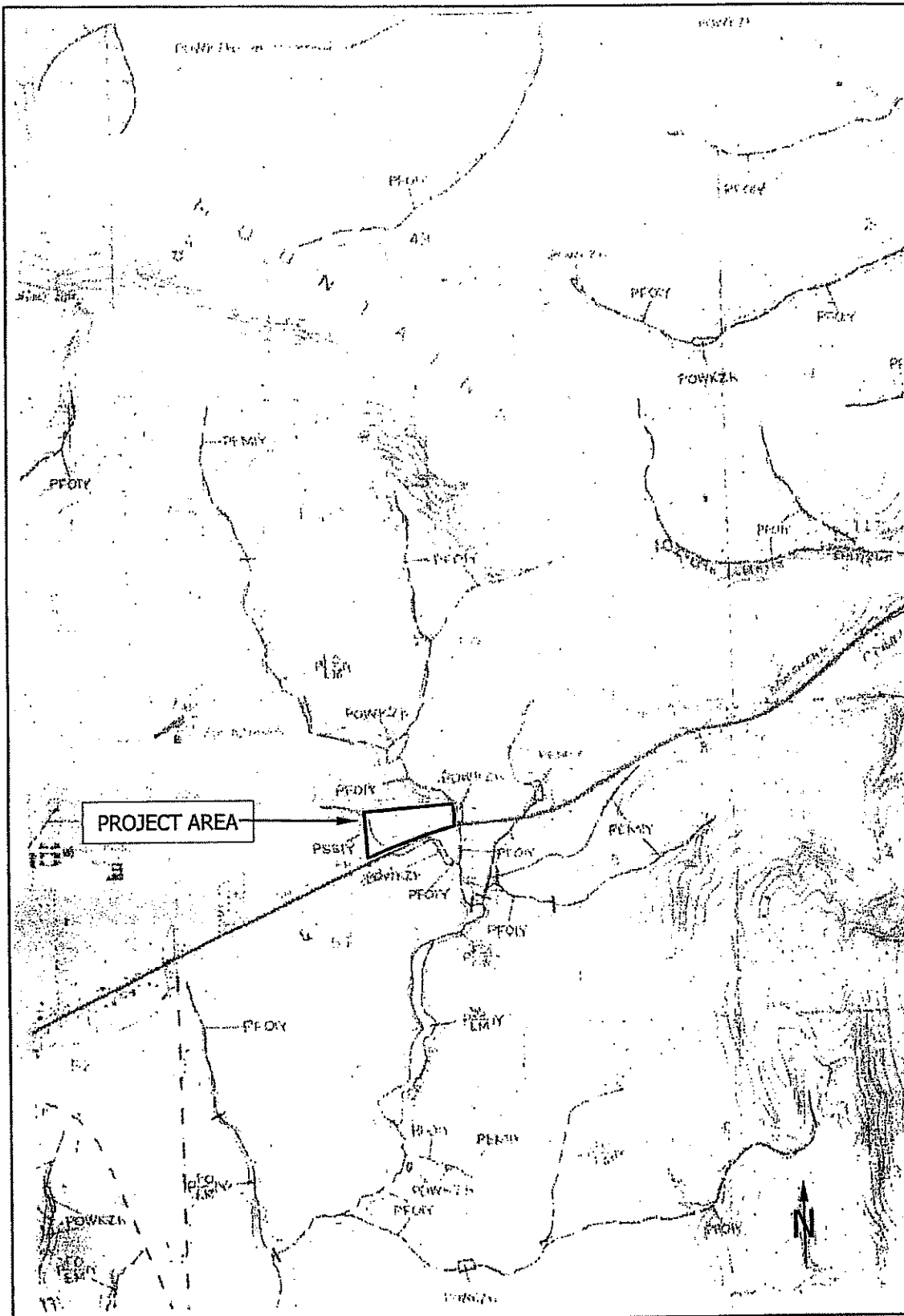


FIGURE 3. NEWBERG NWI
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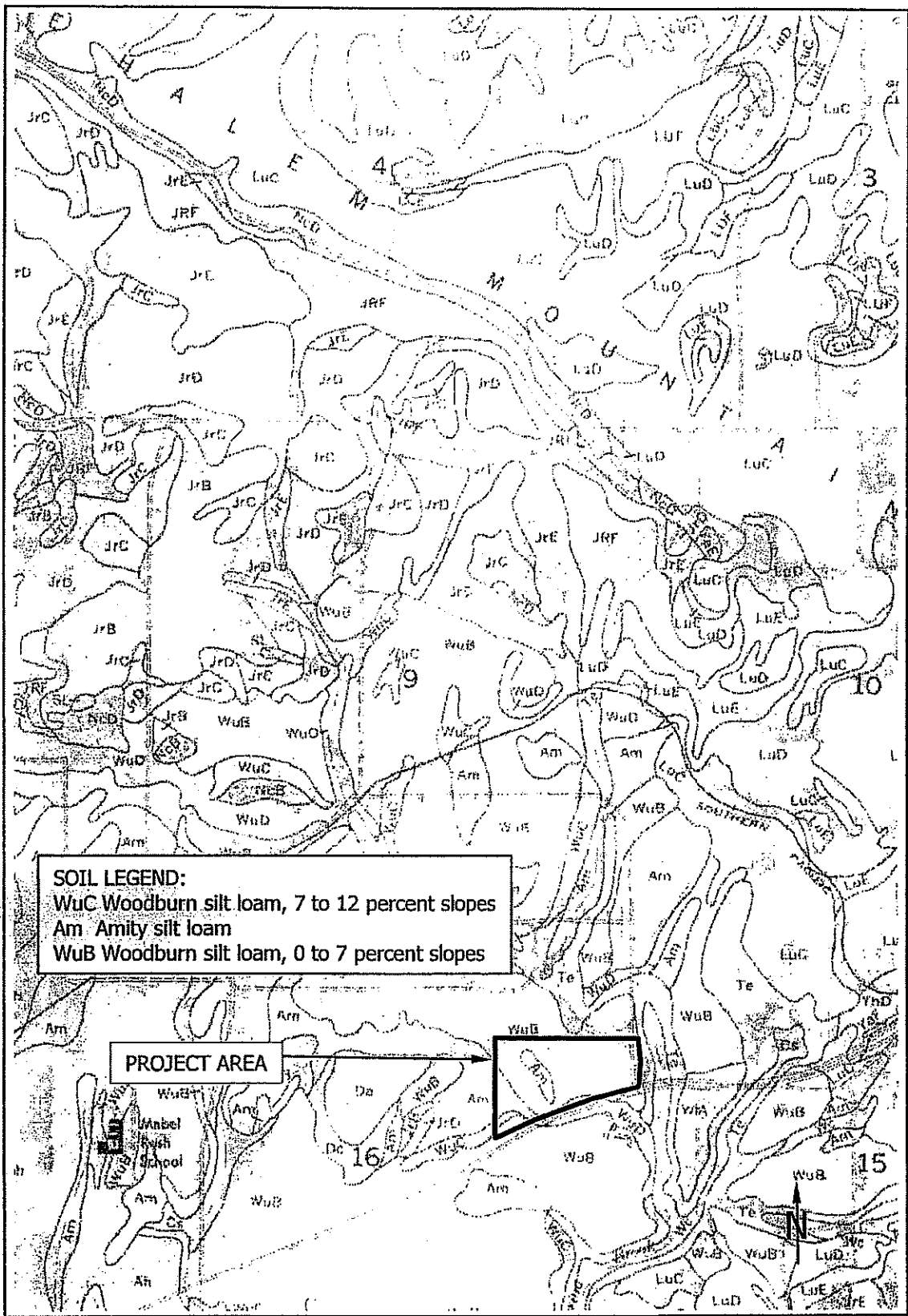


FIGURE 4. YAMHILL COUNTY SOIL SURVEY, SHEET 16
S&A #1985

Schott & Associates
P.O. Box 589
Aurora, OR. 97002
503.678.6007

Data Forms

Schott & Associates

Ecologists and Wetland Specialists

PO Box 589, Aurora, OR, 97002 • (503) 678-6007 • Fax (503) 678-6011

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S&A#: 1985

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM - Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #: 1985
Project/Contact: NewB./CS	Det. By: C. Steinkoenig		Plot #: 1
Plant Community: meadow			
Plot Location: south side of swale			
Recent Weather: rainy and cold			
Do normal environmental conditions exist? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	If no, explain:		
Has Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> Hydrology <input type="checkbox"/>	been significantly disturbed?		
Explain:			

VEGETATION

Tree Stratum				Herb Stratum			
Total Plot Cover: 5		2.5 = 50%	1. = 20%	Total Plot Cover: 100		50 = 50%	20 = 20%
Status/Raw % Cover				Status/Raw % Cover			
1. <i>Pseudotsuga menziesii</i>		FACU 5*		1. <i>Festuca arundinacea</i>		FAC- 100*	
2.				2.			
3.				3.			
4.				4.			
5.				5.			
6.				6.			
Sapling/Shrub Stratum							
Total Plot Cover: 20		10 = 50%	4 = 20%	Status/Raw % Cover			
1. <i>Rubus discolor</i>		FACU- 20*		7.			
2.				8.			
3.				9.			
4.				10.			
5.				11.			
6.				12.			

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-): 50
Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Hydrophytic veg. not exceeding 50 percent.

SOILS

Map Unit Name: Amity silt loam
On Hydric Soil List? Yes No

Drainage Class: Somewhat poorly drained
Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-8	10YR3/1	10YR3/4 FFD		S CL
8-16	10YR3/1	10YR3/4 CMP		CL

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Reducing Conditions (tests positive)
- Gleyed or low chroma colors
- Redox features within 10" (e.g., concentrations)

- Concretions/Nodules (w/in 3", > 2mm)
- High organic content in surface (in Sandy Soils)
- Organic streaking (in Sandy Soils)
- Organic pan (in Sandy Soils)
- Listed on Hydric Soils List (and soil profile matches)
- Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
- Supplemental indicator (e.g., NRCS field indicator)

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Criteria Met? Yes No

Depth to Saturation: 10"

Depth to Free Water:

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC - Neutral Test
- Other:

Comments: Recent heavy rains and high water table.

DETERMINATION

WETLAND? YES NO Comments: Area adjacent blackberry thicket and higher topography.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #:1985
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Project/Contact: NewB./CS
 Plant Community: meadow
 Plot Location: paired with sample plot 1
 Recent Weather: rainy and cold
 Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum				Herb Stratum			
Total Plot Cover:0		0 = 50%	0 = 20%	Total Plot Cover:100		50 = 50%	20 = 20%
Status/Raw % Cover				Status/Raw % Cover			
1.				1. <i>Agrostis stolonifera</i>		FAC 25*	
2.				2. <i>Poa pratensis</i>		FAC 10	
3.				3. MOSS		65	
4.				4.			
5.				5.			
Sapling/Shrub Stratum				6.			
Total Plot Cover:		= 50%	= 20%	Status/Raw % Cover	7.		
1.				8.			
2.				9.			
3.				10.			
4.				11.			
5.				12.			

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Hydrophytic veg. exceeds 50 percent.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-7	10YR3/1	10YR3/4 FFF		Si CL
7-16	10YR3/1	10YR3/4 CFD		CL

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input checked="" type="checkbox"/> Gleyed or low chroma colors
<input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: _____ Depth to Saturation:2" Depth to Free Water:6"

Primary Hydrology Indicators:

- Inundated
 Saturated in upper 12 inches
 Water Marks
 Drift Lines
 Sediment Deposits

Criteria Met? Yes No

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
 Water-stained leaves
 Local Soil Survey Data
 FAC – Neutral Test
 Other:

Comments: A lot of moss growing on ground.

DETERMINATION

WETLAND? YES NO Comments: Wetland criteria is met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM - Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #: 1985
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Project/Contact: NewB./CS
 Plant Community: meadow
 Plot Location: North side of swale
 Recent Weather: rainy and cold
 Det. By: C. Steinkoenig
 Plot #:3

Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover: 0	0 = 50%	0 = 20%	Total Plot Cover: 100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Agrostis stolonifera</i>		FAC 80*
2.			2. <i>Festuca arundinacea</i>		FAC- 15
3.			3. <i>Trifolium repens</i>		FACU+ 5
4.			4. <i>Daucus carota</i>		NOL trace
5.			5. <i>Geranium richardsonii</i>		trace
Sapling/Shrub Stratum			6. <i>Hypochoeris radicata</i>		trace
Total Plot Cover:	= 50%	= 20%	Status/Raw % Cover	7.	
1.			8.		
2.			9.		
3.			10.		
4.			11.		
5.			12.		

Hydrophytic Vegetation Indicators:
 > 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100
 Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Hydrophytic veg. exceeds 50 percent.

SOILS

Map Unit Name: Arnity silt loam
 On Hydric Soil List? Yes No
 Drainage Class: Somewhat poorly drained
 Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	None		CL L
12-16	10YR4/2	10YR4/4 CCP		SI CI

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:
 Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Criteria Met? Yes No

Depth to Saturation:

Depth to Free Water:

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root-Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC - Neutral Test
- Other:

Comments: .

DETERMINATION

WETLAND? YES NO Comments: No wetland soils or hydrology.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #:1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: meadow		Plot #:4	
Plot Location: Paired with sample plot 3			
Recent Weather: rainy and cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/>		Soil <input type="checkbox"/>	
		Hydrology <input type="checkbox"/> been significantly disturbed?	
Explain:			

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:0	0 = 50%	0 = 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Agrostis stolonifera</i>		FAC 80*
2.			2. <i>Festuca arundinacea</i>		FAC- 15
3.			3. <i>Moss</i>		NI 20
4.			4. <i>Daucus carota</i>		NOL trace
5.			5. <i>Geranium richardsonii</i>		trace
Sapling/Shrub Stratum			6.		
Total Plot Cover:	= 50%	= 20%	Status/Raw % Cover	7.	
1.				8.	
2.				9.	
3.				10.	
4.				11.	
5.				12.	

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100
Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Hydrophytic veg. exceeds 50 percent.

SOILS

Map Unit Name: Amity silt loam
On Hydric Soil List? Yes No

Drainage Class: Somewhat poorly drained
Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	10YR3/6 FFF		CL L
12-18	10YR4/2	10YR4/6 CMD		SI CI

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|--|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:5"

Depth to Free Water:8"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
 Saturated in upper 12 inches
 Water Marks
 Drift Lines
 Sediment Deposits

- Oxidized Root Channels (upper 12")
 Water-stained leaves
 Local Soil Survey Data
 FAC – Neutral Test
 Other:

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Wetland Criteria met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #:1985
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Project/Contact: NewB./CS
 Plant Community: Scrub-shrub
 Plot Location: South side of tributary.
 Recent Weather: rainy and cold
 Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:45	22.5 = 50%	9 = 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1. <i>Malus sp.</i>	NOL 30*		1. <i>Agrostis stolonifera</i>	FAC 25*	
2. <i>Crataegus monogyna</i>	FACU+ 15*		2. <i>Festuca arundinacea</i>	FAC- 50*	
3.			3. <i>Dactylis glomerata</i>	FACU 25*	
4.			4.		
5.			5.		
Sapling/Shrub Stratum					
Total Plot Cover:20	10= 50%	4= 20%	Status/Raw % Cover	7.	
1. <i>Rubus discolor</i>			FACU- 20*	8.	
2.				9.	
3.				10.	
4.				11.	
5.				12.	

Hydrophytic Vegetation Indicators:
 > 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):40
 Other hydrophytic vegetation indicators:
Criteria Met? Yes No **Comments:** Hydrophytic veg does not exceed 50%. FEAR used as FAC veg.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/3	None		CL L
12-16	10YR3/4			SI Cl

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:
 Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: Depth to Saturation: Depth to Free Water: 14"

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: Depth to free water in pit at 14 inches.

DETERMINATION

WETLAND? YES NO **Comments:** Wetland criteria not met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #:1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: meadow		Plot #:6	
Plot Location: Paired with sample plot 5			
Recent Weather: rainy and cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/>		Soil <input type="checkbox"/>	
Explain:		Hydrology <input type="checkbox"/> been significantly disturbed?	

VEGETATION

Tree Stratum				Herb Stratum			
Total Plot Cover:0		= 50%	= 20%	Total Plot Cover:100		50 = 50%	20 = 20%
Status/Raw % Cover				Status/Raw % Cover			
1.				1.	<i>Agrostis stolonifera</i>		FAC 25*
2.				2.	<i>Festuca arundinacea</i>		FAC- 50*
3.				3.	<i>Dactylis glomerata</i>		FACU 25*
4.				4.			
5.				5.			
Sapling/Shrub Stratum				6.			
Total Plot Cover:		= 50%	= 20%	Status/Raw % Cover		7.	
1.				8.			
2.				9.			
3.				10.			
4.				11.			
5.				12.			

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):66
 Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Hydrophytic veg exceeds 50%. FEAR used as FAC veg.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-11	10YR4/1	10YR4/4 FFD		Si CL
11-15	10YR3/4			SI Cl

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input checked="" type="checkbox"/> Gleyed or low chroma colors
<input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:

Depth to Free Water:7"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: Wetland hydrology observed.

DETERMINATION

WETLAND? YES NO Comments: Wetland criteria is met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #:1985
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Project/Contact: NewB./CS
 Plant Community: meadow
 Plot Location: Paired w/8-N side of seasonal drainage-E. of berm
 Recent Weather: rainy and cold
 Det. By: C. Steinkoenig
 Plot #:7

Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:0	= 50%	= 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Poa pratensis</i>		FAC 75*
2.			2. <i>Festuca arundinacea</i>		FAC- 10
3.			3. <i>Trifolium latifolia</i>		FACU+ 15
4.			4. <i>Chrysanthemum Leu.</i>		NI trace
5.			5.		
Sapling/Shrub Stratum			6.		
Total Plot Cover:	= 50%	= 20%	Status/Raw % Cover	7.	
1.			8.		
2.			9.		
3.			10.		
4.			11.		
5.			12.		

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100
 Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: FEAR (FAC-) used as FAC veg.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR4/2	None		Si CL
12-17	10YR4/2	10YR4/6 FFP		CL

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation: 10

Depth to Free Water: 12"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: Recent heavy rainfall.

DETERMINATION

WETLAND? YES NO Comments: Wetland soil criterion is not met. Subdominant veg. is upland and higher topography.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #:1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: meadow		Plot #:8	
Plot Location:			
Recent Weather: rainy and cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?			
Explain:			

VEGETATION

Tree Stratum				Herb Stratum											
Total Plot Cover:0		= 50%		= 20%		Total Plot Cover:100		50 = 50%		20 = 20%					
				Status/Raw % Cover								Status/Raw % Cover			
1.								1. <i>Poa pratensis</i>				FAC 85*			
2.								2. <i>Rumex crispus</i>				FAC+ 5			
3.								3. <i>Gernatium richardsoni</i>				FACU+ 10			
4.								4.							
5.								5.							
Sapling/Shrub Stratum								6.							
Total Plot Cover:		= 50%		= 20%		Status/Raw % Cover		7.							
1.								8.							
2.								9.							
3.								10.							
4.								11.							
5.								12.							

Hydrophytic Vegetation Indicators:
 > 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100
 Other hydrophytic vegetation indicators:
 Criteria Met? Yes No Comments: .

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	10YR3/6 MFD		Si CL
12-17	10YR4/2	10YR4/4 FFD		CL

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Reducing Conditions (tests positive)	<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Gleyed or low chroma colors	<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations)	<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
	<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator)

Criteria Met? Yes No

HYDROLOGY

Recorded Data:
 Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data
 Depth of inundation: _____ Depth to Saturation: to Surface _____ Depth to Free Water: 1" _____
Primary Hydrology Indicators:
 Inundated
 Saturated in upper 12 inches
 Water Marks
 Drift Lines
 Sediment Deposits
Criteria Met? Yes No

Secondary Hydrology Indicators (2 or more required):
 Oxidized Root Channels (upper 12")
 Water-stained leaves
 Local Soil Survey Data
 FAC – Neutral Test
 Other: .
 Comments: Recent heavy rainfall and high water table.

DETERMINATION

WETLAND? YES NO Comments: Wetland criteria met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill Date: 2/21 City: Newberg File #: 1985
 Project/Contact: NewB./CS Det. By: C. Steinkoenig
 Plant Community: forested Plot #: 9
 Plot Location: SW side of stream
 Recent Weather: rainy and cold
 Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover: 100	50 = 50%	20 = 20%	Total Plot Cover: 70	35 = 50%	14 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1. <i>Fraxinus latifolia</i>	FACW 100*		1. <i>Carex obnupta</i>	OBL 60*	
2.			2. <i>Oenanthe sarmentosa</i>	OBL 10	
3.			3.		
4.			4.		
5.			5.		
Sapling/Shrub Stratum			6.		
Total Plot Cover: 55	27.5 = 50%	11 = 20%	Status/Raw % Cover	7.	
1. <i>Rosa nutkana</i>	FAC 10		8.		
2. <i>Crataegus monogyna</i>	FACU+ 5		9.		
3. <i>Spirea douglasii</i>	FACW 40*		10.		
4.			11.		
5.			12.		

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-): 100

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments:

SOILS

Map Unit Name: Amity silt loam
 On Hydric Soil List? Yes No

Drainage Class: Somewhat poorly drained
 Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	10YR3/6 MFD		Si CL
12-17	10YR4/2	10YR4/4 FFD		CL

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Reducing Conditions (tests positive)
- Gleyed or low chroma colors
- Redox features within 10" (e.g., concentrations)
- Concretions/Nodules (w/in 3", > 2mm)
- High organic content in surface (in Sandy Soils)
- Organic streaking (in Sandy Soils)
- Organic pan (in Sandy Soils)
- Listed on Hydric Soils List (and soil profile matches)
- Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
- Supplemental indicator (e.g., NRCS field indicator)

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation: to Surface Depth to Free Water: 1"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: Recent heavy rainfall and high water table.

DETERMINATION

WETLAND? YES NO Comments: Wetland criteria met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #:1985
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Project/Contact: NewB./CS
 Plant Community: forested
 Plot Location: West side of stream
 Recent Weather: rainy and cold
 Def. By: C. Steinkoenig
 Plot #:10

Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:30	15 = 50%	6 = 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1. <i>Fraxinus latifolia</i>	FACW+30*		1. <i>Festuca arundinacea</i>	FAC- 15	
2.			2. <i>Dactylis glomerata</i>	FACU 35*	
3.			3. <i>Poa pratensis</i>	FAC 40*	
4.			4. <i>Taraxacum officinale</i>	NOL 10	
5.			5.		
Sapling/Shrub Stratum			6.		
Total Plot Cover:5	2.5 = 50%	1 = 20%	Status/Raw % Cover	7.	
1. <i>Corylus cornuta</i>	FACU+ 5*		8.		
2.			9.		
3.			10.		
4.			11.		
5.			12.		

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):50
 Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Does not exceed fifty percent.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-11	10YR3/2	None		Si CL
11-17	10YR3/3			CL

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:13"

Depth to Free Water:

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- | | |
|---|---|
| <input type="checkbox"/> Inundated
<input type="checkbox"/> Saturated in upper 12 inches
<input type="checkbox"/> Water Marks
<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Sediment Deposits | <input type="checkbox"/> Oxidized Root Channels (upper 12")
<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> FAC – Neutral Test
<input type="checkbox"/> Other: |
|---|---|

Criteria Met? Yes No

Comments: Recent heavy rainfall and high water table.

DETERMINATION

WETLAND? YES NO Comments: Criteria not met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #: 1985
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Project/Contact: NewB./CS
 Plant Community: forested
 Plot Location: paired with sample plot 10
 Recent Weather: rainy and cold
 Det. By: C. Steinkoenig
 Plot #: 11

Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum				Herb Stratum							
Total Plot Cover: 50		25 = 50%		10 = 20%		Total Plot Cover: 100		50 = 50%		20 = 20%	
Status/Raw % Cover				Status/Raw % Cover							
1. <i>Fraxinus latifolia</i>				1. <i>Poa pratensis</i>				FAC 50*			
2.				2. <i>Rumex crispus</i>				FAC+ 10			
3.				3. <i>Agrostis stolonifera</i>				FAC 40*			
4.				4.							
5.				5.							
Sapling/Shrub Stratum											
Total Plot Cover:		= 50%		= 20%		Status/Raw % Cover		7.			
1.				8.							
2.				9.							
3.				10.							
4.				11.							
5.				12.							

Hydrophytic Vegetation Indicators:
 > 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-): 100
 Other hydrophytic vegetation indicators:
 Criteria Met? Yes No Comments: .

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-11	10YR3/2	10YR3/6 FFF		Si CL
11-17	10YR4/2	10YR4/6 CFP		CL

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Reducing Conditions (tests positive)
- Gleyed or low chroma colors
- Redox features within 10" (e.g., concentrations)
- Concretions/Nodules (w/in 3", > 2mm)
- High organic content in surface (in Sandy Soils)
- Organic streaking (in Sandy Soils)
- Organic pan (in Sandy Soils)
- Listed on Hydric Soils List (and soil profile matches)
- Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
- Supplemental indicator (e.g., NRCS field indicator)

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: _____ Depth to Saturation: 6" Depth to Free Water: 9"

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Wetland Criteria is met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #:1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: forested		Plot #:12	
Plot Location: NW end of the property			
Recent Weather: rainy and cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/>		Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?	
Explain:			

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:95	47.5 = 50%	19 = 20%	Total Plot Cover:	= 50%	= 20%
Status/Raw % Cover			Status/Raw % Cover		
1. <i>Fraxinus latifolia</i>	FACW+ 95*		1.		
2.			2.		
3.			3.		
4.			4.		
5.			5.		
Sapling/Shrub Stratum			Sapling/Shrub Stratum		
Total Plot Cover:10	5= 50%	2.5= 20%	Status/Raw % Cover		
1. <i>Rubus discolor</i>	FACU 10*		7.		
2.			8.		
3.			9.		
4.			10.		
5.			11.		
			12.		

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):50
Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: BPJ. Blackberry not rooted in sample plot. Dominant cover is ash

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-18	10YR2/1			Si CL

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input checked="" type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|--|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:3"

Depth to Free Water:8"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- | | |
|--|--|
| <input type="checkbox"/> Inundated
<input checked="" type="checkbox"/> Saturated in upper 12 inches
<input type="checkbox"/> Water Marks
<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Sediment Deposits | <input type="checkbox"/> Oxidized Root Channels (upper 12")
<input checked="" type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> FAC – Neutral Test
<input type="checkbox"/> Other: |
|--|--|

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Wetland area adjacent to the creek. Wetland characteristic are met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
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Project/Contact: NewB./CS
 Plant Community: scrub-shrub/meadow
 Plot Location: northeast side if isolated wetland
 Recent Weather: cold and wet/hail
 Det. By: C. Steinkoenig
 Plot #:13

Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum				Herb Stratum			
Total Plot Cover:		= 50%	= 20%	Total Plot Cover:100		50 = 50%	20 = 20%
Status/Raw % Cover				Status/Raw % Cover			
1.				1.	<i>Alopecurus pratensis</i>		FACW 60*
2.				2.	<i>Agrostis stolonifera</i>		FAC 40*
3.				3.			
4.				4.			
5.				5.			
Sapling/Shrub Stratum				6.			
Total Plot Cover:10		5= 50%	2.5= 20%	Status/Raw % Cover		7.	
1. <i>Rubus discolor</i>				FACU 5*			
2. <i>Rosa nutkana</i>				FAC 5*			
3.				10.			
4.				11.			
5.				12.			

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):75

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Exceeds fifty percent.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-13	10YR3/2	None		Si CL
13-18	10YR3/2	10YR3/4 FFF		CL

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:3"

Depth to Free Water:6"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: Very high water table.

DETERMINATION

WETLAND? YES NO Comments: No hydric soil, rise in topogrpahy.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
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Project/Contact: NewB./CS
 Plant Community: scrub-shrub/meadow
 Plot Location: paired w/sample plot 13
 Recent Weather: cold and wet/hail
 Det. By: C. Steinkoenig
 Plot #:14

Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum				Herb Stratum			
Total Plot Cover:0		= 50%	= 20%	Total Plot Cover:100		50 = 50%	20 = 20%
Status/Raw % Cover				Status/Raw % Cover			
1.				1.	<i>Alopecurus pratensis</i>	FACW 60*	
2.				2.	<i>Agrostis stolonifera</i>	FAC 40*	
3.				3.			
4.				4.			
5.				5.			
Sapling/Shrub Stratum							
Total Plot Cover:10		5= 50%	2.5= 20%	Status/Raw % Cover		7.	
1.		<i>Rubus discolor</i>		FACU 5*		8.	
2.		<i>Rosa nutkana</i>		FAC 5*		9.	
3.						10.	
4.						11.	
5.						12.	

Hydrophytic Vegetation Indicators:
 > 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):75
 Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Exceeds fifty percent.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR4/2	10YR4/6 CFD		Si CL
12-18	10YR4/2	10YR4/4 FFF		CL

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|--|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: Depth to Saturation:to surface Depth to Free Water:0.5"

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Criteria Met? Yes No

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Comments: .

DETERMINATION

WETLAND? YES NO Comments: All wetland criteria met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
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Project/Contact: NewB./CS Det. By: C. Steinkoenig
 Plant Community: meadow Plot #:15

Plot Location: Northwest end of wetland

Recent Weather: cold and wet/hail

Do normal environmental conditions exist? Y N If no, explain:

Has Vegetation Soil Hydrology been significantly disturbed?

Explain:

VEGETATION

Tree Stratum				Herb Stratum		
Total Plot Cover:0	= 50%	= 20%		Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover				Status/Raw % Cover		
1.				1. <i>Alopecurus pratensis</i>		FACW 60*
2.				2. <i>Agrostis stolonifera</i>		FAC 40*
3.				3.		
4.				4.		
5.				5.		
Sapling/Shrub Stratum				6.		
Total Plot Cover:10	5= 50%	2.5= 20%	Status/Raw % Cover	7.		
1. <i>Rubus discolor</i>			FACU 5*	8.		
2. <i>Rosa nutkana</i>			FAC 5*	9.		
3.				10.		
4.				11.		
5.				12.		

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):75

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Exceeds fifty percent.

SOILS

Map Unit Name: Amity silt loam

Drainage Class: Somewhat poorly drained

On Hydric Soil List? Yes No

Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR4/2	10YR4/6 CFD		Si CL
12-18	10YR4/2	10YR4/4 FFF		CL

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|--|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation: to surface

Depth to Free Water: 0.5"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
 Saturated in upper 12 inches
 Water Marks
 Drift Lines
 Sediment Deposits

- Oxidized Root Channels (upper 12")
 Water-stained leaves
 Local Soil Survey Data
 FAC – Neutral Test
 Other:

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: All wetland criteria met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
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Project/Contact: NewB./CS Det. By: C. Steinkoenig
 Plant Community: meadow/scrub-shrub Plot #:16
 Plot Location: Paired with sample plot 15

Recent Weather: cold and wet/hail
 Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:15	7.5 = 50%	3 = 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1. <i>Quercus garryana</i>	UPL 5*		1. <i>Alopecurus pratensis</i>	FACW 40*	
2. <i>Malus sp.</i>	NOL 5*		2. <i>Agrostis stolonifera</i>	FAC 40*	
3.			3. <i>Dactylis glomerata</i>	FACU 15	
4.			4. <i>Chrysanthemum l.</i>	NOL 5	
5.			5. <i>Hypochoeris radicata</i>	FACU trace	
Sapling/Shrub Stratum			6.		
Total Plot Cover:15	7.5 = 50%	3 = 20%	Status/Raw % Cover	7.	
1. <i>Rubus discolor</i>			FACU 10*	8.	
2. <i>Crataegus sp.</i>			FAC/FACU+ 5*	9.	
3.				10.	
4.				11.	
5.				12.	

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):66
 Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Exceeds fifty percent. Sundominants are upland

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	None		Si CL
12-18	10YR4/2	None		CL

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm) |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High organic content in surface (in Sandy Soils) |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic streaking (in Sandy Soils) |
| <input type="checkbox"/> Reducing Conditions (tests positive) | <input type="checkbox"/> Organic pan (in Sandy Soils) |
| <input type="checkbox"/> Gleyed or low chroma colors | <input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches) |
| <input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration) |
| | <input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:6"

Depth to Free Water:9"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- | | |
|--|---|
| <input type="checkbox"/> Inundated | <input type="checkbox"/> Oxidized Root Channels (upper 12") |
| <input checked="" type="checkbox"/> Saturated in upper 12 inches | <input type="checkbox"/> Water-stained leaves |
| <input type="checkbox"/> Water Marks | <input type="checkbox"/> Local Soil Survey Data |
| <input type="checkbox"/> Drift Lines | <input type="checkbox"/> FAC – Neutral Test |
| <input type="checkbox"/> Sediment Deposits | <input type="checkbox"/> Other: |

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Wetland soil criterion is not met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill Date: 2/28/07 City: Newberg File #:1985

Project/Contact: NewB./CS Det. By: C. Steinkoenig
 Plant Community: meadow/scrub-shrub Plot #:17
 Plot Location: west side of wetland
 Recent Weather: cold/wet
 Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:	= 50%	= 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Alopecurus pratensis</i>		FACW 30*
2.			2. <i>Agrostis stolonifera</i>		FAC 55*
3.			3. <i>Juncus patens</i>		FACW 15
4.			4. <i>Vicia americana</i>		trace
5.			5.		
Sapling/Shrub Stratum			6.		
Total Plot Cover:15	7.5= 50%	3= 20%	Status/Raw % Cover	7.	
1. <i>Rosa nutkana</i>			FAC 15*	8.	
2.				9.	
3.				10.	
4.				11.	
5.				12.	

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100
 Other hydrophytic vegetation indicators:
 Criteria Met? Yes No Comments: Mets wetland vegetation criteria.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-11	10YR3/2	10YR4/6 FFF		CL L
11-16	10YR4/1	10YR4/6 CFD		Si CL

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Reducing Conditions (tests positive)
- Gleyed or low chroma colors
- Redox features within 10" (e.g., concentrations)
- Concretions/Nodules (w/in 3", > 2mm)
- High organic content in surface (in Sandy Soils)
- Organic streaking (in Sandy Soils)
- Organic pan (in Sandy Soils)
- Listed on Hydric Soils List (and soil profile matches)
- Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
- Supplemental indicator (e.g., NRCS field indicator)

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:1.5" Depth to Free Water:1.5"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits
- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Wetland criteria met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: meadow/scrub-shrub		Plot #:18	
Plot Location: Paired w/17			
Recent Weather: cold /wet			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?			
Explain:			

VEGETATION

Tree Stratum				Herb Stratum			
Total Plot Cover:0		= 50%	= 20%	Total Plot Cover:100		50 = 50%	20 = 20%
Status/Raw % Cover				Status/Raw % Cover			
1.				1. <i>Alopecurus pratensis</i>			FACW 30*
2.				2. <i>Agrostis stolonifera</i>			FAC 55*
3.				3. <i>Juncus patens</i>			FACW 15
4.				4. <i>Vicia americana</i>			trace
5.				5.			
Sapling/Shrub Stratum				6.			
Total Plot Cover:15		7.5= 50%	3= 20%	Status/Raw % Cover		7.	
1. <i>Rosa nutkana</i>				FAC 15*		8.	
2.						9.	
3.						10.	
4.						11.	
5.						12.	

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100
 Other hydrophytic vegetation indicators:
 Criteria Met? Yes No Comments: Mets wetland vegetation criteria.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-13	10YR3/2	None		Si L
13-18	10YR4/2	10YR4/6 CFD		Si CL

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:4"

Depth to Free Water:4"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
 Saturated in upper 12 inches
 Water Marks
 Drift Lines
 Sediment Deposits

- Oxidized Root Channels (upper 12")
 Water-stained leaves
 Local Soil Survey Data
 FAC – Neutral Test
 Other:

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Slight shift in topography, no hydric soil indicators observed.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: meadow/scrub-shrub		Plot #:19	
Plot Location: South end of wetland			
Recent Weather: cold/wet			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/>		Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?	
Explain:			

VEGETATION

Tree Stratum				Herb Stratum							
Total Plot Cover:0		= 50%		= 20%		Total Plot Cover:55		27.5 = 50%		11 = 20%	
Status/Raw % Cover						Status/Raw % Cover					
1.				1. <i>Alopecurus pratensis</i>				FACW 20*			
2.				2. <i>Agrostis stolonifera</i>				FAC 35*			
3.				3.							
4.				4.							
5.				5.							
Sapling/Shrub Stratum						6.					
Total Plot Cover:60		30= 50%		6= 20%		Status/Raw % Cover		7.			
1. <i>Rubus discolor</i>				FACU 45*				8.			
2. <i>Quercus garryana</i>				UPL 5				9.			
3. <i>Crataegus sp.</i>				FAC/FACU 5				10.			
4. <i>Malus sp.</i>				NOL 5				11.			
5.								12.			

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):66

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Mets wetland vegetation criteria.

SOILS

Map Unit Name: Amity silt loam

Drainage Class: Somewhat poorly drained

On Hydric Soil List? Yes No

Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-13	10YR3/2	None		Si L
13-18	10YR4/2	10YR4/6 CFD		Si CL

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm) |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High organic content in surface (in Sandy Soils) |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic streaking (in Sandy Soils) |
| <input type="checkbox"/> Reducing Conditions (tests positive) | <input type="checkbox"/> Organic pan (in Sandy Soils) |
| <input type="checkbox"/> Gleyed or low chroma colors | <input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches) |
| <input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration) |
| | <input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:4"

Depth to Free Water:6"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Slight shift in topography, no hydric soil indicators observed.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
Project/Contact: NewB./CS	Def. By: C. Steinkoenig		
Plant Community: meadow/scrub-shrub	Plot #:20		
Plot Location: paired w/19			
Recent Weather: cold/wet			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/>	Soil <input type="checkbox"/>	Hydrology <input type="checkbox"/>	been significantly disturbed?
Explain:			

VEGETATION

Tree Stratum				Herb Stratum			
Total Plot Cover:0		= 50%	= 20%	Total Plot Cover:100		50 = 50%	20 = 20%
Status/Raw % Cover				Status/Raw % Cover			
1.				1. <i>Alopecurus pratensis</i>			FACW 20*
2.				2. <i>Agrostis stolonifera</i>			FAC 80*
3.				3.			
4.				4.			
5.				5.			
Sapling/Shrub Stratum							
Total Plot Cover:15		7.5= 50%	3= 20%	Status/Raw % Cover			
1. <i>Crataegus sp.</i>				FAC or FACU+ 15			
2.				7.			
3.				8.			
4.				9.			
5.				10.			
				11.			
				12.			

Hydrophytic Vegetation Indicators:
 > 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100
 Other hydrophytic vegetation indicators:
 Criteria Met? Yes No Comments: Did not include hawthorn.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	10YR3/6 MFD		SI CL
12-18	10YR4/2	10YR4/6 CFD		Si CL

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|--|---|
- Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Primary Hydrology Indicators:

- Inundated
 Saturated in upper 12 inches
 Water Marks
 Drift Lines
 Sediment Deposits

Criteria Met? Yes No

Depth to Saturation: to surface

Depth to Free Water: 1"

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
 Water-stained leaves
 Local Soil Survey Data
 FAC – Neutral Test
 Other:

Comments: Area has patches of standing water.

DETERMINATION

WETLAND? YES NO Comments: Wetland criteria met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: meadow/scrub-shrub		Plot #:21	
Plot Location: east side if isolated wetland			
Recent Weather: cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/>		Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?	
Explain:			

VEGETATION

Tree Stratum				Herb Stratum			
Total Plot Cover:0		= 50%		= 20%		Total Plot Cover:55	
				27.5 = 50%		11 = 20%	
Status/Raw % Cover				Status/Raw % Cover			
1.				1. <i>Alopecurus pratensis</i>			FACW 20*
2.				2. <i>Agrostis stolonifera</i>			FAC 60*
3.				3. <i>Festuca aruninacea</i>			FAC- 20*
4.				4.			
5.				5.			
Sapling/Shrub Stratum							
Total Plot Cover:50		25= 50%		10= 20%		Status/Raw % Cover	
1. <i>Rubus discolor</i>				FACU 50*			
2.							
3.							
4.							
5.							

Hydrophytic Vegetation Indicators:
 > 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):75
 Other hydrophytic vegetation indicators:
 Criteria Met? Yes No Comments: Mets wetland vegetation criteria.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-13	10YR3/2	None		SI CL
13-18	10YR4/2	10YR4/6 FFD		SI CL

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|
- Criteria Met? Yes No

HYDROLOGY

Recorded Data:
 Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: _____ Depth to Saturation: _____ Depth to Free Water: _____

Primary Hydrology Indicators:
 Inundated
 Saturated in upper 12 inches
 Water Marks
 Drift Lines
 Sediment Deposits

Secondary Hydrology Indicators (2 or more required):
 Oxidized Root Channels (upper 12")
 Water-stained leaves
 Local Soil Survey Data
 FAC – Neutral Test
 Other: _____

Criteria Met? Yes No Comments: .

DETERMINATION

WETLAND? YES NO Comments: No wetland hydrology or hydric soils.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
Project/Contact: NewB./CS	Det. By: C. Steinkoenig		Plot #:22
Plant Community: meadow/scrub-shrub	Recent Weather: cold/wet		
Plot Location: Paired w/ sample plot 21	Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:		
Has Vegetation <input type="checkbox"/>	Soil <input type="checkbox"/>	Hydrology <input type="checkbox"/>	been significantly disturbed?
Explain:			

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:0	= 50%	= 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Alopecurus pratensis</i>		FACW 50*
2.			2. <i>Agrostis stolonifera</i>		FAC 45*
3.			3. <i>Moss</i>		5
4.			4.		
5.			5.		
Sapling/Shrub Stratum					
Total Plot Cover:5	2.5= 50%	1= 20%	Status/Raw % Cover	7.	
1. <i>Rubus discolor</i>			FACU 5 *	8.	
2.				9.	
3.				10.	
4.				11.	
5.				12.	

Hydrophytic Vegetation Indicators:
 > 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100
 Other hydrophytic vegetation indicators:
Criteria Met? Yes No **Comments:** Vegetation criterion is met.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	10YR3/6 CFF		Si L
12-18	10YR4/2	10YR4/6 MFD		Si CL

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|--|---|
- Criteria Met?** Yes No

HYDROLOGY

Recorded Data:
 Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data
 Depth of inundation: Depth to Saturation: Saturated to the surface Depth to Free Water:
Primary Hydrology Indicators: **Secondary Hydrology Indicators (2 or more required):**
 Inundated Oxidized Root Channels (upper 12")
 Saturated in upper 12 inches Water-stained leaves
 Water Marks Local Soil Survey Data
 Drift Lines FAC – Neutral Test
 Sediment Deposits Other:
Criteria Met? Yes No **Comments:** .

DETERMINATION

WETLAND? YES NO **Comments:** All wetland criteria is met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #: 1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: meadow/scrub-shrub		Plot #:23	
Plot Location:			
Recent Weather: cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/>		Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?	
Explain:			

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:0	= 50%	= 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Alopecurus pratensis</i>	FACW 20*	
2.			2. <i>Agrostis stolonifera</i>	FAC 50*	
3.			3. <i>Dactylis glomerata</i>	FACU 20*	
4.			4. <i>Chrysanthemum ;euc.</i>	NOL 5	
5.			5. <i>Aster sp.</i>	Unknown 5	
Sapling/Shrub Stratum			6.		
Total Plot Cover:35	17.5= 50%	7= 20%	Status/Raw % Cover		
1. <i>Rubus discolor</i>			FACU- 10*	7.	
2. <i>Rubus laciniatus</i>			FACU+ trace	8.	
3. <i>Rhamnus purshiana</i>			FAC- 5	9.	
4. <i>Crataegus sp</i>			FAC/FACU 20*	10.	
5.				11.	
				12.	

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):50

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Hawthron species not included.

SOILS

Map Unit Name: Amity silt loam

Drainage Class: Somewhat poorly drained

On Hydric Soil List? Yes No

Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-13	10YR3/2	None		SI L
13-18	10YR4/2	10YR4/6 MFD		Si CL

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Reducing Conditions (tests positive)
- Gleyed or low chroma colors
- Redox features within 10" (e.g., concentrations)

- Concretions/Nodules (w/in 3", > 2mm)
- High organic content in surface (in Sandy Soils)
- Organic streaking (in Sandy Soils)
- Organic pan (in Sandy Soils)
- Listed on Hydric Soils List (and soil profile matches)
- Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
- Supplemental indicator (e.g., NRCS field indicator)

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:

Depth to Free Water: 10"

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Vegetation and soil did not met wetland criteria.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: meadow/scrub-shrub		Plot #:24	
Plot Location: Paired w/ sample plot 23			
Recent Weather: cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/>		Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?	
Explain:			

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:0	= 50%	= 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Alopecurus pratensis</i>		FACW 50*
2.			2. <i>Agrostis stolonifera</i>		FAC 45*
3.			3. <i>Moss</i>		5
4.			4.		
5.			5.		
Sapling/Shrub Stratum			6.		
Total Plot Cover:30	15= 50%	6= 20%	Status/Raw % Cover	7.	
1. <i>Rosa nutkana</i>			FAC 30*	8.	
2.				9.	
3.				10.	
4.				11.	
5.				12.	

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100
 Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Vegetation criterion is met.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-10	10YR3/2	10YR3/6 MMF		Si L
10-16	10YR4/2	10YR4/6 MFD		Si CL

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|--|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: _____ Depth to Saturation: Saturated to the surface Depth to Free Water: _____

Primary Hydrology Indicators:

- Inundated
 Saturated in upper 12 inches
 Water Marks
 Drift Lines
 Sediment Deposits

Criteria Met? Yes No

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
 Water-stained leaves
 Local Soil Survey Data
 FAC – Neutral Test
 Other:

Comments: .

DETERMINATION

WETLAND? YES NO Comments: All wetland criteria is met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
-----------------	---------------	---------------	-------------

Project/Contact: NewB./CS
 Plant Community: meadow
 Plot Location: south of isolated wetland
 Recent Weather: cold/wet
 Det. By: C. Steinkoenig
 Plot #:25

Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:0	= 50%	= 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Alopecurus pratensis</i>	FACW 20*	
2.			2. <i>Agrostis stolonifera</i>	FAC 80*	
3.			3.		
4.			4.		
5.			5.		
Sapling/Shrub Stratum			6.		
Total Plot Cover:	= 50%	= 20%	Status/Raw % Cover	7.	
1.			8.		
2.			9.		
3.			10.		
4.			11.		
5.			12.		

Hydrophytic Vegetation Indicators:
 > 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100
 Other hydrophytic vegetation indicators:
 Criteria Met? Yes No Comments: Did not include hawthorn.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	10YR3/6 MFD		SI CL
12-18	10YR4/2	10YR4/6 CFD		Si CL

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|--|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation: to surface

Depth to Free Water: 1"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: Area has patches of standing water.

DETERMINATION

WETLAND? YES NO Comments: Wetland criteria met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #: 1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: meadow		Plot #: 26	
Plot Location: Paired w/sampleplot 25			
Recent Weather: cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?			
Explain:			

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover: 0	= 50%	= 20%	Total Plot Cover: 100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Alopecurus pratensis</i>		FACW 45*
2.			2. <i>Agrostis stolonifera</i>		FAC 55*
3.			3.		
4.			4.		
5.			5.		
Sapling/Shrub Stratum					
Total Plot Cover: 10	5 = 50%	2.5 = 20%	Status/Raw % Cover	7.	
1. <i>Rubus discolor</i>			FACU 5*	8.	
2. <i>Malus sp.</i>			NOL 5*	9.	
3.				10.	
4.				11.	
5.				12.	

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-): 66

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Mets wetland vegetation criteria.

SOILS

Map Unit Name: Amity silt loam

Drainage Class: Somewhat poorly drained

On Hydric Soil List? Yes No

Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	None		SIL
12-18	10YR4/2	10YR4/6 CFD		Si CL

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm) |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High organic content in surface (in Sandy Soils) |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic streaking (in Sandy Soils) |
| <input type="checkbox"/> Reducing Conditions (tests positive) | <input type="checkbox"/> Organic pan (in Sandy Soils) |
| <input type="checkbox"/> Gleyed or low chroma colors | <input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches) |
| <input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration) |
| | <input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation: 5"

Depth to Free Water: 5"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Soil did not met wetland criterion.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: meadow		Plot #:27	
Plot Location: Tax lot 1000 Vet Clinic			
Recent Weather: cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?			
Explain:			

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:0	= 50%	= 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Poa pratensis</i>		FAC 45*
2.			2. <i>Agrostis stolonifera</i>		FAC 50*
3.			3. <i>Rumex crispus</i>		FAC+ trace
4.			4. <i>Chrysanthemum Leuc.</i>		UPL trace
5.			5. <i>Trifolium repens</i>		FAC 15
Sapling/Shrub Stratum			6.		
Total Plot Cover:	= 50%	= 20%	Status/Raw % Cover	7.	
1.				8.	
2.				9.	
3.				10.	
4.				11.	
5.				12.	

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: .

SOILS

Map Unit Name: Woodburn silt loam 0-7% Drainage Class: Moderately well drained

On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-16	10YR3/3	None		SI L

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:

Depth to Free Water:

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- | | |
|---|---|
| <input type="checkbox"/> Inundated
<input type="checkbox"/> Saturated in upper 12 inches
<input type="checkbox"/> Water Marks
<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Sediment Deposits | <input type="checkbox"/> Oxidized Root Channels (upper 12")
<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> FAC – Neutral Test
<input type="checkbox"/> Other: |
|---|---|

Criteria Met? Yes No

Comments:

DETERMINATION

WETLAND? YES NO Comments: No hydric soil or wetland hydrology observed.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
Project/Contact: NewB./CS	Det. By: C. Steinkoenig		
Plant Community: meadow	Plot #:28		
Plot Location: Tax lot 900	Recent Weather: cold		
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/>	Soil <input type="checkbox"/>	Hydrology <input type="checkbox"/>	been significantly disturbed?
Explain:			

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:0	= 50%	= 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Poa pratensis</i>		FAC 45*
2.			2. <i>Agrostis stolonifera</i>		FAC 50*
3.			3. <i>Rumex crispus</i>		FAC+ trace
4.			4. <i>Chrysanthemum Leuc.</i>		UPL trace
5.			5. <i>Trifolium repens</i>		FAC 15
6.					
7.					
8.					
9.					
10.					
11.					
12.					
Sapling/Shrub Stratum					
Total Plot Cover:	= 50%	= 20%	Status/Raw % Cover		
1.					
2.					
3.					
4.					
5.					

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: .

SOILS

Map Unit Name: Woodburn silt loam 0-7% Drainage Class: Moderately well drained

On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-17	10YR3/3	None		SI L

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:

Depth to Free Water:

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments:

DETERMINATION

WETLAND? YES NO Comments: No hydric soil or wetland hydrology observed.

Appendices

Boiler Plate Information

References

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Boiler Plate Information

Wetland Definition and Authority

The U.S. Army Corps of Engineers (COE) regulates the discharge of dredged or fill materials into waters and adjacent wetlands of the United States under authority of Section 404 of the Clean Water Act (*Federal Register*, 1986). For purposes of the Section 404 permitting program, the COE and other federal agencies define wetlands as follows (*Federal Register*, 1980, 1982):

“Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.”

In Oregon, the Department of State Lands (DSL) regulates removal/fill permitting in wetlands under ORS 196.800 to 196.990, and OAR 141-85-005 to OAR 141-85-090, and uses the same definition.

Regulatory Context

In 1987, the COE published a manual (Corps of Engineers Wetlands Delineation Manual or 1987 manual), which describes methods for determining the extent of jurisdictional wetlands under Section 404 of the Clean Water Act (Environmental Laboratory, 1987). *The Federal Manual for Identifying and Delineating Jurisdictional Wetlands* was published two years later as a collaborative effort by the COE, U.S. Fish and Wildlife Service (USFWS), U.S. Environmental Protection Agency (EPA), and U.S. Soil Conservation Service (SCS), revised the 1987 manual (Federal Interagency Committee for Wetland Delineation, or 1989 manual).

Both the COE and DSL used the 1989 manual until 1992 when the 1992 Energy and Water Development Appropriation Act went into effect. The Act limited the COE (federal permitting agency) to using the 1987 manual for determining the extent of wetlands under federal jurisdiction. Oregon continued to use the 1989 manual until March 23, 1993, when the Director of DSL signed a policy statement requiring the agency to use the 1987 manual. The policy statement was the result of the EPA agreement to use the 1987 manual.

Vegetation

Plants growing in wetlands must be specifically adapted for life under saturated or anaerobic conditions and are commonly referred to as hydrophytic vegetation. The U.S.F.W.S. in cooperation with the National and Regional Interagency Review Panels publishes regional lists estimating the probability of plant species' occurrence in wetlands (e.g., Fish and Wildlife Service, 1988). Each species is given an *indicator status*, which represents the likelihood that it will be found in a wetland. Categories defined in Table 1

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are obligate (OBL), facultative wetland (FACW), facultative (FAC), facultative upland (FACU), or upland (UPL). Plants with an indicator status of OBL, FACW, or FAC are considered adapted for life in saturated or anaerobic soil conditions.

The percent coverage of each plant species within the herb, shrub, and tree layers was estimated at each sample plot. Shrubs within a five-foot radius and trees within a 30-foot radius of the center of each plot were identified and recorded. Within the plot, all species were recorded in descending order of coverage, and dominant species were determined. The presence of wetland vegetation was determined according to the indicator status of the dominant species within each vegetative stratum. According to the manual, a sample plot is considered to have wetland vegetation if more than 50% of the number of dominant species present has an indicator status of OBL, FACW, and/or FAC. By 1987 standards, dominant species are chosen by selecting the three most dominant species from each of the four strata (herbs, saplings/shrubs, woody vines, trees). If only one or two strata are represented, then the five most dominant species from each stratum are selected.

TABLE 1: DEFINITIONS OF INDICATOR STATUS

Indicator Symbol	Definition
OBL	Obligate. Species that occur in wetlands under natural conditions with an estimated probability of greater than 99%
FACW	Facultative wetland. Species that usually occur in wetlands (estimated probability 67 to 99%), but occasionally are found in non-wetlands.
FAC	Facultative. Species that are equally likely to occur in wetlands or non-wetlands (estimated probability 34 to 66%).
FACU	Facultative upland. Species that usually occur in non-wetlands (estimated probability 67 to 99%), but occasionally are found in wetlands.
UPL	Upland. Species that occur in non-wetlands under natural conditions with an estimated probability of greater than 99%
NI	No indicator. Species for which insufficient information was available to determine an indicator status.

Sources: Federal Interagency Committee for Wetland Delineation, 1989. Environmental Laboratory, 1987. Reed, 1988.

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Soils

Hydric soils, defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part of the soil profile, are one characteristic of wetlands (USDA Soil Conservation Service, 1987). A list of hydric soils of the United States was compiled by the Soil Conservation Service (SCS), in cooperation with the National Technical Committee for Hydric Soils (NTCHS). All soils are mapped in county soil surveys. However, the mapped boundaries of SCS soil types are not at a fine enough resolution for delineating boundaries of jurisdictional wetlands. Errors of omission can occur on SCS maps. Inclusions of upland (non-wetland) soil may exist in hydric soils and uplands may have inclusions of hydric soil. Therefore, field examination of soils is important for accurately delineating the extent of hydric soils. Hydric soils exhibit certain characteristics that can be observed in the field. Field indicators include: high organic content, accumulation of sulfidic material (rotten egg odor), greenish or bluish gray color (gley formation), iron and manganese concretions, spots or blotches of color (mottling), and/or dark soil colors (low soil chroma).

A shovel, excavating down to a depth of at least 16 inches, was used to sample soil along the wetland boundary. Soil samples were checked for presence of sulfide gases; organic content was estimated visually and texturally; and soil colors were determined by using a Munsell soil color chart (Kollmorgen 1975). The Munsell soil color chart provides the standard for three attributes of color: hue, value, and chroma.

According to the 1987 manual, hydric soils are required to be inundated or saturated for seven or more consecutive days during the growing season. Soil color is examined in the horizon immediately below the A-horizon, or within 10 inches of the surface, whichever is shallower.

Hydrology

Wetlands, by their very name, must have water. Jurisdictional wetlands are characterized as having permanent or periodic inundation, or soil saturation for five percent or more of the growing season. Saturation occurs when the capillary fringe is within the major portion of the root zone (usually within 12 inches of the surface). Areas meeting one of these criteria are considered to have wetland hydrology.

Ponding or soil saturation for five percent or more of the growing season during the growing season is direct evidence of wetland hydrology. Bare soil and dried algae are evidence that a site was previously inundated. Oxidized rhizospheres along live root channels also indicate soil saturation for five percent or more of the growing season. At each sample plot, wetland hydrology was assumed if positive indicators were present.

Wetland Determination

Presence or absence of wetlands was based on soil, vegetation, and hydrology data collected at sample plots. Following procedures outlined in the 1987 manual, sample plots with homogeneous vegetation were determined to be wetlands if wetland characteristics were present or judged to be normally present (barring human or unusual natural events) for all three parameters.

Difficulties in wetland determination can arise because of disturbance or in problem areas. Both human (e.g., clearing vegetation, agriculture, filling, and excavation) and natural (e.g., mudslides, fire, and beaver dams) events have potential for obliterating field indicators of the three wetland parameters. In disturbed sites, both field and offsite data may be used to determine the presence of a wetland. Offsite information such as historical records, aerial photographs, previous soil, and vegetation surveys may indicate the presence of a jurisdictional wetland.

Some sites are difficult to evaluate because field indicators may not be present throughout the year. Field indicators may vary because of changing environmental conditions that occur seasonally and not necessarily the result of human or natural disturbance.

According to the 1987 manual, all three parameters (hydric soils, hydrophytic vegetation, and wetland hydrology) must be present for an area to be determined as wetland. Drumlins, seasonal wetlands, prairie potholes, and vegetated flats exemplify areas that are difficult to evaluate.

Schott & Associates

Ecologists and Wetland Specialists

PO Box 589, Aurora, OR, 97002 • (503) 678-6007 • Fax (503) 678-6011

Page 17

S&A#: 1985

REFERENCES

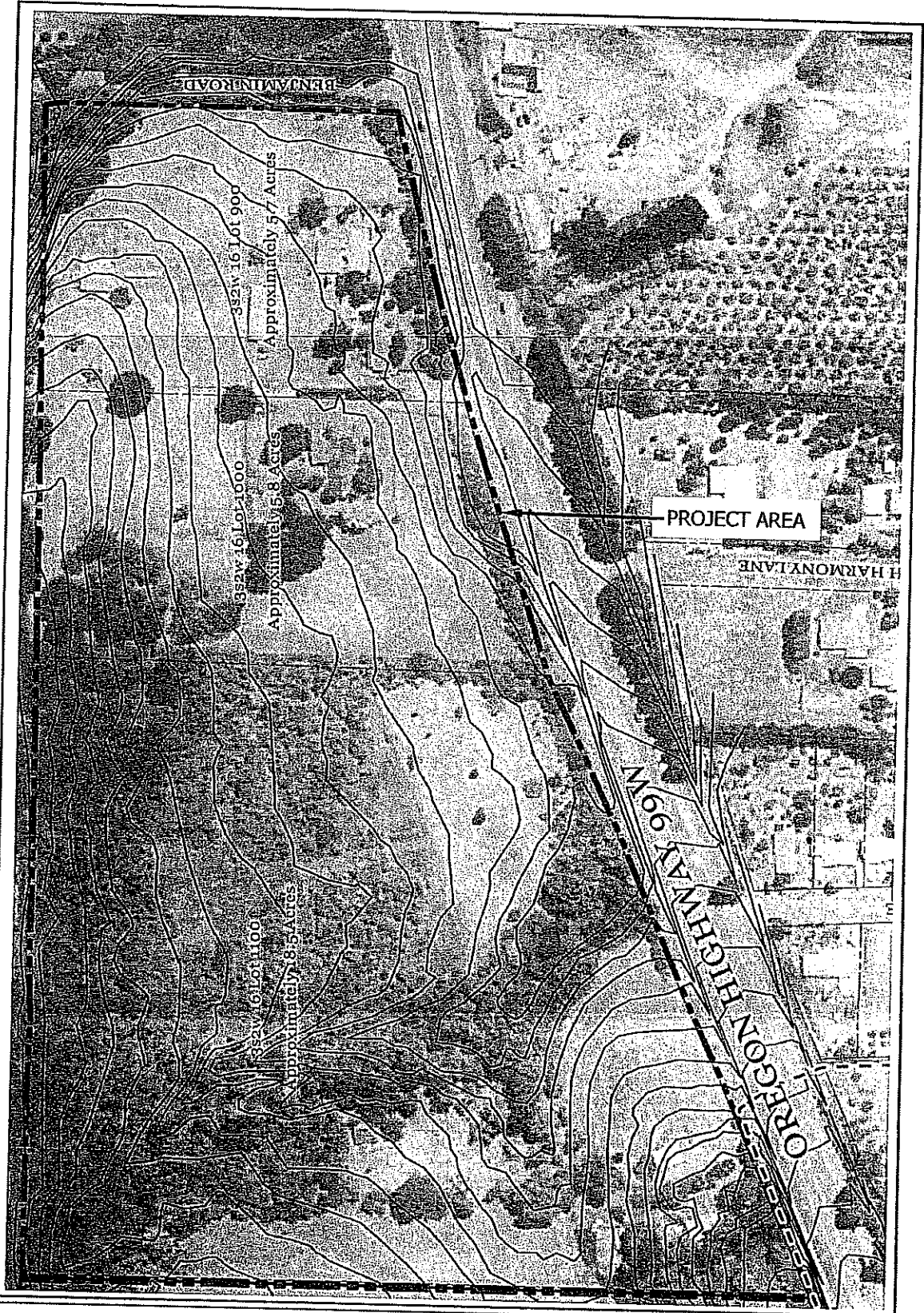
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- U.S. Department of Agriculture, Soil Conservation Service, 1982. *Soil Survey of Yamhill County, Oregon*. U.S.D.A. Soil Conservation Service, Washington, D.C., 138 pp.

Schott & Associates

Ecologists and Wetland Specialists

PO Box 589, Aurora, OR 97002 • (503) 678-6007 • Fax (503) 678-6011

S&A#: 1985



AERIAL
S&A #1985

Schott & Associates
P.O. Box 589
Aurora, OR. 97002
503.678.6007

August 30, 2018

City of Newberg
Community Development Department
PO Box 970
Newberg, OR 97132

Written Comments: File No. PUD18-0001/CUP18-0004
Crestview Crossing

To the Planning Commission:

We have owned and occupied the adjacent property at 4410 NE Birdhaven Loop since 2008. We moved here expecting the neighboring properties to be annexed and developed – with the development following a specific set of rules agreed to by the parties involved.

New development can still be a positive addition to the area if it proceeds following the same rules established in 2006-2008:

- The development is appropriate for its location and the neighborhood.
- Effective water management protects the aquifer from which the Oxberg community gets its water.
- Proper traffic calming maintains the collector-route properties intended for Crestview Drive.
- A sound wall separates the new development and existing neighborhoods.

Therefore, we support the efforts of the Oxberg Lake Homeowners Association to resolve these and other development provisions, as expressed in the correspondence from attorney Jeffrey Kleinman.

Regards,



Joanne Goodfellow

Steve and Joanne Goodfellow
4410 NE Birdhaven Loop
Newberg, OR 97132
503-538-8031
sjgoodfellow@gmail.com

RECEIVED

SEP 04 2018

Initial: _____

cc: Oxberg Lake Homeowners Association Board of Directors

SEP 05 2018

Initial: _____

Beth Bernier
1811 Leo Lane
Newberg, OR 97132

September 1, 2018

City of Newberg
Community Development Department
P.O. Box 970
Newberg, Oregon 97123

Re: File No. MISC 318-0001

To Whom It May Concern:

I am writing to make you aware of my strong objections with regard to the proposed development of what is being referenced as Crestview Crossing and is currently a greenspace. I am a local resident living adjacent to the site of the proposed development and I am of the view that the proposed developments will have a serious negative impact on my standard and quality of living.

My backyard faces the current greenspace and wetlands that have been undisturbed for years. I enjoy the wildlife that the greenspace is home to. The greenspace permits me peace and tranquility of enjoying my backyard and balcony in privacy. The trees that make up the greenspace are a natural noise barrier to the traffic on 99W and keep it from being a noise nuisance.

From 99W the area may look like just an empty lot but it backs up to the greenspace and wetlands that touches established neighborhoods. I work in a high stressful field and I have come to rely on the solitude and tranquility of being in my backyard facing the greenspace to permit me to decompress and relax it has become my safe haven and an important part of my quality of life.

Impact on highway and residential streets

Highway 99W is already heavily congested during peak times and weekends due to commuter traffic. The proposed development would have a negative effect on the operation of the main intersection of 99W and Springbrook due to congestion which is already congested during peak hours.

Springbrook has become a heavily traveled street giving the earmarks of a highway almost to a capacity it was not designed to handle. Commuters have been trying to locate side streets to eliminate having to travel on either of these streets which have impacted neighborhoods into becoming bypass streets.

The development proposed will increase traffic on our already heavily traveled roads proving that their allege traffic study is inaccurate. Anyone who travels on 99W and/or Springbrook will tell you the traffic into and out of Newberg is almost equivalent to traffic in the bigger cities and just about as unbearable. Adding additional development of apartments and row houses will cause gridlock and increase accidents within this overburdened area.

The development will have an adverse effect on surrounding neighborhoods as they become congested with the overflow of additional vehicles that 99W, Springbrook, and adjoining neighborhoods cannot accommodate.

Conservation of the natural environment

The current greenspace and wetlands earmarked to be leveled is host to different species of birds, bats, deer, fox, and a huge array of other wildlife that will perish and/or be displaced as a result of the proposed development.

The current greenspace acts as a natural noise and ventilation barrier from traffic on 99W. Clear cutting the trees and developing the property with row houses will permit the sound of the traffic and pollution from 99W and destroy all the adjacent residence's quality of living.

If this development is approved, the developer should be required to have a substantial buffer and setback between the proposed development and the preexisting neighborhoods to protect the current neighborhoods from the large row houses and keep them from being built directly behind existing homes and impeding on the homeowners right to privacy and visual quality. I have been told by others who have lived in the neighborhood longer than I have that this was the original agreement on developing this parcel of land.

Visually Unappealing

The developers are not vested in Newberg or care about the appearance, needs, of our town or the residents that reside in Newberg and how the development will affect anyone.

The proposed development does not integrate with the neighborhood character. These row houses are planned to be built up to established single family homes that are single or double level and the proposed row houses are expected to be half the size of a normal home and three stories which is visually unacceptable and intrudes upon the expected privacy of the existing homes. The row houses conflicts with that of the adjacent and surrounding properties and will disturb contextual flow.

The greenspace has old growth trees that should be protected and used as a barrier between the unsightly row houses being planned by the developer and in consideration of the established homes where the home owners have come to expect a level of privacy and quality of living that this developer wants to impede on.

The visual impact of the row houses will significantly impact the character of the area. The developer refers to the buildings as "gingerbread houses" in an attempt to make them sound more appealing but they are row houses built to minimize the amount of space needed and to permit the developer to build more houses, close together, for higher financial gain. Consideration was not taken into account the existing greenspace and what they could do to incorporate the greenspace and taking into account the living quality of the homeowners.

The development plan is for row housing to overlook adjoining residences which will create a loss of privacy in private personal spaces. The use of balconies overlooking my home will also result in unacceptable noise levels.

The density of the development is excessive. If this high density living is approved, the increase in residential capacity will be dramatic. This will have a significant impact on residential noise volumes affecting the adjacent properties.

A proper study needs to be done on the development that has already been submitted and a more accurate study of the number of buildings for sale/lease/rent currently on the market. The same is true for the housing and rental market in Newberg. The rental market is higher than what it should be but, unfortunately that is everywhere. New apartments are not going to force the market to be affordable unless rental controls are put into place and adhere to. Renters face a rent increase yearly and renters are usually forced out due to the rent increase which causes constant turnovers and/or empty apartments. Adding additional apartments, even if you call them or any other building affordable does not make them affordable. It does add to a problem that already exists if people are price out of a place to call home.

Not a Value Solution

The row houses are being marketed by the developer as being affordable new homes ranging from the mid to upper 300k even though they are only half the size of a normal home. This does not translate into "affordable" new housing. A quick search produces 56 homes for sale, in just Newberg not counting surrounding areas, which are full size homes in the 200k to 400k price range. This does not include homes that are in the process of foreclosure.

An example of row houses can be seen when traveling on 99W through Sherwood. They are an unsightly in appearance and give a bad impression of Sherwood. The row houses stand-out and look out of place as if it was just thrown in without any thought or planning. The parking lot is poorly designed and not sufficient to accommodate the residents or visitors.

Shortly after they were originally built, we took a tour through a couple of them to get an idea of the layout. They are as poorly designed inside as they are outside with the only individuals benefitting from these monstrosity are the developers. The row houses are rented out and it is apparent with the lack of pride and responsibility for upkeep and care.

The greenspace and wetlands behind my home has permitted me to have a tranquil and peaceful area that I can enjoy along with privacy when I am in my home or backyard. The canopy of trees helps with providing me with my privacy, noise reduction from the highway, and an array of wildlife that have been living among the greenspace.

The development will not alleviate any of the problems that Newberg might be thinking this is addressing but it will leave in time, if permitted to be constructed, a large negative impact on Newberg. The only thing this development will do is leave a black eye on our town for everyone to see as people enter and leave Newberg.

Tearing down the greenspace and permitting the development of the area will not enhance the surrounding neighborhoods or the city of Newberg. Newberg is losing the greenspaces it was previously known for very quickly to development and is beginning to have the feel of another overdeveloped city instead of a family friendly town.

DEVELOPMENT AGREEMENT

This Development Agreement ("DEVELOPMENT AGREEMENT") is made and executed this 16th day of June 2008, by and between GC Commercial, an Oregon Limited Liability Company ("GC"), and Terry Coss, Amelia Coss, Charles Alex Miller, Daniel Peek and Rebecca Peek the "Homeowners") GC and the Homeowners are collectively referred to herein as, the "Parties".

RECITALS:

- A. GC owns and plans to develop the real property located in the City of Newberg, Yamhill County, Oregon, shown on the attached Exhibit "A" (the "GC Development").
- B. GC, with respect to the GC Development, intends to develop the Property into one mixed-use commercial and residential development (collectively, the "Project"). A map of the Project is attached as Exhibit "B."
- C. The Homeowners are owners of those certain parcels of residential real property located in the Oxberg Lakes Subdivision, Yamhill County, Oregon, the southern boundaries of which abut and are adjacent to the northern boundary of the GC Development (individually, each a "Homeowner Parcel" and collectively, the "Homeowners' Parcels").
- D. The Homeowners anticipate significant negative impacts from the GC Development, including reduced security, increased noise, light pollution, increased traffic, and may experience problems with storm drainage and the Oxberg Lake Estates water system and aquifer.
- E. GC desires to help mitigate any potential negative impacts to which the Project and the GC Development might subject the Homeowners.

AGREEMENT:

In consideration of the foregoing and of the mutual agreements, promises, covenants and restrictions set forth herein, GC and the Homeowners agree as follows:

1. **Incorporation of Recitals.** The parties agree that the foregoing Recitals are true and correct and that the Recitals are incorporated herein as if set forth in full.

2. **Construction of the Sound Wall.**

a. GC shall construct or cause to be constructed, at its sole cost and expense, a pre-cast concrete wall approximately six (6) feet in height along the boundary shared by the GC Development and the Homeowners' Parcels (the "Sound Wall"). The approximate location and length of the Sound Wall are more particularly illustrated on the attached Exhibit "B." However, the exact location and length of the Sound Wall shall be determined by GC in compliance with applicable plans approved by the City of Newberg, or

any other governmental agency having jurisdiction. The design style of the Sound Wall and its construction type shall be consistent with Exhibit "C" attached hereto.

b. GC shall construct and install the Sound Wall in such a manner as to preserve, to the best of GC's ability, those trees with trunks greater than twelve (12) inches in diameter that are located along the boundary shared by the GC Development and the Homeowners' Parcels.

c. GC shall provide the Homeowners with copies of any proposed designs and drawings of the Sound Wall, and consider, in good faith, all timely comments GC receives from the Homeowners with respect to the Sound Wall. However, the final design and specifications of the Sound Wall shall be in accordance with plans approved by the City of Newberg, or any other governmental agency having jurisdiction.

d. GC shall include a ten-foot (10') wide landscape buffer zone along the boundary shared by the GC Development and the Homeowners' Parcels (the "**Landscape Buffer Zone**"), and a 30-foot (30') setback (the "**Setback Zone**") between the Sound Wall and any buildings in any subdivision plat maps for its respective parcels submitted for approval to any governmental entity with jurisdiction over the GC Development. The Landscape Buffer Zone and Setback Zone shall be negative easements, binding GC and its successors in interest by encumbering the lots along the boundary shared by the GC Development and the Homeowners' Parcels.

e. GC shall complete the construction and installation of the Sound Wall on or before the date of final lift of asphalt concrete within the GC Development.

3. Construction of the Storm Water Drainage System

a. GC shall construct and install, at its sole cost and expense a storm water and surface water drainage system on a portion of the Homeowners' Parcels adjacent to the GC Development (the "**Storm Water Drainage System**").

b. GC shall provide the Homeowners with copies of any proposed designs and drawings of the Storm Water Drainage System and consider, in good faith, all timely comments GC receives from the Homeowners with respect to the Storm Water Drainage System. However, the final design and specifications of the Storm Water Drainage System shall be in accordance with plans approved by the City of Newberg, or any other governmental agency having jurisdiction.

c. GC shall complete the construction and installation of the Storm Water Drainage System on or before the date installation of the Sound Wall begins.

5. Easements.

a. The Homeowners shall grant to GC temporary easements across their respective Homeowner Parcels for the construction of the Storm Water Drainage System and the Sound Wall, and;

b. The Homeowners shall grant permanent easements to GC and its successors and assigns, where necessary pursuant to the approved design specifications, to permit encroachments of the Sound Wall onto the Homeowners' Parcels and placement of the Storm Water Drainage system and any catch basins or drain lines appurtenant thereto;

6. Permitting. GC shall begin construction of the Sound Wall and the Storm Water Drainage System after it has received all site design approvals, land use permits, entitlements and other permits required for the development of the Project, and has begun construction of the Project. If GC does not receive the aforementioned permits and entitlements it shall not be obligated to build either the Sound Wall or the Storm Water Drainage System.

7. Maintenance. The parties shall share in all costs and expenses related to the maintenance and general upkeep of the Sound Wall and Storm Water Drainage System after their respective completion. This maintenance obligation shall bind the Parties and their respective successors in interest and shall be made a part of any permanent easement granted by the Homeowners pursuant to paragraph 5.b., above. In addition to the encumbrances referenced in paragraph 2.d., above, GC shall encumber the lots along the boundary shared by the GC Development and the Homeowners' Parcels to the extent of the maintenance obligation contained herein.

8. Assignability. This DEVELOPMENT AGREEMENT is assignable and/or delegable with respect to the rights and duties of GC and the Homeowners, both jointly and severally, to any transferee or other successor in interest to the GC Development or the Project.

9. Severability. Should any provision of this DEVELOPMENT AGREEMENT be declared or determined by any forum of competent jurisdiction to be illegal, invalid, or unenforceable, the legality, validity and enforceability of the remaining parts, terms, or provisions shall not be affected thereby, and said illegal, unenforceable or invalid part, term or provision shall be deemed not to be part of this DEVELOPMENT AGREEMENT.

10. Counterparts. This DEVELOPMENT AGREEMENT may be executed in any number of counterparts and by each party on a separate counterpart page, each of which when so executed shall be deemed an original.

11. Waiver. No waiver of any provision of this DEVELOPMENT AGREEMENT shall be deemed, or shall constitute, a waiver of any other provisions, whether or not similar, not shall any waiver constitute a continuing waiver. No waiver shall be binding unless executed in writing by the party making the waiver.

12. Binding Effect. All rights, remedies and liabilities herein given to or imposed upon the parties shall extend to, inure to the benefit of and bind, as the circumstances may

require, the parties and their respective heirs, personal representatives, administrators, successors and permitted assigns and designees.

13. Notices. Any notice or other communication required or permitted under this DEVELOPMENT AGREEMENT shall be in writing and shall be deemed given on the date of transmission when sent by telex or facsimile transmission, or on the third business date after the date of mailing when mailed by certified mail, postage prepaid, return receipt requested, from within the United States, or on the date of actual delivery, whichever is the earliest, and shall be sent to the parties at the addresses shown provided below, or at such other address as either party may hereafter designate by written notice to the other.

To GC: Jeffrey D. Smith
4386 SW Macadam Avenue
Suite 305
Portland, OR 97239

With a copy to: Jessica S. Cain
Gunn & Cain, LLP
P.O. Box 1046
Newberg, Oregon 97132

To Terry Coss and Amelia Coss: Terry Coss and Amelia Coss
4304 Robin Court
Newberg, OR 97132

To Alex Miller: Alex Miller *Nikula + Warren Stone*
4308 E. Robin Court
Newberg, OR 97132

To Dan Peek and Rebecca Peek: Dan Peek and Rebecca Peek
4402 Birdhaven Loop
Newberg, OR 97132

14. Amendment. No supplement, modification or amendment of this DEVELOPMENT AGREEMENT shall be valid unless the same is in writing and signed by all of the Parties.

15. Attorney's Fees. In the event any suit, action or other legal proceeding shall be instituted to declare or enforce any right created by this DEVELOPMENT AGREEMENT, or by reason on any breach of this DEVELOPMENT AGREEMENT, both parties shall be individually responsible for their respective legal fees.

16. Governing Law and Venue. This DEVELOPMENT AGREEMENT and the rights of the parties hereunder shall be governed, construed and enforced in accordance with the law of the State of Oregon, without regard to its conflict of law principles. Venue for any such suit, action or other legal proceeding regarding this DEVELOPMENT AGREEMENT or the Real Property shall be brought in Yamhill County Circuit Court.

17. Interpretation. This DEVELOPMENT AGREEMENT shall be deemed to have been drafted jointly by the parties and shall be interpreted in accordance with the plain meaning of its terms and not strictly for or against any of the parties hereto.

18. Indemnification. GC hereby agrees to indemnify the Homeowners and hold them harmless from and against any and all claims, demands, liabilities, costs, expenses, penalties, damages and losses, including, without limitation, reasonable attorneys' fees before or at trial, on appeal, and on any petition for review, resulting from any injuries made by contractors performing work to satisfy this DEVELOPMENT AGREEMENT.

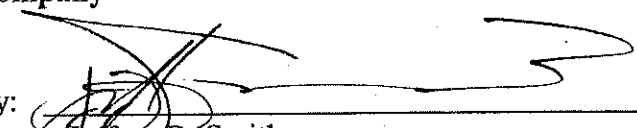
19. Third-Party Beneficiaries. Nothing in this DEVELOPMENT AGREEMENT, express or implied, is intended to confer on any person, other than the parties to this DEVELOPMENT AGREEMENT, any right or remedy of any nature whatsoever.

20. Advice of Counsel. Each of the parties also represent that they have read this DEVELOPMENT AGREEMENT and discussed it with an attorney of their choosing, that they understand each of the terms of this Agreement, and that they enter into and execute this DEVELOPMENT AGREEMENT voluntarily and willingly.

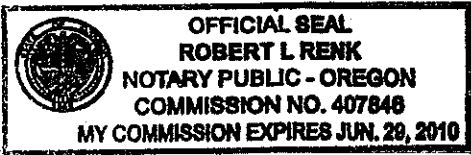
21. Preparation by Gunn & Cain. The Homeowners acknowledge that this DEVELOPMENT AGREEMENT has been prepared by Gunn & Cain LLP, attorneys for GC, and that the Homeowners have been advised to consult with their own respective legal counsel should they have any questions regarding the matter.

DEVELOPERS:

GC Commercial LLC, an Oregon Limited Liability Company

By: 
Name: Jeffrey D. Smith
Title: Manager
Date: 6/16/08

On this 1st day of ~~June~~ ^{July}, 2008, personally appeared before me the above-named Charles Alex Miller who acknowledged the execution of the foregoing instrument to be his voluntary act and deed.



[Handwritten signature]

Notary Public for Oregon
My commission expires: 6/29/2010

STATE OF OREGON)
) ss.
County of Yamhill)

On this _____ day of June, 2008, personally appeared before me the above-named Daniel Peek who acknowledged the execution of the foregoing instrument to be his voluntary act and deed.

Notary Public for Oregon
My commission expires: _____

STATE OF OREGON)
) ss.
County of Yamhill)

On this _____ day of June, 2008, personally appeared before me the above-named Rebecca Peek who acknowledged the execution of the foregoing instrument to be her voluntary act and deed.

Notary Public for Oregon
My commission expires: _____


THE HOMEOWNERS:

TERRY COSS

AMELIA COSS

Date: _____

Property Address:
4304 Robin Court
Newberg, OR 97132



CHARLES ALEX MILLER, a single man

Date: _____

July 1, 2004

Property Address:
4308 E. Robin Court
Newberg, OR 97132

DANIEL PEEK

REBECCA PEEK

Date: _____

Property Address:
4402 Birdhaven Loop
Newberg, OR 97132



Oregon

Theodore R. Kulongoski, Governor

Department of State Lands

775 Summer Street NE, Suite 100

Salem, OR 97301-1279

(503) 378-3805

FAX (503) 378-4844

www.oregonstatelands.us

February 4, 2008

Tim Speakman
New B. Properties, LLC
3401 SW Huber Street
Portland, OR 97219

State Land Board

Theodore R. Kulongoski
Governor

Bill Bradbury
Secretary of State

Re: Wetland Delineation Report for 4505 E Portland Rd, Newberg; Yamhill
County; T 3S R 2W Sec. 16 Tax Lots 900, 1000 & 1100; WD #07-0345

Randall Edwards
State Treasurer

Dear Mr. Speakman:

The Department of State Lands has reviewed the wetland delineation report prepared by Schott and Associates for the site referenced above. Based upon the information presented in the report, we concur with the wetland and waterway boundaries as mapped in Wetland Map Pages 1 of 3 and 3 of 3 of the report. Within the study area, three wetlands (totaling approximately 2.24 acres) and two waterways within the mapped wetlands were identified. The wetlands and waterways are subject to the permit requirements of the state Removal-Fill Law. A state permit is required for cumulative fill or annual excavation of 50 cubic yards or more in the wetlands or below the ordinary high water line (OHWL) of a waterway (or the 2 year recurrence interval flood elevation if OHWL cannot be determined).

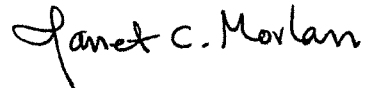
This concurrence is for purposes of the state Removal-Fill Law only. Federal or local permit requirements may apply as well. The Army Corps of Engineers will review the report and make a determination of jurisdiction for purposes of the Clean Water Act at the time that a permit application is submitted. We recommend that you attach a copy of this concurrence letter to both copies of any subsequent joint permit application to speed application review.

Please be advised that state law establishes a preference for avoidance of wetland impacts. Because measures to avoid and minimize wetland impacts may include reconfiguring parcel layout and size or development design, we recommend that you work with Department staff on appropriate site design before completing the city or county land use approval process.

This concurrence is based on information provided to the agency. The jurisdictional determination is valid for five years from the date of this letter, unless new information necessitates a revision. Circumstances under which the Department may change a determination and procedures for renewal of an expired determination are found in OAR 141-090-0045 (available on our web site or upon request). The applicant, landowner, or agent may submit a request for reconsideration of this determination in writing within 60 calendar days of the date of this letter.

Thank you for having the site evaluated. Please phone me at 503-986-5236 if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Janet C. Morlan".

Janet C. Morlan, PWS
Wetlands Program Manager

Enclosures

cc: Claudia Steinkoenig, Schott and Associates
City of Newberg, Planning Department
Tina Teed, Corps of Engineers
Carrie Landrum, DSL

Site Data Sheet

Project Name: New B.
Project Number: 1985
Date of Site Visit: February 21 & 28, 2007

Applicant: Tim Speakman
Applicant's Address: 3401 SW Huber Street
Portland, Oregon 97219

Owner(s): Same
Owner(s) Address:

State: Oregon
County: Yamhill
Site Location: East of Victoria Way, North of 99W
USGS Quadrangle: Newberg
Latitude/Longitude: 45°18.738'N / 122°55.870'W
Tax Map Information: 3S2W Sect. 16 TL 1100, 1000, 900

Watershed: Willamette River
Adjacent Waterbody: Tributary of Spring Brook Creek
In the Floodplain: Yes
Topography: Gentle to moderate slopes

Site Zoning: Agriculture/Forestry Small Holding (AF-10)
Proposed Use: Residential/Commercial
Present/Past Use: Rural/farmed
Surrounding Usage: residential to the north and west/ rural to the east

Determination: 2 unnamed tributaries of Spring Brook Creek, 0.32 acre PEM wetland, 1.63 acre PFO wetland, 0.29 acre PEM/PSS wetland

Days Since Last Rain: 0

Mapping accuracy: Alpha Community Development, PLS

DSL WD # 07-0345

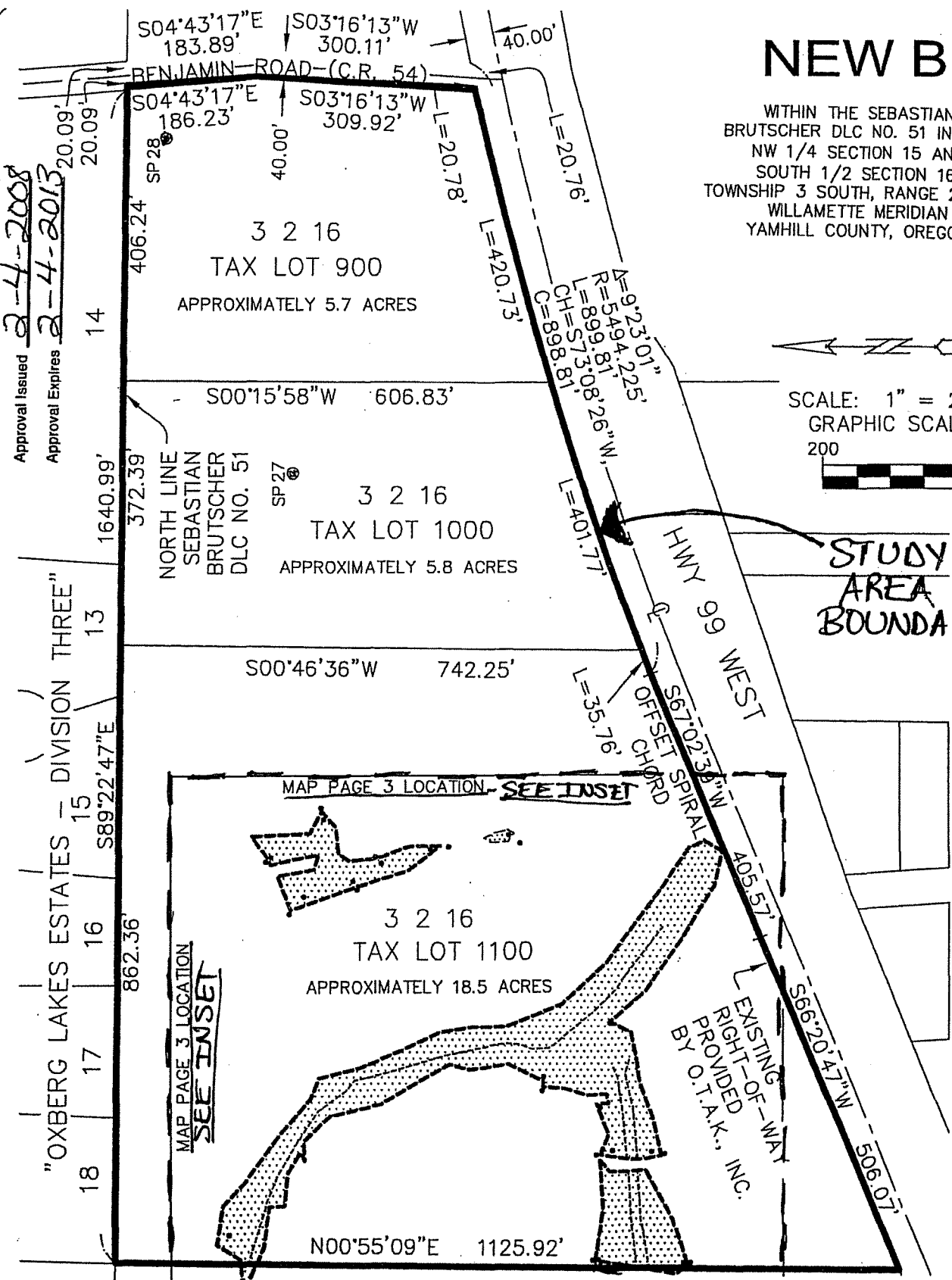
Approval Issued 2-4-2008
Approval Expires 2-4-2013

Apr 23, 2007 - 1:00pm mem

N:\proj\428-005\Survey\428-005 WETLAND.dwg - SHEET: 8x11

NEW B

WITHIN THE SEBASTIAN BRUTSCHER DLC NO. 51 IN THE NW 1/4 SECTION 15 AND SOUTH 1/2 SECTION 16, TOWNSHIP 3 SOUTH, RANGE 2 WEST WILLAMETTE MERIDIAN YAMHILL COUNTY, OREGON



DRAWN BY: MEM DATE: 4-12-07
 REVIEWED BY: MRG DATE: 4-12-07
 PROJECT NO.: 0428-0005
 SCALE: 1"=200'
 WETLAND MAP PAGE 1 OF 3



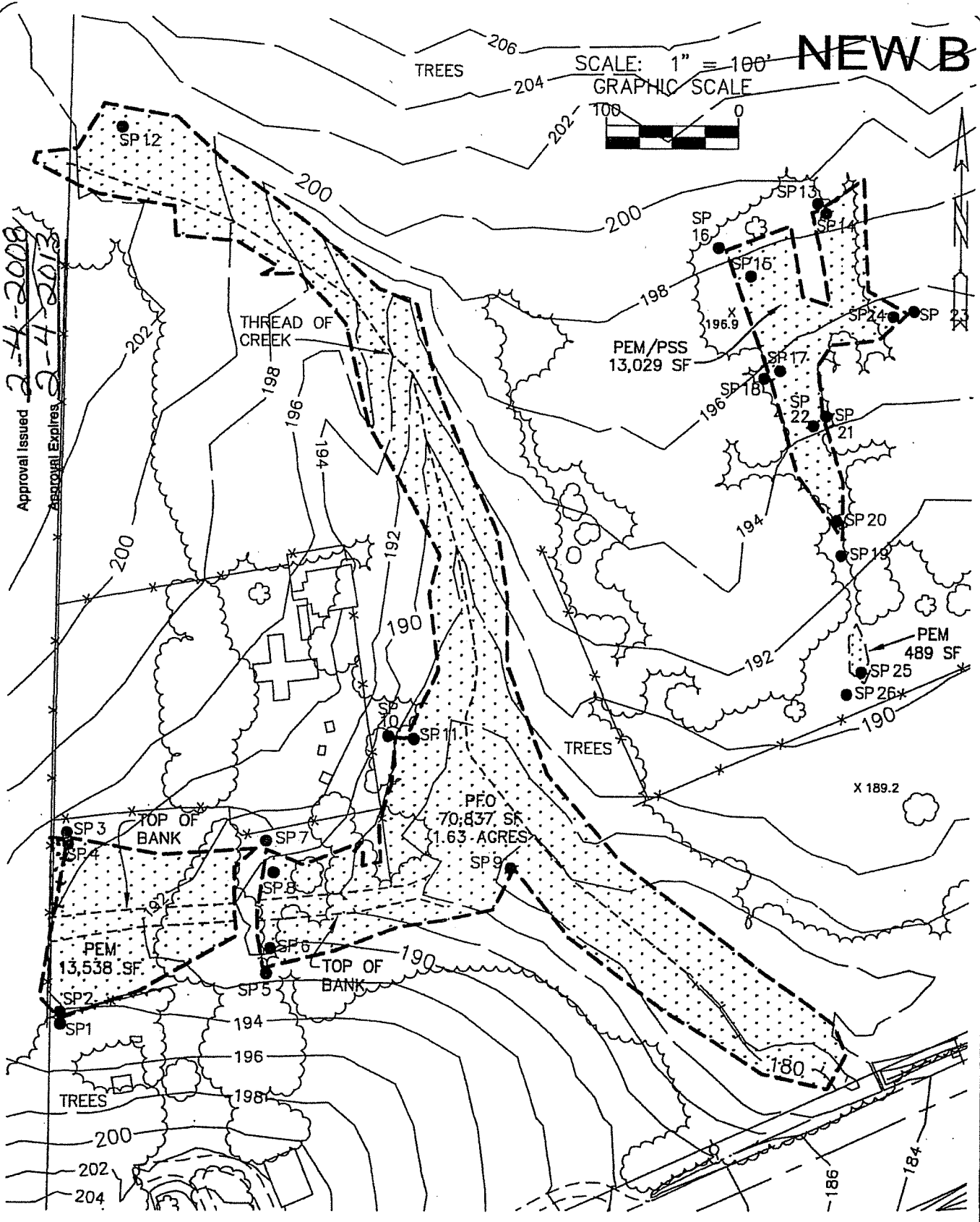
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DSL WD # 07-0345

Approval Issued 2-4-2008
Approval Expires 2-4-2013

NEW B

SCALE: 1" = 100'
GRAPHIC SCALE



DRAWN BY: MEM DATE: 4-12-07
REVIEWED BY: MRG DATE: 4-12-07
PROJECT NO.: 0428-0005
SCALE: 1"=100'
WETLAND MAP PAGE 3 OF 3



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(A) Site Description

The 30-acre project area is located on the eastern edge of Newberg in Yamhill County, Oregon (SW1/4,NE1/4 Sec. 16, T3S, R2W TL#900,1000, 1100)(Figure 1) just outside of the city limits. The southern boundary abuts city limits. The study area is west of Benjamin Road and east of Victoria Way. Hwy 99W forms the southern property boundary. The new Providence Hospital (zoned I- Institutional) is to the southwest. The three tax lots that comprise the study area are designated as Agricultural/Forestry Small Holdings (AF-10).

For the purposes of this report, the project area will be described by tax lot. Tax lot 900 is located west of Benjamin Road and north of Highway 99 West. The lot is approximately 5.7 acres and has two homes and two large barns on it. The topography has gentle to moderate slopes to the east. The majority of the property consists of horse pasture comprised of grasses and forbs that include colonial bentgrass (*Agrostis stolonifera*), Kentucky bluegrass (*Poa pratensis*), tall fescue (*Festuca arundinacea*) and white clover (*Trifolium repens*) as dominants. Ornamental species were observed around the homes.

Tax Lot 1000 is located west of tax lot 900. It is 5.8 acres and has a vet clinic and associated buildings in the center of it. The topography slopes gently to the south, southeast. Fenced pastures are located on the south and north end of the property. Dominant vegetation includes bentgrass, Kentucky bluegrass, tall fescue and orchard grass (*Dactylis glomerata*). Groupings of Oregon Oak (*Quercus garryana*) and Douglas fir (*Pseudotsuga menziesii*) were scattered along the northern and western property perimeter.

Tax lot 1100 is 18.5 acres and located on the west end of the study area. Topography on the west end slopes gently east to two unnamed tributaries. The mid and east section of the tax lot slopes predominantly south. There is an existing residential home on the southwest end of the property and some outbuilding north of the home. A small drainage located behind the home flows to the east and joins a larger tributary of Spring Brook Creek which flows south to the Willamette River. Three meadow communities were identified on site. The first is along the western property boundary. The second is located southeast of the residence and the third is on the south end of the tax lot. The vegetation in the meadow communities consisted of grasses and forbs that included tall fescue, Kentucky bluegrass, bentgrass, orchard grass (*Dactylis glomerata*), and white clover, queen Anne's lace (*Daucus carota*) and cat's ear (*Hypochoeris radicata*) as subdominants. An upland forest community was located on the northern property boundary and included Oregon oak, Douglas fir, and bigleaf maple (*Acer macrophyllum*).

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The dominant species found in the shrub layer included Service berry (*Amelanchier alnifolia*), Indian plum (*Oemleria cerasiformis*), beaked hazelnut (*Corylus cornuta*) and common snowberry (*Symphoricarpos albus*). Sword fern (*Polystichum munitum*) and English ivy (*Hedera helix*) were the dominants in the herbaceous layer.

A forested riparian area was located adjacent to the largest tributary. The tree species in the riparian forest include Oregon ash (*Fraxinus latifolia*) and willow (*Salix sp.*) Shrub communities varied from area to area along the drainage. Portions of the shrub layer consisted of a dense layer of Himalayan blackberry interspersed with dense patches of Nookta rose (*Rosa nutkana*) and Douglas spiraea (*Spiraea douglasii*). Species identified in the herbaceous layer included slough sedge (*Carex obnupta*), water parsley (*Oenanthe sarmentosa*) and bentgrass.

The National Wetland Inventory (NWI) map for Newberg shows a tributary of Spring Brook Creek on the west end of the study area. There is no Local Wetland Inventory (LWI) for the area. The Yamhill County Soil Survey indicated two mapping units on the property that include Woodburn silt loam and Amity silt loam. The topographic map shows a site gently sloping north, northeast.

Project purpose

The site is proposed for commercial development to service the new hospital across the street and the adjacent residential areas. The developer of the site is currently applying for annexation into the city of Newberg and rezoning designation to Community Commercial.

(B) Wetland Description

Based on soil, hydrology and vegetation data taken on site two unnamed tributaries of Spring Brook Creek, and four wetlands were delineated. Two of the wetlands are adjacent to the tributaries. A 0.31 acres palustrine emergent/RFT wetland is located along a short portion of the smaller tributary on the west end of the property. The second wetland is 1.63 acres palustrine forested/RFT wetland adjacent to the remaining portion of the smaller tributary and the entire length of the larger tributary. The other two wetlands are isolated and located in the north mid-section of the property. The larger wetland is 0.29 acre and classified as palustrine emergent/scrub-shrub/slope wetland. The smaller one is 0.011 acres classified as a palustrine emergent/slope wetland.

A small seasonal drainage channel enters on the southwest end of tax lot 1100. It is the extension of a drainage located on the adjoining property to the west. The hydrology of the channel is associated with stormwater runoff from the neighborhood to the west. The drainage channel is u-shaped with a varying width of 2 to 3 feet and depth of approximately 3.5 feet. It has a mud and small cobble substrate bottom. The drainage flows east and drains into a larger tributary of Spring Brook Creek. Duckweed (*Lemna*

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minor) was observed growing in portions of the drainage. The drainage has a defined channel for approximately 250 feet and then flattens out, draining as surface and subsurface lateral flow into the tributary of Spring Brook Creek.

A larger, unnamed perennial tributary of Spring Brook Creek enters the northwest corner of tax lot 1100 and exits the property on the south side. It flows to the south joining Spring Brook Creek on the south side of Hwy 99W. Portions of the creek are confined to a single channel while other portions of the channel are braided.

Two wetlands were identified adjacent to the two tributaries. The first is a 0.31 acre palustrine emergent (PEM/RFT) wetland. It was located on the west end of the study site where the smaller drainage entered the site. The plant community in this area is a meadow comprised of grasses and forbs. The dominant species are tall fescue and bentgrass. Hydrology for the wetland on the north and south side of the drainage is associated with precipitation, a seasonal high water table and overflow from the drainage during winter high water.

The second wetland is 1.63 acres and forested (PFO/RFT). The dominant tree in the canopy is Oregon ash (*Fraxinus latifolia*). The shrub layer consists of large dense patches of Douglas spirea (*Spiraea douglasii*) and nootka rose (*Rosa nutkana*). The herbaceous layer includes large patches of slough sedge (*Carex obnupta*) and water parsley (*Oenanthe sarmentosa*). Hydrology of the wetland is associated with precipitation, a seasonal high water table and overflow from the drainage during winter high water. The southern end of the drainage is fed by a perennial spring.

The other two wetlands are isolated and located in the north mid-section of the property. The larger wetland is 0.29 acres and classified as palustrine emergent/scrub-shrub/slope wetland. The dominant vegetation in the emergent portion is meadow foxtail (*Alopecurus pratensis*) and bentgrass (*Agrostis stolonifera*). The shrubs in the scrub shrub communities were nootka rose (*Rosa nutkana*) with scattered patches of hawthorn (*Crataegus sp.*). The second isolated wetland is immediately below the first. It consists of a small depressional area with colonial bentgrass and meadow foxtail as the dominants.

The analysis of wetlands conducted on this site was based on published methods for implementing Section 404 of the Clean Water Act. The 1987 manual was used to satisfy the requirements of the COE on non-agricultural land. The manual requires three parameters to be examined: vegetation, soils, and hydrology. According to the 1987 manual, independent evidence of hydrophytic vegetation, hydric soils, and wetland hydrology must be present for an area to be declared a wetland. The analysis of wetlands on the project site was conducted by reviewing and analyzing existing site-specific literature and by field investigation.

(C) Site Analysis

The three tax lots that comprise the study area are designated as Agricultural/Forestry Small Holdings (AF-10). There was no evidence of alterations to the drainages observed onsite. The hydrology associated with the smaller drainage is stormwater runoff from the neighborhood to the west.

(D) Site Specific Methods

The Routine Onsite Determination Method (1987 manual, pp. 52-69) was used to determine the State of Oregon wetland boundaries and the Federal jurisdictional wetlands. The entire study area was walked and observed for wetland characteristics. Sample plots were dug and placed in areas determined to meet all wetland criteria. Adjacent plots were placed in the upland.

The first area investigated was located on the west end of the study site. A drainage swale located on the adjacent property to the west extended east into the study area. A delineation for the property to the west was conducted a year ago and is pending review by DSL. The area consists of a grazed meadow community with dominant grasses of bentgrass and fescue. Areas with wetland characteristics extend north and south of the drainage by approximately 30-40 feet. The source of hydrology for the wetland on the north and south side of the drainage is associated with precipitation, a seasonal high water table and overflow from the drainage during winter high water. The area had recently received days of heavy rain so that the ground water table was exceptionally high.

Along the north side of the swale the wetland boundary was determined predominantly by soil and hydrology since the vegetation in both wetland and upland were the same. On the south side of the swale the vegetation was the determining factor. The soil matrix color in the wetland varied between 10YR3/1 with redox concentrations of 10YR3/4 in sample plot 2 and 10YR3/2 with redox concentrations of 10YR3/6 in sample plot 4. Both sample plots had a depth to free water between 6 and 8 inches.

The upland area on the south side of the swale was determined by the vegetation. The topography was slightly higher and Himalayan blackberry formed a dense hedge. Some Douglas fir trees were planted in this area as well. On the north side of the swale the upland area did not have hydric soil or wetland hydrology.

Approximately 130 feet east of the property line a small berm built for vehicle access to the back barn area crosses the drainage and wetland area. The berm has been in place on the property well over fifty years. The drainage crosses the berm via a small culvert. It flows an additional 120 feet before it becomes an undefined channel and flows as broad sheet flow into the other tributary.

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The wetland continues past the berm and is located adjacent to the tributaries. The plant community on the east side of the berm slowly transitions from a meadow into a forested community that joins the riparian community along the main tributary. Soils in this portion of the wetland (Sample plot, 8, 9 & 11) predominantly have a matrix value of 10YR3/2 with redox concentrations of 10YR3/6.

The upland edge was obvious by topography as well as vegetation and hydrology. The overstory transitioned from Oregon ash into Oregon oak and Douglas fir on the north end. Further south the vegetation in the upland riparian area had Oregon ash mixed with common snowberry (*Symphoricarpos alba*), beaked hazelnut (*Corylus cornuta*) and Himalayan blackberry. Upland soils observed along the tributaries included matrix colors of 10YR3/3 (sample plot 5), from 0 to 12 inches, 10YR4/2 (sample plot 7) and (10YR3/2) (sample plot 10). No redox concentration were observed within 10 inches and no evidence of wetland hydrology was observed.

The wetland identified in the middle of tax lot 1100 consists of an emergent and scrub shrub wetland. The majority of it is located in a clearing surrounded by dense thickets of English hawthorn, Himalayan blackberry and various overgrown fruit trees. The vegetation in the northern portion of the wetland consisted of scattered dense thickets of nootka rose (*Rosa nutkana*). Meadow foxtail was the dominant grass. The soil matrix color varied between 10YR3/2 and 10YR4/2 with redox concentrations that varied in color. The hydrology of the wetland was associated with overland sheet flow and a seasonal high water table. The wetland was hummocky with slight shift in topography along the upland edge.

The vegetation in the upland area was similar to the wetland vegetation. The upland area had a predominant soil color of 10YR3/2 with no redox concentrations (sample plot 13, 16, 18, 19, 23, 26) and no wetland hydrology.

(E) Deviation

No deviations were observed. The National Wetland Inventory (NWI) map for Newberg did not show any wetlands in the project area. It did show the tributary of Spring Brook Creek on the western portion of the study area. There is no Local Wetland Inventory (LWI) for the area.

(F) Methods of Determining Other Waters of the State

No other waters of the state were observed onsite. The top of bank was defined for the smaller tributary that flow west to east. The larger tributary had the center line mapped for the main branch of the creek, because the mid section is braided.

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(G) Additional Info

None.

(H) Statement of Mapping Accuracy

The wetland boundaries were flagged and the flags were surveyed by Alpha Community Development, PLS.

(I) Date of Investigation

The site was visited on February 21 and 28, 2007.

(J) Weather

The weather on the day of the February 21 site visit was cold and rainy. The day before 0.67 inches of rain were recorded at the Forest Grove weather station. 2.48 inches of rain were recorded for the past two weeks.

The weather on the day of the February 28 site visit was cold interspersed with periods of hail, rain and sun. There was 0.26 inches of rain the day prior to the site visit. 3.21 inches of rain were recorded for the past two weeks. This is 52 percent of the average for the entire month. A total of 36.56 inches were recorded since October 1, 2006. This is 115 percent of the water year average.

(K) Results and Conclusions

The National Wetland Inventory (NWI) map did not show any onsite wetlands however it did show a tributary of Spring Brook Creek on the west end of the site. There is no Local Wetland Inventory for the Newberg area. The Yamhill County Soil Survey mapped two soil series on the subject property: Amity silt loam and Woodburn silt loam 0 to 7 percent slopes and 7 to 12 percent slopes. The Amity series is somewhat poorly drained. This soil series is not listed as hydric however it does have hydric inclusions. Some of the soil observed on site matched the Amity series.

Based on soil, hydrology and vegetation data taken on site two unnamed tributaries of Spring Brook Creek, and four wetlands were delineated. The smaller drainage is seasonal, the larger has recently developed a perennial flow. Two of the wetlands are adjacent to the tributaries: A 0.31 acres palustrine emergent/RFT wetland is located along a short portion of the smaller tributary on the west end of the property. The second wetland is 1.63 acres palustrine forested/RFT wetland adjacent to the tributaries. The other two wetlands are isolated and located in the north mid-section of the property. The larger wetland is 0.29 acre and classified as palustrine emergent/scrub-shrub/slope wetland. The smaller one is 0.011 acres classified as a palustrine emergent/slope wetland.

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(L) Required Disclaimer

This report documents the investigation, best professional judgment and the conclusions of the investigator. It is correct and complete to the best of my knowledge. It should be considered a Preliminary Jurisdictional Determination of wetlands and other waters and used at your own risk unless it has been reviewed and approved in writing by the Oregon Department of State lands in accordance with OAR 141-090-0005 through 141-090-0055.

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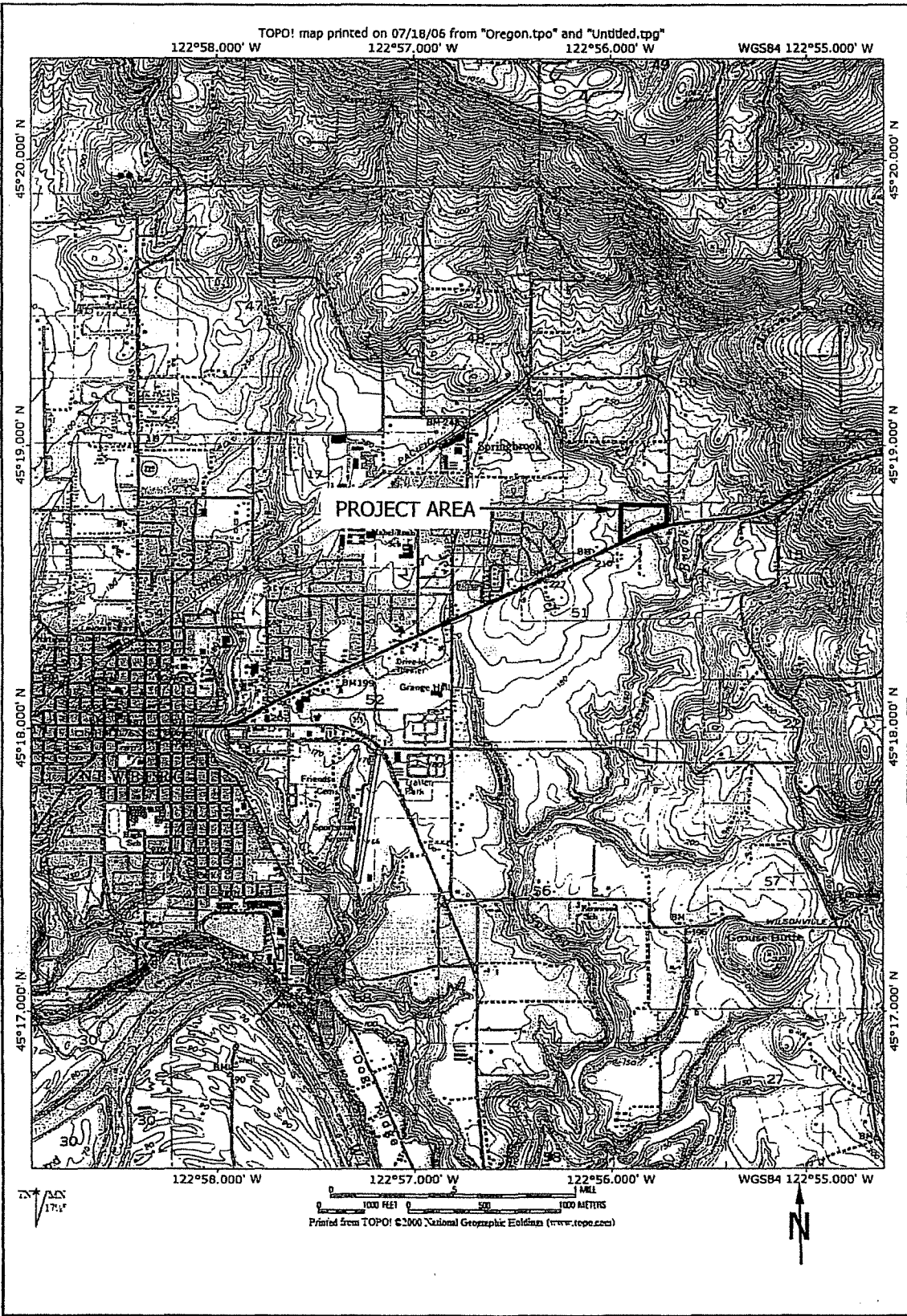


FIGURE 1. SITE VICINITY MAP
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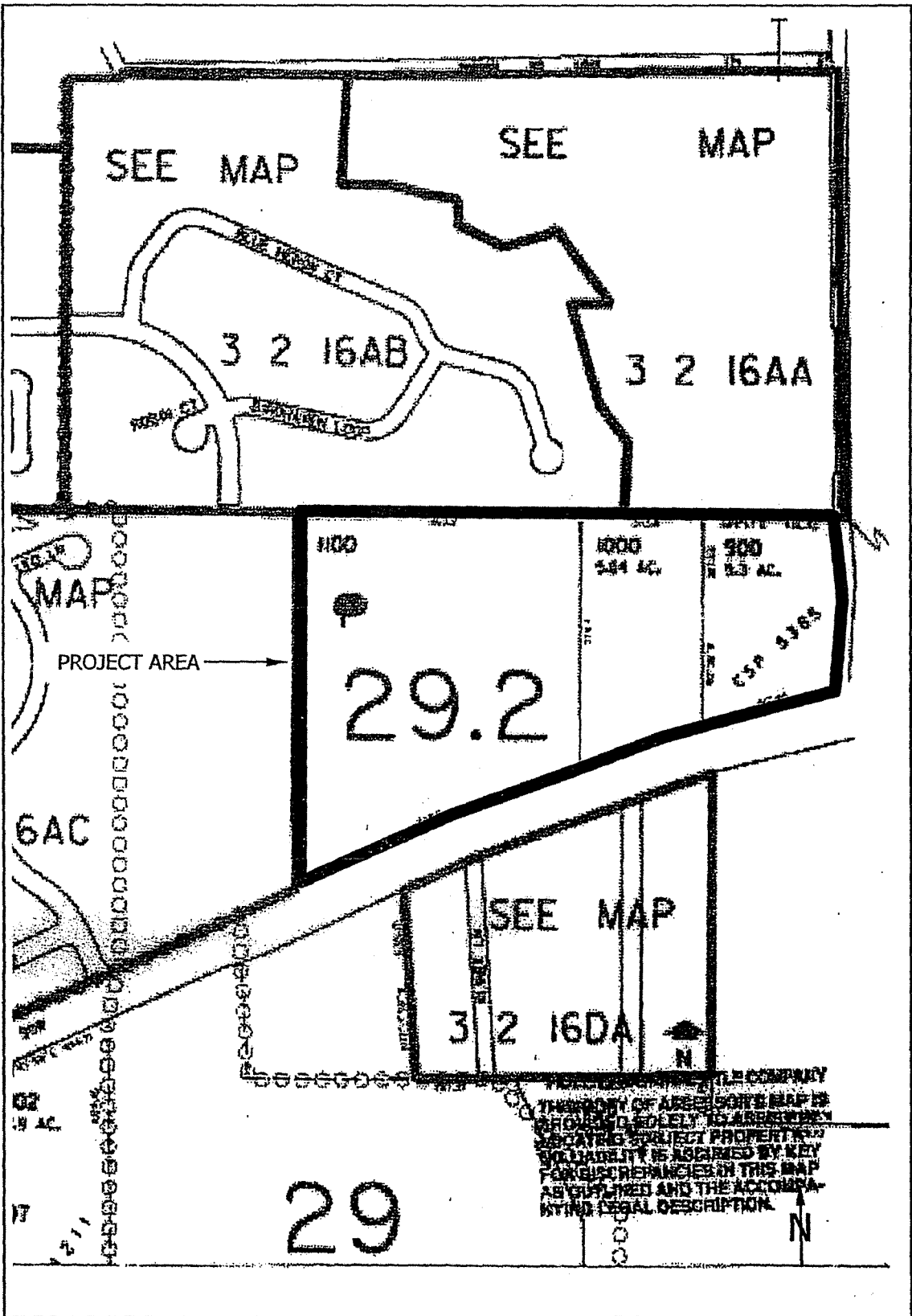


FIGURE 2. TAX MAP
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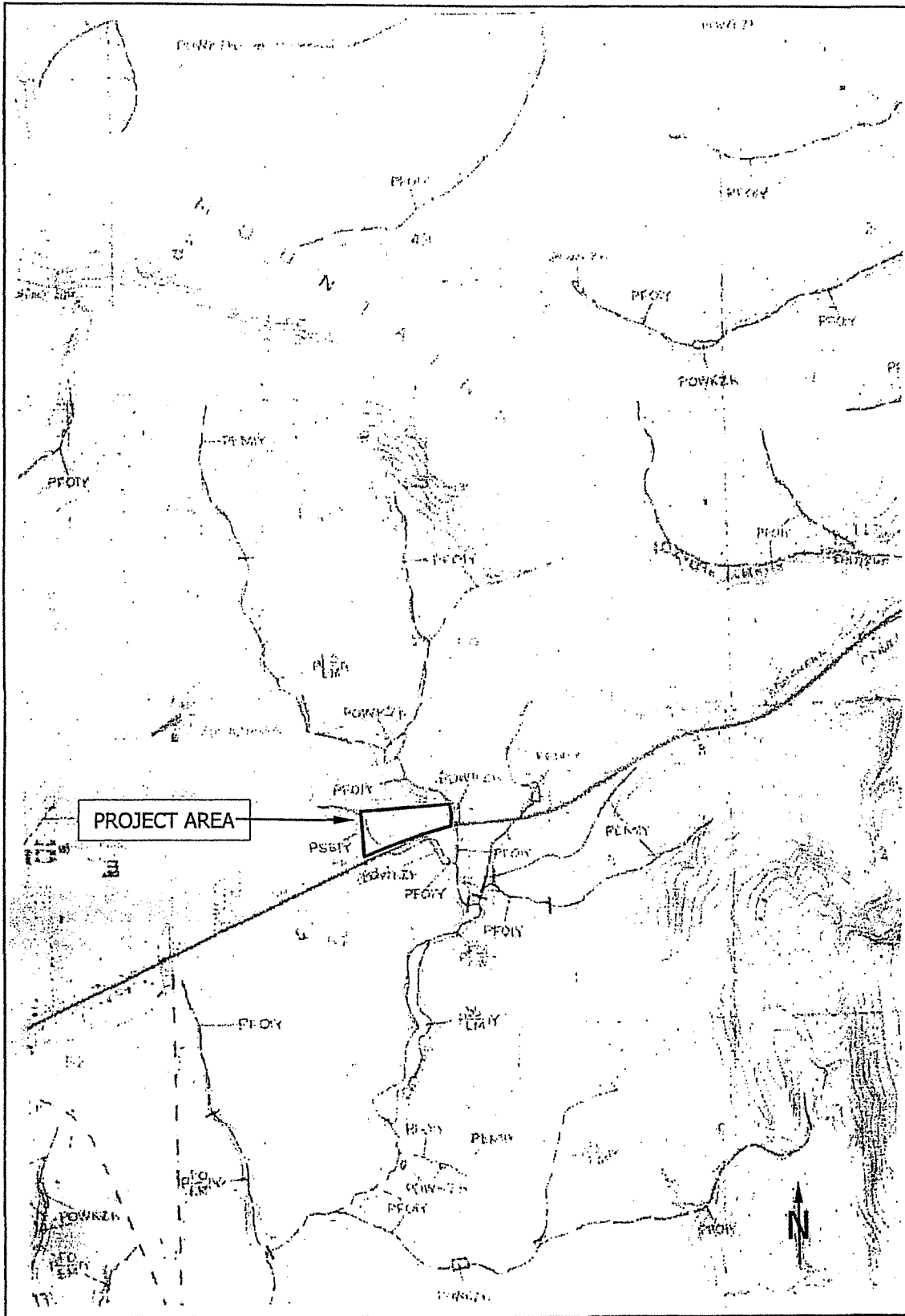
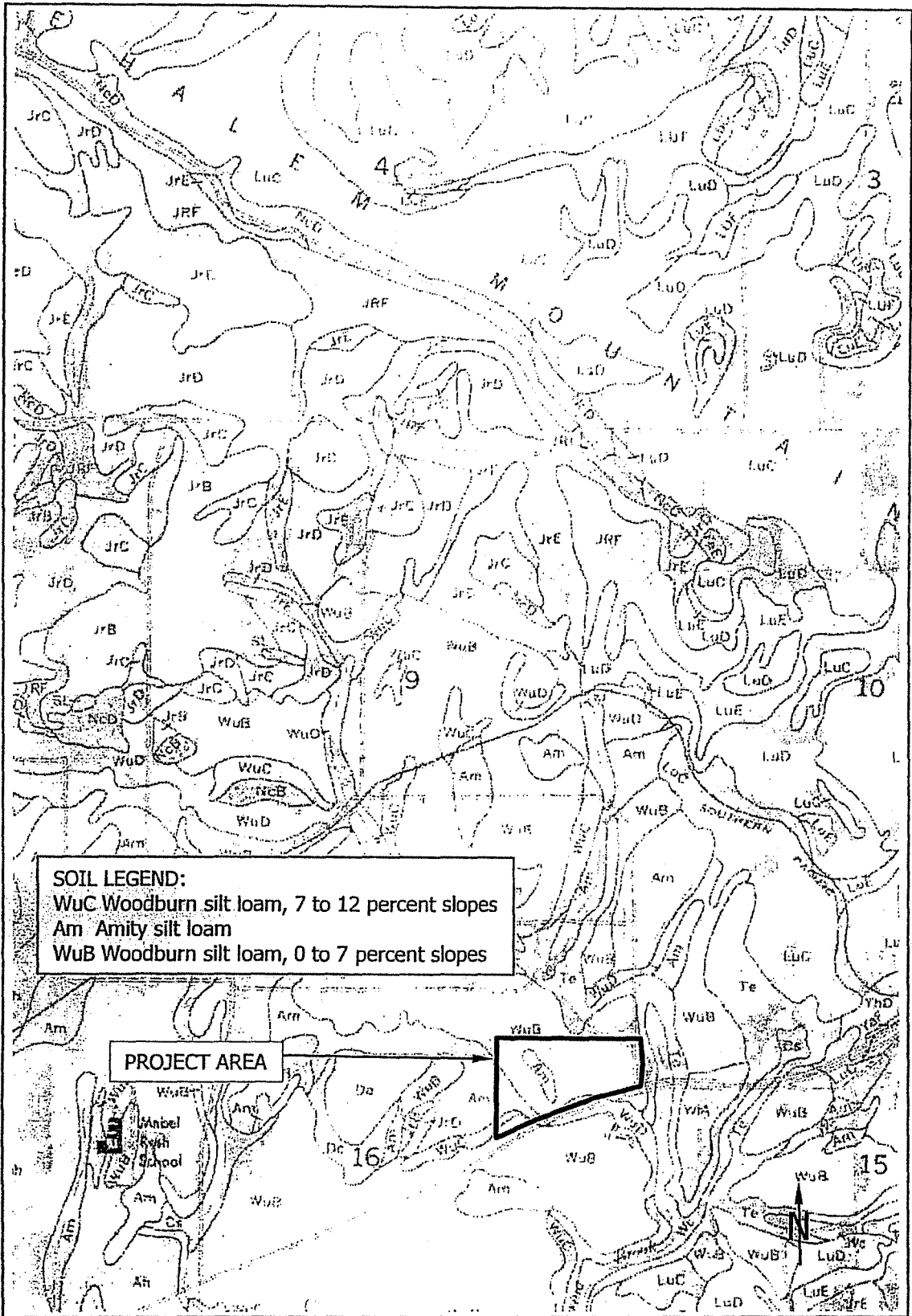


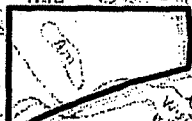
FIGURE 3. NEWBERG NWI
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SOIL LEGEND:
 WuC Woodburn silt loam, 7 to 12 percent slopes
 Am Amity silt loam
 WuB Woodburn silt loam, 0 to 7 percent slopes

PROJECT AREA



**FIGURE 4. YAMHILL COUNTY SOIL SURVEY, SHEET 16
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Data Forms

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DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill Date: 2/21 City: Newberg File #:1985

Project/Contact: NewB./CS Det. By: C. Steinkoenig
 Plant Community: meadow Plot #:1
 Plot Location: south side of swale
 Recent Weather: rainy and cold
 Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:5	2.5 = 50%	1. = 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1. <i>Pseudotsuga menziesii</i>	FACU 5*		1. <i>Festuca arundinacea</i>	FAC- 100*	
2.			2.		
3.			3.		
4.			4.		
5.			5.		
Sapling/Shrub Stratum			6.		
Total Plot Cover:20	10= 50%	4= 20%	Status/Raw % Cover	7.	
1. <i>Rubus discolor</i>	FACU- 20*		8.		
2.			9.		
3.			10.		
4.			11.		
5.			12.		

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):50

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Hydrophytic veg. not exceeding 50 percent.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained

On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-8	10YR3/1	10YR3/4 FFD		S CL
8-16	10YR3/1	10YR3/4 CMP		CL

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Reducing Conditions (tests positive)
- Gleyed or low chroma colors
- Redox features within 10" (e.g., concentrations)
- Concretions/Nodules (w/in 3", > 2mm)
- High organic content in surface (in Sandy Soils)
- Organic streaking (in Sandy Soils)
- Organic pan (in Sandy Soils)
- Listed on Hydric Soils List (and soil profile matches)
- Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
- Supplemental indicator (e.g., NRCS field indicator)

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:10"

Depth to Free Water:

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits
- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: Recent heavy rains and high water table.

DETERMINATION

WETLAND? YES NO Comments: Area adjacent blackberry thicket and higher topography.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #:1985
-----------------	------------	---------------	-------------

Project/Contact: NewB./CS
 Plant Community: meadow
 Plot Location: paired with sample plot 1
 Recent Weather: rainy and cold
 Det. By: C. Steinkoenig
 Plot #:2

Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum				Herb Stratum									
Total Plot Cover:0		0 = 50%		0 = 20%		Total Plot Cover:100		50 = 50%		20 = 20%			
Status/Raw % Cover						Status/Raw % Cover							
1.						1. <i>Agrostis stolonifera</i>						FAC 25*	
2.						2. <i>Poa pratensis</i>						FAC 10	
3.						3. MOSS						65	
4.						4.							
5.						5.							
6.						6.							
7.						7.							
8.						8.							
9.						9.							
10.						10.							
11.						11.							
12.						12.							

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100
 Other hydrophytic vegetation indicators:
 Criteria Met? Yes No Comments: Hydrophytic veg. exceeds 50 percent.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-7	10YR3/1	10YR3/4 FFF		Si CL
7-16	10YR3/1	10YR3/4 CFD		CL

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input checked="" type="checkbox"/> Gleyed or low chroma colors
<input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: Primary Hydrology Indicators: Depth to Saturation:2" Depth to Free Water:6"

- | | |
|--|--|
| <input type="checkbox"/> Inundated
<input checked="" type="checkbox"/> Saturated in upper 12 inches
<input type="checkbox"/> Water Marks
<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Sediment Deposits | Secondary Hydrology Indicators (2 or more required):
<input checked="" type="checkbox"/> Oxidized Root Channels (upper 12")
<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> FAC – Neutral Test
<input type="checkbox"/> Other: |
|--|--|

Criteria Met? Yes No Comments: A lot of moss growing on ground.

DETERMINATION

WETLAND? YES NO Comments: Wetland criteria is met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #:1985
-----------------	------------	---------------	-------------

Project/Contact: NewB./CS Det. By: C. Steinkoenig
 Plant Community: meadow Plot #:3

Plot Location: North side of swale

Recent Weather: rainy and cold

Do normal environmental conditions exist? Y N If no, explain:

Has Vegetation Soil Hydrology been significantly disturbed?

Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:0	0 = 50%	0 = 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Agrostis stolonifera</i>		FAC 80*
2.			2. <i>Festuca arundinacea</i>		FAC- 15
3.			3. <i>Trifolium repens</i>		FACU+ 5
4.			4. <i>Daucus carota</i>		NOL trace
5.			5. <i>Geranium richardsonii</i>		trace
Sapling/Shrub Stratum			6. <i>Hypochoeris radicata</i>		trace
Total Plot Cover:	= 50%	= 20%	Status/Raw % Cover	7.	
1.			8.		
2.			9.		
3.			10.		
4.			11.		
5.			12.		

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Hydrophytic veg. exceeds 50 percent.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained

On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	None		CL L
12-16	10YR4/2	10YR4/4 CCP		SI C

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:

Depth to Free Water:

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- | | |
|---|---|
| <input type="checkbox"/> Inundated
<input type="checkbox"/> Saturated in upper 12 inches
<input type="checkbox"/> Water Marks
<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Sediment Deposits | <input type="checkbox"/> Oxidized Root Channels (upper 12")
<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> FAC – Neutral Test
<input type="checkbox"/> Other: |
|---|---|

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: No wetland soils or hydrology.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #:1985
Project/Contact: NewB./CS	Det. By: C. Steinkoenig		
Plant Community: meadow	Plot #:4		
Plot Location: Paired with sample plot 3			
Recent Weather: rainy and cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?			
Explain:			

VEGETATION

Tree Stratum				Herb Stratum			
Total Plot Cover:0		0 = 50%	0 = 20%	Total Plot Cover:100		50 = 50%	20 = 20%
Status/Raw % Cover				Status/Raw % Cover			
1.				1.	<i>Agrostis stolonifera</i>		FAC 80*
2.				2.	<i>Festuca arundinacea</i>		FAC- 15
3.				3.	<i>Moss</i>		NI 20
4.				4.	<i>Daucus carota</i>		NOL trace
5.				5.	<i>Geranium richardsonii</i>		trace
Sapling/Shrub Stratum							
Total Plot Cover:		= 50%	= 20%	Status/Raw % Cover			
1.				7.			
2.				8.			
3.				9.			
4.				10.			
5.				11.			
				12.			

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Hydrophytic veg. exceeds 50 percent.

SOILS

Map Unit Name: Amity silt loam

Drainage Class: Somewhat poorly drained

On Hydric Soil List? Yes No

Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	10YR3/6 FFF		CL L
12-18	10YR4/2	10YR4/6 CMD		SI CI

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|--|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:5"

Depth to Free Water:8"

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Criteria Met? Yes No

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Wetland Criteria met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #:1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: Scrub-shrub		Plot #:5	
Plot Location: South side of tributary.			
Recent Weather: rainy and cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?			
Explain:			

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:45	22.5 = 50%	9 = 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1. <i>Malus sp.</i>	NOL 30*		1. <i>Agrostis stolonifera</i>	FAC 25*	
2. <i>Crataegus monogyna</i>	FACU+ 15*		2. <i>Festuca arundinacea</i>	FAC- 50*	
3.			3. <i>Dactylis glomerata</i>	FACU 25*	
4.			4.		
5.			5.		
Sapling/Shrub Stratum					
Total Plot Cover:20	10 = 50%	4 = 20%	Status/Raw % Cover	7.	
1. <i>Rubus discolor</i>			FACU- 20*	8.	
2.				9.	
3.				10.	
4.				11.	
5.				12.	

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):40

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Hydrophytic veg does not exceed 50%. FEAR used as FAC veg.

SOILS

Map Unit Name: Amity silt loam

Drainage Class: Somewhat poorly drained

On Hydric Soil List? Yes No

Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/3	None		CL L
12-16	10YR3/4			SI Cl

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Reducing Conditions (tests positive)
- Gleyed or low chroma colors
- Redox features within 10" (e.g., concentrations)

- Concretions/Nodules (w/in 3", > 2mm)
- High organic content in surface (in Sandy Soils)
- Organic streaking (in Sandy Soils)
- Organic pan (in Sandy Soils)
- Listed on Hydric Soils List (and soil profile matches)
- Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
- Supplemental indicator (e.g., NRCS field indicator)

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:

Depth to Free Water:14"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: Depth to free water in pit at 14 inches.

DETERMINATION

WETLAND? YES NO Comments: Wetland criteria not met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #:1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: meadow		Plot #:6	
Plot Location: Paired with sample plot 5			
Recent Weather: rainy and cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?			
Explain:			

VEGETATION

Tree Stratum				Herb Stratum							
Total Plot Cover:0		= 50%		= 20%		Total Plot Cover:100		50 = 50%		20 = 20%	
Status/Raw % Cover						Status/Raw % Cover					
1.				1. <i>Agrostis stolonifera</i>				FAC 25*			
2.				2. <i>Festuca arundinacea</i>				FAC- 50*			
3.				3. <i>Dactylis glomerata</i>				FACU 25*			
4.				4.							
5.				5.							
Sapling/Shrub Stratum											
Total Plot Cover:		= 50%		= 20%		Status/Raw % Cover		7.			
1.				8.							
2.				9.							
3.				10.							
4.				11.							
5.				12.							

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):66

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Hydrophytic veg exceeds 50%. FEAR used as FAC veg.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-11	10YR4/1	10YR4/4 FFD		Si CL
11-15	10YR3/4			SI Cl

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input checked="" type="checkbox"/> Gleyed or low chroma colors
<input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:
 Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: _____ Depth to Saturation: _____ Depth to Free Water: 7"

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Criteria Met? Yes No

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Comments: Wetland hydrology observed.

DETERMINATION

WETLAND? YES NO Comments: Wetland criteria is met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #:1985
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Project/Contact: NewB./CS Det. By: C. Steinkoenig
 Plant Community: meadow Plot #:7

Plot Location: Paired w/8-N side of seasonal drainage-E. of berm

Recent Weather: rainy and cold

Do normal environmental conditions exist? Y N If no, explain:

Has Vegetation Soil Hydrology been significantly disturbed?

Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:0	= 50%	= 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Poa pratensis</i>	FAC 75*	
2.			2. <i>Festuca arundinacea</i>	FAC- 10	
3.			3. <i>Trifolium latifolia</i>	FACU+ 15	
4.			4. <i>Chrysanthemum Leu.</i>	NI trace	
5.			5.		
Sapling/Shrub Stratum			6.		
Total Plot Cover:	= 50%	= 20%	Status/Raw % Cover	7.	
1.				8.	
2.				9.	
3.				10.	
4.				11.	
5.				12.	

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: FEAR (FAC-) used as FAC veg.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained

On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR4/2	None		Si CL
12-17	10YR4/2	10YR4/6 FFP		CL

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: Depth to Saturation:10 Depth to Free Water:12"

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Criteria Met? Yes No

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Comments: Recent heavy rainfall.

DETERMINATION

WETLAND? YES NO Comments: Wetland soil criterion is not met. Subdominant veg. is upland and higher topography.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #:1985
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Project/Contact: NewB./CS
 Plant Community: meadow
 Plot Location:
 Recent Weather: rainy and cold
 Det. By: C. Steinkoenig
 Plot #:8

Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:0	= 50%	= 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Poa pratensis</i>		FAC 85*
2.			2. <i>Rumex crispus</i>		FAC+ 5
3.			3. <i>Gernaium richardsoni</i>		FACU+ 10
4.			4.		
5.			5.		
Sapling/Shrub Stratum			6.		
Total Plot Cover:	= 50%	= 20%	Status/Raw % Cover	7.	
1.			8.		
2.			9.		
3.			10.		
4.			11.		
5.			12.		

Hydrophytic Vegetation Indicators:
 > 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100
 Other hydrophytic vegetation indicators:
 Criteria Met? Yes No Comments: .

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	10YR3/6 MFD		Si CL
12-17	10YR4/2	10YR4/4 FFD		CL

Hydric Soil Indicators:
 Histosol Concretions/Nodules (w/in 3", > 2mm)
 Histic Epipedon High organic content in surface (in Sandy Soils)
 Sulfidic Odor Organic streaking (in Sandy Soils)
 Reducing Conditions (tests positive) Organic pan (in Sandy Soils)
 Gleyed or low chroma colors Listed on Hydric Soils List (and soil profile matches)
 Redox features within 10" (e.g., concentrations) Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
 Supplemental indicator (e.g., NRCS field indicator)
 Criteria Met? Yes No

HYDROLOGY

Recorded Data:
 Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data
 Depth of inundation: _____ Depth to Saturation: to Surface _____ Depth to Free Water: 1"
Primary Hydrology Indicators:
 Inundated
 Saturated in upper 12 inches
 Water Marks
 Drift Lines
 Sediment Deposits
Criteria Met? Yes No
Secondary Hydrology Indicators (2 or more required):
 Oxidized Root Channels (upper 12")
 Water-stained leaves
 Local Soil Survey Data
 FAC – Neutral Test
 Other: .
 Comments: Recent heavy rainfall and high water table.

DETERMINATION

WETLAND? YES NO Comments: Wetland criteria met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #:1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: forested		Plot #:9	
Plot Location: SW side of stream			
Recent Weather: rainy and cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?			
Explain:			

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:100	50 = 50%	20 = 20%	Total Plot Cover:70	35 = 50%	14 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1. <i>Fraxinus latifolia</i>	FACW 100*		1. <i>Carex obnupta</i>	OBL 60*	
2.			2. <i>Oenanthe sarmentosa</i>	OBL 10	
3.			3.		
4.			4.		
5.			5.		
Sapling/Shrub Stratum			6.		
Total Plot Cover:55	27.5 = 50%	11 = 20%	Status/Raw % Cover		
1. <i>Rosa nutkana</i>			7.		
2. <i>Crataegus monogyna</i>			8.		
3. <i>Spirea douglasii</i>			9.		
4.			10.		
5.			11.		
			12.		

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: .

SOILS

Map Unit Name: Amity silt loam

Drainage Class: Somewhat poorly drained

On Hydric Soil List? Yes No

Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	10YR3/6 MFD		Si CL
12-17	10YR4/2	10YR4/4 FFD		CL

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|--|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation: to Surface

Depth to Free Water: 1"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: Recent heavy rainfall and high water table.

DETERMINATION

WETLAND? YES NO Comments: Wetland criteria met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #:1985
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Project/Contact: NewB./CS
 Plant Community: forested
 Plot Location: West side of stream
 Recent Weather: rainy and cold
 Det. By: C. Steinkoenig
 Plot #:10
 Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum				Herb Stratum			
Total Plot Cover:30		15 = 50%	6 = 20%	Total Plot Cover:100		50 = 50%	20 = 20%
Status/Raw % Cover				Status/Raw % Cover			
1. <i>Fraxinus latifolia</i>		FACW+30*		1. <i>Festuca arundinacea</i>		FAC- 15	
2.				2. <i>Dactylis glomerata</i>		FACU 35*	
3.				3. <i>Poa pratensis</i>		FAC 40*	
4.				4. <i>Taraxacum officinale</i>		NOL 10	
5.				5.			
Sapling/Shrub Stratum				6.			
Total Plot Cover:5		2.5 = 50%	1 = 20%	Status/Raw % Cover		7.	
1. <i>Corylus cornuta</i>		FACU+ 5*		8.			
2.				9.			
3.				10.			
4.				11.			
5.				12.			

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):50
 Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Does not exceed fifty percent.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-11	10YR3/2	None		Si CL
11-17	10YR3/3			CL

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: Depth to Saturation:13" Depth to Free Water:

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Criteria Met? Yes No

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Comments: Recent heavy rainfall and high water table.

DETERMINATION

WETLAND? YES NO Comments: Criteria not met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill Date: 2/21 City: Newberg File #:1985

Project/Contact: NewB./CS Det. By: C. Steinkoenig
 Plant Community: forested Plot #:11
 Plot Location: paired with sample plot 10
 Recent Weather: rainy and cold
 Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:50	25 = 50%	10 = 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1. <i>Fraxinus latifolia</i>	FACW+ 50*		1. <i>Poa pratensis</i>	FAC 50*	
2.			2. <i>Rumex crispus</i>	FAC+ 10	
3.			3. <i>Agrostis stolonifera</i>	FAC 40*	
4.			4.		
5.			5.		
Sapling/Shrub Stratum			6.		
Total Plot Cover:	= 50%	= 20%	Status/Raw % Cover	7.	
1.			8.		
2.			9.		
3.			10.		
4.			11.		
5.			12.		

Hydrophytic Vegetation Indicators:
 > 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100
 Other hydrophytic vegetation indicators:
 Criteria Met? Yes No Comments: .

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-11	10YR3/2	10YR3/6 FFF		Si CL
11-17	10YR4/2	10YR4/6 CFP		CL

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Reducing Conditions (tests positive)
- Gleyed or low chroma colors
- Redox features within 10" (e.g., concentrations)
- Concretions/Nodules (w/in 3", > 2mm)
- High organic content in surface (in Sandy Soils)
- Organic streaking (in Sandy Soils)
- Organic pan (in Sandy Soils)
- Listed on Hydric Soils List (and soil profile matches)
- Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
- Supplemental indicator (e.g., NRCS field indicator)

Criteria Met? Yes No

HYDROLOGY

Recorded Data:
 Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: Depth to Saturation:6" Depth to Free Water:9"
Primary Hydrology Indicators: **Secondary Hydrology Indicators (2 or more required):**
 Inundated Oxidized Root Channels (upper 12")
 Saturated in upper 12 inches Water-stained leaves
 Water Marks Local Soil Survey Data
 Drift Lines FAC – Neutral Test
 Sediment Deposits Other:
 Criteria Met? Yes No Comments: .

DETERMINATION

WETLAND? YES NO Comments: Wetland Criteria is met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/21	City: Newberg	File #:1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: forested		Plot #:12	
Plot Location: NW end of the property			
Recent Weather: rainy and cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?			
Explain:			

VEGETATION

Tree Stratum				Herb Stratum			
Total Plot Cover:95		47.5 = 50%		19 = 20%		Total Plot Cover:	
						= 50%	
						= 20%	
Status/Raw % Cover				Status/Raw % Cover			
1. <i>Fraxinus latifolia</i>				FACW+ 95*			
2.				1.			
3.				2.			
4.				3.			
5.				4.			
6.				5.			
7.				6.			
8.				7.			
9.				8.			
10.				9.			
11.				10.			
12.				11.			
13.				12.			
14.				13.			
15.				14.			
16.				15.			
17.				16.			
18.				17.			
19.				18.			
20.				19.			
21.				20.			
22.				21.			
23.				22.			
24.				23.			
25.				24.			
26.				25.			
27.				26.			
28.				27.			
29.				28.			
30.				29.			
31.				30.			
32.				31.			
33.				32.			
34.				33.			
35.				34.			
36.				35.			
37.				36.			
38.				37.			
39.				38.			
40.				39.			
41.				40.			
42.				41.			
43.				42.			
44.				43.			
45.				44.			
46.				45.			
47.				46.			
48.				47.			
49.				48.			
50.				49.			
51.				50.			
52.				51.			
53.				52.			
54.				53.			
55.				54.			
56.				55.			
57.				56.			
58.				57.			
59.				58.			
60.				59.			
61.				60.			
62.				61.			
63.				62.			
64.				63.			
65.				64.			
66.				65.			
67.				66.			
68.				67.			
69.				68.			
70.				69.			
71.				70.			
72.				71.			
73.				72.			
74.				73.			
75.				74.			
76.				75.			
77.				76.			
78.				77.			
79.				78.			
80.				79.			
81.				80.			
82.				81.			
83.				82.			
84.				83.			
85.				84.			
86.				85.			
87.				86.			
88.				87.			
89.				88.			
90.				89.			
91.				90.			
92.				91.			
93.				92.			
94.				93.			
95.				94.			
96.				95.			
97.				96.			
98.				97.			
99.				98.			
100.				99.			

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):50

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: BPJ. Blackberry not rooted in sample plot. Dominant cover is ash

SOILS

Map Unit Name: Amity silt loam

Drainage Class: Somewhat poorly drained

On Hydric Soil List? Yes No

Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-18	10YR2/1			Si CL

Hydric Soil Indicators:

Histosol

Histic Epipedon

Sulfidic Odor

Reducing Conditions (tests positive)

Gleyed or low chroma colors

Redox features within 10" (e.g., concentrations)

Concretions/Nodules (w/in 3", > 2mm)

High organic content in surface (in Sandy Soils)

Organic streaking (in Sandy Soils)

Organic pan (in Sandy Soils)

Listed on Hydric Soils List (and soil profile matches)

Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)

Supplemental indicator (e.g., NRCS field indicator)

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available

Aerial Photos

Stream Gauge

Other

No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:3"

Depth to Free Water:8"

Primary Hydrology Indicators:

Inundated

Saturated in upper 12 inches

Water Marks

Drift Lines

Sediment Deposits

Criteria Met? Yes No

Secondary Hydrology Indicators (2 or more required):

Oxidized Root Channels (upper 12")

Water-stained leaves

Local Soil Survey Data

FAC – Neutral Test

Other:

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Wetland area adjacent to the creek. Wetland characteristic are met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
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Project/Contact: NewB./CS
 Plant Community: scrub-shrub/meadow
 Plot Location: northeast side if isolated wetland
 Recent Weather: cold and wet/hail
 Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum				Herb Stratum			
Total Plot Cover:		= 50%	= 20%	Total Plot Cover:100		50 = 50%	20 = 20%
Status/Raw % Cover				Status/Raw % Cover			
1.				1.	<i>Alopecurus pratensis</i>	FACW 60*	
2.				2.	<i>Agrostis stolonifera</i>	FAC 40*	
3.				3.			
4.				4.			
5.				5.			
Sapling/Shrub Stratum							
Total Plot Cover:10		5= 50%	2.5= 20%	Status/Raw % Cover			
1.	<i>Rubus discolor</i>			7.			
2.	<i>Rosa nutkana</i>			8.			
3.				9.			
4.				10.			
5.				11.			
				12.			

Hydrophytic Vegetation Indicators:
 > 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):75
 Other hydrophytic vegetation indicators:
 Criteria Met? Yes No Comments: Exceeds fifty percent.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-13	10YR3/2	None		Si CL
13-18	10YR3/2	10YR3/4 FFF		CL

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:
 Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: _____ Depth to Saturation:3" Depth to Free Water:6"

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: Very high water table.

DETERMINATION

WETLAND? YES NO Comments: No hydric soil, rise in topography.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
Project/Contact: NewB./CS	Det. By: C. Steinkoenig		
Plant Community: scrub-shrub/meadow	Plot #:14		
Plot Location: paired w/sample plot 13			
Recent Weather: cold and wet/hail			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?			
Explain:			

VEGETATION

Tree Stratum				Herb Stratum			
Total Plot Cover:0		= 50%	= 20%	Total Plot Cover:100		50 = 50%	20 = 20%
Status/Raw % Cover				Status/Raw % Cover			
1.				1 <i>Alopecurus pratensis</i>		FACW 60*	
2.				2 <i>Agrostis stolonifera</i>		FAC 40*	
3.				3.			
4.				4.			
5.				5.			
Sapling/Shrub Stratum				6.			
Total Plot Cover:10		5= 50%	2.5= 20%	Status/Raw % Cover		7.	
1. <i>Rubus discolor</i>				FACU 5*		8.	
2. <i>Rosa mutkana</i>				FAC 5*		9.	
3.						10.	
4.						11.	
5.						12.	

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):75

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Exceeds fifty percent.

SOILS

Map Unit Name: Amity silt loam

Drainage Class: Somewhat poorly drained

On Hydric Soil List? Yes No

Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR4/2	10YR4/6 CFD		Si CL
12-18	10YR4/2	10YR4/4 FFF		CL

Hydric Soil Indicators:

- | | |
|--|--|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm) |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High organic content in surface (in Sandy Soils) |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic streaking (in Sandy Soils) |
| <input type="checkbox"/> Reducing Conditions (tests positive) | <input type="checkbox"/> Organic pan (in Sandy Soils) |
| <input type="checkbox"/> Gleyed or low chroma colors | <input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches) |
| <input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration) |
| | <input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation: to surface

Depth to Free Water: 0.5"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: All wetland criteria met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
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Project/Contact: NewB./CS
 Plant Community: meadow
 Plot Location: Northwest end of wetland
 Recent Weather: cold and wet/hail
 Det. By: C. Steinkoenig
 Plot #:15
 Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:0	= 50%	= 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1.	<i>Alopecurus pratensis</i>	FACW 60*
2.			2.	<i>Agrostis stolonifera</i>	FAC 40*
3.			3.		
4.			4.		
5.			5.		
Sapling/Shrub Stratum			6.		
Total Plot Cover:10	5= 50%	2.5= 20%	Status/Raw % Cover	7.	
1.	<i>Rubus discolor</i>		FACU 5*	8.	
2.	<i>Rosa nutkana</i>		FAC 5*	9.	
3.				10.	
4.				11.	
5.				12.	

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):75
 Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Exceeds fifty percent.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR4/2	10YR4/6 CFD		Si CL
12-18	10YR4/2	10YR4/4 FFF		CL

Hydric Soil Indicators:

- | | |
|--|--|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm) |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High organic content in surface (in Sandy Soils) |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic streaking (in Sandy Soils) |
| <input type="checkbox"/> Reducing Conditions (tests positive) | <input type="checkbox"/> Organic pan (in Sandy Soils) |
| <input type="checkbox"/> Gleyed or low chroma colors | <input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches) |
| <input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration) |
| | <input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: Depth to Saturation:to surface Depth to Free Water:0.5"

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: All wetland criteria met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
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Project/Contact: NewB./CS
 Plant Community: meadow/scrub-shrub
 Plot Location: Paired with sample plot 15
 Recent Weather: cold and wet/hail
 Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:15	7.5 = 50%	3 = 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1. <i>Quercus garryana</i>	UPL 5*		1. <i>Alopecurus pratensis</i>	FACW 40*	
2. <i>Malus sp.</i>	NOL 5*		2. <i>Agrostis stolonifera</i>	FAC 40*	
3.			3. <i>Dactylis glomerata</i>	FACU 15	
4.			4. <i>Chrysanthemum l.</i>	NOL 5	
5.			5. <i>Hypochoeris radicata</i>	FACU trace	
Sapling/Shrub Stratum					
Total Plot Cover:15	7.5 = 50%	3 = 20%	Status/Raw % Cover		
1. <i>Rubus discolor</i>			FACU 10*		
2. <i>Crataegus sp.</i>			FAC/FACU+ 5*		
3.					
4.					
5.					

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):66
 Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Exceeds fifty percent. Sundominants are upland

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	None		Si CL
12-18	10YR4/2	None		CL

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: _____ Depth to Saturation:6" Depth to Free Water:9"

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Wetland soil criterion is not met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
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Project/Contact: NewB./CS
 Plant Community: meadow/scrub-shrub
 Plot Location: west side of wetland
 Recent Weather: cold/wet
 Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum				Herb Stratum			
Total Plot Cover:		= 50%	= 20%	Total Plot Cover:100		50 = 50%	20 = 20%
Status/Raw % Cover				Status/Raw % Cover			
1.				1. <i>Alopecurus pratensis</i>			FACW 30*
2.				2. <i>Agrostis stolonifera</i>			FAC 55*
3.				3. <i>Juncus patens</i>			FACW 15
4.				4. <i>Vicia americana</i>			trace
5.				5.			
Sapling/Shrub Stratum							
Total Plot Cover:15		7.5= 50%	3= 20%	Status/Raw % Cover			
1. <i>Rosa nutkana</i>							FAC 15*
2.				6.			
3.				7.			
4.				8.			
5.				9.			
				10.			
				11.			
				12.			

Hydrophytic Vegetation Indicators:
 > 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100
 Other hydrophytic vegetation indicators:
 Criteria Met? Yes No Comments: Mets wetland vegetation criteria.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-11	10YR3/2	10YR4/6 FFF		CL L
11-16	10YR4/1	10YR4/6 CFD		Si CL

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|--|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:
 Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: _____ Depth to Saturation:1.5" Depth to Free Water:1.5"

Primary Hydrology Indicators:

- Inundated
 - Saturated in upper 12 inches
 - Water Marks
 - Drift Lines
 - Sediment Deposits
- Criteria Met? Yes No

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Wetland criteria met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: meadow/scrub-shrub		Plot #:18	
Plot Location: Paired w/17			
Recent Weather: cold /wet			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?			
Explain:			

VEGETATION

Tree Stratum				Herb Stratum			
Total Plot Cover:0		= 50%	= 20%	Total Plot Cover:100		50 = 50%	20 = 20%
Status/Raw % Cover				Status/Raw % Cover			
1.				1. <i>Alopecurus pratensis</i>			FACW 30*
2.				2. <i>Agrostis stolonifera</i>			FAC 55*
3.				3. <i>Juncus patens</i>			FACW 15
4.				4. <i>Vicia americana</i>			trace
5.				5.			
Sapling/Shrub Stratum							
Total Plot Cover:15		7.5= 50%	3= 20%	Status/Raw % Cover			
1. <i>Rosa nutkana</i>				FAC 15*			
2.							
3.							
4.							
5.							

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Mets wetland vegetation criteria.

SOILS

Map Unit Name: Amity silt loam

Drainage Class: Somewhat poorly drained

On Hydric Soil List? Yes No

Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-13	10YR3/2	None		SI L
13-18	10YR4/2	10YR4/6 CFD		Si CL

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:4"

Depth to Free Water:4"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Slight shift in topography, no hydric soil indicators observed.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
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Project/Contact: NewB./CS
 Plant Community: meadow/scrub-shrub
 Plot Location: South end of wetland
 Recent Weather: cold/wet
 Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum				Herb Stratum							
Total Plot Cover:0		= 50%		= 20%		Total Plot Cover:55		27.5 = 50%		11 = 20%	
Status/Raw % Cover						Status/Raw % Cover					
1.				1. <i>Alopecurus pratensis</i>				FACW 20*			
2.				2. <i>Agrostis stolonifera</i>				FAC 35*			
3.				3.							
4.				4.							
5.				5.							
Sapling/Shrub Stratum											
Total Plot Cover:60		30= 50%		6= 20%		Status/Raw % Cover		7.			
1. <i>Rubus discolor</i>				FACU 45*				8.			
2. <i>Quercus garryana</i>				UPL 5				9.			
3. <i>Crataegus sp.</i>				FAC/FACU 5				10.			
4. <i>Malus sp.</i>				NOL 5				11.			
5.								12.			

Hydrophytic Vegetation Indicators:
 > 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):66
 Other hydrophytic vegetation indicators:
 Criteria Met? Yes No Comments: Mets wetland vegetation criteria.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-13	10YR3/2	None		SI L
13-18	10YR4/2	10YR4/6 CFD		Si CL

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:
 Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: _____ Depth to Saturation:4" Depth to Free Water:6"
Primary Hydrology Indicators: **Secondary Hydrology Indicators (2 or more required):**

- | | |
|--|---|
| <input type="checkbox"/> Inundated
<input checked="" type="checkbox"/> Saturated in upper 12 inches
<input type="checkbox"/> Water Marks
<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Sediment Deposits | <input type="checkbox"/> Oxidized Root Channels (upper 12")
<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> FAC – Neutral Test
<input type="checkbox"/> Other: _____ |
|--|---|

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Slight shift in topography, no hydric soil indicators observed.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill Date: 2/28/07 City: Newberg File #:1985

Project/Contact: NewB./CS Det. By: C. Steinkoenig
 Plant Community: meadow/scrub-shrub Plot #:20
 Plot Location: paired w/19
 Recent Weather: cold/wet
 Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum				Herb Stratum			
Total Plot Cover:0		= 50%	= 20%	Total Plot Cover:100		50 = 50%	20 = 20%
Status/Raw % Cover				Status/Raw % Cover			
1.				1. <i>Alopecurus pratensis</i>		FACW 20*	
2.				2. <i>Agrostis stolonifera</i>		FAC 80*	
3.				3.			
4.				4.			
5.				5.			
Sapling/Shrub Stratum				6.			
Total Plot Cover:15		7.5= 50%	3= 20%	Status/Raw % Cover	7.		
1. <i>Crataegus sp.</i>				FAC or FACU+ 15	8.		
2.					9.		
3.					10.		
4.					11.		
5.					12.		

Hydrophytic Vegetation Indicators:
 > 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100
 Other hydrophytic vegetation indicators:
 Criteria Met? Yes No Comments: Did not include hawthorn.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	10YR3/6 MFD		SI CL
12-18	10YR4/2	10YR4/6 CFD		Si CL

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Reducing Conditions (tests positive)
- Gleyed or low chroma colors
- Redox features within 10" (e.g., concentrations)
- Concretions/Nodules (w/in 3", > 2mm)
- High organic content in surface (in Sandy Soils)
- Organic streaking (in Sandy Soils)
- Organic pan (in Sandy Soils)
- Listed on Hydric Soils List (and soil profile matches)
- Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
- Supplemental indicator (e.g., NRCS field indicator)

Criteria Met? Yes No

HYDROLOGY

Recorded Data:
 Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: _____ Depth to Saturation: to surface Depth to Free Water: 1"
Primary Hydrology Indicators: **Secondary Hydrology Indicators (2 or more required):**
 Inundated Oxidized Root Channels (upper 12")
 Saturated in upper 12 inches Water-stained leaves
 Water Marks Local Soil Survey Data
 Drift Lines FAC – Neutral Test
 Sediment Deposits Other:
 Criteria Met? Yes No Comments: Area has patches of standing water.

DETERMINATION

WETLAND? YES NO Comments: Wetland criteria met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
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Project/Contact: NewB./CS
 Plant Community: meadow/scrub-shrub
 Plot Location: east side if isolated wetland
 Recent Weather: cold
 Det. By: C. Steinkoenig
 Plot #:21

Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:0	= 50%	= 20%	Total Plot Cover:55	27.5 = 50%	11 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Alopecurus pratensis</i>	FACW 20*	
2.			2. <i>Agrostis stolonifera</i>	FAC 60*	
3.			3. <i>Festuca aruminacea</i>	FAC- 20*	
4.			4.		
5.			5.		
Sapling/Shrub Stratum			6.		
Total Plot Cover:50	25= 50%	10= 20%	Status/Raw % Cover	7.	
1. <i>Rubus discolor</i>			FACU 50*	8.	
2.				9.	
3.				10.	
4.				11.	
5.				12.	

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):75

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Mets wetland vegetation criteria.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-13	10YR3/2	None		SI CL
13-18	10YR4/2	10YR4/6 FFD		Si CL

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: _____ Depth to Saturation: _____ Depth to Free Water: _____

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Criteria Met? Yes No

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other: _____

Comments: .

DETERMINATION

WETLAND? YES NO Comments: No wetland hydrology or hydric soils.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
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Project/Contact: NewB./CS
 Plant Community: meadow/scrub-shrub
 Plot Location: Paired w/ sample plot 21
 Recent Weather: cold/wet
 Det. By: C. Steinkoenig
 Plot #:22
 Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum				Herb Stratum			
Total Plot Cover:0		= 50%	= 20%	Total Plot Cover:100		50 = 50%	20 = 20%
Status/Raw % Cover				Status/Raw % Cover			
1.				1. <i>Alopecurus pratensis</i>			FACW 50*
2.				2. <i>Agrostis stolonifera</i>			FAC 45*
3.				3. <i>Moss</i>			5
4.				4.			
5.				5.			
Sapling/Shrub Stratum							
Total Plot Cover:5		2.5= 50%	1= 20%	Status/Raw % Cover			
1. <i>Rubus discolor</i>				FACU 5 *			
2.							
3.							
4.							
5.							

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100
 Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Vegetation criterion is met.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	10YR3/6 CFF		Si L
12-18	10YR4/2	10YR4/6 MFD		Si CL

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|--|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: Depth to Saturation: Saturated to the surface Depth to Free Water:

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Criteria Met? Yes No

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Comments: .

DETERMINATION

WETLAND? YES NO Comments: All wetland criteria is met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
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Project/Contact: NewB./CS
 Plant Community: meadow/scrub-shrub
 Plot Location:
 Recent Weather: cold
 Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:0	= 50%	= 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Alopecurus pratensis</i>	FACW 20*	
2.			2. <i>Agrostis stolonifera</i>	FAC 50*	
3.			3. <i>Dactylis glomerata</i>	FACU 20*	
4.			4. <i>Chrysanthemum ; euc.</i>	NOL 5	
5.			5. <i>Aster sp.</i>	Unknown 5	
Sapling/Shrub Stratum			6.		
Total Plot Cover:35	17.5= 50%	7= 20%	Status/Raw % Cover	7.	
1. <i>Rubus discolor</i>			FACU- 10*	8.	
2. <i>Rubus laciniatus</i>			FACU+ trace	9.	
3. <i>Rhamnus purshiana</i>			FAC- 5	10.	
4. <i>Crataegus sp</i>			FAC/FACU 20*	11.	
5.				12.	

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):50

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Hawthron species not included.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-13	10YR3/2	None		SI L
13-18	10YR4/2	10YR4/6 MFD		Si CL

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: Depth to Saturation: Depth to Free Water:10"

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Criteria Met? Yes No

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Vegetation and soil did not met wetland criteria.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
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Project/Contact: NewB./CS
 Plant Community: meadow/scrub-shrub
 Plot Location: Paired w/ sample plot 23
 Recent Weather: cold
 Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum				Herb Stratum		
Total Plot Cover:0	= 50%	= 20%	Status/Raw % Cover	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover				Status/Raw % Cover		
1.				1. <i>Alopecurus pratensis</i>		FACW 50*
2.				2. <i>Agrostis stolonifera</i>		FAC 45*
3.				3. <i>Moss</i>		5
4.				4.		
5.				5.		
Sapling/Shrub Stratum				6.		
Total Plot Cover:30	15= 50%	6= 20%	Status/Raw % Cover	7.		
1. <i>Rosa nutkana</i>			FAC 30*	8.		
2.				9.		
3.				10.		
4.				11.		
5.				12.		

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100
 Other hydrophytic vegetation indicators:
 Criteria Met? Yes No Comments: Vegetation criterion is met.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-10	10YR3/2	10YR3/6 MMF		Si L
10-16	10YR4/2	10YR4/6 MFD		Si CL

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input checked="" type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|--|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: _____ Depth to Saturation: Saturated to the surface Depth to Free Water: _____

Primary Hydrology Indicators:

- Inundated
 Saturated in upper 12 inches
 Water Marks
 Drift Lines
 Sediment Deposits

Criteria Met? Yes No

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
 Water-stained leaves
 Local Soil Survey Data
 FAC – Neutral Test
 Other: _____

Comments: .

DETERMINATION

WETLAND? YES NO Comments: All wetland criteria is met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
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Project/Contact: NewB./CS
 Plant Community: meadow
 Plot Location: south of isolated wetland
 Recent Weather: cold/wet
 Det. By: C. Steinkoenig
 Plot #:25
 Do normal environmental conditions exist? Y N If no, explain:
 Has Vegetation Soil Hydrology been significantly disturbed?
 Explain:

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:0	= 50%	= 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Alopecurus pratensis</i>		FACW 20*
2.			2. <i>Agrostis stolonifera</i>		FAC 80*
3.			3.		
4.			4.		
5.			5.		
Sapling/Shrub Stratum			6.		
Total Plot Cover:	= 50%	= 20%	Status/Raw % Cover	7.	
1.			8.		
2.			9.		
3.			10.		
4.			11.		
5.			12.		

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Did not include hawthorn.

SOILS

Map Unit Name: Amity silt loam Drainage Class: Somewhat poorly drained
 On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	10YR3/6 MFD		SI CL
12-18	10YR4/2	10YR4/6 CFD		Si CL

Hydric Soil Indicators:

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Reducing Conditions (tests positive)
- Gleyed or low chroma colors
- Redox features within 10" (e.g., concentrations)
- Concretions/Nodules (w/in 3", > 2mm)
- High organic content in surface (in Sandy Soils)
- Organic streaking (in Sandy Soils)
- Organic pan (in Sandy Soils)
- Listed on Hydric Soils List (and soil profile matches)
- Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
- Supplemental indicator (e.g., NRCS field indicator)

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation: Depth to Saturation:to surface Depth to Free Water:1"

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Criteria Met? Yes No

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Comments: Area has patches of standing water.

DETERMINATION

WETLAND? YES NO Comments: Wetland criteria met.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #: 1985
Project/Contact: NewB./CS		Det. By: C. Steinkoenig	
Plant Community: meadow		Plot #: 26	
Plot Location: Paired w/sampleplot 25			
Recent Weather: cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?			
Explain:			

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover: 0	= 50%	= 20%	Total Plot Cover: 100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Alopecurus pratensis</i>		FACW 45*
2.			2. <i>Agrostis stolonifera</i>		FAC 55*
3.			3.		
4.			4.		
5.			5.		
Sapling/Shrub Stratum			6.		
Total Plot Cover: 10	5 = 50%	2.5 = 20%	Status/Raw % Cover		
1. <i>Rubus discolor</i>			7.		
2. <i>Malus sp.</i>			8.		
3.			9.		
4.			10.		
5.			11.		
			12.		

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-): 66

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: Mets wetland vegetation criteria.

SOILS

Map Unit Name: Amity silt loam

Drainage Class: Somewhat poorly drained

On Hydric Soil List? Yes No

Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-12	10YR3/2	None		SI L
12-18	10YR4/2	10YR4/6 CFD		Si CL

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm) |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High organic content in surface (in Sandy Soils) |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic streaking (in Sandy Soils) |
| <input type="checkbox"/> Reducing Conditions (tests positive) | <input type="checkbox"/> Organic pan (in Sandy Soils) |
| <input type="checkbox"/> Gleyed or low chroma colors | <input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches) |
| <input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration) |
| | <input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation: 5"

Depth to Free Water: 5"

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- | | |
|--|---|
| <input type="checkbox"/> Inundated | <input type="checkbox"/> Oxidized Root Channels (upper 12") |
| <input checked="" type="checkbox"/> Saturated in upper 12 inches | <input type="checkbox"/> Water-stained leaves |
| <input type="checkbox"/> Water Marks | <input type="checkbox"/> Local Soil Survey Data |
| <input type="checkbox"/> Drift Lines | <input type="checkbox"/> FAC – Neutral Test |
| <input type="checkbox"/> Sediment Deposits | <input type="checkbox"/> Other: |

Criteria Met? Yes No

Comments: .

DETERMINATION

WETLAND? YES NO Comments: Soil did not met wetland criterion.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
Project/Contact: NewB./CS	Det. By: C. Steinkoenig		
Plant Community: meadow	Plot #:27		
Plot Location: Tax lot 1000 Vet Clinic			
Recent Weather: cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?			
Explain:			

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:0	= 50%	= 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Poa pratensis</i>		FAC 45*
2.			2. <i>Agrostis stolonifera</i>		FAC 50*
3.			3. <i>Rumex crispus</i>		FAC+ trace
4.			4. <i>Chrysanthemum Leuc.</i>		UPL trace
5.			5. <i>Trifolium repens</i>		FAC 15
Sapling/Shrub Stratum					
Total Plot Cover:	= 50%	= 20%	Status/Raw % Cover	7.	
1.				8.	
2.				9.	
3.				10.	
4.				11.	
5.				12.	

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: .

SOILS

Map Unit Name: Woodburn silt loam 0-7% Drainage Class: Moderately well drained

On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-16	10YR3/3	None		SI L

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol
<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Odor
<input type="checkbox"/> Reducing Conditions (tests positive)
<input type="checkbox"/> Gleyed or low chroma colors
<input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm)
<input type="checkbox"/> High organic content in surface (in Sandy Soils)
<input type="checkbox"/> Organic streaking (in Sandy Soils)
<input type="checkbox"/> Organic pan (in Sandy Soils)
<input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches)
<input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration)
<input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |
|---|---|

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Primary Hydrology Indicators:

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

Criteria Met? Yes No

Depth to Saturation:

Depth to Free Water:

Secondary Hydrology Indicators (2 or more required):

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Comments:

DETERMINATION

WETLAND? YES NO Comments: No hydric soil or wetland hydrology observed.

DEPARTMENT OF STATE LANDS WETLAND DETERMINATION DATA FORM – Quick Method

County: Yamhill	Date: 2/28/07	City: Newberg	File #:1985
Project/Contact: NewB./CS	Det. By: C. Steinkoenig		
Plant Community: meadow	Plot #:28		
Plot Location: Tax lot 900			
Recent Weather: cold			
Do normal environmental conditions exist? Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If no, explain:			
Has Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> Hydrology <input type="checkbox"/> been significantly disturbed?			
Explain:			

VEGETATION

Tree Stratum			Herb Stratum		
Total Plot Cover:0	= 50%	= 20%	Total Plot Cover:100	50 = 50%	20 = 20%
Status/Raw % Cover			Status/Raw % Cover		
1.			1. <i>Poa pratensis</i>		FAC 45*
2.			2. <i>Agrostis stolonifera</i>		FAC 50*
3.			3. <i>Rumex crispus</i>		FAC+ trace
4.			4. <i>Chrysanthemum Leuc.</i>		UPL trace
5.			5. <i>Trifolium repens</i>		FAC 15
Sapling/Shrub Stratum			6.		
Total Plot Cover:	= 50%	= 20%	Status/Raw % Cover	7.	
1.			8.		
2.			9.		
3.			10.		
4.			11.		
5.			12.		

Hydrophytic Vegetation Indicators:

> 50% of dominants are OBL, FACW or FAC Percent of Dominant Species that are OBL, FACW, FAC (not FAC-):100

Other hydrophytic vegetation indicators:

Criteria Met? Yes No Comments: .

SOILS

Map Unit Name: Woodburn silt loam 0-7% Drainage Class: Moderately well drained

On Hydric Soil List? Yes No Has Hydric Inclusions? Yes No

Depth Range of Horizon	Matrix Color	Redox Concentrations	Redox Depletions	Texture
0-17	10YR3/3	None		SI L

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions/Nodules (w/in 3", > 2mm) |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High organic content in surface (in Sandy Soils) |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic streaking (in Sandy Soils) |
| <input type="checkbox"/> Reducing Conditions (tests positive) | <input type="checkbox"/> Organic pan (in Sandy Soils) |
| <input type="checkbox"/> Gleyed or low chroma colors | <input type="checkbox"/> Listed on Hydric Soils List (and soil profile matches) |
| <input type="checkbox"/> Redox features within 10" (e.g., concentrations) | <input type="checkbox"/> Meets hydric soil criteria 3 or 4 (ponded or flooded for long duration) |
| | <input type="checkbox"/> Supplemental indicator (e.g., NRCS field indicator) |

Criteria Met? Yes No

HYDROLOGY

Recorded Data:

Recorded Data Available Aerial Photos Stream Gauge Other No Recorded Data Available

Field Data

Depth of inundation:

Depth to Saturation:

Depth to Free Water:

Primary Hydrology Indicators:

Secondary Hydrology Indicators (2 or more required):

- Inundated
- Saturated in upper 12 inches
- Water Marks
- Drift Lines
- Sediment Deposits

- Oxidized Root Channels (upper 12")
- Water-stained leaves
- Local Soil Survey Data
- FAC – Neutral Test
- Other:

Criteria Met? Yes No

Comments:

DETERMINATION

WETLAND? YES NO Comments: No hydric soil or wetland hydrology observed.

Appendices

Boiler Plate Information

References

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Boiler Plate Information

Wetland Definition and Authority

The U.S. Army Corps of Engineers (COE) regulates the discharge of dredged or fill materials into waters and adjacent wetlands of the United States under authority of Section 404 of the Clean Water Act (*Federal Register*, 1986). For purposes of the Section 404 permitting program, the COE and other federal agencies define wetlands as follows (*Federal Register*, 1980, 1982):

“Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.”

In Oregon, the Department of State Lands (DSL) regulates removal/fill permitting in wetlands under ORS 196.800 to 196.990, and OAR 141-85-005 to OAR 141-85-090, and uses the same definition.

Regulatory Context

In 1987, the COE published a manual (Corps of Engineers Wetlands Delineation Manual or 1987 manual), which describes methods for determining the extent of jurisdictional wetlands under Section 404 of the Clean Water Act (Environmental Laboratory, 1987). *The Federal Manual for Identifying and Delineating Jurisdictional Wetlands* was published two years later as a collaborative effort by the COE, U.S. Fish and Wildlife Service (USFWS), U.S. Environmental Protection Agency (EPA), and U.S. Soil Conservation Service (SCS), revised the 1987 manual (Federal Interagency Committee for Wetland Delineation, or 1989 manual).

Both the COE and DSL used the 1989 manual until 1992 when the 1992 Energy and Water Development Appropriation Act went into effect. The Act limited the COE (federal permitting agency) to using the 1987 manual for determining the extent of wetlands under federal jurisdiction. Oregon continued to use the 1989 manual until March 23, 1993, when the Director of DSL signed a policy statement requiring the agency to use the 1987 manual. The policy statement was the result of the EPA agreement to use the 1987 manual.

Vegetation

Plants growing in wetlands must be specifically adapted for life under saturated or anaerobic conditions and are commonly referred to as hydrophytic vegetation. The U.S.F.W.S. in cooperation with the National and Regional Interagency Review Panels publishes regional lists estimating the probability of plant species' occurrence in wetlands (e.g., Fish and Wildlife Service, 1988). Each species is given an *indicator status*, which represents the likelihood that it will be found in a wetland. Categories defined in Table 1

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are obligate (OBL), facultative wetland (FACW), facultative (FAC), facultative upland (FACU), or upland (UPL). Plants with an indicator status of OBL, FACW, or FAC are considered adapted for life in saturated or anaerobic soil conditions.

The percent coverage of each plant species within the herb, shrub, and tree layers was estimated at each sample plot. Shrubs within a five-foot radius and trees within a 30-foot radius of the center of each plot were identified and recorded. Within the plot, all species were recorded in descending order of coverage, and dominant species were determined. The presence of wetland vegetation was determined according to the indicator status of the dominant species within each vegetative stratum. According to the manual, a sample plot is considered to have wetland vegetation if more than 50% of the number of dominant species present has an indicator status of OBL, FACW, and/or FAC. By 1987 standards, dominant species are chosen by selecting the three most dominant species from each of the four strata (herbs, saplings/shrubs, woody vines, trees). If only one or two strata are represented, then the five most dominant species from each stratum are selected.

TABLE 1: DEFINITIONS OF INDICATOR STATUS

Indicator Symbol	Definition
OBL	Obligate. Species that occur in wetlands under natural conditions with an estimated probability of greater than 99%
FACW	Facultative wetland. Species that usually occur in wetlands (estimated probability 67 to 99%), but occasionally are found in non-wetlands.
FAC	Facultative. Species that are equally likely to occur in wetlands or non-wetlands (estimated probability 34 to 66%).
FACU	Facultative upland. Species that usually occur in non-wetlands (estimated probability 67 to 99%), but occasionally are found in wetlands.
UPL	Upland. Species that occur in non-wetlands under natural conditions with an estimated probability of greater than 99%
NI	No indicator. Species for which insufficient information was available to determine an indicator status.

Sources: Federal Interagency Committee for Wetland Delineation, 1989. Environmental Laboratory, 1987. Reed, 1988.

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Soils

Hydric soils, defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part of the soil profile, are one characteristic of wetlands (USDA Soil Conservation Service, 1987). A list of hydric soils of the United States was compiled by the Soil Conservation Service (SCS), in cooperation with the National Technical Committee for Hydric Soils (NTCHS). All soils are mapped in county soil surveys. However, the mapped boundaries of SCS soil types are not at a fine enough resolution for delineating boundaries of jurisdictional wetlands. Errors of omission can occur on SCS maps. Inclusions of upland (non-wetland) soil may exist in hydric soils and uplands may have inclusions of hydric soil. Therefore, field examination of soils is important for accurately delineating the extent of hydric soils. Hydric soils exhibit certain characteristics that can be observed in the field. Field indicators include: high organic content, accumulation of sulfidic material (rotten egg odor), greenish or bluish gray color (gley formation), iron and manganese concretions, spots or blotches of color (mottling), and/or dark soil colors (low soil chroma).

A shovel, excavating down to a depth of at least 16 inches, was used to sample soil along the wetland boundary. Soil samples were checked for presence of sulfide gases; organic content was estimated visually and texturally; and soil colors were determined by using a Munsell soil color chart (Kollmorgen 1975). The Munsell soil color chart provides the standard for three attributes of color: hue, value, and chroma.

According to the 1987 manual, hydric soils are required to be inundated or saturated for seven or more consecutive days during the growing season. Soil color is examined in the horizon immediately below the A-horizon, or within 10 inches of the surface, whichever is shallower.

Hydrology

Wetlands, by their very name, must have water. Jurisdictional wetlands are characterized as having permanent or periodic inundation, or soil saturation for five percent or more of the growing season. Saturation occurs when the capillary fringe is within the major portion of the root zone (usually within 12 inches of the surface). Areas meeting one of these criteria are considered to have wetland hydrology.

Ponding or soil saturation for five percent or more of the growing season during the growing season is direct evidence of wetland hydrology. Bare soil and dried algae are evidence that a site was previously inundated. Oxidized rhizospheres along live root channels also indicate soil saturation for five percent or more of the growing season. At each sample plot, wetland hydrology was assumed if positive indicators were present.

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Wetland Determination

Presence or absence of wetlands was based on soil, vegetation, and hydrology data collected at sample plots. Following procedures outlined in the 1987 manual, sample plots with homogeneous vegetation were determined to be wetlands if wetland characteristics were present or judged to be normally present (barring human or unusual natural events) for all three parameters.

Difficulties in wetland determination can arise because of disturbance or in problem areas. Both human (e.g., clearing vegetation, agriculture, filling, and excavation) and natural (e.g., mudslides, fire, and beaver dams) events have potential for obliterating field indicators of the three wetland parameters. In disturbed sites, both field and offsite data may be used to determine the presence of a wetland. Offsite information such as historical records, aerial photographs, previous soil, and vegetation surveys may indicate the presence of a jurisdictional wetland.

Some sites are difficult to evaluate because field indicators may not be present throughout the year. Field indicators may vary because of changing environmental conditions that occur seasonally and not necessarily the result of human or natural disturbance.

According to the 1987 manual, all three parameters (hydric soils, hydrophytic vegetation, and wetland hydrology) must be present for an area to be determined as wetland. Drumlins, seasonal wetlands, prairie potholes, and vegetated flats exemplify areas that are difficult to evaluate.

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REFERENCES

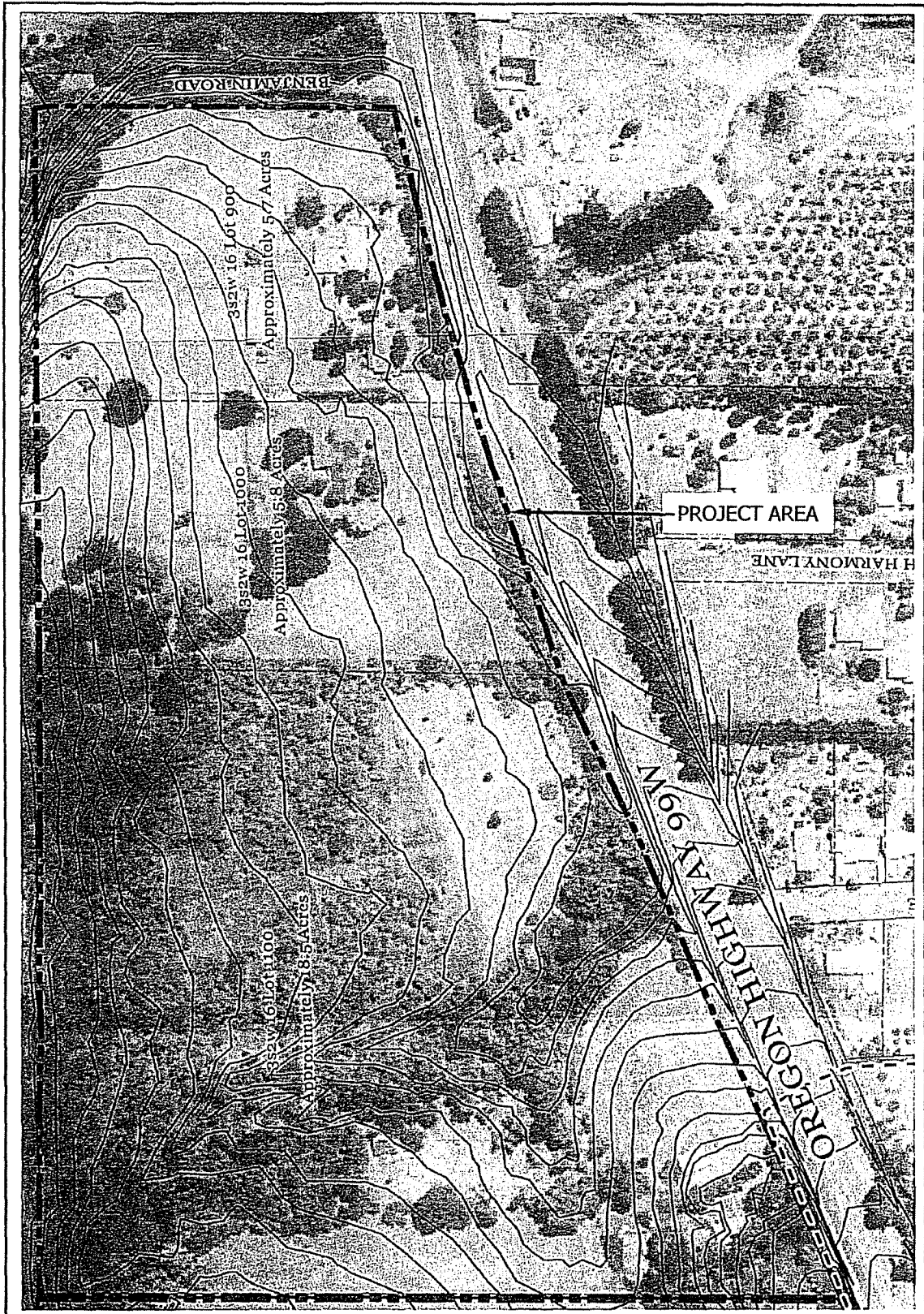
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Aurora, OR. 97002
503.678.6007

Keith Leonard

From: Kleinmanjl <kleinmanjl@aol.com>
Sent: Thursday, August 02, 2018 9:47 AM
To: Keith Leonard
Subject: Crestview Crossing, File No. PUD18-0001/CUP18-0004
Attachments: DSL-Wetland Delineation Report 2-4-2008.pdf

Hi Keith,

Attached please find one more exhibit for the above case file, Wetland Delineation Report with DSL letter dated February 4, 2008.

Thanks again.

Jeffrey L. Kleinman
Attorney at Law
The Ambassador
1207 SW Sixth Avenue
Portland, OR 97204
Tel (503) 248-0808
Fax (503) 228-4529

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Keith Leonard

From: Kleinmanjl <kleinmanjl@aol.com>
Sent: Thursday, August 02, 2018 9:41 AM
To: Keith Leonard
Subject: Crestview Crossing, File No. PUD18-0001/CUP18-0004
Attachments: Six-Party Agreement (signed) 4-10-2006.pdf; Oxberg Source Water Assessment - April 2004_1of2.pdf; Oxberg Source Water Assessment-Appendices - April 2004_2of2.pdf

Hi Keith,

In order to avoid potential problems with oversized transmissions later, I am submitting the following exhibits for the above case file now. I will send one more large document separately, and will email my memorandum to the Planning Commission later this morning.

1. Six-Party Agreement dated April 10, 2006.
2. Source Water Assessment Report by the State of Oregon for the Oxberg Water System, April 2004.
3. Appendices to the above report.

Please confirm receipt of this message and the attachments. Thanks very much.

Jeffrey L. Kleinman
Attorney at Law
The Ambassador
1207 SW Sixth Avenue
Portland, OR 97204
Tel (503) 248-0808
Fax (503) 228-4529

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Keith Leonard

From: Kleinmanjl <kleinmanjl@aol.com>
Sent: Thursday, August 02, 2018 9:41 AM
To: Keith Leonard
Subject: Crestview Crossing, File No. PUD18-0001/CUP18-0004
Attachments: Six-Party Agreement (signed) 4-10-2006.pdf; Oxberg Source Water Assessment - April 2004_1of2.pdf; Oxberg Source Water Assessment-Appendices - April 2004_2of2.pdf

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Jeffrey L. Kleinman
Attorney at Law
The Ambassador
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SOURCE WATER ASSESSMENT REPORT

Summary of Analysis

**Oxberg Water System
Newberg, Oregon
Yamhill County
PWS #4105308**

April, 2004

Prepared By

Oregon Department of Human Services
Health Services
Drinking Water Program



And

Oregon Department of Environmental Quality
Water Quality Division
Drinking Water Protection



Available in Alternate Formats by contacting the DHS DWP at (541) 726-2587

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Oxberg Water System Source Water Assessment Report Summary of Analysis

1. Introduction

The Source Water Assessment Program, mandated by the 1996 Amendments to the Safe Drinking Water Act, requires that states provide the information needed by public water systems to develop drinking water protection plans if they choose. That information includes the identification of the area most critical to maintaining safe drinking water, i.e., the Drinking Water Protection Area, an inventory of potential sources of contamination within the Drinking Water Protection Area, and an assessment of the relative threat that these potential sources pose to the water system.

The intent of this report is to present our conclusions regarding the source water assessment analysis for your water system. It is our hope that this information will be used as a basis for reducing the risk of contamination to your water source through the development of a voluntary Drinking Water Protection Plan (DWPP). Should you decide to proceed with the development of a DWPP, this document can serve as the foundation for the plan. If, however, a more in depth analysis of the local hydrogeology, water system susceptibility, and/or the water system specific assumptions is needed to help promote the development of a DWPP, a more comprehensive assessment analysis can be made available to you by contacting either the DHS Project Manager or the DHS Drinking Water Program Groundwater Coordinator.

The methodology that the Source Water Assessment results are based on is included in Appendix I, "Source Water Assessment Methodology". Appendix I includes a discussion of the source water assessment project; groundwater basics; and the processes involved with conducting the delineation, sensitivity analysis, potential contaminant source inventory, and overall water system susceptibility. Therefore, it is our intention that the assessment results, identified in this portion of the report, be used in conjunction with the methodology and rationale presented in Appendix I. For instance, if questions arise regarding our conclusions with respect to a specific element of the assessment (i.e. type of delineation used, aquifer sensitivity, well construction sensitivity, etc...), the methodology that led to our conclusions can be reviewed in Appendix I for further clarification.

We believe public awareness is a powerful tool for protecting drinking water and that the information provided in this report will help you increase local awareness regarding land use activities and local drinking water quality. We have also included a groundwater fact sheet in Appendix E and a list of Oregon specific drinking water protection information and resources in Appendix H.

2. Water System Background

Oxberg Water System is located in Yamhill County and serves approximately 80 people through 27 connections. Drinking water is supplied by one well, commonly referred to as Well #2. According to DHS Drinking Water Program records, this well serves as the only permanent water source.

2.1 Location of the Drinking Water Source(s)

We have located your drinking water source(s) using a Trimble GeoExplorer II Global Positioning System (GPS) unit. The data has been differentially corrected to remove some of the common positioning errors. The location of the source(s), with the corresponding Drinking Water Protection Area, has been placed in a Geographic Information System (GIS) layer and projected onto a USGS 7.5 minute topographic map that is included within this report. In order to be consistent with the topographic map, the projection uses the NAD1927 datum. The latitude and longitude values given on the map and below, however, reflect a projection in the more commonly used WGS1984 datum.

Data collection specifics include:

- 150 individual measurements,
- linked to a minimum of four satellites,
- a PDOP of less than 6 (pertains to precision of measurement), and
- a signal to noise ratio of greater than 5.

The raw data was subjected to differential correction using the PATHFINDER software. The location data for your drinking water source(s) using the WGS84 datum is as follows:

Source	Latitude	Longitude
Well #2 - Source AA	45° 18' 53.679" N	122° 56' 00.350" W

2.2 Source Construction

The well was constructed in November and December 1986. A 12-inch diameter hole was drilled to a depth of 30 feet, with an eight-inch diameter hole continuing to 200 feet. Eight-inch diameter casing was installed from one foot above the surface to a depth of 162 feet and six-inch diameter liner was installed from 160 to 200 feet. Cement was placed between the casing and the outer wall of the hole from the surface to a depth of 30 feet to serve as a casing seal. This casing seal is considered adequate. In a sanitary survey conducted on 8/4/98, DHS Drinking Water Program staff determined that there are no visible well construction deficiencies pertaining to drinking water protection. A copy of the well report for this well is included in Appendix D.

2.3 Nature and Characteristics of the Aquifer

The aquifer supplying the drinking water to the Oxberg Water System well consists of layered basalt and sedimentary interbeds of the Columbia River Basalt Group. The well log identifies the first water-bearing zone at a depth of 50 feet.

Based on the well log and regional geologic maps, the aquifer supplying the well consists of interflow zones of layered volcanic rocks associated with the Columbia River Basalt Group. According to the well log, water was found from 50 to 200 feet and the static water level (water level when well is not being pumped) was reported as 29 feet below the surface. The aquifer is directly overlain by 48 feet of basalt and silt. Since the water level in the well has risen approximately 21 feet above the first water-bearing zone water in the aquifer is assumed to be under pressure. **Therefore, we consider the aquifer supplying the well to be a confined layered volcanic aquifer with a minimum depth to the first water-bearing zone of 50 feet. Thickness of the water-bearing zone exploited in the aquifer is estimated to be 15 feet.**