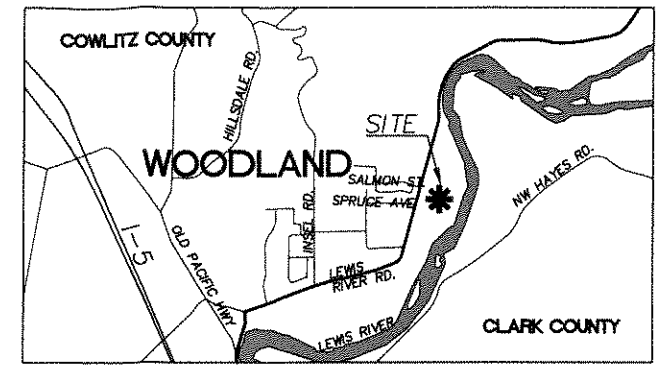


HERON MEADOWS SUBDIVISION LEWIS RIVER ROAD WOODLAND, WASHINGTON FEBRUARY 2020

PARCEL 3 & PART OF PARCEL 2,
OF THE SURVEY
FILED IN VOL. 37 PG. 74
LOCATED IN THE JOSEPH EATON D.L.C.,
AND THE NE1/4 NE1/4 SEC. 18, SE1/4 SE1/4 7,
SW1/4 SW1/4 8, AND THE NW1/4 NW1/4 SEC. 17
ALL LOCATED IN
TOWNSHIP 5 NORTH, RANGE 1 EAST, W.M.
COWLITZ COUNTY, WASHINGTON



VICINITY MAP

QUAIL COVER 2/15/20

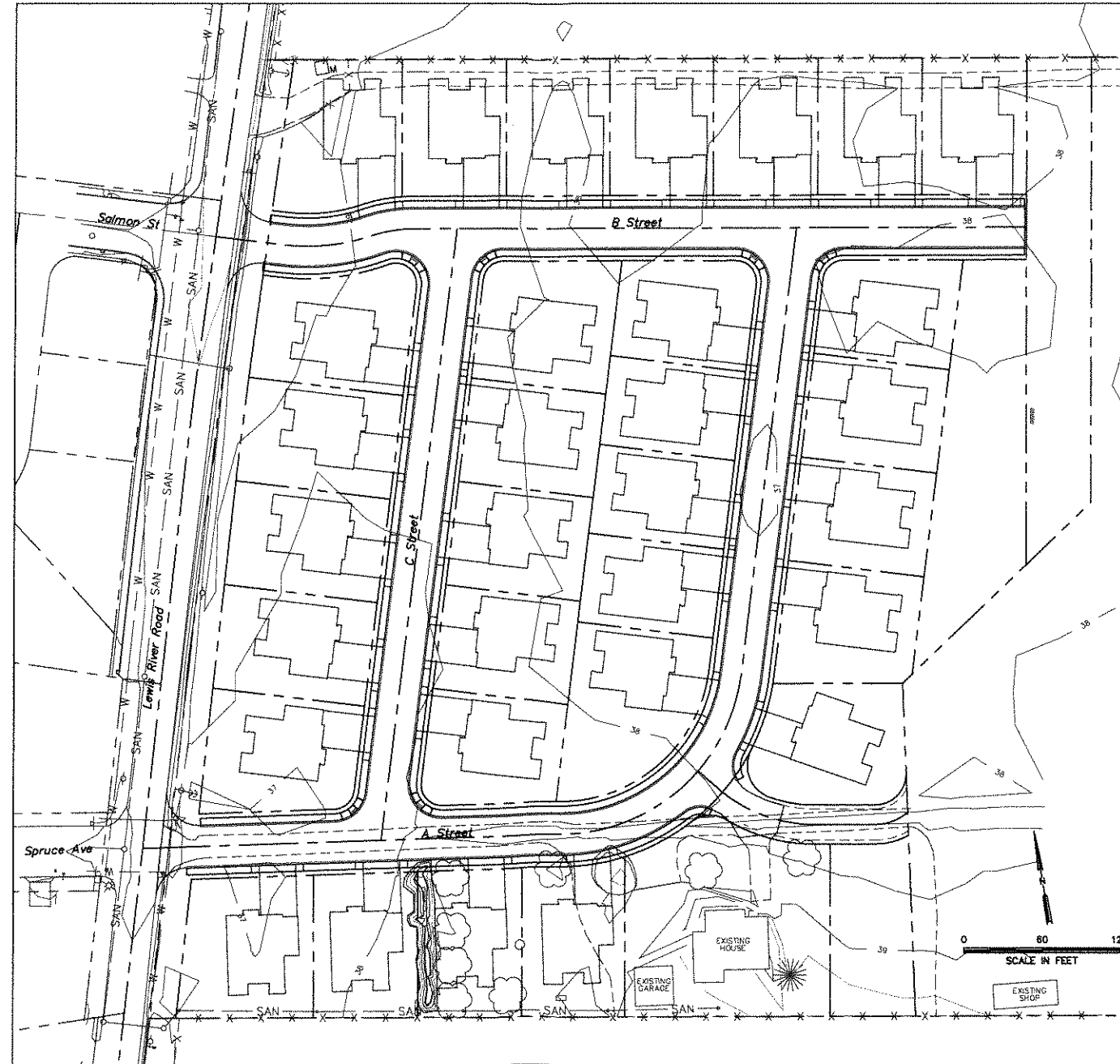
DRAWING NO.
C-1
PROJECT NO.

HERON MEADOWS SUBDIVISION
2215 LEWIS RIVER ROAD
WOODLAND, WASHINGTON 98674

COVER SHEET

SHEET INDEX

C-1	COVER
C-2	EXISTING CONDITIONS
C-3	PRELIMINARY PLAT & SITE PLAN
C-4	GRADING AND DRAINAGE PLAN
C-5	UTILITY PLAN
C-6	TREE PLAN
C-7	A STREET PLAN AND PROFILE
C-8	B STREET PLAN AND PROFILE
C-9	C STREET PLAN AND PROFILE
C-10	EROSION CONTROL PLAN
C-11	DETAILS
C-12	STANDARD DETAILS
C-13	STANDARD DETAILS
C-14	STANDARD DETAILS
C-15	STANDARD DETAILS



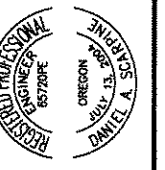
- LEGEND**
- EXISTING CATCH BASIN
 - PROPOSED CATCH BASIN
 - EXISTING MANHOLE
 - PROPOSED MANHOLE
 - PROPOSED STREET LIGHT
 - EXISTING SPOT ELEVATION
 - EXISTING FIRE HYDRANT
 - PROPOSED FIRE HYDRANT
 - EXISTING WATER VALVE
 - PROPOSED WATER VALVE
 - PROPOSED WATER BLOW OFF
 - ROADWAY CENTERLINE
 - EXISTING RIGHT-OF-WAY
 - EXISTING PROPERTY LINES
 - PROPOSED RIGHT-OF-WAY
 - EXISTING EDGE OF PAVEMENT
 - PROPOSED EDGE OF PAVEMENT
 - EXISTING SANITARY SEWER
 - PROPOSED SANITARY SEWER
 - EXISTING STORM SEWER
 - PROPOSED STORM SEWER
 - EXISTING GAS LINE
 - EXISTING WATER LINE
 - PROPOSED WATER LINE
 - EXISTING OVERHEAD ELECTRIC
 - PROPOSED SEDIMENT FENCE
 - REMOVE TREE
 - PROPOSED STREET TREE

APPLICANT:
SAGE INVESTMENT HOLDINGS, LLC
2215 LEWIS RIVER ROAD
WOODLAND, WASHINGTON 98674
CONTACT: ANDREW LOUD
503-799-6125
EMAIL: ANDREWLOUD@YAHOO.COM

CIVIL ENGINEER:
DANIEL SCARPINE, P.E.
AQUARIUS ENVIRONMENTAL, LLC
2117 NE OREGON STREET
PORTLAND, OR 97232
503-828-0265
daniels@aquariusenv.com



REV	DATE	DESCRIPTION	DESIGNED BY	CHECKED BY	APP BY
1	1/15/20	PRELIMINARY	DL	DL	



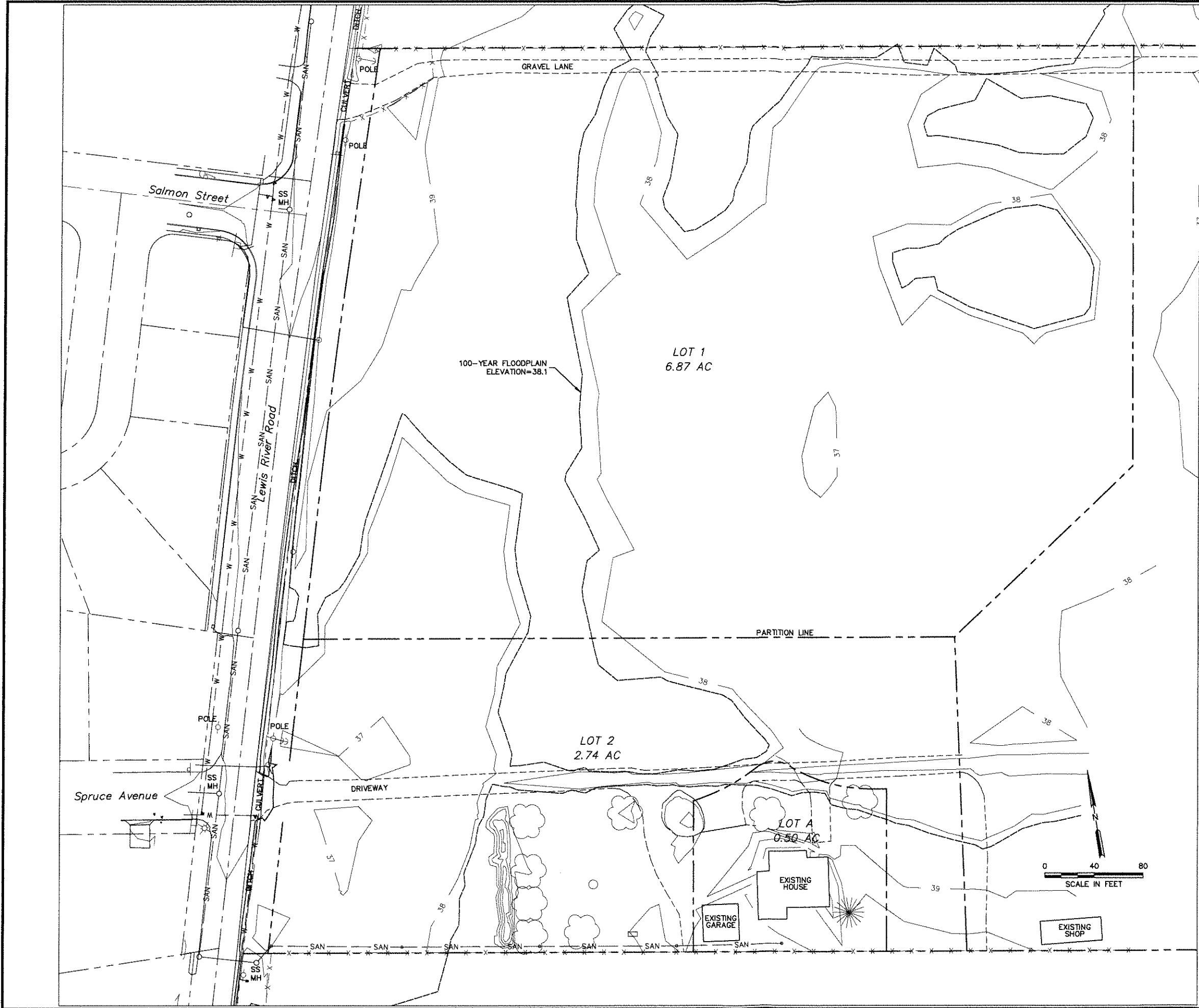
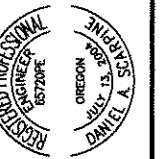
PARCEL 3 & PART OF PARCEL 2,
 OF THE SURVEY
 FILED IN VOL. 37 PG. 74
 LOCATED IN THE JOSEPH EATON D.L.C.,
 AND THE NE1/4 NE1/4 SEC. 18, SE1/4 SE1/4 7,
 SW1/4 SW1/4 8, AND THE NW1/4 NW1/4 SEC. 17
 ALL LOCATED IN
 TOWNSHIP 5 NORTH, RANGE 1 EAST, W.M.
 COWLITZ COUNTY, WASHINGTON

DRAWING NO. **C-2**
 PROJECT NO.

HERON MEADOWS SUBDIVISION
 2215 LEWIS RIVER ROAD
 WOODLAND, WASHINGTON 98674
EXISTING CONDITIONS



REV.	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
1	FEB 2020	ISS				



QUAIL EXISTING 2/15/20



PARCEL LINE TABLE			PARCEL CURVE TABLE			CENTERLINE LINE TABLE			CENTERLINE CURVE TABLE		
#	DISTANCE	BEARING	#	LENGTH	RADIUS	#	DISTANCE	BEARING	#	LENGTH	RADIUS
L1	20.20	S80°09'51"E	C1	31.92	125.00	L110	53.13	S73°06'16"E	C26	68.00	152.00
L2	83.50	S80°09'51"E	C2	56.82	127.00	L111	33.09	S80°09'51"E	C27	32.42	100.00
L3	105.30	S09°50'09"W	C3	8.60	125.00	L112	261.94	S80°09'51"E	C28	83.16	140.00
L4	12.68	N73°06'16"W	C4	84.35	177.00	L113	176.38	S80°09'51"E	C29	115.44	140.00
L5	116.76	N17°53'47"E	C5	32.73	16.00	L114	344.22	S16°47'59"W	C30	81.57	114.00
L6	80.00	S80°09'51"E	C6	56.99	5,190.00	L115	142.89	N81°55'27"W	C31	27.41	39.00
L7	105.00	S09°50'09"W	C7	80.00	5,190.00	L116	183.48	N81°55'27"W			
L8	71.41	N80°09'51"W	C8	18.60	5,190.00	L117	472.52	N16°47'59"E			
L9	80.00	S80°09'51"E	C9	22.70	16.00	L118	20.56	S39°10'06"E			
L10	105.00	S09°50'09"W	C10	23.19	16.00	L119	45.23	S80°09'51"E			
L11	80.00	N80°09'51"W	C11	27.57	16.00						
L12	80.00	S80°09'51"E	C12	27.08	16.00						
L13	105.00	S09°50'09"W	C13	163.13	115.00						
L14	80.00	N80°09'51"W	C14	23.19	16.00						
L15	80.00	S80°09'51"E	C15	5.10	165.00						
L16	105.00	S09°50'09"W	C16	53.60	165.00						
L17	80.00	N80°09'51"W	C17	44.03	26.00						
L18	80.00	S80°09'51"E	C18	35.10	99.00						
L19	105.00	S09°50'09"W	C19	38.66	24.00						
L20	80.00	N80°09'51"W	C20	27.01	54.00						
L21	80.00	S80°09'51"E	C21	70.77	129.00						
L22	105.00	S09°50'09"W	C22	28.90	24.00						
L23	80.00	N73°06'16"W	C23	72.27	165.00						
L24	13.67	S73°06'16"E	C24	57.85	165.00						
L25	84.35	S16°47'59"W	C25	45.23	165.00						
L26	119.42	N73°12'01"W									
L27	22.03	N17°53'47"E									
L28	80.00	S16°47'59"W									
L29	119.45	N73°12'01"W									
L30	80.00	S16°47'59"W									
L31	118.62	N73°12'01"W									
L32	61.40	N16°10'43"E									
L33	80.00	S16°47'59"W									
L34	117.75	N73°12'01"W									
L35	80.00	N16°10'43"E									
L36	65.44	S16°47'59"W									
L37	104.33	N81°55'27"W									
L38	97.08	N16°10'43"E									
L39	91.62	S80°09'51"E									
L40	73.28	S16°47'59"W									
L41	29.67	S16°47'59"W									
L42	105.00	N73°12'01"W									
L43	75.96	N16°47'59"E									
L44	38.90	S16°47'59"W									
L45	41.10	S16°47'59"W									
L46	105.00	N73°12'01"W									
L47	80.00	N16°47'59"E									
L48	27.47	S16°47'59"E									
L49	52.53	S16°47'59"E									
L50	105.00	N73°12'01"W									
L51	80.00	N16°47'59"E									
L52	16.04	S16°47'59"W									
L53	63.96	S16°47'59"W									
L54	105.00	N73°12'01"W									
L55	80.00	N16°47'59"E									
L56	75.02	S16°47'59"W									
L57	87.59	N81°55'27"W									
L58	72.49	N16°47'59"E									
L59	87.71	S80°09'51"E									
L60	63.03	S16°47'59"W									
L61	105.00	N73°12'01"W									
L62	88.57	S16°47'59"W									
L63	105.00	N73°12'01"W									
L64	68.57	S16°47'59"W									
L65	105.00	N73°12'01"W									
L66	68.57	S16°47'59"W									
L67	105.00	N73°12'01"W									
L68	24.17	S16°47'59"W									
L69	7.53	N81°55'27"W									
L70	91.61	S80°09'51"E									
L71	84.88	S16°47'59"W									
L72	105.00	N73°12'01"W									
L73	57.89	N16°47'59"E									
L74	80.00	S16°47'59"W									
L75	105.00	N73°12'01"W									
L76	80.00	N16°47'59"E									
L77	80.00	S16°47'59"W									
L78	105.00	N73°12'01"W									
L79	80.00	N16°47'59"E									
L80	75.22	S16°47'59"W									
L81	10.17	S54°04'55"W									
L82	99.37	N80°09'51"W									
L83	90.03	N16°47'59"E									
L84	63.32	S07°32'56"W									
L85	46.21	N80°09'51"W									
L86	138.85	S07°31'55"W									
L87	223.17	N80°09'51"W									
L88	123.00	N09°50'09"E									
L89	80.00	N80°09'51"W									
L90	114.38	N09°50'09"E									
L91	35.56	S81°55'27"E									
L92	80.00	N80°09'51"W									
L93	111.92	N09°50'09"E									
L94	80.04	S81°55'27"E									
L95	80.00	N80°09'51"W									
L96	109.24	N09°50'09"E									
L97	80.04	S81°55'27"E									
L98	105.69	N80°09'51"W									
L99	107.24	N16°10'43"E									
L100	93.89	S81°55'27"E									
L101	20.12	N80°09'51"W									
L102	48.47	S80°09'51"E									
L103	234.17	S09°50'09"W									
L104	120.83	S56°04'55"W									
L105	50.00	N09°50'09"E									
L106	50.00	S80°25'44"E									
L107	341.53	S09°50'09"W									
L108	69.22	S56°04'55"W									
L109	48.37	S07°32'55"W									

QUAIL PLAT 2/15/20

DRAWING NO. **C-3**

PROJECT NO.

HERON MEADOWS SUBDIVISION
2215 LEWIS RIVER ROAD
WOODLAND, WASHINGTON 98674

PRELIMINARY PLAT & SITE PLAN

AQUARIUS
e n v i r o n m e n t a l
a c c u r a t e s u r v e y i n g

REV.	DATE	DESCRIPTION	DRAWN BY	CHECK BY	APP. BY
1	FEB 2020	DIS BY	DS		

DATE OF ISSUE: FEB 2020

DESCRIPTION: DIS BY DS

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APP. BY:

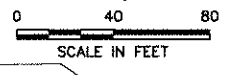
OREGON PROFESSIONAL ENGINEERS BOARD
DANIEL A. SARGENT
JULY 13, 2017

TYPICAL LOT SETBACKS

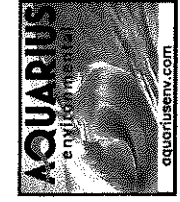


CONSTRUCTION NOTES

- ① STA 1+41.8 RT 16" CURB INLET PER STD DWG D-03
GL=39.15, RIM=38.86, IE=36.36
- ② 29 LF 12" HDPE AT 1.0% SLOPE
- ③ STA 1+42.6 LT 16" CURB INLET PER STD DWG D-03
GL=39.17, RIM=38.88, IE=36.07
- ④ 47 LF 12" HDPE AT 1.0% SLOPE
- ⑤ STA 1+90.0 LT 3" MANHOLE PER STD DWG D-10
RIM=39.74, IE IN(NW)=35.60, IE IN(NE)=35.86
IE OUT(E)=33.90
- ⑥ STA 2+22.8 RT 16" CURB INLET PER STD DWG D-03
GL=39.25, RIM=38.96, IE=36.46
- ⑦ 28 LF 12" HDPE AT 1.0% SLOPE
- ⑧ STA 2+22.8 LT 16" CURB INLET PER STD DWG D-03
GL=39.25, RIM=38.96, IE=36.18
- ⑨ 32 LF 12" HDPE AT 1.0% SLOPE
- ⑩ 147 LF 12" HDPE AT 0.40% SLOPE
- ⑪ STA 4+02.3 LT 16" CURB INLET PER STD DWG D-03
GL=39.57, RIM=39.28, IE=36.78
- ⑫ 28 LF 12" HDPE AT 1.0% SLOPE
- ⑬ STA 4+02.3 RT 16" CURB INLET PER STD DWG D-03
GL=39.57, RIM=39.28, IE=36.50
- ⑭ 50 LF 12" HDPE AT 1.0% SLOPE
- ⑮ STA 4+52.0 LT 3" MANHOLE PER STD DWG D-10
RIM=40.16, IE IN(W&S)=33.32, IE IN(SW)=36.00
IE IN(SE)=36.15, IE OUT(E)=33.32
- ⑯ STA 4+84.9 LT 16" CURB INLET PER STD DWG D-03
GL=39.57, RIM=39.28, IE=36.78
- ⑰ 28 LF 12" HDPE AT 1.0% SLOPE
- ⑱ STA 4+84.9 RT 16" CURB INLET PER STD DWG D-03
GL=39.57, RIM=39.28, IE=36.50
- ⑲ 35 LF 12" HDPE AT 1.0% SLOPE
- ⑳ 144 LF 12" HDPE AT 0.40% SLOPE
- ㉑ 140 LF 12" HDPE AT 0.40% SLOPE
- ㉒ STA 5+96.5 LT 3" SED MANHOLE PER STD DWG D-11
RIM=40.95, IE IN(W)=33.00, IE IN(S)=33.00
- ㉓ 50 LF 12" HDPE AT 1.00% SLOPE
- ㉔ DAYLIGHT AT IE=32.5
- ㉕ STA 1+48.3 RT 16" CURB INLET PER STD DWG D-03
GL=38.42, RIM=38.13, IE=35.63
- ㉖ 28 LF 12" HDPE AT 1.0% SLOPE
- ㉗ STA 1+48.3 LT 16" CURB INLET PER STD DWG D-03
GL=38.42, RIM=38.13, IE=35.35
- ㉘ 38 LF 12" HDPE AT 1.0% SLOPE
- ㉙ STA 1+87.0 LT 3" MANHOLE PER STD DWG D-10
RIM=38.99, IE IN(NW)=34.97, IE IN(N)=33.59
IE IN(NE)=34.79, IE OUT(E)=33.59
- ㉚ STA 2+31.2 RT 16" CURB INLET PER STD DWG D-03
GL=38.29, RIM=38.00, IE=35.50
- ㉛ 28 LF 12" HDPE AT 1.0% SLOPE
- ㉜ STA 2+31.2 LT 16" CURB INLET PER STD DWG D-03
GL=38.29, RIM=38.00, IE=35.22
- ㉝ 43 LF 12" HDPE AT 1.0% SLOPE
- ㉞ 191 LF 12" HDPE AT 0.40% SLOPE
- ㉟ STA 4+13.6 LT 16" CURB INLET PER STD DWG D-03
GL=38.29, RIM=38.00, IE=35.50
- ㊱ 28 LF 12" HDPE AT 1.0% SLOPE
- ㊲ STA 4+13.6 LT 16" CURB INLET PER STD DWG D-03
GL=38.29, RIM=38.00, IE=35.22
- ㊳ 33 LF 12" HDPE AT 1.0% SLOPE
- ㊴ STA 3+80.6 RT 7.9" MANHOLE PER STD DWG D-10
RIM=38.66, IE IN(W)=33.16, IE IN(E)=34.89
IE OUT(NE)=33.16
- ㊵ 104 LF 12" HDPE AT 0.40% SLOPE
- ㊶ STA 4+85.2 RT 9.0" MANHOLE PER STD DWG D-10
RIM=38.03, IE=32.87
- ㊷ 35 LF 12" HDPE AT 0.40% SLOPE
- ㊸ STA 5+22.3 LT 3.0" MANHOLE PER STD DWG D-10
RIM=38.03, IE IN(NW)=34.73, IE IN(NE)=34.78
IE OUT(E)=32.73
- ㊹ STA 5+30.3 LT 16" CURB INLET PER STD DWG D-03
GL=37.69, RIM=37.40, IE=34.90
- ㊺ 17 LF 12" HDPE AT 1.0% SLOPE
- ㊻ STA 5+30.3 RT 16" CURB INLET PER STD DWG D-03
GL=37.69, RIM=337.40, IE=34.90
- ㊼ 12 LF 12" HDPE AT 1.0% SLOPE
- ㊽ 119 LF 12" HDPE AT 0.40% SLOPE
- ㊾ SED MANHOLE PER STD DWG D-11
RIM=38.30, IE=32.25
- ㊿ 69 LF 12" HDPE AT 0.40% SLOPE
- ① DAYLIGHT AT IE=32.0
- ② STA 4+25.3 LT 16" CURB INLET PER STD DWG D-03
GL=37.97, RIM=37.68, IE=35.18
- ③ 15 LF 12" HDPE AT 1.0% SLOPE
- ④ STA 4+23.3 RT 3" MANHOLE PER STD DWG D-10
RIM=38.23, IE IN(W)=35.03, IE IN(E)=35.09
IE OUT(E)=34.23
- ⑤ STA 4+25.3 RT 16" CURB INLET PER STD DWG D-03
GL=37.97, RIM=37.68, IE=35.18
- ⑥ 9 LF 12" HDPE AT 1.0% SLOPE
- ⑦ STA 2+05.1 LT 16" CURB INLET PER STD DWG D-03
GL=37.55, RIM=37.26, IE=34.76
- ⑧ 15 LF 12" HDPE AT 1.0% SLOPE
- ⑨ STA 2+05.1 RT 3" MANHOLE PER STD DWG D-10
RIM=37.81, IE IN(W)=34.61, IE IN(E)=34.67
IE OUT(E)=34.23
- ⑩ STA 2+05.1 RT 16" CURB INLET PER STD DWG D-03
GL=37.55, RIM=37.26, IE=34.76
- ⑪ 9 LF 12" HDPE AT 1.0% SLOPE
- ⑫ 102 LF 12" HDPE AT 0.40% SLOPE
- ⑬ STA 7+26.2 LT 16" CURB INLET PER STD DWG D-03
GL=38.35, RIM=38.06, IE=35.56
- ⑭ 12 LF 12" HDPE AT 1.0% SLOPE
- ⑮ STA 7+26.2 RT 3" MANHOLE PER STD DWG D-10
RIM=38.59, IE IN(W)=35.41, IE IN(E)=35.47
IE OUT(N)=33.90
- ⑯ STA 7+26.2 RT 16" CURB INLET PER STD DWG D-03
GL=38.35, RIM=38.06, IE=35.56
- ⑰ 9 LF 12" HDPE AT 1.0% SLOPE



QUAIL GRADING PLAN 2/15/20
 HERON MEADOWS SUBDIVISION
 2215 LEWIS RIVER ROAD
 WOODLAND, WASHINGTON 98674



REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY	DATE
1	02/15/20				





CONSTRUCTION NOTES

- ① CONNECT TO EXISTING MAIN
- ② INSTALL 6" GATE VALVE, BOX AND COVER PER STD DWG W-06
- ③ INSTALL 1" WATER SERVICE, TYPICAL 31 PLACES PER STD DWG W-02
- ④ INSTALL SANITARY SEWER MANHOLE, TYPICAL 13 PLACES PER STD DWG S-07
- ⑤ INSTALL FIRE HYDRANT, TYPICAL 5 PLACES PER STD DWG W-14
- ⑥ INSTALL LUMINAIRE ASSEMBLY PER STD DWG T40, 41, AND 42, TYPICAL 7 PLACES
- ⑦ INSTALL 8" SANITARY SEWER MAIN
- ⑧ CONNECT TO EXISTING SANITARY SEWER MANHOLE
- ⑨ INSTALL STANDARD BLOW OFF, TYPICAL 2 PLACES PER STD DWG W-10
- ⑩ INSTALL 6" WATER MAIN

QUAIL UTILITY PLAN 2/15/20

DRAWING NO. **C-5**
PROJECT NO.

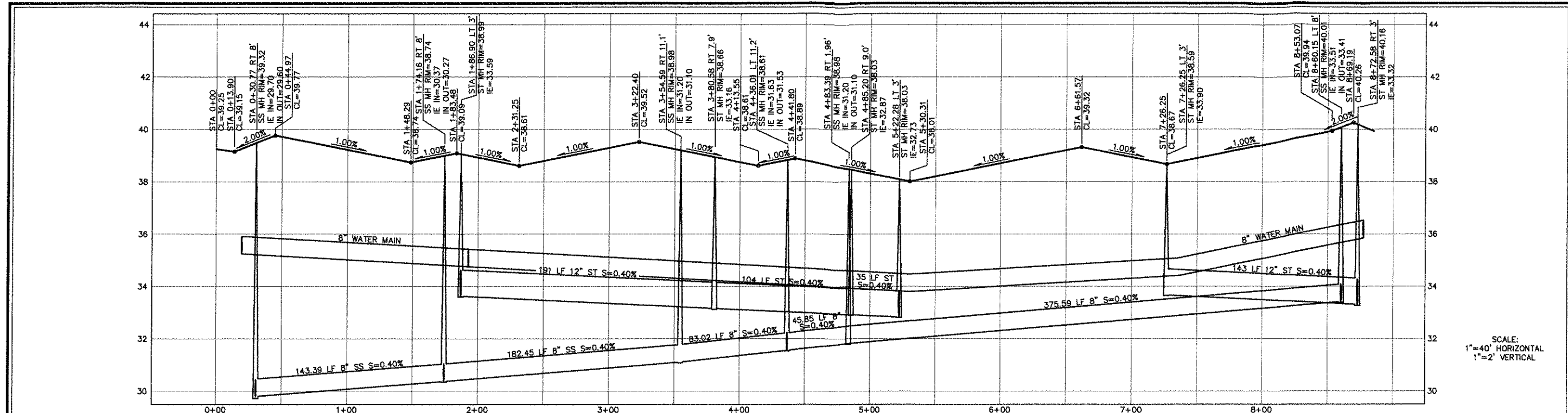
HERON MEADOWS SUBDIVISION
2215 LEWIS RIVER ROAD
WOODLAND, WASHINGTON 98674

UTILITY PLAN

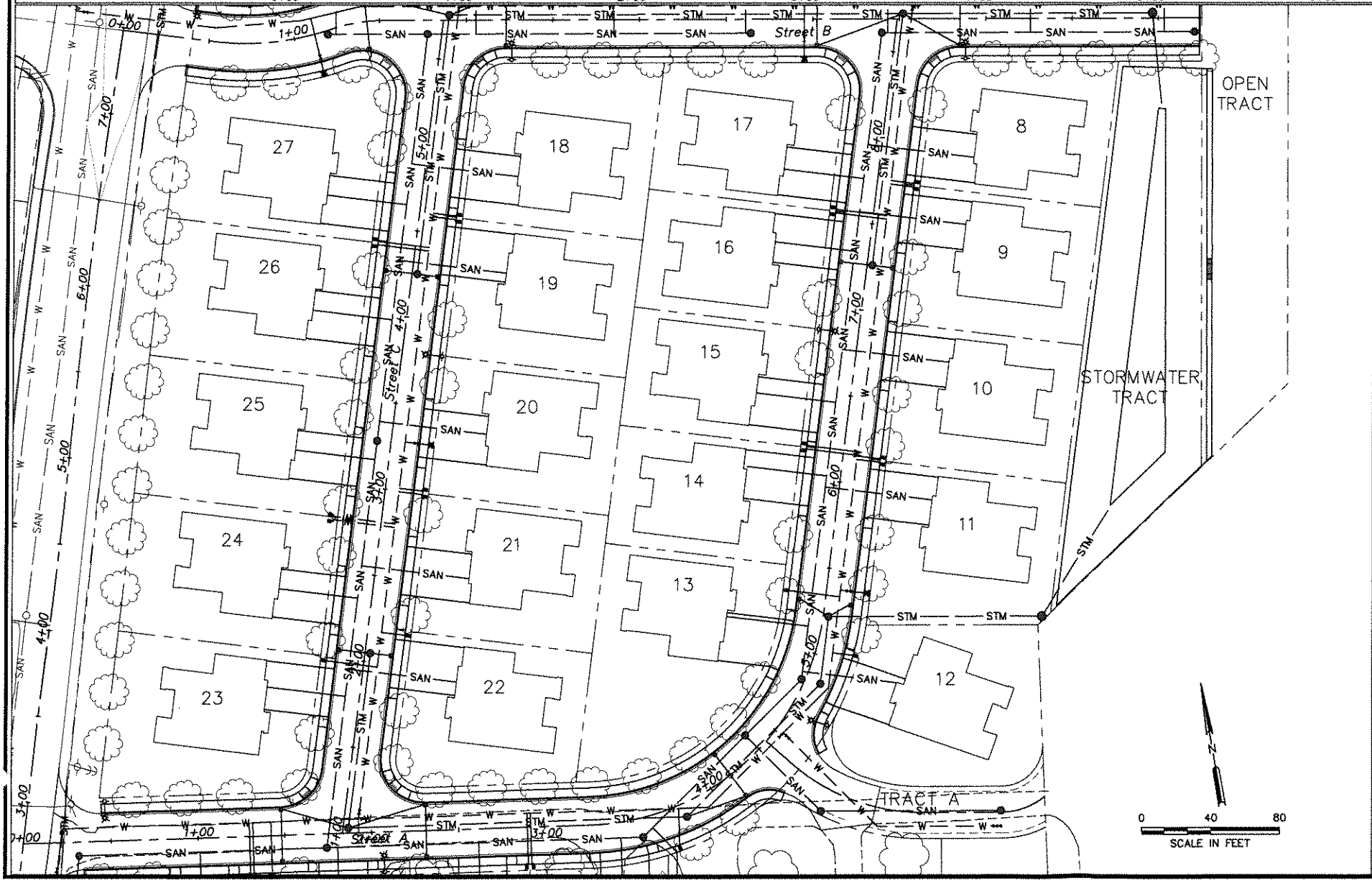


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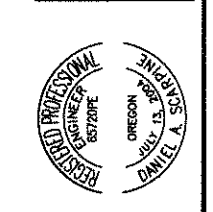
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1"=40' HORIZONTAL
1"=2' VERTICAL



QUAIL PP A 2/15/20
DRAWING NO. C-7
PROJECT NO.
HERON MEADOWS SUBDIVISION
2215 LEWIS RIVER ROAD
WOODLAND, WASHINGTON 98674
STREET "A" PLAN AND PROFILE



REV.	DATE	DESCRIPTION	DRAWN BY	DESIGNED BY	CHECKED BY	APP. BY
1	JER 2020					



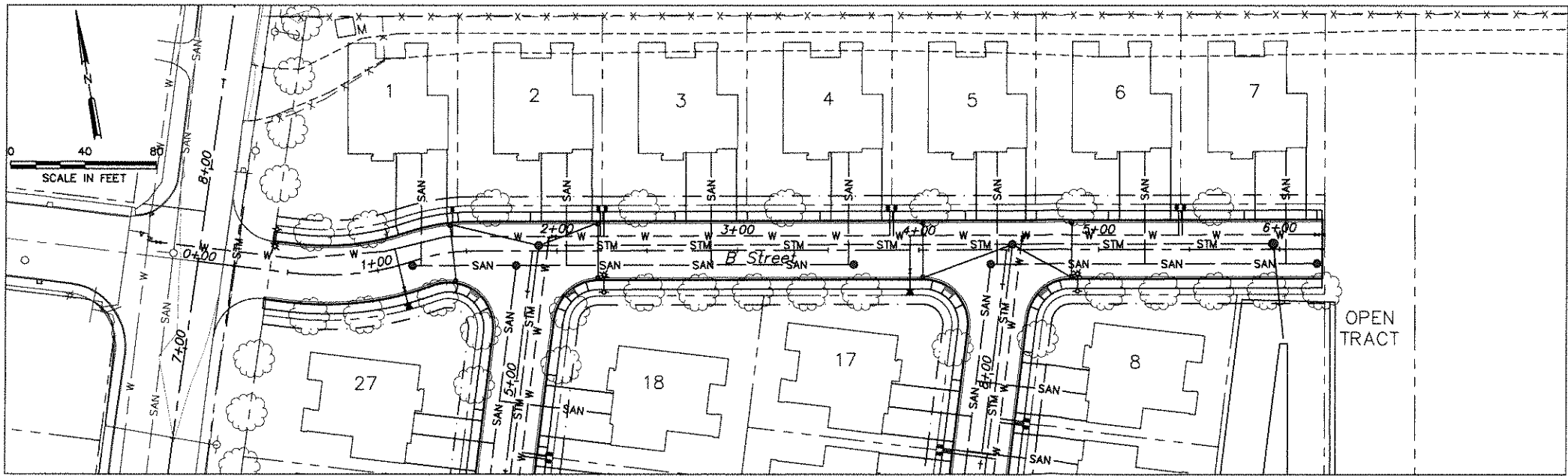
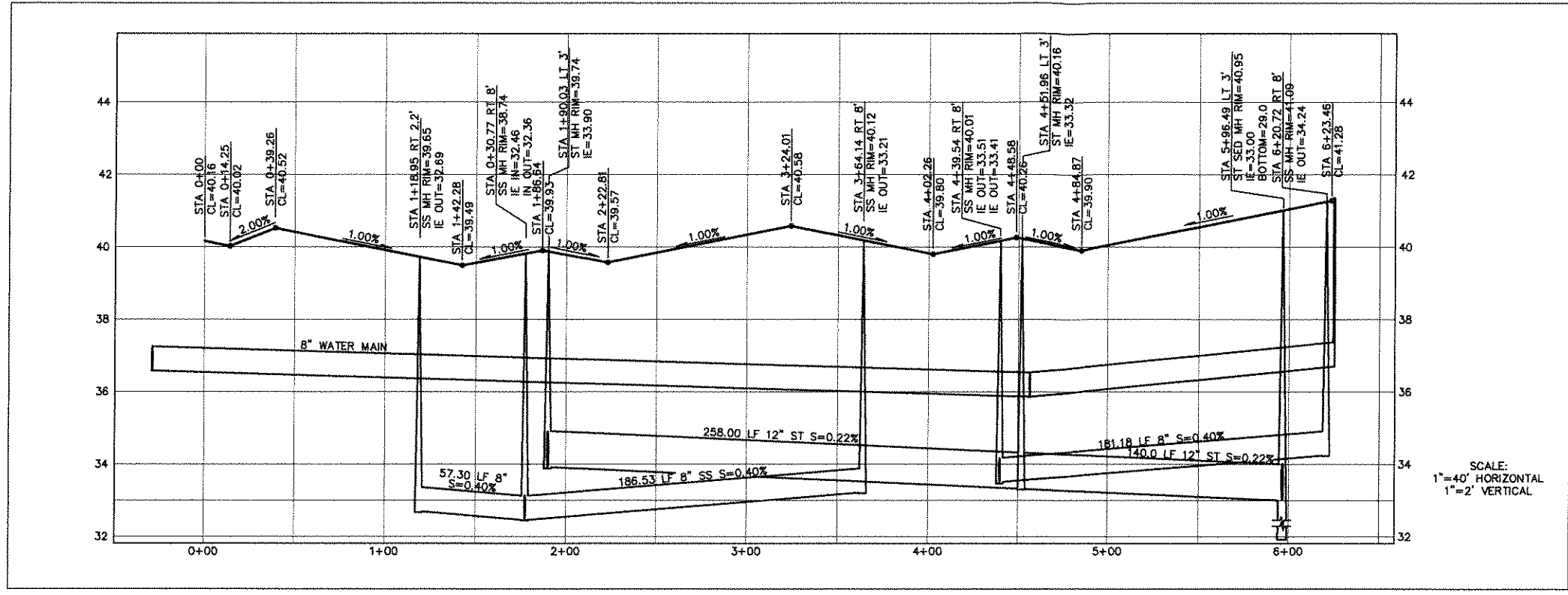
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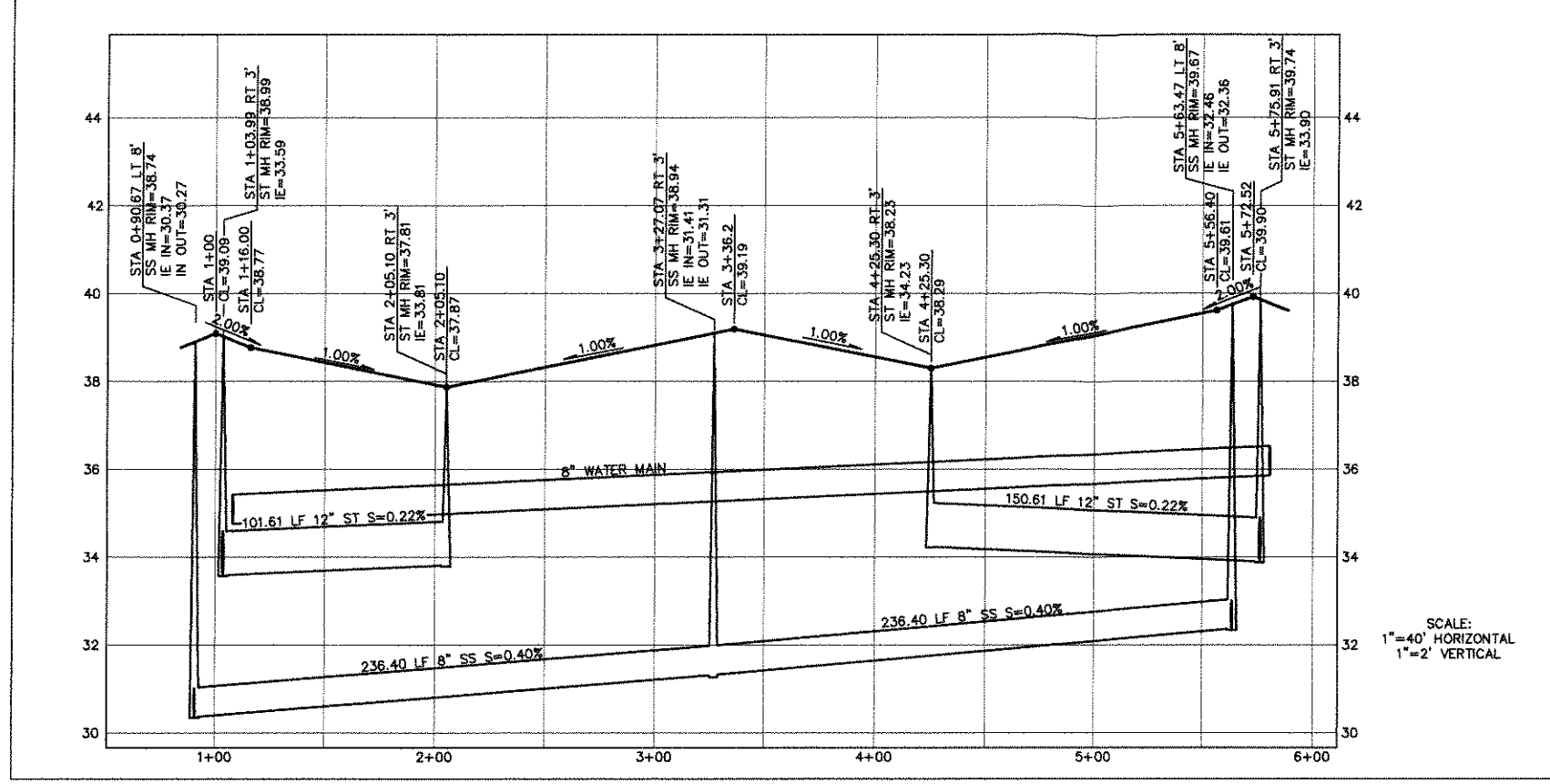
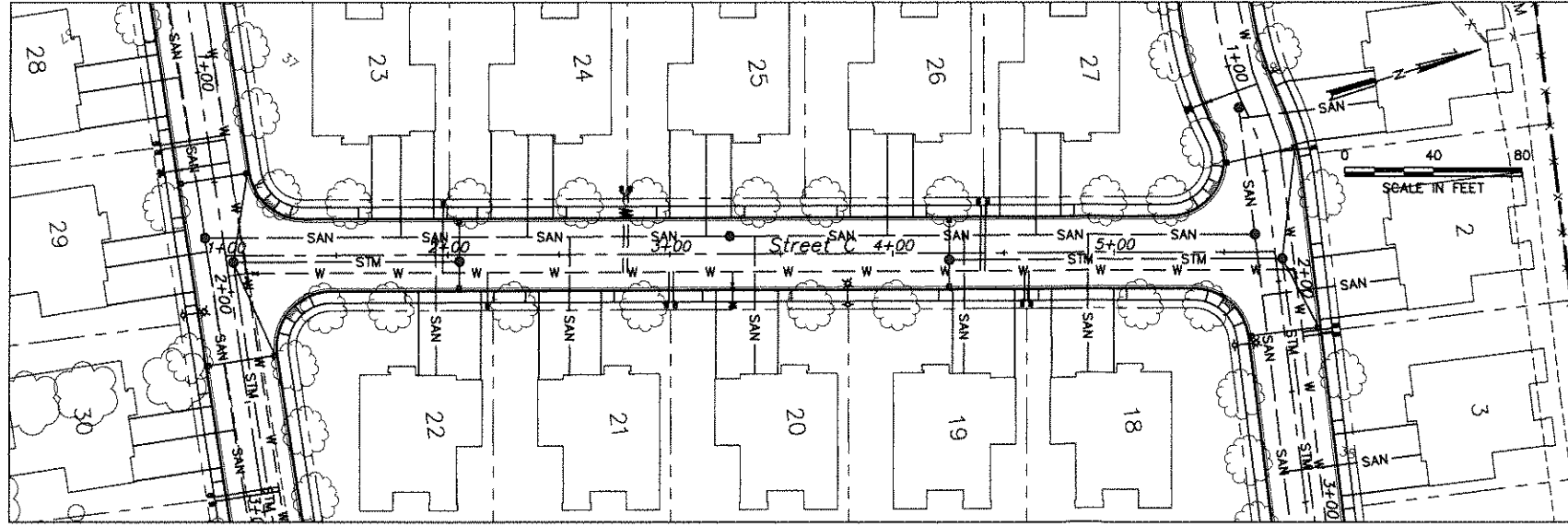
HERON MEADOWS SUBDIVISION
 2215 LEWIS RIVER ROAD
 WOODLAND, WASHINGTON 98674

STREET "B" PLAN AND PROFILE



REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
	FEB 2020			DS		





SCALE:
 1"=40' HORIZONTAL
 1"=2' VERTICAL

QUAIL PP C 2/15/20

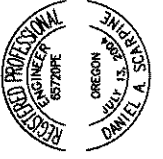
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C-9
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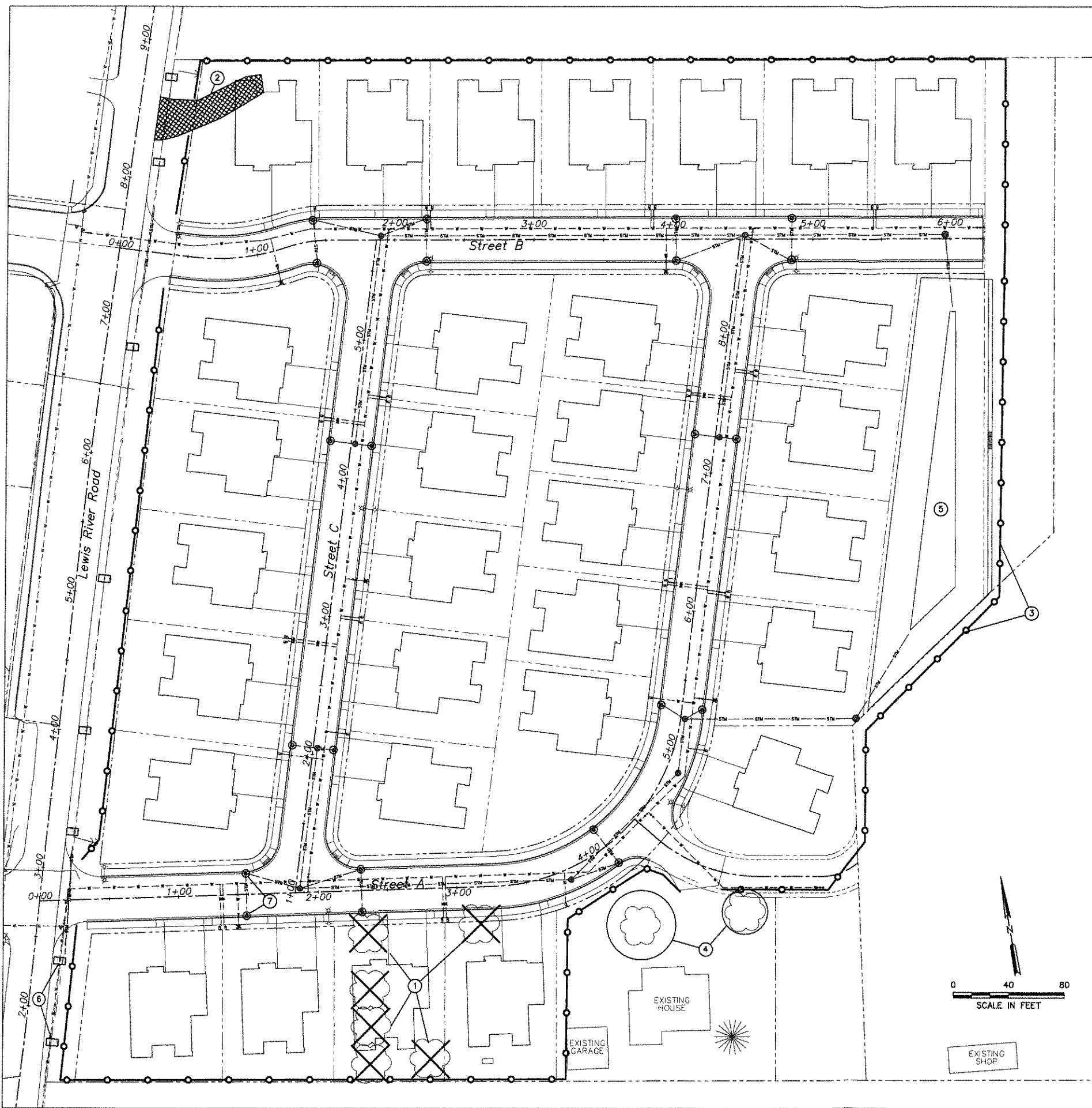
HERON MEADOWS SUBDIVISION
 2215 LEWIS RIVER ROAD
 WOODLAND, WASHINGTON 98674

STREET "C" PLAN AND PROFILE



REV	DATE	DESCRIPTION	DESIGNED BY	CHECKED BY	APP'D BY
1	FEB. 2020		DS		





CONSTRUCTION NOTES

- ① REMOVE TREES
- ② CONSTRUCTION ENTRANCE PER STD DWG E-05
- ③ SILT FENCE PER STD DWG E-20
- ④ TREE PROTECTION FENCE
- ⑤ SEED AND MULCH UNTIL LANDSCAPING CAN BE ESTABLISHED
- ⑥ BIO-FILTER BAGS OR STRAW WATTLES PER STD DWG E-16 ALONG ROADSIDE DITCH
- ⑦ INLET PROTECTION PER STD DWG E-16 AT EACH STORM INLET

QUAIL EROSION 2/15/20

DRAWING NO. C-10
PROJECT NO.

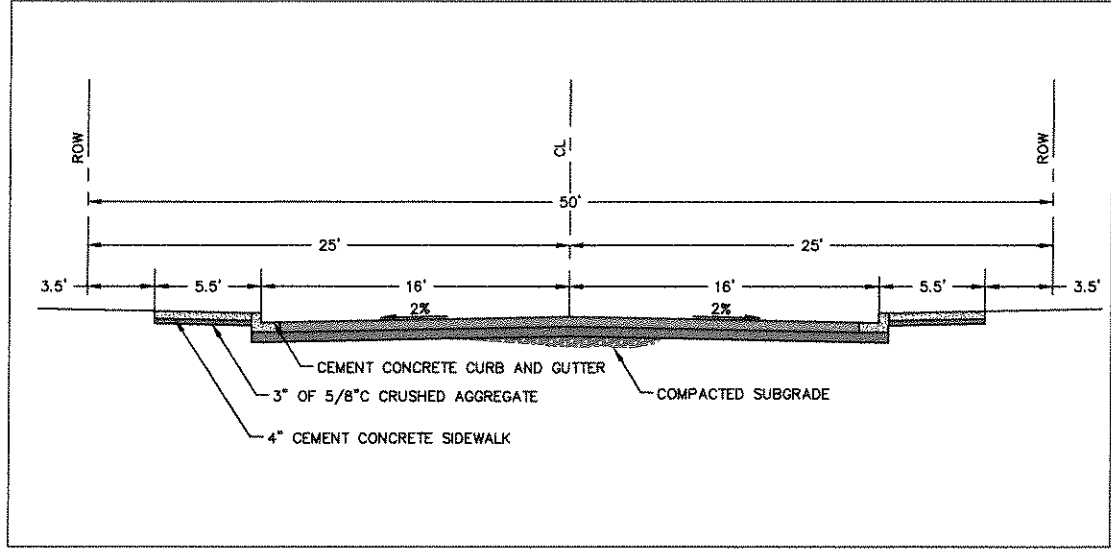
HERON MEADOWS SUBDIVISION
2215 LEWIS RIVER ROAD
WOODLAND, WASHINGTON 98674

EROSION CONTROL PLAN

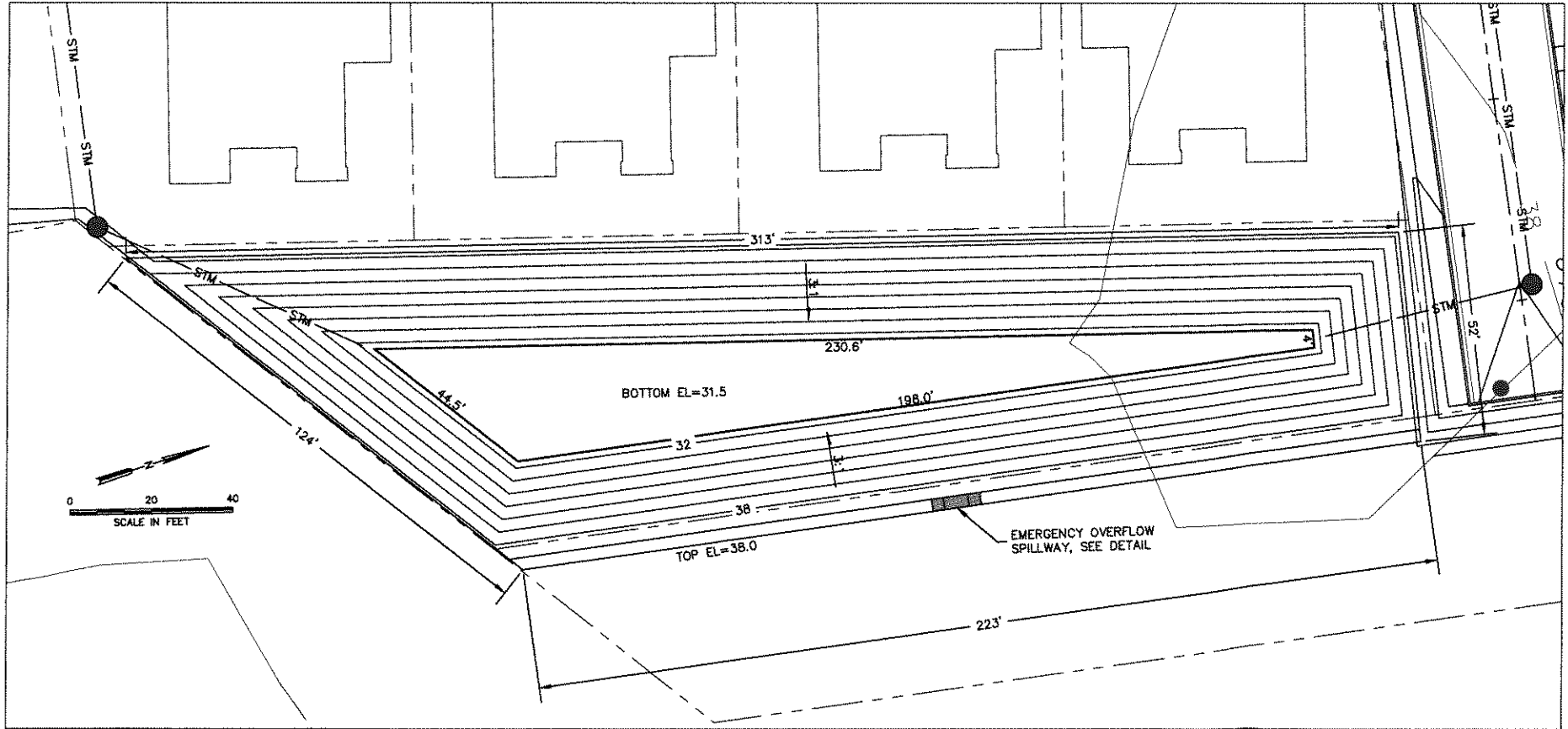


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1	12/15/20	ISSUE	DL	DL	DL	DL
2	1/15/21	REVISED	DL	DL	DL	DL

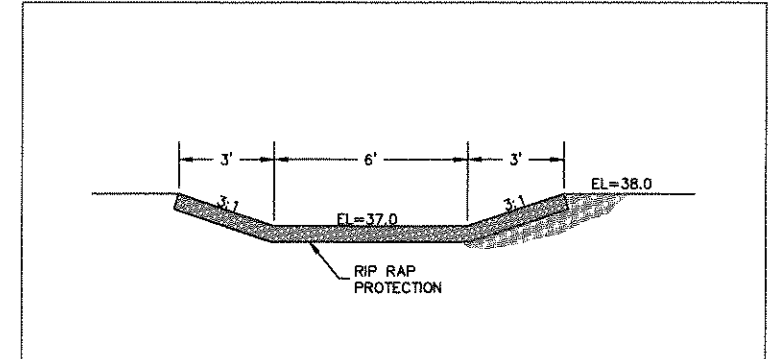




TYPICAL STREET SECTION



INFILTRATION BASIN



EMERGENCY OVERFLOW SPILLWAY

QUAIL DETAIL 4 2/15/20

DRAWING NO.
C-11
PROJECT NO.

HERON MEADOWS SUBDIVISION
2215 LEWIS RIVER ROAD
WOODLAND, WASHINGTON 98674

STANDARD DETAILS



REV.	DATE	DESCRIPTION	OWN BY	DES BY	CHK BY	APP BY
1	FEB 2020		DS			

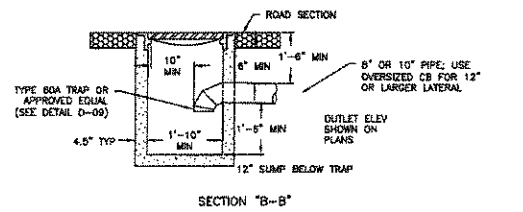
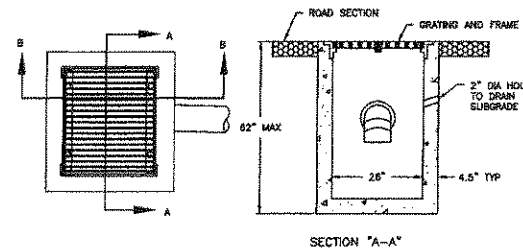


GENERAL NOTES FOR STORM SEWERS

- ALL MATERIALS AND INSTALLATION OF STORM SEWERS AND DRAINAGE SYSTEMS SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS IN THE CITY OF WOODLAND'S LATEST VERSION OF STANDARD DETAILS AND THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION (APWA) AND THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION, WHERE THE CITY OF WOODLAND REQUIREMENTS SHALL TAKE PRECEDENCE. WHEREVER THE STANDARD SPECIFICATIONS REFER TO THE OWNER AS EITHER THE "STATE" OR "SECRETARY" OR WHEN REFERENCE IS MADE TO THE DEPARTMENT OF TRANSPORTATION IT SHALL BE UNDERSTOOD THAT THE STANDARD SPECIFICATIONS SHOULD READ THE "CITY".
- ALL STORM SEWER AND DRAINAGE SYSTEM CONSTRUCTION IS SUBJECT TO INSPECTION AND APPROVAL BY THE CITY OF WOODLAND'S PUBLIC WORKS DEPARTMENT. THE CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS OFFICE (360) 225-7999 AT LEAST 48 HOURS PRIOR TO THE START OF ANY CONSTRUCTION. THE CITY MAY REQUIRE THAT A PRECONSTRUCTION CONFERENCE BE HELD.
- THE CONTRACTOR IS REQUIRED TO NOTIFY ALL UTILITIES 48 HOURS PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR MAY CONTACT THE NORTHWEST UTILITY NOTIFICATION CENTER AT 1-800-424-5555 IN LIEU OF CONTACTING INDIVIDUAL UTILITIES.
- IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER AND/OR CONTRACTOR TO PROCURE AND COMPLY WITH THE PROVISIONS OF ALL APPLICABLE PERMITS, EASEMENTS, LICENSES AND CERTIFICATES IN CONJUNCTION WITH THE CONSTRUCTION OF STORM SEWERS AND DRAINAGE SYSTEMS. COMPLIANCE SHALL BE AT ALL LEVELS: FEDERAL, STATE, AND CITY, RELATING TO THE PERFORMANCE OF THIS WORK. THE CONTRACTOR SHALL OBTAIN A STREET CLOSURE PERMIT FOR WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
- THE CONTRACTOR SHALL OBTAIN AND SUBMIT AN APPROVED TRAFFIC CONTROL PLAN PRIOR TO BEGINNING CONSTRUCTION. THE PLAN SHALL BE APPROVED BY THE PUBLIC WORKS DIRECTOR.
- ALL EROSION CONTROL BEST MANAGEMENT PRACTICES (BMPs) SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE EROSION CONTROL PLAN AND EROSION CONTROL DETAILS, PRIOR TO START OF ANY CONSTRUCTION OR LAND DISTURBING ACTIVITY.
- THE CONTRACTOR SHALL OBTAIN ALL OFFSITE CONSTRUCTION EASEMENTS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THAT ALL OFFSITE UTILITIES EASEMENTS HAVE BEEN OBTAINED BY THE OWNER PRIOR TO THE COMMENCEMENT OF ANY OFFSITE CONSTRUCTION.
- THE CONTRACTOR IS TO VERIFY AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER. ITEMS TO VERIFY INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
-INVERT AND TOP ELEVATIONS OF EXISTING STORM SEWERS
-CENTERLINE AND TOP OF CURB ELEVATIONS
- WATER QUALITY DEVICES WILL BE INSTALLED AND FUNCTIONING PRIOR TO COMMENCING WITH INSTALLATION OF PAVEMENT FOR ALL AREAS DRAWING INTO THE WATER QUALITY SYSTEM. VEGETATION IN BIO-FILTRATION SWALE AND POND SYSTEMS SHALL BE ESTABLISHED AND MECHANICAL DEVICES AND FILTER MEDIA SHALL BE INSTALLED. SWALES AND FILTER STRIPS WILL BE SEEDED WITH AN APPROVED SEED MIX PER THE WESTERN WASHINGTON MANUAL. TURF IS ALLOWED FOR VEGETATED FILTERS PROVIDED THE TURF AREA IS OVERSEED WITH THE EQUIVALENT GRASS SEED MIX.
- ALL CATCH BASINS SHALL BE STENCILED: "PROTECT STREAMS" OR "PROTECT GROUNDWATER."
- ROOF DOWNSPOUT RUNOFF MUST BE RETAINED ON EACH SPECIFIC SITE. DOWNSPOUTS SHALL NOT DRAIN TO THE STREET OR ANY ADJACENT PROPERTIES UNLESS SPECIFIC APPROVAL HAS BEEN OBTAINED.
- THE CONTRACTOR WILL PROVIDE A TELEVISION REPORT, TAPE AND TABULAR AS-BUILT OF ALL PUBLIC STORM MAINS AND LATERALS PRIOR TO PAYING. THIS INFORMATION WILL BE SUBMITTED TO THE CITY INSPECTOR FOR REVIEW. APPROVAL AND ACCEPTANCE OF THE TV INSPECTION WILL BE BASED UPON MANUFACTURING AND INSTALLATION DETAILS, AS WELL AS SEEBERS IN THE LINES. FINAL ACCEPTANCE AND CONSTRUCTION OF STORM SEWERS IS SUBJECT TO INSPECTION AND TESTING IN ACCORDANCE WITH SECTIONS 1-05.11, 1-05.12, AND 7-04.3 OF THE STANDARD SPECIFICATIONS.

GENERAL NOTES FOR STORM SEWERS				
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED
<i>Paul Stepp</i>		12/16/13		
PUBLIC WORKS DIRECTOR		DATE		

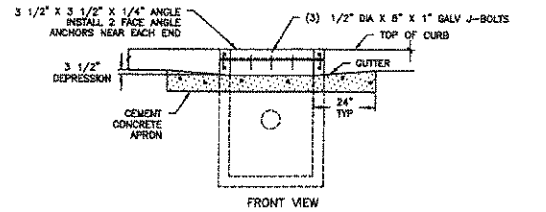
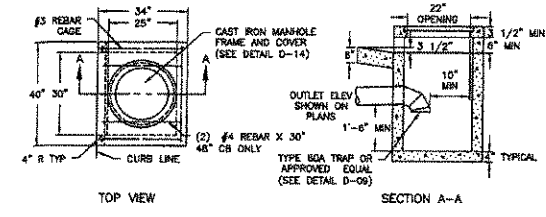
D-01



- NOTES:
- LATERALS WILL BE CONSTRUCTED TO ENTER THE BASIN PERPENDICULAR TO THE BASIN WALL. THE LATERAL WILL ENTER ONLY AT THE FRONT OR SIDE OF THE BASIN WITH NO LATERALS ALLOWED TO ENTER THE CATCH BASIN AT THE CORNERS. IF NEEDED, A BEND MAY BE USED AS THE FIRST SECTION OF PIPE OUTSIDE THE BASIN WALL. THE MAXIMUM BEND ALLOWED IS 45 DEGREES.
 - ALL REINFORCED STEEL SHALL HAVE A 1-1/2" CLEAR COVER UNLESS OTHERWISE NOTED, AND SHALL BE GRADE 40 OR GRADE 60 (ASTM A-615).
 - ANY PROTRUDING ENDS OF PIPES SHALL BE TRIMMED FLUSH WITH THE INSIDE WALLS AND GROUTED.
 - THE METAL FRAME AND GRATE SHALL BE SET TO A SLOPE TO CONFORM TO THE PARTICULAR DRAINAGE AREA (SEE DETAIL D-08).
 - ELBOW SECTION SHALL BE REMOVABLE FOR MAINTENANCE PURPOSES USING A BELL AND SPOUT JOINT.
 - ALL PRECAST OR CAST-IN-PLACE CONCRETE SHALL BE CLASS 4000.

STANDARD CATCH BASIN				
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED
<i>Paul Stepp</i>		12/16/13		
PUBLIC WORKS DIRECTOR		DATE		

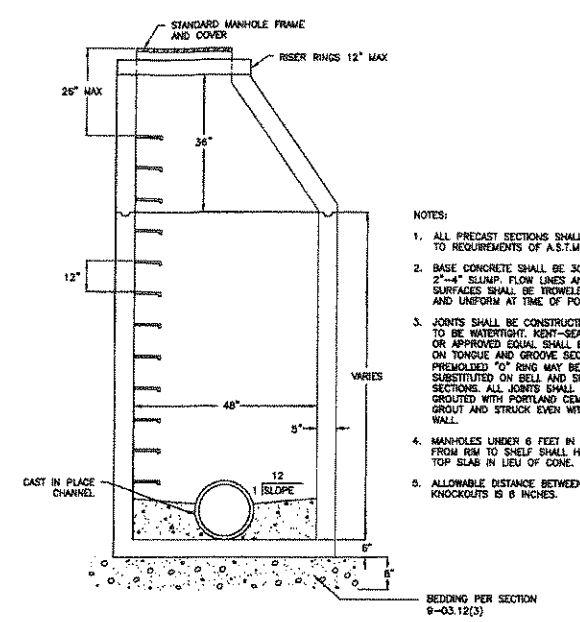
D-02



- NOTES:
- LATERALS WILL BE CONSTRUCTED TO ENTER THE BASIN PERPENDICULAR TO THE BASIN WALL. THE LATERAL WILL ENTER ONLY AT THE FRONT OR SIDE OF THE BASIN WITH NO LATERALS ALLOWED TO ENTER THE CATCH BASIN AT THE CORNERS. IF NEEDED, A BEND MAY BE USED AS THE FIRST SECTION OF PIPE OUTSIDE THE BASIN WALL. THE MAXIMUM BEND ALLOWED IS 45 DEGREES.
 - ALL REINFORCED STEEL SHALL HAVE A 1-1/2" CLEAR COVER UNLESS OTHERWISE NOTED, AND SHALL BE GRADE 40 OR GRADE 60 (ASTM A-615).
 - ANY PROTRUDING ENDS OF PIPES SHALL BE TRIMMED FLUSH WITH THE INSIDE WALLS AND GROUTED.
 - THE METAL FRAME AND GRATE SHALL BE SET TO A SLOPE TO CONFORM TO THE PARTICULAR DRAINAGE AREA (SEE DETAIL D-08).
 - ELBOW SECTION SHALL BE REMOVABLE FOR MAINTENANCE PURPOSES USING A BELL AND SPOUT JOINT.
 - ALL PRECAST OR CAST-IN-PLACE CONCRETE SHALL BE CLASS 4000.

CURB INLET				
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED
<i>Paul Stepp</i>		12/16/13		
PUBLIC WORKS DIRECTOR		DATE		

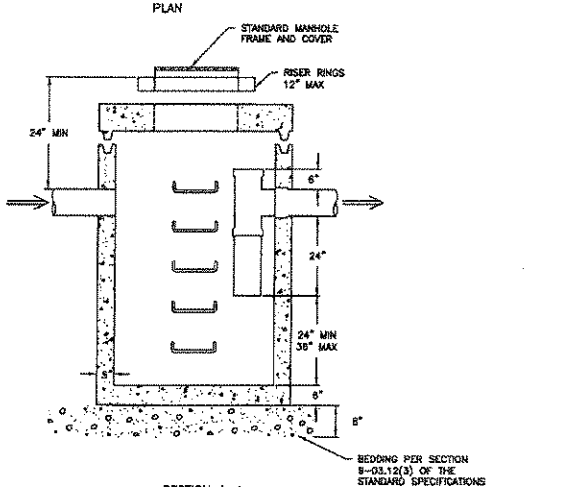
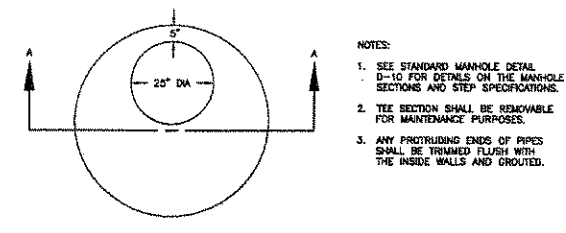
D-03



- NOTES:
- ALL PRECAST SECTIONS SHALL CONFORM TO REQUIREMENTS OF A.S.T.M. C476.
 - BASE CONCRETE SHALL BE 3000 P.S.I. 2"-4" SLUMP. FLOW LINES AND INSIDE SURFACES SHALL BE TROWELED SMOOTH AND LANSRUP AT TIME OF POUR.
 - JOINTS SHALL BE CONSTRUCTED SO AS TO BE WATERTIGHT. KEAT-SEAL NO. 2 OR APPROVED EQUAL SHALL BE USED ON TONGUE AND GROOVE SECTIONS. PREMOULDED "O" RING MAY BE SUBSTITUTED ON BELL AND SPOUT SECTIONS. ALL JOINTS SHALL BE GROUTED WITH PORTLAND CEMENT GROUT AND STRUCK EVEN WITH THE WALL.
 - MANHOLES UNDER 6 FEET IN DEPTH FROM RIM TO SHELF SHALL HAVE A TOP SLAB IN LIEU OF CONE.
 - ALLOWABLE DISTANCE BETWEEN PIPE KNOCKOUTS IS 8 INCHES.

MANHOLE				
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED
<i>Paul Stepp</i>		12/16/13		
PUBLIC WORKS DIRECTOR		DATE		

D-10



- NOTES:
- SEE STANDARD MANHOLE DETAIL D-10 FOR DETAILS ON THE MANHOLE SECTIONS AND STEP SPECIFICATIONS.
 - THE SECTION SHALL BE REMOVABLE FOR MAINTENANCE PURPOSES.
 - ANY PROTRUDING ENDS OF PIPES SHALL BE TRIMMED FLUSH WITH THE INSIDE WALLS AND GROUTED.

PRE-SEDIMENTATION MANHOLE				
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED
<i>Paul Stepp</i>		12/16/13		
PUBLIC WORKS DIRECTOR		DATE		

D-11

CONSTRUCTION SPECIFICATIONS FOR SANITARY SEWER

ALL MATERIALS AND INSTALLATION OF SANITARY SEWERS SHALL BE IN CONFORMANCE WITH THE MOST CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, HERINAFTER REFERRED TO AS THE "STANDARD SPECIFICATIONS", PREPARED BY THE WASHINGTON STATE CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION (APWA) AND THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION, EXCEPT AS NOTED HEREON OR ON THE STANDARD PLANS. WHEREVER THE STANDARD SPECIFICATIONS REFER TO THE OWNER AS EITHER THE "STATE" OR "SECRETARY" OR WHEN REFERENCE IS MADE TO THE DEPARTMENT OF TRANSPORTATION IT SHALL BE UNDERSTOOD THAT THE STANDARD SPECIFICATIONS SHOULD READ THE "CITY".

ALL SANITARY SEWER CONSTRUCTION IS SUBJECT TO INSPECTION AND APPROVAL BY THE CITY OF WOODLAND PUBLIC WORKS DEPARTMENT. THE CONTRACTOR SHALL NOTIFY THE CITY AT (360) 225-7999 AT LEAST 48-HOURS PRIOR TO THE START OF CONSTRUCTION. A PRE-CONSTRUCTION CONFERENCE MAY BE REQUIRED.

THE CONTRACTOR IS REQUIRED TO NOTIFY ALL UTILITIES 48 HOURS PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR MUST CONTACT THE UNDERGROUND UTILITY NOTIFICATION CENTER "CALL BEFORE YOU DIG" AT (800) 424-5555 OR "811".

FINAL ACCEPTANCE OF SANITARY SEWERS ARE SUBJECT TO SECTIONS 1-05.11, 1-05.12, 7-17.3(2)(c), 7-17.3(2)(f), 7-17.3(2)(g) AND 7-17.3(2)(h) OF THE APWA STANDARD SPECIFICATIONS. TELEVISION INSPECTION SHALL INCLUDE VOID OF ALL MANHOLES IN ADDITION TO THE PIPE. THE CONTRACTOR SHALL WARRANT ALL WORK DONE UNDER CITY CONTRACT FOR A PERIOD OF TWO (2) YEARS AS PER OF THE CITY OF WOODLAND GENERAL PROVISIONS FOR MUNICIPAL CONSTRUCTION.

LOCAL VARIATIONS IN SLOPE (I.E. "BELLETS") MUST BE NO MORE THAN 1/2" MAXIMUM. VARIATIONS IN EXCESS OF THESE TOLERANCES MUST BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE CITY.

ALL PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING:

- POLYVINYL CHLORIDE (PVC) SEWER PIPE 18" DIAMETER OR LESS SHALL CONFORM TO ASTM D5034, SEE 35. IT SHALL HAVE A MINIMUM PIPE STIFFNESS OF 48 PIP. PVC PIPE 18" DIAMETER SHALL CONFORM TO ASTM F 679. ALL PVC PIPE SHALL HAVE AN INTEGRAL BELL GASKETED JOINT WITH ELASTOMERIC GASKET AND SHALL BE FURNISHED IN 12-1/2 FOOT LAYING LENGTHS.
- DUCTILE IRON (DI) PIPE SHALL CONFORM TO ANSI A21.51 OR ANSA C151, WITH PUSH-ON JOINTS, CLASS 52, UNLESS OTHERWISE NOTED.

INSTALLATION OF PIPE AND MANHOLES SHALL CONFORM TO THE FOLLOWING:

- PIPE SHALL BE INSTALLED IN CONFORMANCE WITH PIPE DETAIL S-02 AND TRENCHING DETAIL S-03.
- MANHOLES SHALL CONFORM WITH STANDARD DETAILS S-07 THROUGH S-14.

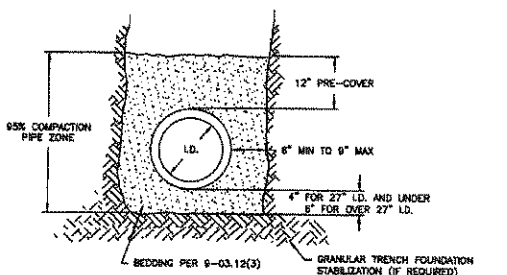
MANHOLES, CLEANOUTS, SERVICE LATERAL CONNECTIONS, TRENCH EXCAVATION, PIPE BEDDING AND STREET RESTORATION, AND APPURTENANCES SHALL CONFORM TO THE DETAILS SHOWN ON THE STANDARD PLANS. ALL OTHER CONSTRUCTION SHALL CONFORM TO THE STANDARD DETAILS CONTAINED IN THE STANDARD PLANS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION.

THE CONTRACTOR SHALL COMPLY WITH THE PROVISIONS OF ALL PERMITS ISSUED OR EASEMENTS GRANTED TO THE CITY IN CONJUNCTION WITH THE CONSTRUCTION OF SANITARY SEWERS. THE CONTRACTOR SHALL OBTAIN A RIGHT-OF-WAY PERMIT FOR WORK WITHIN THE PUBLIC RIGHT-OF-WAY.

THE CONTRACTOR SHALL SUBMIT AN APPROVED TRAFFIC CONTROL PLAN. APPROVAL SHALL BE OBTAINED PRIOR TO BEGINNING CONSTRUCTION.

GENERAL NOTES FOR SANITARY SEWER				
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED
<i>Paul Stepp</i>		1/14/14		
PUBLIC WORKS DIRECTOR		DATE		

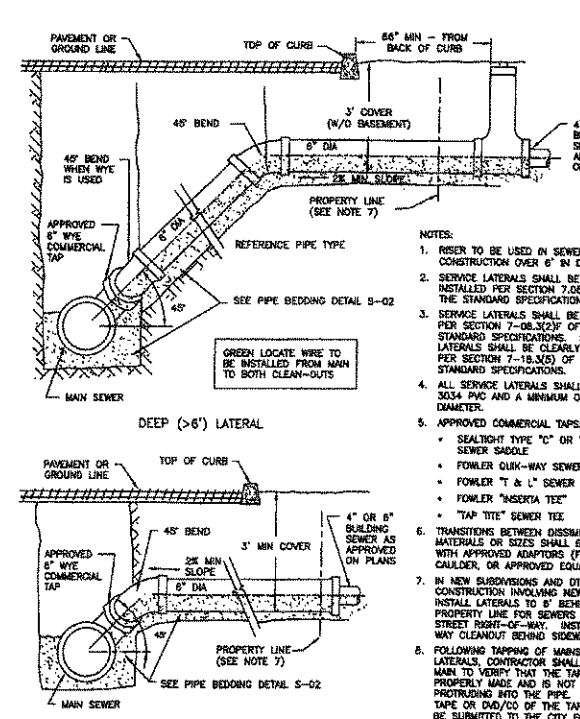
S-01



- NOTES:
- WHERE DIRECTED BY THE ENGINEER GRANULAR TRENCH FOUNDATION STABILIZATION SHALL BE PLACED PRIOR TO PLACEMENT OF THE BEDDING. SIZE AND DEPTH ARE DEPENDENT ON SOIL CONDITIONS.
 - BEDDING AND BACKFILL MATERIALS IN THE PIPE ZONE SHALL BE COMPACTED AS SPECIFIED PRIOR TO BACKFILLING THE REMAINDER OF THE TRENCH.
 - FOR ROCK AND OTHER INCOMPRESSIBLE MATERIALS, THE TRENCH SHALL BE OVER-EXCAVATED A MINIMUM OF 6" AND REFILLED WITH GRANULAR MATERIALS AS DIRECTED BY THE ENGINEER.
 - BACKFILL AND COMPACTION ABOVE THE PIPE ZONE SHALL BE AS SHOWN IN TRENCHING DETAIL S-05.
 - PVC PIPE INSTALLATION SHALL CONFORM TO LAMBELL PLASTIC PIPE ASSOCIATION STANDARD SPEC. UNB-5 (LATEST EDITION) EXCEPT AS NOTED.
 - FINAL INSTALLATION TO BE TESTED PER SECTION 7-17.3(2)(g) OF THE STANDARD SPECIFICATIONS.
 - ALTERNATIVE PRE-COVER MATERIALS ARE ALLOWABLE FROM PIPE CENTERLINE TO ONE FOOT ABOVE THE TOP OF PIPE. ALTERNATE PRE-COVER MATERIALS MUST BE PRE-APPROVED BY THE INSPECTOR AND MAY BE SAND, CRUSHER SCREENINGS, GRAVEL, OR OTHER CLEAN GRANULAR MATERIAL CONTAINING NO ROCK LARGER THAN 1-1/4" IN LENGTH.
- APPROVAL FOR ALTERNATE MATERIALS WILL BE GRANTED UPON CONFIRMATION BY TEST OF ITS COMPLIANCE WITH THESE REQUIREMENTS. SUBMIT 50 LB SAMPLE FOR TESTING TO THE CITY INSPECTOR AND OBTAIN MATERIAL PRIOR TO STARTING PIPE INSTALLATION WORK. THE TEST REQUIRES A MINIMUM OF FIVE BUSINESS DAYS TO COMPLETE.
- TRENCH WIDTH SHALL NOT EXCEED ONE AND ONE-HALF THE INSIDE DIAMETER OF THE PIPE PLUS 18" AT THE TOP OF THE PIPE ZONE. ANY SUBSIDENCE OF SURROUNDING PAVEMENT DUE TO TRENCHING SHALL BE EXCAVATED BEYOND ORIGINAL PAVEMENT OR TRENCH LIMITS AND REPAIRED TO SATISFACTION OF THE CITY OF WOODLAND.
 - NATIVE MATERIAL MAY BE USED OUTSIDE OF THE ROAD PRISM FOR DUCTILE IRON IN LIEU OF IMPORTED MATERIAL FOR BEDDING SPECIFIED, PROVIDED THAT THE NATIVE MATERIAL CONFORMS TO SECTION 9-03.15 OF THE STANDARD SPECIFICATIONS, AND AS APPROVED BY THE CITY OF WOODLAND. THE CONTRACTOR SHALL SUBMIT A SAMPLE OF THE NATIVE MATERIAL TO THE CITY OF WOODLAND AT LEAST 72-HOURS PRIOR TO USE. THE CITY MAY APPROVE, REJECT, OR REQUIRE LABORATORY TESTING OF THE MATERIAL.

PIPE BEDDING				
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED
<i>Paul Stepp</i>		1/14/14		
PUBLIC WORKS DIRECTOR		DATE		

S-02



- NOTES:
- RISER TO BE USED IN SEWER CONSTRUCTION OVER 6" IN DEPTH.
 - SERVICE LATERALS SHALL BE INSTALLED PER SECTION 7.03.5 OF THE STANDARD SPECIFICATIONS. SERVICE LATERALS SHALL BE CLEARLY MARKED PER SECTION 7-18.3(5) OF THE STANDARD SPECIFICATIONS.
 - ALL SERVICE LATERALS SHALL BE 3034 PVC AND A MINIMUM OF 8" IN DIAMETER.
 - APPROVED COMMERCIAL TAPS:
 - SEALTITE TYPE "C" OR "D" SEWER SADDLE
 - FOWLER QUIK-WAY SEWER TAP
 - FOWLER "T & L" SEWER TEE
 - FOWLER "INSERTA TEE"
 - "TAP TIE" SEWER TEE
 - TRANSITIONS BETWEEN DISSIMILAR PIPE MATERIALS OR SIZES SHALL BE MADE WITH APPROVED ADAPTORS (FERRULE, CALDLER, OR APPROVED EQUAL).
 - IN NEW SUBDIVISIONS AND OTHER CONSTRUCTION INVOLVING NEW ROADS, INSTALL LATERALS TO 6" BEHIND PROPERTY LINE FOR SEWERS IN STREET RIGHT-OF-WAY. INSTALL TWO WAY CLEANOUT BEHIND SIDEWALK.
 - FOLLOWING TAPPING OF MAINS FOR LATERALS, CONTRACTOR SHALL IV THE MAIN TO VERIFY THAT THE TAP HAS PROPERLY MADE AND IS NOT PROTRUDING INTO THE PIPE. A VIDEO TAP OR DIV/CO OF THE TAP SHALL BE SUBMITTED TO THE CITY FOR APPROVAL OF THE TAP.

SERVICE LATERAL CONNECTIONS				
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED
<i>Paul Stepp</i>		1/14/14		
PUBLIC WORKS DIRECTOR		DATE		

S-04

QUAIL COVER 2/15/20

HERON MEADOWS SUBDIVISION
2215 LEWIS RIVER ROAD
WOODLAND, WASHINGTON 98674

DRAWING NO. C-12
PROJECT NO.

STANDARD DETAILS

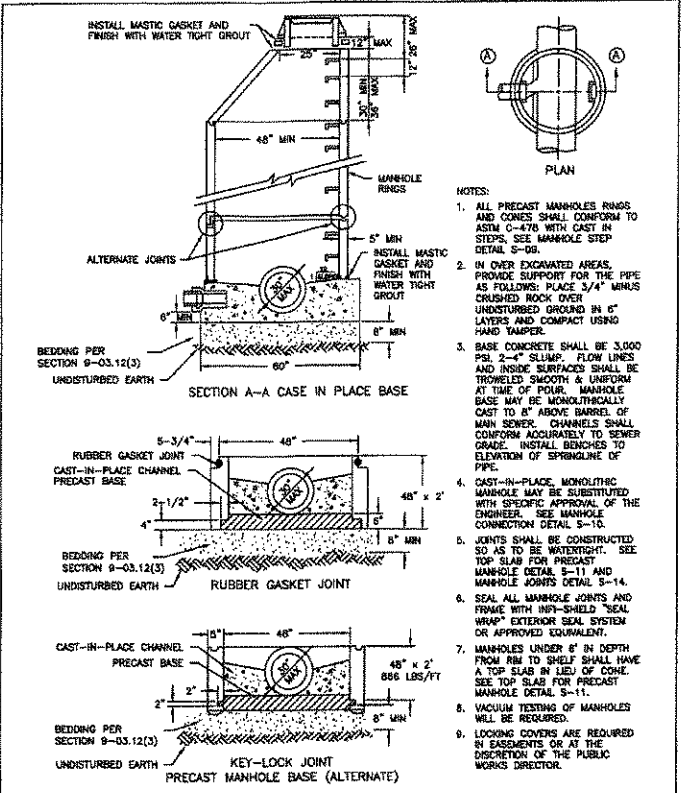
AQUARIUS
ENVIRONMENTAL
CONSTRUCTION

REV.	DATE	DESCRIPTION	DESIGNED BY	CHECKED BY	APP. BY

REGISTERED PROFESSIONAL ENGINEER
STATE OF WASHINGTON
DANIEL A. SAMPSON
EXPIRES JULY 13, 2015

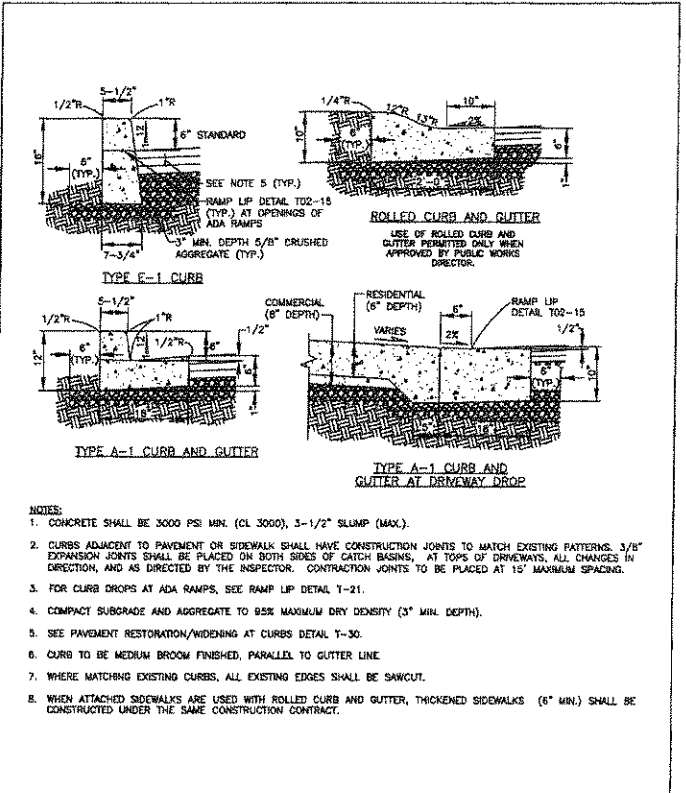


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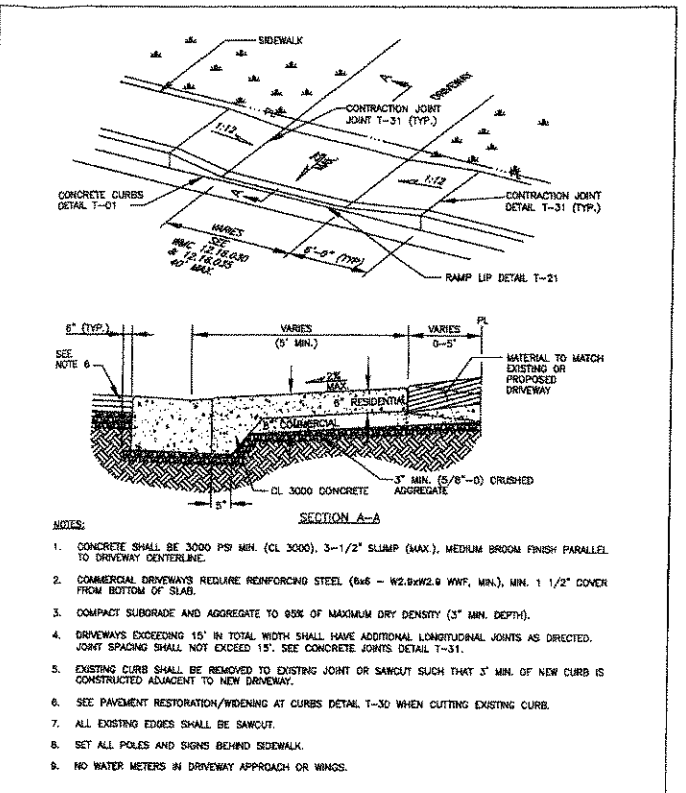
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED
<i>Bart Stapp</i>				
PUBLIC WORKS DIRECTOR				

DATE: 5/8/19



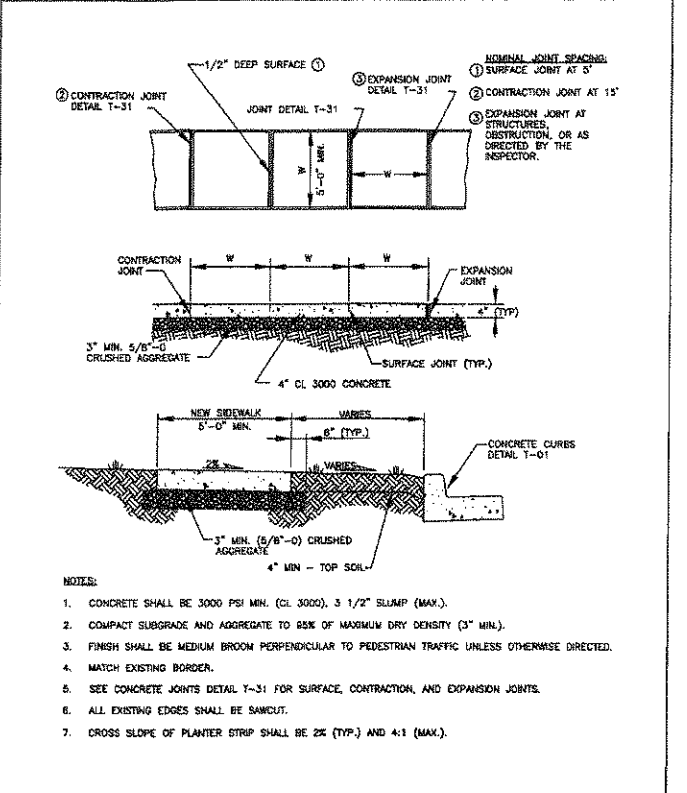
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<i>Bart Stapp</i>				
PUBLIC WORKS DIRECTOR				

DATE: 5/8/19



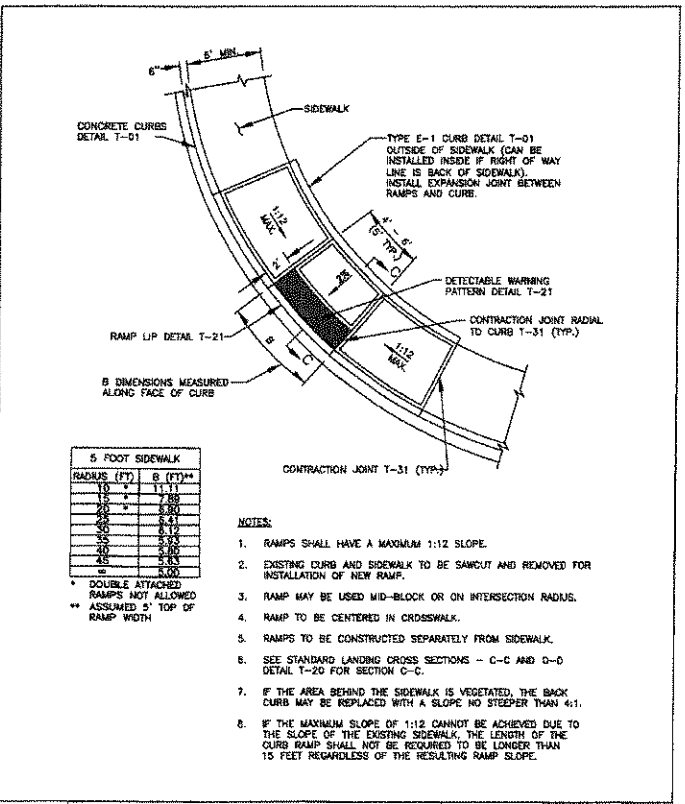
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<i>Bart Stapp</i>				
PUBLIC WORKS DIRECTOR				

DATE: 5/8/19



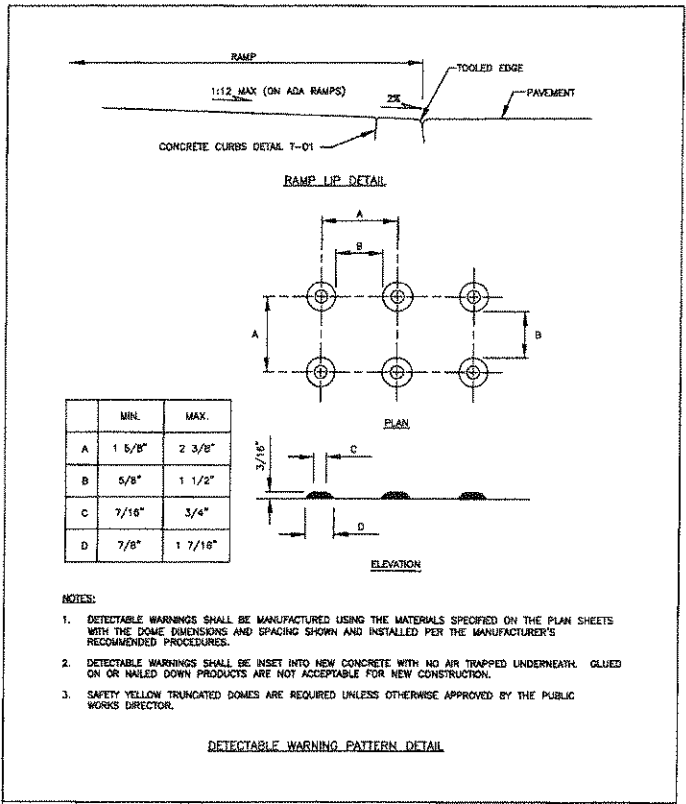
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<i>Bart Stapp</i>				
PUBLIC WORKS DIRECTOR				

DATE: 5/8/19



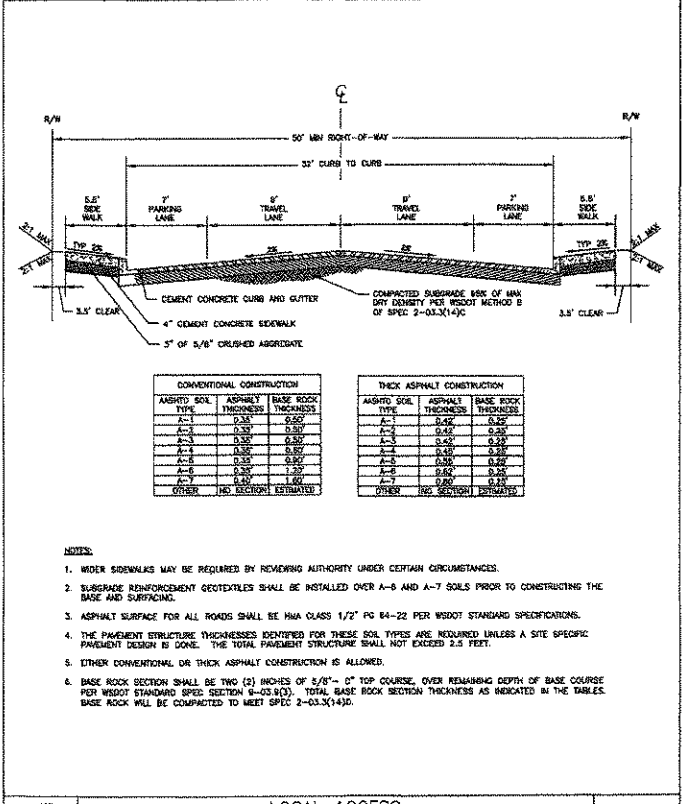
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<i>Bart Stapp</i>				
PUBLIC WORKS DIRECTOR				

DATE: 5/8/19



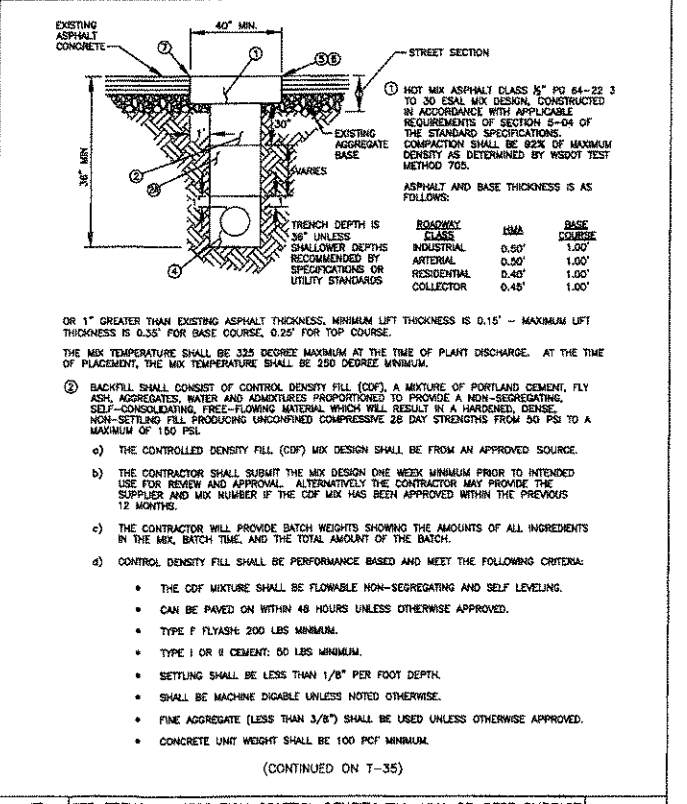
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<i>Bart Stapp</i>				
PUBLIC WORKS DIRECTOR				

DATE: 5/8/19



APPROVED	REVISIONS	DATE	DRAWN	DESIGNED
<i>Bart Stapp</i>				
PUBLIC WORKS DIRECTOR				

DATE: 2/24/15



APPROVED	REVISIONS	DATE	DRAWN	DESIGNED
<i>Bart Stapp</i>				
PUBLIC WORKS DIRECTOR				

DATE: 5/8/19

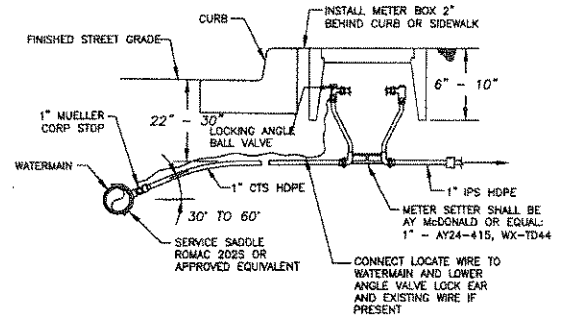
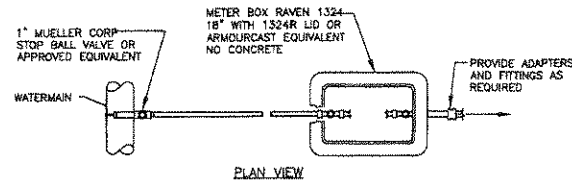


GENERAL NOTES FOR WATER MAIN INSTALLATION

1. ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH THE WSDOT/APWA STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION HEREIN IDENTIFIED AS THE "STANDARD SPECIFICATIONS" AND AWWA SPECIFICATIONS, EXCEPT AS MODIFIED BELOW OR BY CITY OF WOODLAND STANDARD DETAILS.
2. A PRE-CONSTRUCTION MEETING SHALL BE HELD WITH CITY OF WOODLAND AT LEAST 48-HOURS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE CONSTRUCTION SCHEDULES AND TRAFFIC CONTROL PLANS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. PROPOSED "EQUIVALENTS" MUST BE SUBMITTED TO THE CITY OF WOODLAND FOR APPROVAL.
3. THE CONTRACTOR SHALL NOTIFY THE CITY PUBLIC WORKS DEPARTMENT AT (360) 225-7599, 48-HOURS PRIOR TO LIVE TAPS OR OTHER CONNECTIONS TO EXISTING WATERMANS. WHERE CONNECTIONS REQUIRE SHUT-DOWN OF SERVICE, CONNECTION POINTS WILL BE EXPOSED FOR "FIELD VERIFICATION" BY CONTRACTOR AND CONNECTION DETAILS SHALL BE VERIFIED 48 HOURS PRIOR TO DISTRIBUTING SHUT-DOWN NOTICES.
4. CALL UNDERGROUND LOCATE AT 811 A MINIMUM OF 48-HOURS PRIOR TO ANY EXCAVATIONS.
5. UNLESS OTHERWISE ESTABLISHED IN WRITING BY THE CITY, ALL WATER MAINS SHALL BE STAKED FOR GRADES AND ALIGNMENT BY AN ENGINEERING OR SURVEYING FIRM CAPABLE OF PERFORMING SUCH WORK.
6. EXISTING VALVES AND ANY VALVES INSTALLED DIRECTLY TO AND CONNECTED TO A PORTION OF ACTIVE WATER SYSTEM ARE TO BE OPERATED BY CITY OF WOODLAND REPRESENTATIVES ONLY.
7. WATER MAINS SHALL BE PVC IN ACCORDANCE WITH AWWA C900, PRESSURE CLASS AS SPECIFIED ON DRAWINGS OR DUCTILE IRON PRESSURE CLASS 50 OR AS NOTED ON DRAWING.
8. ALL LINES SHALL BE CHLORINATED AND TESTED IN CONFORMANCE WITH THE STANDARD SPECIFICATIONS PRIOR TO USE.
9. HARD COPY AND ELECTRONIC "AS-BUILT" DRAWINGS SHALL BE SUBMITTED TO CITY OF WOODLAND UPON COMPLETION OF THE WORK.
10. ALL WATERMANS, FIRE HYDRANTS, BLOW OFF ASSEMBLIES, VACUUM BREAKERS, AND WATER SERVICES MUST HAVE LOCATE WIRE INSTALLED.

GENERAL NOTES FOR WATER MAIN INSTALL

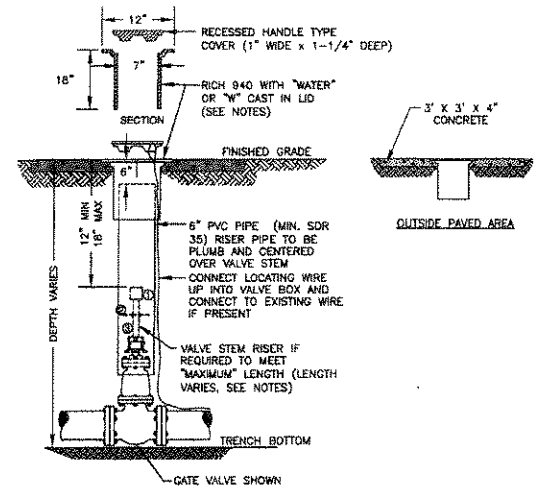
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<i>Bart Stipa</i>		11/21/12			W-01
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- NOTES:
1. SERVICE LINES ON NEW WATERMANS SHALL BE PRESSURE TESTED UP TO THE LOCKING ANGLE BALL VALVE AS PART OF THE WATERMAIN TESTING.
 2. METER BOXES SHALL HAVE A 4" WOOD STAKE WITH BLUE PAINT BEHIND THE BOX.
 3. ALL DOMESTIC AND IRRIGATION METERS SHALL BE SUPPLIED, OWNED, AND INSTALLED BY THE CITY OF WOODLAND.

3/4" AND 1" WATER SERVICE

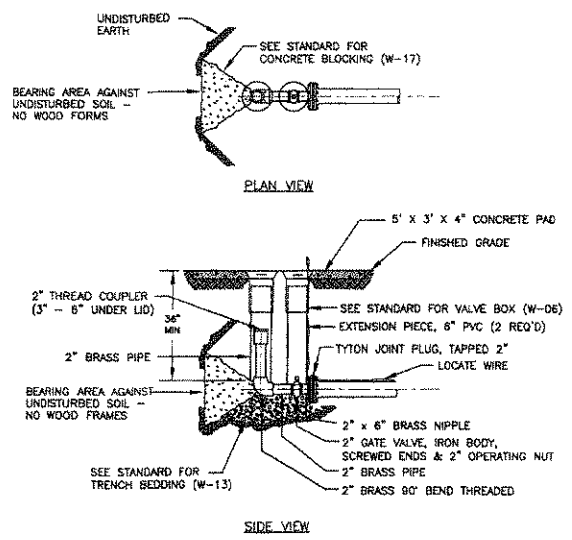
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- NOTES:
1. VALVE STEM EXTENSION TO INCLUDE THE FOLLOWING WELDS TO BE 1/4" FILLET WELD ALL AROUND.
 2. VALVE OPERATING NUT OR 1-7/8" X 1-7/8" X 2" HIGH GRADE STEEL.
 3. 3/16" THICK X 5-1/8" DIA STEEL GUIDE PLATE SHAFT.
 4. 2" X 2" X 5/16" SQUARE STRUCTURAL STEEL TUBING TO FIT OPERATING NUT.
 5. FOR NEW VALVES IN EXISTING STREET, RESTORE PAVEMENT PER CITY OF WOODLAND STANDARDS.

STANDARD VALVE BOX AND COVER

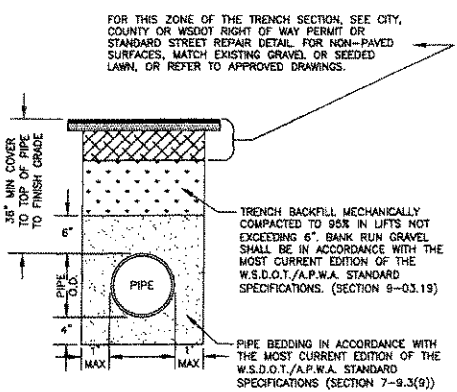
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- NOTE:
1. NO WOOD OR TIE DOWNS ALLOWED.

STANDARD BLOW OFF

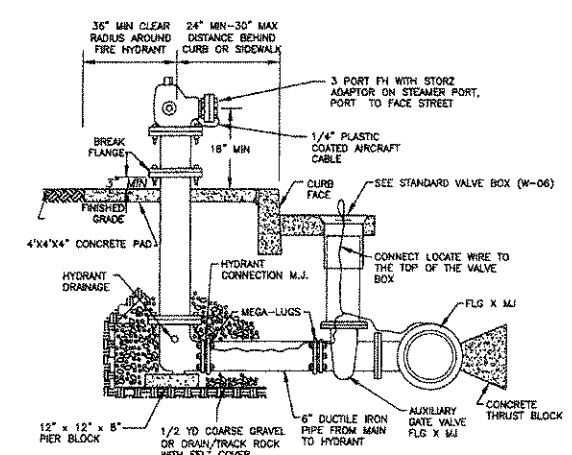
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- NOTE:
1. CLEAN NATIVE MATERIAL MAY BE USED AS PIPE BEDDING AND TRENCH BACKFILL AS APPROVED BY CITY OF WOODLAND PUBLIC WORKS.

WATER PIPE TRENCH BEDDING & BACKFILL

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- NOTES:
1. HYDRANT TO BE WATEROUS W67 CLASS 250.
 2. HYDRANT TO BE 5-1/4" COMMERCIAL W/ (2) 2-1/2" NST, (1) 4-1/2" NST THREADED PORT(S) WITH (1) 5" TWO LUG QUARTER TURN STORZ OR APPROVED EQUAL PUMPER PORT CONNECTION.
 3. STORZ ADAPTORS ARE REQUIRED.
 4. FOUR (4) GUARD POSTS TO BE INSTALLED IN UNPROTECTED AREAS (4" RADIUS).
 5. FIRE HYDRANT INSTALLATION SHALL BE APPROVED BY THE CITY OF WOODLAND PUBLIC WORKS DEPARTMENT PRIOR TO BACKFILLING.
 6. HYDRANTS SHALL NOT BE SET UNTIL LOCATION AND DEPTH ARE APPROVED BY THE CITY OF WOODLAND.
 7. FIRE HYDRANTS SHALL BE SHOP PAINTED PRIOR TO INSTALLATION W/ SAFETY YELLOW (RODDA NO. Q081) HIGH GLOSS EQUIPMENT ENAMEL.
 8. HYDRANT STANDARD BURY IS 4' UNLESS OTHERWISE NOTED ON THE PLANS, OR WHEN BREAKAWAY JOINT IS STALLED 7" ABOVE FINISHED GRADE.
 9. HYDRANT LOCATIONS SHALL BE AS SHOWN ON THE PLANS.
 10. JOINT RESTRAINT SYSTEM MAY BE USED FOR INSTALLATIONS OF NOT MORE THAN 18" (ONE PIPE LENGTH).
 11. INSTALL LOCATING WIRE AND CONNECT TO EXISTING WIRE IF PRESENT.

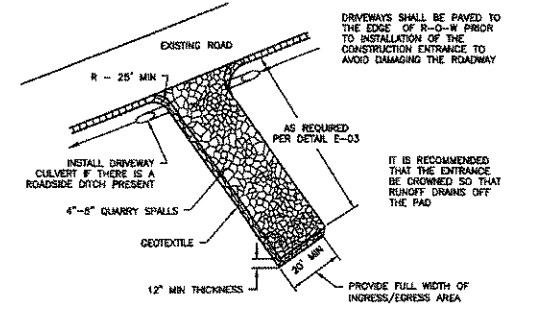
FIRE HYDRANT

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- GENERAL EROSION PREVENTION & SEDIMENT CONTROL NOTES**
1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE AND IN WORKING CONDITION PRIOR TO ANY LAID DISTURBING ACTIVITY CAUSED BY CLEARING OR GRUBBING AND SEDIMENT CONTROL MEASURES SHALL BE APPROVED BY THE CITY OF WOODLAND PRIOR TO THE COMMENCEMENT OF WORK.
 2. THE DESIGN AND CONSTRUCTION OF EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF WOODLAND'S LATEST EROSION CONTROL AND SEDIMENTATION MANUAL FOR WESTERN WASHINGTON, AND THE CITY OF WOODLAND GENERAL REQUIREMENTS SHALL TAKE PRECEDENCE.
 3. THE DESIGNER IS RESPONSIBLE FOR MAINTAINING EROSION PREVENTION AND SEDIMENT CONTROL MEASURES DURING AND AFTER INSTALLATION OF ALL UTILITY WORK PROVIDED WITH UTILITY RECORDS.
 4. PRIOR TO ANY SITE EXCAVATION, ALL STORM DRAINAGE SLOPES SHALL BE PROTECTED DOWN SLOPE FROM ANY DISTURBED OR CONSTRUCTION AREAS FOR THE DURATION OF THE EXCAVATION. THE STORM DRAINAGE SLOPES SHALL BE PROTECTED BY THE INSTALLATION OF THE DISTURBED AREAS. CLEAN THE FILTER FABRIC AS NECESSARY TO MAINTAIN DRAINAGE, REMOVE FILTER AND CLEAN GROUND BEHIND FOLLOWING COMPLETION OF EXCAVATION.
 5. THE CONTRACTOR SHALL NOT ALLOW SEDIMENT OR DEBRIS TO ENTER NEW OR EXISTING PIPES, CATCH BASINS OR INFILTRATION SYSTEMS.
 6. NEWLY CONSTRUCTED OR MODIFIED VAULTS AND CATCH BASINS ARE TO BE PROTECTED IMMEDIATELY UPON INSTALLATION.
 7. TEMPORARY BEARING AND MAINTENANCE OF FILL SLOPES AND EXCAVATION EGGS SHALL BE COMPLETED WITHIN ONE WEEK AFTER ROUGH GRADE.
 8. ALL EXPOSED AND UNPROTECTED SOILS SHALL BE STABILIZED BY THE APPROPRIATE BEST MANAGEMENT PRACTICES (BMPs) DURING THE PERIOD FROM OCTOBER 1 TO APRIL 30 NO SOIL SHALL BE EXPOSED FOR MORE THAN TWO (2) DAYS FROM MAY 1 TO SEPTEMBER 30 NO SOIL SHALL BE EXPOSED FOR MORE THAN SEVEN (7) DAYS.
 9. MATERIAL STOCKPILES ARE TO BE PROTECTED BY THE FOLLOWING MEANS:
TEMPORARY COVER PILES WITH TARP OR PLASTIC BEHIND WEATHERED WITH CONCRETE BLOCK, LUMBER OR TIRES.
PERMANENT COVER PILES WITH TARP OR PLASTIC BEHIND WEATHERED WITH CONCRETE BLOCK, LUMBER OR TIRES.
FILTER FABRIC FENCES UNTIL SOIL SURFACE IS STABILIZED WITH PERMANENT.
 10. THE CONTRACTOR SHALL MAINTAIN ON SITE A WRITTEN DAILY LOG OF EROSION CONTROL BMP MAINTENANCE.
 11. IF THE CITY INSPECTOR OR ENGINEER HAS EVIDENCE OF POOR CONSTRUCTION PRACTICES OR IMPROPER EROSION PREVENTION BMPs, OPTIONS AND/OR A STOP WORK ORDER SHALL BE ISSUED UNTIL PROPER MEASURES HAVE BEEN TAKEN AND APPROVED BY THE CITY OF WOODLAND. IF THE BMPs APPLIED TO A SITE ARE INSUFFICIENT TO PREVENT SEDIMENT FROM REACHING WATER BODIES, ADJACENT PROPERTIES, OR PUBLIC RIGHT-OF-WAY, THEN THE PUBLIC WORKS DEPARTMENT SHALL REQUIRE ADDITIONAL BMPs.
 12. DISTRIBUTION OF ADJACENT PROPERTIES, SIGNS AND STRIPES
 13. PROVIDE A 12-18" DEEP PAD OF CRUSHED ROCK FOR A DISTANCE OF 100 FEET INTO THE SITE FOR ALL ACCESS POINTS UTILIZED BY CONSTRUCTION EQUIPMENT AND TRUCKS. WIDTH OF THE PAD SHALL BE A MINIMUM OF 20 FEET. ALL TRUCKS LEAVING THE SITE SHALL CROSS THE PAD. ACCUMULATED SOIL SHALL BE REMOVED BY WASHING OR ADDITIONAL ROCK SHALL BE PLACED FROM THE PAD SURFACE. ROCK SHALL BE CLEAN 4" MAX TO 8" BULK QUARRY SPALLS. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINAGE MUST BE REMOVED IMMEDIATELY.
 14. WINDMAY SWEEPING AND SHOULDERING IS REQUIRED. WASHING THE PRODUCT INTO THE STORM SYSTEM IS NOT PERMITTED.
 15. AT SITES WITH LESS THAN 1 ACRE OF EXPOSED SOIL, PAD LENGTH MAY BE REDUCED TO 50 FEET. SINGLE FAMILY LOT EXCHANGES MAY HAVE THE PAD LENGTH REDUCED TO 20 FEET. IF CONSTRUCTION OCCURS SIMULTANEOUSLY ON ADJACENT LOTS WITH THE SAME OWNER DURING CONSTRUCTION, ONE LOT ENTRANCE MAY BE USED FOR THE ADJACENT LOTS.
 16. INSTALL SEDIMENT FENCE IN ACCORDANCE WITH THIS DETAIL PRIOR TO BUILDING CONSTRUCTION AND/OR EXCAVATION TO PREVENT SOIL INTRUSION UPON ADJACENT LOTS. IF CONSTRUCTION OCCURS SIMULTANEOUSLY ON ADJACENT LOTS AND THE LOTS HAVE THE SAME OWNER DURING CONSTRUCTION, THE SILT FENCE ALONG THE COMMON LOT LINE MAY BE ELIMINATED.
 17. CONSTRUCTION ROAD AND PARKING AREAS SHALL BE STABILIZED WHENEVER THEY ARE CONSTRUCTED, WHETHER PERMANENT OR TEMPORARY, FOR THE USE OF CONSTRUCTION TRAFFIC.
 18. MAINTENANCE OF SEDIMENT CONTROL AREA
 19. MAINTAIN AND REMOVE ALL SEDIMENT CONTROLS AS SPECIFIED IN THE STANDARD DETAIL. THE CONTRACTOR SHALL REMOVE ALL ACCUMULATED SEDIMENT FROM THE GRASS BARRIERS, SWALES, LULU, WEEDS AND STORM PILES PRIOR TO ACCEPTANCE BY THE CITY.
 20. SEDIMENT CONTROL BMPs SHALL BE INSPECTED WEEKLY AND AFTER ANY STORM EVENT PRODUCING RUNOFF. THE INSPECTION FREQUENCY FOR STABILIZED, SOFTENED SITES SHALL BE ONCE EVERY TWO WEEKS OR MORE FREQUENTLY AS DETERMINED BY THE LOCAL PERMITTING AUTHORITY BASED ON THE LEVEL OF SOIL STABILITY AND POTENTIAL FOR NONPOINT CONFINEMENTAL POLLUTION.
 21. ALL TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER SITE STABILIZATION IS ACHIEVED OR AFTER TEMPORARY BMPs ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL AREAS RESULTING FROM REMOVAL SHALL BE TEMPORARILY STABILIZED.
 22. IN AREAS SUBJECT TO SURFACE AND AIR MOVEMENT OF DUST OR SOIL BY THE FOLLOWING PREVENTATIVE MEASURES SHALL BE TAKEN FOR DUST CONTROL:
A. MAINTAIN THE PERIOD OF SOIL EXPOSURE THROUGH THE USE OF TEMPORARY GROUND COVER AND OTHER TEMPORARY STABILIZATION PRACTICES.
B. SPRINKLE THE SITE WITH WATER UNTIL THE SURFACE IS WET.
C. SPRAY EXPOSED SOIL AREAS WITH A DUST PALLETING. NOTE: USE OF PETROLEUM PRODUCTS OR POTENTIALLY HAZARDOUS MATERIALS ARE PROHIBITED IMMEDIATELY.
 23. EXPOSED SURFACES THAT WILL NOT BE BROUGHT TO FINAL GRADE OR GIVEN A PERMANENT COVER TREATMENT WITHIN 30 DAYS OF THE EXPOSURE SHALL HAVE SOIL AREAS AND MOUND PLACES TO STABILIZE THE SOIL AND REDUCE THROUGH SEDIMENTATION. SEDIMENT AREAS SHALL BE COVERED IMMEDIATELY TO AVOID A GOOD STAND OF GRASS IS BEING MAINTAINED. AREAS THAT FAIL TO STABILIZE THROUGH COVER SHOULD BE COVERED IMMEDIATELY TO PREVENT EROSION AND BE RESTORED AS SOON AS SUCH AREAS ARE IDENTIFIED.
 24. APPLY AN APPROVED TEMPORARY SEDIMENT MIXTURE TO THE PREPARED SEED BED AT A RATE OF 100 LBS/ACRE. NOTE: "HYDROSEEDING" APPLICATIONS WITH APPROVED SEED-MIXTURE-FERTILIZER MIXTURES MAY ALSO BE USED.

EROSION PREVENTION AND SEDIMENT CONTROL

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- NOTES:
1. IF THE ENTRANCE SITS ON A SLOPE, PLACE A FILTER FABRIC FENCE DOWN GRADIENT.
 2. TOP DRESS THE PAD WITH CLEAN 3" PLUS RADIUS ROCK WHEN THE CONSTRUCTION ENTRANCE BECOMES CLOGGED WITH SEDIMENTS.
 3. ANY SEDIMENT CARRIED FROM THE SITE ONTO THE STREET SHALL BE CLEANED UP IMMEDIATELY.
 4. IF EQUIPMENT TRAVELS EXTENSIVELY ON UNSTABILIZED ROADS ON THE SITE, A TIRE AND VEHICLE UNDERCARRIAGE WASH NEAR THE ENTRANCE WILL BE NEEDED. PERFORM WASHING ON CRUSHED ROCK. WASH WATER WILL REQUIRE TREATMENT IN A SEDIMENT POND OR TRAP.

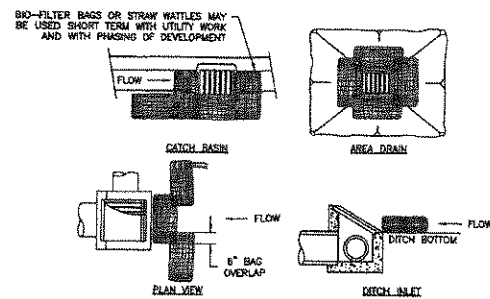
STABILIZED CONSTRUCTION ENTRANCE

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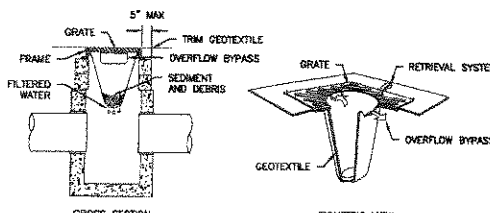


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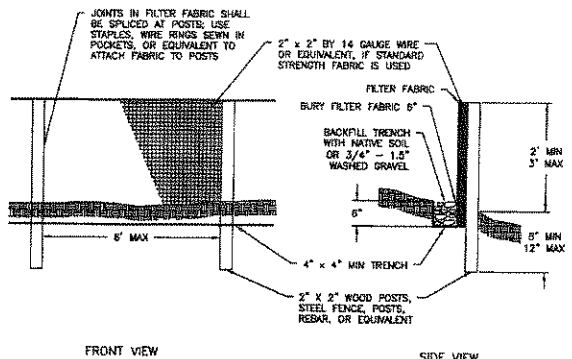


- NOTES:
- ADDITIONAL MEASURES MUST BE CONSIDERED DEPENDING ON SOIL TYPE.
 - BIO-FILTER BAGS SHOULD BE STAKED WHERE APPLICABLE USING (2) 1" x 2" WOODEN STAKES OR APPROVED EQUAL PER BAG.
 - STRAW WATTLES MUST BE STABILIZED BY ATTACHING WIRE CLIPS TO THE CATCH BASIN PER MANUFACTURER SPECIFICATIONS.
 - INLET PROTECTION MUST BE REGULARLY INSPECTED BY THE EROSION CONTROL INDIVIDUAL TO INSURE PROPER PLACEMENT/FUNCTION AND MAINTENANCE.



- NOTES:
- SIZE THE BELOW GRATE INLET DEVICE (BGID) FOR THE STORM WATER STRUCTURE IT WILL SERVICE.
 - THE REMOVAL SYSTEM MUST ALLOW REMOVAL OF THE BGID WITHOUT SPILLING THE COLLECTED MATERIAL.
 - THE BGID SHALL HAVE A BUILT-IN HIGH-FLOW RELIEF SYSTEM (OVERFLOW BYPASS).
 - THE CONTRACTOR SHALL INSPECT THE BAG AFTER EACH STORM EVENT AND AT REGULAR INTERVALS.
 - THE FILTER BAG SHALL BE CLEANED OR REPLACED WHEN THE BAG BECOMES HALF FULL.

INLET PROTECTION (1 OF 2)					
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	
<i>Paul Stepp</i>		1/6/14			E-16
PUBLIC WORKS DIRECTOR		DATE			



- NOTES:
- FILTER FABRIC FENCES SHALL BE INSTALLED ALONG CONTOUR WHENEVER POSSIBLE.
 - POST SPACING MAY BE INCREASED TO 8' IF WIRE BACKING IS USED.

- MAINTENANCE STANDARDS:
- SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
 - IF CONCENTRATED FLOWS ARE EVIDENT UPHILL OF THE FENCE, THEY MUST BE INTERCEPTED AND CONVEYED TO A SEDIMENT POND.
 - IT IS IMPORTANT TO CHECK THE UPHILL SIDE OF THE FENCE FOR SIGNS OF THE FENCE CLOGGING AND ACTING AS A BARRIER TO FLOW AND THEN CAUSING CHANNELIZATION OF FLOWS PARALLEL TO THE FENCE. IF THIS OCCURS, REPLACE THE FENCE OR REMOVE THE TRAPPED SEDIMENT.
 - SEDIMENT DEPOSITS SHALL EITHER BE REMOVED WHEN THE DEPOSIT REACHES APPROXIMATELY ONE-THIRD THE HEIGHT OF THE SILT FENCE, OR A SECOND SILT FENCE SHALL BE INSTALLED.
 - IF THE FILTER FABRIC (GEOTEXTILE) HAS DEGRADED DUE TO ULTRAVIOLET BREAKDOWN, IT SHALL BE REPLACED.

SILT FENCE					
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<i>Paul Stepp</i>		1/6/14			E-20
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CONSTRUCTION SPECIFICATIONS

GENERAL
THE FOLLOWING ARE TO BE USED IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION BY THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT) AS ADOPTED BY THE CITY OF WOODLAND.

CONCRETE STREET LIGHT FOUNDATION
ALL CONCRETE FOUNDATIONS SHALL BE THE SIZE AND CONFIGURATION SHOWN ON THE PLANS, EXCEPT WHERE, BY THE JUDGMENT OF THE ENGINEER, UNSTABLE SOIL CONDITIONS REQUIRE ENLARGEMENT OF THE FOUNDATION. BEFORE PLACING THE CONCRETE, THE CONTRACTOR SHALL BLOCK OUT AROUND ANY OTHER UNDERGROUND UTILITIES THAT ARE IN THE EXCAVATED BASE SO THAT THE CONCRETE WILL NOT ADHERE TO THE UTILITY LINE. CONCRETE BASE SHALL BE CLASS 4000 AND BE TROWELED, FINISHED, EGGED, AND FINISHED IN A WORKMANLIKE MANNER. CONCRETE SHALL BE PROMPTLY CLEANED FROM ANCHOR BOLTS AND CONDUITS AFTER PLACEMENT. ANCHOR BOLTS FOR ALL POLES SHALL BE ARRANGED SO THAT THE POLE'S BRACKET ARM IS PERPENDICULAR TO THE CENTERLINE OF THE ADJACENT ROADWAY RIGHT-OF-WAY. STREET LIGHTS MAY BE INSTALLED AFTER A COMPRESSIVE STRENGTH OF 2,400 PSI HAS BEEN ACHIEVED.

ALL POLES SHALL BE INSTALLED ON LEVELING NUTS SECURED TO THE ANCHOR BOLTS AND WITH LOCKING NUTS ON THE TOP OF THE BASE FLANGE. THE SIDE OF THE POLE SHANTY OPPOSITE THE LOAD SHALL BE PLUMBED BY ADJUSTING THE LEVELING NUTS OR AS OTHERWISE DIRECTED BY THE ENGINEER. THE SPACE BETWEEN THE CONCRETE BASE AND THE BOTTOM OF THE POLE FLANGE SHALL BE FILLED WITH DRY PACK MORTAR TO COMPLETELY FILL THE SPACE UNDER THE FLANGE AND AROUND THE CONDUITS AND BE NEATLY TROWELED TO THE CONTOUR OF THE POLE FLANGE. A PLASTIC DRAIN HOSE (1/2" DIAMETER) SHALL BE INSERTED THROUGH THE MORTAR TO PROVIDE DRAINAGE FROM THE INTERIOR OF THE POLE BASE AND TROWELED FLUSH WITH THE INTERIOR AND EXTERIOR SURFACE OF THE MORTAR. DRY PACK MORTAR SHALL CONSIST OF A 1:3 MIXTURE OF CEMENT AND FINE SAND WITH JUST ENOUGH WATER SO THAT THE MIXTURE WILL STICK TOGETHER ON BEING MOLDED INTO A BALL BY HAND AND WILL NOT EXUDE FREE MOISTURE WHEN SO PRESSED.

CONDUIT
ALL CONDUIT SHALL BE SCHEDULE 40 PVC, MINIMUM ONE INCH DIAMETER EXCEPT UNDER DRIVEWAYS, AND STREET CROSSINGS. THESE EXCEPTIONS SHALL BE RIGID STEEL CONDUIT AND SHALL BE A MINIMUM OF TWO INCHES IN DIAMETER. ALL ELBOWS SHALL BE RIGID STEEL.

RIGID CONDUIT TO BE PROVIDED AS SPECIFIED ON THE PLANS SHALL BE OF HOT DIPPED GALVANIZED STEEL, METALLIC CONDUIT CONFORMING TO THE REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.

ALL UNDERGROUND CONDUIT SHALL BE INSTALLED A MINIMUM OF 24" BELOW GRADE. IN PAVED DRIVEWAY OR ROADWAY AREAS, ELECTRICAL CONDUIT SHOULD BE INSTALLED BY PUSHING OR BORING METHODS.

GROUNDING
ALL POLES, METAL CONDUITS AND CABINETS IN THE SAME AREA COVERED BY THE SAME POWER SERVICE SHALL BE MADE MECHANICALLY AND ELECTRICALLY SECURE FOR A CONTINUOUS GROUNDING SYSTEM IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. BONDING JUMPERS SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH WSDOT STANDARD PLAN J-8A TO ALL #6 BARE METAL CONDUITS IN THE JUNCTION BOX. GROUNDING OF CONDUIT AND GROUND WIRE AT THE SERVICE POINT TO THE PUD SERVICE GROUND ON THE PUD POWER POLE SHALL BE ACCOMPLISHED AS REQUIRED UNDER THE NATIONAL ELECTRICAL CODE.

CATALOG CUTS
PRIOR TO THE BEGINNING OF CONSTRUCTION, CATALOG CUTS OF THE FOLLOWING ITEMS SHALL BE SUBMITTED AND APPROVED BY THE PUBLIC WORKS DIRECTOR: 1. STREET LIGHT STANDARDS 2. LUMINAIRES 3. JUNCTION BOXES 4. WYE AND IN-LINE CONNECTORS 5. SERVICE CABINET 6. IN-LINE FUSE HOLDERS 7. CONDUIT 8. WIRE.

CRITICAL INSPECTION POINTS
THE ILLUMINATION SYSTEM WILL BE INSPECTED BY THE PUBLIC WORKS DEPARTMENT. THE TELEPHONE NUMBER IS: (360)225-7899.

THE FOLLOWING ARE THE CRITICAL INSPECTION POINTS. NO WORK SHALL BE DONE UNTIL INSPECTION IS COMPLETED.

MINING 1. CHECK OF CONDUIT DEPTH. NO TRENCHING SHALL BE FILLED WITHOUT THE DEPTH OF CONDUIT VERIFIED. 2. SERVICE. THE SERVICE SHALL BE INSPECTED AND APPROVED BY THE INSPECTOR. 3. WIRING. THE WIRING, SPLICES, GROUNDING, AND FUSING SHALL BE INSPECTED AND APPROVED BY THE INSPECTOR.

POLES 1. POLE LOCATIONS. THE POLE LOCATIONS SHALL BE APPROVED BY THE PUBLIC WORKS DEPARTMENT PRIOR TO EXCAVATION OF THE POLE BASES. 2. POLE BASES. THE POLE BASES SHALL BE INSPECTED AND APPROVED PRIOR TO THE POURING OF THE CONCRETE.

STREET LIGHTING - CONSTRUCTION NOTES					
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	
<i>Paul Stepp</i>		5/16/13			T-40
PUBLIC WORKS DIRECTOR		DATE			

DESIGN SPECIFICATIONS

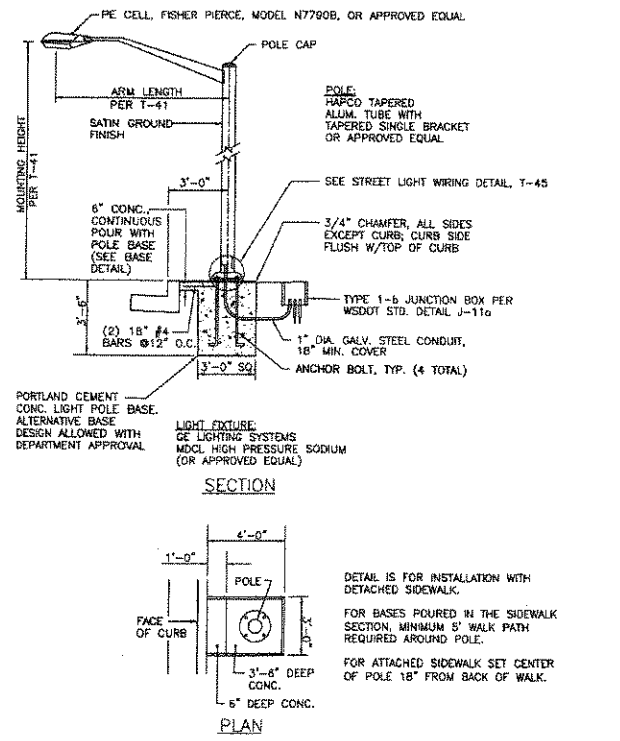
- STREET LIGHT LOCATIONS ARE TO BE PLACED ON THE PROPERTY LINE WHENEVER POSSIBLE. LIGHTING FACILITIES SHALL BE LOCATED WITHIN PUBLIC RIGHT-OF-WAY OR AN EASEMENT DEDICATED TO THE CITY OF WOODLAND.
- THE FOLLOWING TABLE SHALL BE FOLLOWED FOR STREET LIGHT DESIGN:

ROADWAY AND AREA CLASSIFICATION	AVERAGE LUMINANCE	LUMINANCE UNIFORMITY	
		L. AVE. TO L. MIN.	L. MAX. TO L. MIN.
ARTERIAL	COMMERCIAL	1.0	3 TO 1
	INTERMEDIATE	0.8	3 TO 1
	RESIDENTIAL	0.6	3.5 TO 1
COLLECTOR	COMMERCIAL	0.8	3 TO 1
	INTERMEDIATE	0.6	3.5 TO 1
	RESIDENTIAL	0.4	4 TO 1
LOCAL	COMMERCIAL	0.6	5 TO 1
	INTERMEDIATE	0.5	6 TO 1
	RESIDENTIAL	0.3	6 TO 1

- THE PUBLIC WORKS DEPARTMENT SHALL ADJUST, ADD, OR REMOVE STREET LIGHTS WHERE NECESSARY. THE CONTRACTOR MAY SUBMIT STAMPED CALCULATIONS BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF WASHINGTON IF THE CONTRACTOR DOES NOT AGREE WITH THE MODIFIED POLE LOCATIONS.
- WHERE THE AVERAGE RESIDENTIAL DENSITY IS IN EXCESS OF 12 UNITS PER ACRE - USE INTERMEDIATE CLASSIFICATIONS.
- TYPICAL MOUNTING DIMENSIONS UNLESS OTHERWISE REQUIRED BY THE PUBLIC WORKS DEPARTMENT SHALL BE:

CLASSIFICATION	MOUNTING HEIGHT	WATTAGE	ARM LENGTH
ARTERIAL	35'	200 W	8'
COLLECTOR	30'	200 W	6'
LOCAL	25'	100 W	6'

ILLUMINATION SPECIFICATIONS					
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	
<i>Paul Stepp</i>		5/16/13			T-41
PUBLIC WORKS DIRECTOR		DATE			



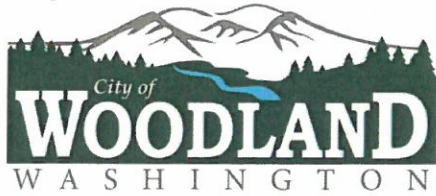
STREET LIGHT POLE					
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	
<i>Paul Stepp</i>		2/24/15			T-42
PUBLIC WORKS DIRECTOR		DATE			

QUAIL DETAIL 5 2/15/20
DRAWING NO. C-15
PROJECT NO.
HERON MEADOWS SUBDIVISION
2215 LEWIS RIVER ROAD
WOODLAND, WASHINGTON 98674
STANDARD DETAILS



REV	DATE	DESCRIPTION	DWN BY	CHK BY	APP BY





Community Development Department

P.O. Box 9, 230 Davidson Avenue
 Woodland, WA 98674
www.ci.woodland.wa.us
 (360) 225-1048 / FAX # (360) 225-7336

STAFF REPORT

ISSUE DATE: May 14, 2020
Project Title: Heron Meadows 31-lot Subdivision
Land Use Application No.: SUB 2020-001

Applicant:	Method Construction Larry Cowlshaw PO Box 33822 Portland, OR 97292
Property Owner:	Andy Loud & Connie Taylor 2215 Lewis River Road Woodland, WA 98674
Site Location:	2225 Lewis River Road Woodland, WA 98674
Parcel Number:	508440100 and 508820100
Parcel Size:	8.35 acres
Zoning Designation:	Low-Density Residential (LDR-7.2)
Date Application Received:	NFC letter issued March 3, 2020 Waived traffic study on April 10, 2020 TIR received April 24 th , 2020
Date Notice of Application Issued:	April 10, 2020
Published:	May 6 th , 2020
Comment Period Ended:	April 27 th , 2020
Hearing Date & Time:	May 21 st , 2020 at 7:00 pm
Hearing Location:	The hearing will be conducted using remote GoToMeeting or FreeConferenceCall for remote attendance, and at the City of Woodland Council Chambers in the Police Station at 200 East Scott Avenue, Woodland, WA 98674. Participation instructions will be made available as part of the agenda published on the City's website at www.ci.woodland.wa.us

I. DESCRIPTION OF PROPOSAL:

The applicant proposes dividing approximately 8.35 acres into 31 lots ranging in size from 7,200 sq. ft to 10,769 sq. ft. The development will include two connections to Lewis River Road at the intersections of Spruce Avenue and Salmon Street, and internal circulation streets to serve the subdivision, an existing home on an adjacent lot, and a neighboring short plat.

This project is adjacent to a four-lot short plat project at 2215 Lewis River Road (SPL 19-003 a.k.a. Sage Investments SP) that received preliminary approval in October 2019.

II. REVIEW AUTHORITY:

Per WMC 19.08.030, for Subdivision Preliminary Plats staff shall prepare a staff report for an open record pre-decision hearing before the Planning Commission (PC). The commission is responsible for making a recommendation on the subdivision, which is then forwarded, along with the record, to the City Council to decide.

Preliminary subdivisions are reviewed under WMC 16.08.110 which requires a hearing before the PC based on the merits of the proposed subdivision. Under WMC 16.08.130, the PC shall the proposal and make a recommendation for approval, disapproval, or approval with conditions, supported by findings of fact. The recommendation is advisory only and the sole authority to approve or disapprove preliminary plats shall reside with the city council.

The recommendation shall be based on a determination that the proposed subdivision satisfies the requirements of city codes; will serve the public interest; conforms to the City's comprehensive plan; and that the lots created by the subdivision conform to the standards of the applicable zoning district.

Per WMC 16.08.140, the city council shall review the preliminary plat materials and the PC recommendation at a public meeting, for which the clerk-treasurer shall set a date, time and location. See recommendation section below.

III. FINDINGS:

**Title 14 Building and Construction
Flood Damage Prevention (Chapter 14.40.)**

The flood hazard areas of Woodland are subject to periodic inundation which can result in the loss of life, health, and property, so the City is authorized to regulate development within the floodplain as identified within WMC 14.40 and the associated maps adopted by the city. Development within the floodplain is regulated by WMC 14.40 and includes the requirement that a permit be obtained.

Finding 1: The applicant has submitted for a floodplain permit (FLD-20-001) as part of this project request. That case is concurrent but won't be part of this decision. Staff will issue the decision when the final plat is submitted so they can verify surveyed elevations meet code.

Finding 2: The applicant will be establishing the Base Flood Elevation (BFE) for locations throughout the subdivision so that subsequent residential development on the lots can be reviewed for compliance with WMC 14.40 for protection from flood events. These locations shall be shown on the face of the plat. (See Conditions #2 and 3)

Finding 3: With the establishment of the BFE for the project, each lot will be responsible for filing a floodplain Elevation Certificate for review as part of the building permit application process for any structure in the floodplain. A note reflecting this requirement has been added to the face of the plat to ensure that future lot owners are aware. (See Conditions #2 and 3)

Title 15 ENVIRONMENT

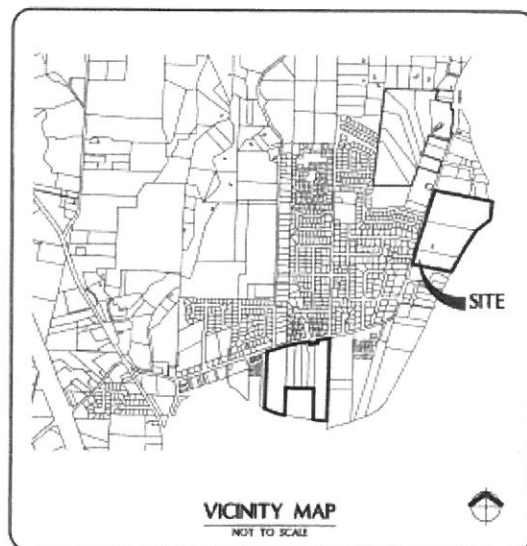
Environmental Policy (Chapter 15.04) and Critical Areas (Chapter 15.08)

Finding 4: The applicant is requesting a subdivision of property that was previously approved for division in 2006 under the project name of Riverview Subdivision. At the time, the site was approved for 109 residential lots and 26,000 cubic yards of fill associated with the subdivision. At that time, the project covered additional properties and was a total of 27.29 acres in size and included land within the shoreline of the Lewis River, and included critical areas that included associated wetlands and an identified bald eagle nest. (The Riverview Subdivision from 2006 can be seen in Figures 1 & 2 below.)

Figure 1



Figure 2



Finding 5: A SEPA Mitigated Determination of Non-Significance (MDNS) was adopted for this site on April 16, 2006 (Case #205-942/SHOR/CAP/SEP) and is attached as Attachment B of this staff report. The SEPA covered the Riverview Subdivision which include a larger size and scope but included the impacts expected from the Heron Meadows project. The decision also included an approved Eagle Protection Area and wetland buffers within the shoreline jurisdiction of the Lewis River. This MDNS accompanied an approval for the Riverview Subdivision, approved by then Hearing Examiner Irv Berteig, as part of the shoreline permitting process (See Attachment C)

Finding 6: Since that time, the Riverview Subdivision approval has expired, and the properties have been sold and partially developed. (Figure 3 shows the ownership configuration for the property covered by the Riverview Subdivision decision.)

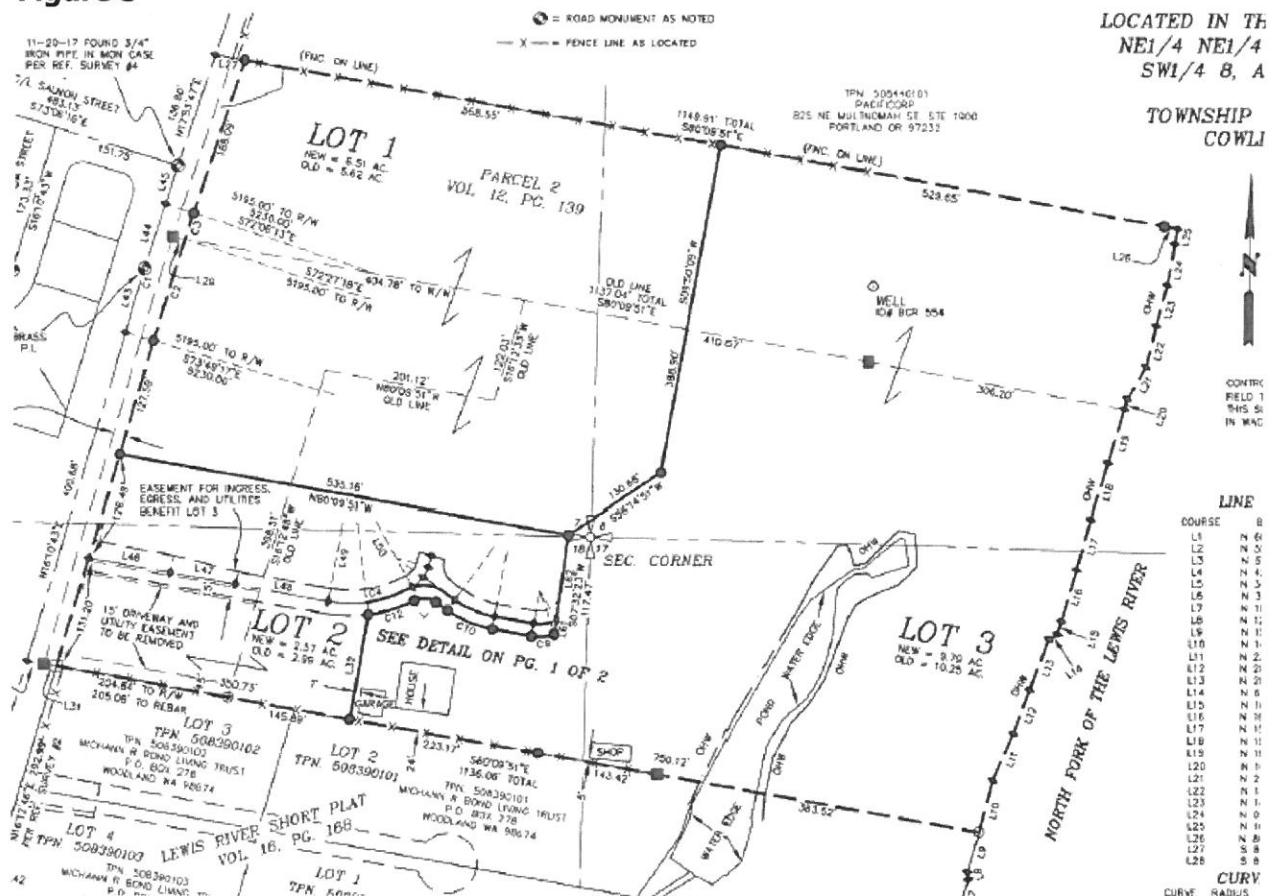
Finding 7: The northern most parcel of that project (Parcel 508440101) is no longer part of the property being considered for division under the Heron Meadows subdivision. That site, 2233 Lewis River Road (Parcel 508440101) is the parcel that had the identified bald eagle nesting tree. As a result, the identified bald eagle nest is not on the subject property. The identified buffer does not extend onto the project subject to this review. (Figure 4 shows the approximate location of the eagle nest in relation to

Finding 8: The current owner of parcel 508440101, Pacificorp, has submitted comments in response to public notice given for the project. Those comments are discussed below.

Finding 9: In addition, the property at the south end of the Riverview Subdivision has been short platted by into four lots. The Bond Short Plat, SPL-19-002, was approved and the plat was recorded with Cowlitz County on December 10, 2019 under AFN #3632823. Those lots are shown in approximation in Figures 3, 4, & 5).

Finding 10: In March of 2018, Sage Investment Holdings LLC filed a boundary line adjustment request to consolidate the identified critical areas onto a single lot so they could be isolated and protected from development. BLA-18-003 was approved and the survey of the revised lots was recorded with Cowlitz County on March 9, 2018 under AFN #3590525 (Volume 37 Page 73).

Figure 5



The Heron Meadows project includes Lots 1 and 2 of the Sage Investment BLA. (Shown in blue in Figure 4 above.)

NOTE: The Cowlitz County GIS system does not show the approved and recorded Sage Investment BLA at the time of this staff report. When the GIS will be updated is unknown.

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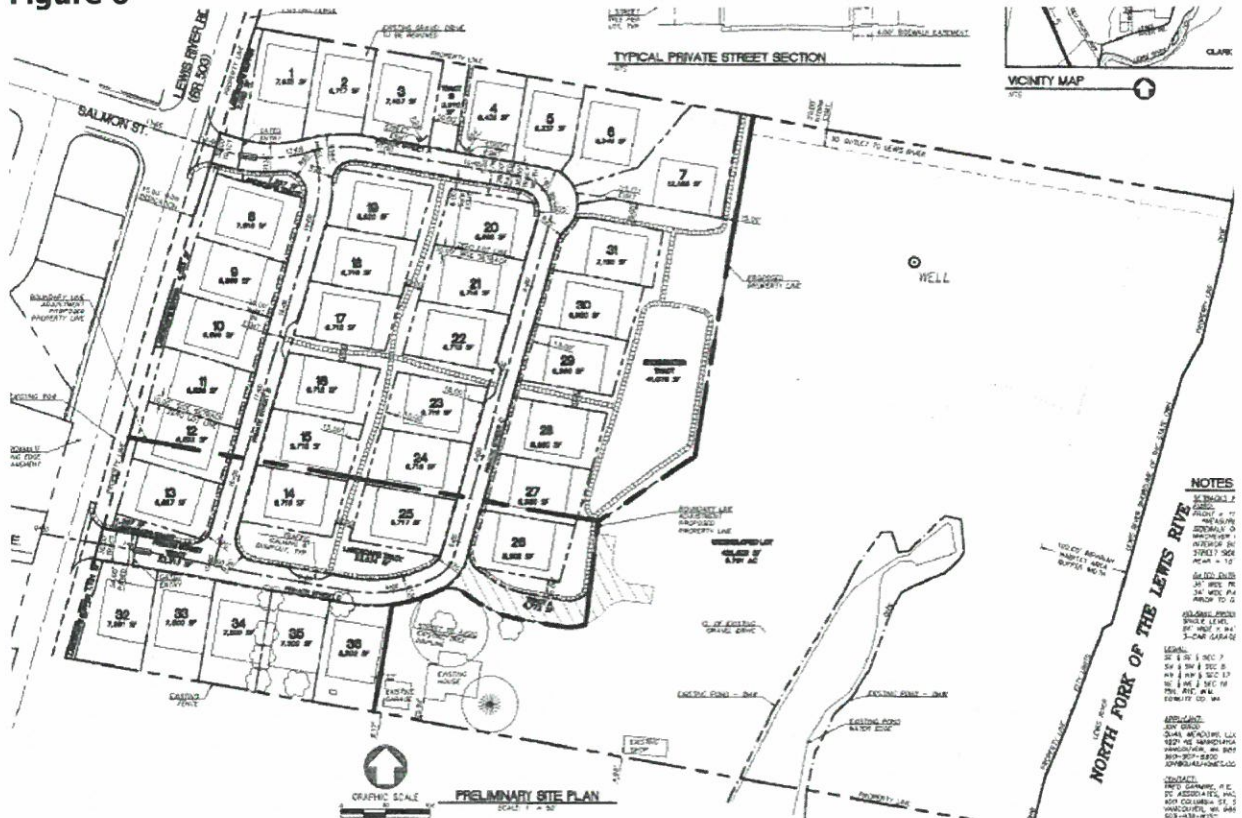
Finding 11: As a result of BLA-18-003, the Heron Meadows subdivision is more than 500-feet from the Ordinary High-Water Mark (OHWM) of the Lewis River and outside of shoreline jurisdiction. They are also beyond the jurisdiction for wetland and habitat buffers associated with the Lewis River. However, staff has included a condition requiring a note on the face of the plat which notifies owners that the site is in close proximity of an bald eagle nest and construction activities should follow acceptable management recommendations measures recommended by the Washington State Department of Fish and Wildlife and U.S. Fish and Wildlife Service. (See Condition #3c)

Finding 12: In early 2018, the property owner and a partner performed a pre-application conference to review the viability of the site for division given the expired Riverview permits and the fact that the northernmost parcel had since been developed by Pacificorp as a fish hatchery, and the approval of the Bond Short Plat to the south.

The proposal was for a potential Planned Unit Residential Development (PURD) as shown in Figure 6 below. Figure 6 and Figure 4 used in tandem show the relative distance between Heron Meadows and the eagle nest buffer and the OHWM for the Lewis River.

NOTE: **This is not the proposal** but is given to put the location of the project in perspective given the BLA.

Figure 6



Finding 13: The project is within the floodplain of the Lewis River. In the Under WMC 15-08-500 development within frequently flooded areas must comply with WMC 14.40 for Flood Damage Prevention. Those standards are discussed above.

Finding 14: SEPA review thresholds under WMC 15.04.110 require review if they exceed adopted thresholds from WAC 197-11-800. In the city's case, no flexible thresholds have been adopted and the proposed 31-lot subdivision exceeds the maximum threshold (if it were adopted) so staff required a SEPA checklist at the time of the preapp. However, the applicant argued that a SEPA review had been completed and given the scope of the project, no additional review was warranted. They opined that the 109 lots, fill within the shoreline, and impacts to the critical areas had been reviewed and adequately mitigated at the time.

Finding 15: Staff reviewed the MDNS decision (listed above) and concurred that the scope of the SEPA exceeded the impact of the proposed development and that the change in circumstances and design were within the scope of the MDNS. Staff therefore adopts the MDNS adopted April 16, 2006 by reference except as modified below and outlined in the SEPA section below. (Additional SEPA discussion is included below.)

Conclusion: As conditioned, the proposal can comply with City standards.

Erosion Control Ordinance (Chapter 15.10)

Finding 16: Applicant is required to install and maintain erosion control measures per the Best Management Practices as outlined in this section (current Stormwater Management Manual for Western Washington) during site excavations and grading. An NPDES permit from the Department of Ecology is required where more than one acre is being disturbed. A final erosion control plan will be required with final engineering. (See Conditions #4, 5, 18, 18, 20, and 26)

Conclusion: The proposal can comply with City standards. The applicant will be required to demonstrate compliance with Woodland requirements prior to approval for construction.

Stormwater Management (Chapter 15.12)

Finding 17: Stormwater standards are based on the DOE "Puget Sound Manual" and adoption criteria is included in WMC 15.12. The applicant's submittal included a preliminary stormwater technical information report, which demonstrates that on-site treatment followed by infiltration is the proposed method of complying with this Chapter. As submitted the approach appears feasible. Applicant shall prepare and submit a final TIR and stormwater design for detailed review. (See Conditions #12, 15, and 26)

Conclusion: As conditioned, the proposal can comply with the development standards.

TITLE 16 SUBDIVISION PRELIMINARY PLAT – Chapter 16.08

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Open Space, streets and utility provisions (Chapter 16.08.170)

The planning commission and city council shall determine whether appropriate provisions are made for, but not limited to, public health, safety and general welfare; open spaces, parks and playgrounds; schoolgrounds; drainageways and facilities; streets, alleys, sidewalks and other public ways; water supplies; and sanitary and solid waste disposal.

Finding 18: The applicant is proposing a 6-inch water main in the interior streets, connecting at two places to the existing main in the Lewis River Road right of way. A 6-inch main does not meet the city standard and the mains will be required to be 8-inch diameter. (See Conditions #9 and 10)

Finding 19: Gravity sewer will be extended to all lots within the subdivision connecting to the existing main sewer within Lewis River Road. All gravity sewer mains shall be 8-inch diameter. (See Conditions #9 and 10)

Finding 20: New water and sewer services will be extended to each lot within the subdivision. The services to the existing residence must be abandoned and reconnected to the new mains. (See Conditions #5 and 7)

Conclusion: As conditioned the proposal can meet the development code criteria.

Curb, sidewalk, drainage and roadway improvements (Chapter 16.08.175)

All lots of a subdivision abutting a street shall be improved with curbs, sidewalks, drainage and roadway constructed to standards outlined in this chapter and approved by the public works supervisor to the centerline of such streets.

Finding 21: Proposed interior streets will be 50' of right of way width, with 32' between curb and gutter, and with sidewalks on each side, consistent with standard drawing T-27 for Local Access improvements. (See Conditions #4 thru 8)

Finding 22: At the east dead end of Street "B" a temporary turning circle shall be required per WMC 16.14.260 in lieu of a cul-de-sac bulb. (See Conditions #4 thru 8)

Finding 23: The private street within Tract "A" shall be improved to private road standards in accordance with the adopted development standards. (See Conditions #4 thru 8, and 13)

Finding 24: Street improvements will also include lighting and stormwater management. (See Conditions #5 and 6)

Finding 25: A preliminary stormwater technical report indicates that site stormwater runoff will be collected in catch basins and sent via pipe to the treatment facility and detention area designated as "Stormwater Tract". Runoff will infiltrate into the soil and an overflow will be provided to adjacent property. (See Conditions #11 and 12)

Finding 26: The application will be conditioned to construct half-street widening including curb, gutter, sidewalk, roadway drainage improvements and lighting along

Lewis River Road consistent with the adopted Standard Drawing T-24A for improvements to SR-503. Dedication of additional right of way will also be required consistent with this standard. (See Conditions #4 thru 7)

Finding 26a: Related to the SR-503 discussion, staff had determined the submittal package was not fully complete because it lacked a traffic study. The applicant argued that a traffic study was not warranted for a 31-lot subdivision and that the 2006 SEPA and traffic study for the site was adequate.

Staff reviewed the SEPA and the case file for the Riverview Subdivision and determined that, both decisions were based upon the developer's improvement of SR-503. Since the traffic study would serve to analyze the impacts of the development and determine what mitigation would be warranted, staff agreed to waive the traffic study with the understanding that frontage improvements would be required, thus making a traffic study redundant.

This staff report reflects this commitment, however, the property owner has submitted comments arguing why the frontage improvements are not warranted. Please see the findings below discussing the applicant's correspondence.

Finding 27: The application will also be conditioned to address management of stormwater from the widening of Lewis River Road.

Conclusion: As conditioned the proposal can meet the development code criteria.

Physical Site Characteristics (Chapter 16.08.190)

Physical characteristics of the site must be considered including, but not limited to, slope, soil slip potential, flood hazard, inundation, swamp conditions, drainage conditions, and location in or proximity to environmentally sensitive areas.

Finding 28: Portions of the site are within the 100-year floodplain (floodway fringe) and subject to inundation. Site development will be required to comply with the Flood Damage Prevention Ordinance. (As discussed above.)

Finding 29: The site does not include wetlands or shorelines.

Finding 30: A geotechnical assessment has been prepared that indicates site soils are suitable for infiltration of stormwater. Per the preliminary report, all stormwater will be collected and infiltrated into the site's soils. Proposed erosion control measures have been included as part of the proposal as discussed above.

Conclusion: As conditioned the proposal can meet this standard.

Title 17 ZONING

Low Density Residential (LDR) Zoning District (Chapter 17.16)

The project is located within the LDR-7.2 zoning district.

Finding 31: Per WMC 17.16.020 Principal Uses, "E. Single family detached dwellings, but not to exceed one dwelling on any one lot, except as provided in Section 17.16.030 of this code". The propose development is a single-family residential subdivision and is therefore a permitted principal use.

Finding 32: As noted above, accessory uses, including accessory dwelling units may be permitted within the Heron Meadows Subdivision if they meet the standards of WMC 17.16 at the time of construction or commencement.

Finding 33: Per WMC 17.16.070(A) the minimum lot size in the LDR-7.2 zone is 7,200 square feet (unless a mix of substandard lot sizes is requested). In this case, three lots are 7,200 square feet while the remaining lots are between 8,198 and 11,777 sq. ft. in size. There will also be two tracts, one for stormwater and one for open space, which are approximately 18,000 sq. ft. each. The proposal meets the size standard requirement.

Finding 34: Per WMC 17.16.070(B) the minimum lot width is 70 feet. The proposed development meets that standards except for Lots 14, 15 and 16 which have lot widths of 68.57 feet.

Finding 35: WMC 17.16.070(A) allows for smaller substandard lots to be proposed as a means to ensure a mix of lot sizes. If smaller lots are proposed, WMC 17.16.070(B) allows for lots with a lot width of 60-feet for those smaller lots. A condition of approval has been added which requires that Lots 14, 15, and 16 either be modified to have widths of 70-feet OR that they be reduced in size to less than 7,200 square feet. (See Condition #21)

Finding 36: Setbacks are defined as follows in WMC 17.16.070:

- C. Front yard setback in feet: 25
- D. Rear yard setback in feet: 15
- E. Interior side yard setback in feet: 5
- F. Street side yard setback in feet: 15

The application material shows proposed building footprints on several pages but not setbacks. Sheet C-5 marked as the Utility Plan appears to have building envelopes that meet the setback standards. Though shown on the utility plan, staff has attached a condition of approval requiring that setbacks be added as a note on the face of the plat. (See Condition #2e)

Finding 37: Per WMC 17.16.070(G) and (H) maximum building height and lot coverage are established. These issues do not come into play until building permits are issued so an advisory note addressing these issues has been added. (See Condition #2e)

Finding 38: Per WMC 17.16.070(I) each lot must have 2 required parking spaces. This issue does not come into play until building permits are issued so an advisory note addressing this issue has been added. (See Condition #2e)

Finding 39: Per WMC 17.16.070(J) all lots must have 15 feet of street frontage. All lots meet this standard.

Finding 40: The applicant has indicated that they could introduce a possible phasing plan for the subdivision. At the time of the report, a phasing plan was not available for review, but phasing is permitted with subdivisions. Therefore, a condition has been added wherein a phasing plan CAN be approved as part of the final engineering plan review provided it adequately allows for the phased extension of utilities (as approved by Public Works) and Clark County Fire & Rescue. (See Condition #23)

Finding 41: All new development is subject to impact fees. Impact fees are calculated and assessed at the time of building permit application and paid when building permits are issued. The City of Woodland has impact fees for Parks, School, Fire, and traffic. (See Condition #3f)

Conclusion: As conditioned, the subdivision meets city zoning standards.

Title 15 Environment (Chapter 15.04)

SEPA Threshold Determination Comments

The existing MDNS covers the scope and site of the project but the revised scope of the project means that some of the adopted mitigation measures are no longer applicable for the Heron Meadows like they were for the Riverview Subdivision. Therefore, the following findings are made to modify the MDNS adopted under SEPA case #205-942/SHOR/CAP/SEP:

Finding 42: Staff acknowledges the MDNS was issued for a residential subdivision with larger impacts that warranted thirteen (13) mitigation measure conditions under SEPA. Staff further recognizes that the MDNS covers a larger site and only a portion of the mitigation may apply to the property that is subject to the Heron Meadows Subdivision request. (Those mitigation measures are discussed below but are attached in context as Attachment B to this staff report.)

Finding 43: Accordingly, the conditions from case #205-942(SHOR/CAP/SEPA that are unaffected by for the Heron Meadows Subdivision are conditions:

- #1 requiring a grade and fill permit
- #2 requiring erosion control compliance
- #3 requiring stormwater compliance
- #4 requiring particulate matter control during construction
- #5 requiring soil stabilization as necessary
- #6 requiring downstream sewer analysis and improvement as necessary
- #7 requiring erosion control measure implementation
- #8 requiring maintenance of right-of-way for erosion tracking
- #9 requiring construction hour limitations
- #10 (See below)
- #11 Traffic Mitigation (See below)
- #12 (See below)
- #13 (See below)

Finding 44: Mitigation condition #10 is no longer applicable because there is no wetland or buffer within the Heron Meadows subdivision as currently configured.

Finding 45: Mitigation condition #11 include traffic impact mitigation. The mitigation includes a proportional amount of fees based on the size of the development. The conditional also notes that the mitigation may be waived if impact fees are adopted by the city. Impact fees have been adopted as discussed above so this proportional mitigation may or may not be required as discussed in this report. (See below)

Finding 46: Mitigation condition #12 is generally no longer applicable because the eagle nest in question is not within the area covered by the management plan. In addition, bald eagles were de-listed since the time of the Riverview Subdivision. In lieu of the mitigation condition, the nest is discussed in the analysis of WMC 15.08 Critical Areas above and concerns need not be in the form of SEPA mitigation.

Finding 47: Mitigation condition #13 is no longer applicable because there is no wetland or buffer within the Heron Meadows subdivision as currently configured.

Conclusion: As modified by Condition #24 and #25, the city adopts the MDNS by reference.

Agency and Public Comments

Pacificcorp Comments

Finding 48: Pacificcorp operates the fish hatchery on the neighboring property. They expressed concern about the eagle's nest on their property and ensuring future residents know that the hatchery is existing and recognizing the potential impacts from the hatchery prior to purchase of the property. While there is nothing in the regulations, staff has included advisory notes as a condition of approval. (See Attachment E and Condition 2c)

Clark County Fire & Rescue Comments

Fire Department Access:

Finding 49: Roadways to Structures: The perimeter of all structures must be within 150' an approved access road with a minimum clear width of 20' (26' where a hydrant is located). IFC 503.1.1 / D102 / D103

Finding 50: Dead end Streets: Any dead-end road longer than 150' must be provided with an approved cul-de-sac or hammer-head turn-around in accordance the International Fire Code design criteria. (96' Diameter Cul-de-sac; 120' Hammerhead with 20' clear width and 28'R corners) IFC D103.4

Finding 51: Parking Restrictions: Roadways must have signage for parking restrictions as follows: Signs for no-parking must be provided on both sides of all streets that are less than 26' wide in accordance with local standards for future enforcement. Signs for no-parking must be provided on one side of all streets that are between 26' and 32' wide in accordance with local standards for future enforcement. IFC D103.6

Finding 52: Remote Access Points: One and Two-Family Residential Developments with more than 30 dwelling units must be provided with two separate and remote fire apparatus access roads. Multiple Family Residential Developments with more than 100 dwelling units must be provided with two separate and remote fire apparatus access

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roads. (remote = min. 1/2 the overall diagonal of the land area being served) IFC D106/107

Finding 53: Access During Construction: Access roadways must be completed and unobstructed prior to combustible construction.

Finding 54: Gates: Where required access is restricted with a gate, an approved key box or key switch must be provided to allow Fire Department Access. (IFC 506)

Fire Department Water Supply and Suppression Systems:

Finding 55: Hydrant spacing is assessed based on structures that are non-sprinklered, type V-B Construction and no larger than 4,800 combined square feet. Additional hydrants may be required for streets providing access to structures greater than 4,800 SF. (IFC Table B105.1(2) / C102.1)

Finding 56: Fire Hydrants: Hydrants must be provided on fire access roadways so that average spacing does not exceed 500' and the maximum distance from any point on the street frontage to a hydrant is no more than 250'. (400' and 200' for Dead end roads) IFC C102

Finding 57: Fire Sprinklers: Any structures larger than 5,000 SF must be equipped with an automatic fire sprinkler system in accordance with NFPA 13D. (Woodland Municipal Code 14.32.130)

Finding 58: Water Supply During Construction: Required hydrants must be serviceable and unobstructed prior to combustible construction.

Finding 59: FIRE SPRINKLERS May be Considered as an alternate method to increase hydrant spacing or to address access issues.

Conclusion: As conditioned, the project can meet applicable fire code and Woodland Municipal Codes.

Andy Loud (property owner) Comments

Finding 60: The property owner submitted documentation arguing that SR-503 improvements fronting the site are not warranted. (Those comments are included as Attachment F. Please review those documents.)

Finding 61: The comments argue that Heron Meadows should only be asked to enter into a developer's agreement. This would put the city in compliance with the Final Order issued by the Hearing Examiner for the Bond Short Plat (File No. #213-915) per Condition 7 on Page 4 of that order. (Page 1 of Attachment F.)

Finding 62: The owner argues that the order obligates the city to enter into a developer's agreement with the owners of each of the listed properties that share frontage on SR-503. It is furthered argued that by processing the short plat and approving the final plat map for the Bond Short Plat, which has since been recorded, the city obligated itself to enter into contracts with the owners of those identified lots. (But possibly for only up to four of them?)

Finding 63: Staff has reviewed the submitted documents and disagrees with the owner's assertion. The referenced final order was for the neighboring property, known as the Bond short plat (as identified in the Figures above) and only applies to the property being short platted at that time.

Finding 64: At the time of the short plat application, only parcel number #508390100 was reviewed for division (per Paragraph #1 of the Summary section of the order).

Neither the City nor the Examiner have the authority to unilaterally expand that application to include any additional adjacent properties. Therefore, neither the City nor the Examiner could require entry into developer agreements for any property other than the bond property #508390100. All other properties are beyond the scope of the application and therefore not subject to the short plat process.

None of the four parcels mentioned in Condition 7 had standing in the Bond Short Plat application process. Therefore, there is no nexus to encumber neighboring property owners. In fact, doing so could be considered a "taking" under property rights laws because the owners of those five lots were not legally informed of such an encumbrance, nor were they given the opportunity to participate in the process where such an encumbrance occurred.

Finding 65: Developer's agreements require approval by the City Council. The examiner has no authority to obligate the city council to take a legislative action like adopting a developer's agreement. For that reason, if the applicant's assertion is true, there is no guarantee that Item 7 of the examiner's order could be enforced.

The applicant or owner would have to offer to enter into an agreement on a voluntary basis. However, because there has been no proportionality argument, the staff has attached a condition of approval that the frontage improvements on SR-503 must be completed. Staff specifically agreed to not require a revised traffic report because the applicant had not raised a proportionality argument and made the waiver conditional upon the understanding that frontage improvements would be required. (More in the SEPA discussion below.)

Finding 66: Staff interprets the decision to require the City to enter into a developer's agreement with the Bond Short Plat applicants.

Staff further believes the intent of the agreement in regard to SR-503 frontage improvements, was to recognize that there were proportionality issues and requiring construction of the frontage was not proportional to the impact of the proposed 4-lot subdivision.

Finding 67: Staff interprets the documents to also say that as a result of the review, the City and the Examiner provided a proportional option to allow for a deferred mitigation contribution that would be triggered when "at least four other of the neighboring properties...complete subdividing the Applicant shall dedicate...right-of-way and pay" the agreed upon amount. (Quoted from Item 7 on Page 4 of the order)

Meaning development of the fourth lot his means the trigger for Bond Short Plat lot owners to know when the need to pay the agreed upon mitigation amounts. I.E. when four of the neighboring properties develop their properties...Lots 1-4 of the short plat will be asked to pay their transportation mitigation. It even goes on to say that

Staff does not interpret this document as deferring all SR-503 frontage improvements for four of the five lots. Such an interpretation might mean that improvements would never be triggered because the owner of the fifth lot would be cost burdened with the SR-503 improvements and rely upon the city's collection of its agreed contributions.

Finding 68: Staff notes that in the Riverview Subdivision Final Order (Attachment C), Condition #1 requires improvements to SR-503. With that in mind, it is supported by the SEPA decision.

Finding 69: Staff notes that the SEPA MDNS for the Riverview Subdivision (and used for this case) includes language that supports the idea that SR-503 improvements were part of the decision.

Section 14 of the SEPA checklist covers transportation. While Question 15.d describes the proposed internal roads, Question 15.g describes measures that will be taken to reduce traffic impacts. It says:

Based on the results of the analysis described in the Traffic Study (Exhibit H), it is concluded that the proposed development can be constructed without adversely affecting traffic operations or safety in the vicinity of the site. Several improvements are discussed in the traffic study to meet the needs of future background traffic regardless of the buildout of the proposed development, specifically providing eastbound left turn lanes along the intersections of SR 503 at Hillshire Dr, Insel Rd, and Gun Club Rd and installing a traffic signal at the intersection of SR 503 at E Scott Avenue. The City already has a planned project to install the signal. With this planned improvement, this intersection will operate at LOS A during both AM and PM peak hours. Furthermore, vehicles volumes along the intersections of SR 503 at Insel Rd and Gun Club Rd do not meet MUTCD signal warrants and vehicle queues should not be excessive (2-4 Vehicles). No other specific off-site roadway improvements are recommended to accommodate this development or mitigate its impact.

Note: The signal project discussed above actually turned into the round-about at SR-503 and E Scott Avenue.

However, the response shows that the traffic analysis showed that there were "no other specific off-site roadway improvements...recommended to accommodate this development or mitigate its impact."

Staff can only assume that no additional improvements were needed because: a) frontage improvements for SR-503 were already required for the plat, and b) mitigation condition #11 of the MDNS required additional mitigation for transportation impacts.

10. No fill shall be placed within any portion of a wetland and/or buffer area.
11. To mitigate traffic impacts on State Route 503 (Lewis River Road) applicant shall contribute \$154,500 to the City SR 503 Improvement Project Fund. In the event that traffic impact fees have been adopted by the city prior to recording of the plat, thereby providing for collecting of such fees, on the lots created thereby, this requirement for the contribution shall be waived.
12. Implement recommended mitigation measures as set forth in the "Bald Eagle Habitat Management Plan" by Ecological Land Services, Inc. dated November 29, 2005.

The collection of mitigation fees, impact fees in addition to having a developer build on-site roads is a common practice.

However, as noted in the MDNS condition, now that the city has adopted Transportation Impact Fees, the \$154,500 of traffic mitigation for off-site impacts is no longer applicable.

Staff assumed that the applicant agreed to this when they asked for the city to adopt the existing MDNS rather than review an updated SEPA checklist for the smaller project.

Finding 70: Staff also notes that when the applicant asked the city to waive the traffic study required to be a fully complete application, staff only did so on the understanding that SR-503 frontage improvements would be a recommended condition of approval. (See Attachment H) The applicant accepted this decision and the review of Heron Meadows proceeded accordingly.

Without traffic data more current than the 2006 traffic study it is hard to argue for against waiving frontage improvements on SR-503.

As noted in the SEPA, off-site improvements were identified in 2006 and MDNS Condition #11 attached a \$154,500 price tag for those improvements. (\$154,500 divided by 109 units = \$1,407.43 in 2006 dollars)

With the City's \$838 transportation impact fee, waiving frontage improvements for \$25,978 (in 2020 dollars) would lead me to believe that the MDNS is no longer adequate to cover current transportation impacts unless the \$154,500 of SEPA mitigation is retained.

A waiver of frontage improvements on SR-503 AND MDNS Condition #11 could result in unmitigated significant adverse environmental impacts to the city's transportation system. Such impacts should not be approved without additional review under SEPA.

Finding 71: Looking at the executed developer's agreement between the City and the Ms. Bond (also in Attachment F) staff notes that Section 2 of the agreement specifically states that the agreement only applies to the parent parcel (#508440101) and the subsequent child parcels represented by the four new lots (parcels #508390100, #508390101, #508390102, and #508390103).

Finding 72: Section 1 of the Bond developer's agreement appears to recognize that "the project would consist of frontage improvements along Lewis River Road (SR-503) in front of the developer's property." It then says "The project will not occur until four of five neighboring properties also develop and sign similar agreements with the city.

Those five identified properties being Parcels #508490100, #508520101, #508520100, #508440100, and #508440101. (which include the Heron Meadows property and the Save Investments property.)

Finding 73: While Mr. Loud is asserting that the above information implies that the identified parcels (#508490100, #508520101, #508520100, #508440100, and #508440101) should be subject to a developer's agreement, upon re-reading the language, what it actually says is that the Bond Short Plat lots don't have to pay their Lewis River Road improvement fees if the city fails to get four other property owners to sign agreements. (If we can only get 3...they don't have to pay...)

IV. STAFF RECOMMENDATION:

Based upon the analysis herein and the case record for the cases listed, staff hereby recommends that the Planning Commission recommend **APPROVAL of Heron Meadows Subdivision with conditions** as listed below.

Per WMC 16.08.140, the city council shall review the preliminary plat materials and the PC recommendation at a public meeting, for which the clerk-treasurer shall set a date, time and location. See recommendation section below. This meeting is expected to be completed by a web-based GoToMeeting/FreeConferenceCall platform but the City Council Chambers will be open and staffed by the presenter as advertised. PC members and other staff will attend remotely.

Attendees will be required to use social distancing measures and the use of individual protective masks are requested.

The Commission's recommendation will be documented and sent to the Woodland City Council for review. Staff expects the Council to consider the recommendation at the June 15th, 2020 Council meeting, or the July 6th meeting. Those meetings are held at 7:00 pm,

V. CONDITIONS OF APPROVAL

In order to record a final plat, a final plat application shall be required. The final plat shall meet the following conditions:

1. A final plat application shall be required. The final plat application shall be accompanied by the necessary fees and shall contain the information required under WMC 16.10 and that information necessary to determine that the project meets these conditions of approval. An electronic copy of all final plat application material shall also be required.
2. Base Flood Elevation (BFE) information shall be shown on the face of the final plat. Elevation measurements should be shown on the survey wherever necessary to facilitate subsequent building permit reviews using a floodplain review process in lieu of a full floodplain permit for each unit. A note regarding flood elevation information, similar to the one below, describing each BFE marker shall be required on the face of the plat.

330000 0001 0 (02-07-1988), 000000 0000 0 (02-07-1988)

9) BENCH MARK:
FEMA REFERENCE MARK 2
FEMA ELEVATION = 27.88 FEET (NGVD 29)
A BRASS PIN IN THE CENTER OF A 9 BY 15 FOOT CONCRETE MANHOLE SLAB, AT THE NORTHEAST CORNER OF THE INTERSECTION OF BUCKEYE AND GOERING STREETS.

SITE DATUM:
CLARK COUNTY DATUM ELEVATION = 28.10 FEET (NGVD 29-47)

3. The following notes shall be placed on the face of the plat:
 - a. SR 503 predates this development. WSDOT will not be responsible for any traffic noise.
 - b. The Pacifcorp fish hatchery on the adjacent property predates this development. Owners acknowledge that Pacifcorp will not be responsible for any noise, odors, or related impacts from the normal operation of the hatchery.
 - c. This project is close to a known bald eagle nest. If the nest is occupied for nesting during nesting season (January 1 to August 31) and/or rearing season (October 15 to March 15) construction activity must be conducted using Washington State Department of Fish and Wildlife and/or the U.S. Fish and Wildlife Service management practices.
 - d. Construction on each lot will be subject to review under the City's flood hazard reduction standards. An elevation certificate will be required with all building permit applications.
 - e. Development on all lots shall be reviewed at the time of building permit approval to determine if they meet the following:
 - Front yard setback in feet: 25
 - Rear yard setback in feet: 15
 - Interior side yard setback in feet: 5
 - Street side yard setback in feet: 15
 - Maximum building height in feet: 30
 - Maximum lot coverage: 50 percent
 - Required off-street parking spaces: 2
 - f. All lots are subject to impact fees for Parks, Fire, Schools, and Traffic. Impact fees are calculated at the time of building permit and paid at the time of building permit issuance.
4. Detailed construction drawings for the proposed road, drainage and utility facilities shall be submitted to the City's Public Works Department for review and approval prior to construction of subdivision improvements. Design of improvements shall be in accordance with the City of Woodland Public Works Engineering Standards for Construction.
5. The applicant shall construct or bond all frontage and interior street improvements including road base, paving, curb and gutter, sidewalks and streetlights to City standards prior to final plat approval.
6. Frontage half-street improvements for Lewis River Road (State Route 503) shall be constructed to the adopted Arterial standards. Improvements shall include curb, gutter, sidewalk, street widening, stormwater management and street lighting in compliance with City standard details based on a street section of 24' from centerline to face of curb. A right of way dedication to 40' of half width shall be required.
7. Driveways shall not be permitted directly to Lewis River Road from any of the proposed lots. The driveway to the first lot on each connecting street shall be located the farthest practical distance east from the intersection.

DECISION
Heron Meadows
Subdivision
SUB 2020-001

8. All interior public streets shall be constructed to Local Access standards based on Standard Detail T-27. Improvements shall include curb, gutter, sidewalk, paving of the street and street lighting in compliance with City standards based on a street section of 32 feet from face of curb to face of curb. A 50' right of way dedication shall be required. The temporary turning circle dimensions for the east end of Street "B" shall include a pavement radius of 40-feet. Any portion of the turning circle, which falls outside of dedicated right of way, shall be placed in an access easement to the City that will be vacated at such time as the street is extended. The extension of the proposed private street within Tract "A" shall be designed and constructed in accordance with city standards for Private Streets.
9. The applicant shall construct or bond for drainage, water and sewer systems, telephone, electrical and telecommunication systems prior to final plat approval.
10. Gravity sewer and water mains shall conform to city design standards. Sewer mains and water mains shall be 8-inch diameter. The number and location of fire hydrants must be approved by the fire marshal.
11. Stormwater detention and treatment facilities shall be designed in accordance with adopted standards, which are based on the DOE "Puget Sound Manual" and adoption criteria, which is included in WMC 15.12. Design of improvements shall mitigate for quality and quantity of runoff and for impacts to downstream conveyance systems, as determined by the Public Works Director.
12. The stormwater treatment area and the discharge pipe routes which are outside of public right of way shall be placed in an easement or a parcel of land that is owned jointly by the lot owners. Stormwater treatment areas shall be enclosed by a 6-foot tall chain link fence. Fences shall be vinyl coated with commercial grade materials subject to approval by the Public Works Director.
13. An easement to the city will be required for public utilities placed within the Tract "A" private road alignment.
14. Establish a Home Owner Association (HOA) for the maintenance and management of the commonly owned properties and facilities. HOA documents shall be subject to review and approval by the Public Works Director.
15. A stormwater covenant shall be prepared and executed to insure ongoing maintenance of the treatment and detention facilities by the property owners. The form of the covenant document shall be in accordance with city policy.
16. Prior to the placement of any fill material, a Fill and Grade permit shall be obtained from the City of Woodland and shall comply with the Flood Damage Prevention Ordinance and FEMA regulations.
17. Hours of construction shall be limited to 7:00 A.M. to 8:00 P.M. on weekdays and prohibited on Sundays.
18. Provisions shall be made to minimize the tracking of sediment by construction vehicles onto paved public roads.
19. Erosion control measures shall comply with WMC 15.10 and shall be in place prior to any clearing, grading, or construction.
20. The applicant shall comply with Department of Ecology requirements to secure permits associated with stormwater discharge during construction.
21. Lots 14, 15, and 16 must be modified to have minimum widths of 70-feet OR be reduced in size to less than 7,200 square feet so that they can meet the 60-foot width standard for substandard lots per WMC 17.16.070.

22. A general condition of Cowlitz County is that all newly created lots must indicate the addresses for all lots on the face of the plat. Please contact Public Works for address assignment as part of the final plat process.
23. If a phasing plan is not available for review by the public hearing, a phasing plan can be approved as part of the Final Engineering review process. A phasing plan that involves phased development of utilities will need approval from the Public Works Director, the City Engineer, Clark County Fire & Rescue, and the city planner. Additional review applications for CCF&R may be required at that time. Phasing plan proposals that the planner believes will have substantive changes to the subdivision may be taken the Planning Commission if it is deemed necessary.
24. SEPA mitigation conditions as discussed in the staff report will continue to apply except for Conditions 10, 12, and 13 which are waived as not applicable, and Condition #11 as modified within this report and approved by the Heron Meadows Subdivision decision.
25. SEPA MDNS Condition #11 should be amended to require off-site transportation mitigation for traffic impacts on SR-503 in addition to the impact fees adopted by the city. Such mitigation should be reviewed and negotiated by the Public Works Department and subject to review and approval by the City as part of a developer's agreement. Such a developer's agreement is a condition for the waiver of MDNS Condition #11 to ensure that transportation impacts are mitigated to a non-significant level. The developer's agreement must be in place prior to approval of the final plat map for recording.
26. Submit a final erosion control plan and a final stormwater Technical Information Report. Design of erosion control and stormwater improvements shall comply with Woodland Development standards.
27. Once final approval is given to print the final plat, signatures on three copies of the plat, shall be collected in the following order:
 1. The owners in fee simple;
 2. Notary public in and for the state;
 3. Professional land surveyor registered in the state;
 4. Public Works Director;
 5. Cowlitz County treasurer;
 6. Cowlitz County Auditor
28. Three signed copies of the final plat must be submitted to staff for review and approval.
29. The plat shall be filed with the County Auditor and shall not be deemed approved until so filed. A copy of the approved subdivision plat (after recorded) shall be submitted to the Community Development Department.
30. To ensure the development is consistent with adopted fire codes and Woodland Municipal Codes the following conditions are applicable to the application:
 - a. Roadways to Structures: The perimeter of all structures must be within 150' an approved access road with a minimum clear width of 20' (26' where a hydrant is located). IFC 503.1.1 / D102 / D103
 - b. Dead end Streets: Any dead-end road longer than 150' must be provided with an approved cul-de-sac or hammer-head turn-around in accordance the International Fire Code design criteria. (96' Diameter Cul-de-sac; 120' Hammerhead with 20' clear width and 28'R corners) IFC D103.4
 - c. Parking Restrictions: Roadways must have signage for parking restrictions as follows: Signs for no-parking must be provided on both sides of all streets that are less than 26' wide in accordance with local standards for future enforcement. Signs for no-parking must be provided on one side of all streets that are between

26' and 32' wide in accordance with local standards for future enforcement.
IFC D103.6

- d. Remote Access Points: One and Two-Family Residential Developments with more than 30 dwelling units must be provided with two separate and remote fire apparatus access roads. Multiple Family Residential Developments with more than 100 dwelling units must be provided with two separate and remote fire apparatus access roads. (remote = min. 1/2 the overall diagonal of the land area being served) IFC D106/107
- e. Access During Construction: Access roadways must be completed and unobstructed prior to combustible construction.
- f. Gates: Where required access is restricted with a gate, an approved key box or key switch must be provided to allow Fire Department Access. (IFC 506)
- g. Hydrant spacing is assessed based on structures that are non-sprinklered, type V-B Construction and no larger than 4,800 combined square feet. Additional hydrants may be required for streets providing access to structures greater than 4,800 SF. (IFC Table B105.1(2) / C102.1)
- h. Fire Hydrants: Hydrants must be provided on fire access roadways so that average spacing does not exceed 500' and the maximum distance from any point on the street frontage to a hydrant is no more than 250'. (400' and 200' for Dead end roads) IFC C102
- i. Fire Sprinklers: Any structures larger than 5,000 SF must be equipped with an automatic fire sprinkler system in accordance with NFPA 13D. (Woodland Municipal Code 14.32.130)
- j. Water Supply During Construction: Required hydrants must be serviceable and unobstructed prior to combustible construction.
- k. FIRE SPRINKLERS May be Considered as an alternate method to increase hydrant spacing otr to address access issues.
- l. These standards must be incorporated as part of the final engineering plan review.

VI. SEPA DECISION:

As lead agency, City of Woodland staff acts as the SEPA Responsible Official (WMC 19.08.030) and hereby adopts the MDNS dated April 18, 2006 as modified above. As lead agency the City has determined there will be no unmitigated probable significant adverse impacts on the environment and that an environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of the completed environmental checklist and other information on file with the lead agency. There is no further comment period on the MDNS.

VII. APPEALS

Appeals are governed by WMC 19.08.030. Appeals of City Council subdivision decisions must be made to county superior court in accordance with RCW 36.70C (Judicial Review of Land Use Decisions). Proceedings for review under this chapter shall be filed within 21 days from the date the land use decision is issued to be considered timely. (RCW 36.70C.040(3))

The staff report is not an appealable action. Parties are invited to submit written comments on the staff report as indicated below and are invited to give testimony at the Pre-Decision Open Record Public Hearing before the Planning Commission.

The recommendation of the Planning Commission is also not appealable.

The City Council is the decision-making body and the adoption of a subdivision is a legislative decision. Legislative decisions to adopt or not adopt ordinances or resolutions are not appealable. Legal council should be consulted for advice regarding legal remedy.

CONTACT PERSON: Travis Goddard, Community Development Director
City of Woodland
PO Box 9
230 Davidson Ave
Woodland, WA 98674
Goddardt@ci.woodland.wa.us

Date: May 14, 2020

Signature:



Attachments

- A. Heron Meadows Subdivision Plat
- B. SEPA MDNS signed April 18, 2006
- C. Riverview Subdivision Final Order dated August 2, 2006
- D. Riverview Subdivision Plat Maps (expired)
- E. Pacificorp comments
- F. Andy Loud comments
- G. Clark County Fire & Rescue comments
- H. E-mail regarding the waiver of the traffic study.

Cc: Applicant
Parties of Record
Department Heads
Rob VanderZanden, P.E.
Fire Marshal
Mayor



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www.aquariusenv.com
503.828.0265

May 18, 2020

Travis Goddard
City of Woodland
Community Development Department
PO Box 9, 230 Davidson Ave,
Woodland, WA 98674

Via Email - GoddardT@ci.woodland.wa.us

RE: Heron Meadows Subdivision
Land Use Application – SUB 2020-001

Travis, In response to your email dated May 15 with staff comments, we are providing a project phasing narrative for the Heron Meadows Subdivision, Phases 1 thru , specifically:

Phase 1

- Develop Lots 22, 23, 28,29, 30 and 31.
- Construct Street "A" from the intersection with Lewis River Road to Station 5+44 (north of Lot 13).
- Connect new 8" sanitary sewer to the existing manhole (near southwest corner of Lot 28) and extend main to Street "A" station 5+44 and stub out for future connection.
- Connect new 8" water main to existing main in Lewis River Road and extend main to Street "A" Station 5+44 and stub out for future connection.
- Install two fire hydrants – one at intersection with Street "C" and one near Street "A" Station 5+44.
- Construct Road "C" from intersection with Street "A" to Street "C" Station 2+30 (north of Lot 22).
- Extend sanitary sewer and water main to Street "C" Station 2+30 and stub out for future connection.
- Construct stormwater retention pond.
- Construction stormwater main with associated catch basin along Street "A" to Station 5+22.
- Extend stormwater main from Street "A" Station 5+22 to the south end of the retention pond.
- Construction Tract "A" street.

- Install water and sanitary sewer main extensions in Tract "A" street with stub-out for future con.

Phase 2

- Develop Lots 8, 9, 10, 11, 12, 13, 14, 15, 16 and 17.
- Extend Street "A" from Station 5+44 to the intersection with Street "B".
- Construct Street "B" 50 feet east and west of centerline intersection with Street "A".
- Extend 8" sanitary sewer in Street "A" to manhole at intersection with Street "B".
- Extend 8" sanitary sewer in Street "B" 50 east and west to stub outs for future connection.
- Extend water main along Street "A" to Street "B" intersection and 50 feet east and west in Street "B".
- Install fire hydrant at Street "B" intersection.
- Extend stormwater main with associated catch basins from stub out in Street "A" to the north end of the retention pond.

Phase 3

- Develop the remaining Lots.
- Construct Street "B" from intersection with Lewis River Road to east end.
- Construct temporary cul-du-sac on at east end of Street "B".
- Extend remaining sanitary sewer and water mains.
- Complete remaining stormwater mains and associated catch basins.

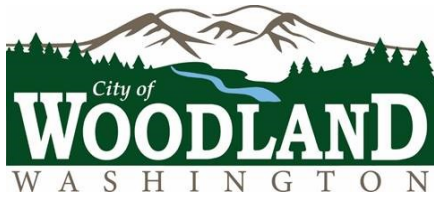
Should you have any questions about project phasing or the site in general you can contact me directly at 503.828.0265 or daniels@aquariusenv.com.

Sincerely,



Daniel A. Scarpine, PE

Cc: Larry Cowlshaw, Method Construction
Connie Taylor, Andrew Loud – Property Owners



Community Development Department

P.O. Box 9, 230 Davidson Avenue
 Woodland, WA 98674
www.ci.woodland.wa.us
 (360) 225-1048 / FAX # (360) 225-7336

SUPPLEMENTAL STAFF REPORT

ISSUE DATE: May 20, 2020

**Project Title: Heron Meadows 31-lot Subdivision
 Land Use Application No.: SUB 2020-001**

Applicant:	Method Construction Larry Cowlshaw PO Box 33822 Portland, OR 97292
Property Owner:	Andy Loud & Connie Taylor 2215 Lewis River Road Woodland, WA 98674
Site Location:	2225 Lewis River Road Woodland, WA 98674
Parcel Number:	508440100 and 508820100
Parcel Size:	8.35 acres
Hearing Date & Time:	May 21 st , 2020 at 7:00 pm
Hearing Location:	The hearing will be conducted using remote GoToMeeting or FreeConferenceCall for remote attendance, and at the City of Woodland Council Chambers in the Police Station at 200 East Scott Avenue, Woodland, WA 98674. Participation instructions will be made available as part of the agenda published on the City's website at www.ci.woodland.wa.us

I. DESCRIPTION OF PROPOSAL:

Staff has identified issues that need correction or clarification. Also, the applicant has proposed a phasing plan to divide the project into 3 phases.

II. FINDINGS:

Supplemental Finding #1

Hatchery vs Release Facility on the Pacificorp property

Staff has incorrectly identified the Pacificorp facility as a "hatchery" it is in fact a fish release facility. Consequently Findings #12 and #48 are modified in part on in whole as follows:

Revised Finding 12: In early 2018, the property owner and a partner performed a pre-application conference to review the viability of the site for division given the expired Riverview permits and the fact that the northernmost parcel had since been developed by Pacificorp as a fish release facility, and the approval of the Bond Short Plat to the south.

Revised Finding 48: Pacifcorp operates the fish release facility on the neighboring property. They expressed concern about the eagle's nest on their property and ensuring future residents know that the facility is existing and recognizing the potential impacts from the facility prior to purchase of the property. While there is nothing in the regulations, staff has included advisory notes as a condition of approval. (See Attachment E and Condition 2c)

Condition #3 is revised to have a plat note to read as follows:

Revised Plat Note

3.b The Pacifcorp fish release facility on the adjacent property predates this development. Owners acknowledge that Pacifcorp will not be responsible for any noise, odors, or related impacts from the normal operation of the facility.

Title 16 SUBDIVISIONS

Design Standards (Chapter 16.14)

Landscape buffer along SR-503 (Lewis River Road)

Supplemental Finding #2

In the staff report, staff missed a condition of approval that requires a 10-foot landscaping strip along the east property line. WMC 16.14.240(I) says:

"I. Where residential subdivisions abut a major arterial, the subdivider shall provide a buffer strip at least ten feet in width along the property line abutting the arterial. The buffer strip may or may not be dedicated and shall be improved in accordance with subsection B of [Section 16.16.060](#). If not dedicated, the strip shall be designated on the plat as follows: "This strip is reserved for screening. The placement of any structure hereon is prohibited.""

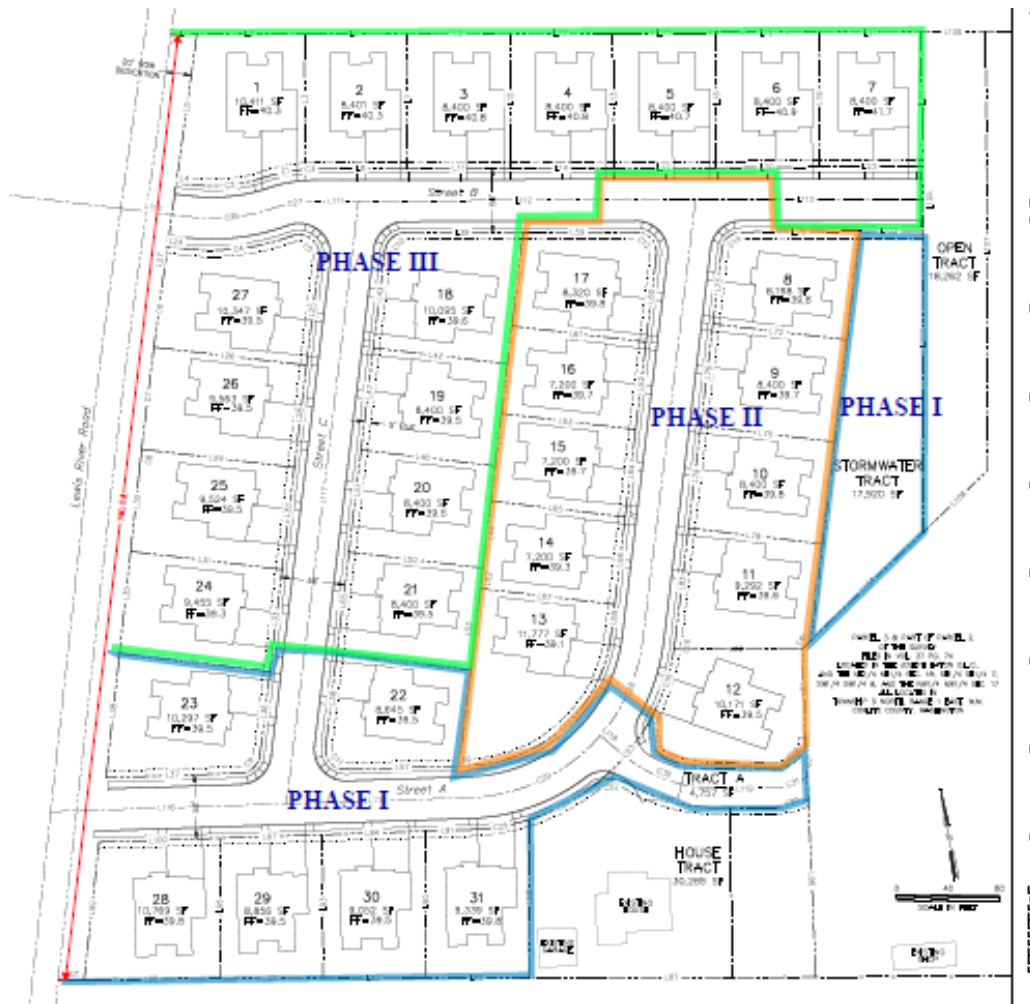
This landscaping buffer is not within the right of way and must be part of the subdivision lots fronting on Lewis River Road (currently lots 1, and 23 through 28). Staff is recommending that the following condition be added:

New Condition #32

32. Lots fronting on Lewis River Road shall provide a 10-foot landscaping buffer meeting WMC 16.16.060. As part of the final plat process, a landscape design showing hedges, trees and fencing for the landscaping buffer shall be submitted for review and approval. Landscaping shall be either installed prior to filing the final plat, or, as part of the landscaping plan, landscaping may be deferred to final occupancy for each lot.

Phasing

The applicant has proposed the attached phasing plan. Staff has translated the request into a graphic that it believes shows the proposed phasing plan. (See below)



Supplemental Finding #3

Clark County Fire & Rescue has reviewed the phasing plan and believes that hydrant spacing, and emergency vehicle access can be addressed as part of the final engineering process. Not additional conditions are required to address CCF&R concerns at this time.

Supplemental Finding #4

The phasing narrative does not address the timing of frontage improvements on Lewis River Road (SR-503).

Frontage improvements along Lewis River Road should be installed prior to final plat for any phase. However, under WMC 16.12 (Improvements – Assurance for completion and maintenance) applicants may provide bonds or other financial surety for on-site and off-site improvements. (See Condition #33)

New Condition #33

33. The Lewis River Road (SR-503) frontage improvements shall be constructed as required above (Condition #6) unless another form of financial assurance meeting WMC 16.12 is arranged or completed prior to the recording of a plat. Said agreement of assurance shall be negotiated with the Public Works Director and approved by the City Council at a regular meeting of the Council.

Supplemental Staff Report
Heron Meadows Subdivision
SUB 2020-001

III. STAFF RECOMMENDATION:

Based upon the additional analysis herein, staff continues to recommend that the Planning Commission recommend **APPROVAL of Heron Meadows Subdivision with conditions** as listed in the staff report dated May 14, 2020 and as modified herein.

The Commission's recommendation will be documented and sent to the Woodland City Council for review. Staff expects the Council to consider the recommendation at the June 15th, 2020 Council meeting, or the July 6th meeting. Those meetings are held at 7:00 pm and will be held by GoToMeeting for remote attendance, and/or at the City of Woodland Council Chambers in the Police Station at 200 East Scott Avenue, Woodland, WA 98674. Participation instructions will be made available as part of the agenda published on the City's website at www.ci.woodland.wa.us

CONTACT PERSON: Travis Goddard, Community Development Director
City of Woodland
PO Box 9
230 Davidson Ave
Woodland, WA 98674
Goddardt@ci.woodland.wa.us

Date: May 20, 2020

Signature: ATG

Attachments

- A. Phasing Narrative
- B. Phasing Map

Cc: Applicant

Parties of Record
Department Heads
Rob VanderZanden, P.E.
Fire Marshal
Mayor