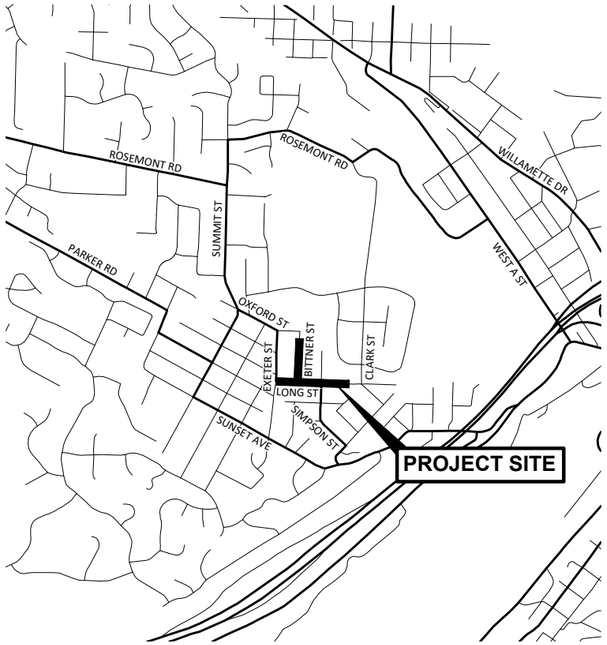
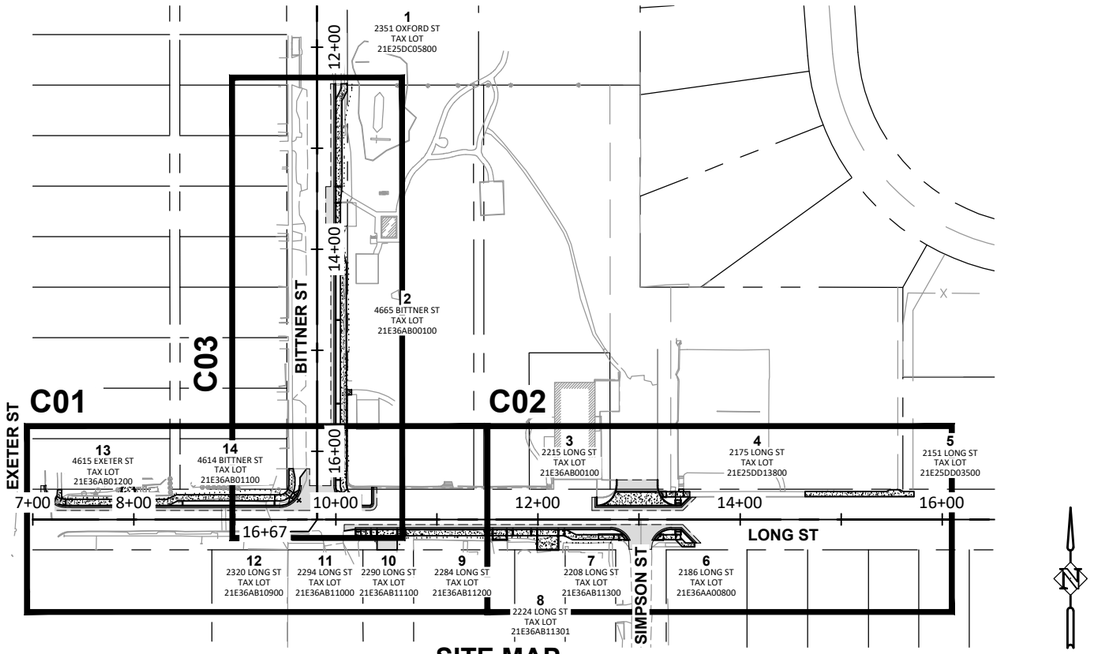
BITTNER ST/ LONG ST SAFE ROUTES

WEST LINN, OREGON



VICINITY MAP

NTS



SITE MAP

SCALE: 1" = 150'

OWNER/DEVELOPER

CITY OF WEST LINN
DEPARTMENT OF PUBLIC WORKS
22500 SALAMO RD
WEST LINN, OR 97068
CONTACTS:
CLARK IDE, PE
PHONE:(503) 722-3437
JAMESON LUMPKIN
PHONE:(503) 722-4739

ENGINEER

HARPER HOUF PETERSON RIGHELLIS INC.
205 SE SPOKANE STREET, SUITE 200
PORTLAND, OREGON 97202
PHONE: (503) 221-1131
CONTACTS: JIMMY HOUF, PE
JAMES WATTS, PE

SITE INFORMATION

WIILLAMETTE MERIDAN
CLACKAMAS COUNTY, OREGON
TOWNSHIP 2S, RANGE 1E, SECTION 36

SHEET INDEX

BID SET

COVER SHEET
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS♦PLANNERS
LANDSCAPE ARCHITECTS♦SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

CITY OF West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

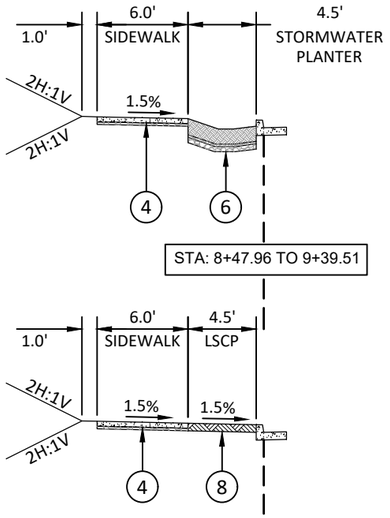
EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. A01
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

DRAWING NAME: CWL10-PH2 A01 COVER SHEET.DWG

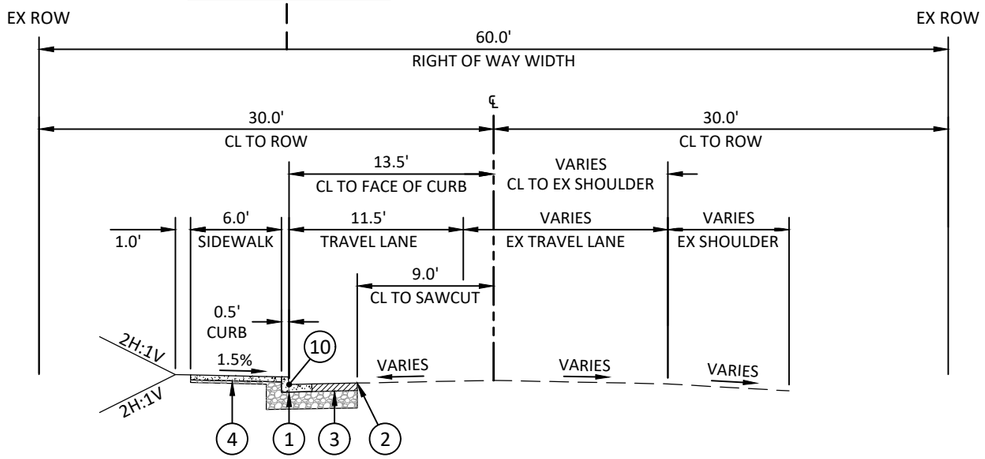
CONSTRUCTION NOTES:

1. CONSTRUCT CURB AND GUTTER (E=6"; GUTTER PAN=18") PER CITY DWG WL-RD700 ON SHEET DC05.
2. SAWCUT EXISTING ASPHALT.
3. CONSTRUCT ROADWAY PAVEMENT SECTION.
   2" OF LEVEL 2, 1/2 INCH ACP (TOP LIFT)
   2" OF LEVEL 2, 1/2 INCH ACP (BASE LIFT)
   2" OF 3/4"-0 AGGREGATE BASE
   10" OF 1 1/2"-0 AGGREGATE BASE
4. CONSTRUCT CONCRETE SIDEWALK.
   4" OF PCC
   2" OF 3/4"-0 AGGREGATE BASE
6. CONSTRUCT STORMWATER PLANTER PER DETAIL ON SHEETS DC06.
8. CONSTRUCT LANDSCAPE AREA. EXCAVATE DOWN TO NATIVE SOIL. BACKFILL AND PROVIDE MINIMUM 6" TOP COVER WITH TOPSOIL.
10. FINISHED GRADE ELEVATION AT GUTTER. SEE PROFILE ON SHEETS C01-C03.



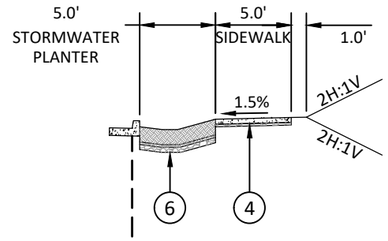
STA: 8+47.96 TO 9+39.51

STA: 8+43.46 TO 8+47.96
9+39.51 TO 9+44.51

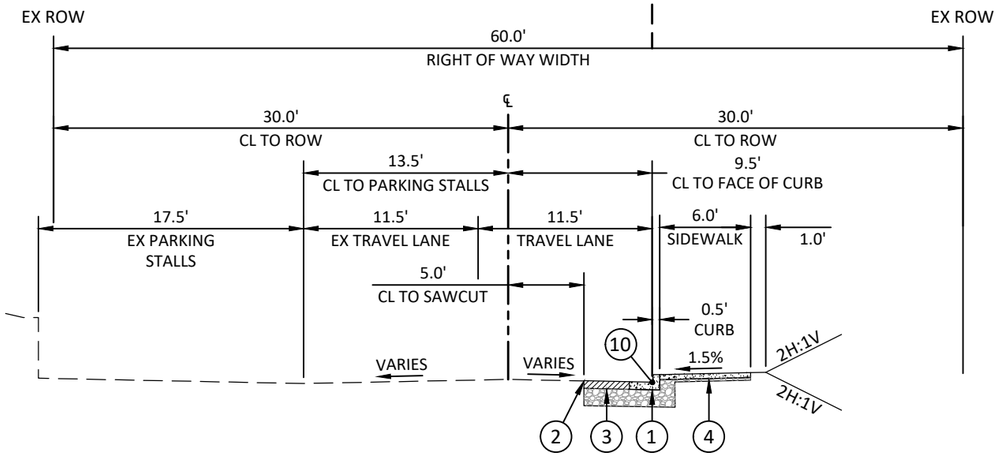


LONG ST - TYPICAL SECTION

EXETER ST TO BITTNER ST
STA: 7+40.96 TO 9+44.51
N.T.S.



STA: 12+37.62 TO 12+71.77



LONG ST - TYPICAL SECTION

BITTNER ST TO SIMPSON ST
STA: 10+19.09 TO 12+71.77
N.T.S.

TYPICAL SECTIONS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

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CITY OF West Linn

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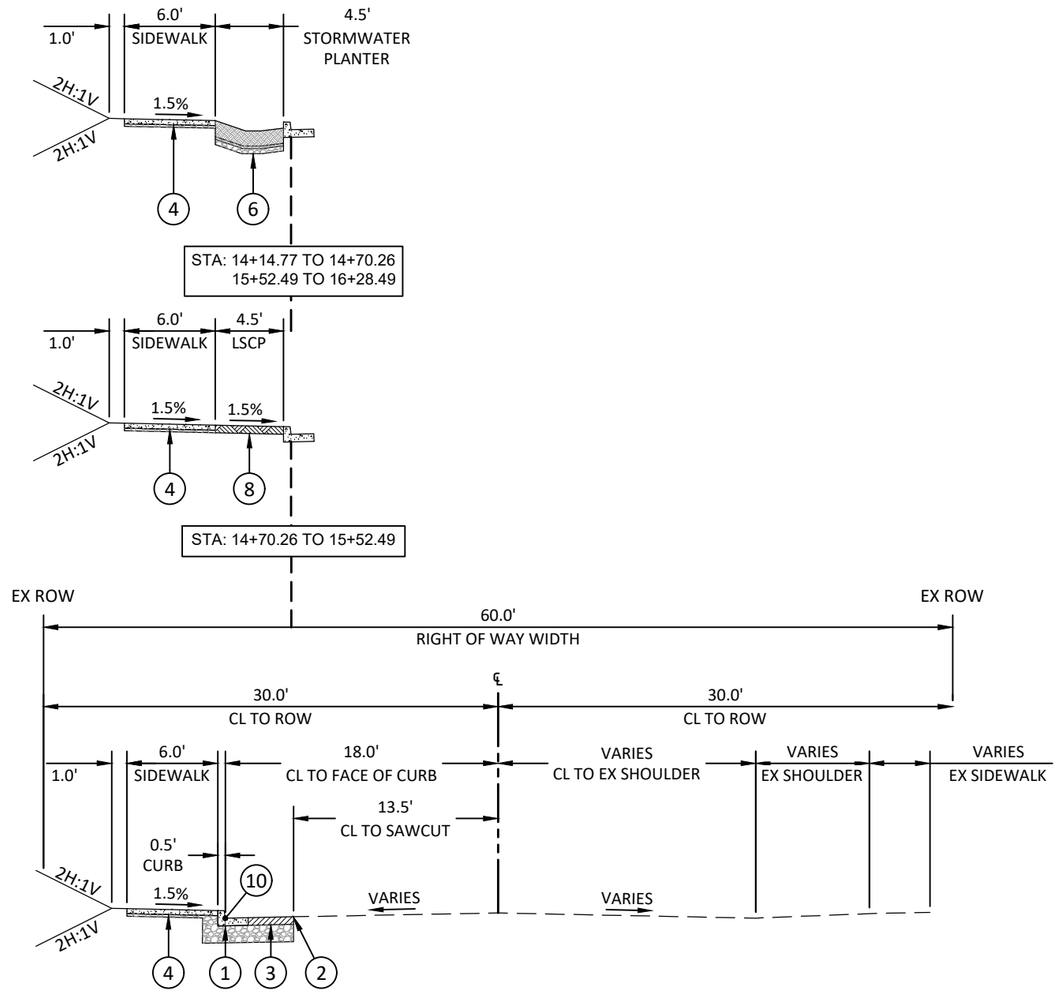
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. B01
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

DRAWING NAME: CWL10-PH2_B01 TYPICAL SECTIONS.DWG



BITTNER ST - TYPICAL SECTION

STA: 12+51.43 TO 16+33.99
N.T.S.

CONSTRUCTION NOTES:

1. CONSTRUCT CURB AND GUTTER (E=6"; GUTTER PAN=18") PER CITY DWG WL-RD700 ON SHEET DC06.
2. SAWCUT EXISTING ASPHALT.
3. CONSTRUCT ROADWAY PAVEMENT SECTION.
   2" OF LEVEL 2, 1/2 INCH ACP (TOP LIFT)
   2" OF LEVEL 2, 1/2 INCH ACP (BASE LIFT)
   2" OF 3/4"-0 AGGREGATE BASE
   10" OF 1 1/2"-0 AGGREGATE BASE
4. CONSTRUCT CONCRETE SIDEWALK.
   4" OF PCC
   2" OF 3/4"-0 AGGREGATE BASE
6. CONSTRUCT STORMWATER PLANTER PER DETAIL ON SHEETS DC16.
8. CONSTRUCT LANDSCAPE AREA. EXCAVATE DOWN TO NATIVE SOIL. BACKFILL AND PROVIDE MINIMUM 6" TOP COVER WITH TOPSOIL.
10. FINISHED GRADE ELEVATION AT GUTTER. SEE PROFILE ON SHEETS C01-C03.

TYPICAL SECTIONS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

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City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. B02
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

DRAWING NAME: CWL10.PH2.B01 TYPICAL SECTIONS.DWG

SEE SHEET B04

13
4615 EXETER ST
TAX LOT
21E36AB01200

14
4614 BITTNER ST
TAX LOT
21E36AB01100

2
4665 BITTNER ST
TAX LOT
21E36AB00100

EXETER ST

BITTNER ST

EX ROW

GRADING LIMITS

PC STA: 7+12.36, 33.50' L

PT STA: 7+32.36, 13.50' L

PI STA: 8+34.46, 14.00' L

PI STA: 8+43.46, 18.50' L

16+00

7+00

8+00

9+00

10+00

11+00

16+67

R=20.00
L=31.42
T=20.00
Δ=90°00'00"

S89° 14' 57.25"E
1030.04'

LONG ST

SC STA: 16+58.32, 273.66' R

SEE SHEET B04

EX ROW

PI STA: 10+08.10, 11.20' R

PI STA: 10+19.09, 9.50' R

GRADING LIMITS

12
2320 LONG ST
TAX LOT
21E36AB10900

11
2294 LONG ST
TAX LOT
21E36AB11000

10
2290 LONG ST
TAX LOT
21E36AB11100

9
2284 LONG ST
TAX LOT
21E36AB11200

MATCHLINE STA. 11+50 SEE SHEET BELOW

LEGEND

- FULL DEPTH STRUCTURAL SECTION
- CONCRETE SIDEWALK
- TRUNCATED DOMES
- DRIVEWAY/DRIVEWAY APPROACH
- STORMWATER PLANTER
- LANDSCAPING AREA
- GRAVEL

MATCHLINE STA. 11+50 SEE SHEET ABOVE

3
2215 LONG ST
TAX LOT
21E36AB00100

REINFORCED DRIVEWAY

PI STA: 12+78.06, 39.24' L

PT STA: 12+78.06, 33.50' L

R=20.00
L=31.42
T=20.00
Δ=90°00'00"

PI STA: 12+57.99, 22.01' L

PC STA: 12+58.06, 13.50' L

PI STA: 13+18.06, 39.24' L

PC STA: 13+18.06, 33.50' L

R=20.00
L=31.42
T=20.00
Δ=90°00'00"

PI STA: 13+50.05, 22.01' L

PI STA: 13+41.56, 13.52' L

PT STA: 13+38.06, 13.50' L

4
2175 LONG ST
TAX LOT
21E25DD13800

EX ROW

PI STA: 15+72.18, 27.83' L

PI STA: 14+64.27, 27.64' L

12+00

PC STA: 12+71.77, 9.50' R

PI STA: 12+37.62, 15.00' R

R=20.00
L=22.08
T=12.32
Δ=63°15'23"

14+00

S89° 14' 57.25"E
1030.04'

15+00

16+00

LONG ST

R=20.00
L=22.08
T=12.32
Δ=63°15'23"

PI STA: 13+55.03, 23.28' R

PI STA: 13+41.56, 9.50' R

PT STA: 13+32.27, 9.50' R

PC STA: 13+12.27, 29.50' R

EX ROW

EX ROW

GRADING LIMITS

PI STA: 12+27.62, 10.00' R

PT STA: 12+89.64, 20.50' R

PI STA: 12+90.23, 29.50' R

8
2224 LONG ST
TAX LOT
21E36AB11301

7
2208 LONG ST
TAX LOT
21E36AB11300

SIMPSON ST

6
2186 LONG ST
TAX LOT
21E36AA00800

0 10 20 40
SCALE: 1" = 40'

GEOMETRY & PAVING PLAN
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

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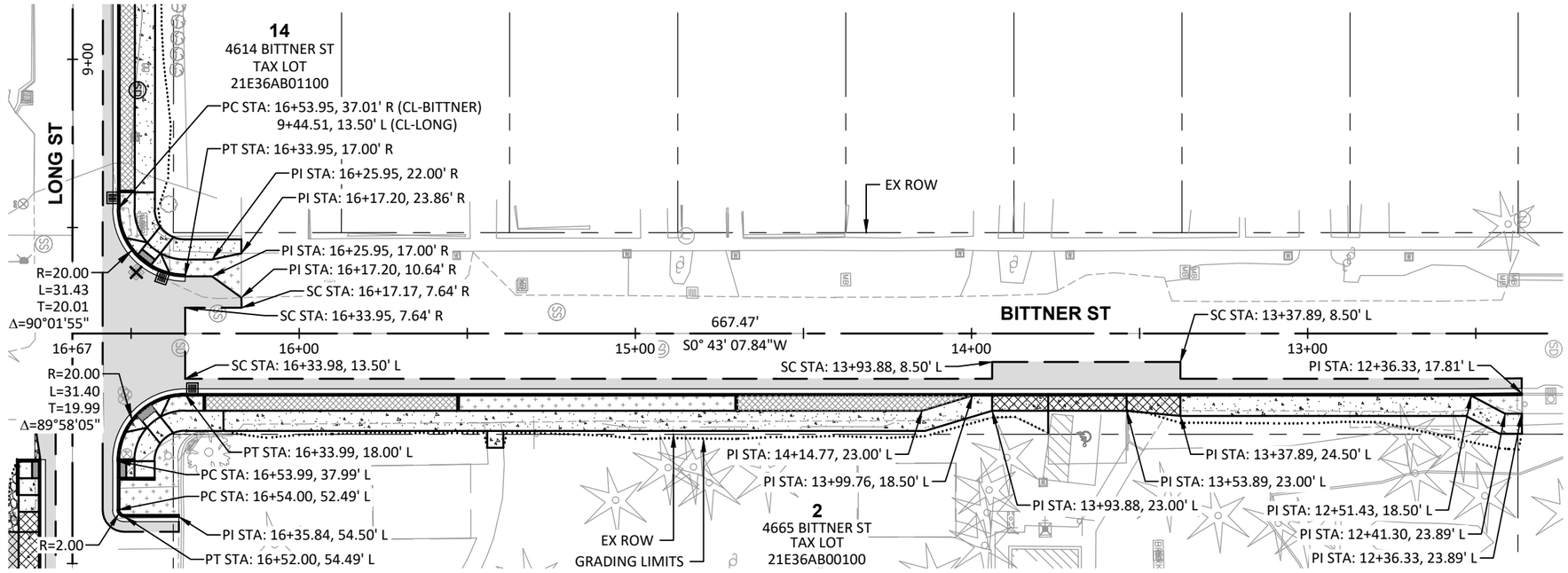
City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. B03
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

DRAWING NAME: CWL10-PH2 B03 GEOMETRY AND PAVING PLAN.DWG



LEGEND

- FULL DEPTH STRUCTURAL SECTION
- CONCRETE SIDEWALK
- TRUNCATED DOMES
- DRIVEWAY/DRIVEWAY APPROACH
- STORMWATER PLANTER
- LANDSCAPING AREA
- GRAVEL

GEOMETRY & PAVING PLAN

BITTNER-LONG SAFE ROUTES

WEST LINN, OREGON

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City of West Linn

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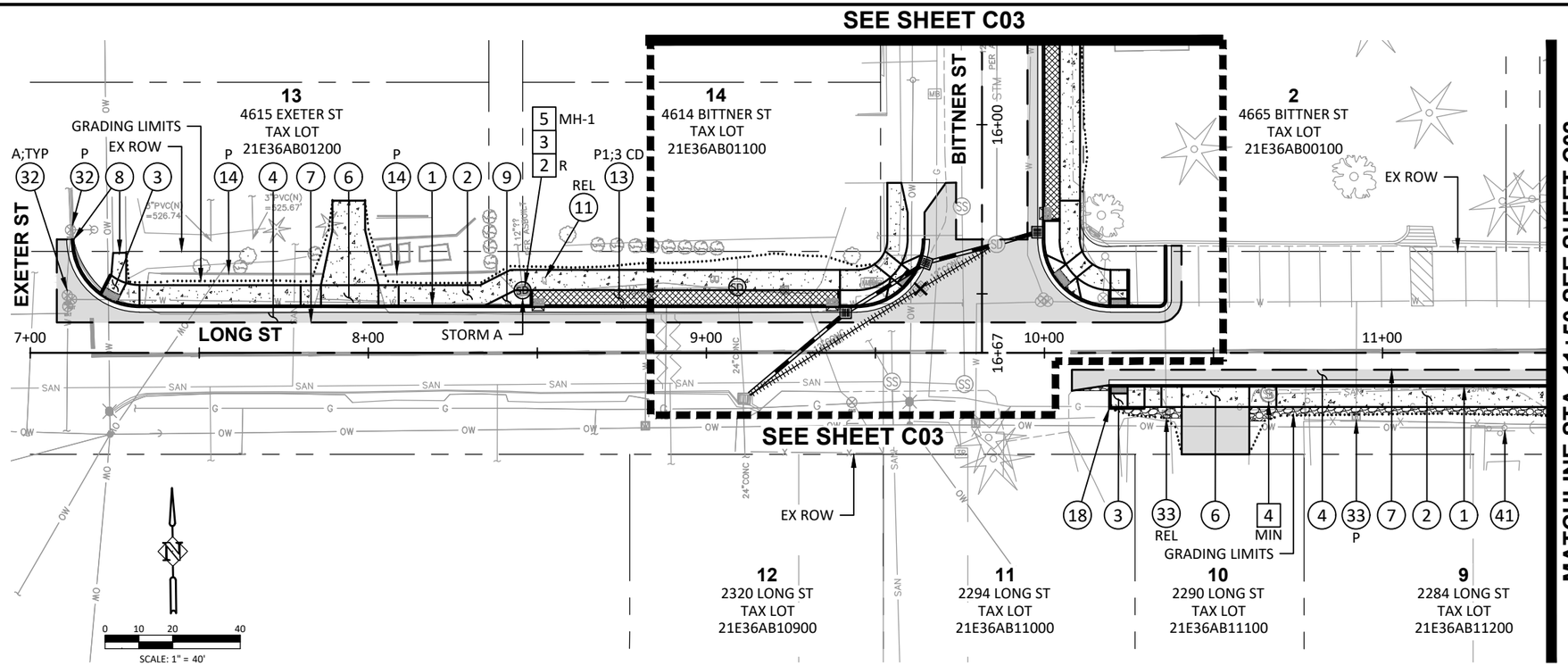
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/27

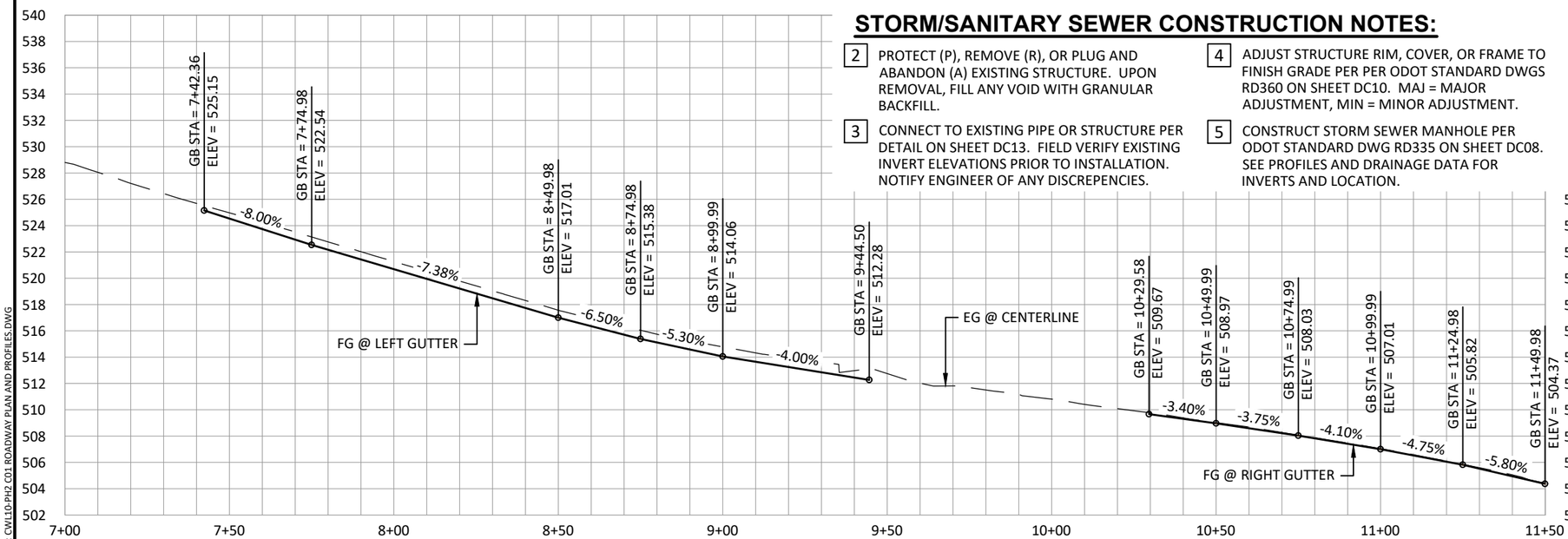
DESIGNED: HHPR TEAM	SHEET NO. B04
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

DRAWING NAME: CWL10-PH2 B03 GEOMETRY AND PAVING PLAN.DWG



LONG ST PLAN VIEW - STA: 7+00 TO 11+50

SCALE: 1" = 40' (HORZ.)



LONG ST PROFILE VIEW - STA: 7+00 TO 11+50

SCALE: 1" = 40' (HORZ.)
1" = 10' (VERT.)

CAUTION: PROPOSED UNDERGROUND UTILITY CROSSING. CONTRACTOR TO POTHOLE PRIOR TO BEGINNING WORK AND NOTIFY CITY AND ENGINEER OF ANY CONFLICTS.

CONSTRUCTION NOTES:

1. CONSTRUCT CURB AND GUTTER (E=6"; GUTTER PAN=18") PER CITY DWG WL-RD700 ON SHEET DC05.
2. CONSTRUCT CONCRETE SIDEWALK PER TYPICAL SECTION ON SHEETS B01-B02. FOR DETAILS, SEE ODOT STANDARD DWG RD735 ON SHEET DC01.
3. CONSTRUCT SIDEWALK RAMP PER ODOT STANDARD DWGS RD904, RD910, AND RD960 ON SHEET DC02-DC04. SEE CURB RETURN GRADE ELEVATIONS ON "DB" SHEETS.
4. CONSTRUCT FULL DEPTH PAVEMENT SECTION PER TYPICAL SECTION ON SHEETS B01-B02.
6. CONSTRUCT CONCRETE DRIVEWAY APPROACH PER ODOT STANDARD DWG RD735 ON SHEET DC01. MATCH EXISTING WIDTH AND MATERIAL BEHIND APPROACH UNLESS NOTED OTHERWISE. SAWCUT AND REMOVE EXISTING SURFACE AS REQUIRED. MINIMUM STRUCTURAL SECTION BEHIND APPROACH: 3" AC PAVEMENT OVER 9" AGGREGATE BASE OR 6" P.C.C. OVER 2" AGGREGATE BASE. SEE DRIVEWAY GRADE ELEVATIONS ON SHEET SERIES "DA".
7. SAWCUT EXISTING ASPHALT OR CONCRETE AND REMOVE AS REQUIRED AND DIRECTED.
8. MATCH NEW CURB TO EXISTING CURB AND/OR MATCH NEW SIDEWALK TO EXISTING SIDEWALK, AS REQUIRED AND DIRECTED. FIELD COORDINATE SAWCUT LIMITS, AS REQUIRED AND DIRECTED. PROTECT EXISTING CURB AND/OR CONCRETE SIDEWALK.
9. CONSTRUCT LANDSCAPE AREA. EXCAVATE DOWN TO NATIVE SOIL AND BACKFILL WITH TOPSOIL.
11. RELOCATE (REL), REMOVE (R), ADJUST (A) OR PROTECT (P) EXISTING MAILBOX(ES). FOR ANY RELOCATION OR ADJUSTMENT, SEE ODOT STANDARD DRAWING RD100 AND RD101 ON SHEET DC15 & DC16. COORDINATE LOCATION WITH ENGINEER.
13. CONSTRUCT STORMWATER PLANTER PER DETAIL ON SHEETS DC06. STORMWATER PLANTER TO INCLUDE CHECK DAMS AND CURB CUTS. SEE PLAN FOR QUANTITY OF EVENLY SPACED CHECK DAMS (CD) TO INSTALL.
14. REMOVE (R), ADJUST (A), OR PROTECT (P) EXISTING WALL. REMOVAL TO LIMITS OF SIDEWALK IMPROVEMENTS.
18. CONSTRUCT STANDARD CURB (E=6"; H=16") PER CITY DWG WL-RD700 ON SHEET DC05.
32. ADJUST (A) OR PROTECT (P) EXISTING WATER VALVE.
33. RELOCATE (REL) OR PROTECT (P) EXISTING WATER METER, BOX, AND SERVICE. CONTRACTOR TO RELOCATE OR INSTALL PER DETAIL WL-RD-274 ON SHEET DC14. RELOCATE TO LOCATION SHOWN AND RECONNECT TO EXISTING SERVICE.
41. PROTECT EXISTING UTILITY POLE.

STORM/SANITARY SEWER CONSTRUCTION NOTES:

2. PROTECT (P), REMOVE (R), OR PLUG AND ABANDON (A) EXISTING STRUCTURE. UPON REMOVAL, FILL ANY VOID WITH GRANULAR BACKFILL.
3. CONNECT TO EXISTING PIPE OR STRUCTURE PER DETAIL ON SHEET DC13. FIELD VERIFY EXISTING INVERT ELEVATIONS PRIOR TO INSTALLATION. NOTIFY ENGINEER OF ANY DISCREPENCIES.
4. ADJUST STRUCTURE RIM, COVER, OR FRAME TO FINISH GRADE PER PER ODOT STANDARD DWGS RD360 ON SHEET DC10. MAJ = MAJOR ADJUSTMENT, MIN = MINOR ADJUSTMENT.
5. CONSTRUCT STORM SEWER MANHOLE PER ODOT STANDARD DWG RD335 ON SHEET DC08. SEE PROFILES AND DRAINAGE DATA FOR INVERTS AND LOCATION.

SEE SHEET C04 FOR STORM A STRUCTURE STATIONS AND INVERTS.

LONG ST PLAN & PROFILE
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

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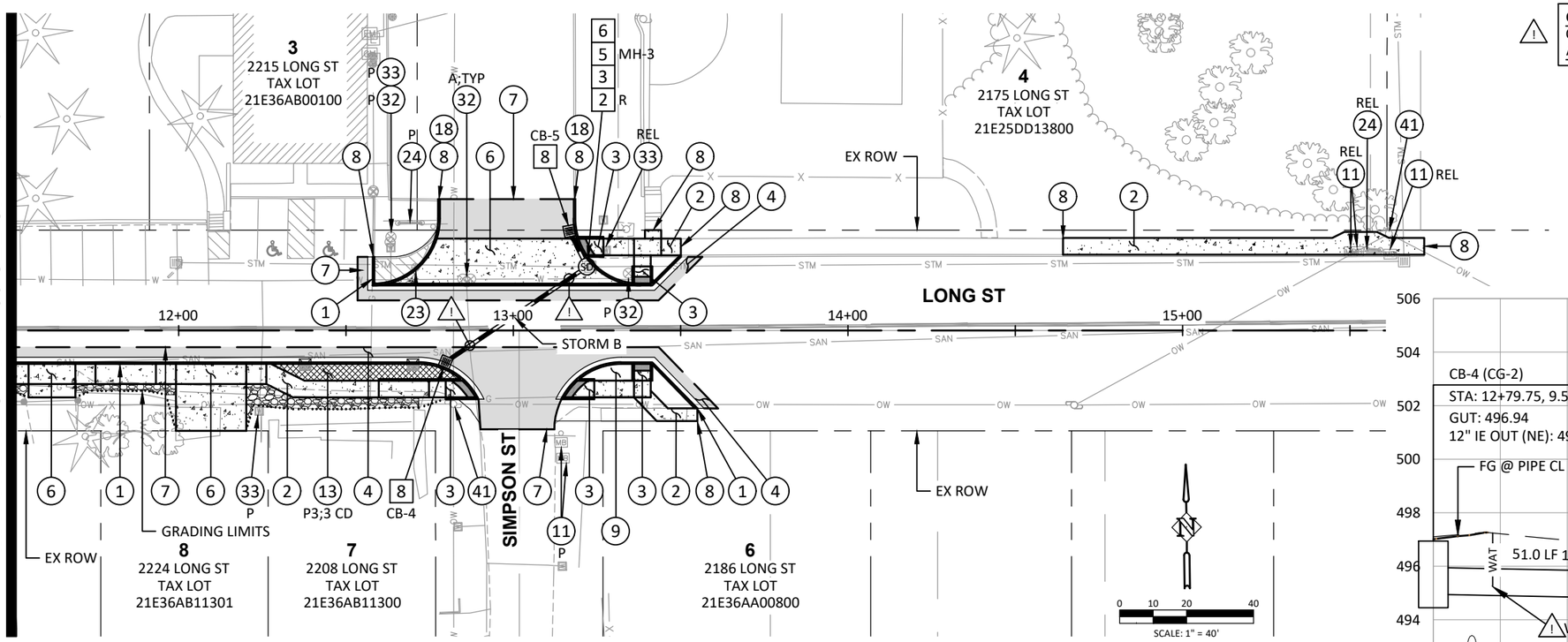
CITY OF West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. C01
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

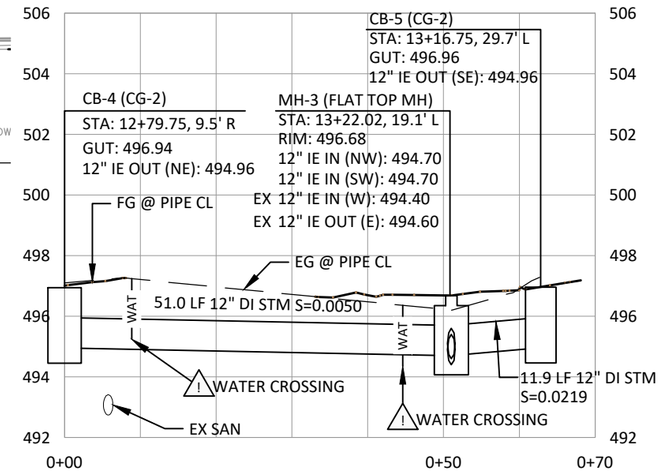
DRAWING NAME: CWL10-PH2 C01 ROADWAY PLAN AND PROFILES.DWG



LONG ST PLAN VIEW - STA: 11+50 TO 16+00

SCALE: 1" = 40' (HORZ.)

CAUTION: PROPOSED UNDERGROUND UTILITY CROSSING. CONTRACTOR TO POTHOLE PRIOR TO BEGINNING WORK AND NOTIFY CITY AND ENGINEER OF ANY CONFLICTS.



STORM B - DRAINAGE PROFILE

SCALE: 1" = 20' (HORZ.)
1" = 5' (VERT.)

STORM/SANITARY SEWER CONSTRUCTION NOTES:

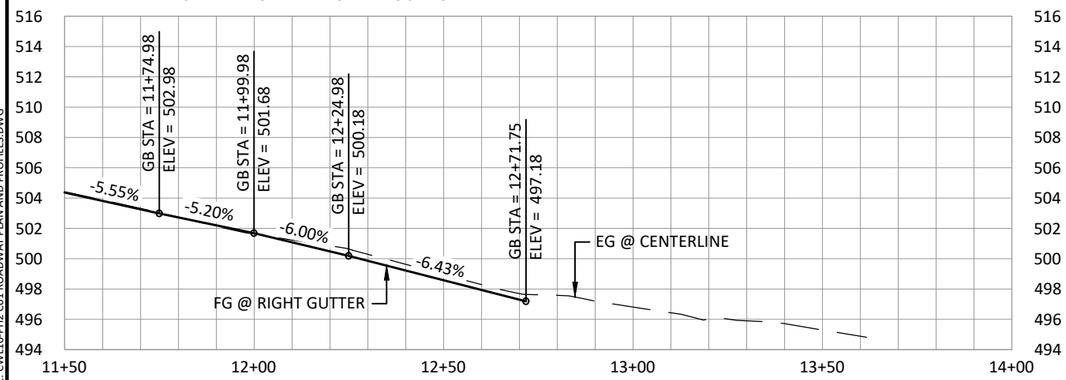
2 PROTECT (P), REMOVE (R), OR PLUG AND ABANDON (A) EXISTING STRUCTURE. UPON REMOVAL, FILL ANY VOID WITH GRANULAR BACKFILL.

3 CONNECT TO EXISTING PIPE OR STRUCTURE PER DETAIL ON SHEET DC13. FIELD VERIFY EXISTING INVERT ELEVATIONS PRIOR TO INSTALLATION. NOTIFY ENGINEER OF ANY DISCREPENCIES.

5 CONSTRUCT STORM SEWER MANHOLE PER ODOT STANDARD DWG RD335 ON SHEET DC08. SEE PROFILES AND DRAINAGE DATA FOR INVERTS AND LOCATION.

6 CONTRACTOR TO POTHOLE EXISTING UTILITIES AND CONFIRM EXISTING INVERTS. OFFSET MANHOLE AND/OR STORM INVERTS AS REQUIRED TO CONSTRUCT.

8 CONSTRUCT CG-2 INLET CATCH BASIN AND LATERALS PER ODOT STANDARD DWG RD366 ON SHEET DC11. SEE PLAN FOR INVERTS AND DATA.



LONG ST PROFILE VIEW - STA: 11+50 TO 16+00

SCALE: 1" = 40' (HORZ.)
1" = 10' (VERT.)

CONSTRUCTION NOTES:

1 CONSTRUCT CURB AND GUTTER (E=6"; GUTTER PAN=18") PER CITY DWG WL-RD700 ON SHEET DC05.

2 CONSTRUCT CONCRETE SIDEWALK PER TYPICAL SECTION ON SHEETS B01-B02. FOR DETAILS, SEE ODOT STANDARD DWG RD735 ON SHEET DC01.

3 CONSTRUCT SIDEWALK RAMP PER ODOT STANDARD DWGS RD904, RD910, AND RD960 ON SHEET DC02-DC04. SEE CURB RETURN GRADE ELEVATIONS ON "DB" SHEETS.

4 CONSTRUCT FULL DEPTH PAVEMENT SECTION PER TYPICAL SECTION ON SHEETS B01-B02.

6 CONSTRUCT CONCRETE DRIVEWAY APPROACH PER ODOT STANDARD DWG RD735 ON SHEET DC01. MATCH EXISTING WIDTH AND MATERIAL BEHIND APPROACH UNLESS NOTED OTHERWISE. SAWCUT AND REMOVE EXISTING SURFACE AS REQUIRED. MINIMUM STRUCTURAL SECTION BEHIND APPROACH: 3" AC PAVEMENT OVER 9" AGGREGATE BASE OR 6" P.C.C. OVER 2" AGGREGATE BASE. SEE DRIVEWAY GRADE ELEVATIONS ON SHEET SERIES "DA".

7 SAWCUT EXISTING ASPHALT OR CONCRETE AND REMOVE AS REQUIRED AND DIRECTED.

8 MATCH NEW CURB TO EXISTING CURB AND/OR MATCH NEW SIDEWALK TO EXISTING SIDEWALK, AS REQUIRED AND DIRECTED. FIELD COORDINATE SAWCUT LIMITS, AS REQUIRED AND DIRECTED. PROTECT EXISTING CURB AND/OR CONCRETE SIDEWALK.

9 CONSTRUCT LANDSCAPE AREA. EXCAVATE DOWN TO NATIVE SOIL AND BACKFILL WITH TOPSOIL.

11 RELOCATE (REL), REMOVE (R), ADJUST (A) OR PROTECT (P) EXISTING MAILBOX(ES). FOR ANY RELOCATION OR ADJUSTMENT, SEE ODOT STANDARD DRAWING RD100 AND RD101 ON SHEET DC15 & DC16. COORDINATE LOCATION WITH ENGINEER.

13 CONSTRUCT STORMWATER PLANTER PER DETAIL ON SHEETS DC06. STORMWATER PLANTER TO INCLUDE CHECK DAMS AND CURB CUTS. SEE PLAN FOR QUANTITY OF EVENLY SPACED CHECK DAMS (CD) TO INSTALL.

18 CONSTRUCT STANDARD CURB (E=6"; H=16") PER CITY DWG WL-RD700 ON SHEET DC05.

23 REMOVE EXISTING BOLLARDS.

24 PROTECT (P) OR RELOCATE (REL) EXISTING SIGN.

32 ADJUST (A) OR PROTECT (P) EXISTING WATER VALVE.

33 RELOCATE (REL) OR PROTECT (P) EXISTING WATER METER, BOX, AND SERVICE. CONTRACTOR TO RELOCATE OR INSTALL PER DETAIL WL-RD-274 ON SHEET DC14. RELOCATE TO LOCATION SHOWN AND RECONNECT TO EXISTING SERVICE.

41 PROTECT EXISTING UTILITY POLE.

LONG ST PLAN & PROFILE
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

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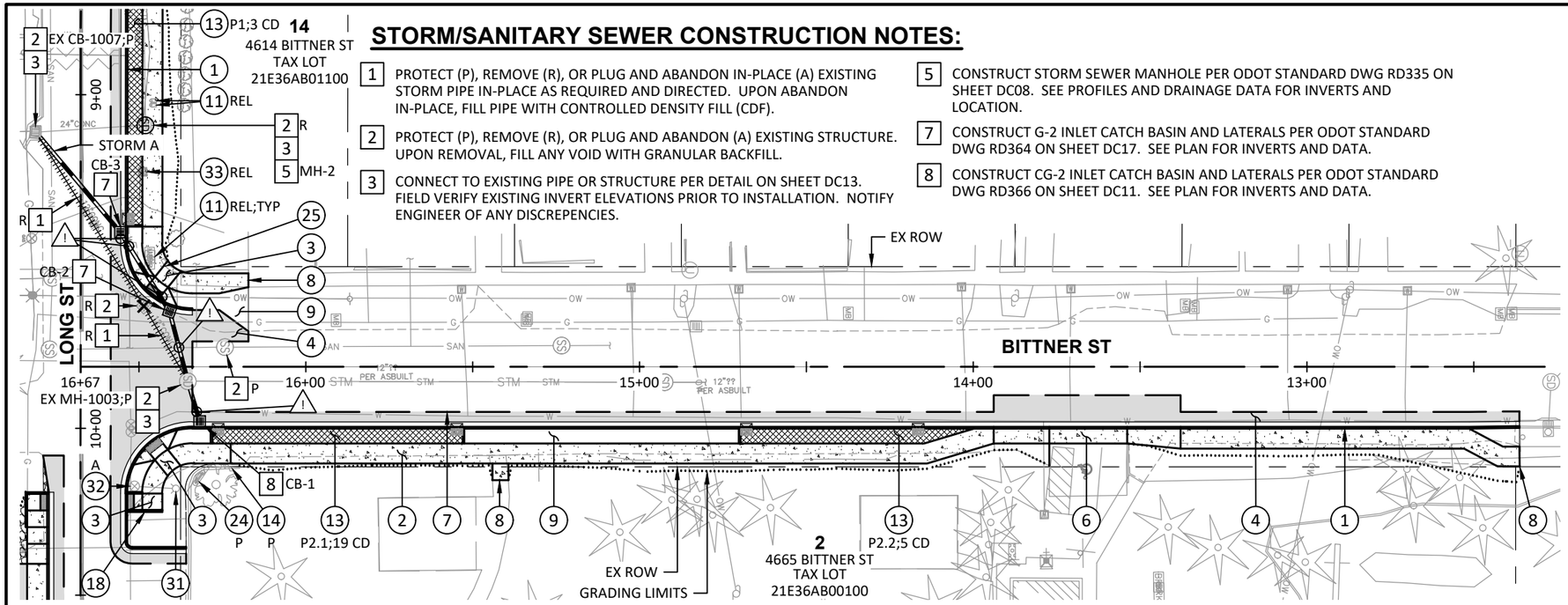
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. C02
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

DRAWING NAME: CWL10-PH2 C01 ROADWAY PLAN AND PROFILES.DWG

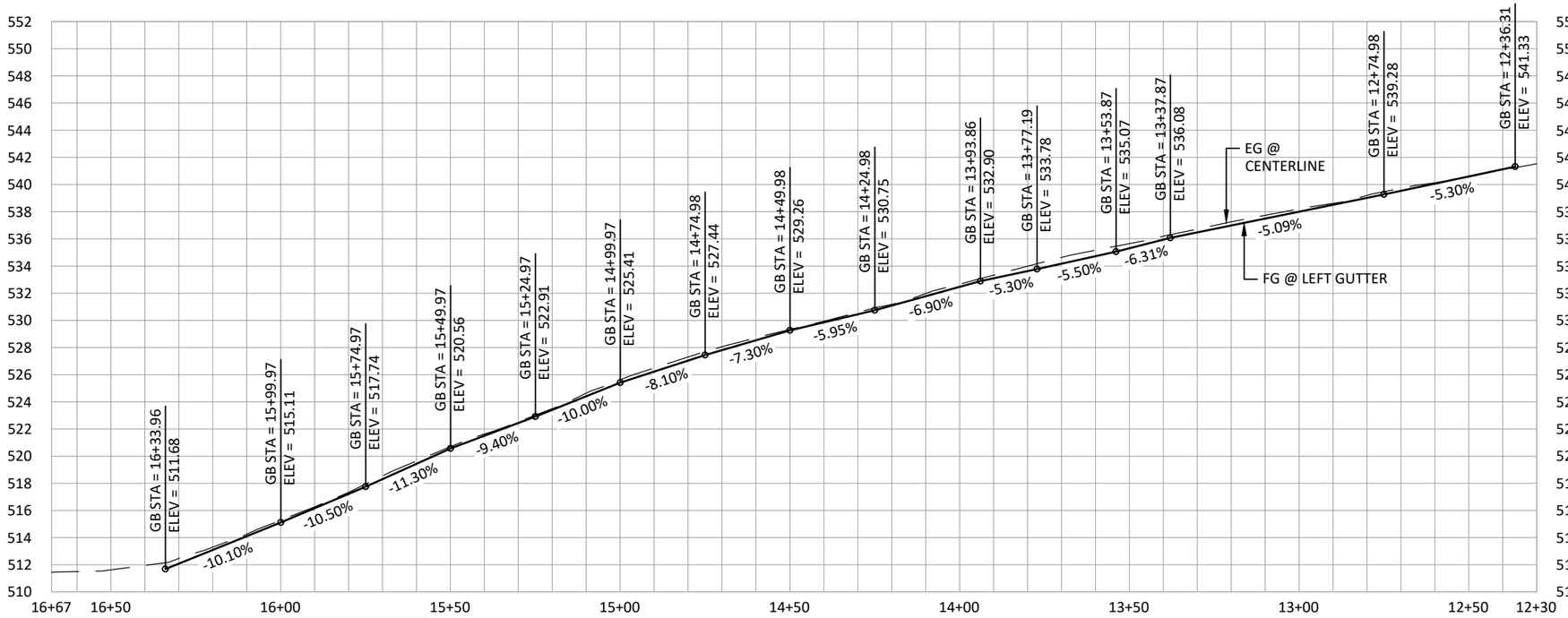


BITTNER ST PLAN VIEW - STA: 12+30 TO 16+67

SCALE: 1" = 40' (HORZ.)

STORM/SANITARY SEWER CONSTRUCTION NOTES:

1. PROTECT (P), REMOVE (R), OR PLUG AND ABANDON IN-PLACE (A) EXISTING STORM PIPE IN-PLACE AS REQUIRED AND DIRECTED. UPON ABANDON IN-PLACE, FILL PIPE WITH CONTROLLED DENSITY FILL (CDF).
2. PROTECT (P), REMOVE (R), OR PLUG AND ABANDON (A) EXISTING STRUCTURE. UPON REMOVAL, FILL ANY VOID WITH GRANULAR BACKFILL.
3. CONNECT TO EXISTING PIPE OR STRUCTURE PER DETAIL ON SHEET DC13. FIELD VERIFY EXISTING INVERT ELEVATIONS PRIOR TO INSTALLATION. NOTIFY ENGINEER OF ANY DISCREPENCIES.
5. CONSTRUCT STORM SEWER MANHOLE PER ODOT STANDARD DWG RD335 ON SHEET DC08. SEE PROFILES AND DRAINAGE DATA FOR INVERTS AND LOCATION.
7. CONSTRUCT G-2 INLET CATCH BASIN AND LATERALS PER ODOT STANDARD DWG RD364 ON SHEET DC17. SEE PLAN FOR INVERTS AND DATA.
8. CONSTRUCT CG-2 INLET CATCH BASIN AND LATERALS PER ODOT STANDARD DWG RD366 ON SHEET DC11. SEE PLAN FOR INVERTS AND DATA.



BITTNER ST PROFILE VIEW - STA: 12+30 TO 16+67

SCALE: 1" = 40' (HORZ.)
1" = 10' (VERT.)

CAUTION: PROPOSED UNDERGROUND UTILITY CROSSING. CONTRACTOR TO POTHOLE PRIOR TO BEGINNING WORK AND NOTIFY CITY AND ENGINEER OF ANY CONFLICTS.

SEE SHEET C04 FOR STORM A STRUCTURE STATIONS AND INVERTS.

CONSTRUCTION NOTES:

1. CONSTRUCT CURB AND GUTTER (E=6"; GUTTER PAN=18") PER CITY DWG WL-RD700 ON SHEET DC05.
2. CONSTRUCT CONCRETE SIDEWALK PER TYPICAL SECTION ON SHEETS B01-B02. FOR DETAILS, SEE ODOT STANDARD DWG RD735 ON SHEET DC01.
3. CONSTRUCT SIDEWALK RAMP PER ODOT STANDARD DWGS RD904, RD910, AND RD960 ON SHEET DC02-DC04. SEE CURB RETURN GRADE ELEVATIONS ON "DB" SHEETS.
4. CONSTRUCT FULL DEPTH PAVEMENT SECTION PER TYPICAL SECTION ON SHEETS B01-B02.
6. CONSTRUCT CONCRETE DRIVEWAY APPROACH PER ODOT STANDARD DWG RD735 ON SHEET DC01. MATCH EXISTING WIDTH AND MATERIAL BEHIND APPROACH UNLESS NOTED OTHERWISE. SAWCUT AND REMOVE EXISTING SURFACE AS REQUIRED. MINIMUM STRUCTURAL SECTION BEHIND APPROACH: 3" AC PAVEMENT OVER 9" AGGREGATE BASE OR 6" P.C.C. OVER 2" AGGREGATE BASE. SEE DRIVEWAY GRADE ELEVATIONS ON SHEET SERIES "DA".
7. SAWCUT EXISTING ASPHALT OR CONCRETE AND REMOVE AS REQUIRED AND DIRECTED.
8. MATCH NEW CURB TO EXISTING CURB AND/OR MATCH NEW SIDEWALK TO EXISTING SIDEWALK, AS REQUIRED AND DIRECTED. FIELD COORDINATE SAWCUT LIMITS, AS REQUIRED AND DIRECTED. PROTECT EXISTING CURB AND/OR CONCRETE SIDEWALK.
9. CONSTRUCT LANDSCAPE AREA. EXCAVATE DOWN TO NATIVE SOIL AND BACKFILL WITH TOPSOIL.
11. RELOCATE (REL), REMOVE (R), ADJUST (A) OR PROTECT (P) EXISTING MAILBOX(ES). FOR ANY RELOCATION OR ADJUSTMENT, SEE ODOT STANDARD DRAWING RD100 AND RD101 ON SHEET DC15 & DC16. COORDINATE LOCATION WITH ENGINEER.
13. CONSTRUCT STORMWATER PLANTER PER DETAIL ON SHEETS DC06. STORMWATER PLANTER TO INCLUDE CHECK DAMS AND CURB CUTS. SEE PLAN FOR QUANTITY OF EVENLY SPACED CHECK DAMS (CD) TO INSTALL.
14. REMOVE (R), ADJUST (A), OR PROTECT (P) EXISTING WALL. REMOVAL TO LIMITS OF SIDEWALK IMPROVEMENTS.
18. CONSTRUCT STANDARD CURB (E=6"; H=16") PER CITY DWG WL-RD700 ON SHEET DC05.
24. PROTECT (P) OR RELOCATE (REL) EXISTING SIGN.
25. ADJUST EXISTING ROCK WALL AS REQUIRED.
31. PROTECT EXISTING FIRE HYDRANT.
32. ADJUST (A) OR PROTECT (P) EXISTING WATER VALVE.
33. RELOCATE (REL) OR PROTECT (P) EXISTING WATER METER, BOX, AND SERVICE. CONTRACTOR TO RELOCATE OR INSTALL PER DETAIL WL-RD-274 ON SHEET DC14. RELOCATE TO LOCATION SHOWN AND RECONNECT TO EXISTING SERVICE.

0 10 20 40
SCALE: 1" = 40'

BITTNER ST PLAN & PROFILE
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
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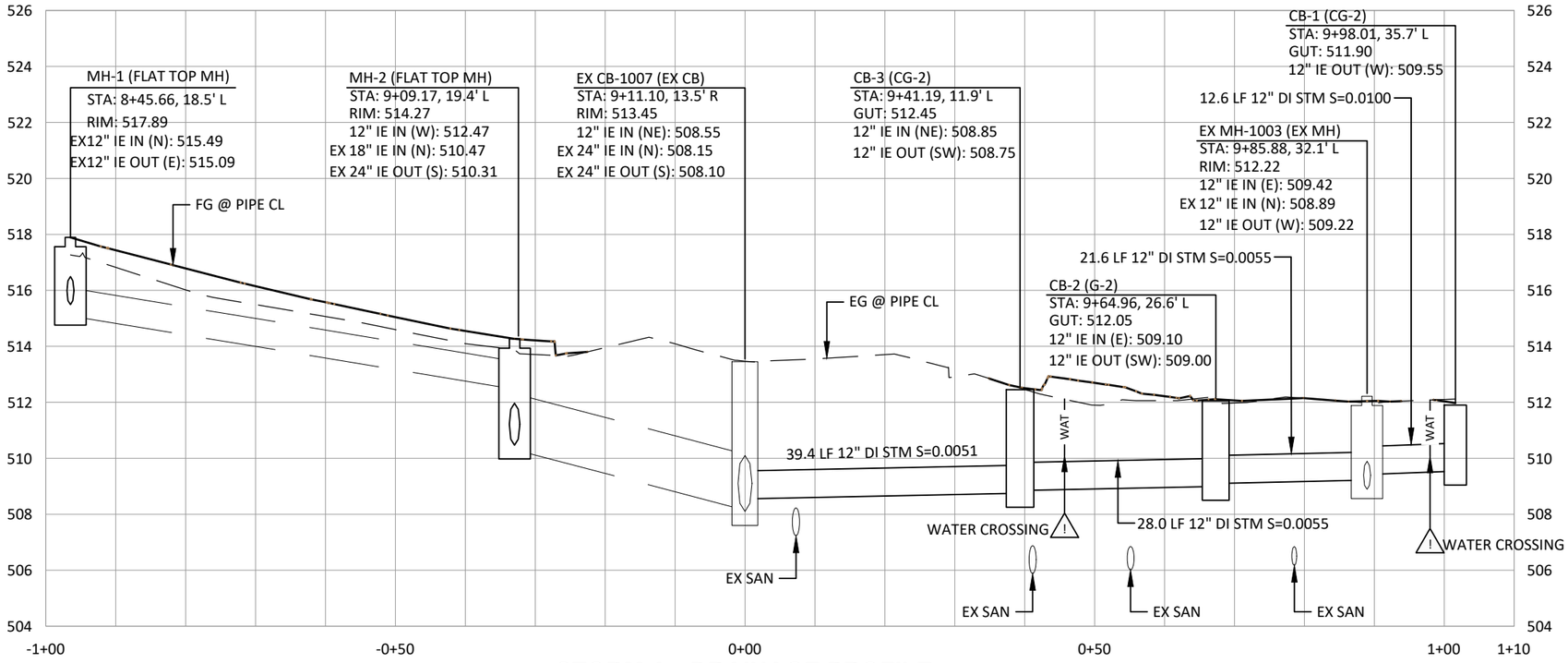
City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. C03
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

DRAWING NAME: CWL10-PH2 C01 ROADWAY PLAN AND PROFILES.DWG



STORM A - DRAINAGE PROFILE

SCALE: 1" = 20' (HORZ.)
1" = 5' (VERT.)

⚠ **CAUTION:** PROPOSED UNDERGROUND UTILITY CROSSING. CONTRACTOR TO POTHOLE PRIOR TO BEGINNING WORK AND NOTIFY CITY AND ENGINEER OF ANY CONFLICTS.

LONG ST DRAINAGE PROFILE
BITTNER-LONG SAFE ROUTES
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86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/27

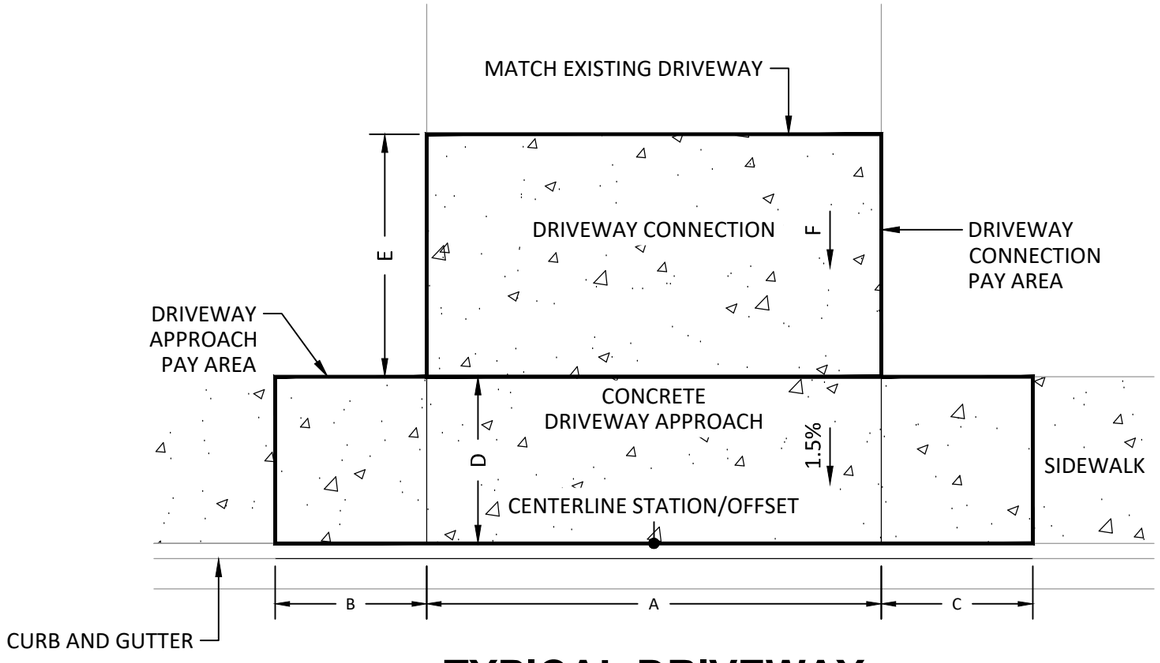
DESIGNED: HHPR TEAM	SHEET NO. C04
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

DRAWING NAME: CWL10-PH2 C01 ROADWAY PLAN AND PROFILES.DWG

DRIVEWAY CONSTRUCTION TABLE

LOCATION			CONCRETE DRIVEWAY APPROACH					DRIVEWAY CONNECTION			
STATION	ADDRESS	PROPERTY NUMBER	"A" APPROACH WIDTH	APPROACH AREA (SF)	"B" WING WIDTH	"C" WING WIDTH	"D" APPROACH LENGTH	FINISH SURFACE	"E" ESTIMATED LENGTH	ESTIMATED AREA (SF)	"F" APPROX. SLOPE
13+65.55, 18.0' LT	4665 BITTNER ST	2	23.3	264	16.0	16.7	4.5	N/A	N/A	N/A	N/A
12+09.71, 9.5' RT	2224 LONG ST	8	21.0	198	6.0	6.0	6.0	CONCRETE	14.0	294	8.8%
11+62.14, 9.5' RT	2284 LONG ST	9	14.0	156	6.0	6.0	6.0	CONCRETE	4.0	56	12.8%
10+50.59, 9.5' RT	2290 LONG ST	10	20.0	204	8.0	6.0	6.0	AC PAVEMENT	14.0	280	11.1%
7+94.53, 13.5' LT	4615 EXETER ST	13	17.0	174	6.0	6.0	6.0	CONCRETE	25.0*	301	14.3%

* DRIVEWAY CONNECTION EXTENSION PER PERMIT OF ENTRY.
COORDINATE WITH CITY PRIOR TO BEGINNING WORK AT THESE LOCATIONS.



TYPICAL DRIVEWAY

DRIVEWAY DETAIL GRADING
BITTNER-LONG SAFE ROUTES
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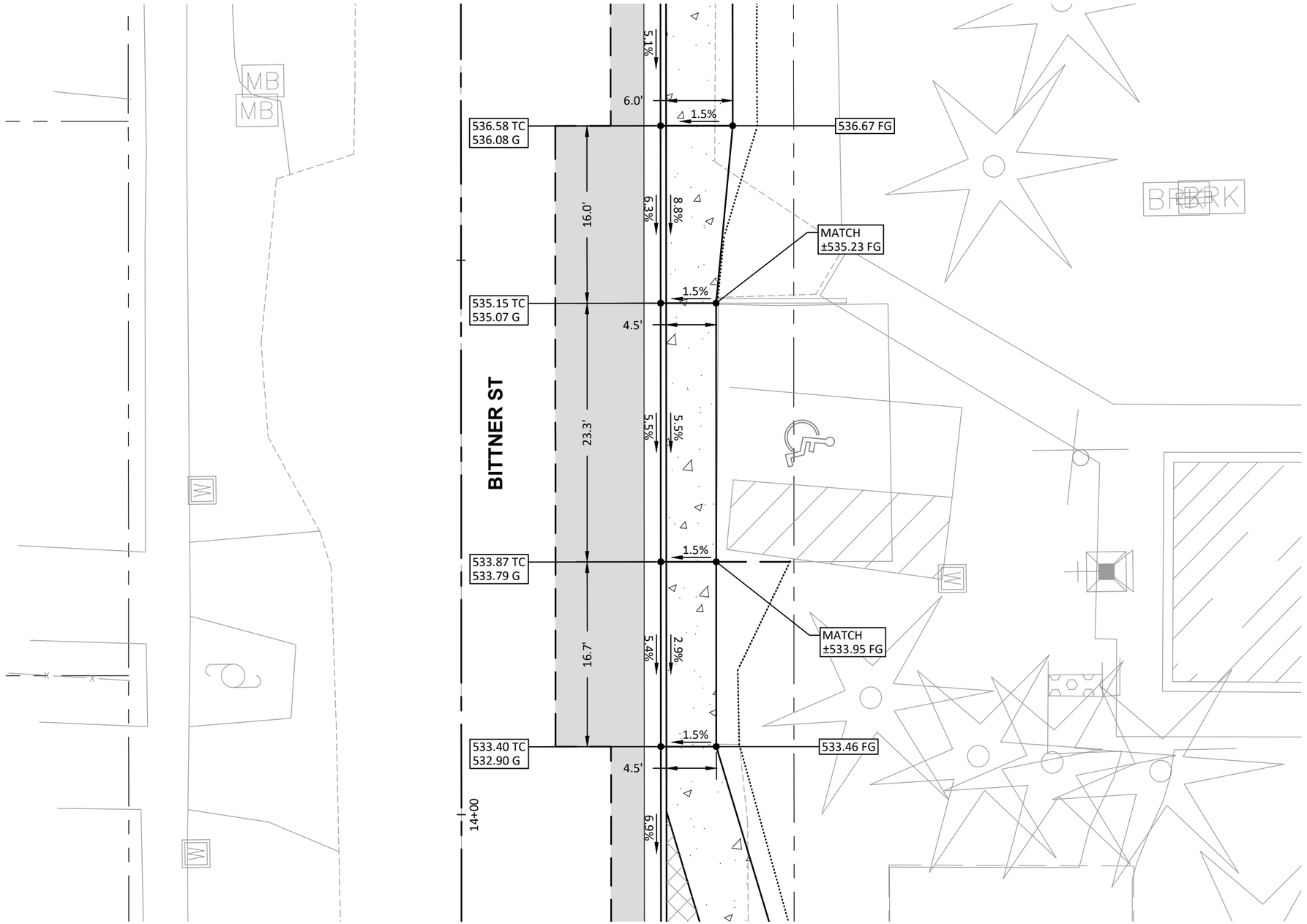
JAMES S. HOUF

EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. DA01
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

DRAWING NAME: CWL10-PH2 DA01 DRIVEWAY DETAIL GRADING.DWG



PROPERTY 2 DRIVEWAY - PLAN VIEW

SCALE: 1" = 10' (HORZ.)

0 2.5 5 10

SCALE: 1" = 10'

DRIVEWAY DETAIL GRADING

BITTNER-LONG SAFE ROUTES

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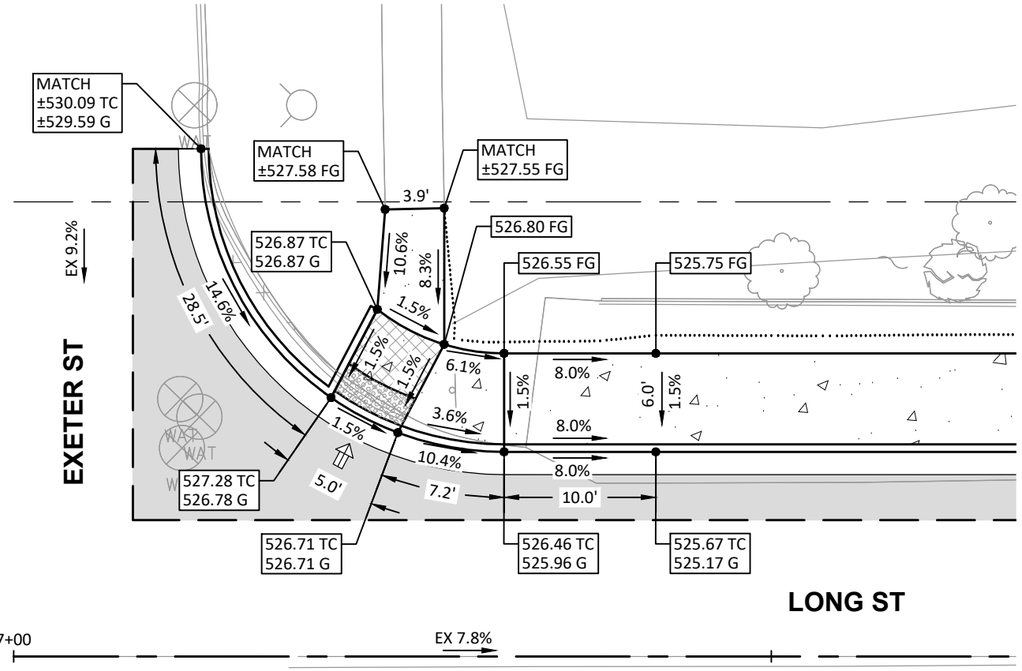
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. DA02
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

DRAWING NAME: CWL10-PH2 DA01 DRIVEWAY DETAIL GRADING.DWG



LONG ST AND EXETER ST NE RAMP - PLAN VIEW

SCALE: 1" = 10' (HORZ.)

SIDEWALK

LEVEL AREA (TURNING SPACE/LANDING)

TRUNCATED DOME DETECTABLE WARNING SURFACE

XXX SLOPE INFORMATIONAL ARROW (FINISHED SURFACE SLOPE)

(X) ELEVATION POINT

COUNTER SLOPE (5% MAX)

0 2.5 5 10

SCALE: 1" = 10'

DRAWING NAME: CWL10-PH2 DB01 CURB RETURNS.DWG

CURB RETURNS

BITTNER-LONG SAFE ROUTES

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OREGON
JAN. 10, 2017
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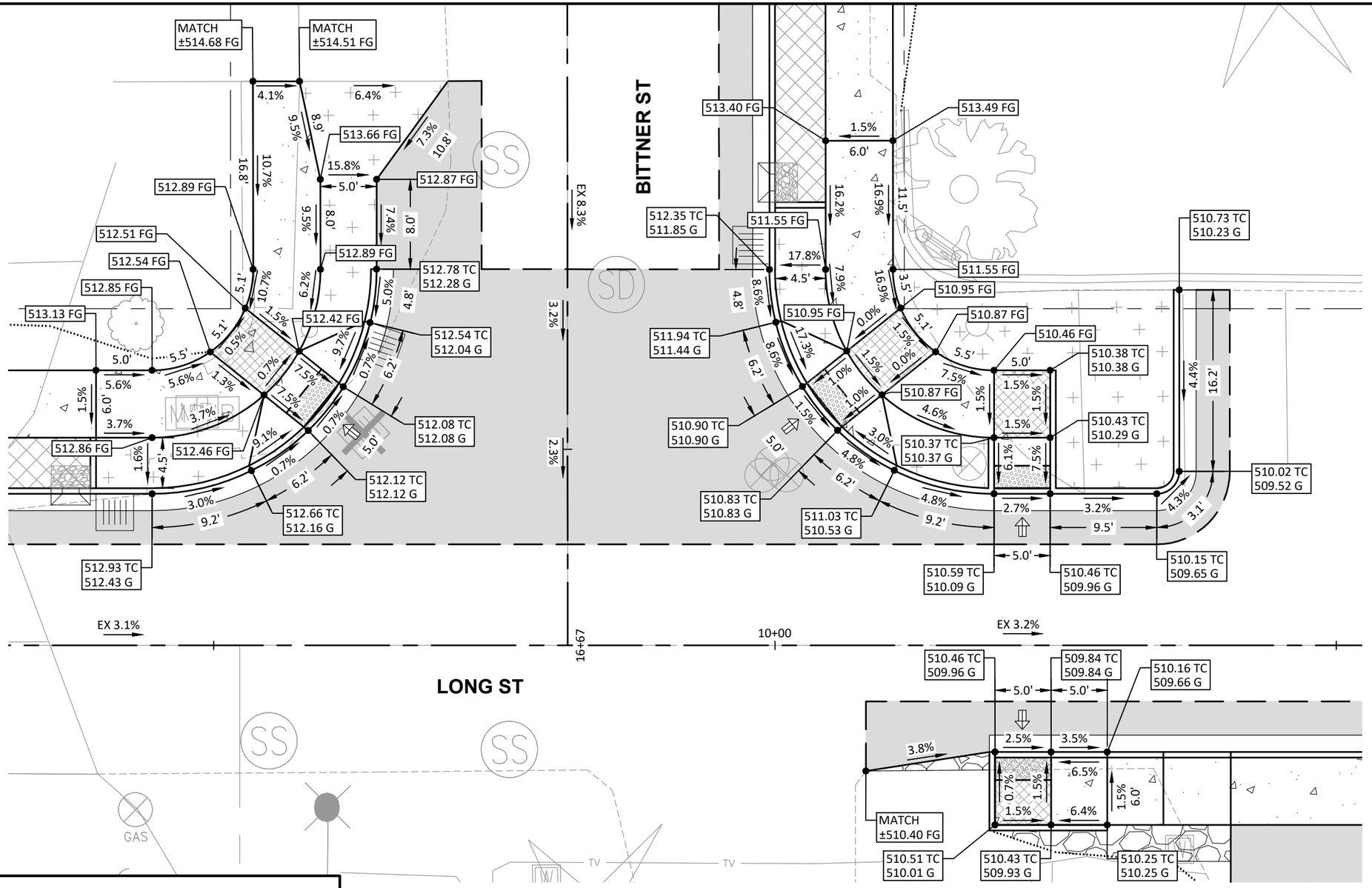
EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. DB01
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10



LONG ST AND BITTNER ST NW, NE, AND SE RAMP - PLAN VIEW

SCALE: 1" = 10' (HORZ.)

- SIDEWALK
- LEVEL AREA (TURNING SPACE/LANDING)
- TRUNCATED DOME DETECTABLE WARNING SURFACE
- XXX — SLOPE INFORMATIONAL ARROW (FINISHED SURFACE SLOPE)
- (X) — ELEVATION POINT
- COUNTER SLOPE (5% MAX)

0 2.5 5 10
SCALE: 1" = 10'

CURB RETURNS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

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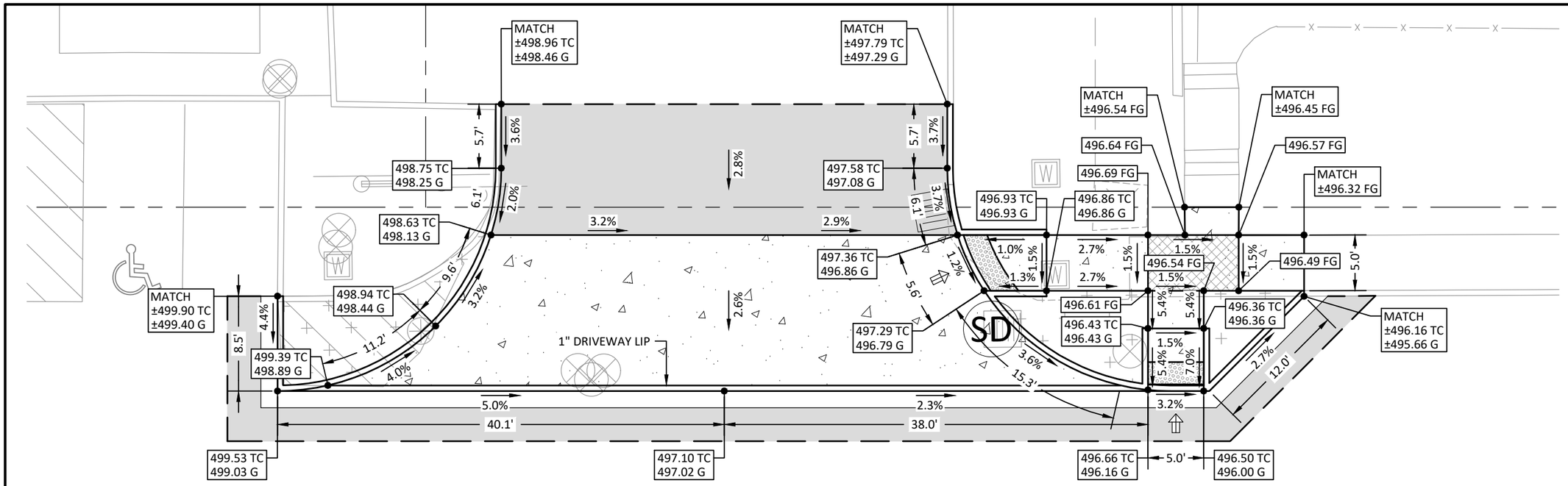
OREGON
JAN. 10, 2017
JAMES S. HOUF
EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. DB02
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

DRAWING NAME: CWL10-PH2 DB01 CURB RETURNS.DWG



LONG ST AND SIMPSON ST NW, SW, NE, AND SE RAMP - PLAN VIEW

SCALE: 1" = 10' (HORZ.)

CURB RETURNS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

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CITY OF West Linn

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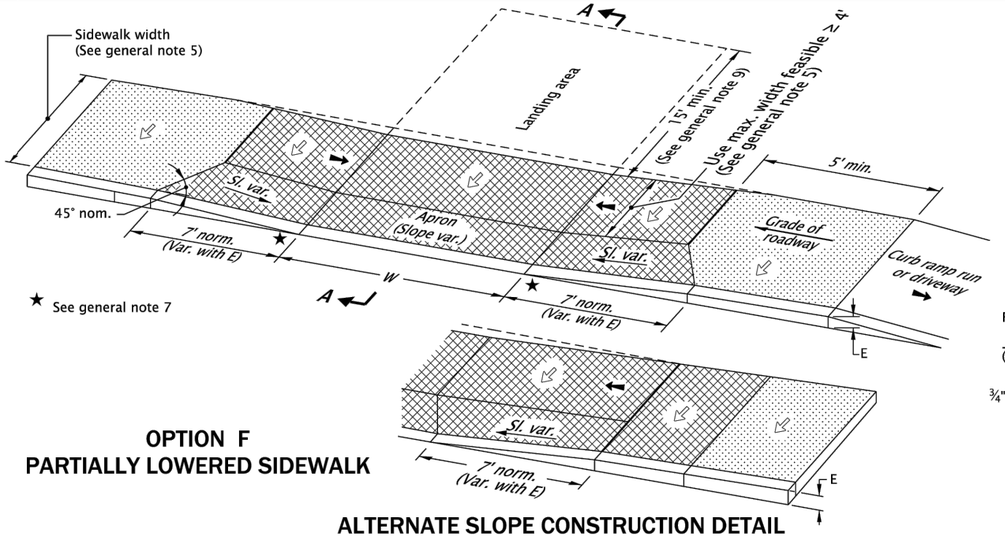
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/27

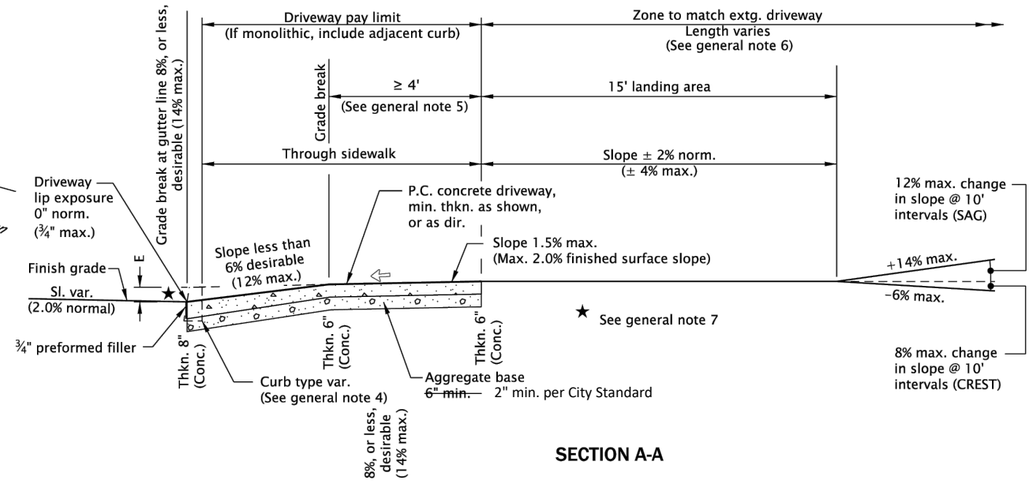
DESIGNED: HHPR TEAM	SHEET NO. DB03
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

DRAWING NAME: CWL10-PH2 DB01 CURB RETURNS.DWG

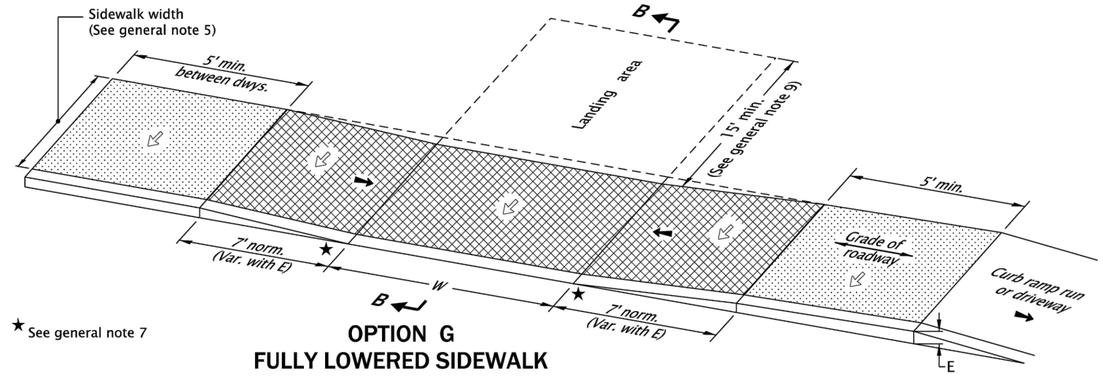


OPTION F
PARTIALLY LOWERED SIDEWALK

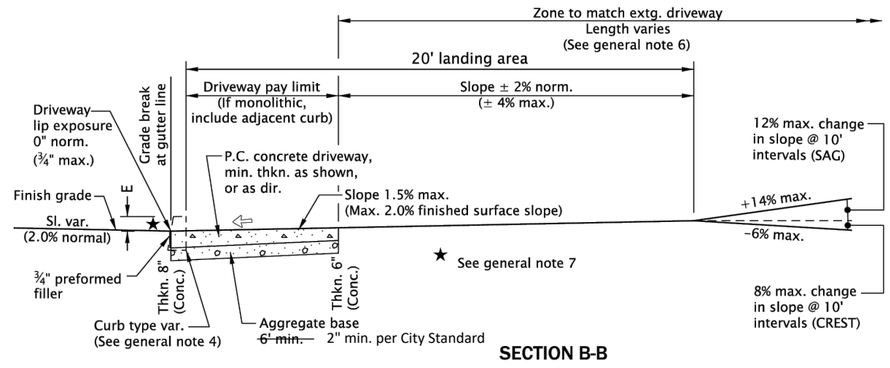
ALTERNATE SLOPE CONSTRUCTION DETAIL



SECTION A-A



OPTION G
FULLY LOWERED SIDEWALK



SECTION B-B

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Details are based on applicable ODOT Standards.
2. Only use details allowed by jurisdiction.
3. The following dimensions are as shown on plans, or as directed: driveway width, driveway slope, sidewalk width, curb exposure, driveway lip exposure, landing area length and width. See project plans for details not shown.
4. Curb, gutter, and sidewalk types varies, see plans.
   See Std. Dwgs. RD700 & RD701 for curb details.
   See Std. Dwg. RD720 for sidewalk details.
   See Std. Dwg. RD722 for joint details.
5. A greater than or equal 4' unobstructed clear passage with cross slope 1.5% max. (Max. 2.0% finished surface slope) is required behind driveway apron.
6. Where existing driveway is in good condition, and meets slope requirements, construct only as much landing area as required for satisfactory connection with new work.
7. Check the gutter flow depth at driveway locations to assure that the design flood does not overtop the back of sidewalk at driveway. If overtopping occurs place an inlet at upstream side of driveway or perform other approved design mitigation.
8. Construct a full deph expansion joints with 1#2" (In) preformed joint filler at ends of each driveway. Tooled joints are required at all driveway slope break lines.
9. 15' min. of the driveway behind the sidewalk should be surfaced to prevent tracking of gravel onto the sidewalk.
10. Monolithic curb & sidewalk shall retain thickened edge through lowered profile, to accommodate driveway use. See Std. Dwg. RD720 for details.

LEGEND:

	Sidewalk
	Driveway pay limit (If monolithic, include adjacent curb) (See project plans for details not shown)
⇦	Cross slope 1.5% max. (Max. 2.0% finished surface slope) (Normal sidewalk cross slope)
←	Running slope 7.5% max. (Max. 8.3% finished surface slope)
W	Width of driveway
E	Curb exposure

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

CURB LINE SIDEWALK DRIVEWAYS OR ALLEYS (OPTIONS F & G) ODOT HIGHWAYS

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 20-JUL-2020 | **RD735**

Effective Date: December 1, 2025 – May 31, 2026

STANDARD DETAILS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
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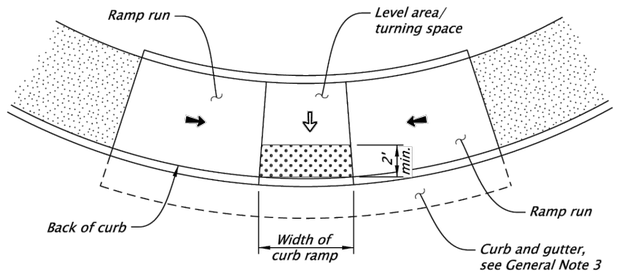
CITY OF West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

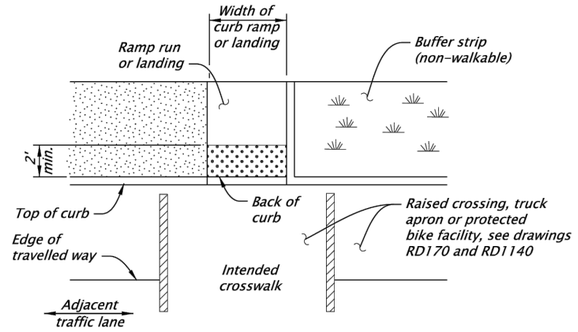
EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. DC01
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

20-JUL-2020
RD735.dgn
DRAWING NAME: CWL10-PH2 DC01 STANDARD DETAILS.DWG



PARALLEL CURB RAMP



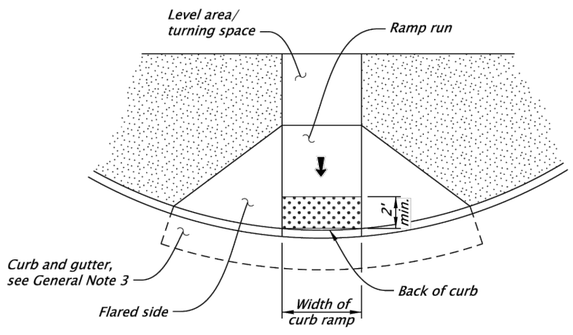
RAISED CROSSING, TRUCK APRON OR PROTECTED BIKE FACILITY

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

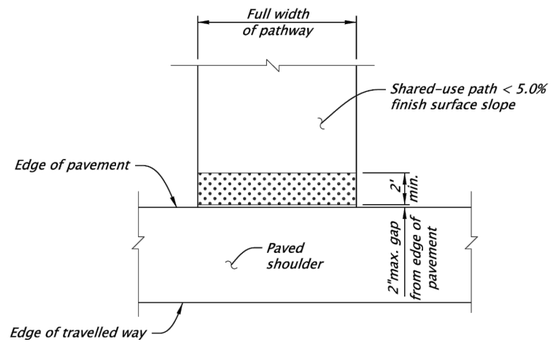
1. *Detectable warning surface details and locations are based on applicable ODOT Standards.*
2. *See project plans for details not shown. See drawings RD700 and RD701 for curbs. See drawing RD902 for detectable warning surface installation details.*
3. *On or along state highways, curb and gutter is required at curb ramps.*
4. *Detectable warning surface placement for perpendicular ramps vary as shown.*

LEGEND:

- *Marked or intended crossing location*
- *Sidewalk*
- *Detectable warning surface*
- *Cross slope 1.5% maximum (Maximum 2.0% finished surface slope) (Normal sidewalk cross slope)*
- *Running slope 7.5% maximum (Maximum 8.3% finished surface slope)*



PERPENDICULAR CURB RAMP
GRADE BREAK IN FRONT OF CURB



SHARED-USE PATH CONNECTION OR CURBLESS WALKWAY

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

DETECTABLE WARNING SURFACE PLACEMENT FOR CURB RAMPS

2024

DATE	REVISION DESCRIPTION
01-2025	UPDATED CAD STANDARDS

CALC. BOOK NO. N/A | SDR DATE 10-JAN-2025 | **RD904**

Effective Date: December 1, 2025 - May 31, 2026

STANDARD DETAILS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

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City of West Linn

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86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

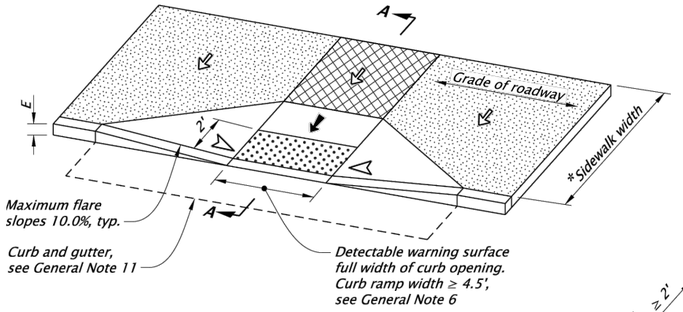
EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. DC02
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

10-JAN-2025

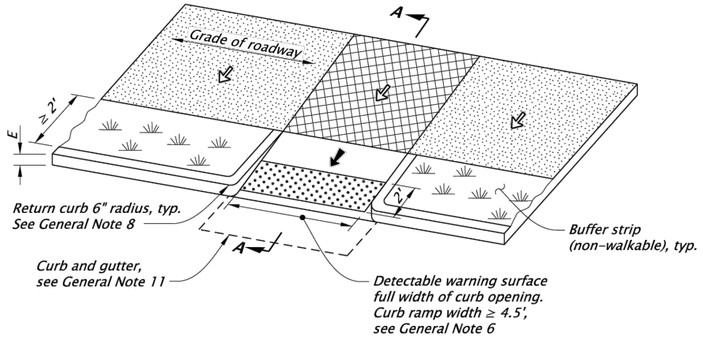
RD904.dgn

DRAWING NAME: CWL10.PH2.DC01.STANDARD.DETAILS.DWG

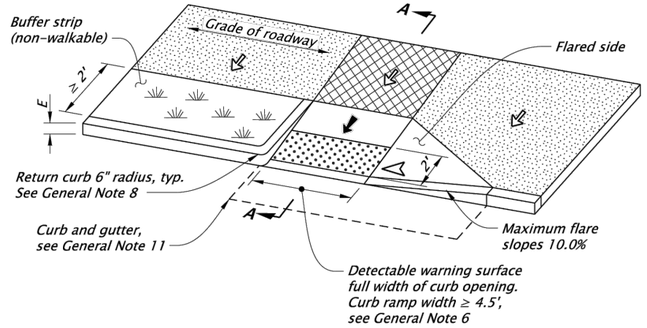


PERPENDICULAR CURB RAMP DETAIL

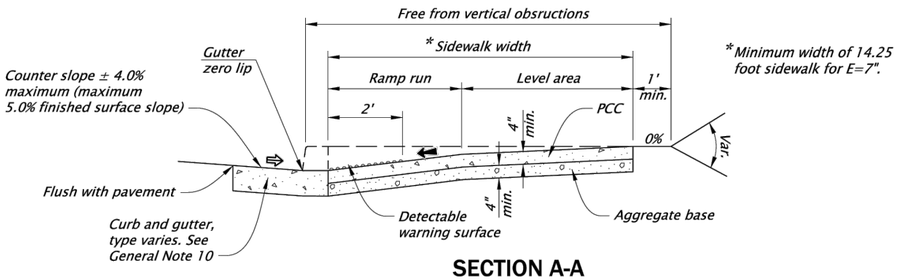
(Use "Parallel Curb Ramp Detail" or "Combination Curb Ramp Detail" when required turning space cannot be obtained)



PERPENDICULAR CURB RAMP THROUGH BUFFER STRIP



PERPENDICULAR CURB RAMP WITH SINGLE FLARE



SECTION A-A

LEGEND:

- Sidewalk
- Detectable warning surface (DWS)
- Level area (Turning space/landing)
  Unobstructed 4.5' x 4.5'
  With obstruction 4.5' x 5.5' (longer dimension in direction of pedestrian street crossing).
  For the purposes of this application, a maximum 2.0% finished surface slope (for drainage) measured perpendicular in two directions is considered level.
- Cross slope 1.5% maximum (Maximum 2.0% finished surface slope) (Normal sidewalk cross slope)
- Running slope 7.5% maximum (Maximum 8.3% finished surface slope)
- Counter slope 4.0% maximum ascending or descending (Maximum 5.0% finished surface slope) Slope as required for drainage
- Flare slope (Maximum 10.0% finished surface slope)

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Curb ramp details are based on applicable ODOT standards.
2. See project plans for details not shown. See drawings RD700 and RD701 for curbs. See drawings RD720 and RD721 for sidewalks. See drawings RD902 through RD908 for detectable warning surface installation details. See drawings RD912 through RD916 for curb ramp placement options.
3. Site conditions normally require a project specific design. See project plans for details not shown.
4. Tooled dummy joints are required at all curb ramp slope break lines. See drawing RD722.
5. Curb ramp slopes shown are relative to the true level horizon (zero bubble).
6. Place detectable warning surface at the back of curb for a minimum depth of 2 feet in the direction of pedestrian travel full width of curb ramp opening that is adjacent to traffic.
7. Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.
8. Return curb may be provided in lieu of flared slope only if protected from traverse travel by softscape, see drawing RD721. Return curb shall not reduce width of approaching sidewalk.
9. Curb ramps for shared use paths intersecting a roadway shall be full width of path, excluding flares. When a curb ramp is used to provide bicycle access from a roadway to a sidewalk, the curb ramp opening will be greater than or equal to 8 feet wide. See drawings RD904 and RD909 for additional details.
10. Place an inlet at upstream side of curb ramp or perform other approved design mitigation. Check the gutter flow depth at curb ramp locations to assure that the design flood does not overtop the back of sidewalk.
11. On or along state highways, curb and gutter is required at curb ramps. Curb and gutter shall be flush with the adjacent pavement.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

PERPENDICULAR CURB RAMP

2024

DATE	REVISION DESCRIPTION
01-2025	UPDATED CAD STANDARDS

CALC. BOOK NO. N/A | SDR DATE 10-JAN-2025 | **RD910**

Effective Date: December 1, 2025 – May 31, 2026

STANDARD DETAILS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
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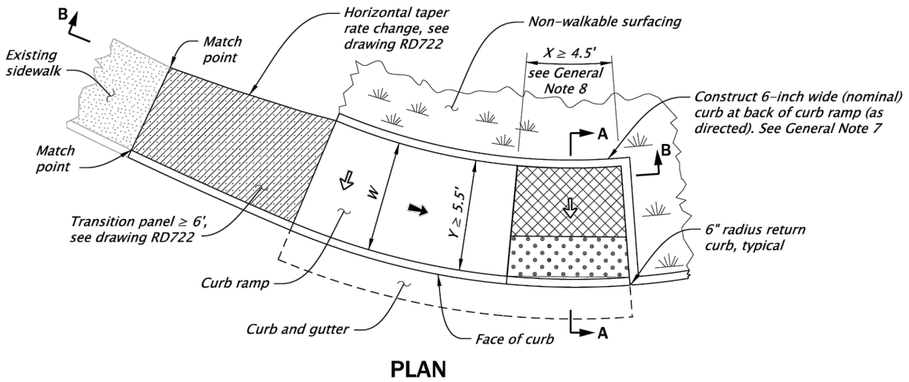
CITY OF West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. DC03
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

10-JAN-2025
RD910.dgn
DRAWING NAME: CWL10-PH2 DC03 STANDARD DETAILS.DWG



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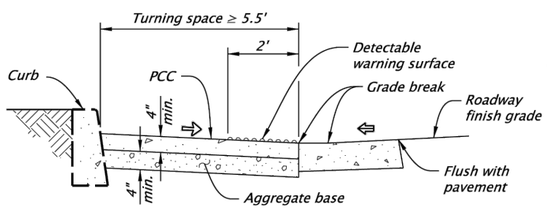
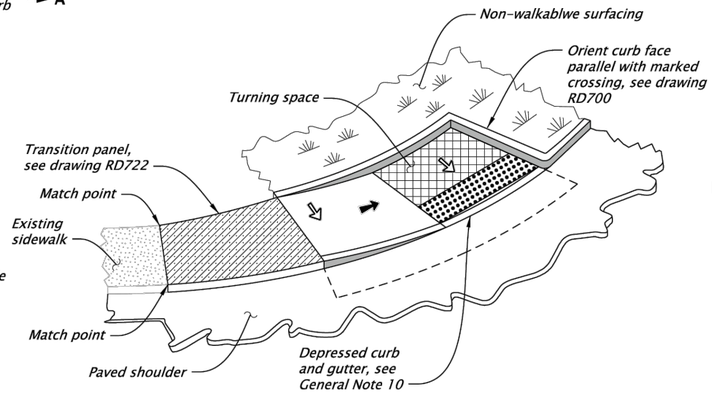
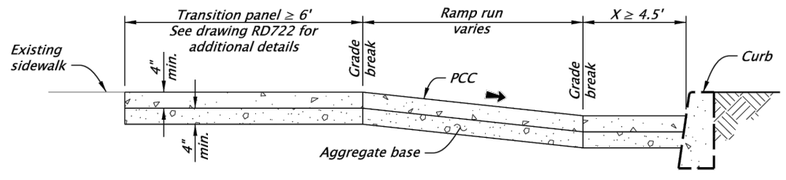


SECTION A-A



ISOMETRIC VIEW



SECTION B-B

CURBED OPTION

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. *Curb ramp details are based on applicable ODOT applicable Standards.*
2. *See project plans for details not shown. See drawings RD700 and RD701 for curbs. See drawings RD720 and RD721 for sidewalks. See drawing RD722 for transition panel details. See drawings RD902 through RD908 for detectable warning surface installation details. See drawing RD920 for parallel curb ramp details.*
3. *Site conditions normally require a project special design. See project plans for details not shown.*
4. *Tooled dummy joints are required at all curb ramp grade break lines. See drawing RD722.*
5. *Curb ramp slopes shown are relative to the true level horizon (zero bubble).*
6. *Place detectable warning surface at the back of curb for a minimum depth of 2 feet in the direction of pedestrian travel, full width of curb ramp opening, that is adjacent to traffic.*
7. *Place an inlet at upstream side of curb ramp or perform other approved design mitigation. Check the gutter flow depth at curb ramp locations to assure that the design flood does not overtop the back of sidewalk.*
8. *When a shared use path terminates, the curb ramp shall be the full width of the path, the turning space X dimension should be minimum 8 feet wide to enable bicycles to ride from ramp to shoulder.*
9. *Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.*
10. *On or along state highways, curb and gutter is required at curb ramps. Curb and gutter shall be flush with the adjacent pavement.*
11. *Unique curb ramp option can be used for curved or tangent roadway sections. Superelevated roadways require a site specific detail.*

LEGEND:

- *Sidewalk*
- *Transition panel*
- *Detectable warning surface (DWS)*
- *Level area (Turning space/landing)*
  Unobstructed 4.5' x 4.5'
  With obstruction 4.5' x 5.5' (longer dimension in direction of pedestrian street crossing).
  For the purposes of this application, a maximum 2.0% finished surface slope (for drainage) measured perpendicular in two directions is considered level.
- W *New construction sidewalk width. See contract plans for dimension.*

⇦ *Cross slope 1.5% maximum (Maximum 2.0% finished surface slope) (Normal sidewalk cross slope)*

⇦ *Counter slope 4.0% maximum ascending or descending (Maximum 5.0% finished surface slope) Slope as required for drainage*

⬅ *Running slope 7.5% maximum (Maximum 8.3% finished surface slope)*

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

UNIQUE CURB RAMP

2024

DATE	REVISION DESCRIPTION
01-2025	UPDATED CAD STANDARDS

CALC. BOOK NO. N/A | SDR DATE 10-JAN-2025 | **RD960**

Effective Date: December 1, 2025 - May 31, 2026

STANDARD DETAILS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

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ENGINEERS • PLANNERS
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phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

CITY OF West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

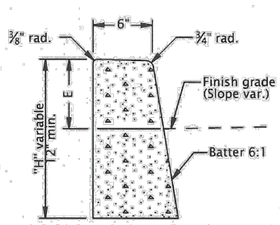
EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. DC04
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

10-JAN-2025

RD960.dgn

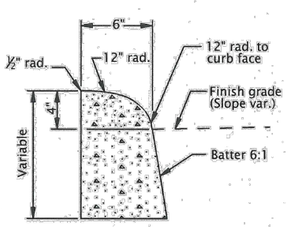
DRAWING NAME: CWL10-PH2 DC01 STANDARD DETAILS.DWG



O.D.O.T. & City of Portland Standard "H"=16"

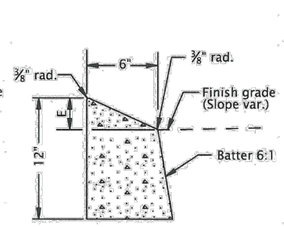
STANDARD CURB

(See general note 11)

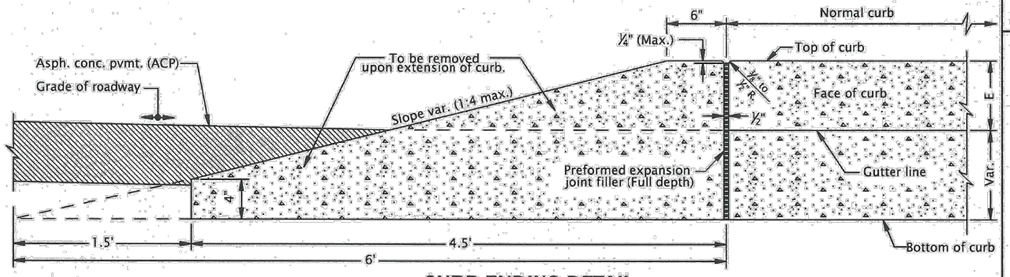


MOUNTABLE CURB

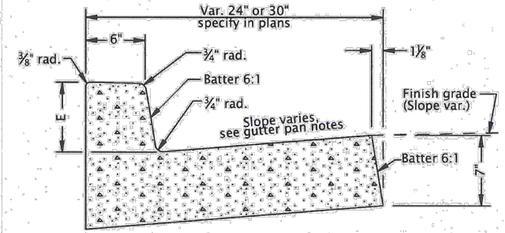
(See general note 11)



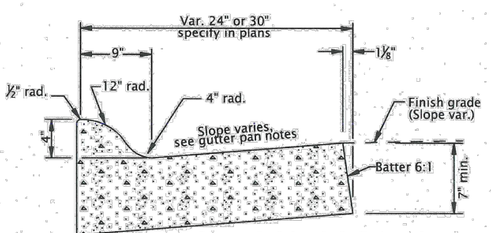
SLOPED CURB



CURB ENDING DETAIL



CURB AND GUTTER



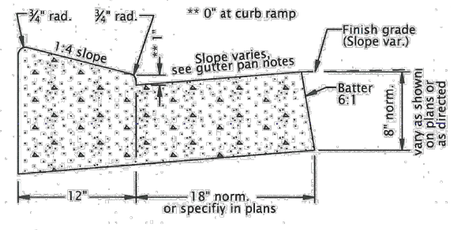
MOUNTABLE CURB AND GUTTER

GUTTER PAN NOTES:

Slope 5.0% normal.

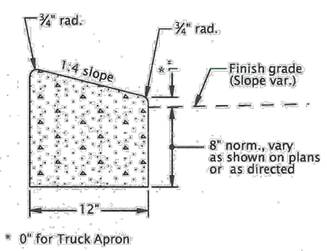
Slope 4.0% max. at curb ramps.

Vary slope as reqd. for drainage. Vary where shown on plans, and allowed by jurisdiction.



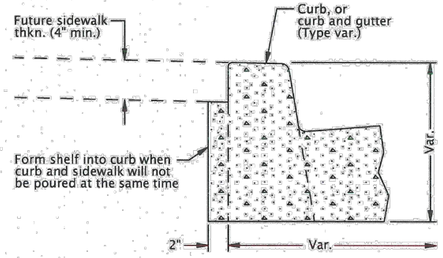
LOW PROFILE MOUNTABLE CURB AND GUTTER

(Where shown on plans)



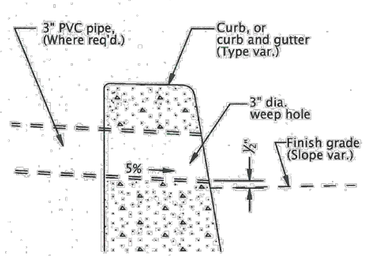
LOW PROFILE MOUNTABLE CURB

(See general note 11)



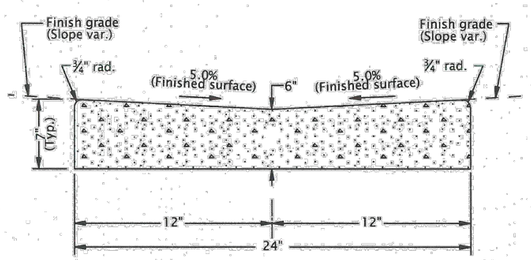
MODIFICATION FOR KEYWAY

(Where shown on plans)



WEEP HOLE DETAIL

(Where shown on plans, and allowed by jurisdiction)



WEST LINN VALLEY GUTTER

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Curb exposure "E" = 6" to 9", as measured vertically from flowline to hig hest point on curb. Vary as shown on plans or as directed. O.D.O.T standard "E"=7".
2. Const. curb expansion joints at 200' maximum spacing, and at points of tangency, and at ends of each driveways.
3. Const. curb contraction joints at 15' maximum spacing, and at ends of each inlet and curb ramp.
4. Transitions shall be used to connect curbs of different exposures "E". ("E" is the total vertical dimension of those curb surfaces having a slope of 1:1 or steeper). Minimum desirable transition length shall be 20' for each 1" difference in "E".
5. Tops of all curbs shall slope toward the roadway at 1.5% max. (Max. 2.0% finished surface slope), unless otherwise shown, or as directed.
6. Dimensions are nominal, vary to conform with curb machine approved by the engineer.
7. Dimensions adjacent to radii are measured to the point of intersection of curb surfaces.
8. For sidewalk details, and monolithic curb & sidewalk, see Std. Dwgs. RD720 & RD721.
9. For drainage curbs, see Std. Dwg. RD701.
10. For curb ramp details, see Std. Dwgs. RD900 series.
11. On or along state highways, curb and gutter is required at curb ramp.

Standard Drawing No. WL–RD700

Effective Date: 02/22/22

Title: CURBS

Approved: City Engineer

CITY OF West Linn

PUBLIC WORKS DEPARTMENT – STANDARD DRAWINGS
22500 Salamo Road, West Linn OR 97068
Phone:503–722–3500 www.westlinnoregon.gov

NOTE: All material and workmanship shall be in accordance with the City of West Linn Standard Construction Specifications.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should only be used without consulting a Registered Professional Engineer.

File WL–RD700.dwg

STANDARD DETAILS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
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205 SE Spokane Street, Suite 200, Portland, OR 97202
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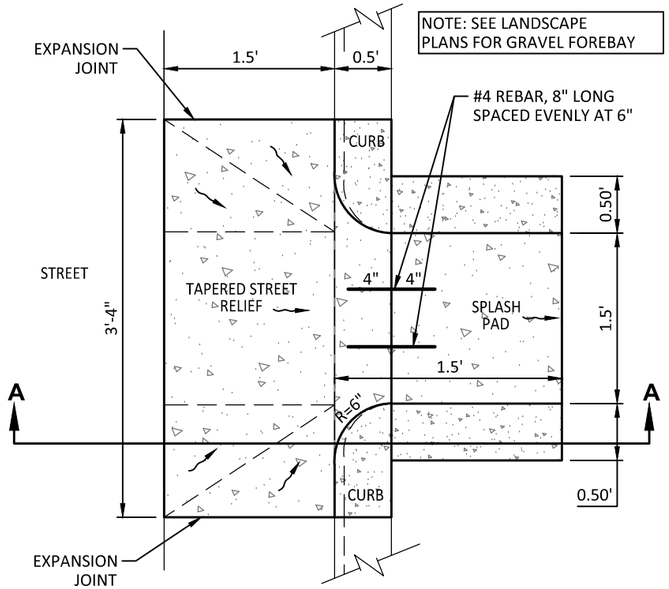
CITY OF West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. DC05
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

DRAWING NAME: CWL10-PH2 DC01 STANDARD DETAILS.DWG



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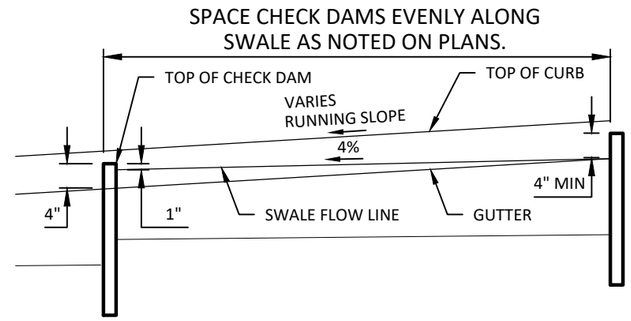
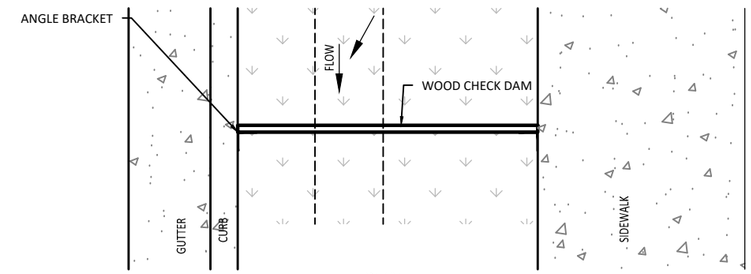


CHECK DAM PROFILE

NTS



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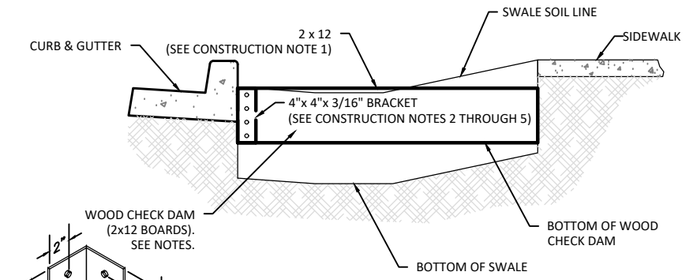
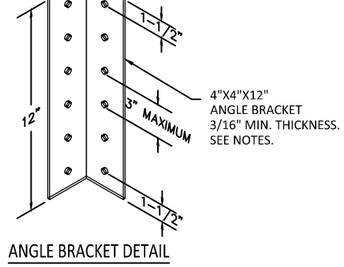




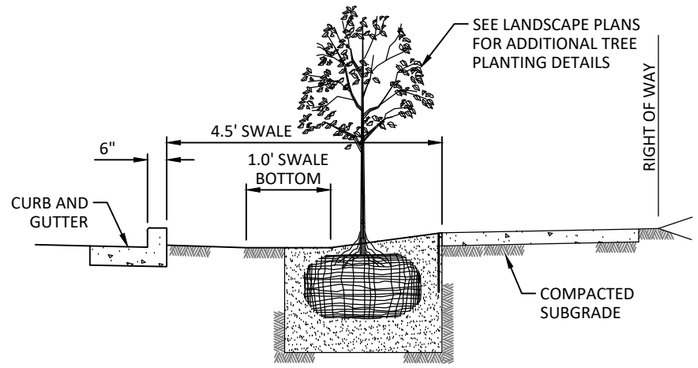
ANGLE BRACKET DETAIL

CONSTRUCTION NOTES

1. Lumber to be a naturally rot-resistant wood (e.g. cedar). Manufactured products can be used with approval. No chemically treated wood will be allowed.
2. All fasteners to be stainless steel or aluminum.
3. 4"x 4"x 12" angle bracket, minimum 3/16"thick, stainless steel, or aluminum.
4. Top of bracket to be no higher than top of check dam.
5. Minimum 5/16" dia. bolts, 3 bolts into concrete, 2 bolts into each board

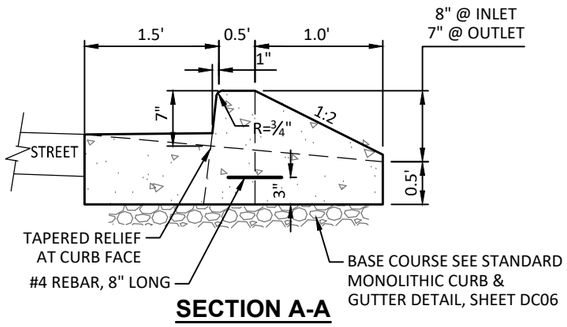
WOOD CHECK DAM DETAIL

NTS

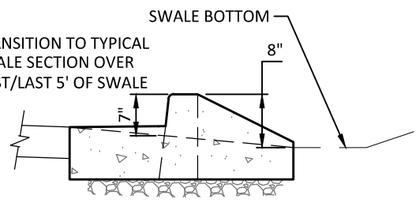


TREE PLANTING SECTION

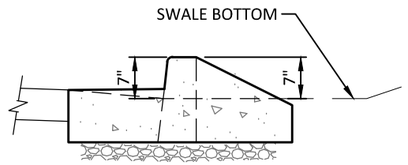
NTS



SECTION A-A



INLET SECTION

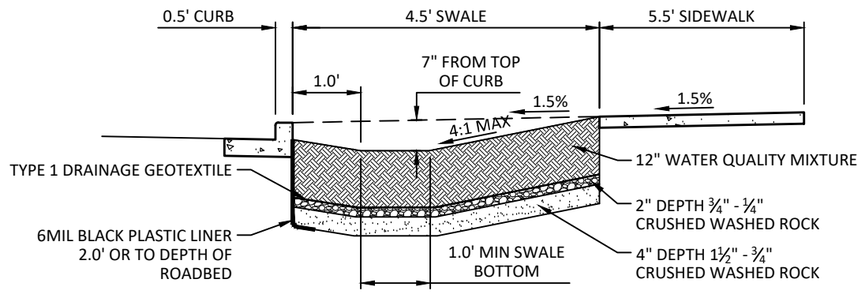


OUTLET SECTION

NOTE: OUTLET ON PLANTER SWALES MAY REQUIRE ADJUSTMENT TO ACCOMMODATE THE CATCH BASIN.

SWALE INLET/OUTLET

NTS



TYPICAL SWALE SECTION

NTS

STANDARD DETAILS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

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CITY OF West Linn

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86,200
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JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. DC06
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

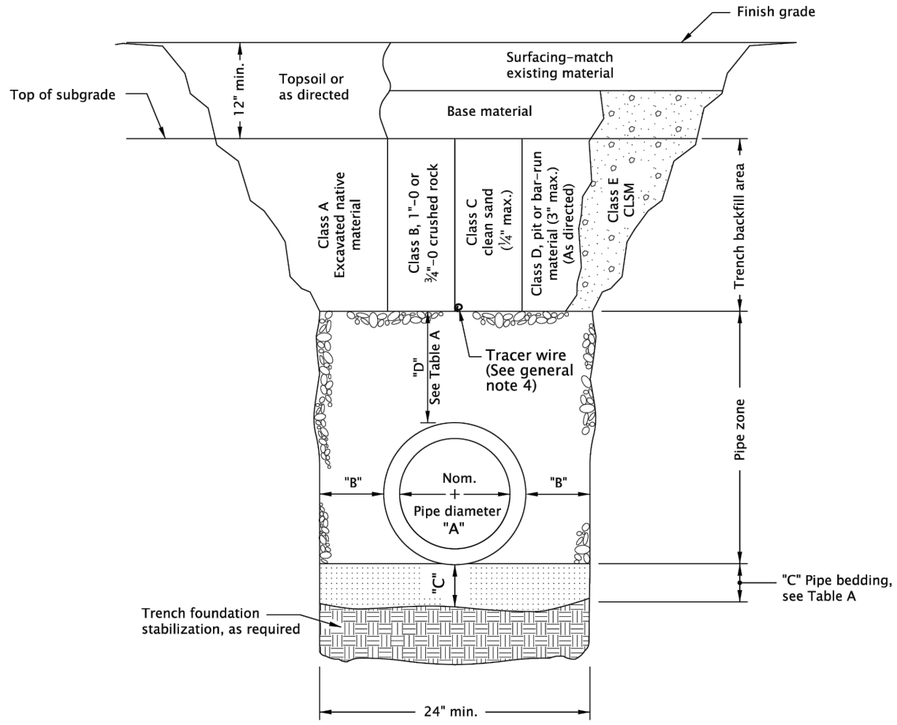
DRAWING NAME: CWL10-PH2 DC01 STANDARD DETAILS.DWG

RD300.dgn 20-JUL-2020

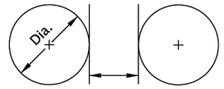
TABLE A

"A" (in)	"B" (in)	"C" (in)	"D" (in)
4	10	4	8
6	10	4	8
8	10	6	10
10	10	6	10
12	12	6	10
15	12	6	10
18	16	6	12
21	16	6	12
24	18	6	12
30	18	6	12
36	24	6	14
42	24	6	14
48	24	6	14
54	24	6	14
60	24	6	14
66	24	6	14
72	24	6	14

For pipes over 72" diameter, see general note 3.



MULTIPLE INSTALLATIONS



DIAMETER	MIN. SPACE BETWEEN PIPES
Up to 48"	24"
48" to 72"	One half (½) dia. of pipe

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Surfacing of paved areas shall comply with street cut Std. Dwg. RD302.
2. For pipe installation in embankment areas where the trench method will not be used and the pipe is ≥ 36" diameter, increase dimension "B" to nominal pipe diameter.
3. Pipes over 72" diameter are structures, and are not applicable to this drawing.
4. See Std. Dwg. RD336 for tracer wire details (When required).

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

TRENCH BACKFILL, BEDDING, PIPE ZONE AND MULTIPLE INSTALLATIONS

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 14-JUL-2014 | **RD300**

Effective Date: December 1, 2025 – May 31, 2026

DRAWING NAME: CWL10-PH2 DC01 STANDARD DETAILS.DWG

STANDARD DETAILS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

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CITY OF West Linn

REGISTERED PROFESSIONAL ENGINEER
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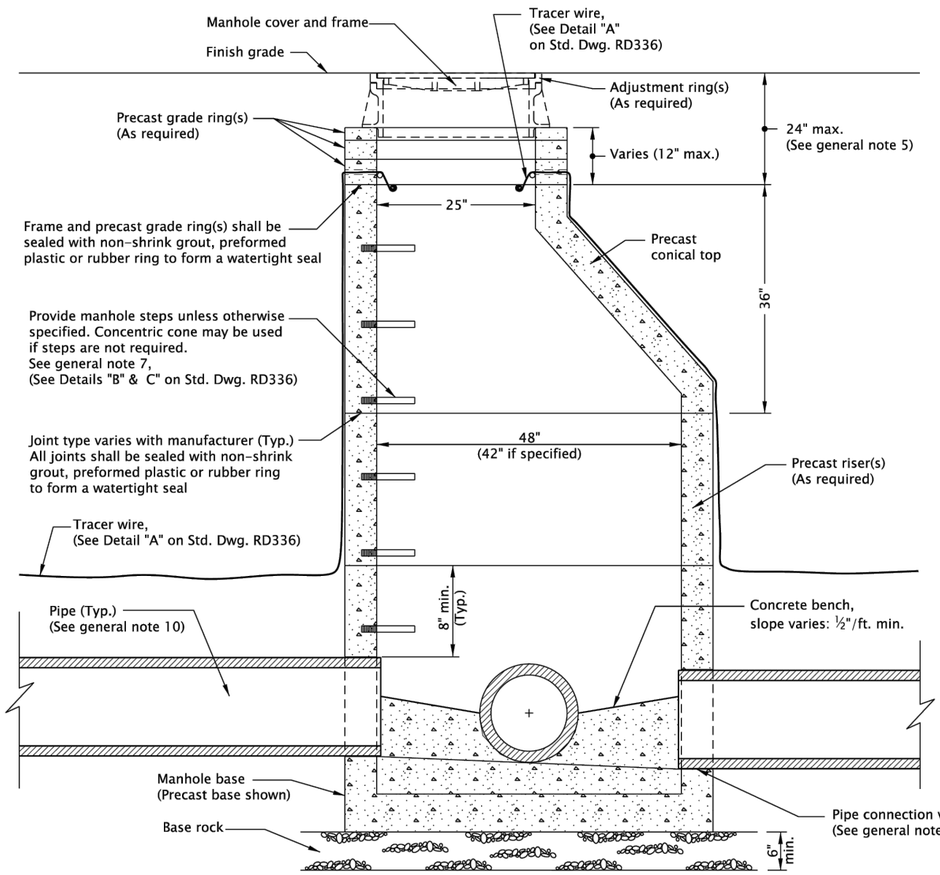
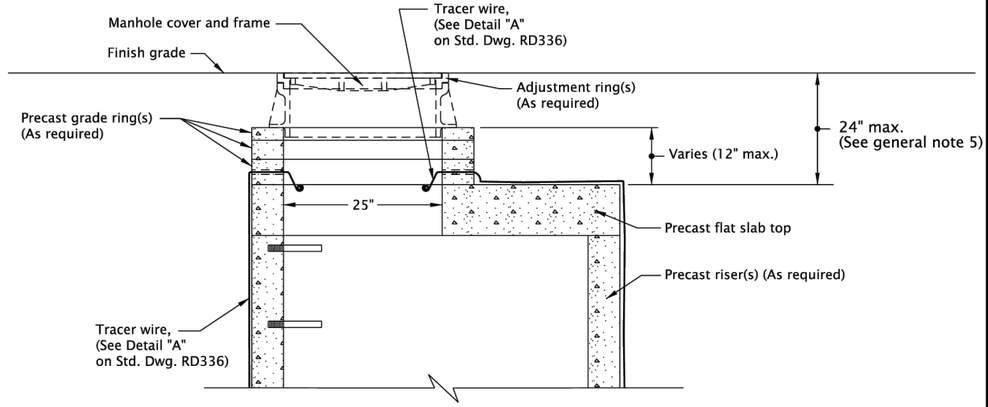
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. DC07
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10



MANHOLE WITH PRECAST CONICAL TOP



MANHOLE WITH PRECAST FLAT SLAB TOP

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. All precast products shall conform to requirements of ASTM C478.
2. Standard precast manhole section diameter shall be 48". Use 42" if specified by the Engineer.
3. See Std. Dwg. RD345 for pipe to manhole connections.
4. See Std. Dwg. RD344 for manhole base section.
5. Adjust 24" maximum.
6. All connecting pipes shall have a tracer wire, or approved alternate.
7. See Std. Dwg. RD336 for manhole steps.
8. See Std. Dwg. RD336 for details not shown.
9. See Std. Dwg. RD356 for manhole covers and frames, manhole adjustment rings, etc.
10. Max. pipe diameter varies with pipe material.
11. See Std. Dwg. RD342 for shallow manholes.
12. Location, elevation, diameter, slope, and number of pipe(s) varies, see project plans.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

STANDARD STORM SEWER MANHOLE

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 21-JUN-2019 | **RD335**

Effective Date: December 1, 2025 – May 31, 2026

STANDARD DETAILS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

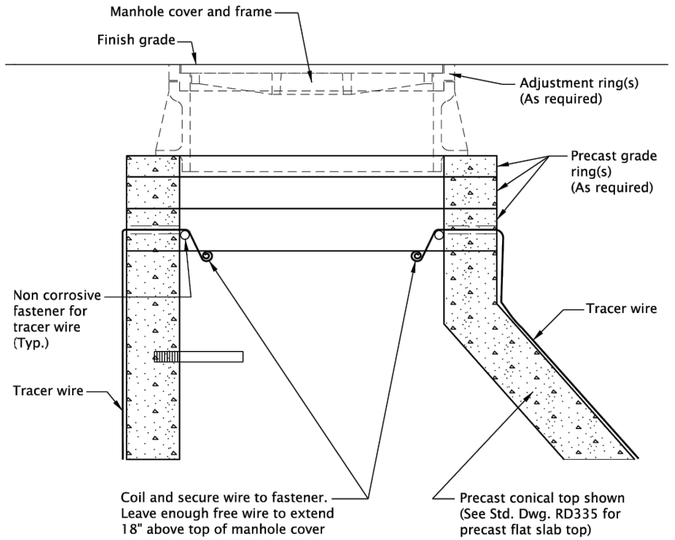
REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/27

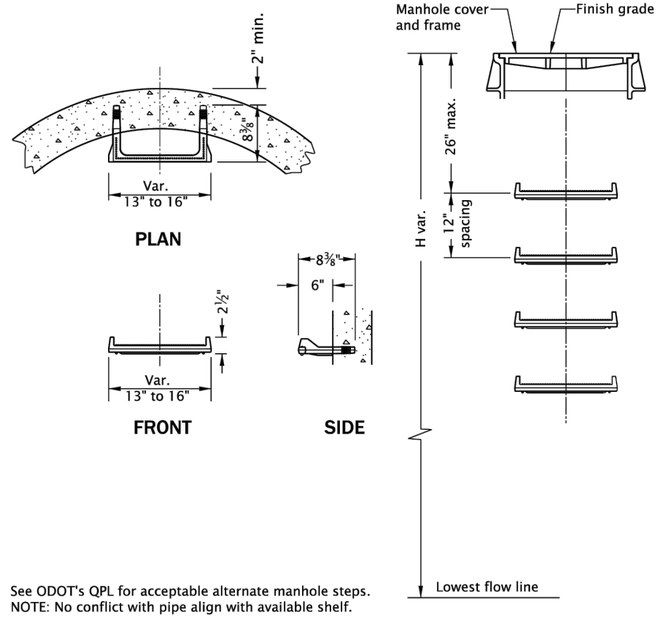
DESIGNED: HHPR TEAM	SHEET NO. DC08
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

RD335.dgn 20-JUL-2020

DRAWING NAME: CWL10-PH2 DC01 STANDARD DETAILS.DWG

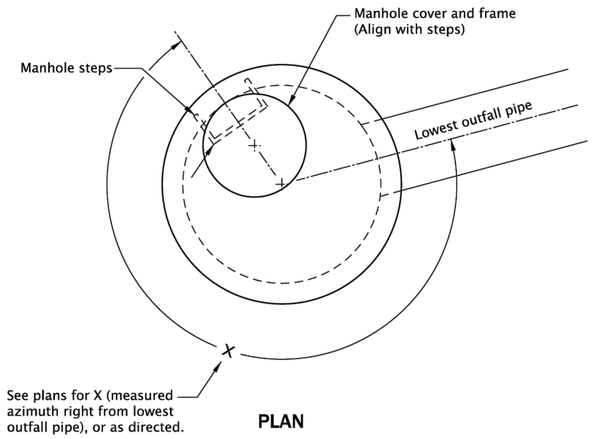


DETAIL "A"
TRACER WIRE
(See general note 6)



See ODOT's QPL for acceptable alternate manhole steps.
NOTE: No conflict with pipe align with available shelf.

DETAIL "B"
MANHOLE STEPS
(See general note 7)



PLAN

DETAIL "C"
PRECAST CONICAL TOP
OR
PRECAST FLAT SLAB TOP
AND MANHOLE STEPS ORIENTATION
(See general note 7)

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. All precast products shall conform to requirements of ASTM C478.
2. Standard precast manhole section diameter shall be 48". Use 42" if specified by the Engineer.
3. See Std. Dwg. RD345 for pipe to manhole connections.
4. See Std. Dwg. RD344 for manhole base section.
5. Adjust 24" maximum.
6. All connecting pipes shall have a tracer wire, or approved alternate. Place tracer wire directly over pipe centerline and on top of the pipe zone material.
7. Steps shall conform to requirements of ASTM C478. When H=42" or less omit steps. See Detail "C" for alignment of steps, and manhole cover and frame.
8. See Std. Dwg. RD335 for details not shown.
9. See Std. Dwg. RD356 for manhole covers and frames, manhole adjustment rings, etc.
10. Max. pipe diameter varies with pipe material.
11. See Std. Dwg. RD342 for shallow manholes.
12. See project plans for details not shown.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

STANDARD MANHOLE DETAILS

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE ~~16-JAN-2019~~ | **RD336**

Effective Date: December 1, 2025 – May 31, 2026

STANDARD DETAILS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

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City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
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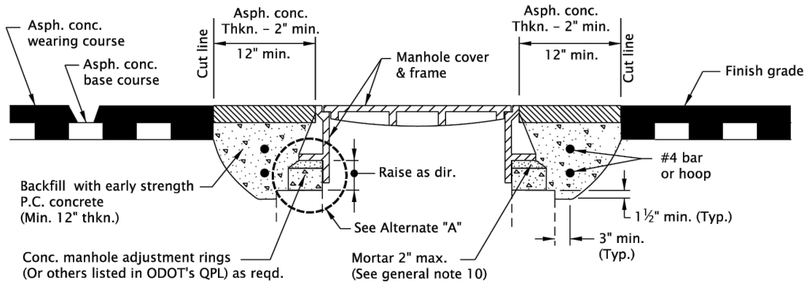
JAMES S. HOUF

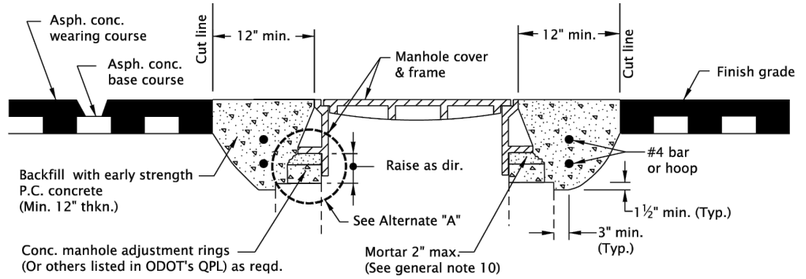
EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. DC09
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

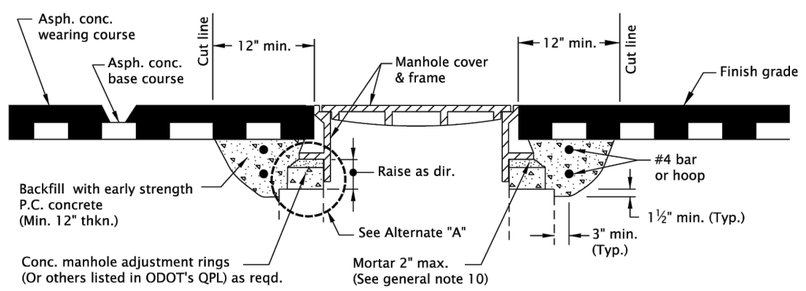
20-JUL-2020
RD336.dgn
DRAWING NAME: CWL10-PH2 DC01 STANDARD DETAILS.DWG



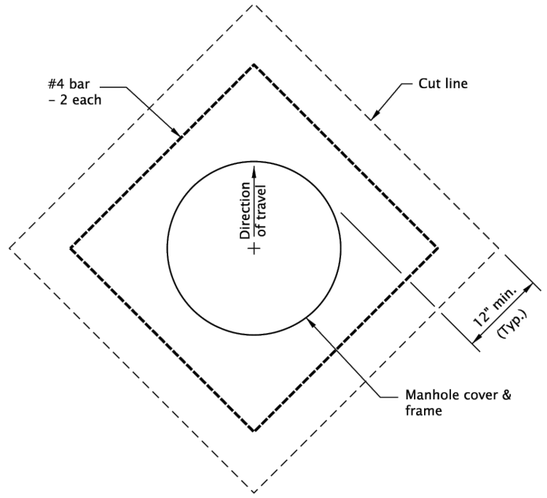
METHOD "A"



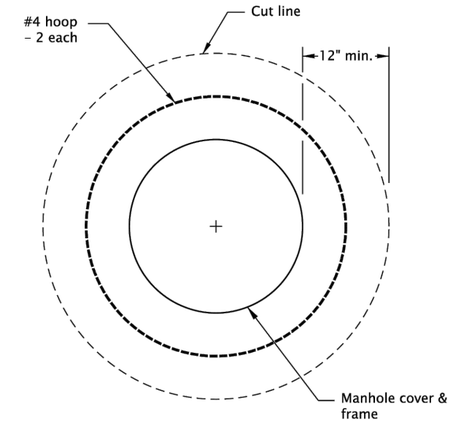
METHOD "B"



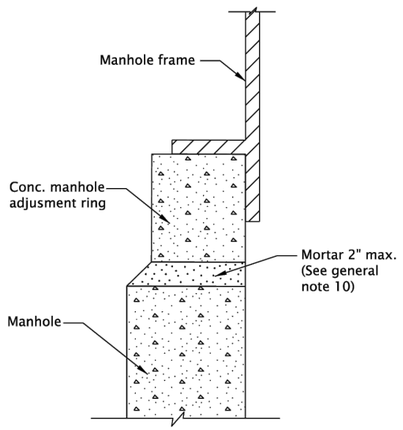
METHOD "C"



PLAN
SQUARE CUT



PLAN
CIRCULAR CUT



ALTERNATE "A"

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Cover manhole with building paper and const. asph. conc. base course and wearing courses.
2. Saw cut square or circular excavation around manhole 12" min. from manhole frame.
3. Raise manhole cover and frame to finish grade by installing conc. manhole adjustment rings and leveling mortar, as shown.
4. Backfill with early strength Portland Cement Concrete. All concrete shall be commercial grade concrete.
5. Protect from traffic loading until conc. has cured to 3000 psi.
6. Apply tack coat to edges of existing pavement before installing patch.
7. Finish joint with asphalt seal and sand.
8. See Std. Dwg. RD336 for manhole steps details.
9. See appropriate manhole standard drawings for details not shown.
10. Use epoxy for synthetic grade rings.
11. See Std. Dwg. RD336 for tracer wire details.
12. See Std. Dwg. RD356 for manhole covers and frames.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

MANHOLE FRAME ADJUSTMENT

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. – – – N/A – – – | SDR DATE– ~~21-JUL-2015~~ – – – – | **RD360**

Effective Date: December 1, 2025 – May 31, 2026

STANDARD DETAILS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
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LANDSCAPE ARCHITECTS♦SURVEYORS
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CITY OF West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

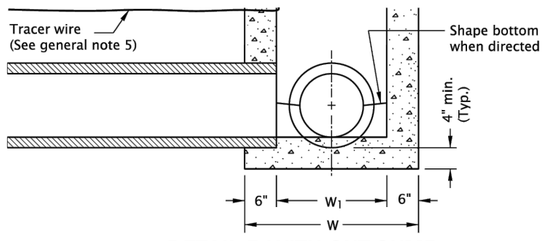
EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. DC10
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

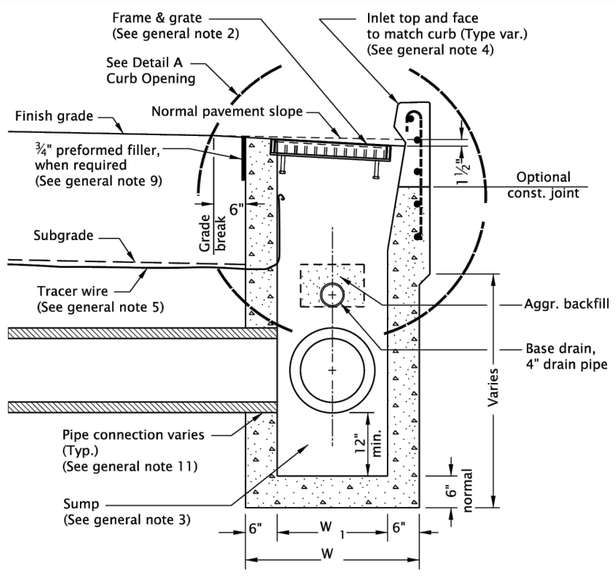
20-JUL-2020
RD360.dgn
DRAWING NAME: CWL10-PH2 DC01 STANDARD DETAILS.DWG

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

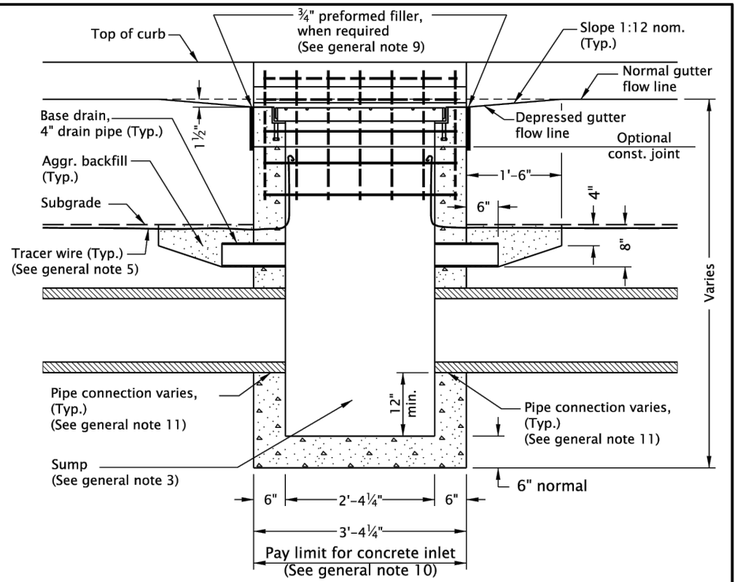
1. Where precast inlets are used as an alternate to cast-in-place inlets, a 4" compacted leveling bed of sand or ¼"-0 crushed aggregate shall be provided. All precast inlets shall conform to requirements of ASTM C913.
2. Graphics show CG-1 inlet with Type 2 grate. See Table A for inlet dimensions. Type 1 grate allowed only in locations not subject to bicycle or pedestrian use. For frame and grate details, see Std. Dwg. RD365.
3. Provide sump only where shown on plans, and allowed by jurisdiction. See Detail B for inlet without sump.
4. For curb details, see Std. Dwgs. RD700 & RD701.
5. See Std. Dwg. RD336 for tracer wire details, or approved alternate.
6. Max. pipe diameter varies with pipe material.
7. Location, elevation, diameter, slope, and number of pipe(s) varies, see project plans.
8. All concrete shall be commercial grade concrete.
9. ¾" preformed filler (in concrete pavement or gutter only) to extend through thickness of concrete.
10. See Std. Dwg. RD363 for gutter transition section, when curb and gutter are required. (Pay limit for inlet is expanded when curb and gutter are monolithic)
11. See Std. Dwg. RD339 for pipe to structure connections.



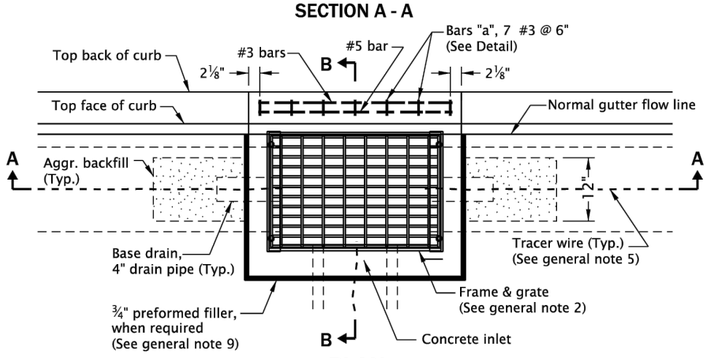
DETAIL B WITH-OUT SUMP



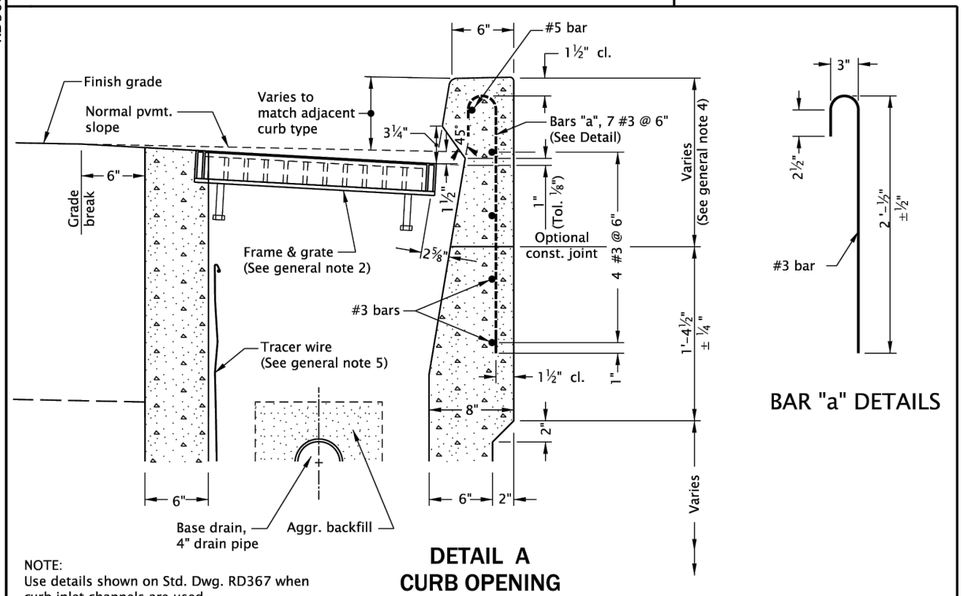
SECTION B - B



SECTION A - A



PLAN



NOTE:
Use details shown on Std. Dwg. RD367 when curb inlet channels are used.

DETAIL A
CURB OPENING

BAR "a" DETAILS

TABLE A		
INLET TYPE	W	W_1
CG-1	2'-8⅞"	1'-8⅞"
CG-2	3'-3⅜"	2'-3⅜"

NOTES:

1. #3 "a" bars to be placed during curb construction.
2. All bars to be placed 1½" clear of nearest face of concrete unless shown or noted otherwise.
3. All bars shall be full length.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

CONCRETE INLETS
TYPE CG-1, CG-2

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 20-JUL-2020 | **RD366**

Effective Date: December 1, 2025 – May 31, 2026

STANDARD DETAILS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

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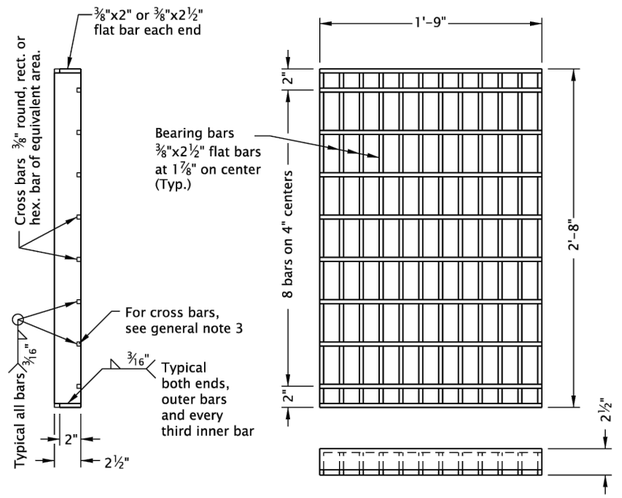
City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

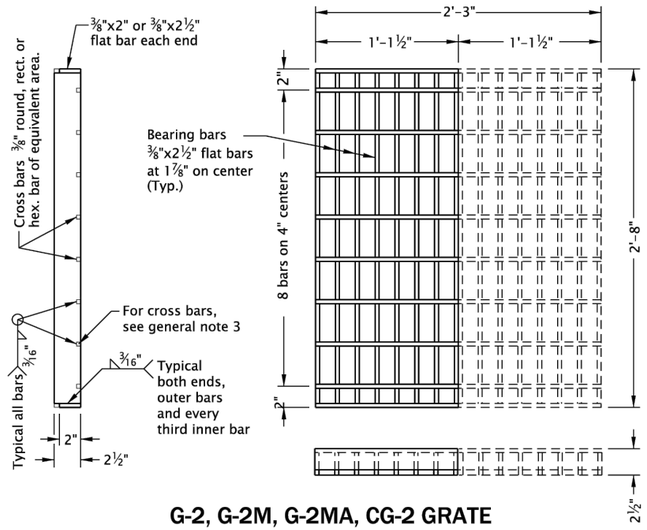
EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. DC11
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

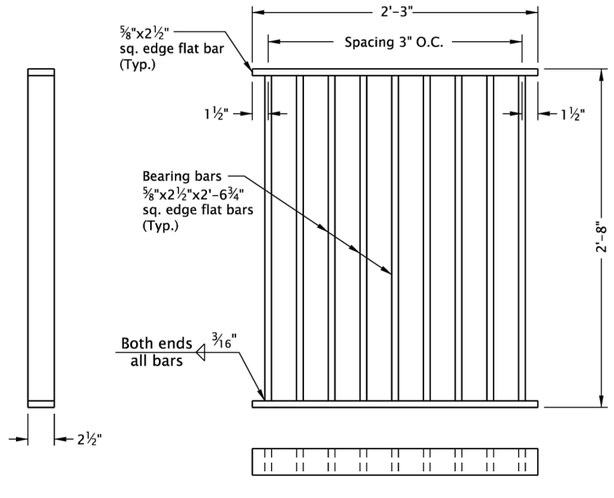
RD366.dgn
20-JUL-2020
DRAWING NAME: CWL10-PH2 DC01 STANDARD DETAILS.DWG



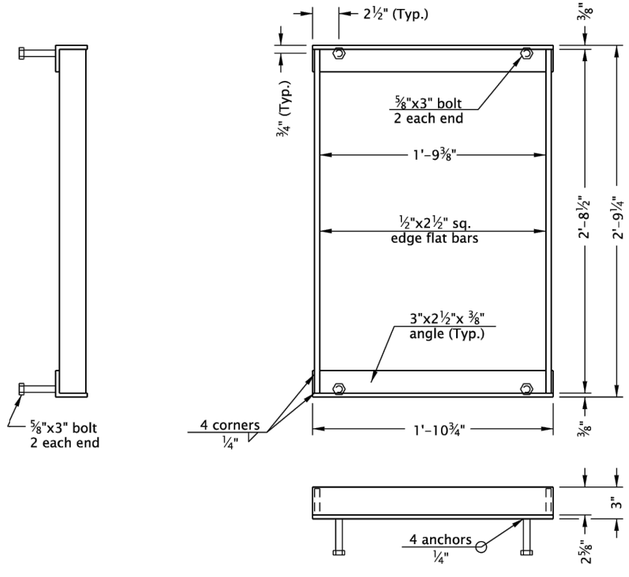
G-1, CG-1 GRATE
(TYPE 2)
(Bicycle-safe)



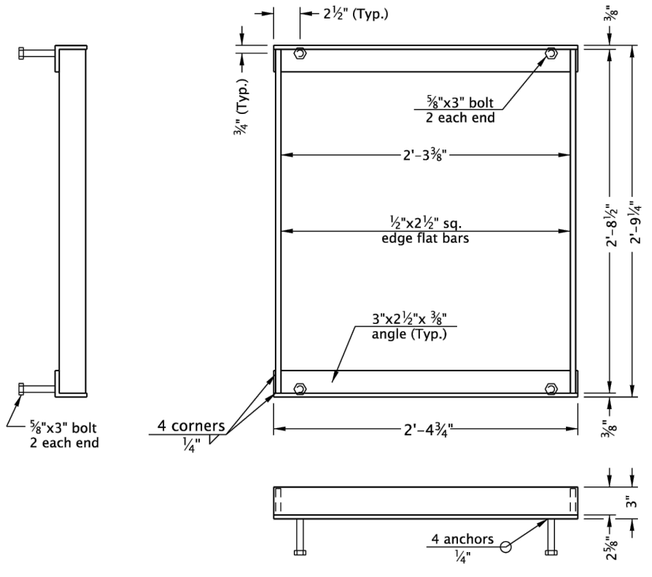
G-2, G-2M, G-2MA, CG-2 GRATE
(TYPE 2)
(Bicycle-safe)
(2 grates required per inlet, as shown)



G-2, G-2M, G-2MA, CG-2 GRATE
(TYPE 1)
(See general note 2)



G-1, CG-1 FRAME



G-2, G-2M, G-2MA, CG-2 FRAME

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. For inlet details, see appropriate inlet standard drawing(s).
2. Type 1 grate allowed only in locations not subject to bicycle or pedestrian use.
3. ⅜" cross bars shall be flush with the top of grate surface and may be fillet welded, resistance welded or electroforged to bearing bars.
4. Hot dip galvanize after fabrication.
5. Cast iron grate and frame are acceptable alternates. See ODOT's QPL.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

FRAMES & GRATES FOR CONCRETE INLETS

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 14-JUL-2014 | **RD365**

Effective Date: December 1, 2025 – May 31, 2026

STANDARD DETAILS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

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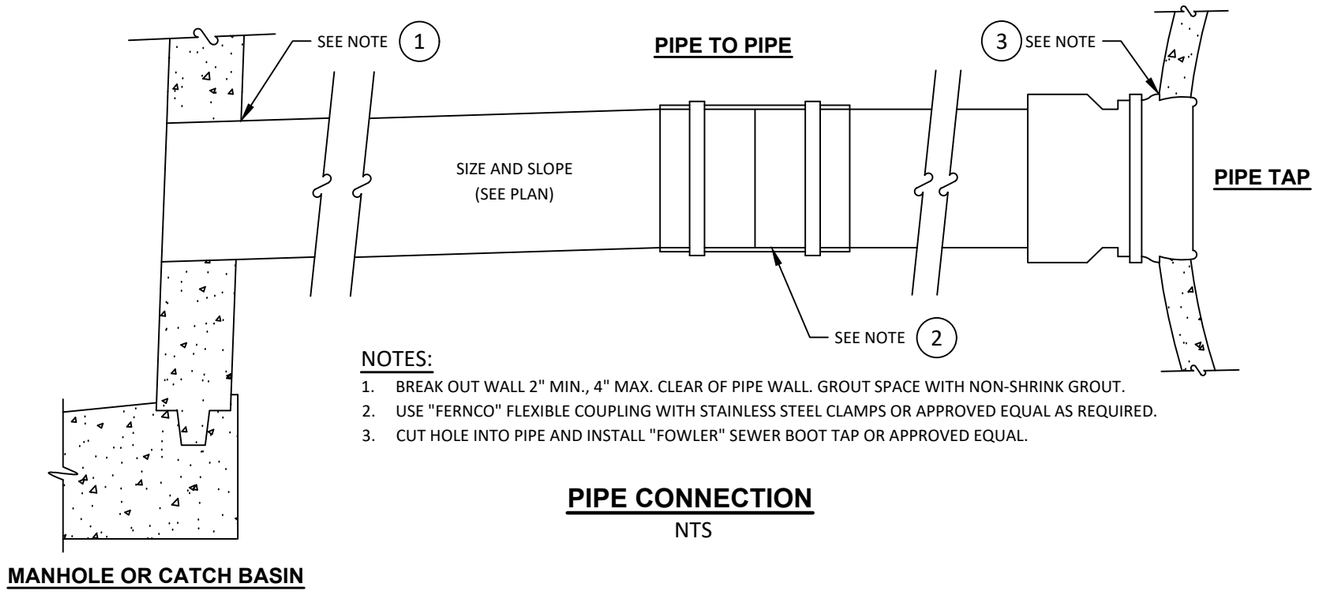
CITY OF West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. DC12
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

20-JUL-2020
RD365.dgn
DRAWING NAME: CWL10-PH2 DC01 STANDARD DETAILS.DWG



PIPE TO PIPE

PIPE TAP

NOTES:

1. BREAK OUT WALL 2" MIN., 4" MAX. CLEAR OF PIPE WALL. GROUT SPACE WITH NON-SHRINK GROUT.
2. USE "FERNCO" FLEXIBLE COUPLING WITH STAINLESS STEEL CLAMPS OR APPROVED EQUAL AS REQUIRED.
3. CUT HOLE INTO PIPE AND INSTALL "FOWLER" SEWER BOOT TAP OR APPROVED EQUAL.

PIPE CONNECTION

NTS

MANHOLE OR CATCH BASIN

STANDARD DETAILS

BITTNER-LONG SAFE ROUTES

WEST LINN, OREGON

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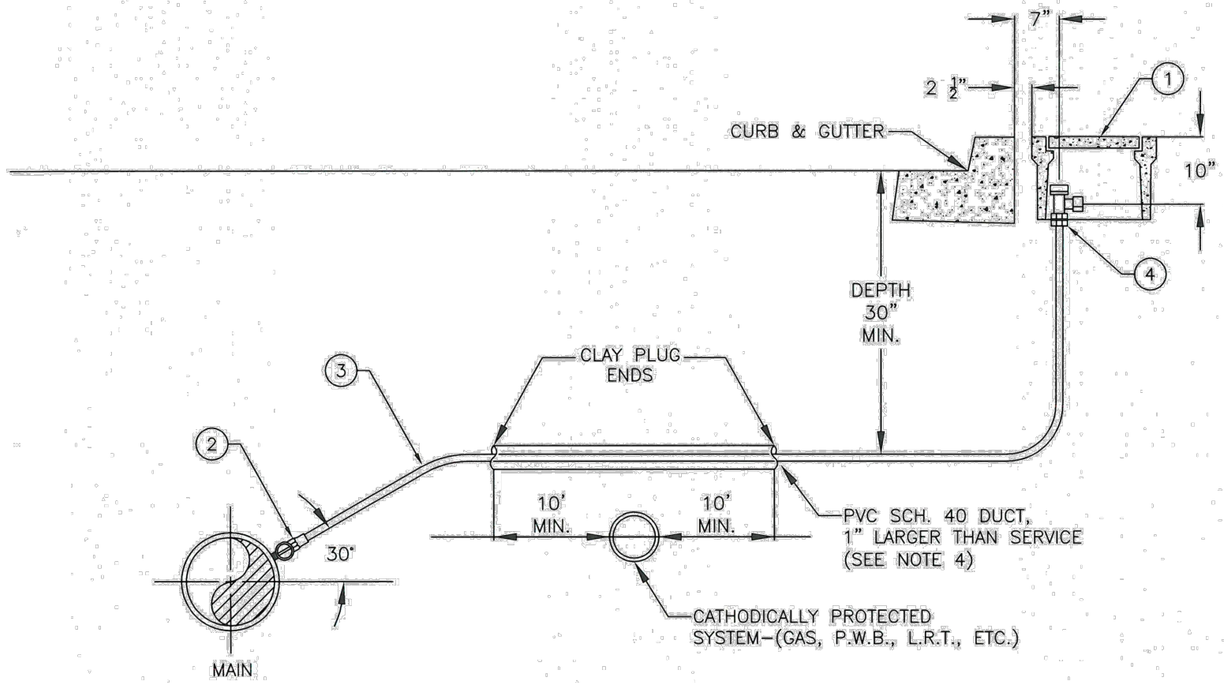
City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. DC13
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

DRAWING NAME: CWL10-PH2-DC01 STANDARD DETAILS.DWG



MATERIALS:

1. METER BOX: DFW PLASTICS MODEL DFW486WBC4, OR APPROVED EQUAL
2. CORPORATION STOP: MUELLER 1" B–25008 300 PSI BALL TYPE CORP, OR APPROVED EQUAL
3. COPPER TUBING: 1" SEAMLESS SOFT TEMPER, TYPE "K", COMPLYING WITH ASTM B–88
4. ANGLE STOP: MUELLER 1" B–24258 FULL PORT 300 PSI BALL VALVE NO LEAD ANGLE STOP, OR APPROVED EQUAL

NOTE:

1. MACHINE DRILL OR TAP, HAND DRILLING IS NOT ALLOWED.
2. BACKFILL WITHIN PIPE AND STRUCTURE ZONE WITH 3/4" – 0" AGGREGATE BASE. COMPACT TO 95% MAX DENSITY AS DETERMINED BY AASHTO T–180.
3. WHEN AN ACTIVE CATHODIC PROTECTED SYSTEM IS ENCOUNTERED, SCH. 40 PVC SHALL BE INSTALLED AS SHOWN WITH CLAY PLUG.
4. METER BOX SHALL BE CENTERED OVER THE COMPLETED METER ASSEMBLY.
5. SERVICE TAPS INTO MAIN SHOULD HAVE 18" MIN. SEPARATION ON CENTER.
6. ANGLE METER STOPS SHALL BE 18" FROM ALL PROPERTY LINES AND NOT WITHIN A DRIVEWAY APPROACH.
7. METERS SHALL BE LOCATED BEHIND SIDEWALKS OR PLACED IN PLANTER STRIPS. BOXES THAT HAVE TO BE PLACED IN SIDEWALKS NEED TO BE APPROVED BY THE CITY ENGINEER.

Title: 1–INCH WATER SERVICE

Standard Drawing No. WL–RD274

Effective Date: 08/01/19

Approved: City Engineer

City of West Linn
PUBLIC WORKS DEPARTMENT – STANDARD DRAWINGS
22500 Salamo Road, West Linn OR 97068
Phone:503–722–5500
www.westlinnoregon.gov

NOTE: All material and workmanship shall be in accordance with the City of West Linn Standard Construction Specifications.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

File WL–RD274.dwg

STANDARD DETAILS
BITTNER–LONG SAFE ROUTES
WEST LINN, OREGON

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City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
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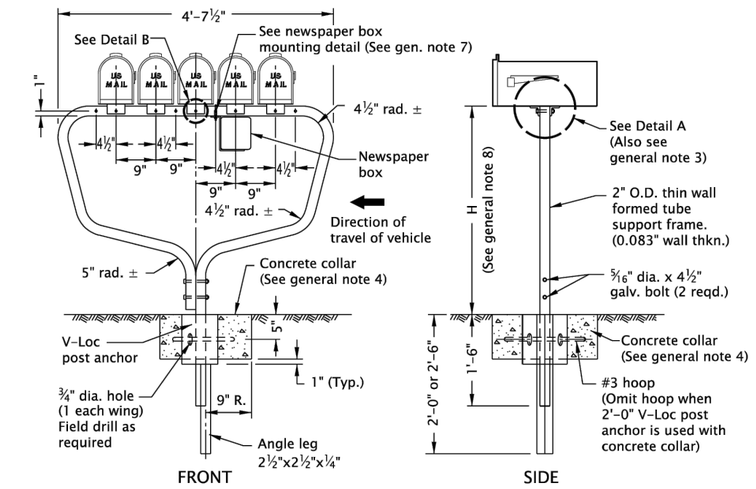
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/27

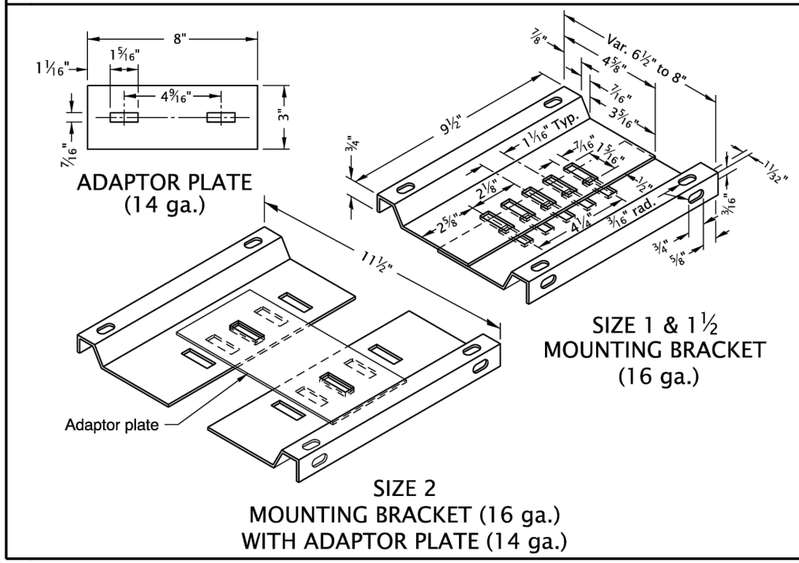
DESIGNED: HHPR TEAM	SHEET NO. DC14
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

DRAWING NAME: CWL10-PH2 DC01 STANDARD DETAILS.DWG



CONCRETE COLLAR
(See general note 4)

MULTIPLE SUPPORT
(Supports 5 standard (Sizes 1 & 1½) mailboxes or 4 large (Size 2) mailboxes)



SIZE 1 & 1½
MOUNTING BRACKET
(16 ga.)

SIZE 2
MOUNTING BRACKET (16 ga.)
WITH ADAPTOR PLATE (14 ga.)

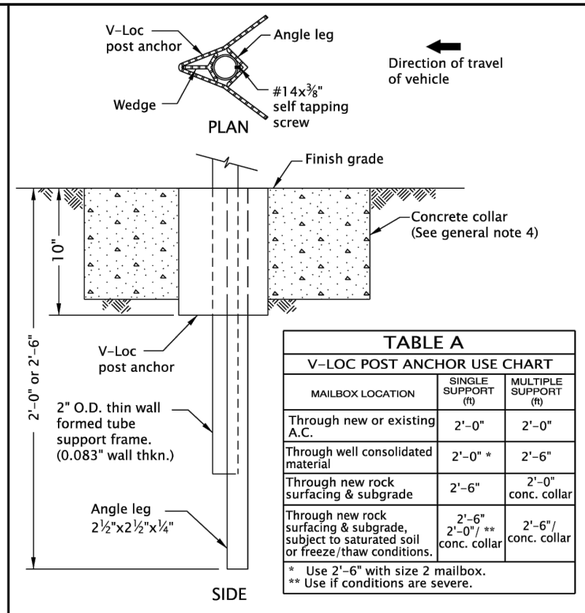
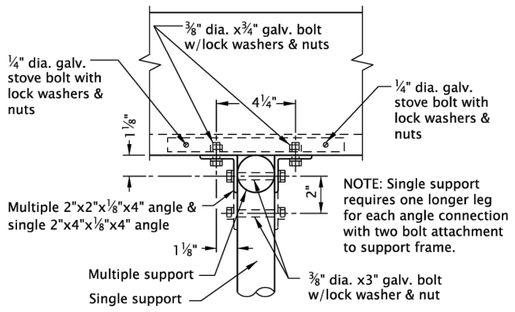


TABLE A
V-LOC POST ANCHOR USE CHART

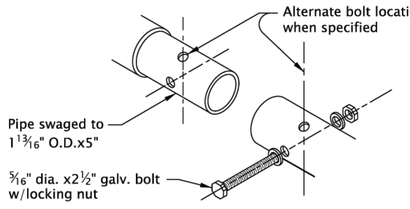
MAILBOX LOCATION	SINGLE SUPPORT (ft)	MULTIPLE SUPPORT (ft)
Through new or existing A.C.	2'-0"	2'-0"
Through well consolidated material	2'-0" *	2'-6"
Through new rock surfacing & subgrade	2'-6"	2'-0" conc. collar
Through new rock surfacing & subgrade, subject to saturated soil or freeze/thaw conditions.	2'-6" 2'-0"/ ** conc. collar	2'-6"/ conc. collar

* Use 2'-6" with size 2 mailbox.
** Use if conditions are severe.

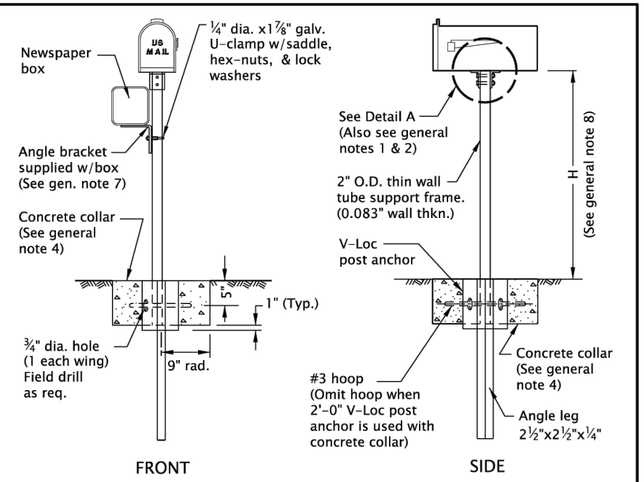
POST MOUNTING SOCKET



DETAIL A



DETAIL B



SINGLE SUPPORT

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Angle connections to be parallel to traffic flow for Size 2 mailbox mounted on single post.
2. All holes in the tube support frame are to be predrilled by the manufacturer.
3. Size 2 mailbox mounted on a multiple support requires 2 each ⅜" dia. x⅝" galv. bolts with lock washers and nuts to attach the adaptor plate to the mounting bracket. The unit will then require 4 angle connections to attach to the formed tube support frame. See Detail A.
4. Provide concrete collar when any of the following conditions exist:
   a) when required in Table A
   b) when required by project plans
   c) as directed by the Engineer
   Concrete collar, when required, to be poured in place after V-Loc post anchor has been installed, level and plumb. Do not excavate below bottom of V-Loc post anchor. Care shall be taken that no concrete is placed within anchor.
5. Other proprietary products available as listed in ODOT's QPL.
6. For mailbox installation locations, see Std. Dwg. RD101 and project plans.
7. For Newspaper Box Mounting Detail, see Std. Dwg. RD101.
8. Mounting height (H) shall be from 41″ Min. to 45″ Max. (42" nominal), measured from vehicle driving surface.
9. See project plans for detail not shown.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

MAILBOX SUPPORT

2024

DATE	REVISION DESCRIPTION
12-2023	REVISED NOTES AND DETAILS

CALC. BOOK NO. N/A | SDR DATE 19-JAN-2024 | **RD100**

Effective Date: December 1, 2025 - May 31, 2026

STANDARD DETAILS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

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CITY OF West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

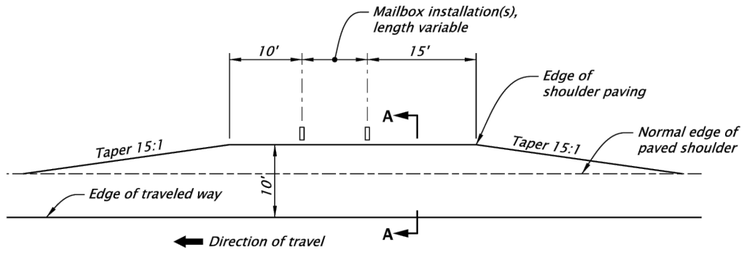
EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. DC15
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

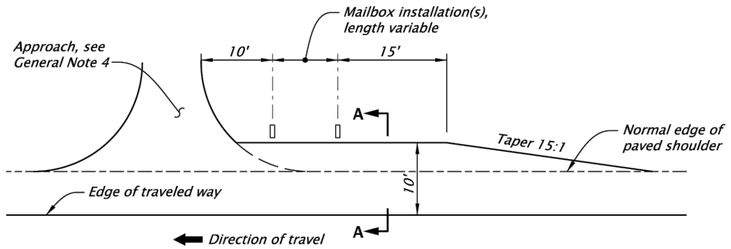
19-JAN-2024

RD100.dgn

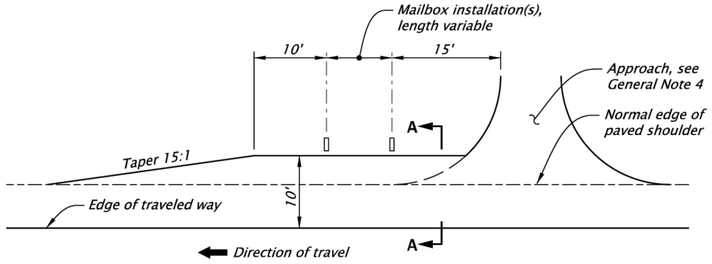
DRAWING NAME: CWL10-PH2 DC01 STANDARD DETAILS.DWG



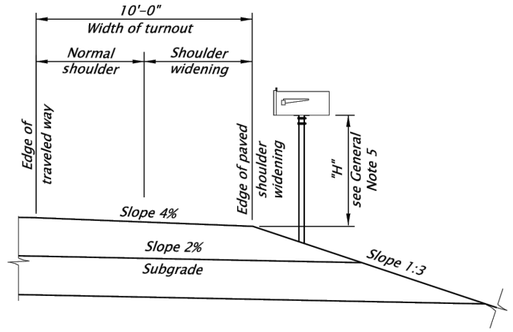
MAILBOX SERVICE TURNOUT



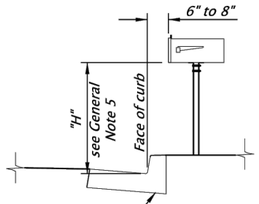
MAILBOX SERVICE TURNOUT BEFORE APPROACH



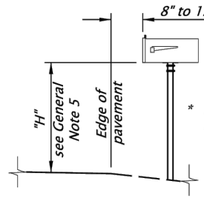
MAILBOX SERVICE TURNOUT AFTER APPROACH



INSTALLATION AT MAILBOX TURNOUT
SECTION A-A



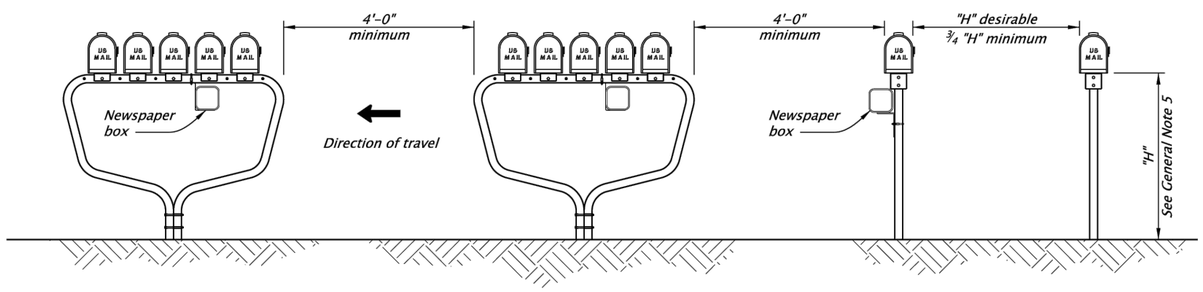
CURBED SECTION



NON-CURBED SECTION

* May be reduced to zero if turnout is provided

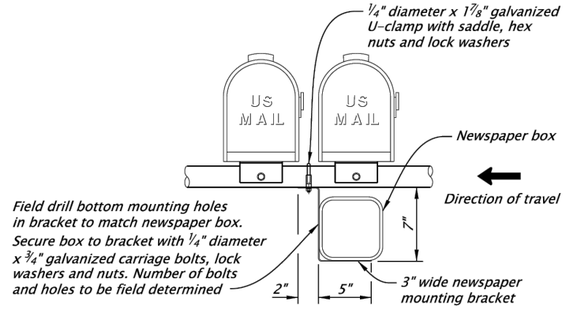
TYPICAL MAILBOX INSTALLATIONS



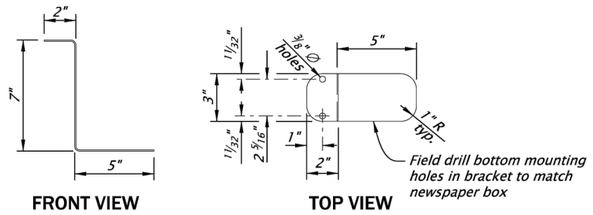
TYPICAL MAILBOX SUPPORT SPACING

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. *All holes in the tube support frame are to be predrilled by the manufacturer.*
2. *Other proprietary products available as listed in ODOT's QPL.*
3. *For mailbox support details, see Std. Dwg. RD100.*
4. *For approach details, see Std. Dwg. RD715.*
5. *Mounting height ("H") shall be from 41 inches minimum to 45 inches maximum (42 inches nominal), measured from vehicle driving surface.*
6. *See project plans for details not shown.*



NEWSPAPER BOX MOUNTING DETAIL



FRONT VIEW

TOP VIEW

NEWSPAPER BOX MOUNTING BRACKET
(14 ga.)

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

MAILBOX INSTALLATION

2024

DATE	REVISION DESCRIPTION
01-2024	REVISED NOTES AND DETAILS, UPDATED DRAWING CAD STANDARDS

CALC. BOOK NO. N/A | SDR DATE ~~19-JAN-2024~~ | **RD101**

Effective Date: December 1, 2025 - May 31, 2026

STANDARD DETAILS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

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City of West Linn

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JAN. 10, 2017
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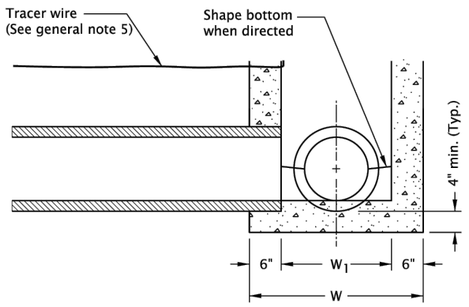
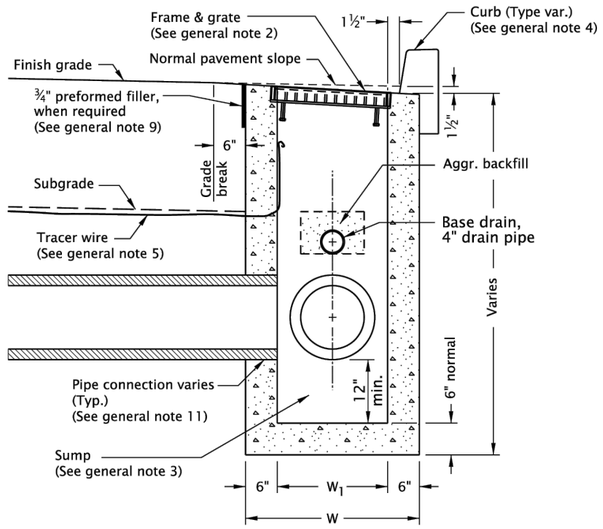
EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. DC16
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

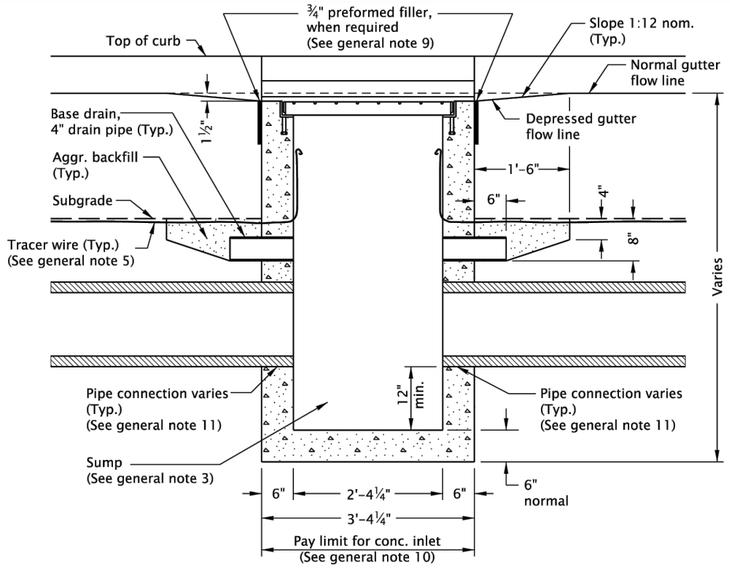
19-JAN-2024
RD101.dgn
DRAWING NAME: CWL10-PH2 DC01 STANDARD DETAILS.DWG



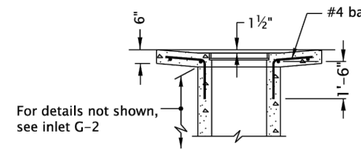
DETAIL A
WITHOUT SUMP



SECTION B - B



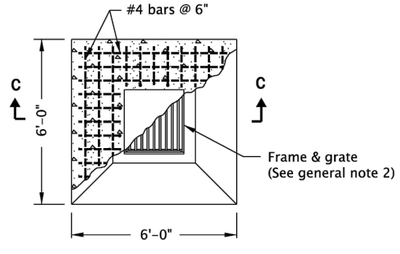
SECTION A - A



SECTION C-C

NOTE:

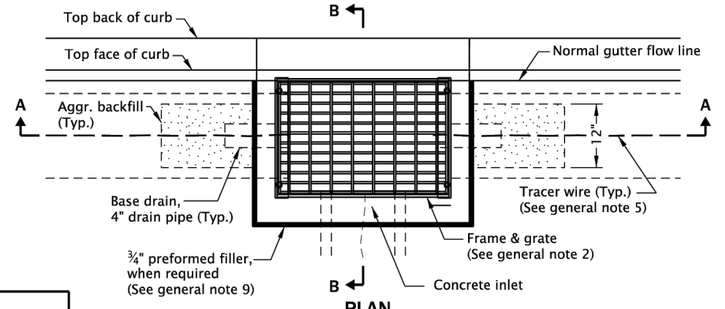
All reinforcement to be placed 2" clear of nearest face of concrete unless shown or noted otherwise



PLAN

TYPE G-2MA

TABLE A		
INLET TYPE	W	W_1
G-1	2'-8⅞"	1'-8⅞"
G-2, G-2M, G-2MA	3'-3⅜"	2'-3⅜"



PLAN

TYPE G-1, G-2, G-2M

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Where precast inlets are used as an alternate to cast-in-place inlets, a 4" compacted leveling bed of sand or ¼"-0 crushed aggregate shall be provided. All precast inlets shall conform to requirements of ASTM C913.
2. Graphics show G-1 inlet with Type 2 grate. See Table A for inlet dimensions.
   Type 1 grate allowed only in locations not subject to bicycle or pedestrian use.
   For frame and grate details, see Std. Dwg. RD365.
3. Provide sump only where shown on plans, and allowed by jurisdiction. See Detail A for inlet without sump.
4. For curb details, see Std. Dwgs. RD700 & RD701.
5. See Std. Dwg. RD336 for tracer wire details, or approved alternate.
6. Max. pipe diameter varies with pipe material.
7. Location, elevation, diameter, slope, and number of pipe(s) varies, see project plans.
8. All concrete shall be commercial grade concrete.
9. ¾" preformed filler (in concrete pavement or gutter only) to extend through thickness of concrete.
10. See Std. Dwg. RD363 for gutter transition section, when curb and gutter are required.
11. See Std. Dwg. RD339 for pipe to structure connections.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

CONCRETE INLETS
TYPE G-1, G-2, G-2M, & G-2MA

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 21-JUL-2015 | **RD364**

Effective Date: December 1, 2025 - May 31, 2026

STANDARD DETAILS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

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EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. DC17
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

20-JUL-2020

RD364.dgn

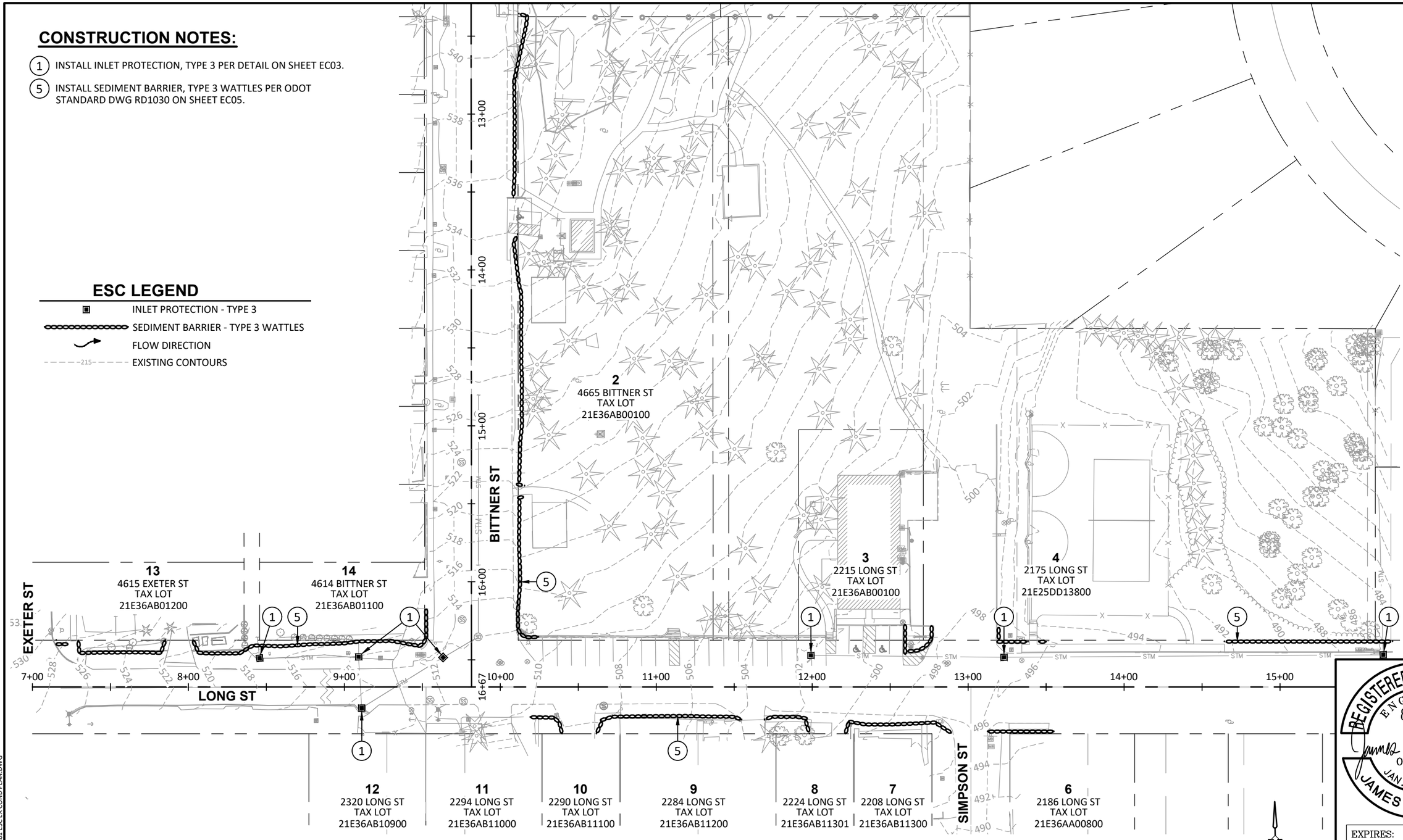
DRAWING NAME: CWL10-PH2 DC01 STANDARD DETAILS.DWG

CONSTRUCTION NOTES:

1. INSTALL INLET PROTECTION, TYPE 3 PER DETAIL ON SHEET EC03.
5. INSTALL SEDIMENT BARRIER, TYPE 3 WATTLES PER ODOT STANDARD DWG RD1030 ON SHEET EC05.

ESC LEGEND

- INLET PROTECTION - TYPE 3
- SEDIMENT BARRIER - TYPE 3 WATTLES
- FLOW DIRECTION
- 215 EXISTING CONTOURS



NOTE: INSTALL INLET PROTECTION AT NEAREST DOWNSTREAM INLET OF SIMPSON ST.

0 15 30 60
SCALE: 1" = 60'

ESCP - EXISTING CONDITIONS

BITTNER-LONG SAFE ROUTES

WEST LINN, OREGON

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EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. EC01
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

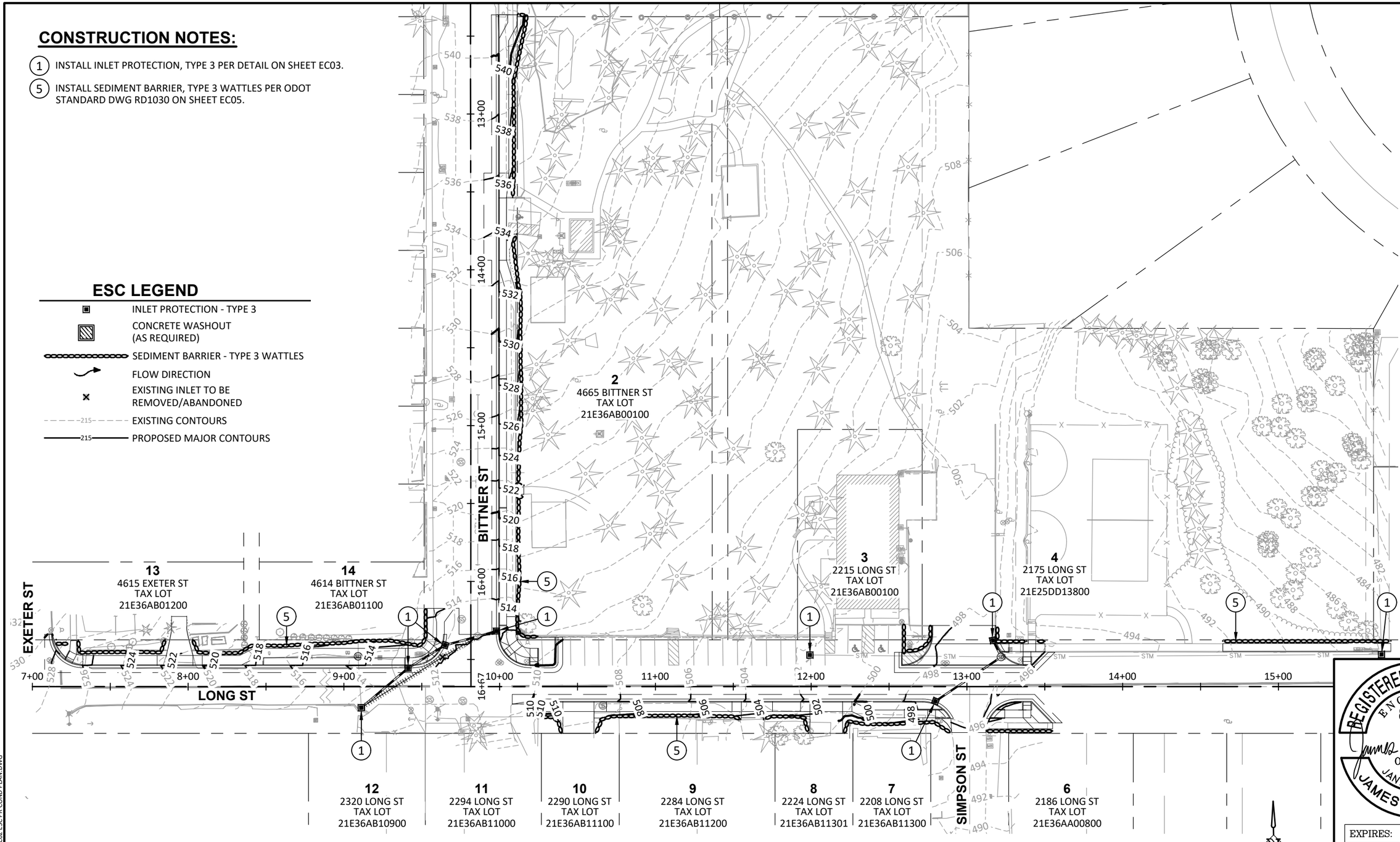
DRAWING NAME: CWL10-PH2 EC01 ESC EX COND PLAN.DWG

CONSTRUCTION NOTES:

1. INSTALL INLET PROTECTION, TYPE 3 PER DETAIL ON SHEET EC03.
5. INSTALL SEDIMENT BARRIER, TYPE 3 WATTLES PER ODOT STANDARD DWG RD1030 ON SHEET EC05.

ESC LEGEND

- INLET PROTECTION - TYPE 3
- CONCRETE WASHOUT (AS REQUIRED)
- SEDIMENT BARRIER - TYPE 3 WATTLES
- FLOW DIRECTION
- EXISTING INLET TO BE REMOVED/ABANDONED
- 215 EXISTING CONTOURS
- 215 PROPOSED MAJOR CONTOURS



NOTE: INSTALL INLET PROTECTION AT NEAREST DOWNSTREAM INLET OF SIMPSON ST.

0 15 30 60
SCALE: 1" = 60'

ESCP - PROPOSED CONDITIONS

BITTNER-LONG SAFE ROUTES

WEST LINN, OREGON

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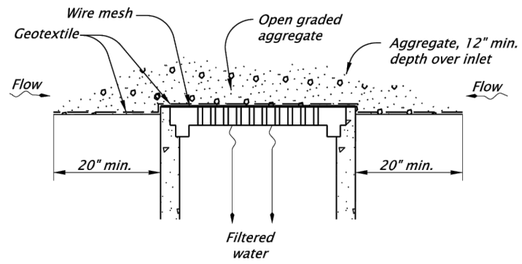
JAMES S. HOUF

EXPIRES: 6/30/27

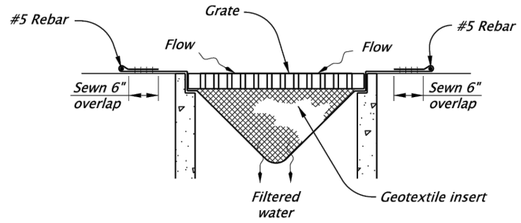
DESIGNED: HHPR TEAM	SHEET NO. EC02
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

DRAWING NAME: CWL10-PH2 EC02 ESC PR COND PLAN.DWG



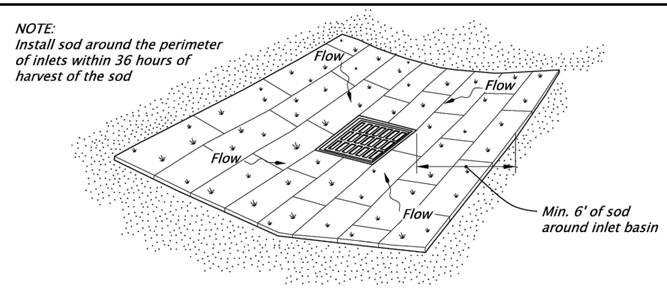
GEOTEXTILE/WIRE MESH/AGGREGATE - TYPE 2

NOT TO SCALE



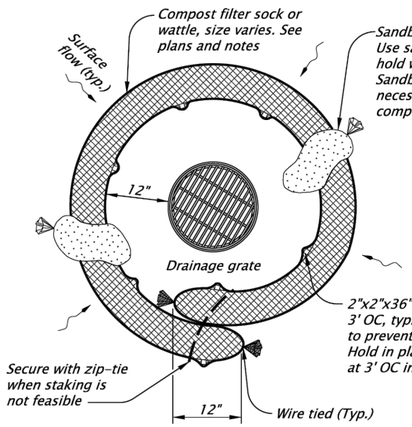
PREFABRICATED FILTER INSERT - TYPE 3

NOT TO SCALE

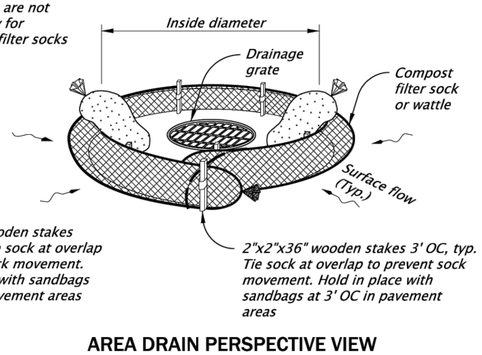


SOD PROTECTION - TYPE 6

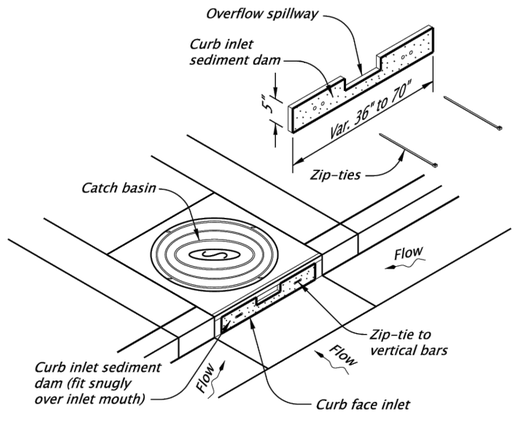
NOT TO SCALE



AREA DRAIN PLAN

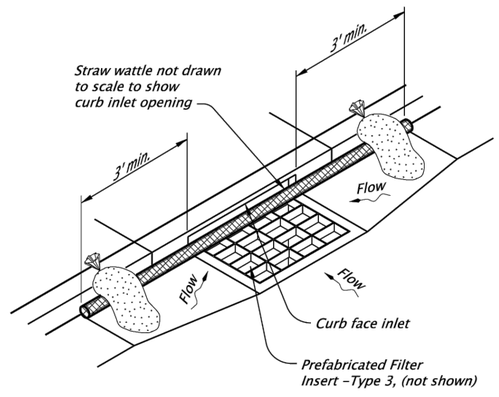


AREA DRAIN PERSPECTIVE VIEW



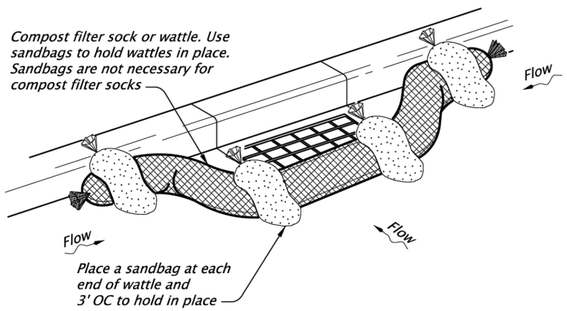
CURB INLET SEDIMENT DAM - TYPE 10

NOT TO SCALE



WATTLE BARRIER WITH FILTER INSERT - TYPE 11

NOT TO SCALE



CURB INLET PERSPECTIVE VIEW

COMPOST FILTER SOCK OR WATTLE - TYPE 7

NOT TO SCALE

NOTES:
Type 2 – Geotextile/wire mesh/aggregate
Place the wire mesh over the grate.
Place sediment fence geotextile over the wire mesh and perimeter area around structure.
Install aggregate over the geotextile fabric.

Type 3 – Prefabricated filter inserts
Install prefabricated filter inserts according to the plans, special provisions, and manufacturer recommendations.
Prefabricated inserts with provisions for overflow are allowed only when accompanied by additional BMP's to prevent the potential of sediments entering project storm systems.
Field fabricated inserts are not allowed.

Type 7 – Compost filter sock
Drive 2"x2" wood stakes a minimum of 6" into ground and flush with the top of the sock.
Overlap ends of sock per manufacturers recommendations (12"min., 36" max.).
Use 8" to 12" dia sock on curbside in traffic areas.

(Type 7 cont.)
Use 12" to 18" dia sock in non-traffic areas or areas where the larger socks can be used safely.
use synthetic mesh socks for temporary installations.

Type 10 – Curb inlet sediment dam
Fit curb inlet sediment dam snugly into inlet mouth. Curb inlet sediment dam is required for use with inlet filter insert where at-grade inlet grate and curb inlet are combined at a catch basin.

Type 11 – Wattle barrier with filter insert
Install prefabricated filter insert per Type 3 detail.
Install wattles over opening and 36" to each side of opening tight against curb. Adjust wattle to force storm water to flow through filter insert or wattle prior to leaving the site.
Adjust, replace or modify the inlet protection as needed to prevent sediment laden water from entering the catch basin.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

INLET PROTECTION TYPE 2, 3, 6, 7, 10 AND 11

2024

DATE	REVISION DESCRIPTION
01-2021	REMOVED CALC BOOK NUMBERS
01-2021	MOVED NOTES UP FROM OVERLAPPING THE SHEET BORDER

CALC. BOOK NO. N/A | SDR DATE 20-JAN-2021 | **RD1010**

Effective Date: December 1, 2025 - May 31, 2026

20-JAN-2021

RD1010.dgn

DRAWING NAME: CWL10-PH2 EC03 ESC DETAILS.DWG

ESCP - EROSION CONTROL DETAILS

BITTNER-LONG SAFE ROUTES

WEST LINN, OREGON

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City of West Linn

REGISTERED PROFESSIONAL ENGINEER
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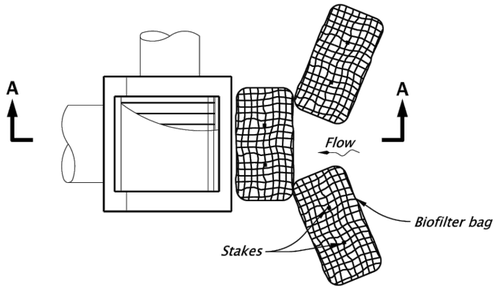
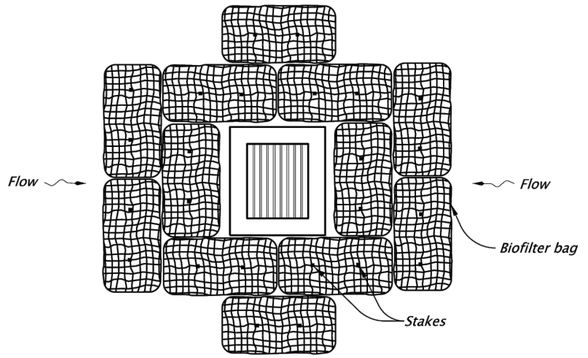
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/27

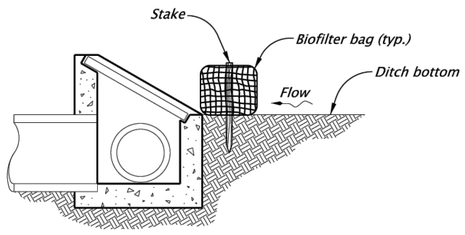
DESIGNED: HHPR TEAM	SHEET NO. EC03
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10



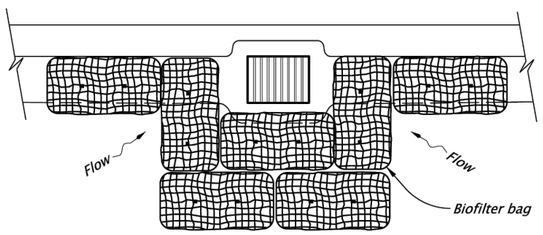
PLAN
DITCH INLET



PLAN
AREA DRAIN



SECTION A-A
DITCH INLET



PLAN
CATCH BASIN

BIOFILTER BAGS - TYPE 4

NOT TO SCALE

NOTES:

1. *Stake biofilter bags with 2"x2"x36" wood stakes, and use a minimum 2 stakes per bag. Drive stakes a minimum of 6" into the ground and flush with the top of the bags.*
2. *Omit stakes when bags are placed on pavement surface.*
3. *Overlap all bag joints 6".*
4. *Biofilter bags used on active roadways are easily displaced and made ineffective if struck by vehicles. If struck by a cyclist, falls with injury could result. On active roadways alternative inlet protection should be considered.*

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

INLET PROTECTION TYPE 4

2024

DATE	REVISION DESCRIPTION
01-2021	REMOVED CALC BOOK NUMBERS

CALC. BOOK NO. N/A | SDR DATE 20-JAN-2021 | **RD1015**

Effective Date: December 1, 2025 - May 31, 2026

ESCP - EROSION CONTROL DETAILS

BITTNER-LONG SAFE ROUTES

WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS♦PLANNERS
LANDSCAPE ARCHITECTS♦SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

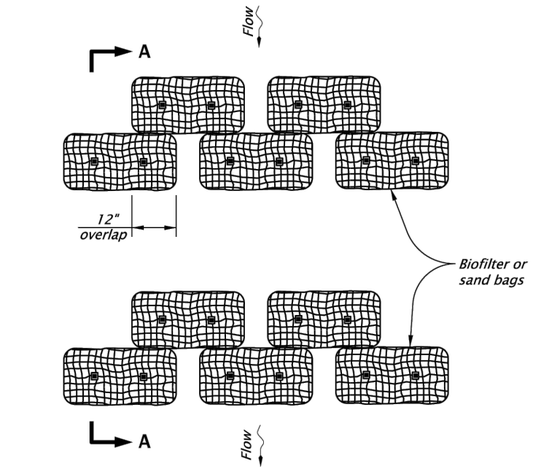
REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/27

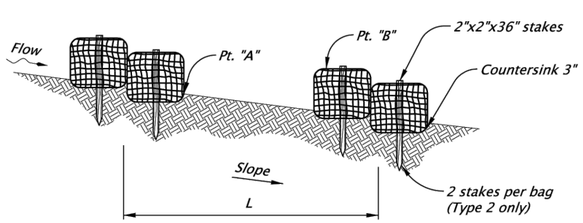
DESIGNED: HHPR TEAM	SHEET NO. EC04
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

RD1015.dgn 20-JAN-2021

DRAWING NAME: CWL10-PH2 EC03 ESC DETAILS.DWG



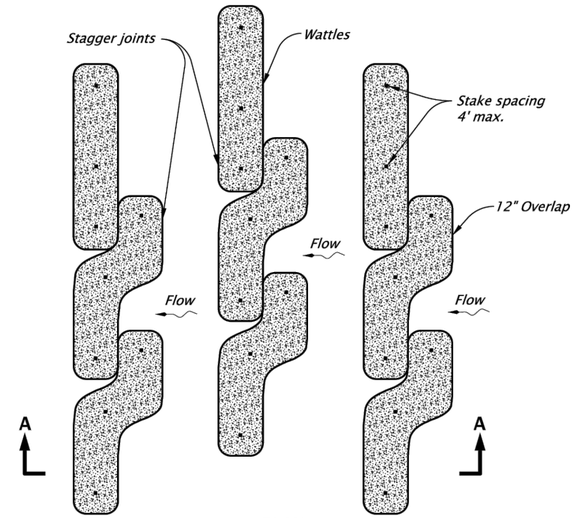
PLAN



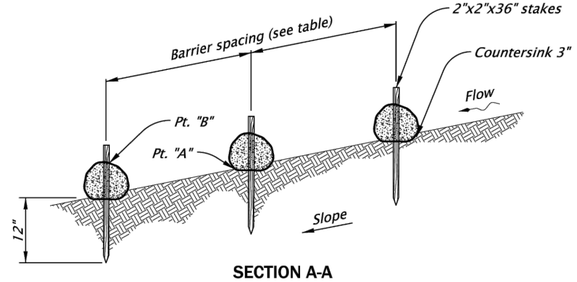
SECTION A-A

BIOFILTER BAG / SAND BAG BARRIER - TYPE 2 AND 4

NOT TO SCALE



PLAN



SECTION A-A

FIBER ROLL BARRIER - TYPE 3

NOT TO SCALE

NOTES:

1. *For Type 2 barrier, drive stakes flush with top of bag and into undisturbed ground a min. of 12". Omit stakes if bags are placed on paved surface.*
2. *For Type 2 and Type 4 barriers, space bags (L) so that the elevation of point "A" is less than or equal to the elevation of point "B".*

Type 2 – Biofilter bags
Type 3 – Wattles
Type 4 – Sand bags

BARRIER SPACING		
INSTALL PARALLEL ALONG CONTOURS AS FOLLOWS		
% SLOPE	*% SLOPE*	*MAXIMUM SPACING ON SLOPE*
10% Flatter	*1:10 or Flatter*	*300'*
10 > % ≥ 15	*10 > X ≥ 7.5*	*150'*
15 > % ≥ 20	*7.5 > X ≥ 5*	*100'*
20 > % ≥ 30	*5 > X ≥ 3*	*50'*
Steeper than 30%	*Steeper than 1:3*	*25'*

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

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OREGON STANDARD DRAWINGS

SEDIMENT BARRIER TYPE 2, 3 AND 4

2024

DATE	REVISION DESCRIPTION
01-2021	REMOVED CALC BOOK NUMBERS

CALC. BOOK NO. N/A | SDR DATE 20-JAN-2021 | **RD1030**

Effective Date: December 1, 2025 - May 31, 2026

ESCP - EROSION CONTROL DETAILS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

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CITY OF West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. EC05
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

RD1030.dgn 20-JAN-2021

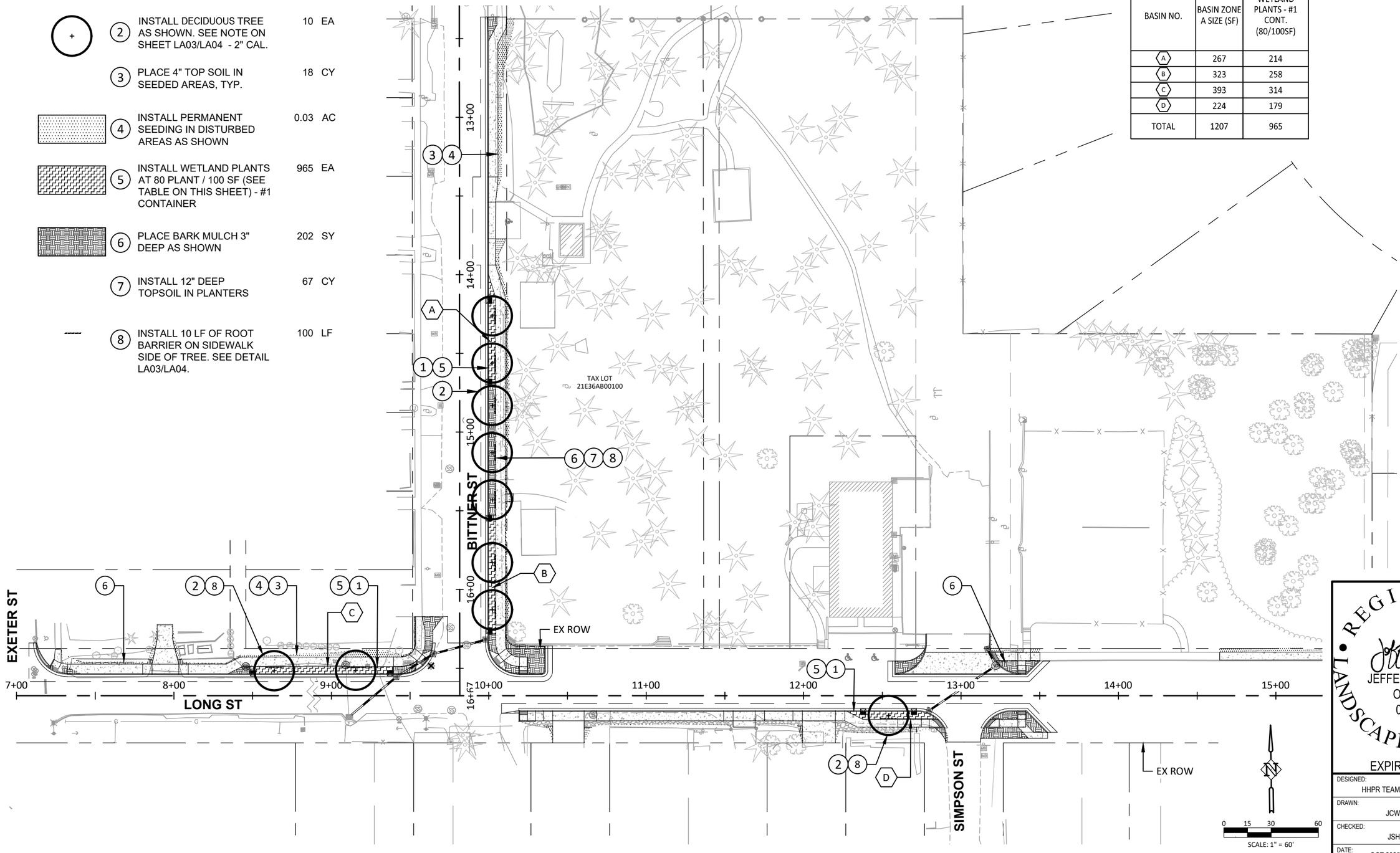
DRAWING NAME: CWL10-PH2 EC03 ESC DETAILS.DWG

CONSTRUCTION NOTES:

1	PLACE 12" WATER QUALITY MIXTURE IN PLANTERS, TYP.	45	CY
2	INSTALL DECIDUOUS TREE AS SHOWN. SEE NOTE ON SHEET LA03/LA04 - 2" CAL.	10	EA
3	PLACE 4" TOP SOIL IN SEEDED AREAS, TYP.	18	CY
4	INSTALL PERMANENT SEEDING IN DISTURBED AREAS AS SHOWN	0.03	AC
5	INSTALL WETLAND PLANTS AT 80 PLANT / 100 SF (SEE TABLE ON THIS SHEET) - #1 CONTAINER	965	EA
6	PLACE BARK MULCH 3" DEEP AS SHOWN	202	SY
7	INSTALL 12" DEEP TOPSOIL IN PLANTERS	67	CY
8	INSTALL 10 LF OF ROOT BARRIER ON SIDEWALK SIDE OF TREE. SEE DETAIL LA03/LA04.	100	LF

WATER QUALITY PLANTERS

WATER QUALITY PLANTER CALCULATIONS		
BASIN NO.	BASIN ZONE A SIZE (SF)	WETLAND PLANTS - #1 CONT. (80/100SF)
A	267	214
B	323	258
C	393	314
D	224	179
TOTAL	1207	965



LANDSCAPE PLAN

BITTNER-LONG SAFE ROUTES

WEST LINN, OREGON

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City of West Linn

REGISTERED LANDSCAPE ARCHITECT

747

JEFFERY P. CREEL

OREGON

05/13/11

EXPIRES: 05/31/26

DESIGNED: HHPR TEAM	SHEET NO. LA01
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

DRAWING NAME: CWL10-PH2 LA01 LANDSCAPE.DWG

GENERAL PLANTING NOTES

1. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT CITY OF WEST LINN STANDARDS AND OREGON BUILDING AND SPECIALITY CODES.
2. INSTALL EROSION CONTROL SYSTEMS IN ACCORDANCE WITH CITY OF WEST LINN STANDARDS PRIOR TO SITE WORK AND LANDSCAPE INSTALLATION.
3. CONTRACTOR SHALL MARK AND PROTECT ALL UTILITIES, SITE FEATURES, AND VEGETATION TO REMAIN IN PLACE.
4. CONTRACTOR SHALL REMOVE ALL WEEDS AND INVASIVE SPECIES PRIOR TO PLANTING OR SEEDING.
5. ALL AREAS DISTURBED BY STAGING AND CONSTRUCTION ACTIVITIES SHALL BE SEEDED AT NO ADDITIONAL COST TO THE OWNER.
6. ALL SEEDED AREAS SHALL BE STRIPPED OF VEGETATION, SCARIFIED AND RECEIVE 4" OF TOPSOIL PRIOR TO APPLICATION OF SEED.
7. LANDSCAPE INSTALLATION SHALL INCLUDE PROVISION FOR TEMPORARY IRRIGATION OF PLANT MATERIALS DURING THE ESTABLISHMENT PERIOD
8. PLANT MATERIAL INSTALLED SHALL CONFORM IN SIZE AND GRADE TO THE "AMERICAN STANDARD FOR NURSERY STOCK" CURRENT EDITION.
9. LANDSCAPE CONTRACTOR SHALL WATER PLANTINGS FOR DURATION OF 1 YEAR WARRANTY PERIOD AFTER INSTALLATION AND GUARANTEE ALL PLANTINGS TO BE IN SATISFACTORY HEALTH. LANDSCAPE CONTRACTOR SHALL REPLACE ALL DAMAGED, DEAD, OR DYING PLANTS COVERED BY WARRANTY WITHIN 30 DAYS OF INITIAL IDENTIFICATION OF CONDITION.

PLANT SCHEDULE

TREES

+	10	DECIDUOUS ST. TREE - SEE NOTE BELOW
	2" CAL.	B&B, WELL BRANCHED, LIMBED TO 6'

WETLAND PLANTS

	483	Juncus patens - Spreading Rush
	482	Carex obnupta - Slough Sedge
	#1 CONT.	CONT., FULL PLANTS, 80 PLANTS / 100 SF

SEED MIXES

			% PLS	LBS OF PLA/ 1000 SF
	.03 AC	PERMANENT SEEDING		
		Festuca rubra ssp fallax	20	8.00
		Festuca rubra	20	8.00
		Lolium perenee	30	12.00
		Agrostis calillaris var highland	20	8.00
		Trifolium repens	10	4.00
			TOTAL	40.00

MISC.

BARK MULCH - 3" DEEP

STREET TREES SHALL BE NYSSA SYLVATICA 'WILDFIRE' - WILDFIRE TUPELO OR SIMILAR SPECIES. CONTRACTOR TO COORDINATE WITH CITY ARBORIST PRIOR TO ORDERING AND INSTALLATION OF TREES.

LANDSCAPE LEGEND & NOTES

BITTNER-LONG SAFE ROUTES

WEST LINN, OREGON

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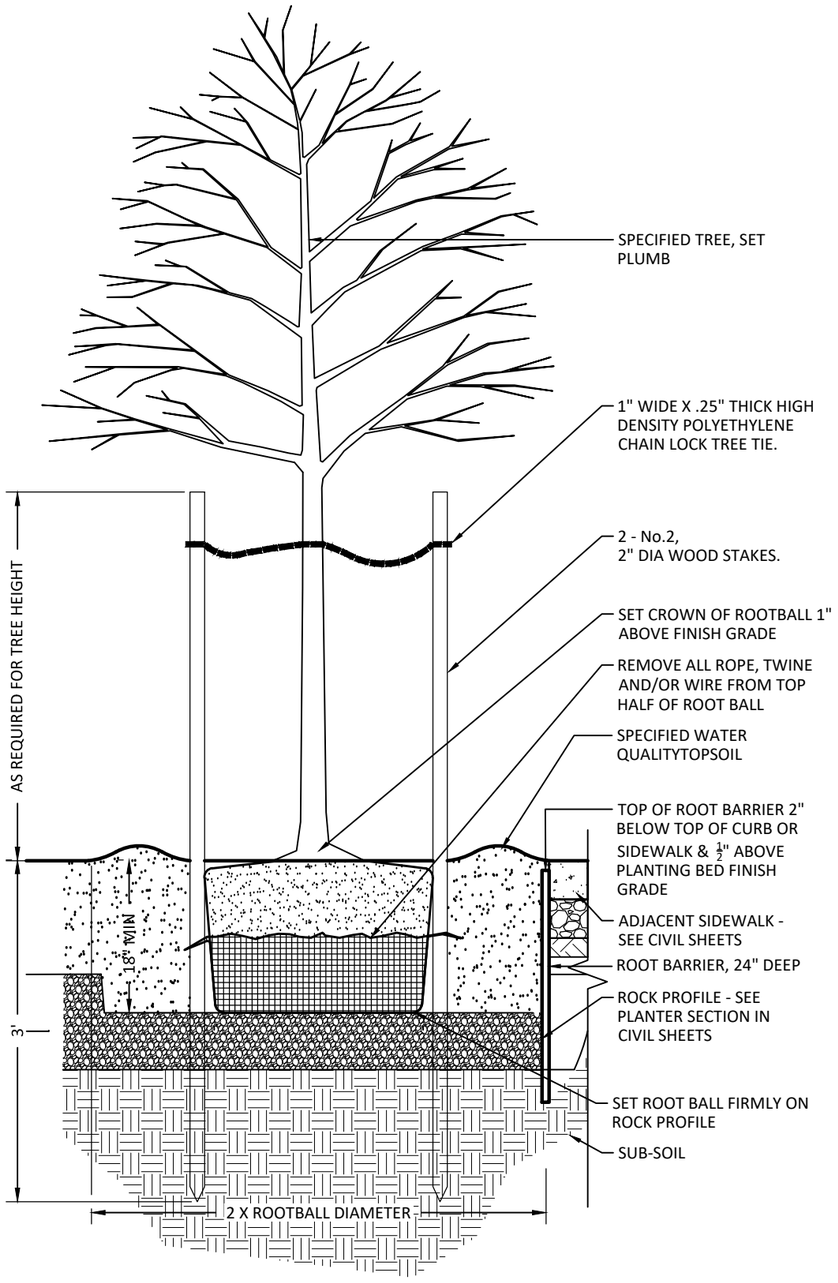
City of West Linn

REGISTERED LANDSCAPE ARCHITECT
747
JEFFERY P. CREEL
OREGON
05/13/11
EXPIRES: 05/31/26

DESIGNED: HHPR TEAM	SHEET NO. LA02
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

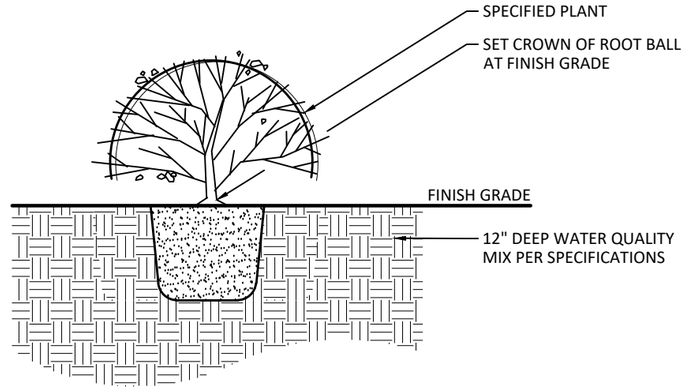
DRAWING NAME: CWL10-PH2 LA01 LANDSCAPE.DWG



3 DECIDUOUS TREE PLANTING IN SW PLANTER

Section

NOT TO SCALE

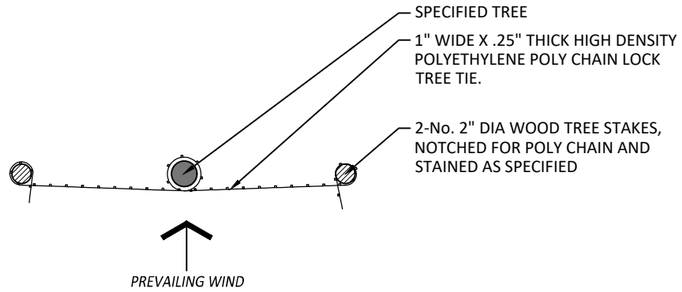


1 SHRUB PLANTING IN SWALE

Section

NOT TO SCALE

NOTE:
WRAP POLY CHAIN AROUND NOTCHED STAKE AND LOCK TO SECURE. WRAP CENTER OF POLY CHAIN AROUND TREE TRUNK TO MOVE 3" IN ALL DIRECTIONS.



2 TREE STAKING

Plan

NOT TO SCALE

LANDSCAPE DETAILS

BITTNER-LONG SAFE ROUTES

WEST LINN, OREGON

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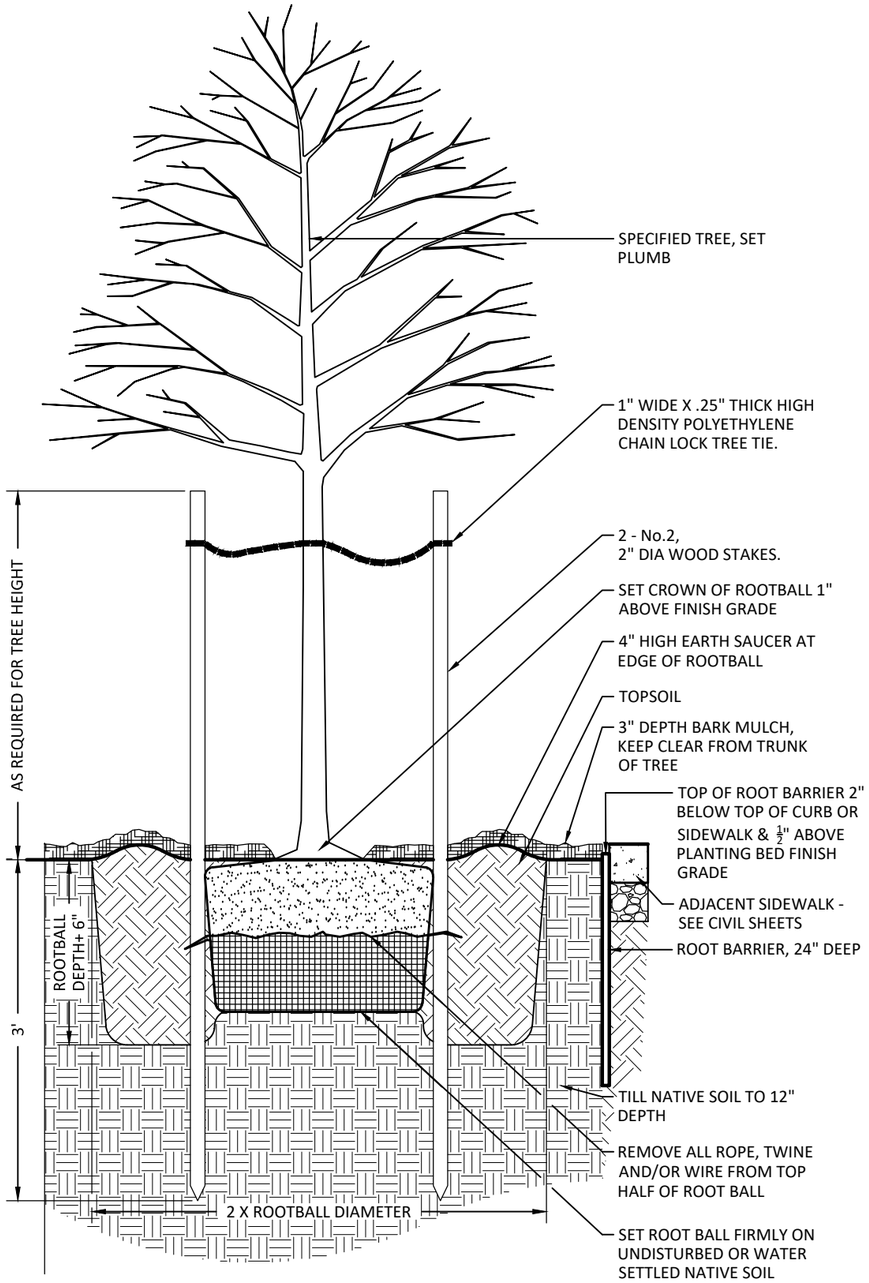
City of West Linn

REGISTERED
747
JEFFERY P. CREEL
OREGON
05/13/11
LANDSCAPE ARCHITECT
EXPIRES: 05/31/26

DESIGNED: HHPR TEAM	SHEET NO. LA03
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

DRAWING NAME: CWL10-PH2 LA01 LANDSCAPE.DWG



1 DECIDUOUS TREE PLANTING
Section

NOT TO SCALE

LANDSCAPE DETAILS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

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CITY OF West Linn

REGISTERED LANDSCAPE ARCHITECT
747
JEFFERY P. CREEL
OREGON
05/13/11
EXPIRES: 05/31/26

DESIGNED: HHPR TEAM	SHEET NO. LA04
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

DRAWING NAME: CWL10-PH2 LA01 LANDSCAPE.DWG

CONSTRUCTION NOTES:

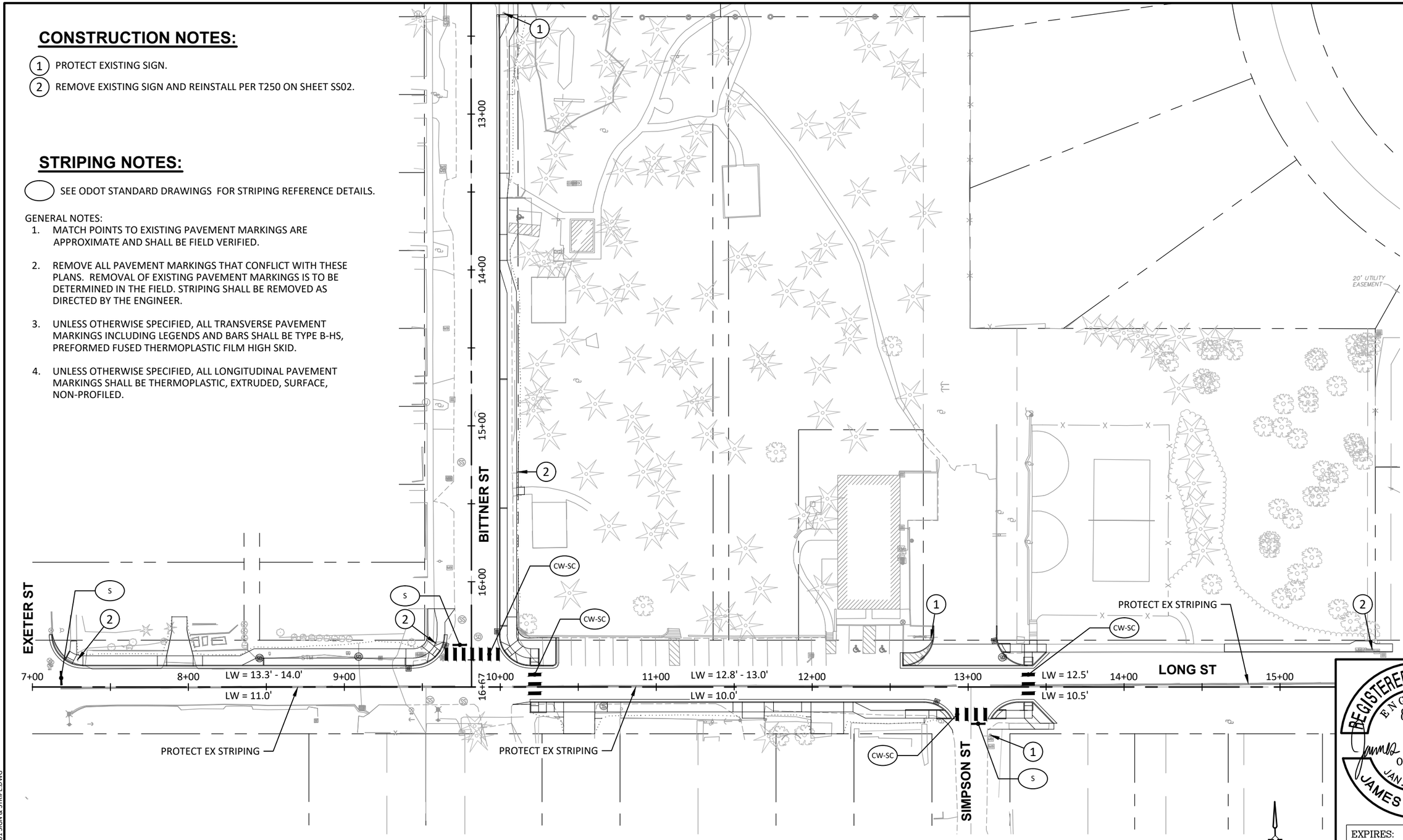
1. PROTECT EXISTING SIGN.
2. REMOVE EXISTING SIGN AND REINSTALL PER T250 ON SHEET SS02.

STRIPING NOTES:

SEE ODOT STANDARD DRAWINGS FOR STRIPING REFERENCE DETAILS.

GENERAL NOTES:

1. MATCH POINTS TO EXISTING PAVEMENT MARKINGS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED.
2. REMOVE ALL PAVEMENT MARKINGS THAT CONFLICT WITH THESE PLANS. REMOVAL OF EXISTING PAVEMENT MARKINGS IS TO BE DETERMINED IN THE FIELD. STRIPING SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.
3. UNLESS OTHERWISE SPECIFIED, ALL TRANSVERSE PAVEMENT MARKINGS INCLUDING LEGENDS AND BARS SHALL BE TYPE B-HS, PREFORMED FUSED THERMOPLASTIC FILM HIGH SKID.
4. UNLESS OTHERWISE SPECIFIED, ALL LONGITUDINAL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC, EXTRUDED, SURFACE, NON-PROFILED.



SIGNING & STRIPING PLAN

BITTNER-LONG SAFE ROUTES

WEST LINN, OREGON

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ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
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phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

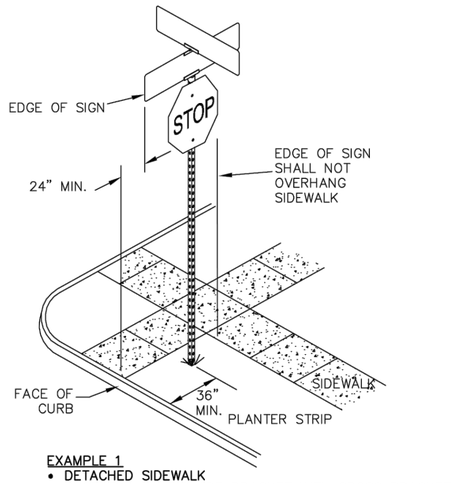
CITY OF West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

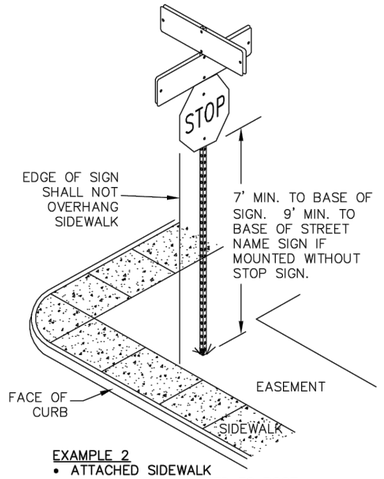
EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. SS01
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

DRAWING NAME: CWL10-PH2 SS01 SIGN & STRIPE.DWG

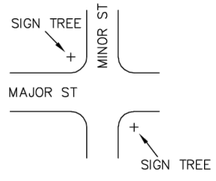


EXAMPLE 1
- DETACHED SIDEWALK
- POST TOP FLAT BLADE BRACKET WITH CROSS BRACKET



EXAMPLE 2
- ATTACHED SIDEWALK
- DOUBLE SIGNS RIVETED TO POST

TYPICAL SIGN INSTALLATIONS



4–LEG INTERSECTION

T INTERSECTON

TYPICAL STREET NAME SIGN LOCATIONS

REVISION	DATE	BY

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

CLACKAMAS COUNTY

APPROVAL DATE: 1/1/10 SCALE: N.T.S.

SIGN INSTALLATIONS

STANDARD DRAWING
T250

S:\Engineering\Roadway Standards\2010 Roadway Standards\2010 Standards for Publish\Drawings\DWGs\ T100-T250.dwg

DRAWING NAME: CWL10-PH2 SS01 SIGN & STRIPE.DWG

SIGNING & STRIPING DETAILS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

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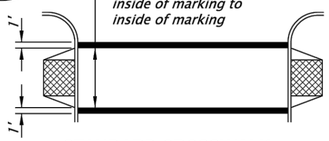
City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/27

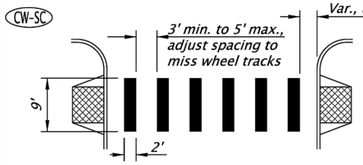
DESIGNED: HHPR TEAM	SHEET NO. SS02
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

CW



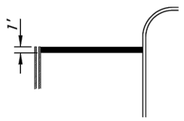
STANDARD CROSSWALK
TWO 1' WHITE BARS
Install per Standard Drawing TM530

CW-SC



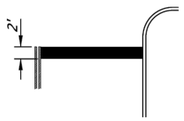
STAGGERED CONTINENTAL CROSSWALK
2'WHITE BARS
Install per Standard Drawing TM530

S



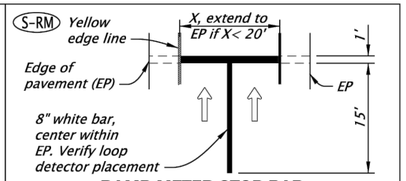
STOP BAR
1' WHITE BAR
Install per Standard Drawing TM530

S-2



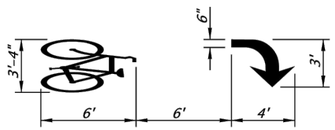
STOP BAR - LARGE
2' WHITE BAR
Install per Standard Drawing TM530

S-RM



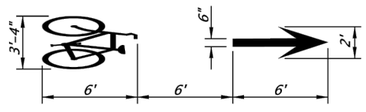
RAMP METER STOP BAR
1' AND 8" WHITE BARS
For multi-lane ramp meter applications

BR



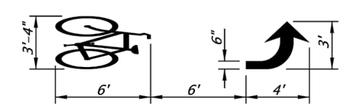
BIKE RIGHT TURN STENCIL (white)
Center marking within lane width, for proportion details, see current version of Standard Highway Signs

BS



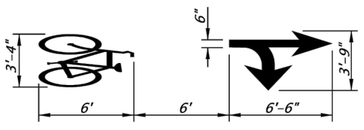
BIKE LANE STANDARD STENCIL (white)
Center marking within lane width, for proportion details, see current version of Standard Highway Signs

BL



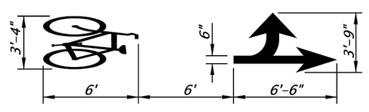
BIKE LEFT TURN STENCIL (white)
Center marking within lane width, for proportion details, see current version of Standard Highway Signs

BRS



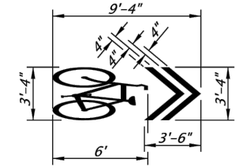
BIKE RIGHT TURN STRAIGHT STENCIL (white)
Center marking within lane width, for proportion details, see current version of Standard Highway Signs

BLS



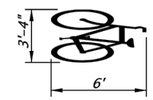
BIKE LEFT TURN STRAIGHT STENCIL (white)
Center marking within lane width, for proportion details, see current version of Standard Highway Signs

SLM



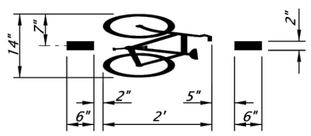
SHARED LANE MARKING (white)
Center marking within lane width, for proportion details, see current version of Standard Highway Signs

B



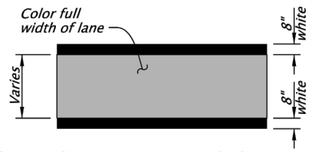
BIKE STENCIL (white)
Used for Intersection Bicycle Box applications. Place markings within bicycle box, centered with motor vehicle lane width

BD



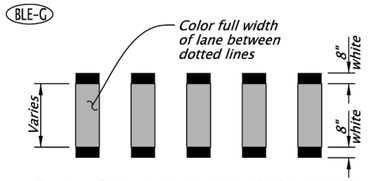
BICYCLE DETECTOR MARKING (white)
Place Bicycle Detector Pavement Marking in optimum location where bicycle actuates the traffic signal

GRN



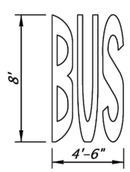
GREEN SUPPLEMENTAL BICYCLE LANE
SOLID GREEN (green)

BLE-G



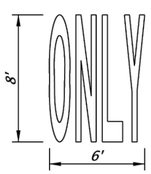
GREEN SUPPLEMENTAL BICYCLE LANE
DOTTED LINE EXTENSION (green)

BUS



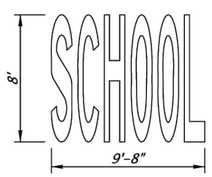
BUS (white)
Center marking within lane width, for proportion details, see current version of Standard Highway Signs

ON



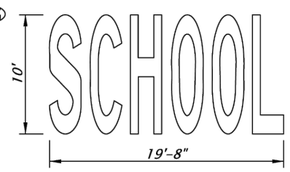
ONLY (white)
Center marking within lane width, for proportion details, see current version of Standard Highway Signs

SCH



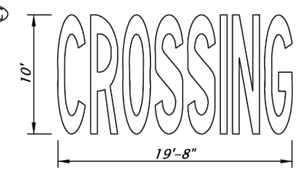
SCHOOL (white)
Center marking within lane width, for proportion details, see current version of Standard Highway Signs

SCH-LG



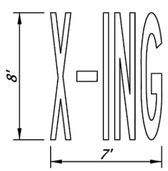
SCHOOL LARGE (white)
Center marking within lane width, for proportion details, see current version of Standard Highway Signs

CRS-LG



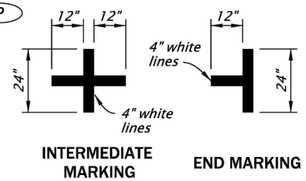
CROSSING - LARGE (white)
Center marking within lane width, for proportion details, see current version of Standard Highway Signs

XNG



X-ING - WHITE
Center marking within lane width, for proportion details, see current version of Standard Highway Signs

P



ON-STREET PARKING DETAIL - WHITE

GENERAL NOTES:

1. *Arrow, letter, and bicycle symbol dimensions nominal.*

LEGEND

⇦ Direction of Travel

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

PAVEMENT MARKING STANDARD DETAIL BLOCKS

2024

DATE	REVISION DESCRIPTION
07-2022	ADDED NOTE FOR MEASUREMENT OF STANDARD CROSSWALK
07-2025	REPLACED HELMETED BICYCLIST SYMBOL WITH BICYCLE SYMBOL
07-2025	UPDATED CAD STANDARDS

CALC. BOOK NO. N/A | SDR DATE 11-JUL-2025 | **TM503**

Effective Date: December 1, 2025 - May 31, 2026

SIGNING & STRIPING DETAILS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
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CITY OF West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

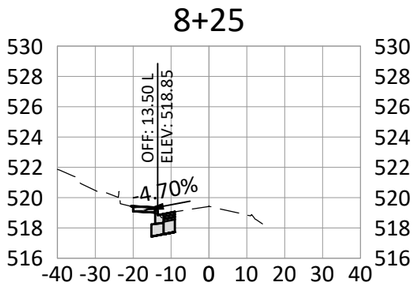
EXPIRES: 6/30/27

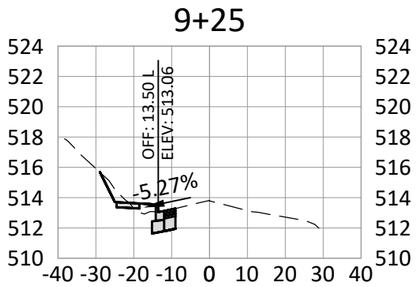
DESIGNED: HHPR TEAM	SHEET NO. SS03
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

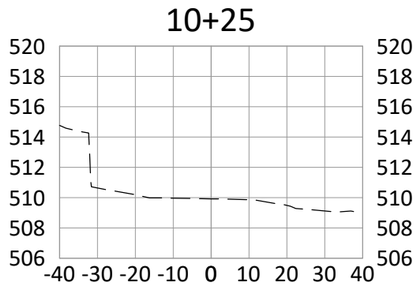
11-JUL-2025

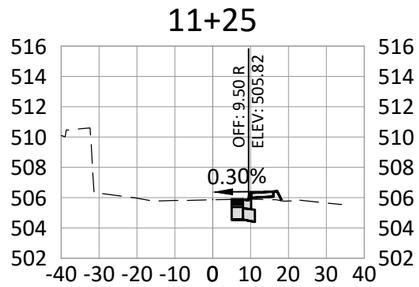
TM503.dgn

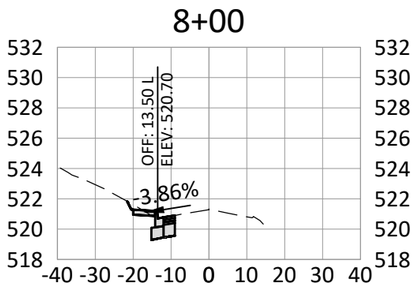
DRAWING NAME: CWL10-PH2-SS01 SIGN & STRIPE.DWG

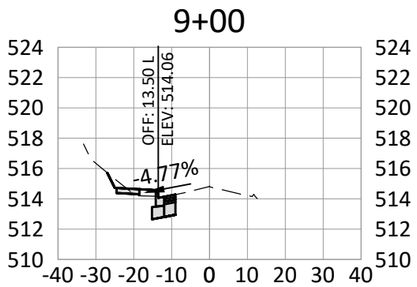


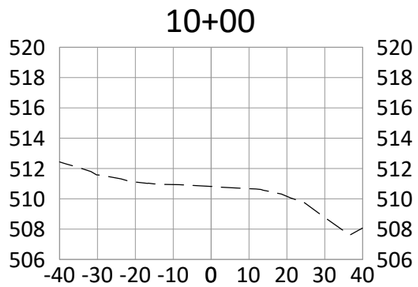


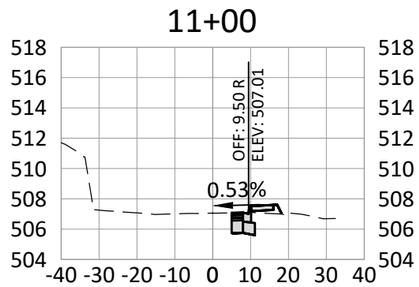


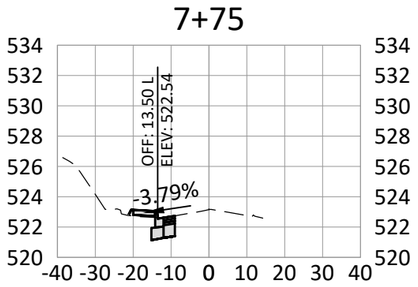


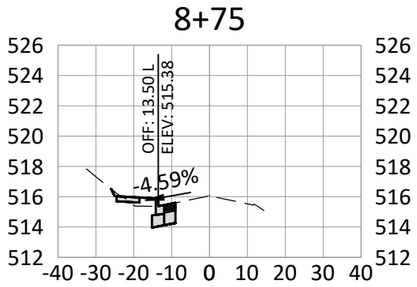


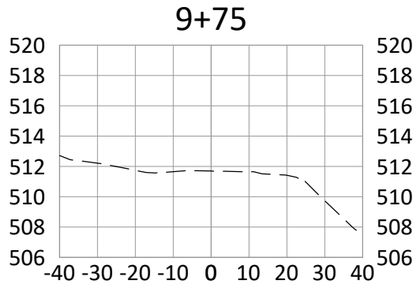


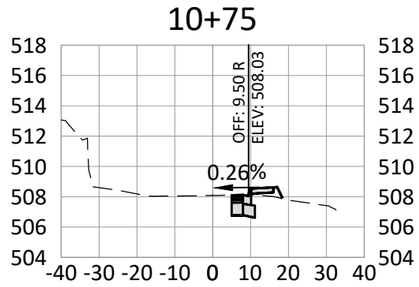


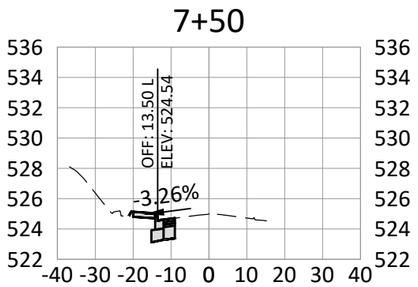


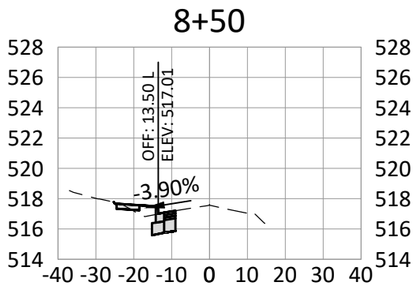


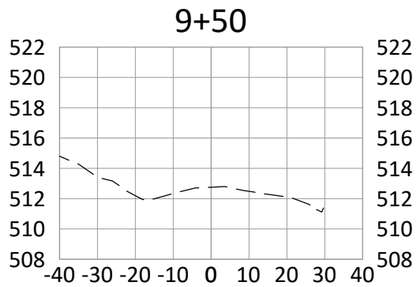


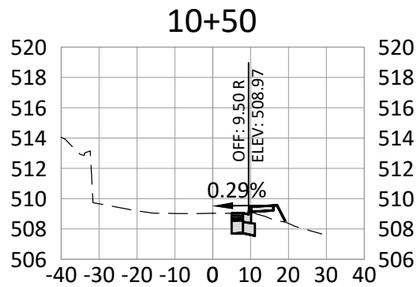












LONG ST - CROSS SECTIONS

SCALE: 1" = 40' (HORZ.)
1" = 10' (VERT)

CROSS SECTIONS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
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phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

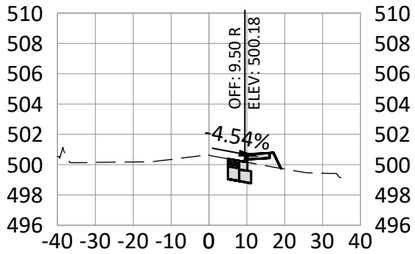
REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/27

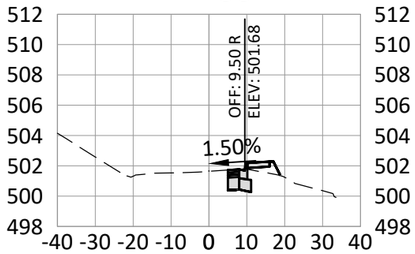
DESIGNED: HHPR TEAM	SHEET NO. XS01
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

DRAWING NAME: CWL10-PH2 XS01 CROSS SECTIONS.DWG

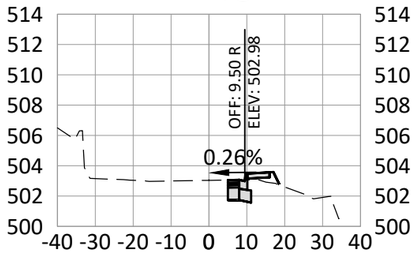
12+25



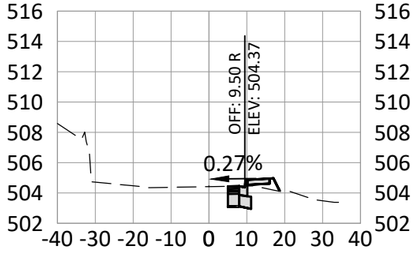
12+00



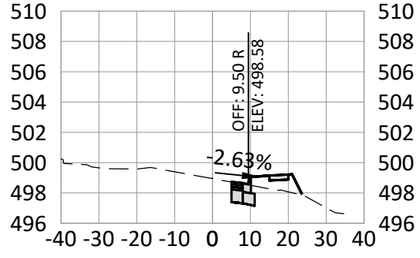
11+75



11+50



12+50



LONG ST - CROSS SECTIONS

SCALE: 1" = 40' (HORZ.)
1" = 10' (VERT)

CROSS SECTIONS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

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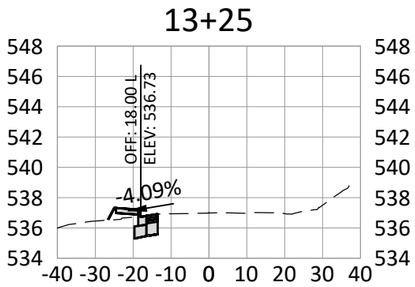
City of West Linn

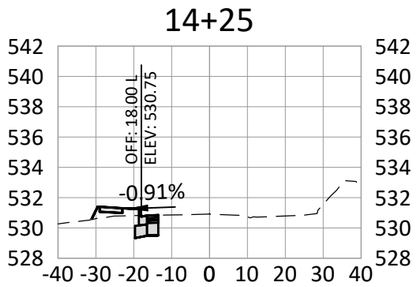
REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

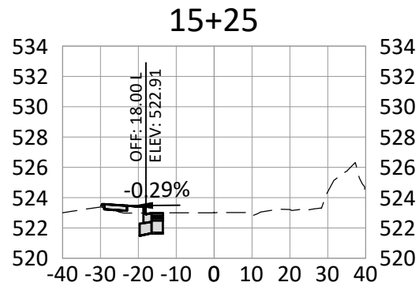
EXPIRES: 6/30/27

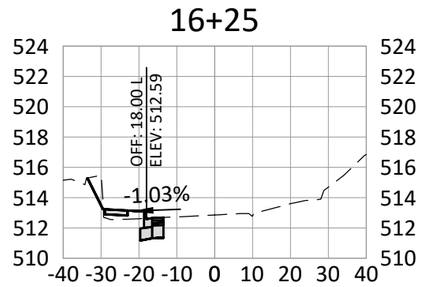
DESIGNED: HHPR TEAM	SHEET NO. XS02
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

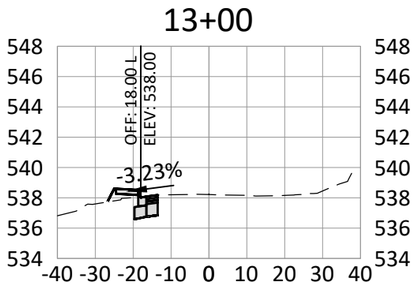
DRAWING NAME: CWL10-PH2 XS01 CROSS SECTIONS.DWG

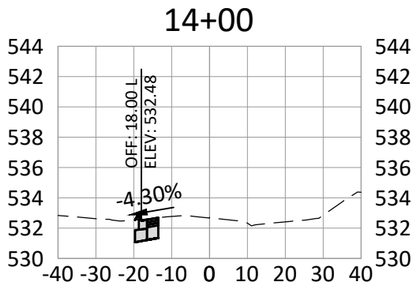


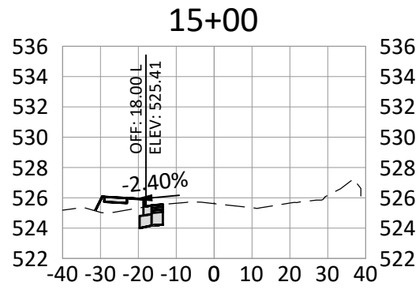


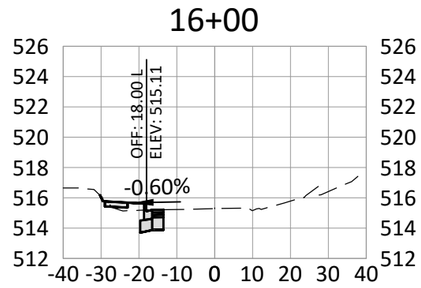


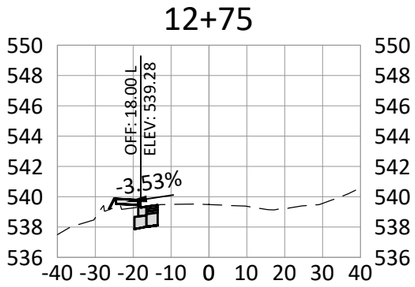


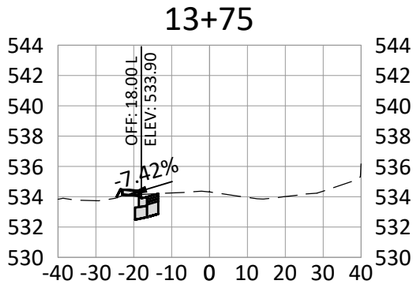


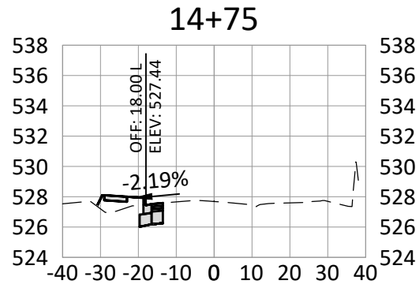


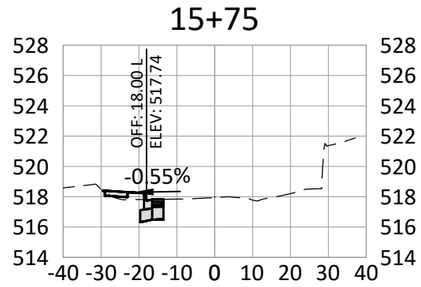


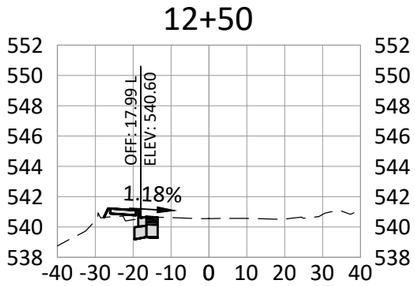


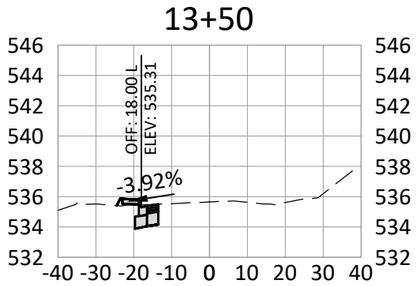


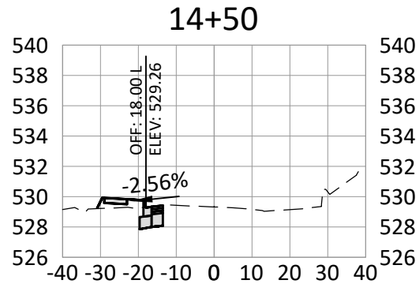


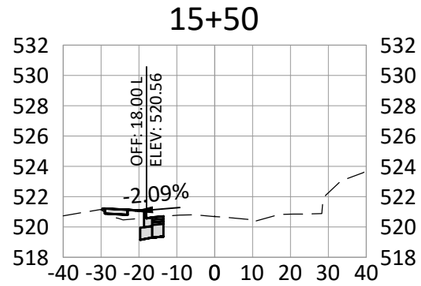












BITTNER ST - CROSS SECTIONS

SCALE: 1" = 40' (HORZ.)
1" = 10' (VERT)

CROSS SECTIONS
BITTNER-LONG SAFE ROUTES
WEST LINN, OREGON

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City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/27

DESIGNED: HHPR TEAM	SHEET NO. XS03
DRAWN: JCW	
CHECKED: JSH	
DATE: OCT 2025	JOB NO. CWL-10

DRAWING NAME: CWL10-PH2 XS01 CROSS SECTIONS.DWG