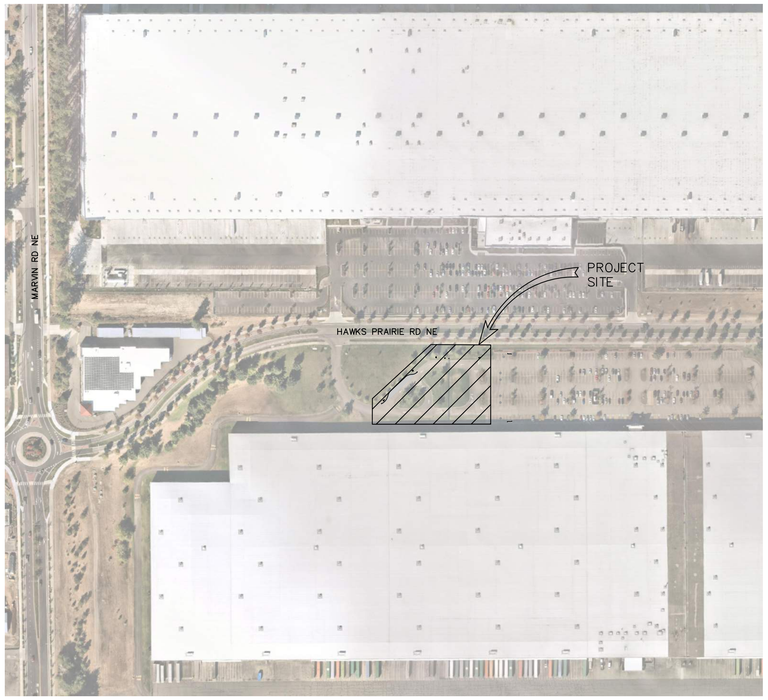
GRADING PERMIT
TARGET T0600 - EMPLOYEE DROP-OFF
in Lacey, WA
APN 37560000100



VICINITY MAP
1" = 200'

NORTH

SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
C1.0	COVER SHEET
C1.1	GENERAL NOTES
C2.0	DEMOLITION & TEMPORARY EROSION & SEDIMENT CONTROL PLAN
C3.0	HORIZONTAL CONTROL & PAVEMENT PLAN
C4.0	GRADING & DRAINAGE PLAN
C5.0	CONSTRUCTION DETAILS
C5.1	CONSTRUCTION DETAILS
C5.2	CONSTRUCTION DETAILS
C5.3	CONSTRUCTION DETAILS
L1.0	LANDSCAPE PLAN
L2.0	LANDSCAPE NOTES
L2.1	LANDSCAPE DETAILS

SITE INFORMATION

ADDRESS:	3500 MARVIN ROAD NE LACEY, WA 98516
TAX LOT:	37560000100
GROSS LOT SIZE:	±54,467,424 SF (±125.04 AC)

PROJECT INFORMATION & NOTES

LAND USE:

ZONING:	NC2-75(M)
APN:	37560000100
GROSS LOT SIZE:	125.04 ± ACRES
AREA OF DISTRUBANCE:	0.26± ACRES
TOTAL NO. OF LOTS:	1 (EXISTING)

ABBREVIATIONS

AD	AREA DRAIN
CB	CATCH BASIN
CPEP	CORRUGATED POLYETHYLENE PIPE
DEC	DECIDUOUS
EVG	EVERGREEN
IE	INVERT ELEVATION
LOD	LIMITS OF DISTURBANCE
ME	MATCH EXISTING
PIV	POST INDICATOR VALVE
SW	SIDEWALK
TC	TOP OF CURB
BC	BOTTOM OF CURB

LEGAL DESCRIPTION

LOT 1, CITY OF LACEY BSP #040005LA AUDITOR'S FILE NO. 3697509, RECORDS OF THURSTON COUNTY, WASHINGTON.

BASIS OF BEARINGS

PER CITY OF LACEY SURVEY CONTROL POINTS NO. 150 AND 994, A LINE BETWEEN FOUND MONUMENTS BEARS N 70° 04' 27" E.

VERTICAL DATUM

NGVD 29 PER CITY OF LACEY BENCHMARK NO. 1198 DESCRIPTION: PT C/L MON ON HAWKS PRAIRIE RD NE, 900' +/- EAST OF THE ABOVE INTERSECTION IN GRASS IN PLANTER, 38' EAST OF THE 2ND LUM EAST OF MARVIN RD NE
ELEVATION: 258.142'

OWNER

TARGET CORPORATION
P.O. BOX 9456
MINNEAPOLIS, MN 55440

SURVEYOR

TERRANE
10801 MAIN ST, SUITE 102
BELLEVUE, WA 98004
CONTACT: JACOB MILLER, PLS
E: JMILLER@TERRANE.NET
T: 425-233-6083

ENGINEER

KIMLEY-HORN
1000 2ND AVE, SUITE 3900
SEATTLE, WA 98104
CONTACT: LIZ WILLMOT, PE
E: LIZ.WILLMOT@KIMLEY-HORN.COM
T: 206-677-8610

LANDSCAPE ARCHITECT

KIMLEY-HORN
4582 SOUTH ULSTER STREET, SUITE 1500
DENVER, CO 80237
CONTACT: EMILY WILSON
E: EMILY.WILSON@KIMLEY-HORN.COM
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ELIZABETH ANNE WILLMOT
STATE OF WASHINGTON
21034213
REGISTERED PROFESSIONAL ENGINEER
07/06/2022

KHA PROJECT	090057000
DATE	07/06/2022
SCALE	AS SHOWN
DESIGNED BY	LW
DRAWN BY	NW
CHECKED BY	LW

COVER SHEET

LACEY, WA
EMPLOYEE
DROP-OFF
THURSTON COUNTY WASHINGTON

C1.0

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CITY OF LACEY GENERAL CONSTRUCTION NOTES

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF LACEY STANDARDS AND THE MOST CURRENT EDITION OF THE STATE OF WASHINGTON STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION (WSDOT/APWA). IN CASES OF CONFLICT, THE MOST STRINGENT STANDARD SHALL APPLY.

2. THE CONTRACTOR SHALL BE IN COMPLIANCE WITH ALL SAFETY STANDARDS AND REQUIREMENTS AS SET FORTH BY OSHA, WISHA AND THE STATE OF WASHINGTON, DEPARTMENT OF LABOR AND INDUSTRIES.

3. ALL APPROVALS AND PERMITS REQUIRED BY THE CITY OF LACEY SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.

4. IF CONSTRUCTION IS TO TAKE PLACE IN THE COUNTY RIGHT-OF-WAY, THE CONTRACTOR SHALL NOTIFY THE COUNTY AND OBTAIN ALL THE REQUIRED APPROVALS AND PERMITS.

5. A PRE-CONSTRUCTION MEETING SHALL BE HELD WITH THE CITY OF LACEY CONSTRUCTION INSPECTOR A MINIMUM 72 HOURS PRIOR TO THE START OF CONSTRUCTION.

6. THE CITY OF LACEY CONSTRUCTION INSPECTOR SHALL BE NOTIFIED A MINIMUM OF 48 HOURS IN ADVANCE OF A TAP CONNECTION TO AN EXISTING MAIN. THE INSPECTOR SHALL BE PRESENT AT THE TIME OF THE TAP.

7. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 811 NOT LESS THAN TWO BUSINESS DAYS AND NOT MORE THAN 10 BUSINESS DAYS PRIOR TO ANY EXCAVATION. THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR MAINTAINING ALL LOCATE MARKS ONCE THE UTILITIES HAVE BEEN LOCATED.

8. TEMPORARY STREET PATCHING SHALL BE ALLOWED FOR AS APPROVED BY THE CITY ENGINEER. TEMPORARY STREET PATCHING SHALL BE PROVIDED BY PLACEMENT AND COMPACTION OF 1 INCH MAXIMUM ASPHALT CONCRETE COLD MIX. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE AS REQUIRED.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL IN ACCORDANCE WITH THE WSDOT/APWA STANDARD PLANS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION (ALL APPLICABLE "K" PLANS) AND/OR THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). PRIOR TO DISRUPTION OF ANY TRAFFIC, A TRAFFIC CONTROL PLAN SHALL BE PREPARED AND SUBMITTED TO THE CITY FOR APPROVAL. NO WORK SHALL COMMENCE UNTIL ALL APPROVED TRAFFIC CONTROL IS IN PLACE.

10. EROSION CONTROL/WATER POLLUTION MEASURES SHALL BE REQUIRED IN ACCORDANCE WITH SECTION 1-07.15 OF THE WSDOT/APWA STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION AND THE CITY OF LACEY STORMWATER DESIGN MANUAL. AT NO TIME WILL SILTS AND DEBRIS BE ALLOWED TO DRAIN INTO AN EXISTING OR NEWLY INSTALLED FACILITY UNLESS SPECIAL PROVISIONS HAVE BEEN DESIGNED.

11. ALL SURVEYING AND STAKING SHALL BE PERFORMED PER THE CORRESPONDING CHAPTER OF THE CITY OF LACEY DEVELOPMENT GUIDELINES AND PUBLIC WORKS STANDARDS.

12. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE A COPY OF AN APPROVED SET OF PLANS ON THE CONSTRUCTION SITE AT ALL TIMES.

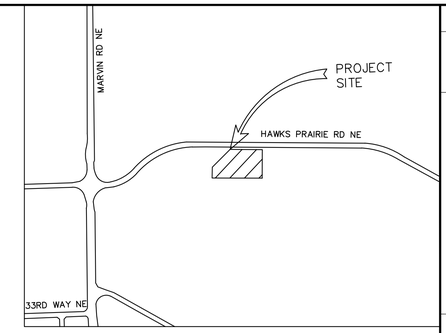
13. ANY CHANGES TO THE DESIGN SHALL FIRST BE REVIEWED AND APPROVED BY THE PROJECT ENGINEER AND THE CITY OF LACEY.

14. IF CONSTRUCTION IS TO TAKE PLACE IN OTHER JURISDICTION'S RIGHT-OF-WAY (I.E., THE COUNTY, THE STATE, THE CITY OF OLYMPIA, OR OTHER ADJACENT MUNICIPALITIES), THE CONTRACTOR SHALL NOTIFY THE JURISDICTION AND OBTAIN ALL THE REQUIRED APPROVALS AND PERMITS.

15. PRIOR TO BACKFILL ALL MAINS AND APPURTENANCES SHALL BE INSPECTED AND APPROVED BY THE CITY OF LACEY CONSTRUCTION INSPECTOR. APPROVAL SHALL NOT RELIEVE THE CONTRACTOR FOR CORRECTION OF ANY DEFICIENCIES AND/OR FAILURES AS DETERMINED BY SUBSEQUENT TESTING AND INSPECTIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY OF LACEY FOR THE REQUIRED INSPECTIONS.

16. THE CITY WILL BE GIVEN 72 HOURS NOTICE PRIOR TO SCHEDULING A SHUTDOWN. WHERE CONNECTIONS REQUIRE "FIELD VERIFICATION", CONNECTION POINTS SHALL BE EXPOSED BY THE CONTRACTOR AND FITTINGS VERIFIED 72 HOURS PRIOR TO DISTRIBUTING SHUT-DOWN NOTICES.

REFER TO GETOECHNICAL REPORT BY GEOENGINEERS DATED MARCH 30, 2022 FOR FURTHER INFORMATION



VICINITY MAP

NTS

NORTH

No.	REVISIONS	DATE	BY

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ELIZABETH ANNE WILLMOTT
STATE OF WASHINGTON
21034213
REGISTERED PROFESSIONAL ENGINEER
07/06/2022

KHA PROJECT 090057000	DATE 07/06/2022	SCALE AS SHOWN	
DESIGNED BY LW	DRAWN BY NW	CHECKED BY LW	

GENERAL NOTES

LACEY, WA
EMPLOYEE
DROP-OFF

THURSTON COUNTY WASHINGTON

C1.1

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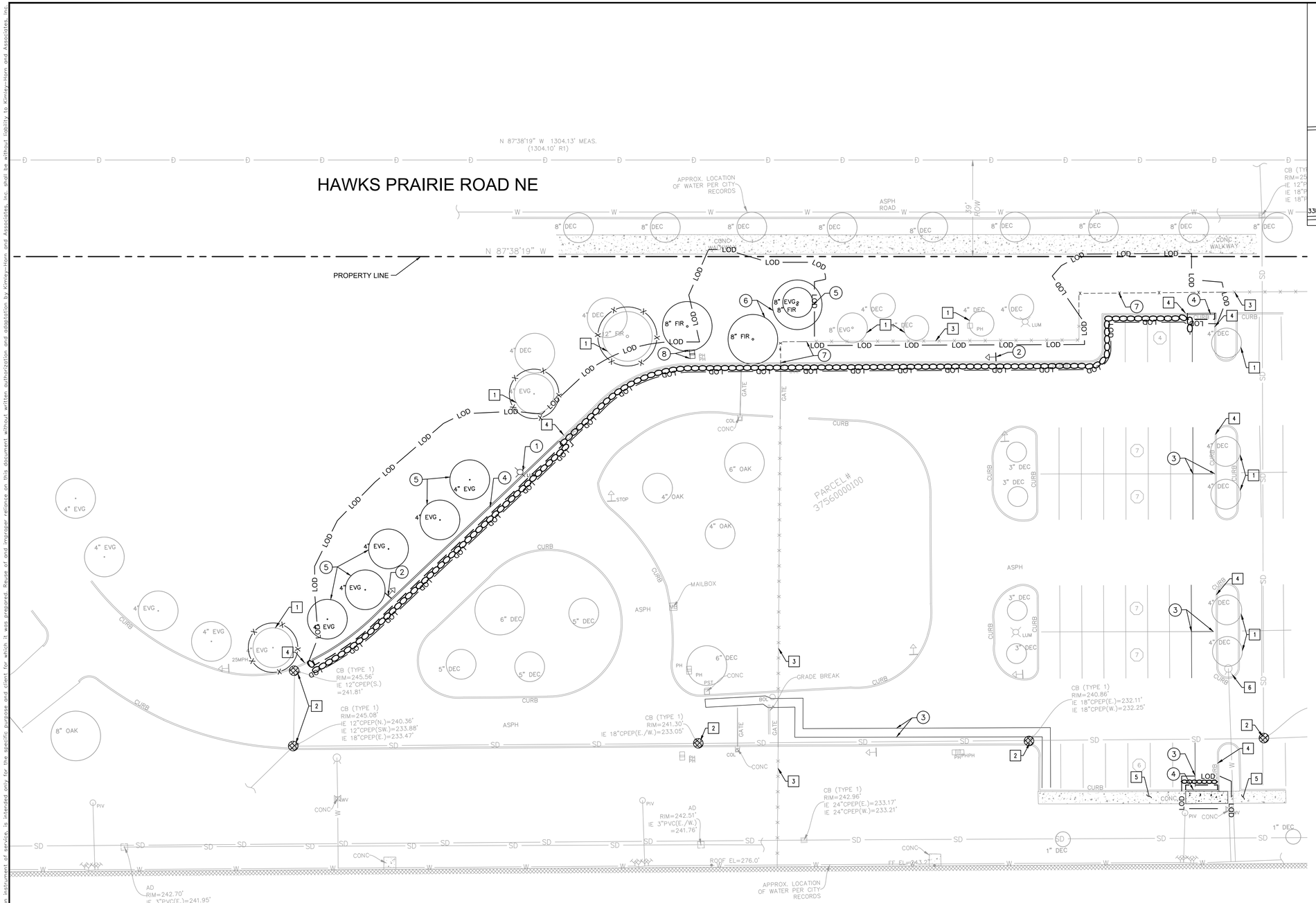

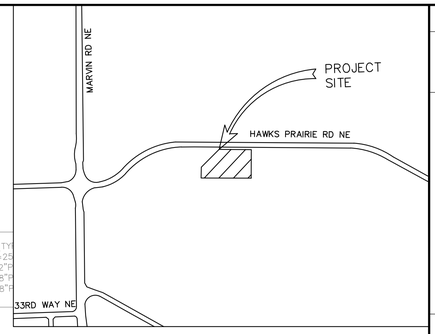

VICINITY MAP

NTS

NORTH

LEGEND

- PROPERTY LINE
- EXISTING FENCE
- EXISTING WATER LINE
- EXISTING STORM DRAIN LINE
- EXISTING CENTERLINE
- EXISTING CURB TO REMAIN
- EXISTING SIDEWALK CONCRETE
- EXISTING CATCH BASIN
- EXISTING SIGN
- EXISTING POWER HAND HOLE
- EXISTING TREE
- EXISTING BOLLARD
- EXISTING LIGHT POLE
- PARKING COUNT
- EXISTING FENCE TO BE REMOVED
- EXISTING STRIPING TO BE REMOVED
- EXISTING CURB TO BE REMOVED
- EXISTING SIDEWALK CONCRETE TO BE REMOVED
- EXISTING SIGN TO BE RELOCATED
- EXISTING POWER HAND HOLE TO BE RELOCATED
- EXISTING TREE TO BE REMOVED
- EXISTING LIGHT POLE TO BE RELOCATED
- LIMITS OF SAWCUT PAVEMENT
- LIMITS OF DISTURBANCE
- FILTER SOCK (1 C~5.0)
- INLET PROTECTION (2 C~5.0)
- TREE PROTECTION FENCE

DEMOLITION NOTES

1. RELOCATE EXISTING LIGHT POLE
2. RELOCATE EXISTING SIGN
3. REMOVE EXISTING STRIPING
4. REMOVE EXISTING 6" CURB
5. REMOVE EXISTING EVERGREEN TREES
6. REMOVE EXISTING FIR TREES
7. REMOVE EXISTING FENCE
8. RELOCATE EXISTING POWER VAULT

PROTECTION NOTES

1. PROTECT IN PLACE EXISTING TREE
2. PROTECT IN PLACE EXISTING CATCH BASIN
3. PROTECT IN PLACE EXISTING FENCE
4. PROTECT IN PLACE EXISTING 6" CURB
5. PROTECT IN PLACE EXISTING SIDEWALK
6. PROTECT IN PLACE EXISTING FIRE HYDRANT

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

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DEMOLITION & TEMPORARY EROSION & SEDIMENT CONTROL PLAN

LACEY, WA EMPLOYEE DROP-OFF

THURSTON COUNTY, WASHINGTON

C2.0

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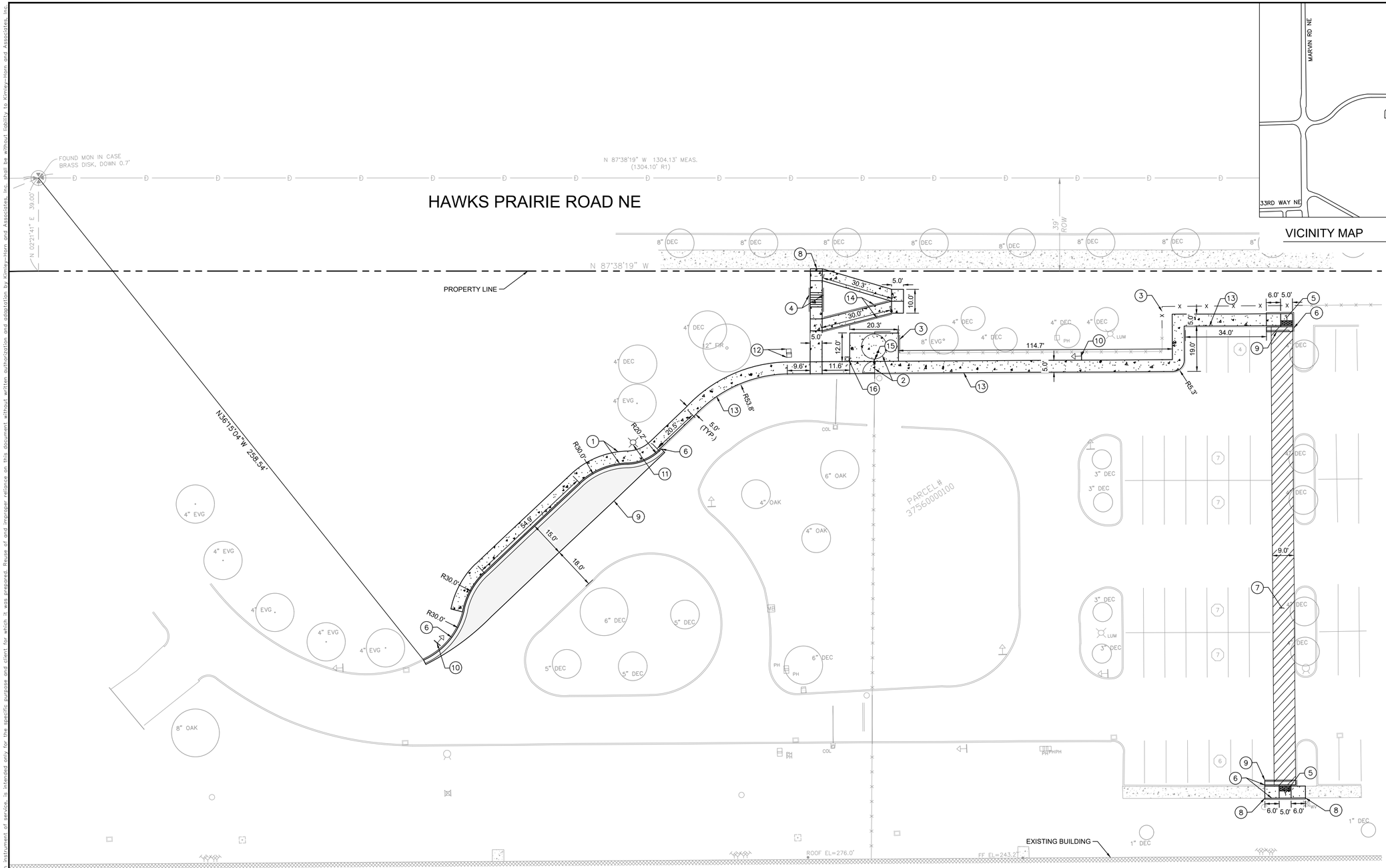

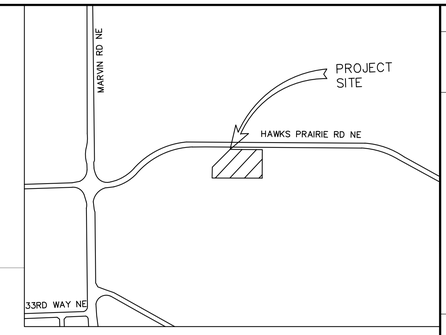

VICINITY MAP

NTS

LEGEND

- PROPERTY LINE
- EXISTING FENCE
- EXISTING CURB
- EXISTING SIDEWALK CONCRETE
- EXISTING CATCH BASIN
- EXISTING SIGN
- EXISTING POWER BOX
- EXISTING TREE
- EXISTING BOLLARD
- EXISTING LIGHT POLE
- PARKING COUNT
- PROPOSED CURB
- PROPOSED FENCE AT FINISHED GRADE
- PROPOSED SIDEWALK CONCRETE
- PROPOSED ASPHALT PAVEMENT
- PROPOSED SIGN
- PROPOSED POWER BOX
- PROPOSED LIGHT POLE
- PROPOSED BOLLARD LIGHT

SITE NOTES

1. PROPOSED SIDEWALK PER DETAIL 4, SHEET C5.0
2. PROPOSED ALVARADO FULL HEIGHT TURNSTILE & PEDESTRIAN SECURITY GATE, CONFIRM COLOR AND MODEL WITH OWNER
3. PROPOSED FENCE
4. PROPOSED STAIRS. 7 RISERS @ 6" WITH HANDRAIL EXTENDING 18" BEYOND TOP & TOE OF STAIRS. SEE DETAIL 9, SHEET C5.1
5. PROPOSED PARALLEL CURB RAMP PER WSDOT STD F-40.12-03 ON SHEET C5.1
6. PROPOSED CONCRETE CURB AND GUTTER PER COL STD DWG 4-14 ON SHEET 5.0
7. PROPOSED 4" PAINTED WHITE 45-DEGREE STRIPING, 3' ON CENTER
8. CONNECT TO EXISTING SIDEWALK WITH EXPANSION JOINT, SEE WSDOT STD F-30.10-04 ON SHEET 5.1
9. PROPOSED ASPHALT PAVEMENT PER DETAIL 3, SHEET C5.0
10. PROPOSED RELOCATION OF SIGNS
11. PROPOSED RELOCATION OF LIGHT POLE, SEE ELECTRICAL AND DETAIL 11, SHEET C5.2
12. PROPOSED RELOCATION OF POWER BOXES, SEE ELECTRICAL
13. CONNECT PROPOSED SIDEWALK TO EXISTING CURB WITH EXPANSION JOINT, SEE WSDOT STD F-30.10-04 ON SHEET 5.1
14. PROPOSED RAMP HANDRAIL, SEE DETAIL 12, SHEET C5.2
15. PROPOSED CARD READER ACCESS, SEE ELECTRICAL
16. PROPOSED BOLLARD LIGHT, SEE ELECTRICAL

NORTH

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07/06/2022

KHA PROJECT	090057000
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CHECKED BY	LW

HORIZONTAL CONTROL & PAVEMENT PLAN

LACEY, WA EMPLOYEE DROP-OFF

THURSTON COUNTY WASHINGTON

C3.0

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HAWKS PRAIRIE ROAD NE

PROPERTY LINE

APPROX. LOCATION OF WATER PER CITY RECORDS

CB (TYP
RIM=25
IE 12"P
IE 18"P
IE 18"P

251.61 ME
251.63 ME
251.53 SW
251.56 SW
250.12 SW
250.04 SW
249.97 SW
249.89 SW
247.65 SW
247.58 SW
247.72 SW
247.30 SW
247.51 SW
247.57 SW
247.27 SW
247.25 SW
247.31 SW
247.35 SW
247.39 SW
247.77 SW
247.80 TC
248.24 TC
247.95 TC
247.89 TC
247.44 LANDING
247.13 SW
246.80 SW
246.55 SW
246.46 SW
246.48 TC ME
245.92 ME
246.35 TC
246.32 SW
246.23 TC
245.83 SW
245.74 TC
244.77 ME
245.89 SW
245.74 TC
245.88 TC ME
245.33 ME
242.22 TC
241.83 LANDING
242.34 SW
242.32 BC
242.32 TC
241.87 BC
242.37 TC
242.41 BC
242.41 TC
241.93 BC
242.43 TC

5.00%
8.00%
1.29%
18.3%
18.6%
0.95%
17.1%
0.82%
0.53%
25.01%
1.04%
6.67%
0.62%
4.00%
0.73%
3.27%
0.80%
4.32%
0.76%
7.38%
8.00%
1.18%
25.06%
0.89%
2.01%
0.34%
1.90%
10.0%

CB (TYPE 1)
RIM=245.56'
IE 12"CPEP(S.)
=241.81'

CB (TYPE 1)
RIM=245.08'
IE 12"CPEP(N.)=240.36'
IE 12"CPEP(SW.)=233.88'
IE 18"CPEP(E.)=233.47'

CB (TYPE 1)
RIM=241.30'
IE 18"CPEP(E./W.)=233.05'

CB (TYPE 1)
RIM=242.96'
IE 24"CPEP(E.)=233.17'
IE 24"CPEP(W.)=233.21'

CB (TYPE 1)
RIM=240.86'
IE 18"CPEP(E.)=232.11'
IE 18"CPEP(W.)=232.25'

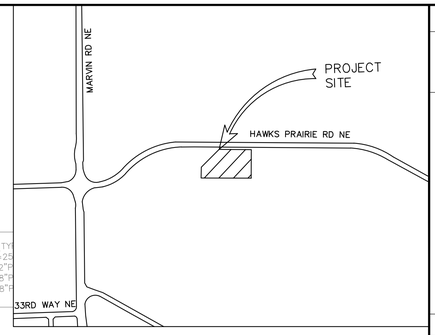
AD
RIM=242.51'
IE 3"PVC(E./W.)
=241.76'

AD
RIM=242.70'
IE 3"PVC(E.)=241.95'

EXISTING BUILDING

APPROX. LOCATION OF WATER PER CITY RECORDS

MAILBOX
GRADE BREAK
CONC
SD
W
PIV
MV
LUM
4" EVG
8" OAK
6" OAK
4" OAK
6" DEC
5" DEC
3" DEC
4" DEC
8" DEC
1" DEC
2" PIN



VICINITY MAP

NTS

NORTH

LEGEND

- PROPERTY LINE
- XXX — EXISTING CONTOUR
- XXX — PROPOSED CONTOUR
- X% — PROPOSED SLOPE
- XXX.XX — PROPOSED SPOT ELEVATION

PROPOSED IMPROVEMENT AREAS	
NEW AND REPLACED IMPERVIOUS AREA	4,489 SF

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

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07/06/2022

KHA PROJECT	090057000		
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DESIGNED BY	LW		
DRAWN BY	NW		
CHECKED BY	LW		

GRADING & DRAINAGE PLAN

LACEY, WA EMPLOYEE DROP-OFF

THURSTON COUNTY, WASHINGTON

C4.0

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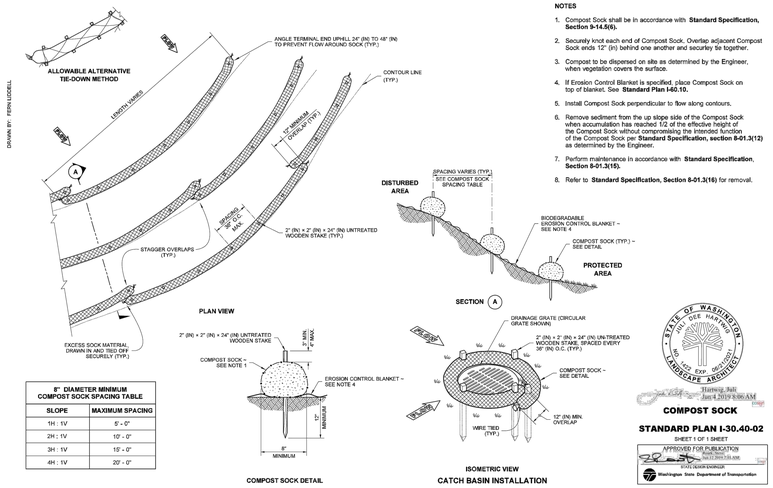


NOTES

1. Compost Sock shall be in accordance with **Standard Specification, Section 9-14.5(6).**
2. Securely knot each end of Compost Sock. Overlap adjacent Compost Sock ends 12" (in) behind one another and securley tie together.
3. Compost to be dispersed on site as determined by the Engineer, when vegetation covers the surface.
4. If Erosion Control Blanket is specified, place Compost Sock on top of blanket. See **Standard Plan I-60.10.**
5. Install Compost Sock perpendicular to flow along contours.
6. Remove sediment from the up slope side of the Compost Sock when accumulation has reached 1/2 of the effective height of the Compost Sock without compromising the intended function of the Compost Sock per **Standard Specification, section 8-01.3(12)** as determined by the Engineer.
7. Perform maintenance in accordance with **Standard Specification, Section 8-01.3(15).**
8. Refer to **Standard Specification, Section 8-01.3(16)** for removal.

6" DIAMETER MINIMUM COMPOST SOCK SPACING TABLE	
SLOPE	**MAXIMUM SPACING**
1H : 1V	5' – 0"
2H : 1V	10' – 0"
3H : 1V	15' – 0"
4H : 1V	20' – 0"

STATE OF WASHINGTON JILL DEE HARTWAY 22222 LICENSED LANDSCAPE ARCHITECT

Hartway, Jill Jun 4, 2019 8:50 AM

COMPOST SOCK

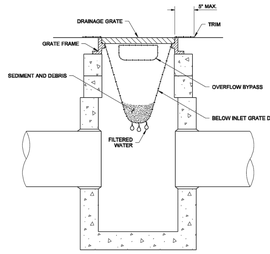
STANDARD PLAN I-30.40-02

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Engineering Publications
See 12.2016.3.XSL.docx
STATE ASSISTANT ENGINEER
Washington State Department of Transportation

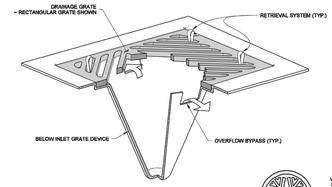
1 COMPOST SOCK
NTS

DRAWN BY: LISA CHYUNG



NOTES

1. Size the Below Inlet Grate Device (BIGD) for the storm water structure it will service.
2. The BIGD shall have a built-in high-flow relief system (overflow bypass).
3. The retrieval system must allow removal of the BIGD without spilling the collected material.
4. Perform maintenance in accordance with Standard Specification 8-01.3(18).



STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT
MARK W. MAURER
CERTIFICATE NO. 000568

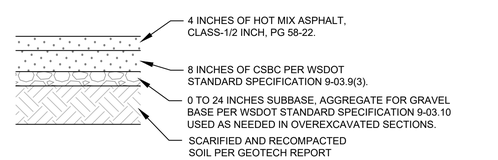
STORM DRAIN INLET PROTECTION

STANDARD PLAN I-40.20-00

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Pasco Bakotich III 09-20-07
DESIGN ENGINEER DATE
Washington State Department of Transportation

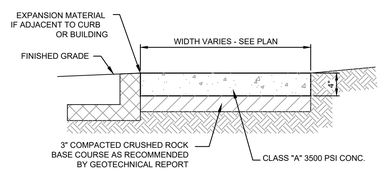
2 INLET PROTECTION
NTS



NOTE:
REFER TO GEOTECH REPORT FOR FURTHER INFORMATION.

ASPHALT PAVEMENT SECTION

3 ASPHALT PAVEMENT SECTION DETAIL
NTS



NOTES:
1. PROVIDE BITUMINOUS EXPANSION MATERIAL WHERE WALK ABUTS EXISTING IMPROVEMENTS AND AT ALL CHANGES IN GRADE
2. SPACE CONTROL JOINT UNIFORMLY AT INTERVALS EQUAL TO THE WALK WIDTH OR AS SHOWN ON ARCHITECTURAL PLANS.
3. PLACE PREMOLDED EXPANSION JOINT MATERIAL AROUND ALL STRUCTURES IN NEW WALK ALONGSIDE ALL ADJACENT BUILDINGS AND ABUTTING STRUCTURES TO THE NEW CONCRETE SIDEWALK
4. SEAL EXPANSION & CONTRACTION JOINTS WITH AN APPROVED TYPE SEALANT.

NOTE:
REFER TO GEOTECH REPORT FOR FURTHER INFORMATION.

4 SIDEWALK DETAIL
NTS

GENERAL NOTES:
1. EXPANSION JOINT MATERIAL TO BE 3/8" THICK PREMOLDED. JOINT FILLER FULL THICKNESS OF CONCRETE SPACING.
2. FORM AND SUBGRADE INSPECTION REQUIRED BEFORE POURING CONCRETE.
3. TYPE I USED ON OUTSIDE LANES.
4. TYPE II USED IN REVERSE SLOPE AREAS.
5. SEE 4B.025 FOR SPECIFICATIONS FOR CURBS AT MEDIANS.

DG4-14.DWG

CITY OF LACEY, WASHINGTON DEPT. OF PUBLIC WORKS			
CEMENT CONCRETE CURB & GUTTER			
APPROVED *Roy A Schaaf* CITY ENGINEER			DWG NO. 4-14
DES. WHO	DWN. WHO	CKD. MAH	DATE 12/15/2014

5 CEMENT CONCRETE CURB & GUTTER DETAIL
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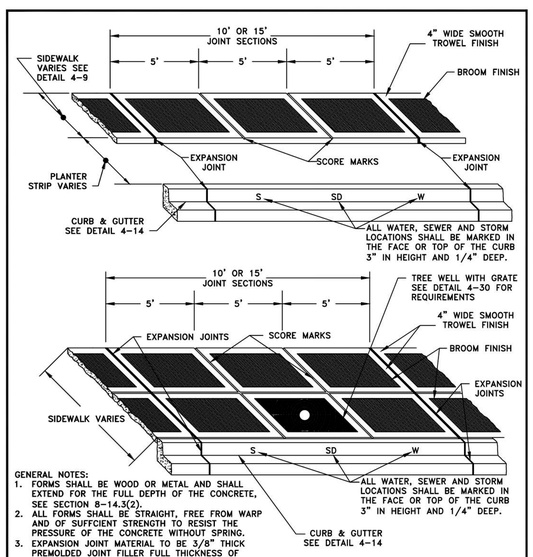

GENERAL NOTES:
1. FORMS SHALL BE WOOD OR METAL AND SHALL EXTEND FOR THE FULL DEPTH OF THE CONCRETE, SEE SECTION 8–14.3(2).
2. ALL FORMS SHALL BE STRAIGHT, FREE FROM WARP AND OF SUFFICIENT STRENGTH TO RESIST THE PRESSURE OF THE CONCRETE WITHOUT SPRING.
3. EXPANSION JOINT MATERIAL TO BE 3/8" THICK PREMOLDED JOINT FILLER FULL THICKNESS OF CONCRETE AND INSTALLED FLUSH OR 1/4" BELOW FINISH GRADE.
4. FORM AND SUBGRADE INSPECTION ARE REQUIRED BEFORE POURING CONCRETE.
5. PLACEMENT OF STREET LIGHTING, TREES, HYDRANTS AND WATER METERS SHALL BE PER THE DETAILS OF ITS PERSPECTIVE SECTIONS.
6. SCORE MARKS SHALL BE 1/8" TO 1/4" WIDE AND A MINIMUM OF 1" DEEP.
7. EXPANSION JOINTS SHALL BE INSTALLED IN THE CURB & GUTTER AND SIDEWALK AT THE PC AND PT FOR ALL CURB RETURNS. EXPANSION JOINTS SHALL BE PLACED IN THE SIDEWALK AT THE SAME LOCATIONS AS THOSE IN THE CURB & GUTTER WHEN THE SIDEWALK IS ADJACENT TO CURB & GUTTER, OR UNLESS OTHERWISE DIRECTED BY THE CITY.

DG4-10.DWG

CITY OF LACEY, WASHINGTON DEPT. OF PUBLIC WORKS			
SIDEWALK SPACING EXPANSION JOINTS & SCORE MARKS			
APPROVED *Roy A Schaaf* CITY ENGINEER			DWG NO. 4-10
DES. EP	DWN. WHO	CKD. RAS	DATE 12/15/2014

6 SIDEWALK SPACING EXPANSION JOINTS & SCORE MARKS
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ELIZABETH ANNE WILLMOT STATE OF WASHINGTON 21034213 REGISTERED PROFESSIONAL ENGINEER
07/06/2022

KHA PROJECT	090057000
DATE	07/06/2022
SCALE	AS SHOWN
DESIGNED BY	LW
DRAWN BY	NW
CHECKED BY	LW

CONSTRUCTION DETAILS

LACEY, WA EMPLOYEE DROP-OFF

THURSTON COUNTY WASHINGTON

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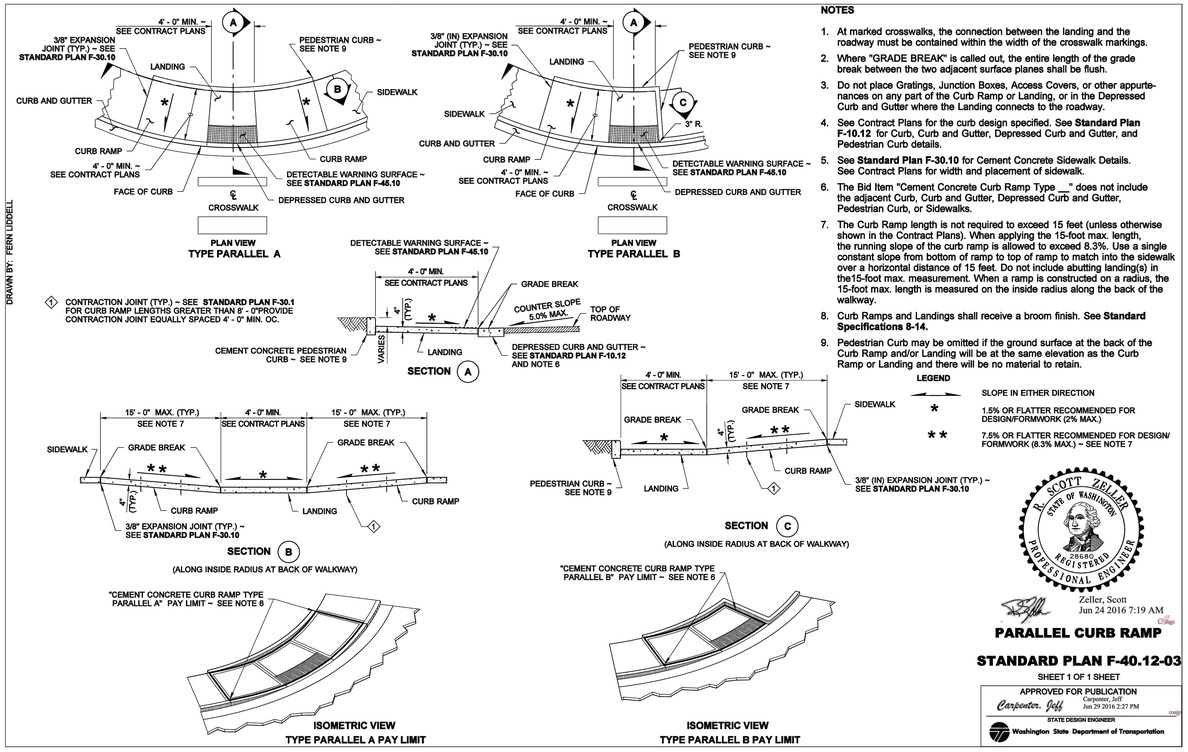

NOTES

1. At marked crosswalks, the connection between the landing and the roadway must be contained within the width of the crosswalk markings.
2. Where "GRADE BREAK" is called out, the entire length of the grade break between the two adjacent surface planes shall be flush.
3. Do not place Gratings, Junction Boxes, Access Covers, or other appurtenances on any part of the Curb Ramp or Landing, or in the Depressed Curb and Gutter where the Landing connects to the roadway.
4. See Contract Plans for the curb design specified. See **Standard Plan F-10.12** for Curb, Curb and Gutter, Depressed Curb and Gutter, and Pedestrian Curb details.
5. See **Standard Plan F-30.10** for Cement Concrete Sidewalk Details. See Contract Plans for width and placement of sidewalk.
6. The Bid Item "Cement Concrete Curb Ramp Type __" does not include the adjacent Curb, Curb and Gutter, Depressed Curb and Gutter, Pedestrian Curb, or Sidewalks.
7. The Curb Ramp length is not required to exceed 15 feet (unless otherwise shown in the Contract Plans). When applying the 15-foot max. length, the running slope of the curb ramp is allowed to exceed 8.3%. Use a single constant slope from bottom of ramp to top of ramp to match into the sidewalk over a horizontal distance of 15 feet. Do not include abutting landing(s) in the15-foot max. measurement. When a ramp is constructed on a radius, the 15-foot max. length is measured on the inside radius along the back of the walkway.
8. Curb Ramps and Landings shall receive a broom finish. See **Standard Specifications 8-14.**
9. Pedestrian Curb may be omitted if the ground surface at the back of the Curb Ramp and/or Landing will be at the same elevation as the Curb Ramp or Landing and there will be no material to retain.

LEGEND

	SLOPE IN EITHER DIRECTION
*	1.5% OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (2% MAX.)
**	7.5% OR FLATTER RECOMMENDED FOR DESIGN/ FORMWORK (8.3% MAX.) ~ SEE NOTE 7

R. SCOTT ZELLER — STATE OF WASHINGTON — 28680 — REGISTERED PROFESSIONAL ENGINEER

Zeller, Scott
Jun 24 2016 7:19 AM

PARALLEL CURB RAMP

STANDARD PLAN F-40.12-03

SHEET 1 OF 1 SHEET

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Carpenter, Jeff
Jun 29 2016 2:27 PM
STATE DESIGN ENGINEER
Washington State Department of Transportation

7 - PARALLEL CURB RAMP DETAIL
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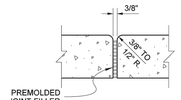
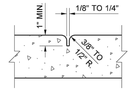


(E) EXPANSION JOINT



(C) CONTRACTION JOINT

MICHAEL S FLEMING — STATE OF WASHINGTON — 38777 — REGISTERED PROFESSIONAL ENGINEER

Michael S Fleming
Digitally signed by Michael S Fleming
Date: 2020.09.24 07:40:16 -07'00'

CEMENT CONCRETE SIDEWALK

STANDARD PLAN F-30.10-04

SHEET 1 OF 1 SHEET

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Washington State Department of Transportation

8 - EXPANSION JOINT DETAIL
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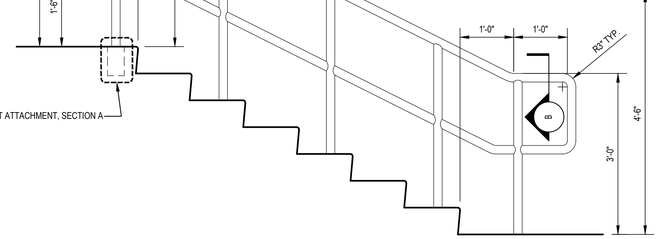
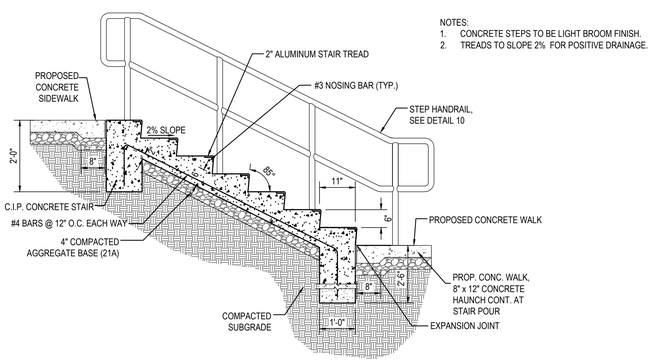
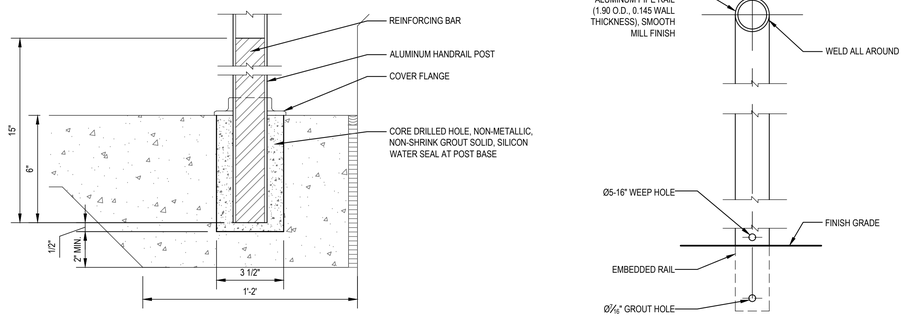




9 - STAIR PROFILE DETAIL
NTS



10 - STANDARD STAIR HANDRAIL DETAIL
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07/06/2022

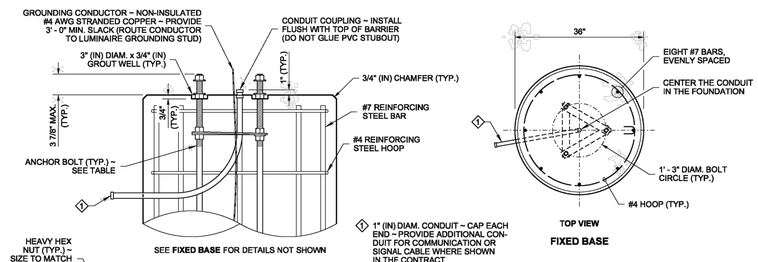
KHA PROJECT 090057000			
DATE 07/06/2022	SCALE AS SHOWN	DESIGNED BY LW	CHECKED BY LW
		DRAWN BY NW	

CONSTRUCTION DETAILS

LACEY, WA EMPLOYEE DROP-OFF

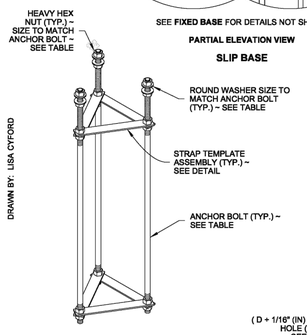
THURSTON COUNTY WASHINGTON

C5.1



1 1" (IN) DIAM. CONDUIT – CAP EACH END – PROVIDE ADDITIONAL CONDUIT FOR COMMUNICATION OR SIGNAL CABLE WHERE SHOWN IN THE CONTRACT

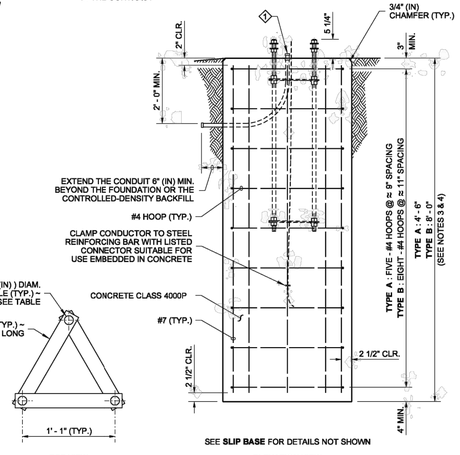
FIXED BASE



SLIP BASE

ANCHOR BOLT ASSEMBLY
(SLIP BASE SHOWN)

ANCHOR BOLT TABLE			
LUMINAIRE HEIGHT (FT) (H1)	MAST ARM TYPE	MAST ARM LENGTH (FT)	ANCHOR BOLT DIAMETER (IN) "D"
20' TO 50'	SINGLE	6' TO 16'	1"
20' TO 50'	DOUBLE	6' TO 8'	1"
20' TO 45'	DOUBLE	10' TO 16'	1"
46' TO 50'	DOUBLE	10' TO 16'	1 1/8"

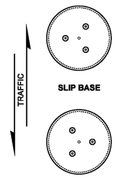


STRAP TEMPLATE ASSEMBLY

FIXED BASE

NOTES

1. See **Standard Plan J-28.40** for Luminaire Pole base mounting details.
2. The Strap Templates shall be held in place by nuts, 6" (in) from the top of the foundation and 3" (in) from the bottom of the anchor bolts. Eighteen heavy duty hex nuts and six round washers are required for a slip base assembly. Eighteen heavy duty hex nuts and six plate washers are required for a fixed base assembly.
3. Use Steel Light Standard Foundation **Type A** on level ground or slopes not exceeding 4H : 1V. Use **Type B** for slopes steeper than 4H : 1V, but not exceeding 2H : 1V. Slopes steeper than 2H : 1V shall require a special design.
4. These foundations are designed for a minimum of 2000 PSF **(TYPE A)** or 1500 PSF **(TYPE B)** allowable lateral bearing pressure for the soil. A special foundation shall be required for soil with allowable lateral bearing pressure lower than 1500 PSF.
5. The Luminaire Pole height shall not exceed 50' (ft) **(H1)**.
6. Slip bases shall not be installed on 50' (ft) **(H1)** poles with Double Mast Arms, nor on poles weighing more than 1000 lbs.
7. Slip bases are required on poles installed inside the Design Clear Zone, and on poles installed behind traffic barrier that are within the traffic barrier deflection zone.
8. Foundations constructed within Media Filter Drains shall be increased in depth by the depth of the Media Filter Drain.
9. Exposed portions of the foundation shall be formed to create a Class 2 surface finish. All forming shall be removed upon completion of foundation construction.
10. For excavation, concrete placement, and backfill options, see METHOD 1 and METHOD 2 on Sheet 2 of 2.
11. The anchor bolts shall be high-strength steel, manufactured from ASTM F1554 Grade 105, with heavy hex nuts and hardened washers. Galvanize the anchor bolts according to ASTM F2329.
12. The foundation shall be grounded in accordance with the requirements of **Standard Specification 8-20.3(4).**
13. See **Standard Plans C-8b** and **C-85.14** for steel light standards on traffic barrier.



ANCHOR BOLT LAYOUT

RICHARD P. ZELDENRUST – STATE OF WASHINGTON – 25470 – STRUCTURAL ENGINEER – PROFESSIONAL ENGINEER

Zeldenrust, Richard
Jun 10 2014 10:37 AM

STEEL LIGHT STANDARD FOUNDATION TYPES A & B

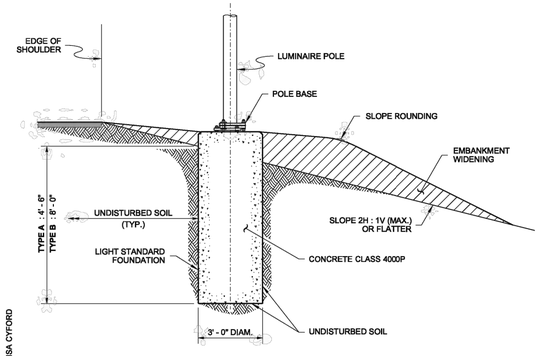
STANDARD PLAN J-28.30-03

SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION
Bakotich, Pasco
Jun 11 2014 1:33 PM
STATE DESIGN ENGINEER
Washington State Department of Transportation

NOTE

These foundation Construction Methods are applicable to all Steel Light Standard Placement Cases. See **Standard Plans J-28.22, J-28.24,** and **J-28.26.**



METHOD 1

NO SUBSURFACE FORM

This option is used only when the existing soil in the hole will remain standing and the cement concrete can be placed without causing the soil to collapse. Concrete shall be cast directly against undisturbed soil.

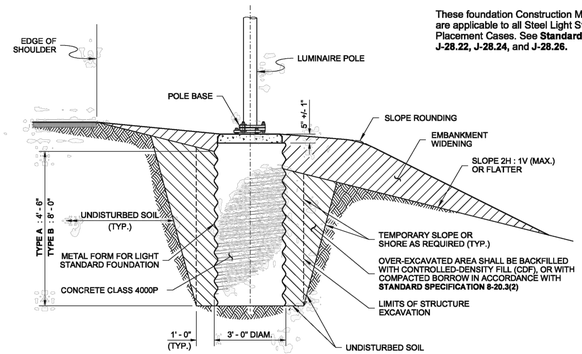
Auger the hole for the foundation. Use a paper or cardboard form to achieve a smooth finish on the final exposed cement concrete. Support the form as necessary to remain plumb.

See **Standard Plans J-28.24** and **J-28.26** for maximum heights of exposed foundation when no embankment widening is to be installed.

Place the concrete foundation.

After concrete has cured, remove the paper or cardboard form portion.

Construct the embankment widening (if required).



METHOD 2

METAL (SUBSURFACE) FORM REQUIRED

When the existing soil will not retain a vertical face, over-excavate the foundation area and install a 36" (in) diameter corrugated metal (pipe) form. The corrugated metal form shall not extend more than 5" (in) +/- 1" (in) below any portion of the foundation that will remain exposed upon final grading. Continue forming to full height using a paper or cardboard form to achieve a smooth finish on final exposed cement concrete. Support the form as necessary to remain plumb.

See **Standard Plans J-28.24** and **J-28.26** for maximum heights of exposed foundation when no embankment widening is to be installed.

Place the concrete foundation.

After concrete has cured, remove the paper or cardboard form portion.

Backfill with controlled-density fill or compacted borrow in accordance with **Standard Specification 8-20.3(2).**

Construct the embankment widening (if required).

RICHARD P. ZELDENRUST – STATE OF WASHINGTON – 25470 – STRUCTURAL ENGINEER – PROFESSIONAL ENGINEER

Zeldenrust, Richard
Jun 10 2014 10:38 AM

STEEL LIGHT STANDARD FOUNDATION TYPES A & B

STANDARD PLAN J-28.30-03

SHEET 2 OF 2 SHEETS

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CONSTRUCTION METHODS

11 - LIGHT POLE FOUNDATION DETAIL
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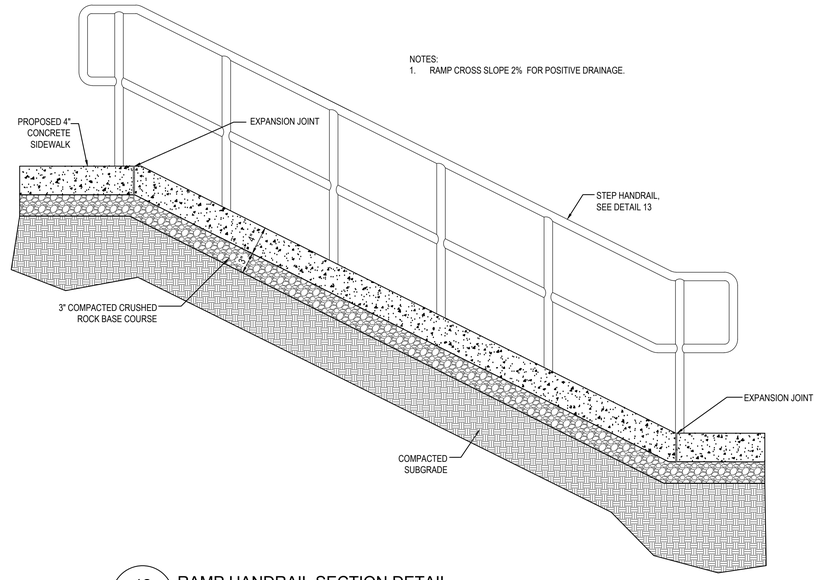
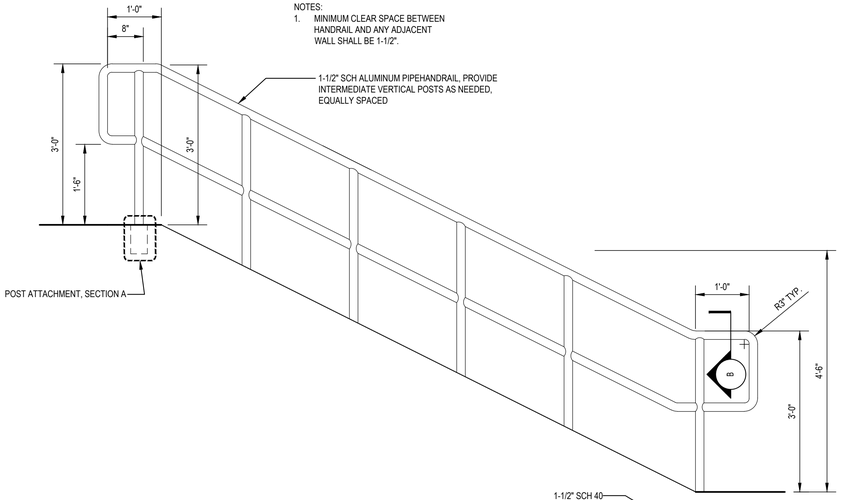
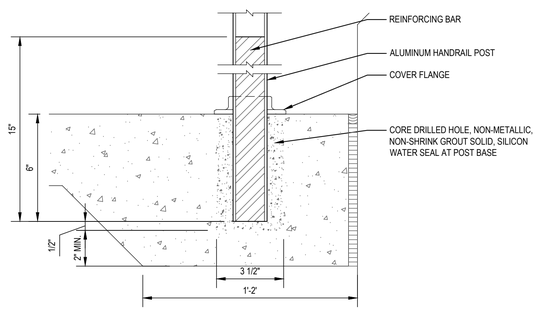
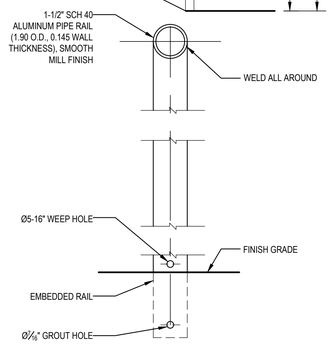


12 - RAMP HANDRAIL SECTION DETAIL
NTS







13 - STANDARD RAMP HANDRAIL DETAIL
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07/06/2022

KHA PROJECT	090057000
DATE	07/06/2022
SCALE	AS SHOWN
DESIGNED BY	LW
DRAWN BY	NW
CHECKED BY	LW

CONSTRUCTION DETAILS

LACEY, WA EMPLOYEE DROP-OFF

THURSTON COUNTY WASHINGTON

C5.2

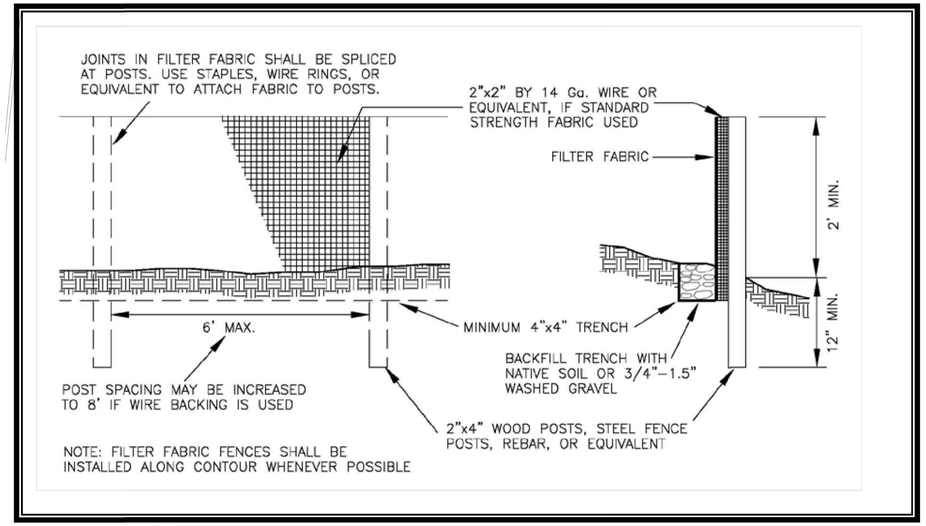

Figure 3.21 Silt Fence

- Silt fence may be used downslope of all disturbed areas.
- Silt fence shall prevent soil carried by runoff water from going beneath, through, or over the top of the silt fence, but shall allow the water to pass through the fence.
- Silt fence is not intended to treat concentrated flows, nor is it intended to treat substantial amounts of overland flow. Convey any concentrated flows through the drainage system to a sediment pond.
- Silt fences should not be constructed in streams or use in V-shaped ditches. They are not an adequate method of silt control for anything deeper than sheet or overland flow.

14 / - SILT FENCE DETAIL

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ELIZABETH ANNE WILLMOT
STATE OF WASHINGTON
21034213
REGISTERED
PROFESSIONAL ENGINEER
07/06/2022

KHA PROJECT	090057000
DATE	07/06/2022
SCALE	AS SHOWN
DESIGNED BY	LW
DRAWN BY	NW
CHECKED BY	LW

CONSTRUCTION DETAILS

LACEY, WA
EMPLOYEE DROP-OFF
THURSTON COUNTY WASHINGTON

C5.3

PLANT SCHEDULE

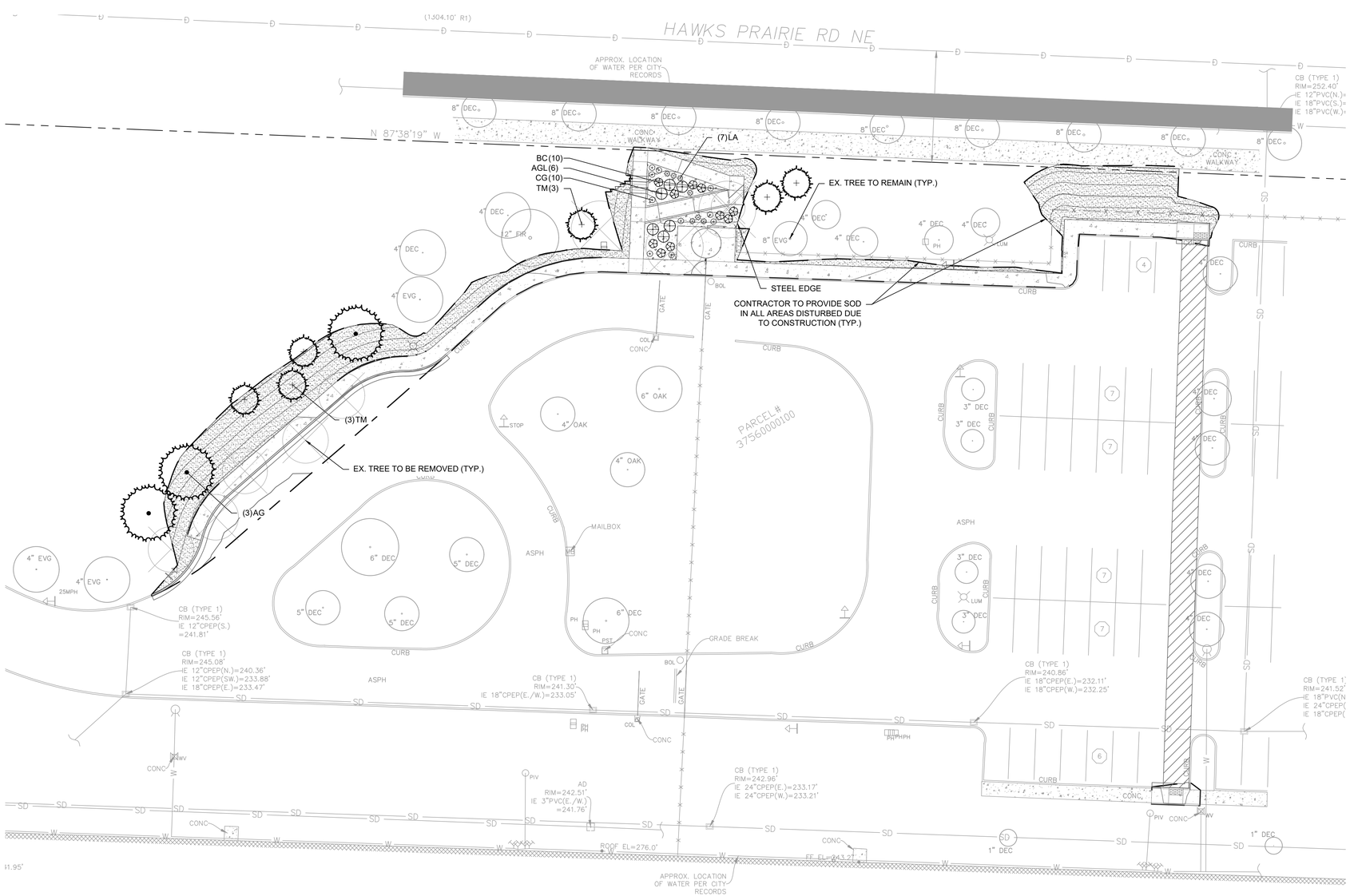
EVERGREEN TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE
	AG	3	ABIES GRANDIS	GRAND FIR	B & B		8` HT MIN
	TM	6	TSUGA MERTENSIANA	MOUNTAIN HEMLOCK	B & B		8` HT MIN

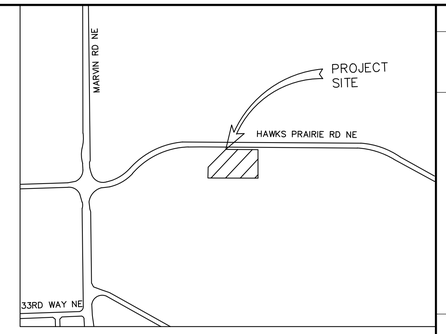
DECIDUOUS SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	SPACING	SIZE
	BC	10	BERBERIS THUNBERGII 'CRIMSON PYGMY'	CRIMSON PYGMY JAPANESE BARBERRY	5 GAL	SEE PLAN	12" FULL

EVERGREEN SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	SPACING	SIZE
	AGL	6	ABELIA X GRANDIFLORA	GLOSSY ABELIA	5 GAL	SEE PLAN	24" FULL

PERENNIALS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	SPACING	SIZE
	CG	10	COREOPSIS GRANDIFLORA	TICKSEED	1 GAL	SEE PLAN	6" FULL
	LA	7	LAVANDULA ANGUSTIFOLIA	ENGLISH LAVENDER	1 GAL	SEE PLAN	6" FULL

GROUND COVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	SIZE	SPACING
	DA	538 SF	DOUBLE SHREDDED HARD HARDWOOD MULCH	HARDWOOD MULCH	-		
	TB	3,803 SF	TURF SOD BOLERO PLUS	FESCUE BLEND	-		





VICINITY MAP

NTS

NORTH

GRAPHIC SCALE IN FEET
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No.	REVISIONS	DATE	BY

Kimley»Horn
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ELIZABETH ANNE WILMOT
STATE OF WASHINGTON
21034213
REGISTERED PROFESSIONAL ENGINEER
07/06/2022

KHA PROJECT	090057000
DATE	07/06/2022
SCALE	AS SHOWN
DESIGNED BY	EIW
DRAWN BY	BKH
CHECKED BY	EIW

LANDSCAPE PLAN

LACEY, WA EMPLOYEE DROP-OFF

THURSTON COUNTY WASHINGTON

L1.0

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GENERAL LANDSCAPE SPECIFICATIONS

A. SCOPE OF WORK

1. THE WORK CONSISTS OF: FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT AS SHOWN ON THE DRAWINGS AND AS SPECIFIED HEREIN.
2. WORK SHALL INCLUDE MAINTENANCE AND WATERING OF ALL CONTRACT PLANTING AREAS UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER.

B. PROTECTION OF EXISTING STRUCTURES

1. ALL EXISTING BUILDINGS, WALKS, WALLS, PAVING, PIPING, OTHER SITE CONSTRUCTION ITEMS, AND PLANTING ALREADY COMPLETED OR ESTABLISHED AND DESIGNATED TO REMAIN SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. ALL DAMAGE RESULTING FROM NEGLIGENCE SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER, AT NO COST TO THE OWNER.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL NECESSARY BEST MANAGEMENT PRACTICES (BMP) DEVICES ACCORDING TO ALL REGULATORY AGENCY'S STANDARDS THROUGH THE DURATION OF ALL CONSTRUCTION ACTIVITIES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MAINTENANCE OF TRAFFIC (MOT) THAT MAY BE REQUIRED FOR THE PROJECT.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES, WHETHER PUBLIC OR PRIVATE, PRIOR TO EXCAVATION. THE OWNER AND DESIGN PROFESSIONAL SHALL NOT BE RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF ANY SUCH INFORMATION OR DATA. THE CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR; REVIEWING AND CHECKING ALL SUCH INFORMATION AND DATA; LOCATING ALL UNDERGROUND FACILITIES DURING CONSTRUCTION; THE SAFETY AND PROTECTION THEREOF; REPAIRING ANY DAMAGE THERETO RESULTING FROM THE WORK. THE COST OF ALL WILL BE CONSIDERED AS HAVING BEEN INCLUDED IN THE CONTRACT PRICE. THE CONTRACTOR SHALL NOTIFY ANY AFFECTED UTILITY COMPANIES OR AGENCIES IN WRITING AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.

C. PROTECTION OF EXISTING PLANT MATERIALS

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO TREES AND SHRUBS EXISTING OR OTHERWISE, CAUSED BY CARELESS EQUIPMENT OPERATION, MATERIAL STOCKPILING, ETC... THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE THE DRIP-LINE AND SPILLING OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DRIP-LINE. NO MATERIALS SHALL BE BURNED ON SITE. EXISTING TREES KILLED OR DAMAGED SO THAT THEY ARE MISSHAPEN AND/OR UNSIGHTLY SHALL BE REPLACED AT THE COST TO THE CONTRACTOR OF FOUR HUNDRED DOLLARS ($400) PER CALIPER INCH ON AN ESCALATING SCALE WHICH ADDS AN ADDITIONAL TWENTY (20) PERCENT PER INCH OVER FOUR (4) INCHES CALIPER AS FIXED AND AGREED LIQUIDATED DAMAGES. CALIPER SHALL BE MEASURED SIX (6) INCHES ABOVE GROUND LEVEL FOR TREES UP TO AND INCLUDING FOUR (4) INCHES IN CALIPER AND TWELVE (12) INCHES ABOVE GROUND LEVEL FOR TREES OVER FOUR (4) INCHES IN CALIPER.
2. SEE TREE MITIGATION PLAN AND NOTES, IF APPLICABLE.

D. MATERIALS

1. GENERAL

   MATERIAL SAMPLES LISTED BELOW SHALL BE SUBMITTED FOR APPROVAL, ON SITE OR AS DETERMINED BY THE OWNER. UPON APPROVAL, DELIVERY OF MATERIALS MAY COMMENCE.

MATERIAL	SAMPLE SIZE
MULCH	ONE (1) CUBIC FOOT
TOPSOIL MIX	ONE (1) CUBIC FOOT
PLANTS	ONE (1) OF EACH VARIETY (OR TAGGED IN NURSERY)

2. PLANT MATERIALS

   a. FURNISH NURSERY-GROWN PLANTS TRUE TO GENUS, SPECIES, VARIETY, CULTIVAR, STEM FORM, SHEARING, AND OTHER FEATURES INDICATED IN PLANT SCHEDULE SHOWN ON DRAWINGS AND COMPLYING WITH ANSI Z60.1; AND WITH HEALTHY ROOT SYSTEMS DEVELOPED BY TRANSPLANTING OR ROOT PRUNING. PROVIDE WELL-SHAPED, FULLY BRANCHED, HEALTHY, VIGOROUS STOCK, DENSELY FOLIATED WHEN IN LEAF AND FREE OF DISEASE, PESTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT.

   b. TREES FOR PLANTING IN ROWS SHALL BE UNIFORM IN SIZE AND SHAPE.

   c. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN PERMISSION FROM THE PROJECT LANDSCAPE ARCHITECT. ANY ROW TREES MUST BE APPROVED BY OFFICE OF THE CITY FORESTER.

   d. PROVIDE PLANTS OF SIZES, GRADES, AND BALL OR CONTAINER SIZES COMPLYING WITH ANSI Z60.1 FOR TYPES AND FORM OF PLANTS REQUIRED. PLANTS OF A LARGER SIZE MAY BE USED IF ACCEPTABLE TO PROJECT LANDSCAPE ARCHITECT WITH A PROPORTIONATE INCREASE IN SIZE OF ROOTS OR BALLS.

   e. PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, OR UPON DELIVERY TO THE SITE, AS DETERMINED BY THE OWNER, FOR QUALITY, SIZE, AND VARIETY. SUCH APPROVAL SHALL NOT IMPAIR THE RIGHT OF INSPECTION AND REJECTION AT THE SITE DURING PROGRESS OF THE WORK OR AFTER COMPLETION FOR SIZE AND CONDITION OF ROOT BALLS OR ROOTS, LATENT DEFECTS OR INJURIES. REJECTED PLANTS SHALL BE REMOVED IMMEDIATELY FROM THE SITE. NOTICE REQUESTING INSPECTION SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR AT LEAST ONE (1) WEEK PRIOR TO ANTICIPATED DATE.

   f. TREES WITH DAMAGED, CROOKED, OR MULTIPLE LEADERS; TIGHT VERTICAL BRANCHES WHERE BARK IS SQUEEZED BETWEEN TWO BRANCHES OR BETWEEN BRANCH AND TRUNK ("INCLUDED BARK"); CROSSING TRUNKS; CUT-OFF LIMBS MORE THAN ¾ INCH (19 MM) IN DIAMETER; OR WITH STEM GIRDLING ROOTS WILL BE REJECTED.

   g. FURNISH TREES AND SHRUBS WITH ROOTS BALLS MEASURED FROM TOP OF ROOT BALL, WHICH SHALL BEGIN AT ROOT FLARE ACCORDING TO ANSI Z60.1. ROOT FLARE SHALL BE VISIBLE BEFORE PLANTING.

   h. LABEL AT LEAST ONE PLANT OF EACH VARIETY, SIZE, AND CALIPER WITH A SECURELY ATTACHED, WATERPROOF TAG BEARING LEGIBLE DESIGNATION OF COMMON NAME AND FULL SCIENTIFIC NAME, INCLUDING GENUS AND SPECIES. INCLUDE NOMENCLATURE FOR HYBRID, VARIETY, OR CULTIVAR, IF APPLICABLE FOR THE PLANT AS SHOWN ON DRAWINGS.

   i. IF FORMAL ARRANGEMENTS OR CONSECUTIVE ORDER OF PLANTS IS SHOWN ON DRAWINGS, SELECT STOCK FOR UNIFORM HEIGHT AND SPREAD, AND NUMBER THE LABELS TO ASSURE SYMMETRY IN PLANTING.

E. SOIL MIXTURE

1. CONTRACTOR SHALL TEST EXISTING SOIL AND AMEND AS NECESSARY IN ACCORDANCE WITH THE GUIDELINES BELOW:
2. SOIL MIXTURE SHALL CONSIST OF TWO PARTS OF TOPSOIL AND ONE PART SAND, AS DESCRIBED BELOW. CONTRACTOR TO SUBMIT SAMPLES AND PH TESTING RESULTS OF SOIL MIXTURE FOR OWNER'S REPRESENTATIVE APPROVAL PRIOR TO PLANT INSTALLATION OPERATIONS COMMENCE.

   a. TOPSOIL FOR USE IN PREPARING SOIL MIXTURE FOR BACKFILLING PLANT OPENINGS SHALL BE FERTILE, FRIABLE, AND OF A LOAMY CHARACTER; REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH WEEDS AND OTHER LITTER; FREE OF ROOTS, STUMPS, STONES LARGER THAN 2" IN ANY DIRECTION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH. IT SHALL CONTAIN THREE (3) TO FIVE (5) PERCENT DECOMPOSED ORGANIC MATTER, HAVE A PH BETWEEN 5.5 AND 8.0, AND SOLUBLE SALTS LESS THAN 3.0 MMHOS/CM. SUBMIT SOIL SAMPLE AND PH TESTING RESULTS FOR APPROVAL.

   b. SAND SHALL BE COARSE, CLEAN, WELL-DRAINING, NATIVE SAND.

3. TREES SHALL BE PLANTED IN THE EXISTING NATIVE SOIL ON SITE, UNLESS DETERMINED TO BE UNSUITABLE - AT WHICH POINT THE CONTRACTOR SHALL CONTACT THE PROJECT LANDSCAPE ARCHITECT TO DISCUSS ALTERNATE RECOMMENDATION PRIOR TO PLANTING.

F. WATER

1. WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS. WATER MEETING THE ABOVE STANDARD SHALL BE OBTAINED ON THE SITE FROM THE OWNER, IF AVAILABLE, AND THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ARRANGEMENTS FOR ITS USE BY HIS TANKS, HOSES, SPRINKLERS, ETC.... IF SUCH WATER IS NOT AVAILABLE AT THE SITE, THE CONTRACTOR SHALL PROVIDE SATISFACTORY WATER FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER.

   * WATERING/IRRIGATION RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

G. FERTILIZER

1. CONTRACTOR SHALL PROVIDE FERTILIZER APPLICATION SCHEDULE TO OWNER, AS APPLICABLE TO SOIL TYPE, PLANT INSTALLATION TYPE, AND SITE'S PROPOSED USE. SUGGESTED FERTILIZER TYPES SHALL BE ORGANIC OR OTHERWISE NATURALLY-DERIVED.

   * FERTILIZER RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

H. MULCH

1. MULCH MATERIAL SHALL BE MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT, AND APPLIED AT A DEPTH OF THREE (3) INCHES. CLEAR MULCH FROM EACH PLANT'S CROWN (BASE) OR AS SHOWN IN PLANTING DETAILS. UNLESS OTHERWISE NOTED ON PLANS, MULCH SHALL BE DOUBLE SHREDDED HARDWOOD MULCH DARK BROWN FINES OR APPROVED EQUAL. DYED MULCH IS NOT ACCEPTABLE. SUBMIT SAMPLES TO PROJECT LANDSCAPE ARCHITECT FOR APPROVAL. MULCH SHALL BE PROVIDED OVER THE ENTIRE AREA OF EACH SHRUB BED, GROUND COVER, VINE BED, AND TREE RING (6' MINIMUM) PLANTED UNDER THIS CONTRACT, AS WELL AS FOR ANY EXISTING LANDSCAPE AREAS AS SHOWN ON PLANS.

I. DIGGING AND HANDLING

1. ALL TREES SPECIFIED SHALL BE BALLED AND BURLAPPED (B&B) UNLESS OTHERWISE APPROVED BY PROJECT LANDSCAPE ARCHITECT.
2. PROTECT ROOTS OR ROOT BALLS OF PLANTS AT ALL TIMES FROM SUN, DRYING WINDS, WATER AND FREEZING, AS NECESSARY UNTIL PLANTING. PLANT MATERIALS SHALL BE ADEQUATELY PACKED TO PREVENT DAMAGE DURING TRANSIT. TREES TRANSPORTED MORE THAN TEN (10) MILES OR WHICH ARE NOT PLANTED WITHIN THREE (3) DAYS OF DELIVERY TO THE SITE SHALL BE SPRAYED WITH AN ANTITRANSPIRANT PRODUCT ("WILTPRUF" OR EQUAL) TO MINIMIZE TRANSPIRATIONAL WATER LOSS.
3. B&B, AND FIELD GROWN (FG) PLANTS SHALL BE DUG WITH FIRM, NATURAL BALLS OF SOIL OF SUFFICIENT SIZE TO ENCOMPASS THE FIBROUS AND FEEDING ROOTS OF THE PLANTS. NO PLANTS MOVED WITH A ROOT BALL SHALL BE PLANTED IF THE BALL IS CRACKED OR BROKEN. PLANTS SHALL NOT BE HANDLED BY STEMS.

J. CONTAINER GROWN STOCK

1. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE OF GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION.
2. AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG ENOUGH FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER. CONTAINER GROWN STOCK SHALL NOT BE HANDLED BY THEIR STEMS.
3. ROOT BOUND PLANTS ARE NOT ACCEPTABLE AND WILL BE REJECTED.

K. MATERIALS LIST

1. QUANTITIES NECESSARY TO COMPLETE THE WORK ON THE DRAWINGS SHALL BE FURNISHED BY THE CONTRACTOR. QUANTITY ESTIMATES HAVE BEEN MADE CAREFULLY, BUT THE LANDSCAPE ARCHITECT OR OWNER ASSUMES NO LIABILITY FOR OMISSIONS OR ERRORS. SHOULD A DISCREPANCY OCCUR BETWEEN THE PLANS AND THE PLANT LIST QUANTITY, THE PLANS SHALL GOVERN. ALL DIMENSIONS AND/OR SIZES SPECIFIED SHALL BE THE MINIMUM ACCEPTABLE SIZE.

L. FINE GRADING

1. FINE GRADING UNDER THIS CONTRACT SHALL CONSIST OF FINAL FINISHED GRADING OF LAWN AND PLANTING AREAS THAT HAVE BEEN DISTURBED DURING CONSTRUCTION.
2. THE CONTRACTOR SHALL FINE GRADE THE LAWN AND PLANTING AREAS TO BRING THE ROUGH GRADE UP TO FINAL FINISHED GRADE ALLOWING FOR THICKNESS OF SOD AND/OR MULCH DEPTH.
3. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED FOR POSITIVE DRAINAGE TO SURFACE/SUBSURFACE STORM DRAIN SYSTEMS. AREAS ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM THE BUILDINGS. REFER TO CIVIL ENGINEER'S PLANS FOR FINAL GRADES, IF APPLICABLE.

M. PLANTING PROCEDURES

1. THE CONTRACTOR SHALL CLEAN WORK AND SURROUNDING AREAS OF ALL RUBBISH OR OBJECTIONABLE MATTER DAILY. ALL MORTAR, CEMENT, BUILDING MATERIALS, AND TOXIC MATERIAL SHALL BE COMPLETELY REMOVED FROM PLANTING AREAS. THESE MATERIALS SHALL NOT BE MIXED WITH THE SOIL. SHOULD THE CONTRACTOR FIND SUCH SOIL CONDITIONS IN PLANTING AREAS WHICH WILL ADVERSELY AFFECT THE PLANT GROWTH, THE CONTRACTOR SHALL IMMEDIATELY CALL IT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. FAILURE TO DO SO BEFORE PLANTING SHALL MAKE THE CORRECTIVE MEASURES THE RESPONSIBILITY OF THE CONTRACTOR.
2. VERIFY LOCATIONS OF ALL UTILITIES, CONDUITS, SUPPLY LINES AND CABLES, INCLUDING BUT NOT LIMITED TO: ELECTRIC, GAS (LINES AND TANKS), WATER, SANITARY SEWER, STORMWATER SYSTEMS, CABLE, AND TELEPHONE. PROPERLY MAINTAIN AND PROTECT EXISTING UTILITIES. CALL COLORADO (811) TO LOCATE UTILITIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING AND IMPORTED LIMEROCK AND LIMEROCK SUB-BASE FROM ALL PLANTING AREAS TO A MINIMUM DEPTH OF 36" OR TO NATIVE SOIL. CONTRACTOR IS RESPONSIBLE TO BACKFILL THESE PLANTING AREAS TO ROUGH FINISHED GRADE WITH CLEAN TOPSOIL FROM AN ON-SITE SOURCE OR AN IMPORTED SOURCE. IF LIMEROCK OR OTHER ADVERSE CONDITIONS OCCUR IN PLANTED AREAS AFTER 36" DEEP EXCAVATION BY THE CONTRACTOR, AND POSITIVE DRAINAGE CAN NOT BE ACHIEVED, CONTRACTOR SHALL UTILIZE POOR DRAINAGE CONDITION PLANTING DETAIL.
4. FURNISH NURSERY'S CERTIFICATE OF COMPLIANCE WITH ALL REQUIREMENTS AS SPECIFIED HEREIN. INSPECT AND SELECT PLANT MATERIALS BEFORE PLANTS ARE DUG AT NURSERY OR GROWING SITE.
5. COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK. UPON ARRIVAL AT THE SITE, PLANTS SHALL BE THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. PLANTS STORED ONSITE SHALL NOT REMAIN UNPLANTED OR APPROPRIATELY HEALED IN FOR A PERIOD EXCEEDING TWENTY-FOUR (24) HOURS. AT ALL TIMES WORKMANLIKE METHODS CUSTOMARY IN ACCEPTED HORTICULTURAL PRACTICES AS USED IN THE TRADE SHALL BE EXERCISED.
6. WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. COORDINATE PLANTING WITH IRRIGATION WORK TO ASSURE AVAILABILITY OF WATER AND PROPER LOCATION OF IRRIGATION APPURTENANCES AND PLANTS.
7. ALL PLANTING OPENINGS SHALL BE EXCAVATED TO SIZE AND DEPTH IN ACCORDANCE WITH ANSI Z60.1-2014 AMERICAN STANDARD FOR NURSERY STOCK.
8. TEST ALL TREE OPENINGS WITH WATER BEFORE PLANTING TO ASSURE PROPER DRAINAGE PERCOLATION IS AVAILABLE. NO ALLOWANCE WILL BE MADE FOR LOST PLANTS DUE TO IMPROPER DRAINAGE. IF POOR DRAINAGE EXISTS, UTILIZE "POOR DRAINAGE CONDITION" PLANTING DETAIL.
9. TREES SHALL BE SET PLUMB AND HELD IN POSITION UNTIL THE PLANTING MIXTURE HAS BEEN FLUSHED INTO PLACE WITH A SLOW, FULL HOSE STREAM. ALL PLANTING SHALL BE PERFORMED BY PERSONNEL FAMILIAR WITH PLANTING PROCEDURES AND UNDER THE SUPERVISION OF A QUALIFIED LANDSCAPE FOREMEN.
10. PRIOR TO EXCAVATION OF TREE OPENINGS, AN AREA EQUAL TO TWO TIMES THE DIAMETER OF THE ROOT BALL SHALL BE ROTO-TILLED TO A DEPTH EQUAL TO THE DEPTH OF THE ROOT BALL.
11. EXCAVATION OF TREE OPENINGS SHALL BE PERFORMED USING EXTREME CARE TO AVOID DAMAGE TO SURFACE AND SUBSURFACE ELEMENTS SUCH AS UTILITIES OR HARDSCAPE ELEMENTS, FOOTERS AND PREPARED SUB-BASES.
12. IN CONTINUOUS SHRUB AND GROUND COVER BEDS, THE ROTO-TILLED PERIMETER SHOULD EXTEND TO A DISTANCE OF ONE FOOT BEYOND THE DIAMETER OF A SINGLE ROOT BALL. THE BED SHALL BE TILLED TO A DEPTH EQUAL TO THE ROOT BALL DEPTH PLUS 6".
13. TREE OPENINGS FOR WELL DRAINED SOILS SHALL BE DUG SO THAT THE BOTTOM OF THE ROOT BALL WILL REST ON UNDISTURBED SOIL AND THE TOP OF THE ROOT BALL WILL BE FLUSH WITH FINISH GRADE. IN POORLY DRAINED SOILS THE TREE OPENING SHALL BE DUG SO THAT THE ROOT BALL RESTS ON UNDISTURBED SOIL AND THE TOP OF THE ROOT BALL IS 1" ABOVE FINISH GRADE. PLANT PIT WALLS SHALL BE SCARIFIED PRIOR TO PLANT INSTALLATION.
14. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO BUILDINGS AND BUILDING STRUCTURES WHILE INSTALLING TREES.
15. SOIL MIXTURE SHALL BE AS SPECIFIED IN SECTION 'E'.
16. TREES AND SHRUBS SHALL BE SET STRAIGHT AT AN ELEVATION THAT, AFTER SETTLEMENT, THE PLANT CROWN WILL STAND ONE (1) TO TWO (2) INCHES ABOVE GRADE. EACH PLANT SHALL BE SET IN THE CENTER OF THE PIT. SOIL MIXTURE SHALL BE BACK FILLED, THOROUGHLY TAMPED AROUND THE BALL, AND SETTLED BY WATER (AFTER TAMPING).
17. AMEND PINE AND OAK PLANT OPENINGS WITH ECTOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. ALL OTHER PLANT OPENINGS SHALL BE AMENDED WITH ENDOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. PROVIDE PRODUCT INFORMATION SUBMITTAL PRIOR TO INOCULATION.
18. FILL HOLE WITH SOIL MIXTURE, MAKING CERTAIN ALL SOIL IS SATURATED. TO DO THIS, FILL HOLE WITH WATER AND ALLOW TO SOAK MINIMUM TWENTY (20) MINUTES, STIRRING IF NECESSARY TO GET SOIL THOROUGHLY WET. PACK LIGHTLY WITH FEET, ADD MORE WET SOIL MIXTURE. DO NOT COVER TOP OF BALL WITH SOIL MIXTURE.
19. ALL BURLAP, ROPE, WIRES, BASKETS, ETC.., SHALL BE REMOVED FROM THE SIDES AND TOPS OF BALLS, BUT NO BURLAP SHALL BE PULLED FROM UNDERNEATH.
20. TREES SHALL BE PRUNED, IN ACCORDANCE WITH ANSI A-300, TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ALL SOFT WOOD OR SUCKER GROWTH AND ALL BROKEN OR BADLY DAMAGED BRANCHES SHALL BE REMOVED WITH A CLEAN CUT. ALL PRUNING TO BE PERFORMED BY CERTIFIED ARBORIST.
21. SHRUBS AND GROUND COVER PLANTS SHALL BE EVENLY SPACED IN ACCORDANCE WITH THE DRAWINGS AND AS INDICATED ON THE PLANT LIST. MATERIALS INSTALLED SHALL MEET MINIMUM SPECIMEN REQUIREMENTS OR QUANTITIES SHOWN ON PLANS, WHICHEVER IS GREATER. CULTIVATE ALL PLANTING AREAS TO A MINIMUM DEPTH OF 6", REMOVE AND DISPOSE ALL DEBRIS. MIX TOP 4" THE PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION E. THOROUGHLY WATER ALL PLANTS AFTER INSTALLATION.
22. TREE GUYING AND BRACING SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS TO INSURE STABILITY AND MAINTAIN TREES IN AN UPRIGHT POSITION. IF THE CONTRACTOR AND OWNER DECIDE TO WAIVE THE TREE GUYING AND BRACING, THE OWNER SHALL NOTIFY THE PROJECT LANDSCAPE ARCHITECT IN WRITING AND AGREE TO INDEMNIFY AND HOLD HARMLESS THE PROJECT LANDSCAPE ARCHITECT IN THE EVENT UNSUPPORTED TREES PLANTED UNDER THIS CONTRACT FALL AND DAMAGE PERSON OR PROPERTY.
23. ALL PLANT BEDS SHALL BE KEPT FREE OF NOXIOUS WEEDS UNTIL FINAL ACCEPTANCE OF WORK. IF DIRECTED BY THE OWNER, "ROUND-UP" SHALL BE APPLIED FOR WEED CONTROL BY QUALIFIED PERSONNEL TO ALL PLANTING AREAS IN SPOT APPLICATIONS PER MANUFACTURER'S RECOMMENDATIONS. PRIOR TO FINAL INSPECTION, TREAT ALL PLANTING BEDS WITH AN APPROVED PRE-EMERGENT HERBICIDE AT AN APPLICATION RATE RECOMMENDED BY THE MANUFACTURER. (AS ALLOWED BY JURISDICTIONAL AUTHORITY)

N. LAWN SODDING

1. THE WORK CONSISTS OF LAWN BED PREPARATION, SOIL PREPARATION, AND SODDING COMPLETE, IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND THE APPLICABLE DRAWINGS TO PRODUCE A TURF GRASS LAWN ACCEPTABLE TO THE OWNER.
2. ALL AREAS THAT ARE TO BE SODDED SHALL BE CLEARED OF ANY ROUGH GRASS, WEEDS, AND DEBRIS BY MEANS OF A SOD CUTTER TO A DEPTH OF THREE (3) INCHES, AND THE GROUND BROUGHT TO AN EVEN GRADE. THE ENTIRE SURFACE SHALL BE ROLLED WITH A ROLLER WEIGHING NOT MORE THAN ONE-HUNDRED (100) POUNDS PER FOOT OF WIDTH. DURING THE ROLLING, ALL DEPRESSIONS CAUSED BY SETTLEMENT SHALL BE FILLED WITH ADDITIONAL SOIL, AND THE SURFACE SHALL BE REGRADED AND ROLLED UNTIL PRESENTING A SMOOTH AND EVEN FINISH TO THE REQUIRED GRADE.
3. PREPARE LOOSE BED FOUR (4) INCHES DEEP. HAND RAKE UNTIL ALL BUMPS AND DEPRESSIONS ARE REMOVED. WET PREPARED AREA THOROUGHLY.
4. SODDING

   a. THE CONTRACTOR SHALL SOD ALL AREAS THAT ARE NOT PAVED OR PLANTED AS DESIGNATED ON THE DRAWINGS WITHIN THE CONTRACT LIMITS, UNLESS SPECIFICALLY NOTED OTHERWISE.

   b. SOD PANELS SHALL BE LAID TIGHTLY TOGETHER SO AS TO MAKE A SOLID SODDED LAWN AREA. SOD SHALL BE LAID UNIFORMLY AGAINST THE EDGES OF ALL CURBS AND OTHER HARDSCAPE ELEMENTS, PAVED AND PLANTED AREAS. ADJACENT TO BUILDINGS, A 24 INCH STONE MULCH STRIP SHALL BE PROVIDED. IMMEDIATELY FOLLOWING SOD LAYING, THE LAWN AREAS SHALL BE ROLLED WITH A LAWN ROLLER CUSTOMARILY USED FOR SUCH PURPOSES, AND THEN THOROUGHLY IRRIGATED. IF, IN THE OPINION OF THE OWNER, TOP-DRESSING IS NECESSARY AFTER ROLLING TO FILL THE VOIDS BETWEEN THE SOD PANELS AND TO EVEN OUT INCONSISTENCIES IN THE SOD, CLEAN SAND, AS APPROVED BY THE OWNER'S REPRESENTATIVE, SHALL BE UNIFORMLY SPREAD OVER THE ENTIRE SURFACE OF THE SOD AND THOROUGHLY WATERED IN. FERTILIZE INSTALLED SOD AS ALLOWED BY PROPERTY'S JURISDICTIONAL AUTHORITY.

5. DURING DELIVERY, PRIOR TO, AND DURING THE PLANTING OF THE LAWN AREAS, THE SOD PANELS SHALL AT ALL TIMES BE PROTECTED FROM EXCESSIVE DRYING AND UNNECESSARY EXPOSURE OF THE ROOTS TO THE SUN. ALL SOD SHALL BE STACKED SO AS NOT TO BE DAMAGED BY SWEATING OR EXCESSIVE HEAT AND MOISTURE.
6. LAWN MAINTENANCE

   a. WITHIN THE CONTRACT LIMITS, THE CONTRACTOR SHALL PRODUCE A DENSE, WELL ESTABLISHED LAWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RE-SODDING OF ALL ERODED, SUNKEN OR BARE SPOTS (LARGER THAN 12"X12") UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. REPAIRED SODDING SHALL BE ACCOMPLISHED AS IN THE ORIGINAL WORK, INCLUDING REGRADING IF NECESSARY.

   b. CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SOD/LAWN UNTIL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. PRIOR TO AND UPON ACCEPTANCE, CONTRACTOR TO PROVIDE WATERING/IRRIGATION SCHEDULE TO OWNER. OBSERVE ALL APPLICABLE WATERING RESTRICTIONS AS SET FORTH BY THE PROPERTY'S JURISDICTIONAL AUTHORITY.

O. EDGING

   a. CONTRACTOR SHALL INSTALL 4"X⅛" ROLLED TOP STEEL EDGING BETWEEN ALL SOD/SEED AREAS AND PLANTING BEDS.

P. CLEANUP

1. UPON COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM CONTRACTORS WORK. ALL PAVED AREAS SHALL BE CLEANED AND THE SITE LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER'S REPRESENTATIVE.

Q. PLANT MATERIAL MAINTENANCE

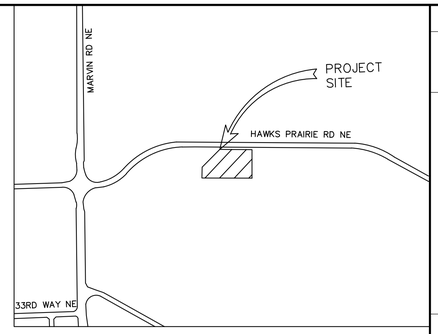
1. ALL PLANTS AND PLANTING INCLUDED UNDER THIS CONTRACT SHALL BE MAINTAINED BY WATERING, CULTIVATING, SPRAYING, PRUNING, AND ALL OTHER OPERATIONS (SUCH AS RE-STAKING OR REPAIRING GUY SUPPORTS) NECESSARY TO INSURE A HEALTHY PLANT CONDITION BY THE CONTRACTOR UNTIL CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE.

R. FINAL INSPECTION AND ACCEPTANCE OF WORK

1. FINAL INSPECTION AT THE END OF THE WARRANTY PERIOD SHALL BE ON PLANTING, CONSTRUCTION AND ALL OTHER INCIDENTAL WORK PERTAINING TO THIS CONTRACT. ANY REPLACEMENT AT THIS TIME SHALL BE SUBJECT TO THE SAME ONE (1) YEAR WARRANTY (OR AS SPECIFIED BY THE LANDSCAPE ARCHITECT OR OWNER IN WRITING) BEGINNING WITH THE TIME OF REPLACEMENT AND ENDING WITH THE SAME INSPECTION AND ACCEPTANCE HEREIN DESCRIBED.

S. WARRANTY

1. THE LIFE AND SATISFACTORY CONDITION OF ALL PLANT MATERIAL INSTALLED (INCLUDING SOD) BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTANCE BY THE OWNER'S REPRESENTATIVE.
2. ANY PLANT NOT FOUND IN A HEALTHY GROWING CONDITION AT THE END OF THE WARRANTY PERIOD SHALL BE REMOVED FROM THE SITE AND REPLACED AS SOON AS WEATHER CONDITIONS PERMIT. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE AS SPECIFIED IN THE PLANT LIST. THEY SHALL BE FURNISHED PLANTED AND MULCHED AS SPECIFIED AT NO ADDITIONAL COST TO THE OWNER.
3. IN THE EVENT THE OWNER DOES NOT CONTRACT WITH THE CONTRACTOR FOR LANDSCAPE AND IRRIGATION MAINTENANCE, THE CONTRACTOR SHOULD VISIT THE PROJECT SITE PERIODICALLY DURING THE ONE (1) YEAR WARRANTY PERIOD TO EVALUATE MAINTENANCE PROCEDURES BEING PERFORMED BY THE OWNER. CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING OF MAINTENANCE PROCEDURES OR CONDITIONS WHICH THREATEN VIGOROUS AND HEALTHY PLANT GROWTH.



VICINITY MAP

NTS

NORTH

No.	REVISIONS	DATE	BY

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ELIZABETH ANNE WELMAT
STATE OF WASHINGTON
21034213
REGISTERED PROFESSIONAL ENGINEER
07/06/2022

KHA PROJECT	090057000
DATE	07/06/2022
SCALE	AS SHOWN
DESIGNED BY	EIW
DRAWN BY	BKH
CHECKED BY	EIW

LANDSCAPE NOTES

LACEY, WA
EMPLOYEE
DROP-OFF

THURSTON COUNTY WASHINGTON

L2.0

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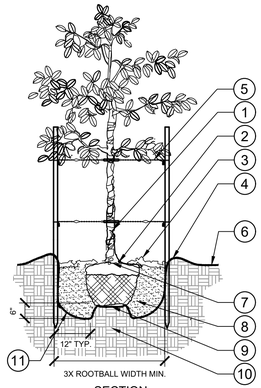


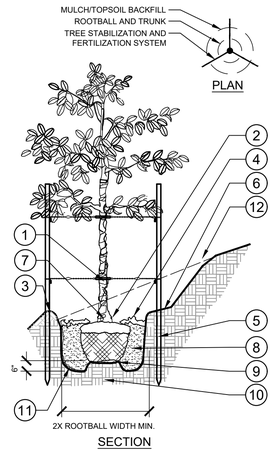
SECTION

1. TRUNK/ROOT BALL TO BE CENTERED AND PLUMB/LEVEL IN PLANTING PIT.
2. 6" DIA. CLEAR OF MULCH AT TRUNK FLARE.
3. 4" MINIMUM MULCH AS SPECIFIED. WHERE TREES ARE PLACED IN SOD, MULCH RING FOR TREES SHALL BE 6' DIAMETER (MIN.) OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
4. 4" HIGH BERM, FIRMLY COMPACTED.
5. 8' x 2" TREATED LODGE POLE PINE TREE STAKES, TWO (2) PER TREE; AVOID PENETRATING ROOT BALL. 14 GAUGE, ANNEALED STEEL GUY WIRE. STAPLE ENDS TO INSIDE OF TREE STAKE. ADJUST TENSION BY TURNING WIRE PAIRS FROM THE MIDDLE
6. FINISHED GRADE. (SEE GRADING PLAN)
7. TOP OF ROOTBALL MIN. 1" ABOVE FINISHED GRADE.
8. PREPARED PLANTING SOIL AS SPECIFIED.
9. TOP OF ROOTBALL SHALL BE 1" ABOVE FINISHED GRADE. ROOTBALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING. ROOTBALLS SMALLER THAN 24" IN DIAMETER MAY SIT ON COMPACTED EARTH.
10. UNDISTURBED NATIVE SOIL.
11. SCARIFY BOTTOM AND SIDES OF PLANTING PIT.

NOTES:

A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
B. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.
C. PRUNE ALL TREES IN ACCORDANCE WITH ANSI A-300.
D. INSTALL PRE-EMERGENT HERBICIDE PRIOR TO PLANT INSTALLATION.

1 / L2.1 TREE PLANTING - STAKING
SECTION / PLAN — NTS



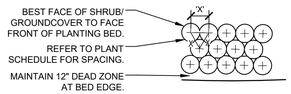
SECTION

1. TRUNK/ROOT BALL TO BE CENTERED AND PLUMB/LEVEL IN PLANT OPENING.
2. 6" DIA. CLEAR OF MULCH AT TRUNK FLARE.
3. 4" HIGH BERM, FIRMLY COMPACTED NATIVE SOIL.
4. 3" MINIMUM OF MULCH AS SPECIFIED. WHERE TREES ARE PLACED IN SOD, MULCH RING FOR TREES SHALL BE 6' DIAMETER (MIN.) OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
5. 8' x 2" TREATED LODGE POLE PINE TREE STAKES OR 8' STEEL T-POSTS, THREE (3) PER TREE; AVOID PENETRATING ROOT BALL. 14 GAUGE, ANNEALED STEEL GUY WIRE. STAPLE ENDS TO INSIDE OF TREE STAKE. ADJUST TENSION BY TURNING WIRE PAIRS FROM THE MIDDLE.
6. CUT BACK SLOPE TO PROVIDE A FLAT SURFACE FOR PLANTING.
7. TOP OF ROOTBALL MIN. 1" ABOVE FINISHED GRADE.
8. PREPARED PLANTING SOIL AS SPECIFIED.
9. ROOTBALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING. ROOTBALLS SMALLER THAN 24" IN DIAMETER MAY SIT ON COMPACTED EARTH.
10. UNDISTURBED NATIVE SOIL.
11. SCARIFY BOTTOM AND SIDES OF PLANT OPENING.
12. CUT BACK SLOPE TO PROVIDE A FLAT SURFACE FOR PLANTING.

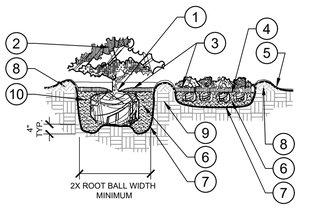
NOTES:

A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
B. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.
C. PRUNE ALL TREES IN ACCORDANCE WITH ANSI A-300.

2 / L2.1 TREE PLANTING ON A SLOPE - STAKING
SECTION / PLAN — NTS



PLAN



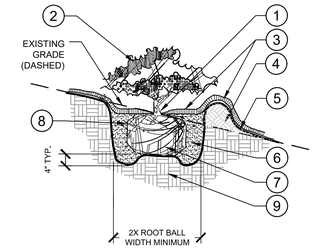
SECTION

1. TOP OF ROOTBALLS TO BE PLANTED AT GRADE OR SLIGHTLY ABOVE SURROUNDING SOIL. 2" DIA. CLEAR OF MULCH AT TRUNK FLARE.
2. PRUNE ALL SHRUBS TO ACHIEVE A UNIFORM MASS/HEIGHT.
3. 4" MULCH LAYER AS SPECIFIED.
4. EXCAVATE ENTIRE BED SPECIFIED FOR GROUNDCOVER BED.
5. FOR CONDITIONS WITH FINISHED GRADE OF 4:1 MAX SLOPE ON ALL SIDES (SEE GRADING PLAN).
6. PREPARED PLANTING SOIL AS SPECIFIED. (SEE LANDSCAPE NOTES). NOTE: WHEN GROUND-COVERS AND SHRUBS USED IN MASSES, ENTIRE BED TO BE AMENDED WITH PLANTING SOIL MIX AS SPECIFIED.
7. SCARIFY PLANT OPENING SIDES AND BOTTOM.
8. 4" HIGH BERM FIRMLY COMPACTED.
9. UNDISTURBED NATIVE SOIL.
10. FERTILIZER TABLETS (MAX 3" DEEP)

NOTES:

A. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING AREAS PRIOR TO INSTALLATION.
B. WHEN SHRUBS ARE PRUNED IN MASSES, PRUNE ALL SHRUBS TO ACHIEVE UNIFORM MASS / HEIGHT.
C. ALL SHRUBS AND GROUNDCOVERS SHALL BE PLUMB VERTICALLY, UNLESS OTHERWISE DIRECTED BY PROJECT LANDSCAPE ARCHITECT.
D. PRE-EMERGENT HERBICIDE TO BE APPLIED PRIOR TO PLANT INSTALLATION.

3 / L2.1 SHRUB/GROUNDCOVER PLANTING
SECTION / PLAN — NTS

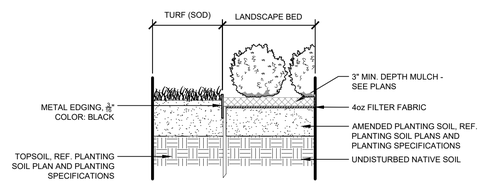


1. TOP OF ROOTBALLS TO BE PLANTED AT GRADE OR SLIGHTLY ABOVE SURROUNDING SOIL. 2" DIA. CLEAR OF MULCH AT TRUNK FLARE.
2. PRUNE SHRUBS AS DIRECTED BY OWNER'S REPRESENTATIVE.
3. 4" MINIMUM OF MULCH AS SPECIFIED. WHERE SHRUBS ARE PLACED IN MASSES, MULCH SHALL BE SPREAD IN A CONTINUOUS BED.
4. SOIL BERM TO HOLD WATER. TOP OF PLANTING PIT 'BERM' TO BE LEVEL ACROSS PIT. SLOPE DOWNHILL PORTION OF BERM AS REQUIRED TO MEET EXISTING GRADE. MULCH OVER EXPOSED TOPSOIL.
5. FINISHED GRADE (SEE GRADING PLAN)
6. PREPARED PLANTING SOIL AS SPECIFIED. (SEE LANDSCAPE NOTES).
7. SCARIFY SIDES AND BOTTOM OF PLANTING PIT.
8. FERTILIZER TABLETS (MAX 3" DEEP).
9. UNDISTURBED NATIVE SOIL

NOTES:

A. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANT OPENINGS PRIOR TO INSTALLATION.
B. WHEN SHRUBS ARE PRUNED IN MASSES, PRUNE ALL SHRUBS TO ACHIEVE UNIFORM MASS / HEIGHT.
C. ALL SHRUBS AND GROUNDCOVERS SHALL BE PLUMB VERTICALLY, UNLESS OTHERWISE DIRECTED BY OWNERS REPRESENTATIVE.
D. PRE-EMERGENT HERBICIDE TO BE APPLIED PRIOR TO PLANT INSTALLATION.

4 / L2.1 SHRUB/GROUNDCOVER PLANTING ON A SLOPE
SECTION — NTS



5 / L2.1 METAL EDGER AT PLANTING BED — 1" = 1"

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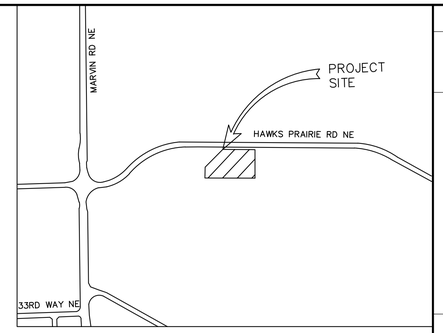

VICINITY MAP — NTS

NORTH

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ELIZABETH ANNE WILMOT
STATE OF WASHINGTON
21034213
REGISTERED PROFESSIONAL ENGINEER
07/06/2022

KHA PROJECT	090057000
DATE	07/06/2022
SCALE	AS SHOWN
DESIGNED BY	EIW
DRAWN BY	BKH
CHECKED BY	EIW

LANDSCAPE DETAILS

LACEY, WA EMPLOYEE DROP-OFF

THURSTON COUNTY WASHINGTON

L2.1