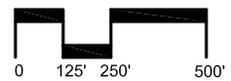


Mt. Scott Creek Restoration

Location Plan





Mt. Scott Creek Restoration
PHOTOS OF EXISTING CONDITIONS



Mt. Scott Creek Restoration
PHOTOS OF EXISTING CONDITIONS



ABBREVIATIONS

APPROX.	= APPROXIMATE
ABBEV.	= ABBREVIATED
A.C.	= ASPHALT CONCRETE
B&B	= BALLED AND BURLAP
BF	= BOTTOM OF FOUNTAIN
BR	= BOTTOM OF RAMP
BS	= BOTTOM OF STAIR
BW	= BOTTOM OF WALL (ELEV. AT FINISH GRADE)
B.O.W	= BOTTOM OF WALL (ELEV. BELOW FINISH GRADE)
CAL.	= CALIPER
CONT.	= CONTINUOUS
C.P.	= CENTER POINT
C.T.	= CURRENT TRANSFORMER
DOM	= DOMESTIC WATER LINE
(E)	= EXISTING
EA.	= EACH
E.J.	= EXPANSION JOINT
ELC	= EXTERIOR LIGHTING CONTROL
ELEV	= ELEVATION
EOP	= EDGE OF PAVEMENT
FG	= FINISH GRADE
F.L.	= FLOW LINE
FS	= FINISH SURFACE
GAL	= GALLON
GFI	= GROUND FAULT INTERRUPTER
GND	= GROUND
IE	= INVERT ELEVATION
LF	= LINEAR FEET
MIN	= MINIMUM
MAX	= MAXIMUM
O.H.	= OVER HEAD
O.C.	= ON CENTER
O.D.	= OUTSIDE DIAMETER
P.A.	= PLANTING AREA
PERF	= PERFERATED
PC	= POINT OF CURVATURE
PRC	= POINT OF REVERSE CURVATURE
P.P.	= POWER POLE
PVC	= POLYVINYL CHLORIDE PIPE
REQ.	= REQUIRED
R.	= RADIUS
RE	= RIM ELEVATION
R.O.W.	= RIGHT OF WAY
SAN	= SANITARY
SEC.	= SECONDARY
SST	= STAINLESS STEEL
STA.	= STATION
TC	= TOP OF CURB
TD	= TOP OF DECK
TEL	= TELEPHONE
TG	= TOP OF GRATE
TR	= TOP OF RAMP
TS	= TOP OF STAIR
TYP	= TYPICAL
TW	= TOP OF WALL
U.G.	= UNDERGROUND
U.O.N	= UNLESS OTHERWISE NOTED
VR	= VANDAL RESISTANT
WM	= WATER METER
WP	= WATER PROOF
WQ	= WATER QUALITY

SYMBOL LIST

DETAIL NUMBER: DETAIL

SHEET NUMBER: L1.00

SECTION NUMBER: SECTION

SHEET NUMBER: L1.00

1 **DETAIL NAME**
Plan, Section, Elevation

0 2' 4' 8"

PROJECT SITE

AREA MAP

NOT TO SCALE

PROJECT SITE

VICINITY MAP

NOT TO SCALE

DRAWING INDEX

SHEET DESCRIPTION	SHEET NUMBER
GENERAL	
GENERAL INFORMATION	G1.00
KEY PLAN	G1.01
NATURAL RESOURCE - PERMANENT AND TEMPORARY IMPACTS	G1.02
CIVIL	
BANK STABILIZATION: LOG AND BOULDER PLACEMENT	C1.00
BANK STABILIZATION: LOG AND BOULDER PLACEMENT	C1.01
BANK STABILIZATION: LOG AND BOULDER PLACEMENT	C1.02
BANK STABILIZATION: LOG AND BOULDER PLACEMENT	C1.03
BANK STABILIZATION: LOG AND BOULDER PLACEMENT	C1.04
LANDSCAPE	
EXISTING CONDITIONS / DEMOLITION PLAN	L1.00
FENCE LAYOUT AND MATERIALS PLAN	L1.01
LOG JAM OVERLOOK: GRADING, LAYOUT AND MATERIALS PLAN	L1.02
CONFLUENCE OVERLOOK: GRADING, LAYOUT AND MATERIALS PLAN	L1.03
PEDESTRIAN BRIDGE: GRADING, LAYOUT AND MATERIALS PLAN	L1.04
PLANTING PLAN	L2.00
PLANTING LEGEND	L2.01
EROSION CONTROL AND TREE PROTECTION DETAILS	L3.00
CONSTRUCTION DETAILS	L3.01
OVERLOOK DECK FRAMING DETAIL	L3.02
OVERLOOK DECK DETAILS	L3.03
BRIDGE DETAILS	L3.04
TRAIL DECOMMISSIONING DETAILS	L3.05
PLANTING DETAILS	L3.06

- PROJECT PARTNERS**
- CLACKAMAS COUNTY WATER ENVIRONMENT SERVICES
 - NORTH CLACKAMAS PARKS AND RECREATION DISTRICT
 - CITY OF MILWAUKIE
 - METRO
 - OREGON DEPARTMENT OF FISH AND WILDLIFE
 - FRIENDS OF TREES
 - NORTH CLACKAMAS URBAN WATERSHEDS COUNCIL
 - FRIENDS OF KELLOGG AND MT. SCOTT CREEKS
 - FRIENDS OF NORTH CLACKAMAS PARKS
 - MILWAUKIE CENTER

OWNER CONTACT INFORMATION

CLACKAMAS COUNTY WES	CITY OF MILWAUKIE	NORTH CLACKAMAS PARKS AND REC DISTRICT
GAIL SHALOU 150 BEAVERCREEK ROAD, SUITE 430 OREGON CITY, OREGON 97045 PHONE: 530.742.4597	JOANN HERRIGEL 10722 SE MAIN STREET MILWAUKIE, OREGON 97222 PHONE: 503.786.7508	TONIA BURNS 150 BEAVERCREEK ROAD OREGON CITY, OREGON 97045 PHONE: 503.742.4348

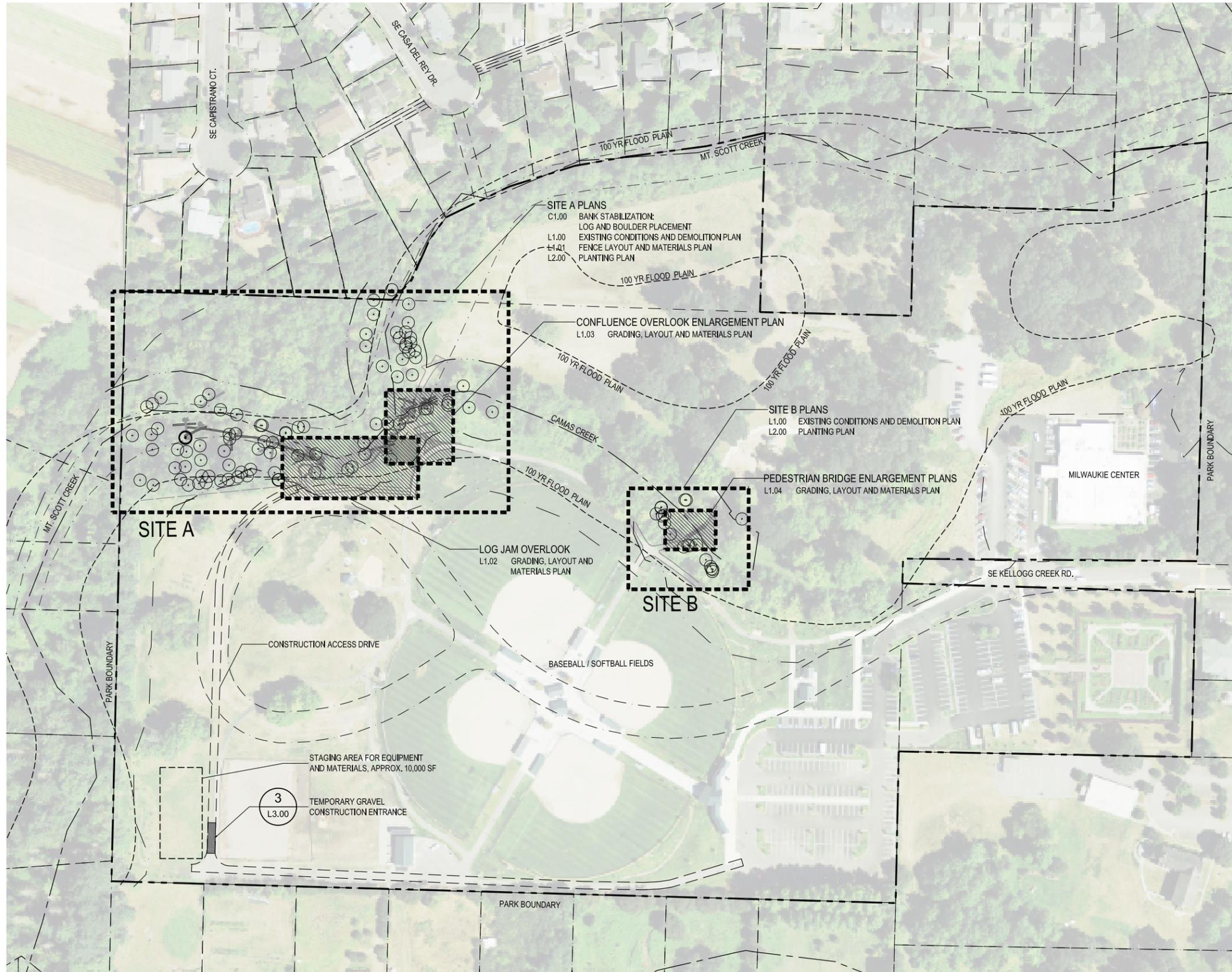
PROJECT TEAM

LANDSCAPE ARCHITECT	ENVIRONMENTAL
GREENWORKS, P.C. 24 NW 2ND AVENUE PORTLAND, OREGON 97209 PHONE: 503.222.5612 FAX: 503.222.2283 PROJECT CONTACT: CLAIRE MAULHARDT	SWCA ENVIRONMENTAL CONSULTANTS 1220 SW MORRISON STREET, SUITE 700 PORTLAND, OREGON 97205-2235 503.224.0333 X6250, FAX 503.224.1851 PROJECT CONTACT: C. MIRTH WALKER, PWS, CWD
ENGINEER	BRIDGE DESIGNER
INTER-FLUVE, INC. 1020 WASCO STREET, SUITE 1 HOOD RIVER, OREGON 97031 PHONE: 503.386.9003 PROJECT CONTACT: BILL NORRIS, P.E.	WESTERN WOOD STRUCTURES P.O. BOX 130, 20675 SW 105TH AVE. TUALATIN, OREGON 97062-0130 PHONE: 509.692.6900 PROJECT CONTACT: HAZEM NYLAND

project: **Mt. Scott Creek Restoration**
North Clackamas Park
Clackamas Water Environment Services
150 Beaver Creek Road, Suite 430
OREGON CITY, OR 97045
GShaloum@co.clackamas.or.us

submit: Land Use Permit
sheet title: **GENERAL INFORMATION**

DATE: 4.25.2012
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Checked By:
Job No.: 110231.3
Approved:

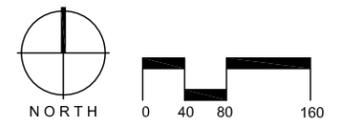


- GENERAL LEGEND**
- PARK BOUNDARY
 - LOT LINES
 - CREEK CENTER LINE
 - 100 YR. FLOOD PLAIN
 - FEMA 100-YEAR FLOOD PLAIN
 - WATER QUALITY RESOURCE (WQR)
 - HABITAT CONSERVATION AREA (HCA)
 - FLOODWAY
 - EXISTING TREES

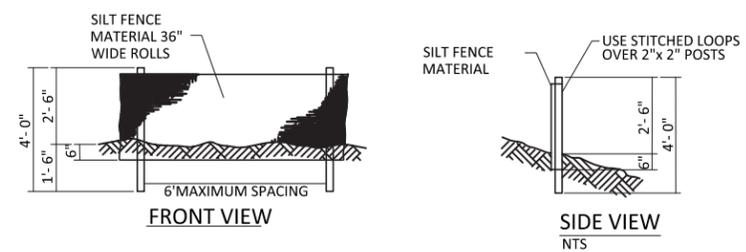
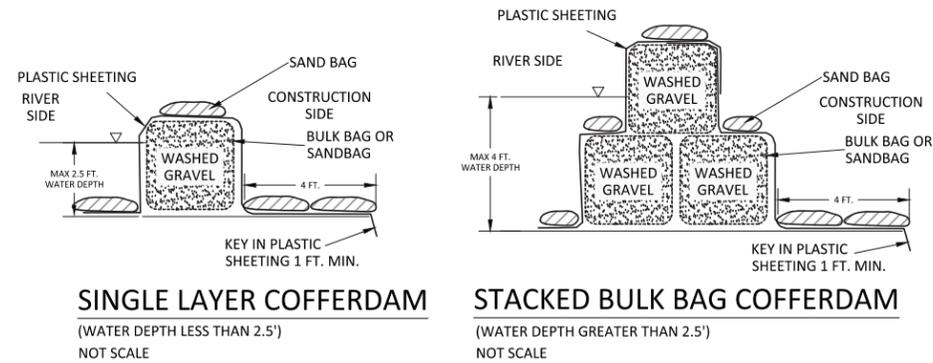
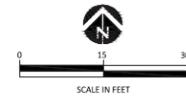
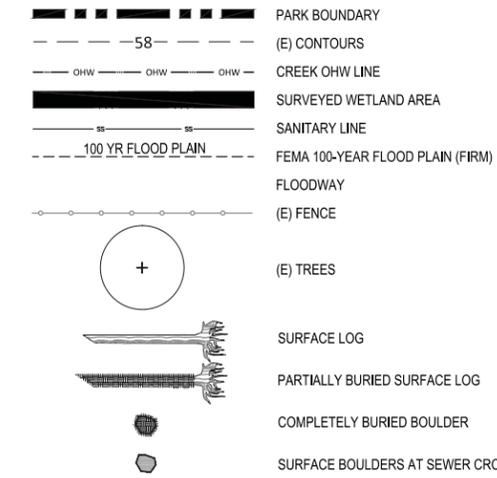


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 - FLOODWAY
 - EXISTING TREES

- DISTURBANCE LEGEND**
- PERMANENT IMPACTS - APPROX. 2,120 SF
 - TEMPORARY IMPACTS - APPROX. 12,200 SF



GENERAL LEGEND



TEMPORARY COFFERDAM DETAILS
NOT SCALE

BULK BAG GENERAL NOTES:

BULK BAG COFFERDAM SHALL BE CONSTRUCTED OF SEVERAL UNITS OF BULK BAGS FILLED WITH WASHED GRAVEL, AND ABUTTED SIDE BY SIDE TO CREATE A ROW THAT ISOLATES THE CONSTRUCTION SITE FROM THE RIVER. IF WATER DEPTH EXCEEDS 85% OF THE BULK BAG HEIGHT, AN ADDITIONAL TOP ROW OF BULK BAGS SHALL BE INSTALLED, SUPPORTED BY TWO BOTTOM ROWS OF BULK BAGS. BULK BAG COFFERDAM SHALL BE SEALED BY COVERING THE COFFERDAM WITH PLASTIC SHEETING HELD IN PLACE BY STANDARD SANDBAGS PLACED IN ROWS ON TOP OF COFFERDAM, AND AT TOE OF COFFERDAM. THE PLASTIC SHEETING SHALL BE DRAPED ALONG THE CHANNEL BOTTOM ON THE WORK AREA SIDE OF THE COFFERDAM WITH OUTWARD EDGE OF SHEETING MINIMUM 4-FEET FROM TOE OF COFFERDAM. THE DRAPED PORTION OF PLASTIC SHEETING SHALL BE PINNED TO THE CHANNEL BED BY MINIMUM TWO ROWS OF STANDARD SANDBAGS. THE OUTWARD EDGE OF PLASTIC SHEETING SHALL BE TOED INTO THE CHANNEL BED MINIMUM 1-FT. TOEING IN THE OUTWARD EDGE OF PLASTIC SHEETING SHALL OCCUR AFTER THE COFFERDAM IS CLOSED TO PREVENT TURBIDITY RELEASE TO THE WATERWAY.

IF POSSIBLE, THE COFFERDAM SHALL BE EXTENDED ONTO A GRAVEL BAR AND OUT OF THE WATER. IF THE END MUST BE TERMINATED AT THE RIVERBANK, THE COFFERDAM SHALL BE TIGHTLY SEALED TO THE GROUND BY PLASTIC SHEETING AND STANDARD SANDBAGS. MULTIPLE LAYERS OF SHEETING AND SANDBAGS MAY BE REQUIRED TO FORM A WATERTIGHT SEAL.

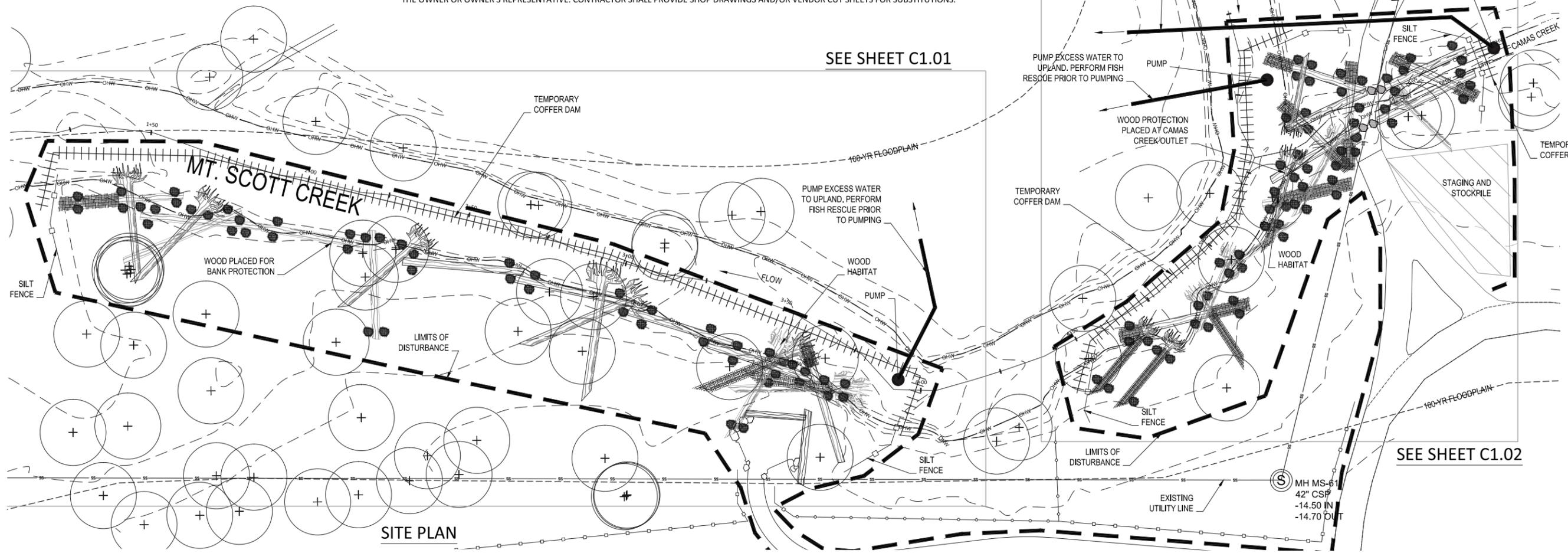
BULK BAGS SHALL BE WATERPROOF CUBE-SHAPED POLYPROPYLENE WOVEN FABRIC BAGS WITH FULLY OPEN TOP, FLAT BOTTOM, FOUR LOOPS, MINIMUM 2-TON WEIGHT CAPACITY, MINIMUM 5:1 SAFETY FACTOR.

PLASTIC SHEETING SHALL BE MINIMUM 6-MIL THICKNESS. ROLL LENGTH SHALL COVER THE COFFERDAM FROM BOTTOM TO TOP WITHOUT SEAMS. FRONT AND BACK PLASTIC SHEETS SHALL OVERLAP ON THE TOP OF THE COFFERDAM.

BULK BAG COFFERDAM SHALL BE COMPLETELY REMOVED AFTER CONSTRUCTION IS COMPLETED AND TURBIDITY HAS BEEN REMOVED.

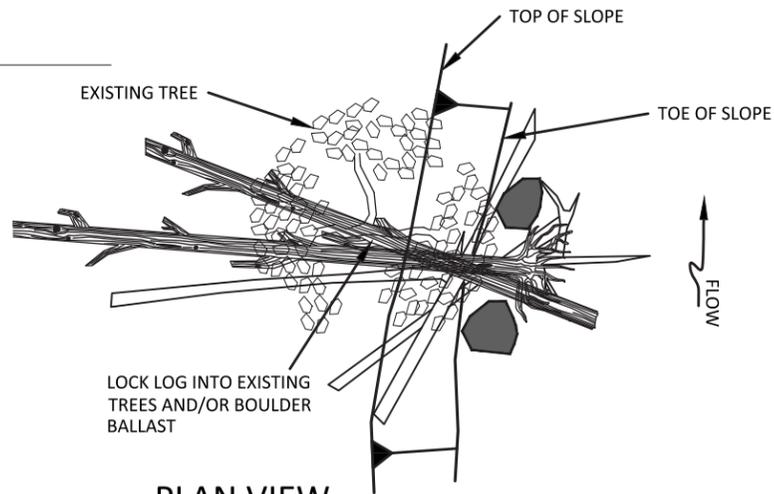
ALTERNATE COFFERDAM MATERIALS AND CONFIGURATIONS MAY BE ALLOWED BUT SHALL NOT BE IMPLEMENTED WITHOUT REVIEW AND APPROVAL BY THE OWNER OR OWNER'S REPRESENTATIVE. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS AND/OR VENDOR CUT SHEETS FOR SUBSTITUTIONS.

- SILT FENCES**
1. THE SILT FENCE SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID USE OF JOINTS. WHEN JOINTS ARE NECESSARY, SILT FENCE SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6 INCH OVERLAP, AND BOTH ENDS SECURELY FASTENED TO THE POST. ALTERNATIVELY, OVERLAP AND INTERLOCK TWO POSTS WITH ATTACHED FABRIC AS APPROVED BY THE GOVERNMENT.
 2. THE SILT FENCE IS TO BE INSTALLED AT LOCATIONS SHOWN ON THE PLAN ALONG THE DOWNHILL PERIMETER OF THE CONTAINMENT AREA BELOW EACH SIDE CHANNEL CONSTRUCTION. THE FENCE POST SHALL BE SPACED A MAXIMUM OF 6 FEET APART AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 24 INCHES APART.
 3. THE SILT FENCE SHALL HAVE A MINIMUM VERTICAL BURIAL OF 6 INCHES. ALL EXCAVATED MATERIAL FROM SILT FENCE INSTALLATION SHALL BE BACK-FILLED AND COMPACTED.
 4. STANDARD OR HEAVY DUTY SILT FENCE SHALL HAVE MANUFACTURED STITCHED LOOPS FOR 2 INCHES X 2 INCHES POST INSTALLATION.
 5. SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UP SLOPE AREA HAS BEEN PERMANENTLY PROTECTED AND STABILIZED, OR AS DIRECTED BY OWNER'S REPRESENTATIVE.

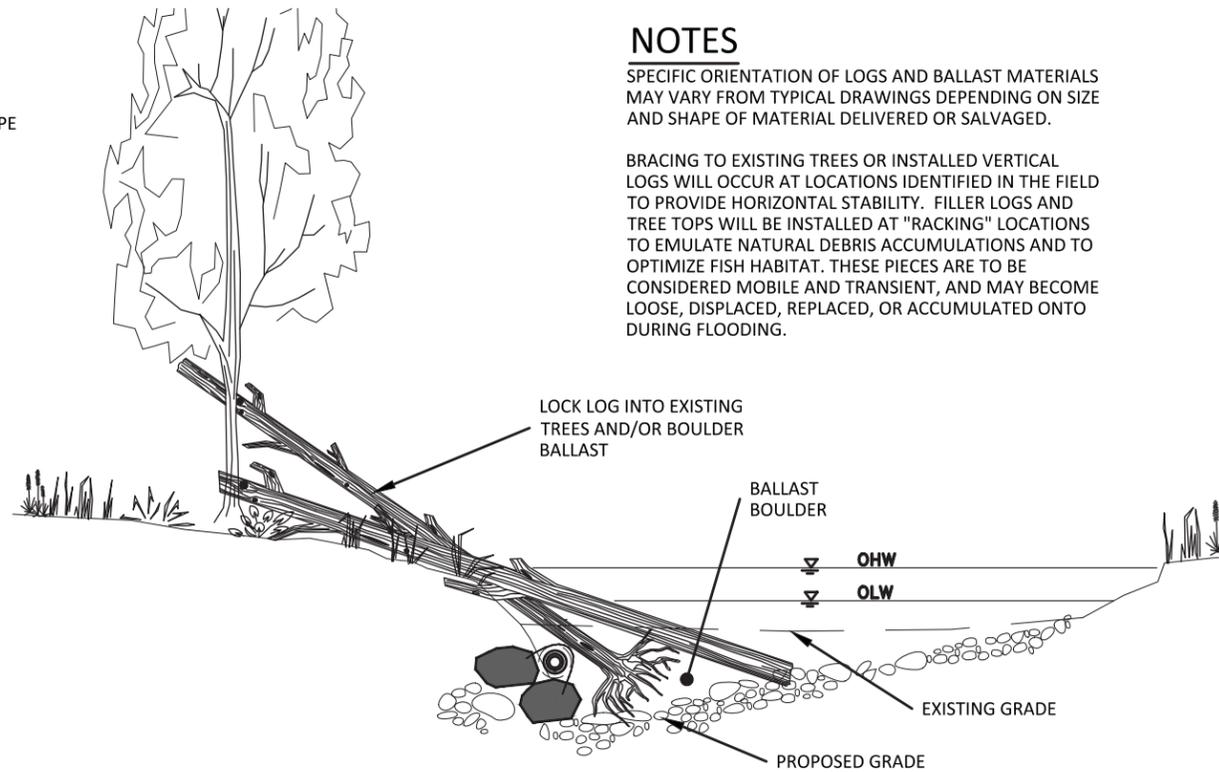


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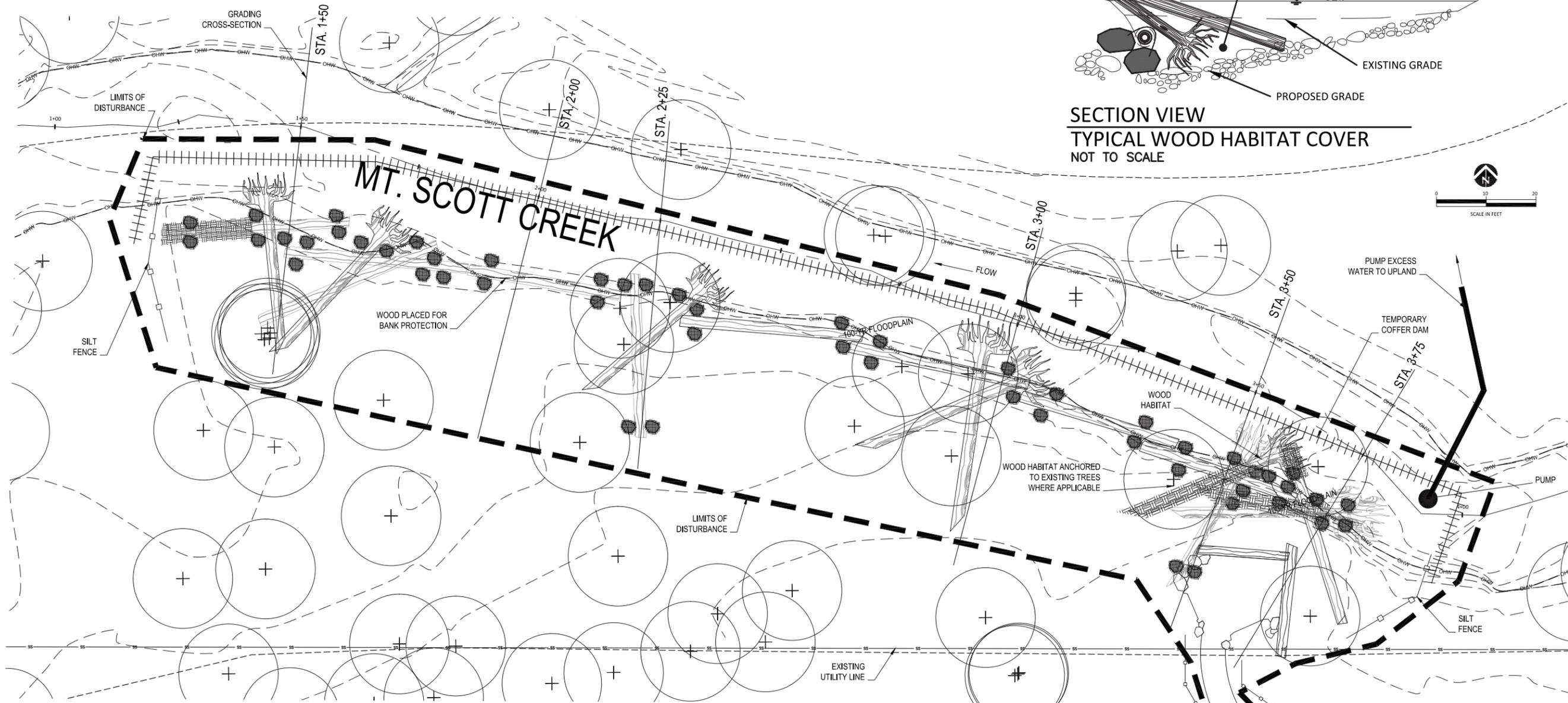
- PARK BOUNDARY
- (E) CONTOURS
- CREEK OHW LINE
- SURVEYED WETLAND AREA
- SANITARY LINE
- FEMA 100-YEAR FLOOD PLAN (FIRM)
- FLOODWAY
- (E) FENCE
- (E) TREES
- SURFACE LOG
- PARTIALLY BURIED SURFACE LOG
- COMPLETELY BURIED BOULDER
- SURFACE BOULDERS AT SEWER CROSSING



PLAN VIEW
TYPICAL WOOD HABITAT COVER
NOT TO SCALE



SECTION VIEW
TYPICAL WOOD HABITAT COVER
NOT TO SCALE



PLAN VIEW

NOTES

SPECIFIC ORIENTATION OF LOGS AND BALLAST MATERIALS MAY VARY FROM TYPICAL DRAWINGS DEPENDING ON SIZE AND SHAPE OF MATERIAL DELIVERED OR SALVAGED.

BRACING TO EXISTING TREES OR INSTALLED VERTICAL LOGS WILL OCCUR AT LOCATIONS IDENTIFIED IN THE FIELD TO PROVIDE HORIZONTAL STABILITY. FILLER LOGS AND TREE TOPS WILL BE INSTALLED AT "RACKING" LOCATIONS TO EMULATE NATURAL DEBRIS ACCUMULATIONS AND TO OPTIMIZE FISH HABITAT. THESE PIECES ARE TO BE CONSIDERED MOBILE AND TRANSIENT, AND MAY BECOME LOOSE, DISPLACED, REPLACED, OR ACCUMULATED ONTO DURING FLOODING.

project: **Mt. Scott Creek Restoration**
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Oregon City, OR 97045
(503) 742-4597
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submital: 50% Construction Documents
sheet title: **BANK STABILIZATION:
LOG AND BOULDER
PLACEMENT**

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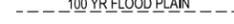
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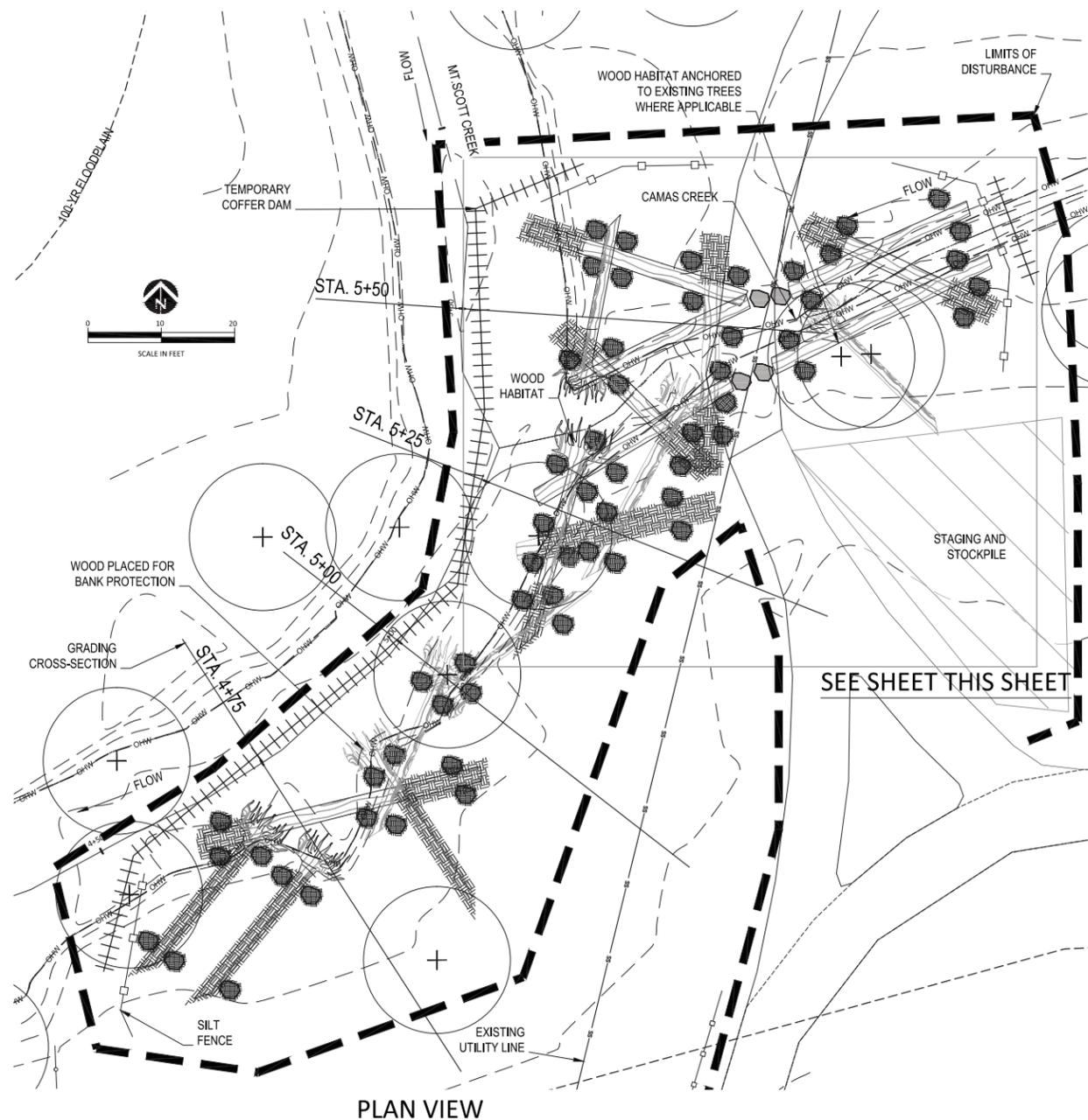
Date: 4.20.2012
Revisions:

Drawn By: REP
Checked By:
Job No.: 110231.3
Approved:

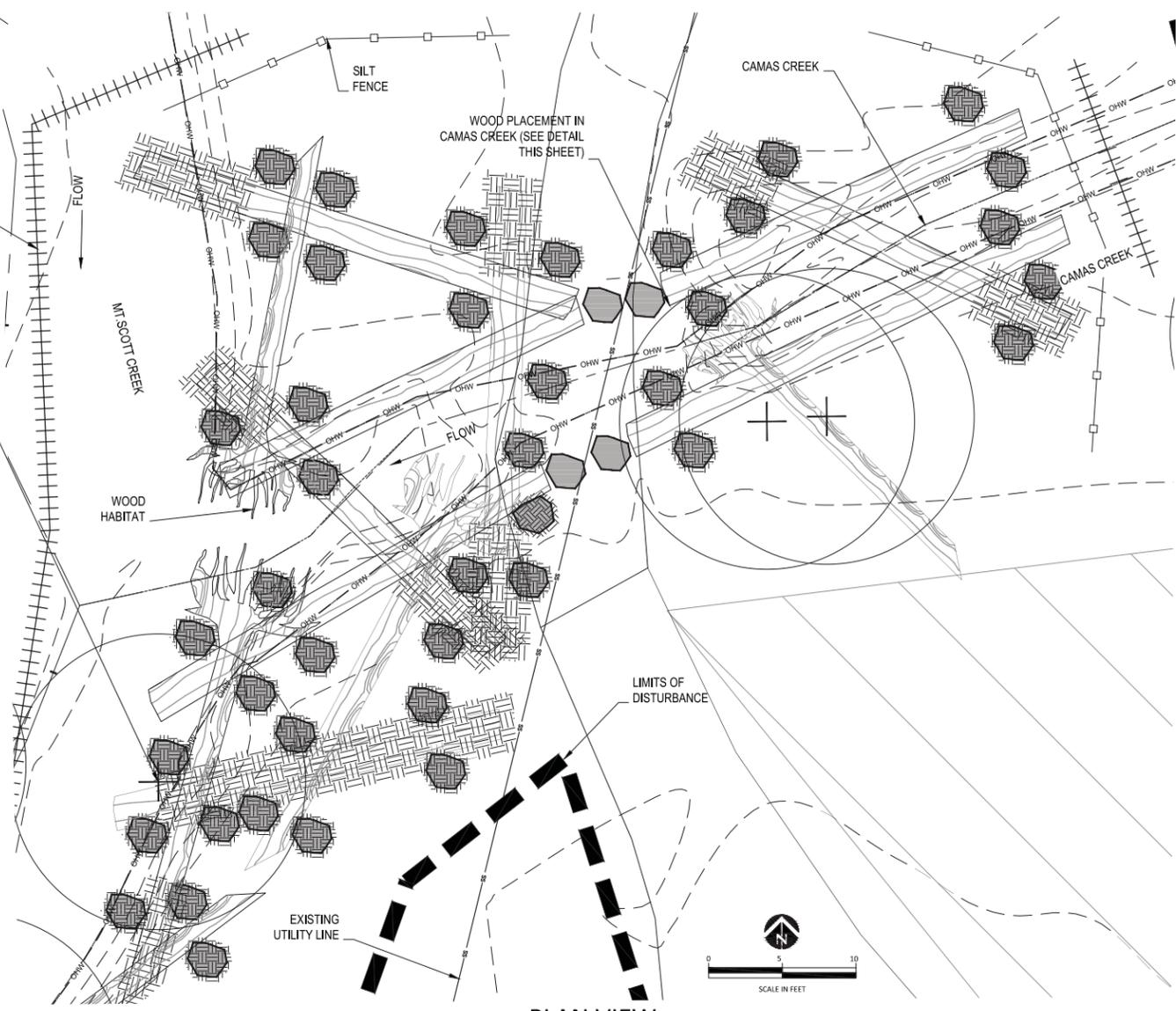
C1.01
sheet no. X of XX

GENERAL LEGEND

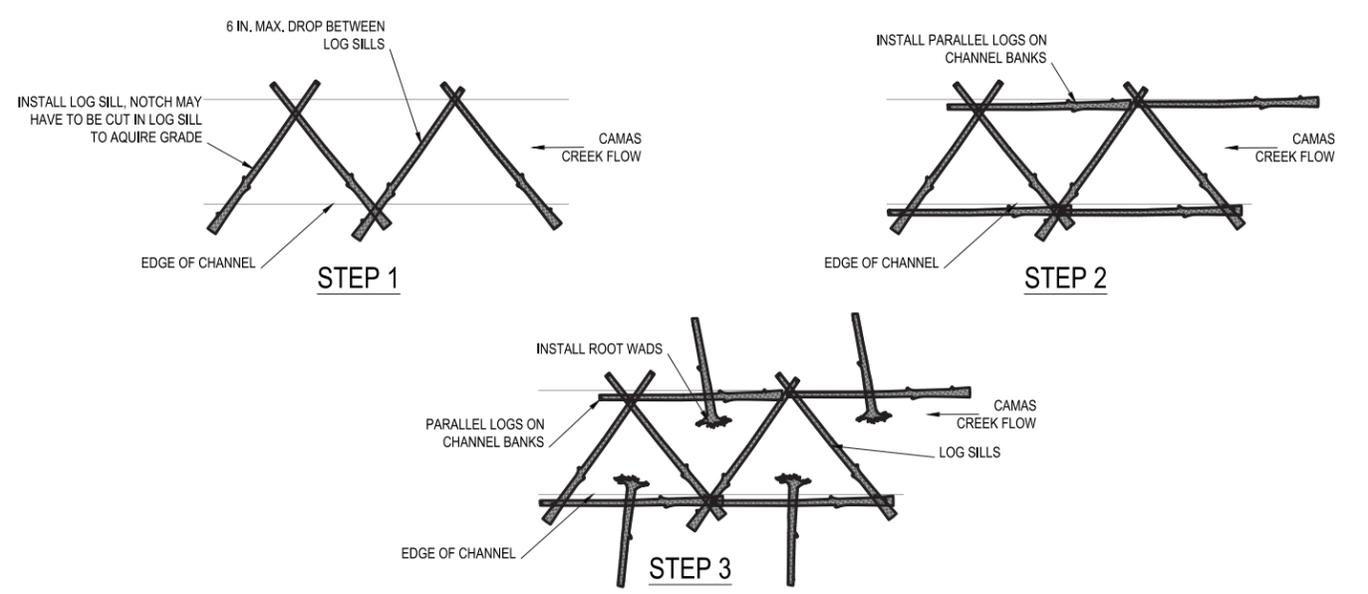
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-  FLOODWAY
-  (E) FENCE
-  (E) TREES
-  SURFACE LOG
-  PARTIALLY BURIED SURFACE LOG
-  COMPLETELY BURIED BOULDER
-  SURFACE BOULDERS AT SEWER CROSSING



PLAN VIEW



PLAN VIEW



PLAN VIEW OF WOOD INSTALLATION SEQUENCE FOR CAMAS CREEK



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Landscape Architecture
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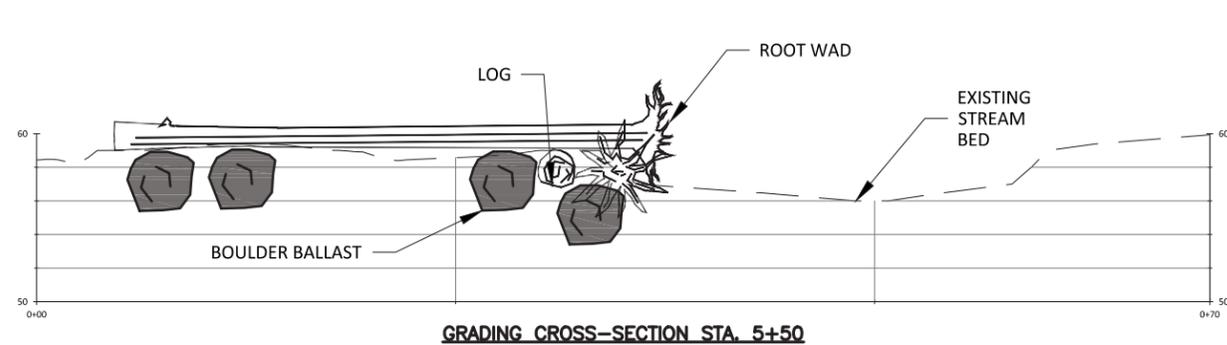
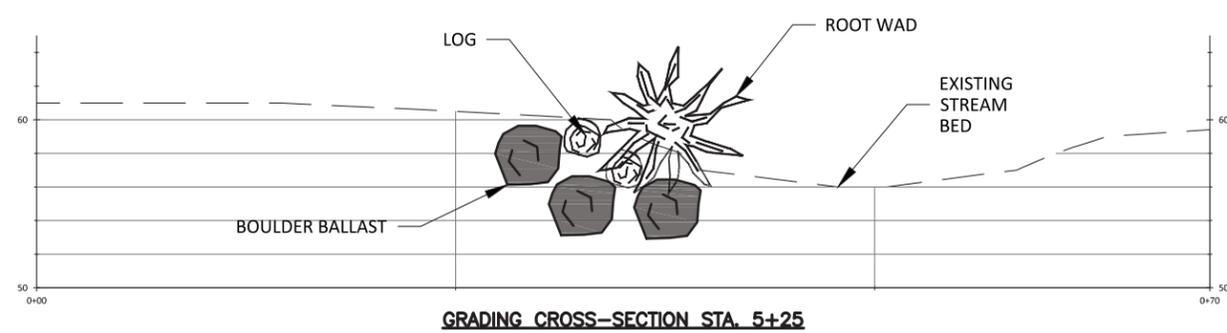
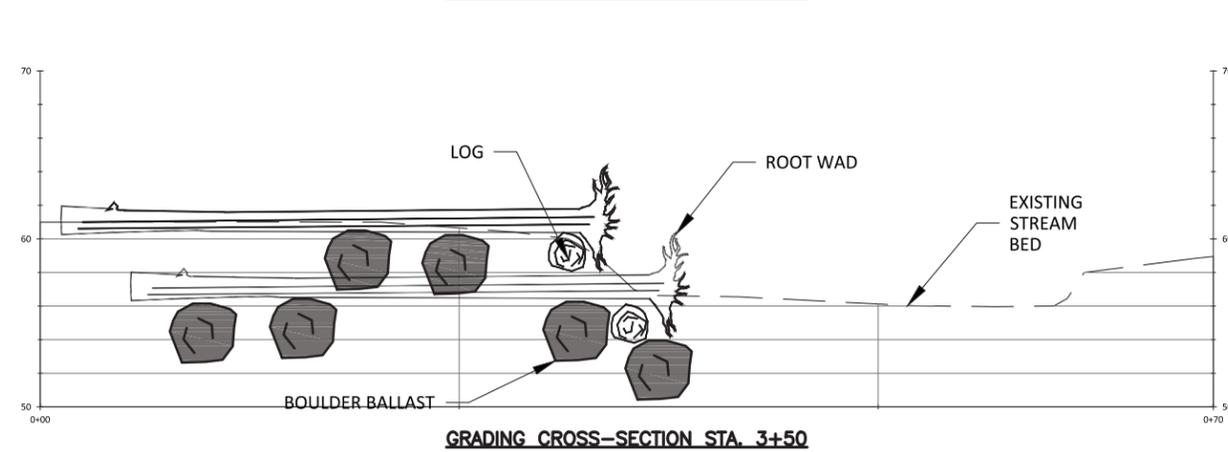
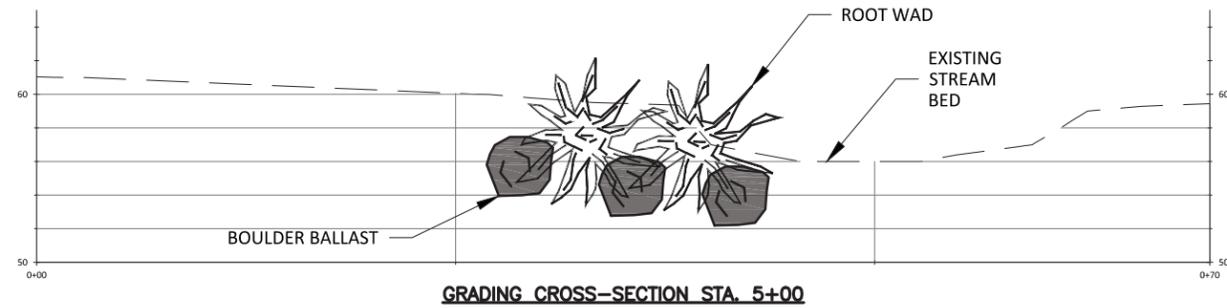
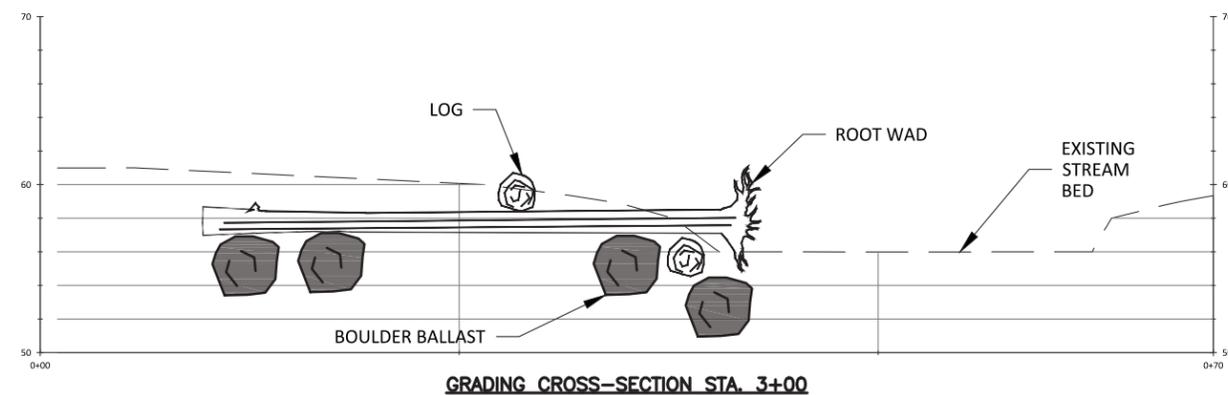
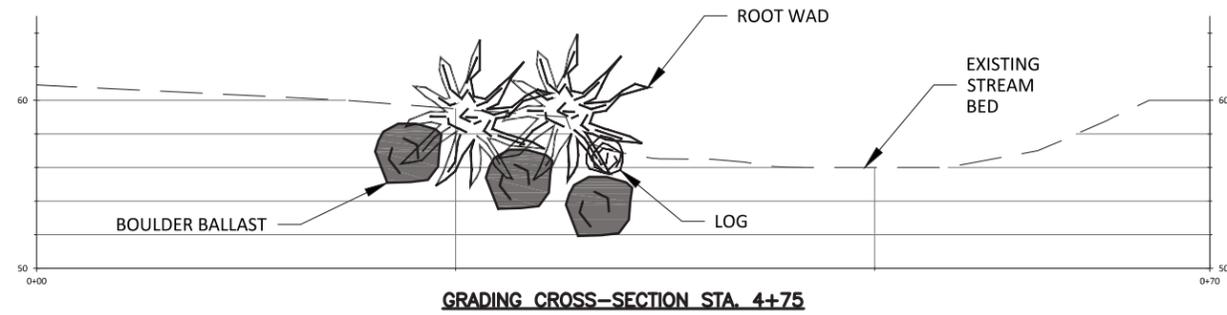
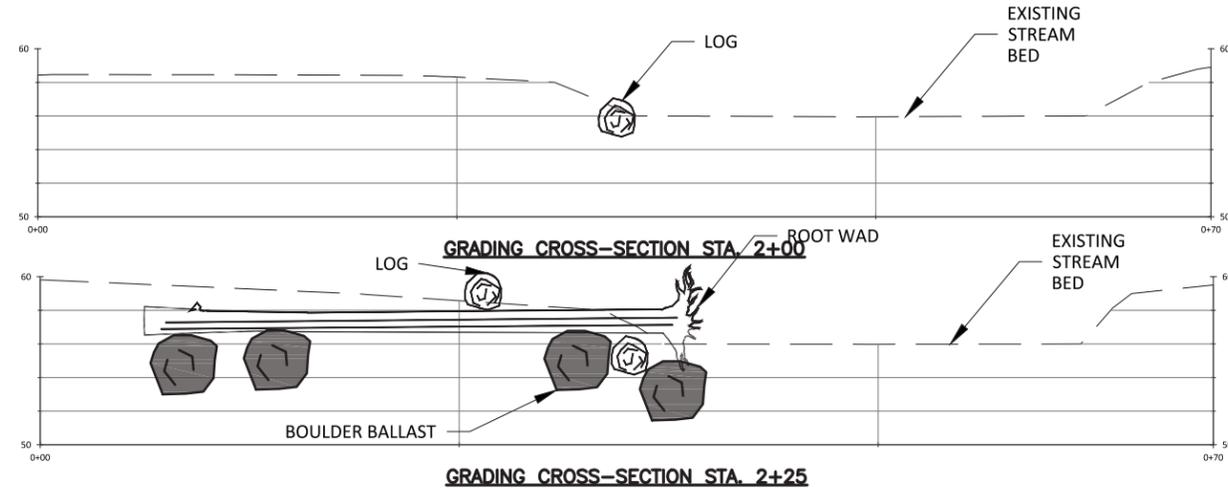
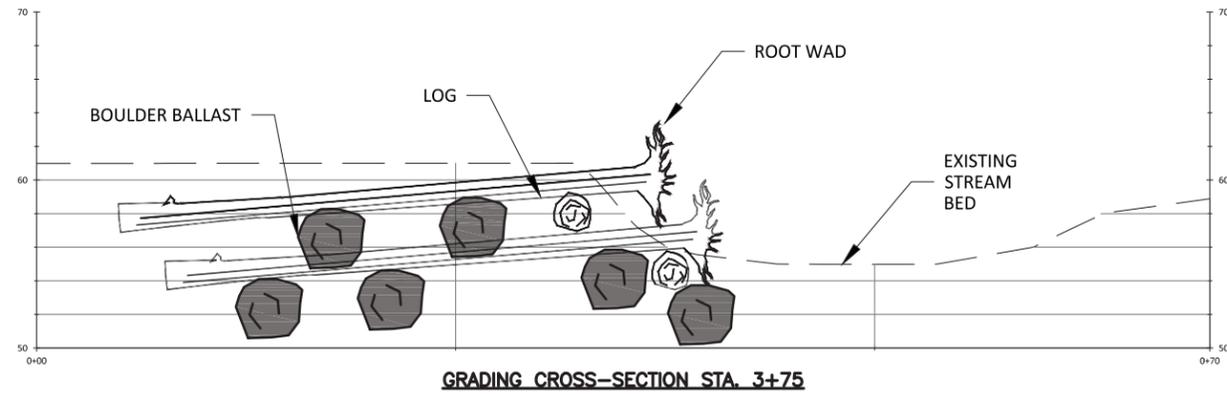
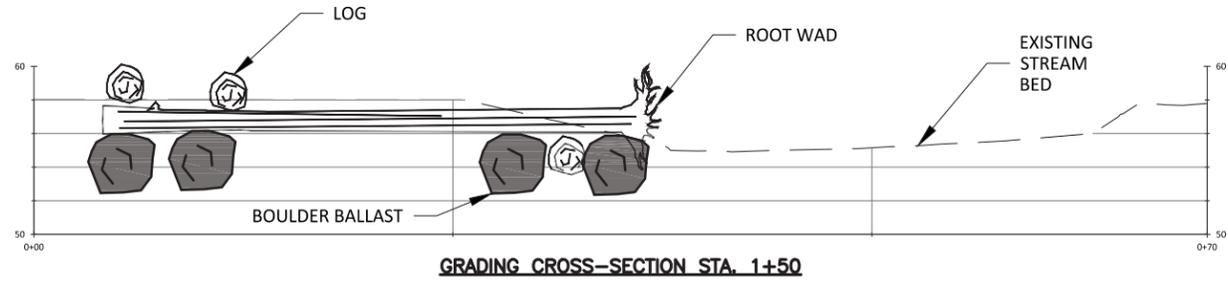
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sheet title: **BANK STABILIZATION:
LOG AND BOULDER
PLACEMENT**

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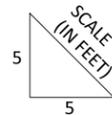
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Checked By:
Job No. 110231.3
Approved:

C1.02
sheet no. X of XX



NOTE:
SEE PLAN VIEW (SHEETS C1.01 AND C1.02)
FOR LOG PLACEMENT AND (SHEET C1.04)
FOR WOOD INSTALLATION DETAILS.



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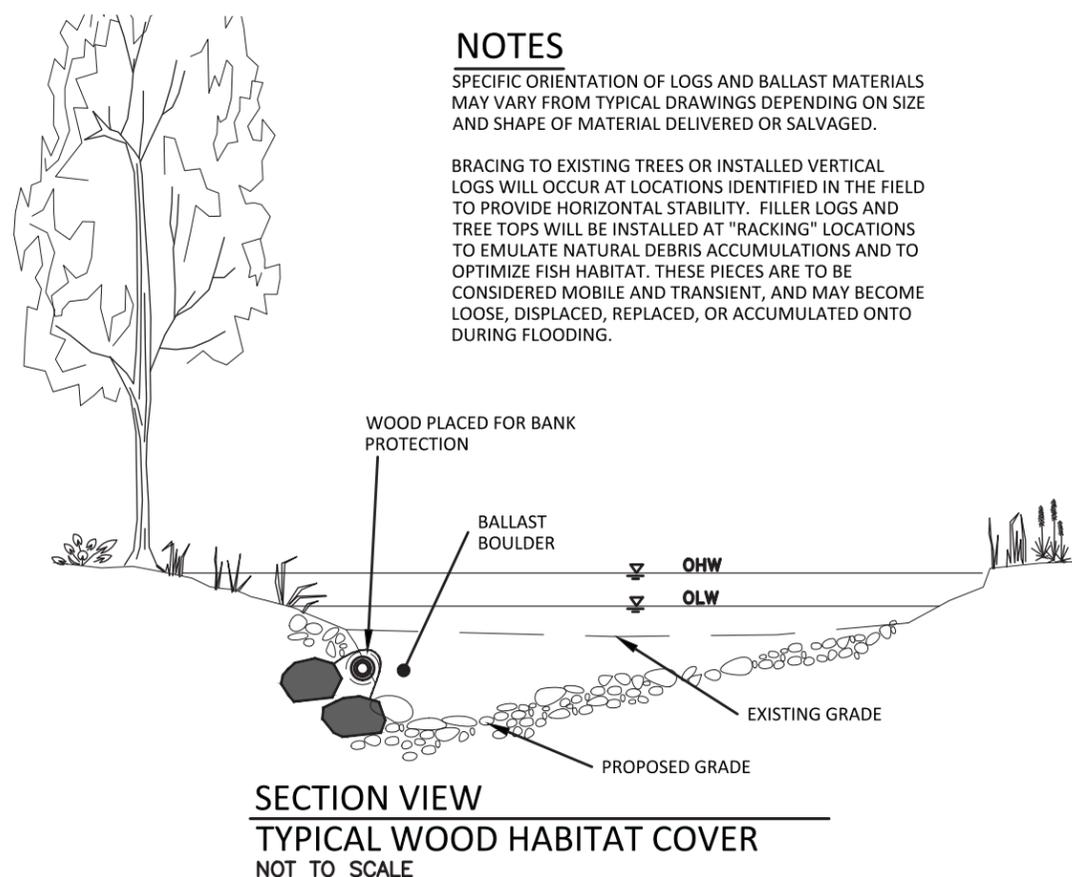
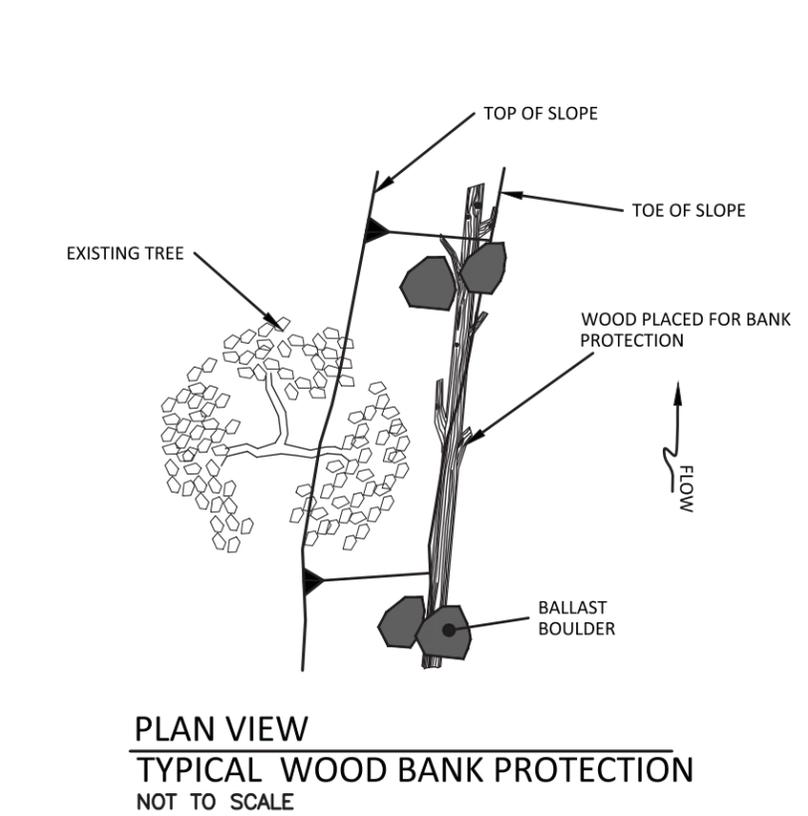
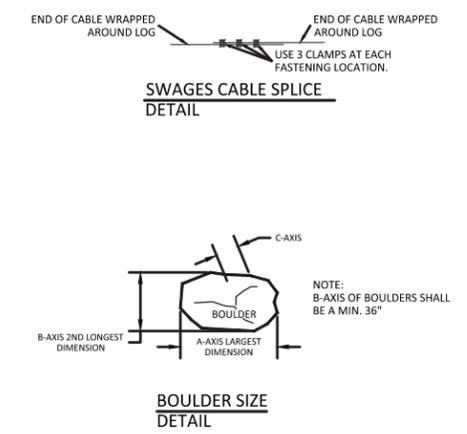
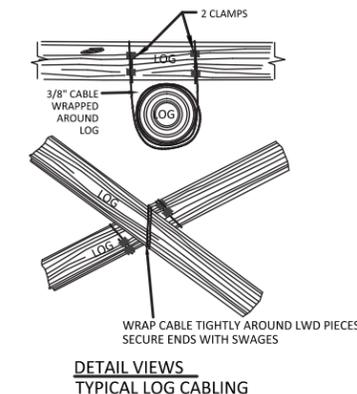
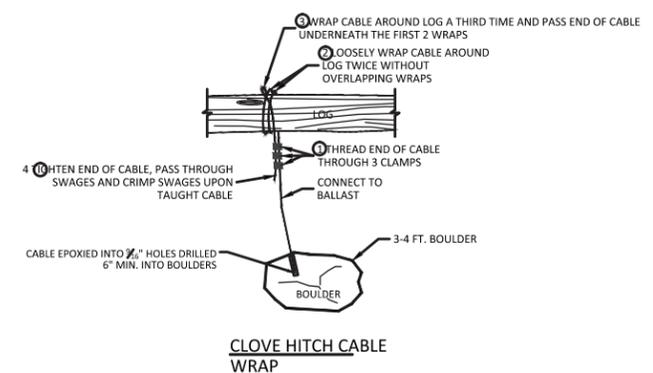
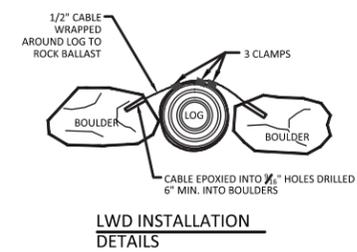
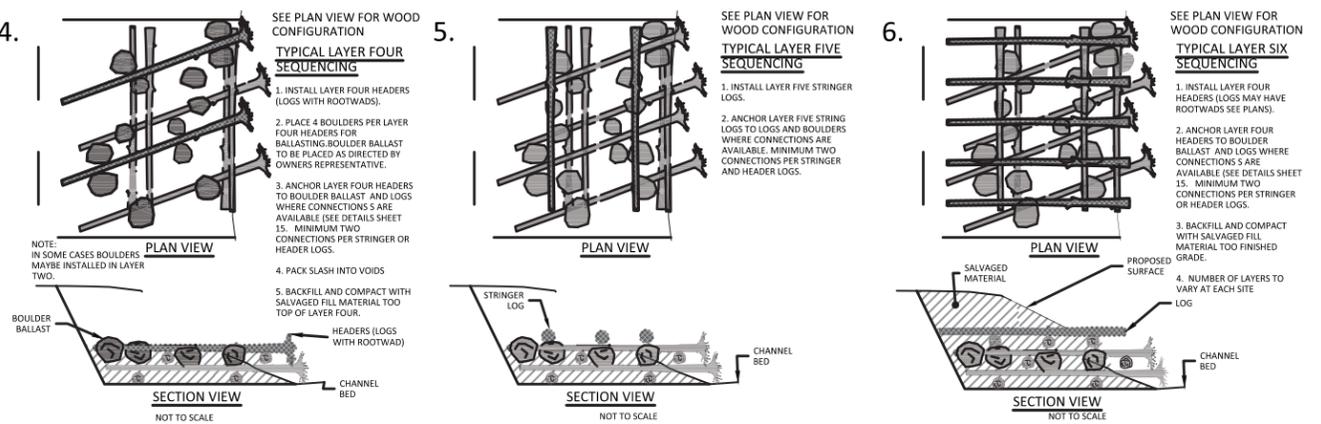
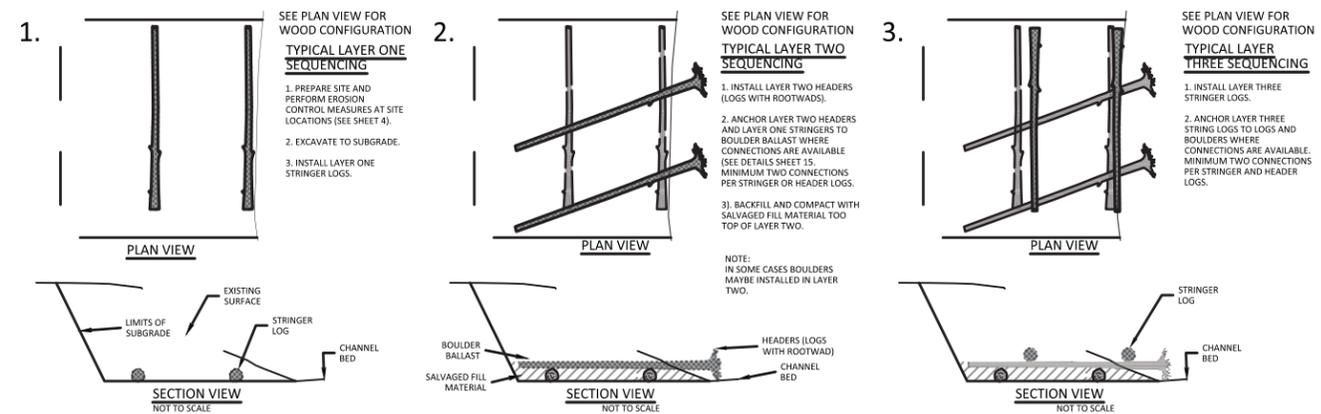
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Checked By:
Job No. 110231.3
Approved:

C1.03
sheet no. X of XX



NOTES

SPECIFIC ORIENTATION OF LOGS AND BALLAST MATERIALS MAY VARY FROM TYPICAL DRAWINGS DEPENDING ON SIZE AND SHAPE OF MATERIAL DELIVERED OR SALVAGED.

BRACING TO EXISTING TREES OR INSTALLED VERTICAL LOGS WILL OCCUR AT LOCATIONS IDENTIFIED IN THE FIELD TO PROVIDE HORIZONTAL STABILITY. FILLER LOGS AND TREE TOPS WILL BE INSTALLED AT "RACKING" LOCATIONS TO EMULATE NATURAL DEBRIS ACCUMULATIONS AND TO OPTIMIZE FISH HABITAT. THESE PIECES ARE TO BE CONSIDERED MOBILE AND TRANSIENT, AND MAY BECOME LOOSE, DISPLACED, REPLACED, OR ACCUMULATED ONTO DURING FLOODING.

GENERAL NOTES

DESCRIPTION
THIS WORK CONSISTS OF INSTALLING THE OWNER FURNISHED LOGS WITH ROOT WADS INTO ANCHORED LOG STRUCTURES AS SHOWN ON THE PLANS AND AS DIRECTED BY THE OWNERS REPRESENTATIVE. SITES VARY DEPENDING ON BALLAST NEED AND WOOD VOLUMES.

MATERIALS
ANCHORS FOR THIS WORK WILL CONSIST OF CABLED BOULDERS. BOULDERS SHALL BE NON-FRACTURED BASALT WITH A MINIMUM SPECIFIC GRAVITY OF 2.65.

CABLE USED FOR LOG TO BOULDER BALLAST SHALL BE GALVANIZED, STEEL CORE, AND SHALL HAVE A MINIMUM DIAMETER OF 1/2 INCH.

CABLE USED FOR LOG TO LOG CONNECTION SHALL BE GALVANIZED, STEEL CORE, AND SHALL HAVE A MINIMUM DIAMETER OF 3/8 INCH.

CLAMPS SHALL MEET THE PERFORMANCE REQUIREMENTS AND BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS. MINIMUM OF 2 CLAMPS PER CONNECTION.

EPOXY FOR ANCHORING SHALL BE HILTI HIT RE 500 ADHESIVE OR APPROVED EQUAL.

CONSTRUCTION
FINAL POSITIONING OF THE ANCHORED LOG STRUCTURES SHALL BE IN THE APPROXIMATE LOCATION AS SHOWN ON THE PLANS AND AS APPROVED IN THE FIELD BY THE OWNERS REPRESENTATIVE.

FINAL POSITIONING OF THE ANCHORED LOG STRUCTURES SHALL BE IN THE APPROXIMATE LOCATION AS SHOWN ON THE PLANS AND AS DIRECTED IN THE FIELD BY THE OWNERS REPRESENTATIVE. CABLING SITES AS DIRECTED BY OWNERS REPRESENTATIVE.

ANCHORED LOG STRUCTURES SHALL BE SECURED AS SHOWN.

DRILL HOLES IN SOLID ROCK AND AVOID ANY CRACKS OR FRACTURES. HOLES SHALL BE 9/16 INCH IN DIAMETER. HOLES MUST BE DRILLED 5 INCHES, MINIMUM, INTO ROCK. HOLES MUST BE CLEANED OF LOOSE ROCK FRAGMENTS AND POWDER WITH A BRUSH AND WATER. HOLES MUST BE CLEAN OF ALL DUST, DEBRIS, OIL, AND SOAP RESIDUES. THE HOLES MUST FLUSH CLEAR TO INSURE NO MATERIAL EXISTS BETWEEN THE CABLE, EPOXY, AND ROCK SURFACE. INSTALL EPOXY PER MANUFACTURER'S RECOMMENDATIONS.

CABLE SHALL BE WRAPPED ONCE AROUND LOG BEFORE ENDS ARE INSERTED INTO THE DRILLED HOLES FILLED WITH EPOXY. SEE DETAIL. WIPE CABLE WITH CLEAN RAG SOAKED IN ACETONE SOAKED RAG TO REMOVE OILS AND GREASES PRIOR TO INSERTION INTO EPOXY FILLED HOLE. FILL DRILL HOLES ENOUGH TO ENSURE COMPLETE COVERAGE WITH EPOXY. INSERT CABLE INTO HOLE SO THAT END OF CABLE HITS THE BOTTOM OF THE HOLE. EXCESS EPOXY SHOULD COME OUT OF THE TOP OF THE HOLE AS CABLE IS SEATED IN DRILL HOLE. TEST STRENGTH OF BOND BY PICKING UP LOG AFTER MINIMUM CURE TIME RECOMMENDED BY THE EPOXY MANUFACTURER. IF BOND FAILS, REPLACE WITH A NEW HOLE AND CUT THE CONTAMINATED END OFF OF THE CABLE.

MINIMUM 2 CLAMPS PER CONNECTION. CLAMPS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION, SPACING AND DIAMETER FOR THE SIZE AND LOAD RATING OF THE CABLE BEING USED.

project: **Mt. Scott Creek Restoration**
North Clackamas Park
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150 Beaver Creek Road, Suite 430
Oregon City, OR 97045
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submittal: 50% Construction Documents
sheet title: **BANK STABILIZATION: LOG AND BOULDER PLACEMENT**

DATE: 4.20.2012
Revisions:
Drawn By: WS/CM
Checked By:
Job No. 110231.3
Approved:

GENERAL LEGEND

- PARK BOUNDARY
- (E) CONTOURS
- CREEK OHW LINE
- DELINEATED WETLAND AREA
- SANITARY LINE
- FEMA 100-YEAR FLOOD PLAIN (FIRM)
- NATURAL RESOURCE - WATER QUALITY RESOURCE (WQR)
- NATURAL RESOURCE - HABITAT CONSERVATION AREA (HCA)
- FLOODWAY
- (E) FENCE
- (E) TREES

DEMOLITION LEGEND

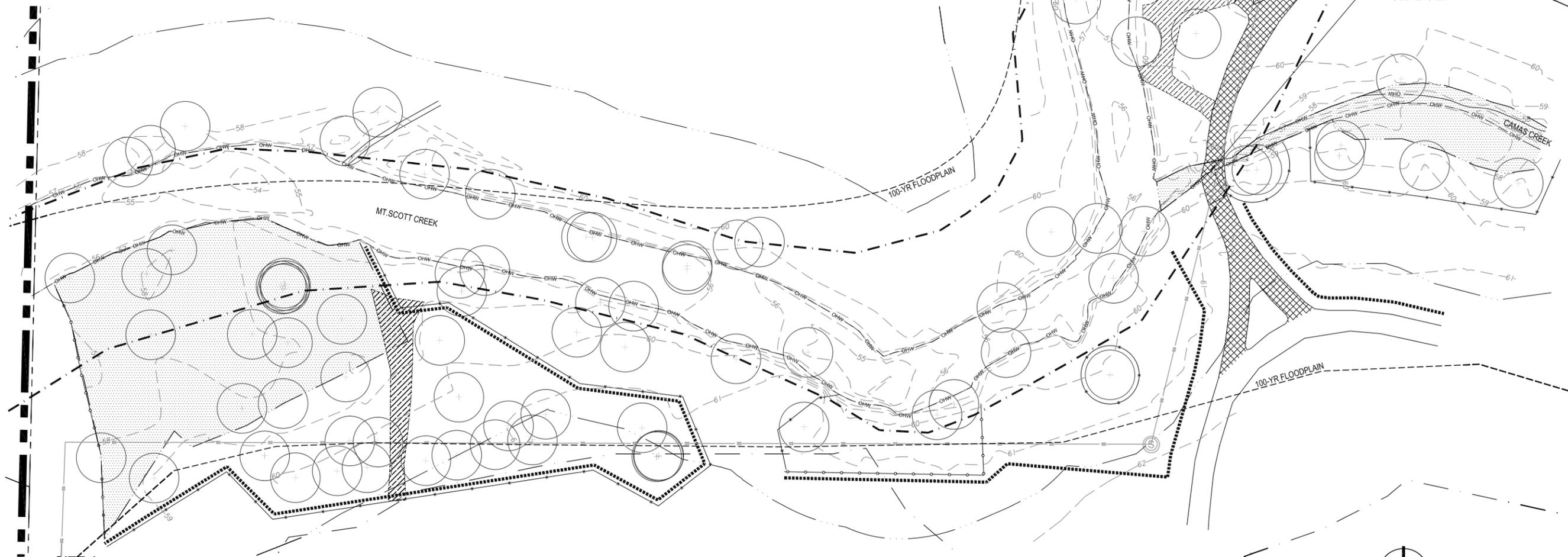
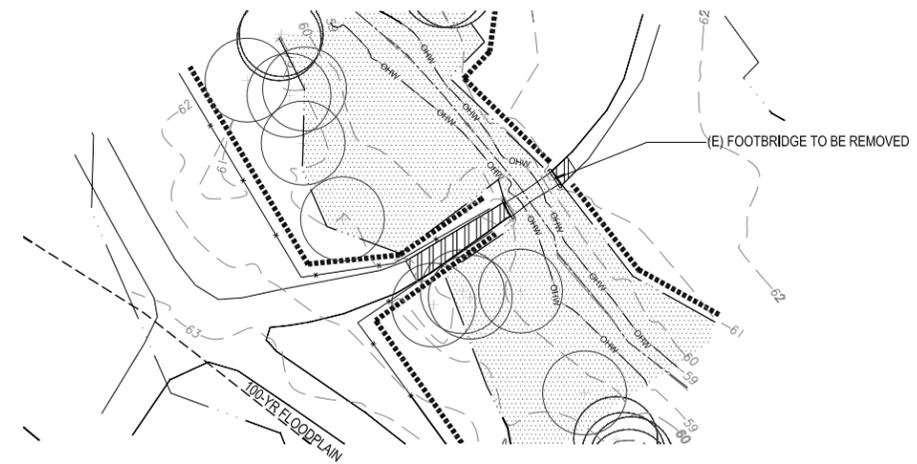
- (E) ASPHALT PATH TO BE REMOVED, UPON COMPLETION OF ASPHALT REMOVAL, RECOMMISSION TRAIL PER DETAIL XL4.0X AND SPECIFICATIONS.
- (E) DIRT TRAIL TO BE DECOMMISSIONED. SEE DETAIL XL4.0X AND SPECIFICATIONS.
- (E) ASPHALT PATH TO BE REMOVED.

EROSION CONTROL / TREE PROTECTION LEGEND

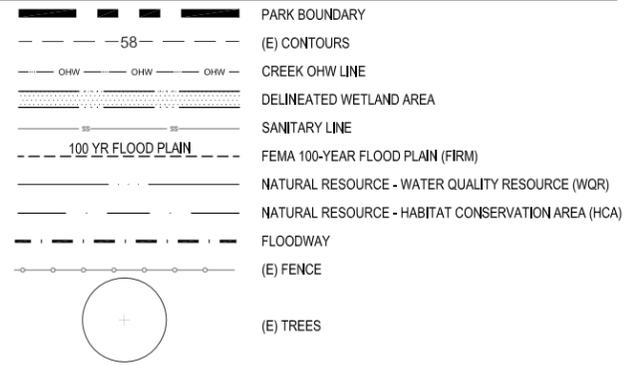
- EROSION CONTROL FENCING
- TREE PROTECTION (SYMBOLIC)

NOTES

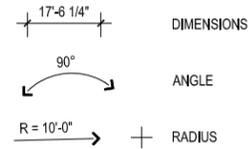
1. THIS SURVEY INFORMATION WAS MAPPED BY RON BUSH SURVEY.
2. SURVEY DATUMS:
HORIZONTAL DATUM IS NAD 83, OREGON STATE PLANE NORTH, ESTABLISHED BY 24 HOUR GPS STATIC SECESSIONS. VERTICAL DATUM IS NAVD 88, ESTABLISHED BY 4 HOUR GPS SECESSION.
3. 100-YR FLOODPLAIN ZONE AE INFORMATION WAS PROVIDED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) PER THE FLOOD INSURANCE RATE MAP (FIRM), MAP NUMBER 41005C0036D.
4. EXISTING SITE AMENITIES TO BE REMOVED SHALL BE RECYCLED OR DISPOSED OF IN ACCORDANCE WITH SPECIFICATIONS INCLUDED IN THIS CONSTRUCTION DRAWING PACKAGE.
5. SEE DETAIL 1/L3.05 AND PREPARATION SPECIFICATION FOR DETAILED INSTRUCTION OF TRAIL DECOMMISSIONING METHODS.



GENERAL LEGEND



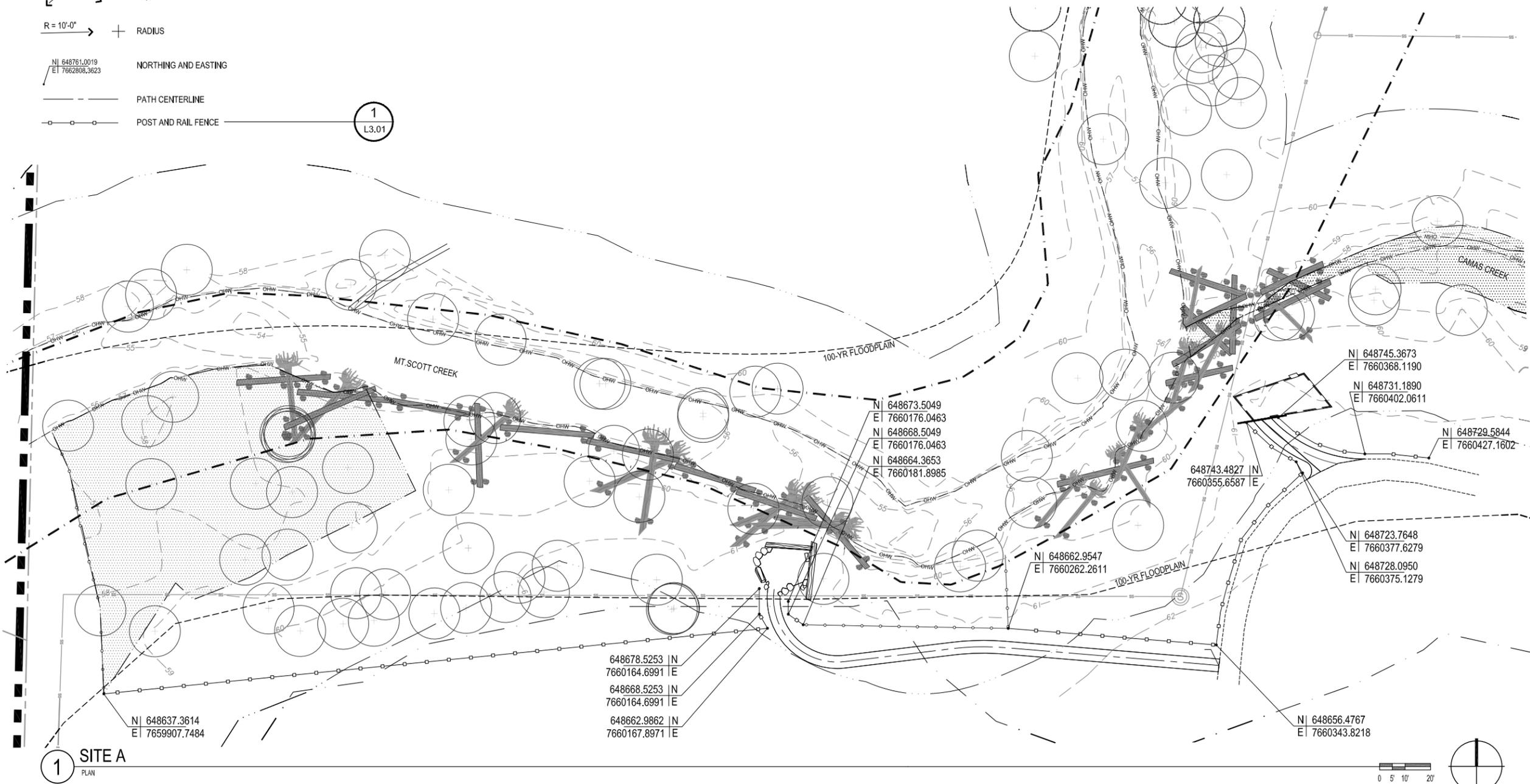
LAYOUT AND MATERIAL LEGEND



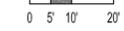
N | 648761.0019
E | 7662808.3623



1
L3.01



1 SITE A
PLAN



project: **Mt. Scott Creek Restoration
North Clackamas Park**

Clackamas Water Environment Services
150 Beaver Creek Road, Suite 430
Clackamas, OR 97045
GShaloun@co.clackamas.or.us

submital: Land Use Permit
sheet title:

**FENCE LAYOUT AND
MATERIALS PLAN**

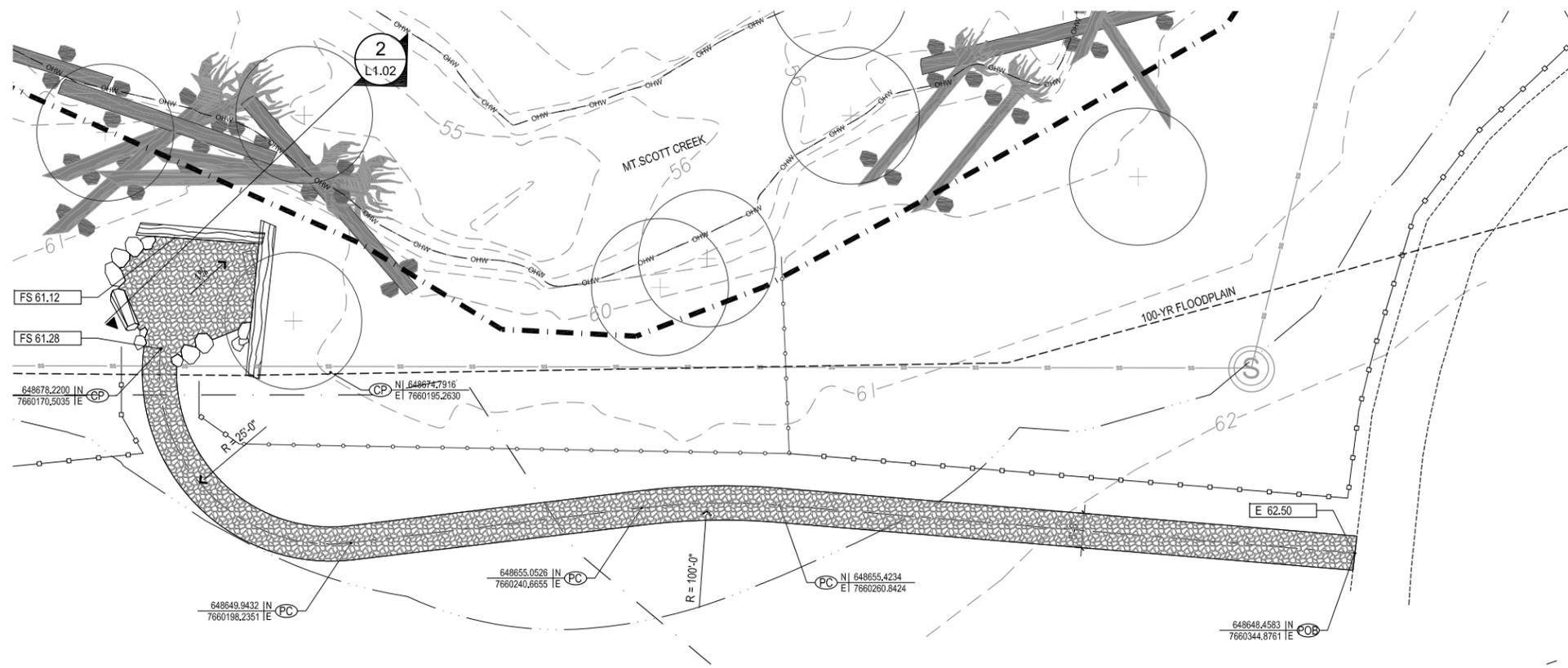
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Date: 4.25.2012
Revisions:

Drawn By: CM
Checked By:
Job No. 110231.3
Approved: WS/CM

L1.01

sheet no. 10 of 22



1 LOG JAM OVERLOOK
PLAN

GENERAL LEGEND

---58---	(E) CONTOURS
OHW OHW OHW	CREEK OHW LINE
-----	DELINEATED WETLAND AREA
-----	SANITARY LINE
-----	FEMA 100-YEAR FLOOD PLAIN (FIRM)
-----	NATURAL RESOURCE - WATER QUALITY RESOURCE (WQR)
-----	NATURAL RESOURCE - HABITAT CONSERVATION AREA (HCA)
-----	FLOODWAY
-----	(E) FENCE
(+)	(E) TREES

LAYOUT AND MATERIALS LEGEND

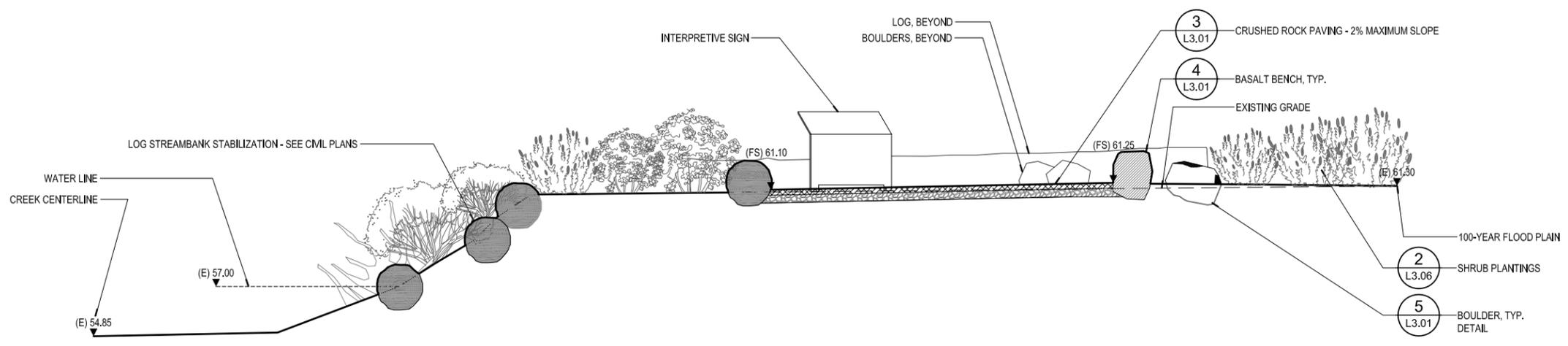
8'-9 1/4"	DIMENSIONS
90°	ANGLE
R = 5'-0"	RADIUS
NI 647118.0345 EI 7662224.3573	NORTHING AND EASTING
-----	PATH CENTERLINE
[Crushed Rock Paving Symbol]	CRUSHED ROCK PAVING
-----	POST AND RAIL FENCE
(3) L3.01	
(1) L3.01	

GRADING LEGEND

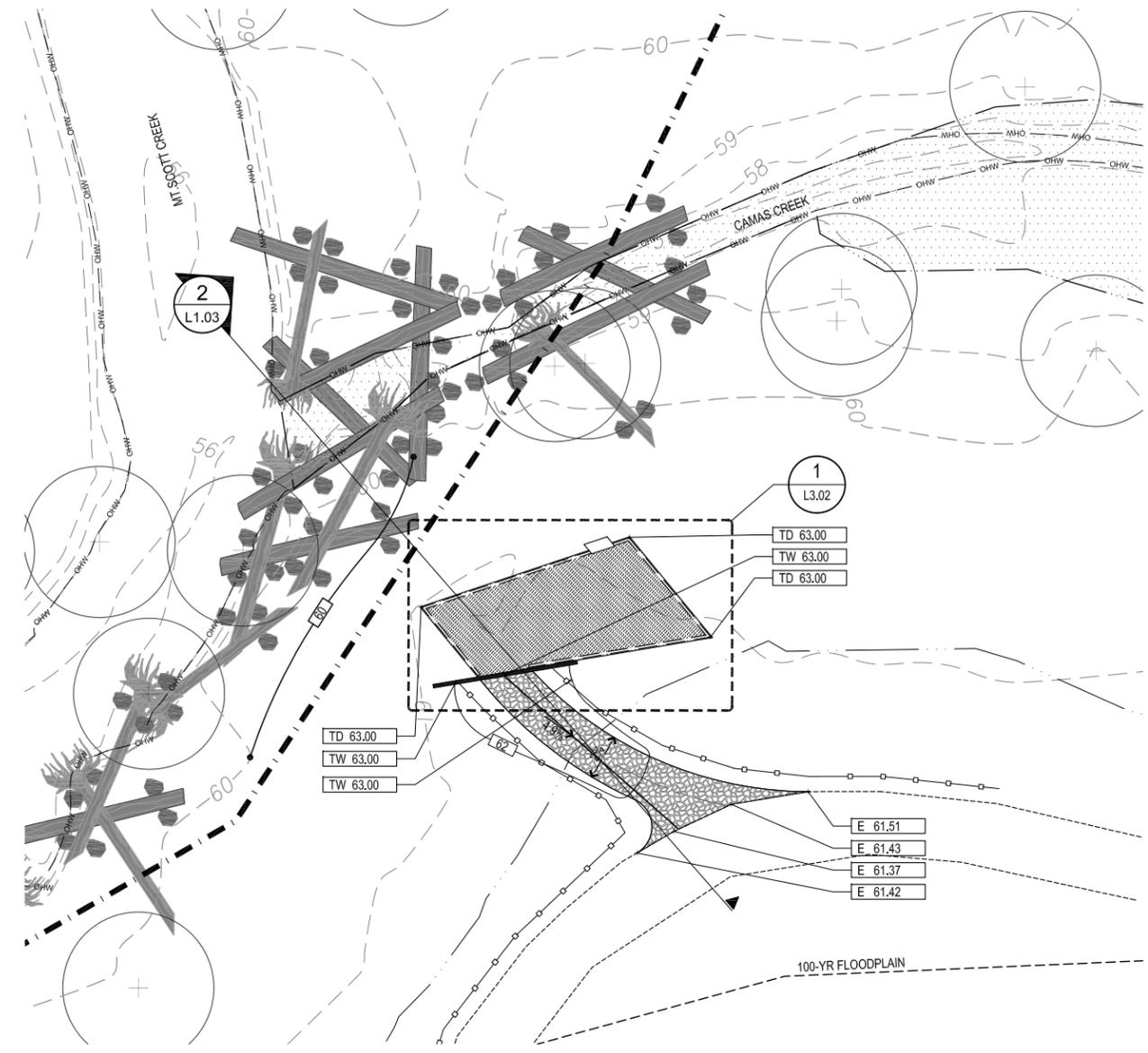
-----	PROPOSED MAJOR CONTOUR
-----	PROPOSED MINOR CONTOUR
XX XXX.XX	GRADING LABEL
← 1%	DIRECTION OF FLOW
---	GRADE BREAK

GRADING NOTES

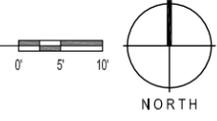
- CONTRACTOR SHALL INSTALL NEW CRUSHED ROCK PATH TO MATCH THE ELEVATION OF EXISTING ASPHALT PATHWAY.



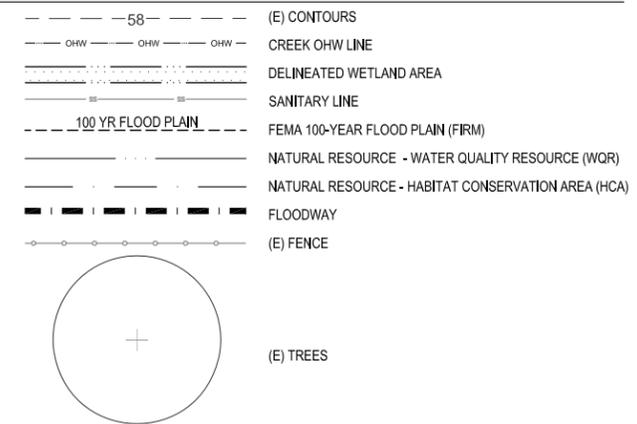
2 LOG JAM LOOKOUT AT MT. SCOTT CREEK
SECTION



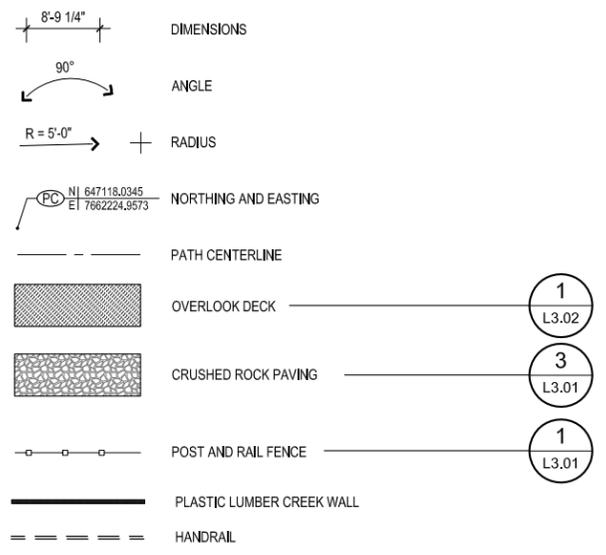
1 CONFLUENCE OVERLOOK
PLAN



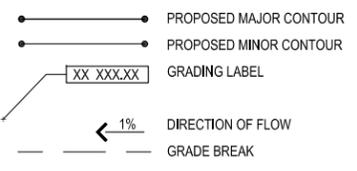
GENERAL LEGEND



LAYOUT AND MATERIALS LEGEND

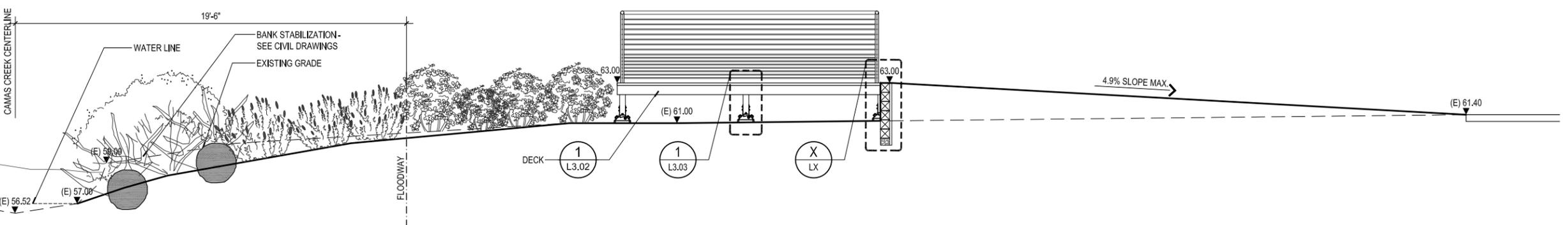


GRADING LEGEND

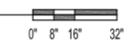


GRADING NOTES

- CONTRACTOR SHALL INSTALL NEW CRUSHED ROCK PATH TO MATCH THE ELEVATION OF EXISTING ASPHALT PATHWAY.



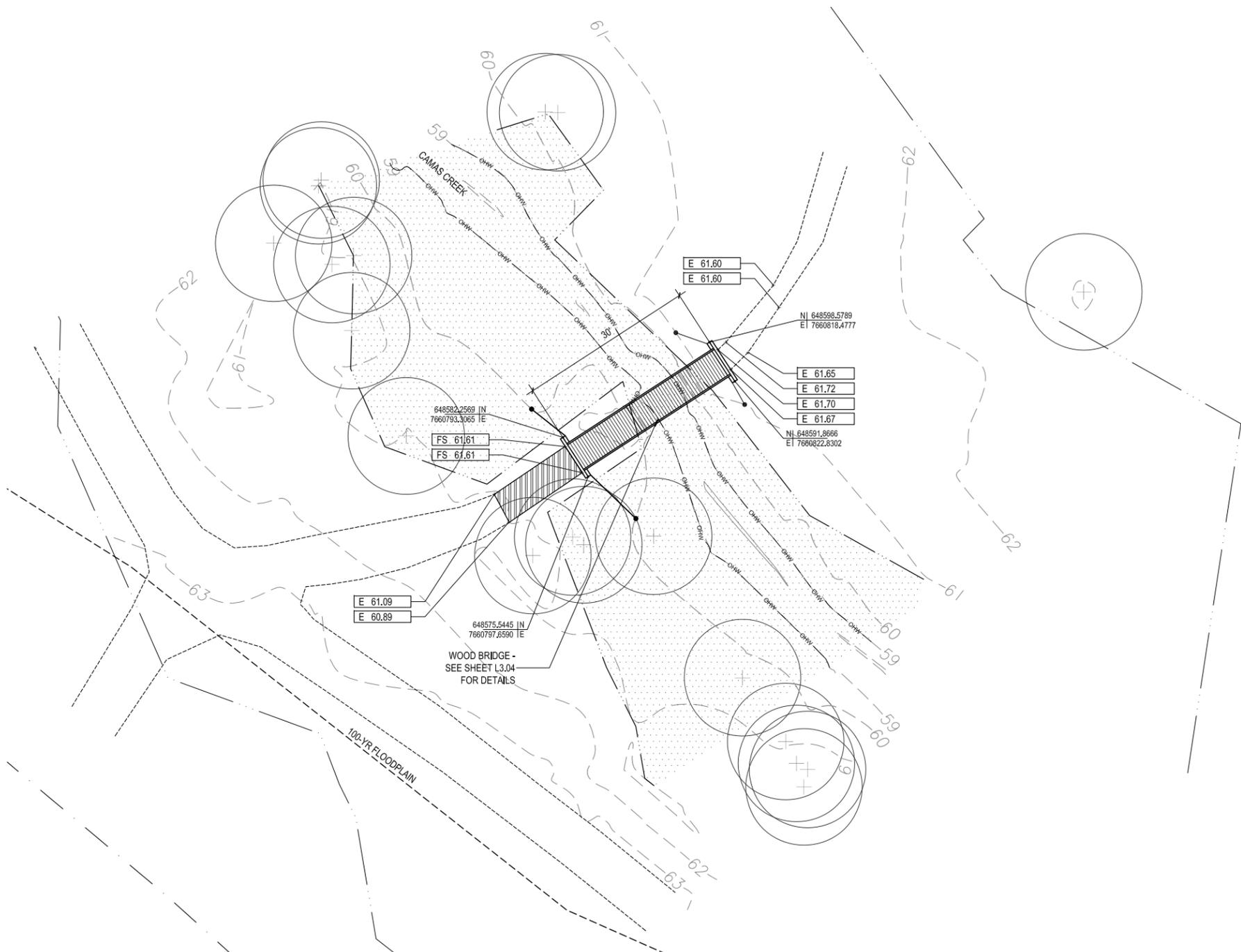
2 CONFLUENCE OVERLOOK
SECTION



project: **Mt. Scott Creek Restoration**
North Clackamas Park
Clackamas Water Environment Services
150 Beavercreek Road, Suite 430
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submital: Land Use Permit
sheet title: **CONFLUENCE OVERLOOK: CONFLUENCE OVERLOOK: GRADING, LAYOUT AND MATERIALS PLAN**

DATE: 4.25.2012
Revisions:
Drawn By: WS/CM
Checked By:
Job No. 110231.3
Approved:



GENERAL LEGEND

- (E) CONTOURS
- CREEK OHW LINE
- DELINEATED WETLAND AREA
- SANITARY LINE
- 100 YR FLOOD PLAIN
- FEMA 100-YEAR FLOOD PLAIN (FIRM)
- NATURAL RESOURCE - WATER QUALITY RESOURCE (WQR)
- NATURAL RESOURCE - HABITAT CONSERVATION AREA (HCA)
- FLOODWAY
- (E) FENCE
- (E) TREES

LAYOUT AND MATERIALS LEGEND

- 8'-9 1/4" DIMENSIONS
- 90° ANGLE
- R = 5'-0" RADIUS
- NI 647118.0345 EI 7662224.9573 NORTHING AND EASTING
- PATH CENTERLINE
- CONCRETE PAVING
- 2 L3.01

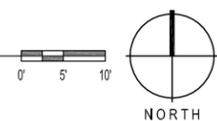
GRADING LEGEND

- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- XX XXX.XX GRADING LABEL
- 1% DIRECTION OF FLOW
- GRADE BREAK

GRADING NOTES

1. CONTRACTOR SHALL INSTALL NEW BRIDGE TO MATCH THE ELEVATION OF EXISTING ASPHALT PATHWAY ON EAST SIDE OF CAMAS CREEK.
2. CONTRACTOR SHALL INSTALL NEW CONCRETE PATH TO MATCH THE ELEVATION OF EXISTING ASPHALT PATHWAY ON THE WEST SIDE OF CAMAS CREEK.
3. CONTRACTOR SHALL INSTALL BRIDGE PER MANUFACTURER'S DRAWINGS AND SPECIFICATIONS.

1 PEDESTRIAN BRIDGE
PLAN



project: **Mt. Scott Creek Restoration**
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150 Beaver Creek Road, Suite 430
Clackamas, OR 97045
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GShaloun@co.clackamas.or.us

submittal: Land Use Permit
sheet title: **PEDESTRIAN BRIDGE:
GRADING, LAYOUT AND
MATERIALS PLAN**

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Date: 4.25.2012
Revisions:

Drawn By: WS/CM
Checked By:
Job No. 110231.3
Approved:

L1.04
sheet no. 13 of 22

MASTER PLANT LIST

BOTANICAL NAME	COMMON NAME	FORM	QTY.
DECIDUOUS TREES			
ACER MACROPHYLLUM	BIG-LEAF MAPLE	1 GAL.	XX
ALNUS RUBRA	RED ALDER	1 GAL.	XX
FRAXINUS LATIFOLIA	OREGON ASH	1 GAL.	XX
POPULUS TRICHOCARPA	BLACK COTTONWOOD	LIVE STAKES	XX
QUERCUS GARRYANA	OREGON WHITE OAK	LIVE STAKES	XX
SALIX LASIANDRA	PACIFIC WILLOW	LIVE STAKES	XX
SALIX SITCHENSIS	SITKA WILLOW	LIVE STAKES	XX
CONIFER TREES			
PSEUDOTSUGA MENZIESII	DOUGLAS FIR	1 GAL.	XX
THUJA PLICATA	WESTERN RED CEDAR	1 GAL.	XX
SHRUBS			
ACER CIRCINATUM	VINE MAPLE	1 GAL.	XX
AMELANCHIER ALNIFOLIA	SERVICEBERRY	1 GAL.	XX
CORNUS SERICEA	RED OSIER DOGWOOD	LIVE STAKES	XX
MAHONIA AQUIFOLIUM	OREGON GRAPE	1 GAL.	XX
OEMLERIA CERASIFORMIS	INDIAN PLUM	1 GAL.	XX
PHYSOCARPUS CAPITATUS	PACIFIC NINEBARK	1 GAL.	XX
POLYSTICHUM MUNITUM	WESTERN SWORD FERN	1 GAL.	XX
ROSA GYMNOCARPA	WOOD ROSE	1 GAL.	XX
ROSA PISOCARPA	PEA-FRUIT ROSE	1 GAL.	XX
RUBUS SPECTABILIS	SALMONBERRY	1 GAL.	XX
SALIX SCOULERIANA	SCOULER WILLOW	LIVE STAKES	XX
SAMBUCUS CAERULEA	BLUE ELDERBERRY	1 GAL.	XX
SPIRAEA DOUGLASII	DOUGLAS SPIREA	1 GAL.	XX
SYMPHORICARPUS ALBUS	SNOWBERRY	1 GAL.	XX
GRASSES / SEDGES / RUSHES			
CAREX OBNUPTA	SLOUGH SEDGE	1 GAL.	XX
ELEOCHARIS PALUSTRIS	COMMON SPIKE RUSH	1 GAL.	XX
FESTUCA OCCIDENTALIS	TALL OATGRASS	1 GAL.	XX
SCIRPUS MICROCARPUS	FRUITED BULLRUSH	1 GAL.	XX
POA HOWELLII	HOWELL BLUEGRASS	1 GAL.	XX

NOTES:

- FRIENDS OF TREES SHALL PROVIDE SOIL AMENDMENTS AND MULCH AS NECESSARY.
- ALL PLANTS SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS AND SPECIFICATIONS PROVIDED AS PART OF THE CONSTRUCTION DOCUMENT PACKAGE.
- AREAS TO BE PLANTED WITHIN 6 FEET OF ORDINARY HIGH WATER SHALL HAVE LIVE STAKE PLANTINGS.
- LARGE WOODY DEBRIS RESTORATION ALONG RIVERBANK WILL BE FIELD FIT WITH FINAL LOCATION AND ORIENTATION DETERMINED DURING CONSTRUCTION. WOOD RESTORATION SHALL CONSIST OF ROOT WADS, DOWNED TREES AND TREE LIMBS GREATER THAN 6" IN DIAMETER SALVAGED DURING SITE CLEARING.
- FRIENDS OF TREES SHALL TAKE MEASURES AS NECESSARY IN ORDER TO PROTECT PLANTING FROM DAMAGE BY WILDLIFE AND ACHIEVE 80% PLANT ESTABLISHMENT AND 80% GROUND COVER ACROSS ENTIRE SITE FOR ONE YEAR AS REQUIRED. FRIENDS OF TREES SHALL PROVIDE ANIMAL PROTECTION SUPPLIES.
- THIS PLANTING PLAN AND LEGEND IS PROVIDED AS A REFERENCE FOR PLANTING. FRIENDS OF TREES SHALL PROVIDE FINAL PLANTING SPECIES LIST, LAYOUT AND QUANTITIES DURING CONSTRUCTION. FRIENDS OF TREES IS RESPONSIBLE FOR ALL RESTORATION PLANTINGS WHICH INCLUDES LAYOUT AND QUANTITIES.

PLANT LEGEND

-  POLYSTICHUM MUNITUM, WESTERN SWORDFERN - SPACE AS SHOWN
-  ROSA GYMNOCARPA, WOOD ROSE - SPACE AS SHOWN
-  ROSA PISOCARPA, PEA-FRUIT ROSE - SPACE AS SHOWN

PLANT COMMUNITY ZONES (20,000 SF TOTAL)



UPLAND RIPARIAN (TOTAL OF 10,000 SF)



LAYER	QTY. PER.
OVERSTORY	
ALNUS RUBRA	
FRAXINUS LATIFOLIA	
QUERCUS GARRYANA	
PSEUDOTSUGA MENZIESII	
THUJA PLICATA	
UNDERSTORY	
AMELANCHIER ALNIFOLIA	
CORNUS SERICEA	
MAHONIA AQUIFOLIUM	
PHYSOCARPUS CAPITATUS	
POLYSTICHUM MUNITUM	
ROSA GYMNOCARPA	
ROSA PISOCARPA	
SPIRAEA DOUGLASII	
RUBUS SPECTABILIS	
SAMBUCUS CAERULEA	
SYMPHORICARPUS ALBUS	

GROUND LAYER
SEED: APPLY 'NATIVE RESTORATION SEED MIX' AT A RATE SPECIFIED IN SECTION 02930 - SEEDED AREAS



BANK STABILIZATION RESTORATION (TOTAL OF 8,350 SF)

LAYER	QTY. PER.
OVERSTORY	
ACER CIRCINATUM	
ALNUS RUBRA	
POPULUS TRICHOCARPA	
SALIX LASIANDRA	
SALIX SITCHENSIS	
UNDERSTORY	
CORNUS SERICEA	
OEMLERIA CERASIFORMIS	
POLYSTICHUM MUNITUM	
ROSA GYMNOCARPA	
ROSA PISOCARPA	
SALIX SCOULERIANA	

GROUND LAYER
SEED: APPLY 'NATIVE RESTORATION SEED MIX' AT A RATE SPECIFIED IN SECTION 02930 - SEEDED AREAS



WETLAND (TOTAL OF 1,650 SF)

LAYER	QTY. PER.
UNDERSTORY	
CORNUS SERICEA	
ROSA PISOCARPA	
SALIX SCOULERIANA	
GROUND LAYER	
CAREX OBNUPTA	
ELEOCHARIS PALUSTRIS	
FESTUCA OCCIDENTALIS	
SCIRPUS MICROCARPUS	
POA HOWELLII	

SEED: APPLY 'WATER QUALITY SEED MIX' AT A RATE SPECIFIED IN SECTION 02930 - SEEDED AREAS

project: **Mt. Scott Creek Restoration**
North Clackamas Park

Clackamas Water Environment Services
150 Beavercreek Road, Suite 430
Gresham, OR 97045
GShaloum@co.clackamas.or.us

submit: Land Use Permit

sheet title:

PLANTING LEGEND

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Date: 4.25.2012

Revisions:

Drawn By: WS/CM

Checked By:

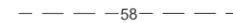
Job No. 110231.3

Approved:

L2.00

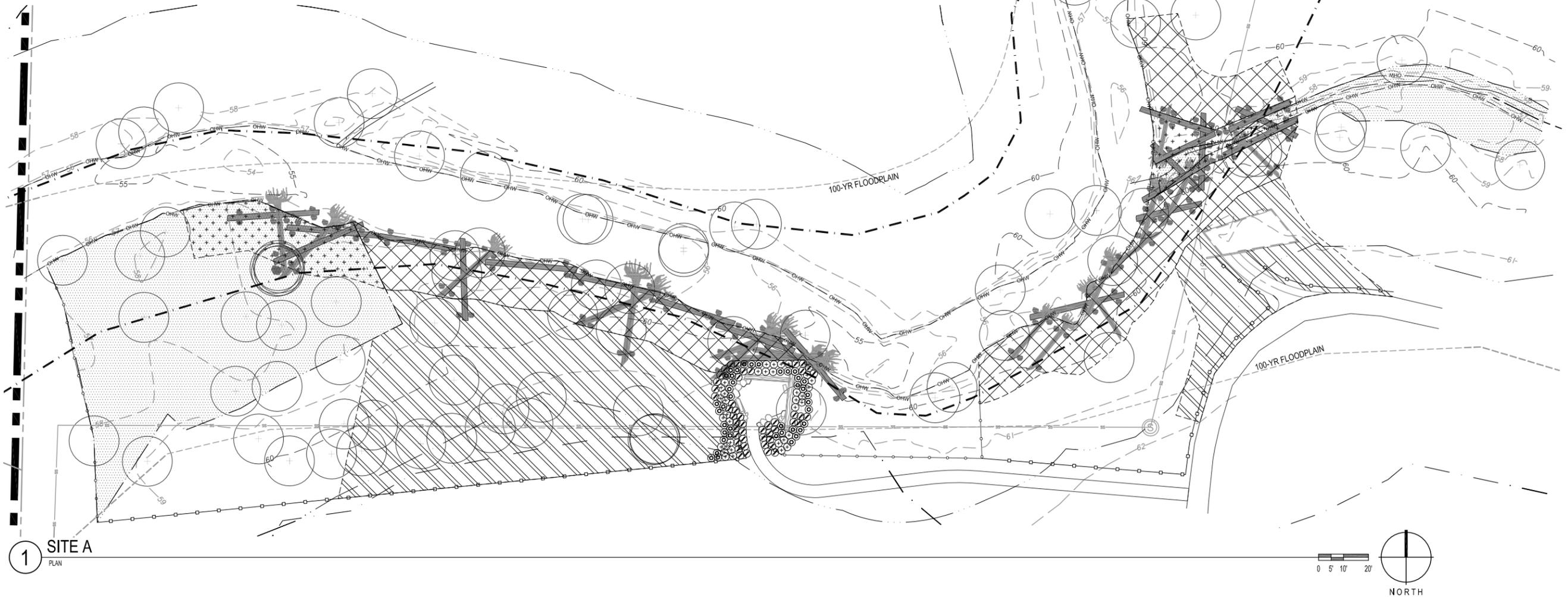
sheet no. 14 of 22

GENERAL LEGEND

-  PARK BOUNDARY
-  (E) CONTOURS
-  CREEK OHW LINE
-  DELINEATED WETLAND AREA
-  SANITARY LINE
-  FEMA 100-YEAR FLOOD PLAIN (FIRM)
-  NATURAL RESOURCE - WATER QUALITY RESOURCE (WQR)
-  NATURAL RESOURCE - HABITAT CONSERVATION AREA (HCA)
-  FLOODWAY
-  (E) FENCE
-  (E) TREES

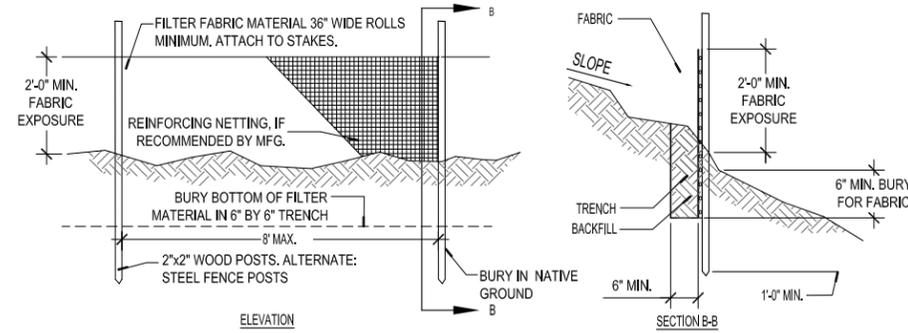
PLANT COMMUNITY ZONES

-  UPLAND RIPARIAN
SEE SHEET L3.01 FOR PLANT COMMUNITY SPECIES.
-  BANK STABILIZATION PLANTING
SEE SHEET L3.01 FOR PLANT COMMUNITY SPECIES.
-  EMERGENT WETLAND
SEE SHEET L3.01 FOR PLANT COMMUNITY SPECIES.

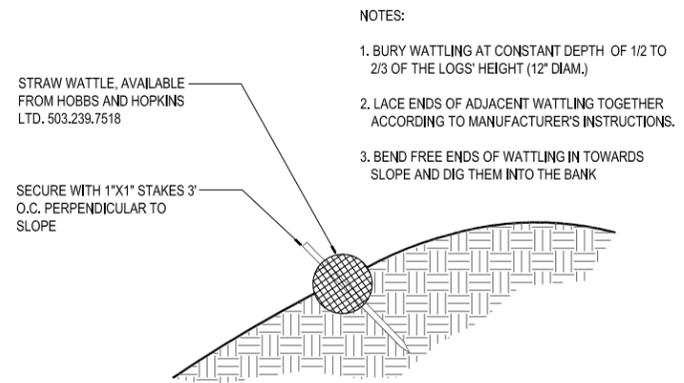


2 SITE B
PLAN
0' 5' 10' 20'
NORTH

1 SITE A
PLAN
0' 5' 10' 20'
NORTH



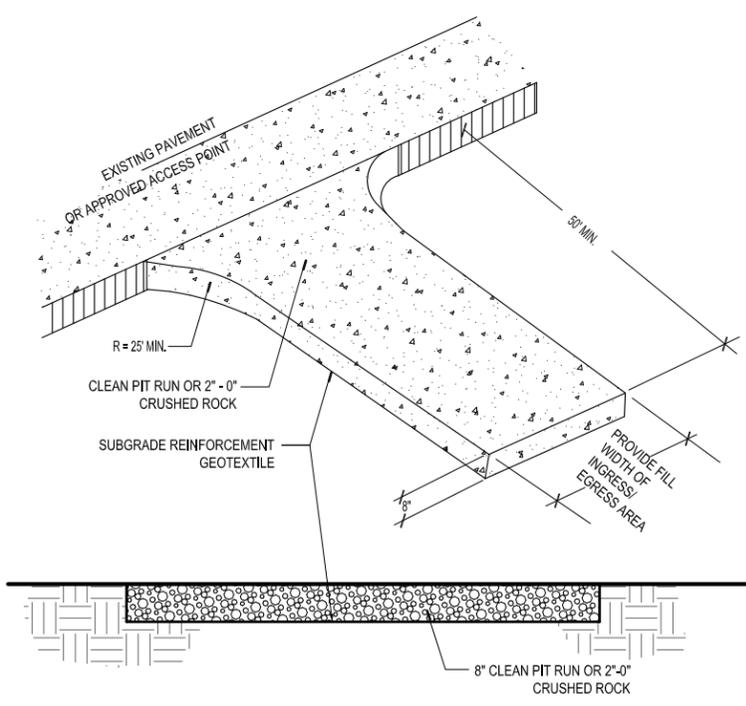
- NOTES:
1. INSTALLATION SHALL FOLLOW THE MANUFACTURERS RECOMMENDATIONS.
 2. POSTS SHALL BE INSTALLED SO THAT A MIN. OF 3'-0" EXTENDS ABOVE THE GROUND WITH A MIN. OF 2'-0" EMBEDMENT.
 3. FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL TO AVOID JOINTS.
 4. SPLICE JOINTS AT SUPPORT POSTS ONLY, WITH A MIN. 6" OVERLAP.



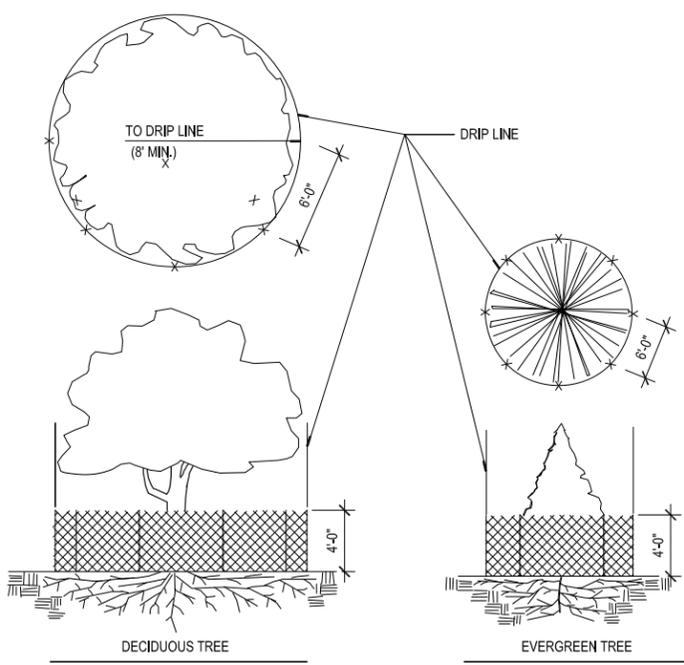
- NOTES:
1. BURY WATTLING AT CONSTANT DEPTH OF 1/2 TO 2/3 OF THE LOGS' HEIGHT (12" DIAM.)
 2. LACE ENDS OF ADJACENT WATTLING TOGETHER ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
 3. BEND FREE ENDS OF WATTLING IN TOWARDS SLOPE AND DIG THEM INTO THE BANK

1 SEDIMENT FENCE

2 TYP. WATTLING INSTALLATION

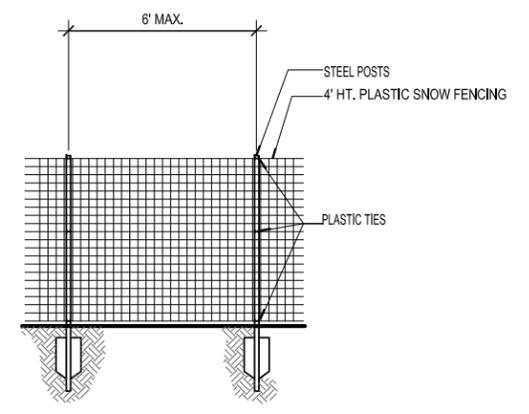


TYPICAL CROSS SECTION



NO GRADING OR TRESPASSING INSIDE FENCE. FINAL GRADING SHALL NOT ALTER GRADE BY MORE THAN 6".

DUPONT CONSTRUCTION FENCING #L-60 OR L-70. SECURE TO STEEL POSTS PLACED 6' O.C. INSTALL FENCING PRIOR TO START OF CONSTRUCTION. REMOVE ONLY WITH OWNER'S APPROVAL.



5 TEMPORARY TREE PROTECTION FENCE

3 TEMPORARY GRAVEL CONSTRUCTION ENTRANCE

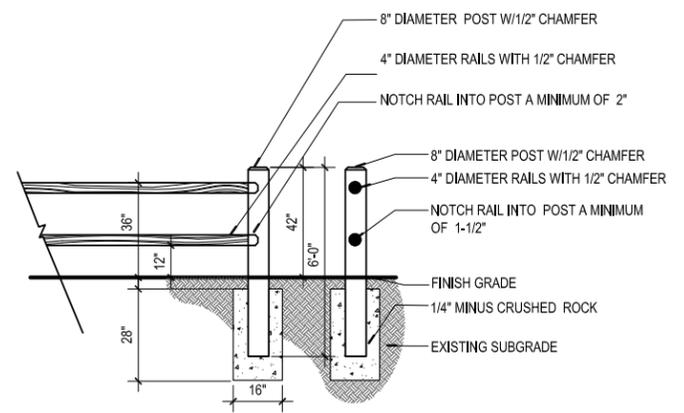
4 EXISTING TREE PROTECTION

project: **Mt. Scott Creek Restoration North Clackamas Park**
Clackamas Water Environment Services
150 Beevercreek Road, Suite 430
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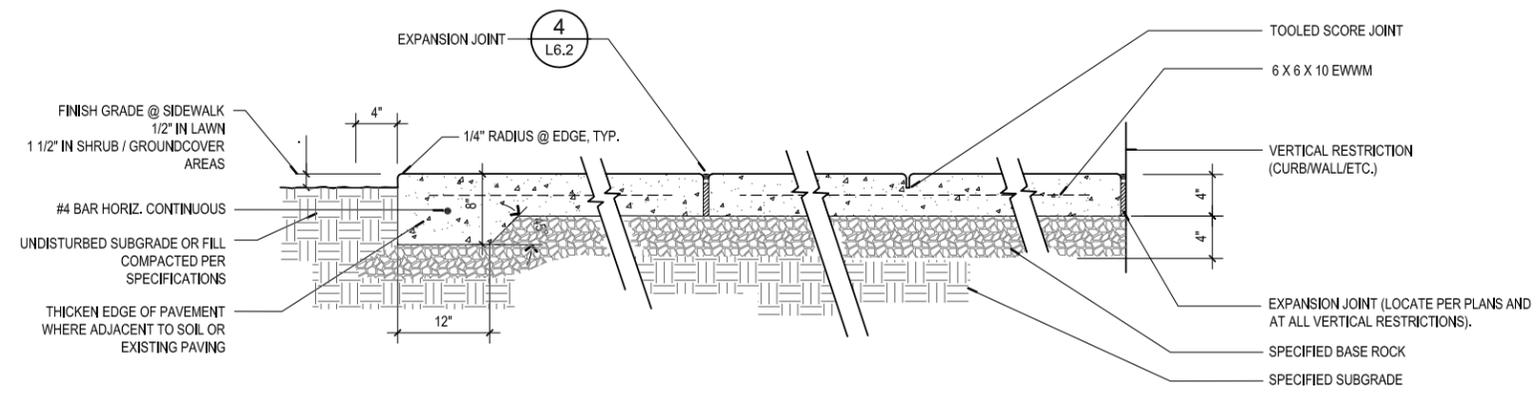
submital: Land Use Permit
sheet title: **EROSION CONTROL AND TREE PROTECTION DETAILS**

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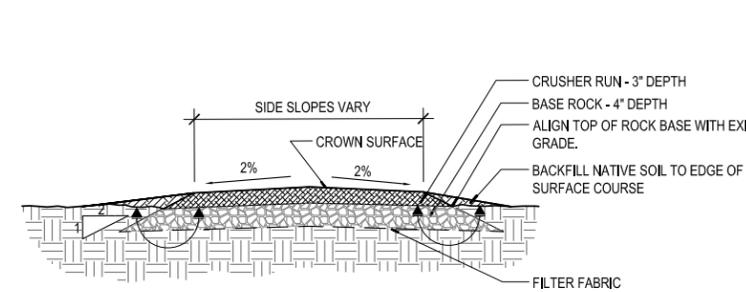
Date: 4.25.2012
Revisions:
Drawn By: WS/CM
Checked By:
Job No. 110231.3
Approved:



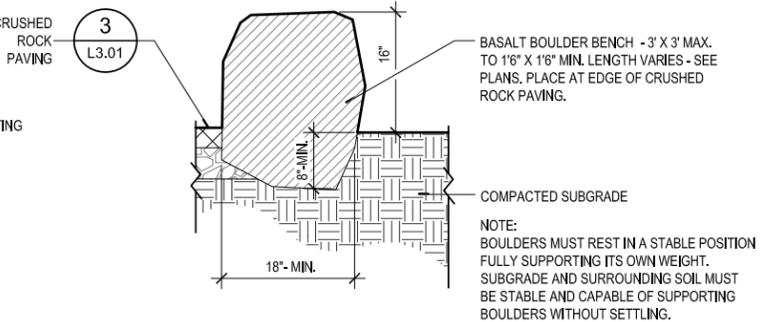
1 POST & RAIL FENCE
SECTION NOT TO SCALE



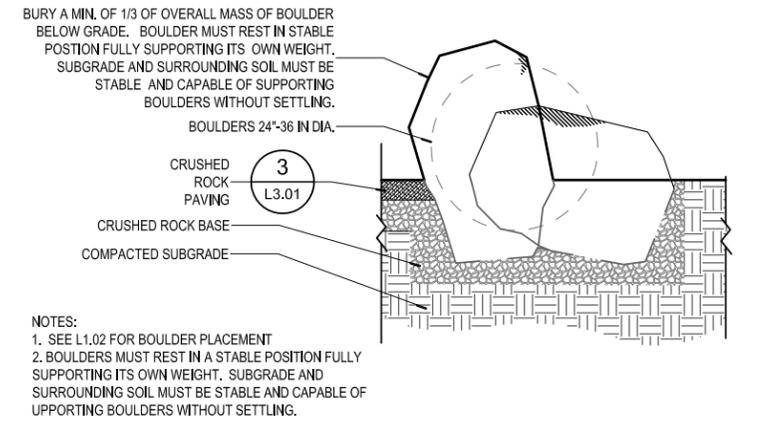
2 CONCRETE PAVING
SECTION 0 2' 4' 8'



3 CRUSHED ROCK PAVING
SECTION NOT TO SCALE



4 BASALT BENCH
SECTION 0 3' 6' 12'



5 BOULDER DETAIL
SECTION 0 3' 6' 12'

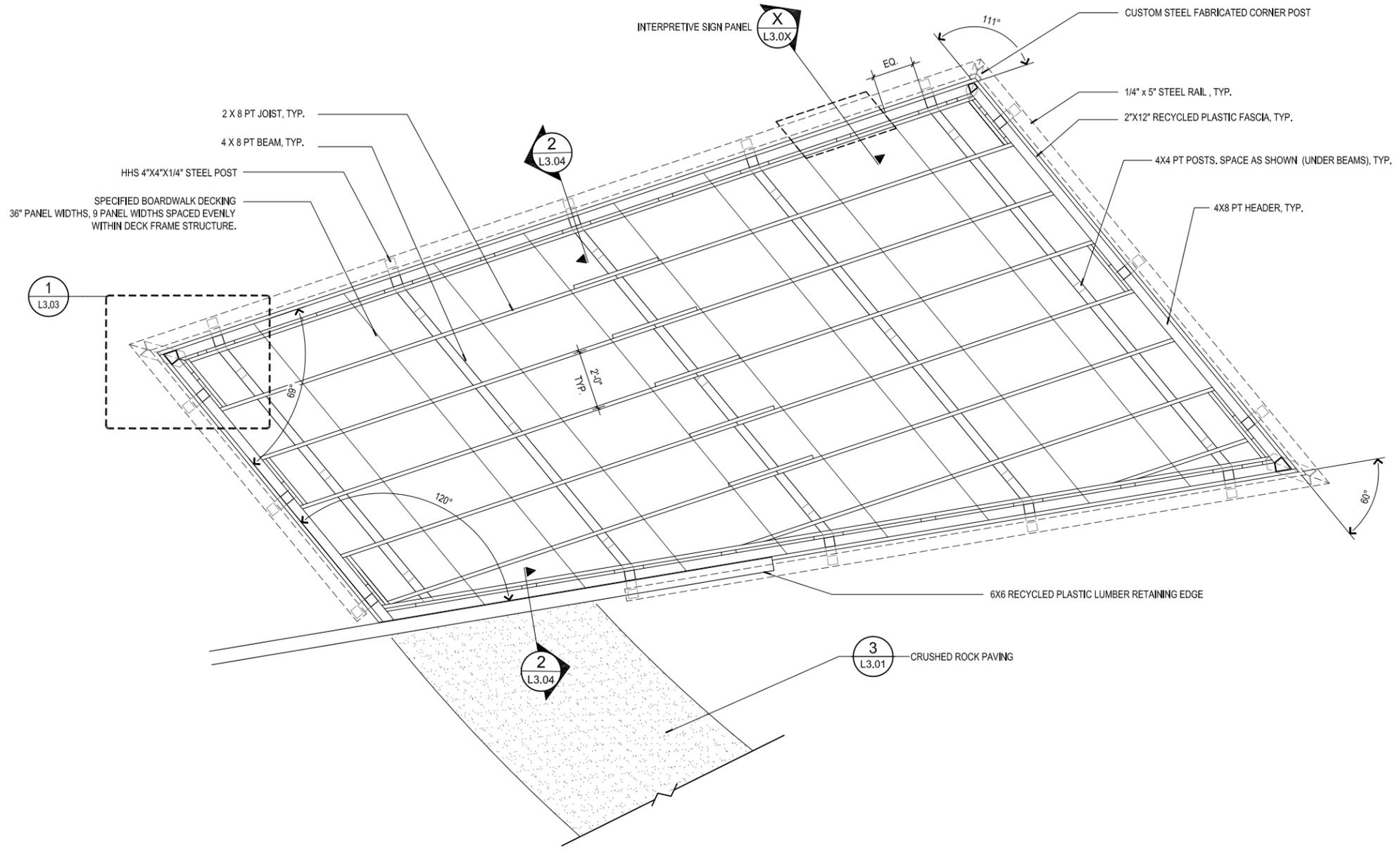
project: **Mt. Scott Creek Restoration**
North Clackamas Park
Clackamas Water Environment Services
150 Beevercreek Road, Suite 430
Gresham, OR 97045
GShaloun@goclackamasorus

submital: Land Use Permit
sheet title: **CONSTRUCTION DETAILS**

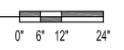
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1 OVERLOOK DECK FRAMING / POST AND RAIL PLAN
PLAN



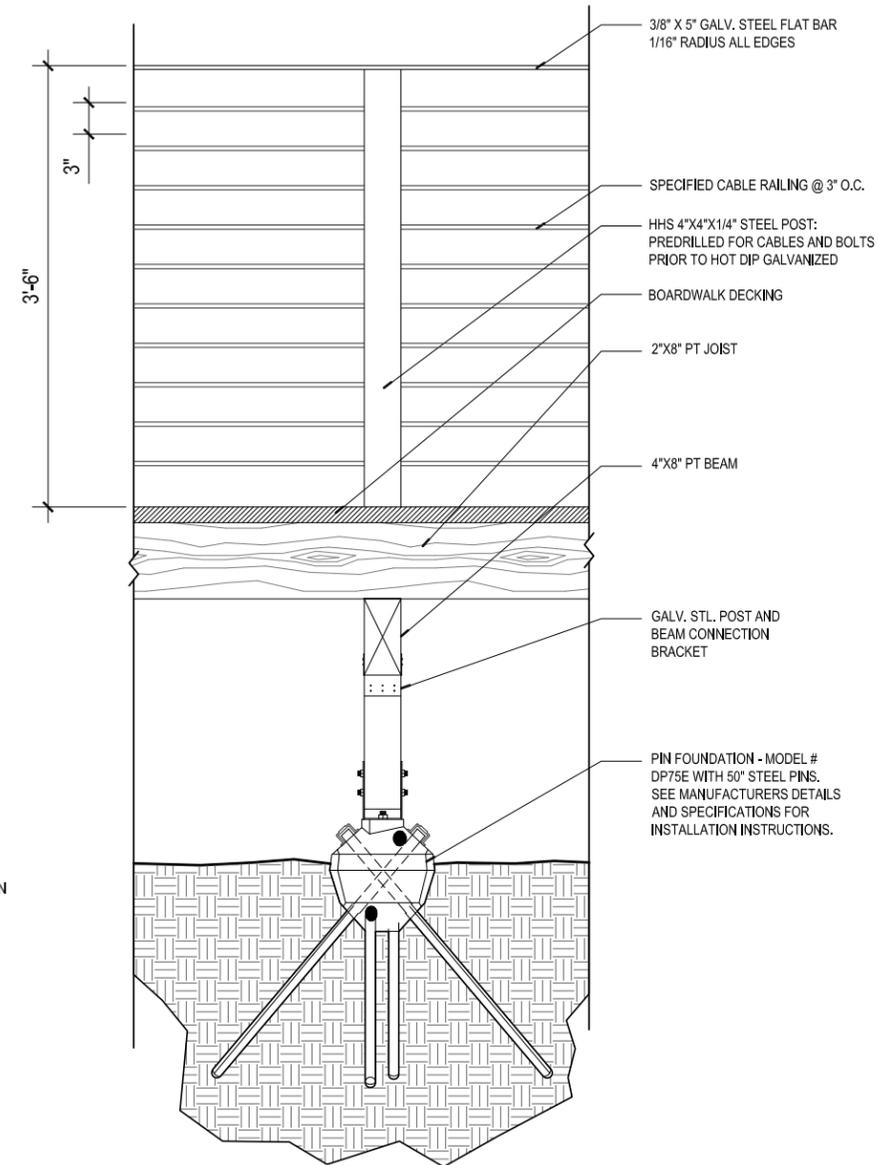
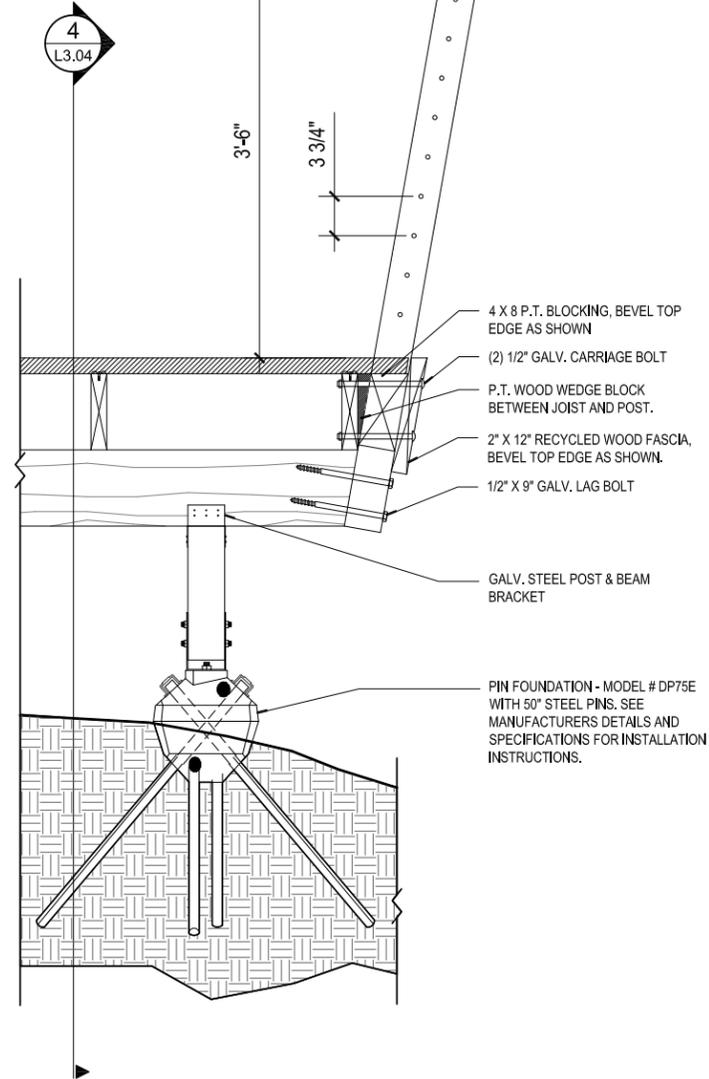
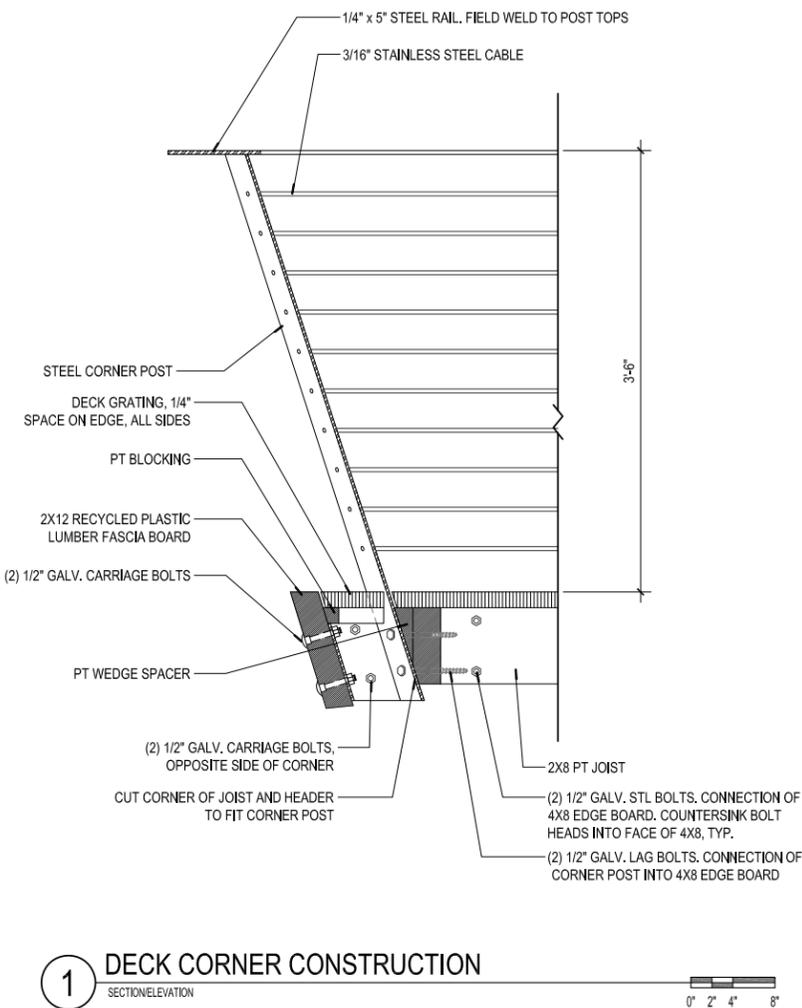
project: **Mt. Scott Creek Restoration**
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Clackamas Water Environment Services
150 Beavercreek Road, Suite 430
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submittal: Land Use Permit
sheet title: **OVERLOOK DETAILS**

DATE: 4.25.2012

Revisions:

Drawn By: WS/CM
Checked By:
Job No. 110231.3
Approved:



2 OVERLOOK DECK
SECTION/ELEVATION

3 OVERLOOK DECK
SECTION/ELEVATION

project: **Mt. Scott Creek Restoration
North Clackamas Park**

Clackamas Water Environment Services
150 Beavercreek Road, Suite 430
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submittal: Land Use Permit

sheet title: **BRIDGE DETAILS**

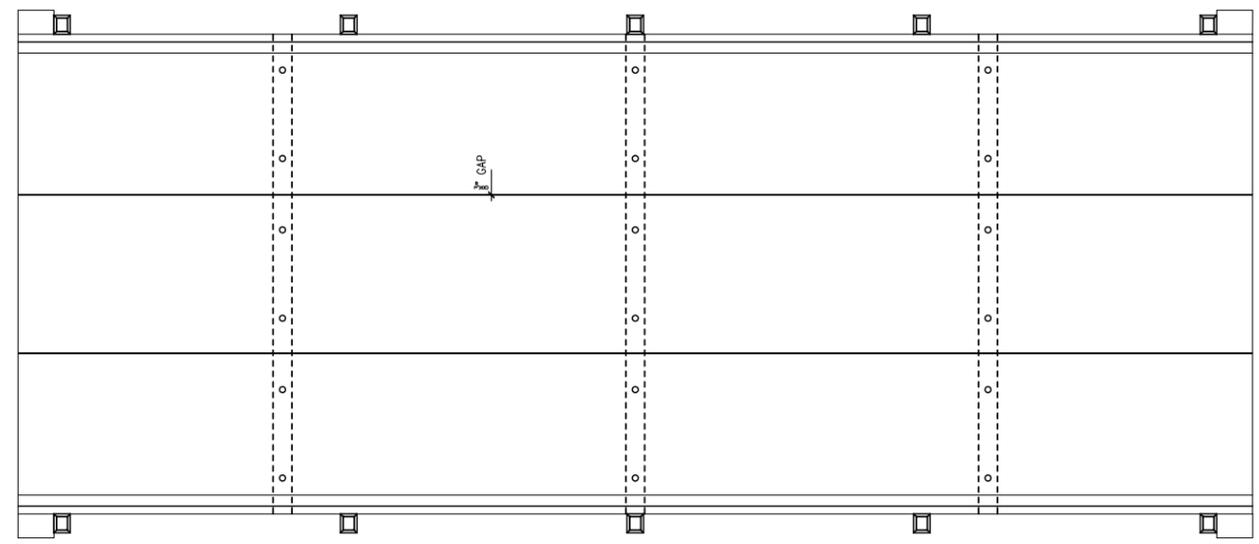
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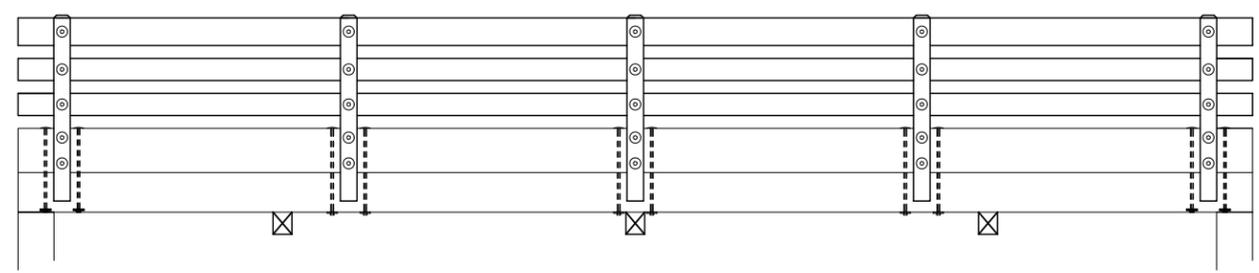
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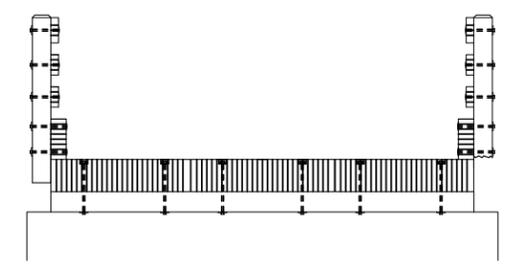
sheet no. 19 of 22



CUT-AWAY BRIDGE PLAN VIEW



BRIDGE ELEVATION



BRIDGE SECTION @ MIDSPAN/ABUTMENT

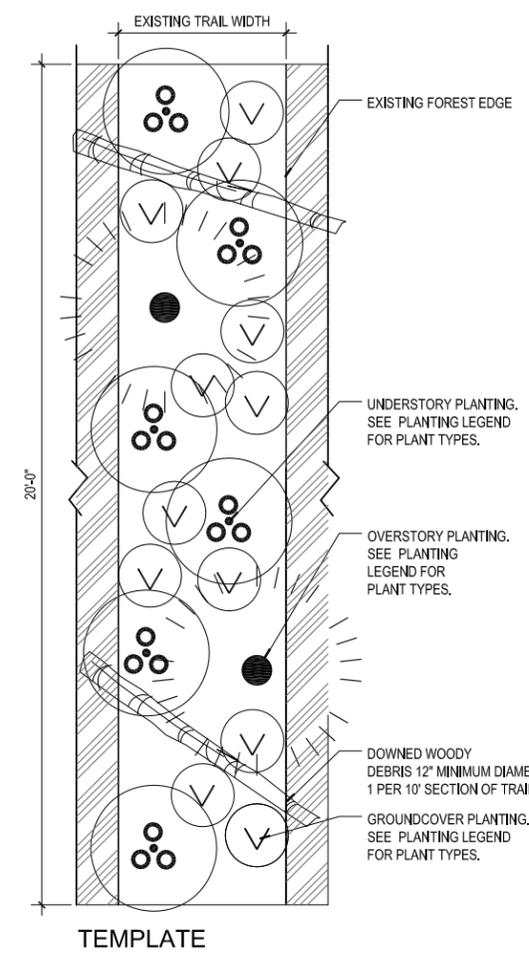
NO.	DATE	REVISIONS	BY



WESTERN WOOD STRUCTURES, INC.
P.O. BOX 130 TUALATIN, OREGON 97062
503/692-6900 FAX 503/692-6434
800/547-5411

PROJECT: _____
LOCATION: _____
ARCHITECT: _____
ENGINEER: _____
CONTRACTOR: _____
DRAWN BY: _____ DATE: _____
CHECKED BY: _____ DATE: _____
DATE PRINTED: _____

JOB NO. **2-B-017**
PILOT DATE: 05/21/12
SHEET: _____ OF _____

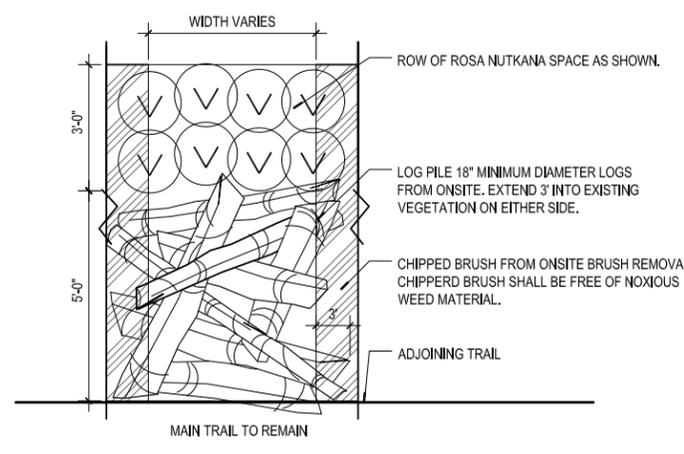


TRAIL REPLANTING LEGEND TYPICAL PLOT: 100 SF

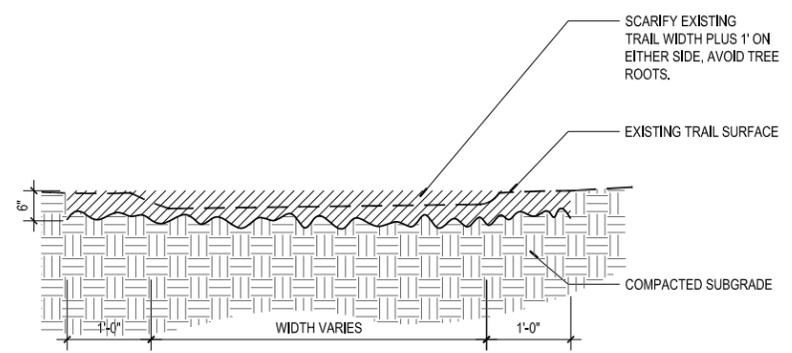
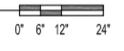
TYPICAL SYMBOL	BOTANICAL NAME	SIZE	TYP. PLOT RATIO
OVERSTORY			
	QUERCUS GARRYANA	OREGON WHITE OAK	BAREROOT 1
	THUJA PLICATA	WESTERN RED CEDAR	BAREROOT 1
UNDERSTORY			
	ACER CIRCINATUM	VINE MAPLE	BAREROOT 3
	OEMLERIA CERASIFORMIS	INDIAN PLUM	BAREROOT 3
GROUND LAYER			
	MAHONIA AQUIFOLIUM	OREGON GRAPE	BAREROOT 4
	POLYSTICHUM MUNITUM	SWORD FERN	BAREROOT 2
	ROSA NUTKANA	NOOTKA ROSE	BAREROOT 4
	SYMPHORICARPOS ALBUS	SNOWBERRY	BAREROOT 2

NOTE: THIS TRAIL REVEGETATION DETAIL IS PROVIDED AS A REFERENCE FOR PLANTING. FRIENDS OF TREES SHALL PROVIDE FINAL PLANTING SPECIES LIST, LAYOUT AND QUANTITIES DURING CONSTRUCTION. FRIENDS OF TREES IS RESPONSIBLE FOR ALL RESTORATION PLANTINGS WHICH INCLUDES LAYOUT AND QUANTITIES.

1 TRAIL REVEGETATION



2 TRAIL BARRIER



3 TRAIL DECOMMISSIONING



project: **Mt. Scott Creek Restoration**
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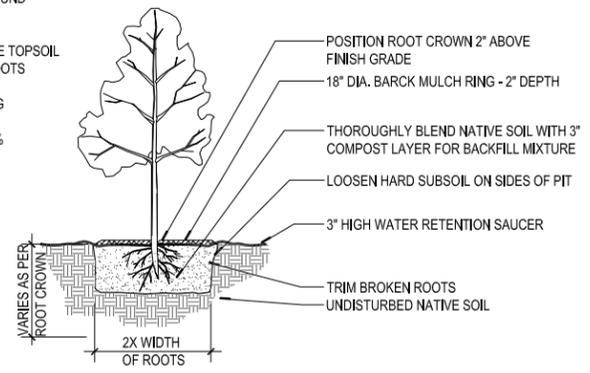
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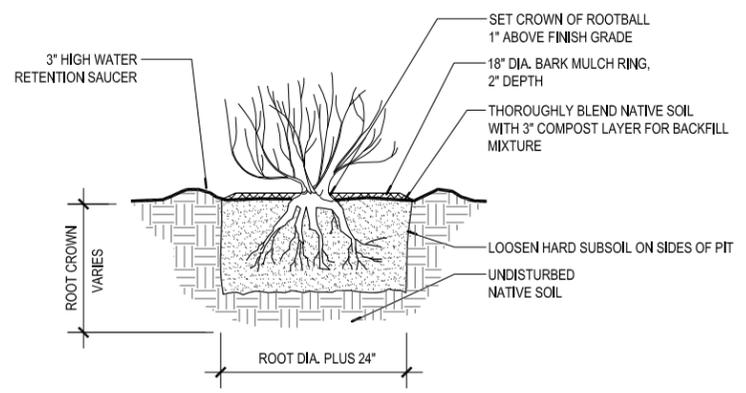
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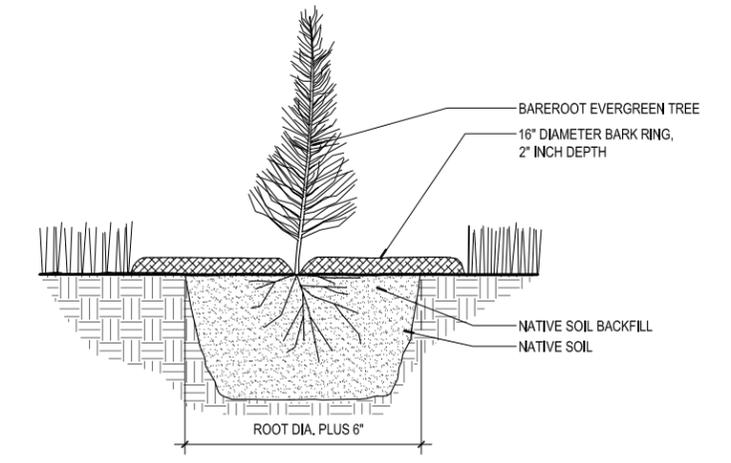
NOTE:
1. BACKFILL MIXTURE TO BE CAREFULLY WORKED AROUND ROOTS.
2. COMPLETELY SATURATE TOPSOIL AND SUBSOIL AROUND ROOTS
3. IN RIVERBANK PLANTING AREA - PLACE BROWSE PROTECTION AROUND 33% OF DECIDUOUS TREES.



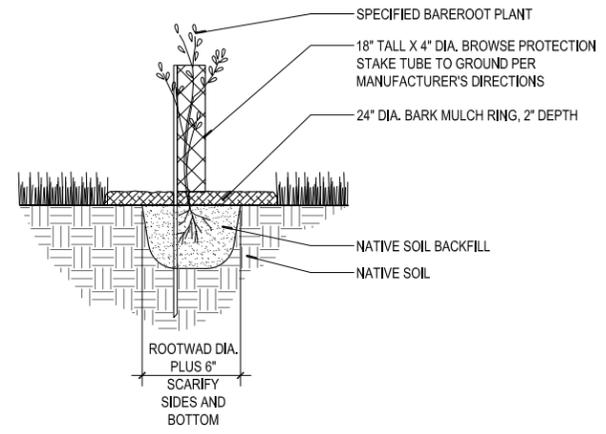
1 BAREROOT DECIDUOUS TREE PLANTING
SECTION NOT TO SCALE



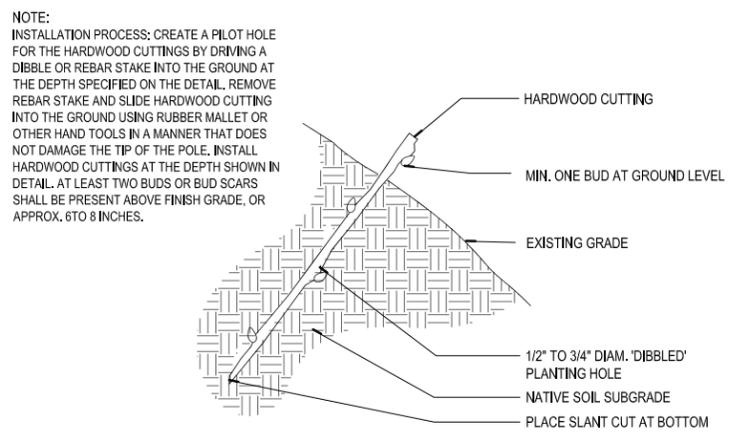
2 BAREROOT SHRUB PLANTING
SECTION NOT TO SCALE



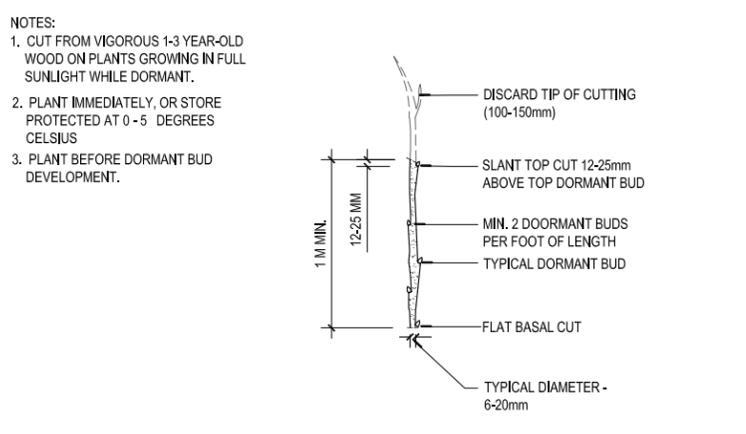
3 BAREROOT EVERGREEN PLUG TREE PLANTING
SECTION NOT TO SCALE



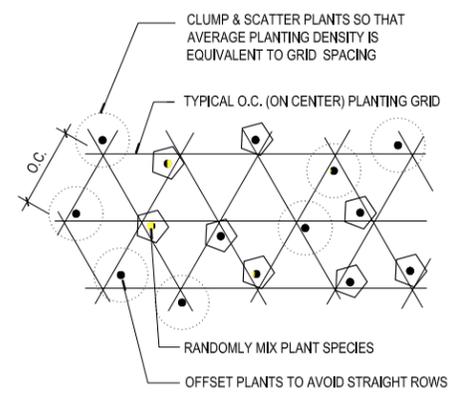
4 BAREROOT BROWSE PROTECTION
SECTION NOT TO SCALE



5 HARDWOOD CUTTING PLANTING
SECTION NOT TO SCALE



6 TYPICAL CUTTING DETAIL
SECTION NOT TO SCALE



7 RANDOM PLANTING PATTERN
PLAN NOT TO SCALE