Know what's below.
Call before you dig.

HERZMAN LEVEE SETBACK
AND CRT 2 STABILIZATION PROJECT

Christie True, Director
Water and Land Resources Division
Department of Natural Resources and Parks
River and Floodplain Management Section

EXISTING SITE PLAN
1. INSTALL SILT FENCE WHERE DIRECTED BY ENGINEER WHERE GROUND SURFACES AWAY FROM WORK AREA. ROUTE FENCE AROUND DRY-LINE OF TREES WHERE POSSIBLE TO PROTECT HABITAT.

2. INSTALL HIGH VISIBILITY FENCE WHERE DIRECTED BY ENGINEER AT PROJECT LIMITS/CLEAVERS LIMITS.

3. INSTALL BULK BAG EROSION CONTROL AT INTERSECTION OF SIDE CHANNEL AND EXISTING BANK Prior TO START OF SIDE CHANNEL EXCAVATION.

4. INSTALL BULK BAG EROSION CONTROL AROUND DRAINAGE AREA AND FOR CREDIT WORK AREA AFTER COMPLETION OF SIDE CHANNEL PRIOR TO START OF CREDIT 2 CONSTRUCTION. SEE SHEET 6.

5. SEE DRAINAGE AREA TO PROVIDE FLOW Bypass DURING CREDIT WORK.

6. ESTABLISH CREDIT ACCESS TO SR 169 IN ACCORDANCE WITH APPROVED TRAFFIC CONTROL PLAN.
Know what's below. Call before you dig.

HERZMAN LEVEE SETBACK AND CRT 2 STABILIZATION PROJECT

Christie True, Director
Water and Land Resources Division
Department of Natural Resources and Parks
River and Floodplain Management Section

PROPOSED CRT 2 PLAN

King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section
Christopher True, Director

PROPOSED CRT 2 PLAN
Call before you dig.

HERZMAN LEVEE SETBACK
AND CRT 2 STABILIZATION PROJECT

BANK STABILIZATION CROSS SECTIONS

STA. 3+84 - CROSS SECTION - BANK STABILIZATION

STA. 3+84 - CROSS SECTION - TYPICAL

Approximate Location of River Optic Line

Excavate Back from Face of Revetment at Elev. -118.0' Where Necessary to Protect Trail and Utilities.

Existing Riprap to remain below 118.0'.

Approximate Location of River Optic Line

Excavate Back from Face of Revetment at Elev. -118.0' Where Necessary to Protect Trail and Utilities.

Existing Riprap to remain below 118.0'.

King County
Department of Habitat Conservation and Parks
River and Floodplain
Management Section

HERZMAN LEVEE SETBACK
AND CRT 2 STABILIZATION PROJECT

BANK STABILIZATION CROSS SECTIONS
LRG. ANNEX G

1. Each log has been assigned a log number shown in the call-out and log schedule on this sheet.

2. Excavate and backfill scour pad as shown on plans. See Sheets 7 and 8.

3. Logs shall be placed at the locations and elevations specified on the plans or as directed by the Engineer. Each log placed to be in direct contact with the log directly below and/or above them.

4. Construction of channel logs as shown in details before continuing with next log layer.

5. All logs in contact with the existing bank shall be placed in direct contact with the bank.

6. Install log 9 in front of, and at the same elevation as, layer 3 as shown on Sheet 6.

7. Install, and channel logs 5, 6 on top of and offset from log 4 as field directed.

8. Sequence of layering shown may be modified as approved by Engineer. Contractor may elect to assemble Layers 1 and 2 and place them as a unit.

**ELJ CONTROL POINT TABLE**

<table>
<thead>
<tr>
<th>ELJ</th>
<th>Control Point</th>
<th>Approx. Northing</th>
<th>Approx. Easting</th>
<th>Approx. Station Offset</th>
</tr>
</thead>
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<tr>
<td>ELJ 1</td>
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<tr>
<td>ELJ 3</td>
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**SCALE IN FEET**

[Diagram and table details]
ROUGHNESS LOGS NOTES:

1. 2 FT ON CENTER LOGS WITH ROOTPADS SHALL BE DELIVERED AND STAKED ON SITE BY CONTRACTOR.

2. LOGS WILL BE PLACED IN TWO LAYERS WITH TIES ON THE BOTTOM AND THE CENTER LOGS ON TOP.

3. EACH CENTER LOG WILL BE ANCHORED TO AT LEAST TWO ANCHORS (ONE THREE SPOOL DESIGN, WITH ONE ANCHOR ATTACHED IN THE TOP QUARTER OF THE STEM AND ONE ATTACHED IN THE BOTTOM QUARTER).

4. EACH TREE WILL BE CONNECTED AT TWO LOCATIONS WITH ONE CONNECTION IN THE TOP QUARTER OF THE STEM AND ONE CONNECTION IN THE BOTTOM QUARTER. ALL CONNECTIONS WILL BE BY CHAIN, EITHER TO A CROSSING CENTER LOG OR TO A BOULDER ANCHOR AS SHOWN ON PLANS.

5. AT EACH CENTER CONNECTION TO A LOG, THE CHAIN WILL SURROUND THE LOG ENTIRELY, AND THE CHAIN WILL BE INSTALLED WITH NO SLACK.

6. FOR ALL CENTER CONNECTIONS, CONNECTORS WILL BE RATED AT THE SAME WORKING LOAD AS THE CHAIN AND INSTALLED SUCH THAT THEY CANNOT BE LOOSENED OR REMOVED USING COMMON HAND TOOLS.

7. EACH BOULDER ANCHOR WILL BE FITTED WITH TWO ATTACHMENT POINTS SUITABLE FOR CONNECTING TO CHAIN.

8. EACH BOULDER ANCHOR WILL BE ENGRAVED 4 FT BELOW EXISTING GRADE TO RECORD APRON BREAKOUT.

9. FINAL NUMBER AND PRECISION OF BOULDER ANCHORS AND LOGS MAY BE DETERMINED BY ENGINEER BASED ON SITE CONDITIONS AND THE CHARACTERISTICS OF THE SUPPLIED LOGS.
Know what's below.

Call before you dig.

HERZMAN LEVEE SETBACK
AND CRT 2 STABILIZATION PROJECT

Christie True, Director
Water and Land Resources Division
Department of Natural Resources and Parks
River and Floodplain Management Section

PROPOSED SETBACK LEVEE
SIDE CHANNEL GRADING AND

SEE SHEET 17

SEE SHEETS 13 AND 14

NOTES:
1. QUANTITY OF BANK ROUGHENING STRUCTURES DEPENDS ON
   AMOUNT OF TREES SALVAGED.

GENERAL NOTES:
1. REFER TO SHEET 3 FOR LEGEND AND ABBREVIATIONS.
Call before you dig.

HERZMAN LEVEE SETBACK
AND CRT 2 STABILIZATION PROJECT

LEVEE REMOVAL GRADING PLAN

GENERAL NOTES:
1. REFER TO SHEET 3 FOR LEGEND AND ABBREVIATIONS.
2. SIDE MOUNTING TREES AT SOUTHERN EXTENT OF LEVEE
   EXTENT OF REMOVAL TO BE VERIFIED BY PROJECT ENGINEER
   PRIOR TO DATE OF EXCAVATION.
3. REMOVE ROCK FROM WATERWAY SIDE OF LEVEE DOWN TO
   2 FT BELOW WATER LEVEL AT TIME OF CONSTRUCTION.
4. SEPARATE LEVEE FACE ROCK FROM CORE LEVEE MATERIAL
   AND STOCKPILE.

LEVEE REMOVAL - PLAN VIEW

PROFILE - LEVEE REMOVAL

SECTION - LEVEE REMOVAL

APPENDIX: DRAFT DRAWINGS, P.E.

PROJECT NO. 1131549

CITIZEN EXPRESS, P.E.

EMERSON, TRACI, P.E.

ENGROS, WALTER, P.E.

MCCARRON, MARY, P.E.

NORTH, PAT, P.E.

RIVER, TRACI, P.E.

SHAVER, STEVE, P.E.

THE ITALIAN, P.E.

WHISNER, P.E.

WRONG, P.E.

LUBIN, P.E.

MCCARTHY, P.E.

I:1:rivers cad support\1131549_herzmanleveesetback\DWG\Herzman_Levee_REMOVE.dwg, 1/15/2020 12:29:23 PM, kward
Know what's below.
Call before you dig.

HERZMAN LEVEE SETBACK AND CRT 2 STABILIZATION PROJECT

Christie True, Director
Water and Land Resources Division
Department of Natural Resources and Parks
River and Floodplain Management Section

CHANNEL PROFILE AND SECTIONS

SIDE CHANNEL PROFILE
HORIZONTAL SCALE: 1"=10'
VERTICAL SCALE: 1"=10'

STATION 1+00 CHANNEL SECTION
B12

SECTION 3+00 CHANNEL SECTION
C12

PROPOSED LEVEE SETBACK
100 YR WSE
2 YR WSE

EXISTING GROUND, TYP
PROPOSED GROUND, TYP

122'
113'

SIDE CHANNEL PROFILE
A12 1"=40' 1"=10'

i:\1-rivers cad support\1131549_herzmanleveesetback\DWG\Herzman_Side_XSEC.dwg, 1/15/2020 12:30:56 PM, kward
GENERAL NOTES:
1. REFER TO SHEET 3 FOR LEGENDS AND ABBREVIATIONS.
2. REMOVE EXISTING FENCE (NOT SHOWN HERE) AS NEEDED.
3. MAKE MINOR ADJUSTMENTS TO FOOTPRINT TO AVOID EXISTING TREES. PROJECT REPRESENTATIVE APPROVAL OF ADJUSTMENTS REQUIRED PRIOR TO EXCAVATION.
4. STOCKPILE EXCAVATED SOIL FOR REUSE IN BURIED REVETMENT.

BURIED REVETMENT PLAN VIEW

BURIED REVETMENT TYPICAL SECTION

ELEV 116

BACKFILL WITH WELL-WATERED EXCAVATED MATERIAL TO EXISTING GRADING AND SEED WITH NATIVE GRASSES.

ELEV 118

EXCAVATE AT 2:1 (H:V) AND LINE WITH NON-WOVEN GEOTEXTILE FILTER FABRIC.

LAUNCH TIE RAMPS

ELEV 112

SCALE: 1" = 100' (feet)
TO BE DEVELOPED AT 60% DESIGN
Know what's below.
Call before you dig.

HERZMAN LEVEE SETBACK
AND CRT 2 STABILIZATION PROJECT

CHRISTIE TRUE, DIRECTOR
WATER AND LAND RESOURCES DIVISION
DEPARTMENT OF NATURAL RESOURCES AND PARKS
RIVER AND FLOODPLAIN MANAGEMENT SECTION

PLANTING PLAN

FILE INFO:
FILE: 1131549_herzmanleveesetback\DWG\Herzman_PLANT.dwg
DATE: 1/15/2020 12:33:33 PM
CREATOR: kward

LEGEND:
- UNVEGETATED CHANNEL
- CHANNEL PINCH
- RIVERINE WETLANDS
- RIPARIAN UPLAND
- ENHANCEMENT AREA

DRAFT

SHEET 21 OF 23
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<th>LOCATION</th>
<th>TOTAL AREA</th>
<th>CHANNEL SETBACK</th>
<th>ECOSYSTEM</th>
<th>COMMON NAME</th>
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<td>CHANNEL FORCE MAINLINE BANK</td>
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<td>ENVIRONMENTAL AREA</td>
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**PLANTING SCHEDULE**

- **HERZMAN LEVEE SETBACK AND CFT 2 STABILIZATION PROJECT**
- **Christie True, Director**
- **Water and Land Resources Division**
- **Department of Natural Resources and Parks**
- **River and Floodplain Management Section**

**NOTE:** Planting schedule for potential riparian and environmental areas at HERZMAN LEVEE SETBACK AND CFT 2 STABILIZATION PROJECT.
Know what's below.
Call before you dig.

TYPICAL TREE AND SHRUB DETAIL

NOTES:
1. PLANT MATERIAL MUST BE KEPT MOIST.
2. PLACE PLANTS SO THAT ROOT COLLAR IS LEVEL WITH FINISHED GRADE.
3. COMPACT SOIL UNDER PLANT SO PLANT DOES NOT SETTLE.
4. APPLY WASHING PER SPECIFICATIONS.
5. KEEP WASHING 4 INCHES FROM PLANT STEM.

TYPICAL PLANTING X-SECTION

NOTES:
1) IN AREAS TO BE REPLANTED SOIL SCATTER TOP 12 INCHES OF SOIL.
2) PLACE 2 INCHES OF WOOD CHIP WASHO OVER TOP OF FINISHED GRADE.

Herzman levee setback and CRT 2 stabilization project

Planting details