

K:\25697063_PGE_Env_Services_Phase 2\GIS Figures\MXD\IRM_13.5_Permitting\CoP_Land Use\Variance Request\Fig1_Vicinity Map_AECOM.mxd



Source: © 2013 National Geographic Society, i-cubed



July 2015

SITE VICINITY MAP

PORTLAND GENERAL ELECTRIC
RM 13.5 REMEDIAL ACTION
PORTLAND, OREGON

FIGURE 1



PROJECT LOCATION AND PLANNING BOUNDARIES

PORTLAND GENERAL ELECTRIC
RM 13.5 REMEDIAL ACTION
PORTLAND, OREGON



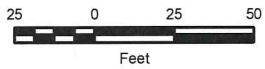
APRIL 2015
25698205

FIGURE 2

K:\25697063_PGE_Env_Services_Phase 2\GIS_Figures\MXD\RM 13.5 Permitting\COP Land Use\Fig3 Cap Design_Boundaries.mxd



Source: Esri, i-cubed, USDA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community



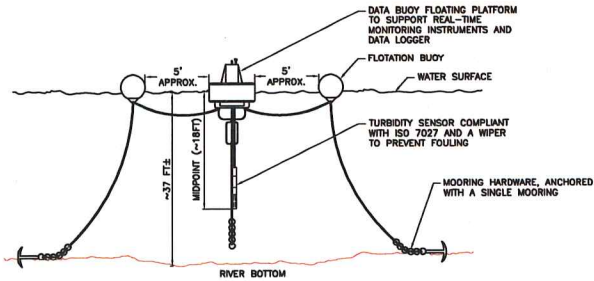
ISOLATION CAP DESIGN, FLOODWAY, & FLOOD HAZARD AREAS



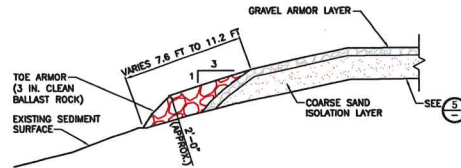
AUGUST 2015
25698205

PORTLAND GENERAL ELECTRIC
RM 13.5 REMEDIAL ACTION
PORTLAND, OREGON

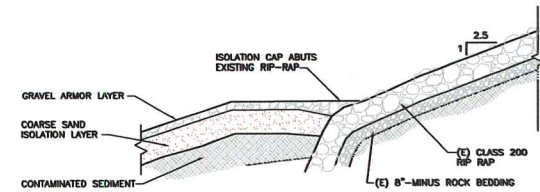
FIGURE 3



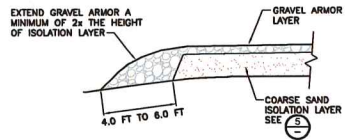
WATER QUALITY MONITORING STATION (CV-1)
N.T.S.



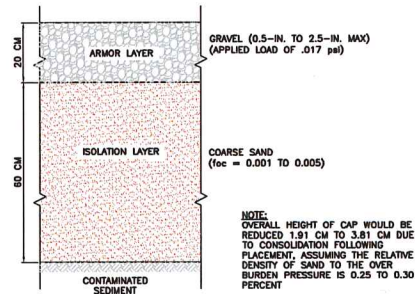
ARMOR PROTECTION AT TOE OF SLOPE (CV-2)
N.T.S.



ARMOR PROTECTION AT EXISTING RIP-RAP (CV-3)
N.T.S.



**ARMOR PROTECTION AT UPSTREAM AND
DOWNSTREAM EXTENT OF ISOLATION CAP** (CV-4)
N.T.S.



ISOLATION CAP (CV-5)
N.T.S.

GENERAL NOTES:

1. CAP WILL BE PLACED AT A FINAL SLOPE OF 3:1 OR LESS WITHIN THE DESIGNATED CAP BOUNDARIES. CAP PLACEMENT TO BE FIELD VERIFIED USING BATHYMETRY SURVEY AND DIVER VISUAL SURVEY.
2. PSI = POUNDS PER SQUARE INCH
3. foc = FRACTION OF ORGANIC CARBON

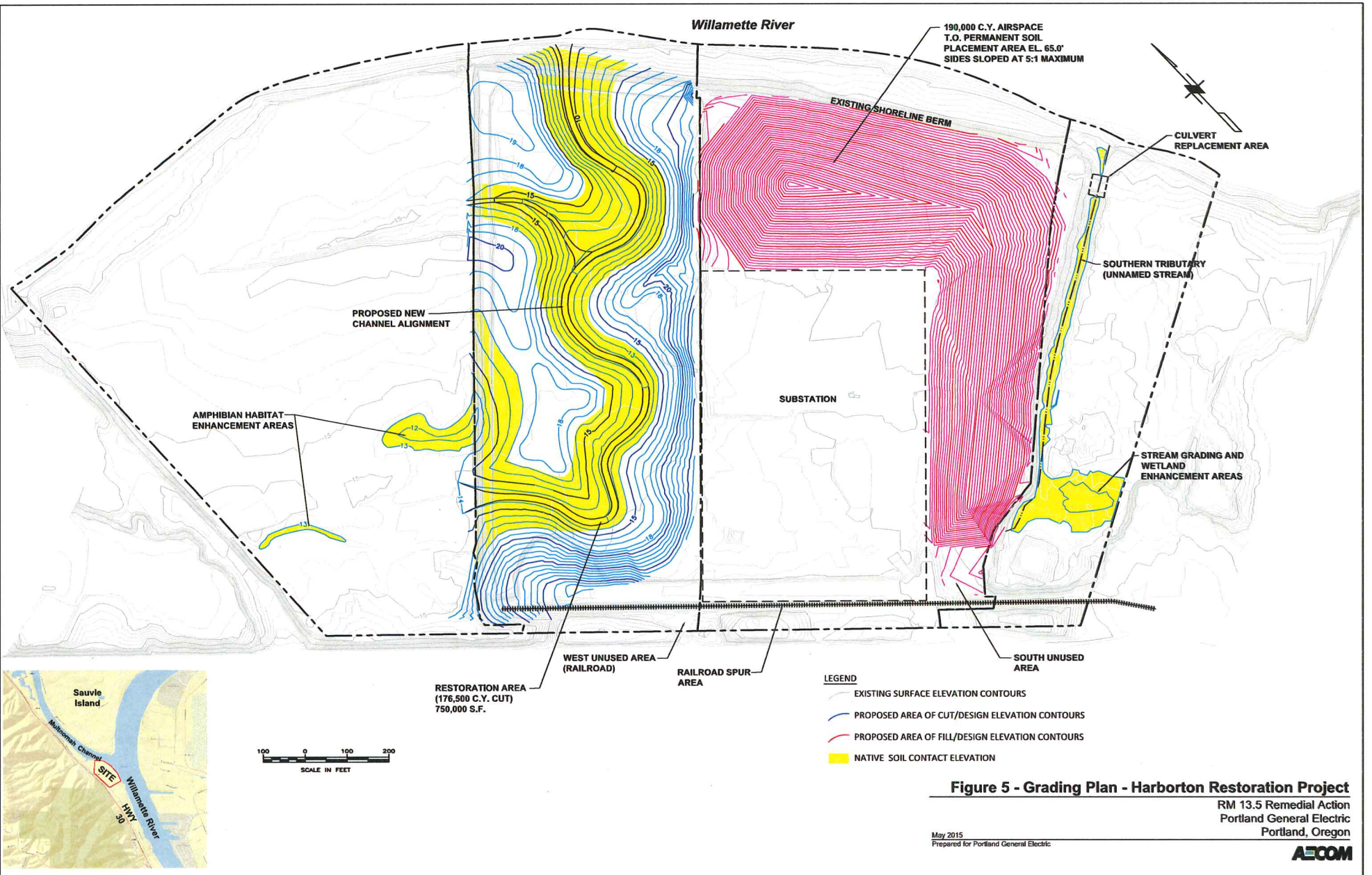
NOTE:
OVERALL HEIGHT OF CAP WOULD BE REDUCED 1.91 CM TO 3.81 CM DUE TO CONSOLIDATION FOLLOWING PLACEMENT, ASSUMING THE RELATIVE DENSITY OF SAND TO BE 0.25 TO 0.30 AND OVERBURDEN PRESSURE IS 0.25 TO 0.30 PERCENT

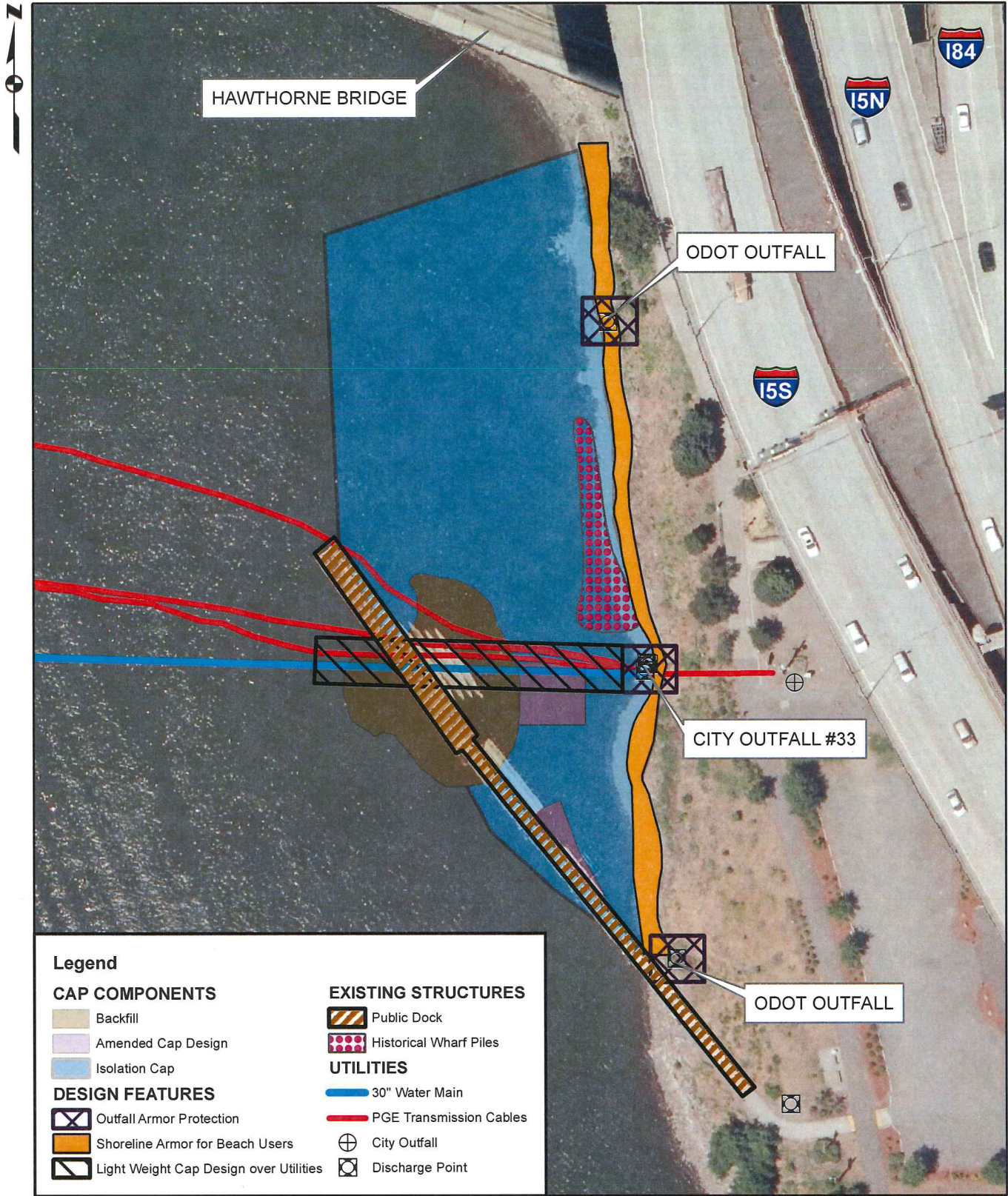
RM 13.5 SEDIMENT CAP DESIGN - (60% DESIGN) - DETAILS

DECEMBER 2014
25697878

JOINT REMIT APPLICATION
RM 13.5 STUDY AREA
PORTLAND, OREGON

FIGURE 8





**RIVER MILE 13.1 ISOLATION CAP CONCEPTUAL DESIGN
& PROJECT AREA FEATURES**



PORTLAND GENERAL ELECTRIC
RM 13.1 REMEDIAL ACTION
PORTLAND, OREGON