

AS-BUILT DRAWINGS



AMCCO UPLAND & SEDIMENT REMEDIATION PLAN

PREPARED FOR:

ASTORIA MARINE CONSTRUCTION COMPANY

LOCATED IN SEC25, T8N, R10W, W.M., CLATSOP COUNTY, ASTORIA, OR

PROJECT CONTACTS

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PROJECT SUMMARY

SITE ADDRESS:
92134 FRONT RD.
ASTORIA, OR 97103

WORK DESCRIPTION:

IN ACCORDANCE WITH THE RECORD OF DECISION AND AGREEMENTS WITH THE STATE OF OREGON, AMCCO WILL REMOVE HIGHLY CONTAMINATED SOIL AND SEDIMENT FROM THE SITE, REMOVE SEDIMENT FROM OFFSITE CONVEYANCE DITCHES, CONSTRUCT ONSITE CONVEYANCE DITCHES, CONSTRUCT A SOIL CAP, CONSTRUCT AN ENHANCED NATURAL RECOVERY SAND LAYER, AND RESTORE THE DIKE. THE PROJECT INCLUDES DEMOLITION OF A NUMBER OF UPLAND AND ABOVE WATER STRUCTURES TO ACCOMMODATE ABOVE REFERENCED REMEDIATION ACTIVITIES.



VICINITY MAP

NOT TO SCALE

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GENERAL NOTES

- | | | | |
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| 1. DESIGN SURVEY PERFORMED BY OTAK IN 2013&2017, AS-BUILT SURVEY PERFORMED BY ANDY MENDENHALL IN DECEMBER 2021 AND OCTOBER 2022. | 7. APPROVAL OF THESE PLANS DOES NOT CONSTITUTE AN APPROVAL OF ANY OTHER CONSTRUCTION NOT SPECIFICALLY SHOWN ON THE PLANS, PLANS FOR STRUCTURES SUCH AS BRIDGES, BUILDINGS, TANKS, VAULTS, ROCKERIES, AND RETAINING WALLS MAY REQUIRE A SEPARATE REVIEW AND APPROVAL BY THE BUILDING DEPARTMENT PRIOR TO CONSTRUCTION. | 13. ALL CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY SHALL HAVE AN APPROVED PUBLIC RIGHT-OF-WAY WORK PERMIT PRIOR TO START OF ANY SUCH WORK. | GAS, IRRIGATION, AND STREET LIGHTING, THE CONTRACTOR SHALL NOTIFY RESIDENTS AND BUSINESSES 48 HOURS IN ADVANCE OF ANY WORK AFFECTING ACCESS OR SERVICE AND SHALL MINIMIZE INTERRUPTIONS TO DRIVEWAYS FOR RESIDENTS AND BUSINESSES ADJACENT TO THE PROJECT. |
| 2. HORIZONTAL DATUM: OREGON STATE PLANE COORDINATE SYSTEM SOUTH ZONE, NAD 83/91. ELEVATION DATUM: NAVD 88 | 8. A COPY OF THESE APPROVED PLANS SHALL BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS. | 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH, AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE LATEST ADOPTED EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION. TWO-WAY TRAFFIC MUST BE MAINTAINED AT ALL TIMES ON THE ADJACENT PUBLIC STREETS. | 17. ALL LAWN AND VEGETATED AREAS DISTURBED WILL BE RESTORED TO ORIGINAL CONDITION. ANY DISTURBANCE OR DAMAGE TO OTHER PROPERTY ON ADJACENT PARCELS OR IN THE PUBLIC RIGHT-OF-WAY SHALL ALSO BE REPAIRED OR RESTORED TO ORIGINAL CONDITION. |
| 3. CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS AND DEPTHS PRIOR TO CONSTRUCTION. A MINIMUM OF TWO FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL CALL 811 (UTILITY NOTIFICATION CENTER) FOR LOCATION MARK-UP OF EXISTING UTILITIES. | 9. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL CONSTRUCTION EASEMENTS AND PERMITS NECESSARY TO PERFORM THE WORK. | 15. ANY PUBLIC OR PRIVATE CURB, GUTTER, SIDEWALK, OR ASPHALT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED TO CLATSOP COUNTY STANDARDS AND PRACTICES. | 18. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION OF THE EROSION AND SEDIMENT CONTROL PLAN AND MAINTAINING OFF-SITE ROADS TO BE FREE OF PROJECT-RELATED SEDIMENTS AND TRACKING. |
| 4. ALL CONSTRUCTION, MATERIALS, AND WORKMANSHIP SHALL CONFORM TO THE LATEST STANDARDS AND PRACTICES OF CLATSOP COUNTY AND THE LATEST EDITION OF THE "OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION" PREPARED BY ODOT/APWA. | 10. OWNER SHALL PROVIDE OREGON DSL ACCESS AGREEMENT FOR OVER-WATER WORK ACTIVITY. | 16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF ADJACENT UTILITIES WHICH MAY INCLUDE, BUT ARE NOT LIMITED TO, WATER, SANITARY SEWER, STORMWATER, POWER, TELEPHONE, CABLE TV, | |
| 5. IN CASE OF A CONFLICT BETWEEN THE REGULATORY STANDARDS AND SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT WILL PREVAIL. | 11. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION STAKING. | | |
| 6. ANY CHANGES TO THE DESIGN AND/OR CONSTRUCTION SHALL BE APPROVED BY THE OWNER OR ENGINEER. | 12. PUBLIC AND PRIVATE DRAINAGE WAYS SHALL BE PROTECTED FROM POLLUTION. NO MATERIAL IS TO BE DISCHARGED TO OR DEPOSITED IN STORMWATER SYSTEMS THAT MAY RESULT IN VIOLATION OF STATE OR FEDERAL WATER QUALITY STANDARDS. | | |

RECORD DRAWING



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AMCCO UPLAND & SEDIMENT
REMEDICATION PLAN

ASTORIA MARINE CONSTRUCTION CO.

ASTORIA, OREGON

	B	01/06/2023	RECORD DRAWING DOCUMENT	
	A	05/27/2020	100% DESIGN DOCUMENTS	
	ISSUE	DATE	DESCRIPTION	

PROJECT: 1653.01.02

DESIGNED: C. GOKCORA

DRAWN: G. KALMETA

CHECK

DRAWING NOT TO SCALE

SHEET TITLE

COVER

SHEET

C0.0

CONSTRUCTION NOTES

EROSION AND SEDIMENT CONTROL

5. ALL GRADING AND EROSION CONTROL MATERIALS, WORKMANSHIP AND METHODS OF CONSTRUCTION SHALL CONFORM TO THE CURRENT EDITION OF THE "EROSION AND SEDIMENT CONTROL MANUAL" PREPARED BY THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY AND THE EXISTING PROJECT NPDES 1200-C PERMIT, EPA NO. ORR107773, FILE NO. 33212, ISSUED 06-21-19. EROSION CONTROL SHALL BE PER THE SPECIFICATIONS AND DETAILS CONTAINED THEREIN AND SHALL TAKE PRECEDENCE OVER OTHER STANDARDS AND SPECIFICATIONS.
6. THE CONTRACTOR SHALL MAINTAIN AN ON-SITE WRITTEN DAILY LOG OF EROSION CONTROL AND MAINTENANCE.
7. DURING THE PERIOD FROM OCTOBER 1ST TO APRIL 30TH, NO SOIL SHALL BE EXPOSED FOR MORE THAN TWO (2) DAYS. FROM MAY 1ST TO SEPTEMBER 30TH, NO SOILS SHALL REMAIN EXPOSED FOR MORE THAN SEVEN (7) DAYS.
8. THE CONSTRUCTION ENTRANCE MAY BE REDUCED TO LESS THAN 100' WITH APPROVAL OF THE EROSION CONTROL INSPECTOR.
9. INLET PROTECTION FABRIC SHALL BE INSTALLED UNDER GRATES FOR INLETS IN LANDSCAPED AREAS.
10. THE CONTRACTOR WILL PROVIDE APPROPRIATE PROACTIVE EROSION CONTROL DURING CONSTRUCTION TO PREVENT THE EROSION CONTROL SYSTEMS FROM FAILING DUE TO SILT. THE CONTRACTOR SHALL ENSURE THAT SEDIMENT DOES NOT IMPACT THE ADJACENT PROPERTIES OR THE SURROUNDING PUBLIC ROADS DURING CONSTRUCTION.
11. THE IMPLEMENTATION OF THESE EROSION AND SEDIMENT CONTROL (ESC) PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED, AND VEGETATION IS ESTABLISHED.
12. CARE SHOULD BE TAKEN TO NOT DISTURB MORE AREA THAN NEEDED FOR CONSTRUCTION REQUIREMENTS. ALL DISTURBED SOIL SURFACES ARE TO BE STABILIZED. STABILIZATION OF DISTURBED SOIL AREAS SHALL CONSIST OF: HYDROSEEDING OR HANDSEEDING, MULCHING, PLACING OF EROSION CONTROL BLANKETS OR PLASTIC IN LANDSCAPING SOIL AREAS. IT WILL ALSO CONSIST OF PAVING AND CONCRETE WORK IN DRIVING, PARKING, AND SIDEWALK AREAS. ALL SEEDED AREAS ARE TO BE FERTILIZED, WATERED, AND MAINTAINED TO ENHANCE THE IMMEDIATE REGROWTH OF VEGETATION.
13. MATERIAL STOCKPILES ARE TO BE PROTECTED FROM PRECIPITATION BY THE FOLLOWING MEANS:
 - TEMPORARY - COVER PILES WITH TARPS OR PLASTIC SHEETING WEIGHTED WITH TIRES, LUMBER, OR CONCRETE BLOCKS.
 - PERMANENT - COVER PILES WITH TARPS OR PLASTIC, OR RESEED. PERIMETER AREAS AROUND PILES ARE TO BE SURROUNDED WITH EROSION CONTROL FILTER FABRIC FENCES UNTIL SOILS SURFACE IS STABILIZED WITH RESEEDING.
14. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE CONTINUOUS FUNCTIONING. INSPECTION AND MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO:
 - VERIFYING THAT ALL AREAS ARE GRADED SUCH THAT ALL RUNOFF IS DIRECTED TO A SEDIMENTATION TRAP FACILITY BEFORE BEING DISCHARGING TO SURFACE.
 - REMOVAL OF TRAPPED SILTS AT SILT BARRIERS, SILT TRAPS, OR POINTS OF ACCUMULATION.
 - ADDITIONAL PROTECTIVE MEASURES, AS REQUIRED, DUE TO JOB SITE CONDITIONS.
 - STABILIZED CONSTRUCTION ENTRANCES INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. MONITORING OF VEHICLES LEAVING THE SITE TO MINIMIZE TRANSMISSION OF LOOSE SOILS TO THE PUBLIC ROADWAYS.
 - IF SEDIMENT IS TRANSPORTED ONTO A ROAD SURFACE, THE SURFACE IS TO BE CLEANED THOROUGHLY AT THE END OF EACH DAY.
15. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 24 HOURS FOLLOWING A STORM EVENT.
16. AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A TRAPPED CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.
17. THIS SEDIMENTATION AND EROSION CONTROL PLAN IS INTENDED TO BE UTILIZED AS A GUIDE TO CONTROL THE TRANSPORTATION OF LOOSE SOILS FROM THE PROPERTY THAT CAUSE WATER QUALITY AND NUISANCE PROBLEMS OUTSIDE OF THE CONSTRUCTION AREA.
18. DEPENDING ON THE CONTRACTOR'S CONSTRUCTION PRACTICES, SOME PORTIONS OF THE PROPOSED EROSION CONTROL PLAN MAY BE VARIED ACCORDING TO THE JOB SITE CONDITION. ALL CHANGES TO THE PLAN MUST BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO ADJUSTMENT.

SITE GRADING

15. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE GEOTECHNICAL REPORT PREPARED BY GEODESIGN, INC. FOR THE SITE. THE CONTRACTOR SHALL FOLLOW ALL RECOMMENDATIONS REGARDING EARTHWORK AS DETAILED IN THE REPORT.
16. ALL PORTIONS OF THE SITE WITHIN THE LIMITS OF THE WORK SHALL BE MOWED AND STRIPPED TO REMOVE ALL GRASS, ROOTS, ORGANIC SOIL, AND CONSTRUCTION FILL DEBRIS PRIOR TO THE BEGINNING OF ANY GRADING OPERATIONS. THE CONTRACTOR SHALL SALVAGE AND STOCKPILE ENOUGH SELECT TOPSOIL TO ACCOMMODATE LANDSCAPING NEEDS.
17. FOLLOWING STRIPPING AND GRUBBING, THE EXPOSED SOILS SHALL BE PROOF ROLLED TO REVEAL WEAK, ORGANIC, OR OTHER UNSUITABLE SOILS. UNSUITABLE SOILS SHALL BE EXCAVATED TO FIRM GROUND AND FILLED TO GRADE WITH SUITABLE NATIVE OR IMPORTED STRUCTURAL FILL.

18. EXPOSED SUBGRADE SOILS ON AREAS TO RECEIVE STRUCTURAL FILL SHALL BE SCARIFIED TO A DEPTH OF 8 INCHES.
19. IF FILLS ARE NEEDED FOR STRUCTURAL SUPPORT, THEY SHALL BE INSTALLED IN NO MORE THAN 8-INCH LIFTS, AND SHALL BE COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY FOR FINE GRAINED NATIVE SOILS UNLESS OTHERWISE SPECIFIED ON THE PLAN. THE TOP LIFT OF FILL SHALL BE COMPACTED TO 92%. ALL OTHER SOILS SHALL BE COMPACTED TO NO LESS THAN 85%.
20. COMPACTION TESTING SHALL BE DONE IN ACCORDANCE WITH ASTM D 698 [STANDARD PROCTOR].
21. AT THE END OF THE GRADING OPERATION, THE STOCKPILED STRIPPINGS SHALL BE DISTRIBUTED ON THE LANDSCAPED AREAS IN A COMPACTED DEPTH NOT TO EXCEED 12".
22. ALL SURFACES SHALL BE GRADED SMOOTH AND FREE OF IRREGULARITIES THAT MIGHT ACCUMULATE SURFACE WATER.
23. ALL GRADING OPERATIONS AND DISTURBED SURFACE STABILIZATION SHALL BE IN ACCORDANCE WITH THE PROJECT EROSION CONTROL PLAN.

TRANSPORTATION

24. THE MOST CURRENT EDITIONS OF THE OREGON DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS AND STANDARD DETAILS AND THE MOST CURRENT EDITIONS OF THE CITY OF ASTORIA DESIGN STANDARDS SHALL BE UTILIZED IN THE CONSTRUCTION OF TRANSPORTATION ELEMENTS OF THESE PLANS.
25. STREET SIGNING AND STRIPING SHALL BE INSTALLED BY THE DEVELOPER. ALL STREET SIGNS AND STRIPING SHALL BE INSTALLED PER THE LATEST ADOPTED EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION AND LATEST ADOPTED EDITION OF THE STATE OF OREGON SUPPLEMENT TO THE MUTCD.
26. ALL CONSTRUCTION WITHIN THE RIGHT-OF-WAY SHALL HAVE AN APPROVED TRAFFIC CONTROL PLAN AND RIGHT-OF-WAY PERMIT PRIOR TO ANY ON-SITE CONSTRUCTION ACTIVITY.
27. PAVING WITHIN THE PUBLIC RIGHT-OF-WAY WILL NOT BE ALLOWED DURING WET OR COLD WEATHER, PER DOT SPECIFICATIONS.
28. ALL PAVEMENT SHALL BE STRAIGHT CUT PRIOR TO PAVING. EXISTING PAVEMENT SHALL BE REMOVED AS NECESSARY TO PROVIDE A SMOOTH TRANSITION FOR BOTH RIDE AND DRAINAGE.
29. ALL ADA PEDESTRIAN RAMPS SHOWN ON THE PLANS AND ON THE DETAIL SHEETS SHALL BE CONSTRUCTED WITH THE PROJECT.
30. CONTRACTOR SHALL REPORT ALL DAMAGES IMMEDIATELY TO THE CITY'S PUBLIC WORKS DEPARTMENT OR CONTACT THE INSPECTOR ON THE JOB.
31. PUBLIC RIGHTS-OF-WAY SHALL BE KEPT IN A CLEAN AND SERVICEABLE CONDITION AT ALL TIMES. IN THE EVENT MATERIALS ARE INADVERTENTLY DEPOSITED ON ROADWAYS, THE MATERIAL SHALL BE PROMPTLY REMOVED. MATERIALS ARE TO BE SWEEPED AND REMOVED WITH A VACUUM SWEEPER.

STORM SEWER CONSTRUCTION

23. ALL MATERIALS AND INSTALLATION OF STORM SEWERS AND DRAINAGE SYSTEMS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS IN THE LATEST EDITION OF THE "OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION" BY THE AMERICAN PUBLIC WORKS ASSOCIATION AND THE OREGON DEPARTMENT OF TRANSPORTATION, WHEREVER THE STANDARD SPECIFICATIONS REFER TO THE "STATE", "SECRETARY", OR WHEN REFERENCE IS MADE TO THE DEPARTMENT OF TRANSPORTATION IT SHALL BE UNDERSTOOD THAT THE STANDARD SPECIFICATIONS SHOULD READ THE "OWNER". ADDITIONALLY, ALL MATERIALS AND INSTALLATION OF STORM SEWERS AND DRAINAGE SYSTEMS IN THE RIGHT OF WAY SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS IN THE MOST CURRENT EDITIONS OF THE CITY OF ASTORIA DESIGN STANDARDS.
33. PIPE LENGTHS SHOWN ON THE PLANS ARE TO THE CENTER OF THE STRUCTURE.
34. PRE-PAVING AS-BUILTS ARE REQUIRED FOR STORMWATER, WATER, AND SANITARY FACILITIES. PROVIDE AS-BUILT INFORMATION TO THE CONSTRUCTION INSPECTOR AND CONSTRUCTION ENGINEER FOR APPROVAL PRIOR TO ANY PAVING.
35. MATERIALS FOR STORM SEWER INLET LATERALS AND MAINS SHALL BE DUAL-WALLED, SMOOTH INTERIOR, CORRUGATED POLYETHYLENE STORM SEWER PIPE, UNLESS OTHERWISE SPECIFIED ON PLANS.
36. SEE THE OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION SECTION 00445 FOR STORM SEWER PIPE MATERIALS AND PLANS.
37. PERFORATED PIPE MATERIALS SHALL BE PERFORATED CORRUGATED POLYETHYLENE STORM SEWER PIPE.
38. CATCH BASINS SHALL BE TYPE 1 H-20 OR PROJECT APPROVED EQUAL, UNLESS OTHERWISE SPECIFIED ON PLANS.
39. TRENCH EXCAVATION SHALL MEET THE REQUIREMENTS OF OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION BY THE AMERICAN PUBLIC WORKS ASSOCIATION AND THE OREGON DEPARTMENT OF TRANSPORTATION SECTION 00405.41.
40. STORM SEWER PIPE BEDDING AND BACKFILL SHALL MEET THE REQUIREMENTS OF SECTIONS 00405.12-14, AND SECTIONS 00405.45-46. PIPE BEDDING MATERIALS SHALL BE $\frac{3}{4}$ "-0 AGGREGATE BEDDING PER SECTION 00405.12 AND PIPE BACKFILL MATERIALS SHALL BE CLASS A OR CLASS B PER SECTION 00405.14 AS APPROVED BY THE INSPECTOR. BACKFILL MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM RELATIVE DENSITY PER ASTM D 698 [STANDARD PROCTOR]. NATIVE BACKFILL MAY BE USED UPON APPROVAL FROM THE INSPECTOR. STORM SEWER PIPE SHALL BE INSTALLED IN THE RIGHT OF WAY IN ACCORDANCE TO THE "UTILITY TRENCH" CITY OF ASTORIA STANDARD DETAIL.

41. STORM SEWER INLETS, AS NOTED ON THE PLANS, SHALL BE FITTED WITH AN APPROVED TRAP.

SANITARY SEWER CONSTRUCTION

42. SANITARY SEWER LATERALS SHALL BE 6" IN SIZE, INSTALLED AT A MINIMUM SLOPE OF 0.01 FT/FT UNLESS OTHERWISE SPECIFIED ON THE PLAN.
43. MATERIALS FOR SANITARY SEWER PIPE SHALL BE PVC PIPE CONFORMING TO ASTM D3034 OR GREEN COLORED PVC-C900 DR 14, HDPE PIPE DR 21, OR DUCTILE IRON, AS NOTED ON THE PLANS.
44. PIPE LENGTHS SHOWN ON THE PLANS ARE TO THE CENTER OF THE STRUCTURE.
45. SANITARY SEWER PIPE BEDDING AND BACKFILL SHALL MEET THE REQUIREMENTS OF SECTIONS 00405.12-14, AND SECTIONS 00405.45-46. PIPE BEDDING MATERIALS SHALL BE $\frac{3}{4}$ " - 0 AGGREGATE BEDDING PER SECTION 00405.12 AND PIPE BACKFILL MATERIALS SHALL BE CLASS A OR CLASS B PER SECTION 00405.14 AS APPROVED BY THE INSPECTOR. BACKFILL MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM RELATIVE DENSITY PER ASTM D 698 (STANDARD PROCTOR). NATIVE BACKFILL MAY BE USED UPON APPROVAL FROM THE INSPECTOR. SANITARY SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE TO THE "TRENCH BACKFILL, BEDDING, PIPE ZONE, AND MULTIPLE INSTALLATIONS" STANDARD DETAIL. SANITARY SEWER PIPE SHALL BE INSTALLED IN THE RIGHT OF WAY IN ACCORDANCE TO THE "UTILITY TRENCH" CITY OF ASTORIA STANDARD DETAIL.
46. CONTRACTOR TO MAINTAIN A MINIMUM 10" HORIZONTAL AND 18" VERTICAL SEPARATION BETWEEN ALL EXISTING AND PROPOSED WATER AND SANITARY SEWER MAINS.
47. ALL SANITARY MANHOLES SHALL BE 48" Ø UNLESS OTHERWISE SPECIFIED ON PLANS.
48. LOCATOR TAPE TO BE LOCATED EIGHTEEN (18) INCHES ABOVE A SEWER MAIN AND TWELVE (12) INCHES ABOVE A SERVICE LINE.
49. THE LOCATOR TAPE SHALL BE MARKED WITH CONTINUOUS THREE (3) INCH WIDE GREEN SIX (6) MIL THICK LOCATOR TAPE THREE (3) INCH HIGH BLACK LETTERS EVERY THREE (3) FEET WITH "WARNING - BURIED SANITARY SEWER".
50. A CONTINUOUS TONING WIRE SHALL BE ATTACHED TO THE TOP OF THE SANITARY SEWER SERVICE LINE. THE TONING WIRE SHALL BE COATED #14 AWG (MIN.) SOLDER COPPER WIRE, OR APPROVED EQUAL. THE TONING WIRE SHALL END IN THE VALVE BOX WITH A MINIMUM OF ONE (1) FOOT COILED OF WIRE. THE TONING WIRE SHALL BE TESTED FOR CONTINUITY PRIOR TO ACCEPTANCE. ALL SPLICES WILL BE SOLDERED A MINIMUM OF TWO (2) INCHES IN LENGTH AND ENCASED WITH 3M SCOTCH #220 VINYL MASTIC PADS (3 1/2" BY 4 1/2") OR 3M SCOTCH 33 ELECTRICAL TAPE AND COATED WITH SCOTCHCOTE ELECTRICAL COATING #1485 (REPEAT PROCESS AFTER FIRST COATING DRIES), OR APPROVED EQUAL.

WATER SYSTEM CONSTRUCTION

51. MATERIALS FOR WATER PIPE SHALL BE DUCTILE IRON CL-52 OR PVC PIPE CONFORMING TO PVC-C900 DR 25, UNLESS OTHERWISE SPECIFIED ON PLANS.
52. PIPE BEDDING MATERIALS SHALL BE $\frac{3}{4}$ " - 0 AGGREGATE BEDDING PER SECTION 00405.12, COMPACTED TO 95% OF THE MAXIMUM RELATIVE DENSITY PER ASTM D 698 (STANDARD PROCTOR). BACKFILL FOR WATER TRENCHES SHALL BE CLASS A OR CLASS B PER SECTION 00405.14 AS APPROVED BY THE DIRECTOR, UNLESS OTHERWISE SPECIFIED ON THE PLANS. NATIVE BACKFILL MAY BE USED UPON APPROVAL FROM THE INSPECTOR. BACKFILL MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM RELATIVE DENSITY PER ASTM D 698 (STANDARD PROCTOR). WATER PIPE SHALL BE INSTALLED IN THE RIGHT OF WAY IN ACCORDANCE WITH THE CITY OF ASTORIA STANDARD DETAIL.
53. CONTRACTOR TO MAINTAIN A MINIMUM 10' HORIZONTAL AND 18" VERTICAL SEPARATION BETWEEN ALL EXISTING AND PROPOSED WATER AND SANITARY SEWER MAINS.
54. ANY SIGNIFICANT DEVIATION FROM THE PLANS WILL REQUIRE A REQUEST FROM THE APPLICANT'S ENGINEER AND APPROVAL FROM THE CITY'S ENGINEER AND CITY INSPECTOR.

BACKFLOW PREVENTION DEVICE NOTES

55. ALL COMMERCIAL WATER METERS SHALL BE PROTECTED WITH A STATE-APPROVED BACKFLOW DEVICE.
56. STATE APPROVED BACKFLOW PROTECTION SHALL BE REQUIRED ON FIRE SPRINKLER AND IRRIGATION SYSTEMS. ALL HOSEBIBS SHALL BE PROTECTED WITH VACUUM BREAKERS. FURTHER BACKFLOW PREVENTION SHALL BE REQUIRED DEPENDING ON WATER USAGE IE - BOILERS, CHILLERS, CHEMICAL ADDITIONS, BOOSTER PUMPS, WELLS, ETC.



AMCCO UPLAND & SEDIMENT
REMEDICATION PLAN

ASTORIA MARINE CONSTRUCTION CO.

ASTORIA, OREGON

[illegible]

PROJECT: 1653.01.02

DESIGNED: C. GOKCORA

DRAWN: G. KALMETA

CHECKED: E. BAKKOM

SCALE

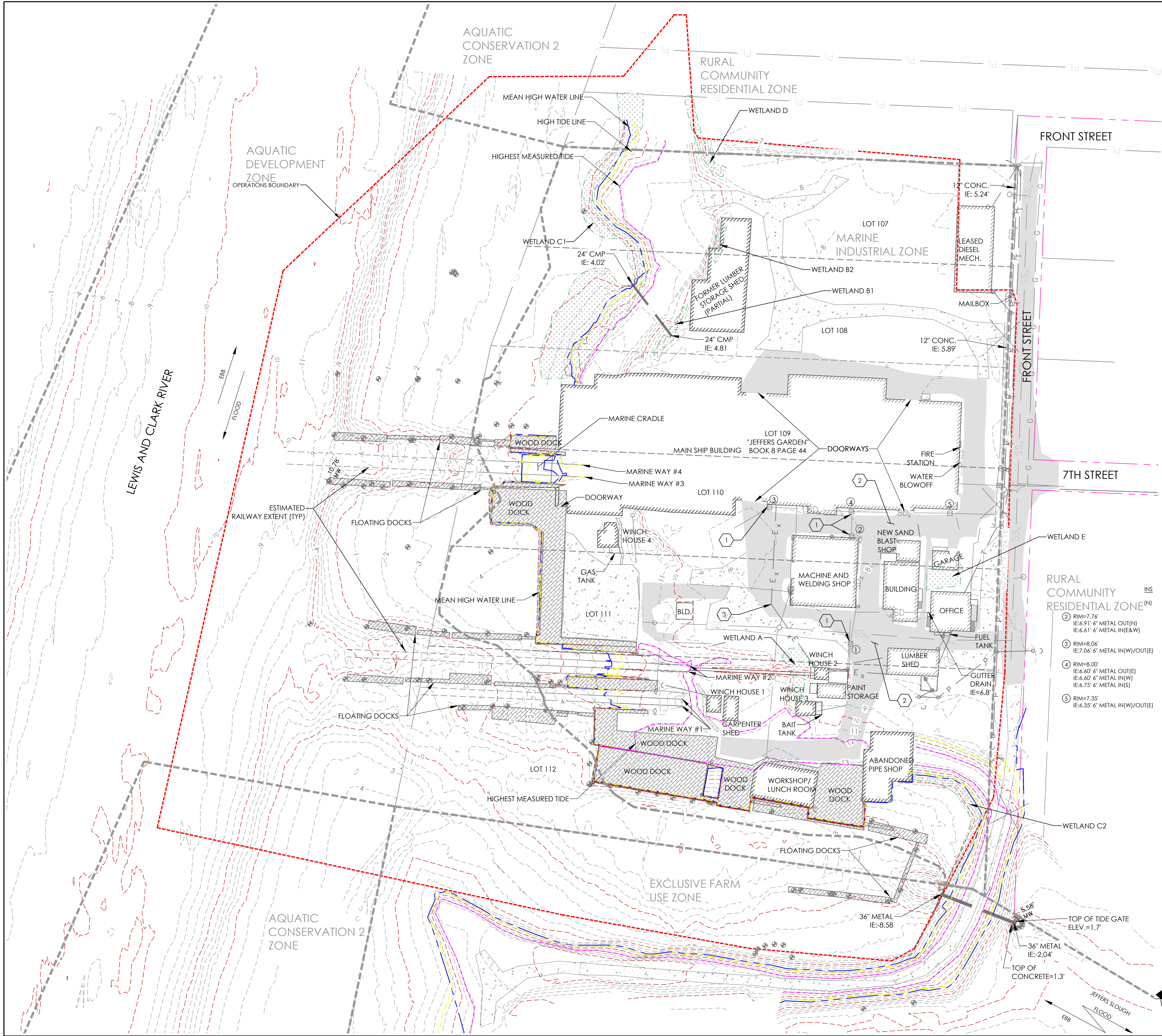
SHEET TITLE

GENERAL CONSTRUCTION NOTES

SHEET

C1.0

PLOTTED BY: Gokkora Karmada FILENAME: G:\00_MFA CH 3D\00_PROJECT\0288\04\03_AMCCO PLANS\MARINE C1 2 EXISTING CONDITIONS PLAN.dwg PLOTTED ON: 2023.12.29 4:24 PM



EXISTING CONDITIONS LEGEND

- DOCK PILING
- EXISTING ASPHALT
- EXISTING DOCK
- EXISTING GRAVEL SURFACE
- WETLAND
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- LOT LINE
- MEAN HIGH WATER LINE - 7.93' (NAVD 88)
- HIGH TIDE LINE - 8.63' (NAVD 88)
- HIGHEST MEASURED TIDE - 11.9' (NAVD 88)

- EXISTING CONDITIONS NOTES
- CONSTRUCTION NOTES
- APPROXIMATE LOCATIONS OF KNOWN OR LOCATED BURIED UTILITIES AND SUBSURFACE FEATURES, AS WELL AS OVERHEAD POWER LINES WITHIN THE SITE ARE PRESENTED ON THE DRAWINGS. HOWEVER, THE CONTRACTOR SHALL ASSUME OTHER BURIED UTILITIES AND SUBSURFACE FEATURES COULD EXIST.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR AVOIDANCE AND PROTECTION OF ALL UTILITIES AND OTHER SUBSURFACE FEATURES. CALL THE OREGON UTILITY NOTIFICATION CENTER AT 1-800-332-2344 AT LEAST SEVEN (7) BUSINESS DAYS BEFORE PERFORMING ANY SUBSURFACE WORK.
 - THE CONTRACTOR SHALL MAINTAIN A RECORD DRAWING SHOWING THE APPROXIMATE LOCATION OF ALL UTILITIES MARKED BY THE UTILITY LOCATING SERVICES FOR REFERENCE DURING THE COMPLETION OF WORK.
 - THE CONTRACTOR SHALL MAINTAIN MARKERS SHOWING THE GROUND LOCATION OF UTILITIES DURING THE EXECUTION OF WORK.
 - THE CONTRACTOR SHALL MARK THE LOCATION OF IN-WATER UTILITIES BY PLASTIC BUOYS.
 - THE CONTRACTOR SHALL NOTIFY ALL UTILITY PROVIDERS TWO WEEKS IN ADVANCE OF PERFORMING WORK NEAR UTILITIES OR WITHIN A UTILITY EASEMENT (IN PARTICULAR, THE HIGH PRESSURE WATER AND GAS LINES), AS IT IS ANTICIPATED THAT REPRESENTATIVES FROM UTILITY PROVIDERS MAY REQUEST TO BE PRESENT DURING THE WORK.
 - THE EXTENTS OF IN-WATER UTILITIES/FEATURES (I.E. RAILWAYS) ARE SHOWN APPROXIMATELY ON THIS PLAN, AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO START OF WORK.
 - IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ACCURATELY FIELD LOCATE AND PREVENT DAMAGE TO ALL UTILITIES AND SUBSURFACE FEATURES. IF ANY UTILITY OR SUBSURFACE FEATURES ARE DAMAGED, THEY SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
- KEYED NOTES
- EXISTING STORMWATER SYSTEM CLOGGED AND NOT FUNCTIONING.
 - EXISTING FAILING PAVEMENT AREA
 - APPROXIMATE LOCATION OF 440V UNDERGROUND POWER.

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AMCCO UPLAND & SEDIMENT
REMEDICATION PLAN

ASTORIA MARINE CONSTRUCTION CO.
ASTORIA, OREGON

ISSUE	DATE	DESCRIPTION
B	01/06/2023	RECORD DRAWING DOCUMENT
A	03/27/2023	100% DESIGN DOCUMENTS

PROJECT: 1653.01.02

DESIGNED: C. GOKKORA

DRAWN: G. KALMETA

CHECKED: E. BAKKOM

SCALE

NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

SHEET TITLE

EXISTING
CONDITIONS PLAN

SHEET

C1.2

RECORD DRAWING

1. HOLD A PRE-CONSTRUCTION MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES THE INSPECTOR TO DISCUSS EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION LIMITS. (SCHEDULE A.8.C.I.(3))
2. ALL INSPECTIONS MUST BE MADE IN ACCORDANCE WITH DEQ 1200-C PERMIT REQUIREMENTS. (SCHEDULE A.12.B AND SCHEDULE B.1.)
3. INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200-C PERMIT REQUIREMENTS. (SCHEDULE B.1.C AND B.2)
4. RETAIN A COPY OF THE ESCP AND ALL REVISIONS ON SITE AND MAKE IT AVAILABLE ON REQUEST TO DEQ, AGENT, OR THE LOCAL MUNICIPALITY. DURING INTERACTIVE PERIODS OF GREATER THAN SEVEN (7) CONSECUTIVE CALENDAR DAYS, THE ABOVE RECORDS MUST BE RETAINED BY THE PERMIT REGISTRANT BUT DO NOT NEED TO BE AT THE CONSTRUCTION SITE. (SCHEDULE B.2.C)
5. ALL PERMIT REGISTRANTS MUST IMPLEMENT THE ESCP. FAILURE TO IMPLEMENT ANY OF THE CONTROL MEASURES OR PRACTICES DESCRIBED IN THE ESCP IS A VIOLATION OF THE PERMIT. (SCHEDULE A.8.A)
6. THE ESCP MUST BE ACCURATE AND REFLECT SITE CONDITIONS. (SCHEDULE A.12.C.I)
7. SUBMISSION OF ALL ESCP REVISIONS IS NOT REQUIRED. SUBMITTAL OF THE ESCP REVISIONS IS ONLY UNDER SPECIFIC CONDITIONS. SUBMIT ALL NECESSARY REVISION TO DEQ OR AGENT WITHIN 10 DAYS. (SCHEDULE A.12.C.IV. AND V)
8. PHASE CLEARING AND GRADING TO THE MAXIMUM EXTENT PRACTICAL TO PREVENT EXPOSED INACTIVE AREAS FROM BECOMING A SOURCE OF EROSION. (SCHEDULE A.7.A.II)
9. IDENTIFY, MARK, AND PROTECT (BY CONSTRUCTION FENCING OR OTHER MEANS) CRITICAL RIPARIAN AREAS AND VEGETATION INCLUDING IMPORTANT TREES AND ASSOCIATED PROTECT ZONES, AND VEGETATION AREAS TO BE PRESERVED. IDENTIFY VEGETATIVE BUFFER ZONES BETWEEN THE SITE AND SENSITIVE AREA (E.G., WETLANDS), AND OTHER AREAS TO BE PRESERVED, ESPECIALLY IN PERIMETER AREAS. (SCHEDULE A.8.C.I.(1) AND (2))
10. PRESERVE EXISTING VEGETATION WHEN PRACTICAL AND RE-VEGETATE OPEN AREAS. RE-VEGETATE OPEN AREAS WHEN PRACTICABLE BEFORE AND AFTER GRADING OR CONSTRUCTION. IDENTIFY THE TYPE OF VEGETATIVE SEED MIX USED. (SCHEDULE A.7.A.V)
11. MAINTAIN AND DELINEATE ANY EXISTING NATURAL BUFFER WITHIN THE 50-FEET OF WATERS OF THE STATE. (SCHEDULE A.7.B.I AND (2)(A)(B))
12. INSTALL PERIMETER SEDIMENT CONTROL, INCLUDING STORM DRAIN INLET PROTECTION AS WELL AS ALL SEDIMENT BASINS, TRAPS, AND BARRIERS PRIOR TO LAND DISTURBANCE. (SCHEDULE A.8.C.I.(5))
13. CONTROL BOTH PEAK FLOW RATES AND TOTAL STORMWATER VOLUME, TO MINIMIZE EROSION AT OUTLETS AND DOWNSTREAM CHANNELS AND STREAMBANKS. (SCHEDULE A.7.C)
14. CONTROL SEDIMENT AS NEEDED ALONG THE SITE PERIMETER AND AT ALL OPERATIONAL INTERNAL STORM DRAIN INLETS AT ALL TIMES DURING CONSTRUCTION, BOTH INTERNALLY AND AT THE SITE BOUNDARY. (SCHEDULE A.7.D.I)
15. ESTABLISH CONCRETE TRUCK AND OTHER CONCRETE EQUIPMENT WASHOUT AREAS BEFORE BEGINNING CONCRETE WORK. (SCHEDULE A.8.C.I.(6))
16. APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS AS GRADING PROGRESSES. TEMPORARY OR PERMANENT STABILIZATIONS MEASURES ARE NOT REQUIRED FOR AREAS THAT ARE INTENDED TO BE LEFT UNVEGETATED, SUCH AS DIRT ACCESS ROADS OR UTILITY POLE PADS. (SCHEDULE A.8.C.II.(3))
17. ESTABLISH MATERIAL AND WASTE STORAGE AREAS, AND OTHER NON-STORMWATER CONTROLS. (SCHEDULE A.8.C.I.(7))
18. PREVENT TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADS USING BMPs SUCH AS: CONSTRUCTION ENTRANCE, GRAVELED (OR PAVED) EXITS AND PARKING AREAS, GRAVEL ALL UNPAVED ROADS LOCATED ONSITE, OR USE AN EXIT TIRE WASH. THESE BMPs MUST BE IN PLACE PRIOR TO LANDDISTURBING ACTIVITIES. (SCHEDULE A.7.D.II AND A.8.C.I.(4))
19. WHEN TRUCKING SATURATED SOILS FROM THE SITE, EITHER USE WATER-TIGHT TRUCKS OR DRAIN LOADS ON SITE. (SCHEDULE A.7.D.II.(5))
20. CONTROL PROHIBITED DISCHARGES FROM LEAVING THE CONSTRUCTION SITE, I.E., CONCRETE WASH-OUT, WASTEWATER FROM CLEANOUT OF STUCCO, PAINT AND CURING COMPOUNDS. (SCHEDULE A.6)
21. USE BMPs TO PREVENT OR MINIMIZE STORMWATER EXPOSURE TO POLLUTANTS FROM SPILLS; VEHICLE AND EQUIPMENT FUELING, MAINTENANCE, AND STORAGE; OTHER CLEANING AND MAINTENANCE ACTIVITIES; AND WASTE HANDLING ACTIVITIES. THESE POLLUTANTS INCLUDE FUEL, HYDRAULIC FLUID, AND OTHER OILS FROM VEHICLES AND MACHINERY, AS WELL AS DEBRIS, FERTILIZER, PESTICIDES AND HERBICIDES, PAINTS, SOLVENTS, CURING COMPOUNDS AND ADHESIVES FROM CONSTRUCTION OPERATIONS. (SCHEDULE A.7.E.I.(2))
22. IMPLEMENT THE FOLLOWING BMPs WHEN APPLICABLE: WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURES, EMPLOYEE TRAINING ON SPILL PREVENTION AND PROPER DISPOSAL PROCEDURES, SPILL KITS IN ALL VEHICLES, REGULAR MAINTENANCE SCHEDULE FOR VEHICLES AND MACHINERY, MATERIAL DELIVERY AND STORAGE CONTROLS, TRAINING AND SIGNAGE, AND COVERED STORAGE AREAS FOR WASTE AND SUPPLIES. (SCHEDULE A.7.E.III.)
23. USE WATER, SOIL-BINDING AGENT OR OTHER DUST CONTROL TECHNIQUE AS NEEDED TO AVOID WIND-BLOWN SOIL. (SCHEDULE A.7.A.IV)
24. THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS TO MINIMIZE NUTRIENT RELEASES TO SURFACE WATERS. EXERCISE CAUTION WHEN USING TIME-RELEASE FERTILIZERS WITHIN ANY WATERWAY RIPARIAN ZONE. (SCHEDULE A.9.B.III)
25. IF AN ACTIVE TREATMENT SYSTEM (FOR EXAMPLE, ELECTRO-COAGULATION, FLOCCULATION, FILTRATION, ETC.) FOR SEDIMENT OR OTHER POLLUTANT REMOVAL IS EMPLOYED, SUBMIT AN OPERATION AND MAINTENANCE PLAN (INCLUDING SYSTEM SCHEMATIC, LOCATION OF SYSTEM, LOCATION OF INLET, LOCATION OF DISCHARGE, DISCHARGE DISPERSION DEVICE DESIGN, AND A SAMPLING PLAN AND FREQUENCY) BEFORE OPERATING THE TREATMENT SYSTEM. OBTAIN PLAN APPROVAL BEFORE OPERATING THE TREATMENT SYSTEM. OPERATE AND MAINTAIN THE TREATMENT SYSTEM ACCORDING TO MANUFACTURER'S SPECIFICATIONS. (SCHEDULE A.9.D)
26. TEMPORARILY STABILIZE SOILS AT THE SITE BEFORE HOLIDAYS AND WEEKENDS, IF NEEDED. THE REGISTRANT IS RESPONSIBLE FOR ENSURING THAT SOILS ARE STABLE DURING RAIN EVENTS AT ALL TIMES OF THE YEAR. (SCHEDULE A.7.B)
27. AS NEEDED BASED ON WEATHER CONDITIONS, AT THE END OF EACH WORKDAY SOIL STOCKPILES MUST BE STABILIZED OR COVERED, OR OTHER BMPs MUST BE IMPLEMENTED TO PREVENT DISCHARGES TO SURFACE WATERS OR CONVEYANCE SYSTEMS LEADING TO SURFACE WATERS. (SCHEDULE A.7.E.II.(2))
28. CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND BARE GROUND ACTIVITIES DURING WET WEATHER. (SCHEDULE A.7.A.I)
29. SEDIMENT FENCE: REMOVE TRAPPED SEDIMENT BEFORE IT REACHES ONE THIRD OF THE ABOVE GROUND FENCE HEIGHT AND BEFORE FENCE REMOVAL. (SCHEDULE A.9.C.I)
30. OTHER SEDIMENT BARRIERS [SUCH AS BIOBAGS]: REMOVE SEDIMENT BEFORE IT REACHES TWO INCHES DEPTH ABOVE GROUND HEIGHT AND BEFORE BMP REMOVAL. (SCHEDULE A.9.C.I)
31. CATCH BASINS: CLEAN BEFORE RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT. SEDIMENT BASINS AND SEDIMENT TRAPS: REMOVE TRAPPED SEDIMENTS BEFORE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT AND AT COMPLETION OF PROJECT. (SCHEDULE A.9.C.III & IV)
32. WITHIN 24 HOURS, SIGNIFICANT SEDIMENT THAT HAS LEFT THE CONSTRUCTION SITE, MUST BE REMEDIATED. INVESTIGATE THE CAUSE OF THE SEDIMENT RELEASE AND IMPLEMENT STEPS TO PREVENT A RECURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS, ANY IN-STREAM CLEAN-UP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DIVISION OF STATE LANDS REQUIRED TIMEFRAME. (SCHEDULE A.9.B.I)
33. THE INTENTIONAL WASHING OF SEDIMENT INTO STORM SEWERS OR DRAINAGE WAYS MUST NOT OCCUR. VACUUMING OR DRY SWEEPING AND MATERIAL PICKUP MUST BE USED TO CLEANUP RELEASED SEDIMENTS. (SCHEDULE A.9.B.II)
34. THE ENTIRE SITE MUST BE TEMPORARILY STABILIZED USING VEGETATION OR A HEAVY MULCH LAYER, TEMPORARY SEEDING, OR OTHER METHOD SHOULD ALL CONSTRUCTION ACTIVITIES CEASE FOR 30 DAYS OR MORE. (SCHEDULE A.7.F.I)
35. PROVIDE TEMPORARY STABILIZATION FOR THAT PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES CEASE FOR 14 DAYS OR MORE WITH A COVERING OF BLOWN STRAW AND A TACKIFIER, LOOSE STRAW, OR AN ADEQUATE COVERING OF COMPOST MULCH UNTIL WORK RESUMES ON THAT PORTION OF THE SITE. (SCHEDULE A.7.F.II)
36. DO NOT REMOVE TEMPORARY SEDIMENT CONTROL PRACTICES UNTIL PERMANENT VEGETATION OR OTHER COVER OF EXPOSED AREAS IS ESTABLISHED. ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED, ALL TEMPORARY EROSION CONTROLS AND RETAINED SOILS MUST BE REMOVED AND DISPOSED OF PROPERLY, UNLESS DOING SO CONFLICTS WITH LOCAL REQUIREMENTS. (SCHEDULE A.8.C.II.(1) AND D.3.C.I AND III)

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THE DEQ EROSION & SEDIMENT CONTROL MANUAL (2013) PRIOR TO THE START OF CONSTRUCTION AND INSTALLATION OF EROSION CONTROL BMPs.
2. THE CONTRACTOR SHALL PROVIDE AN EROSION AND SEDIMENT CONTROL INSPECTOR, A PROFESSIONAL WHO MEETS THE INSPECTOR QUALIFICATION REQUIREMENTS AS IDENTIFIED IN SCHEDULE A.12.b.iii.(1) and (2) OF 1200-C PERMIT.
3. ALL EROSION CONTROL BMPs SHALL BE INSTALLED AND MAINTAINED PER THE DEQ EROSION & SEDIMENT CONTROL MANUAL (JANUARY 2013).
4. APPROVAL OF THIS EROSION, SEDIMENT AND POLLUTION CONTROL PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES)
5. THE IMPLEMENTATION OF THIS ESPCP AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESPCP FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND LANDSCAPING IS ESTABLISHED AND INSPECTED.
6. THE ESPCP FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
7. THE ESPCP FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESPCP FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DO NOT LEAVE THE SITE.
8. THE ESPCP FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
9. THE ESPCP FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF EVERY TWO WEEKS OR WITHIN THE 24 HOURS FOLLOWING A STORM EVENT AS DEFINED IN THE CITY OF PORTLAND EROSION CONTROL MANUAL.
10. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.

1. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO MINIMIZE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP, AND BOTH ENDS SECURELY FASTENED TO THE POST, OR OVERLAP 2 INCH X 2 INCH POSTS AND ATTACH AS SHOWN ON DETAIL SHEET 4.3-A.
2. THE FILTER FABRIC FENCE SHALL BE INSTALLED TO FOLLOW THE CONTOURS, THE FENCE POSTS SHALL BE SPACED A MAXIMUM OF 6 FEET APART AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 12 INCHES.
3. THE FILTER FABRIC SHALL HAVE A MINIMUM VERTICAL BURIAL OF 6 INCHES. ALL EXCAVATED MATERIAL FROM FILTER FABRIC FENCE INSTALLATION, SHALL BE BACKFILLED AND COMPACTED, ALONG THE ENTIRE DISTURBED AREA.
4. STANDARD OR HEAVY DUTY FILTER FABRIC FENCE SHALL HAVE MANUFACTURED STITCHED LOOPS FOR 2 INCH X 2 INCH POST INSTALLATION. STITCHED LOOPS SHALL BE INSTALLED ON THE UP HILL SIDE OF THE SLOPED AREA.
5. FILTER FABRIC FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY PROTECTED AND STABILIZED.
6. FILTER FABRIC FENCES SHALL BE INSPECTED BY AN OWNER APPROVED INSPECTOR IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

AMCCO UPLAND & SEDIMENT
REMEDIATION PLAN

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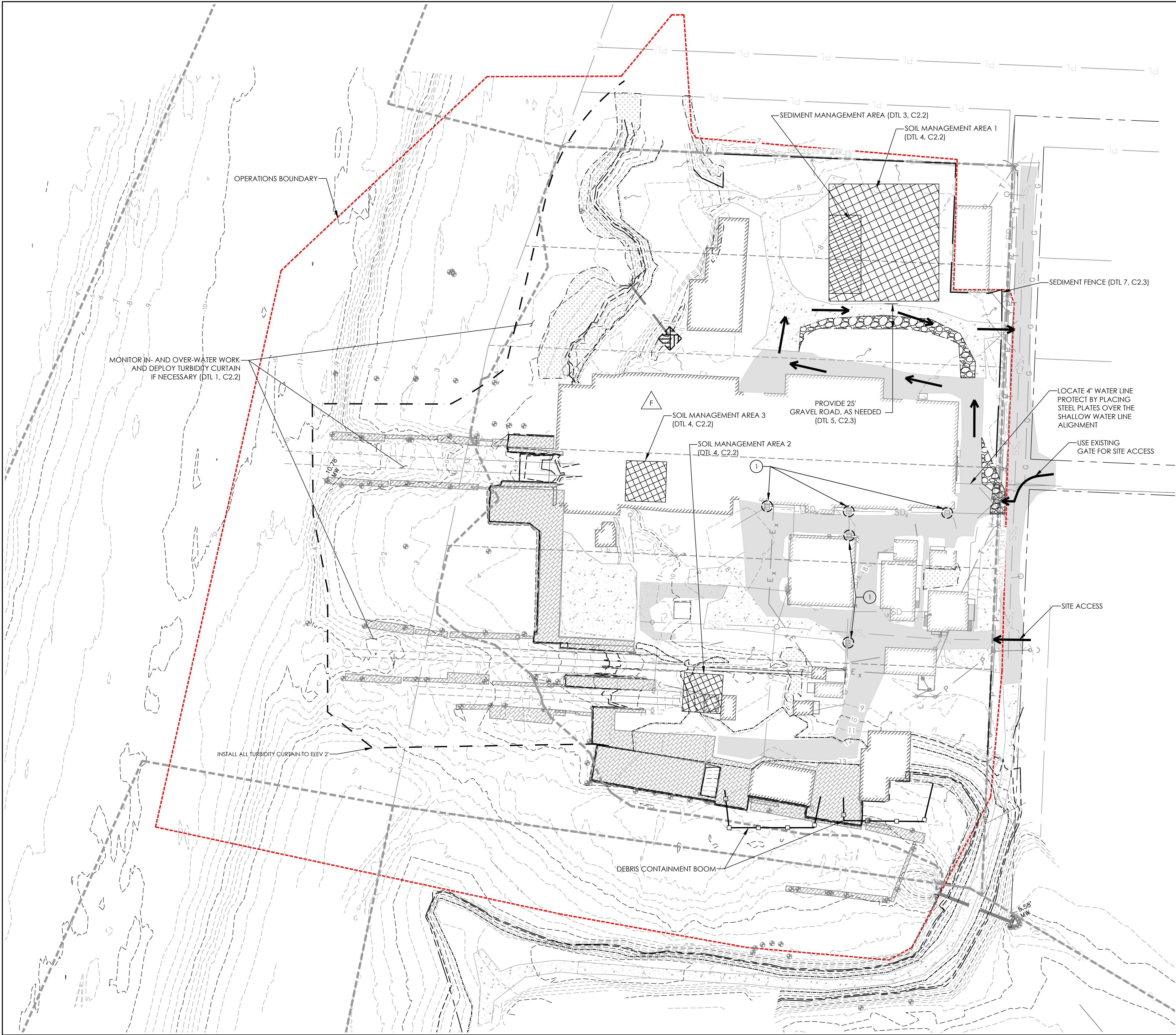
ASTORIA, OREGON

SHEET

C2.0

PLOTTED BY: Corrick Karmala FILENAME: G:\00_MIA CH 3D\00_PROJECT\028\04\03_AMCCO\PLANS\AS-BUILT\C2.1 EROSION AND SEDIMENT CONTROL PLAN.dwg

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EROSION AND SEDIMENT CONTROL LEGEND

- DOCK PILING
- EXISTING ASPHALT
- EXISTING DOCK
- EXISTING GRAVEL SURFACE
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- LOT LINE
- MEAN HIGH WATER LINE
- MATERIAL STOCKPILE & STAGING AREA
- SEDIMENT MANAGEMENT CELL
- ACCESS ROAD
- IN-WATER WORK BOUNDARY
- CONTAINMENT BOOM
- FLOW DIRECTION ARROW
- PROPOSED SEDIMENT FENCE
- PLUG INLET (5)
- INLET PROTECTION (1)

AMCCO EROSION AND SEDIMENT CONTROL NOTES

SEQUENCING

- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR TO DEMOLITION OR EXCAVATION.
- IN- AND OVER-WATER WORK WILL BE MONITORED BY THE PROJECT EROSION AND SEDIMENT CONTROL LEAD. IF NECESSARY, IN- AND OVER-WATER WORK STOPPAGE MAY BE REQUIRED IN ORDER TO DEPLOY A TURBIDITY CURTAIN.

CONSTRUCTION NOTES

- ALL EROSION CONTROL MEASURES AND BEST MANAGEMENT PRACTICES (BMPs) SHALL MEET THE REQUIREMENTS OF THE DEQ 1200-C NPDES GENERAL PERMIT.
- REFER TO SHEET C2.0 FOR DEQ STANDARD EROSION CONTROL PRACTICES.
- OFF-SITE STREET SWEEPING WILL BE REQUIRED DAILY WHEN TRUCKS ARE ENTERING AND EXITING THE SITE IF THERE IS OBSERVABLE TRACKING OF MUD FROM THE SITE.
- INLET PROTECTION SHALL BE PERIODICALLY INSPECTED FOR SEDIMENT ACCUMULATION AND REPLACED WHEN SEDIMENT ACCUMULATION EXCEEDS HALF OF THE CONE DEPTH.

MATERIALS (AND EQUIPMENT)

- DEBRIS CONTAINMENT BOOM TO BE 10" BOOM WITH 22 OZ. PVC FABRIC.
- STOCKPILE COVERS SHALL BE IMPLEMENTED FOR ALL ON SITE STORAGE OF SOIL, LONG- OR SHORT-TERM, AND SHALL BE, AT A MINIMUM, 6 MIL THICK U.V. PROTECTED BLACK PLASTIC SHEETING.

KEYED NOTES

- ABANDON STORMWATER INLETS. CONTRACTOR TO REMOVE STRUCTURE AND FILL WITH CRUSHED ROCK. ALTERNATIVELY, CONTRACTOR MAY CUT, CAP, AND GROUT THE STORMWATER FACILITIES. GRATES SHOULD BE REMOVED AND CAPPED IN ACCORDANCE WITH THE PLANS.

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EXPIRES: 6/30/2025
 This digital seal certifies the signatory and document content.

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 REMEDIATION PLAN
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 ASTORIA, OREGON

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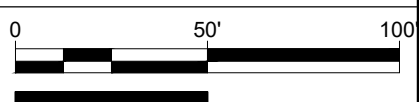
PROJECT: 1653.01.02

DESIGNED: C. GOKCORA

DRAWN: G. KALMETA

CHECKED: E. BAKKOM

SCALE



NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

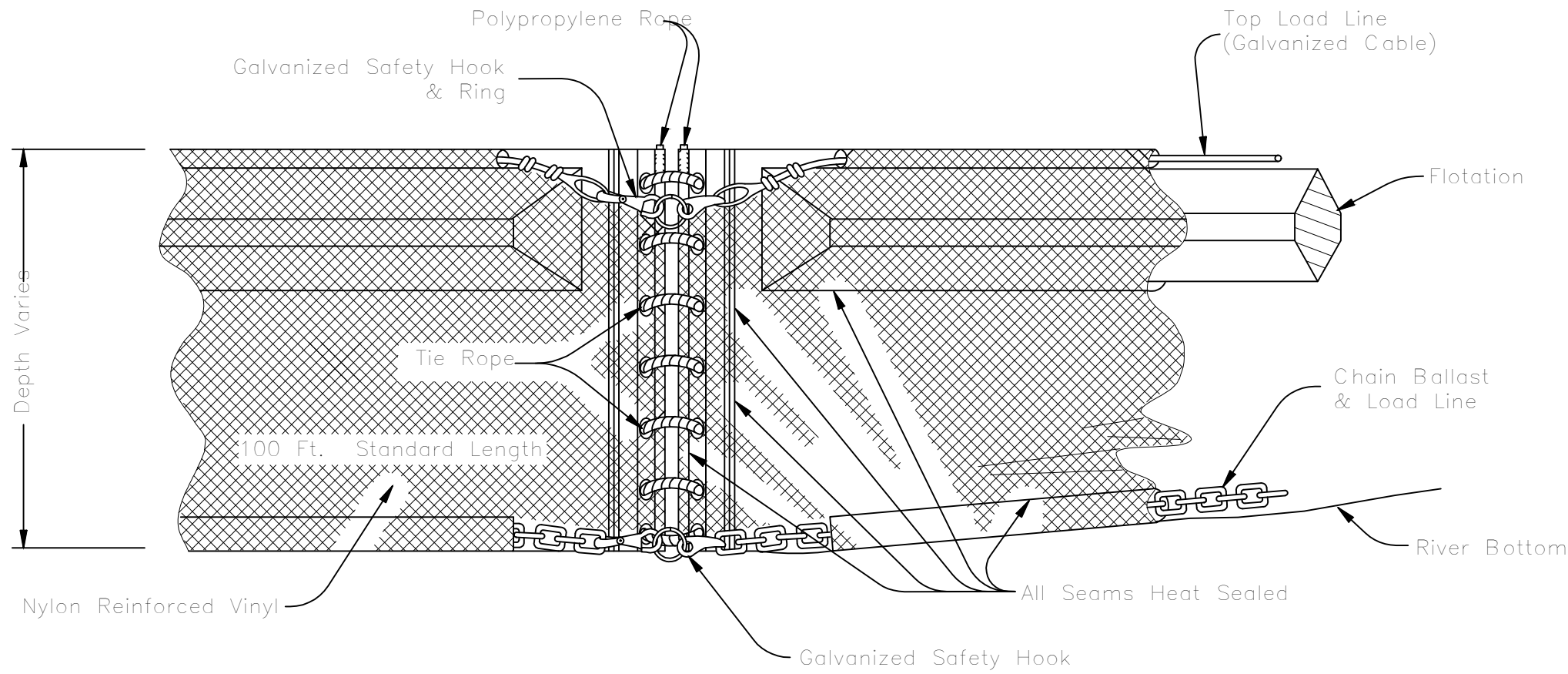
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EROSION AND
 SEDIMENT CONTROL
 PLAN

SHEET

C2.1

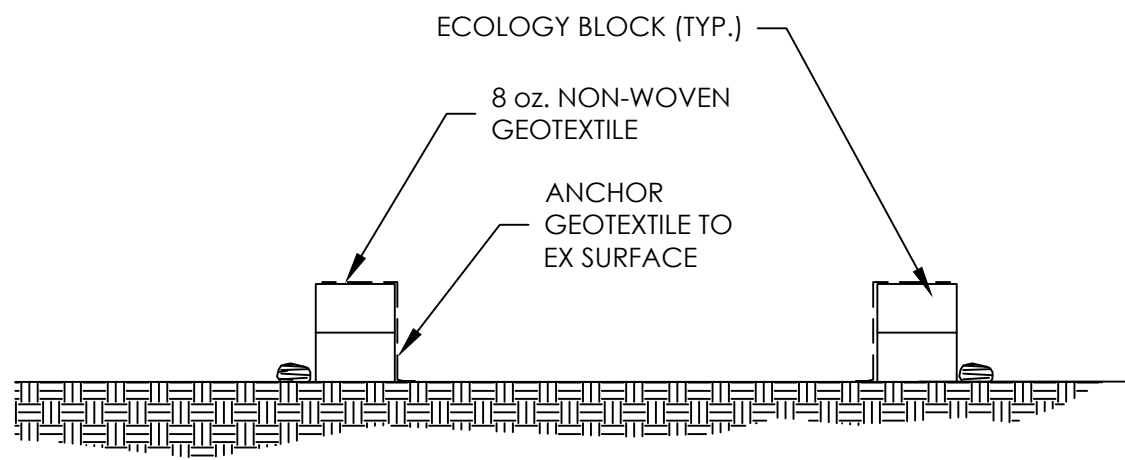
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1 C2.1 TURBIDITY CURTAIN DETAIL

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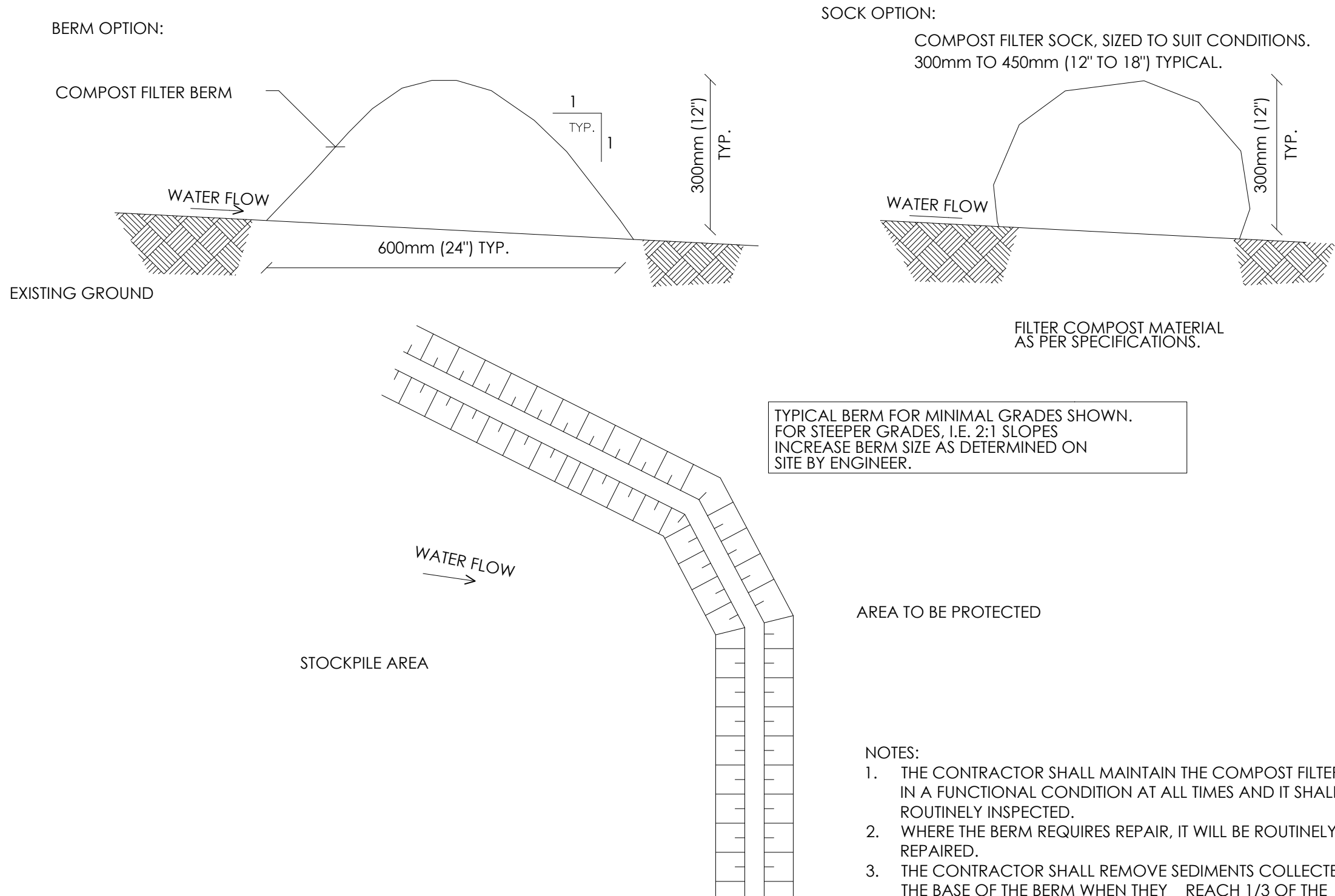
- NOTE:
- TURBIDITY CURTAIN SHALL BE USED AS APPROVED IN THE SECTION 401 CERTIFICATION.
 - TURBIDITY CURTAIN SHALL BE INSTALLED 50' NORTH AND 50' SOUTH FROM THE EXCAVATION WORK AREA, (AS SHOWN IN DETAIL 2 ON THIS SHEET).
 - AS THE EXCAVATION AREA MOVES ALONG THE BANK, THE TURBIDITY CURTAIN SHALL MOVE AND BE INSTALLED AS SHOWN IN THE FIGURE.
 - CONTRACTOR SHALL MAINTAIN CURTAIN DEPLOYMENT CONFIGURATION DURING WORK ACTIVITIES AS OFTEN AS NECESSARY.



3 C2.1 SEDIMENT MANAGEMENT CELL DETAIL

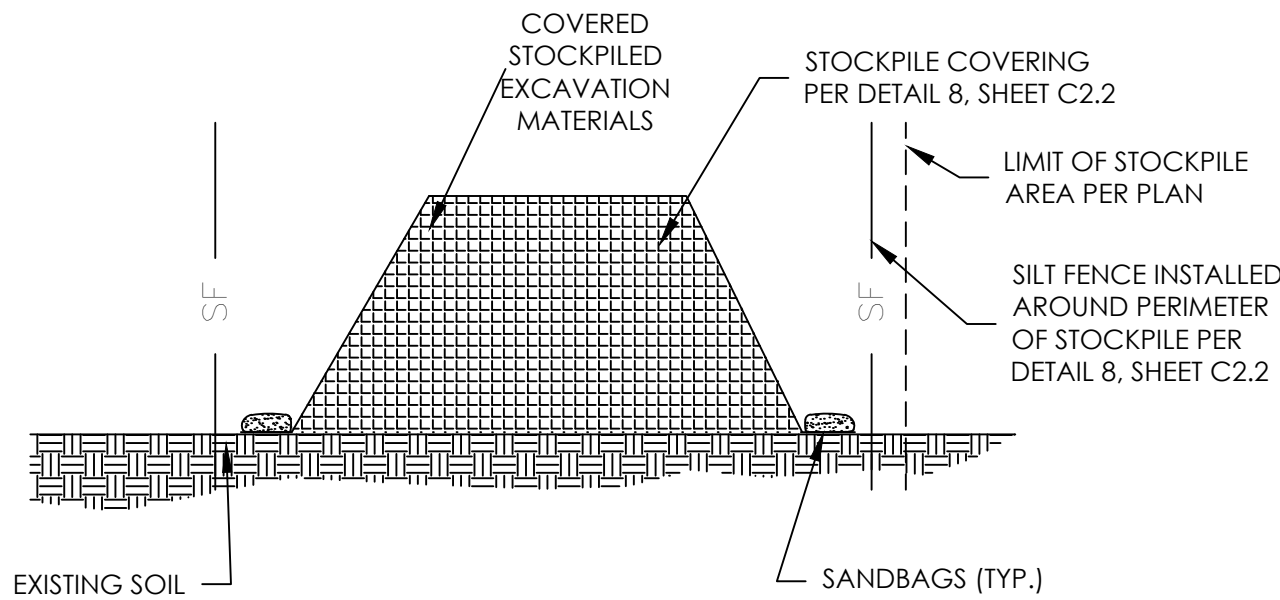
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- SEDIMENT MANAGEMENT CELL NOTES
- SEDIMENT MANAGEMENT CELL TO BE USED SOLELY FOR STORING OF WET SEDIMENT EXCAVATED FROM SATURATED AREAS.
 - SEDIMENT MANAGEMENT CELL SHALL BE CONSTRUCTED WITH AN ECOLOGY BLOCK PERIMETER.
 - ECOLOGY BLOCKS ARE TO BE STACKED 2-3 COURSES HIGH.
 - TOTAL SEDIMENT VOLUME TO BE MANAGED IS ROUGHLY 1,350 CY. DEPENDENT ON STAGING AND RATE OF EVAPORATION 2 TO 3 COURSES SHALL BE USED AS NEEDED.
 - AS SEDIMENT SETTLES, SUPERNATANT WATER MAY BE SPRAYED ONTO NEARBY STOCKPILES FOR DUST CONTROL. REMAINING SEDIMENT TO DEWATER PRIOR TO OFF-SITE DISPOSAL OF SEDIMENT.



2 C2.1 COMPOST SOCK DETAIL

NOT TO SCALE



STOCKPILE AREA NOTES

- INSTALL SEDIMENT FENCING, COMPOST SOCKS AND OTHER BMPs AS NECESSARY TO PREVENT SEDIMENT LADEN RUNOFF FROM EXITING THE STOCKPILE AREA.
- STOCKPILE COVER TO BE DEPLOYED DURING HEAVY RAIN/WIND AND WHEN STOCKPILE WILL NOT BE USED FOR MORE THAN 48 HOURS. COVER MATERIAL SHALL BE DEPLOYED AS SHOWN ON DETAIL 8, SHEET C2.2.
- PERIMETER SILT FENCING REMOVED FOR ACCESS TO THE STOCKPILE AREA SHALL BE REPLACED AT THE END OF EACH WORKING DAY. THE PERIMETER SHALL REMAIN COMPLETELY ENCLOSED DURING NON-WORKING HOURS.
- STOCKPILES PLACED OUTSIDE OF THE PRIMARY STOCKPILE AREA SHALL BE PLACED ON 6 MIL (MINIMUM THICKNESS) PLASTIC SHEETING.
- SEE SHEET C7.1 FOR SOIL HANDLING NOTES AND DETAILS.

4 C2.1 CROSS SECTION VIEW FOR PVIOUS SURFACE

NOT TO SCALE



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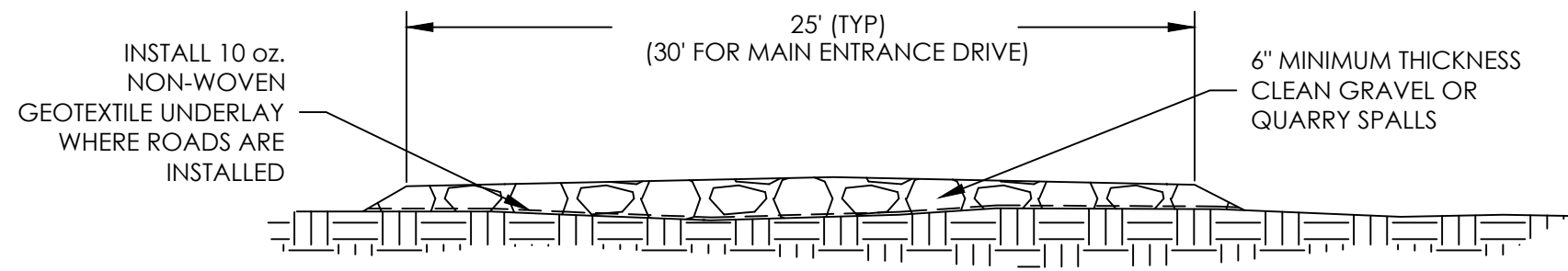
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SHEET TITLE
EROSION AND
SEDIMENT CONTROL
DETAILS I

SHEET
C2.2

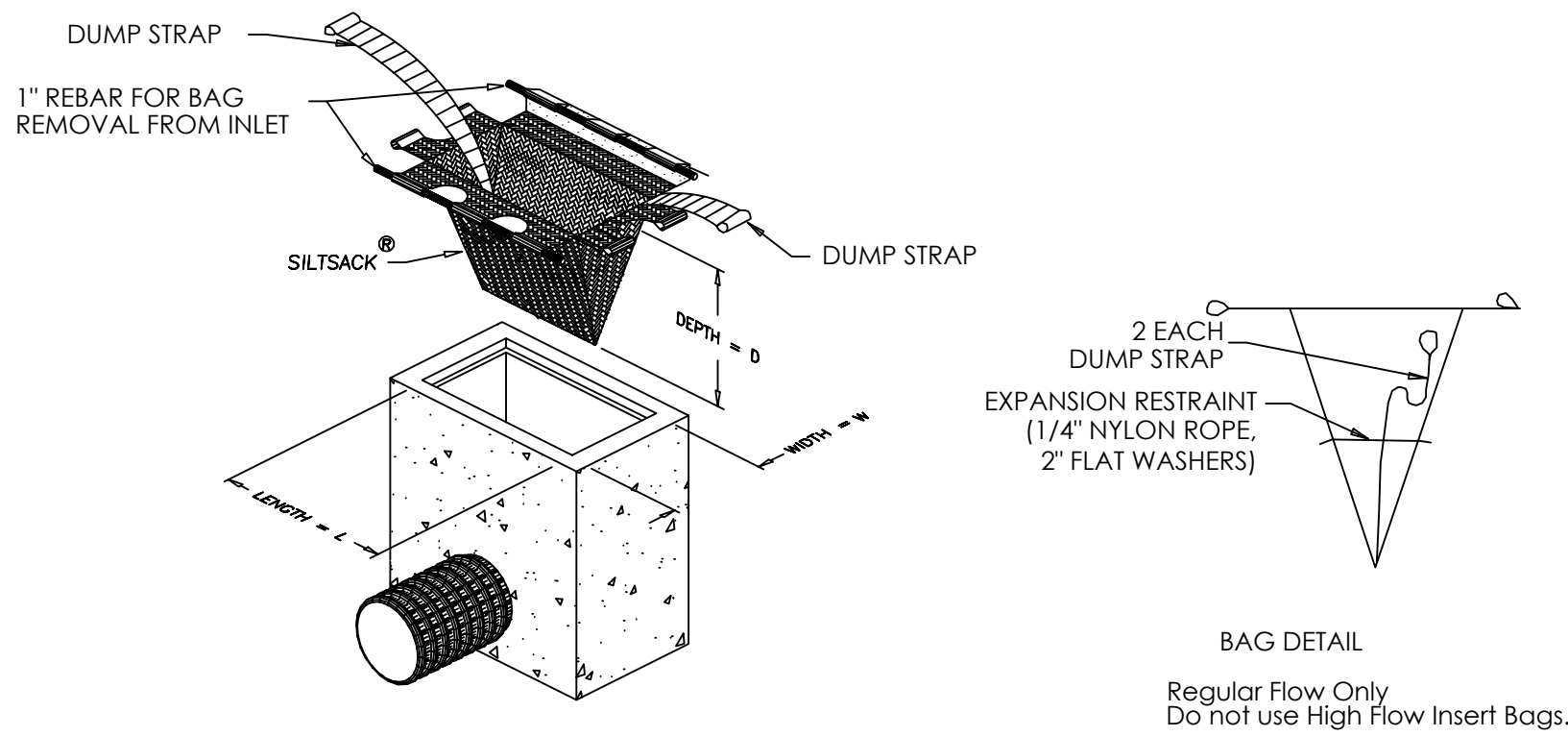
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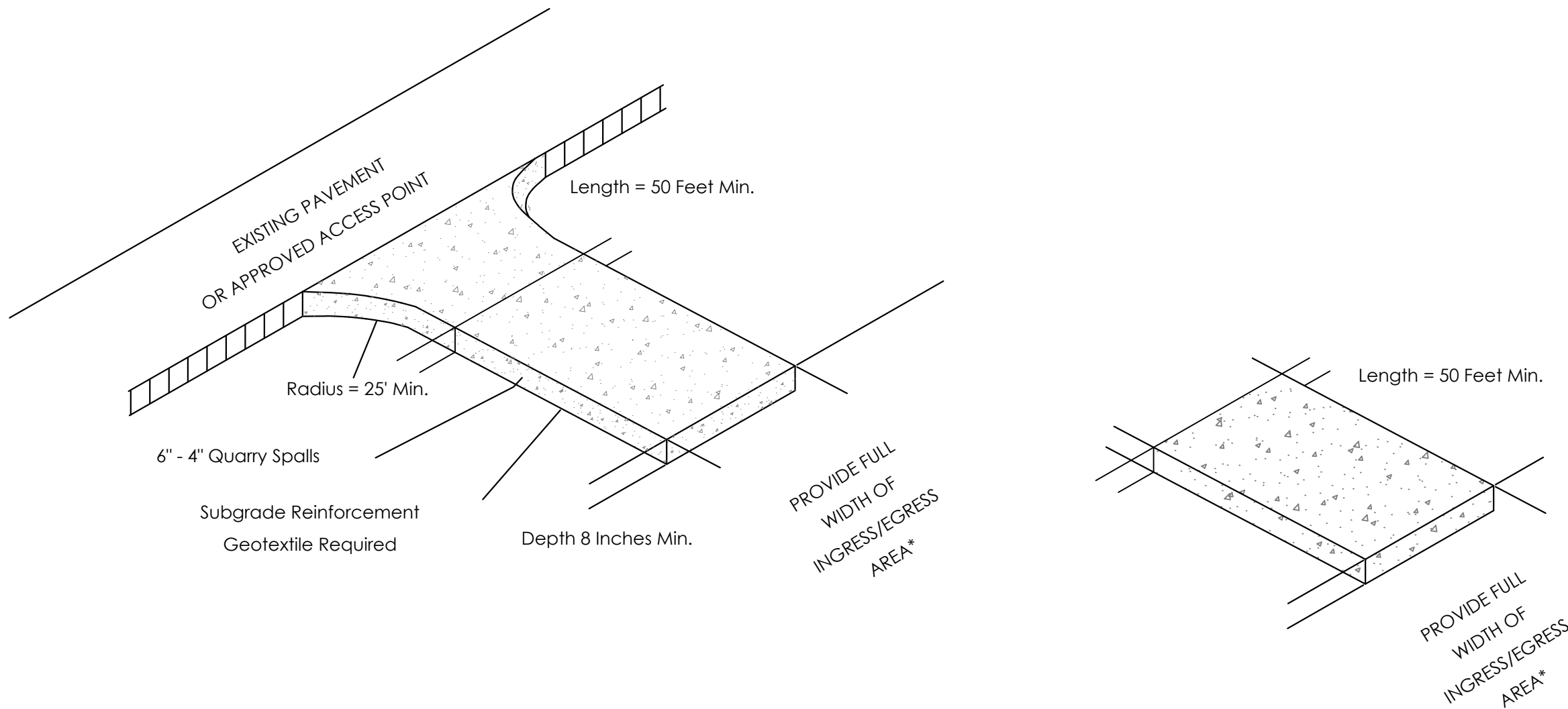
ACCESS / CIRCULATION ROAD NOTES

- ACCESS AND INTERNAL CIRCULATION ROADS SHALL BE CLEARED OF VEGETATION OR OTHER DEBRIS PRIOR TO PLACEMENT OF GRAVEL SURFACE.
- GRAVEL SHALL BE KEPT REGULARLY WETTED TO PREVENT AIRBORNE DUST FROM DEVELOPING DURING CONSTRUCTION.
- GRAVEL MAY BE USED TO BACKFILL HOT SPOT EXCAVATIONS AS WORK PROGRESSES AND HAUL ROADS ARE NO LONGER REQUIRED.
- HAUL ROADS SHALL BE INSTALLED AS NEEDED TO PREVENT SITE SOIL DUST OVER CONSTRUCTION AREAS.

5
C2.1
TEMPORARY GRAVEL ACCESS ROAD
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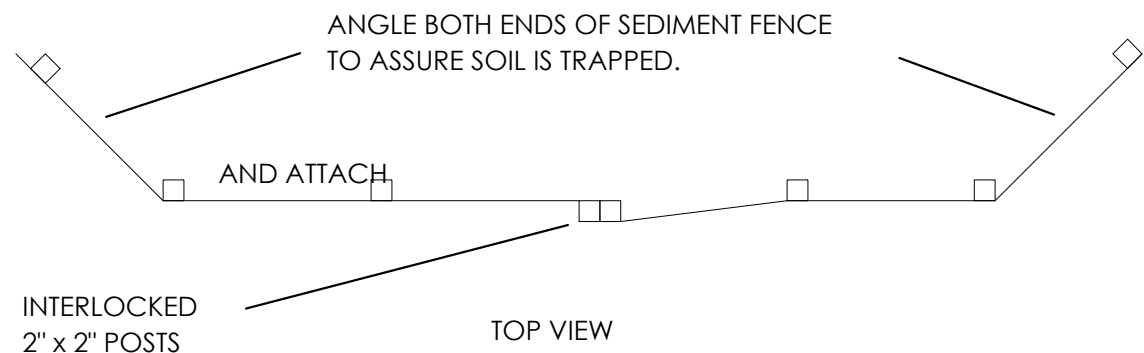
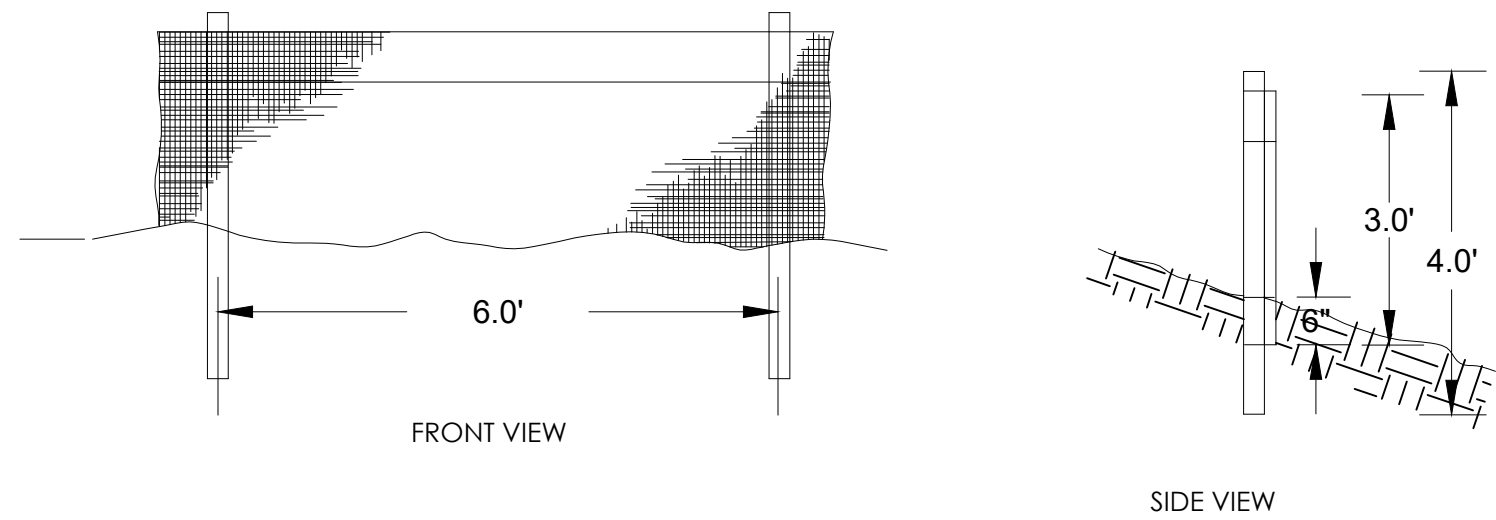


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C2.1
STORMWATER INLET PROTECTION
NOT TO SCALE



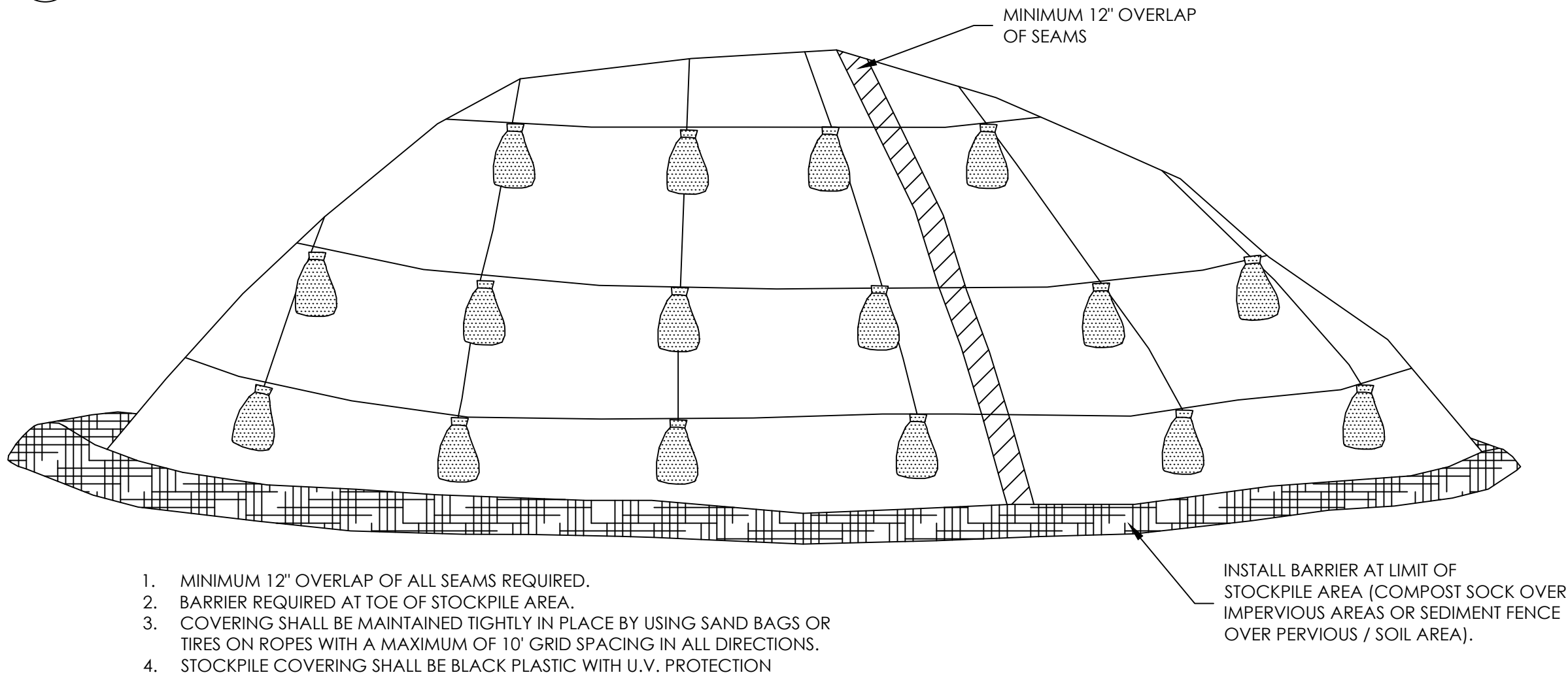
CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE

CONSTRUCTION EXIT DETAIL
NOT TO SCALE

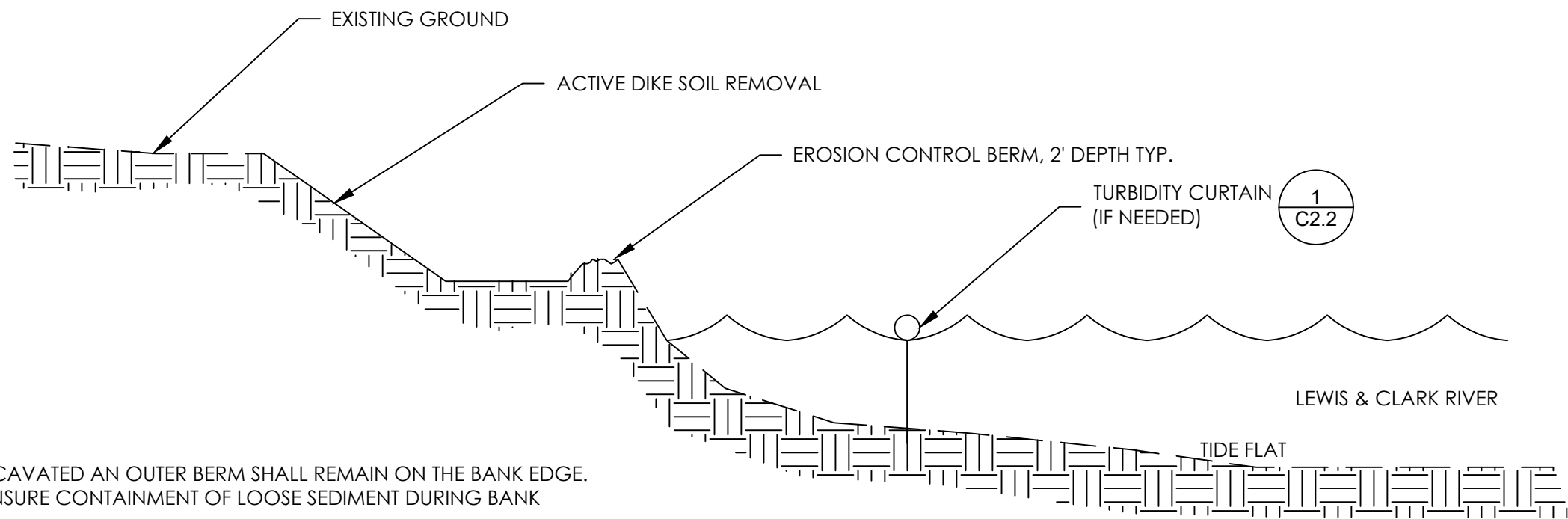


- NOTES:
- BURY BOTTOM OF FILTER FABRIC 6" MIN. VERTICALLY BELOW GRADE.
 - 2" x 2" FIR, PINE, OR STEEL FENCE POSTS.
 - STITCHED LOOPS TO BE INSTALLED UPHILL SIDE OF SLOPE.
 - COMPACT NATIVE FILL IN ALL AREAS OF FILTER FABRIC TRENCH.
 - SEDIMENT FENCING SHALL BE INSTALLED ON CONTOUR.

7
C2.1
SEDIMENT FENCE DETAIL
NOT TO SCALE



8
C2.1
STOCKPILE COVER DETAIL
NOT TO SCALE



NOTES:

- AS BANK IS EXCAVATED AN OUTER BERM SHALL REMAIN ON THE BANK EDGE. BERM SHALL ENSURE CONTAINMENT OF LOOSE SEDIMENT DURING BANK EXCAVATION.

10
C2.1
EROSION CONTROL BERM DETAIL
NOT TO SCALE

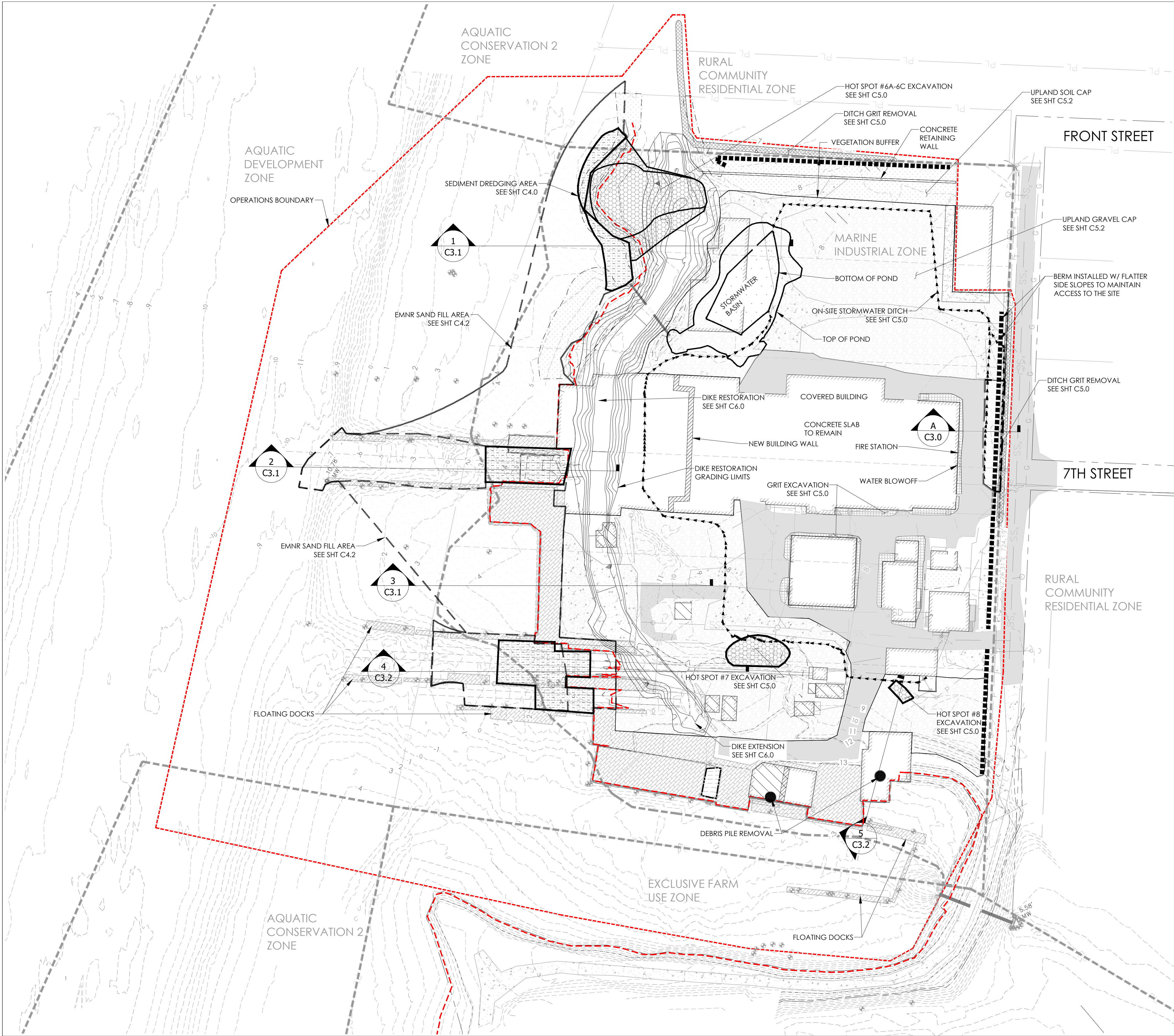
ISSUE	DATE	DESCRIPTION
B	01/06/2023	RECORD DRAWING DOCUMENT
A	03/27/2020	100% DESIGN DOCUMENTS

PROJECT: 1653.01.02
DESIGNED: C. GOKCORRA
DRAWN: G. KALMETA
CHECKED: E. BAKKOM
SCALE

DRAWING NOT TO SCALE

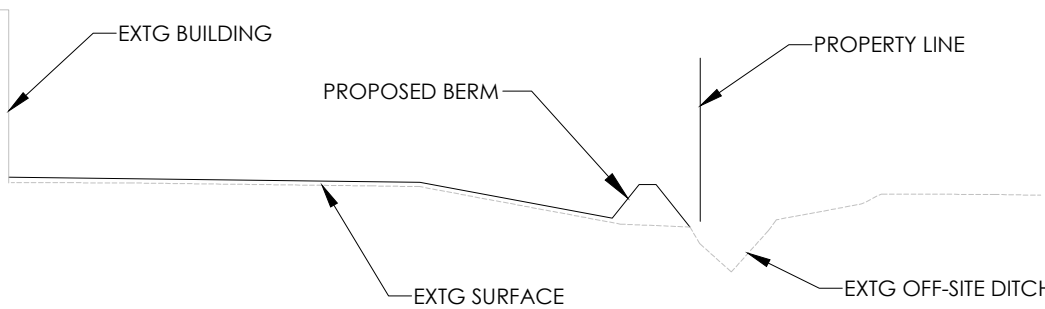
SHEET TITLE
EROSION AND
SEDIMENT CONTROL
DETAILS II

SHEET
C2.3



REMEDIATION PLAN LEGEND

- DOCK PILING
- EXISTING ASPHALT
- EXISTING DOCK
- EXISTING GRAVEL SURFACE
- UPLAND GRAVEL CAP
- UPLAND SOIL CAP
- HOT SPOT EXCAVATION
- GRIT EXCAVATION
- EMNR SAND FILL
- SEDIMENT DREDGING
- BERM
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- LOT LINE
- MEAN HIGH WATER LINE - 7.93' (NAVD 88)
- HIGH TIDE LINE - 8.63' (NAVD 88)
- HIGHEST MEASURED TIDE - 11.9' (NAVD 88)



A C3.0 CROSS SECTION VIEW
NOT TO SCALE

REMEDIATION NOTES
SEQUENCING

1. INSTALL EROSION CONTROL MEASURES PRIOR TO EARTH DISTURBING ACTIVITIES (SHEETS C2.0 THROUGH C2.3)
2. DEMOLITION OF SITE STRUCTURES/FEATURES (SHEET C2.4)

a. PERFORM HAZARDOUS BUILDING MATERIALS (HBM) ASSESSMENT

b. ISOLATE/CONTAIN AREA UNDER OVER-WATER STRUCTURES

c. ABATE MATERIALS AS DETERMINED IN HBM

d. DISPOSE OF DEMOLITION WASTE OFFSITE AS DEBRIS
3. COMPLETE SEDIMENT EXCAVATION/BACKFILL (SHEET C4.0), PRIOR TO INSTALLATION OF EMNR SAND LAYER (SHEET C5.1).

a. STOCKPILE/DEWATER SATURATED SEDIMENT
4. EXCAVATE UPLAND HOT-SPOTS (SHEET C5.0).

a. STOCKPILE HOT-SPOT SOIL

b. TREAT DESIGNATED SOIL

c. DISPOSE OF EXCAVATED/TREATED SOIL/SEDIMENT AT OFFSITE SUBTITLE D LANDFILL
5. BACKFILL EXCAVATION #6A-6C TO MATCH EXISTING GRADE (SHEET C5.0) AND VEGETATE
6. PREPARE SUBGRADE AND ESTABLISH DRAINAGE PATTERNS (SHEET C5.1)

a. EXCAVATION OF STORMWATER BASIN

b. STORMWATER DITCHES

c. BACKFILL OF EXCAVATIONS #7 AND #8 USING ON-SITE MATERIALS
7. CONSTRUCT DIKE EXTENSION/IMPROVEMENTS (SHEETS C6.0 AND C6.1)
8. CONSTRUCT UPLAND CAPS (SHEET C4.2)

a. CLEAN SOIL CAP AT LANDSCAPE BUFFER

b. PAVEMENT OVERLAY

c. GRAVEL CAP
9. VEGETATE SITE

a. DIKE EXCAVATION AREA

b. DIKE CONSTRUCTION AREA

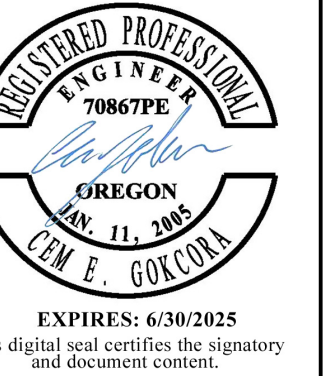
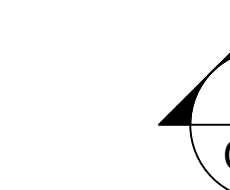
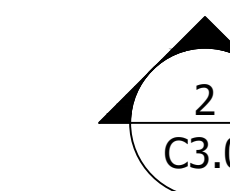
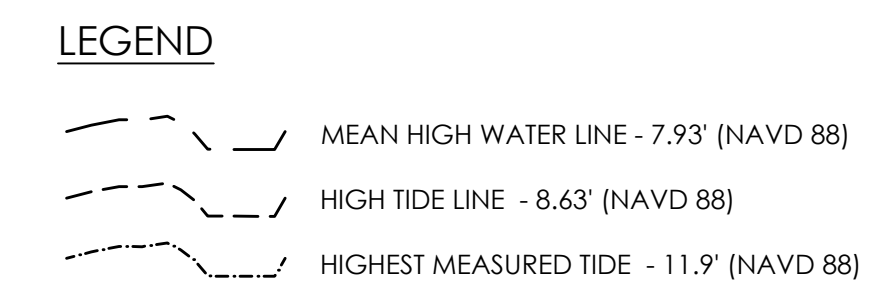
c. LANDSCAPE BUFFER.

CONSTRUCTION NOTES

1. SEQUENCING LISTED ON THIS SHEET IS ENGINEER'S RECOMMENDATION, WILL BE DISCUSSED WITH THE CONTRACTOR AND CAN BE ADJUSTED/MODIFIED PER CONTRACTOR'S RECOMMENDATIONS.
2. EXCAVATION #6A-6C SHALL BE BACKFILLED WITH CLEAN MATERIAL MEETING DIKE FILL REQUIREMENTS.
3. EXCAVATIONS #7 AND #8 SHOULD BE BACKFILLED USING SOILS GENERATED ON SITE DURING SUB-GRADE PREPARATION.
4. LIMITS OF ASPHALT OVERLAY TO BE CONFIRMED.

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PROJECT: 1653.01.02
DESIGNED: C. GOKCORA
DRAWN: G. KALMETA
CHECKED: E. BAKKOM
SCALE
0 50' 100'
NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.
SHEET TITLE



AMCCO UPLAND & SEDIMENT REMEDIATION PLAN

ASTORIA MARINE CONSTRUCTION CO.

ASTORIA, OREGON

	B	01/06/2023		RECORD DRAWING DOCUMENT	
	A	05/27/2020		100% DESIGN DOCUMENTS	
	ISSUE	DATE		DESCRIPTION	

PROJECT: 1653.01.02
DESIGNED: C. GOKCORA
DRAWN: G. KALMEITA
CHECKED: E. BAKKOM

SCALE

20' 40'

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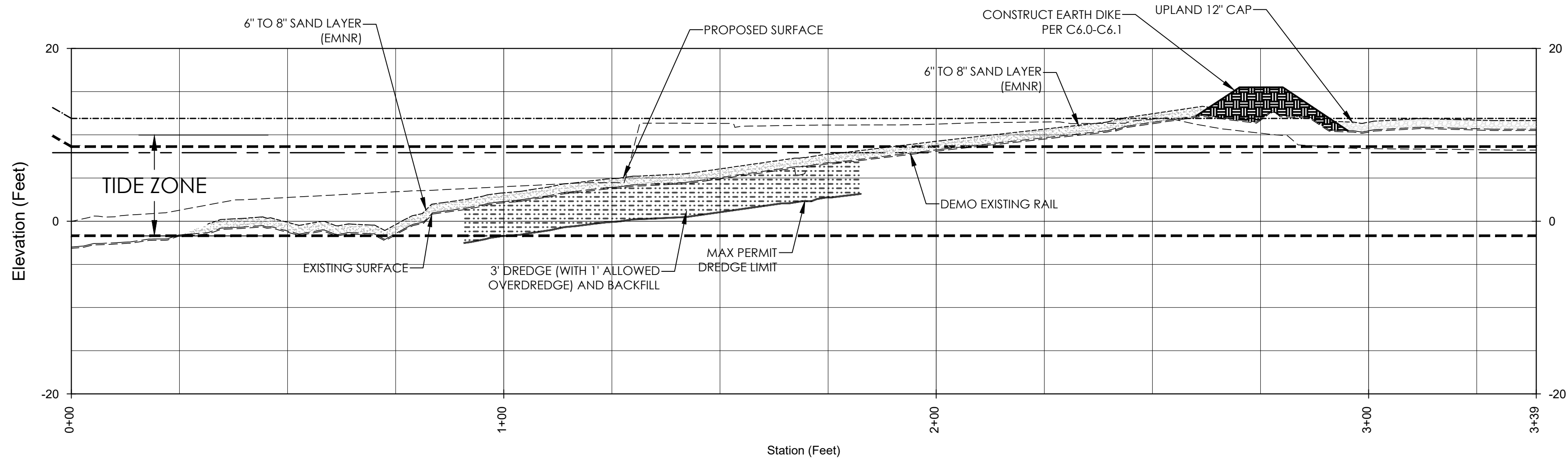
SHEET TITLE

REMEDIATION
CROSS-SECTIONS

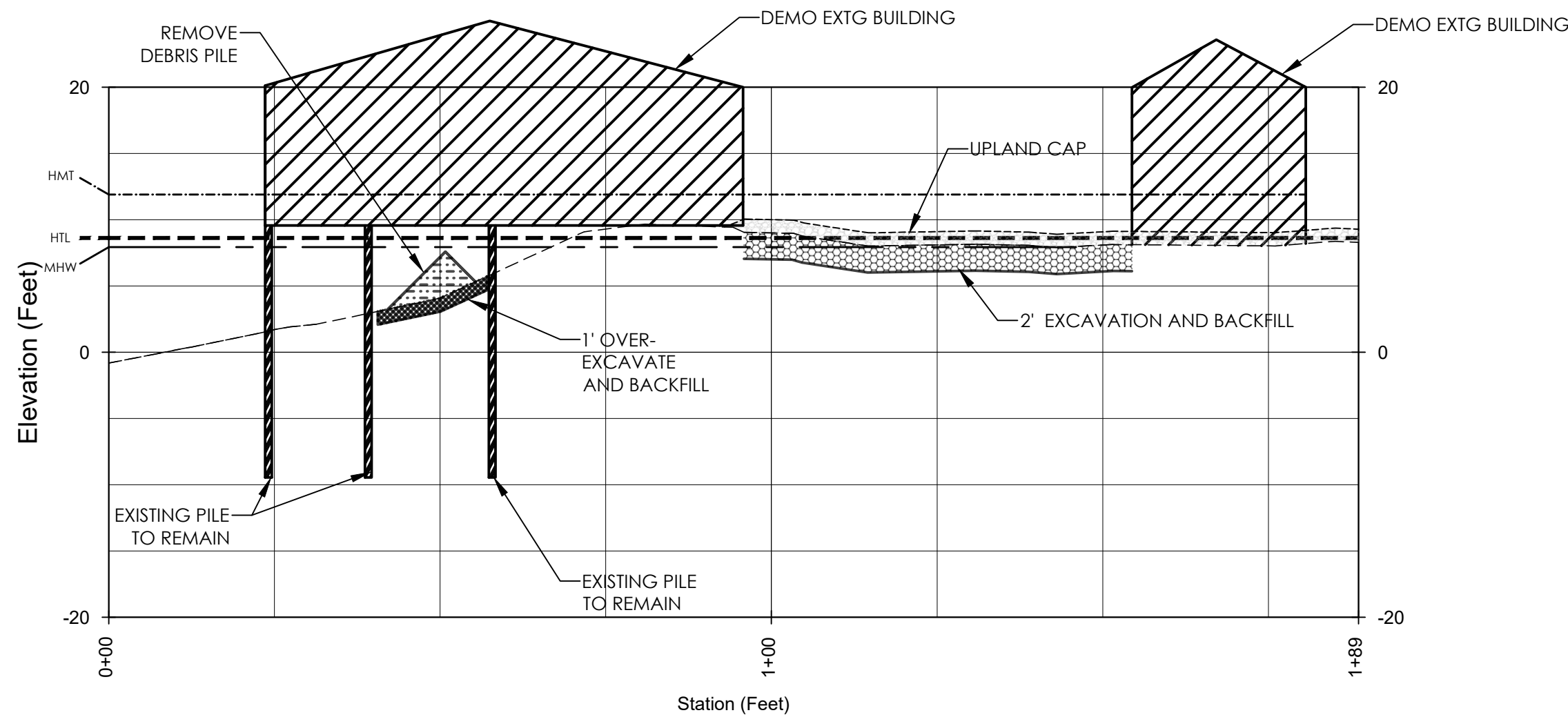
SHEET

C3.1

PLOTTED BY: Garick Kalmeta FILENAME: G:\00_MIA CH\3D\00_PROJECT\028\04\03_AMCCO\PLANS\AS-BUILT\C3.2 REMEDIATION CROSS SECTIONS.dwg PLOTTED ON: 2023-12-29 4:28 PM



4
C3.0
HORIZONTAL SCALE 1" = 20' VERTICAL SCALE 1" = 10'
VERTICAL EXAGGERATION: 2



5
C3.0
HORIZONTAL SCALE 1" = 20' VERTICAL SCALE 1" = 10'
VERTICAL EXAGGERATION: 2

LEGEND

- MEAN HIGH WATER LINE - 7.93' (NAVD 88)
- HIGH TIDE LINE - 8.63' (NAVD 88)
- HIGHEST MEASURED TIDE - 11.9' (NAVD 88)



AMCCO UPLAND & SEDIMENT
REMEDICATION PLAN
ASTORIA MARINE CONSTRUCTION CO.
ASTORIA, OREGON

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PROJECT: 1653.01.02

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DRAWN: G. KALMETA

CHECKED: E. BAKKOM

SCALE



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SHEET TITLE

REMEDICATION
CROSS SECTIONS II

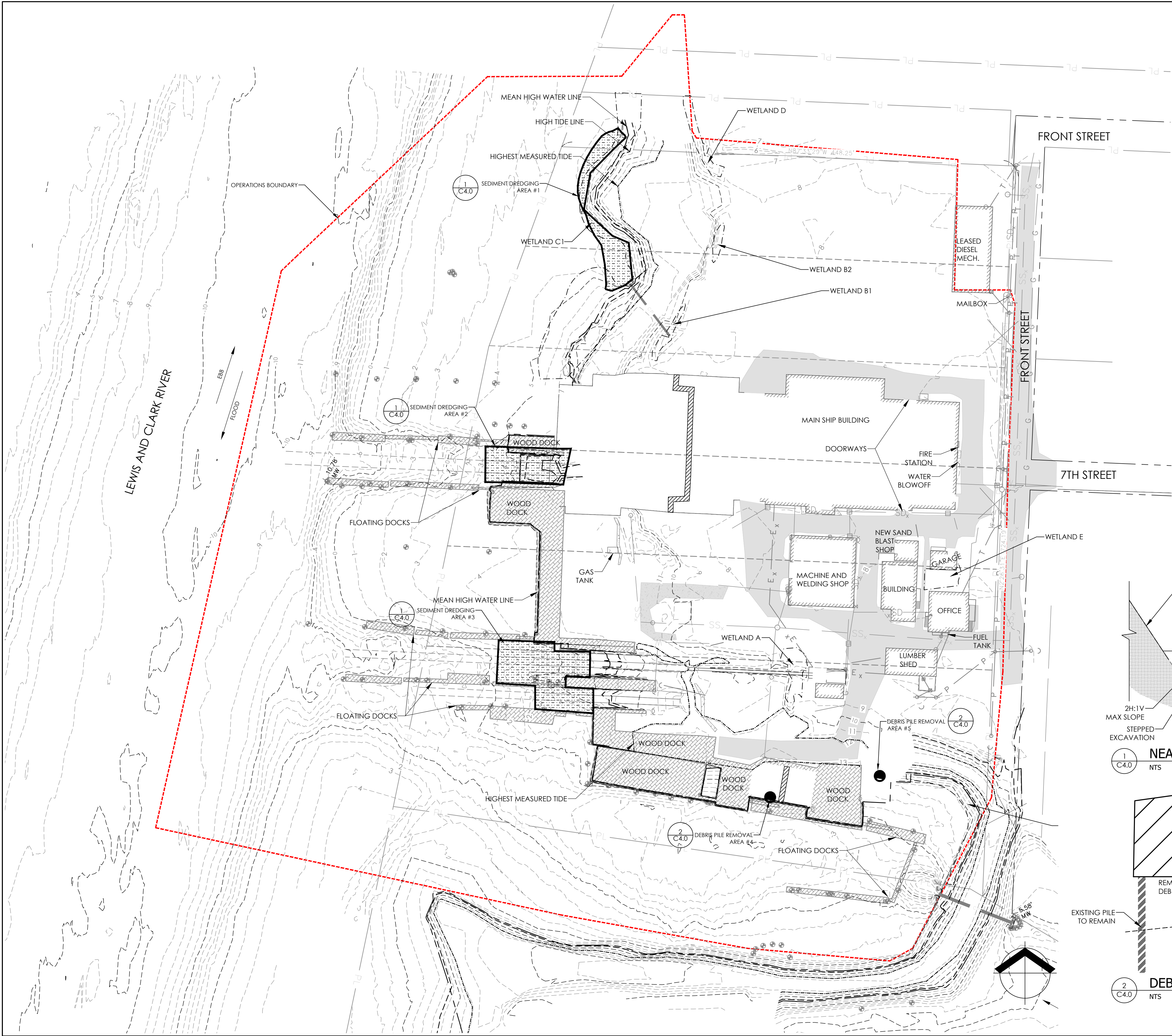
SHEET

C3.2

RECORD DRAWING

MAUL FOSTER ALONGI
3140 NE BROADWAY STREET
PORTLAND, OR 97232
PHONE: 971.344.2139
www.maulfooster.com

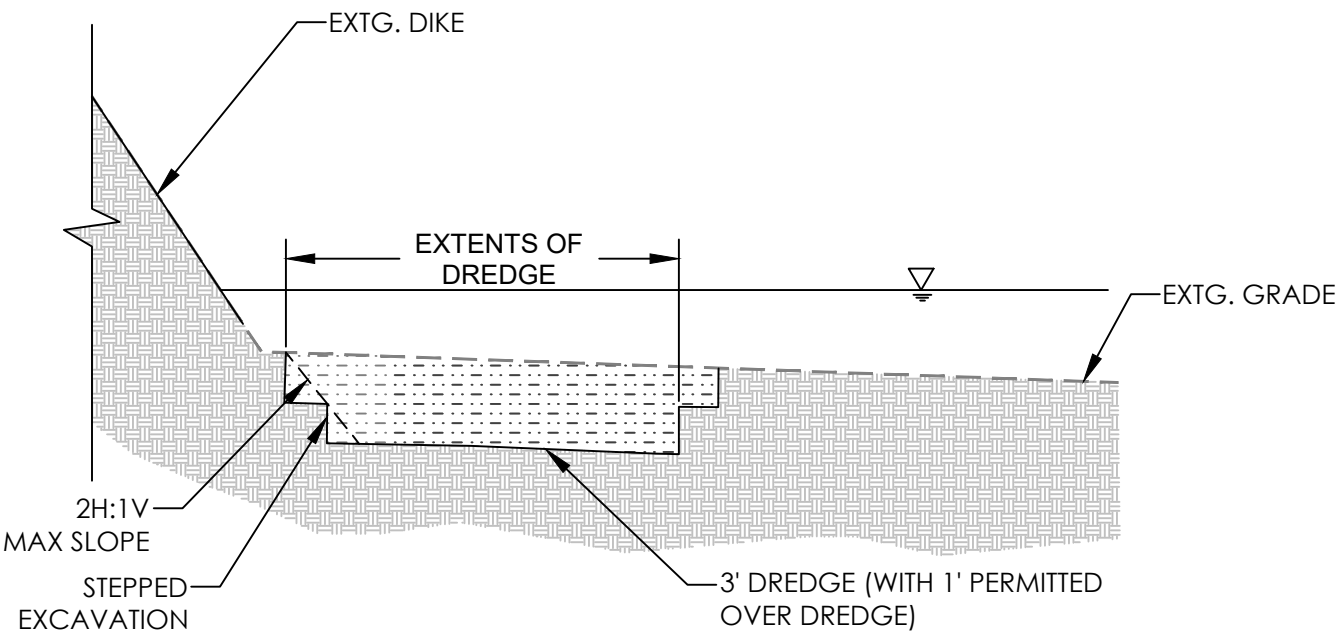
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 PLOTTED BY: Gokcek Karmali
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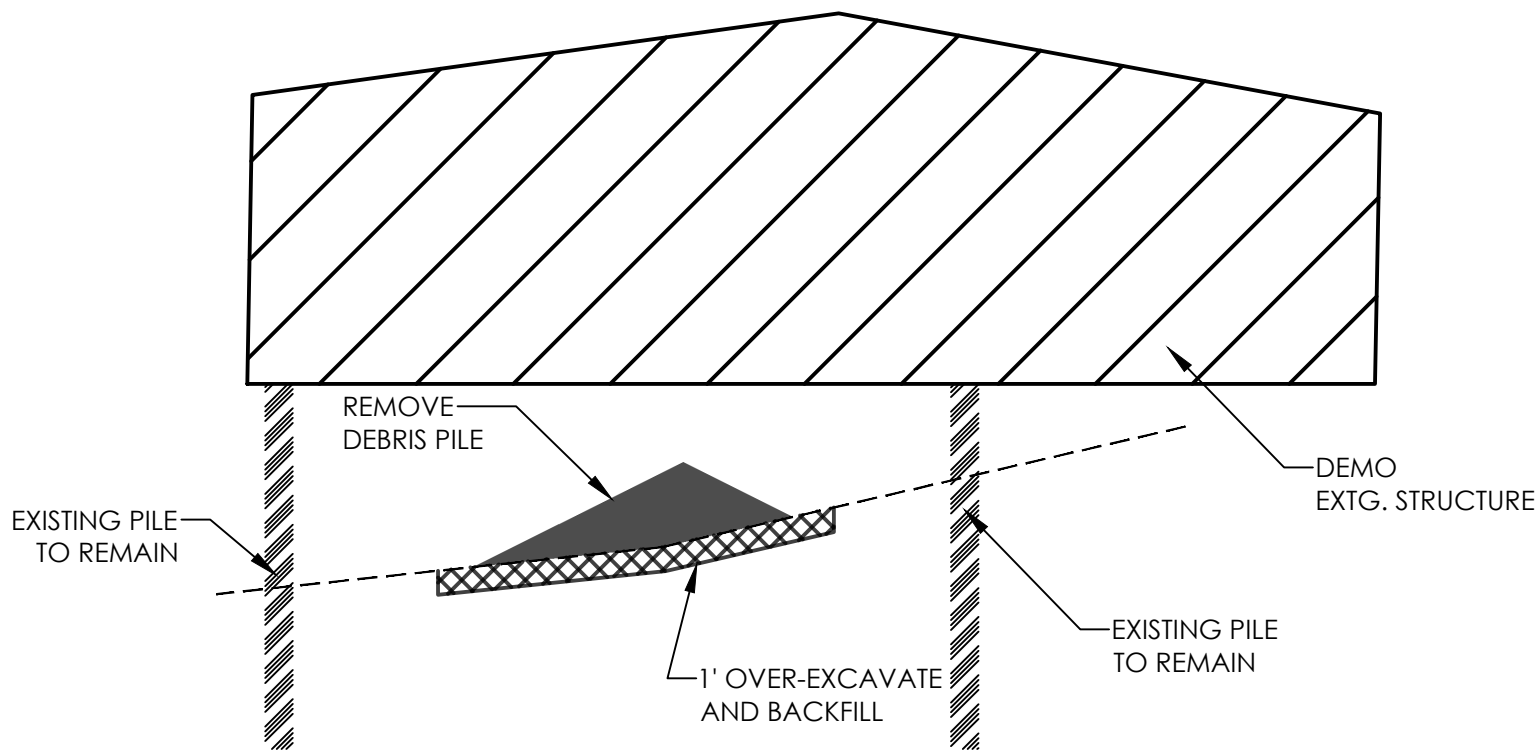
SEDIMENT DREDGING PLAN LEGEND

- DOCK PILING
- EXISTING ASPHALT
- EXISTING DOCK
- EXISTING GRAVEL SURFACE
- SEDIMENT DREDGING
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
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SEE SHEET C4.1 FOR SEDIMENT DREDGING NOTES



1
C4.0
NTS
NEAR SHORE SEDIMENT DREDGE



2
C4.0
NTS
DEBRIS PILE REMOVAL

RECORD DRAWING

MAUL FOSTER ALONGI
 3140 NE BROADWAY STREET
 PORTLAND, OR 97232
 PHONE: 971.344.2139
 www.maulfooster.com

REGISTERED PROFESSIONAL ENGINEER
 70867PE
 OREGON
 JAN. 11, 2005
 CEN. E. GOKCORA
 EXPIRES: 6/30/2025
 This digital seal certifies the signatory and document content.

AMCCO UPLAND & SEDIMENT REMEDIATION PLAN
ASTORIA MARINE CONSTRUCTION CO.
 ASTORIA, OREGON

ISSUE	DATE	DESCRIPTION
B	01/16/2023	RECORD DRAWING DOCUMENT
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PROJECT: 1653.01.02

DESIGNED: C. GOKCORA

DRAWN: G. KALMETA

CHECKED: E. BAKKOM

SCALE

NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

SHEET TITLE

SEDIMENT DREDGING PLAN

SHEET

C4.0

SEQUENCING

- ### REDGING NOTES

- | | Sed Excavation #1
(Burn Pit) | Sed Excavation #2
(MW #3) | Sed Excavation #3
(MW #1-2) | Sed Excavation #4
(Coffee Shop
Debris Pile) | Sed Excavation #5
(Pipe Shop Debris
Pile) |
|---|---------------------------------|------------------------------|--------------------------------|---|---|
| Area (SF) | 2630 | 3375 | 4850 | 100 (EST) | 100 (EST) |
| Target Depth Below
Existing (ft) | 3 | 3 | 3 | 1 | 1 |
| Overdredge Depth
Below Existing (ft) | 4 | 4 | 4 | N/A | N/A |
| Target Volume (cy) | 370 | 420 | 610 | 15 | 10 |
| Max Volume (w/
Overdredge) (cy) | 520 | 580 | 840 | N/A | N/A |
| Wetlands (Y/N) | Y | N | N | N | N |

a. WATER QUALITY REQUIREMENTS SPECIFIED IN THE WATER QUALITY CERTIFICATION MUST BE SATISFIED WHILE WORKING IN WATER.

b. CONTRACTOR SHALL EMPLOY OPERATIONAL AND ENGINEERING CONTROLS AS NECESSARY TO MEET DOWNGRADIENT LIMITS THAT ARE ESTABLISHED IN THE CERTIFICATION.

c. OPERATIONAL WATER QUALITY BMPs MAY INCLUDE:

- i. CONDUCTING EXCAVATION WORK ONLY IN THE DRY, I.E. AT LOW WATER CONDITIONS.
- ii. TO THE EXTENT POSSIBLE, THE DAILY EXCAVATION SHALL BE FULLY BACKFILLED PRIOR TO BEING SUBMERGED BY INCOMING TIDE.
- iii. FOR WORK IN SUBMERGED CONDITIONS, UTILIZE CRANE DERRICK WITH ENVIRONMENTAL CLAMSHELL BUCKETS (SEE MATERIALS AND EQUIPMENT NOTES) TO LIMIT THE GENERATION OF TURBIDITY AND POTENTIALLY CONTAMINATED SUSPENDED RESIDUALS.
- iv. FIXED-ARM EXCAVATORS TO PERFORM WORK FROM THE SHORELINE.
- v. RTK-GPS ON THE EXCAVATOR FOR BUCKET POSITIONING IS PREFERRED.
- vi. INDIVIDUAL GRABS SHALL BE LIMITED IN DEPTH TO PREVENT OVERFILLING OF THE BUCKET AND SPILLAGE OF EXCAVATED MATERIAL ONTO THE SHORELINE.
- vii. EXCAVATION SHALL BE COMPLETED IN LIFTS CORRESPONDING TO THE CAPABILITIES OF THE PROPOSED BUCKET. ALL EXCAVATIONS SHALL UTILIZE STAIR-STEPPING (AS SHOWN IN DETAIL ON THIS SHEET) AT THE EDGES TO PREVENT HIGH SIDEWALL CONDITIONS (>1-FOOT) WHICH MAY LEAD TO LOCALIZED SLOPE FAILURE.

d. ENGINEERING WATER QUALITY BMPs MAY INCLUDE:

- i. TURBIDITY CURTAIN MAY BE DEPLOYED AND MAINTAINED AS NECESSARY TO SATISFY DOWNGRADIENT TURBIDITY REQUIREMENTS AND PREVENT DISPERSAL OF WORK AREA TURBIDITY WHEN EXCAVATIONS ARE COMPLETED IN SUBMERGED CONDITIONS (I.E. DREDGING), OR WHEN OPERATIONAL BMPs ARE NOT ACHIEVING DESIRED RESULTS.
- ii. IF TURBIDITY CURTAIN IS DEPLOYED, THE CONTRACTOR SHALL MANAGE THE CURTAIN EXTENTS DURING THE INCOMING AND OUTGOING TIDE TO PREVENT SIGNIFICANT BILLOWING AND DISTURBANCE OF UNDERLYING RIVERBED SEDIMENT.

SEDIMENT EXCAVATION (IN THE DRY) WILL BE PERFORMED USING THE FOLLOWING METHODS:

- ## 11. DEWATERING

- a. SEDIMENTS SHALL BE DEWATERED ONSITE PRIOR TO DISPOSAL IN A DEWATERING CELL. DISPOSAL MATERIALS MUST SATISFY LANDFILL REQUIREMENTS (INCLUDING PAINT-FILTER) PRIOR TO TRUCKING.
- b. DEWATERING SHALL BE CONDUCTED VIA GRAVITY AND CONSOLIDATION WITHIN A CELL CONSISTING OF CONCRETE BLOCK WALLS AND LINED WITH 6-OZ NON-WOVEN GEOTEXTILE FABRIC (BOTTOM & SIDES). DECANT WATER IS CURRENTLY ANTICIPATED TO INFILTRATE AND/OR DISCHARGE THROUGH THE CONTAINMENT WALL TO THE STORMWATER CONVEYANCE DITCH. INSTALL A GABION BASKET FILLED WITH OYSTER SHELL IN THE DRAINAGE DITCH ON THE UPGRADE SIDE OF THE STORMWATER DETENTION FACILITY. DECANT WATER MAY BE DISCHARGED TO THE ONSITE SURFACE WATER MANAGEMENT SYSTEM AND THROUGH THE TIDE GATE.
- c. FOR SEDIMENT THAT IS DREDGED TO A BARGE TO OVER-WATER TRANSPORT, CONSTRUCT STRAWBALE "MAZE" INCLUDING STRAWBALE CHECK DAMS TERMINATING WITH A FILTER BASKET FILLED WITH OYSTER SHELL PRIOR TO FLOWING OFF THE BARGE THROUGH THE SCUPPERS.
- d. THE CONTRACTOR SHALL PROVIDE DETAILS OF THE DEWATERING CELL CONSTRUCTION AND MANAGEMENT IN THE CONSTRUCTION WORK PLAN.

MATERIALS AND EQUIPMENT

- ## SUBMITTALS

1. A PORTION OF THE REQUIRED CONTRACTOR'S WORK PLAN SHALL OUTLINE MATERIALS, EQUIPMENT, AND METHODS TO BE USED DREDGE CONTAMINATED NEAR-SHORE SEDIMENT AS SHOWN ON THE DRAWINGS AND DESCRIBED IN THESE SPECIFICATIONS. DESCRIPTIONS SHALL INCLUDE:
 - a. LIST OF ALL EQUIPMENT (NAMES, TYPE, SIZE, ETC.).
 - b. LIST OF ALL POTENTIAL DREDGE OPERATORS (NAMES, EXPERIENCE, ETC.).
 - c. SUMMARY OF DREDGING PROCEDURES.
 - d. SUMMARY OF UPLAND SEDIMENT HANDLING PROCEDURES.
 - e. SUMMARY OF UPLAND SEDIMENT DEWATERING FACILITIES AND PROCEDURES.
 - f. OPERATIONAL BMPs TO BE IMPLEMENTED DURING DREDGING, INCLUDING ALTERNATIVE BMPs TO BE CONSIDERED.
2. THE CONTRACTOR'S WORK PLAN SHALL DESCRIBE SEDIMENT PROCESSING TO ENSURE THAT ALL SEDIMENTS MEET LANDFILL CRITERIA FOR PAINT-FILTER.



AMCCO UPLAND & SEDIMENT
REMEDICATION PLAN

ASTORIA MARINE CONSTRUCTION CO

ASTORIA, OREGON

[illegible]

DESIGNED: C. GOKCORA

CHECKED: E. BAKKOM

DRAWING NOT TO SCALE

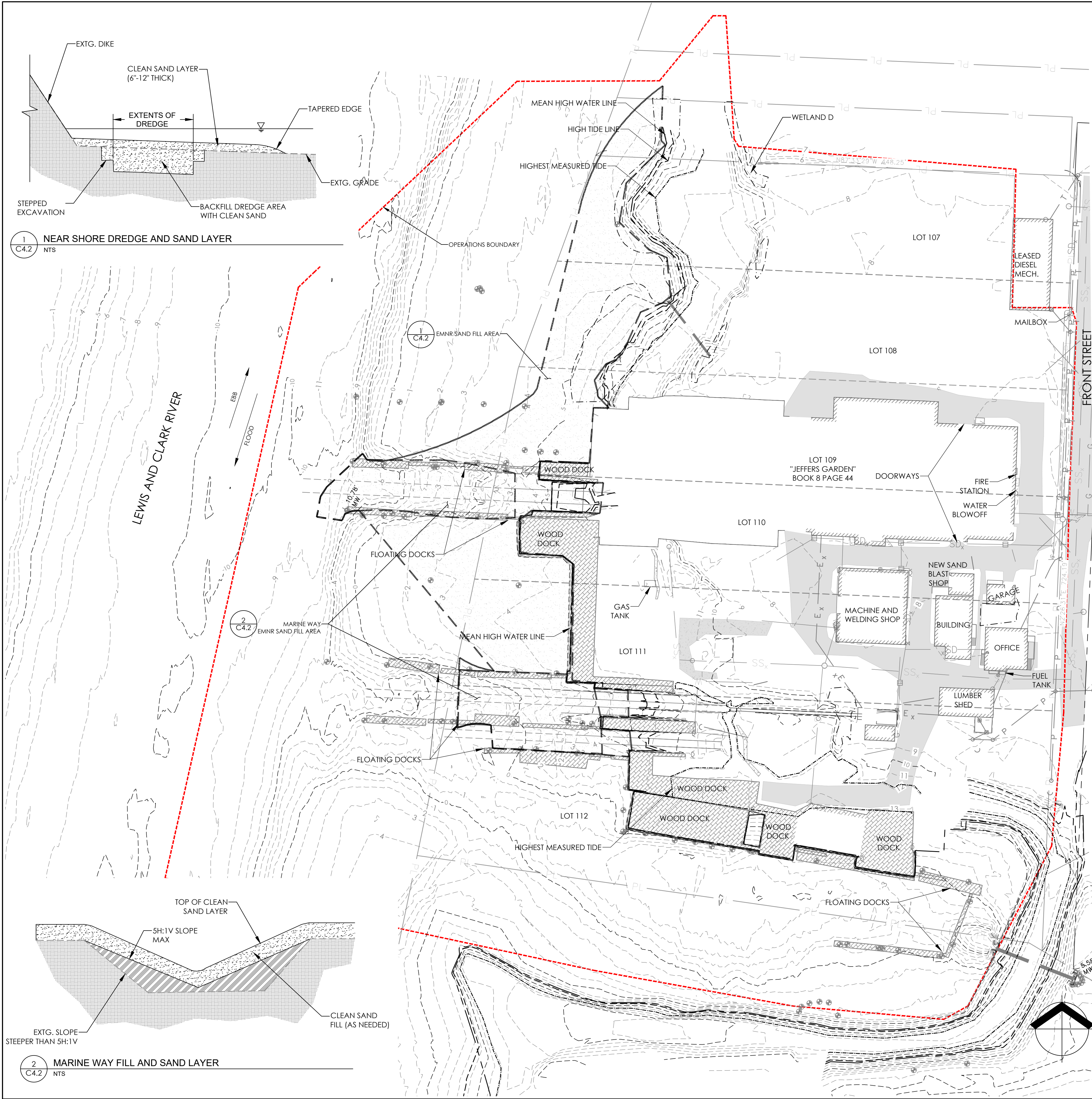
SHEET TITLE

SEDIMENT
DREDGING NOTES

SHEET

C4.1

PLOTTED BY: Carick Kennedy FILENAME: G:\00_MIA CH\3D\00_PROJECT\0288\04\03_AMCCO\PLANS\MARINE\C4.2 EMNR SAND FILL GRADING PLAN.dwg PLOTTED ON: 2023.12.29 4:29 PM



REMEDIATION PLAN LEGEND

DOCK PILING
 EXISTING ASPHALT
 EXISTING DOCK
 EXISTING GRAVEL SURFACE
 EMNR SAND FILL

EXISTING MINOR CONTOUR
 EXISTING MAJOR CONTOUR
 LOT LINE
 MEAN HIGH WATER LINE
 HIGH TIDE LINE
 HIGHEST MEASURED TIDE

EMNR SAND FILL NOTES

SEQUENCING

- SEDIMENT EXCAVATION AND BACKFILL IN THE LEWIS AND CLARK RIVER WORK AREA SHALL BE COMPLETE PRIOR TO PLACEMENT OF THE EMNR MATERIALS.
- EMNR SAND SHOULD GENERALLY BE PLACED FROM UPSTREAM TO DOWNSTREAM.
- EMNR SAND SHOULD BE PLACED STARTING AT THE GREATEST DEPTH IN THE PLACEMENT AREA, MOVING TO THE SHALLOWEST LOCATION.

CONSTRUCTION NOTES

- EMNR SAND IS REQUIRED TO BE PLACED IN AREAS OF THE LEWIS AND CLARK RIVER WHERE VEGETATION MAY OR MAY NOT EXIST. EMNR SAND SHOULD BE PLACED USING A METHOD THAT WILL GRADUALLY SPREAD THE SAND OVER AN AREA WITHOUT SIGNIFICANT DAMAGE TO VEGETATION THAT MAY REMAIN IN PLACE. THE ENGINEER ANTICIPATES THESE METHODS TO UTILIZE AN AERIAL BROADCASTING APPROACH, SUCH AS TELEBELT CONVEYOR, THIN LAYER CLAMSHELL SPREAD, SLURRY SPRAY.
- SAND SHOULD BE PLACED BY MECHANICAL MEANS - UNLESS HYDRAULIC PLACEMENT METHODS ARE DEMONSTRATED TO NOT DISPLACE OR SUSPEND THE EXISTING SEDIMENT BED.
- PROVIDE CLEAN EQUIPMENT FOR THE PLACEMENT AND TRANSPORT OF ALL EMNR MATERIALS.
- PRIOR TO EMNR SAND PLACEMENT ACTIVITIES, OBTAIN VERIFICATION FROM ENGINEER THAT DREDGING IN AN AREA IS COMPLETE.
- DEMONSTRATE THE PROPOSED EMNR PLACEMENT METHOD IN A PILOT TEST, WITH EVIDENCE PROVIDED TO THE ENGINEER CONSISTING OF RAIN BUCKETS OR SEDIMENT CORES (CLAM GUN), OR OTHER APPROVED METHOD. CORRECTIONS TO APPLICATION METHODOLOGY SHALL BE MADE AND VERIFIED PRIOR TO GOING FULL SCALE.
- ESTIMATE THE VOLUME OR TONNAGE OF SAND MATERIAL REQUIRED TO BE PLACED IN EACH GRID APPROVAL UNIT AREA TO SATISFY THE DESIGN REQUIREMENT. CONTRACTOR SHALL MONITOR THE PLACEMENT OF EMNR SAND QUANTITY TO DEMONSTRATE THAT THE REQUIRED THICKNESS OF SAND HAS BEEN PLACED.
- PRIOR TO START OF CONSTRUCTION, THE ENGINEER AND CONTRACTOR SHALL AGREE ON A MEANS OF DEMONSTRATING SUCCESSFUL PLACEMENT TO THE THICKNESS AND LIMITS DESCRIBED IN THE DRAWINGS FOR PURPOSES OF CERTIFYING COMPLETION FOR DEQ. THESE MEANS MAY INCLUDE A COMBINATION OF THE FOLLOWING: DOCUMENTATION OF TONNAGE/VOLUME OF EMNR DELIVERED TO THE SITE, ENGINEER OBSERVATION OF PLACEMENT, PHYSICAL MEASUREMENT (SEDIMENT CORES/RAIN BUCKETS), AND/OR BATHYMETRY.
- THE MATERIAL SHALL BE PLACED EVENLY AND METHODICALLY IN ORDER TO ACHIEVE THE SAND THICKNESS SPECIFIED BELOW:
 - THE DESIRED EMNR SAND LAYER IN VEGETATED AREAS IS 6 TO 8 INCHES.
 - THE DESIRED EMNR SAND LAYER IN NON-VEGETATED AREAS IS 6 TO 12 INCHES.
- PLACEMENT OF THE EMNR SAND MATERIAL SHALL BE CONDUCTED IN A CONTROLLED AND ACCURATE MANNER IN SUCH A WAY AS TO CONTROL TURBIDITY TO THE REQUIRED LEVELS SPECIFIED IN THE WATER QUALITY PLAN.
- EMNR SAND SHOULD BE PLACED STARTING AT THE GREATEST DEPTH IN THE PLACEMENT AREA AND MOVING TO THE SHALLOWEST LOCATION.
- SUDDEN DISCHARGES OF LARGE VOLUMES OF SAND THAT RESULT IN LARGE DISPLACEMENTS OR "BOMBING" OF THE UNDERLYING SEDIMENT OR AN EMNR SAND THICKNESS THAT EXCEEDS THE ALLOWABLE TOLERANCES SHALL BE AVOIDED.
- PROVIDE ADVANCE NOTICE TO ALLOW ENGINEER'S PERSONNEL TO OBSERVE EMNR PLACEMENT ACTIVITIES FOR THE PURPOSES OF PLACEMENT VERIFICATION.

MATERIALS (AND EQUIPMENT)

- EMNR SAND
 - THE MATERIAL TO BE USED FOR CONSTRUCTION OF THE EMNR LAYER SHALL BE AN IMPORTED, CLEAN, GRANULAR MATERIAL FREE OF ROOTS, LARGE ORGANIC MATERIAL, CONTAMINANTS, AND ALL OTHER DELETERIOUS AND OBJECTIONABLE MATERIAL.
 - THE MATERIAL SHOULD BE MAIN STEM COLUMBIA RIVER MID-CHANNEL DREDGE SPOILS SUPPLIED BY VARIOUS COMMERCIAL SOURCES.
 - COORDINATE DREDGING ACTIVITIES WITH THE USAGE IN ORDER TO COMPLY WITH THEIR FEDERAL NAVIGATION PROJECT PERMIT. ADDITIONAL PERMIT INFORMATION IS AVAILABLE AT [HTTPS://WWW.NWP.USACE.ARMY.MIL/OP/N/](https://www.nwp.usace.army.mil/op/n/).
 - GRAIN SIZE:

%	PASSING	U.S. SIEVE
100		1/2 INCH
80-100		NO. 10
<5		NO. 200
 - PHYSICAL CHARACTERISTICS: WELL-GRADED, SUBANGULAR TO SUBROUNDED SAND.
 - SAND SHALL BE FREE FROM CHEMICAL CONTAMINANTS PER TESTING DEFINED IN THE REMEDIAL DESIGN REPORT
- EMNR SAND PLACEMENT EQUIPMENT: PROPOSE EQUIPMENT THAT HAS THE ABILITY TO MEET THE FOLLOWING CRITERIA:
 - MINIMIZATION OF THE GENERATION OF SUSPENDED SEDIMENTS DURING SAND PLACEMENT OPERATIONS.
 - CONSISTENT PLACEMENT OF MATERIAL TO THE ALIGNMENTS, GRADES, AND CROSS SECTIONS SHOWN ON THE DRAWINGS AND DETAILED IN THE SPECIFICATIONS.
 - CAPABLE OF PROCESSING NECESSARY VOLUMES OF MATERIAL TO ACHIEVE THE PROJECT DELIVERY SCHEDULE.

SUBMITTALS

- PRE-CONSTRUCTION SUBMITTALS:
 - SUMMARY OF EQUIPMENT OPERATORS' EXPERIENCE SHOWING THAT THE OPERATORS HAVE A MINIMUM OF 3 YEARS OF EXPERIENCE WITH THE PROPOSED EQUIPMENT FOR EMNR SPREADING.
 - TWO WEEKS PRIOR TO DELIVERY TO THE SITE, THE CONTRACTOR SHALL CONDUCT ONE GRADATION TEST ACCORDING TO ASTM D422 FOR EMNR SAND FROM EACH SOURCE THAT IS PROPOSED FOR THE PROJECT. THE TEST RESULTS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO MATERIAL DELIVERY TO THE SITE.
- CONSTRUCTION SUBMITTALS:
 - A PORTION OF THE REQUIRED CONTRACTOR'S WORK PLAN SHALL OUTLINE MATERIALS, EQUIPMENT, AND METHODS TO BE USED TO PLACE EMNR SAND AND FISH MIX ROCK AS SHOWN ON THE DRAWINGS AND DESCRIBED IN THESE SPECIFICATIONS. DESCRIPTIONS SHALL INCLUDE:
 - EQUIPMENT AND PROCEDURES TO BE USED TO PLACE MATERIALS AND DEMONSTRATE THAT THEY ARE APPROPRIATE TO DESCRIBED SCOPE OF WORK.
 - EQUIPMENT AND TEMPORARY FACILITY REQUIREMENTS AND PROCEDURES TO BE USED TO STAGE, STORE, AND TRANSPORT MATERIALS PRIOR TO PLACEMENT.
 - PROPOSED METHODS TO SYSTEMATICALLY EXECUTE THE MATERIAL PLACEMENT IN REQUIRED LIFT THICKNESSES (E.G. SWING PATTERN, BUCKET SIZE, ETC.).
 - USACE DREDGE PERMIT FOR EMNR SAND, AS APPLICABLE TO PROPOSED SOURCE.
 - THE CONTRACTOR SHALL SUBMIT ALL FILL MATERIAL SOURCE INFORMATION INCLUDING A CONTACT NAME, ADDRESS, PHONE NUMBER FOR EACH PRODUCT AND/OR SOURCE TO THE ENGINEER FOR APPROVAL.

PROJECT: 1653.01.02

DESIGNED: C. GOKCORRA

DRAWN: G. KALMETA

CHECKED: E. BAKKOM

SCALE

0 50' 100'

NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

SHEET TITLE

EMNR SAND PLACEMENT

SHEET

C4.2

RECORD DRAWING

MAUL FOSTER ALONG I

3140 NE BROADWAY STREET

PORTLAND, OR 97232

PHONE: 971.344.2139

www.maulfooster.com

REGISTERED PROFESSIONAL ENGINEER 70867PE

OREGON JAN. 11, 2005

CEN. E. GOKCORRA

EXPIRES: 6/30/2025

This digital seal certifies the signatory and document content.

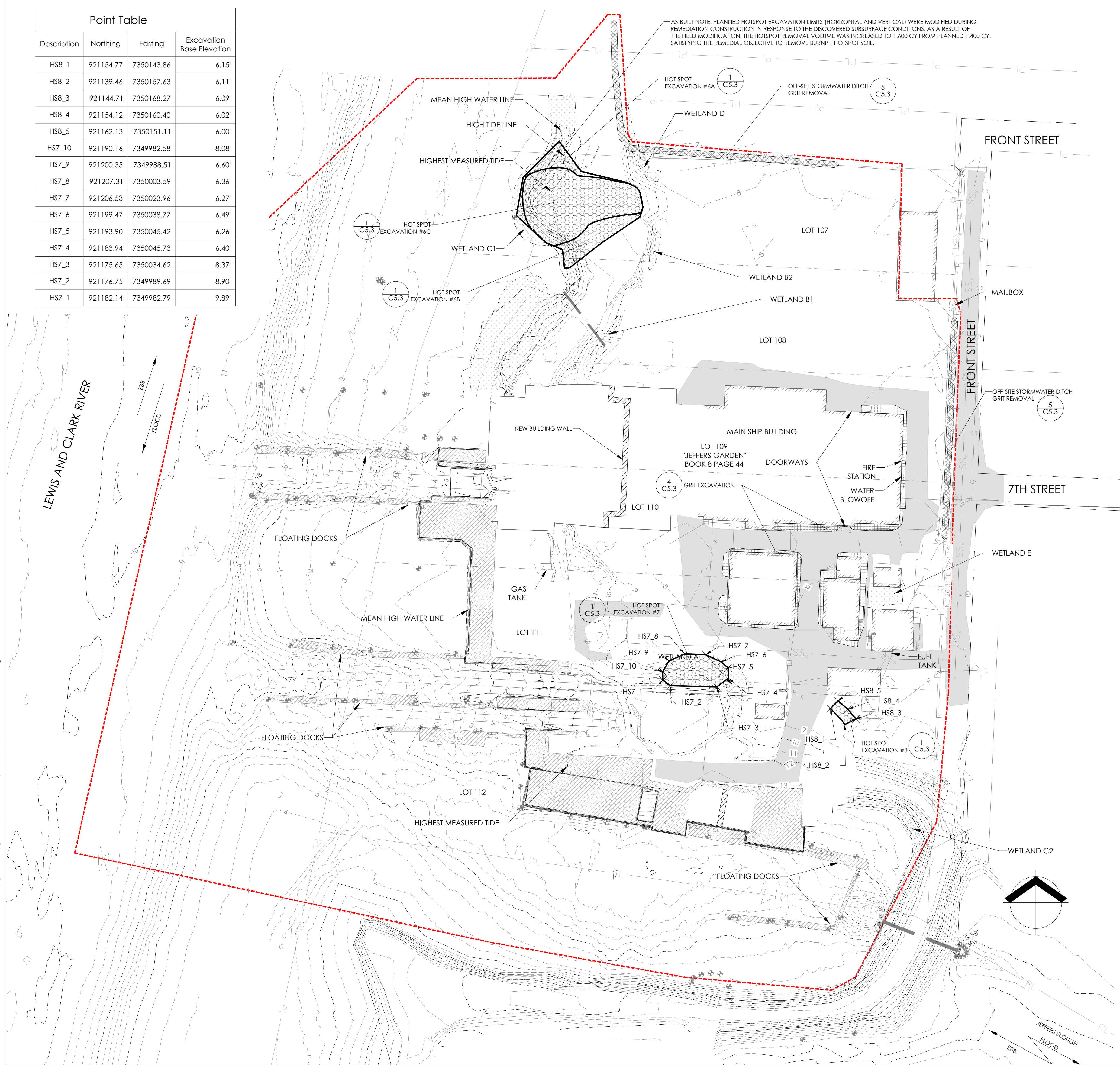
AMCCO UPLAND & SEDIMENT REMEDIATION PLAN

ASTORIA MARINE CONSTRUCTION CO.

ASTORIA, OREGON

PLOTTED BY: Cam Galano FILENAME: G:\00_MIA CH\3D\00_PROJECT\0288\04\03_AMCCO\PLANS\AS-BUILT\C5.UPLAND EXCAVATION PLAN.dwg PLOTTED ON: 2024-01-25 8:02 AM

Point Table			
Description	Northing	Easting	Excavation Base Elevation
HS8_1	921154.77	7350143.86	6.15'
HS8_2	921139.46	7350157.63	6.11'
HS8_3	921144.71	7350168.27	6.09'
HS8_4	921154.12	7350160.40	6.02'
HS8_5	921162.13	7350151.11	6.00'
HS7_10	921190.16	7349982.58	8.08'
HS7_9	921200.35	7349988.51	6.60'
HS7_8	921207.31	7350003.59	6.36'
HS7_7	921206.53	7350023.96	6.27'
HS7_6	921199.47	7350038.77	6.49'
HS7_5	921193.90	7350045.42	6.26'
HS7_4	921183.94	7350045.73	6.40'
HS7_3	921175.65	7350034.62	8.37'
HS7_2	921176.75	7349989.69	8.90'
HS7_1	921182.14	7349982.79	9.89'



UPLAND EXCAVATION PLAN LEGEND

- DOCK PILING
 EXISTING ASPHALT
 EXISTING DOCK
 EXISTING GRAVEL SURFACE
 WETLAND
 HOT SPOT EXCAVATION
 GRIT EXCAVATION
- EXISTING MINOR CONTOUR
 EXISTING MAJOR CONTOUR
 LOT LINE
 MEAN HIGH WATER LINE - 7.93' (NAVD88)
 HIGH TIDE LINE - 8.63' (NAVD88)
 HIGHEST MEASURED TIDE - 11.9' (NAVD88)

UPLAND EXCAVATION NOTES
 SEQUENCING

- UPLAND HOT SPOT EXCAVATIONS SHALL FOLLOW NEAR SHORE DREDGING AND SEDIMENT DEWATERING OPERATIONS.
- CONTRACTOR TO STAKE HOT SPOT AREAS PER COORDINATE TABLE (TO BE PROVIDED AT TIME OF CONSTRUCTION) AND START EXCAVATION WORK AFTER ENGINEER'S APPROVAL OF THE HOT SPOT BOUNDARIES.
- CONTRACTOR TO COORDINATE ENGINEER'S EVALUATION AND SAMPLING OF EXCAVATED HOT SPOT AREAS, AND START BACKFILL UPON APPROVAL FROM ENGINEER.
- EXCAVATE OFFSITE DITCHES AND PERFORM ONSITE GRIT REMOVAL.

EXCAVATION NOTES

- PROVIDE SHORING IN ACCORDANCE WITH SECTION 15.3.26 AND OTHER APPLICABLE SECTIONS OF THE MOST CURRENT VERSION OF THE ODOT GEOTECHNICAL DESIGN MANUAL (GDM).
- EXCAVATION LIMITS SHALL BE STAKED BY SURVEYOR, AND TO BE CONFIRMED WITH CQA OFFICER.
- PROTECT SURVEY BENCH MARKS AND MONUMENTS, FENCES, PAVING, AND STRUCTURES TO REMAIN FROM EQUIPMENT AND VEHICULAR TRAFFIC.
- PROTECT ABOVE- AND BELOW-GRADE UTILITIES THAT ARE TO REMAIN, IF APPLICABLE.
- NOTIFY ENGINEER OF UNEXPECTED SUBSURFACE CONDITIONS (SUCH AS VISIBLE CONTAMINATION) AND DISCONTINUE AFFECTED WORK IN AREA UNTIL NOTIFIED TO RESUME WORK.
- ALL EARTHWORK ACTIVITIES SHALL BE DONE IN STRICT COMPLIANCE WITH ALL FEDERAL, STATE, AND LOCAL STANDARDS AND REGULATIONS FOR EXCAVATION, TRENCHES, AND EARTHWORK, AND IN ACCORDANCE WITH THE PROVISIONS OF THE SAFETY AND HEALTH REGULATIONS OF THE DEPARTMENT OF LABOR, BUREAU OF LABOR STANDARDS.
- HOT SPOT EXCAVATIONS SHALL BE LIMITED TO AREAS IDENTIFIED ON THIS PLAN SHEET.
- NOTIFY THE ENGINEER OF HOT SPOT STAKING FOR APPROVAL PRIOR TO COMMENCING EXCAVATION.
- EXCAVATION SHALL BE PERFORMED IN A MANNER THAT WILL CONTROL DUST GENERATION, LIMIT SPILLS, AND PREVENT CONTAMINATED MATERIAL FROM MIXING WITH UNCONTAMINATED MATERIAL.
- SOIL EXCAVATION SHALL BE CONDUCTED IN A MANNER THAT WILL NOT RESULT IN SPILLS TO THE LEWIS AND CLARK RIVER.
- EXCAVATED HOT-SPOT SOIL, OFFSITE DITCH SOIL, AND GRIT REMOVAL SHALL BE STOCKPILED AT THE SOIL MANAGEMENT AREA.
- STOCKPILED SOILS SHALL BE COVERED WITH EROSION CONTROL MATTING OR PLASTIC AT THE END OF EACH WORKING DAY TO PREVENT OR MINIMIZE WIND EROSION OR STORMWATER CONTACT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING THE OFF-SITE MOVEMENT OF ALL WASTE MATERIALS, SPILLS, ETC., RESULTING FROM THE CONSTRUCTION PROCESS, AND SHALL BE RESPONSIBLE FOR ANY CONSEQUENCES OF ANY SUCH OFF-SITE MOVEMENT OF THE MATERIAL.
- EXCAVATIONS SHALL BE COMPLETED TO THE DEPTH OR ELEVATION SHOWN IN THE TABLE BELOW:

	Excavation #6A (Burn Pit)	Excavation #6B (Burn Pit)	Excavation #6C (Burn Pit)	Excavation #7 (PCB)	Excavation #8 (TPH)
Area (SF)	8070	3685	930	1560	252
Target Depth Below Existing (ft) or Elevation (EL- ft)	2	4	EL-5.10	2	2
Target Volume (cy)	600	550	250	94	11
Wetlands (Y/N)	Y	Y	N	Y	N

- EXCAVATION TOLERANCE IS BETWEEN +0.1 FT (ABOVE) TO -0.25 FT (BELOW) THE DEPTH INDICATED ON THIS PLAN SHEET.
- NOTIFY ENGINEER WHEN EXCAVATION HAS REACHED REQUIRED ELEVATIONS FOR EVALUATION.
- EXCAVATED MATERIALS FROM HOT SPOT #6A-6C SHALL BE TREATED BY PHOSPHATE LIQUIDS (ADT ENVIRONMENTAL) OR BY MIXING WITH 3% (BY WEIGHT) CEMENT UNTIL LEACHING CHARACTERISTICS HAVE BEEN STABILIZED.
- ALL EXCAVATED HOT SPOT SOIL SHALL BE DISPOSED AT A SUBTITLE D LANDFILL THAT HAS BEEN APPROVED BY THE OWNER AND ENGINEER.

BACKFILL NOTES

- OBTAIN SURVEY OF FINAL EXCAVATION SUBGRADE LIMITS PRIOR TO DEMARCATION AND BACKFILLING.
- AFTER EVALUATION AND CONFIRMATION (BY THE ENGINEER) OF THE EXCAVATED HOT SPOT AREAS, THE CONTRACTOR SHALL INSTALL THE APPROPRIATE DEMARCATION MATERIAL TO COVER THE FULL EXTENT OF HOT SPOTS #7 AND #8 PRIOR TO BACKFILL. HOT SPOTS 6A-6C SHALL NOT BE DEMARCATED.
- BACKFILL FOR HOT SPOTS #7 AND #8: BACKFILL AND COMPACT SITE SPOILS AND IMPORTED CLEAN FILL TO THE SURROUNDING GRADES IN LAYERS NOT EXCEEDING 8-INCH THICKNESS, FOLLOWED BY A MINIMUM OF 5 PASSES WITH A VIBRATORY ROLLER OR HEAVY PLATE COMPACTOR.
- BACKFILL FOR HOT SPOTS #6A THROUGH #6C: BACKFILL AND COMPACT DIKE CONSTRUCTION MATERIAL TO THE EXISTING GRADE PER DIKE BACKFILL REQUIREMENTS AS IDENTIFIED ON SHEET C6.0.

MATERIALS (AND EQUIPMENT)

- SHORING MATERIALS TO BE CONSISTENT WITH APPROVED SHORING SUBMITTALS, AS IDENTIFIED IN SUBMITTALS SECTION.
- DEMARCATION MATERIAL - BELTECH 1696, 3 OZ/SY WOVEN POLYPROPYLENE, ORANGE OR APPROVED EQUAL
- SITE SPOILS FROM STORMWATER SYSTEM ASSOCIATED EXCAVATIONS
- IMPORTED CLEAN BACKFILL SATISFYING OREGON DEQ CLEAN FILL CRITERIA FOR SOIL
- DIKE CONSTRUCTION MATERIAL - SEE DIKE EXTENSION PLAN
- VIBRATORY ROLLER OR HEAVY PLATE COMPACTOR FOR COMPACTING BACKFILL
- SHEEPSFOOT ROLLER FOR COMPACTING DIKE BACKFILL SOIL, OR AS APPROVED IN THE DIKE EXTENSION PLAN.

SUBMITTALS

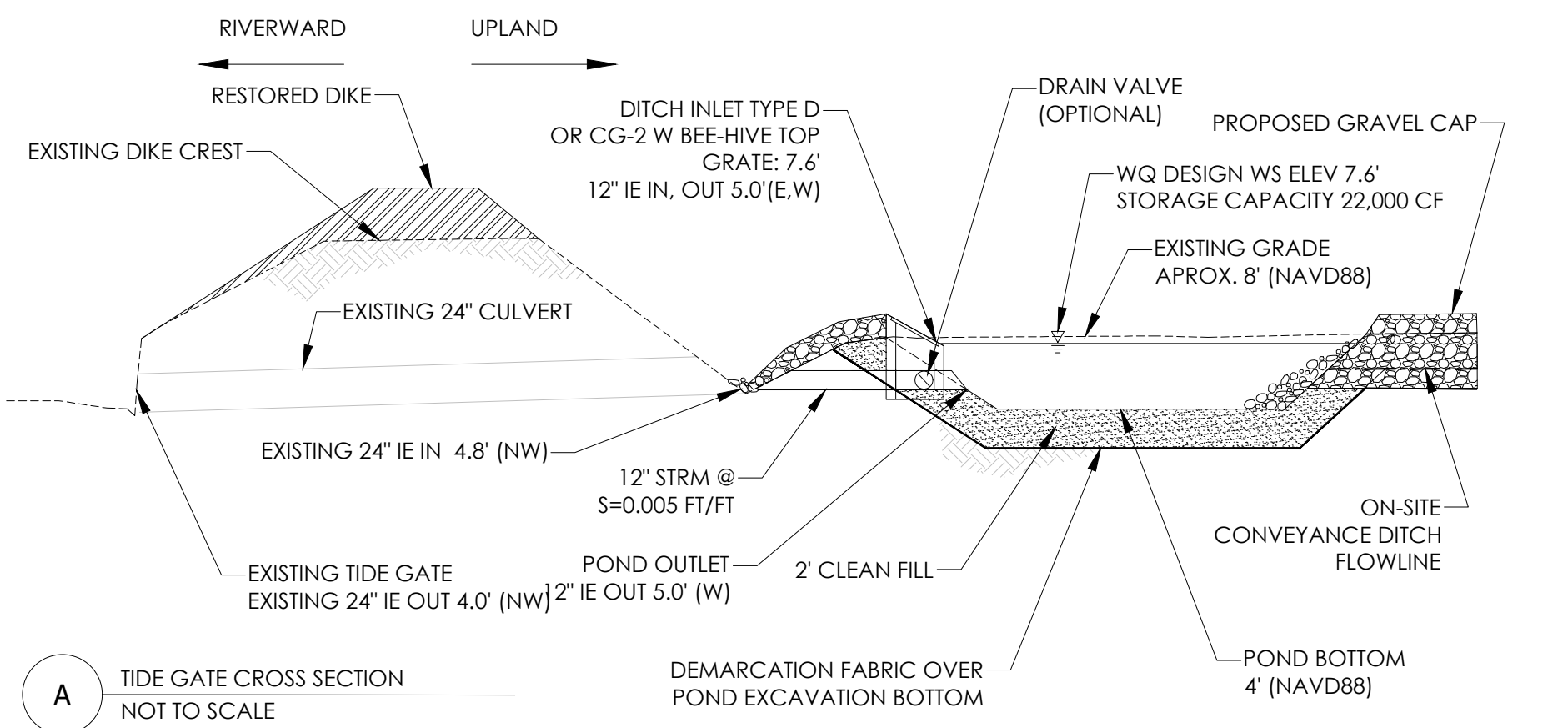
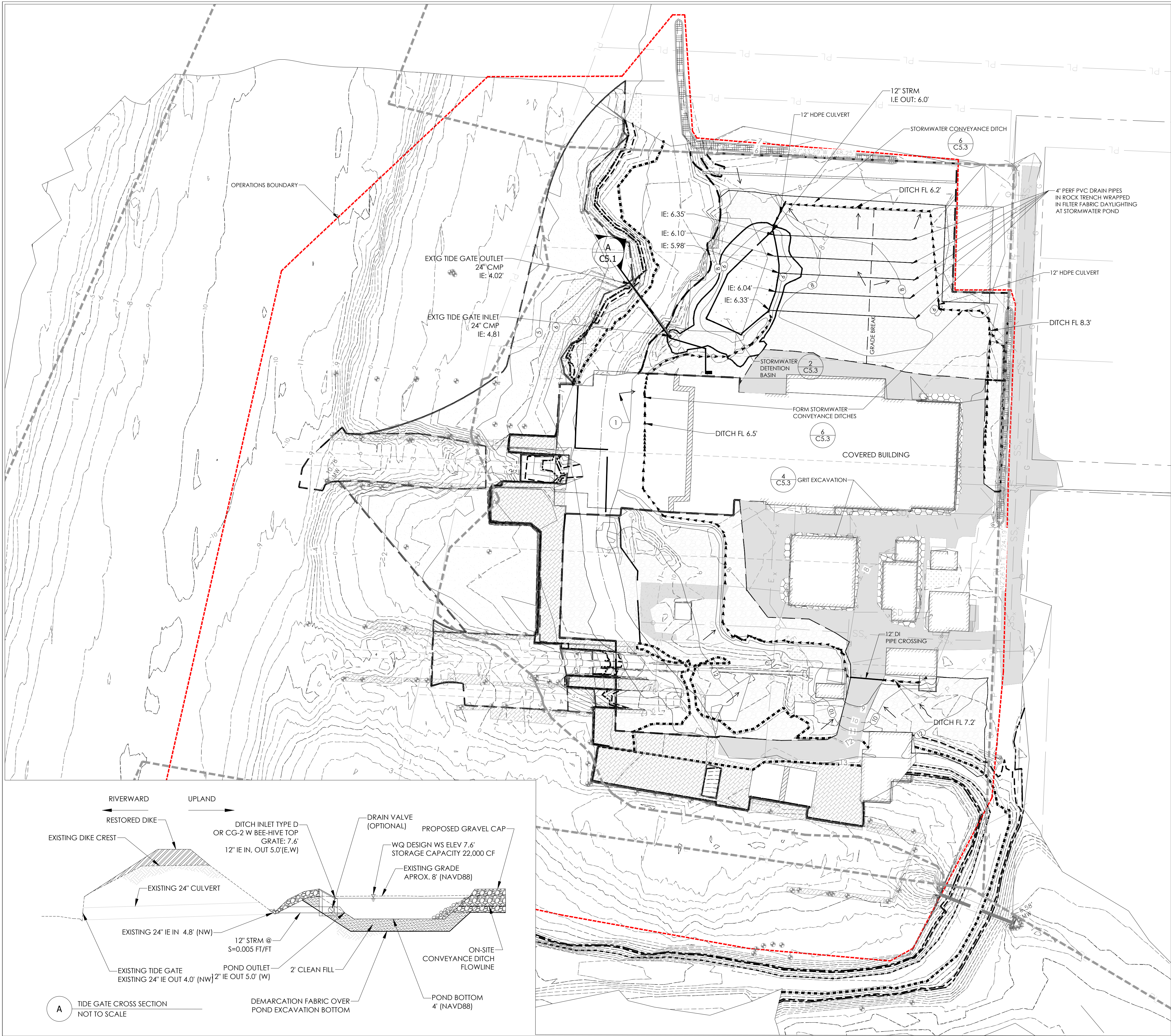
- SD-01 (PRECONSTRUCTION SUBMITTALS):
 - COPIES OF LICENSES AND CERTIFICATIONS AS REQUIRED BY ALL APPLICABLE JURISDICTIONS TO COMPLETE THE SPECIFIED WORK INCLUDING ALL APPROPRIATE HAZWOPER CERTIFICATIONS.
 - A WRITTEN STATEMENT INDICATING THE SOURCE, CHARACTER, AND PROPOSED USE OF ALL IMPORTED MATERIALS WITH THE SAMPLES. A 50-LB SAMPLE OF EACH PROPOSED SOURCE SHALL BE SUBMITTED TO THE ENGINEER FOR EVALUATION. ONCE PRELIMINARY APPROVAL IS PROVIDED, THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE ENGINEER TO OBTAIN SAMPLES TO VERIFY THAT OREGON DEQ CLEAN FILL CRITERIA ARE MET.
 - SUBMIT A SHORING DESIGN SUMMARY PREPARED BY THE SHORING DESIGN ENGINEER, TO ACCOMPANY THE WORKING DRAWINGS AND CALCULATIONS. INCLUDE THE FOLLOWING IN THE SUMMARY:
 - A LIST OF SHORING MEMBERS WITH THEIR CAPACITIES AND DESIGN STRESSES
 - DESIGN LOADING ASSUMPTIONS FOR EACH MEMBER
 - DESIGN SPECIFICATIONS
 - SUBSURFACE MATERIALS AND CONDITIONS USED IN DESIGN
- SD-02 (CONSTRUCTION SUBMITTALS):
 - DISPOSAL RECEIPTS FOR ALL MATERIALS DISPOSED OFF SITE.
 - DAILY FIELD REPORTS AND WEEKLY SUMMARIES (LOCATION, PERCENT COMPLETE, STOCKPILES GENERATED)
 - RECEIPTS FOR ANY MATERIALS RECYCLED OR SALVAGED AT AN OFF-SITE FACILITY.

ISSUE	DATE	DESCRIPTION
B	01/06/2023	RECORD DRAWING DOCUMENT
A	03/27/2020	100% DESIGN DOCUMENTS

PROJECT: 1653.01.02
DESIGNED: C. GOKCORA
DRAWN: G. KALMETA
CHECKED: E. BAKKOM
SCALE
0 50' 100'
NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.
SHEET TITLE
UPLAND EXCAVATION PLAN
SHEET
C5.0

RECORD DRAWING

PLOTTED BY: Cam Galanos FILENAME: G:\00_MIA CH 3D\00_PROJECT\2028\04\03_AMCCO\PLANS\AS-BUILT\C5.1 UPLAND SUBGRADE PLAN.dwg PLOTTED ON: 2023-01-10 12:15 AM



UPLAND EXCAVATION PLAN LEGEND

- DOCK PILING
- EXISTING ASPHALT
- EXISTING DOCK
- EXISTING GRAVEL SURFACE
- WETLAND
- PROPOSED FLOW DIRECTION
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- LOT LINE

UPLAND SUBGRADE NOTES

SEQUENCING

- SUBGRADE GRADING EFFORT TO FOLLOW COMPLETION OF UPLAND HOT SPOT EXCAVATION ACTIVITIES
- EXCAVATE STORMWATER BASIN
- EXCAVATION OF NEW ON-SITE STORMWATER CONVEYANCE DITCHES
- GRADE SUBGRADE TOWARD ON-SITE STORMWATER FACILITIES

CONSTRUCTION NOTES

- CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO ENSURE NO DAMAGE OCCURS TO EXISTING STRUCTURES TO BE PRESERVED, THE EXISTING CLEAN SOIL CAP, AND ACTIVE UTILITIES.
- DAMAGE TO EXISTING STRUCTURES, AND ACTIVE UTILITIES RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT NO ADDITIONAL EXPENSE TO THE OWNER.
- SUBGRADE SPOILS SHALL BE MANAGED ONSITE TO ESTABLISH DESIRED DRAINAGE PATTERNS AND SHALL NOT BE DISPOSED OFFSITE.
- EXCAVATE ON-SITE STORMWATER DITCHES TO THE GRADES SHOWN ON THE PLAN.
- STOCKPILE SPOILS FROM DITCH AND BASIN EXCAVATION FOR USE IN GRADING ACTIVITIES.
- CAST SPOILS DURING SUBGRADE ESTABLISHMENT OUT THE SITE AS NEEDED TO ASSURE POSITIVE DRAINAGE.
- CONTRACTOR TO SLOPE SUBGRADE TO PROVIDE POSITIVE DRAINAGE, A MINIMUM ONE HALF (0.5) PERCENT SLOPE, TOWARD THE ON-SITE STORMWATER FACILITIES (DITCHES AND BASIN).
- BREAKLINE LOCATION(S) SHOWN ON THIS SHEET ARE APPROXIMATE, AND CAN BE MODIFIED BY THE CONTRACTOR TO OPTIMIZE THE SUBGRADE GRADING EFFORT, PROVIDING POSITIVE DRAINAGE TOWARD THE ON-SITE STORMWATER FACILITIES.
- PROVIDE AN EVEN SUBGRADE SURFACE WITH NO OBJECTS PROTRUDING THAT MAY IMPEDE DEMARCATION LAYER INSTALLATION
- COORDINATE SUBGRADE EVALUATION WITH ENGINEER.
- DEMARCATION FABRIC MAY BE INSTALLED AFTER SUBGRADE APPROVAL BY THE ENGINEER.
- PLACED SUBGRADE SHALL MAINTAIN A MINIMUM OF 0.5% SLOPE.

SUBMITTALS

- SD-01 (PRECONSTRUCTION SUBMITTALS)
- SD-02 (CONSTRUCTION SUBMITTALS):
 - GEOTEXTILE SUBGRADE SURVEY: ONE COMPLETE SUBGRADE SURVEY AND TRIANGULATED IRREGULAR NETWORK (TIN) SURFACE, PREPARED BY A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF OREGON, WITH X,Y,Z COORDINATES AT MAXIMUM GRID SPACING OF 30 FEET AND RECORDING GRADE BREAKS AND OTHER FEATURES OF INTEREST (STRUCTURES, PAVING, DITCHES, ETC). THIS SURVEY SHALL BE PROVIDED TO AND APPROVED BY THE ENGINEER PRIOR TO CONTRACTOR PLACING DEMARCATION FABRIC.

KEYED NOTES

- DIKE DRAINAGE TO FIELD ROUTED TO STORMWATER SWALE.

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AMCCO UPLAND & SEDIMENT
REMEDATION PLAN

ASTORIA MARINE CONSTRUCTION CO.

ASTORIA, OREGON

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B	01/06/2023	RECORD DRAWING DOCUMENT
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PROJECT: 1653.01.02
DESIGNED: C. GOKCORO
DRAWN: G. KALMETA
CHECKED: E. BAKKOM

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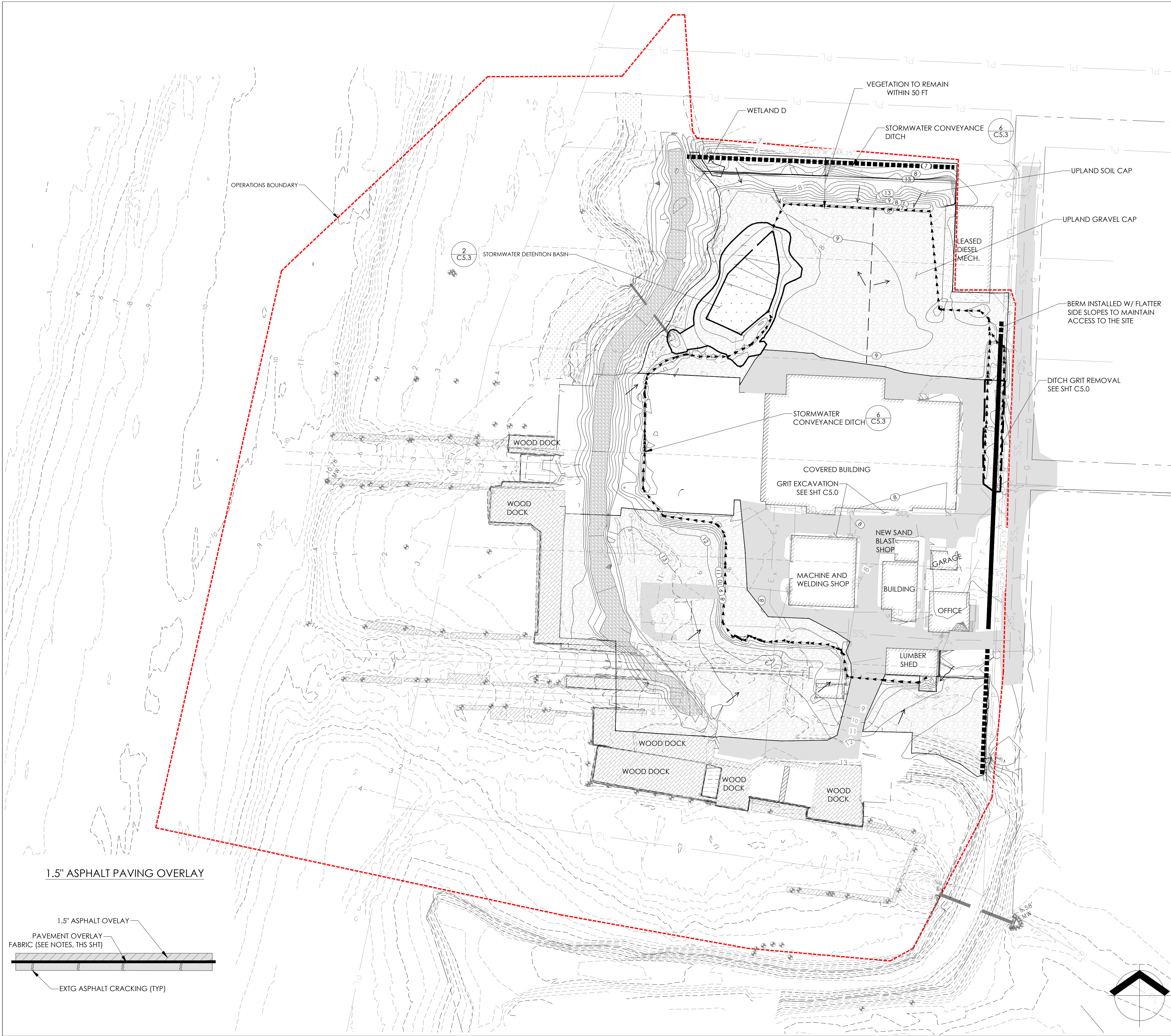
UPLAND SUBGRADE
PLAN

SHEET

C5.1

RECORD DRAWING

PLOTTED BY: Cam Galscott FILENAME: G:\00_MIA CH 3D\00_PROJECT\028\04\03_AMCCO\PLANS\AS-BUILT\C5.3 UPLAND CAPPING PLAN.dwg PLOTTED ON: 2024-01-09 11:51 PM



UPLAND EXCAVATION PLAN LEGEND

- DOCK PILING
- EXISTING ASPHALT
- EXISTING DOCK
- EXISTING GRAVEL SURFACE
- ACCESS ROAD ABOVE LEVEE
- UPLAND GRAVEL CAP
- SOIL CAP
- TOPSOIL
- WETLAND

- STORMWATER CONVEYANCE DITCH
- BERM
- PROPOSED FLOW DIRECTION
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- LOT LINE

UPLAND CAPPING NOTES
SEQUENCING

- OBTAIN SUBGRADE APPROVAL, INCLUDING UPLAND HOT SPOTS BACKFILLING APPROVAL, FROM ENGINEER
- PLACE DEMARCATION LAYER
- CONSTRUCT SOIL CAPS PRIOR TO GRAVEL CAP

GENERAL CAPPING NOTES

- A DEMARCATION LAYER SHALL BE INSTALLED OVER THE ENTIRE AREA OF THE SITE EAST OF THE DIKE.
- DEMARCATION FABRIC INSTALLATION SHALL EXCLUDE HOT SPOT EXCAVATION AREAS WHERE DEMARCATION MATERIALS HAVE ALREADY BEEN INSTALLED.
- DEMARCATION FABRIC SHALL BE PLASTIC MESH FENCE WITHIN THE LANDSCAPE BUFFER AND STORMWATER SWALE TO PROVIDE DELINEATION BETWEEN THE CLEAN MATERIAL AND POTENTIALLY CONTAMINATED MATERIALS UNDERNEATH.

GRAVEL CAP NOTES

- CAP MATERIAL SHALL BE PLACED AND COMPACTED IN A SINGLE 12-INCH LIFT.
- GRAVEL CAP MATERIAL SHALL BE ROLLED OR PLATE COMPACTED UNTIL A FIRM UNYIELDING SURFACE HAS BEEN ESTABLISHED.
- CAP THICKNESS SHALL BE FIELD VERIFIED BY THE ENGINEER AT GRADE STAKE LOCATIONS AND BY TEST PITTING AT A MINIMUM OF FIVE LOCATIONS SELECTED AT RANDOM.

PAVING CAP NOTES

- SAWCUT OR GRIND TRANSITION BETWEEN EXISTING ASPHALT AND OVERLAY
- ASPHALT, TACK COAT AND PAVEMENT OVERLAY GEOTEXTILE PER 2018 ODOT STANDARD SPECIFICATIONS.
- PREPARE SURFACE, APPLY SEALANT, PLACE GEOTEXTILE AND PLACE OVERLAY PAVEMENT AS SPECIFIED IN 2018 ODOT STANDARD SPECIFICATIONS SECTIONS 00350.41 (F), AND 00748.

CLEAN SOIL CAP AT LANDSCAPE BUFFER

- SOIL CAP MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING 8-INCH THICKNESS AND LOOSELY TRACKED INTO PLACE USING TRACKED EQUIPMENT. HAND PLACEMENT AROUND ESTABLISHED VEGETATION IS REQUIRED.
- CAP THICKNESS SHALL BE FIELD VERIFIED BY THE ENGINEER AT GRADE STAKE LOCATIONS AND AT A MINIMUM OF FIVE LOCATIONS SELECTED AT RANDOM.
- THE CAPPED AREAS SHALL BE VEGETATED IN ACCORDANCE WITH THE LANDSCAPE PLAN.

MATERIALS (AND EQUIPMENT)

- GRAVEL CAP DEMARCATION FABRIC - BELTECH 1696, 3 OZ/SY WOVEN POLYPROPYLENE, ORANGE OR APPROVED EQUAL
- VEGETATIVE BUFFER DEMARCATION FABRIC - MESH PLASTIC FENCING, ORANGE OR GREEN
- GRAVEL CAPPING MATERIAL - 3/4" TO 1-1/2" MINUS CRUSHED ROCK (OR EQUIVALENT TO SUPPORT STORAGE AND PERIODIC TRUCK DELIVERY)
- CLEAN SOIL CAPPING MATERIAL -
 - IMPORTED CAP MATERIAL SHALL CONSIST OF SANDY-LOAM FROM APPROVED SOURCES, AND SHALL BE FREE OF PARTICLES GREATER THAN 1-INCH IN DIAMETER, ADMIXTURES OF SUBSOIL, CLAY, NOXIOUS WEEDS AND GRASSES (SUCH AS HORSETAIL, QUACKGRASS, JOHNSON GRASS, AND THEIR ROOTS), AND OTHER MATERIAL DELETERIOUS TO PLANT GROWTH OR THAT HINDER GRADING, PLANTING, OR MAINTENANCE OPERATIONS. IMPORTED TOPSOIL SHALL NOT BE DELIVERED IN A FROZEN OR MUDDY CONDITION. PROTECT FROM EROSION AT ALL TIMES DURING TRANSPORT, STOCKPILING, AND PLACEMENT.
 - CONTRACTOR SHALL PROVIDE AN ANALYSIS OF ORGANIC CONTENT FROM EACH BORROW SITE. ACCEPTABLE ORGANIC CONTENT RANGE: 2 TO 10% (AS DETERMINED BY ASTM D 2974)
 - CLEAN FILL SOILS FOR THE VEGETATED SOIL BUFFER MUST HAVE NO MORE THAN 15% CLAY AND OTHER POORLY DRAINING SOIL MATERIALS.
- PAVEMENT OVERLAY GEOTEXTILE - GEOTEXTILE MEETING PROPERTY VALUES FOR PAVEMENT OVERLAY GEOTEXTILE AS SPECIFIED IN 2018 ODOT STANDARD SPECIFICATIONS TABLE 02320-6.

SUBMITTALS

- SD-01 (PRECONSTRUCTION SUBMITTALS)
 - A 50-LB SAMPLE OF EACH PROPOSED SOURCE SHALL BE SUBMITTED TO THE ENGINEER FOR EVALUATION. ONCE PRELIMINARY APPROVAL IS PROVIDED, THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE ENGINEER TO OBTAIN SAMPLES TO VERIFY THAT OREGON DEQ CLEAN FILL CRITERIA ARE MET.
 - TESTING REPORTS FOR FINAL CAP MATERIAL. REPORTS SHALL HAVE GRAIN SIZE DISTRIBUTION (SIEVE ANALYSIS) PER ASTM C 136. CERTIFICATION OF TEST RESULTS, SOURCE, AND SAMPLES OF IMPORTED MATERIALS. MATERIAL TO BE USED AS TOPSOIL SHOULD ALSO INCLUDE SOIL ANALYSIS RESULTS FROM AN APPROVED SOIL TESTING LABORATORY INDICATING THAT IMPORT TOPSOIL MEETS ORGANIC CONTENT REQUIREMENTS.
 - LIST OF PROPOSED PLACEMENT EQUIPMENT.

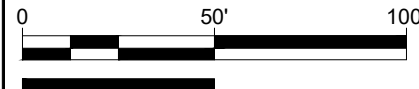


AMCCO UPLAND & SEDIMENT
 REMEDIATION PLAN

ASTORIA MARINE CONSTRUCTION CO.
 ASTORIA, OREGON

ISSUE	DATE	DESCRIPTION
B	01/06/2023	RECORD DRAWING DOCUMENT
A	03/27/2020	100% DESIGN DOCUMENTS

PROJECT: 1653.01.02
 DESIGNED: C. GOKCORA
 DRAWN: G. KALMETA
 CHECKED: E. BAKKOM
 SCALE:



NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

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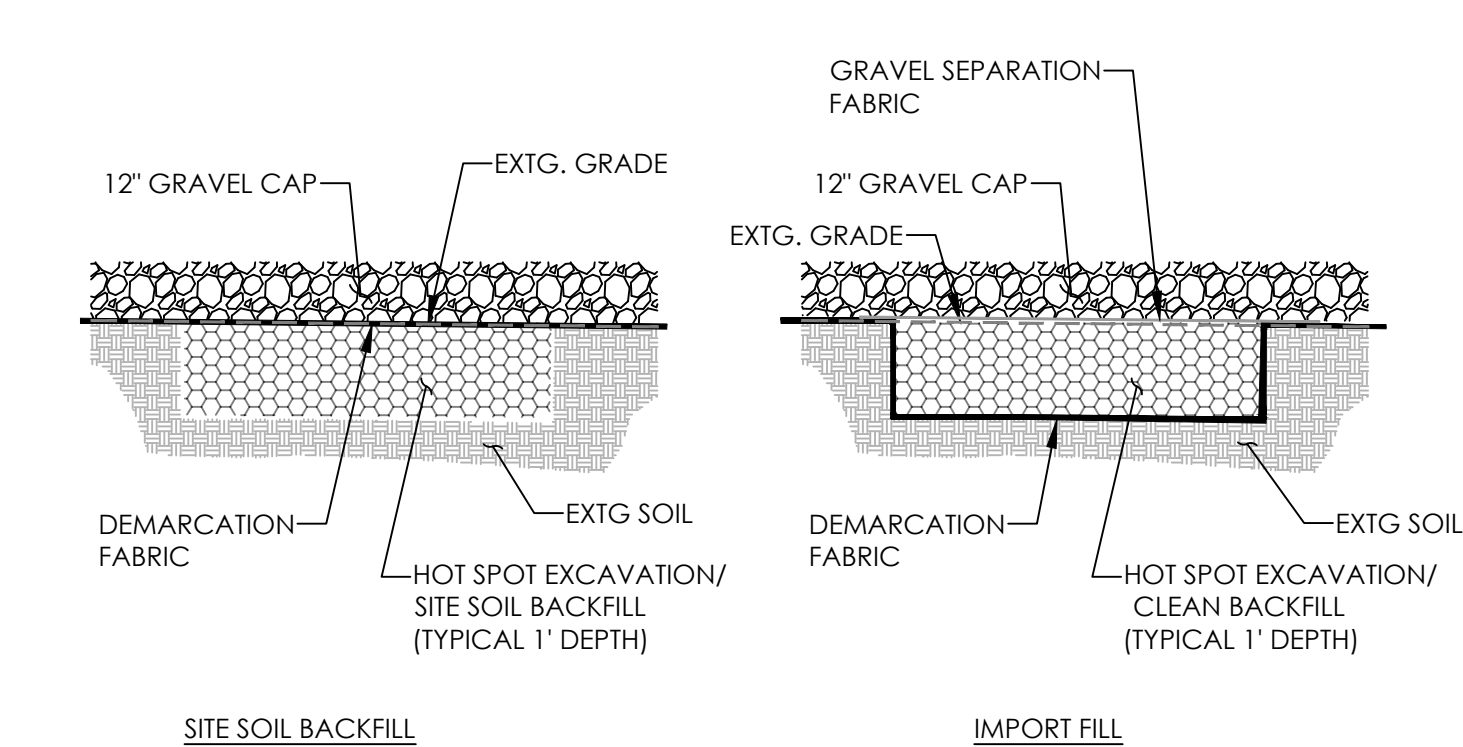
 UPLAND CAPPING
 PLAN

SHEET

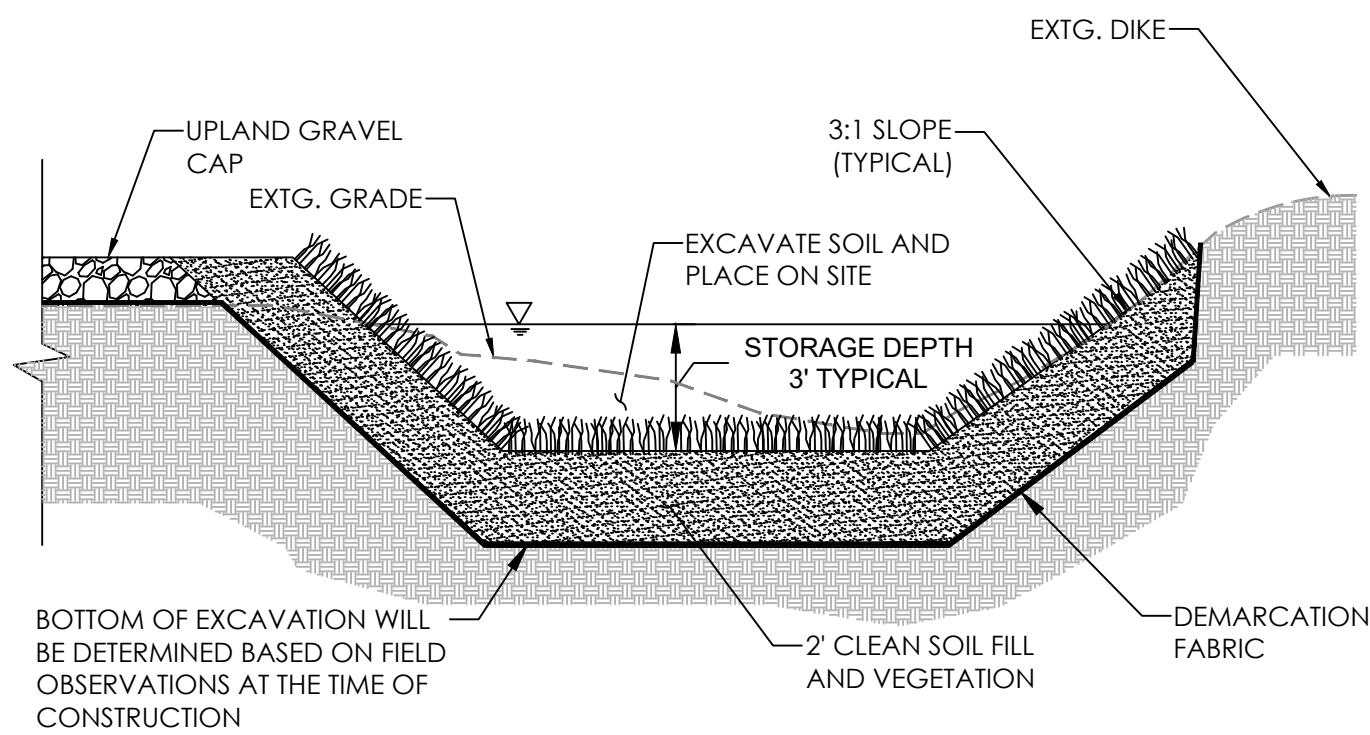
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RECORD DRAWING

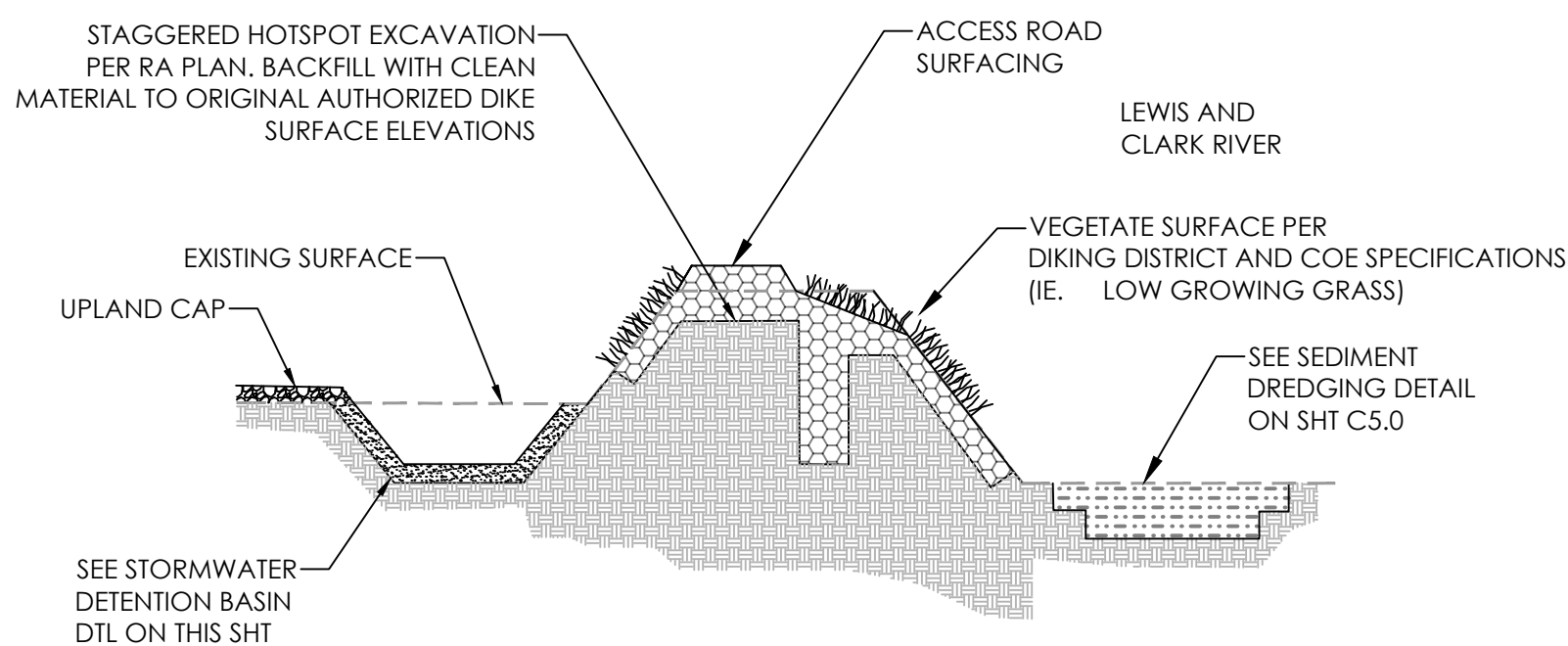
PLOTTED BY: Gorkis Karmali
 FILENAME: G:\00_MIA CH 3D\00_PROJECT\028\04\03_AMCCO\PLANS\AS-BUILT\C5.3 UPLAND REMEDIATION DETAILS.dwg
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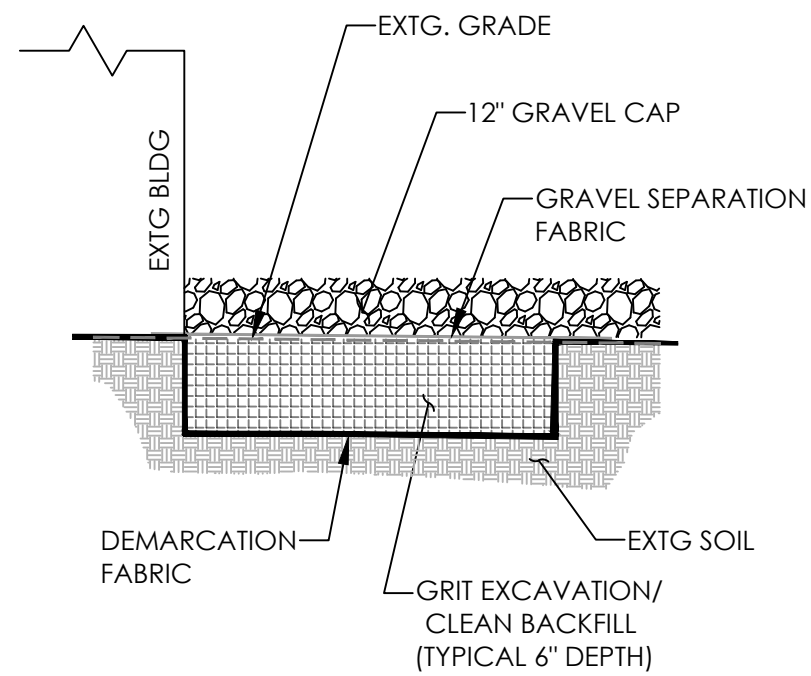
1 HOT SPOT EXCAVATION
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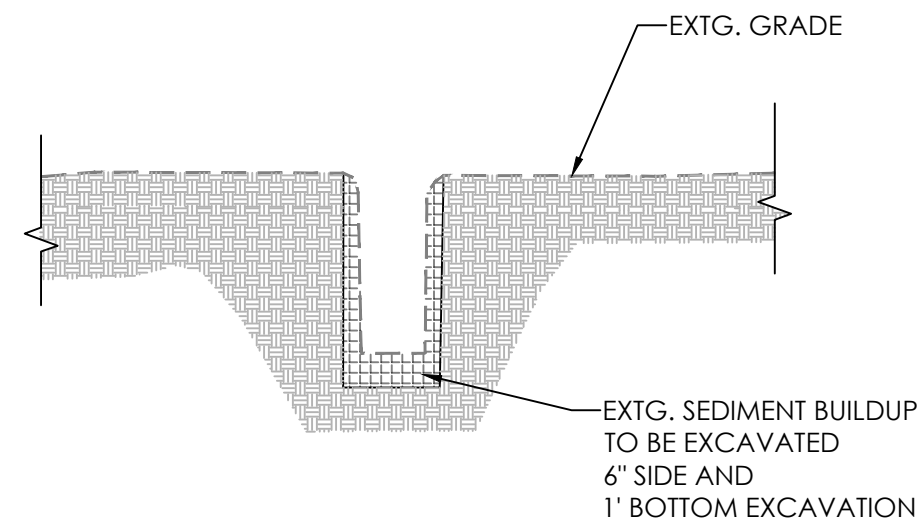
2 STORMWATER DETENTION BASIN
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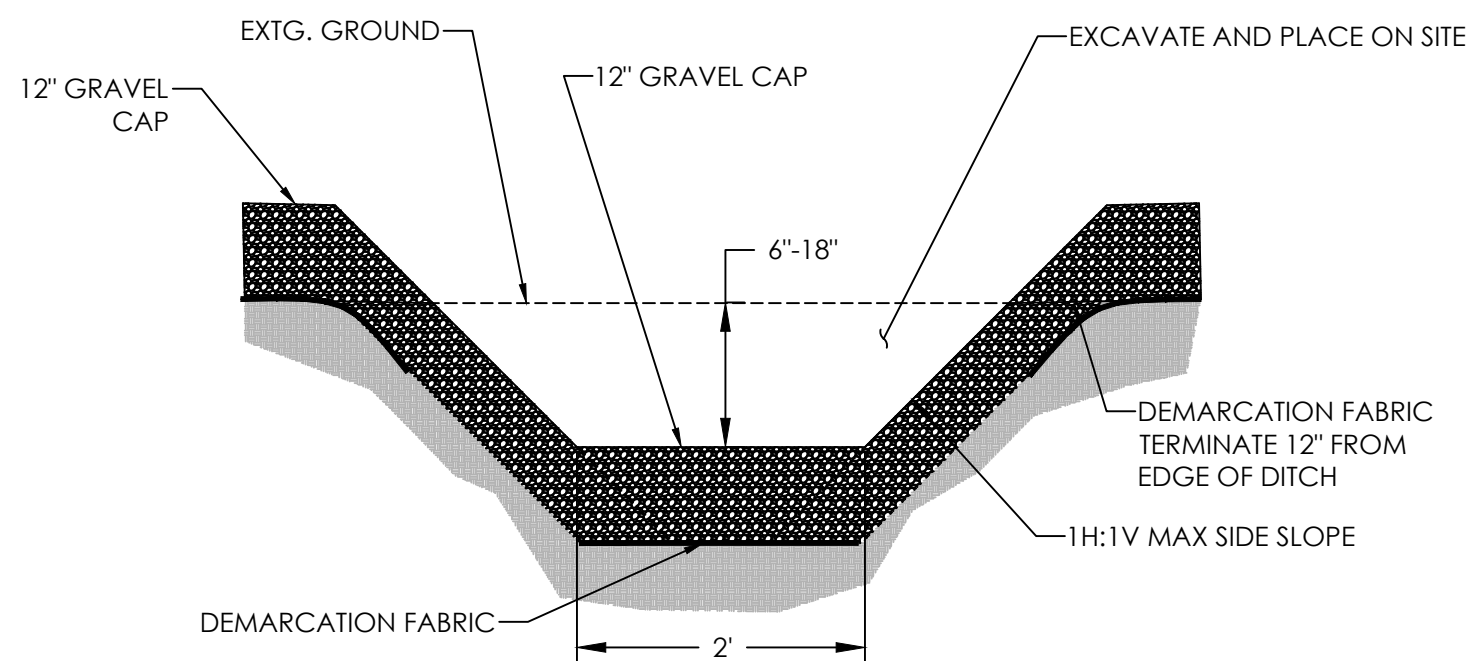
3 DIKE HOT SPOT EXCAVATION
NOT TO SCALE



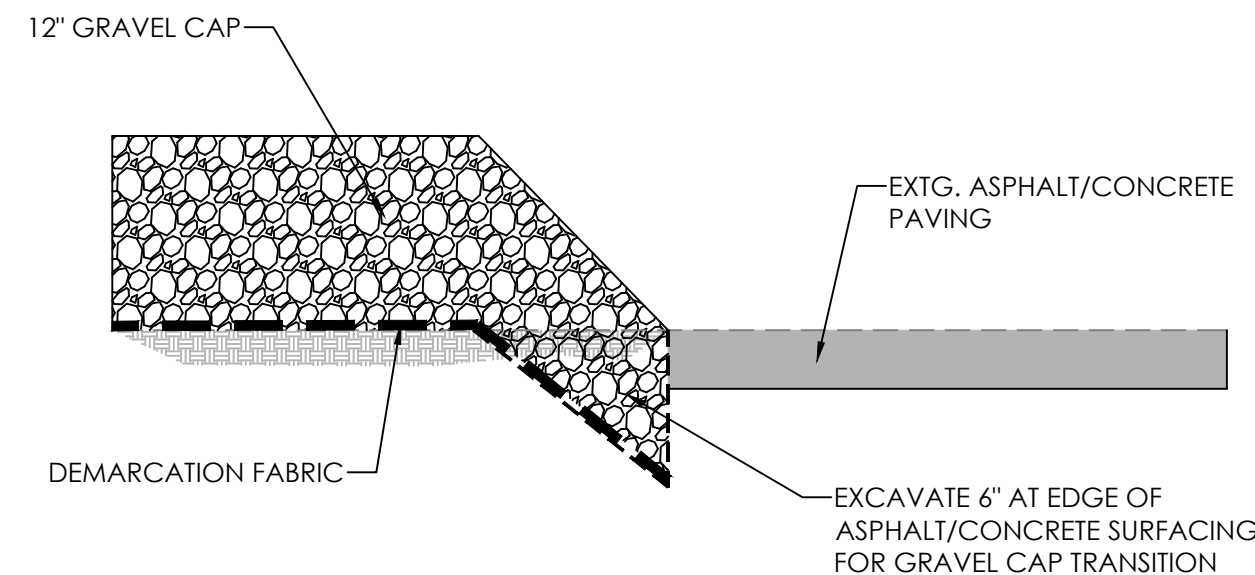
4 GRIT EXCAVATION AND BACKFILL
NOT TO SCALE



5 OFFSITE STORMWATER DITCH
NOT TO SCALE



6 ONSITE STORMWATER CONVEYANCE DITCH
NOT TO SCALE



7 GRAVEL CAP TRANSITION
NOT TO SCALE



AMCCO UPLAND & SEDIMENT
 REMEDIATION PLAN
 ASTORIA MARINE CONSTRUCTION CO.
 ASTORIA, OREGON

ISSUE	DATE	DESCRIPTION
B	01/06/2023	RECORD DRAWING DOCUMENT
A	03/27/2020	100% DESIGN DOCUMENTS

PROJECT: 1653.01.02
 DESIGNED: C. GOKCORRA
 DRAWN: G. KALMETA
 CHECKED: E. BAKKOM
 SCALE

DRAWING NOT TO SCALE

SHEET TITLE
 UPLAND
 REMEDIATION
 DETAILS

SHEET
 C5.3

RECORD DRAWING

NOTE:
NAVD 88 DATUM BASED SURVEYED SITE
ELEVATIONS WERE COMPARED TO THE 1948
AMCCO PLANT ARRANGEMENT PLAN, JULY 1948,
ELEVATIONS, AND FOUND TO BE WITHIN 0.25 INCH
OF EACH OTHER ON TWO DIFFERENT LOCATIONS
ADJACENT TO THE BUILDING, AS IDENTIFIED (BLDG
ENTRANCE BETWEEN MARINeway#3 AND #4,
AND THE NORTH ENTRANCE TO THE BUILDING
FROM BUILDING MIDPOINT. THIS DISCREPANCY IS
ASSUMED TO BE NEGLIGIBLE FOR ANALYZING
EXTENT OF THE DIKE FOOTPRINT, AND PLAN
ELEVATIONS ARE USED FOR BUILDING INTERIOR
TOP OF SLAB ELEVATIONS TO CALCULATE AND
DRAFT THE FOOTPRINT.

AQUATIC
DEVELOPMENT
ZONE

AQUATIC
CONSERVATION 2
ZONE

RURAL
COMMUNITY
RESIDENTIAL ZONE

1937 AUTHORIZED DIKE PRISM
TOP EL= 10.6' MSL
= 15.0' NAVD88
CREST = 8' WIDE

REMEDATION PLAN LEGEND

- DOCK PILING
- EXISTING ASPHALT
- EXISTING DOCK
- EXISTING GRAVEL SURFACE
- ACCESS ROAD ABOVE LEVEE
- UPLAND GRAVEL CAP
- HOT SPOT EXCAVATION
- GRIT EXCAVATION
- EMNR SAND FILL
- SEDIMENT DREDGING
- BERM
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- LOT LINE
- MEAN HIGH WATER LINE - 7.93' (NAVD)
- HIGH TIDE LINE - 8.63' (NAVD)
- HIGHEST MEASURED TIDE - 11.9' (NAVD)
- INTERIOR WALL TO BE PARTIALLY DEMOLISHED
- DIKE EASEMENT

DIKE EXTENSION NOTES

SEQUENCING

- DIKE EMBANKMENT SHOULD PROCEED UPON COMPLETION OF ALL IN-WATER WORKS (DEMOLITION OF IN-WATER STRUCTURES, SEDIMENT DREDGING, AND PLACEMENT OF EMNR SAND LAYER) AND EXCAVATION AND BACKFILL OF DIKE HOT SPOT.
- CONSTRUCT DIKE EMBANKMENT
- CONSTRUCT TOP OF DIKE ROAD

DIKE CONSTRUCTION NOTES

- REMOVAL OF EXISTING FLOODWALL BETWEEN MARINE WAYS NO. 3 AND 4 SHOULD BE SCHEDULED FOR A PERIOD WHEN THE PROJECTED HIGH TIDE OVER FIVE SUCCESSIVE DAYS IS NOT IN EXCESS OF 8.0 FEET (NAVD 88), UNLESS ALTERNATIVE MEASURES ARE INSTALLED TO PROTECT THE DIKING DISTRICT FROM FLOODING.
- SAWCUT CONCRETE SLAB AND REMOVE CONCRETE SLAB/FOUNDATION STRUCTURES WITHIN THE FOOTPRINT OF THE PROPOSED EARTHEN DIKE, TO THE LIMITS SHOWN ON THIS PLAN SHEET.
- CONDUCT DEFLECTION TESTING IN ACCORDANCE WITH ODOT TM 158 TO EVALUATE SUBGRADE CONDITIONS ALONG DIKE EXTENSION ALIGNMENT.
- REMOVE UNACCEPTABLE (SUBGRADE THAT YIELDS OVER 1-INCH AFTER 5 PASSES WITH A MINIMUM 13-TON WATER TRUCK) SUBGRADE MATERIAL (ORGANICS, GRAVEL, ETC), SCARIFY THE TOP OF THE SUBGRADE AND EACH SUBSEQUENT SOIL LIFT PRIOR TO COMPACTION OF THE NEXT SOIL LIFT TO ENSURE CONTINUITY OF THE COMPACTED SOIL STRUCTURE.
- COORDINATE (NOTIFY 72 HRS IN ADVANCE) SUBGRADE EVALUATION WITH ENGINEER PRIOR TO PLACEMENT OF FIRST LIFT.
- PLACE DIKE EMBANKMENT MATERIAL IN LAYERS NOT EXCEEDING 8-INCH PER LIFT.
- MOISTURE CONDITION AND COMPACT EACH LIFT WITH SHEEPSFOOT ROLLER (BY A MINIMUM 5 PASSES). VERIFY COMPACTION TO 95% STANDARD PROCTOR PER ASTM D698
- CONSTRUCT EARTHEN DIKE TO ELEVATION OF 15.0 FEET WITH RIVERWARD SLOPE AT 3H:1V (HORIZONTAL TO VERTICAL) AND LANDWARD SLOPE AT 3H:1V.
- COORDINATE TOP OF DIKE EVALUATION WITH ENGINEER PRIOR TO START OF DIKE ROAD CONSTRUCTION.
- UPON ENGINEER'S APPROVAL OF DIKE EMBANKMENT CONSTRUCTION, PLACE SEPARATION FABRIC TO SUPPORT MAINTENANCE VEHICLES, CONSISTENT WITH CURRENT CONSTRUCTION STANDARDS.
- CONSTRUCT 10'-FOOT-WIDE, 6-INCH CRUSHED ROCK FOR TOP OF DIKE ROAD AND COMPACT BY MINIMUM OF 5 PASSES WITH A DRUM ROLLER, SETTING THE TOP OF DIKE ROAD ELEVATION TO APPROXIMATELY 15.5 FEET.
- VEGETATE EXPOSED EARTHEN FACES OF CONSTRUCTED DIKE WITH DIKE SEED MIX.

MATERIALS (AND EQUIPMENT)

- DIKE EMBANKMENT MATERIAL: LOCAL CLAY LOAM MATERIAL (OR EQUAL) TO MATCH EXISTING DIKE CONSTRUCTION.
- DIKE ROAD WOVEN SEPARATION GEOTEXTILE.
- CRUSHED ROCK FOR TOP OF DIKE ROAD: AGGREGATE BASE IN ACCORDANCE WITH ODOT SPECIFICATIONS SECTION 00640. ALTERNATIVELY, 3 TO 4 INCH PIT RUN AS BASE COURSE, OVERLAIN BY 2 TO 3 INCH 3/4" MINUS OR 1.5 INCH MINUS CRUSHED ROCK.
- DIKE SEED MIX: DIKING DISTRICT'S SPECIFIED SEED MIX FOR DIKE MAINTENANCE PROJECTS (TO BE APPLIED WITH HYDROMULCH).
- SHEEPSFOOT ROLLER FOR EMBANKMENT PLACEMENT.
- VIBRATORY DRUM ROLLER FOR GRAVEL ROAD PLACEMENT.

SUBMITTALS

- SD-01 (PRECONSTRUCTION SUBMITTALS):
 - DIKE CONSTRUCTION WORK PLAN DESCRIBING THE PROPOSED METHODS OF CONSTRUCTION, SEQUENCING, FLOOD PROTECTION MEASURES, MATERIAL SOURCES, AND SCHEDULE.
 - FIFTY-POUND SAMPLES OF IMPORTED MATERIAL PROPOSED FOR USE AS DIKE EMBANKMENT AND DIKE ROAD MATERIAL TO THE ENGINEER IDENTIFIED BY THE OWNER AT LEAST 10 DAYS PRIOR TO USE. THE CONTRACTOR SHALL NOT USE MATERIALS UNTIL APPROVED BY THE ENGINEER.
 - A WRITTEN STATEMENT INDICATING THE SOURCE, CHARACTER, AND PROPOSED USE OF ALL IMPORTED MATERIALS WITH THE SAMPLES. BY SUBMITTING SAMPLES, THE CONTRACTOR AGREES THAT THE FILL MATERIAL WILL CONFORM WITH THE MATERIAL SAMPLES SUPPLIED TO THE GEOTECHNICAL ENGINEER.
 - CERTIFICATION OF TEST RESULTS, SOURCE, AND SAMPLES OF IMPORTED MATERIALS.
 - LIST OF PROPOSED EQUIPMENT.
 - MOISTURE-CONDITIONING METHODOLOGY (INCLUDING, BUT NOT LIMITED TO, AERATION) AND CONTRACTOR'S EXPERIENCE WITH THE METHOD(S).



AMCCO UPLAND & SEDIMENT REMEDATION PLAN

ASTORIA MARINE CONSTRUCTION CO.

ASTORIA, OREGON

ISSUE	DATE	DESCRIPTION
B	01/06/2023	RECORD DRAWING DOCUMENT
A	03/27/2020	100% DESIGN DOCUMENTS

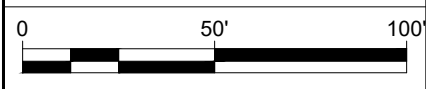
PROJECT: 1653.01.02

DESIGNED: C. GOKCORRA

DRAWN: G. KALMETA

CHECKED: E. BAKKOM

SCALE



NOTE: BAR IS ONE INCH ON ORIGINAL
DRAWING. IF NOT ONE INCH ON THIS
SHEET, ADJUST SCALE ACCORDINGLY.

SHEET TITLE

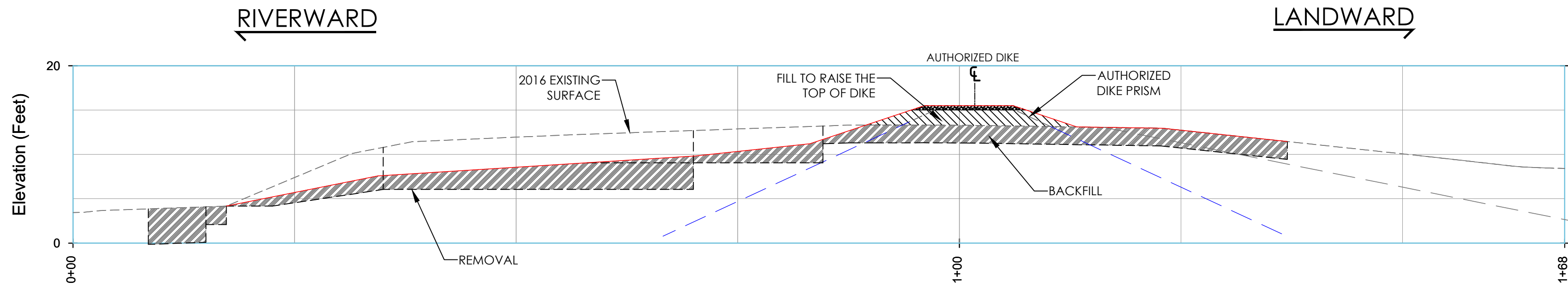
DIKE RESTORATION
PLAN

SHEET

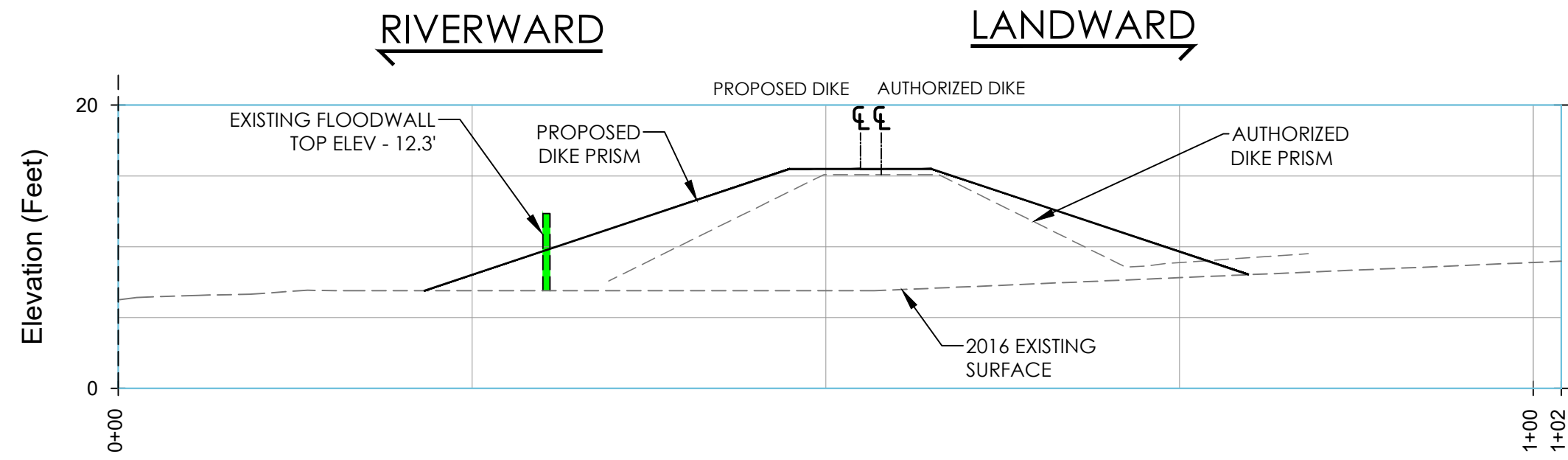
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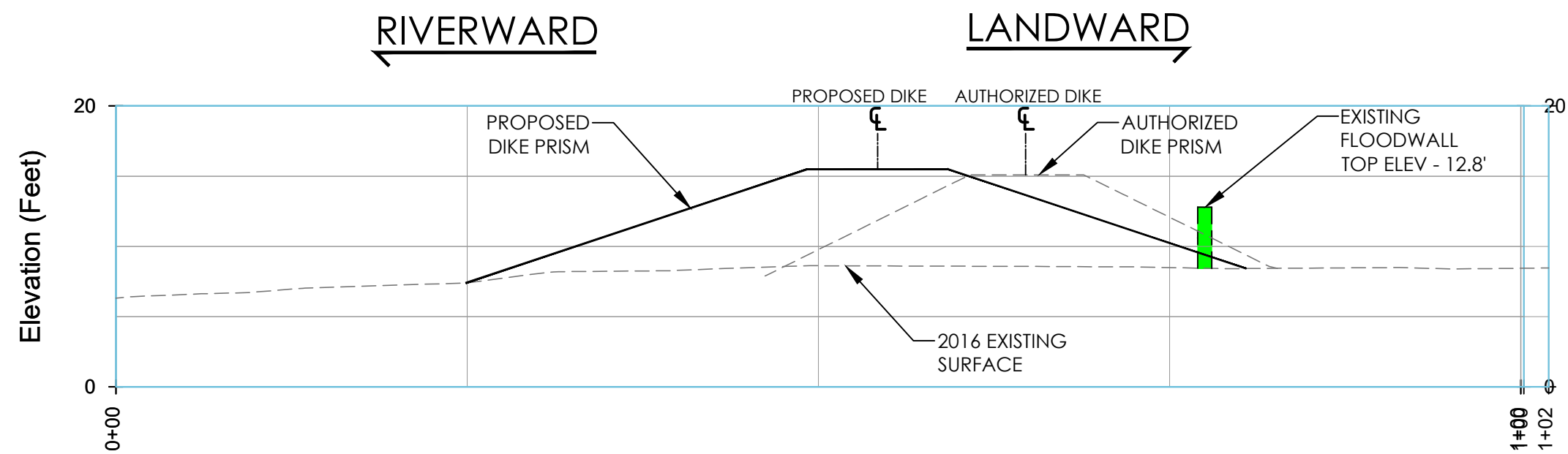
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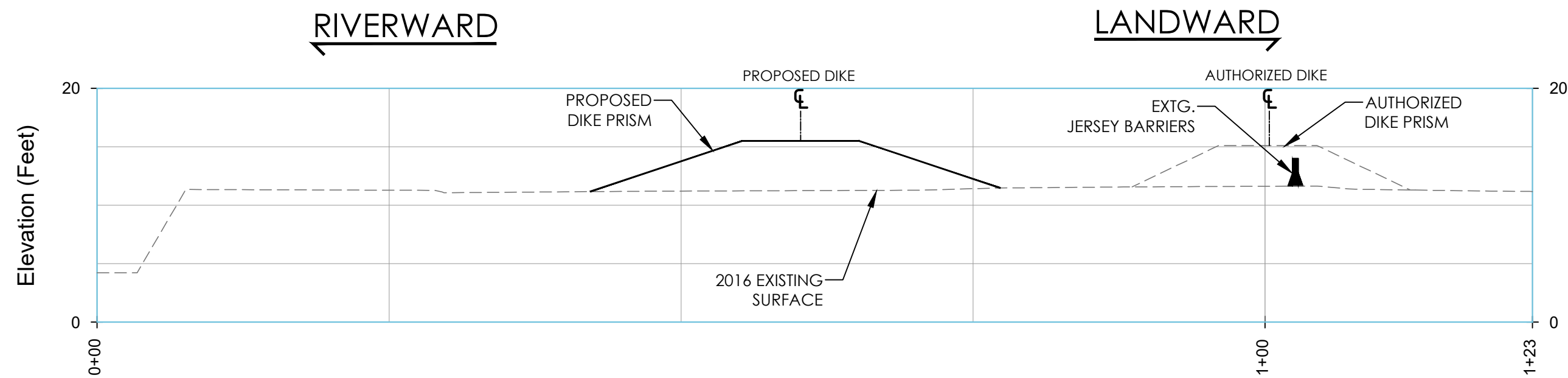
1A BURN PIT
 H:1"=10', V:1"=10'



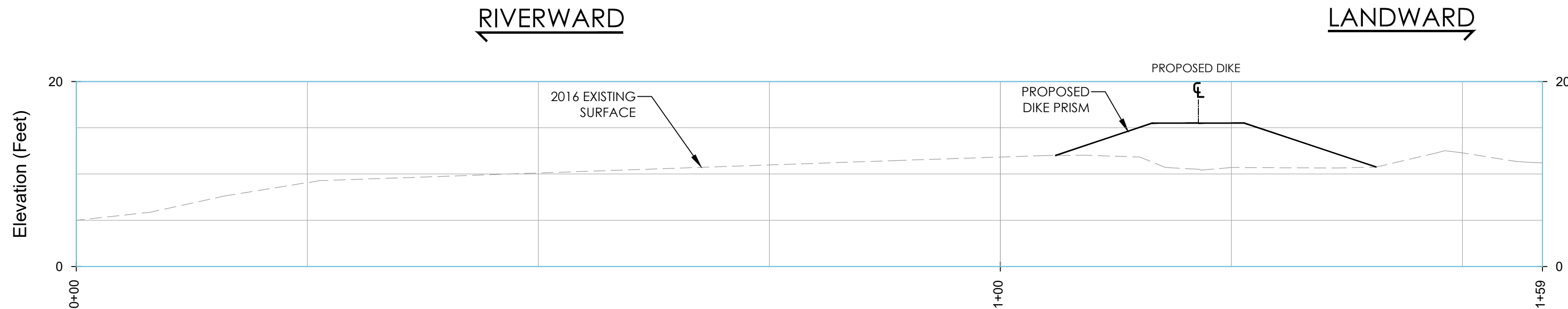
2 MARINEWAY#4
 H:1"=10', V:1"=10'



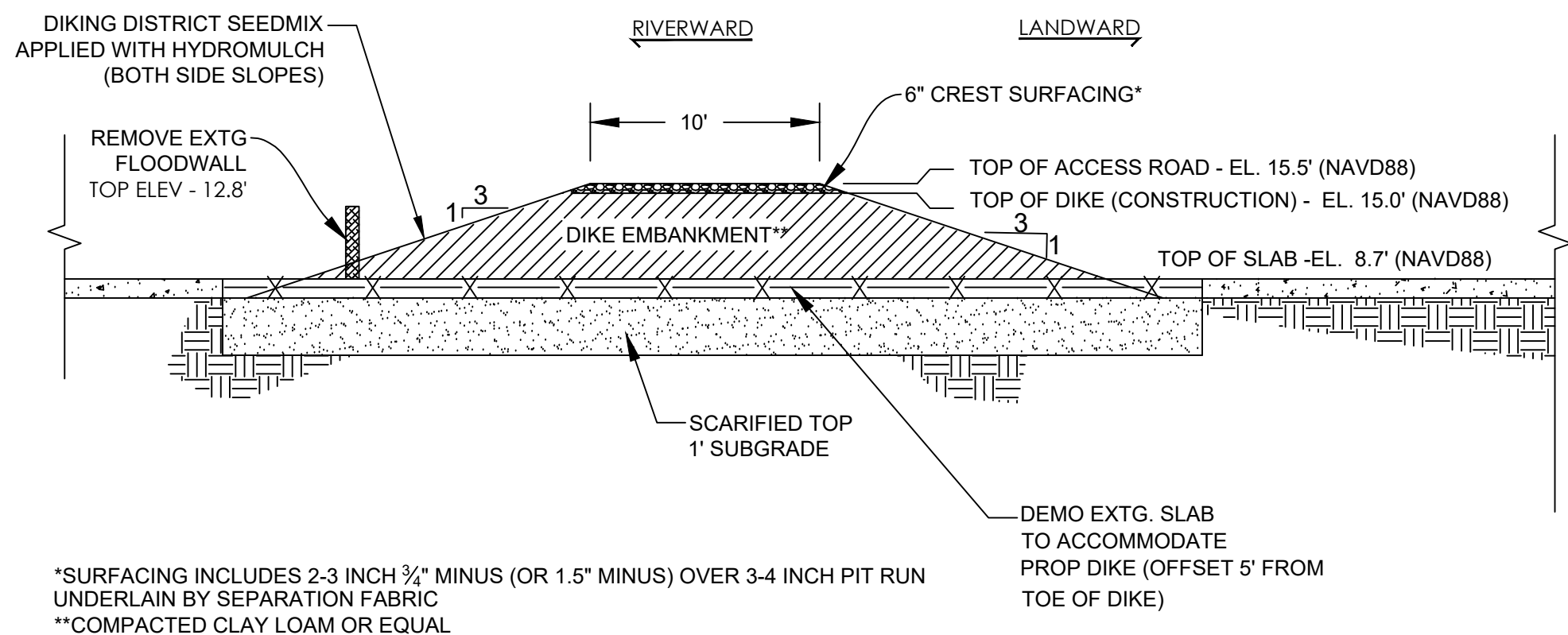
3 MARINEWAY#3
 H:1"=10', V:1"=10'



4 DOCK AREA
 H:1"=10', V:1"=10'

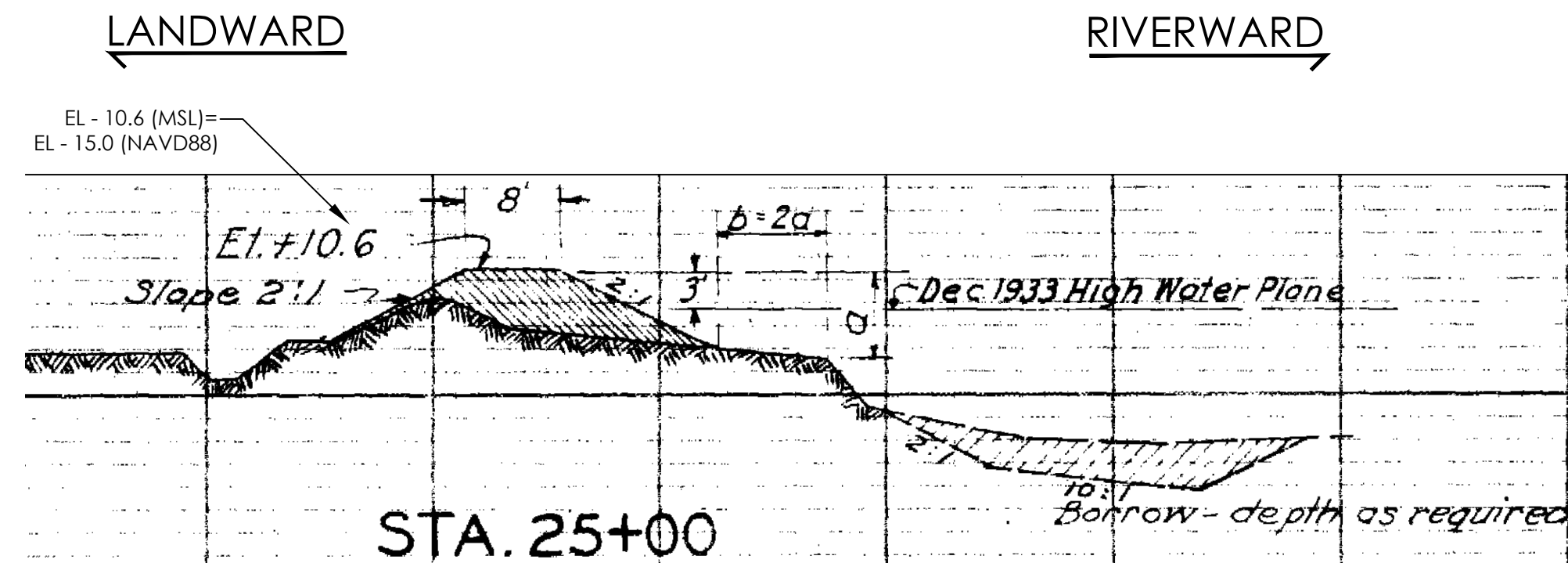


5 MARINEWAY#1
 H:1"=10', V:1"=10'

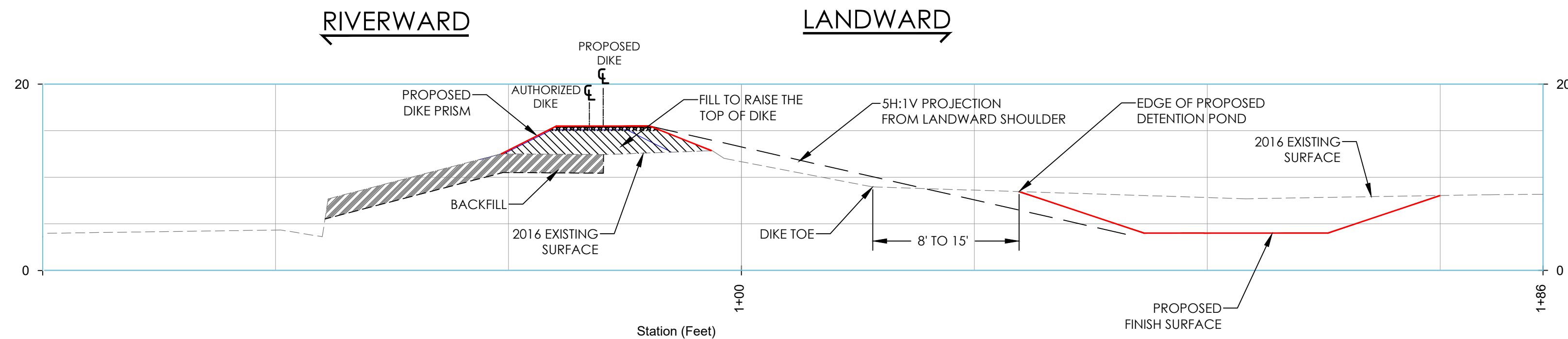


*SURFACING INCLUDES 2-3 INCH 3/4" MINUS (OR 1.5" MINUS) OVER 3-4 INCH PIT RUN UNDERLAIN BY SEPARATION FABRIC
 **COMPACTED CLAY LOAM OR EQUAL

PROPOSED DIKE CROSS SECTION
 NOT TO SCALE



1937 AUTHORIZED DIKE CROSS SECTION (TYPICAL)
 NOT TO SCALE

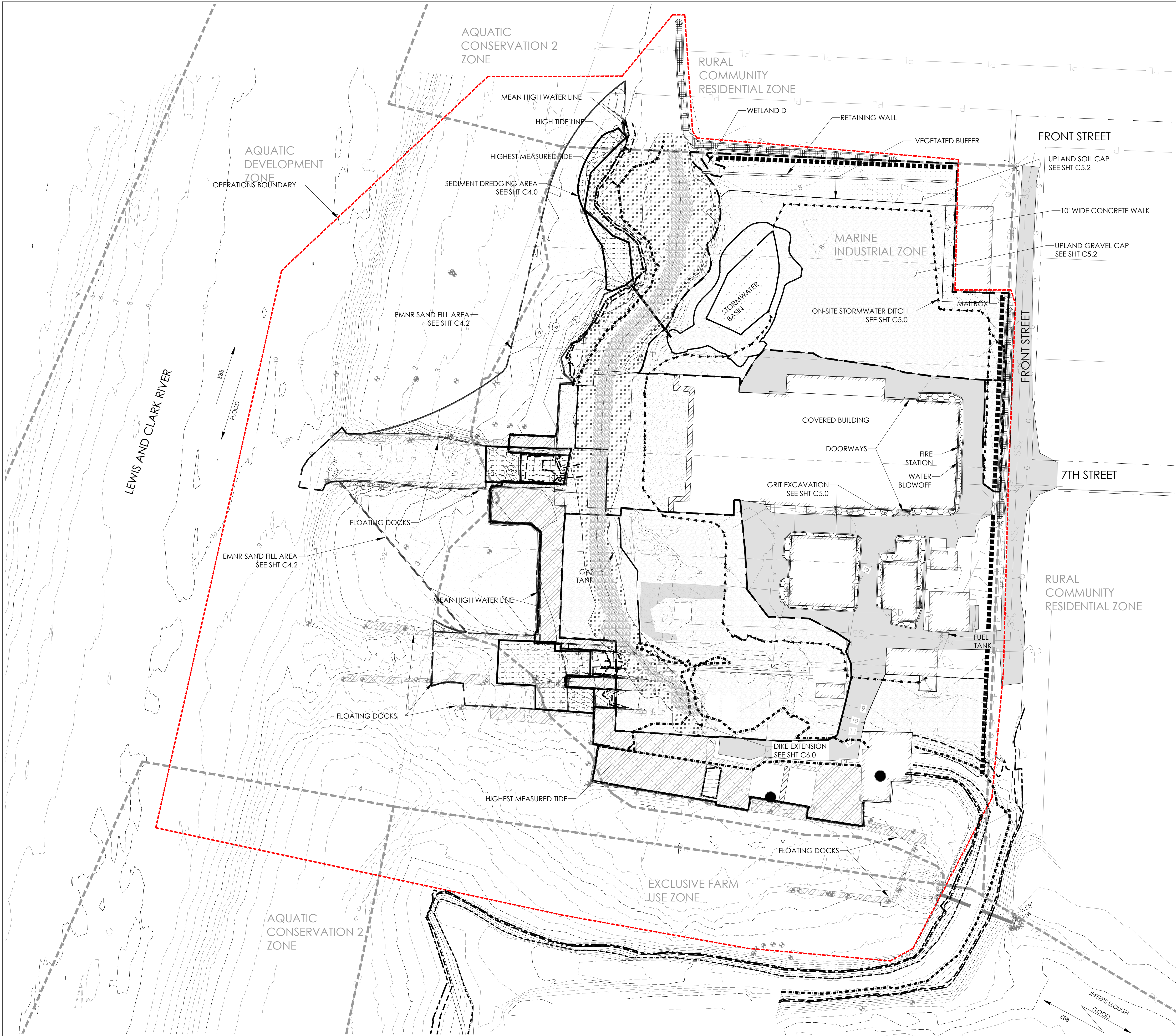


1B DIKE RECONSTRUCTION WITH PROPOSED DETENTION POND
 H:1"=10', V:1"=10'

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PROJECT: 1653.01.02
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 DRAWN: G. KALMETA
 CHECKED: E. BAKKOM
 SCALE

PLOTTED ON: 2023-01-06 7:25 AM
 PLOTTED BY: Cam Galanos
 FILENAME: G:\00_MFA CH 3D\00_PROJECT\0288\03-AMCCO\PLANS\ASB\NLI\01.LANDSCAPE PLAN.dwg



LANDSCAPE LEGEND

- DOCK PILING
- EXISTING ASPHALT
- EXISTING DOCK
- EXISTING GRAVEL SURFACE
- UPLAND GRAVEL CAP
- GRIT EXCAVATION
- EMNR SAND FILL
- SEDIMENT DREDGING
- 1.5" ASPHALT OVERLAY (OR CONCRETE SURFACING)
- BERM
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- LOT LINE
- MEAN HIGH WATER LINE - 7.93' (NAVD 88)
- HIGH TIDE LINE - 8.63' (NAVD 88)
- HIGHEST MEASURED TIDE - 11.9' (NAVD 88)

- DIKE SLOPE NON-VEGETATIVE AREA SEED MIX: LOWLAND PASTURE MIX
- ACCESS ROAD SURFACING: 3/4" MINUS CRUSHED ROCK
- STORMWATER POND SEED MIX: PRO TIME PT 406 NATIVE MIX FOR WET AREAS
- VEGETATIVE BUFFER CAP: 12" TOPSOIL
- EXISTING SLAB TO REMAIN
- UPLAND GRAVEL CAP: 3/4" TO 1-1/2" MINUS CRUSHED ROCK OR EQUAL SURFACING
- ROCK LINED CONVEYANCE DITCH: QUARRY SPALLS OR EQUAL

MAUL FOSTER ALONGI
 3140 NE BROADWAY STREET
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 www.maulfooster.com

REGISTERED PROFESSIONAL ENGINEER
OREGON
NO. 70867PE
EXPIRES: 6/30/2025
This digital seal certifies the signatory and document content.

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SHEET TITLE

LANDSCAPE PLAN

SHEET

L1.0