



**US Army Corps
of Engineers®**
New England District
696 Virginia Road
Concord, MA 01742-2751

PUBLIC NOTICE

Comment Period Begins: September 28, 2021

Comment Period Ends: October 28, 2021

File Number: NAE-2021-01426

In Reply Refer To: Charlotte Skolnick

Phone: (978) 318-8145

E-mail: Charlotte.R.Skolnick@usace.army.mil

The District Engineer has received a permit application to conduct work in waters of the United States from Greystone Enterprises, LLC c/o Kenneth R Bent; 1 Goldsmith Street, Johnston, Rhode Island, 02919. This work is proposed in Woonasquatucket River at Goldsmith Street, Johnston, Rhode Island 02919. The site coordinates are: Latitude 41.834277 N, Longitude -71.472565 W.

The work involves approximately 700 linear feet of bank stabilization. The project proposes the temporary discharge of crushed rock in approximately 7,672 square feet below Ordinary High Water (OHW) for a temporary construction access path, and the installation of a temporary cofferdam in approximately 816 square feet below OHW. Permanent discharge of fill associated with the installation of crushed rock and riprap is proposed in approximately 8,868 square feet below OHW. The purpose of this project is to provide stabilization and restoration of the eroding right bank of the Woonasquatucket River downstream of the Manton Dam to protect adjacent utilities and the Woonasquatucket River Greenway near the eroded bank.

The work is shown on the enclosed plans entitled "RHODE ISLAND ASSOCIATION OF CONSERVATION DISTRICTS; WOONASQUATUCKET RIVERBANK RESTORATION; JOHNSTON, RHODE ISLAND; JUNE 2021," on 8 sheets, and dated "June 2021."

No compensatory mitigation has been proposed for this project. Special conditions will be included in the permit authorization to minimize impacts to Endangered Species Act listed species and essential fish habitat in the project area.

AUTHORITY

Permits are required pursuant to:

☐ Section 10 of the Rivers and Harbors Act of 1899

☒ Section 404 of the Clean Water Act

☐ Section 103 of the Marine Protection, Research and Sanctuaries Act.

The decision whether to issue a permit will be based on an evaluation of the probable impact of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which may reasonably accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are: conservation, economics, aesthetics, general environmental concerns, wetlands, cultural value, fish and wildlife values, flood hazards, flood plain value, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people.

The U.S. Army Corps of Engineers, New England District (USACE), is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. The USACE will consider all comments received to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Where the activity involves the discharge of dredged or fill material into waters of the United States or the transportation of dredged material for the purpose of disposing it in ocean waters, the evaluation of the impact of the activity in the public interest will also include application of the guidelines promulgated by the Administrator, U.S Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act, and/or Section 103 of the Marine Protection Research and Sanctuaries Act of 1972, as amended.

ESSENTIAL FISH HABITAT

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), requires all federal agencies to consult with the National Marine Fisheries Service on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). Essential Fish Habitat describes waters and substrate necessary for fish for spawning, breeding, feeding or growth to maturity.

This project will impact 0.4 acres of EFH. This habitat consists of inland river sand and silts with some gravel. Loss of this habitat may adversely affect species that use these waters and substrate. However, the District Engineer has made a preliminary determination that the site-specific adverse effect will not be substantial. Further consultation with the National Marine Fisheries Service regarding EFH conservation recommendations is being conducted and will be concluded prior to the final decision.

The Natural Resource Conservation Service (NRCS) is the lead Federal agency responsible for compliance with provisions of the Magnuson-Stevens Fishery Conservation and Management Act, including any necessary consultations with the NMFS for this action. The Corps will review and evaluate these findings to ensure they are sufficient for the purposes of our Regulatory action.

NATIONAL HISTORIC PRESERVATION ACT

Based on his initial review, the District Engineer has determined that little likelihood exists for the proposed work to impinge upon properties with cultural or Native American significance, or listed in, or eligible for listing in, the National Register of Historic Places. Therefore, no further consideration of the requirements of Section 106 of the National Historic Preservation Act of 1966, as amended, is necessary. This determination is based upon one or more of the following:

- a. The permit area has been extensively modified by previous work.
- b. The permit area has been recently created.
- c. The proposed activity is of limited nature and scope.

d. Review of the latest published version of the National Register shows that no presence of registered properties listed as being eligible for inclusion therein are in the permit area or general vicinity.

e. Coordination with the State Historic Preservation Officer and/or Tribal Historic Preservation Officer(s).

The Natural Resource Conservation Service (NRCS) is the lead Federal agency responsible for compliance with provisions of Section 106 of the National Historic Preservation Act of 1966, including any necessary consultations with the SHPO and Tribes for this action. The Corps will review and evaluate these findings to ensure they are sufficient for the purposes of our Regulatory action.

ENDANGERED SPECIES CONSULTATION

The USACE is reviewing the application for the potential impact on Federally-listed threatened or endangered species and their designated critical habitat pursuant to section 7 of the Endangered Species Act as amended. Our review will be concluded prior to the final decision.

The Natural Resource Conservation Service (NRCS) is the lead Federal agency responsible for compliance with provisions of section 7 of the Endangered Species Act, including any necessary consultations with the NOAA Fisheries and USFWS for this action. The Corps will review and evaluate these findings to ensure they are sufficient for the purposes of our Regulatory action.

OTHER GOVERNMENT AUTHORIZATIONS

The following authorizations have been applied for, or have been, or will be obtained:

- (X) Permit, license or assent from State.
- (X) Permit from local wetland agency or conservation commission.
- (X) Water Quality Certification in accordance with Section 401 of the Clean Water Act.

COMMENTS

In order to properly evaluate the proposal, we are seeking public comment. Anyone wishing to comment is encouraged to do so. Comments should be submitted in writing by the above date. If you have any questions, please contact Charlotte Skolnick at (978) 318-8145, (800) 343-4789 or (800) 362-4367, if calling from within Massachusetts.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for a public hearing shall specifically state the reasons for holding a public hearing. The USACE holds public hearings for the purpose of obtaining public comments when that is the best means for understanding a wide variety of concerns from a diverse segment of the public.

The initial determinations made herein will be reviewed in light of facts submitted in response to this notice. All comments will be considered a matter of public record. Copies of letters of objection will be forwarded to the applicant who will normally be requested to contact objectors directly in an effort to reach an understanding.

THIS NOTICE IS NOT AN AUTHORIZATION TO DO ANY WORK.

Kevin R Kotelly

Kevin R. Kotelly, P.E.
Chief, Permits and Enforcement Branch
Regulatory Division

If you would prefer not to continue receiving Public Notices by email, please contact Ms. Tina Chaisson at (978) 318-8058 or e-mail her at bettina.m.chaisson@usace.army.mil.

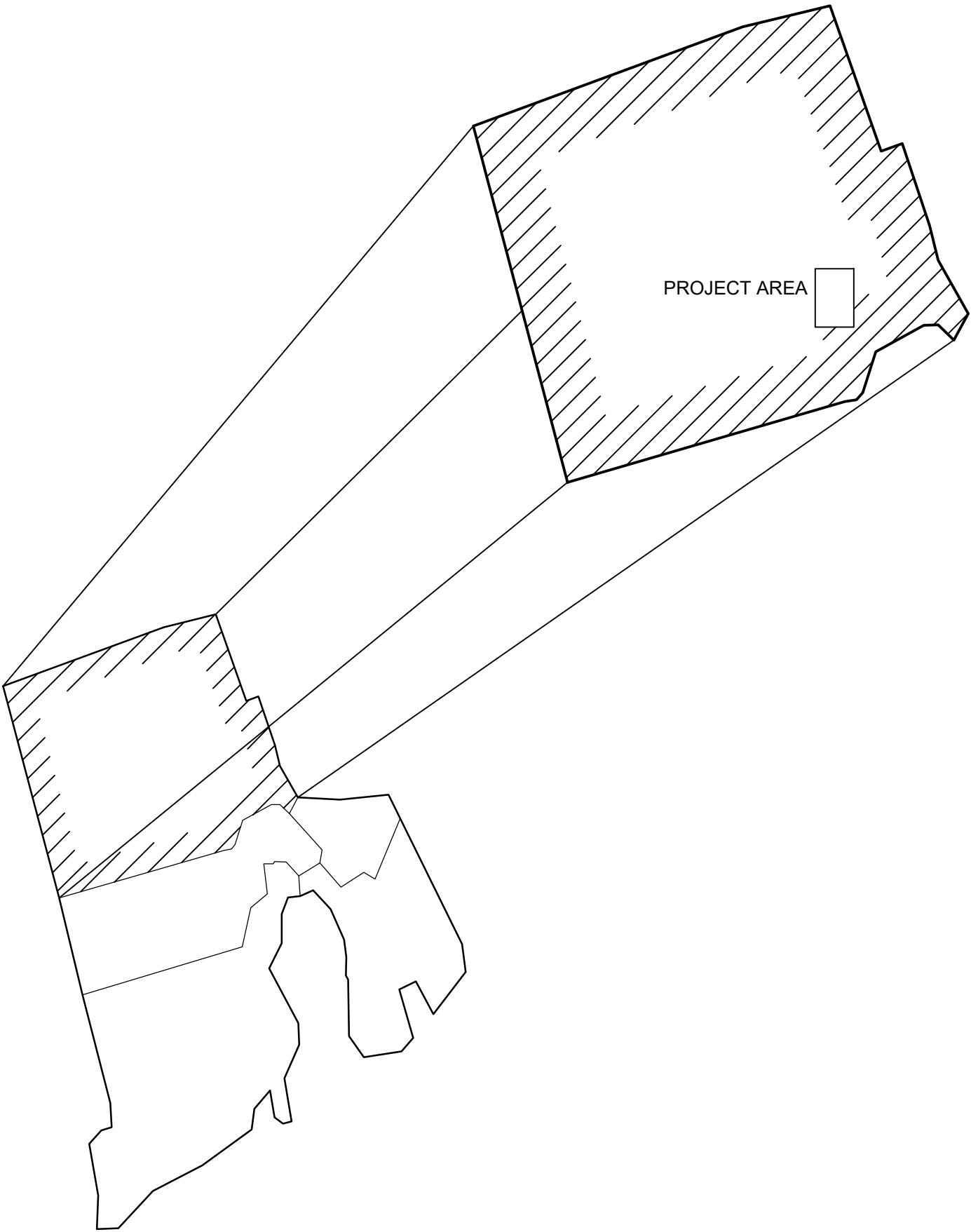
RHODE ISLAND ASSOCIATION OF CONSERVATION DISTRICTS

WOONASQUATUCKET RIVERBANK RESTORATION

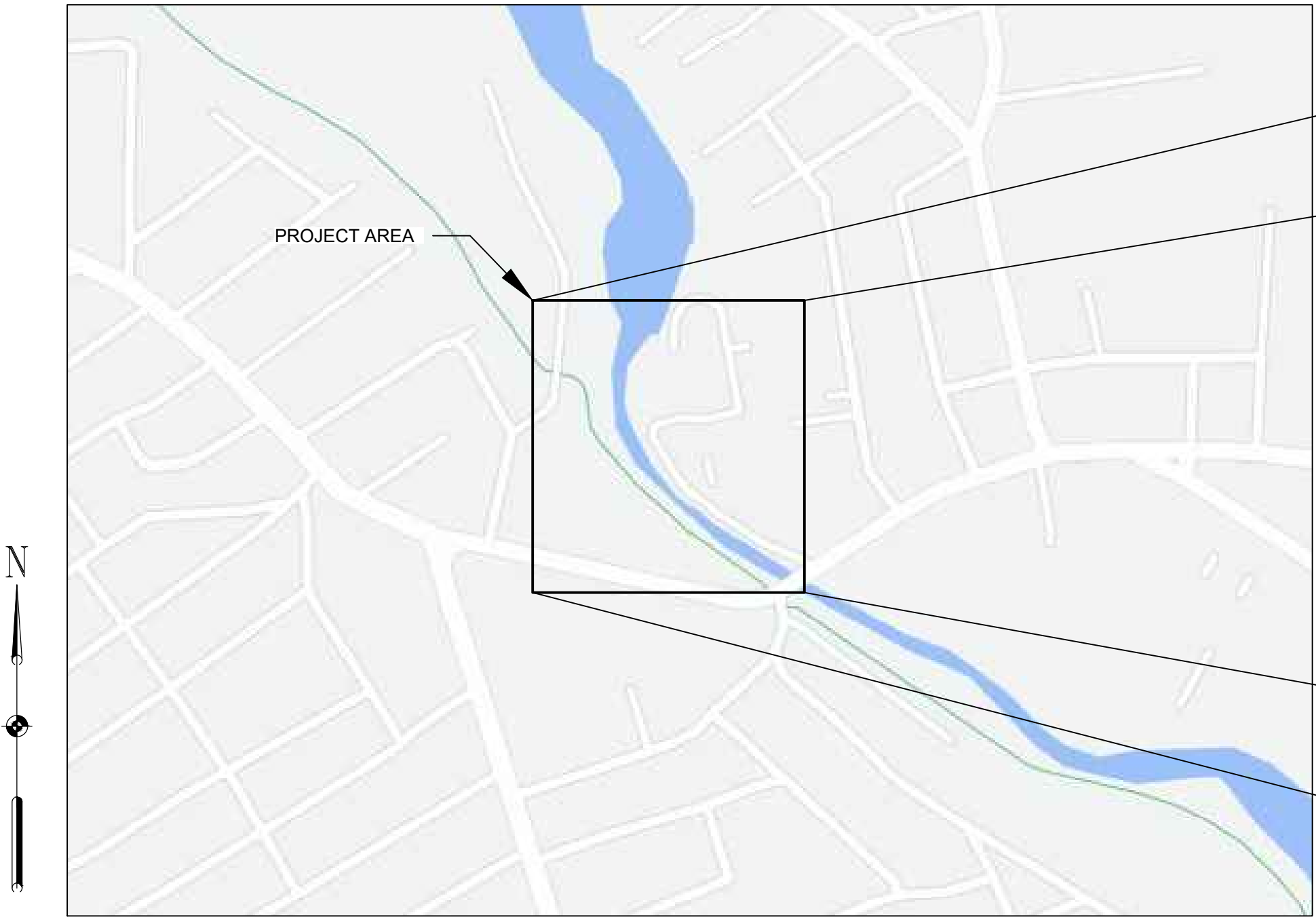
JOHNSTON, RHODE ISLAND

JUNE 2021

60% PERMITTING DRAWING SET



RHODE ISLAND
(PROVIDENCE COUNTY HIGHLIGHTED)



SOURCE: GOOGLE MAPS, 2020

VICINITY MAP



SOURCE: GOOGLE MAPS, 2020

WOONASQUATUCKET RIVERBANK
RESTORATION PROJECT AREA MAP

DRAWING NO.	SHEET NO.	DRAWING TITLE
G-001	1	COVER SHEET
G-002	2	GENERAL NOTES, LEGEND, AND ABBREVIATIONS
C-101	3	EXISTING CONDITIONS
C-201	4	SITE ACCESS
C-202	5	PROPOSED CONDITIONS
C-203	6	RESTORATION PLAN
C-301	7	TYPICAL SECTIONS AND DETAILS
C-302	8	CROSS SECTIONS

DESIGN INFORMATION

DESIGNED BY: JS

DRAWN BY: DCK

CHECKED BY: LLR

PROJECT MANAGER: AH

SEAL

REVISIONS

NO.

DATE

BY

DESCRIPTION


RHODE ISLAND ASSOCIATION OF CONSERVATION DISTRICTS

WOONASQUATUCKET RIVERBANK RESTORATION

JOHNSTON, RHODE ISLAND

JOHNSTON, RHODE ISLAND

COVER SHEET



EA Engineering, Science,
and Technology, Inc., PBC
301 Metro Center Blvd, Suite 102
Warwick, RI 02886
(401) 736-3440

DATE: JUNE 2021

PROJECT NUMBER: 6353901

G-001

SHEET: 1 OF 8

PERMITTING SUBMITTAL - NOT FOR CONSTRUCTION

GENERAL CONSTRUCTION NOTES:

1. UNDERGROUND UTILITIES, WHETHER INDICATED OR NOT, SHALL BE LOCATED AND FLAGGED BY UTILITY COMPANIES AT THE REQUEST OF THE CONTRACTOR. PRIOR TO START OF CONSTRUCTION ACTIVITY, CONTRACTOR TO CONTACT THE DIG SAFE HOTLINE OF RHODE ISLAND FOR UTILITY LOCATION AT 1-888-344-7233, OR 811.
2. THE CONTRACTOR SHALL VERIFY ALL REQUIRED PERMITS HAVE BEEN OBTAINED BEFORE PROCEEDING WITH CONSTRUCTION.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING IN PLACE ALL ACTIVE UTILITY STRUCTURES (BOTH BELOW AND ABOVE GROUND), PIPING, AND APPURTENANCES THAT ARE TO REMAIN IN PLACE UNLESS OTHER TREATMENT IS SPECIFIED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MINIMIZING AND CLEANING UP DUST AND MUD ON ALL ROADS DAILY DUE TO VEHICLES ARRIVING AND LEAVING THE JOB SITE.
5. IT SHALL BE UNDERSTOOD THAT FAILURE TO MENTION SPECIFICALLY ANY WORK THAT WOULD NORMALLY BE REQUIRED TO COMPLETE THE PROJECT SHALL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO COMPLETE SUCH WORK.
6. SHOULD THE CONTRACTOR DISCOVER DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY TO RESOLVE THE SITUATION. THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY FIELD CORRECTIONS OR ADJUSTMENTS MADE WITHOUT NOTIFYING THE ENGINEER.
7. EXISTING UTILITIES AND STRUCTURES (UNDERGROUND, SURFACE, OR OVERHEAD) ARE INDICATED ONLY TO THE EXTENT THAT SUCH INFORMATION WAS MADE AVAILABLE TO OR DISCOVERED BY THE ENGINEER IN PREPARING THE DRAWINGS. LOCATION, CONFIGURATIONS, AND ELEVATIONS OF EXISTING UNDERGROUND POWER, TELEPHONE, FIBER OPTIC CABLE, DUCT WAYS, SPRINKLER SYSTEMS, SEPTIC SYSTEMS, AND WATER, GAS, AND SEWER SERVICE LINES MAY NOT ALL BE INDICATED. OTHER UTILITIES AND STRUCTURES MAY BE PRESENT. UNDERGROUND LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES AND STRUCTURES, AS FURNISHED BY THE ENGINEER OF EACH UTILITY OR STRUCTURE, ARE APPROXIMATE. OVERHEAD UTILITIES ARE NOT SHOWN IN PROFILE.
8. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING WORK AREAS SECURE AT ALL TIMES.
9. JOB SAFETY SHALL BE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
10. THE CONTRACTOR SHALL PERFORM ALL WORK WITHIN THE LIMITS OF DISTURBANCE SHOWN ON THE DRAWINGS, UNLESS ENGINEER AND OWNER APPROVES WORK IN ADDITIONAL AREAS. IF NOT SHOWN, ALL LIMITS OF DISTURBANCE SHALL EXTEND 15 FEET FROM EDGE OF PROPOSED WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRS AND RESTORATION IN AREAS OUTSIDE OF APPROVED WORK LIMITS.
11. THE CONTRACTOR SHALL PROTECT ALL TREES AS MUCH AS PRACTICAL. IF THE CONTRACTOR DECIDES ANY TREES REQUIRE REMOVAL, THE CONTRACTOR SHALL GET THE APPROVAL OF THE ENGINEER TO REMOVE THE TREE. NO TREES SHALL BE CUT OR REMOVED FROM THE SITE BETWEEN APRIL 1 AND JULY 15 WITHOUT FIRST COMPLETING A MIGRATORY BIRD SURVEY BY A QUALIFIED BIOLOGIST.
12. ANY EXCESS MATERIAL THAT REMAINS UNUSED FOLLOWING CONSTRUCTION ACTIVITIES WILL BE THE PROPERTY OF THE CONTRACTOR AND MUST BE REMOVED FROM THE PROJECT SITE.
13. BEFORE FINAL COMPLETION OF THE THIS WORK, ALL ROADWAYS, BIKE PATHS, FENCES, AND SIGNAGE SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
14. THE SITE IS LOCATED APPROXIMATELY 550 FEET NORTHEAST OF GREENVILLE AVE.

EROSION CONTROL NOTES:

15. DISTURBANCE OF SOIL SURFACES IS REGULATED BY STATE LAW AND LOCAL ORDINANCE. APPROVAL FROM RIDEM FRESHWATER WETLANDS AND RIPDES SECTIONS ARE REQUIRED. ALL WORK SHALL COMPLY WITH THE FOLLOWING CRITERIA AND ISSUED PERMIT CONDITIONS TO PREVENT OR MINIMIZE SOIL EROSION.
16. THE INSTALLATION AND MAINTENANCE OR EROSION CONTROL DEVICES IS THE RESPONSIBILITY OF THE CONTRACTOR. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES THE CONTRACTOR SHALL INSTALL ALL EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE PLAN, OR AS DICTATED BY THE RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AND THE CITIES OF JOHNSTON AND PROVIDENCE. ALL EROSION CONTROL DEVICES SHALL BE MAINTAINED IN EFFECTIVE CONDITION DURING CONSTRUCTION.
17. THE CONTRACTOR SHALL USE THE LATEST EDITION OF THE "STATE OF RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK" AS A GUIDE IN CONSTRUCTION THE EROSION AND SEDIMENT CONTROLS INDICATED ON THE PLANS. ALL EROSION AND SEDIMENT CONTROL MEASURES OR WORKS AND REHABILITATION MEASURES MUST CONFORM TO OR EXCEED THE SPECIFICATIONS OR STANDARDS SET OUT IN THIS HANDBOOK.
18. THE CONTRACTOR SHALL INSPECT EROSION AND SEDIMENT CONTROL DEVICES AT THE END OF EACH WORKING DAY, AFTER EACH STORM EVENT, AND AT LEAST DAILY DURING PROLONGED RAINFALL. REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED.
19. THE CONTRACTOR IS RESPONSIBLE FOR THE TIMELY INSTALLATION, INSPECTION, MAINTENANCE, AND/OR REPLACEMENT OF ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES TO ENSURE PROPER OPERATION THROUGHOUT THE LIFE OF THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF PERMANENT MEASURES UNTIL CONSTRUCTION OF THE PROJECT IS COMPLETED OR UNTIL IT IS ACCEPTED BY THE OWNER. THE OWNER IS RESPONSIBLE THEREAFTER.
20. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CLEAN ROADS, CONTROL DUST, AND TAKE ALL NECESSARY MEASURES TO ENSURE THAT THE SITE AND ALL ADJACENT ROADS BE MAINTAINED IN A MUD- AND DUST-FREE CONDITION AT ALL TIMES THROUGHOUT THE LIFE OF THE CONTRACT. DUST CONTROL SHALL INCLUDE, BUT IS NOT LIMITED TO, WATER AND/OR CRUSHED STONE OR COARSE GRAVEL.
21. ALL PROPOSED CONSTRUCTION ENTRANCES SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS AND DETAILS. ALL VEHICLE TRAFFIC ENTERING OR EXITING THE PROJECT SITE SHALL PASS OVER THE CONSTRUCTION ENTRANCES TO REDUCE THE TRACKING AND FLOWING OF SEDIMENT ONTO THE SURROUNDING ROADWAYS. THIS WILL REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO THE SURROUNDING ROADWAYS MUST BE REMOVED IMMEDIATELY. ADDITIONAL ENTRANCES FOR CONSTRUCTION PHASING SHALL BE INSTALLED AS REQUIRED TO PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO ROADWAYS.
22. THE CONTRACTOR SHALL INSTALL ALL PERIMETER SEDIMENT CONTROL BARRIERS (I.E. SILT FENCE) AS SHOWN ON THE PLANS. A ROW OF STAKED HAYBALES OR A SILT FENCE SHALL ALSO BE INSTALLED AROUND ANY SOIL STOCKPILE AREAS.
23. THE CONTRACTOR SHALL RESTORE DISTURBED AREAS AS INDICATED ON THE PLANS. OTHER AREAS DAMAGED DURING CONSTRUCTION SHALL BE RESEEDDED OR OTHERWISE RESTORED TO THEIR ORIGINAL STATE AS CLOSELY AS POSSIBLE. TREES AND OTHER EXISTING VEGETATION NOT PROPOSED TO BE DEMOLISHED SHALL BE RETAINED AS INDICATED ON THE PLANS.
24. TEMPORARY VEGETATIVE COVER SHALL BE APPLIED TO ANY DISTURBED AREAS (INCLUDING SOIL STOCKPILE AREAS) THAT HAVE NOT YET REACHED FINISHED GRADE AS SOON AS POSSIBLE, BUT NOT MORE THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY CEASED. UNLESS THE ACTIVITY IS TO RESUME WITHIN TWENTY-ONE (21) DAYS. THE RECOMMENDED TEMPORARY SEEDING DATES ARE MARCH 15 TO NOVEMBER 15 WITH APPROVAL OF THE ENGINEER. TEMPORARY VEGETATIVE COVER SHALL CONSIST OF 40% OF ANNUAL RYEGRASS AND 60% OF PERENNIAL RYEGRASS (RIDOT M18.10.5). ANNUAL OR PERENNIAL RYEGRASS SHALL BE PLANTED AT A RATE OF 75 LBS/ACRE (BY HAND) OR 85 LBS/ACRE (BY HYDROSEED)
25. PERMANENT VEGETATIVE COVER SHALL BE APPLIED TO ALL DISTURBED AREAS THAT HAVE REACHED FINISHED GRADE AS SOON AS POSSIBLE, BUT NOT MORE THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS PERMANENTLY CEASED. THE RECOMMENDED PERMANENT SEEDING DATES ARE APRIL 1 TO JUNE 15 AND AUGUST 15 TO OCTOBER 15. WITH EXCEPTION TO THE OFF-SITE TEMPORARY CONSTRUCTION STAGING/STORAGE AREA, PERMANENT VEGETATIVE COVER WILL CONSIST OF OBSERVATION AND WETLAND SEED MIXES IN THE ON-SITE LOCATIONS SPECIFIED ON THE "VEGETATIVE RESTORATION PLAN" IN ADDITION TO SHRUB, TUBELING/LIVE STAKES, AND TREE PLANTINGS ALSO SPECIFIED ON THAT PLAN. REFER TO THE "VEGETATIVE RESTORATION PLAN" FOR SEED MIXTURE COMPOSITIONS; APPLICATION RATES; AND TREE, TUBELING, AND SHRUB SPACING REQUIREMENTS.
26. IF SEEDING CANNOT BE COMPLETED IMMEDIATELY OR WITHIN THE RECOMMENDED SEEDING DATES, USE THE TEMPORARY MULCHING MEASURE TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD. TEMPORARY MULCHING SHOULD BE PERFORMED AS SOON AS POSSIBLE, BUT NOT MORE THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY CEASED UNLESS THE ACTIVITY IS TO RESUME WITHIN TWENTY-ONE (21) DAYS. ALL MULCHES MUST BE INSPECTED PERIODICALLY, IN PARTICULAR AFTER RAINSTORMS, TO CHECK FOR RILL EROSION. WHERE EROSION IS OBSERVED, ADDITIONAL MULCH MUST BE APPLIED. IF NETTING IS USED, THE NET SHALL BE INSPECTED AFTER RAINSTORMS FOR DISLOCATION OR FAILURE. IF WASHOUTS OR BREAKAGE OCCUR, THE NET MUST BE REINSTALLED AS NECESSARY AFTER REPAIRING DAMAGE TO SLOPE. INSPECTIONS SHALL TAKE PLACE UNTIL GRASSES ARE FIRMLY ESTABLISHED. GRASS IS CONSIDERED TO BE FIRMLY ESTABLISHED AT A MINIMUM HEIGHT OF THREE (3) INCHES.
27. STRAW OR HAY MULCH, WOOD FIBER MULCH, AND HYDROMULCH ARE RECOMMENDED. STRAW OR HAY MULCH SHOULD BE APPLIED AT A RATE OF 2 TONS PER ACRE. WOOD FIBER MULCH SHOULD BE APPLIED AT A RATE OF 1,500-2,000 POUNDS PER ACRE, OR HYDROMULCH APPLIED AT A RATE OF 1,500 POUNDS PER ACRE. WOOD FIBER MULCH SHOULD NOT BE USED ALONE IN THE WINTER OR DURING HOT, DRY WEATHER. STRAW OR HAY MULCH MUST BE ANCHORED IMMEDIATELY AFTER SPREADING TO PREVENT WINDBLOWING. MULCH ANCHORING SHOULD ALSO BE USED ON SLOPES GREATER THAN THREE (3) PERCENT AND CONCENTRATED FLOW AREAS SUCH AS DIVERSION AND WATERWAY CHANNELS.

CONTROL POINTS:

CONTROL POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP-1	273,175.05	336,149.91	66.21	REBAR
CP-2	273,252.67	335,856.57	66.44	REBAR
CP-3	273,652.50	335,439.52	72.63	REBAR
CP-4	273,864.02	335,463.81	74.72	REBAR
CP-5	273,449.49	335,614.11	70.11	REBAR

INFORMATION SOURCE NOTES:

1. A TOPOGRAPHIC SURVEY WAS COMPLETED WITHIN THE PROJECT AREA BY SMC SURVEYING AND MAPPING CONSULTANTS IN FEBRUARY 2020.
2. HORIZONTAL DATUM IS RHODE ISLAND STATE PLANE NAD83 US SURVEY FEET AND THE VERTICAL DATUM IS NAVD88.
3. IMAGE SOURCE: ©2021 MICROSOFT CORPORATION ©2021 MAXAR CNES (2021) DISTRIBUTION AIRBUS DS.
4. PROPERTY LINE AND OWNERSHIP SOURCE: CITY OF JOHNSTON, RI GIS.
5. WETLANDS DELINEATED BY EA ENGINEERING ON MAY 3, 2021

CONSTRUCTION QUANITIES:

WILL BE ADDED FOR 90% DESIGN


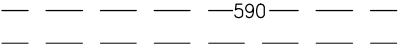











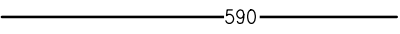



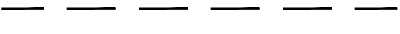
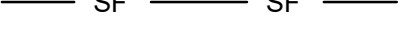

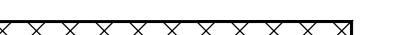

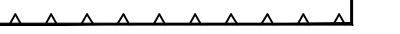
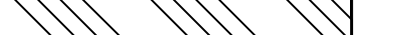
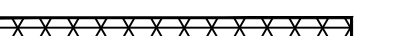

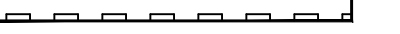



ABBREVIATIONS:

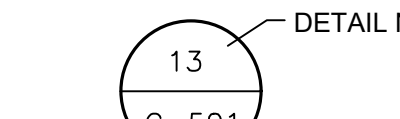
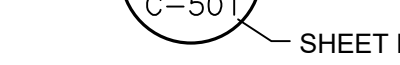
CONC	CONCRETE
CONT.	CONTINUOUS
CP	CONTROL POINT
CY	CUBIC YARDS
DIA.	DIAMETER
ELEV.	ELEVATION
F.E.S.	FLARED END SECTION
FT	FEET
HDPE	HIGH DENSITY POLYETHYLENE
ID	INSIDE DIAMETER
INV.	INVERT
LB.	POUNDS
LF	LINEAR FEET
LOD	LIMITS OF DISTURBANCE
MIN.	MINIMUM
N/A	NOT AVAILABLE
NAD	NORTH AMERICAN DATUM
NAVD	NORTH AMERICAN VERTICAL DATUM
NO.	NUMBER
OC.C	ON CENTER
OD	OUTSIDE DIAMETER
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
SF	SQUARE FEET
TYP	TYPICAL
ø	DIAMETER
"	INCHES
'	FEET
#	NUMBER

SEQUENCE OF CONSTRUCTION

1. PREPARATION AND APPROVAL OF REQUIRED PLANS AND SUBMITTALS
2. COMPLETE CONSTRUCTION STAKING
3. WALK SITE WITH OWNER AND REVIEW TREE AND VEGETATION REMOVAL
4. LOCATE UTILITIES
5. INSTALL TEMPORARY FACILITIES AND EROSION CONTROLS
6. INSTALL CONSTRUCTION ENTRANCE
7. CLEAR AND GRUB TREES APPROVED FOR REMOVAL
8. INSTALL TEMPORARY COFFERDAM FROM STATION 301+90 TO 303+00
9. DEWATER AND BACKFILL ERODED BANK FROM STATION 301+85 TO 302+90
10. REMOVE TEMPORARY COFFERDAM
11. INSTALL ACCESS RAMP AND RIVERBANK ACCESS FROM STATION 298+10 TO 303+15
12. INSTALL RIPRAP ARMORED TOE AND RIPRAP ARMORED SLOPE STARTING ON DOWNSTREAM END. DECONSTRUCT ACCESS AS RIPRAP INSTALLATION PROGRESSES UPSTREAM. UTILIZE ACCESS MATERIAL AS RIPRAP BEDDING TO THE EXTENT POSSIBLE.
13. COMPLETE RIVERBANK MAINTENANCE INCLUDING EROSION CONTROL BLANKET INSTALLATION AND SEEDING FROM STATION 298+10 TO 300+60 AND CLEARING DEAD DEBRIS WITH EROSION CONTROL BLANKET INSTALLATION AND SEEDING AS NEEDED FROM STATION 296+70 TO 298+10
14. COMPLETE SITE RESTORATION
15. DEMOBILIZE
16. VEGETATION ESTABLISHMENT
17. RECORD DOCUMENTS

LEGEND:

	TREE MASS
	EXISTING CONTOURS
	CONTROL POINT
	100-YEAR FLOODPLAIN BOUNDARY
	PROPERTY LINE
	SIGN
	GUARD POST
	ROCK
	UTILITY POLE
	GUY WIRE
	GUARD RAIL
	TREE
	FENCE
	SEWER MANHOLE
	TELEPHONE MANHOLE
	PROPOSED CONTOURS
	WATER LINE
	WETLAND DELINEATION
	AVAILABLE STAGING AREA
	CREST OF SOIL AREA
	SILT FENCE
	RIPRAP
	ACCESS ROAD
	CLEARING DEAD VEGETATION AND DEBRIS
	SCARIFY AND GRADE TOPSOIL
	SEEDING AND EROSION CONTROL BLANKET
	CONSERVATION/WILDLIFE SEED MIX AND EROSION CONTROL BLANKET WHERE NEEDED
	EROSION CONTROL/RESTORATION SEED MIX
	LIMITS OF DISTURBANCE
	CONSTRUCTION ENTRANCE

	DETAIL NUMBER
	SHEET NUMBER OF DETAIL

REVISIONS

DESCRIPTION

BY

DATE

NO.

DESIGN INFORMATION

DESIGNED BY: JS

DRAWN BY: DCK


CHECKED BY: LLR

PROJECT MANAGER: AH

SEAL

RHODE ISLAND ASSOCIATION OF CONSERVATION DISTRICTS
WOONASQUATUCKET RIVERBANK RESTORATION
JOHNSTON, RHODE ISLAND
JOHNSTON, RHODE ISLAND

GENERAL NOTES, LEGEND, AND ABBREVIATIONS



EA Engineering, Science,
and Technology, Inc., PBC
301 Metro Center Blvd, Suite 102
Warwick, RI 02886
(401) 736-3440

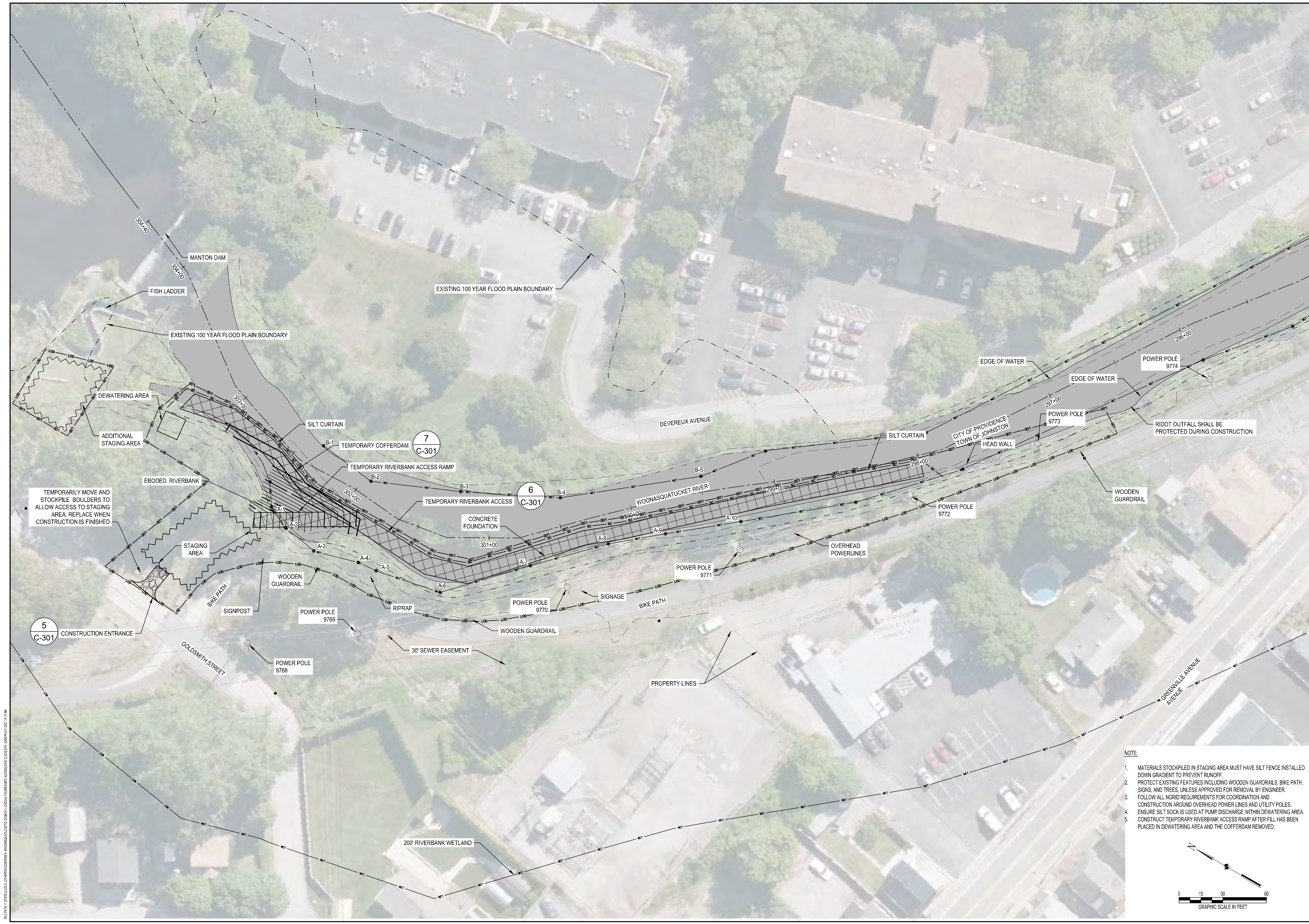
DATE: JUNE 2021

PROJECT NUMBER: 6353901

G-002

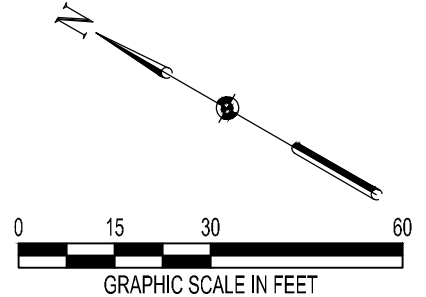
SHEET: 2 OF 8

DRAFT - NOT FOR CONSTRUCTION



NOTE:

1. MATERIALS STOCKPILED IN STAGING AREA MUST HAVE SILT FENCE INSTALLED DOWN GRADIENT TO PREVENT RUNOFF.
2. PROTECT EXISTING FEATURES INCLUDING WOODEN GUARDRAILS, BIKE PATH, SIGNS, AND TREES, UNLESS APPROVED FOR REMOVAL BY ENGINEER.
3. FOLLOW ALL NSRD REQUIREMENTS FOR COORDINATION AND CONSTRUCTION AROUND OVERHEAD POWER LINES AND UTILITY POLES.
4. ENSURE SILT SOCK IS USED AT PUMP DISCHARGE WITHIN DEWATERING AREA.
5. CONSTRUCT TEMPORARY RIVERBANK ACCESS RAMP AFTER FILL HAS BEEN PLACED IN DEWATERING AREA AND THE COFFERDAM REMOVED.



DESIGN INFORMATION		REVISIONS	
DESIGNED BY:	JS	DATE:	
DRAWN BY:	DKK	BY:	
CHECKED BY:	LLR	NO.:	
PROJECT MANAGER:	AH		

SEAL

RHODE ISLAND ASSOCIATION OF CONSERVATION DISTRICTS
WOONASQUACKET RIVERBANK RESTORATION
JOHNSTON, RHODE ISLAND

JOHNSTON, RHODE ISLAND
SITE ACCESS AND EROSION AND SEDIMENT CONTROL

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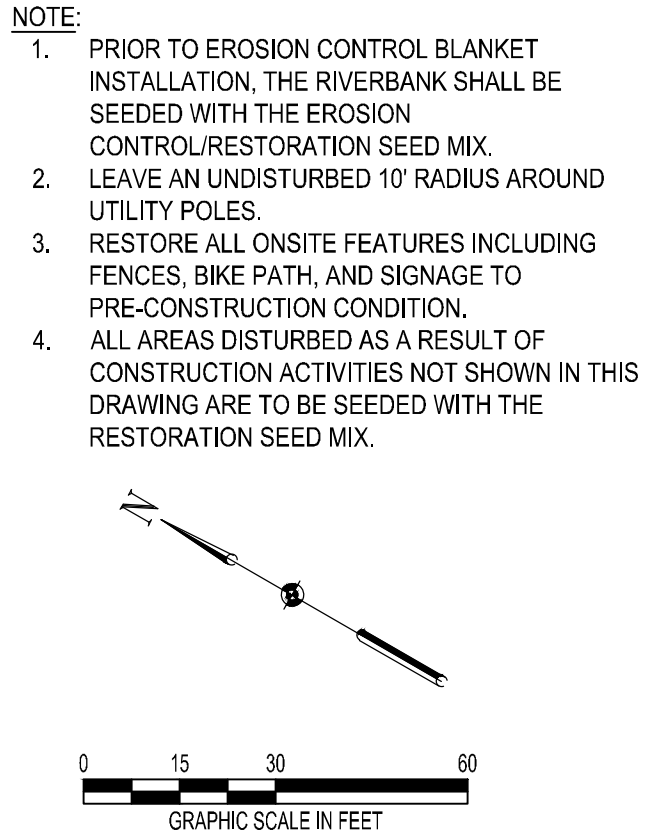
DATE: JUNE 2021
PROJECT NUMBER: 6353901
C-201
SHEET: 4 OF 8

FILE PRINT: SITE LOCAL OFFICE: WOODASQUACKET RIVERBANK RESTORATION: ACCESSING: C-201 BY: J. JOSEPH: 11/02/21 11:58 AM

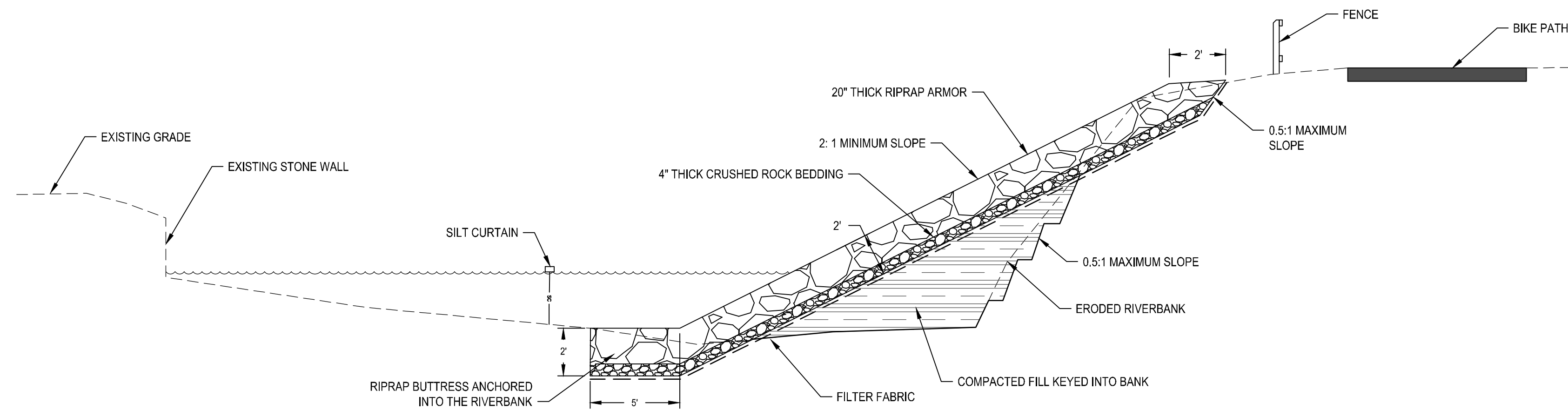
DRAFT - NOT FOR CONSTRUCTION

APPLY AT A RATE OF 18 LB/ACRE WITH A MIX OF 25 LB/ACRE ANNUAL RYE GRASS

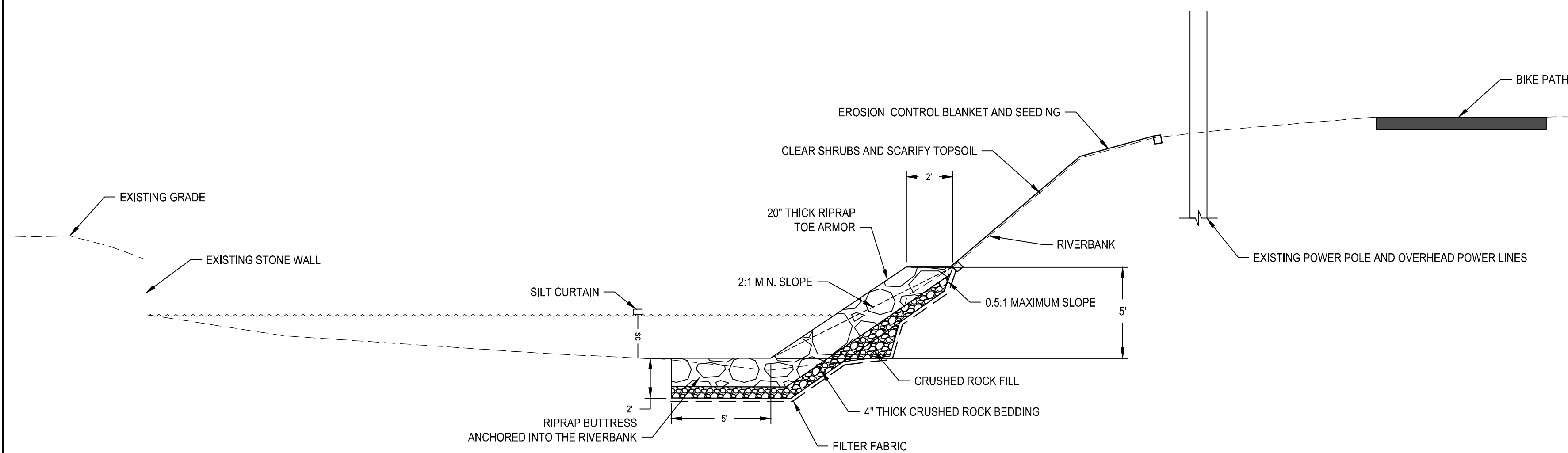
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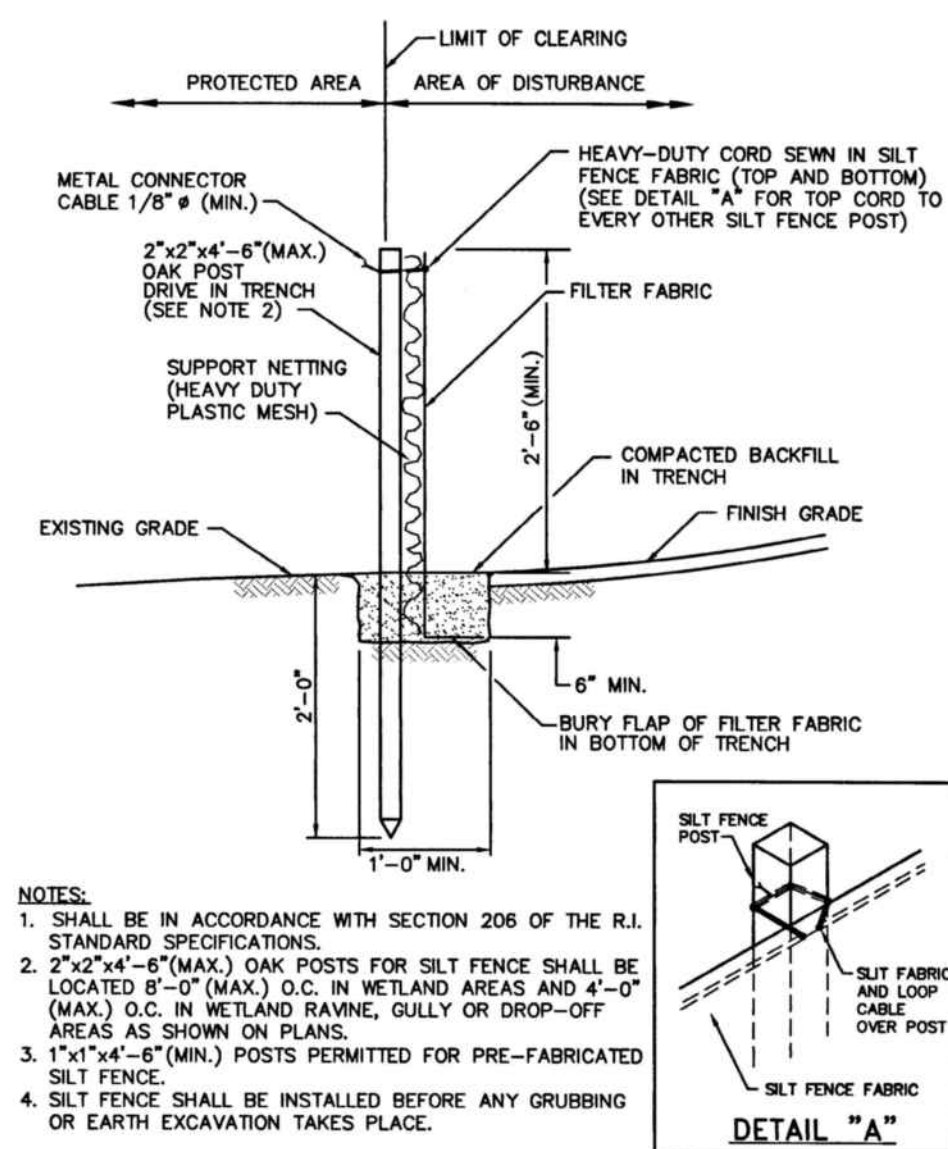
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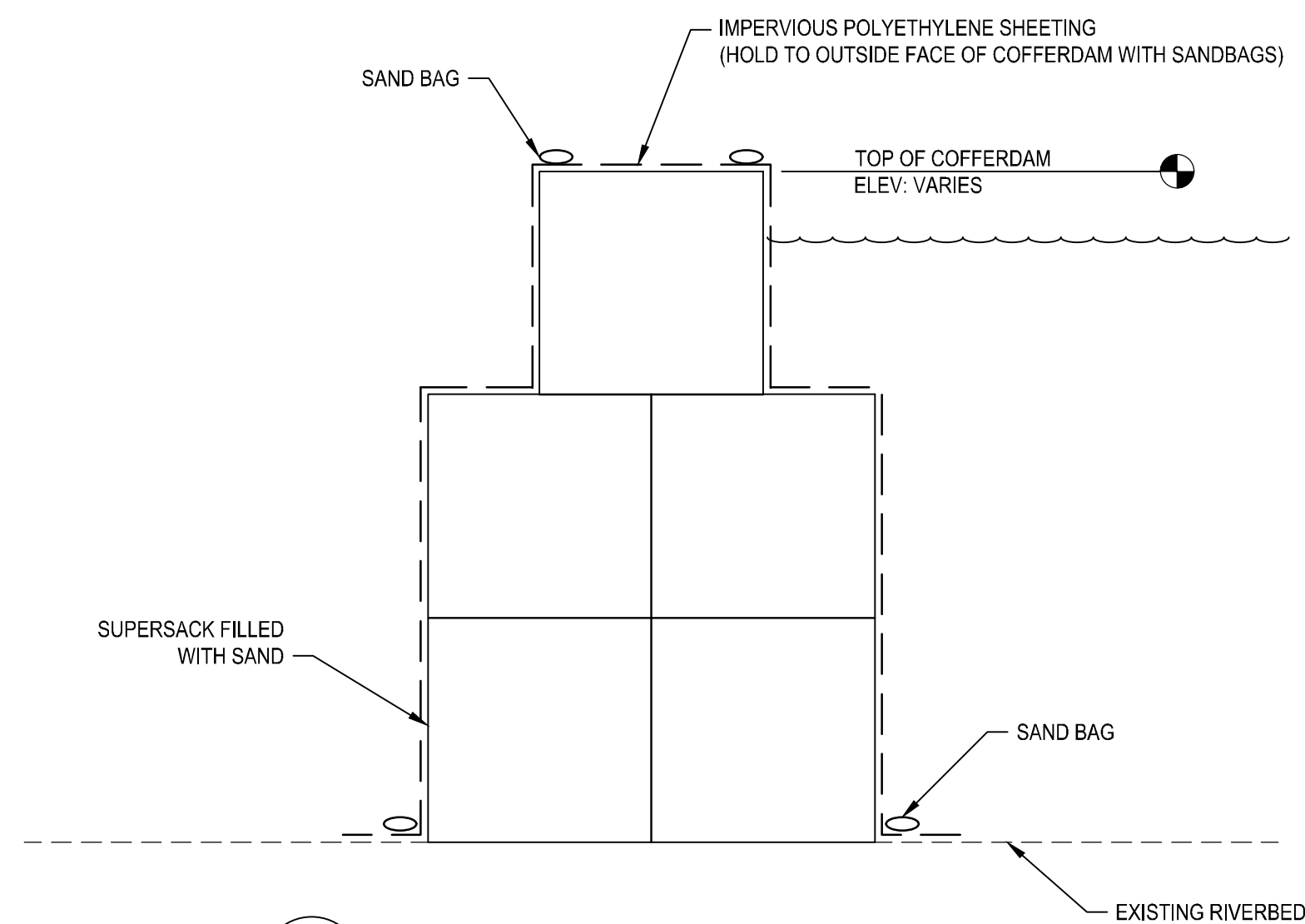
1 TYPICAL CROSS SECTION - RIPRAP ARMORED SLOPE
C 202 SCALE: NO SCALE



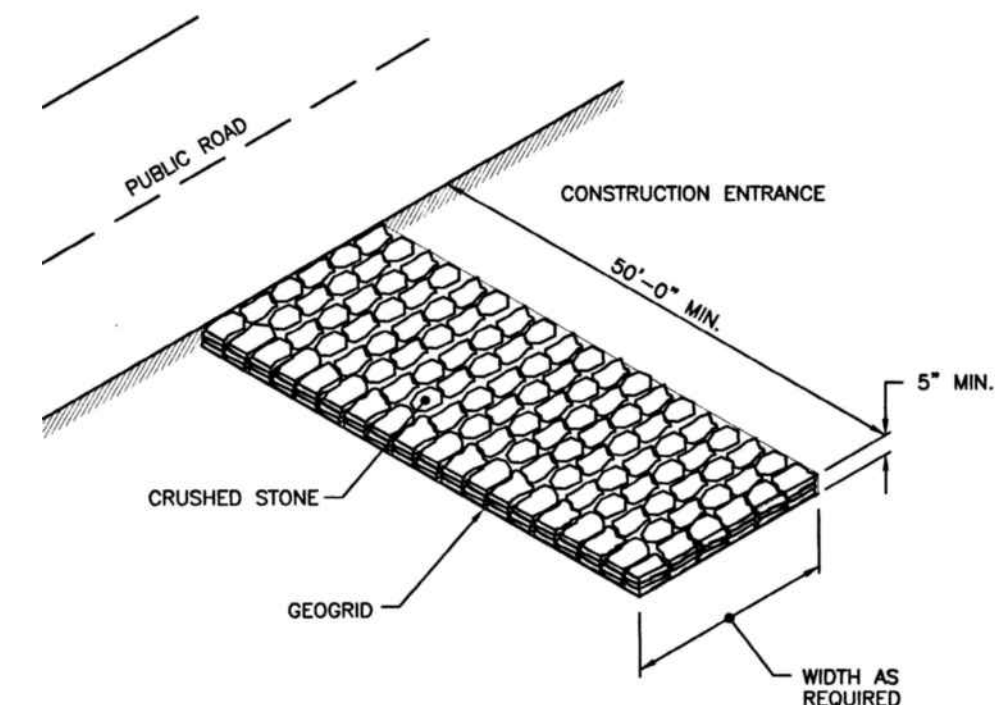
2 TYPICAL CROSS SECTION - RIPRAP ARMORED TOE
C-202 SCALE: NO SCALE



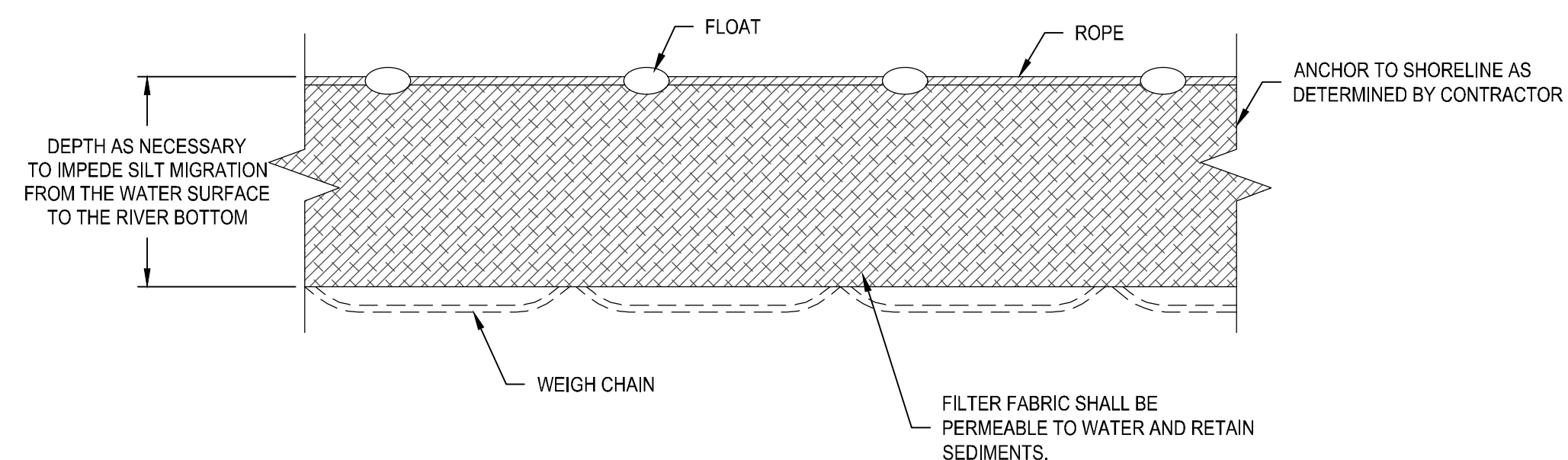
3 SILT FENCE DETAIL



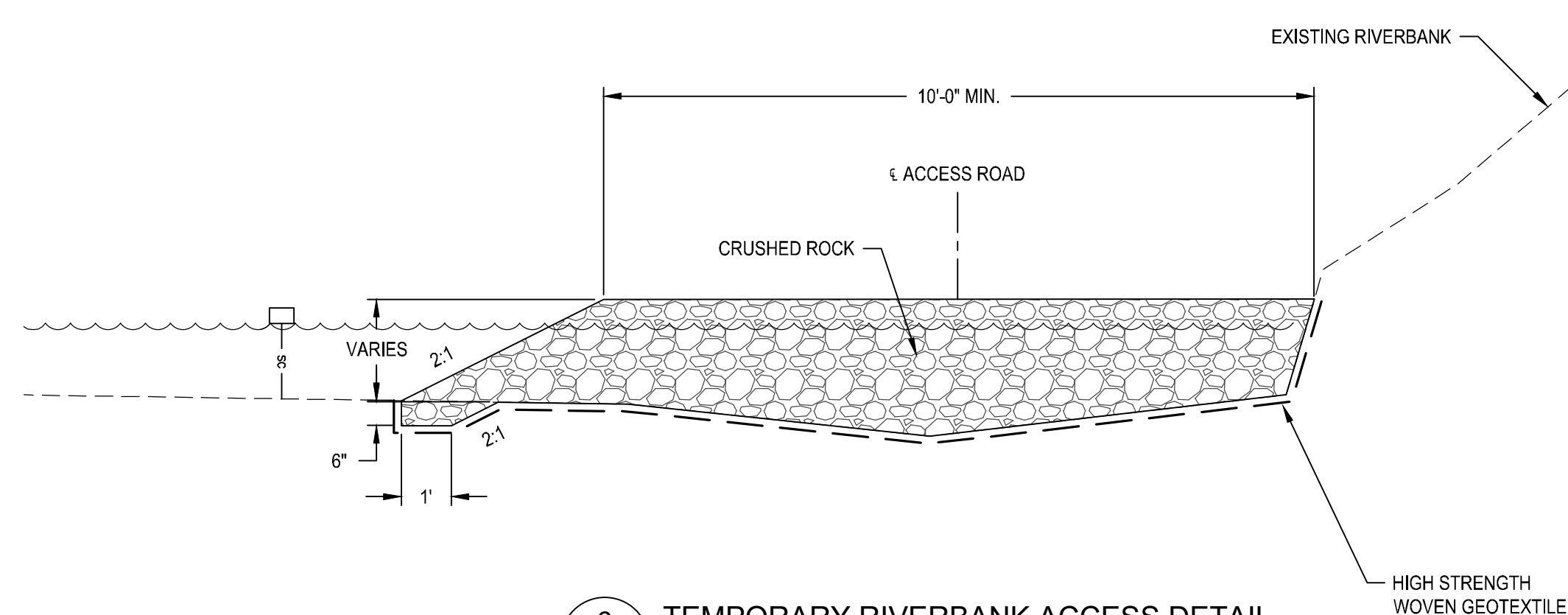
7 TEMPORARY COFFERDAM DETAIL
C-201 SCALE: NO SCALE



4 CONSTRUCTION ENTRANCE DETAIL
C 202 SCALE: NO SCALE



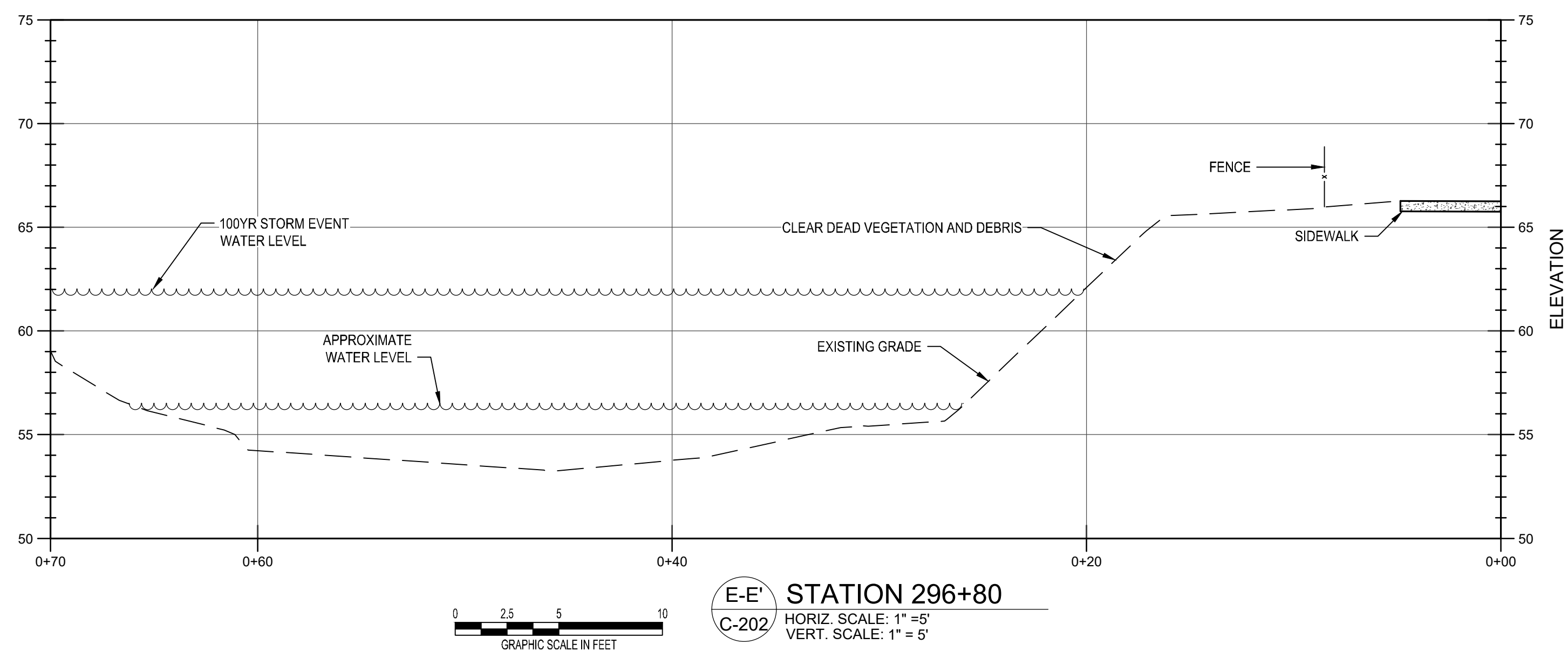
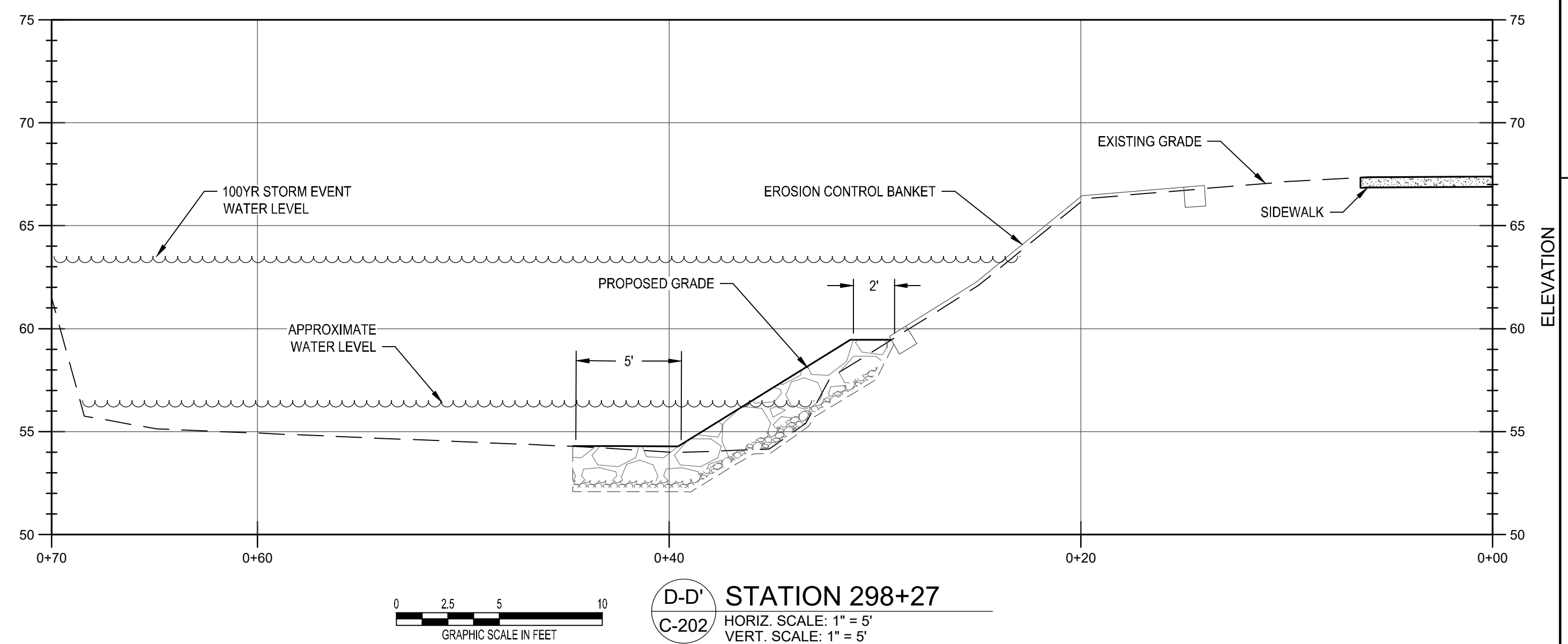
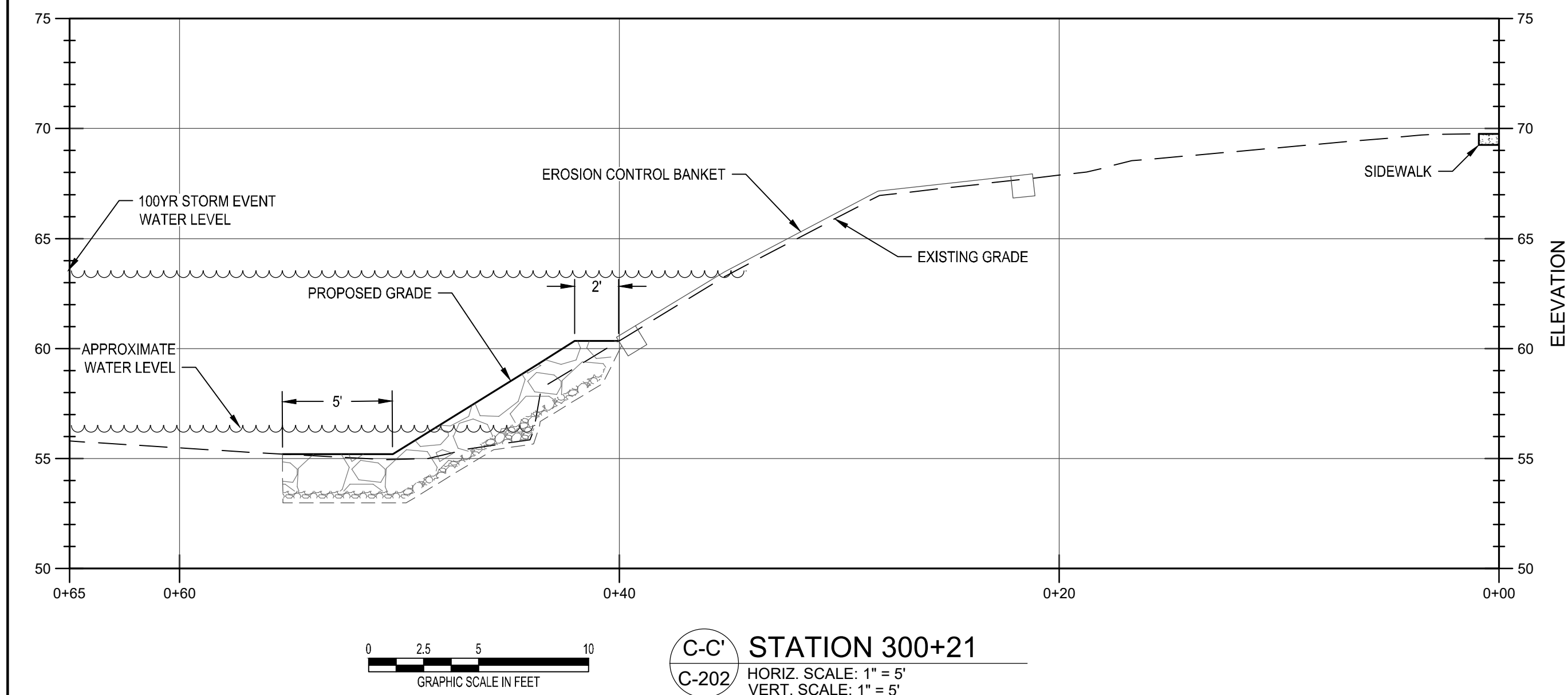
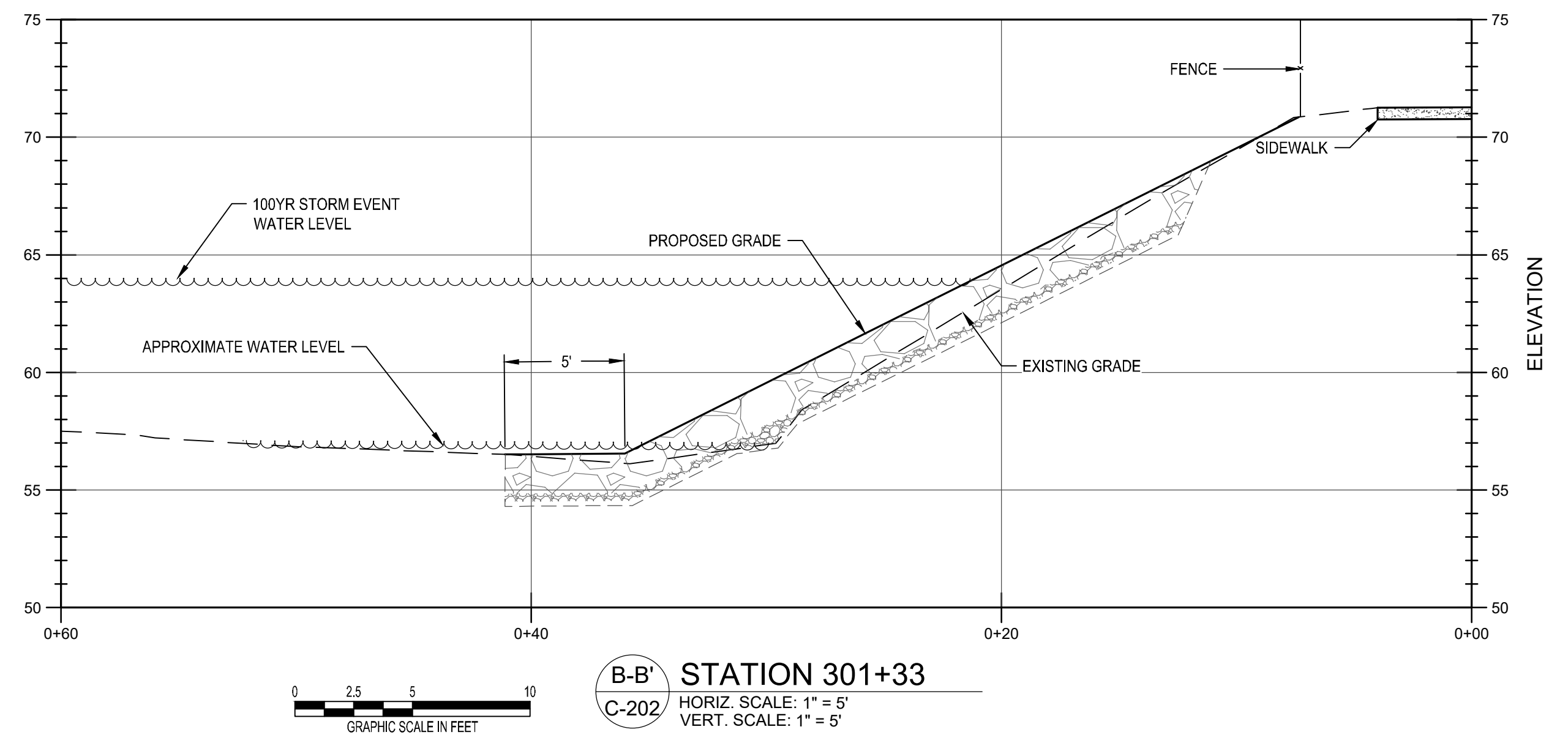
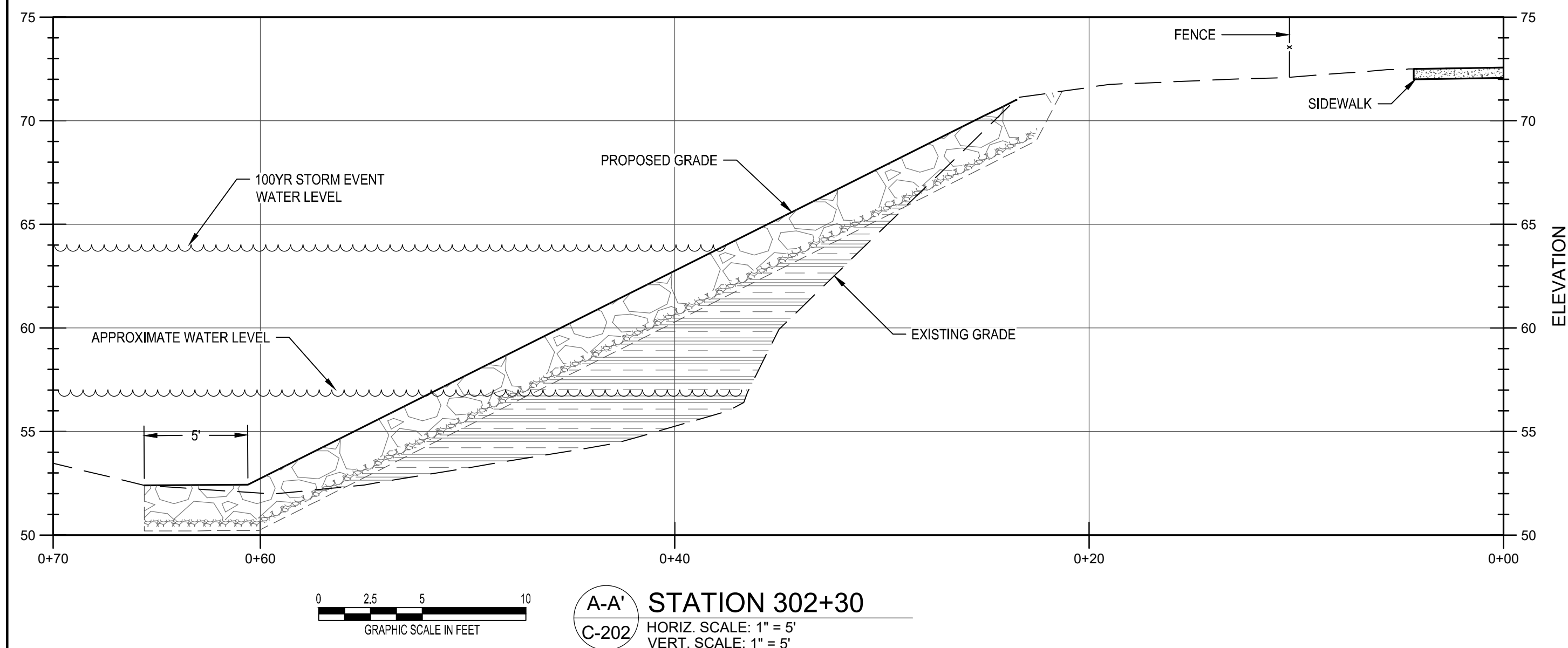
5 SILT CURTAIN DETAIL
C-201 SCALE: NO SCALE



6 TEMPORARY RIVERBANK ACCESS DETAIL
C 301 SCALE: NO SCALE

NOTES:

1. CONSTRUCTED ACCESS ROAD SHALL BE AS SHOWN OR AS APPROVED BY ENGINEER
2. THE RIVERBANK ACCESS IS TO BE DECONSTRUCTED AS WORK PROGRESSES ALONG THE RIVERBANK. USE THE CRUSHED ROCK FROM THE ACCESS AS THE RIPRAP BEDDING WHEN POSSIBLE



<div><div><div>RHODE ISLAND ASSOCIATION OF CONSERVATION DISTRICTS</div><div>WOONASQUATUCKET RIVERBANK RESTORATION</div><div>JOHNSTON, RHODE ISLAND</div></div><div>JOHNSTON, RHODE ISLAND</div><div>CROSS SECTIONS</div></div>										S&L	DESIGN INFORMATION				PERSONS			
											DESIGNED BY: JS		DATE	BY	NO.			
		DRAWN BY: CNS		CHECKED BY: LJR		PROJECT MANAGER: AH												