



**STATE OF MARYLAND
DEPARTMENT OF THE ENVIRONMENT
WATER AND SCIENCE ADMINISTRATION**



WATER QUALITY CERTIFICATION

CERTIFICATION NUMBER: 22-WQC-0013(R1)

ISSUED TO: Baltimore District
US Army Corps of Engineers
Navigation Branch
2 Hopkins Plaza
Baltimore, Maryland, 21203
Attn: Graham McAllister

EFFECTIVE DATE: June 29, 2022

PROJECT LOCATION: Fishing Creek Federal Navigation Channel
Chesapeake Beach, Calvert County, Maryland

DESCRIPTION OF CERTIFIED PROJECT: To hydraulically dredge the Fishing Creek Federal navigation channel to its authorized depth of 7 feet MLLW (plus at least one foot of overdepth) for a width of 100 feet, and to dredge a 75-foot long by 10-foot deep access channel parallel to the existing jetty, resulting in approximately 22,000 cubic yards of material consisting of clay, mud, sand, silt, and shell. Dredged material is proposed to be hydraulically pumped to a nearby existing upland placement site. The work also includes the rehabilitation of the southern jetty along Fishing Creek by placing 1.5 to 3 ton capstone to restore the jetty elevation 2.7 feet higher than originally constructed to reduce overtopping, and increase the jetty crest width to 16 feet.

22-WQC-0013 was issued on June 9, 2022 certifying the activity described above. Additional information was subsequently received from Maryland Department of Natural Resources (DNR), which included updated time-of-year restrictions in consideration of the existing environment surrounding the proposed work. As a result, US Army Corps of Engineers (USACE) Baltimore District Navigation provided Maryland with the opportunity to revise or reconsider the June 9, 2022 WQC decision. Maryland is hereby certifying the proposed work subject to the time-of-year restrictions recommended by DNR to ensure that the activity does not result in adverse impacts to water quality or designated uses.

WATER QUALITY CERTIFICATION

UNDER AUTHORITY OF SECTION 401 OF THE FEDERAL WATER POLLUTION CONTROL ACT AND ITS AMENDMENTS AND IN ACCORDANCE WITH § 9-313 THROUGH § 9-323, INCLUSIVE, OF THE ENVIRONMENT ARTICLE, ANNOTATED CODE OF MARYLAND, THE MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER AND SCIENCE ADMINISTRATION (DEPARTMENT) HAS DETERMINED THAT THE REGULATED ACTIVITIES DESCRIBED IN THE REQUEST FOR

CERTIFICATION WILL NOT VIOLATE MARYLAND'S WATER QUALITY STANDARDS, IF CONDUCTED IN ACCORDANCE WITH THE CONDITIONS OF THIS CERTIFICATION.

This Water Quality Certification (Certification) is issued under authority of Section 401 of the Federal Water Pollution Control Act and its Amendments, Title 9, Subtitle 3 of the Environment Article, and Code of Maryland Regulations (COMAR) 26.08.02.10. The Maryland Department of the Environment (Department) has determined from a review of the request application file that the project activities described in the above will not violate Maryland's water quality standards, provided that the following conditions are satisfied. This Certification does not relieve any person conducting activities under this Certification (Certification Holder) from the responsibility to obtain any other approvals, licenses, or permits in accordance with federal, State, or local requirements.

The Certification Holder subject to this Certification shall comply with the following conditions:

SPECIAL CONDITIONS

1. The Certification Holder shall not conduct any dredging in the easternmost approximately 2,000 feet of the proposed Federal channel maintenance dredging within 500 yards of an area designated as a natural oyster bar (NOB 10-2) during the period 1 June through 30 September of any year.
2. The Certification Holder shall not perform any dredging from November 15th through March 1st of any year to protect wintering waterfowl, with the following exception: The proposed access channel dredging and jetty rehabilitation work can be performed during the period 15 November through 1 March.
3. The dredged material placement site (DMP) shall be operated to limit turbidity in the discharge to waters of the State. A turbidity sample of the discharge water shall be performed every hour of active pumping to the DMP or when there is an observed change in the clarity of the water. Turbidity in the discharge may not exceed 150 units at any time or 50 units as a monthly average. Units shall be measured in Nephelometer Turbidity Units. A logbook of all turbidity monitoring shall be kept on site. The dredger shall have a person at the discharge point of the DMP in constant radio communication. If a problem is incurred, the dredging operation shall be immediately shut down until the reason for the problem can be ascertained and rectified.
4. The Certification Holder shall conduct maintenance dredging within the scope of this Certification in terms of authorized dredge area, volume of material, and authorized depths.
5. The Licensee shall conduct a post dredge bathymetric survey and forward to the Water and Science Administration, Tidal Wetlands Division within 45 days after the termination of maintenance dredging operations.

22-WQC-0013(R1)

6. If work is not conducted by the Certification Holder, all work performed under this Water Quality Certification shall be conducted by a marine contractor licensed by the Marine Contractors Licensing Board (MCLB) in accordance with Title 17 of the Environment Article of Annotated Code of Maryland. Licensing by MCLB shall occur prior to the beginning of dredging activities. A list of licensed marine contractors may be obtained by contacting the MCLB at 410-537- 3249, by e-mail at MDE.MCLB@maryland.gov or by accessing the Maryland Department of the Environment, Environmental Boards webpage.
7. Dredged material pipelines shall be installed, marked and maintained in accordance with all U.S. Coast Guard requirements for navigational safety. Dredge material pipelines and associated equipment shall be removed as soon as practicable, upon completion of activities authorized under this License.
8. The stone jetty shall be designed and constructed to prevent the loss of fill material to waters of the State of Maryland.
9. The DMP shall have an erosion and sediment control plan approved by the appropriate approval authority, including following the stabilization requirements set forth in COMAR 26.17.01.07 and “2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control,” as may be amended.
10. The Certification Holder shall cease operations in the event of any inadvertent returns resulting from failure of the dredge material pipeline and associated equipment and shall:
 - a) Notify the Department within 24 hours; and
 - b) Implement an inadvertent return contingency plan approved by the Department.

GENERAL CONDITIONS

1. All water quality-related performance standards and conditions required by the Department in any state issued authorization for activities in tidal wetlands, nontidal waterways, their 100-year floodplains, nontidal wetland buffers, or nontidal wetland expanded buffers to ensure that any discharges will not result in a failure to comply with water quality standards in COMAR 26.08.02. or other water quality requirements of state law or regulation shall be met.
2. This Certification does not obviate the need to obtain required authorizations or approvals from other State, federal or local agencies as required by law.
3. The Certification Holder shall obtain any and all additional authorizations or approvals, including self-certifying General Permits issued by the Department, and shall comply with all conditions of such authorizations.
4. The proposed project shall be constructed in accordance with the approved final plan by the Department, or, if Department approval is not required, the plan approved by the U.S. Army Corps of Engineers; and its approved revisions.
5. All fill and construction materials not used in the project shall be removed and disposed of

in a manner which will prevent their entry into Waters of the U.S. and State.

6. This Certification does not authorize any injury to private property, any invasion of rights, or any infringement of federal, state, or local laws or regulations.
7. The Certification Holder shall allow authorized representatives of the Department access to the site of authorized activities during normal business hours to conduct inspections and evaluations of the operations and records necessary to assure compliance with this Certification.
8. No stockpiles of any material shall be placed in Waters of the U.S. or state or private tidal wetlands.
9. This Certification is valid for the project identified herein and the associated federally-approved U.S. Army Corps of Engineers Civil Works Navigation Branch project, until such time that federal approval expires or is not administratively extended.

STATEMENTS OF NECESSITY AND CITATIONS

1. Statement of Necessity for Special Condition 1: A time of year restriction is necessary to maintain the designated use for support of estuarine and marine aquatic life and shellfish harvesting. Oysters spawn and subsequently set their spat during the period June through September in estuarine sections of rivers and the Bay. During this period, dredge units can entrain and destroy oyster eggs and larvae. In addition, sediments resuspended by dredging activities may affect oysters. Potentially, larval oysters could be starved by ingesting sediment particles which are the same size as prey organisms. Larval oysters could also delay metamorphosis to spat because the substrate is covered with loose sediments and is therefore unsuitable. Oysters also become inactive during the colder months of the year and are more liable to burial (inability to clear themselves of deposited sediment) during this period of reduced activity.

Citation: Federal and state laws which authorize this condition include but are not limited to: COMAR: 26.08.02.02B(1)(d); 26.08.02.02B(3); COMAR 26.08.02.02-1

2. Statement of Necessity for Special Condition 2: A time of year restriction is necessary to allow for wintering waterfowl to move from breeding areas to seasonally use suitable winter habitat. Breeding and wintering habitat are both essential to support waterfowl populations. Breeding habitat would not sustain waterfowl during winter. Disturbance during the closure period would interfere directly or indirectly with designated uses for growth and propagation of wildlife.

Citations: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08; COMAR 26.08.02.02.B.(3)

3. Statement of Necessity for Special Condition 3: Activities which result or may result in a discharge to regulated waters, including dredging and dredged material placement may

22-WQC-0013(R1)

require monitoring to ensure that water quality standards are met and designated uses are maintained, and to determine if remedial measures are needed to restore compliance with water quality standards if they are not met as a result of the discharge. The condition is necessary to ensure that dredged material does not increase turbidity in violation of general and numeric water quality standards and interfere with designated uses and to ensure that offsets to regulated waters are successfully implemented.

Citation: COMAR 26.08.02.03-3A(5); COMAR 26.08.02.03-3(C(5)); COMAR 26.08.02.01B(2); COMAR 26.08.02.02B(1) COMAR 26.08.02.02B(3); COMAR 26.08.02.03B; COMAR 26.08.02.02B(1); 26.08.02.03B(1)(b); 26.08.02.03B(2)(e); 26.08.02; 26.08.01.02A; 26.08.02.09A; 26.08.02.02B(1)(d); COMAR 26.24; 26.08.02.03-3C(9)(a); COMAR 26.08.02.03B(2); COMAR 26.08.02.02B(1)(d);

4. Statement of Necessity for Special Condition 4: The limits on the scope of maintenance dredging are necessary to ensure that no discharges would violate water quality standards and designated uses for water clarity, turbidity, growth and propagation of fish, other aquatic life, and wildlife; and water contact recreation

Citations: COMAR 26.08.02.02B(1)(d); COMAR 26.08.02.02B(3); COMAR 26.08.02.03B

5. Statement of Necessity for Special Condition 5: The condition is necessary to ensure that discharges associated with dredging result in water depths which are appropriate to support designated uses of fishing and water contact recreation and propagation of fish, other aquatic life and wildlife; and ensure that no discharges are unsightly, create a nuisance, change to an objectionable color or interferes with designated uses.

Citations: COMAR 26.08.02.01B(2); COMAR 26.08.02.02B(1); 26.08.02.02B(3); COMAR 26.08.02.03B

6. Statement of Necessity for Special Condition 6: Expertise for conducting certain activities is required to ensure that there is no violation of water quality standards nor interference with designated uses. This condition is necessary to ensure that discharges will be conducted in a manner which does not violate water quality criteria nor interfere with designated uses.

Citation: COMAR 26.08.02.02B(2)- B(4); COMAR 26.08 02.03B(2)(d) – (e); COMAR 26.08.02.03B(1)(b); 26.08.02.03B(2); COMAR 23.02.04.04

7. Statement of Necessity for Special Condition 7: The condition is necessary to ensure that the discharge does not interfere with navigational safety and designated uses for water contact recreation and fishing, nor create a nuisance.

Citation: COMAR 26.08.02.01B(1) and B(2); COMAR 26.08.02.03B(1)(a); COMAR 26.08.02.03B(2)(d)

8. Statement of Necessity for Special Condition 8, 9 & General Condition 5, 8: Fill or construction material within or adjacent to regulated resources may cause discharges

resulting in turbidity in excess of water quality standards and interfere with designated uses of growth and propagation of fish, other aquatic life, wildlife; and other designated uses; and fail to meet general water quality criteria that waters not be polluted by substances in amounts sufficient to be unsightly or create a nuisance.

Citation: 26.08.02.03B(1)-B(2); COMAR 26.23; COMAR 26.24; COMAR 26.17.04

9. Statement of Necessity for Special Condition 9: Erosion and sediment control plans are necessary to ensure that sediment discharges from construction activities will not enter waters of the United States. Sediment discharges from earth disturbance or discharges at erosive rates within or adjacent to regulated resources may cause discharges resulting in turbidity in excess of water quality standards and interfere with designated uses of growth and propagation of fish, other aquatic life, wildlife; and other designated uses; and fail to meet general water quality criteria that waters not be polluted by substances in amounts sufficient to be unsightly or create a nuisance

Citation: Env. Article, Title 4, Subtitle 1 COMAR 26.17.01; 26.08.02.03B(1)-B(2)

10. Statement of Necessity for Special Condition 10: The condition is necessary to ensure that water quality standards are met under unique circumstances for inadvertent discharges and that designated uses of waters are maintained. Releases of significant amounts of sediment can impact aquatic environments and if unchecked can alter them to an uninhabitable state.

Citation: Federal and state laws that authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 & 4; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 5, Subtitles 5 and 9; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08; COMAR 26.08.02.10G(3); COMAR 26.17.04; COMAR 26.23; COMAR 26.24; COMAR 26.23.02.06, COMAR 26.08, COMAR 26.08.02.10E; COMAR 26.08.02.09C(3); COMAR 26.08.02.03B(1)(b); COMAR 26.08.02.03B(2); COMAR 26.08.02.03-3; COMAR 26.08.02.02B(2); COMAR 26.08.02.02B(4); COMAR 26.08.02.02B(6); COMAR 26.08.02.02B(8)

11. Statement of Necessity for General Condition 1, 2, 3, 4: The condition is necessary to ensure that water quality standards are met and designated uses are maintained.

Citations: Federal and state laws which authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 5, Subtitles 5 and 9; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08; COMAR 26.08.02.10G(3); COMAR 26.23.02.06; COMAR 26.17.01; COMAR 26.23; COMAR 26.24

12. Statement of Necessity for General Condition 6: The condition is necessary to clarify the scope of this certification to ensure compliance with water quality regulations, without limiting restrictions through other requirements.

Citation: Federal and state laws which authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 5, Subtitles 5 and 9; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08, COMAR 26.08.02.10E; COMAR 26.23.02.06; COMAR 26.17.04; COMAR 26.23; COMAR 26.24

13. Statement of Necessity for General Condition 7: Conditions of certification involve precise actions to comply with water quality standards. Site inspection may be necessary to ensure that limits, methods, and other requirements are met to ensure that water quality standards are met and designated uses are maintained.

Citation: Federal and state laws that authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 5, Subtitles 5 and 9; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08; COMAR 26.23.02.06; COMAR 26.23; COMAR 26.24; COMAR 26.17.04

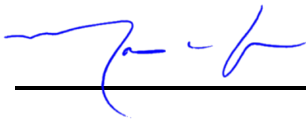
14. Statement of Necessity for General Condition 9: This condition is necessary to qualify the period of applicability of the terms and conditions of this Certification to be protective of Maryland water quality standards.

Citations: Federal and state laws which authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; 40 C.F.R. 121, 15 C.F.R. 930, Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 5, Subtitles 5 and 9; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08; COMAR 26.17.04; COMAR 26.23; COMAR 26.24

Failure to comply with these conditions may subject the Certification Holder to criminal and/or civil penalties or other enforcement action in accordance with applicable law.

CERTIFICATION APPROVED:

DATE:



7/1/22

D. Lee Currey, Director
Water and Science Administration

Tracking Number: 202260727
Agency Interest Number: 175046
Effective Date: June 29, 2022

Enclosure: Plan Sheets dated March 2022

cc: WSA Inspection & Compliance Program

MAINTENANCE DREDGING

FISHING CREEK

CALVERT COUNTY, MARYLAND

INDEX OF DRAWINGS FISHING CREEK DREDGING PLANS

TITLE	FILE & MAP NO.	SHEET NO.
COVER SHEET	FILE:75 MAP: 22-001	1
FISHING CREEK STATIONS 0+000 TO 1+900	FILE:75 MAP: 22-002	2
FISHING CREEK STATIONS 2+000 TO 4+223	FILE:75 MAP: 22-003	3
FISHING CREEK PLACEMENT SITE	FILE:75 MAP: 22-004	4
WIER BOX REPLACEMENT CONSTRUCTION DETAILS	FILE:75 MAP: 22-005	5
DETAILS AND NOTES	FILE: 5 MAP: 22-006	6

INDEX OF DRAWINGS JETTY REPAIR PLANS

TITLE	SHEET NO.
COVER SHEET	G-001
GENERAL INFORMATION SHEET	C-001
GENERAL PLAN	C-101
PLAN-SOUTH JETTY EXISTING CONDITIONS	C-102
PLAN-JETTY REPAIR AREA	C-103
PROFILE-JETTY REPAIR AREA	C-201
TYPICAL SECTIONS	C-301
CROSS SECTIONS-STA. 0+25 TO STA. 2+00	C-302
CROSS SECTIONS-STA. 2+25 TO STA. 4+00	C-303
CROSS SECTIONS-STA. 4+25 TO STA. 6+00	C-304
CROSS SECTIONS-STA. 6+25 TO STA. 8+00	C-305
CROSS SECTIONS-STA. 8+25 TO STA. 10+00	C-306
CROSS SECTIONS-STA. 10+25 TO STA. 12+00	C-307
CROSS SECTIONS-STA. 12+25 TO STA. 13+50	C-308
PLAN-CONFINED DISPOSAL SITE	C-401
DETAILS-GROUTING	C-501

US Army Corps
of Engineers
Baltimore District

DATE	BY	REVISION

DATE	BY	REVISION
MAR 22 2001	D.M.S.	
FILE:75 MAP: 22-001		
DESIGNED BY	DRIVING CODE	FILE NAME

THIS PRODUCT WAS DESIGNED BY THE BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS. THE INITIALS OR SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER 1110-1-8152.

SHOWN BY:
Daniel M. Szymanski
PROJECT MANAGER

RECOMMENDED:

DIRECTOR, DEPT. OF NATURAL RESOURCES

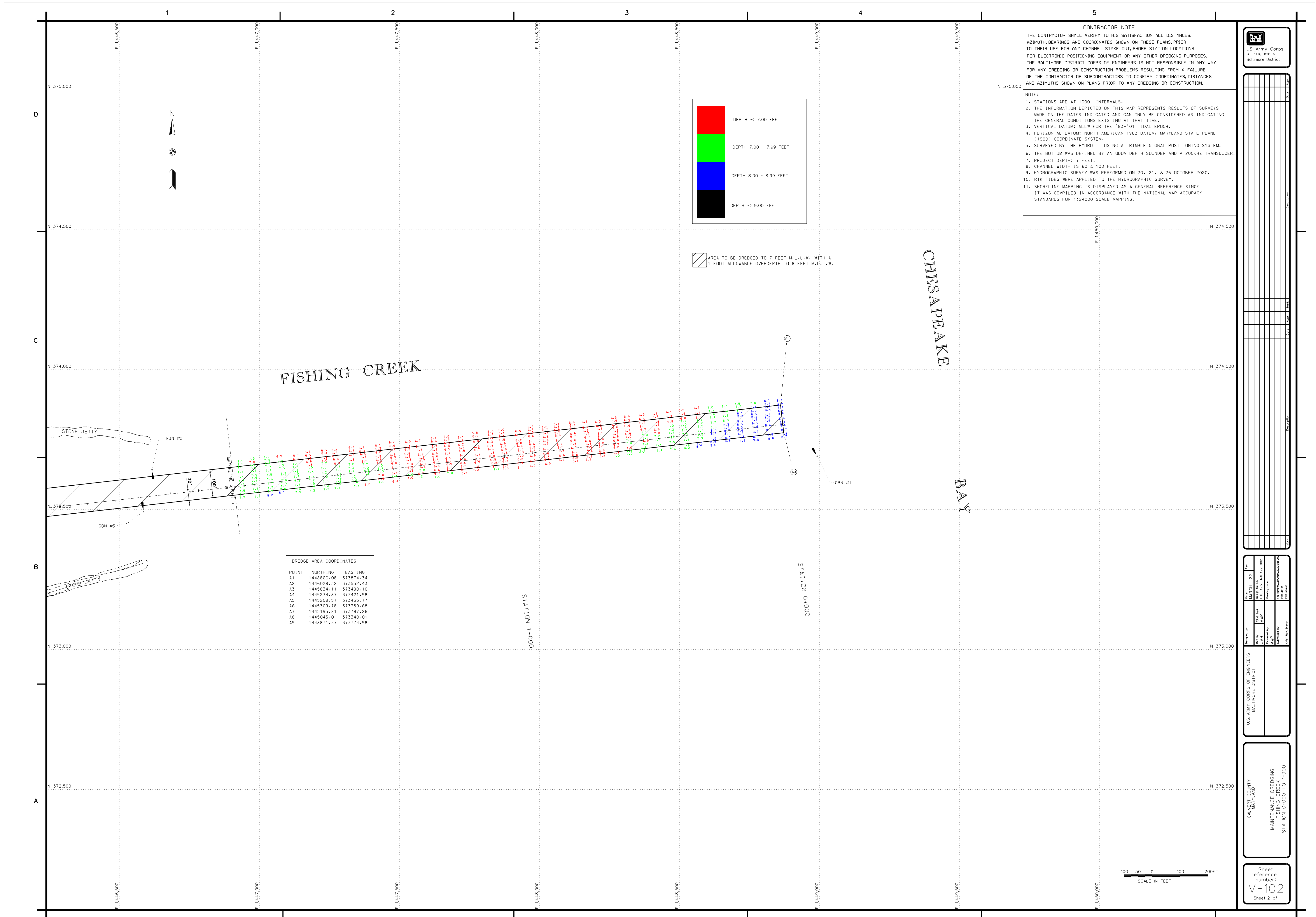
RECOMMENDED:
Kevin Brune
CHIEF, NAVIGATION SECTION

RECOMMENDED:
Robert Mullen
CHIEF, NAVIGATION BRANCH

APPROVED:
Walter P. Sel
CHIEF, OPERATIONS DIVISION

CALVERT COUNTY
MARYLAND
MAINTENANCE DREDGING
FISHING CREEK
COVER SHEET

Sheet
reference
number:
V-101
Sheet 1 of

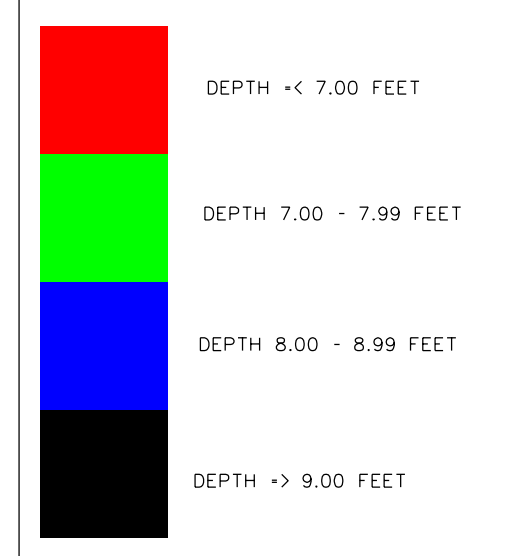


CONTRACTOR NOTE

THE CONTRACTOR SHALL VERIFY TO HIS SATISFACTION ALL DISTANCES, AZIMUTHS, BEARINGS AND COORDINATES SHOWN ON THESE PLANS, PRIOR TO THEIR USE FOR ANY CHANNEL STAKE OUT, SHORE STATION LOCATIONS FOR ELECTRONIC POSITIONING EQUIPMENT OR ANY OTHER DREDGING PURPOSES. THE BALTIMORE DISTRICT CORPS OF ENGINEERS IS NOT RESPONSIBLE IN ANY WAY FOR ANY DREDGING OR CONSTRUCTION PROBLEMS RESULTING FROM A FAILURE OF THE CONTRACTOR OR SUBCONTRACTORS TO CONFIRM COORDINATES, DISTANCES AND AZIMUTHS SHOWN ON PLANS PRIOR TO ANY DREDGING OR CONSTRUCTION.

NOTE:

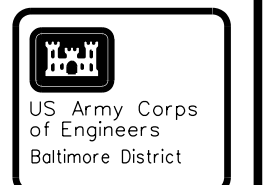
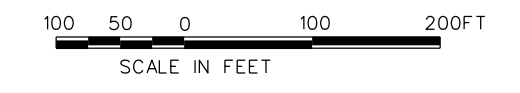
- STATIONS ARE AT 1000' INTERVALS.
- THE INFORMATION DEPICTED ON THIS MAP REPRESENTS RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
- VERTICAL DATUM: M.L.W FOR THE '83-'01 TIDAL EPOCH.
- HORIZONTAL DATUM: NORTH AMERICAN 1983 DATUM, MARYLAND STATE PLANE (1900) COORDINATE SYSTEM.
- SURVEYED BY THE HYDRO 11 USING A TRIMBLE GLOBAL POSITIONING SYSTEM.
- THE BOTTOM WAS DEFINED BY AN ODOM DEPTH SOUNDER AND A 200KHZ TRANSDUCER.
- PROJECT DEPTH: 7 FEET.
- CHANNEL WIDTH IS 60 & 100 FEET.
- HYDROGRAPHIC SURVEY WAS PERFORMED ON 20, 21, & 26 OCTOBER 2020.
- RTK TIDES WERE APPLIED TO THE HYDROGRAPHIC SURVEY.
- SHORELINE MAPPING IS DISPLAYED AS A GENERAL REFERENCE SINCE IT WAS COMPILED IN ACCORDANCE WITH THE NATIONAL MAP ACCURACY STANDARDS FOR 1:24000 SCALE MAPPING.



AREA TO BE DREDGED TO 7 FEET M.L.L.W. WITH A 1 FOOT ALLOWABLE OVERDEPTH TO 8 FEET M.L.L.W.

DREDGE AREA COORDINATES

POINT	NORTHING	EASTING
A1	1448860.08	373874.34
A2	1446028.32	373552.43
A3	1445834.11	373490.10
A4	1445234.87	373421.98
A5	1445209.57	373455.77
A6	1445309.78	373759.68
A7	1445195.81	373797.26
A8	1445045.0	373340.01
A9	1448871.37	373774.98



NO.	DATE	REVISION

U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT

DATE: MARCH '22
FILED: MAP 22-002
PROJECT: JULY 2020

DESIGNED BY: [Name]
CHECKED BY: [Name]
DATE: [Date]

CALVERT COUNTY
MARYLAND

MAINTENANCE DREDGING
FISHING CREEK
STATION 0+000 TO 1+000

Sheet reference number:
V-102
Sheet 2 of

FISHING CREEK CHANNEL COORDINATES

LEFT SIDE	CENTERLINE	RIGHT SIDE
1448871.37 373774.98	0+00.00 1448867.98 373804.79	1448860.08 373874.34
1445045.05 373340.01	3+400.10 1445089.64 373420.74	1446028.52 373552.43
1445195.81 373787.26	3+793.10 1445089.15 373376.35	1446334.11 373490.10
	4+223.11 1445233.80 373784.73	1445234.87 373421.98
		1445209.57 373455.77
		1445309.78 373759.68

DREDGE AREA COORDINATES

POINT	NORTHING	EASTING
A1	1448860.08	373874.34
A2	1446028.52	373552.43
A3	1445834.11	373490.10
A4	1445234.87	373421.98
A5	1445209.57	373455.77
A6	1445309.78	373759.68
A7	1445195.81	373787.26
A8	1445045.05	373340.01
A9	1448871.37	373774.98

TIDAL BENCH MARK

TIDAL BENCH MARK IS BENCH MARK 60FC05. BENCH MARK IS A STANDARD DISK STAMPED "60-FC-05 2010". FROM 1-97 TAKE THE EXIT TOWARDS US-50 EXITS-207N. BEAR RIGHT AT MD-665 E. SLIGHT RIGHT TOWARD MD-2. TAKE FIRST RIGHT ONTO MD-2 S/SOLOMONS ISLAND RD. TAKE 3RD EXIT AT TRAFFIC CIRCLE TO STAY ON MD-2. TURN LEFT AT MD-260 E/CHESAPEAKE BEACH RD. TURN RIGHT AT MD-260/STATE RD. TURN LEFT AT MEARS AVE. MONUMENT IS 15.5' NE OF TRAFFIC LIGHT. 27.9' SE OF 1ST BOLT ON GUARD RAIL. 34.69' SSE OF POWER POLE. 18.3' SSW OF SW CORNER OF POWER UNIT WHITE BRICK FENCE. 25.5' W OF NW CORNER OF LARGE DISPLAY SIGN.

BENCH MARK ELEV. IS 10.87' ABOVE MLW FOR THE '83-'01 TIDAL EPOCH. COMPUTED USING GEGID18.

BENCHMARK	MLW
60FC05	10.87'
060-03	15.07'
60FC02	6.71'

VERTICAL DATUM

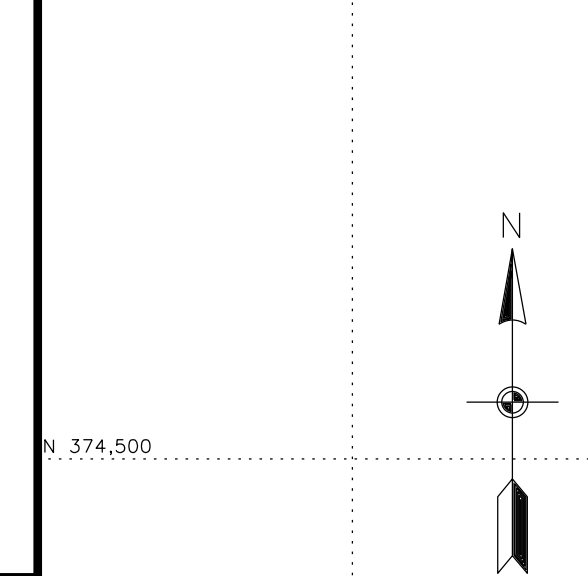
MHW = 1.18
 NAVORS = 0.88
 MLW = 0.20
 MLW = 0.00 ft

CONTRACTOR NOTE

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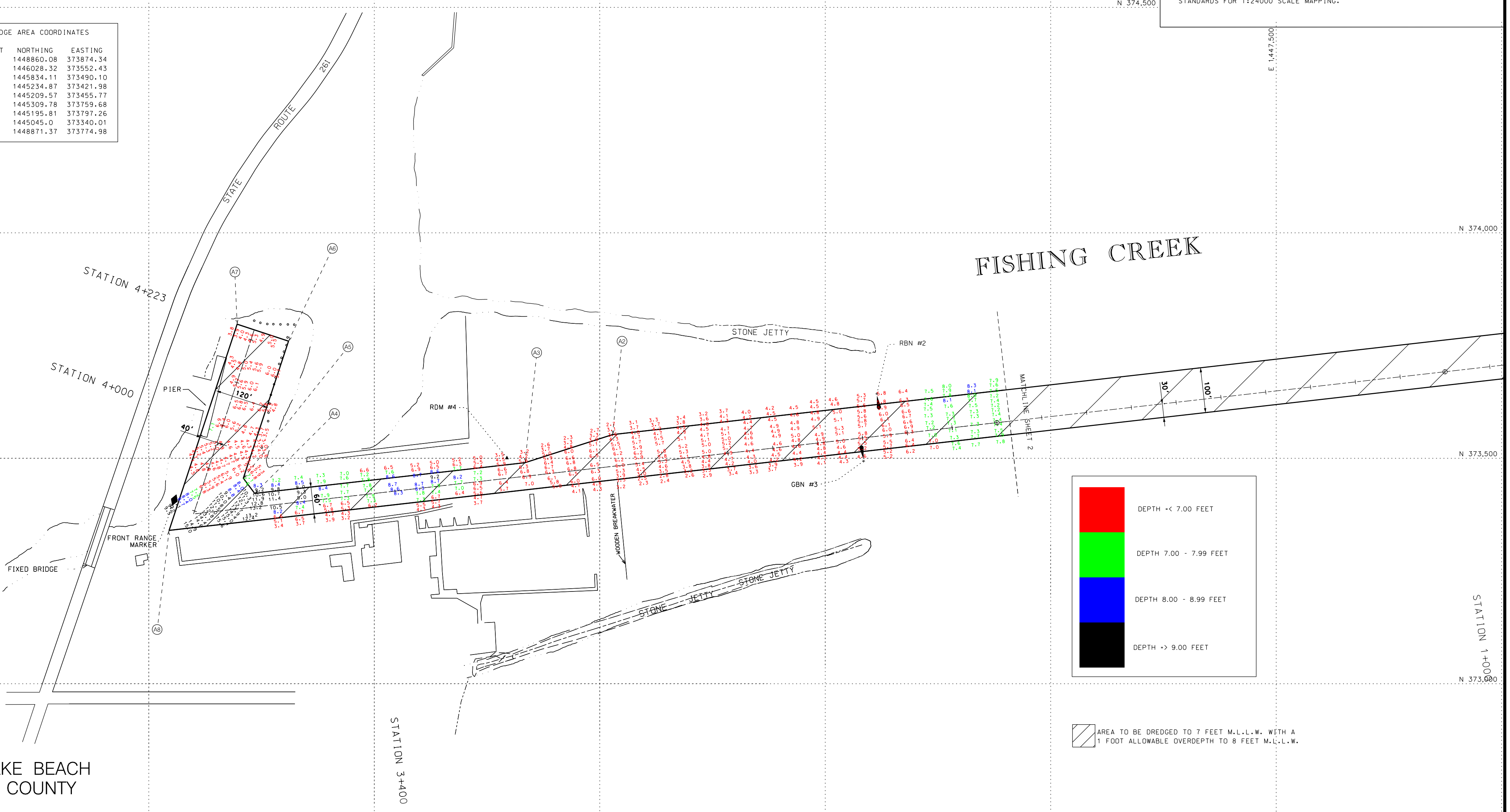
NOTE:

- STATIONS ARE AT 1000' INTERVALS.
- THE INFORMATION DEPICTED ON THIS MAP REPRESENTS RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
- VERTICAL DATUM: MLW FOR THE '83-'01 TIDAL EPOCH.
- HORIZONTAL DATUM: NORTH AMERICAN 1983 DATUM, MARYLAND STATE PLANE (1900) COORDINATE SYSTEM.
- SURVEYED BY THE HYDRO 11 USING A TRIMBLE GLOBAL POSITIONING SYSTEM.
- THE BOTTOM WAS DEFINED BY AN ODOM DEPTH SOUNDER AND A 200KHZ TRANSDUCER.
- PROJECT DEPTH: 7 FEET.
- CHANNEL WIDTH IS 60' & 100 FEET.
- HYDROGRAPHIC SURVEY WAS PERFORMED ON 20. 21. & 26 OCTOBER 2020.
- RTK TIDES WERE APPLIED TO THE HYDROGRAPHIC SURVEY.
- SHORELINE MAPPING IS DISPLAYED AS A GENERAL REFERENCE SINCE IT WAS COMPILED IN ACCORDANCE WITH THE NATIONAL MAP ACCURACY STANDARDS FOR 1:24000 SCALE MAPPING.



N 374,500
N 374,000
N 373,500
N 373,000
N 372,500
N 372,000

E 1,444,000
E 1,444,500
E 1,445,000
E 1,445,500
E 1,446,000
E 1,446,500
E 1,447,000
E 1,447,500



	DEPTH < 7.00 FEET
	DEPTH 7.00 - 7.99 FEET
	DEPTH 8.00 - 8.99 FEET
	DEPTH > 9.00 FEET

AREA TO BE DREDGED TO 7 FEET M.L.L.W. WITH A 1 FOOT ALLOWABLE OVERDEPTH TO 8 FEET M.L.L.W.



U.S. Army Corps of Engineers
BALTIMORE DISTRICT

CHALVERT COUNTY MARYLAND
MAINTENANCE DREDGING
FISHING CREEK
STATION 2+000 TO 4+223

Sheet reference number:
V-103
Sheet 3 of

CONTRACTOR NOTE
 THE CONTRACTOR SHALL VERIFY TO HIS SATISFACTION ALL DISTANCES, AZIMUTH, BEARINGS AND COORDINATES SHOWN ON THESE PLANS, PRIOR TO THEIR USE FOR ANY CHANNEL STAKE OUT, SHORE STATION LOCATIONS FOR ELECTRONIC POSITIONING EQUIPMENT OR ANY OTHER DREDGING PURPOSES. THE BALTIMORE DISTRICT CORPS OF ENGINEERS IS NOT RESPONSIBLE IN ANY WAY FOR ANY DREDGING OR CONSTRUCTION PROBLEMS RESULTING FROM A FAILURE OF THE CONTRACTOR OR SUBCONTRACTORS TO CONFIRM COORDINATES, DISTANCES AND AZIMUTHS SHOWN ON PLANS PRIOR TO ANY DREDGING OR CONSTRUCTION.

NOTE:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
2. VERTICAL DATUM: NAVD88
3. HORIZONTAL DATUM: NORTH AMERICAN 1983 DATUM, MARYLAND STATE PLANE COORDINATE SYSTEM.
4. TOPOGRAPHIC DATA COLLECTED USING A TRIMBLE R-10 AND TRIMBLE ACCESS.
5. TOPOGRAPHIC DATA SURVEYED 1-3 DECEMBER 2021.
6. OUTFLOW PIPE NEEDS TO BE REPLACED FROM THE OUTFALL WEIR BOX TO THE RETURN AT FISHING CREEK. WEIR BOX LOCATIONS BETWEEN CELL 1 AND CELL 2 AND AT CELL 2 AT THE OUTFALL NEED TO BE REPLACED AS WELL.

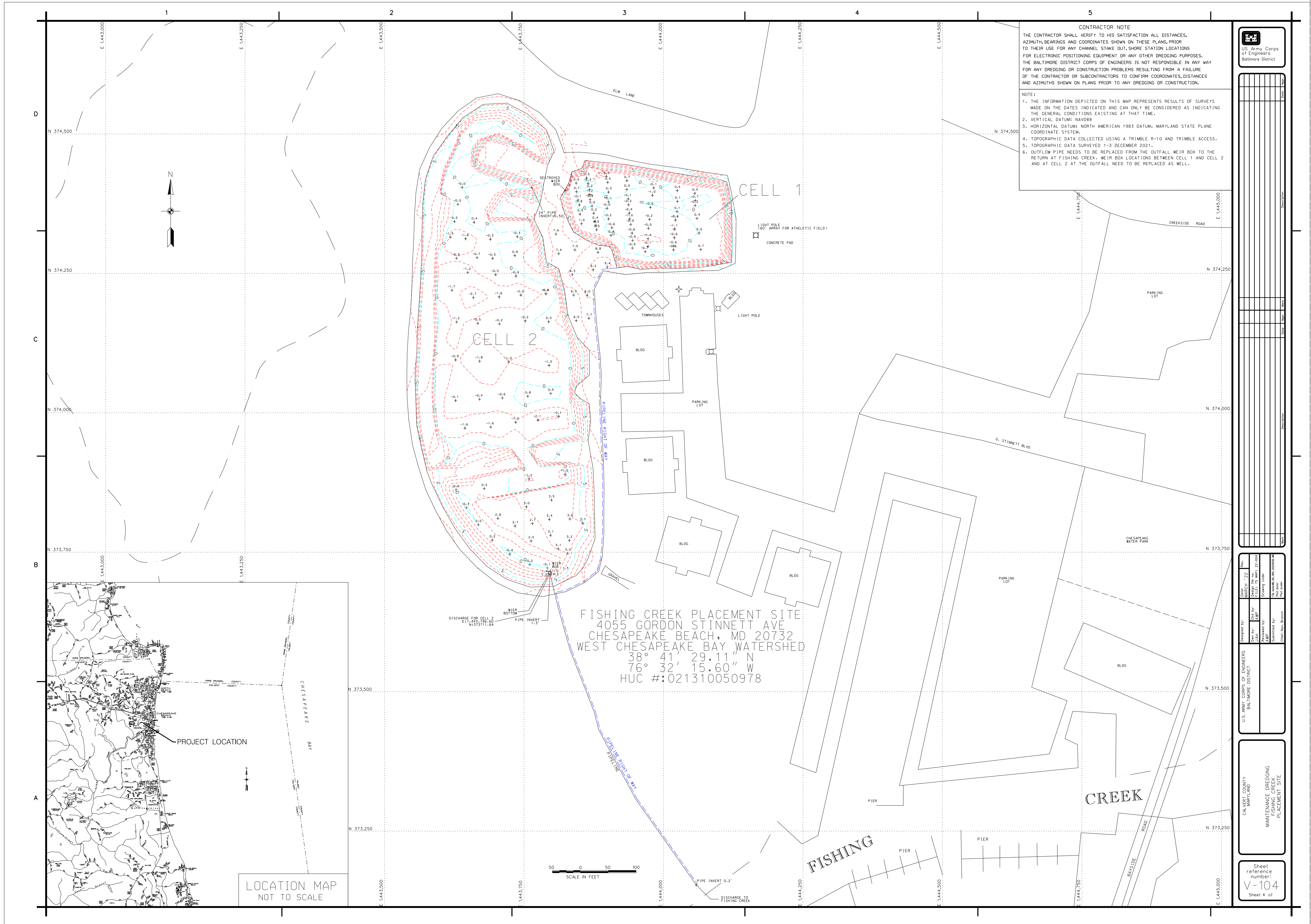


NO.	DATE	BY	REVISIONS

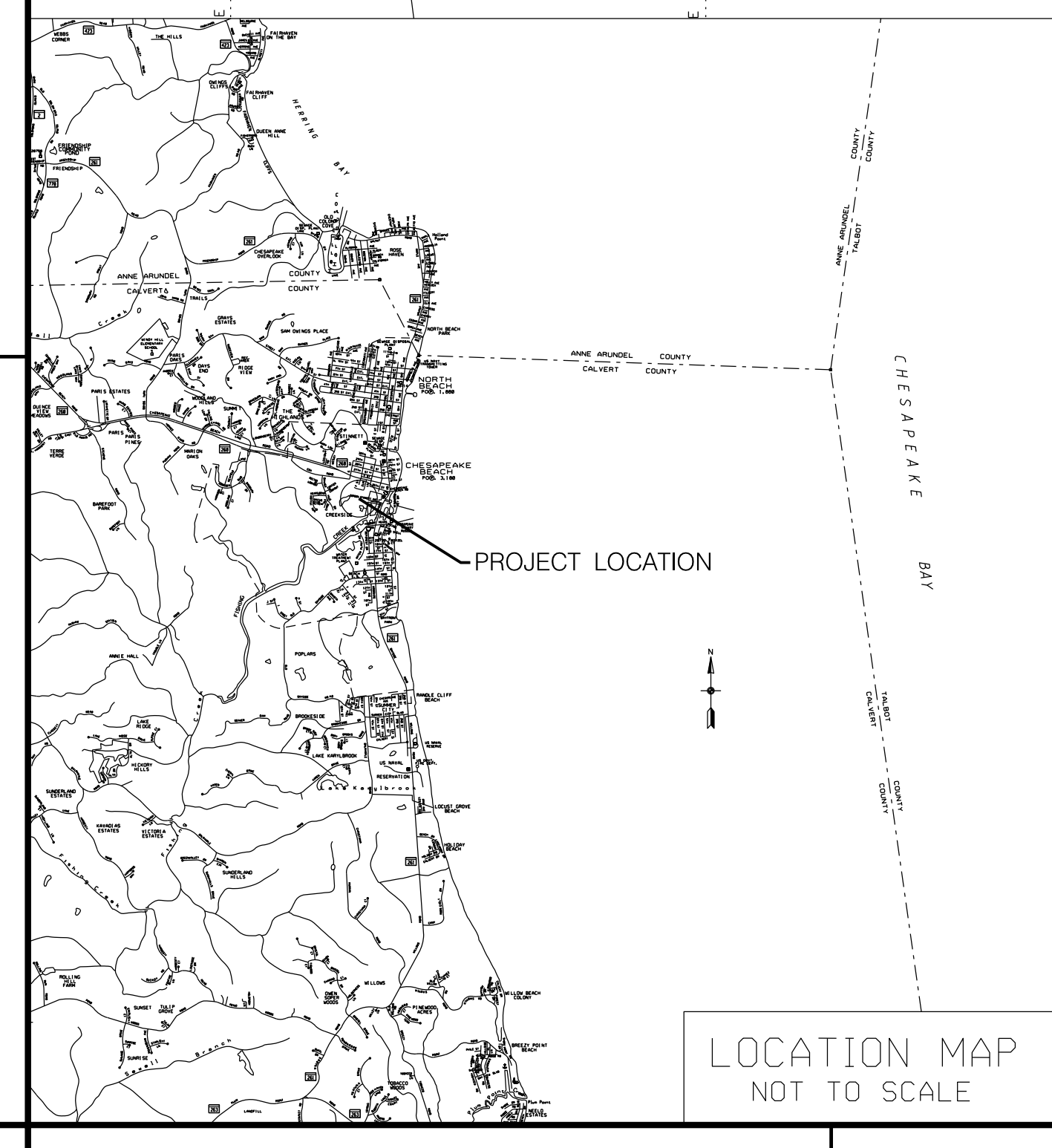
DESIGNED BY	DATE	BY
APPROVED BY	DATE	BY
CHECKED BY	DATE	BY
PROJECT NO.	DATE	BY

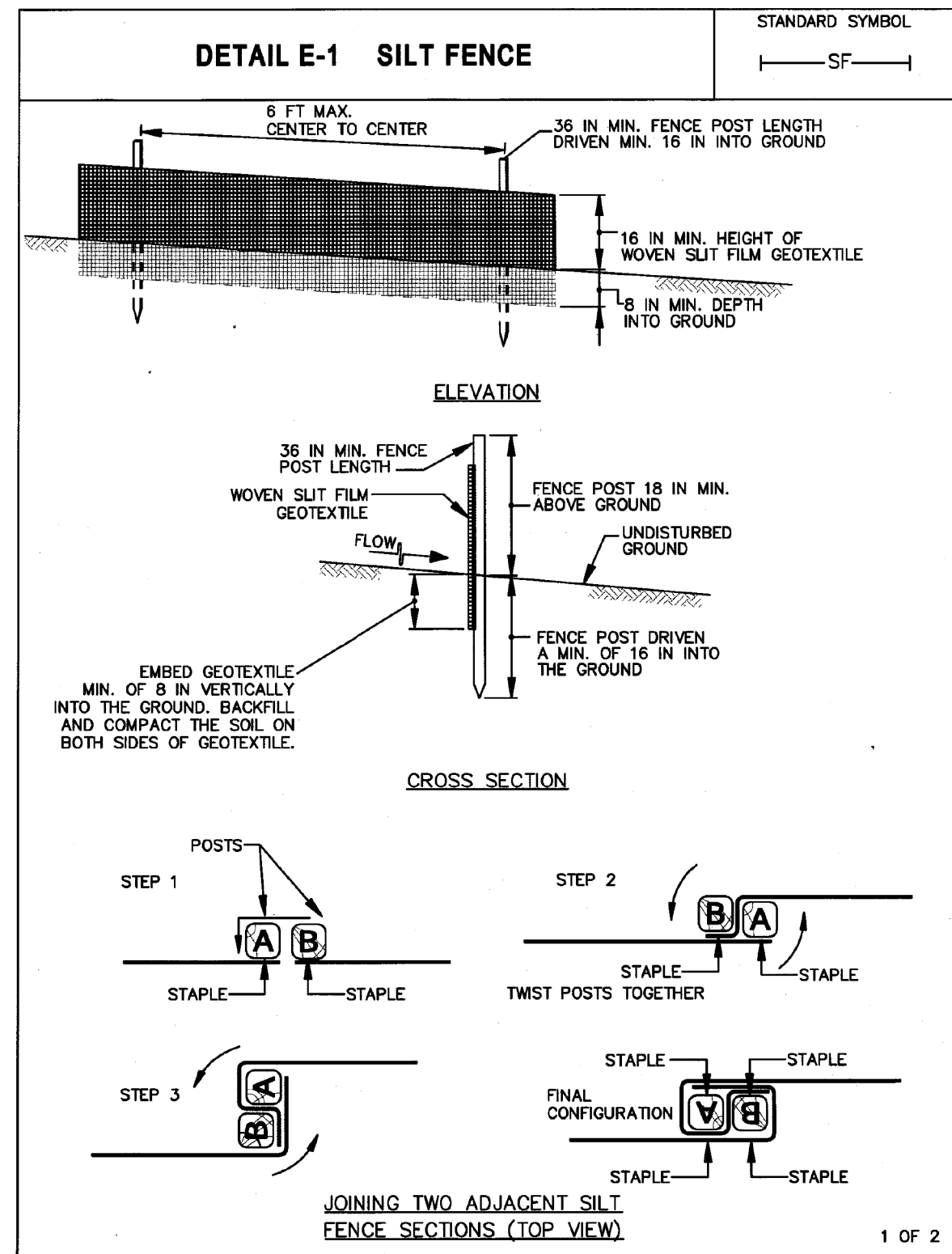
U.S. ARMY CORPS OF ENGINEERS
 BALTIMORE DISTRICT
 CIVIL DIVISION
 MAINTENANCE DREDGING
 FISHING CREEK
 PLACEMENT SITE

Sheet reference number:
V-104
 Sheet 4 of

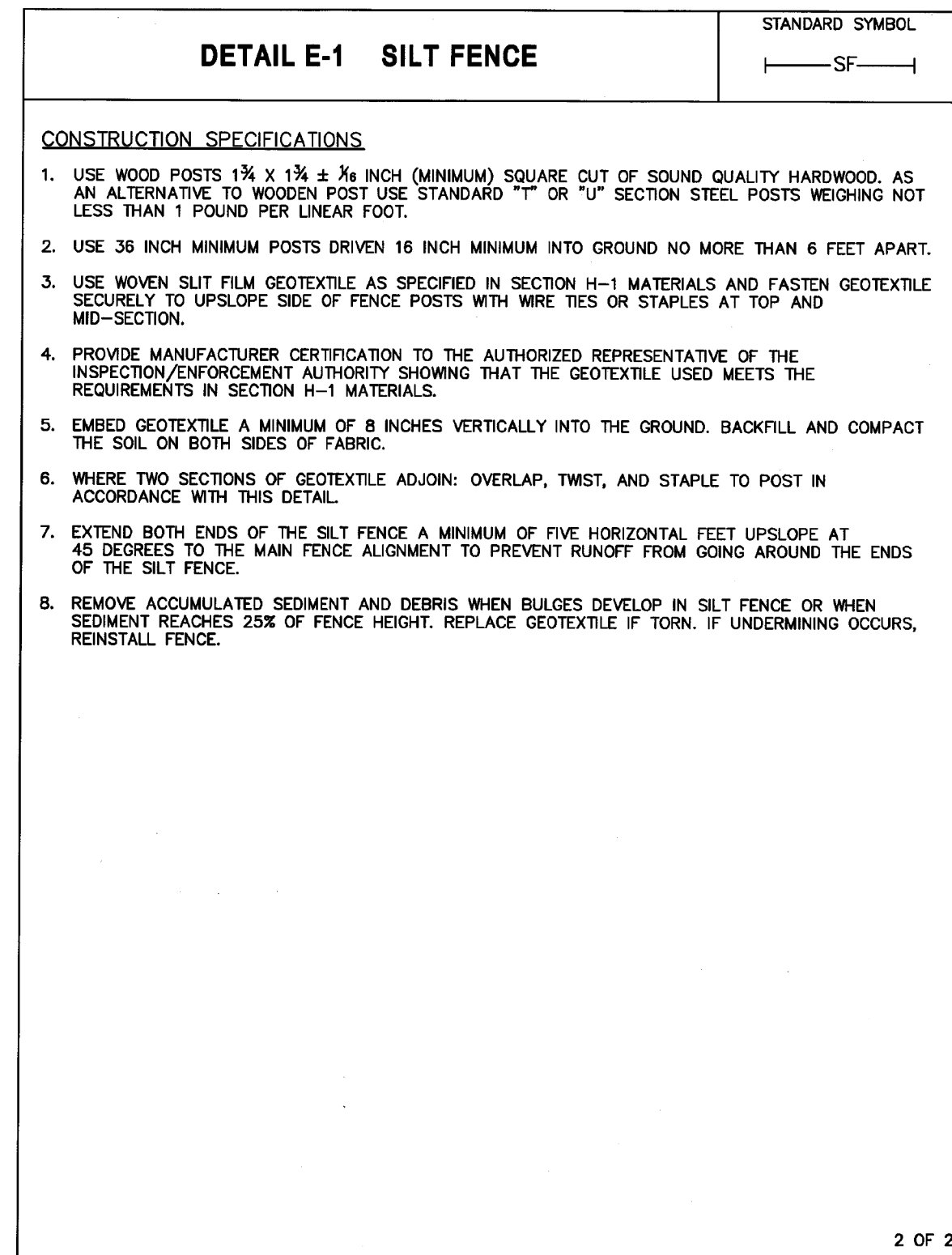


FISHING CREEK PLACEMENT SITE
 4055 GORDON STINNETT AVE
 CHESAPEAKE BEACH, MD 20732
 WEST CHESAPEAKE BAY WATERSHED
 38° 41' 29.11" N
 76° 32' 15.60" W
 HUC #: 021310050978

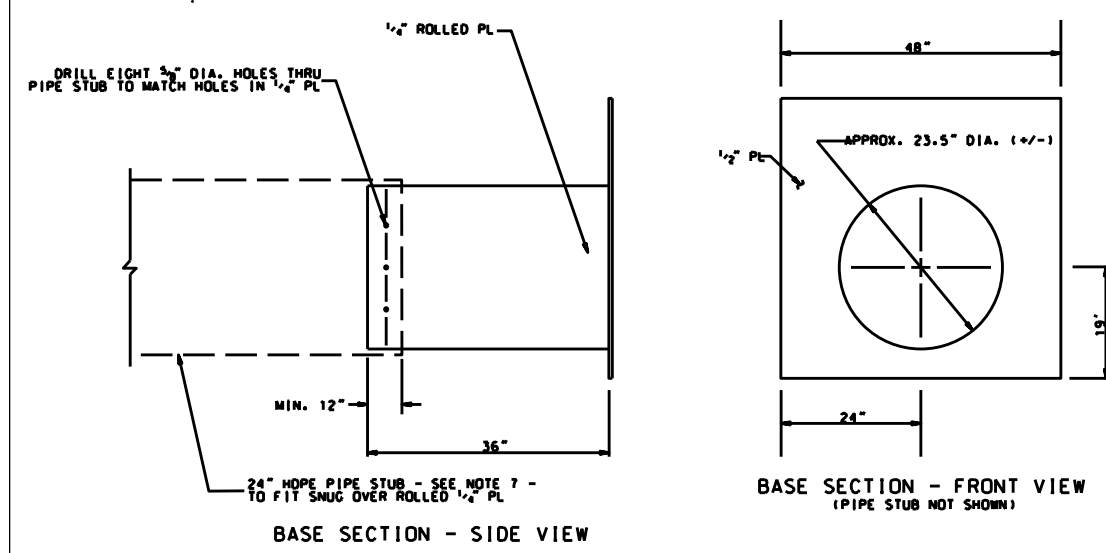




MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
E.2		

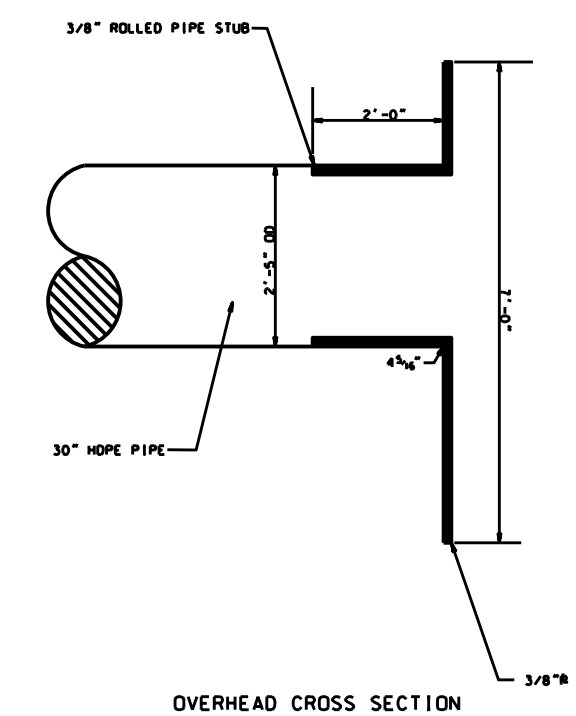


MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
E.3		



CONSTRUCTION NOTES:

- UNLESS OTHERWISE SHOWN, ALL MATERIAL IS TO BE CARBON STEEL CONFORMING TO ASTM A36.
- UNLESS OTHERWISE SHOWN ALL CONSTRUCTION IS TO BE WELDED. ALL WELDS ARE TO BE CONTINUOUS. VISUALLY INSPECT FOR CRACKS AND PINHOLES. NO CRACKS OR PINHOLES ARE ALLOWED.
- SEQUENCE WELDING WHERE APPLICABLE TO MINIMIZE DISTORTION.
- BREAK ANY SHARP CORNERS, REMOVE ALL WELD FLUX, SLAG, AND SPATTER, REMOVE ALL BURRS.
- ENSURE THAT ALL CONTACTING OR OVERLAPPING JOINT SURFACES ARE CLEAN AND FREE OF ALL RESIDUAL OIL AND GREASE PRIOR TO WELDING. COMPLETELY SEAL ALL JOINTS BY WELDING.
- AFTER FABRICATION, BLAST-CLEAN AND PAINT THE SECTIONS WITH TWO COATS OF A COAL TAR EPOXY-POLYAMIDE PAINT IN ACCORDANCE WITH THE SPECS.
- PIPE TO BE 24" DIA. HDPE, ATTACHED BY BOLTING, USING EIGHT (8) $\frac{1}{2}$ " - 13UNC - 2A X 2" LONG BOLTS, NUTS, AND WASHERS (GALV.). PIPE STUB TO BE ATTACHED AT PLACE OF FABRICATION.
- SHOP DRAWINGS OF BOX DESIGN MUST BE SUBMITTED AND APPROVED BEFORE CONSTRUCTION.



NOTE: PROVIDE HOLES IN ROLLED PIPESTUB TO SECURE PIPE FOLLOWING INSTALLATION IN FIELD.



DATE	BY	APP'D	REVISION
MARCH 22			
APRIL 12			
MAY 12			
JUNE 12			
JULY 12			
AUG 12			
SEP 12			
OCT 12			
NOV 12			
DEC 12			

U.S. ARMY CORPS OF ENGINEERS BALTIMORE DISTRICT	DATE: MARCH 22, 2011 BY: J. M. W. (JMW) APP'D: J. M. W. (JMW) PROJECT: MAINTENANCE OF WEIR BOX SHEET NO.: V-105
--	---

CALVERT COUNTY
MARYLAND
MAINTENANCE OF WEIR BOX
CONSTRUCTION DETAILS

Sheet reference number:
V-105
Sheet 5 of

Standard Erosion and Sediment Control Notes

The Water Management Administration requires that these notes, in their entirety, be included on the erosion and sediment control plan. It is recognized that every note may not apply to all projects. The requirement of any individual note not applicable to the subject project is not binding upon the applicant or the applicant's contractor.

1. The contractor shall notify the Administration (WMA) at (410) 537-3510 seven (7) days before commencing any land disturbing activity and, unless waived by the Administration, shall be required to hold a preconstruction meeting between project representatives and a representative of WMA.

2. The contractor must notify WMA in writing and by telephone at the following points:

- a. The required pre-construction meeting.
 b. Following installation of sediment control measures.
 c. Prior to the removal or modification of any sediment control device.
3. The Contractor shall construct all erosion and sediment control measures per the approved plan and construction sequence and shall have them inspected and approved by the agency inspector or WMA Inspector prior to beginning any other land disturbances. Minor sediment control device location adjustments may be made in the field with the approval of the WMA Inspector. The contractor shall ensure that all runoff from disturbed areas is directed to the sediment control devices and shall not remove any erosion or sediment control measure without prior permission from WMA Inspector or agency inspector. The contractor must obtain prior agency and WMA approval for changes to the Sediment Control Plan and / or Sequence of Construction.

4. The contractor shall protect all points of construction ingress and egress to prevent the deposition of materials onto public roads. All materials deposited onto public roads shall be removed immediately.

5. The contractor shall inspect daily and maintain continuously in an effective operating condition all erosion and sediment control measures until such times as they are removed with prior permission from WMA Inspector and agency inspector.

6. All sediment basins, trap embankments and slopes, perimeter dikes, swales and all disturbed slopes steeper or equal to 3:1 shall be stabilized with sod or seed and anchored straw mulch, or other approved stabilization measures, as soon as possible but no later than seven (7) calendar days after establishment. All areas disturbed outside of the perimeter sediment control system must be minimized. Maintenance must be performed as necessary to ensure continued stabilization. (Requirement for stabilization may be reduced to three (3) days for sensitive areas.)

7. The contractor shall apply sod or seed and anchored straw mulch, or other approved stabilization measures to all disturbed areas and stockpiles within fourteen (14) calendar days after stripping and grading activities have ceased in the area. Maintenance shall be performed as necessary to ensure continued stabilization. (Requirement may be reduced to seven (7) days for sensitive areas.)

8. Prior to removal of sediment control measures, the contractor shall stabilize and have established permanent stabilization for all contributory disturbed areas using sod or an approved permanent seed mixture with required soil amendments and an approved anchored mulch. Wood fiber mulch may only be used in seeding season where the slope does not exceed 10% and grading has been done to promote sheet flow drainage. Areas brought to finished grade during the seeding season shall be permanently stabilized as soon as possible, but not later than fourteen (14) calendar days after establishment, when property is brought to finished grade during the months of November through February, and permanent stabilization is found to be impractical, temporary seed and anchored straw mulch shall be applied to disturbed areas. The final permanent stabilization of such property shall be applied by March 15 or earlier if ground and weather conditions allow.

9. The site's approval letter, approved Erosion and Sediment Control Plans, daily log books, and test reports shall be available at the site for inspection by duly authorized officials of WMA and the agency responsible for project.

10. Surface drainage flows over unstabilized cut and fill slopes shall be controlled by either preventing drainage flows from traversing the slopes or by installing protective devices to lower the water downslope without causing erosion. Dikes shall be installed and maintained at the top of a cut or fill slope until the slope and drainage area to it are fully stabilized, at which time they must be removed and final grading done to promote sheet flow drainage. Protective methods must be provided at points of concentrated flow where erosion is likely to occur.

11. Permanent swales or other points of concentrated water flow shall be stabilized with sod or seed with an approved erosion control matting, rip-rap, or by other approved stabilization measures.

12. Temporary sediment control devices may be removed, with permission of WMA Inspector and agency inspectors, within thirty (30) calendar days following establishment of permanent stabilization in all contributory drainage areas. Stormwater management structures used temporarily for sediment control shall be converted to the permanent configuration within this time period as well.

13. No permanent cut or fill slope with a gradient steeper than 3:1 will be permitted in low maintenance areas. A slope gradient of up to 2:1 will be permitted in non-maintenance areas provided that those areas are indicated on the erosion and sediment control plan with a low-maintenance ground cover specified for permanent stabilization. Slope gradient steeper than 2:1 will not be permitted with vegetative stabilization.

14. For finished grading, the contractor shall provide adequate gradients to prevent water from ponding for more than twenty four (24) hours after the end of a rainfall event. Drainage courses and swale flow areas may take as long as forty-eight (48) hours after the end of a rainfall event to drain. Areas designed to have standing water shall not be required to meet this requirement.

15. Sediment traps or basins are not permitted within 20 feet of a foundation that exists or is under construction. No structure may be constructed within 20 feet of an active sediment trap or basin.

16. The WMA Inspector has the option of requiring additional safety or sediment control measures, if deemed necessary.

17. All trap depth dimensions are relative to the outlet elevation. All traps must have a stable outfall. All traps and basins shall have stable inflow points.

18. Vegetative stabilization shall be performed in accordance with the Standards and Specifications for Soil Erosion and Sediment Control. Refer to appropriate specifications for temporary seeding, permanent seeding, mulching, sodding, and ground covers.

19. Sediment shall be removed and the trap or basin restored to its original dimensions when the sediment has accumulated to one quarter of the total depth of the trap or basin. Total depth shall be measured from the trap or basin bottom to the crest of the outlet.

20. Sediment removed from traps (and basins) shall be placed and stabilized in approved areas, but not within a floodplain, wetland or tree-save area. When pumping sediment laden water, the discharge must be directed to a sediment trapping device prior to release from the site. A sump pit may be used if sediment traps themselves are being pumped out.

21. All water removed from excavated areas (e.g., utility trenches) shall be passed through an approved dewatering practice or pumped to a sediment trap or basin prior to discharge from the site (i.e., via functional storm drain system or to stable ground surface).

22. Sediment control for utility construction for areas outside of designed controls or as directed by engineer or WMA Inspector:

- A. Call "Miss Utility" at 1-800-257-7777 48 hours prior to the start of work.
- B. Excavated trench material shall be placed on the high side of the trench.
- C. Trenches for utility installation shall be backfilled, compacted, and stabilized at the end of each working day. No more trench shall be opened than can be completed the same day, unless:
- D. Temporary silt fence shall be placed immediately downstream of any disturbed area intended to remain disturbed for more than one day.

23. Where deemed appropriate by the engineer or inspector, sediment basins and traps may need to be surrounded with an approved safety fence. The fence must conform to local ordinances and regulations. The developer or owner shall check with local building officials on applicable safety requirements. Where safety fence is deemed appropriate and local ordinances do not specify fencing sizes and types, the following shall be used as a minimum standard: The safety fence must be made of welded wire and at least 42 inches high with a minimum of 14 gauge wire. Safety fence must be maintained and in good condition at all times. Fences shall be 42 inches high, have posts spaced no further apart than 8 feet, have mesh openings no greater than 2 inches in width and 4 inches in height.

24. Off-site spoil or borrow areas on State or federal property must have prior approval by WMA and other applicable State, federal, and local agencies; otherwise approval must be granted by the local authorities. All waste and borrow areas off-site must be protected by sediment control measures and stabilized.

25. Sites where infiltration devices are used for the control of stormwater, extreme care must be taken to prevent runoff from unstabilized areas from entering the structure during construction. Sediment control devices placed in infiltration areas must have bottom elevations at least two (2) feet higher than the finish grade bottom elevation of the infiltration practice. When converting a sediment trap to an infiltration device, all accumulated sediment must be removed and disposed of prior to final grading of infiltration device.

26. When a storm drain system outfall is directed to a sediment trap or sediment basin and the system is to be used for temporarily conveying sediment laden water, all storm drain inlets in non-sump areas shall have temporary asphalt berms constructed at the time of base paving to direct gutter flow into the inlets to avoid surcharging and overflow of inlets in sump areas.

27. No areas shall be left unstabilized overnight unless the runoff is directed to an MDE approved E&S device.

28. Site Information:
 Total area of site _____ Acres
 7/1/22 72

Note To Contractor:
 Erosion and Sediment Control will be Strictly Enforced

SEQUENCE OF CONSTRUCTION

1. NOTIFY THE MDE INSPECTOR AT (410) 537-3510 AT LEAST SEVEN (7) DAYS PRIOR TO ANY LAND DISTURBANCE TO SCHEDULE AN ON-SITE PRE-CONSTRUCTION MEETING.
2. INSTALL PERIMETER SEDIMENT CONTROLS, IF NEEDED.
3. STABILIZE ANY STOCKPILED MATERIALS.
4. THE CONTRACTOR IS REQUIRED TO STABILIZE ANY REMAINING DISTURBED AREAS UPON COMPLETION OF THE REMOVAL OF PIPELINES AND CONSTRUCTION EQUIPMENT.
5. UPON APPROVAL OF WMA INSPECTOR, EROSION AND SEDIMENT CONTROL DEVICES WILL BE REMOVED. ANY AREA DISTURBED BY SAID REMOVAL SHALL BE STABILIZED IN ACCORDANCE WITH STABILIZATION SPECIFICATIONS.

STANDARD STABILIZATION NOTE:

FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:

A) THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND

B) SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.

OWNER'S / DEVELOPER'S CERTIFICATION:

I/WE HEREBY CERTIFY THAT ALL CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF EROSION AND SEDIMENT BEFORE BEGINNING THE PROJECT. I/WE HEREBY AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY APPROPRIATE INSPECTION AND ENFORCEMENT AUTHORITY OR THE STATE OF MARYLAND, DEPARTMENT OF THE ENVIRONMENT.

8/22/2018
 DATE OWNER/DEVELOPER SIGNATURE
 DANIELLE SZIMANSKI/PROJECT MANAGER
 CARD No. PRINTED NAME AND TITLE

DESIGN CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH THE MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, THE 2008 MARYLAND STORMWATER DESIGN MANUAL, VOLUMES I & II INCLUDING SUPPLEMENTS, THE ENVIRONMENT ARTICLE SECTIONS 4-101 THROUGH 116 AND SECTIONS 4-201 AND 215, AND THE CODE OF MARYLAND REGULATIONS (COMAR) 26.17.01 AND COMAR 26.17.02 FOR EROSION AND SEDIMENT CONTROL AND STORMWATER MANAGEMENT, RESPECTFULLY.

8/12/2014
 DATE DESIGNER'S SIGNATURE
 KEVIN BRENNAN
 MD. REGISTRATION NO. PRINTED NAME
 P.E., R.L.S., R.L.A. OR R.A. (CIRCLE ONE)



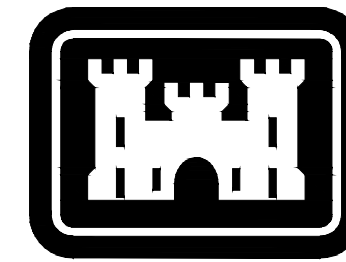
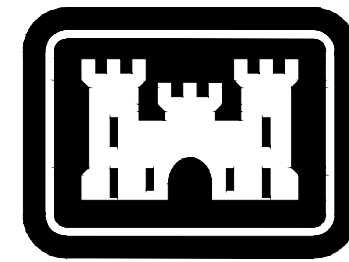
DATE	REVISION	BY	DESCRIPTION

PROJECT NO. 23
 DATE OF ISSUE: 7/1/22
 SCALE: AS SHOWN
 SHEET NO. 22 OF 28
 DRAWING TITLE: EROSION AND SEDIMENT CONTROL NOTES
 PROJECT LOCATION: FISHING CREEK MAINTENANCE

DESIGNED BY: Kevin Brennan
 CHECKED BY: Kevin Brennan
 DATE: 8/12/2014
 DRAWN BY: Danielle Szimanski
 DATE: 8/22/2018
 DESIGNED BY: Danielle Szimanski
 DATE: 8/22/2018
 U.S. ARMY CORPS OF ENGINEERS
 BALTIMORE DISTRICT

CALVERT COUNTY
 MARYLAND
 MAINTENANCE DEREGULATING
 FISHING CREEK
 SEDIMENT AND EROSION CONTROL NOTES

Sheet reference number:
 V-106
 Sheet 6 of

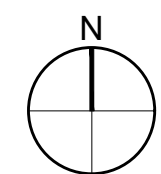
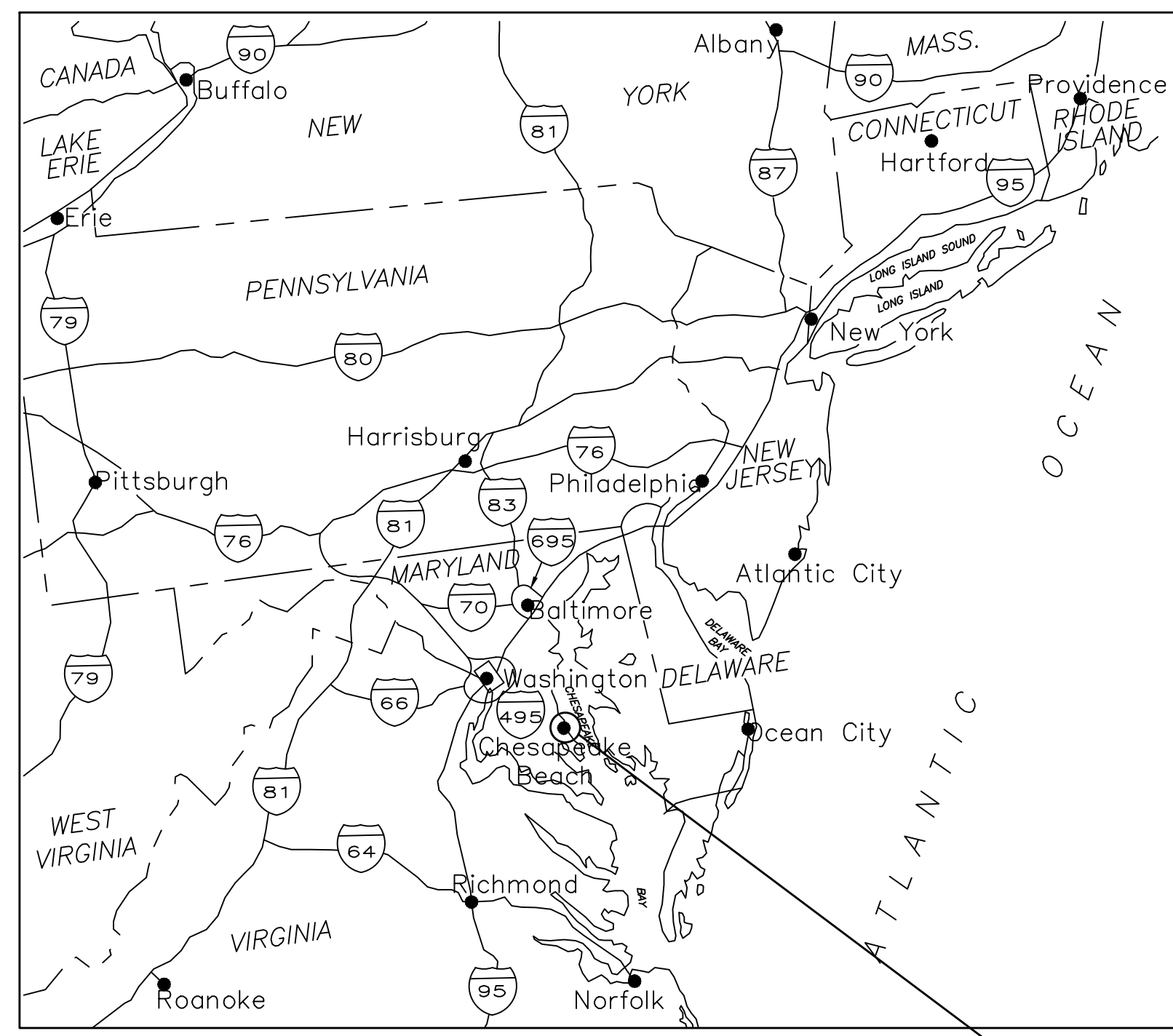


US Army Corps
of Engineers
BALTIMORE
DISTRICT

US Army Corps
of Engineers
PHILADELPHIA
DISTRICT

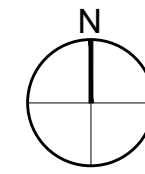
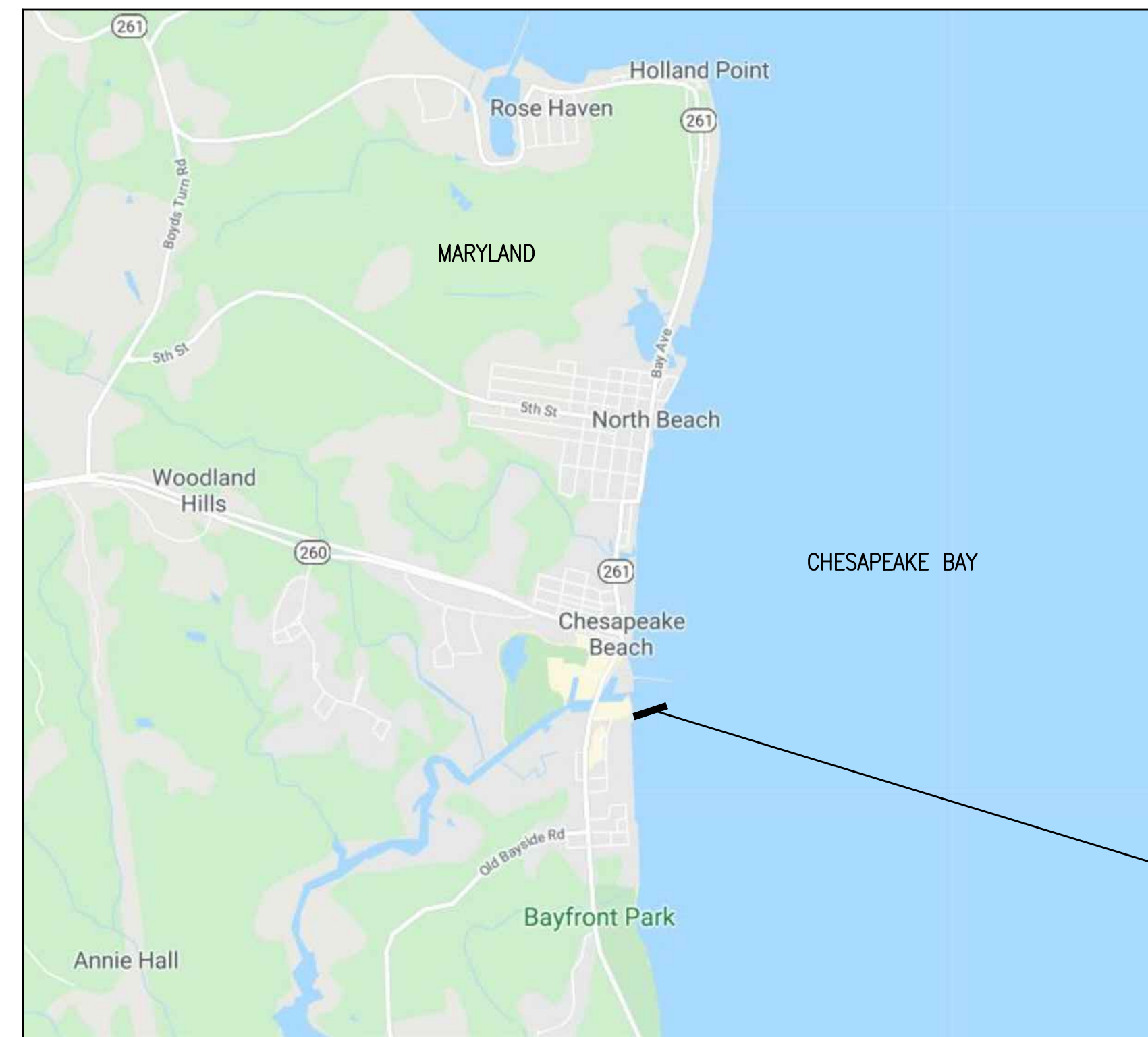
FISHING CREEK SOUTH JETTY REHABILITATION CALVERT COUNTY CHESAPEAKE BEACH, MARYLAND

DRAWING INDEX	
SHEET NUMBER	DESCRIPTION
G-001	COVER SHEET
C-001	GENERAL INFORMATION SHEET
C-101	GENERAL PLAN
C-102	PLAN - SOUTH JETTY EXISTING CONDITIONS
C-103	PLAN - JETTY REPAIR AREA
C-201	PROFILE - JETTY REPAIR AREA
C-301	TYPICAL SECTIONS
C-302	CROSS SECTIONS - STA. 0+25 TO 2+00
C-303	CROSS SECTIONS - STA. 2+25 TO STA. 4+00
C-304	CROSS SECTIONS - STA. 4+25 TO 6+00
C-305	CROSS SECTIONS - STA. 6+25 TO STA. 8+00
C-306	CROSS SECTIONS - STA. 8+25 TO 10+00
C-307	CROSS SECTIONS - STA. 10+25 TO STA. 12+00
C-308	CROSS SECTIONS - STA. 12+25 TO STA. 13+50
C-401	PLAN - CONFINED DISPOSAL FACILITY
C-501	DETAILS - GROUTING



VICINITY MAP
N.T.S.

LOCATION OF PROJECT



LOCATION MAP
N.T.S.

LOCATION OF WORK

SOLICITATION NO:-
CONTRACT NO:-
ISSUE/SUBMITTAL DATE: 26 MARCH 2021

THIS PROJECT WAS DESIGNED BY THE PHILADELPHIA DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS. THE INITIALS OR SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER 1110-1-8152.

SUBMITTED:

ANDREW J. SCHWAIGER, P.E.
CHIEF, ENGINEERING BRANCH

APPROVED:

PETER M. TRANCHIK, P.E.
CHIEF, ENGINEERING AND CONSTRUCTION DIVISION

DATE	BY	DESCRIPTION

ISSUE/SUBMITTAL DATE:
26 MARCH 2021
SOLICITATION NUMBER:
CONTRACT NUMBER:
FILE NAME:
DRAWING SIZE:
SCALE:

U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT
U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

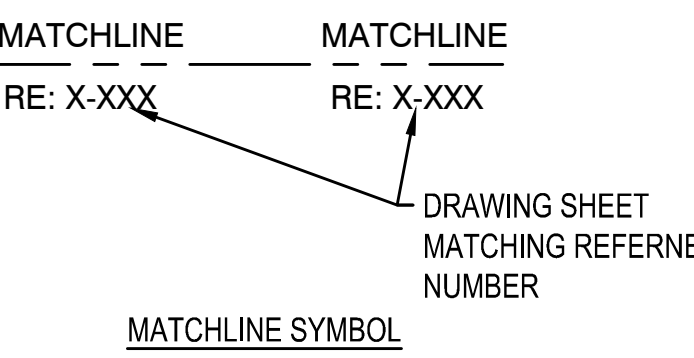
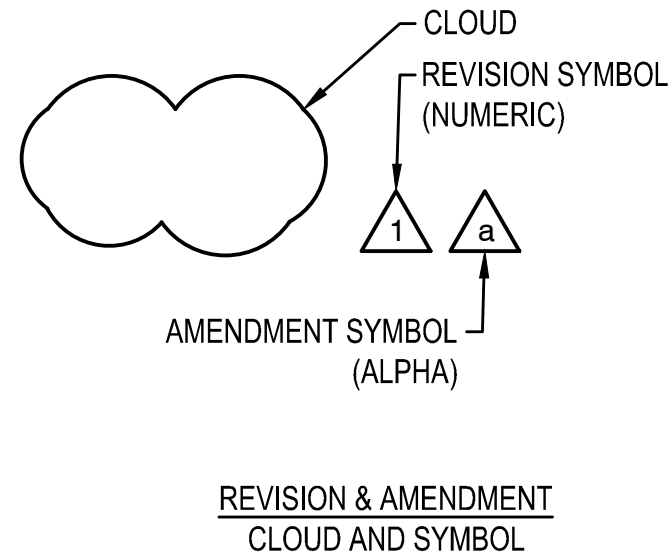
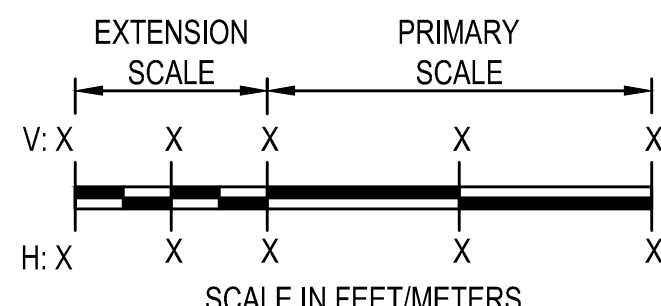
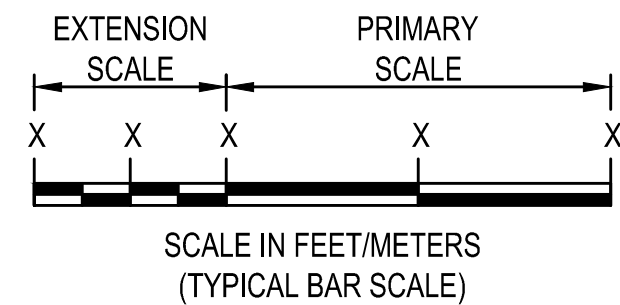
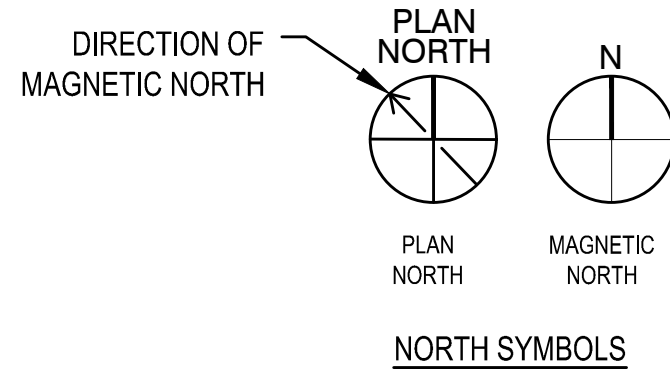
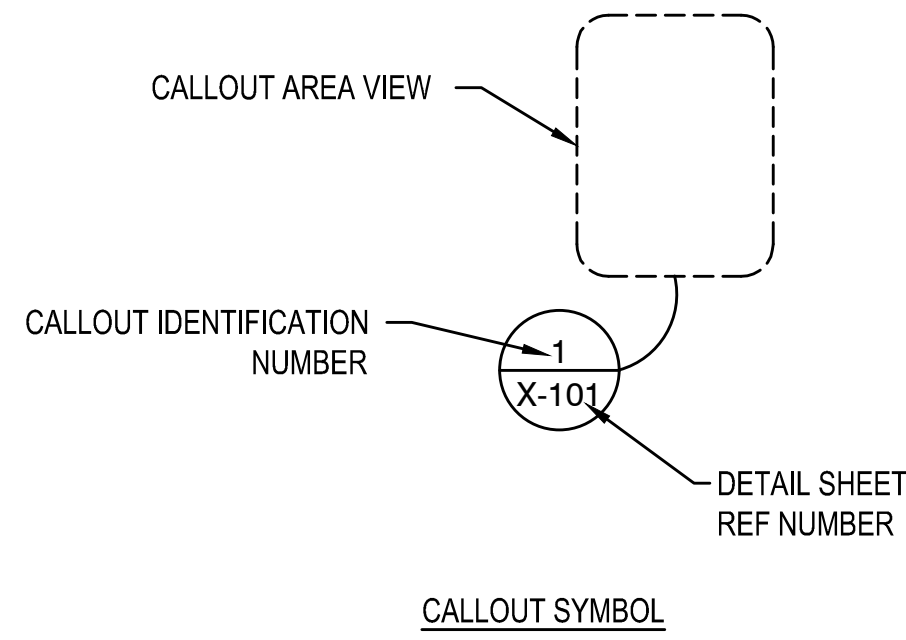
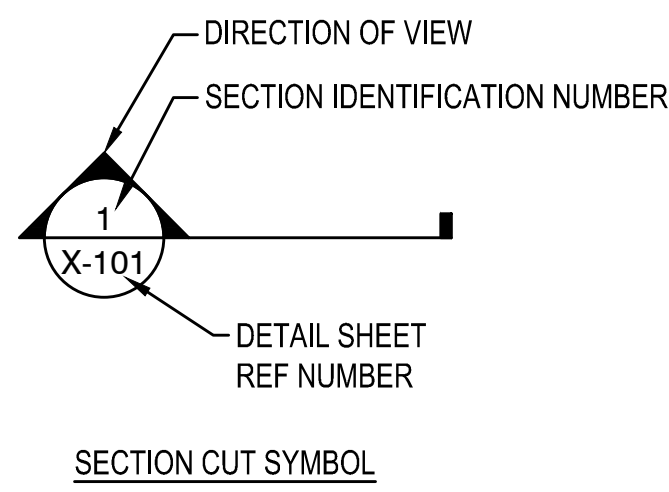
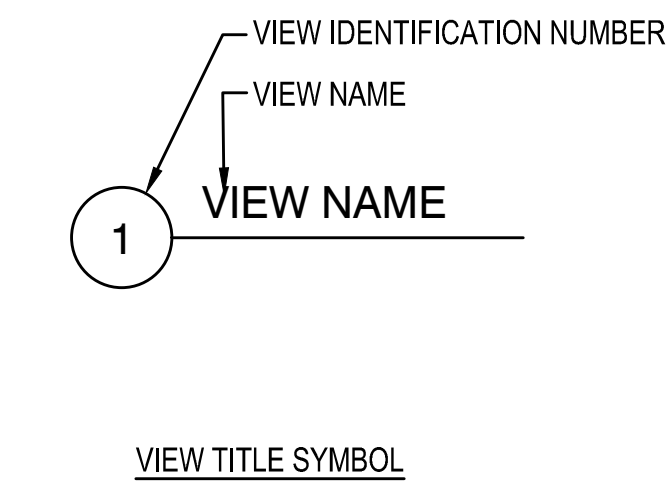
CALVERT COUNTY
CHESAPEAKE BEACH, MARYLAND
FISHING CREEK
SOUTH JETTY REHABILITATION
COVER SHEET

SHEET NUMBER
G-001

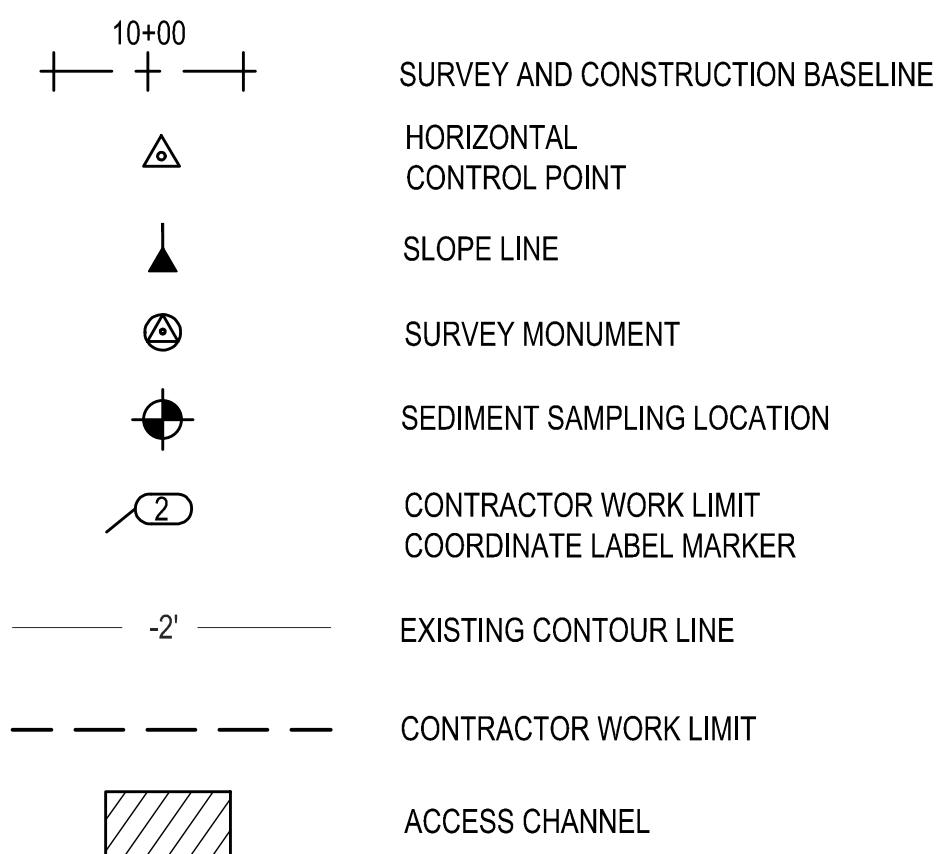
SYMBOLS, ABBREVIATIONS AND GENERAL NOTES



DRAWING SHEET SYMBOLS



PLAN SYMBOLS LEGEND

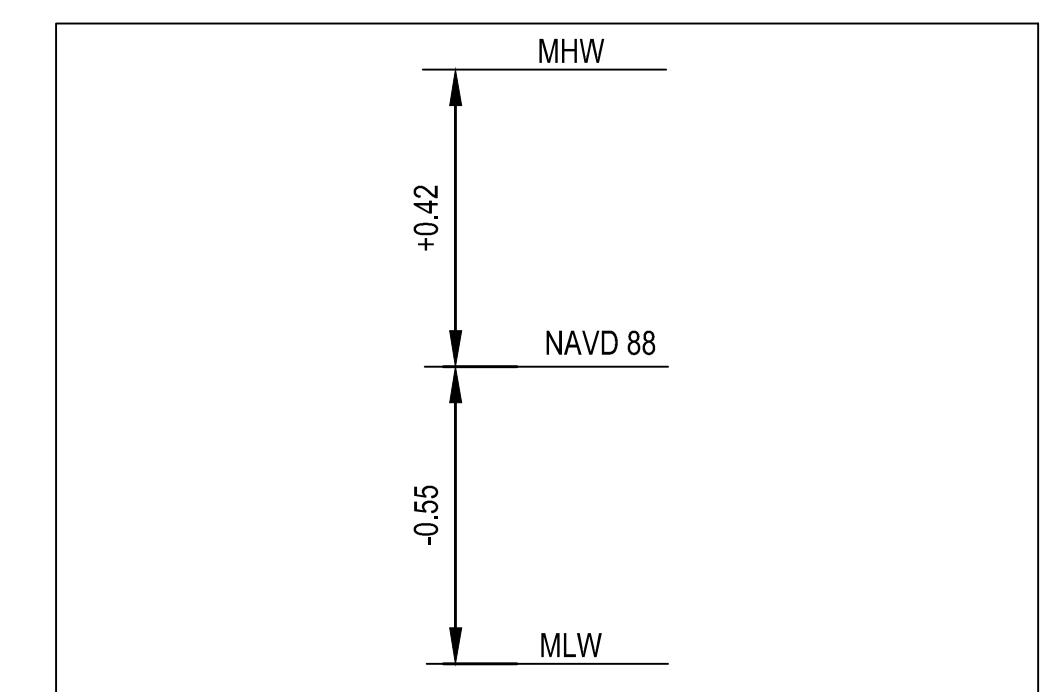


GENERAL NOTES:

1. THIS CONTRACT CONSISTS OF ONE BASE BID ACCESS CHANNEL DREDGING AREA AND THREE BASE BID JETTY REPAIR AREAS (SEE SHEETS C-101 THROUGH C-103).
2. ELEVATIONS ARE EXPRESSED IN FEET AND TENTHS OF A FOOT AND REFER TO THE NORTH AMERICAN VERTICAL DATUM (NAVD) 1988.
3. HORIZONTAL CONTROL AND COORDINATES ARE REFERENCED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM (NAD) 1983. COORDINATES ARE EXPRESSED IN U.S. SURVEY FEET.
4. THE CONTRACTOR WORK LIMIT SHALL BE AS SHOWN ON SHEET C-101.
5. MHW AND MLW TIDAL REFERENCE IS MEASURED FROM NOAA TIDE STATION ID: 8575512 (ANNAPOLIS, MD) AND SHOULD BE CONSIDERED APPROXIMATE FOR FISHING CREEK.
6. EXISTING GROUND INFORMATION IS THE RESULT OF SURVEYS CONDUCTED BY USACE BALTIMORE DISTRICT IN MAY OF 2019 AND OCT OF 2020 AND CAN ONLY BE CONSIDERED REPRESENTATIVE OF CONDITIONS OCCURRING AT THAT TIME. CONTRACTOR IS REQUIRED TO COMPLETE PRE-CONSTRUCTION SURVEY IN ACCORDANCE WITH SPECIFICATION SECTION 01 71 23.
7. TOPOGRAPHIC AND SINGLE BEAM HYDROGRAPHIC SURVEYS SHALL BE TAKEN AT EVERY SURVEY ORIGIN POINT SHOWN ON THIS SHEET IN ACCORDANCE WITH SPECIFICATION SECTION 01 71 23. ALL PROFILE AZIMUTHS ARE FROM THE NORTH.
8. EXISTING SITE FEATURES DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITIONS AT NO ADDITIONAL COST TO THE GOVERNMENT.
9. APPROXIMATE EDGE OF EXISTING JETTY IS ESTIMATED FROM OCT 2020 USACE BALTIMORE DISTRICT TOPOGRAPHIC SURVEYS AND CAN ONLY BE CONSIDERED REPRESENTATIVE OF CONDITIONS OCCURRING AT THAT TIME. APPROXIMATE EDGE OF EXISTING JETTY MAY BE REVISED AFTER RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS.

ABBREVIATIONS			
ABBREV	DESCRIPTION	ABBREV	DESCRIPTION
AD	AREA DRAIN	FDN	FOUNDATION
ADDL	ADDITIONAL	FF	FINISHED FLOOR
AFF	ABOVE FINISHED FLOOR	FIN	FINISH
BD	BOARD	FL	FLOOR
BIT	BITUMINOUS	FM	FORCE MAIN
BL or $\frac{B}{L}$	BASE LINE	FT	FOOT, FEET
BLDG	BUILDING	FTG	FOOTING
BM	BEAM	G	GROUND
BMP	BEST MANAGEMENT PRACTICE	GOVT	GOVERNMENT
BOT	BOTTOM	GR	GRADE
BVCE	BEGINNING OF VERTICAL CURVE ELEVATION	HORIZ	HORIZONTAL
BVCS	BEGINNING OF VERTICAL CURVE STATION	HS	HIGH STRENGTH
CL or $\frac{C}{L}$	CENTERLINE	HT	HEIGHT
CMU	CONCRETE MASONRY UNIT	HVY	HEAVY
CO	CLEAN OUT	IN	INCH
COL	COLUMN	INSUL	INSULATION, INSULATED
CONC	CONCRETE	IINT	INTERIOR
CONSTR	CONSTRUCTION	INV	INVERT
CONT	CONTINUOUS	LL	LIVE LOAD
CTRL	CONTROL	LP	LOW POINT
CWL	CONTRACTOR WORK LIMITS	LT	LIGHT
DET	DETAIL	LVC	LENGTH OF VERTICAL CURVE
DGA	DENSE GRADED AGGREGATE	JCT	JUNCTION
DIA	DIAMETER	MATL	MATERIAL
DIM	DIMENSION	MAX	MAXIMUM
DL	DEAD LOAD	MIN	MINIMUM
DWG	DRAWING	MISC	MISCELLANEOUS
E	EAST	N	NORTH
EA	EACH	NLT	NOT LESS THAN
ECM	EROSION CONTROL MAT	NTS	NOT TO SCALE
EJ	EXPANSION JOINT	OC	ORIGINAL CONSTRUCTION
EL	ELEVATION	OD	OUTSIDE DIAMETER
ELEC	ELECTRIC	OH	OVERHEAD
EOP	EDGE OF PAVEMENT	OPG	OPENING
EOS	EDGE OF SHOULDER	OPP	OPPOSITE
EQ	EQUAL	PC	POINT OF CURVE
EQUIP	EQUIPMENT	PD	PAVEMENT DRAIN
EXH	EXHAUST	PI	POINT OF INFLECTION
EXIST or (E)	EXISTING	PIV	POST INDICATOR VALVE
EXP	EXPANSION, EXPOSED	POT	POINT OF TANGENT
EXP_JT	EXPANSION JOINT	PMP	PROBABLE MAXIMUM PRECIPITATION
EXT	EXTERIOR	PNL	PANEL
FIG	FIGURE SINGLE	PSF	POUNDS PER SQUARE FOOT
		PSI	POUNDS PER SQUARE INCH
		PVI	POINT OF VERTICAL INFLECTION
		RAD	RADIUS
		REINF	REINFORCEMENT
		REM	REMOVABLE
		ROW	RIGHT OF WAY
		S	SOUTH
		SCH	SCHEDULE
		SECT	SECTION
		SPEC	SPECIFICATION
		SPRT	SUPPORT
		SQ	SQUARE
		SST	STAINLESS STEEL
		STA	STATION
		STD	STANDARD
		STRUCT	STRUCTURAL
		SUSP	SUSPENDED
		SYS	SYSTEM
		TEMP	TEMPORARY
		TD	TRENCH DRAIN
		TDO	TRENCH DRAIN OUTLET PIPE
		TELE	TELEPHONE
		TOPO	TOPOGRAPHY
		TYP	TYPICAL
		UD	UNDERDRAIN
		UDO	UNDERDRAIN OUTLET PIPE
		UE	UNDERGROUND ELECTRIC
		UGND	UNDERGROUND
		UNO	UNLESS NOTED OTHERWISE
		UOP	UNDERDRAIN OUTLET PIPE
		UXO	UNEXPLODED ORDNANCE
		VB	VINYL BASE
		VC	VERTICAL CURVE
		VCT	VINYL COMPOSITION TILE
		VOL	VOLUME
		VERT	VERTICAL
		VTR	VENT THROUGH ROOF
		W	WITH
		W	WEST
		WL	WATER LEVEL
		WS	WATER SURFACE
		W/O	WITHOUT

SURVEY ORIGIN POINTS					
STATION	EASTING	NORTHING	AZIMUTH	DISTANCE (FT)*	
0+00	1445700.66	373032.50	162.61	200	-100
0+25	1445724.51	373039.97	162.61	200	-100
0+50	1445748.37	373047.45	162.61	200	-100
0+75	1445772.23	373054.92	162.61	200	-100
1+00	1445796.09	373062.39	162.61	200	-100
1+25	1445819.94	373069.86	162.61	200	-100
1+50	1445843.80	373077.33	162.61	200	-100
1+75	1445867.66	373084.80	162.61	200	-100
2+00	1445891.52	373092.28	162.61	200	-100
2+25	1445915.37	373099.75	162.61	200	-100
2+50	1445939.23	373107.22	162.61	200	-100
2+75	1445963.09	373114.69	162.61	200	-100
3+00	1445986.94	373122.16	162.61	200	-100
3+25	1446010.80	373129.63	162.61	200	-100
3+50	1446034.66	373137.11	162.61	200	-100
3+75	1446058.52	373144.58	162.61	200	-100
4+00	1446082.37	373152.05	162.61	200	-100
4+25	1446106.23	373159.52	162.61	200	-100
4+50	1446130.09	373166.99	162.61	200	-100
4+75	1446153.95	373174.47	162.61	200	-100
5+00	1446177.80	373181.94	162.61	200	-100
5+25	1446201.66	373189.41	162.61	200	-100
5+50	1446225.52	373196.88	162.61	200	-100
5+75	1446249.38	373204.35	162.61	200	-100
6+00	1446273.23	373211.82	162.61	200	-100
6+25	1446297.09	373219.3	162.61	200	-100
6+50	1446320.95	373226.77	162.61	200	-100
6+75	1446344.81	373234.24	162.61	200	-100
7+00	1446368.66	373241.71	162.61	200	-100
7+25	1446392.52	373249.18	162.61	200	-100
7+50	1446416.38	373256.65	162.61	200	-100
7+75	1446440.23	373264.13	162.61	200	-100
8+00	1446464.09	373271.60	162.61	200	-100
8+25	1446487.95	373279.07	162.61	200	-100
8+50	1446511.81	373286.54	162.61	200	-100
8+75	1446535.66	373294.01	162.61	200	-100
9+00	1446559.52	373301.49	162.61	200	-100
9+25	1446583.38	373308.96	162.61	200	-100
9+50	1446607.24	373316.43	162.61	200	-100
9+75	1446631.10	373323.90	162.61	200	-100
10+00	1446654.95	373331.37	162.61	200	-100
10+25	1446678.81	373338.84	162.61	200	-100
10+50	1446702.66	373346.31	162.61	200	-100
10+75	1446726.52	373353.78	162.61	200	-100
11+00	1446750.37	373361.25	162.61	200	-100
11+25	1446774.23	373368.72	162.61	200	-100
11+50	1446798.08	373376.19	162.61	200	-100
11+75	1446821.94	373383.66	162.61	200	-100
12+00	1446845.79	373391.13	162.61	200	-100
12+25	1446869.65	373398.60	162.61	200	-100
12+50	1446893.50	373406.07	162.61	200	-100
12+75	1446917.36	373413.54	162.61	200	-100
13+00	1446941.21	373421.01	162.61	200	-100
13+25	1446965.07	373428.48	162.61	200	-100
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**TIDAL REFERENCE
(PROJECT AREA AVERAGE FOR REFERENCE ONLY)
SCALE = NTS**

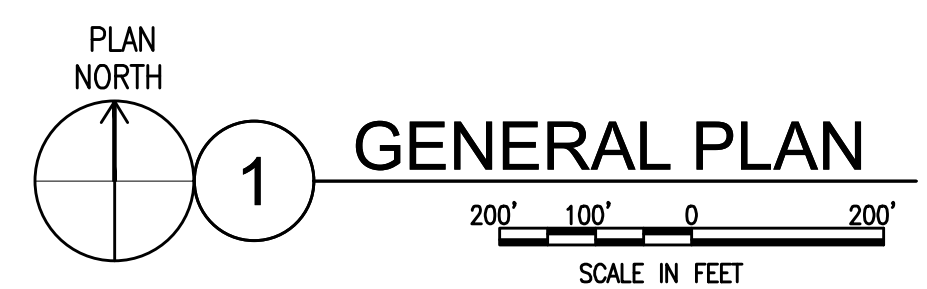
REVISIONS	
NO.	DATE

DESIGNED BY: S.W. JAMES	SUBMITTAL DATE: 20 MAR 2024	CHECKED BY: T.H.	APPROVAL NUMBER:
DRAWN BY: S.W. JAMES	DATE: 20 MAR 2024	CONTRACT NUMBER:	FILE NAME:

CALVERT COUNTY
 CHESAPEAKE BEACH, MARYLAND
 FISHING CREEK
 SOUTH JETTY REHABILITATION
 GENERAL INFORMATION SHEET



D
C
B
A



1 GENERAL PLAN

ACCESS CHANNEL COORDINATES		
POINT ID	EASTING	NORTHING
A	1446767.29	373535.79
B	1446732.42	373333.09
C	1446674.97	373267.43
D	1445744.54	372976.04
E	1445765.46	372909.24
F	1446785.49	373228.69
G	1446827.47	373472.69
H	1446895.42	373550.36

CONTRACTOR WORK LIMIT COORDINATES		
POINT ID	EASTING	NORTHING
1	1446712.04	373529.51
2	1446691.23	373408.55
3	1445788.10	373125.70
4	1445797.47	373095.77
5	1445714.72	373069.86
6	1445720.20	372970.11
7	1445766.41	372822.56
8	1446871.86	373168.77
9	1446938.35	373555.24

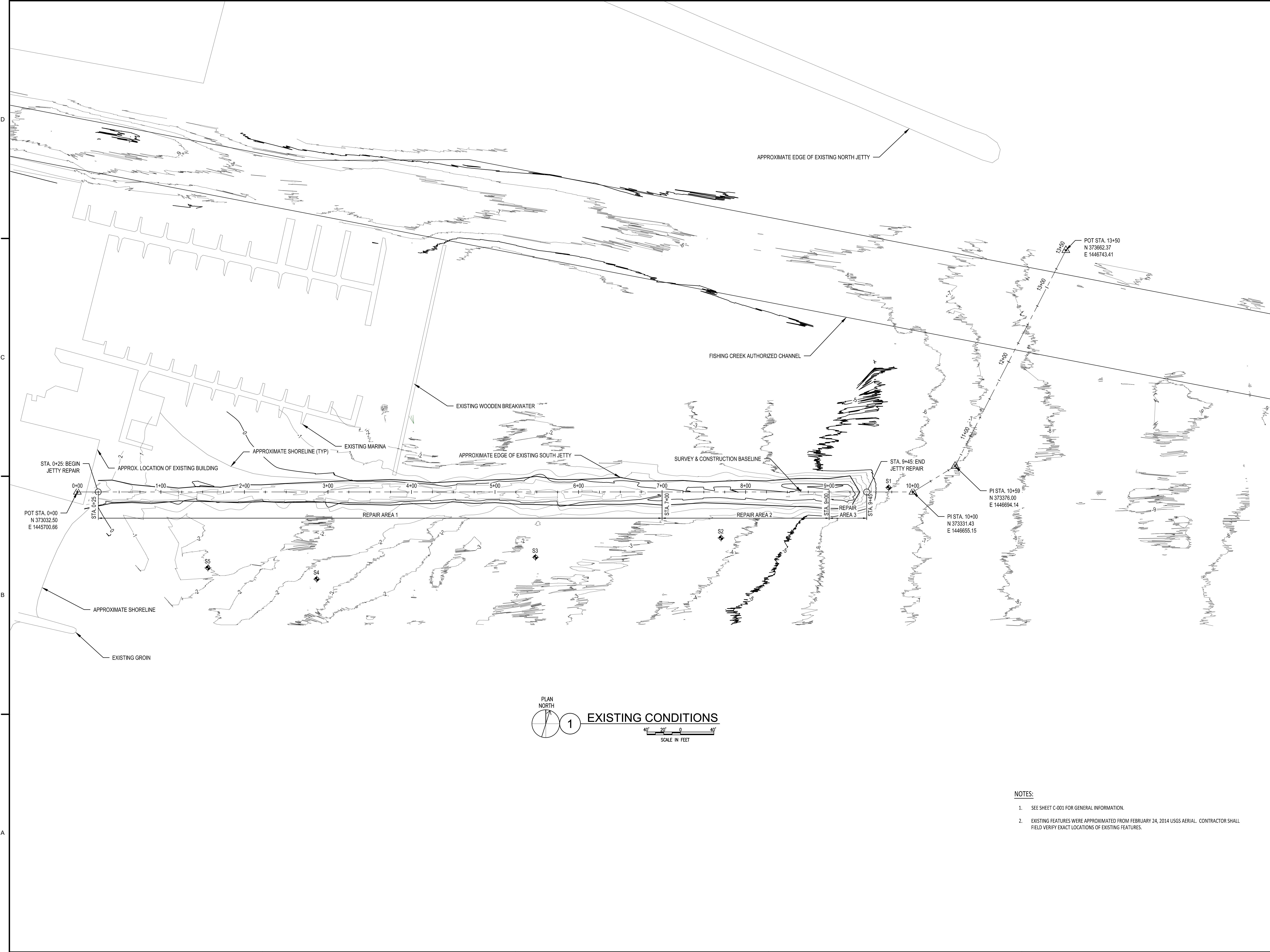
NOTES:

- SEE SHEET C-001 FOR GENERAL INFORMATION.
- CONTRACTOR SHALL ONLY ACCESS THE SITE FROM WATER. CONTRACTOR SHALL MAINTAIN A MINIMUM 15' BUFFER BETWEEN THE CHESAPEAKE BEACH RESORT & SPA BUILDING AND THE START OF THE JETTY REPAIR.
- SEE SHEETS C-301 THROUGH C-308 FOR TYPICAL SECTIONS AND CROSS SECTIONS.
- AERIALS WERE TAKEN ON FEBRUARY 24, 2014 AND WERE OBTAINED FROM USGS. AERIALS CAN ONLY BE CONSIDERED REPRESENTATIVE OF CONDITIONS AT THAT TIME.

DESIGNED BY SW/DM	ISSUED/REVISIONAL DATE 26 MARCH 2017	PRODUCTION NUMBER 1	CONTRACT NUMBER 17-046
DRAWN BY DM/DM	APPROVED BY DM/DM	PROJECT NAME FISHING CREEK	FILE NAME C-101.DWG
U.S. ARMY CORPS OF ENGINEERS BALTIMORE DISTRICT		U.S. ARMY CORPS OF ENGINEERS PHILADELPHIA DISTRICT	
PROJECT TITLE SOUTH JETTY REHABILITATION			

PROJECT TITLE	SHEET NUMBER
FISHING CREEK SOUTH JETTY REHABILITATION CALVERT COUNTY CHESAPEAKE BEACH, MARYLAND GENERAL PLAN	C-101

MARK	ACTION	DESCRIPTION	DATE	BY



MARK	DATE	BY	DESCRIPTION

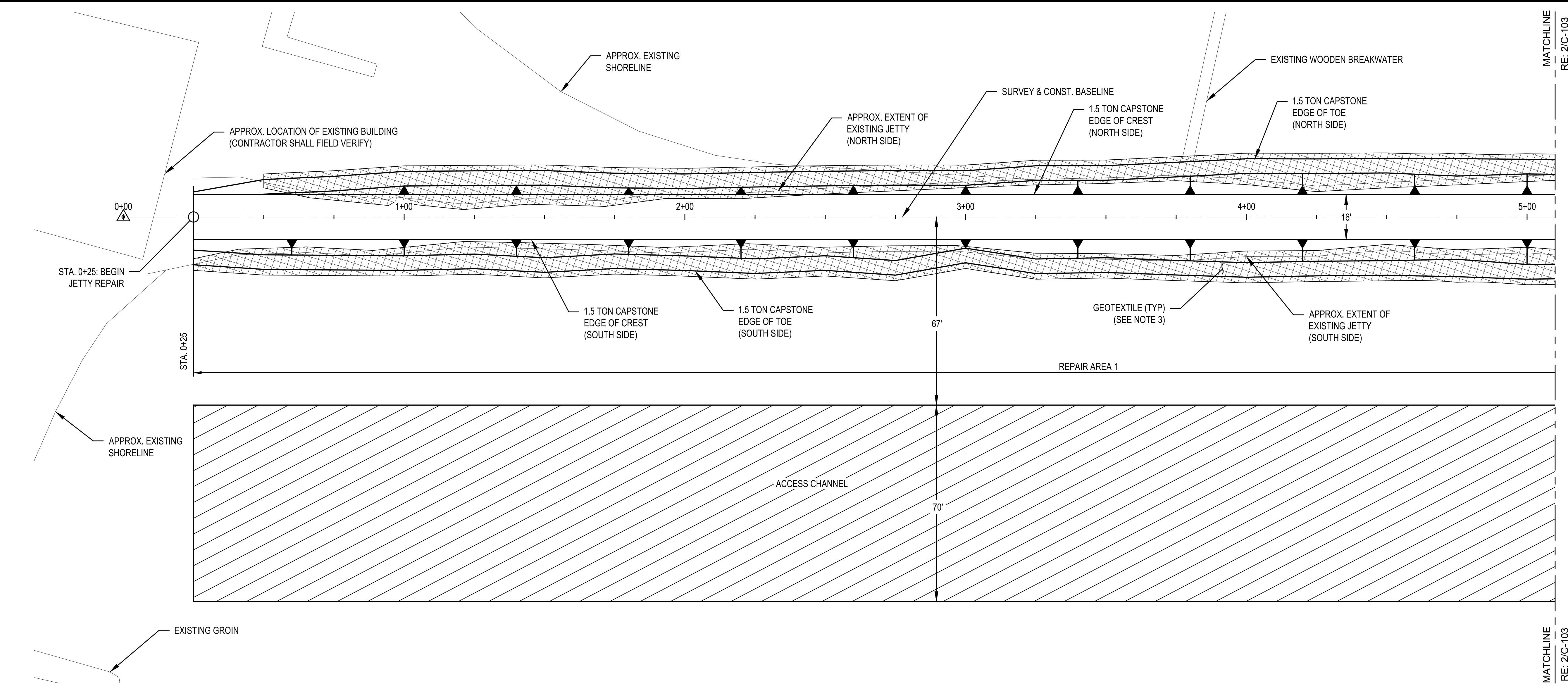
ISSUE/REVISION DATE	28 MARCH 2012
DESIGNED BY	CONTRACT NUMBER
DRAWN BY	FILE NAME
CHECKED BY	DWG. SIZE
DATE	DATE

U.S. ARMY CORPS OF ENGINEERS BALTIMORE DISTRICT	U.S. ARMY CORPS OF ENGINEERS PHILADELPHIA DISTRICT
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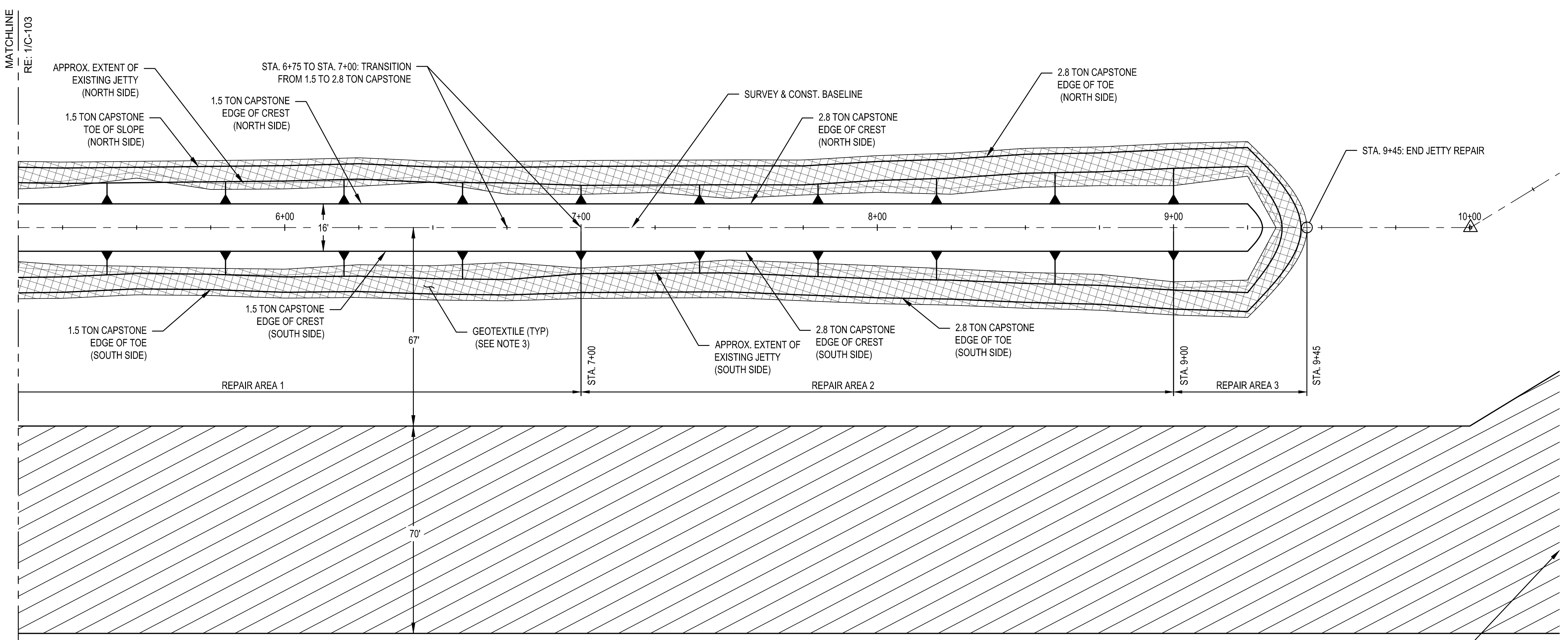
FISHING CREEK
SOUTH JETTY REHABILITATION
CALVERT COUNTY
CHESAPEAKE BEACH, MARYLAND
PLAN - SOUTH JETTY EXISTING CONDITIONS

PLAN NORTH
1 EXISTING CONDITIONS
SCALE IN FEET
40' 20' 0' 40'

- NOTES:
- SEE SHEET C-001 FOR GENERAL INFORMATION.
 - EXISTING FEATURES WERE APPROXIMATED FROM FEBRUARY 24, 2014 USGS AERIAL. CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS OF EXISTING FEATURES.



PLAN NORTH
 1 PLAN - JETTY REPAIR STA. 0+00 TO STA. 5+10
 SCALE IN FEET

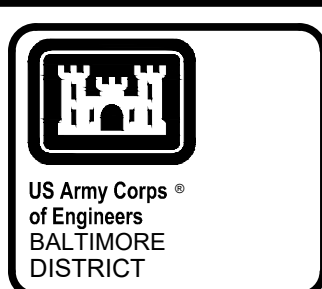


PLAN NORTH
 2 PLAN - JETTY REPAIR STA. 5+10 TO STA. 10+36
 SCALE IN FEET

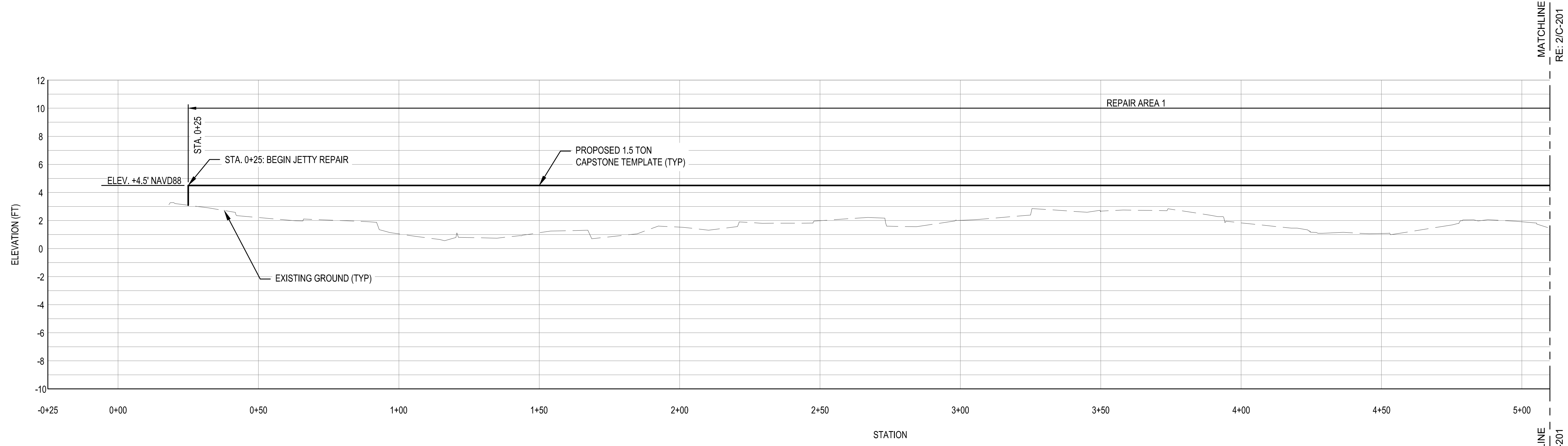
SEE SHEET C-101 FOR REMAINDER OF ACCESS CHANNEL EXTENTS

NOTES:

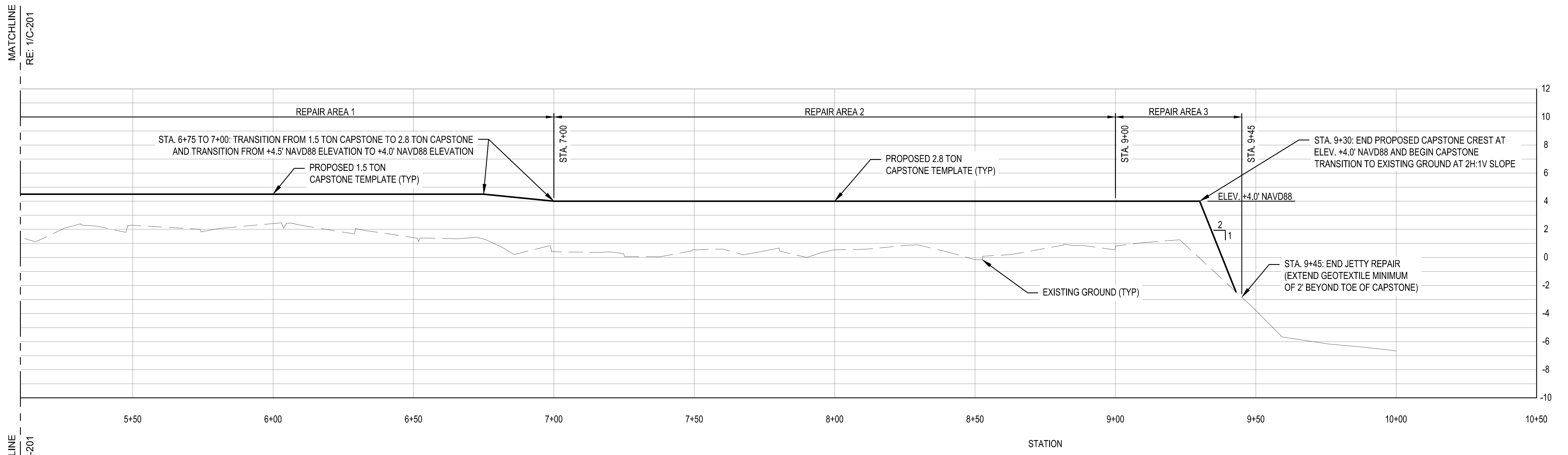
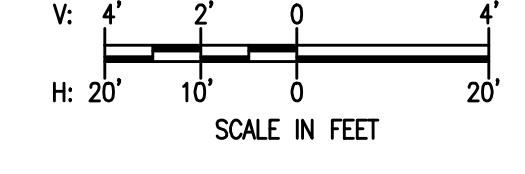
- SEE SHEET C-001 FOR GENERAL INFORMATION.
- SEE SHEET C-301 FOR TYPICAL SECTIONS AND SHEETS C-302 THROUGH C-308 FOR CROSS SECTIONS.
- SEE SPECIFICATION SECTION 31 05 19 FOR GEOTEXTILE REQUIREMENTS.
- TOE OF CAPSTONE AND EXTENTS OF GEOTEXTILE ARE SUBJECT TO CHANGE FOLLOWING RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS DUE TO THE DYNAMIC CONDITIONS OF THE SITE.



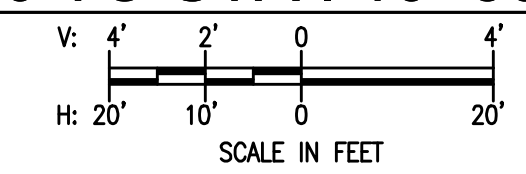
U.S. ARMY CORPS OF ENGINEERS BALTIMORE DISTRICT		ISSUESUBMITTAL DATE 20 MARCH 2021	
U.S. ARMY CORPS OF ENGINEERS PHILADELPHIA DISTRICT		DESIGNED BY CONTRACT NUMBER	
FISHING CREEK SOUTH JETTY REHABILITATION CALVERT COUNTY CHESAPEAKE BEACH, MARYLAND PLAN - JETTY REPAIR AREA		DRAWN BY DWG. NO. DATE	
7/1/22		PROJECT SCALE AS SHOWN	
SHEET NUMBER		MARK ACTION	
C-103			



1 PROFILE - REPAIR AREA STA. 0+00 TO STA. 5+10



2 PROFILE - REPAIR AREA STA. 5+10 TO STA. 10+50



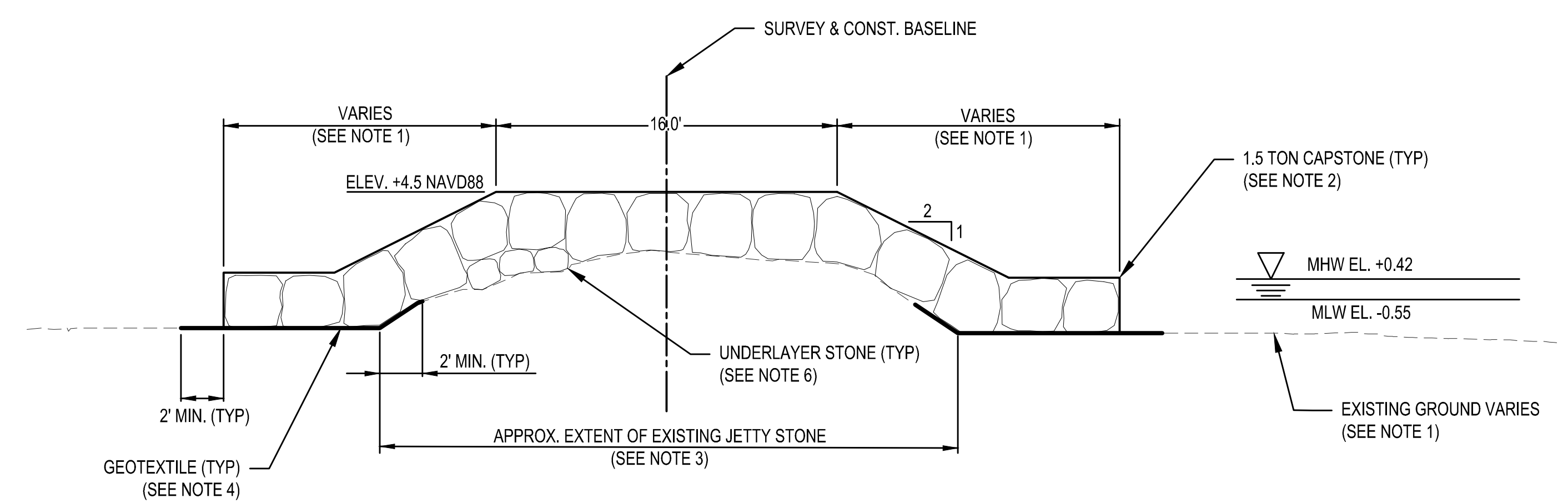
- NOTES:**
1. SEE SHEET C-001 FOR GENERAL INFORMATION
 2. SEE SHEET C-301 FOR TYPICAL SECTIONS.
 3. SEE SHEETS C-302 THROUGH C-308 FOR CROSS SECTIONS.

NO.	REVISION	DATE	BY

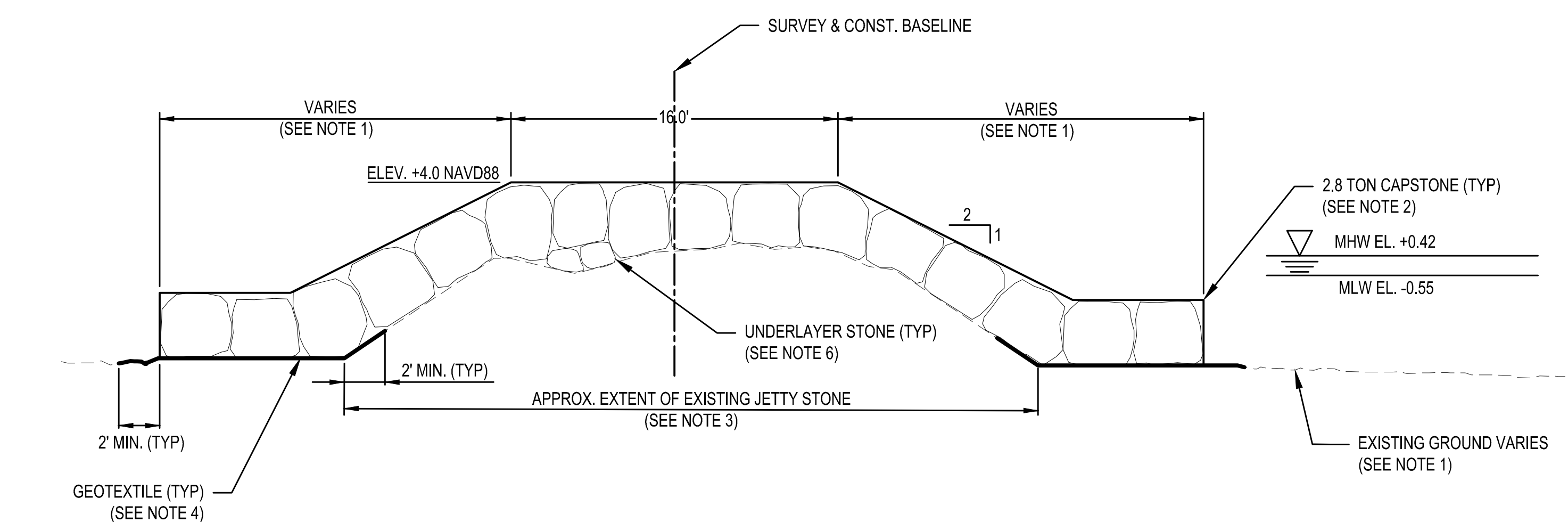
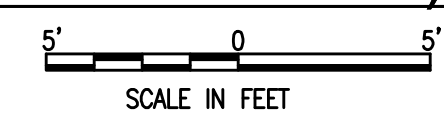
ISSUED/REVISION DATE: 28 MARCH 2021	DESIGNED BY: SJM	CONTRACT NUMBER:
DATE:	CHECKED BY: DAN	PROJECT/CLIENT REFERENCE:
DRAWN BY: SJM	DATE:	FILE NAME:
SCALE: AS SHOWN	PROJECT NO.:	PROJECT TITLE:
U.S. ARMY CORPS OF ENGINEERS BALTIMORE DISTRICT	U.S. ARMY CORPS OF ENGINEERS PHILADELPHIA DISTRICT	

FISHING CREEK
SOUTH JETTY REHABILITATION
CALVERT COUNTY
CHESAPEAKE BEACH, MARYLAND
PROFILE - JETTY REPAIR AREA

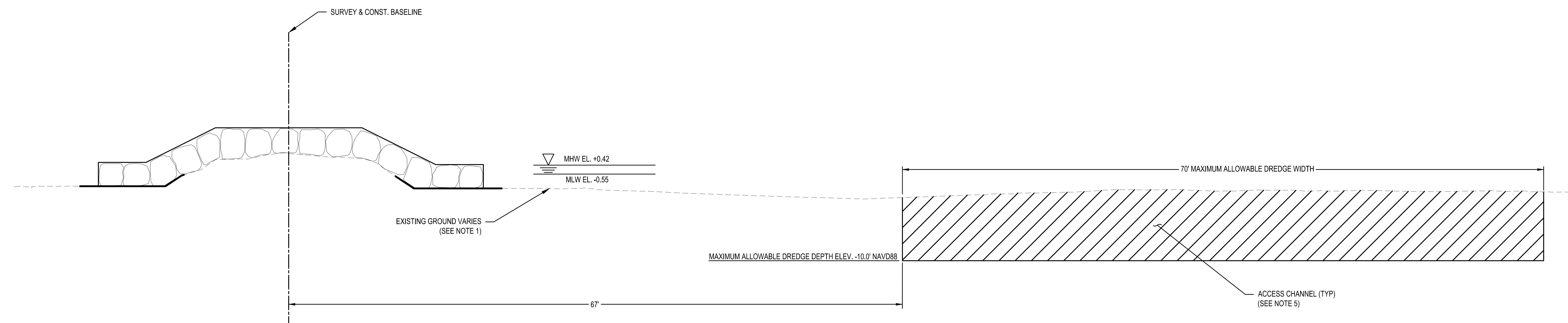
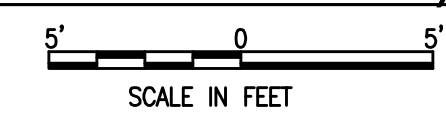
SHEET NUMBER
C-201



1 TYPICAL SECTION - JETTY REPAIR FOR AREA 1 (STA. 0+25 TO 7+00)



2 TYPICAL SECTION - JETTY REPAIR FOR AREAS 2 & 3 (STA. 7+00 TO 9+30)



3 TYPICAL SECTION - ACCESS CHANNEL (STA. 0+25 TO 10+00)



NOTES:

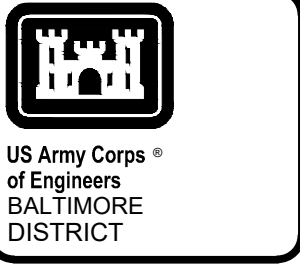
- SEE SHEETS C-302 THROUGH C-308 FOR CROSS SECTIONS.
- CAPSTONE SHALL BE PLACED TO THE TOLERANCES DESCRIBED IN SPECIFICATION SECTION 31 37 00. INDIVIDUAL CAPSTONES SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND DO NOT REPRESENT ACTUAL CAPSTONE SHAPE/SIZE. MINIMUM OF TWO CAPSTONES SHALL BE PLACED AT THE PROPOSED JETTY TOE. CAPSTONE EXTENTS ARE SUBJECT TO CHANGE FOLLOWING RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS. CAPSTONES AND EXISTING JETTY STONES SHALL BE GROUTED AS SHOWN ON SHEET C-501 AND IN ACCORDANCE WITH SPECIFICATION SECTION 31 37 00.
- EXISTING JETTY STONE APPROXIMATED FROM 2020 NAB USACE TOPOGRAPHIC SURVEYS AND ARE ONLY REPRESENTATIVE OF CONDITIONS OCCURRING AT THAT TIME. EXISTING JETTY STONE EXTENTS ARE SUBJECT TO CHANGE FOLLOWING RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS.
- GEOTEXTILE SHALL EXTEND A MINIMUM OF 2' FROM THE TOE OF THE PROPOSED CAPSTONE AND SHALL OVERLAP A MINIMUM OF 2' WITH THE EXISTING JETTY STONE. GEOTEXTILE EXTENTS ARE SUBJECT TO CHANGE FOLLOWING RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS.
- MAXIMUM ALLOWABLE DREDGE DEPTH IS -10.0' NAVD88 FOR THE ENTIRE ACCESS CHANNEL. MAXIMUM ALLOWABLE DREDGE WIDTH IS 70' FROM STA. 0+25 TO STA. 10+00. SEE SHEETS C-101, C-307 AND C-308 FOR ACCESS CHANNEL LOCATION AND WIDTH FROM STA. 10+00 TO THE AUTHORIZED FEDERAL NAVIGATION CHANNEL. CONTRACTOR SHALL ONLY DREDGE AS NEEDED TO ACCESS THE REPAIR AREAS. DREDGING TO THE TEMPLATE SHOWN MAY CAUSE SLOUGHING FAILURE RESULTING IN SIDE SLOPES THAT EXTEND OUTSIDE OF THE TEMPLATE. HOWEVER, AT NO POINT DURING THE CONTRACT SHOULD DREDGING OCCUR OUTSIDE OF THE ACCESS CHANNEL SHOWN.
- INDIVIDUAL UNDERLAYER STONES ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND DO NOT REPRESENT ACTUAL UNDERLAYER STONE SHAPE/SIZE. PLACE UNDERLAYER STONE AS NECESSARY TO PLACE CAPSTONE TO THE TOLERANCES DESCRIBED IN SPECIFICATION SECTION 31 37 00.

ISSUE/REVISION DATE: 26 MARCH 2021	DESIGNED BY: SJM	CHECKED BY: DAN	CONTRACT NUMBER: .
DRAWN BY: SJM	DATE: 1/27	PROJECT SCALE: AS SHOWN	FILE NAME: TYPICAL SECTIONS.dwg
U.S. ARMY CORPS OF ENGINEERS BALTIMORE DISTRICT		U.S. ARMY CORPS OF ENGINEERS PHILADELPHIA DISTRICT	

FISHING CREEK
SOUTH JETTY REHABILITATION
CALVERT COUNTY
CHESAPEAKE BEACH, MARYLAND
TYPICAL SECTIONS

SHEET NUMBER

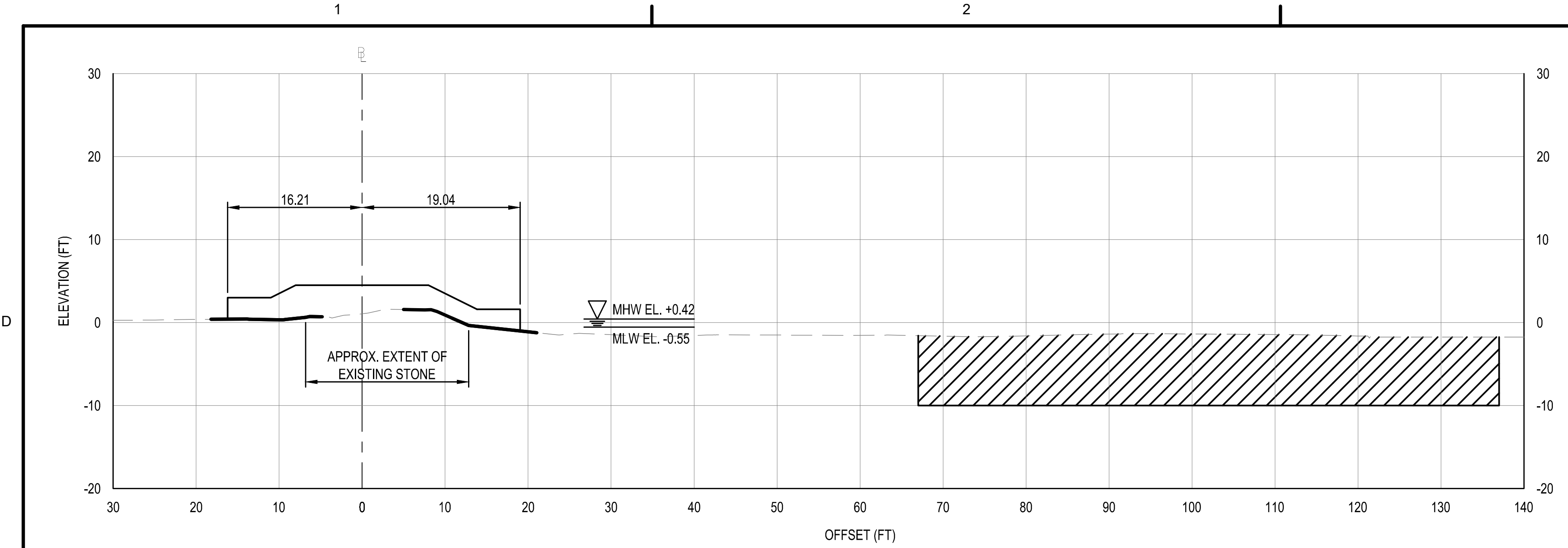
C-301



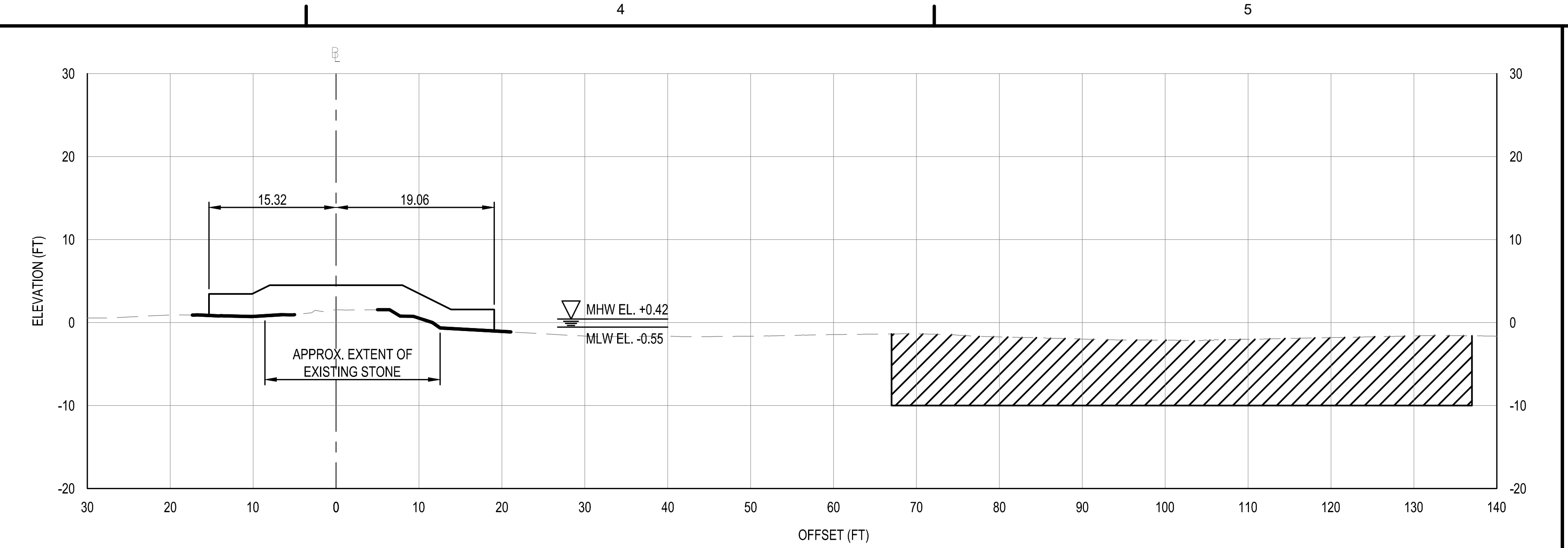
DESIGNED BY	DATE
DRAWN BY	28 MARCH 2021
CHECKED BY	
APPROVED BY	
PROJECT NUMBER	
CONTRACT NUMBER	
FILE NAME	
AS SHOWN	
DWG. SIZE	
DESCRIPTION	

FISHING CREEK
SOUTH LITTY REHABILITATION
CALVERT COUNTY
CHESAPEAKE BEACH, MARYLAND
CROSS SECTIONS - STA. 0+25 TO 2+00

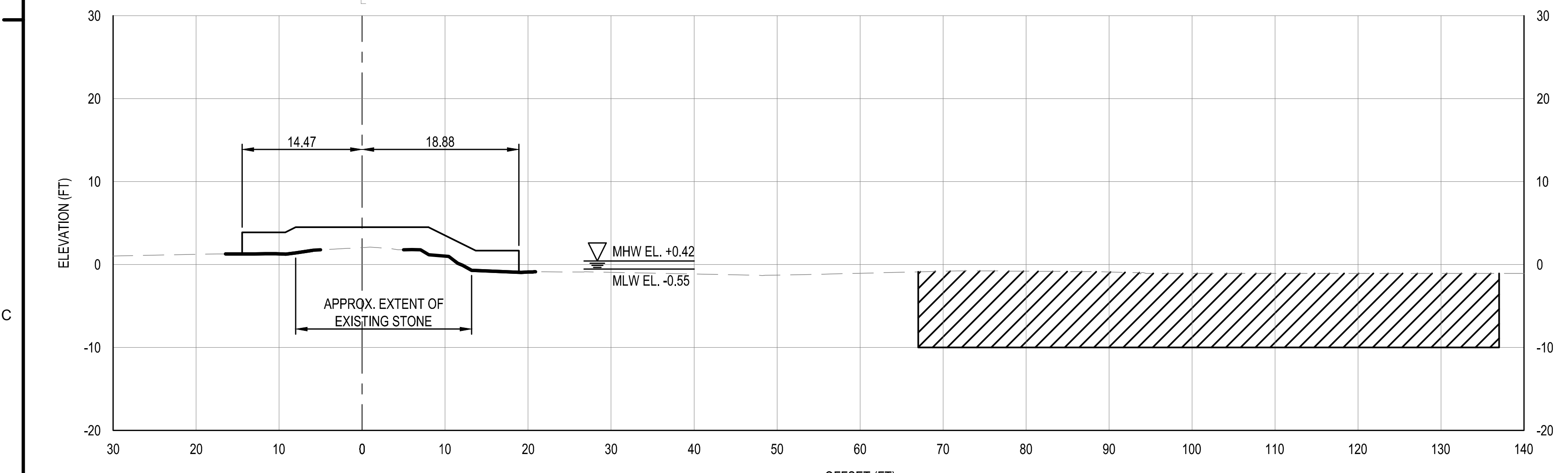
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C-302



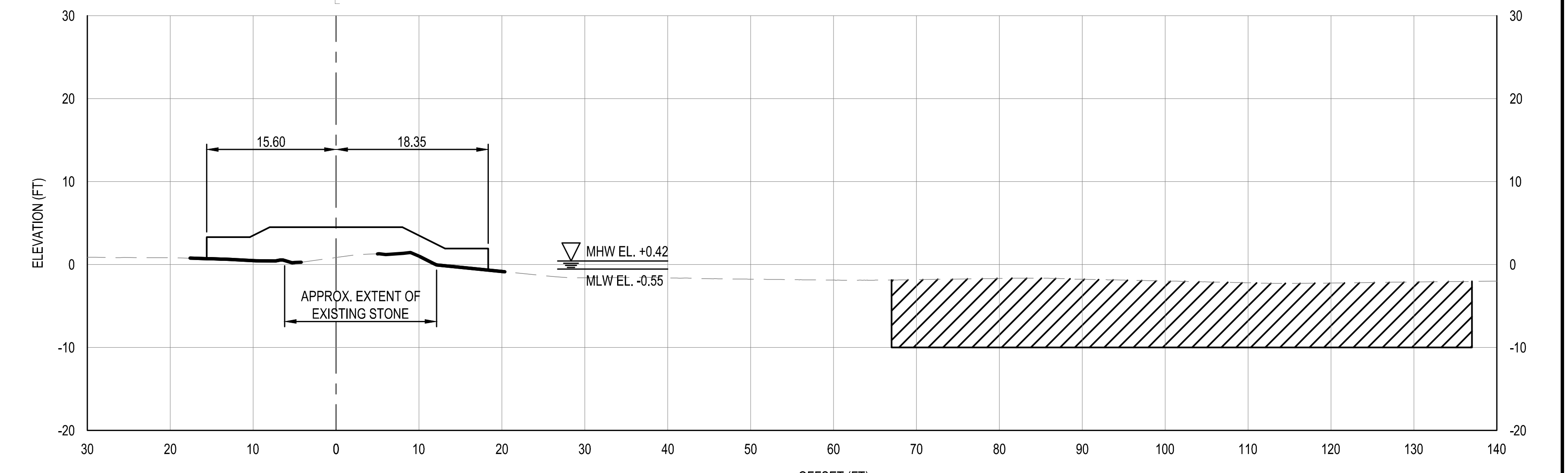
STA. 1+00



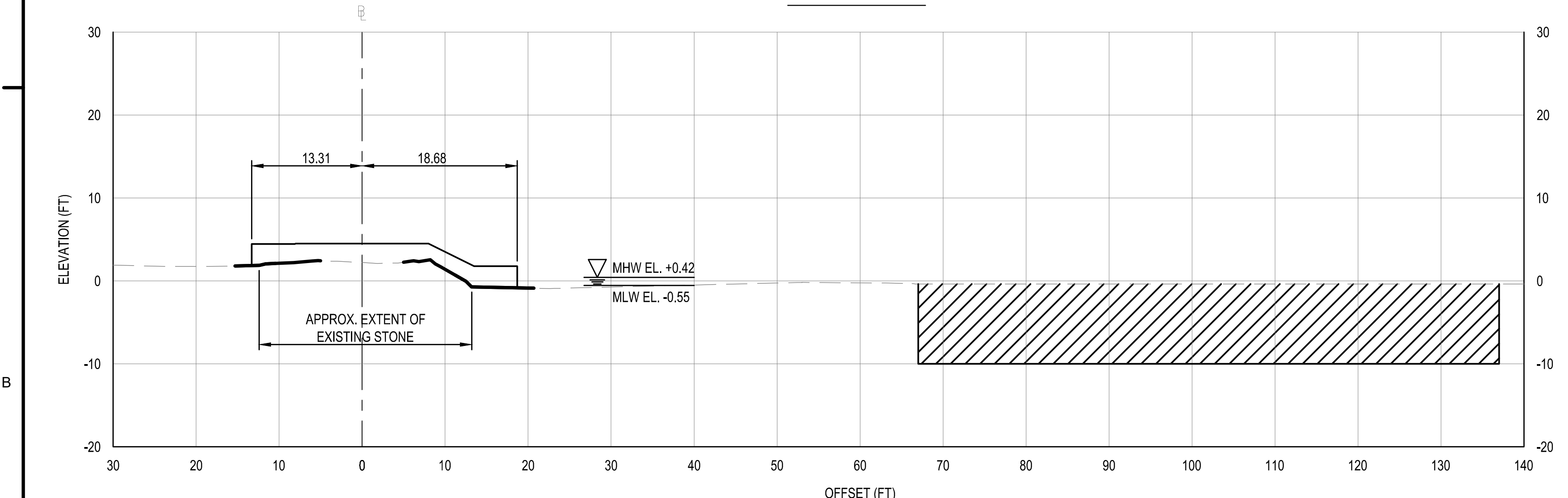
STA. 2+00



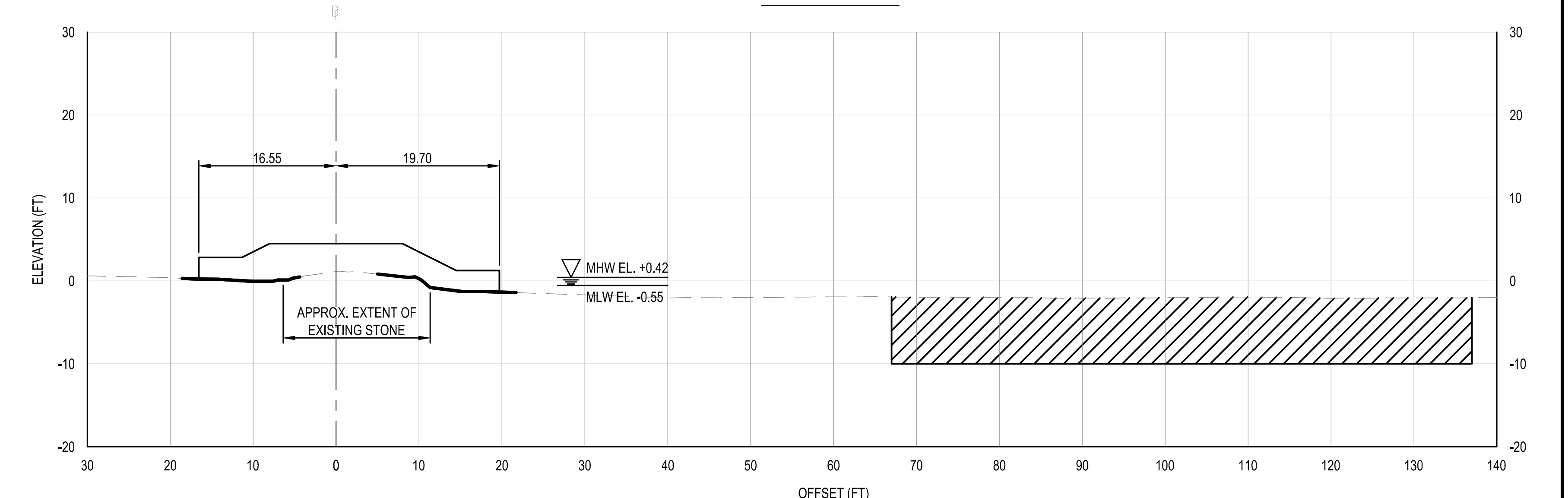
STA. 0+75



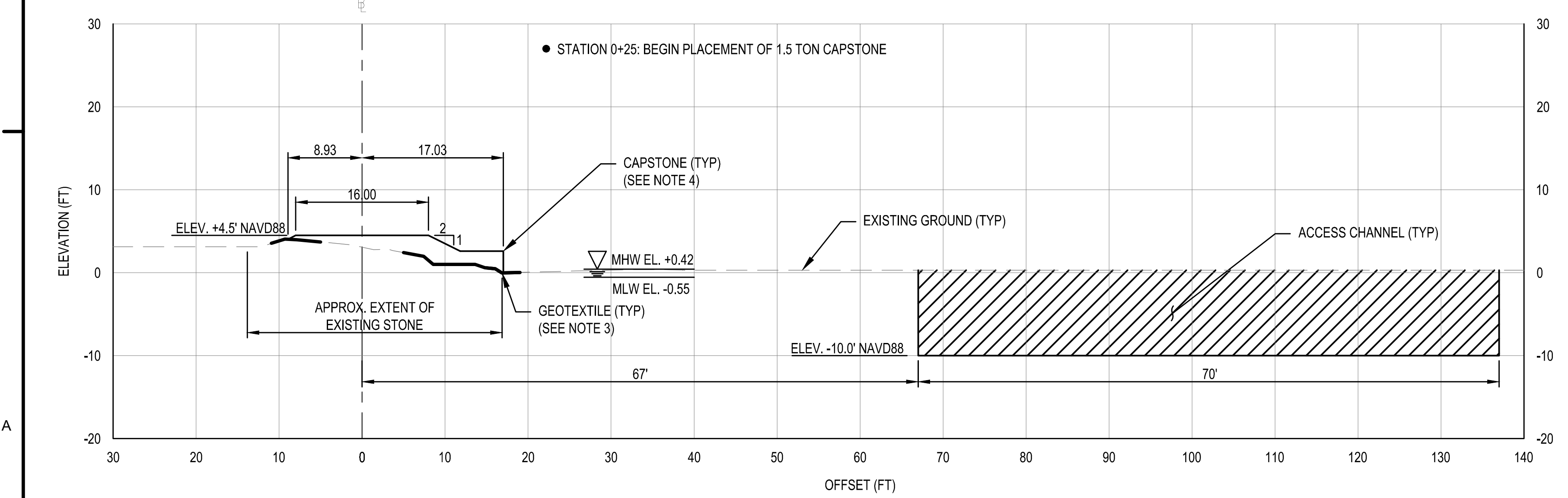
STA. 1+75



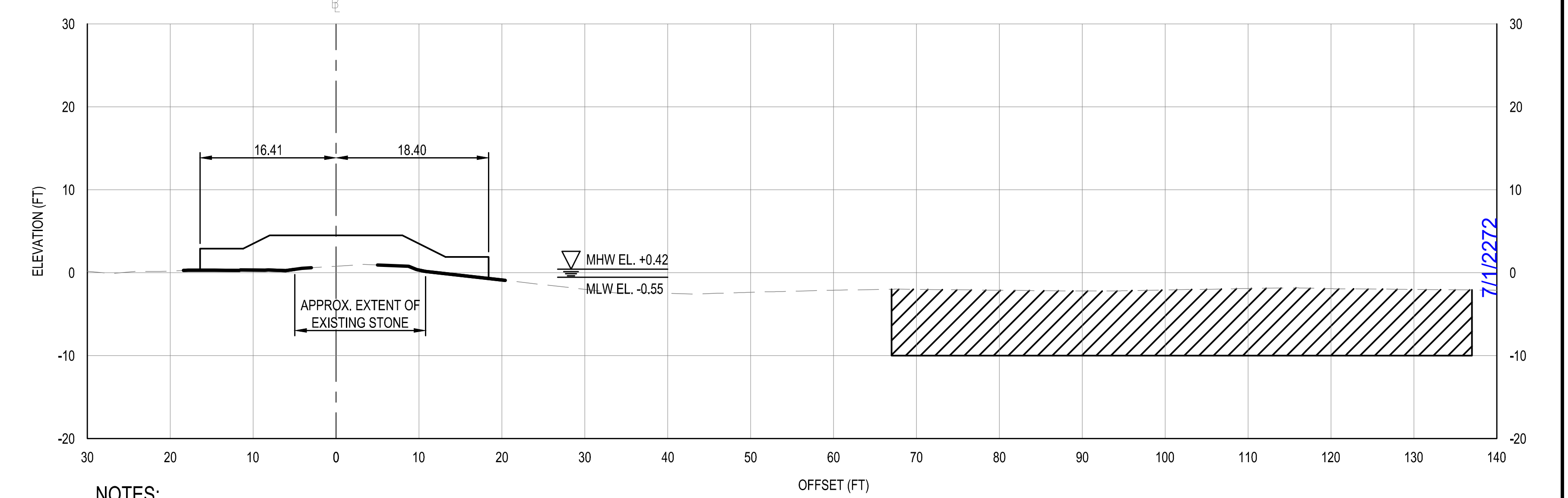
STA. 0+50



STA. 1+50



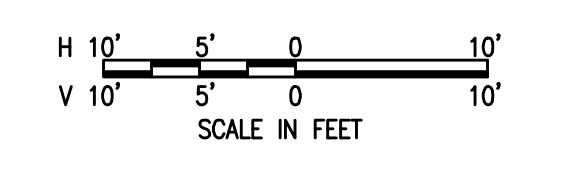
STA. 0+25



STA. 1+25

NOTES:

- SEE SHEET C-001 FOR GENERAL INFORMATION.
- SEE SHEET C-301 FOR TYPICAL SECTIONS.
- GEOTEXTILE EXTENTS ARE APPROXIMATED FROM OCT 2020 NAB USACE SURVEYS AND MAY BE EXTENDED OR REVISED FOLLOWING RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS.
- CAPSTONE TEMPLATE MAY BE REVISED FOLLOWING RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS.
- SEE SHEET C-501 FOR GROUTING DETAILS.



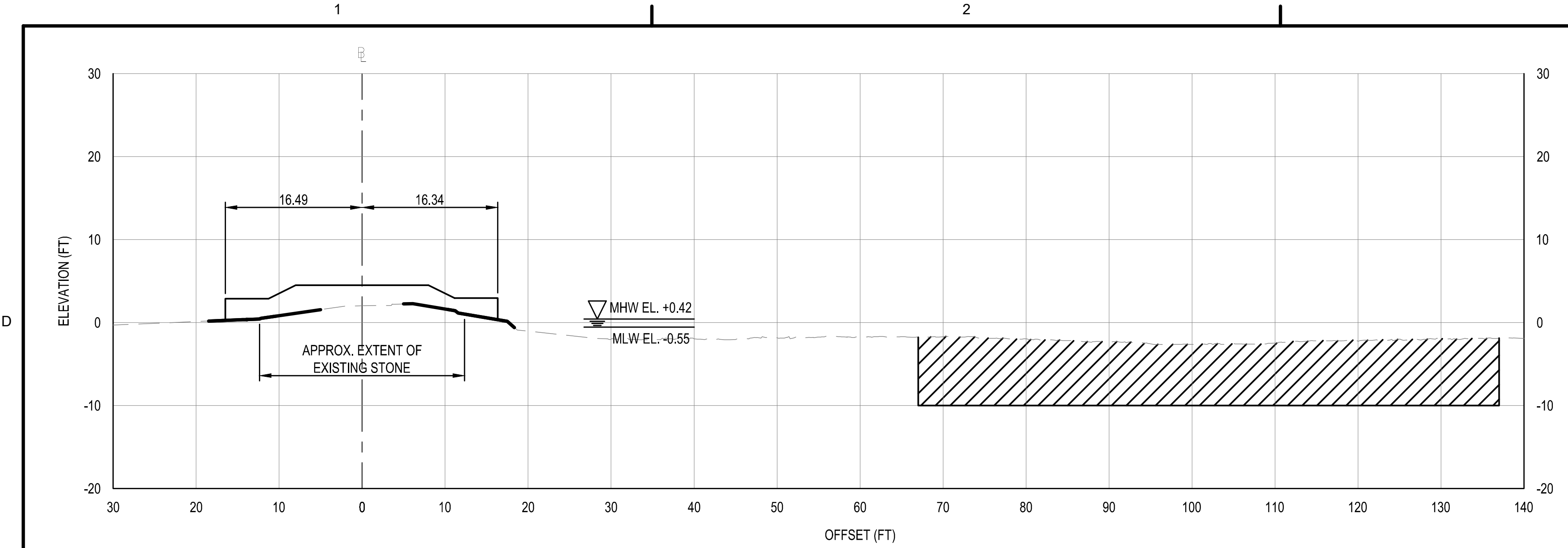
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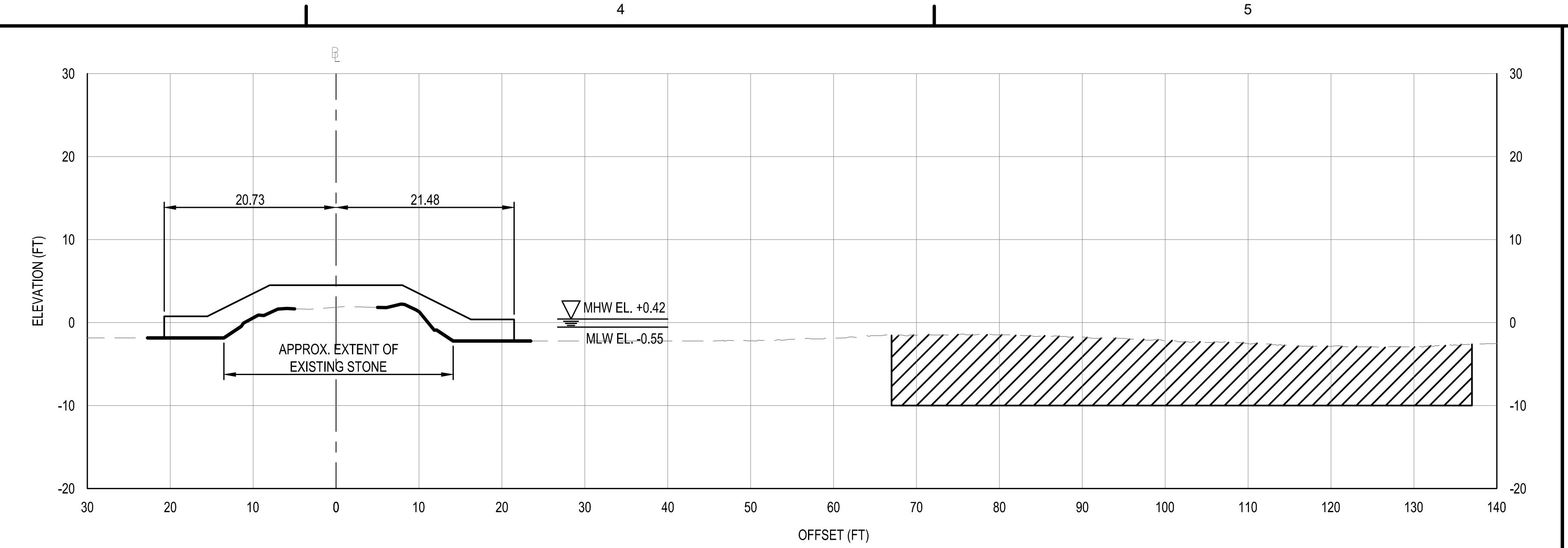
DESIGNED BY	DATE
DRAWN BY	ISSUED FOR
CHECKED BY	CONTRACT NUMBER
IN CHARGE	PROJECT NAME
	FILE NAME
	DWG. SIZE
	DESCRIPTION
	MARK ACTION
	DATE
	BY

U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT
FISHING CREEK SOUTH-LITTY REHABILITATION
CALVERT COUNTY
CHESAPEAKE BEACH, MARYLAND
CROSS SECTIONS - STA. 2+25 TO STA. 4+00

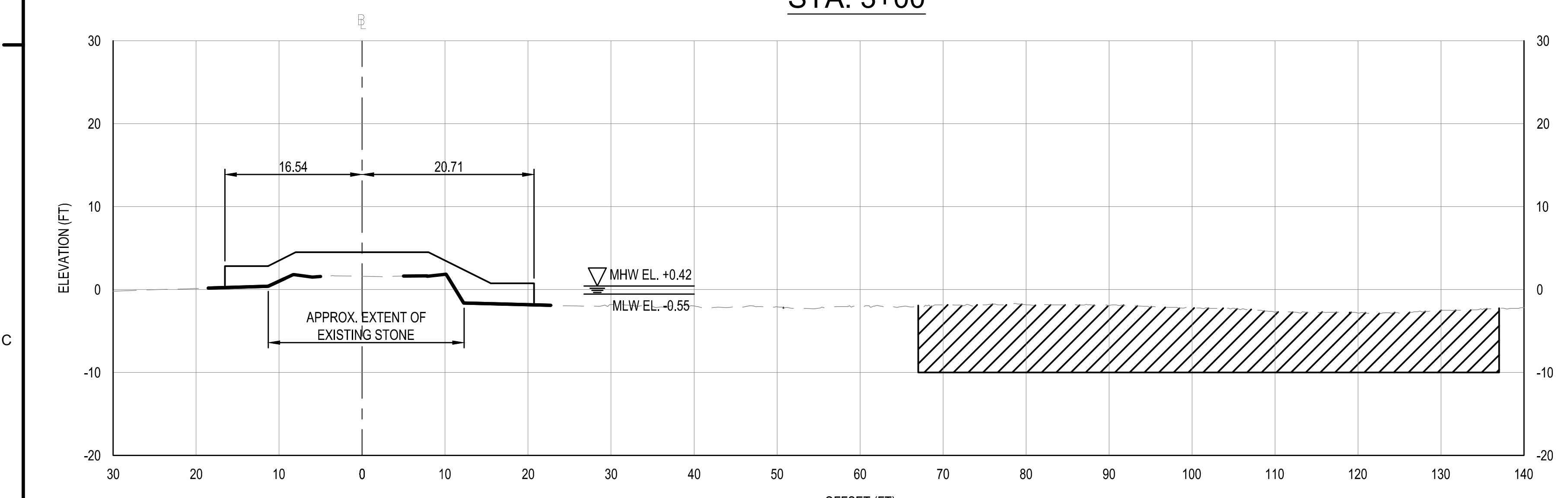
SHEET NUMBER
C-303



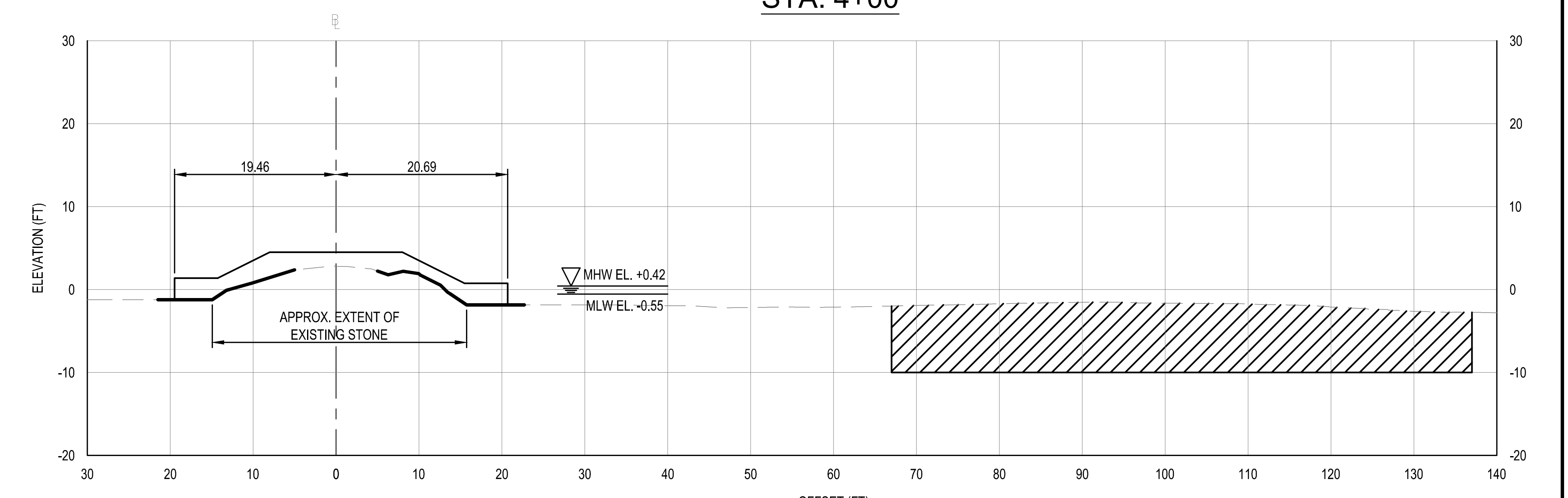
STA. 3+00



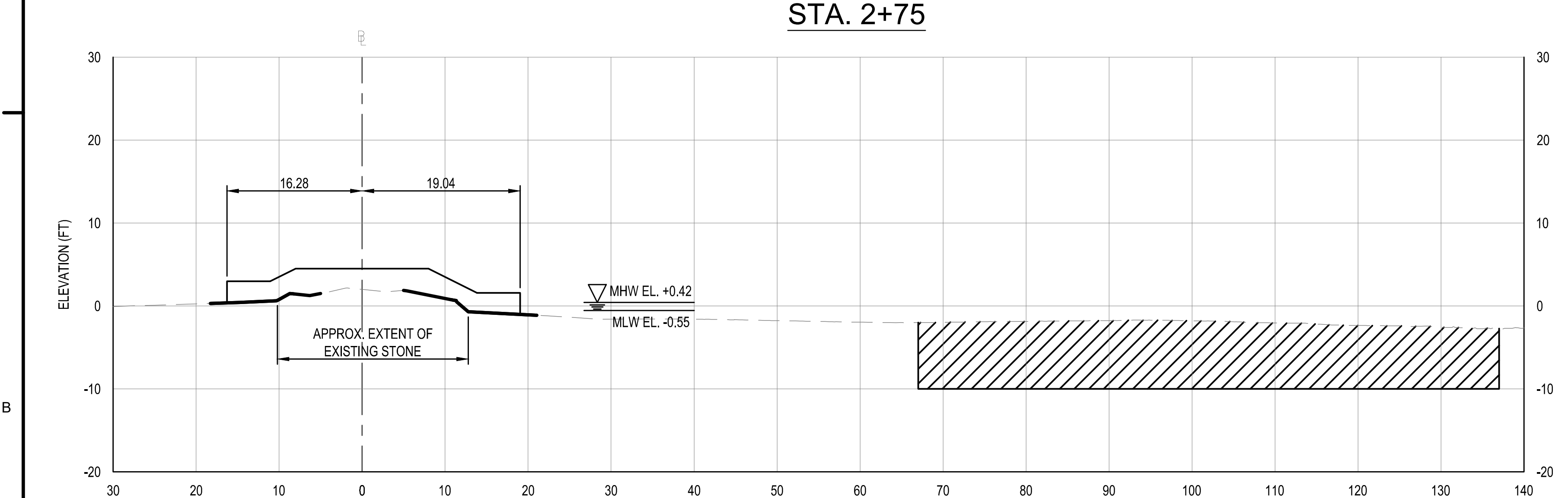
STA. 4+00



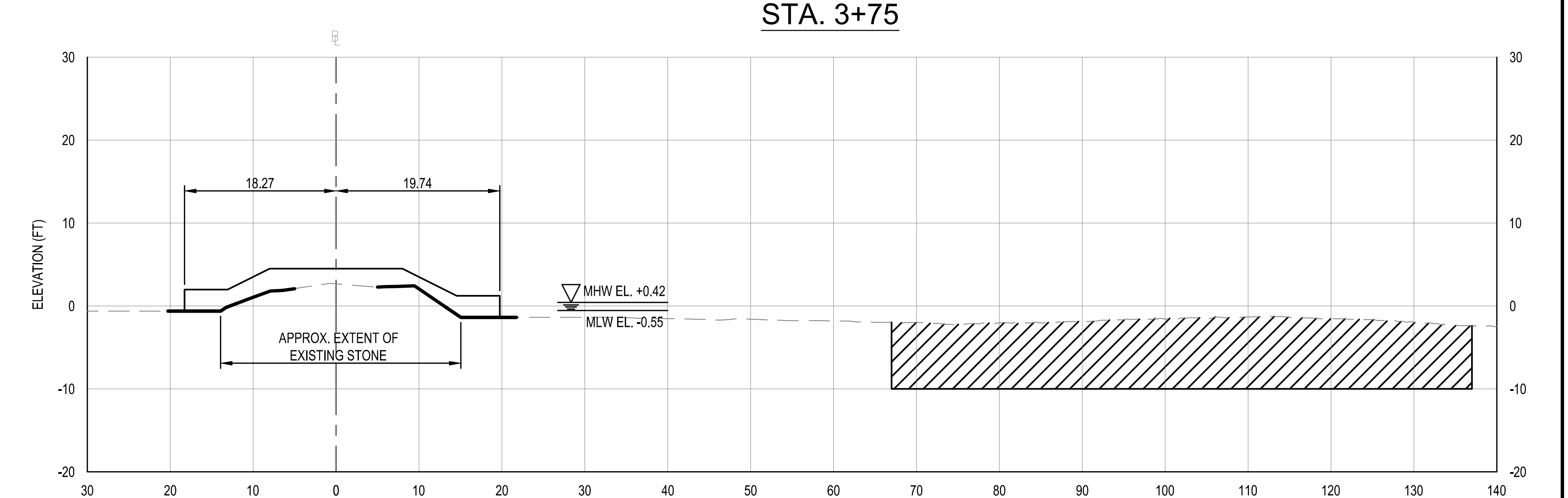
STA. 2+75



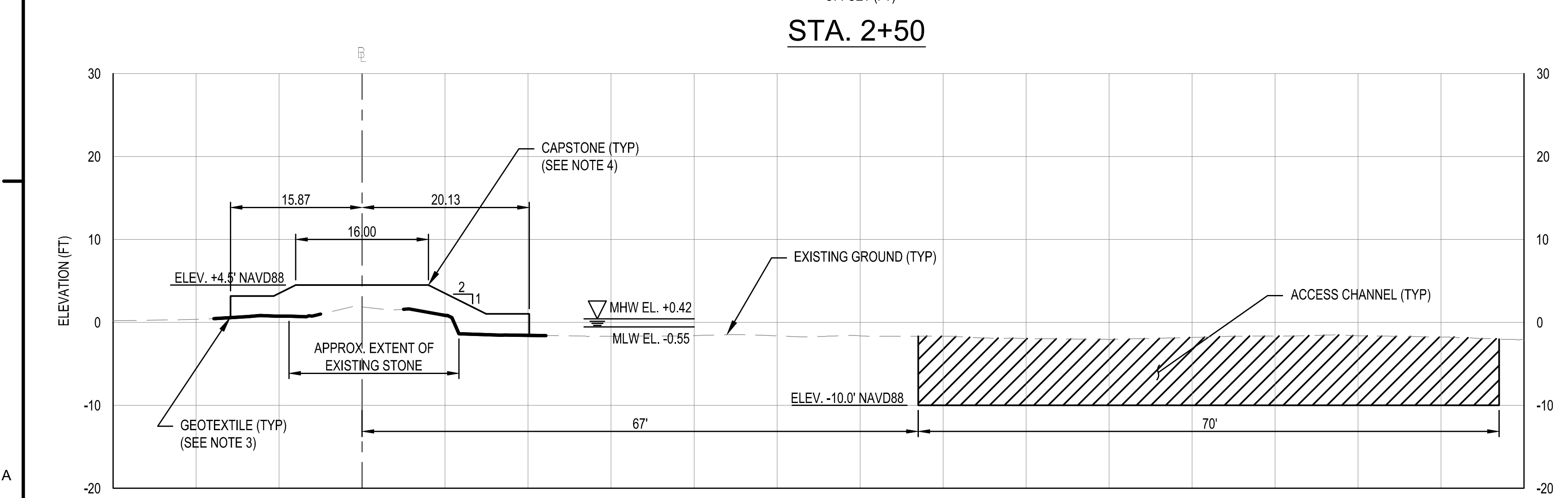
STA. 3+75



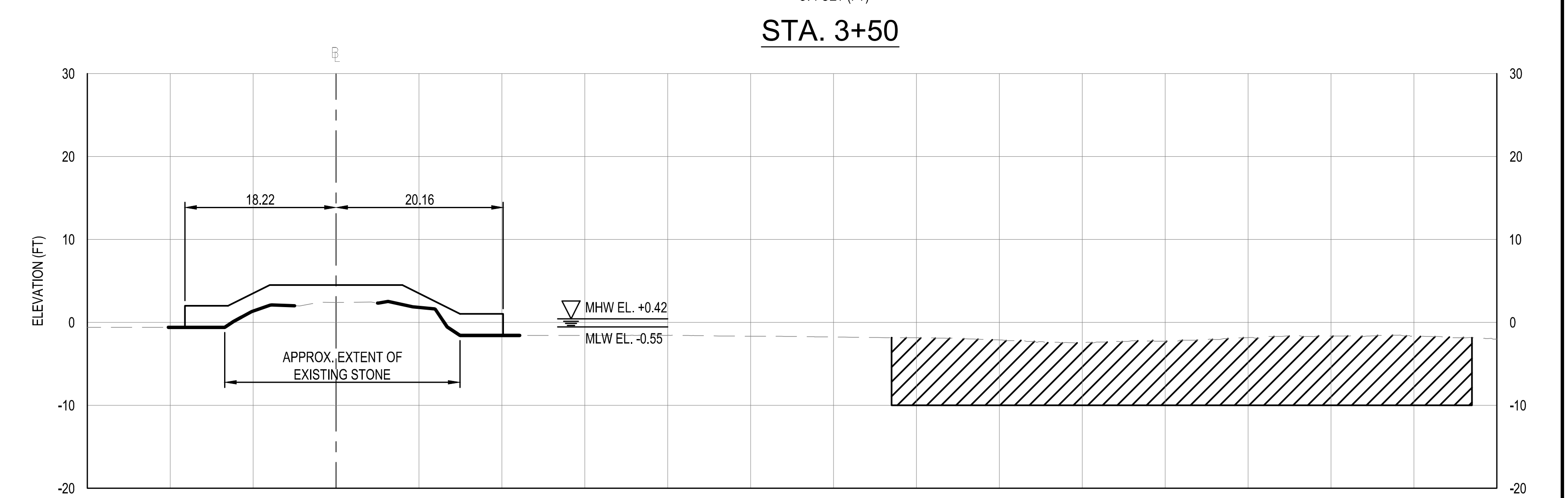
STA. 2+50



STA. 3+50



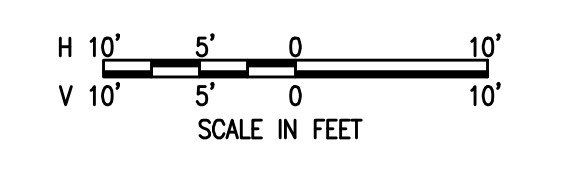
STA. 2+25



STA. 3+25

NOTES:

- SEE SHEET C-001 FOR GENERAL INFORMATION.
- SEE SHEET C-301 FOR TYPICAL SECTIONS.
- GEOTEXTILE EXTENTS ARE APPROXIMATED FROM OCT 2020 NAB USACE SURVEYS AND MAY BE EXTENDED OR REVISED FOLLOWING RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS.
- CAPSTONE TEMPLATE MAY BE REVISED FOLLOWING RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS.
- SEE SHEET C-501 FOR GROUTING DETAILS.

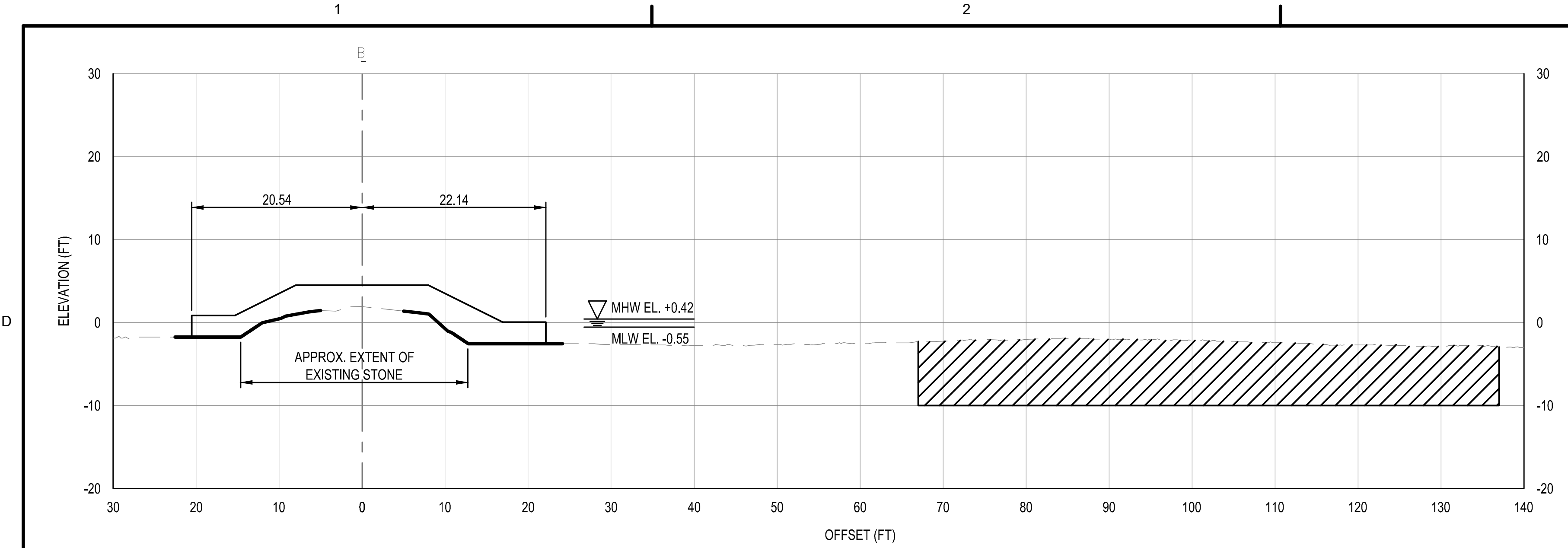




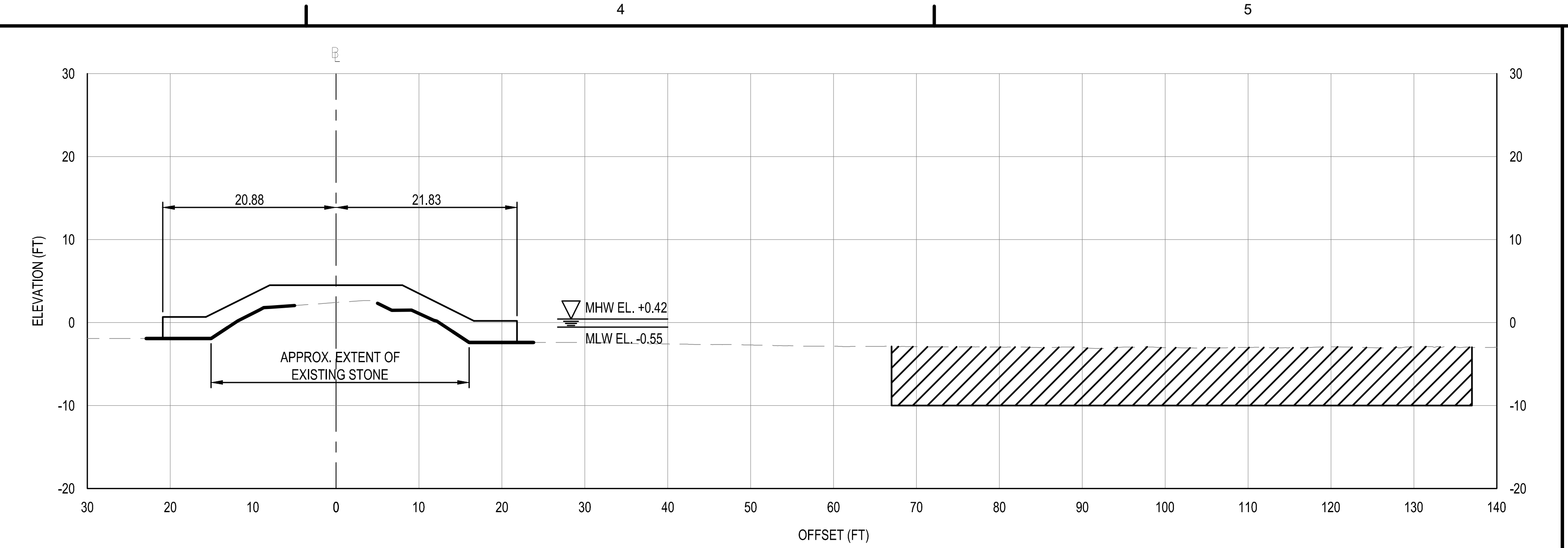
DESIGNED BY	DATE
DRAWN BY	ISSUED FOR
CHECKED BY	CONTRACT NUMBER
IN CHARGE	PROJECT NAME
	FILE NAME
	DWG. SIZE
	DESCRIPTION

FISHING CREEK
SOUTH LITTY REHABILITATION
CALVERT COUNTY
CHESAPEAKE BEACH, MARYLAND
CROSS SECTIONS - STA. 4+25 TO 6+00

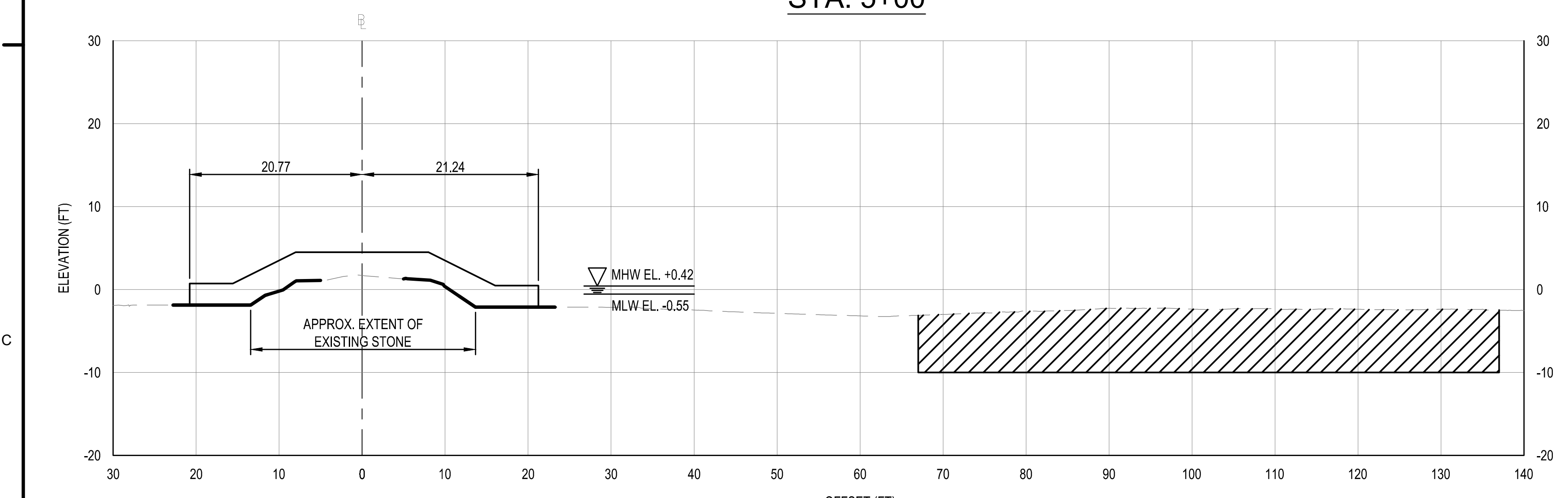
SHEET NUMBER
C-304



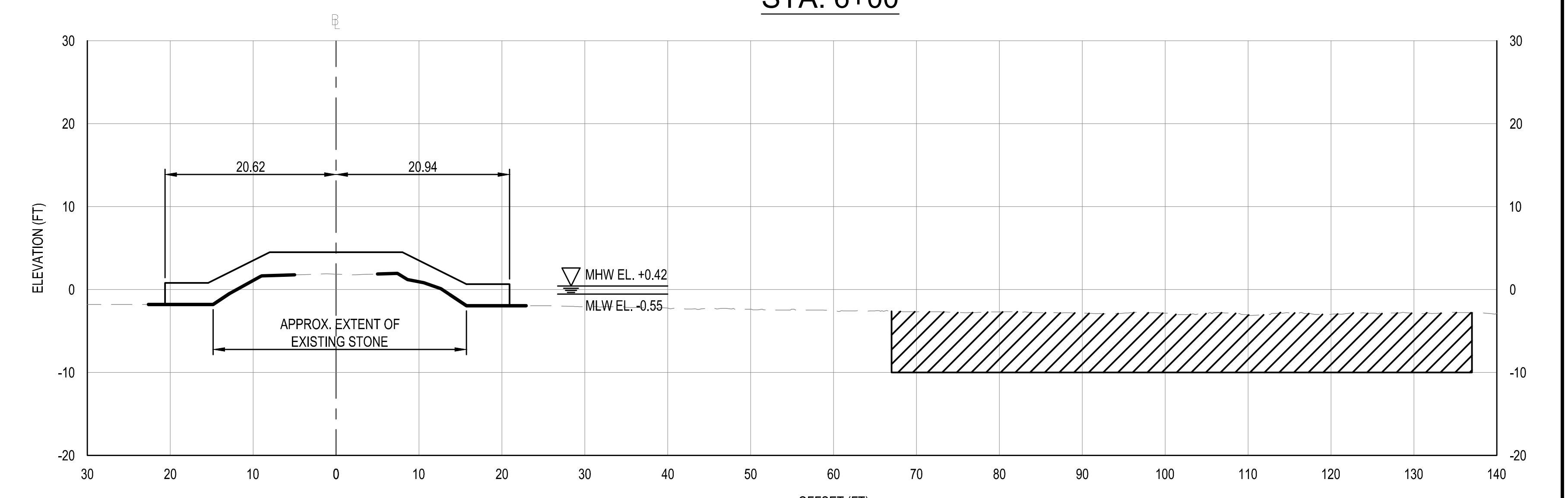
STA. 5+00



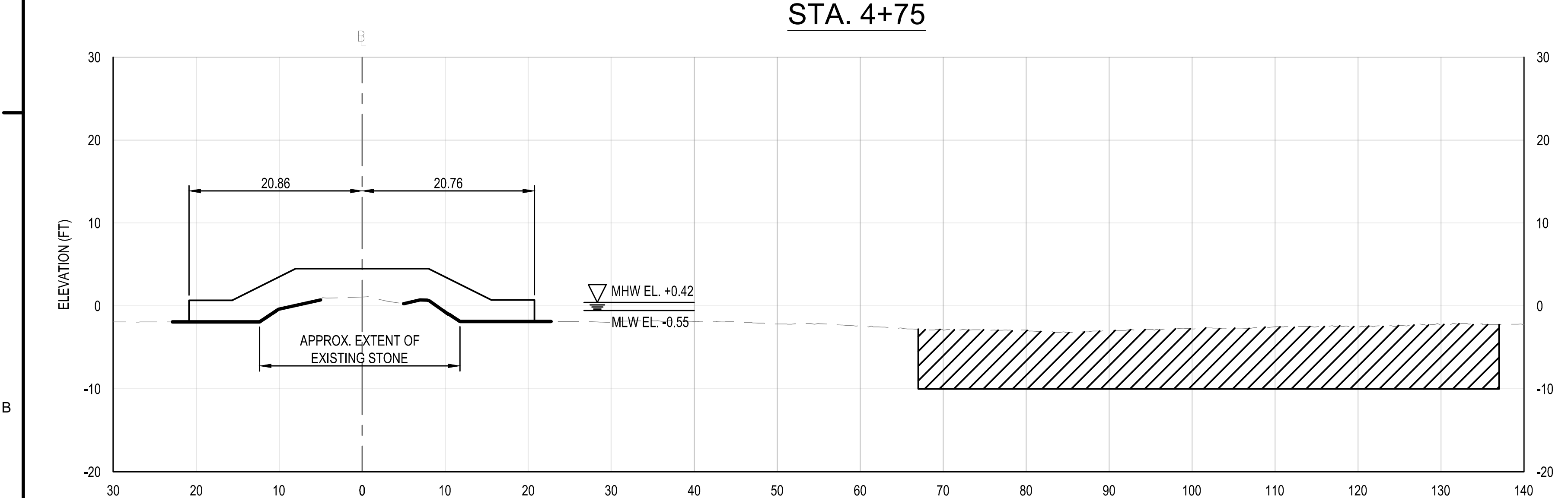
STA. 6+00



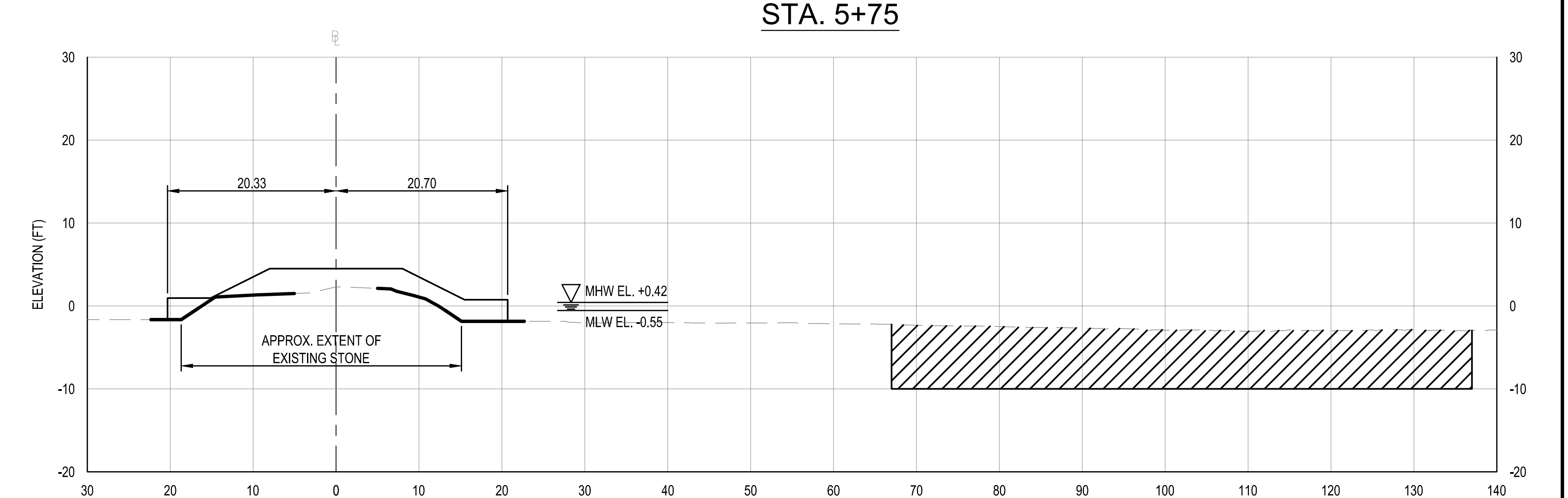
STA. 4+75



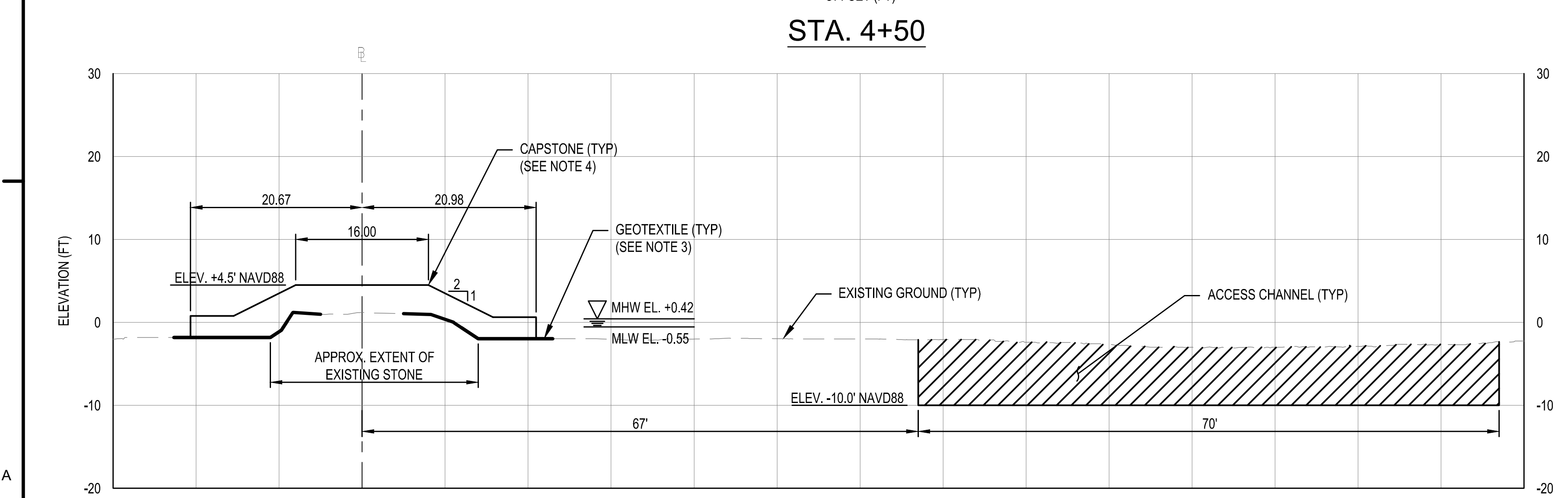
STA. 5+75



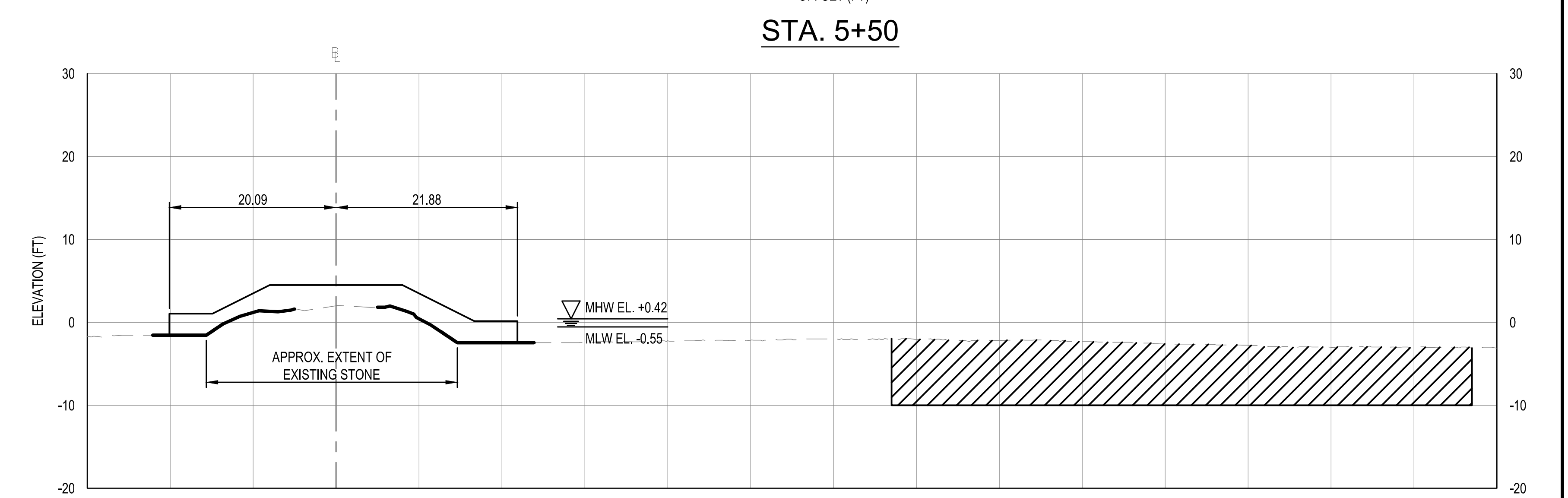
STA. 4+50



STA. 5+50



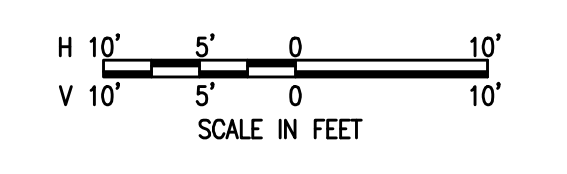
STA. 4+25



STA. 5+25

NOTES:

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- SEE SHEET C-301 FOR TYPICAL SECTIONS.
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- CAPSTONE TEMPLATE MAY BE REVISED FOLLOWING RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS.
- SEE SHEET C-501 FOR GROUTING DETAILS.



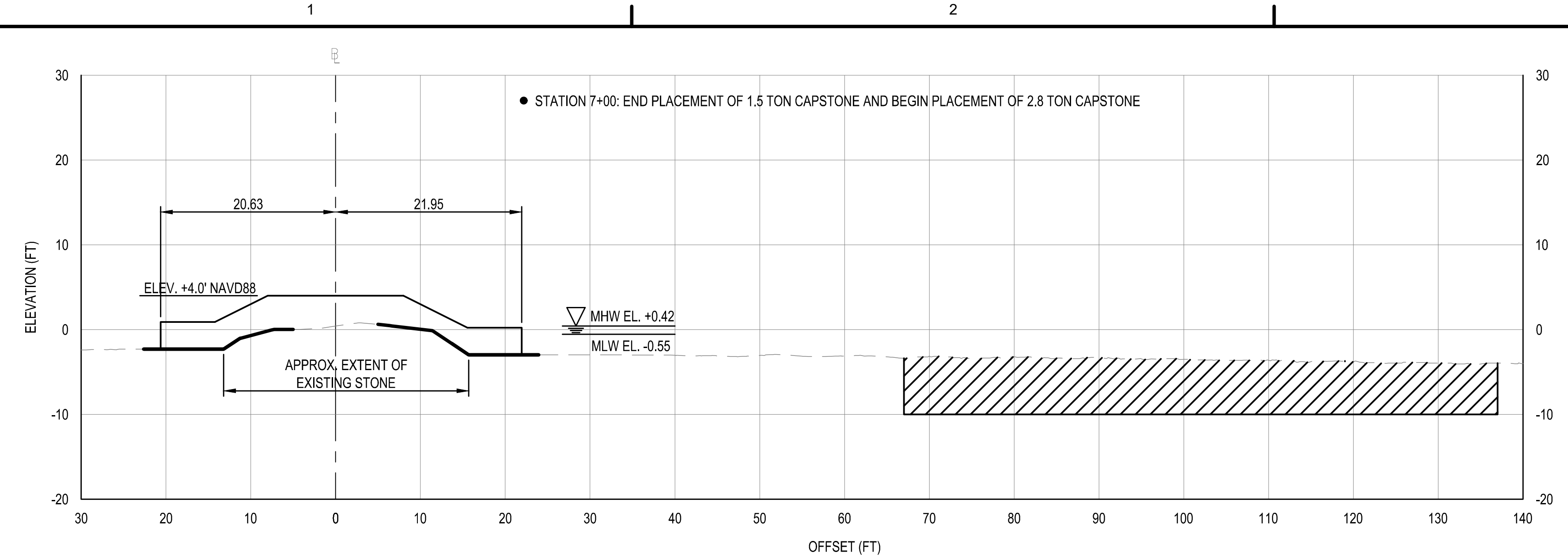


DESIGNED BY	DATE
DRAWN BY	ISSUED FOR
CHECKED BY	PROJECT NUMBER
APPROVED BY	CONTRACT NUMBER
FILE NAME	DESCRIPTION
DATE	

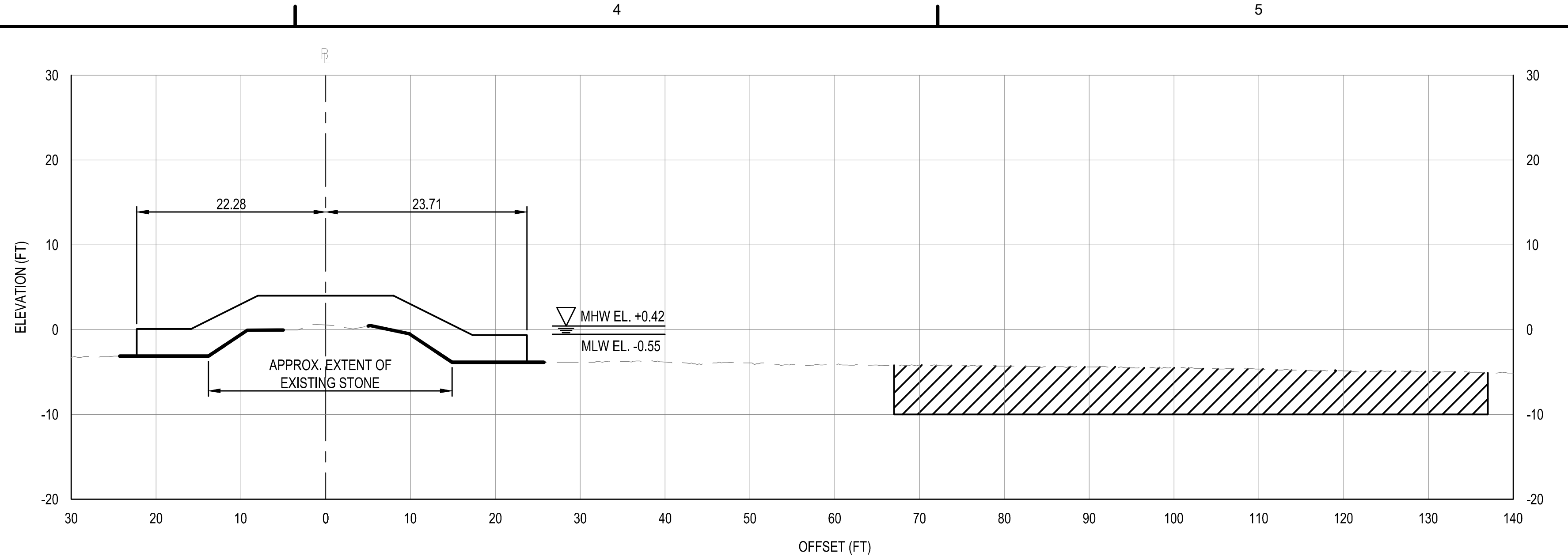
U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT
PHILADELPHIA DISTRICT

FISHING CREEK
SOUTH LITTY REHABILITATION
CALVERT COUNTY
CHESAPEAKE BEACH, MARYLAND
CROSS SECTIONS - STA. 6+25 TO STA. 8+00

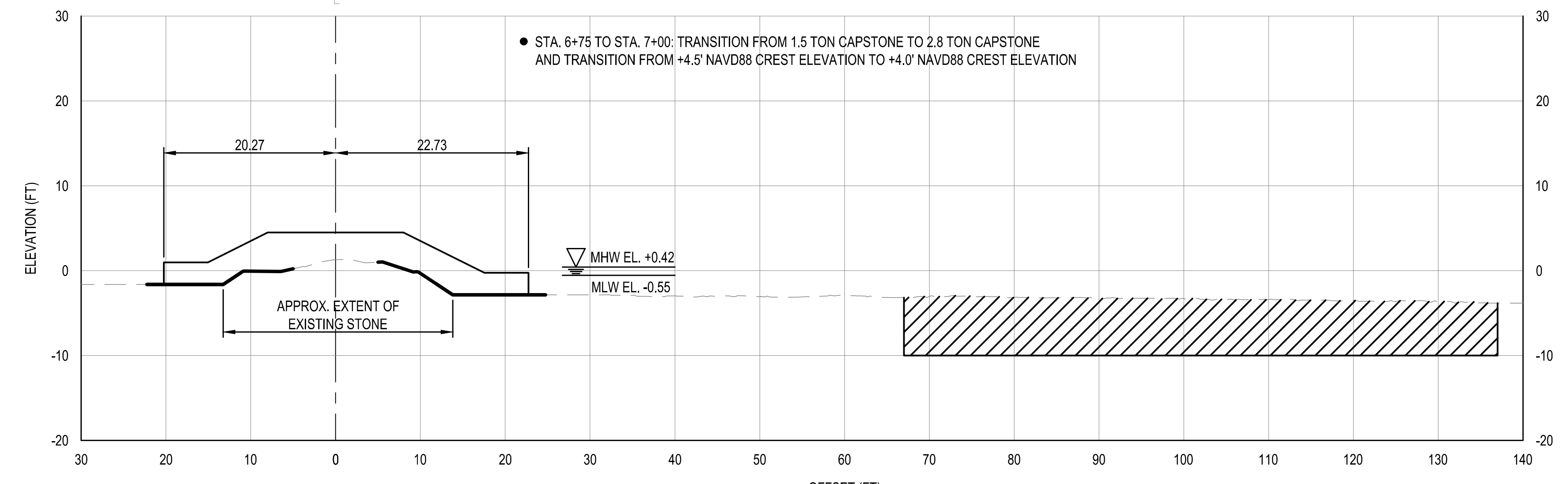
SHEET NUMBER
C-305



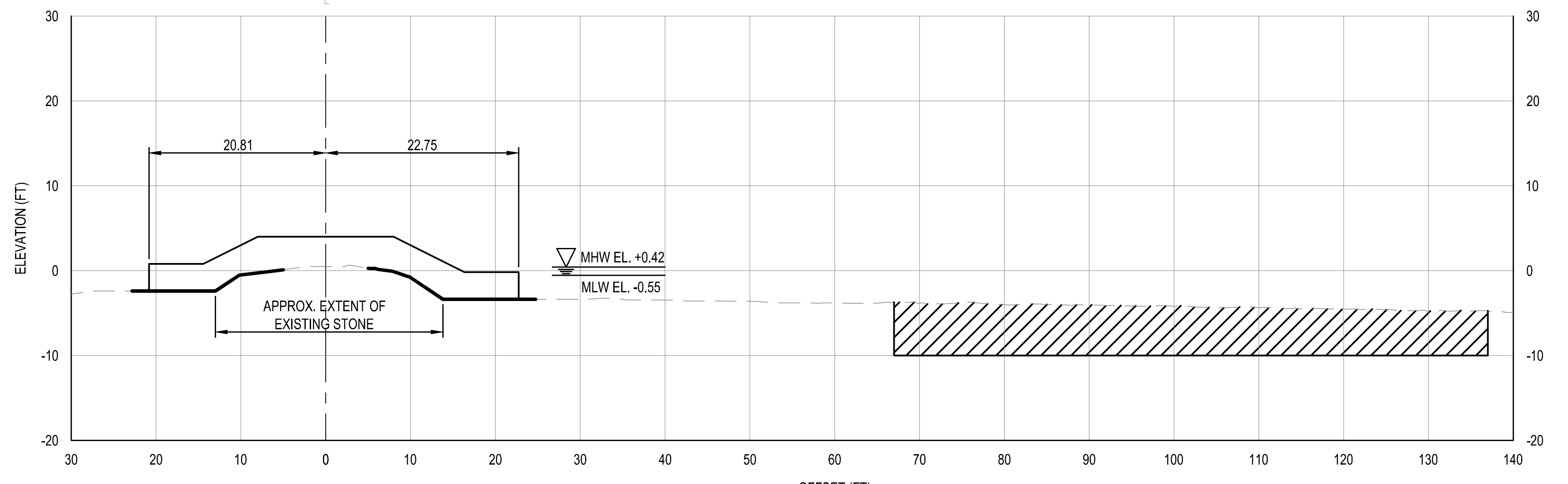
STA. 7+00



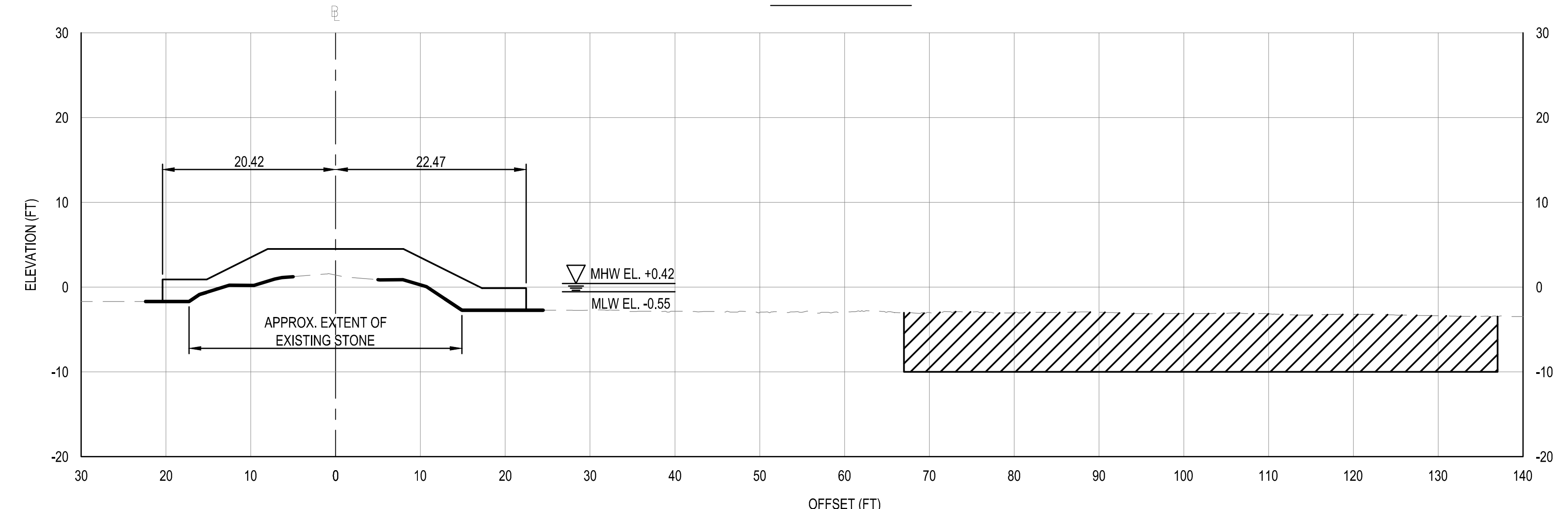
STA. 8+00



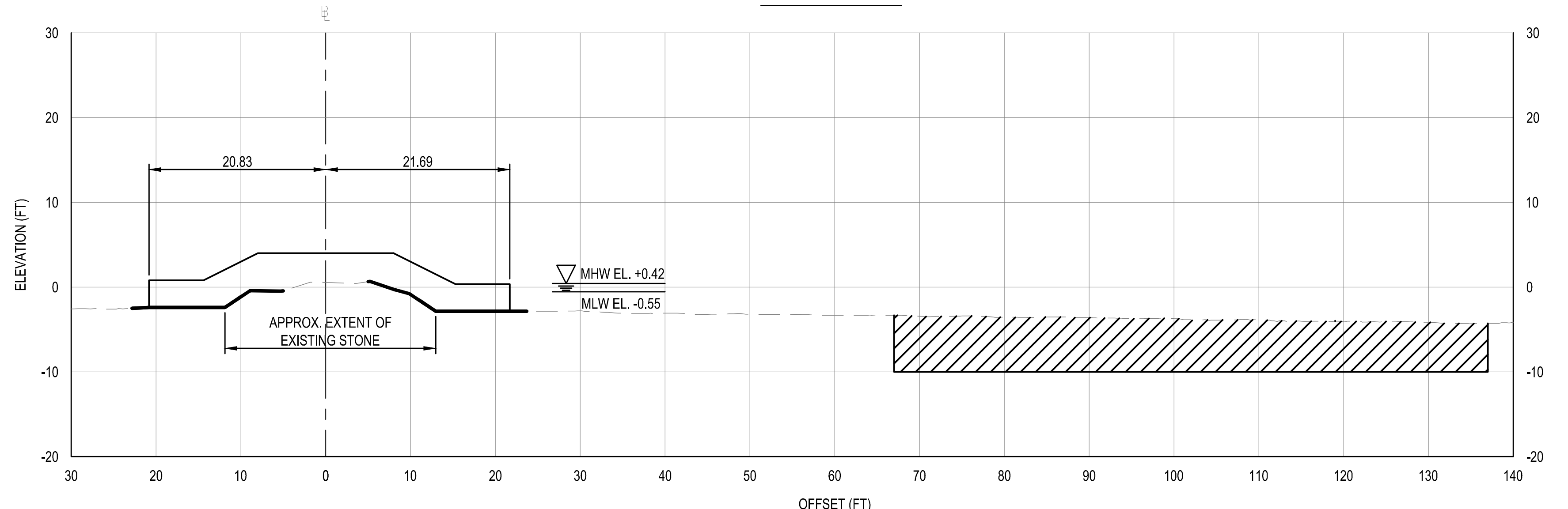
STA. 6+75



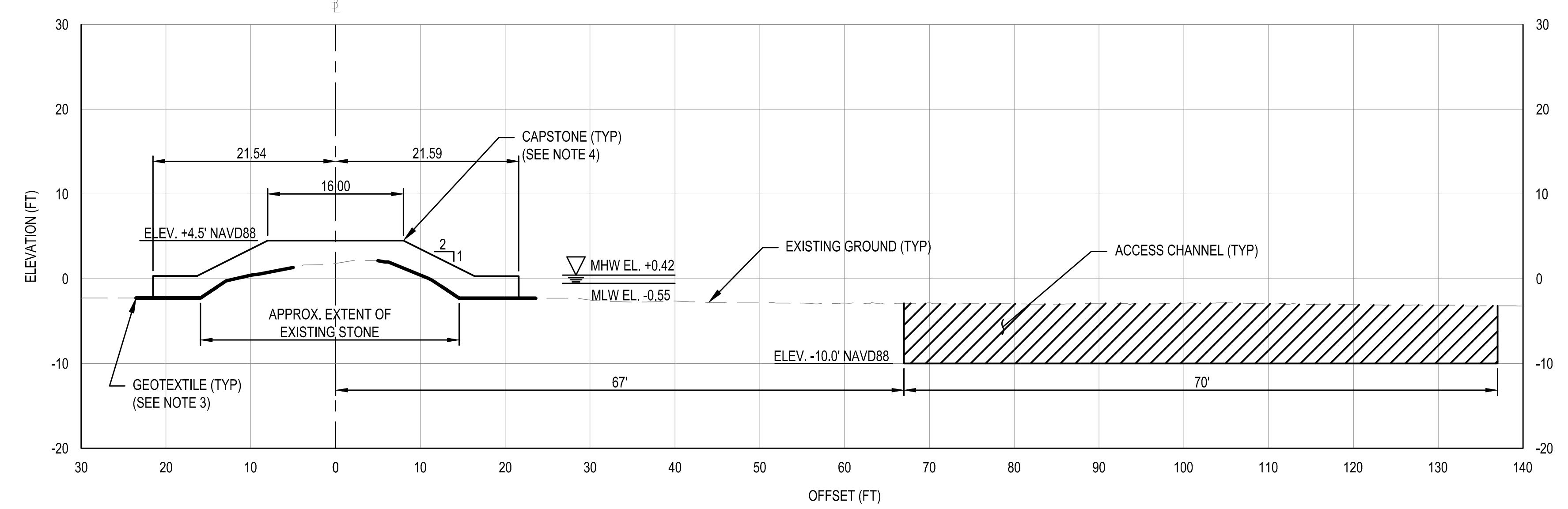
STA. 7+75



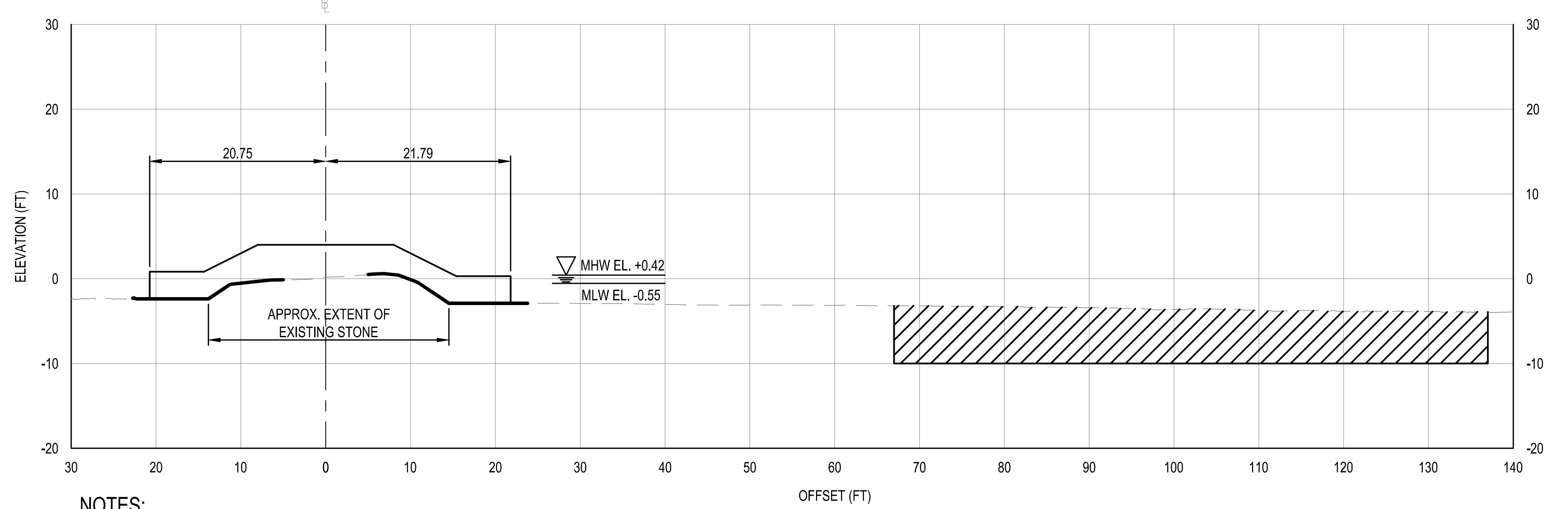
STA. 6+50



STA. 7+50



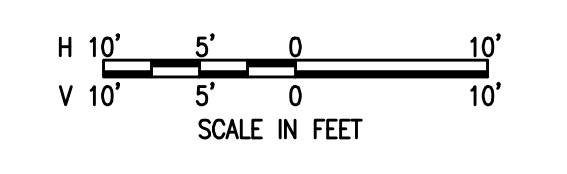
STA. 6+25



STA. 7+25

NOTES:

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- SEE SHEET C-301 FOR TYPICAL SECTIONS.
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- CAPSTONE TEMPLATE MAY BE REVISED FOLLOWING RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS.
- SEE SHEET C-501 FOR GROUTING DETAILS.

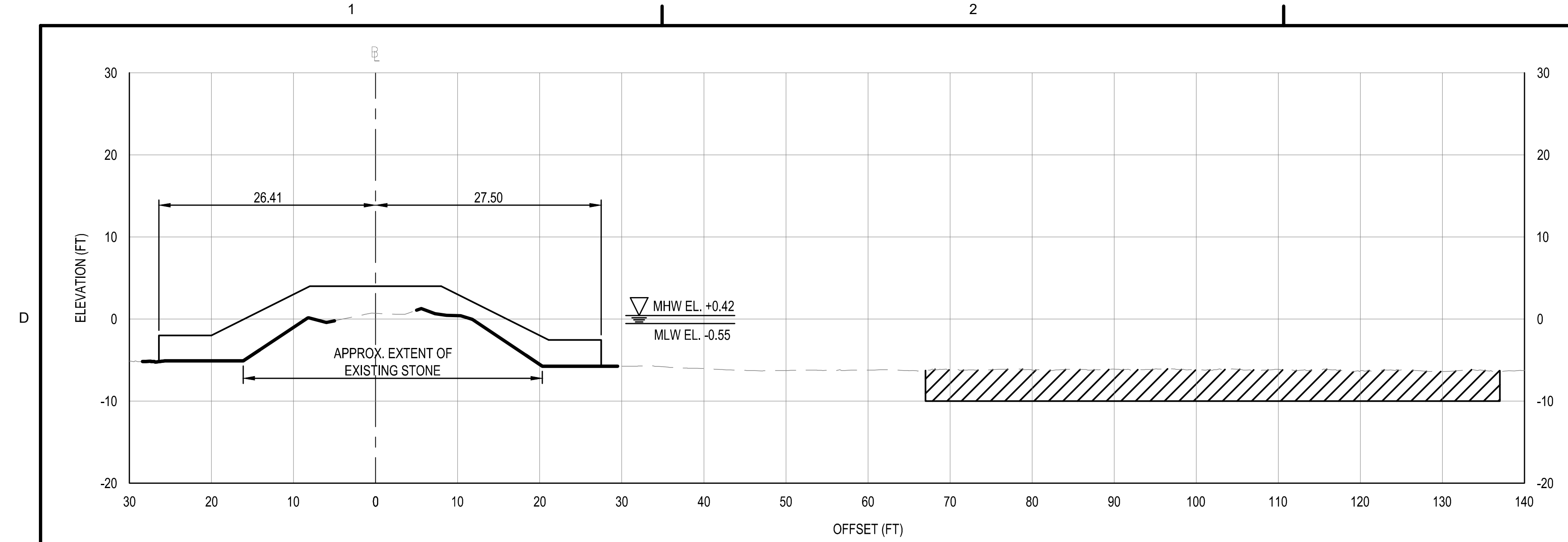




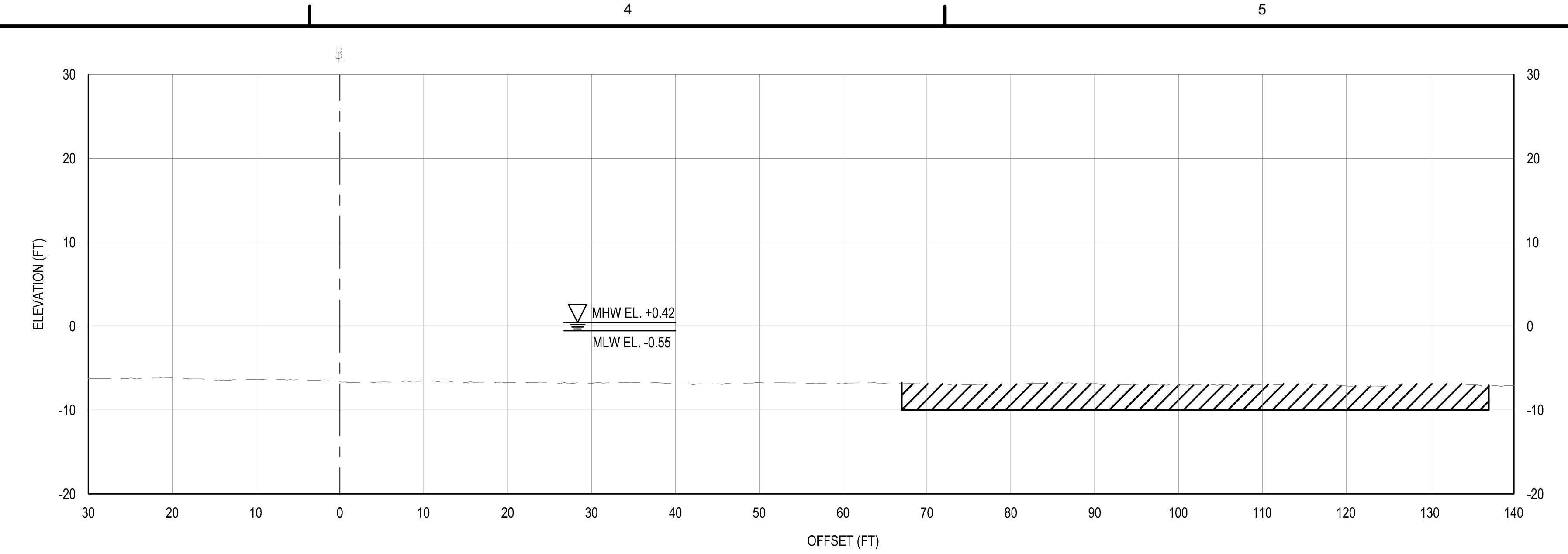
ISSUE/REVISIONAL DATE	28 MARCH 2021
DESIGNED BY	SW
CHECKED BY	TEH
CONTRACT NUMBER	
PROJECT NAME	FISHING CREEK
FILE NAME	CONSTRUCTION STA. 8+25 TO 10+00.dwg
DATE	03/28/21

U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT
FISHING CREEK
SOUTH LITTY REHABILITATION
CALVERT COUNTY
CHESAPEAKE BEACH, MARYLAND
CROSS SECTIONS - STA. 8+25 TO 10+00

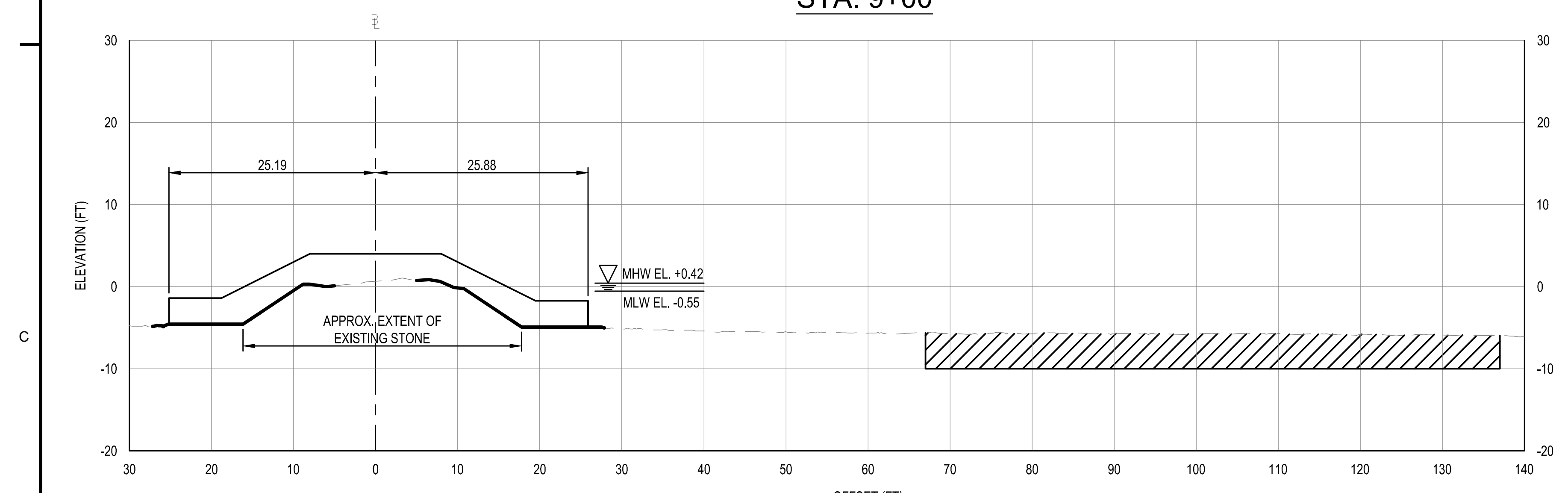
SHEET NUMBER
C-306



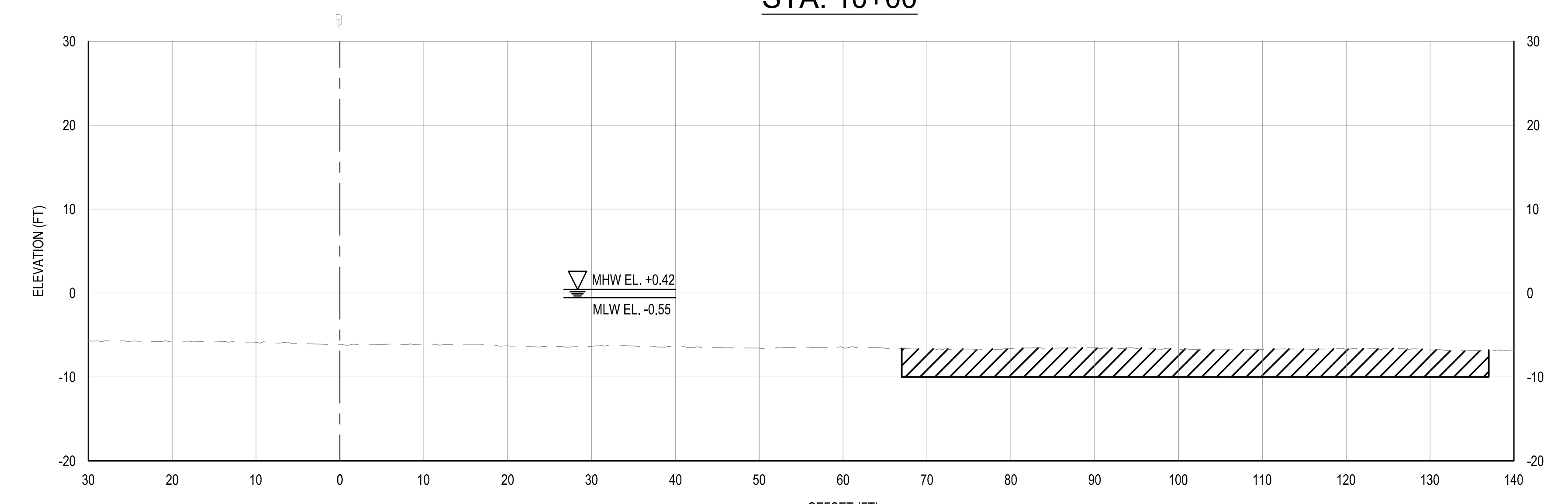
STA. 9+00



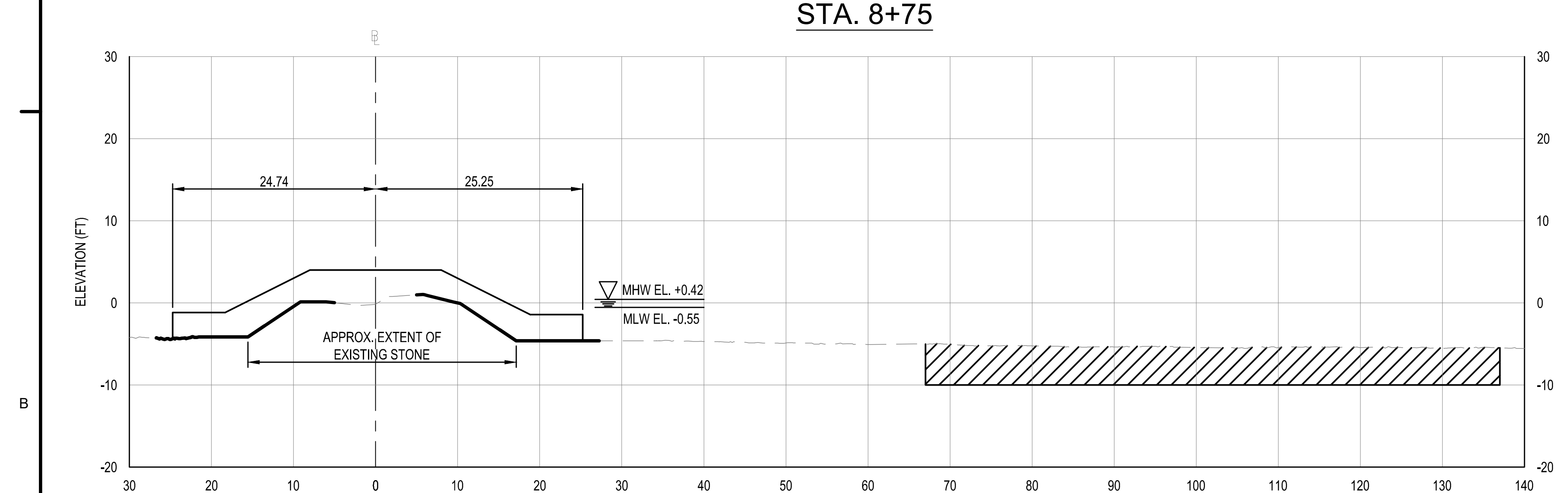
STA. 10+00



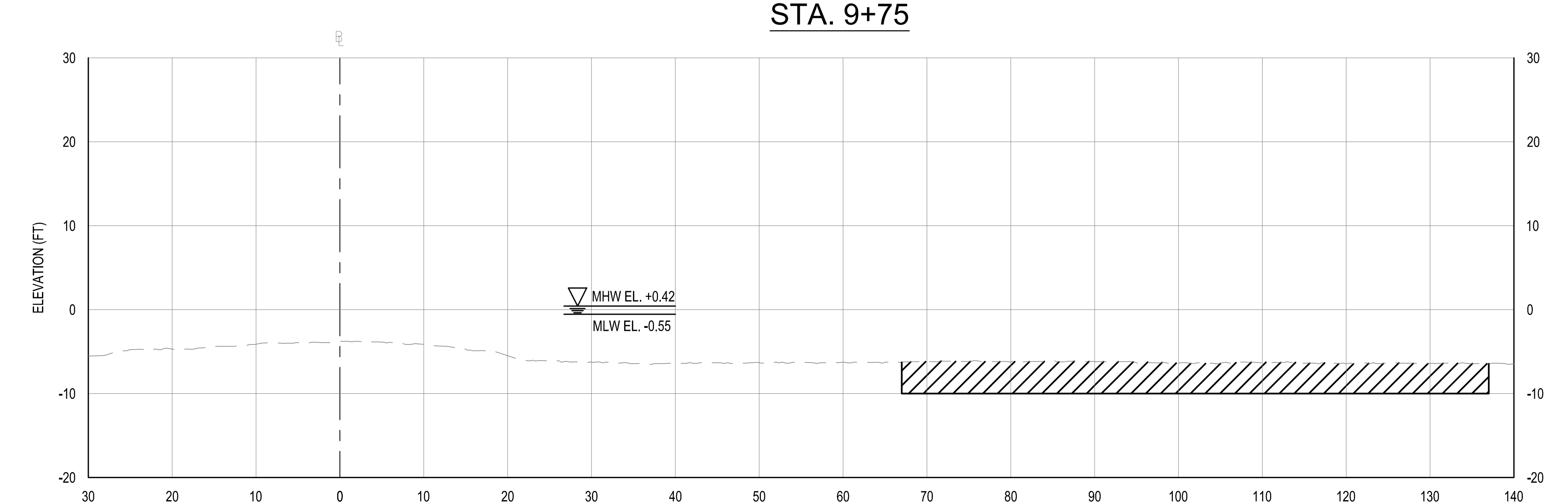
STA. 8+75



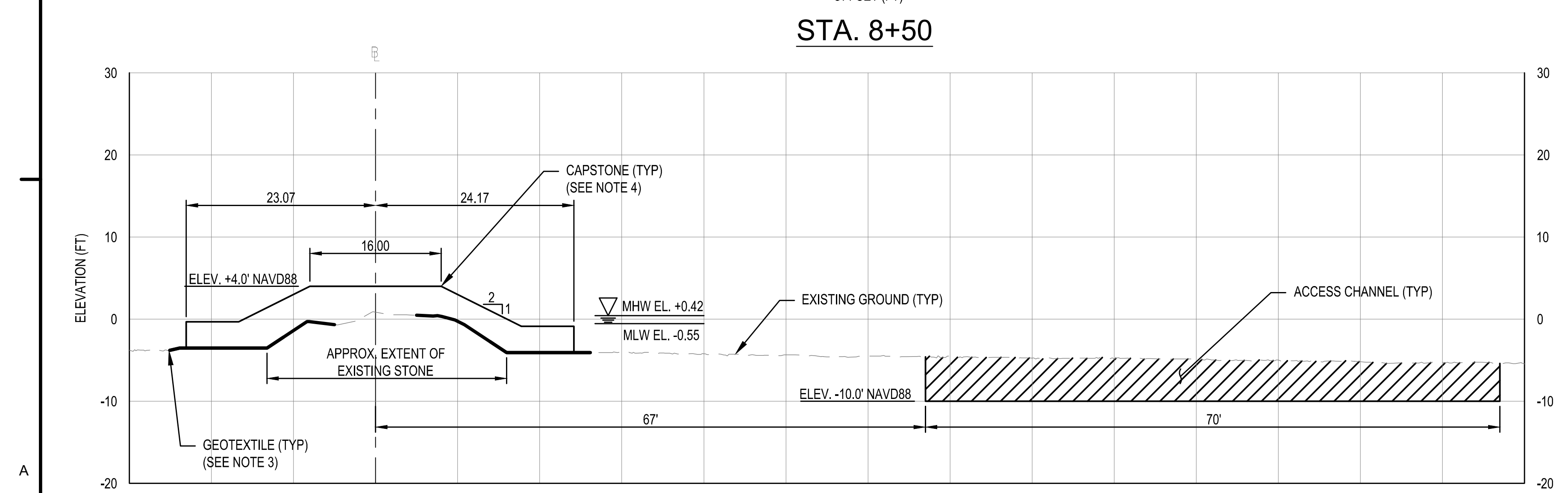
STA. 9+75



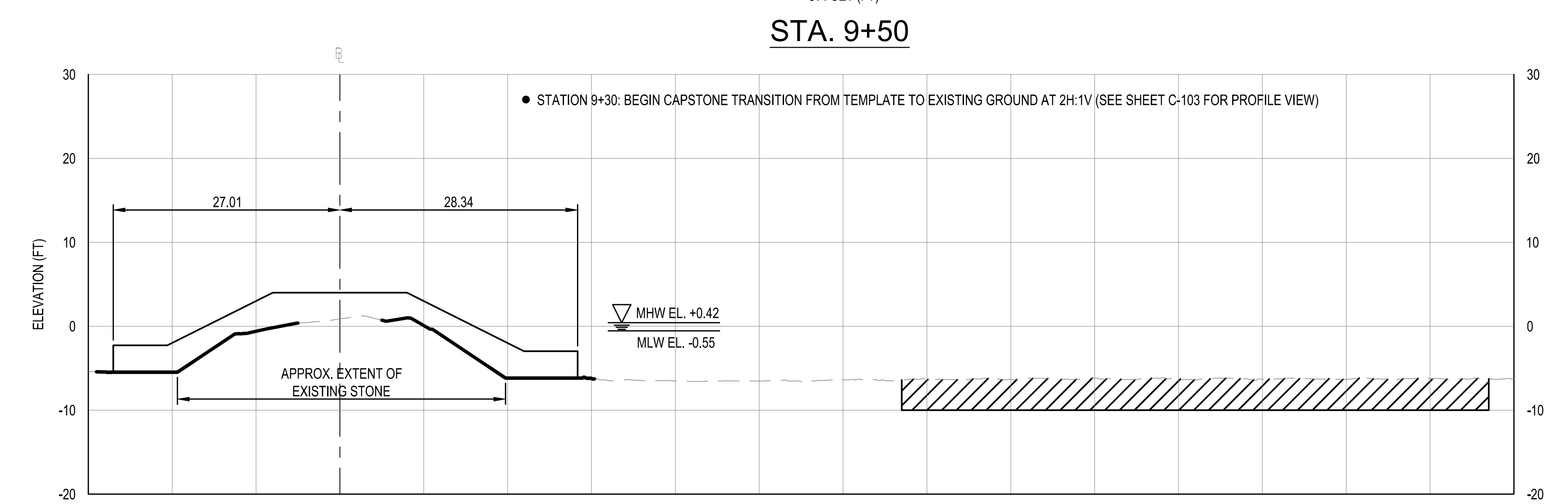
STA. 8+50



STA. 9+50



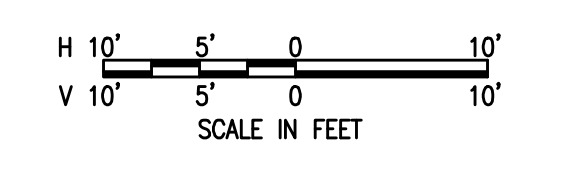
STA. 8+25

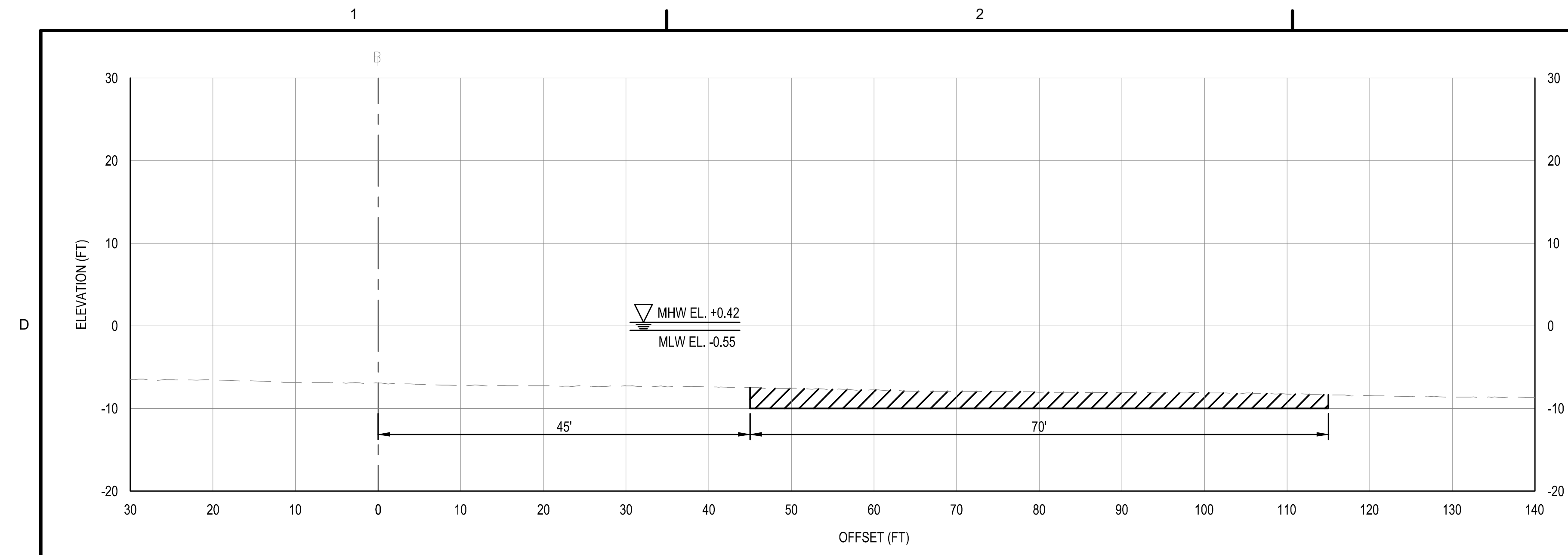


STA. 9+25

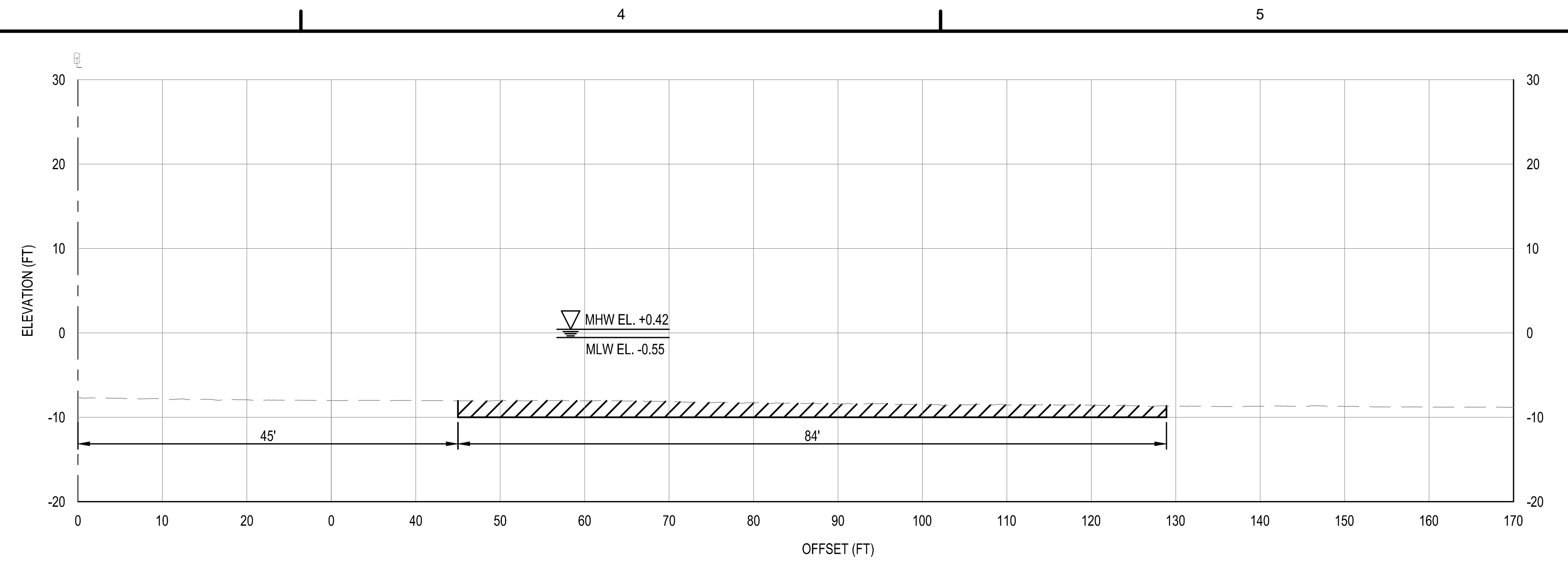
NOTES:

- SEE SHEET C-001 FOR GENERAL INFORMATION.
- SEE SHEET C-301 FOR TYPICAL SECTIONS.
- GEOTEXTILE EXTENTS ARE APPROXIMATED FROM OCT 2020 NAB USACE SURVEYS AND MAY BE EXTENDED OR REVISED FOLLOWING RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS.
- CAPSTONE TEMPLATE MAY BE REVISED FOLLOWING RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS.
- SEE SHEET C-501 FOR GROUTING DETAILS.

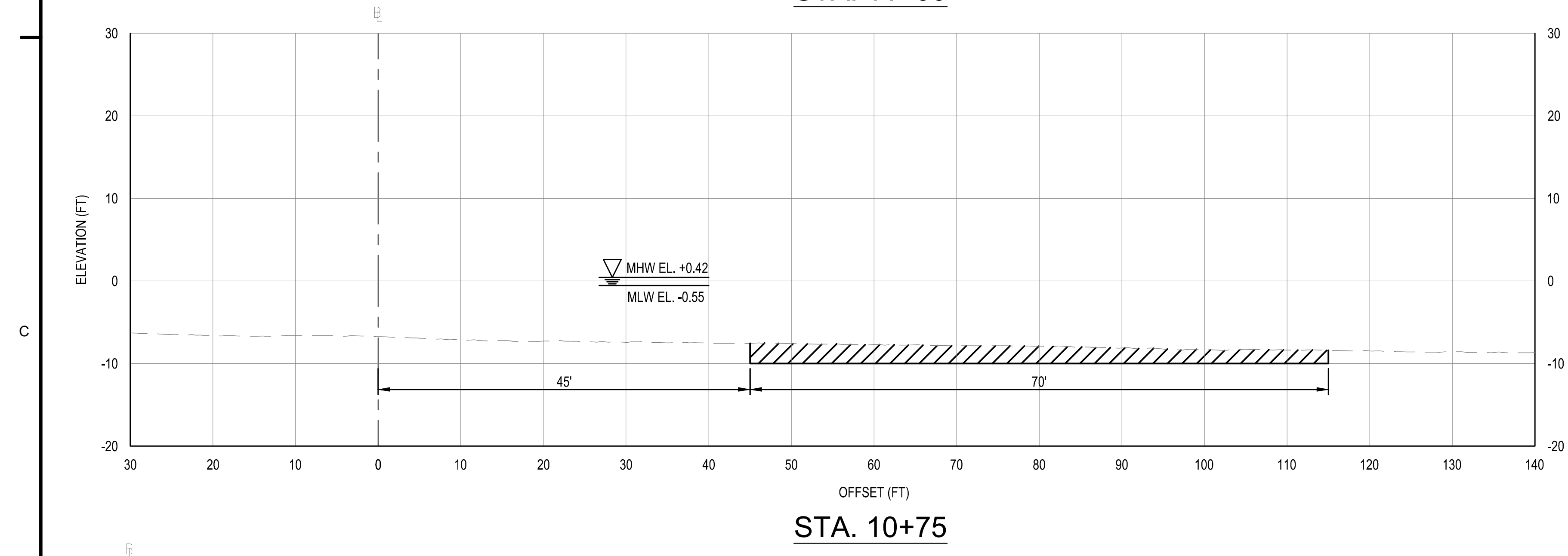




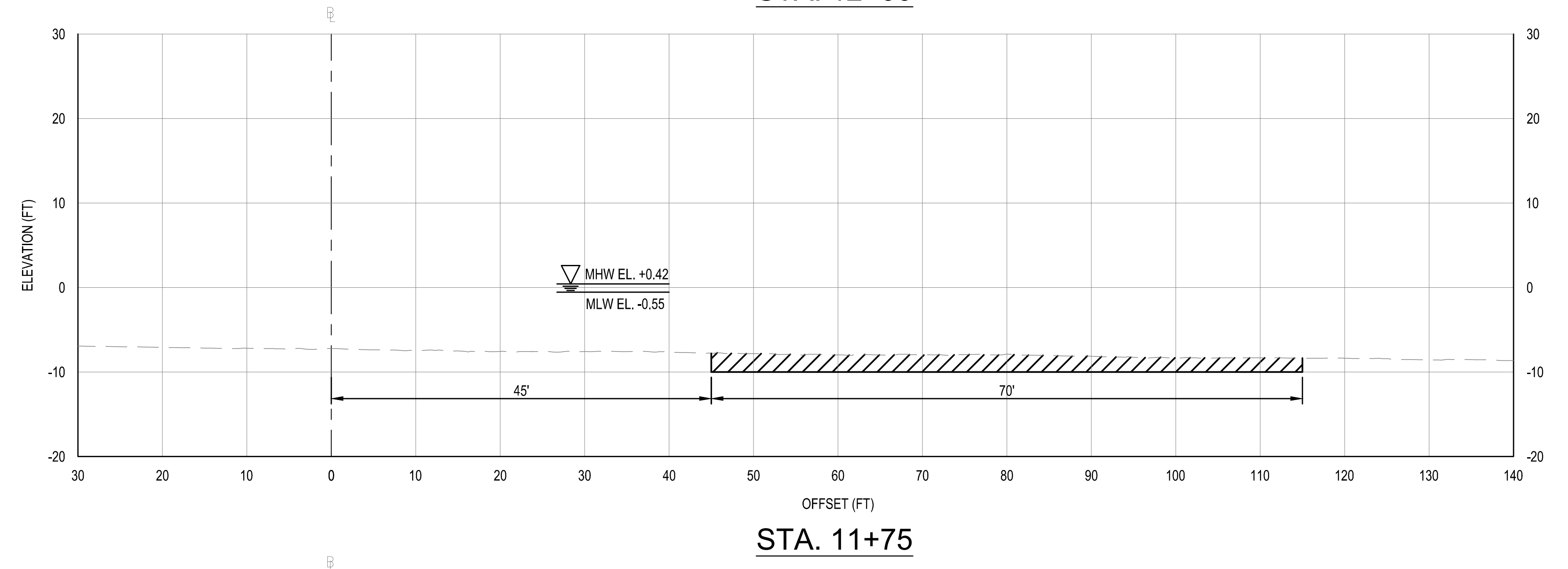
STA. 11+00



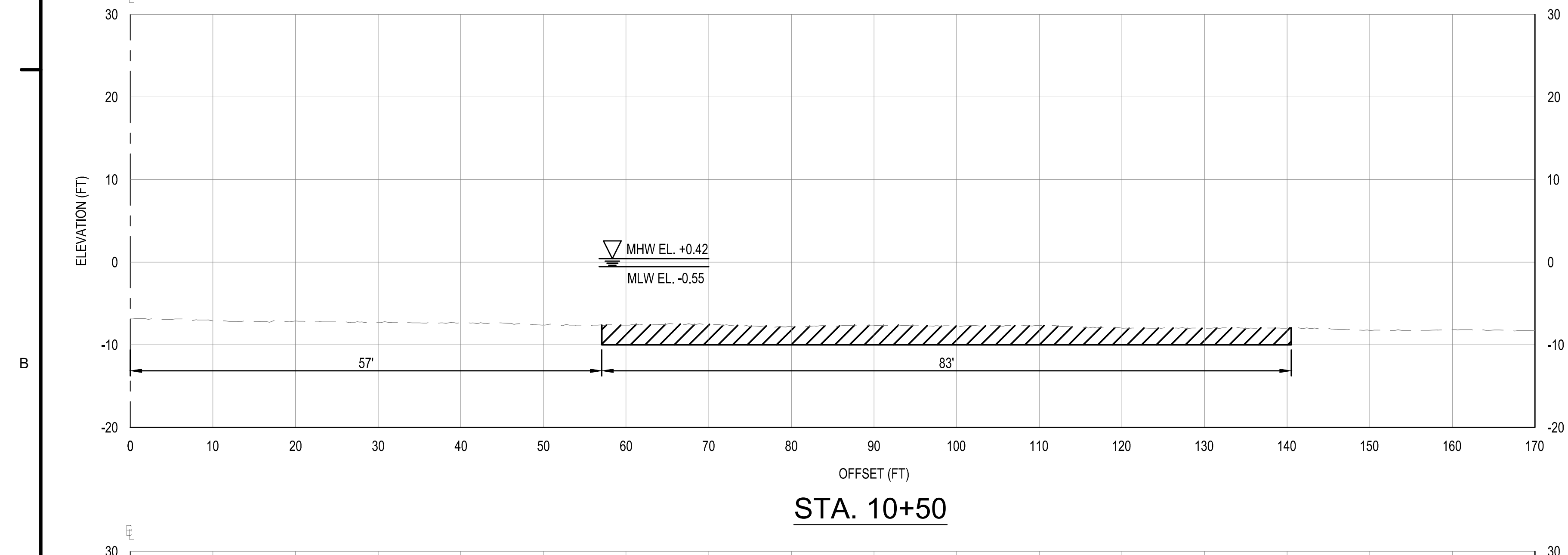
STA. 12+00



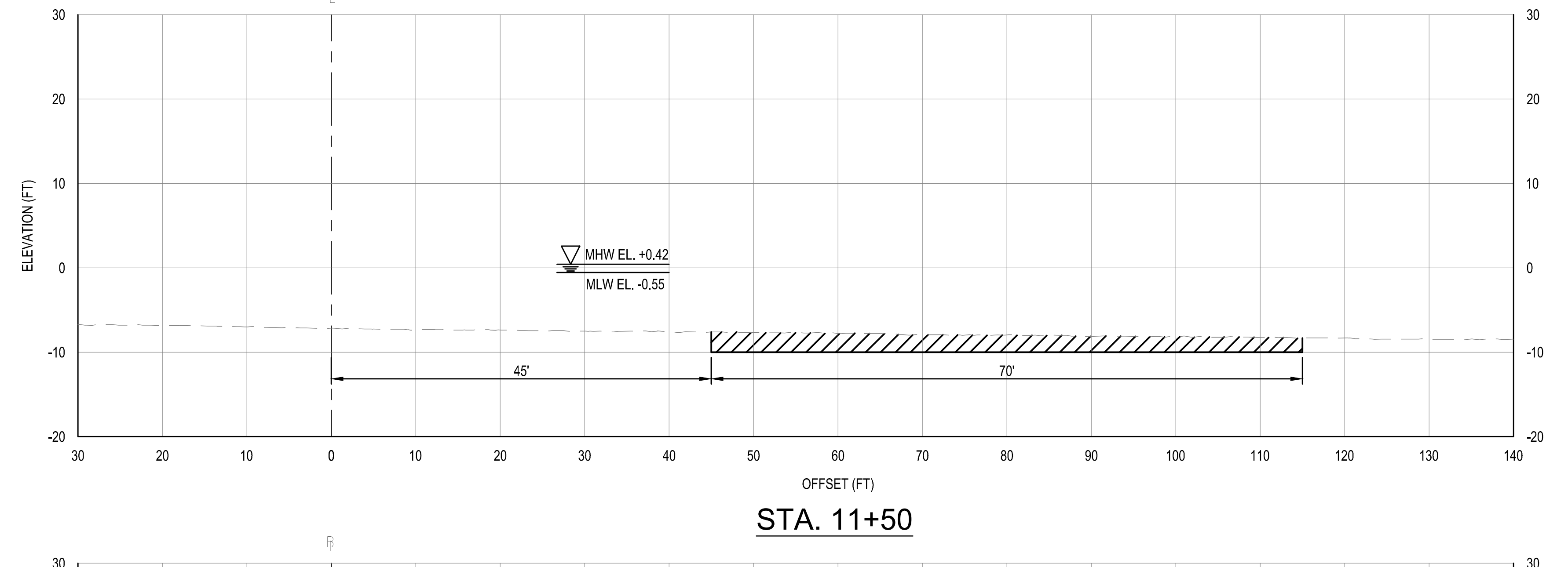
STA. 10+75



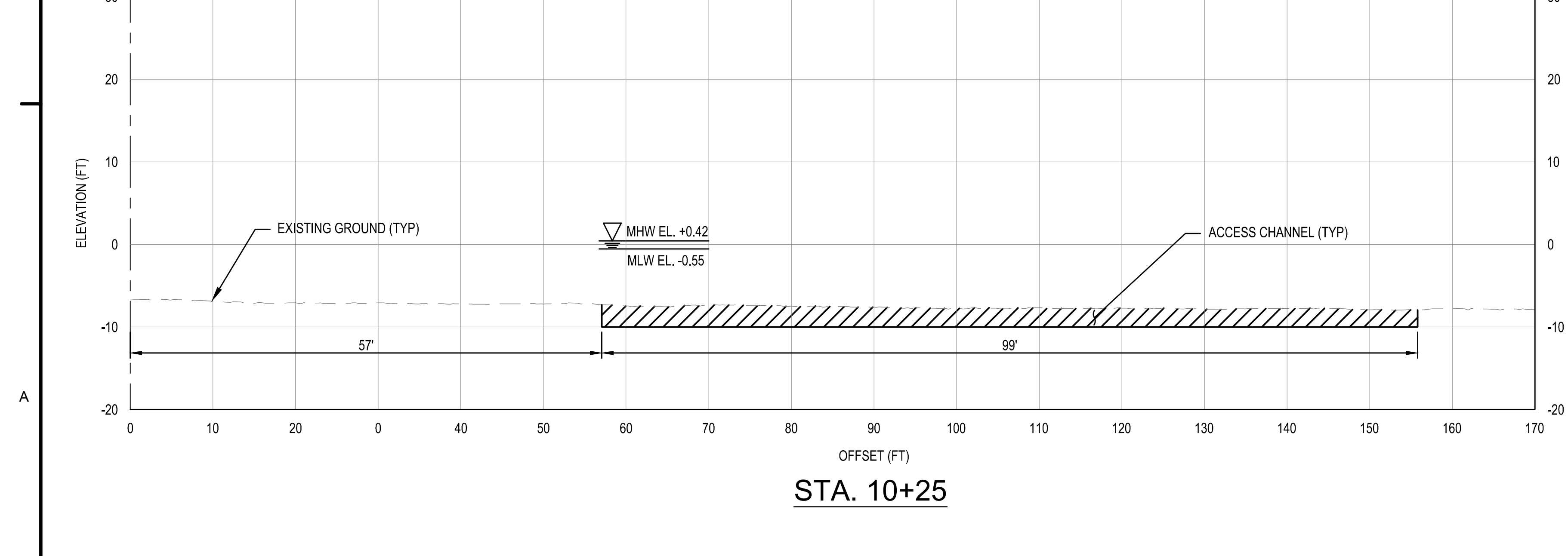
STA. 11+75



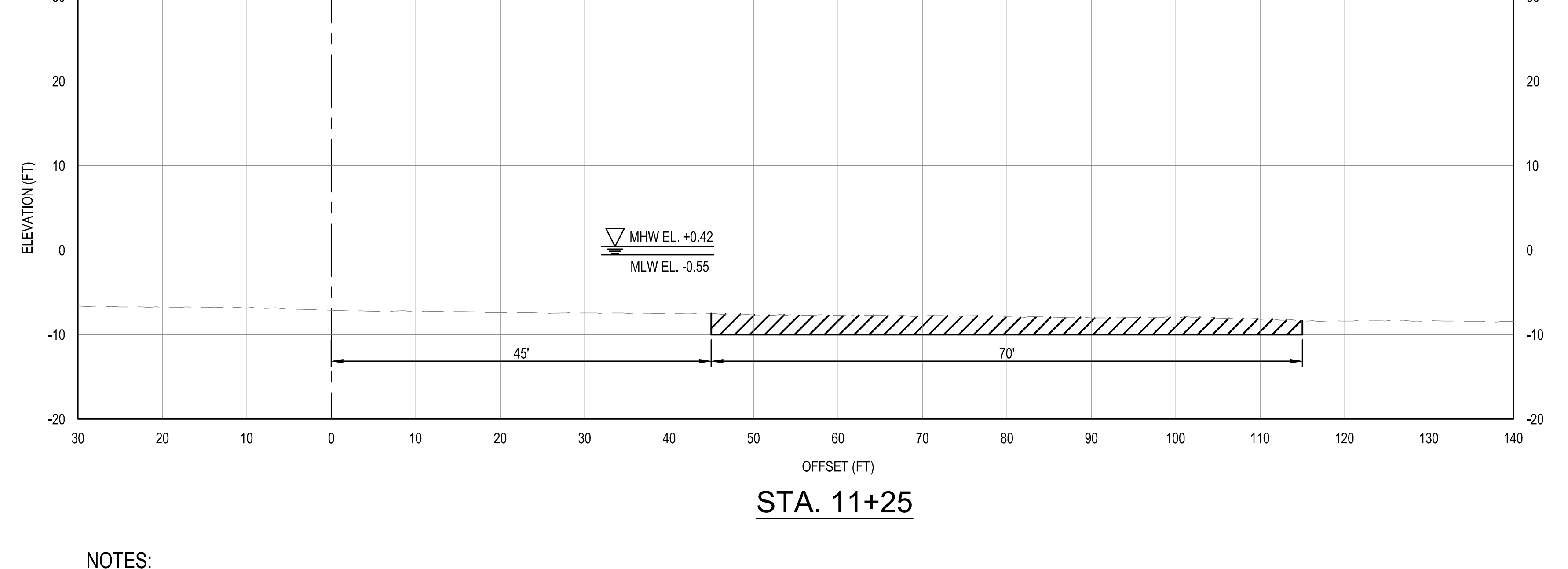
STA. 10+50



STA. 11+50



STA. 10+25



STA. 11+25

NOTES:
1. SEE SHEET C-001 FOR GENERAL INFORMATION.

H 10' / 5' / 0' / 10'
V 10' / 5' / 0' / 10'
SCALE IN FEET



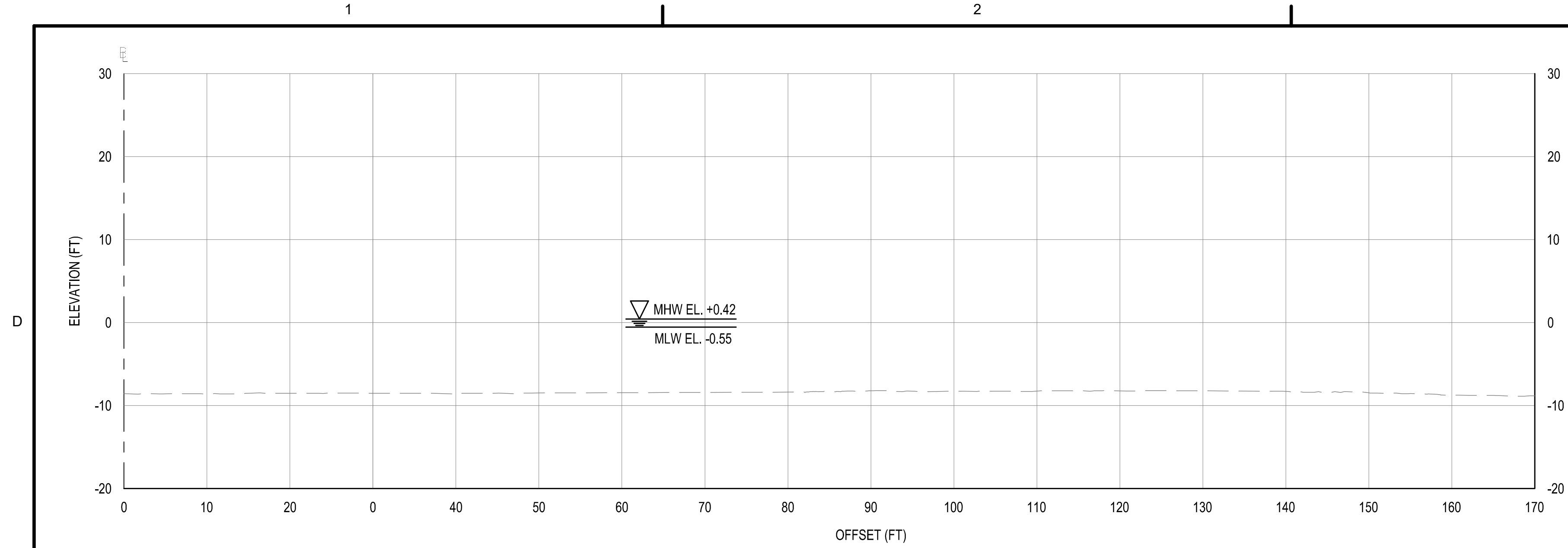
DESIGNED BY	ISSUED/REVISED DATE	CONTRACT NUMBER	DATE
CHECKED BY	28 MARCH 2022	CONTRACT NUMBER	DATE
DATE			

U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT
U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

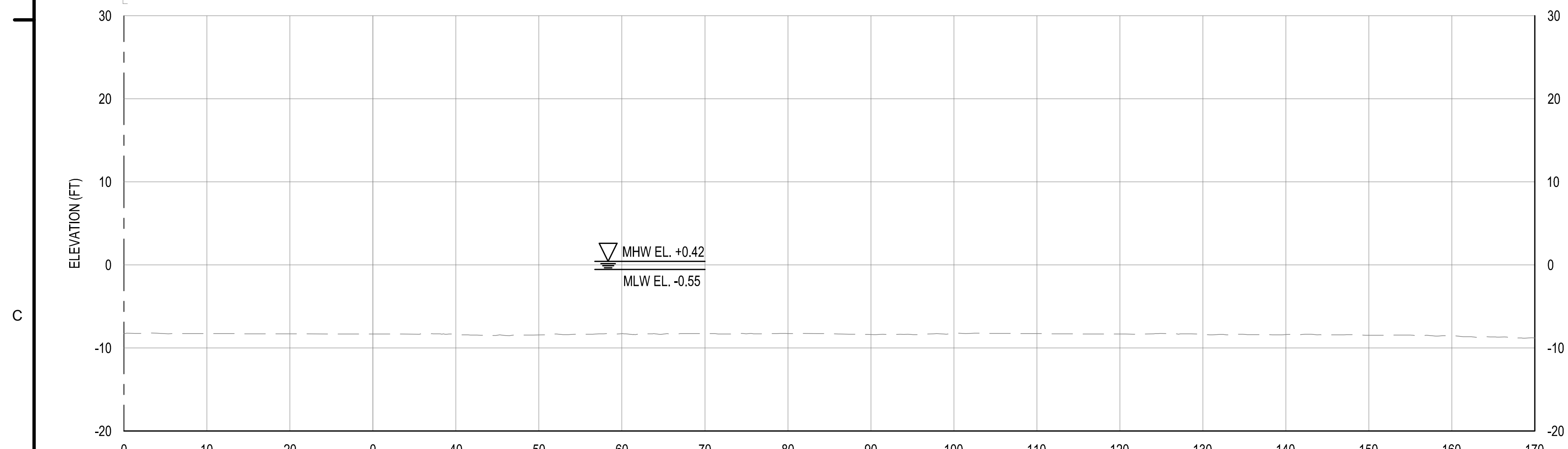
FILE NAME: CROSS SECTIONS - STA. 10+25 TO STA. 12+00
PLOT SCALE
DRAWN BY: [Blank]
DWG. SIZE: [Blank]

SHEET NUMBER

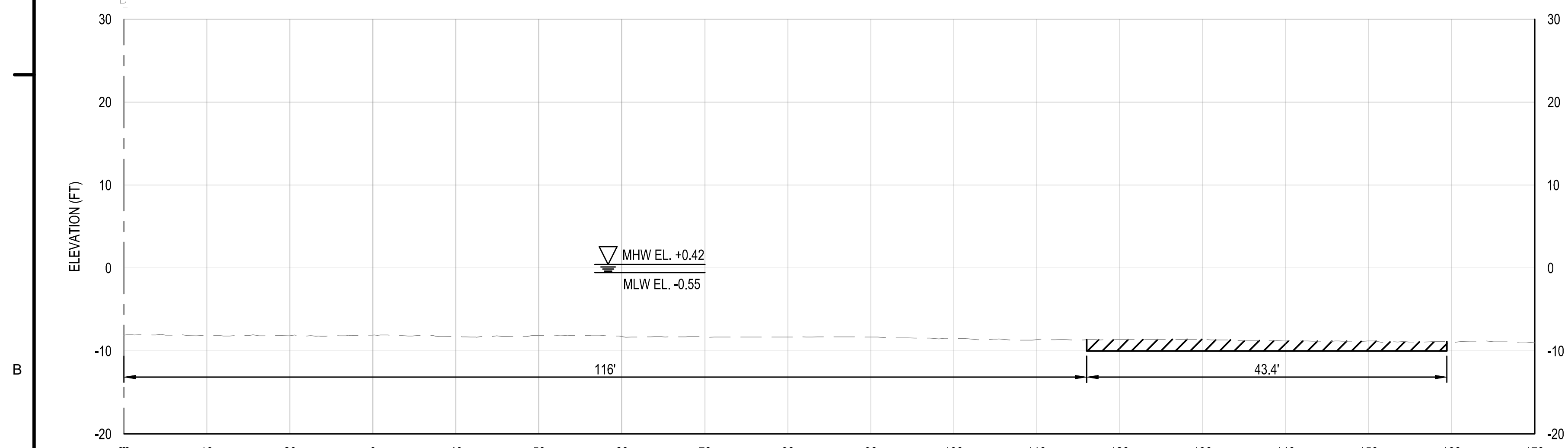
C-307



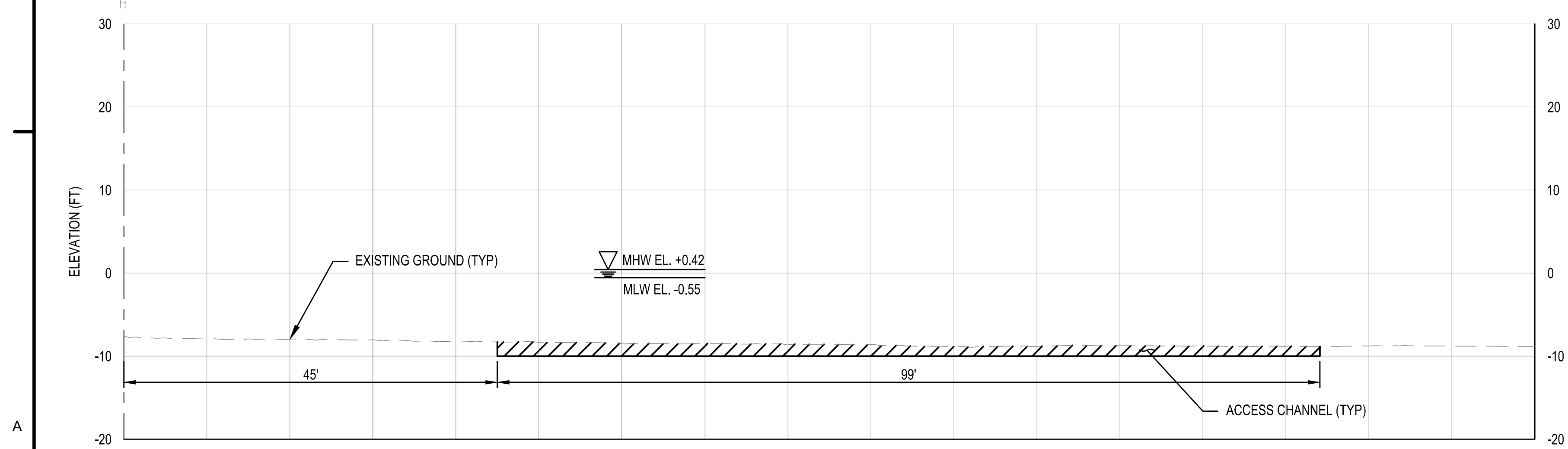
STA. 13+00



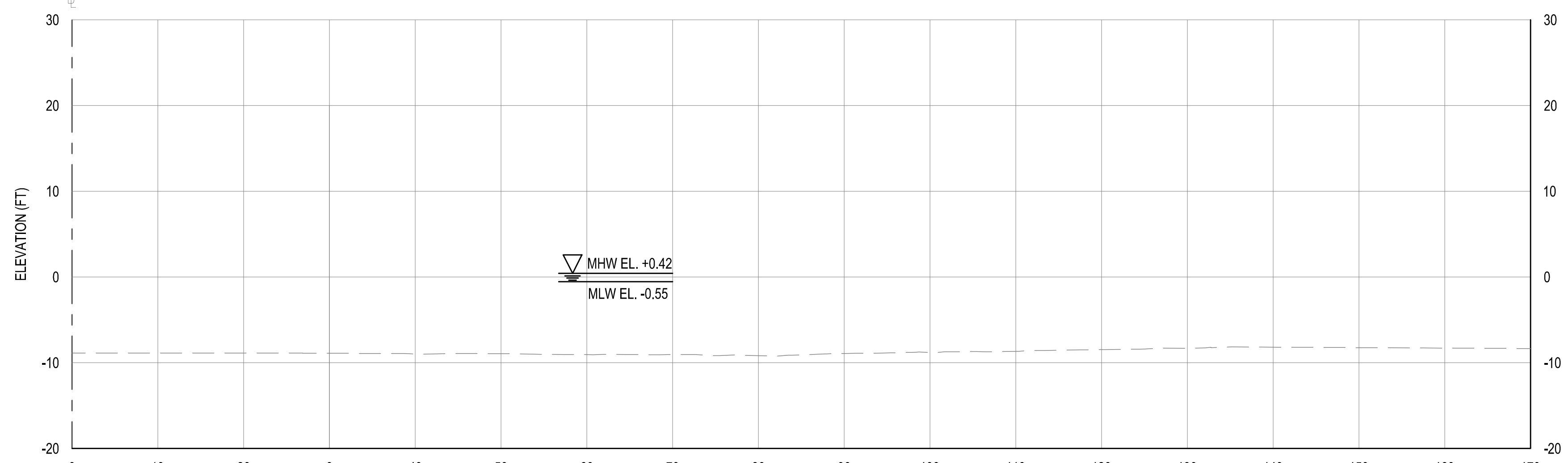
STA. 12+75



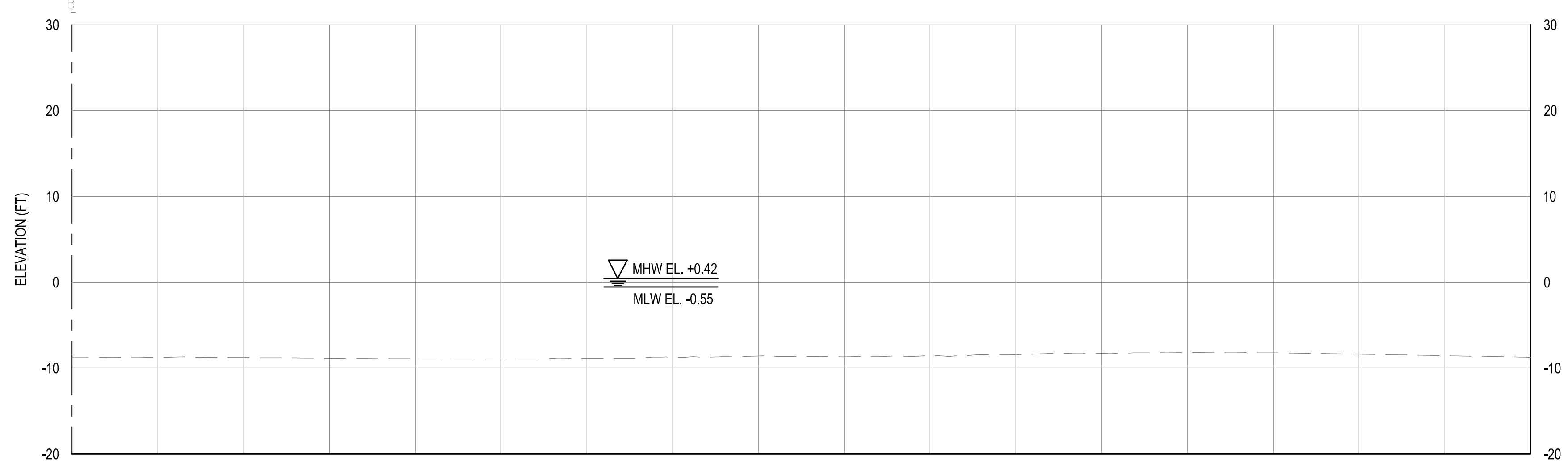
STA. 12+50



STA. 12+25

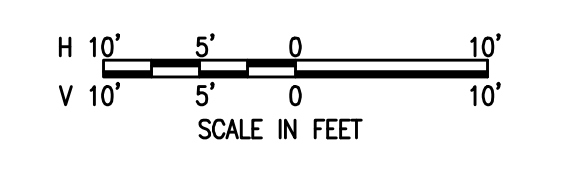


STA. 13+50



STA. 13+25

NOTES:
1. SEE SHEET C-001 FOR GENERAL INFORMATION.



D

C

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US Army Corps
of Engineers
BALTIMORE
DISTRICT

MARK	ACTION	DESCRIPTION	DATE	BY

ISSUED/REVISIONAL DATE: 28 MARCH 2022	DESIGNED BY: TEH	CONTRACT NUMBER:
DRAWN BY: SW	CHECKED BY: DAN	PILOT SCALE: AS SHOWN
FILE NAME: PLAN - CDF.FWG	DATE: 	

U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT

FISHING CREEK
SOUTH-LITTLE REHABILITATION

CALVERT COUNTY
CHESAPEAKE BEACH, MARYLAND

PLAN - CONFINED DISPOSAL FACILITY

PLAN NORTH

1 PLAN - CONFINED DISPOSAL FACILITY

50' 25' 0' 50'

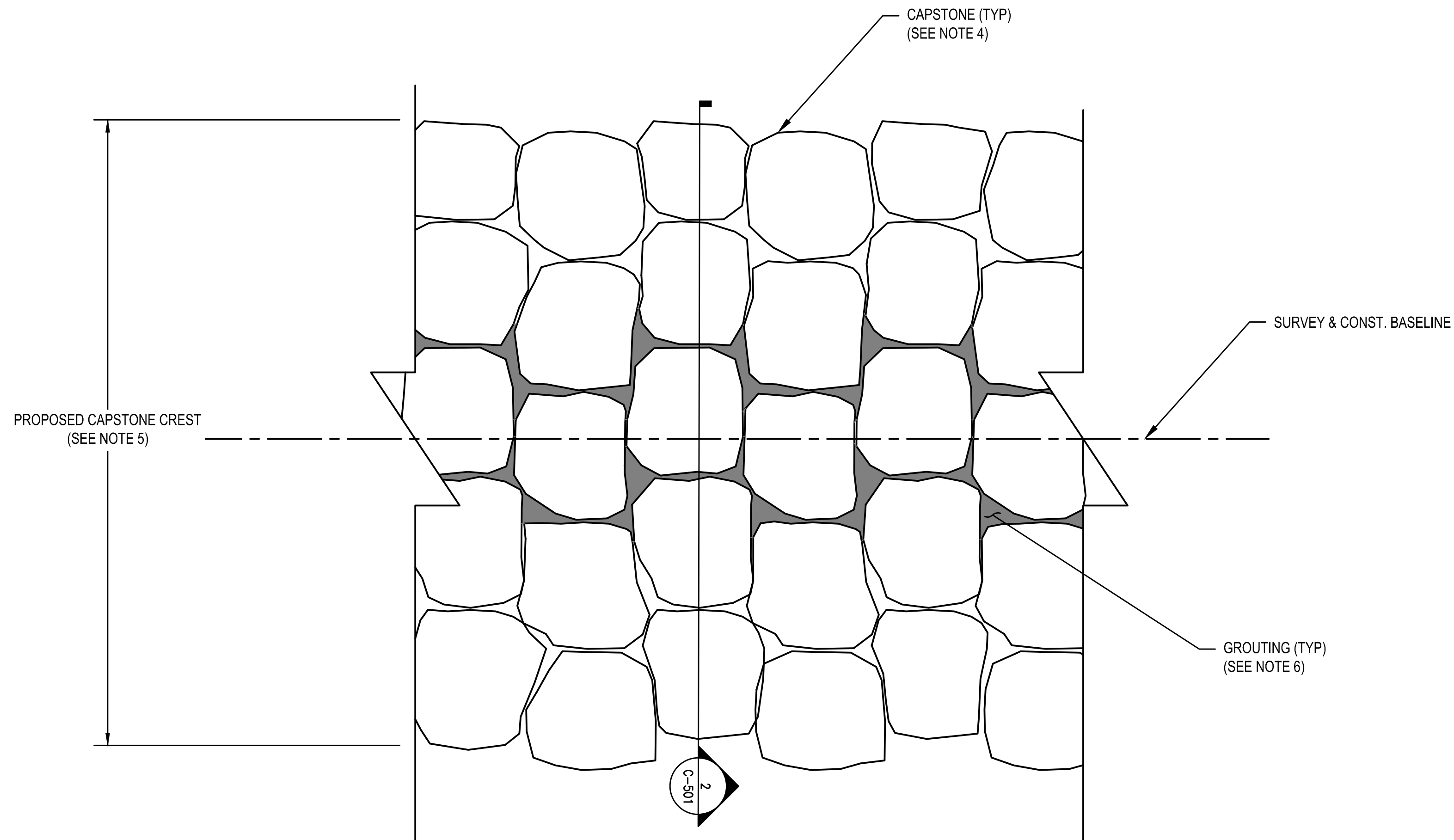
SCALE IN FEET

NOTES:

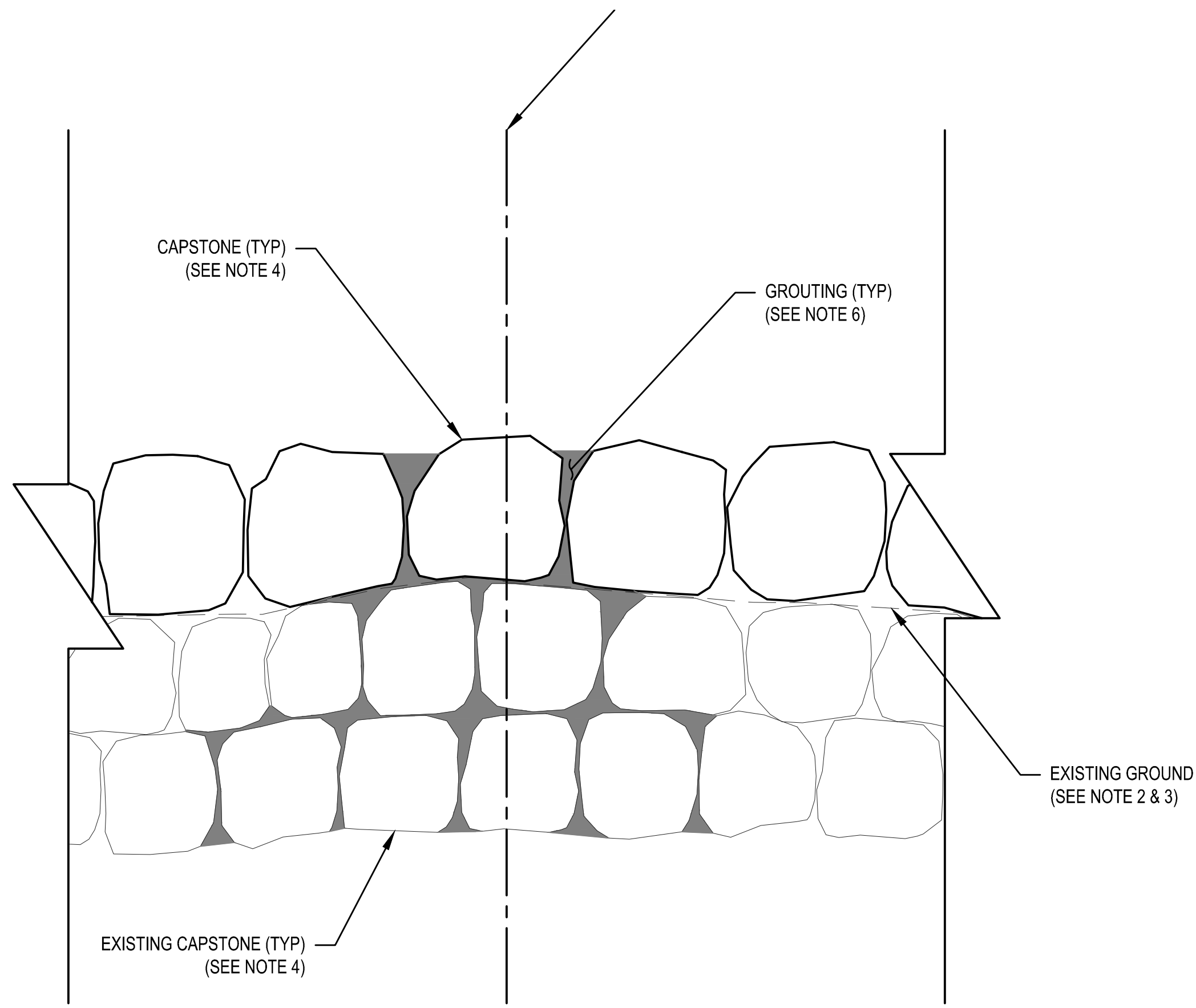
1. CONFINED DISPOSAL FACILITY INFORMATION WILL BE COVERED IN UPCOMING FISHING CREEK FEDERAL NAVIGATION CHANNEL MAINTENANCE DREDGING CONTRACT.

SHEET NUMBER

C-401



1 DETAIL - GROUTING (STA. 0+25 TO 9+00)
NTS



2 SECTION - GROUTING
NTS

NOTES:

- SEE SHEET C-001 FOR GENERAL INFORMATION
- SEE SHEET C-301 FOR TYPICAL SECTIONS
- SEE SHEETS C-302 THROUGH C-308 FOR CROSS SECTIONS.
- INDIVIDUAL CAPSTONES SHOWN FOR ILLUSTRATIVE PURPOSES ONLY.
- PROPOSED CAPSTONE SIDE SLOPES AND PROPOSED CAPSTONE TOE NOT SHOWN FOR CLARITY.
- VOIDS BETWEEN PROPOSED CAPSTONES SHALL BE GROUTED THROUGHOUT TWO CONTINUOUS ROWS IN ACCORDANCE WITH SPECIFICATION SECTION 31 37 00. THE TWO ROWS WITHIN THE PROPOSED CAPSTONE LAYER, CLOSEST TO THE BASELINE, SHALL BE GROUTED. GROUT SHALL EXTEND INTO THE VOIDS OF THE EXISTING JETTY STONE. GROUTING SHALL ONLY OCCUR THROUGHOUT REPAIR AREAS 1 AND 2. NO GROUTING SHALL TAKE PLACE THROUGHOUT REPAIR AREA 3.



US Army Corps
of Engineers
BALTIMORE
DISTRICT

DATE	BY
MARK	ACTION

ISSUESUBMITTAL DATE: 28 MARCH 2021	DESIGNED BY: DAN TET	CONTRACT NUMBER:
DRAWN BY: S/W DAN	DESIGNED BY: DAN TET	CONTRACT NUMBER:
FILE NAME: DETAILS - GROUTING.dwg	PLOT SCALE: AS SHOWN	DESCRIPTION:
DWG. SIZE: 11x17	FILE PATH: DETAILS - GROUTING.dwg	
U.S. ARMY CORPS OF ENGINEERS BALTIMORE DISTRICT		
U.S. ARMY CORPS OF ENGINEERS PHILADELPHIA DISTRICT		

FISHING CREEK
SOUTH JETTY REHABILITATION
CALVERT COUNTY
CHESAPEAKE BEACH, MARYLAND
DETAILS - GROUTING

SHEET NUMBER