



DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD
CONCORD MA 01742-2751

July 26, 2024

Regulatory Division
File Number: NAE-2023-00894

Courtney Walker
MassDOT – Highway Division
10 Park Plaza
Boston, Massachusetts 02116
(via email: Courtney.I.Walker@dot.state.ma.us)

Dear Ms. Walker:

Enclosed is your validated Department of the Army permit from the U.S. Army Corps of Engineers (USACE) authorizing your project. This project is located in waters of the United States along a 3,000 linear-foot section of Route 6 (Marion and Wareham Roads) in Marion and Wareham, Massachusetts. We have assigned the file number provided above to this project. Please refer to this number in all communication concerning this matter.

This permit is a limited authorization containing a specific set of conditions. Please read the permit thoroughly to familiarize yourself with the conditions, including any conditions contained in the enclosed State Section 401 water quality certification. If a contractor performs any authorized work for you, both you and the contractor are responsible for ensuring that the work is performed in compliance with the permit's terms and conditions, as any violations could result in civil or criminal penalties.

Please contact us immediately if you change the plans or construction methods for work within our jurisdiction. We must approve any changes before you undertake them.

This authorization does not obviate the need to obtain other Federal, state, or local authorizations required by law.

We continually strive to improve our customer service. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at <https://regulatory.ops.usace.army.mil/customer-service-survey>.

Please contact Dan Vasconcelos, of my staff, at (978) 318-8653 or daniel.b.vasconcelos@usace.army.mil if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen Rochette". The signature is fluid and cursive, with a large initial "S" and a long, sweeping underline.

Stephen Rochette
Chief, Technical Support Branch
Regulatory Division

Enclosures

1. Standard Permit Form
2. Plans
3. Massachusetts ILF Project Impact Worksheet
4. Work Start Notification Form
5. Compliance Certification Form
6. Water Quality Certification

DEPARTMENT OF THE ARMY PERMIT

Permittee MassDOT – Highway Division

Permit No. NAE-2023-00894

Issuing Office New England District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description:

The work involves the permanent discharge of fill material within 20,433 square feet (0.47 acres) of waters of the U.S., including 17,756 square feet within open water areas below the High Tide Line (HTL) of the Weweantic River, 1,764 square feet within salt marsh, and 913 square feet within non-tidal wetlands, associated with the reconstruction of approximately 3,000 linear feet of Route 6 (Marion and Wareham Roads) in Marion and Wareham, Massachusetts. The project includes roadway widening to accommodate four 11-foot travel lanes, 4-foot shoulders and two 10-foot shared use paths (SUPs), as well as the replacement of the two existing bridges conveying the road over the Weweantic River. The westernmost, two-span bridge in Marion will be replaced with a new two-span bridge. The easternmost, three-span bridge in Wareham will be replaced with a new three-span bridge. For both bridges, the new abutments will be constructed behind (landward of) the existing abutments, and the existing abutments retained to provide scour protection. The new in-river piers will be slightly relocated to increase the horizontal opening below the bridges, and the existing piers removed to below the mudline and overtopped with stockpiled natural river bottom material. Retaining walls and rip-rap will be installed along the widened approaches and the causeway between the bridges to provide scour protection. The project will also have temporary impacts within 7,016 square feet (0.16 acres) of waters of the U.S., including 6,088 square feet within open water areas below HTL, 709 square feet within salt marsh, and 219 square feet within non-tidal wetlands, due to the installation and dewatering of cofferdams to allow work to proceed in the dry.

The work is shown on the enclosed plans titled, "MASSACHUSETTS DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION PLAN AND PROFILE OF U.S. ROUTE 6 (WAREHAM ROAD & MARION ROAD) (BRIDGE NO. M-05-001=W-06-013 & W-06-016) IN THE CITY/TOWN OF MARION & WAREHAM PLYMOUTH COUNTY," on 51 sheets, and dated "10/20/2023."

Project Location:

Route 6 (Marion and Wareham Roads) over the Weweantic River, Marion and Wareham, Massachusetts (Latitude 41.738053°N, Longitude 70.746775°W).

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on **July 31, 2029**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

1. The permittee shall ensure that a copy of this permit is at the work site (and the project office) authorized by this permit whenever work is being performed, and that all personnel with operational control of the site ensure that all appropriate personnel performing work are fully aware of its terms and conditions. The entire permit shall be made a part of any and all contracts and sub-contracts for work that affects areas of Corps jurisdiction at the site of the work authorized by this permit. This shall be achieved by including the entire permit in the specifications for work. The term "entire permit" means this permit (including its drawings, plans, appendices and other attachments) and also includes permit modifications.

If the permit is issued after the construction specifications, but before receipt of bids or quotes, the entire permit shall be included as an addendum to the specifications. If the permit is issued after receipt of bids or quotes, the entire permit shall be included in the contract or sub-contract. Although the permittee may assign various aspects of the work to different contractors or sub-contractors, all contractors and sub-contractors shall be obligated by contract to comply with all environmental protection provisions contained within the entire permit, and no contract or sub-contract shall require or allow unauthorized work in areas of Corps jurisdiction.

2. The permittee shall complete and return the enclosed Work Start Notification Form to this office at least two weeks before the anticipated starting date.
3. The permittee shall complete and return the enclosed Compliance Certification Form to this office at least within one month following the completion of the authorized work.
4. Wetlands temporarily impacted by construction activities shall be restored to their preconstruction conditions, including revegetation with appropriate native herbaceous and woody plant species characteristic of the impacted areas.
5. The introduction, spread, or increased risk of invasion of non-native invasive plant or animal species on the project site into new or disturbed areas is prohibited. Invasive species shall be monitored and controlled onsite throughout construction, and all equipment to be used on the project site, including construction mats, shall be thoroughly inspected and cleaned prior to being onsite to prevent the introduction of invasive species.
6. Prior to initiating the authorized work in waters of the United States, you must provide verification to USACE that compensatory mitigation for 0.06 wetland credits has been purchased from the Massachusetts In Lieu Fee (MA ILF) Program administered by the Massachusetts Department of Fish and Game (MA DFG). The wetland credit calculation is shown on the enclosed MA ILF worksheet. Please contact Brian Kelter at the MA DFG at brian.kelter@mass.gov and/or visit the MA ILF website at <https://www.mass.gov/how-to/make-ilf-payments-to-dfg> for instructions on how to purchase the required credits.
7. To protect Essential Fish Habitat (EFH), the permittee shall comply with any Conservation Recommendations (CRs) provided by the National Marine Fisheries Service (NMFS).

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

- Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
- Section 14 of the Rivers and Harbors Act of 1899 (33 U.S.C. 408).
- Section 404 of the Clean Water Act (33 U.S.C. 1344).
- Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

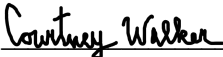
2. Limits of this authorization.

- a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.
 - b. This permit does not grant any property rights or exclusive privileges.
 - c. This permit does not authorize any injury to the property or rights of others.
 - d. This permit does not authorize interference with any existing or proposed Federal project.
3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:
- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from Natural causes.
 - b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
 - c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
 - d. Design or construction deficiencies associated with the permitted work.
 - e. Damage claims associated with any future modification, suspension, or revocation of this permit.
4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.
5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:
- a. You fail to comply with the terms and conditions of this permit.
 - b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
 - c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.


6. Extensions. General Condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interested decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.


 (Permittee)

7/26/2024
 (Date)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.


 (District Engineer)

7/26/2024
 (Date)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(Transferee)

(Date)

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION

PLAN AND PROFILE OF
U.S. ROUTE 6 (WAREHAM ROAD & MARION ROAD)
(BRIDGE NO. M-05-001=W-06-013 & W-06-016)

IN THE CITY/TOWN OF
MARION & WAREHAM
PLYMOUTH COUNTY

FEDERAL AID PROJECT NO.

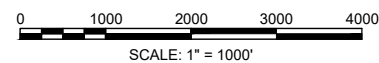
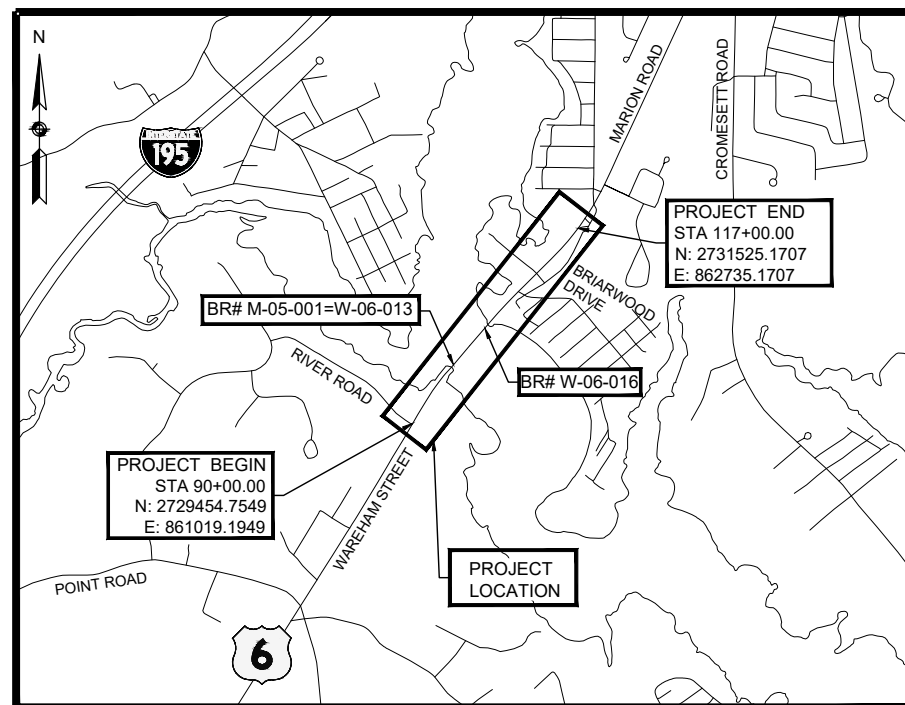
THESE PLANS ARE SUPPLEMENTED BY THE OCTOBER 2017 CONSTRUCTION STANDARD DETAILS, THE 2015 OVERHEAD SIGNAL STRUCTURE AND FOUNDATION DRAWINGS, MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS, THE 1990 STANDARD DRAWINGS FOR LIGHTING, AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK.

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EXISTING SITE NOTES:



- HTL = 3.78'
- MHHW = 2.09'
- MHW = 1.65'
- LMSL = -0.41'
- SALINITY = 5ppt - 25ppt
- REFERENCE SALT MARSH = SALT MARSH #6 / ADJACENT
- DATA SOURCE = BUZZARDS BAY COALITION / NOAA / TIDAL FLUSHING STUDY



LENGTH OF PROJECT = 2,975.00 FEET = 0.563 MILES

DESIGN DESIGNATION - (U.S. ROUTE 6)

DESIGN SPEED	55 MPH
ADT (2024)	9,800
ADT (2044)	11,964
K	9%
D	51%
T (PEAK HOUR)	2.45%
T (AVERAGE DAY)	2.3%
DHV	930
DDHV	450
FUNCTIONAL CLASSIFICATION	MAJOR COLLECTOR/MINOR ARTERIAL

10/20/2023	401/404 PERMIT PLANS	-
DATE	DESCRIPTION	REV #
 Massachusetts Department of Transportation Highway Division		
APPROVED		
PLANS PREPARED BY  100 HIGH STREET, BOSTON, MA 02110	CHIEF ENGINEER	DATE

GENERAL SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		JERSEY BARRIER
		CATCH BASIN
		CATCH BASIN CURB INLET
		FLAG POLE
		GAS PUMP
		MAIL BOX
		POST SQUARE
		POST CIRCULAR
		WELL
		ELECTRIC HANDHOLE
		FENCE GATE POST
		GAS GATE
		BORING HOLE
		MONITORING WELL
		TEST PIT
		HYDRANT
		LIGHT POLE
		COUNTY BOUND
		GPS POINT
		CABLE MANHOLE
		DRAINAGE MANHOLE
		ELECTRIC MANHOLE
		GAS MANHOLE
		MISC MANHOLE
		SEWER MANHOLE
		TELEPHONE MANHOLE
		WATER MANHOLE
		MASSACHUSETTS HIGHWAY BOUND
		MONUMENT
		STONE BOUND
		TOWN OR CITY BOUND
		TRAVERSE OR TRIANGULATION STATION
		TROLLEY POLE OR GUY POLE
		TRANSMISSION POLE
		UTILITY POLE W/ FIREBOX
		UTILITY POLE WITH DOUBLE LIGHT
		UTILITY POLE W / 1 LIGHT
		UTILITY POLE
		BUSH
		TREE
		STUMP
		WATER GATE
		PARKING METER
		OVERHEAD CABLE/WIRE
		CURBING
		CONTOURS (ON-THE-GROUND SURVEY DATA)
		CONTOURS (PHOTOGRAMMETRIC DATA)
		UNDERGROUND DRAIN PIPE (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND ELECTRIC DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND GAS MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND SEWER MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND TELEPHONE DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND WATER MAIN (DOUBLE LINE 24 INCH AND OVER)
		BALANCED STONE WALL/TURBIDITY BARRIER
		GUARD RAIL - STEEL POSTS
		GUARD RAIL - WOOD POSTS
		GUARD RAIL - DOUBLE FACE - STEEL POSTS
		GUARD RAIL - DOUBLE FACE - WOOD POSTS
		PEDESTRIAN HANDRAIL
		CHAIN LINK FENCE
		COMPOST FILTER TUBE
		TREE LINE
		SAWCUT LINE
		TOP OR BOTTOM OF SLOPE
		SHEET PILE WALL
		LIMIT OF EDGE OF PAVEMENT OR COLD PLANE AND OVERLAY
		BORDER OF WETLAND
		STATE HIGHWAY LAYOUT
		TOWN OR CITY LAYOUT
		COUNTY LAYOUT
		RAILROAD SIDELINE
		TOWN OR CITY BOUNDARY LINE
		PROPERTY LINE OR APPROXIMATE PROPERTY LINE
		EASEMENT

PAVEMENT MARKINGS SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		PAVEMENT ARROW - WHITE
		LEGEND "ONLY" - WHITE
		STOP LINE
		CROSSWALK
		SOLID WHITE LINE
		SOLID YELLOW LINE
		BROKEN WHITE LINE (6" WIDTH, 10-30-10 SPACING)
		BROKEN YELLOW LINE (6" WIDTH, 10-30-10 SPACING)
		DOTTED WHITE LINE (6" WIDTH, 2-4-2 SPACING)
		DOTTED YELLOW LINE (6" WIDTH, 2-4-2 SPACING)
		DOTTED WHITE LINE EXTENSION
		DOTTED YELLOW LINE EXTENSION
		DOUBLE WHITE LINE
		DOUBLE YELLOW LINE

ENVIRONMENTAL PLAN SYMBOLS

LINETYPES	DESCRIPTION
	TURTLE PROTECTION FENCE
	COMBINATION PROTECTION FENCE
	LIMIT OF WORK
	COMPOST FILTER TUBE
	TURBIDITY BARRIER
	WETLAND DELINEATION
	MEAN HIGH WATER LINE
	MEAN LOW WATER LINE
	HIGH TIDE LINE
	BASE FLOOD ELEVATION

HATCHING	DESCRIPTION
	EXISTING VEGETATED WETLANDS
	TEMPORARY VEGETATED WETLAND IMPACTS
	PERMANENT VEGETATED WETLAND IMPACTS
	EXISTING SALT MARSH
	TEMPORARY SALT MARSH IMPACTS
	PERMANENT SALT MARSH IMPACTS
	TEMPORARY LAND BELOW HTL IMPACTS
	PERMANENT LAND BELOW HTL PROPOSED RIPRAP/RETWALL IMPACTS
	PERMANENT LAND BELOW HTL BRIDGE PIER IMPACTS

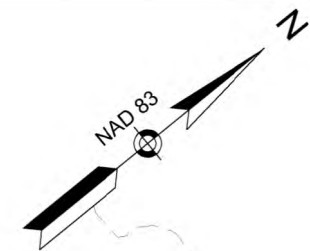
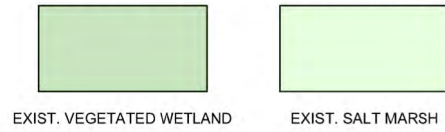
GENERAL ABBREVIATIONS

AADT	ANNUAL AVERAGE DAILY TRAFFIC
ABAN	ABANDON
ADJ	ADJUST
APPROX.	APPROXIMATE
A.C.	ASPHALT CONCRETE
ACCM PIPE	ASPHALT COATED CORRUGATED METAL PIPE
BIT.	BITUMINOUS
BC	BOTTOM OF CURB
BCC	BITUMINOUS CONCRETE CURB
BD.	BOUND
BFE	BASE FLOOD ELEVATION
BL	BASELINE
BLDG	BUILDING
BM	BENCHMARK
BO	BY OTHERS
BOS	BOTTOM OF SLOPE
BR.	BRIDGE
CB	CATCH BASIN
CBICI	CATCH BASIN WITH CURB INLET
CC	CEMENT CONCRETE
CCM	CEMENT CONCRETE MASONRY
CEM	CEMENT
CI	CURB INLET
CIP	CAST IRON PIPE
CIT	CHANGE IN TYPE
CLF	CHAIN LINK FENCE
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CSP	CORRUGATED STEEL PIPE
CO.	COUNTY
CONC	CONCRETE
CONT	CONTINUOUS
CONST	CONSTRUCTION
CPF	COMBINATION PROTECTION FENCE
CR GR	CROWN GRADE
DBH	DIAMETER BREAST HEIGHT
DHV	DESIGN HOURLY VOLUME
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DW	STEADY DON'T WALK - PORTLAND ORANGE
DWY	DRIVEWAY
ELEV (or EL.)	ELEVATION
EMB	EMBANKMENT
EOG	EDGE OF GRAVEL
EOP	EDGE OF PAVEMENT
EXIST (or EX)	EXISTING
EXC	EXCAVATION
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
FDN.	FOUNDATION
FLDSTN	FIELDSTONE
GAR	GARAGE
GD	GROUND
GG	GAS GATE
GI	GUTTER INLET
GIP	GALVANIZED IRON PIPE
GRAN	GRANITE
GRAV	GRAVEL
GRD	GUARD
HDW	HEADWALL
HMA	HOT MIX ASPHALT
HOR	HORIZONTAL
HTL	HIGH TIDE LINE
HYD	HYDRANT
INV	INVERT
JCT	JUNCTION
L	LENGTH OF CURVE
LB	LEACH BASIN
LOW	LIMIT OF WORK
LP	LIGHT POLE
LT	LEFT
LUW	LAND UNDER WATER
MAX	MAXIMUM
MB	MAILBOX
MH	MANHOLE

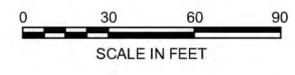
ABBREVIATIONS (cont.)

GENERAL	DESCRIPTION
MHB	MASSACHUSETTS HIGHWAY BOUND
MHHW	MEAN HIGHER HIGH WATER
MHW	MEAN HIGH WATER
MIN	MINIMUM
MLW	MEAN LOW WATER
NIC	NOT IN CONTRACT
NO.	NUMBER
OHW	OVERHEAD WIRE
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PERM	PERMANENT
P.G.L.	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
POC	POINT ON CURVE
POT	POINT ON TANGENT
PRC	POINT OF REVERSE CURVATURE
PROJ	PROJECT
PROP	PROPOSED
PSB	PLANTABLE SOIL BORROW
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PVMT	PAVEMENT
PWW	PAVED WATER WAY
R	RADIUS OF CURVATURE
R&D	REMOVE AND DISPOSE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RDWY	ROADWAY
REM	REMOVE
RET	RETAIN
RET WALL	RETAINING WALL
ROW	RIGHT OF WAY
RR	RAILROAD
R&R	REMOVE AND RESET
R&S	REMOVE AND STACK
RT	RIGHT
SB	STONE BOUND
SHLD	SHOULDER
SMH	SEWER MANHOLE
ST	STREET
STA	STATION
SSD	STOPPING SIGHT DISTANCE
SHLO	STATE HIGHWAY LAYOUT LINE
SW	SIDEWALK
T	TANGENT DISTANCE OF CURVE/TRUCK %
TAN	TANGENT
TEMP	TEMPORARY
TET	TANGENT END TREATMENT
TC	TOP OF CURB
TOS	TOP OF SLOPE
TPF	TURTLE PROTECTION FENCE
TPW	TURTLE PROTECTION WALL
TYP	TYPICAL
UGT	UNDERGROUND TELEPHONE
UP	UTILITY POLE
VAR	VARIES
VC	VERTICAL CURVE
VERT	VERTICAL
VGC	VERTICAL GRANITE CURB
WCR	WHEEL CHAIR RAMP
WG	WATER GATE
WIP	WROUGHT IRON PIPE
WM	WATER METER/WATER MAIN
X-SECT	CROSS SECTION

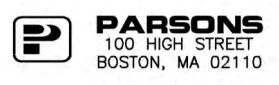
GLOBAL SYMBOLOGY LEGEND



CONTINUED ON SHEET NO. 4

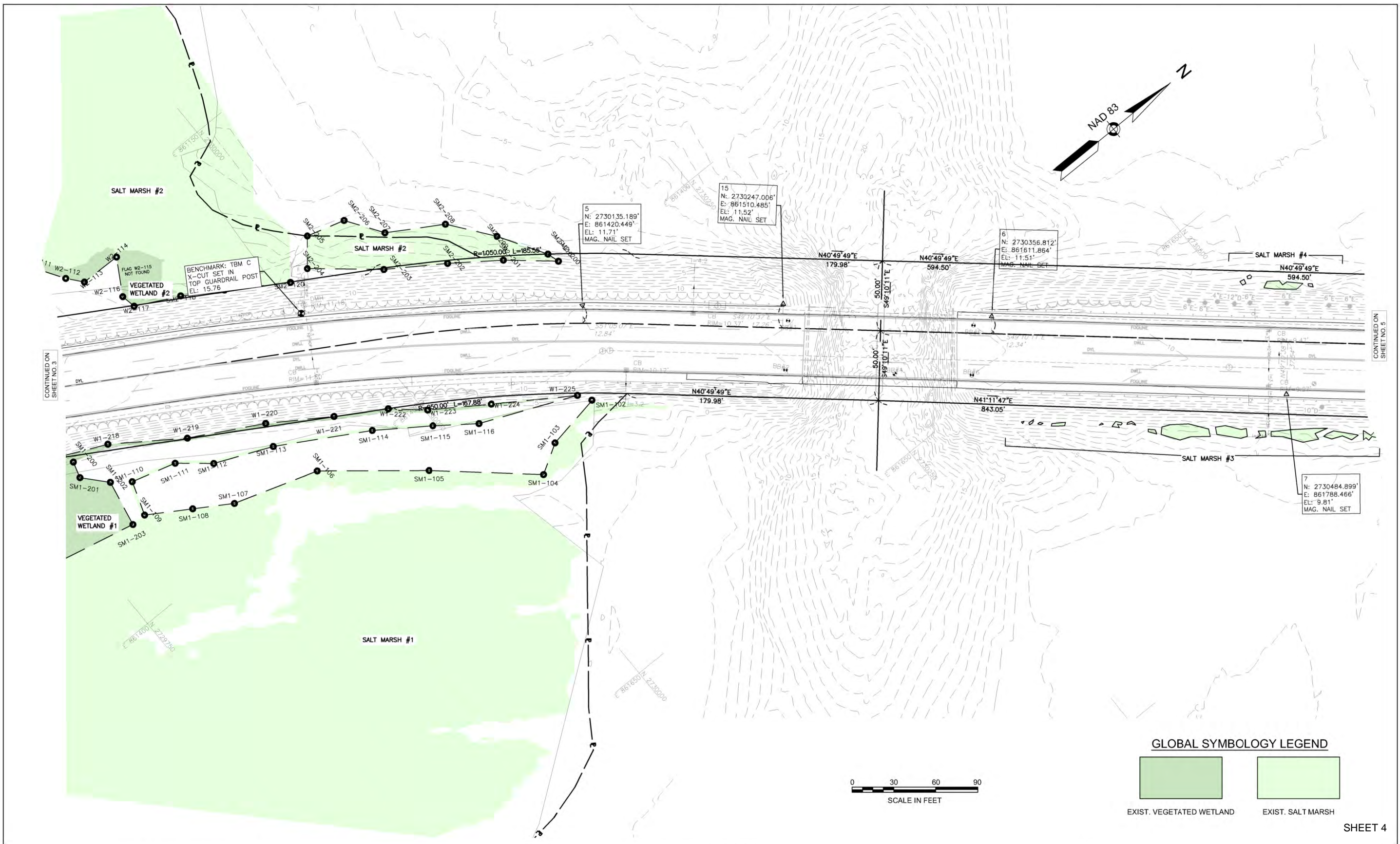


SHEET 3



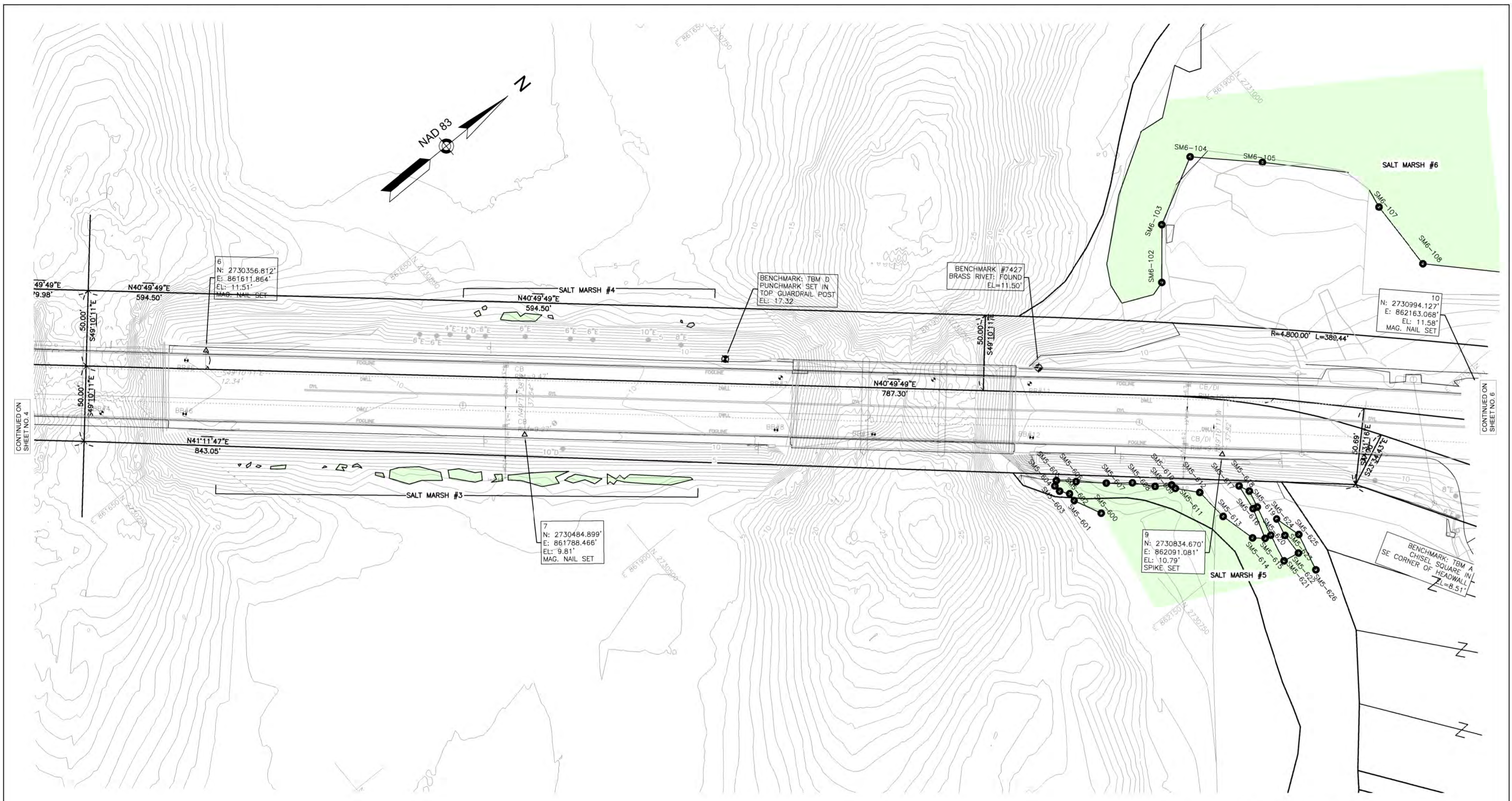
MARION - WAREHAM
WAREHAM STREET (US 6) OVER WEWEANTIC RIVER

HIGHWAY
EXISTING CONDITIONS SHEET 1 OF 5



CONTINUED ON SHEET NO. 3

CONTINUED ON SHEET NO. 5

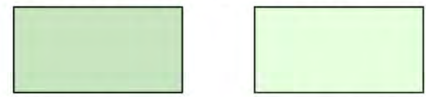


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CONTINUED ON SHEET NO. 6

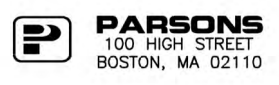


GLOBAL SYMBOLOGY LEGEND



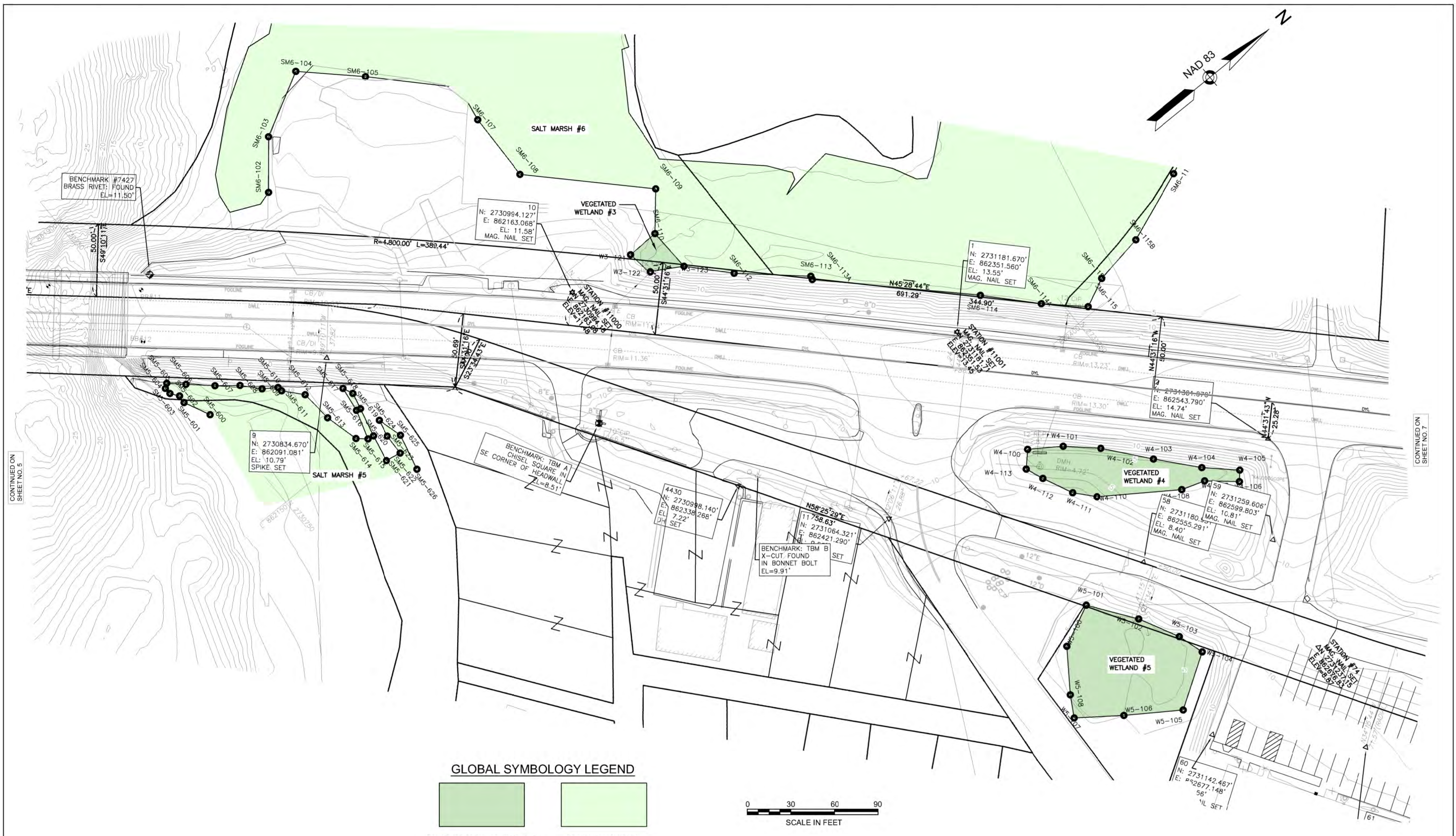
EXIST. VEGETATED WETLAND EXIST. SALT MARSH

SHEET 5



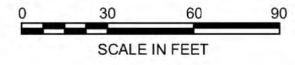
**MARION - WAREHAM
WAREHAM STREET (US 6) OVER WEVEANTIC RIVER**

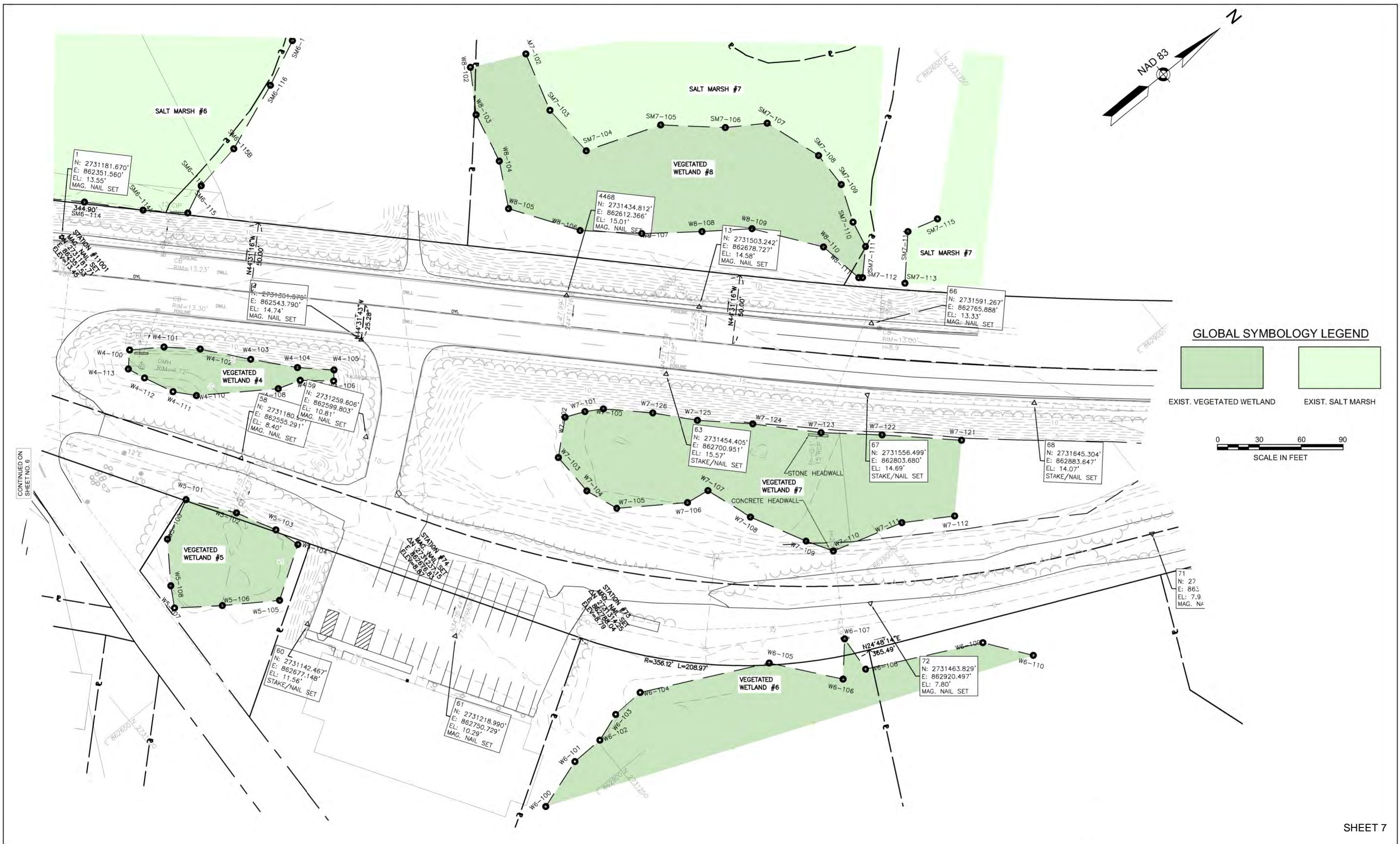
**HIGHWAY
EXISTING CONDITIONS SHEET 3 OF 5**





GLOBAL SYMBOLOGY LEGEND

- EXIST. VEGETATED WETLAND
- EXIST. SALT MARSH





GLOBAL SYMBOLOGY LEGEND

	
EXIST. VEGETATED WETLAND	EXIST. SALT MARSH

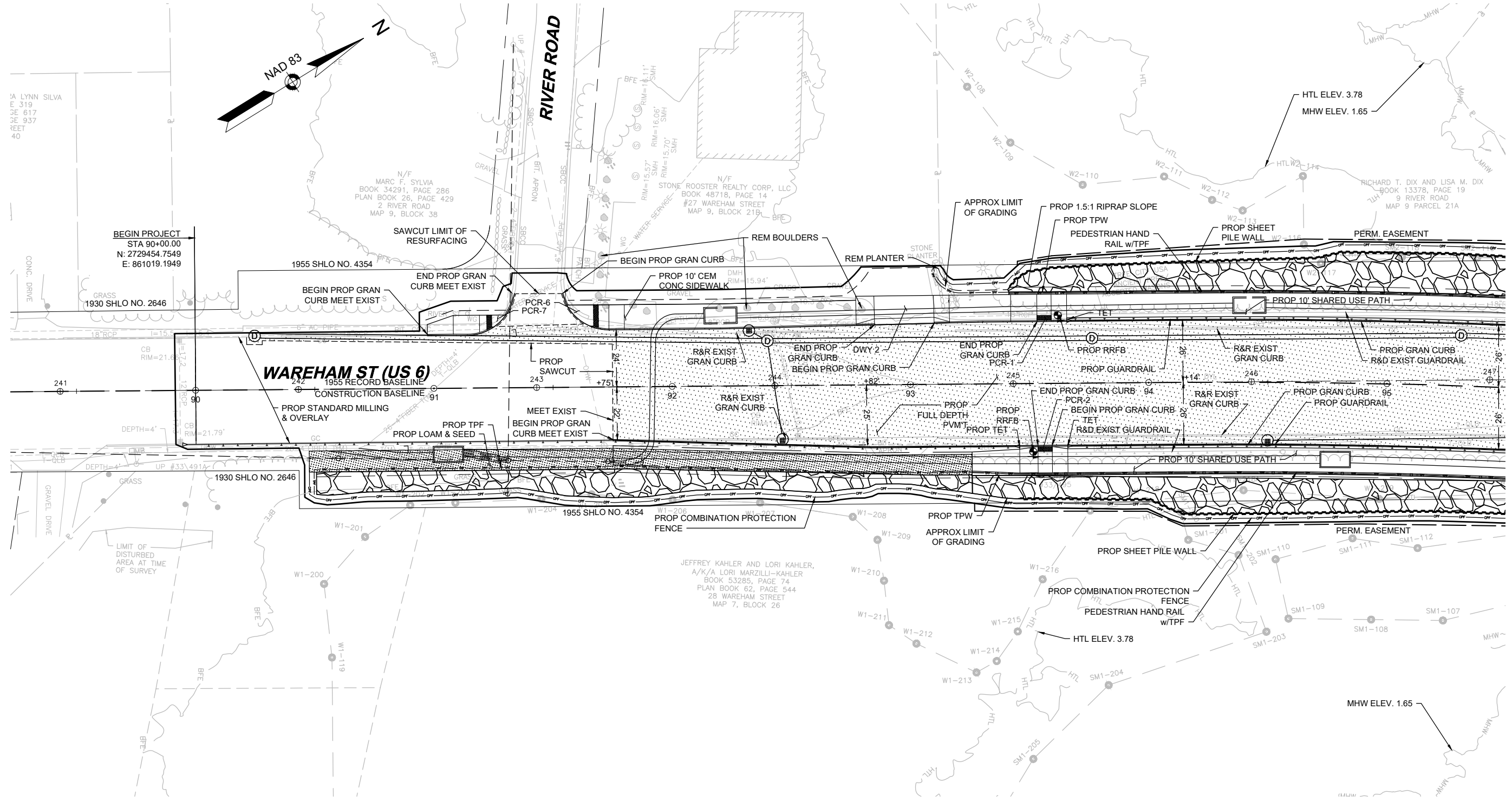


CONTINUED ON SHEET NO. 6

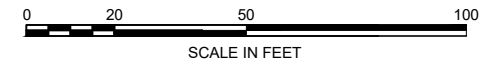
SHEET 7

- EXISTING SITE NOTES:**
1. HTL = 3.78'
 2. MHHW = 2.09'
 3. MHW = 1.65'
 4. LMSL = -0.41'

5. SALINITY = 5ppt - 25ppt
6. REFERENCE SALT MARSH = SALT MARSH #6 / ADJACENT
7. DATA SOURCE = BUZZARDS BAY COALITION / NOAA / TIDAL FLUSHING STUDY



- NOTE:**
- BASE FLOOD ELEV. (15.00') REFERENCED FROM FEMA FIRM MAP NO. 25023C0576K.
 - HIGH TIDE LINE ELEV. (3.78'), MEAN HIGH WATER ELEV. (1.65'), MEAN LOW WATER (-2.27') OBTAINED FROM TIDAL FLUSHING STUDY.



CONTINUED ON SHEET NO. 9

SHEET 8

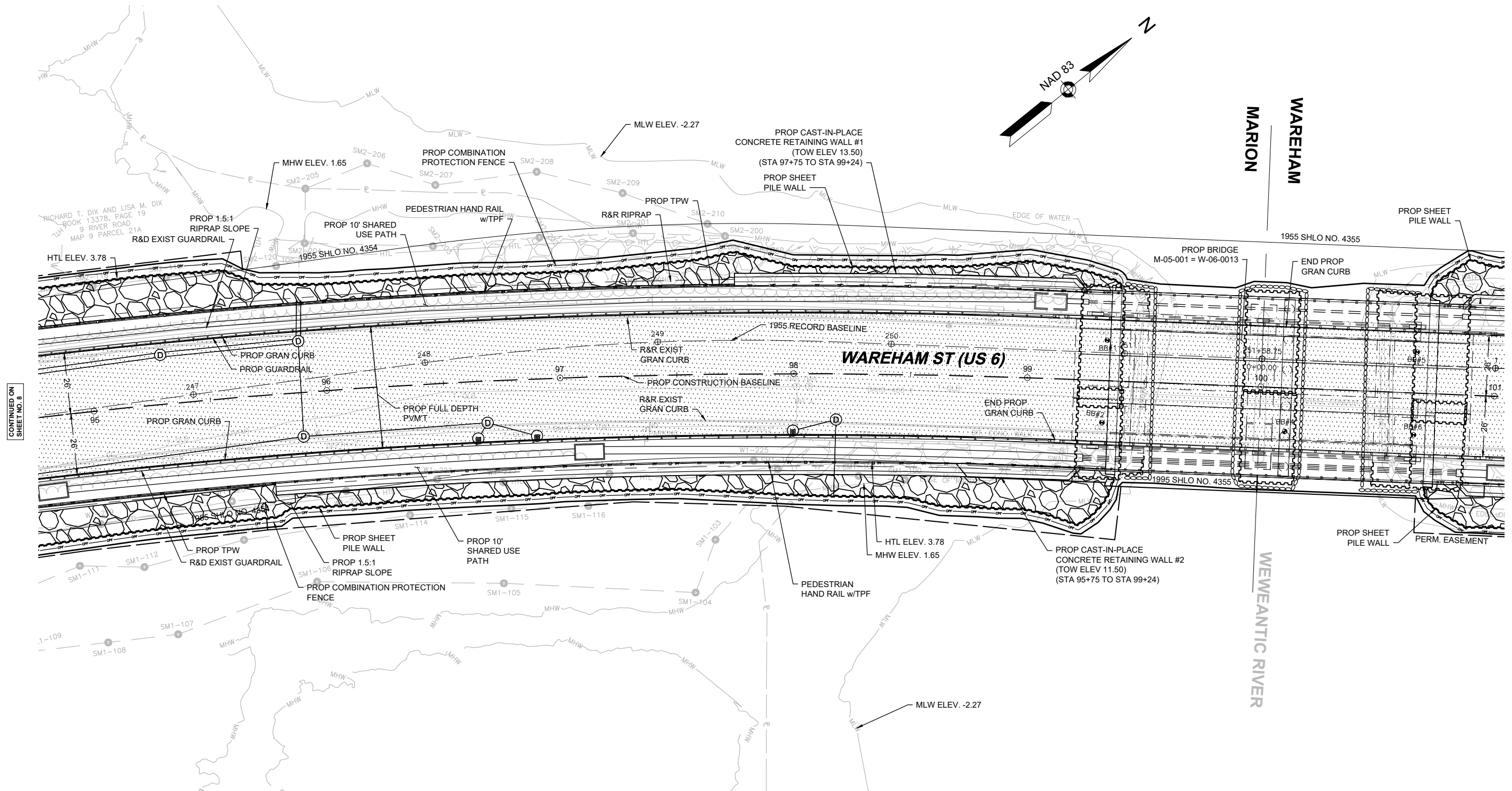


MARION - WAREHAM
WAREHAM STREET (US 6) OVER WEWEANTIC RIVER

HIGHWAY
CONSTRUCTION PLAN SHEET 1 OF 5

EXISTING SITE NOTES:

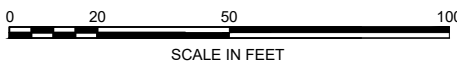
1. HTL = 3.78'
2. MHHW = 2.09'
3. MHW = 1.65'
4. LMSL = -0.41'
5. SALINITY = 5ppt - 25ppt
6. REFERENCE SALT MARSH = SALT MARSH #6 / ADJACENT
7. DATA SOURCE = BUZZARDS BAY COALITION / NOAA / TIDAL FLUSHING STUDY



CONTINUED ON SHEET NO. 8

CONTINUED ON SHEET NO. 10

- NOTE:**
- BASE FLOOD ELEV. (15.00') REFERENCED FROM FEMA FIRM MAP NO. 25023C0576K.
 - HIGH TIDE LINE ELEV. (3.78'), MEAN HIGH WATER ELEV. (1.65'), MEAN LOW WATER (-2.27') OBTAINED FROM TIDAL FLUSHING STUDY.



SHEET 9

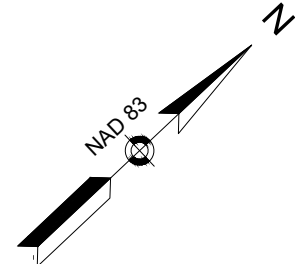


**MARION - WAREHAM
WAREHAM STREET (US 6) OVER WEWEANTIC RIVER**

**HIGHWAY
CONSTRUCTION PLAN SHEET 2 OF 5**

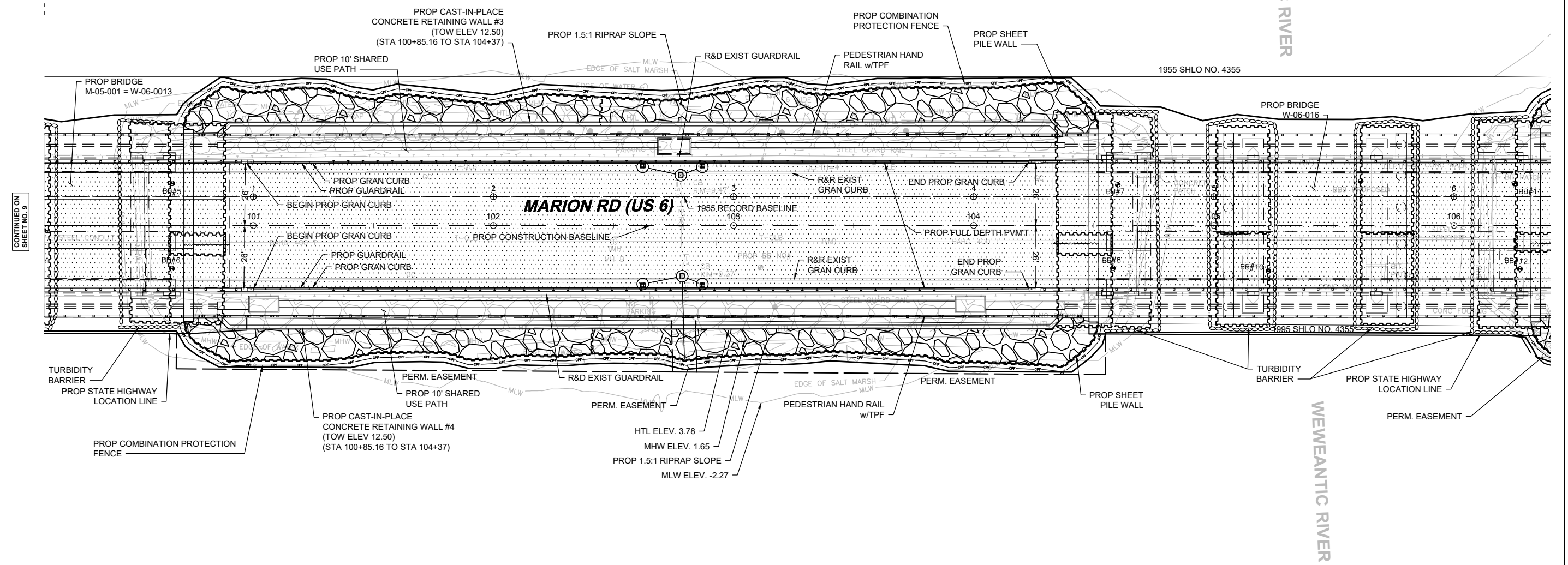
EXISTING SITE NOTES:

1. HTL = 3.78'
2. MHHW = 2.09'
3. MHW = 1.65'
4. LMSL = -0.41'
5. SALINITY = 5ppt - 25ppt
6. REFERENCE SALT MARSH = SALT MARSH #6 / ADJACENT
7. DATA SOURCE = BUZZARDS BAY COALITION / NOAA / TIDAL FLUSHING STUDY

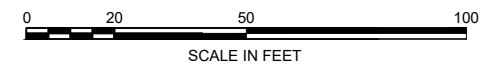


WEWEANTIC RIVER

EDGE
SALT M



- NOTE:**
- BASE FLOOD ELEV. (15.00') REFERENCED FROM FEMA FIRM MAP NO. 25023C0576K.
 - HIGH TIDE LINE ELEV. (3.78'), MEAN HIGH WATER ELEV. (1.65'), MEAN LOW WATER (-2.27') OBTAINED FROM TIDAL FLUSHING STUDY.



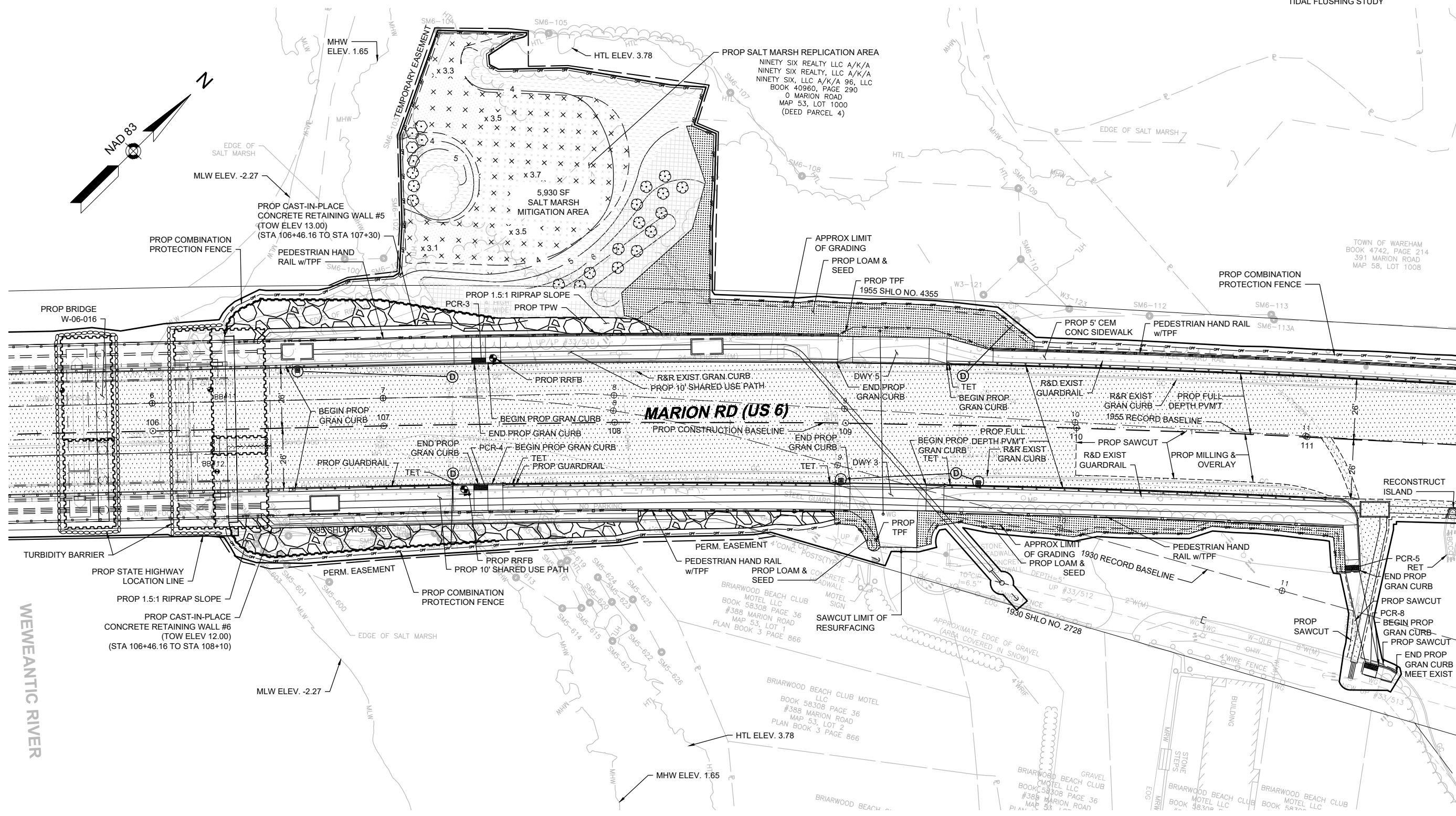
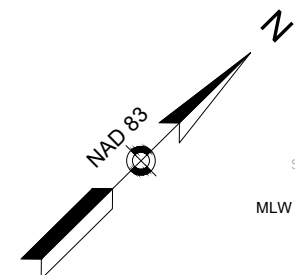
SHEET 10



**MARION - WAREHAM
WAREHAM STREET (US 6) OVER WEWEANTIC RIVER**

**HIGHWAY
CONSTRUCTION PLAN SHEET 3 OF 5**

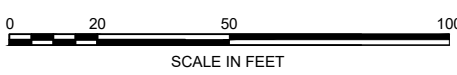
- EXISTING SITE NOTES:**
1. HTL = 3.78'
 2. MHHW = 2.09'
 3. MHW = 1.65'
 4. LMSL = -0.41'
 5. SALINITY = 5ppt - 25ppt
 6. REFERENCE SALT MARSH = SALT MARSH #6 / ADJACENT
 7. DATA SOURCE = BUZZARDS BAY COALITION / NOAA / TIDAL FLUSHING STUDY



CONTINUED ON SHEET NO. 10

CONTINUED ON SHEET NO. 12

- NOTE:**
- BASE FLOOD ELEV. (15.00') REFERENCED FROM FEMA FIRM MAP NO. 25023C0576K.
 - HIGH TIDE LINE ELEV. (3.78'), MEAN HIGH WATER ELEV. (1.65'), MEAN LOW WATER (-2.27') OBTAINED FROM TIDAL FLUSHING STUDY.



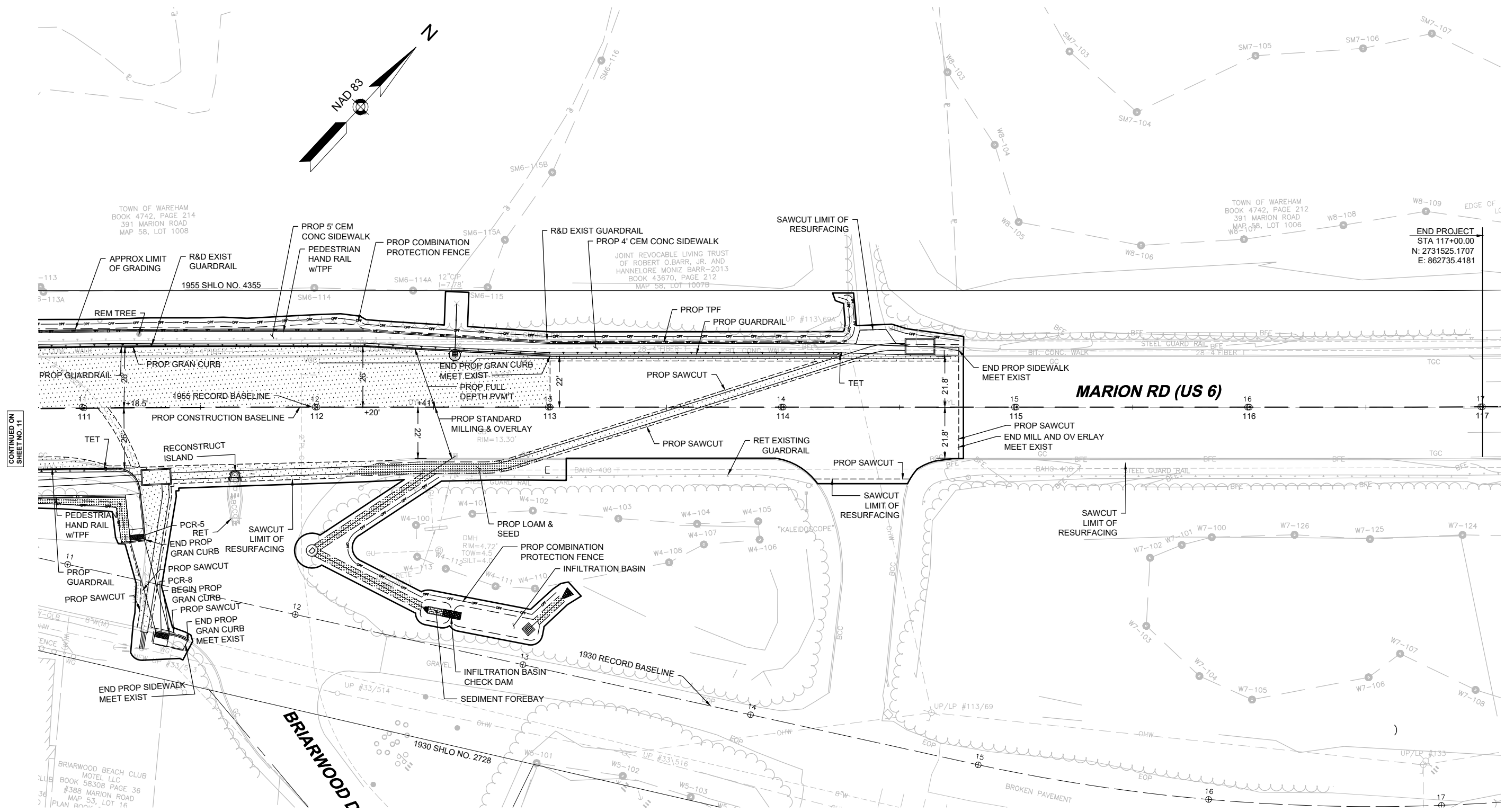
SHEET 11



**MARION - WAREHAM
WAREHAM STREET (US 6) OVER WEWEANTIC RIVER**

**HIGHWAY
CONSTRUCTION PLAN SHEET 4 OF 5**

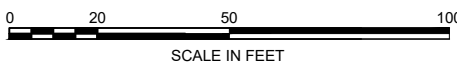
- EXISTING SITE NOTES:**
1. HTL = 3.78'
 2. MHHW = 2.09'
 3. MHW = 1.65'
 4. LMSL = -0.41'
 5. SALINITY = 5ppt - 25ppt
 6. REFERENCE SALT MARSH = SALT MARSH #6 / ADJACENT
 7. DATA SOURCE = BUZZARDS BAY COALITION / NOAA / TIDAL FLUSHING STUDY



CONTINUED ON SHEET NO. 11

END PROJECT
 STA 117+00.00
 N: 2731525.1707
 E: 862735.4181

- NOTE:**
- BASE FLOOD ELEV. (15.00') REFERENCED FROM FEMA FIRM MAP NO. 25023C0576K.
 - HIGH TIDE LINE ELEV. (3.78'), MEAN HIGH WATER ELEV. (1.65'), MEAN LOW WATER (-2.27') OBTAINED FROM TIDAL FLUSHING STUDY.



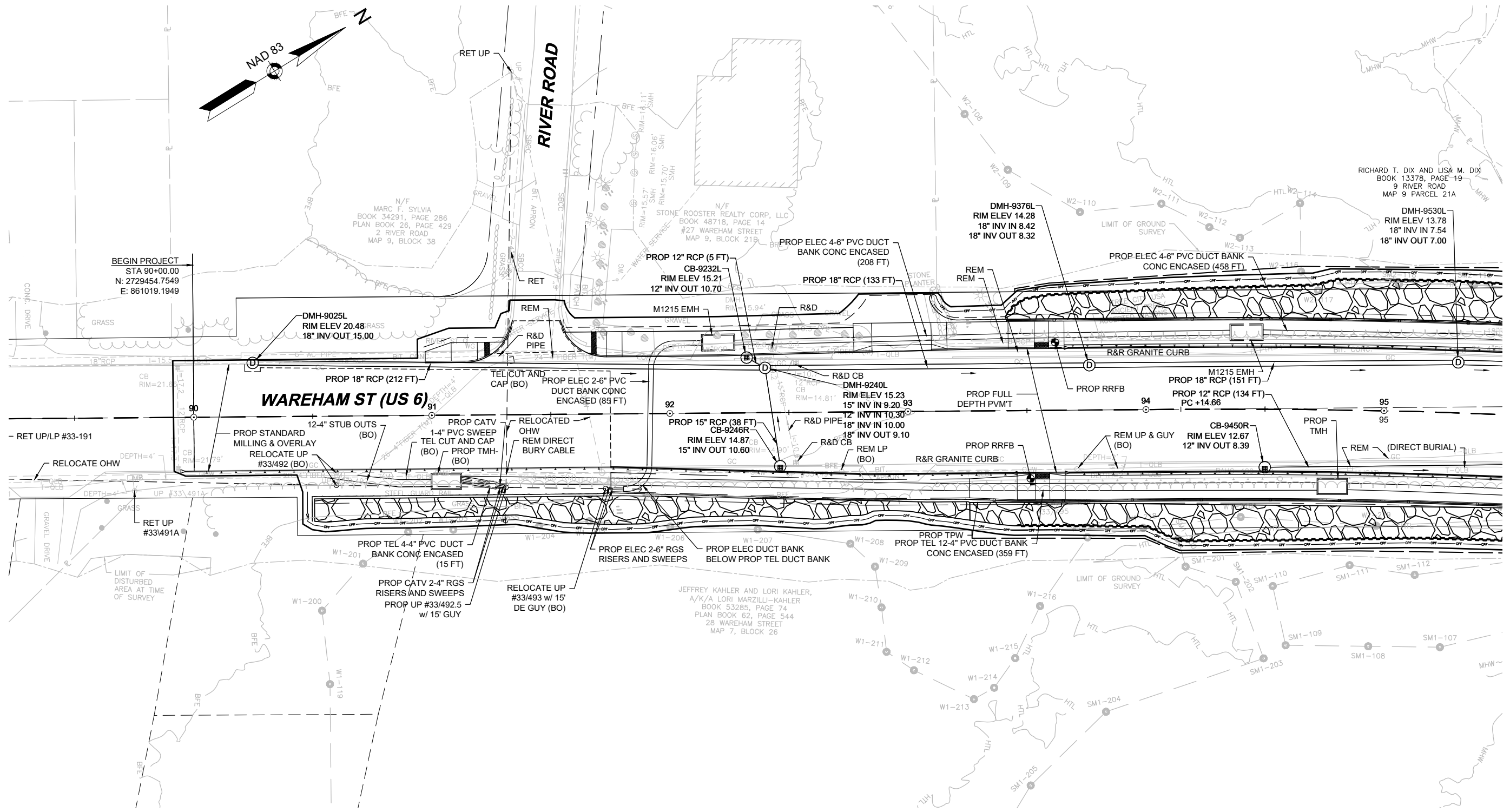
SHEET 12



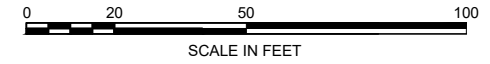
MARION - WAREHAM
 WAREHAM STREET (US 6) OVER WEWEANTIC RIVER

HIGHWAY
 CONSTRUCTION PLAN SHEET 5 OF 5

- EXISTING SITE NOTES:**
1. HTL = 3.78'
 2. MHHW = 2.09'
 3. MHW = 1.65'
 4. LMSL = -0.41'
 5. SALINITY = 5ppt - 25ppt
 6. REFERENCE SALT MARSH = SALT MARSH #6 / ADJACENT
 7. DATA SOURCE = BUZZARDS BAY COALITION / NOAA / TIDAL FLUSHING STUDY



- NOTE:**
- BASE FLOOD ELEV. (15.00') REFERENCED FROM FEMA FIRM MAP NO. 25023C0576K.
 - HIGH TIDE LINE ELEV. (3.78'), MEAN HIGH WATER ELEV. (1.65'), MEAN LOW WATER (-2.27') OBTAINED FROM TIDAL FLUSHING STUDY.



SHEET 13

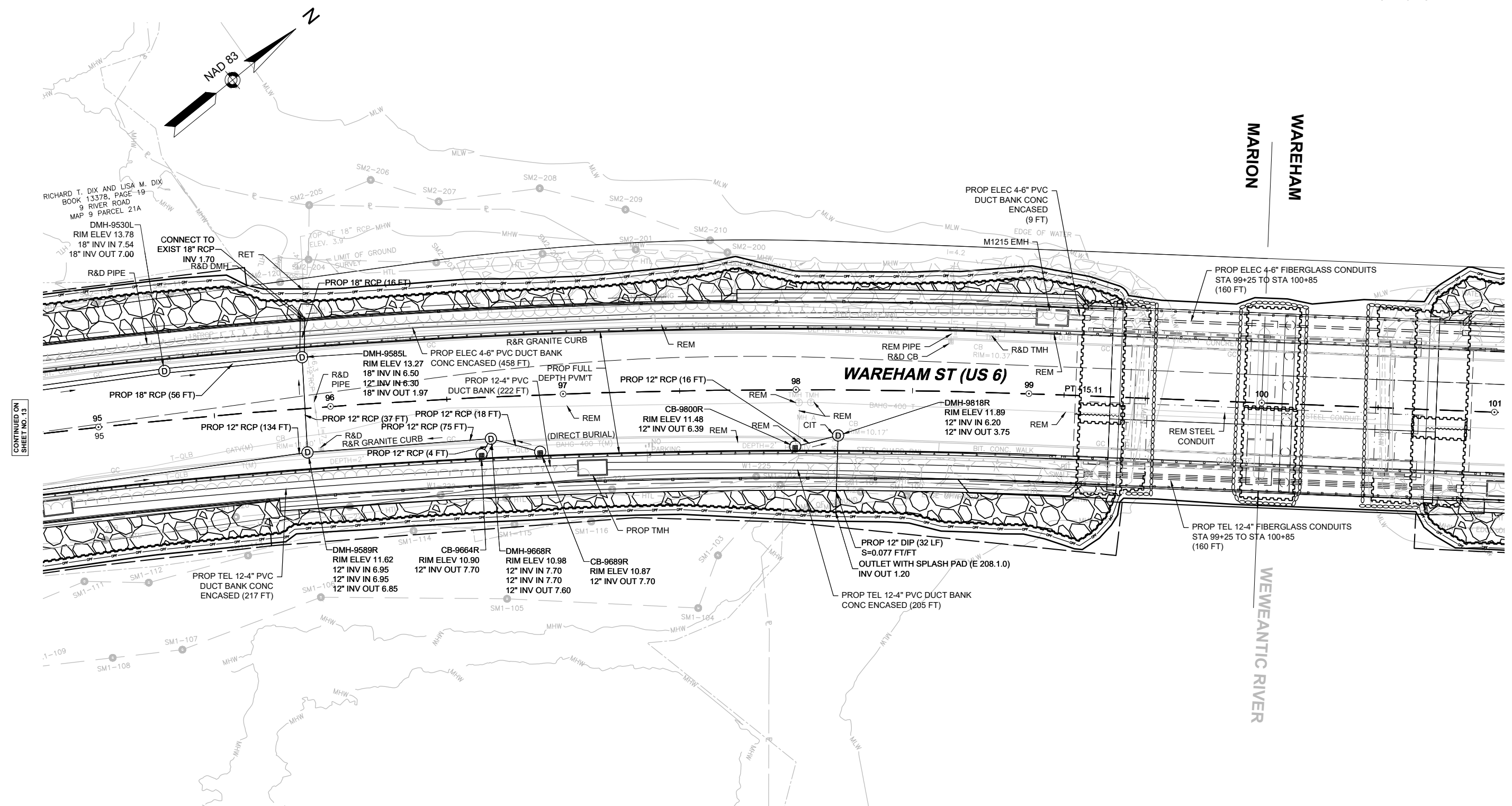
CONTINUED ON SHEET NO. 14



MARION - WAREHAM
WAREHAM STREET (US 6) OVER WEWEANTIC RIVER

HIGHWAY
DRAINAGE AND UTILITY PLAN SHEET 1 OF 5

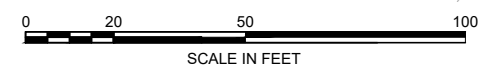
- EXISTING SITE NOTES:**
1. HTL = 3.78'
 2. MHHW = 2.09'
 3. MHW = 1.65'
 4. LMSL = -0.41'
 5. SALINITY = 5ppt - 25ppt
 6. REFERENCE SALT MARSH = SALT MARSH #6 / ADJACENT
 7. DATA SOURCE = BUZZARDS BAY COALITION / NOAA / TIDAL FLUSHING STUDY



CONTINUED ON SHEET NO. 13

CONTINUED ON SHEET NO. 15

- NOTE:**
- BASE FLOOD ELEV. (15.00') REFERENCED FROM FEMA FIRM MAP NO. 25023C0576K.
 - HIGH TIDE LINE ELEV. (3.78'), MEAN HIGH WATER ELEV. (1.65'), MEAN LOW WATER (-2.27') OBTAINED FROM TIDAL FLUSHING STUDY.



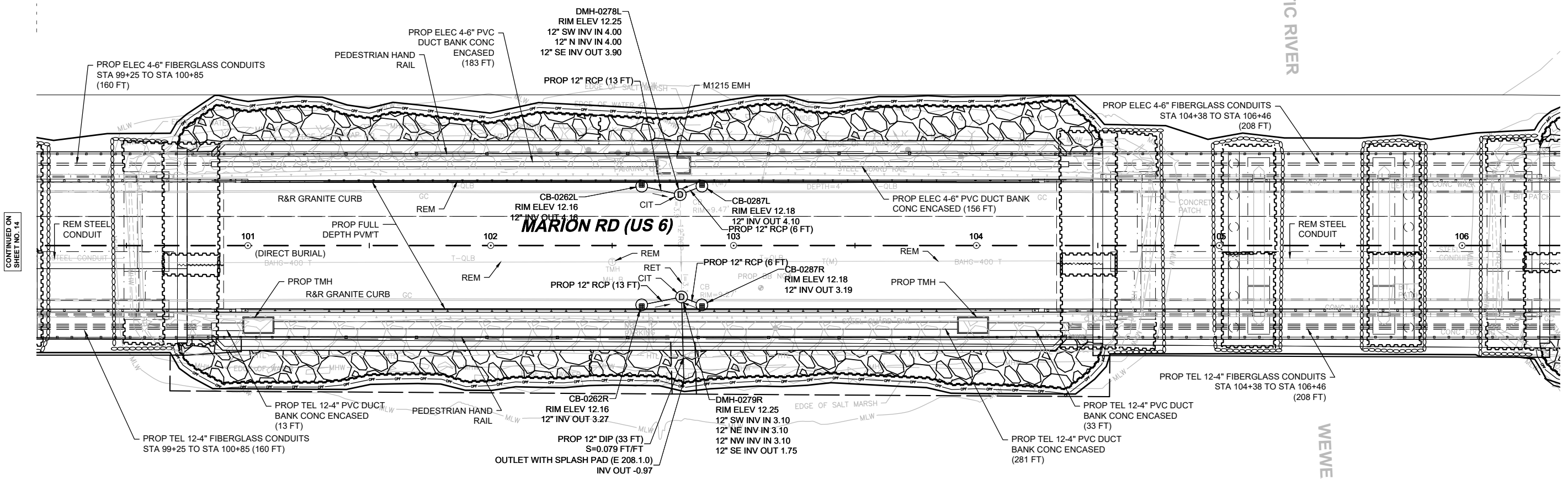
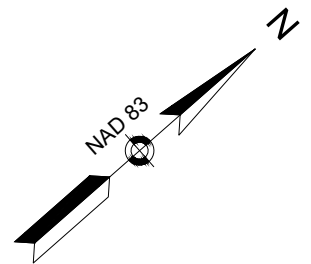
SHEET 14



MARION - WAREHAM
WAREHAM STREET (US 6) OVER WEWEANTIC RIVER

HIGHWAY
DRAINAGE AND UTILITY PLAN SHEET 2 OF 5

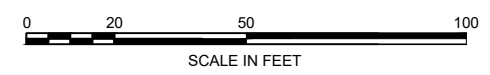
- EXISTING SITE NOTES:**
1. HTL = 3.78'
 2. MHHW = 2.09'
 3. MHW = 1.65'
 4. LMSL = -0.41'
 5. SALINITY = 5ppt - 25ppt
 6. REFERENCE SALT MARSH = SALT MARSH #6 / ADJACENT
 7. DATA SOURCE = BUZZARDS BAY COALITION / NOAA / TIDAL FLUSHING STUDY



CONTINUED ON SHEET NO. 14

CONTINUED ON SHEET NO. 16

- NOTE:**
- BASE FLOOD ELEV. (15.00') REFERENCED FROM FEMA FIRM MAP NO. 25023C0576K.
 - HIGH TIDE LINE ELEV. (3.78'), MEAN HIGH WATER ELEV. (1.65'), MEAN LOW WATER (-2.27') OBTAINED FROM TIDAL FLUSHING STUDY.



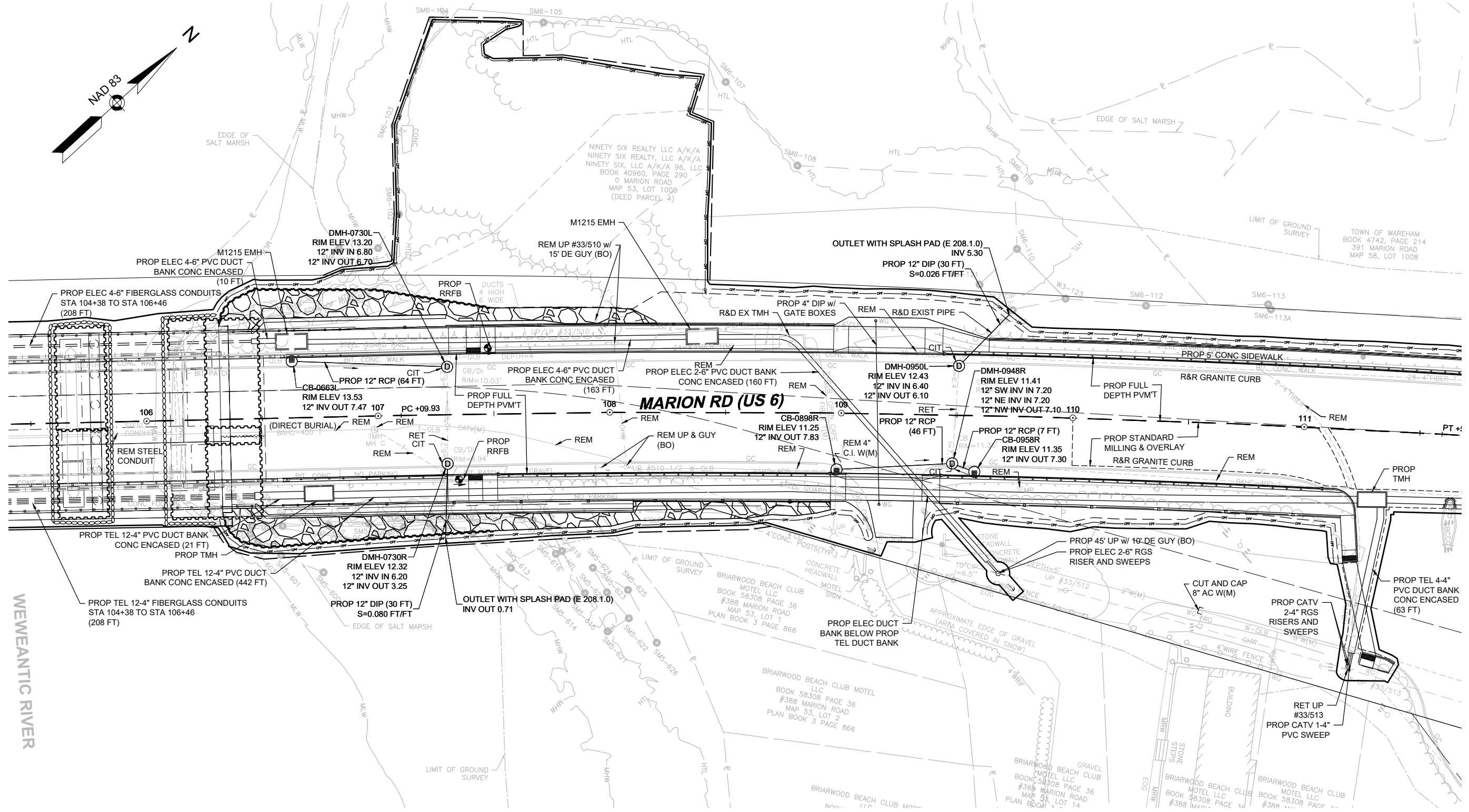
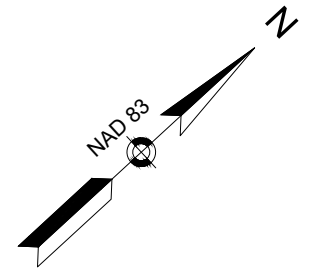
SHEET 15



**MARION - WAREHAM
WAREHAM STREET (US 6) OVER WEWEANTIC RIVER**

**HIGHWAY
DRAINAGE AND UTILITY PLAN SHEET 3 OF 5**

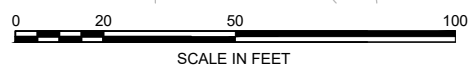
- EXISTING SITE NOTES:**
1. HTL = 3.78'
 2. MHHW = 2.09'
 3. MHW = 1.65'
 4. LMSL = -0.41'
 5. SALINITY = 5ppt - 25ppt
 6. REFERENCE SALT MARSH = SALT MARSH #6 / ADJACENT
 7. DATA SOURCE = BUZZARDS BAY COALITION / NOAA / TIDAL FLUSHING STUDY



CONTINUED ON SHEET NO. 15

CONTINUED ON SHEET NO. 17

- NOTE:**
- BASE FLOOD ELEV. (15.00') REFERENCED FROM FEMA FIRM MAP NO. 25023C0576K.
 - HIGH TIDE LINE ELEV. (3.78'), MEAN HIGH WATER ELEV. (1.65'), MEAN LOW WATER (-2.27') OBTAINED FROM TIDAL FLUSHING STUDY.



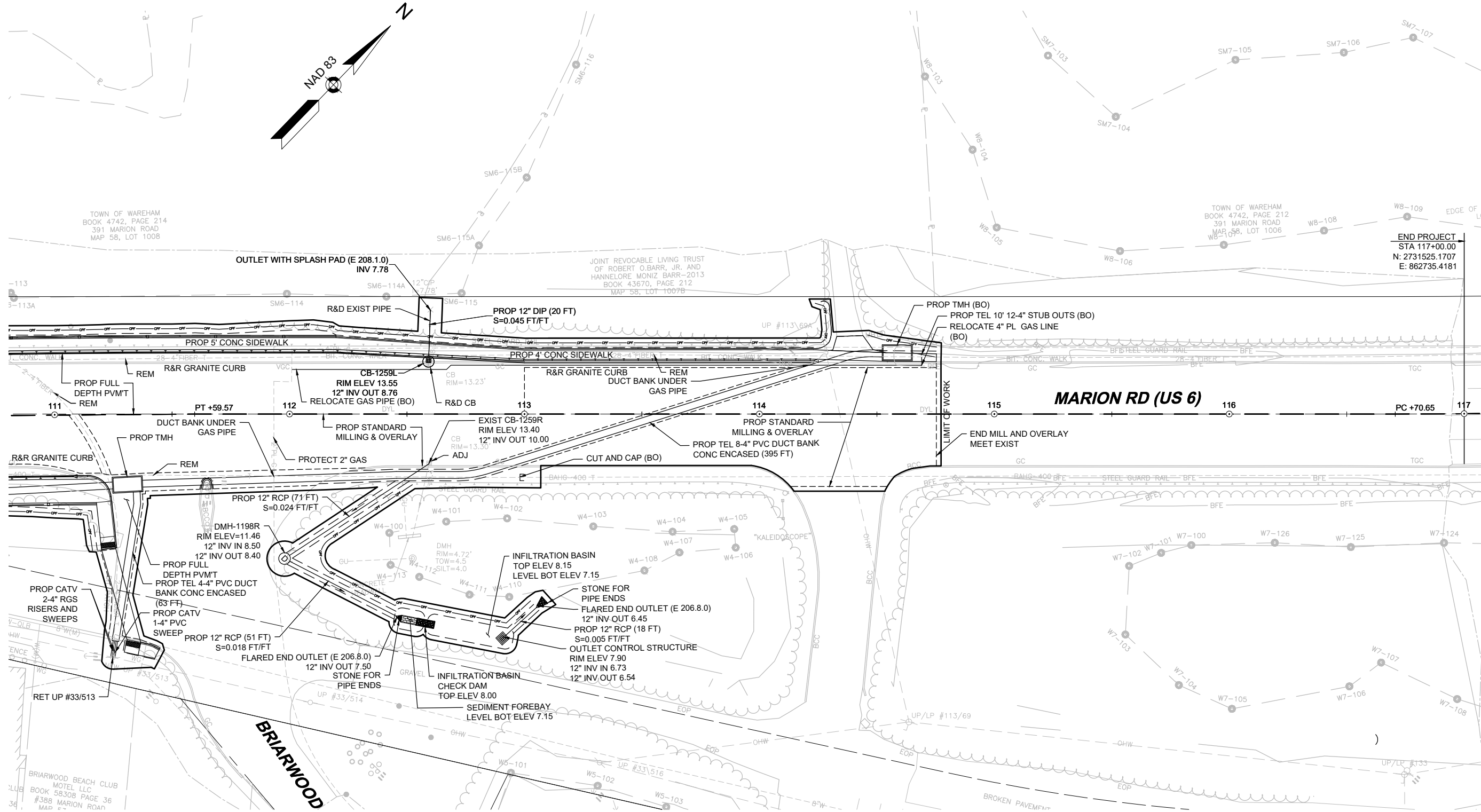
SHEET 16



**MARION - WAREHAM
WAREHAM STREET (US 6) OVER WEWEANTIC RIVER**

**HIGHWAY
DRAINAGE AND UTILITY PLAN SHEET 4 OF 5**

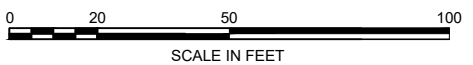
- EXISTING SITE NOTES:**
- HTL = 3.78'
 - MHHW = 2.09'
 - MHW = 1.65'
 - LMSL = -0.41'
 - SALINITY = 5ppt - 25ppt
 - REFERENCE SALT MARSH = SALT MARSH #6 / ADJACENT
 - DATA SOURCE = BUZZARDS BAY COALITION / NOAA / TIDAL FLUSHING STUDY



CONTINUED ON SHEET NO. 16

END PROJECT
 STA 117+00.00
 N: 2731525.1707
 E: 862735.4181

- NOTE:**
- BASE FLOOD ELEV. (15.00') REFERENCED FROM FEMA FIRM MAP NO. 25023C0576K.
 - HIGH TIDE LINE ELEV. (3.78'), MEAN HIGH WATER ELEV. (1.65'), MEAN LOW WATER (-2.27') OBTAINED FROM TIDAL FLUSHING STUDY.



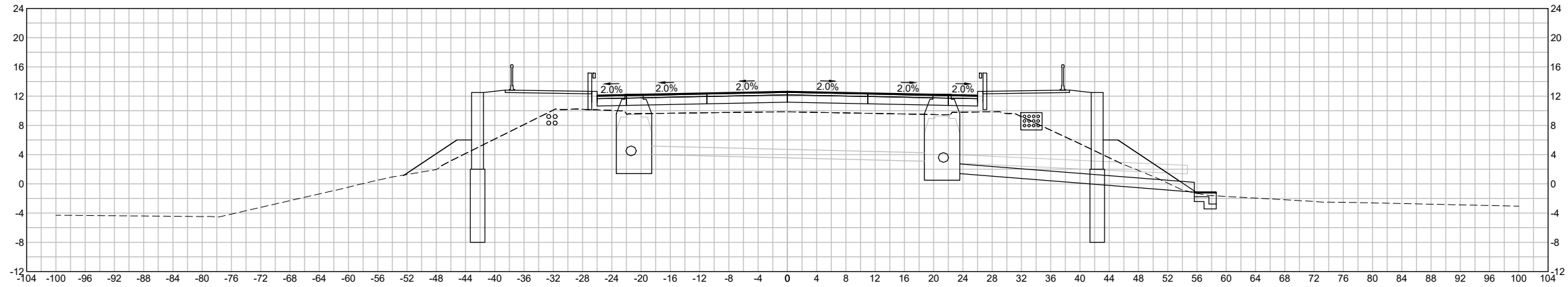
SHEET 17



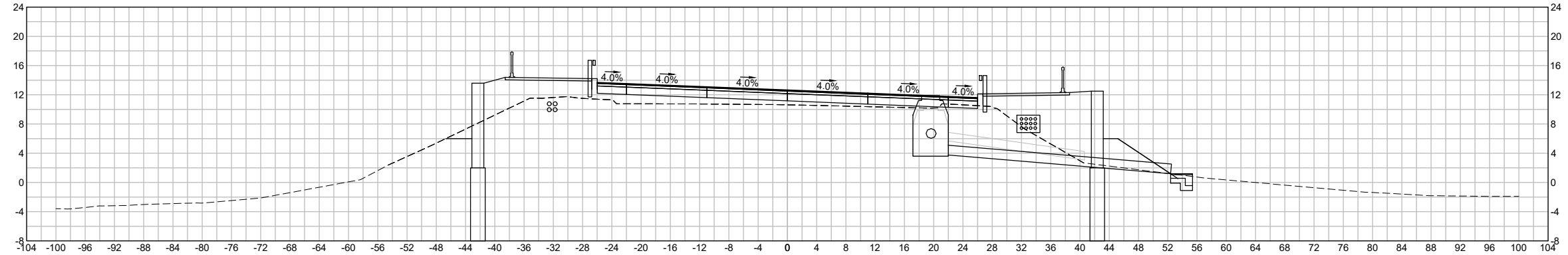
MARION - WAREHAM
WAREHAM STREET (US 6) OVER WEWEANTIC RIVER

HIGHWAY
DRAINAGE AND UTILITY PLAN SHEET 5 OF 5

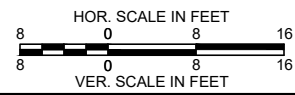
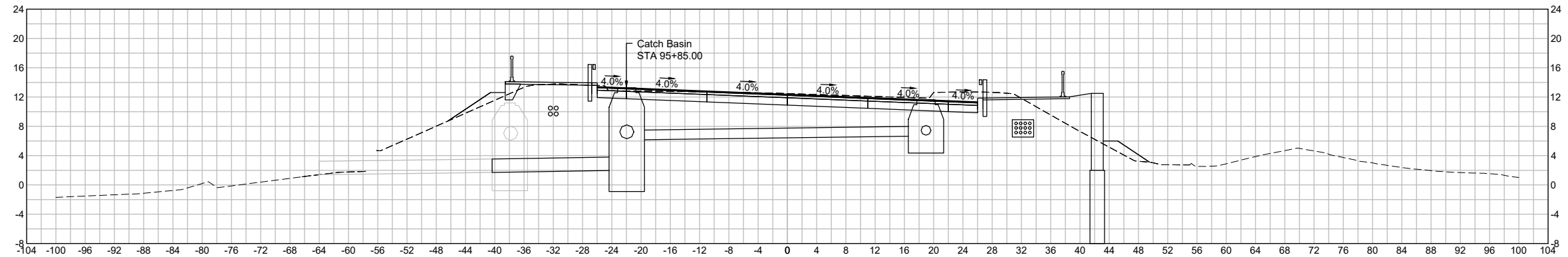
102+79.06



98+17.94

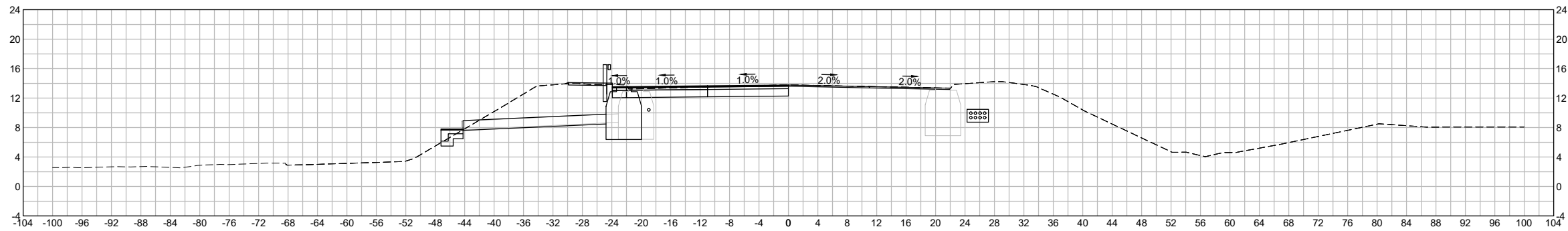


95+89.21

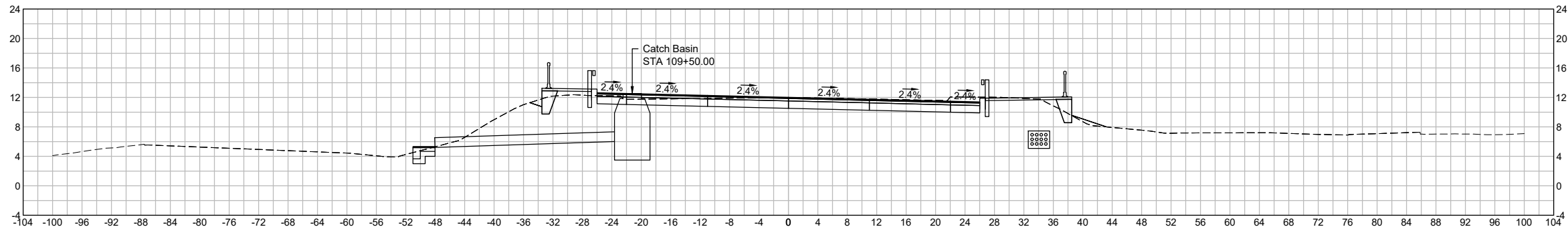


SHEET 18

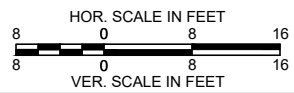
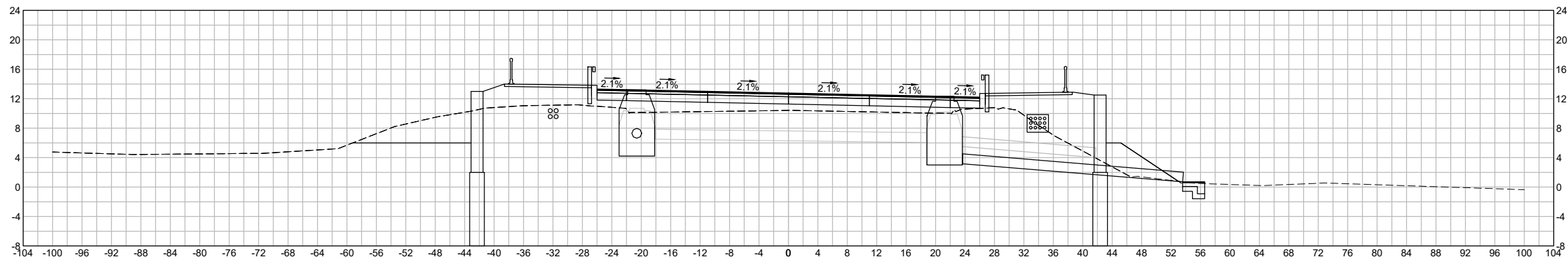
112+59.58



109+72.19



107+29.82



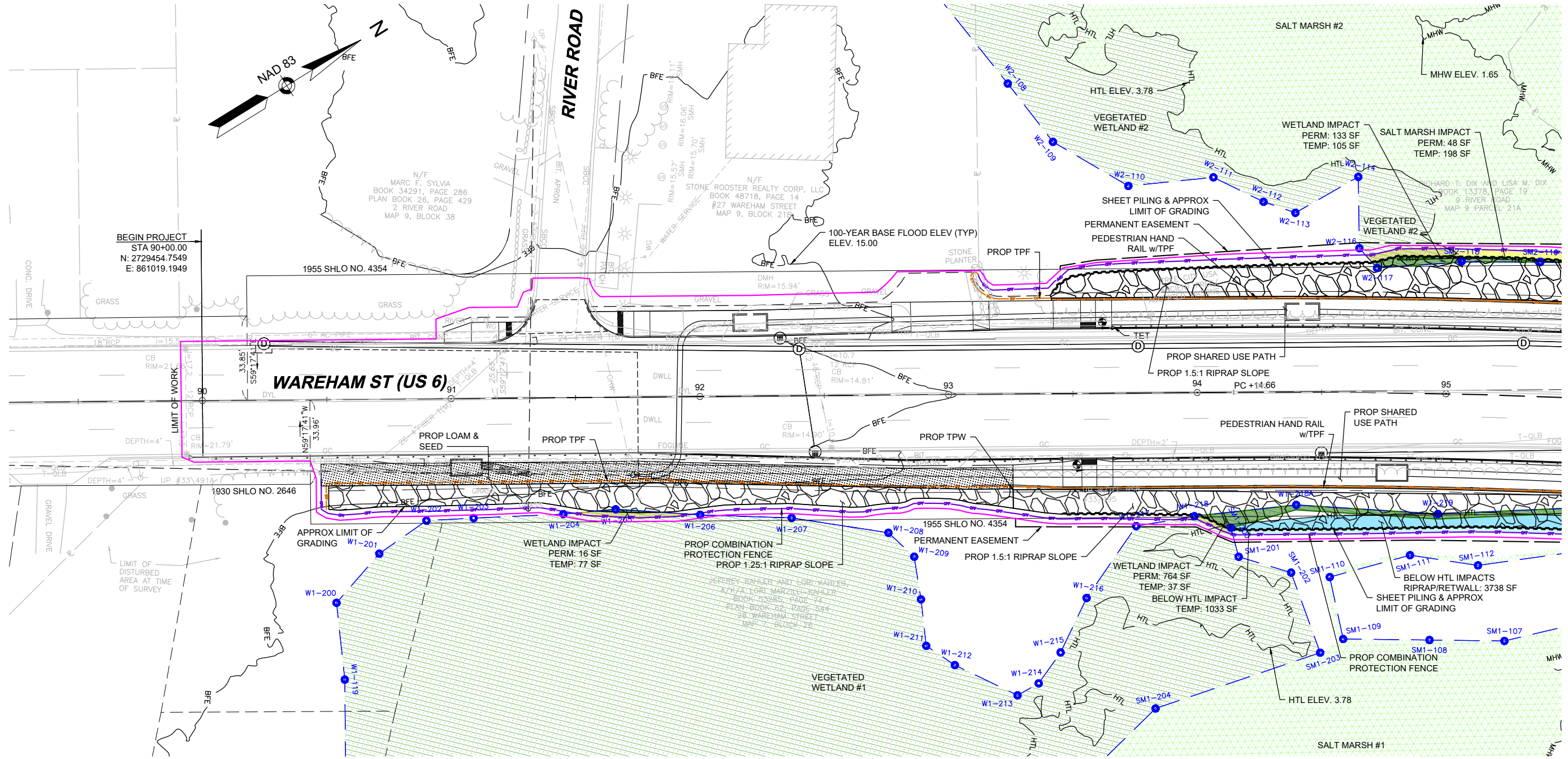
SHEET 19

IMPACT SYMBOLOGY LEGEND



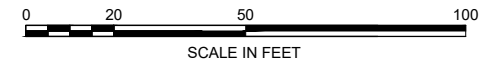
EXISTING SITE NOTES:
 1. HTL = 3.78'
 2. MHHW = 2.09'
 3. MHW = 1.65'
 4. LMSL = -0.41'

5. SALINITY = 5ppt - 25ppt
 6. REFERENCE SALT MARSH = SALT MARSH #6 / ADJACENT
 7. DATA SOURCE = BUZZARDS BAY COALITION / NOAA / TIDAL FLUSHING STUDY



TOTAL PROJECT IMPACT CALCULATIONS (SF.)			
	TEMPORARY	PERMANENT	
		BRIDGE PIER	RIPRAP/RETWALL
VEGETATED WETLAND IMPACTS	219	0	913
SALT MARSH IMPACTS	709	0	1764
BELOW HIGH TIDE LINE IMPACTS	6088	5432	12324

BELOW HIGH TIDE LINE VOLUMETRIC IMPACT CALCULATIONS (CY.)			
	M-05-001=W-06-013		W-06-016
	RIP RAP, CRUSHED STONE, LIGHTWEIGHT FILL		
DREDGING	173	330	3260
FILL	173	330	3890



NOTE:
 • BASE FLOOD ELEV. (15.00') REFERENCED FROM FEMA FIRM MAP NO. 25023C0576K.
 • HIGH TIDE LINE ELEV. (3.78'), MEAN HIGH WATER ELEV. (1.65'), MEAN LOW WATER (-2.27') OBTAINED FROM TIDAL FLUSHING STUDY.

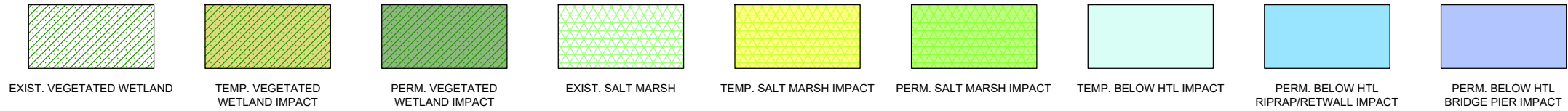
SHEET 20



**MARION - WAREHAM
 WAREHAM STREET (US 6) OVER WEWEANTIC RIVER**

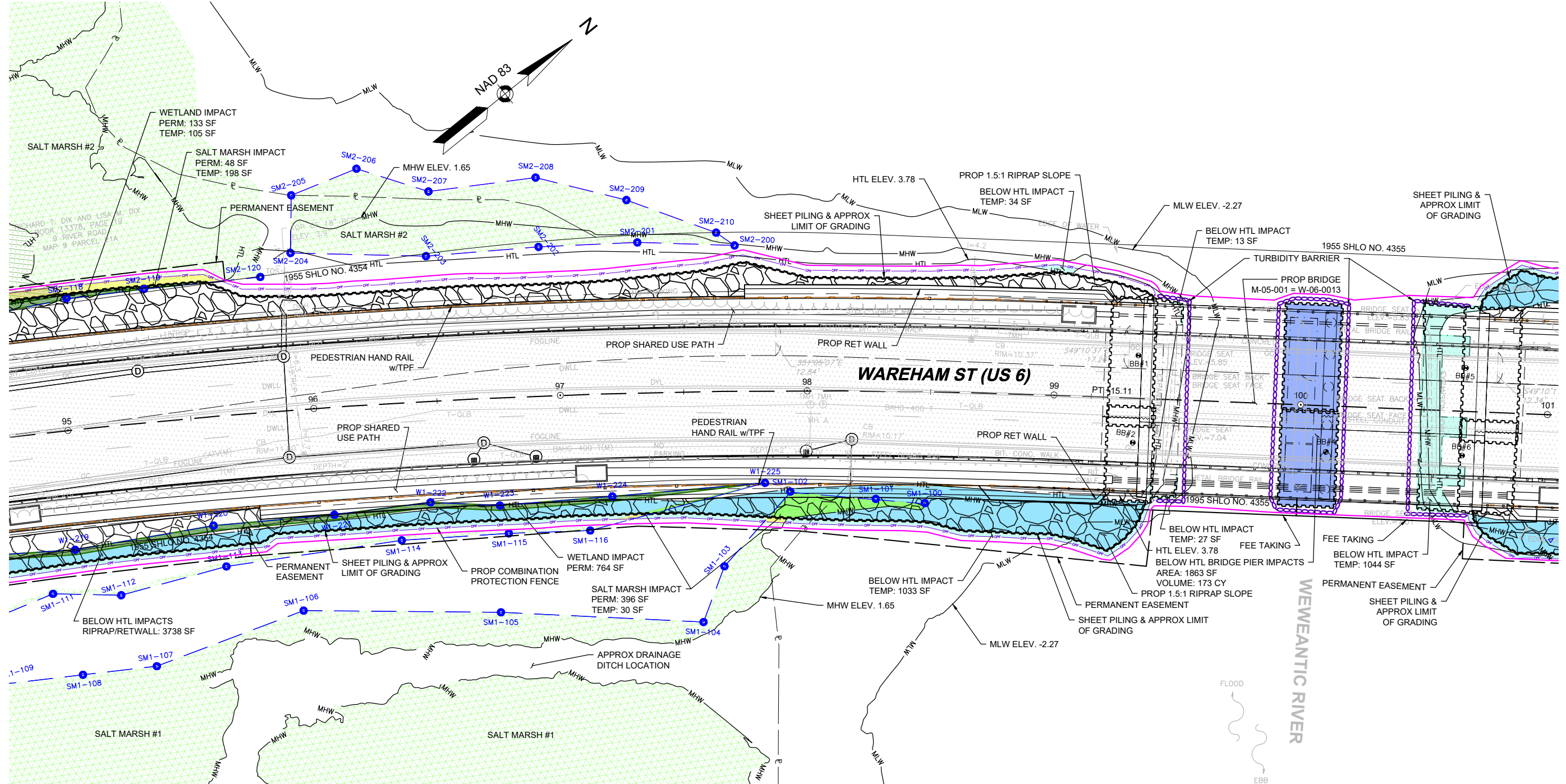
CONTINUED ON SHEET NO. 21

IMPACT SYMBOLOLOGY LEGEND



EXISTING SITE NOTES:
 1. HTL = 3.78'
 2. MHHW = 2.09'
 3. MHW = 1.65'
 4. LMSL = -0.41'

5. SALINITY = 5ppt - 25ppt
 6. REFERENCE SALT MARSH = SALT MARSH #6 / ADJACENT BAY COALITION / NOAA / TIDAL FLUSHING STUDY

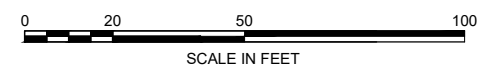


CONTINUED ON SHEET NO. 20

CONTINUED ON SHEET NO. 22

TOTAL PROJECT IMPACT CALCULATIONS (SF.)			
	TEMPORARY	PERMANENT	
		BRIDGE PIER	RIPRAP/RETWALL
VEGETATED WETLAND IMPACTS	219	0	913
SALT MARSH IMPACTS	709	0	1764
BELOW HIGH TIDE LINE IMPACTS	6088	5432	12324

BELOW HIGH TIDE LINE VOLUMETRIC IMPACT CALCULATIONS (CY.)			
	M-05-001=W-06-013		RIP RAP, CRUSHED STONE, LIGHTWEIGHT FILL
	W-06-016		
DREDGING	173	330	3260
FILL	173	330	3890

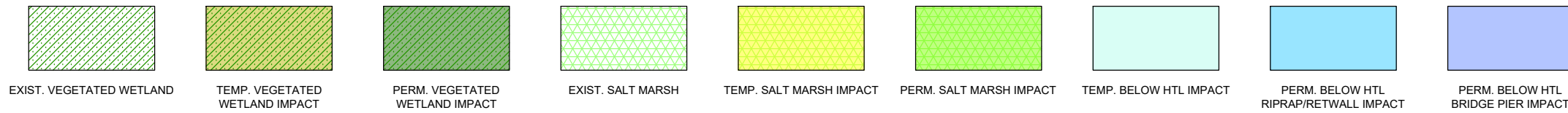


NOTE:
 • BASE FLOOD ELEV. (15.00') REFERENCED FROM FEMA FIRM MAP NO. 25023C0576K.
 • HIGH TIDE LINE ELEV. (3.78'), MEAN HIGH WATER ELEV. (1.65'), MEAN LOW WATER (-2.27') OBTAINED FROM TIDAL FLUSHING STUDY.
 • SEE SHEET 37 FOR M-05-001=W-06-013 EXIST BRIDGE ABUTMENT REMOVAL ELEVATIONS.

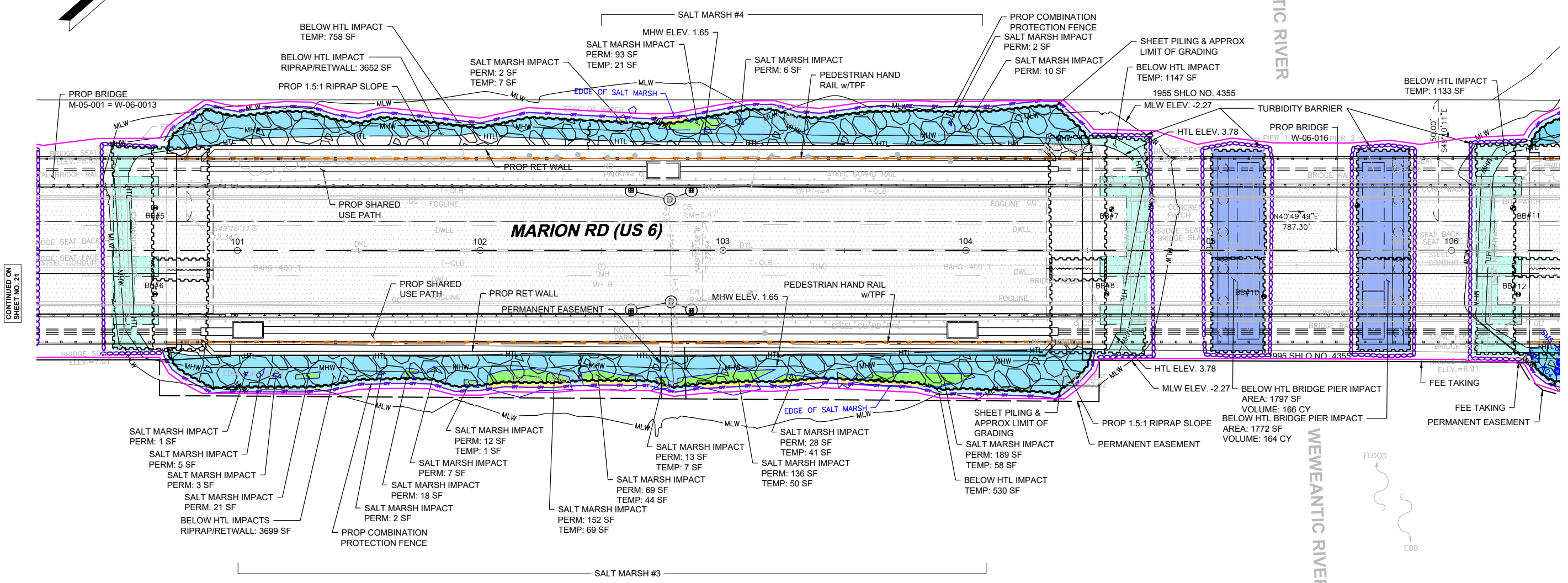
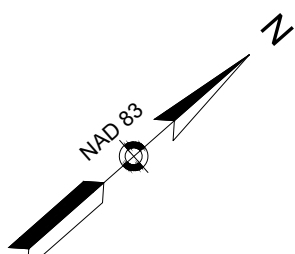


**MARION - WAREHAM
 WAREHAM STREET (US 6) OVER WEWEANTIC RIVER**

IMPACT SYMOLOGY LEGEND



- EXISTING SITE NOTES:**
1. HTL = 3.78'
 2. MHHW = 2.09'
 3. MHW = 1.65'
 4. LMSL = -0.41'
 5. SALINITY = 5ppt - 25ppt
 6. REFERENCE SALT MARSH = SALT MARSH #6 / ADJACENT
 7. DATA SOURCE = BUZZARDS BAY COALITION / NOAA / TIDAL FLUSHING STUDY



CONTINUED ON SHEET NO. 21

CONTINUED ON SHEET NO. 23

TOTAL PROJECT IMPACT CALCULATIONS (SF.)			
	TEMPORARY	PERMANENT	
		BRIDGE PIER	RIPRAP/RETWALL
VEGETATED WETLAND IMPACTS	219	0	913
SALT MARSH IMPACTS	709	0	1764
BELOW HIGH TIDE LINE IMPACTS	6088	5432	12324

BELOW HIGH TIDE LINE VOLUMETRIC IMPACT CALCULATIONS (CY.)			
	M-05-001=W-06-013	W-06-016	RIP RAP, CRUSHED STONE, LIGHTWEIGHT FILL
FILL	173	330	3890

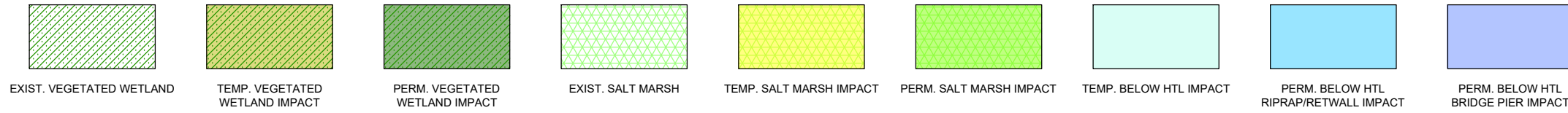
- NOTE:**
- BASE FLOOD ELEV. (15.00') REFERENCED FROM FEMA FIRM MAP NO. 25023C0576K.
 - HIGH TIDE LINE ELEV. (3.78'), MEAN HIGH WATER ELEV. (1.65'), MEAN LOW WATER (-2.27') OBTAINED FROM TIDAL FLUSHING STUDY.
 - SEE SHEET 43 FOR W-06-016 EXIST BRIDGE ABUTMENT REMOVAL ELEVATIONS.

SHEET 22

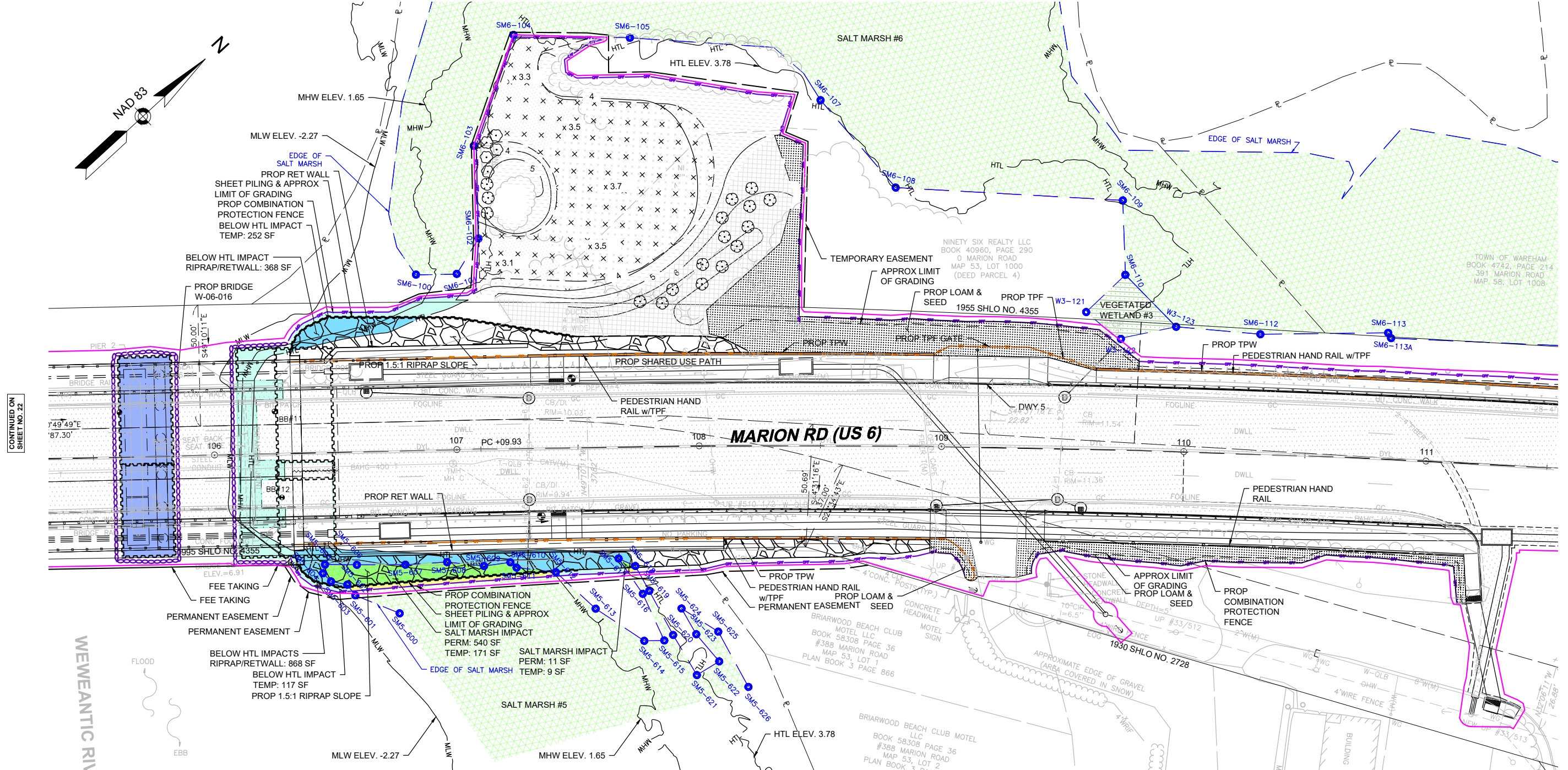


**MARION - WAREHAM
WAREHAM STREET (US 6) OVER WEWEANTIC RIVER**

IMPACT SYMBOLOGY LEGEND



- EXISTING SITE NOTES:
1. HTL = 3.78'
 2. MHHW = 2.09'
 3. MHW = 1.65'
 4. LMSL = -0.41'
 5. SALINITY = 5ppt - 25ppt
 6. REFERENCE SALT MARSH = SALT MARSH #6 / ADJACENT
 7. DATA SOURCE = BUZZARDS BAY COALITION / NOAA / TIDAL FLUSHING STUDY

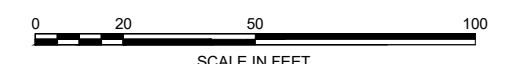


CONTINUED ON SHEET NO. 22

CONTINUED ON SHEET NO. 24

TOTAL PROJECT IMPACT CALCULATIONS (SF.)			
	TEMPORARY	PERMANENT	
		BRIDGE PIER	RIPRAP/RETWALL
VEGETATED WETLAND IMPACTS	219	0	913
SALT MARSH IMPACTS	709	0	1764
BELOW HIGH TIDE LINE IMPACTS	6088	5432	12324

BELOW HIGH TIDE LINE VOLUMETRIC IMPACT CALCULATIONS (CY.)			
	M-05-001=W-06-013		RIP RAP, CRUSHED STONE, LIGHTWEIGHT FILL
	W-06-016		
DREDGING	173	330	3260
FILL	173	330	3890



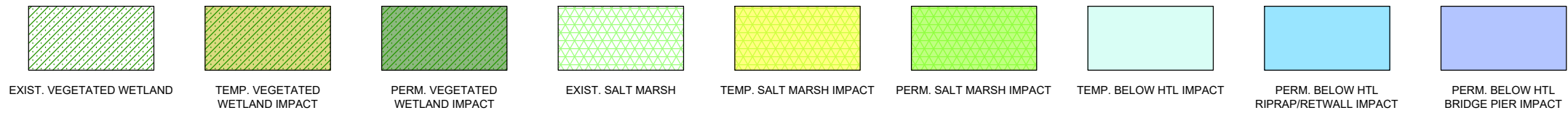
NOTE:
 • BASE FLOOD ELEV. (15.00') REFERENCED FROM FEMA FIRM MAP NO. 25023C0576K.
 • HIGH TIDE LINE ELEV. (3.78'), MEAN HIGH WATER ELEV. (1.65'), MEAN LOW WATER (-2.27') OBTAINED FROM TIDAL FLUSHING STUDY.

SHEET 23



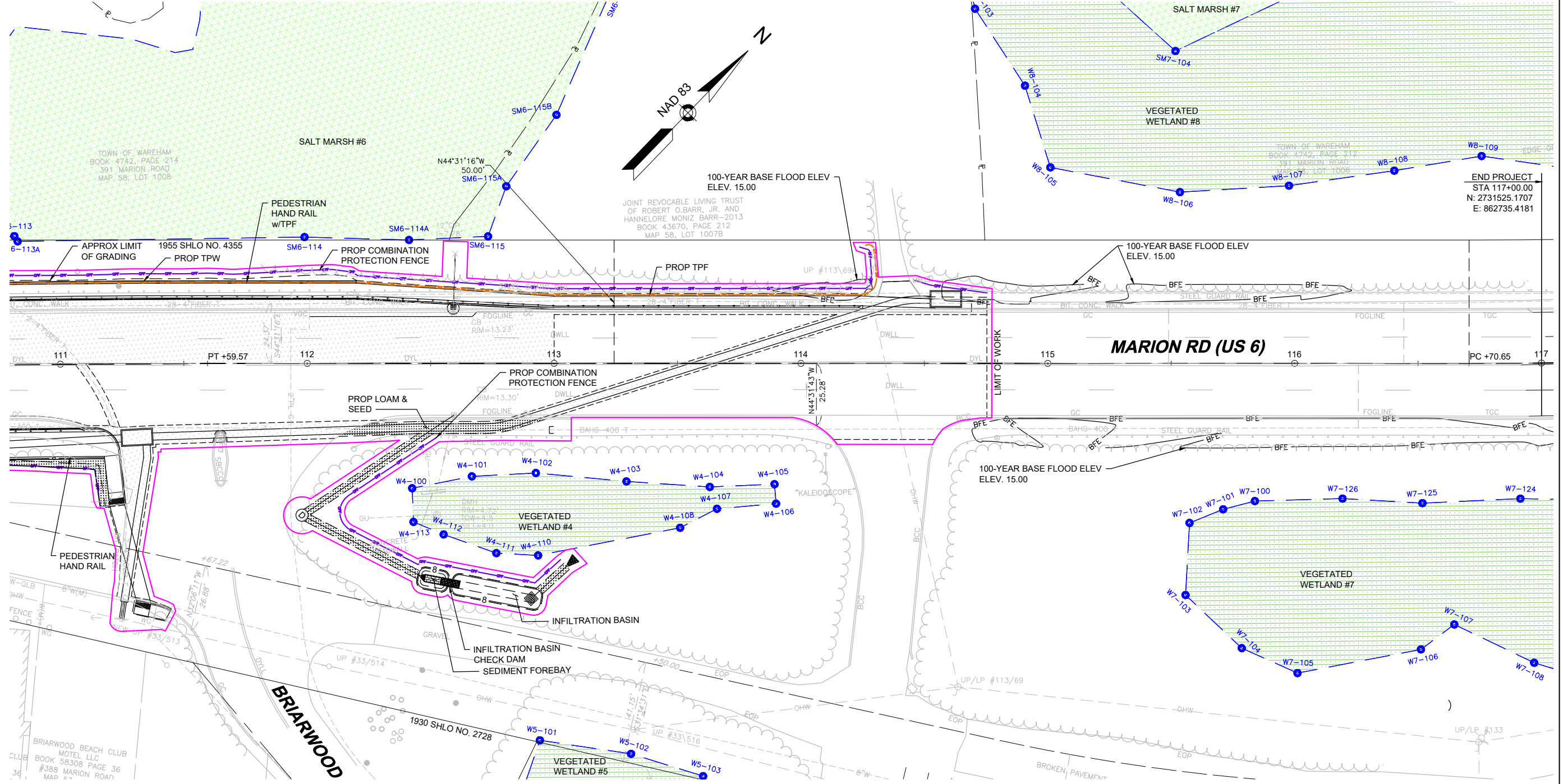
MARION - WAREHAM
 WAREHAM STREET (US 6) OVER WEWEANTIC RIVER

IMPACT SYMBOLOGY LEGEND



EXISTING SITE NOTES:
 1. HTL = 3.78'
 2. MHHW = 2.09'
 3. MHW = 1.65'
 4. LMSL = -0.41'

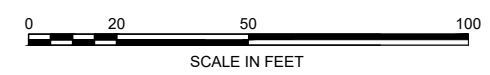
5. SALINITY = 5ppt - 25ppt
 6. REFERENCE SALT MARSH = SALT MARSH #6 / ADJACENT
 7. DATA SOURCE = BUZZARDS BAY COALITION / NOAA / TIDAL FLUSHING STUDY



CONTINUED ON SHEET NO. 23

	TEMPORARY	PERMANENT	
		BRIDGE PIER	RIPRAP/RETWALL
VEGETATED WETLAND IMPACTS	219	0	913
SALT MARSH IMPACTS	709	0	1764
BELOW HIGH TIDE LINE IMPACTS	6088	5432	12324

	BELOW HIGH TIDE LINE VOLUMETRIC IMPACT CALCULATIONS (CY.)		
	M-05-001=W-06-013	W-06-016	RIPRAP/RETWALL
DREDGING	173	330	3260
FILL	173	330	3890

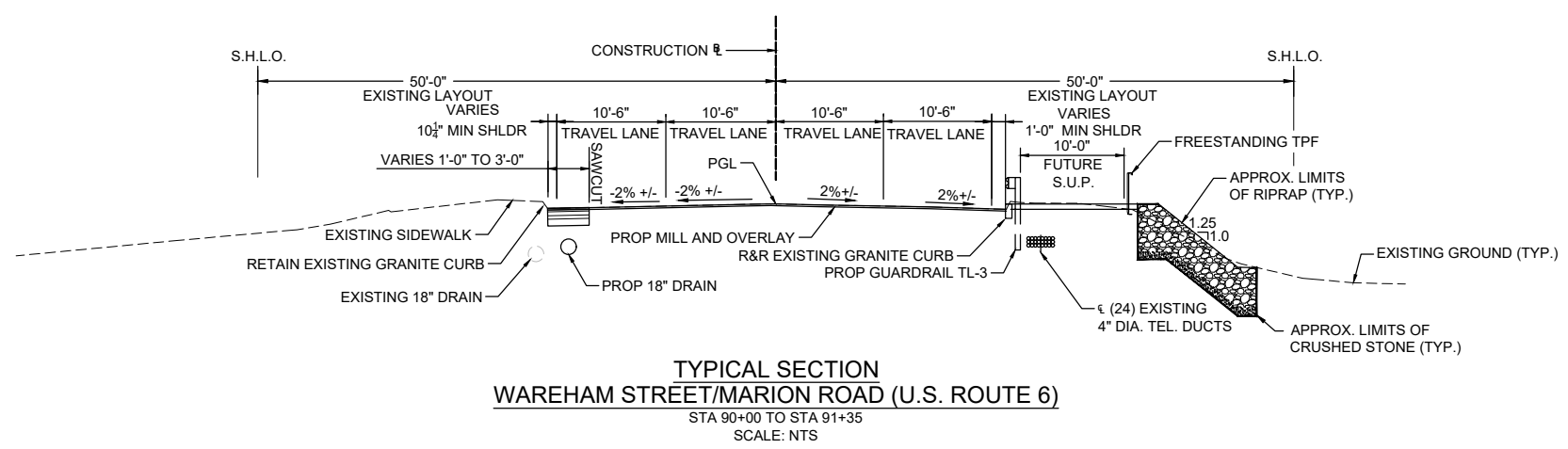
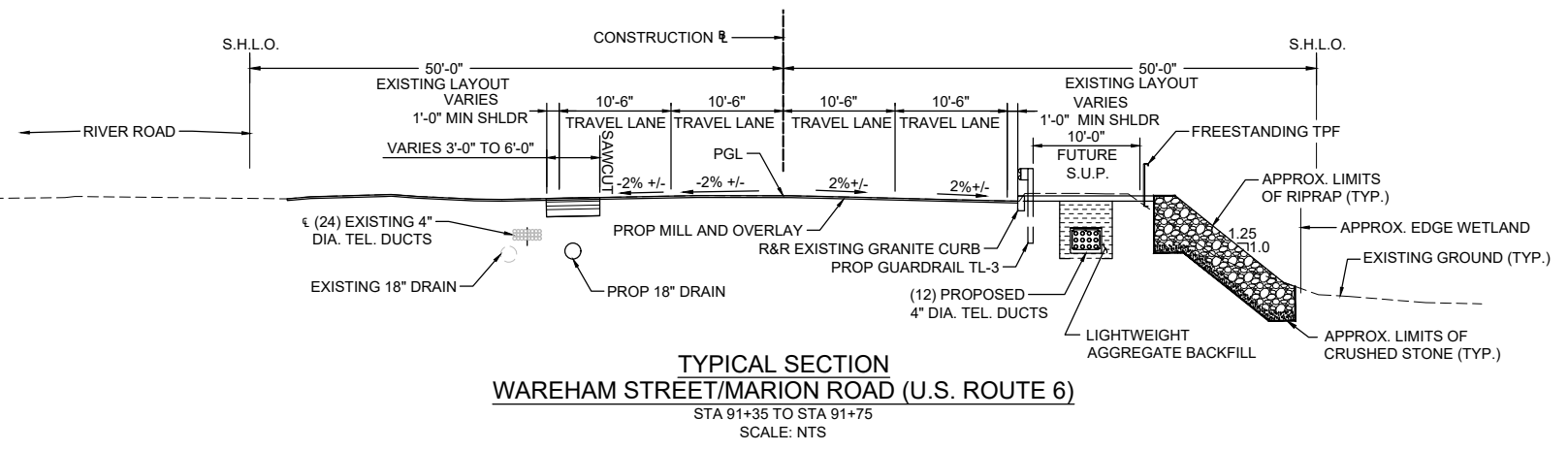
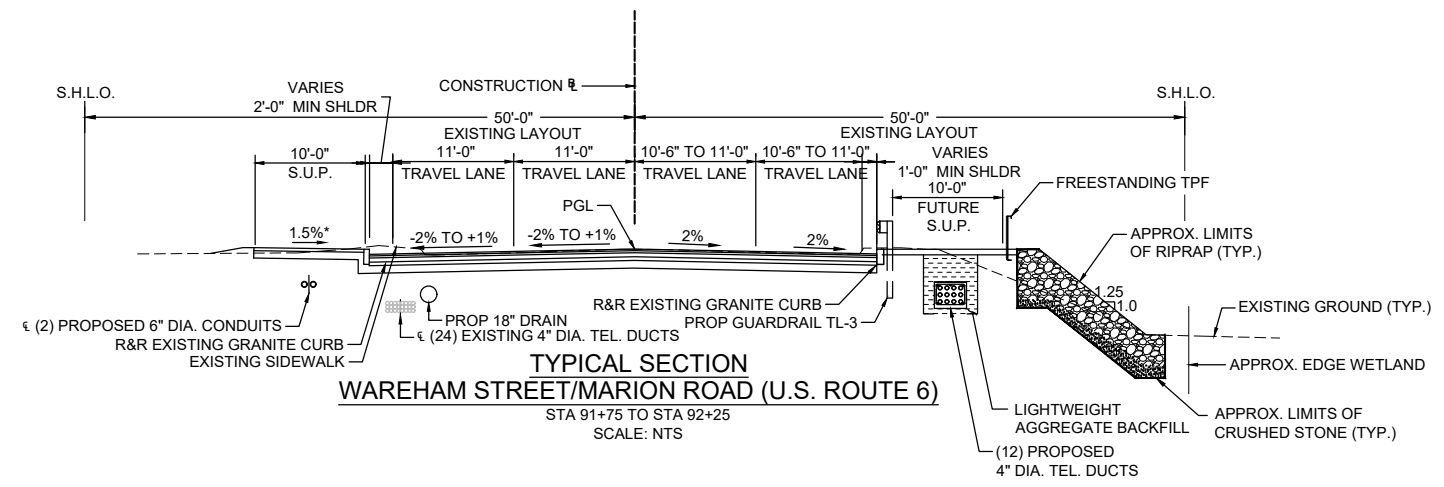


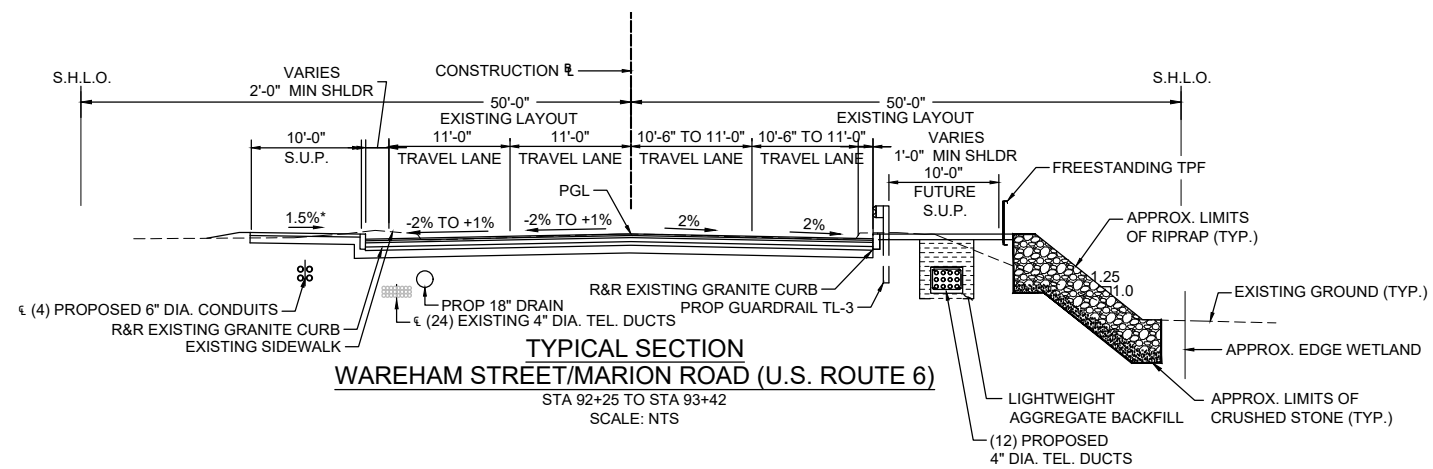
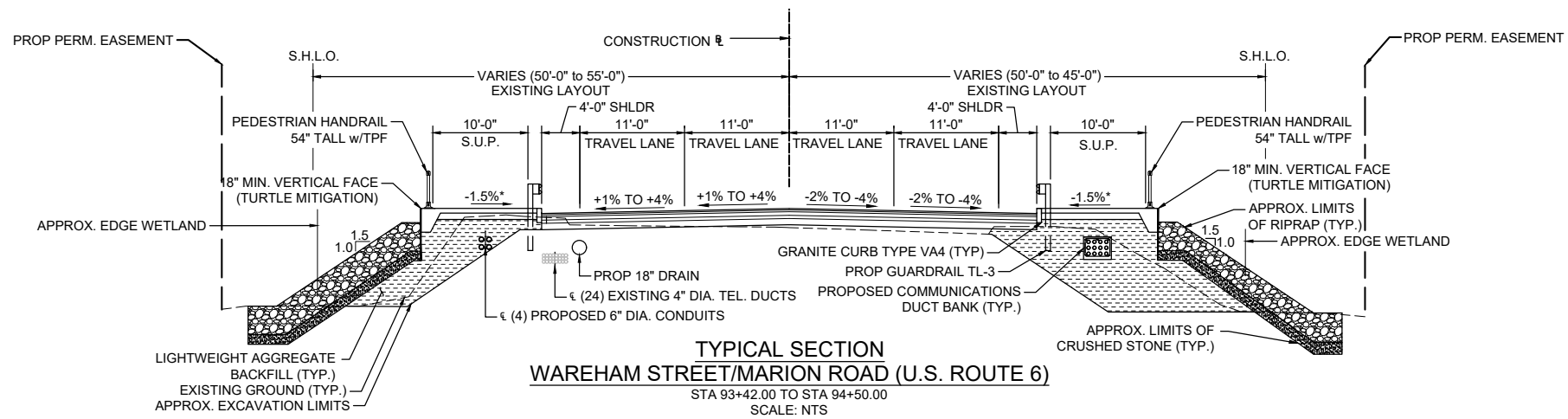
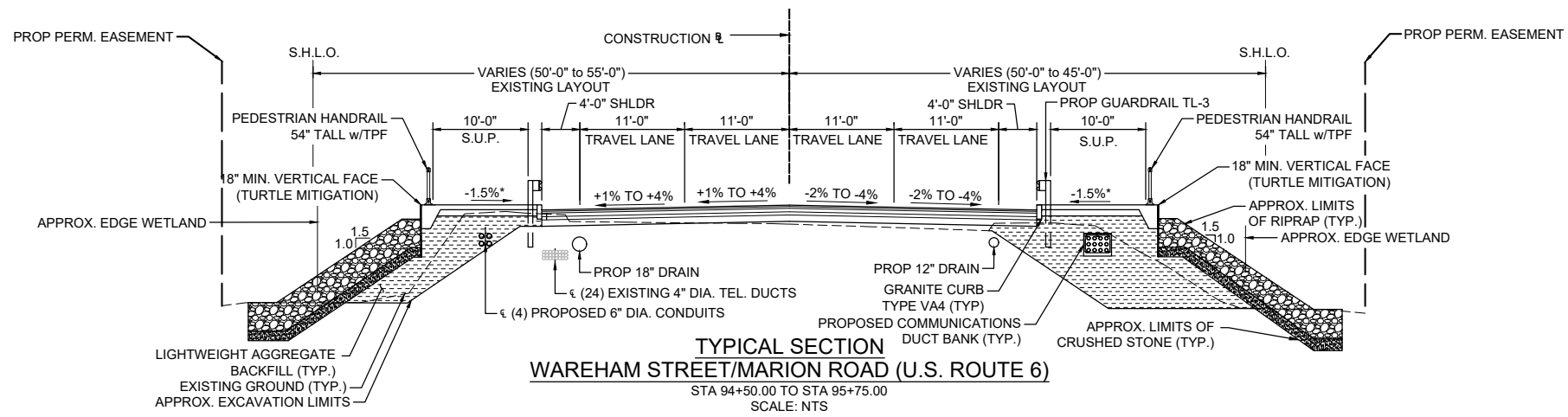
NOTE:
 • BASE FLOOD ELEV. (15.00') REFERENCED FROM FEMA FIRM MAP NO. 25023C0576K.
 • HIGH TIDE LINE ELEV. (3.78'), MEAN HIGH WATER ELEV. (1.65'), MEAN LOW WATER (-2.27') OBTAINED FROM TIDAL FLUSHING STUDY.

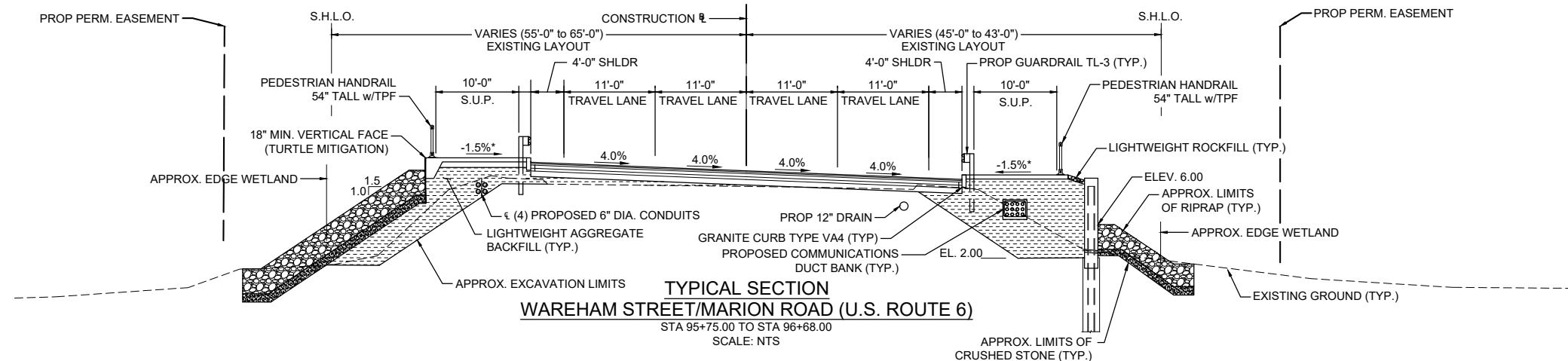
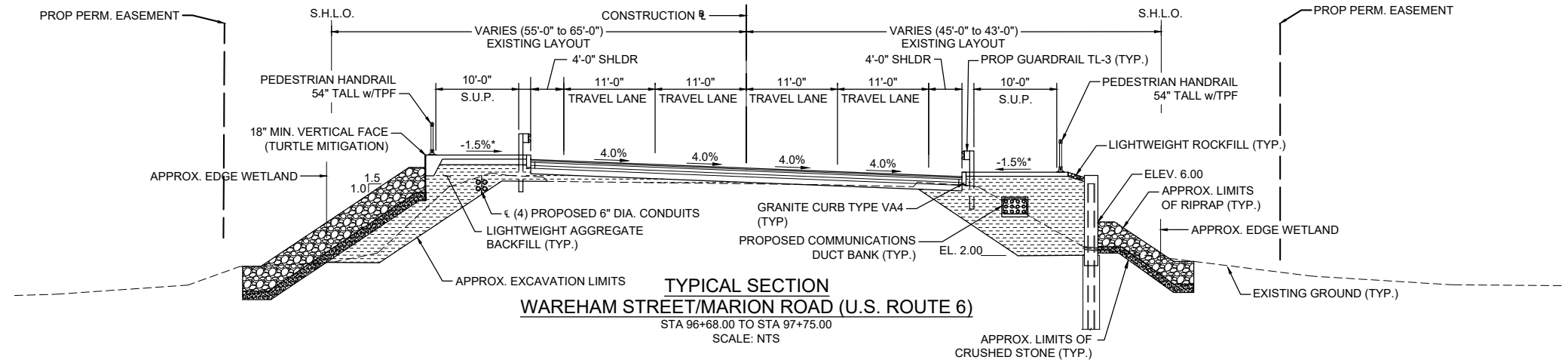
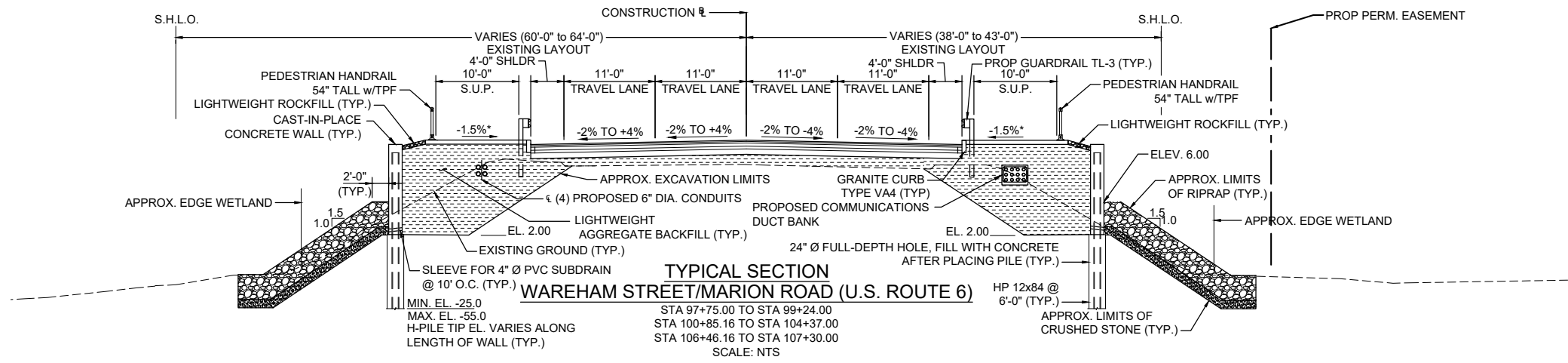
SHEET 24

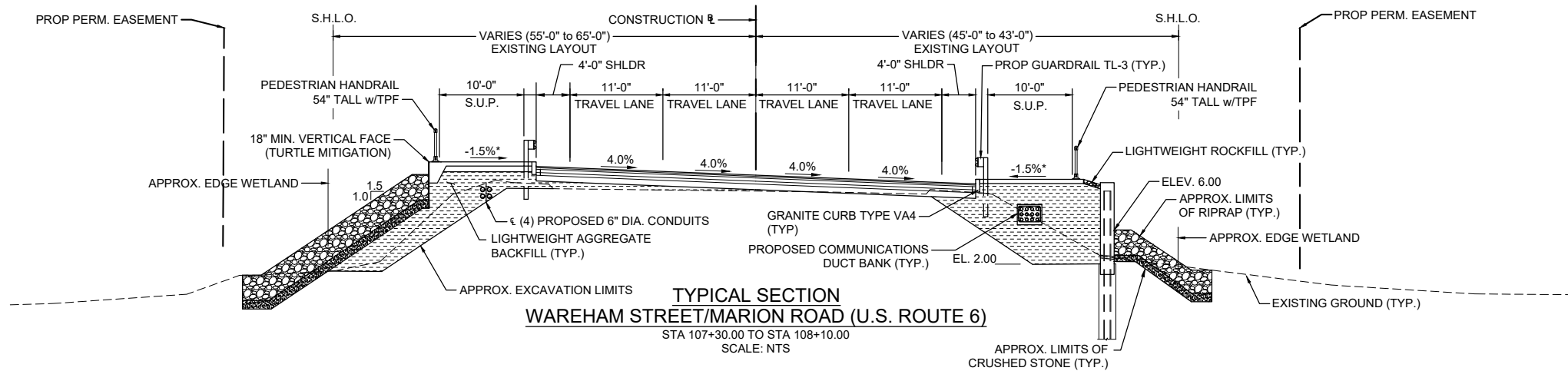
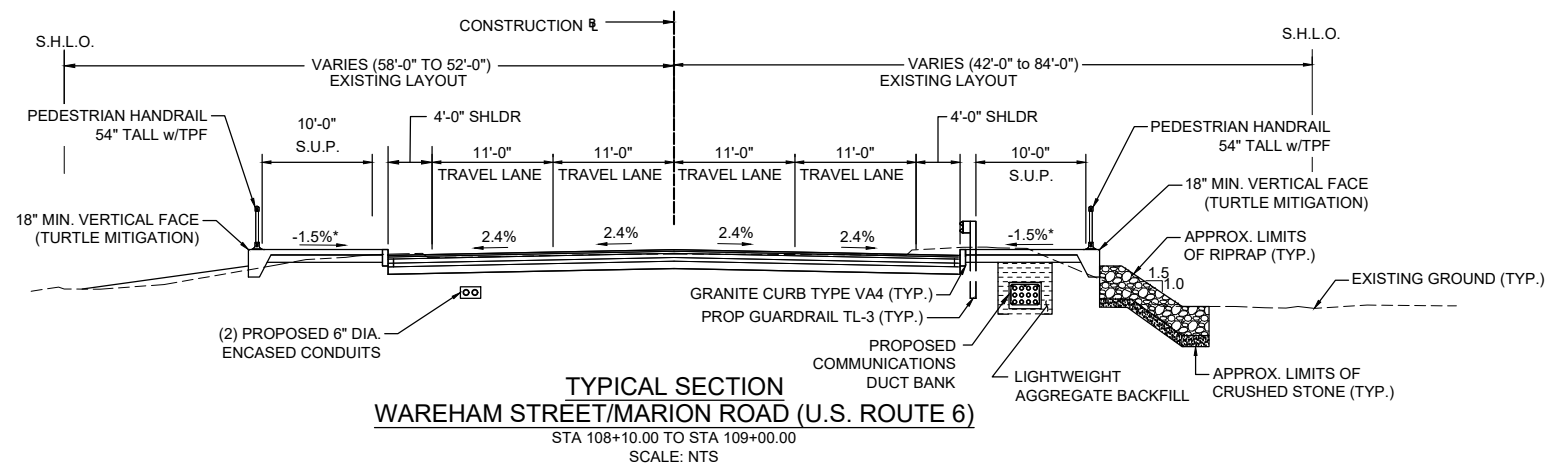
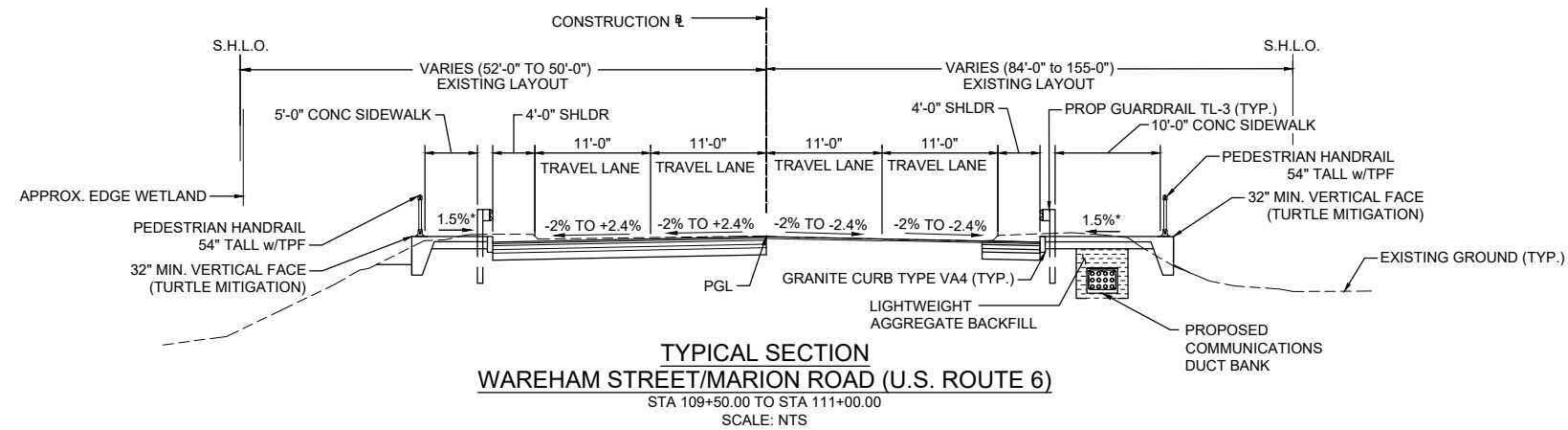


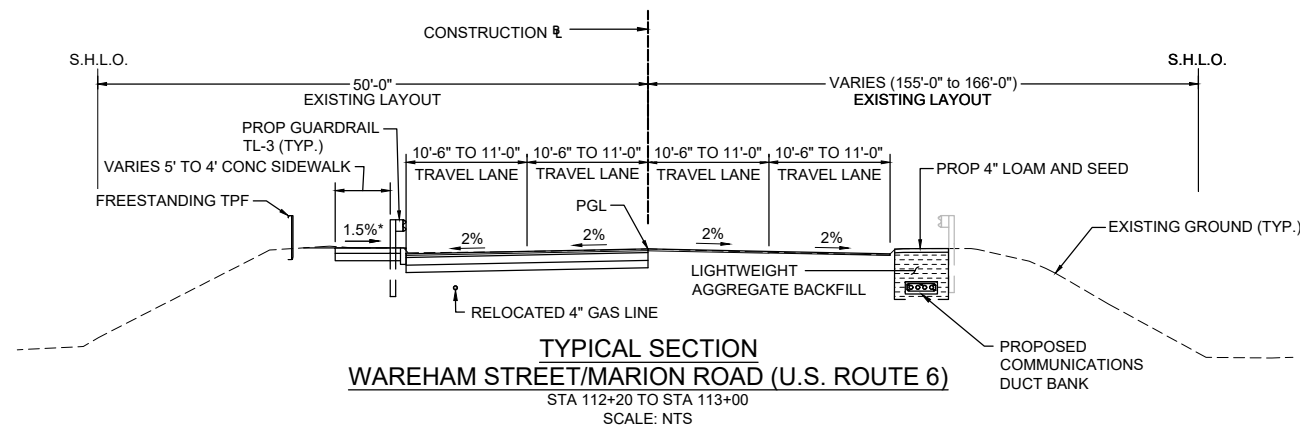
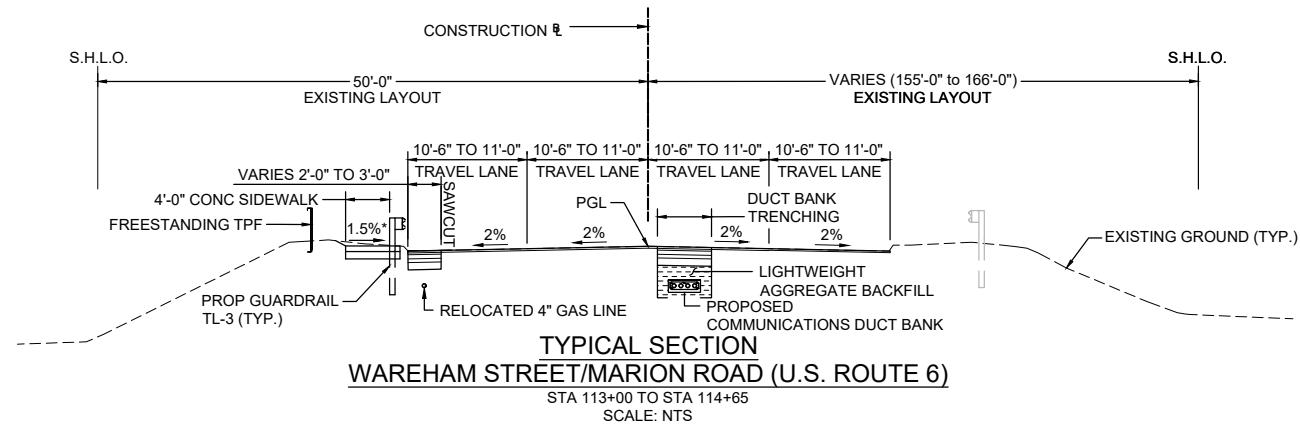
**MARION - WAREHAM
 WAREHAM STREET (US 6) OVER WEWEANTIC RIVER**

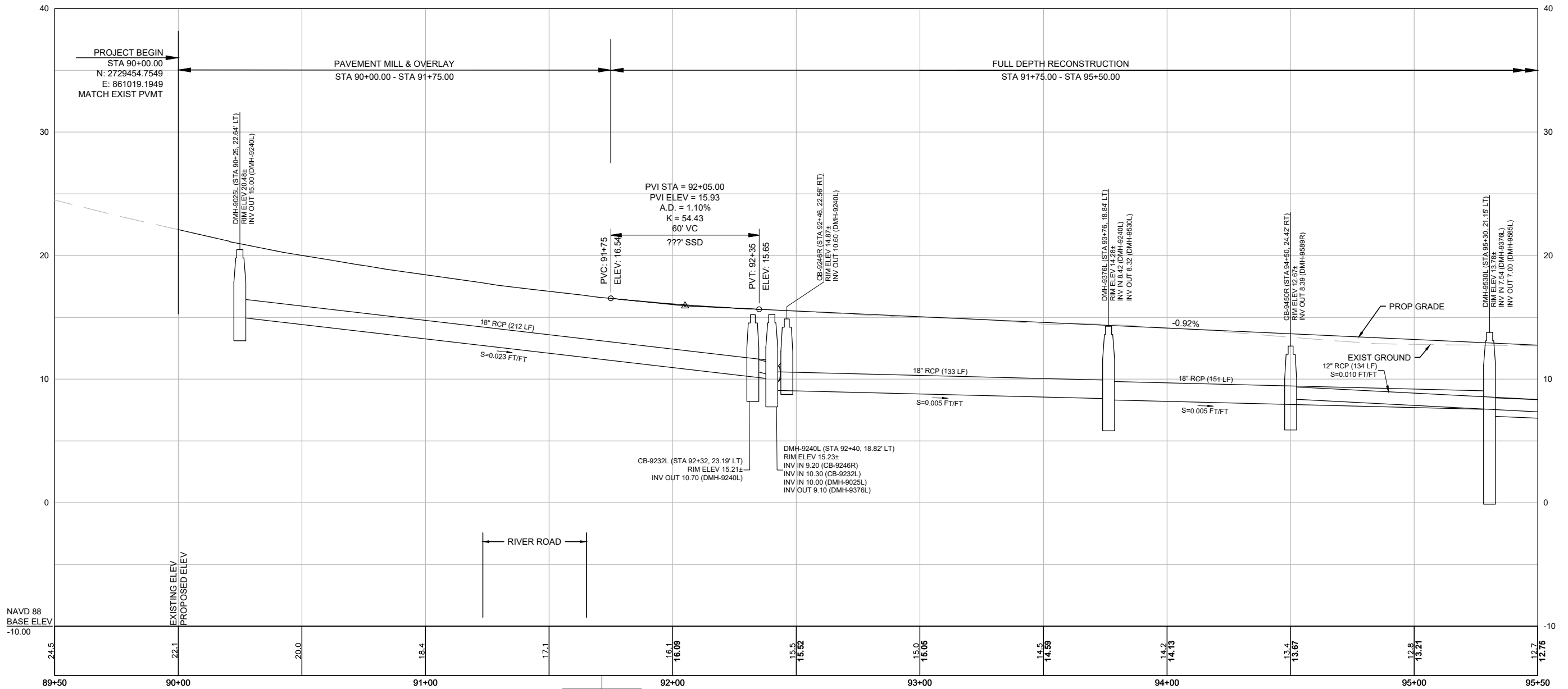








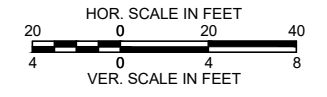




CONTINUED ON SHEET NO. 31

NAVD 88
BASE ELEV
-10.00

Temp. Benchmark #191
Bench. St. Up 1'
UPLP #33493
Elevation = 17.72
Sta. 91+71.36, 23.22 RT



SHEET 30

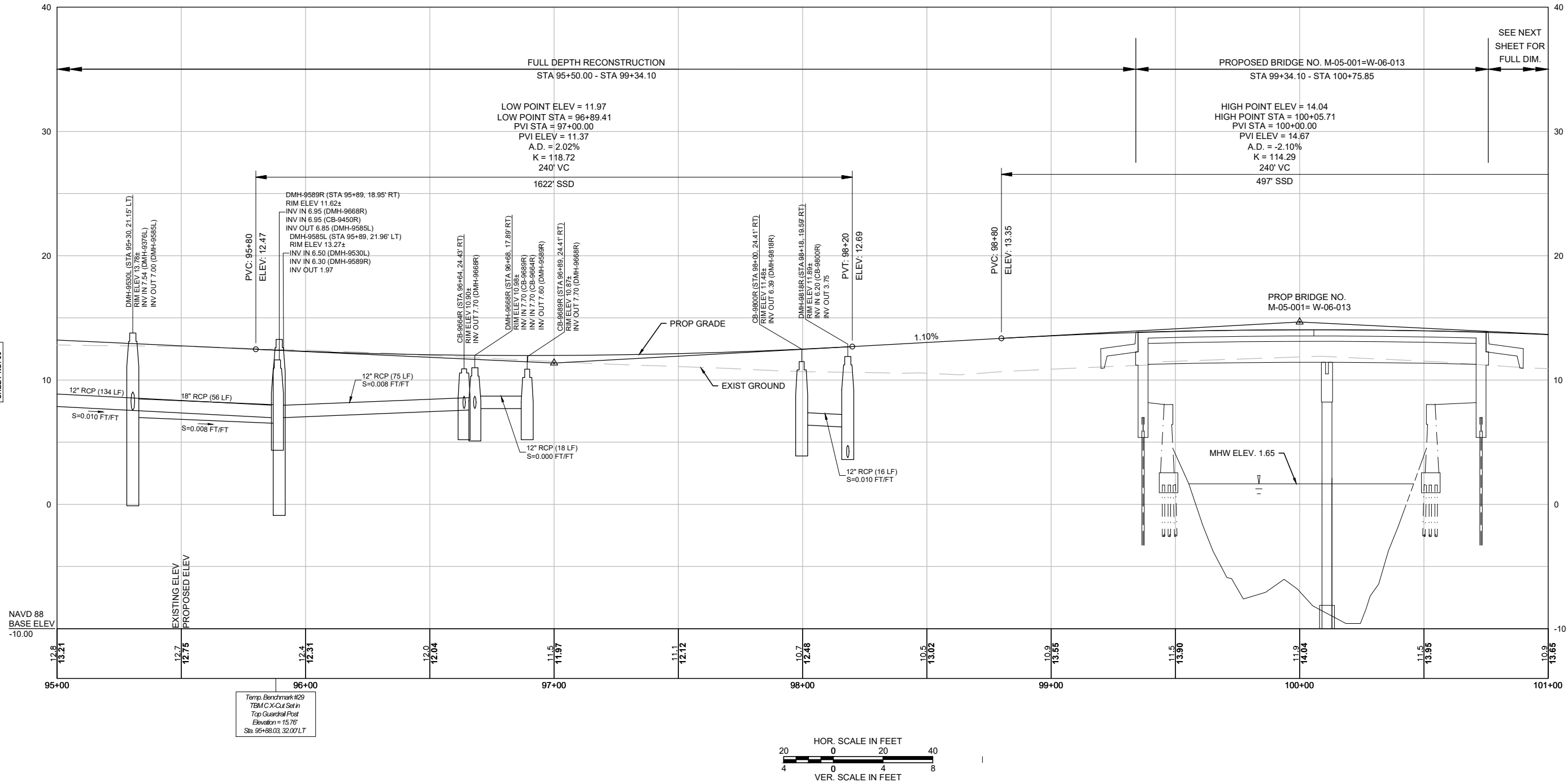


MARION - WAREHAM
WAREHAM STREET (US 6) OVER WEWEANTIC RIVER

HIGHWAY
PROFILE SHEET 1 OF 5

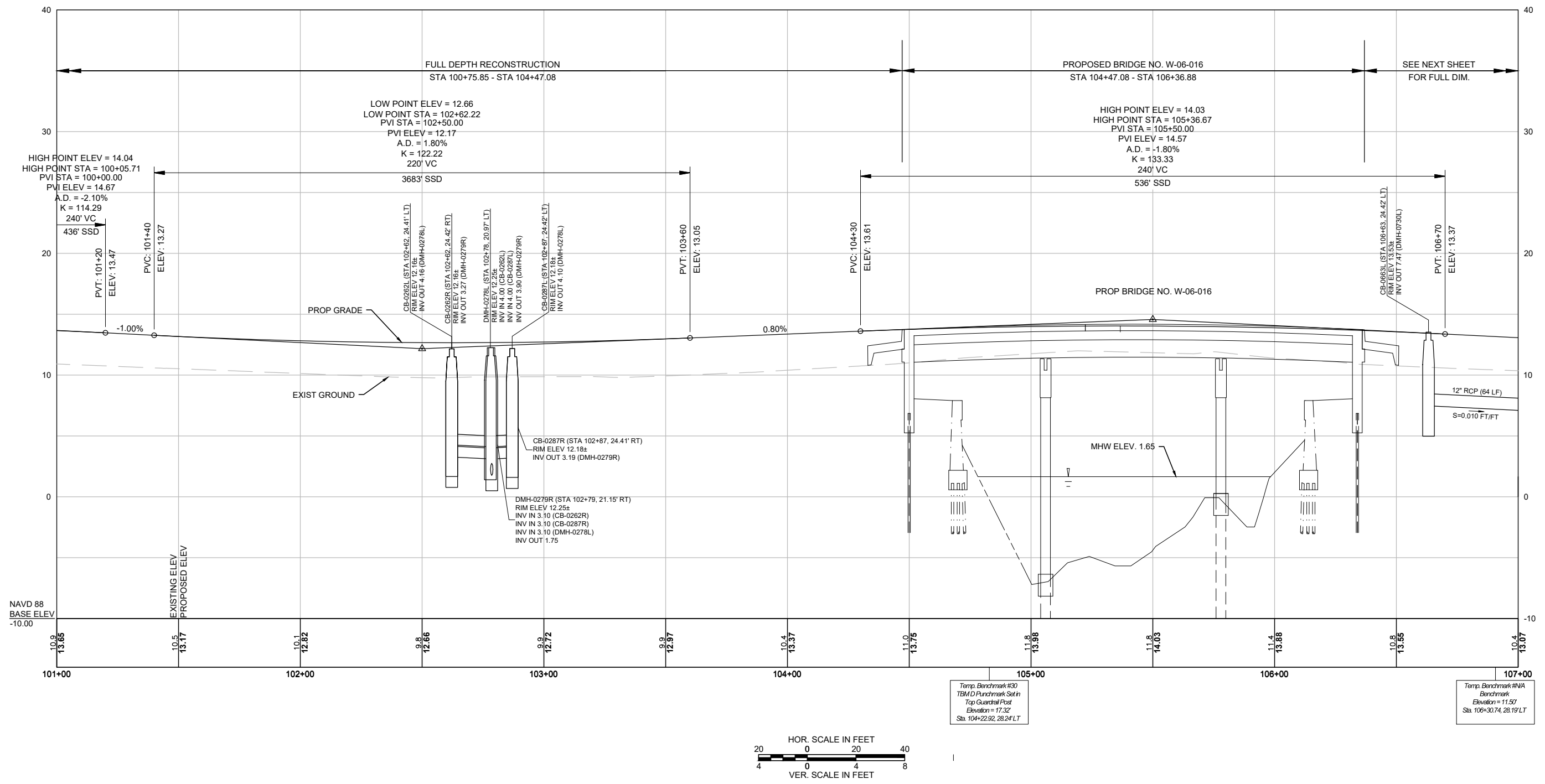
CONTINUED ON SHEET NO. 30

CONTINUED ON SHEET NO. 32



CONTINUED ON SHEET NO. 31

CONTINUED ON SHEET NO. 33



SHEET 32

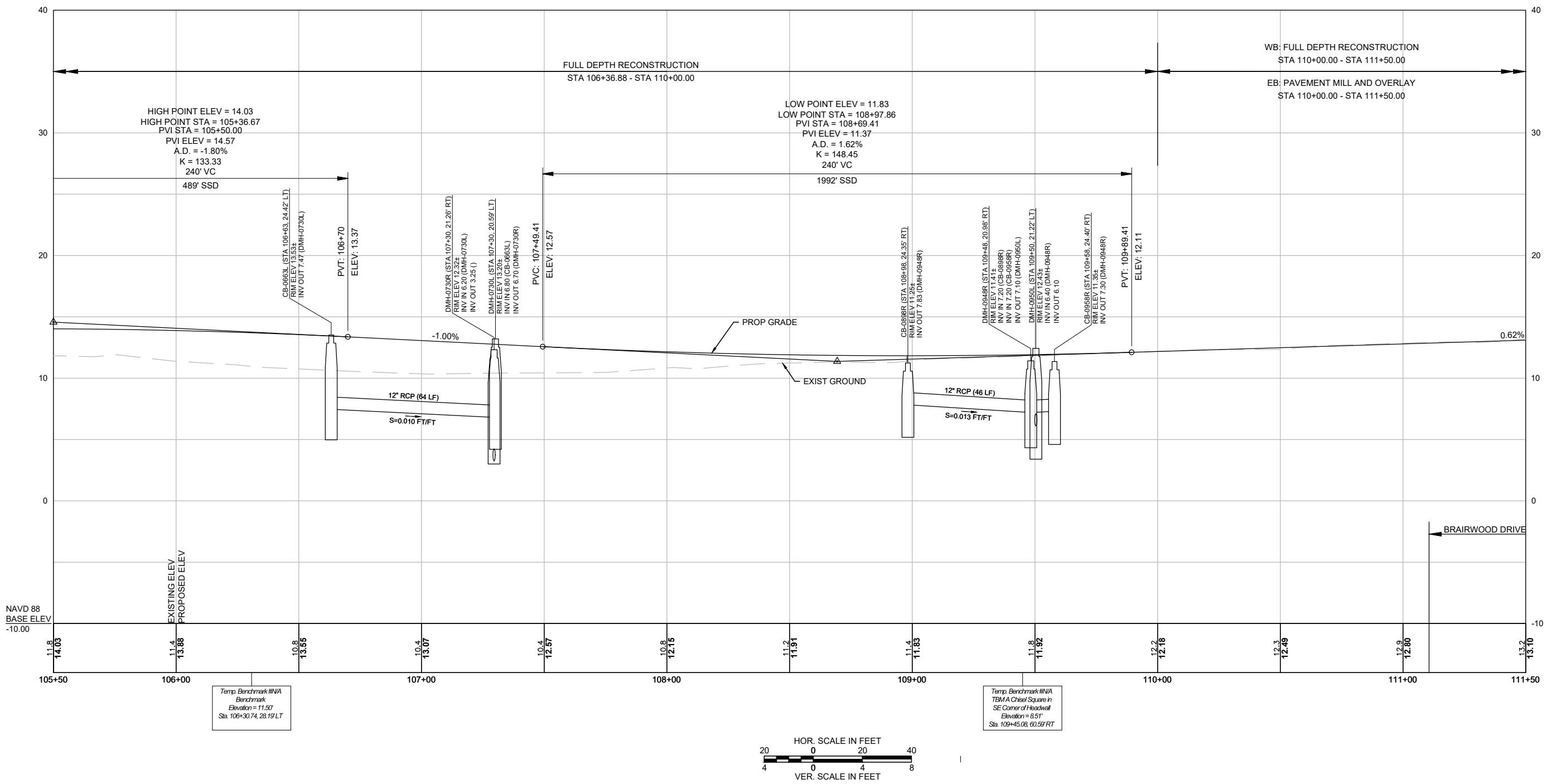


MARION - WAREHAM
WAREHAM STREET (US 6) OVER WEWEANTIC RIVER

HIGHWAY
PROFILE SHEET 3 OF 5

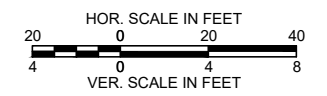
CONTINUED ON
SHEET NO. 32

CONTINUED ON
SHEET NO. 34



Temp. Benchmark #N/A
 Benchmark
 Elevation = 11.50'
 Sta. 106+30.74, 28.19' LT

Temp. Benchmark #N/A
 TBM/A Chest Square in
 SE Corner of Island
 Elevation = 8.51'
 Sta. 109+45.08, 60.59' RT



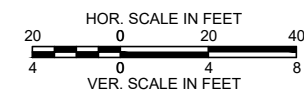
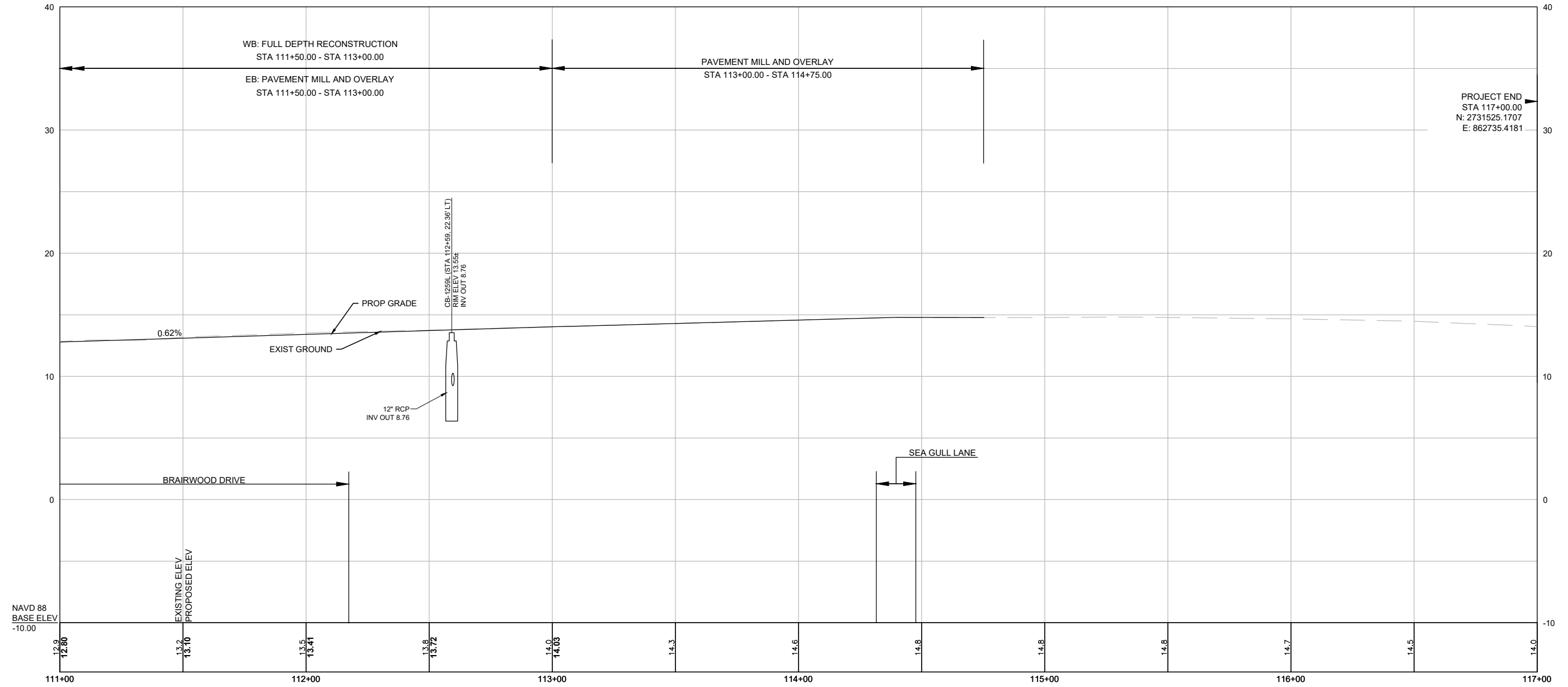
SHEET 33



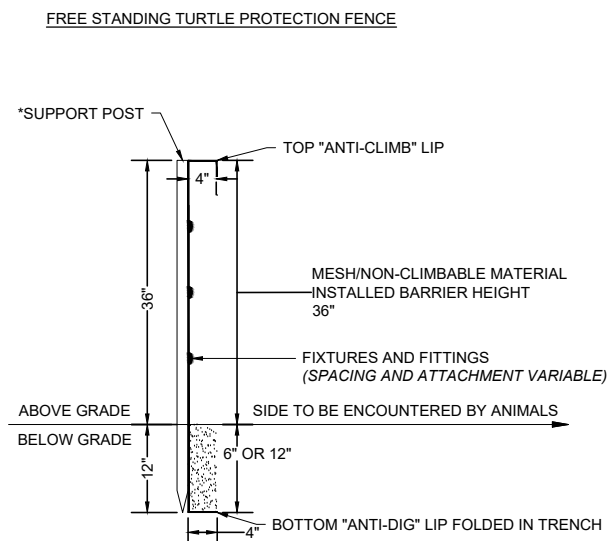
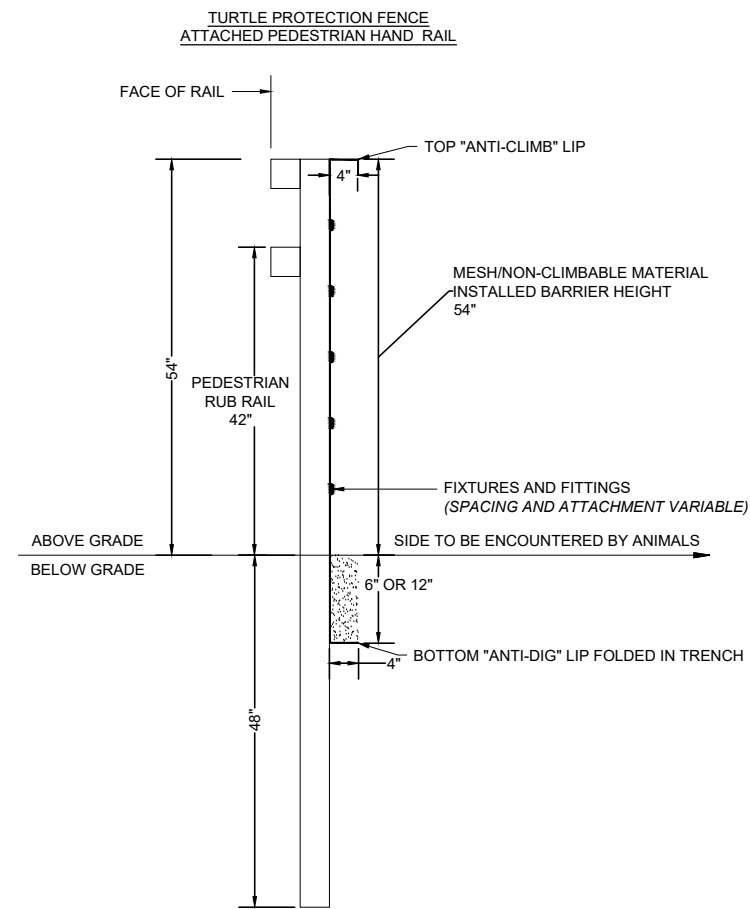
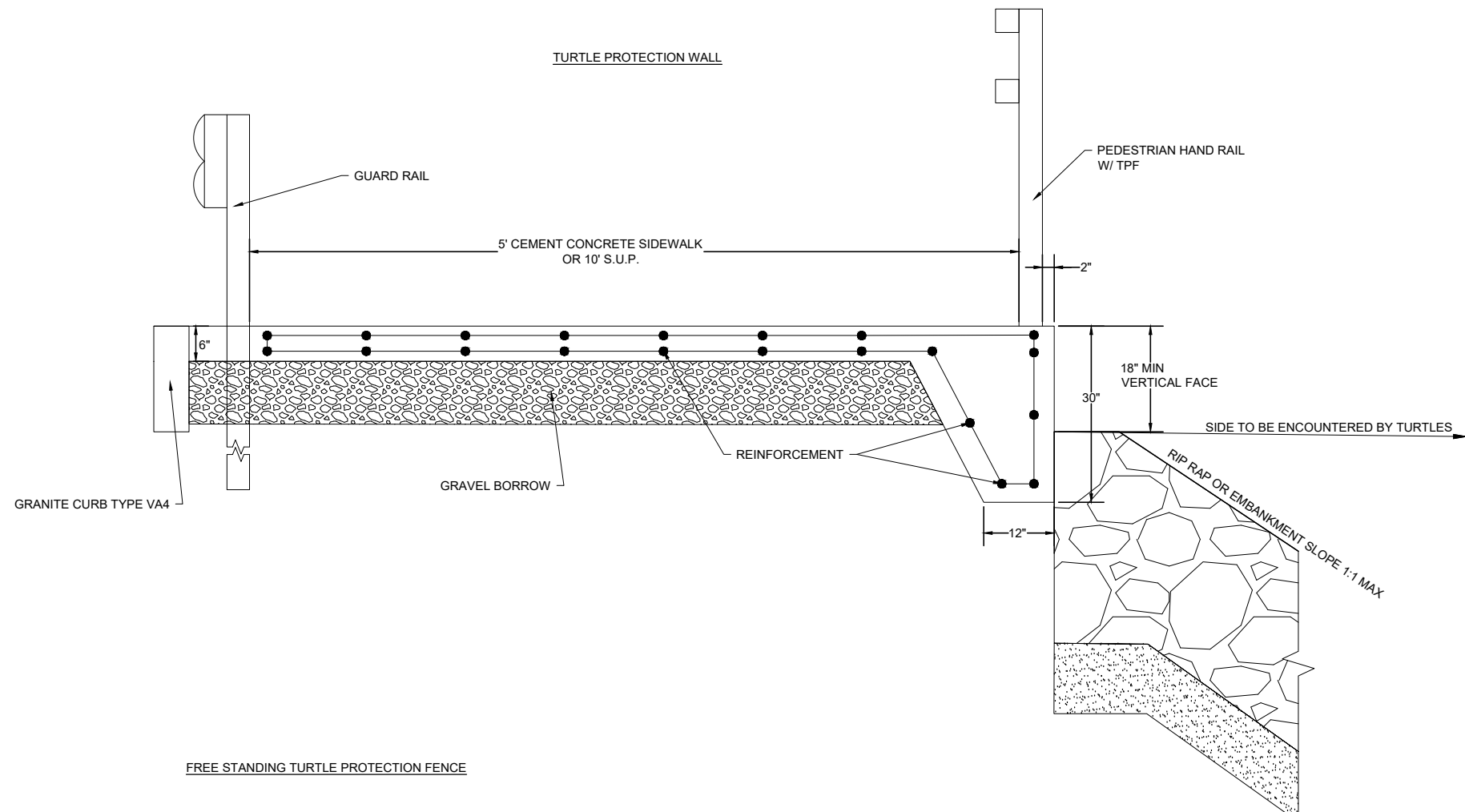
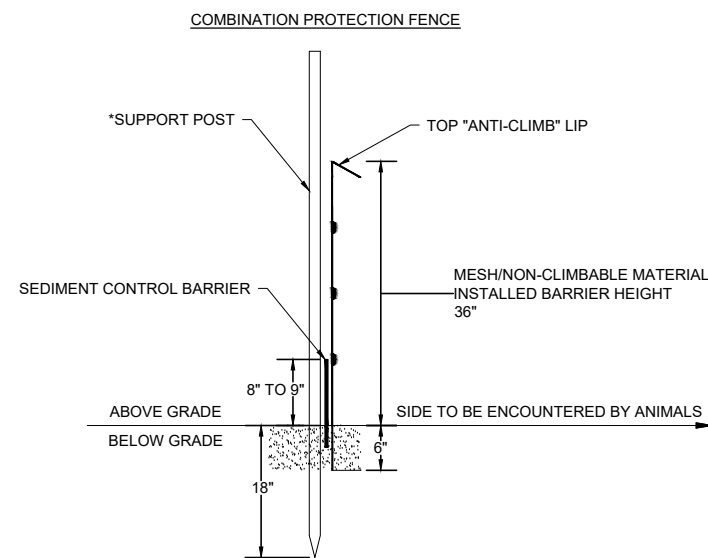
MARION - WAREHAM
 WAREHAM STREET (US 6) OVER WEWEANTIC RIVER

HIGHWAY
 PROFILE SHEET 4 OF 5

CONTINUED ON
SHEET NO. 33

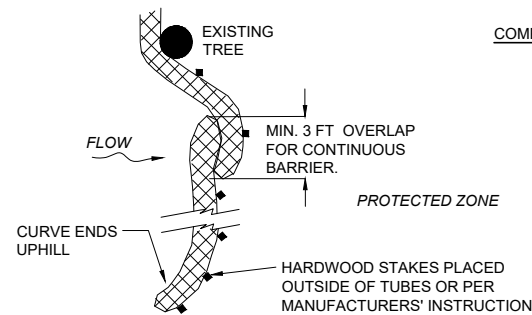


SHEET 34



TURTLE PROTECTION NOTES:

1. THESE SPECIFICATIONS SHOULD BE USED TO AID INSTALLATION. MEASUREMENTS ARE ACCURATE BUT MAY NEED TO BE ADJUSTED DEPENDENT ON LOCATION, CONDITIONS, AND LOCAL AUTHORITY RECOMMENDATIONS.
2. ONE-WAY TURTLE GATES TO BE INSTALLED ON TURTLE PROTECTION FENCE AND SPACED APPROXIMATELY EVERY 150 FEET. THE FINAL DESIGN AND LOCATION OF THE ONE-WAY TURTLE GATES IS TO BE COORDINATED BETWEEN THE CONTRACTOR AND MASSDOT ENVIRONMENTAL SERVICES - WILDLIFE UNIT, AND BASED UPON APPROVAL BY THE MASSACHUSETTS DIVISION OF FISHERIES AND WILDLIFE.
3. CONTRACTOR TO ENSURE NO GAPS ARE PRESENT BETWEEN THE TRANSITION BETWEEN TURTLE PROTECTION FENCE AND TURTLE PROTECTION WALL. MASSDOT ENVIRONMENTAL SERVICES - WILDLIFE UNIT TO REVIEW AND APPROVE FINAL DESIGN OF TURTLE PROTECTION FENCE END TREATMENTS.
4. FINAL DESIGN OF TURTLE PROTECTION GATE TO BE APPROVED BY MASSDOT ENVIRONMENTAL SERVICES - WILDLIFE UNIT AND THE MASSACHUSETTS DIVISION OF FISHERIES AND WILDLIFE.

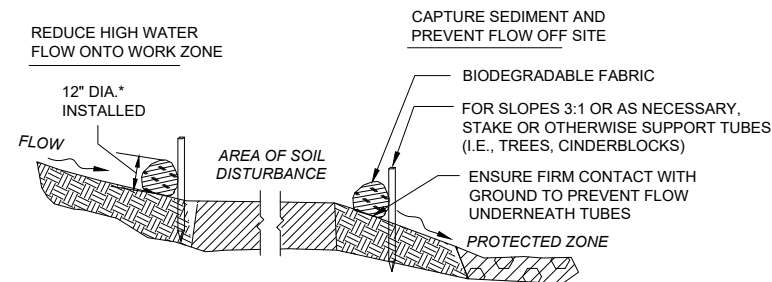


COMPOST FILTER TUBE

PLACE TUBE AS CLOSE TO LIMIT OF SOIL DISTURBANCE AS POSSIBLE, ALONG CONTOURS, AND PERPENDICULAR TO FLOW.

ADJUST LOCATION AS REQUIRED FOR OPTIMUM EFFECTIVENESS. DO NOT INSTALL IN WATERWAYS.

PLAN VIEW - JOIN DETAIL



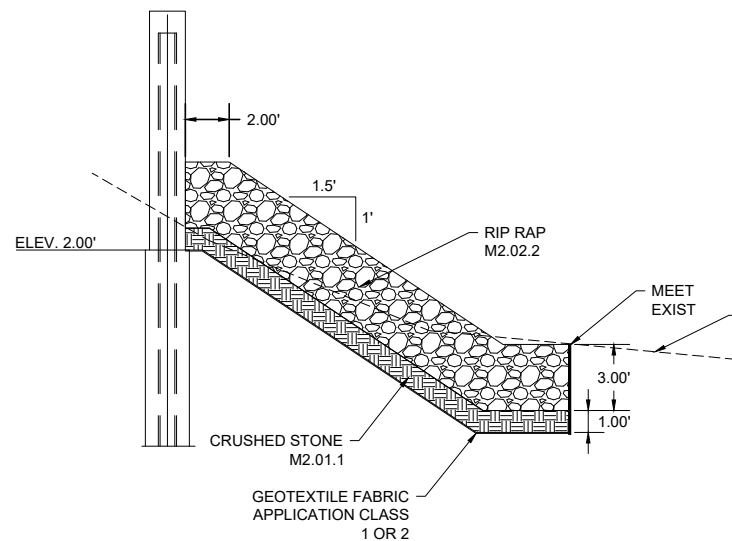
*9 INCH MAY BE USED FOR FLATTER SURFACES WITH APPROVAL FROM ENGINEER

SECTION

NOTE:

1. CONFIGURE TUBES AROUND EXISTING SITE FEATURES TO MINIMIZE SITE DISTURBANCE AND MAXIMIZE CAPTURE AREA OF STORMWATER RUNOFF.
2. TUBES MAY BE PLACED ON THE UPHILL SIDE OF WELL-ANCHORED, STATIONARY FEATURES, SUCH AS EXISTING TREES OR HEADWALLS, IN LIEU OF STAKING.
3. SLOPES LONGER THAN 50 FT. MAY REQUIRE TUBE DIAMETER GREATER THAN 12 IN. REFER TO MANUFACTURER RECOMMENDATIONS FOR SLOPES LONGER THAN 50 FT.
4. TUBE LOCATIONS MAY BE SHIFTED TO ADJUST TO EXISTING LANDSCAPE FEATURES, AND SHALL PROTECT UNDISTURBED AREA TO THE MAXIMUM EXTENT PRACTICABLE.
5. DO NOT INSTALL IN PERENNIAL, EPHEMERAL, OR INTERMITTENT STREAMS.
6. ADDITIONAL TUBES OR STAKING SHALL BE USED AT THE DIRECTION OF THE ENGINEER OR ENVIRONMENTAL MONITOR.
7. TYPE AND LOCATION OF EROSION CONTROL TO BE CONFIRMED WITH RESPECTIVE CONSERVATION COMMISSION PRIOR TO PROCUREMENT OR INSTALLATION.
8. INSTALLATION PROCEDURE TO BE SIMILAR FOR ALL TYPES.

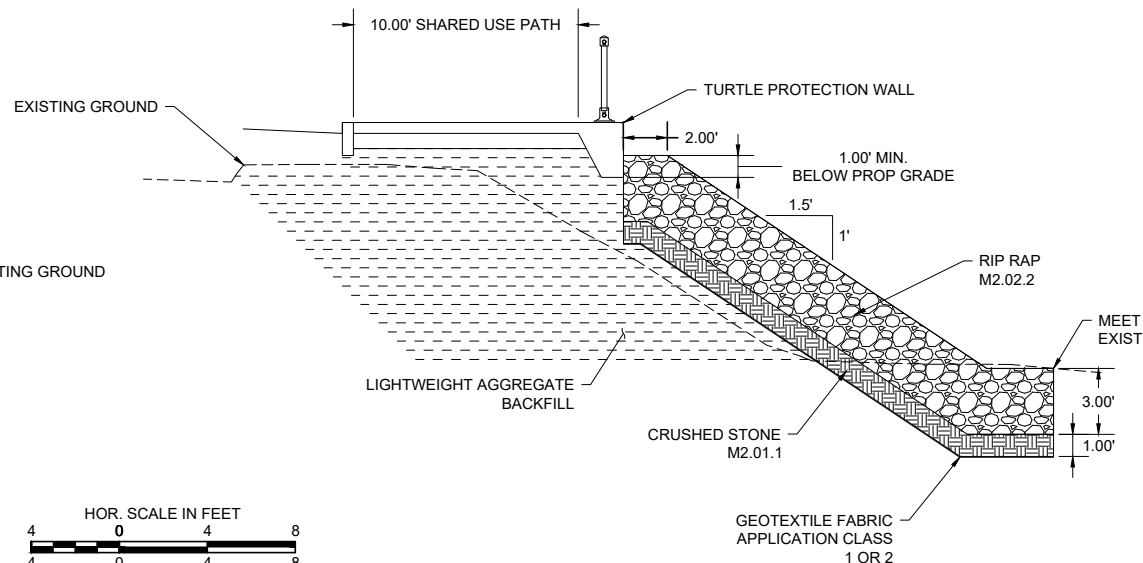
RIP RAP ATTACHED TO RETAINING WALL
NOT TO SCALE



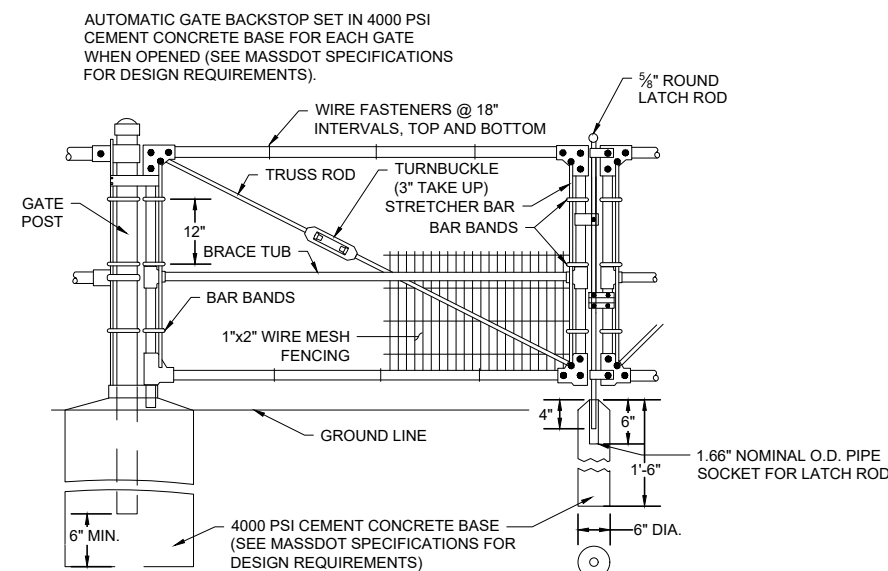
RIP RAP ATTACHED TO TURTLE PROTECTION WALL
NOT TO SCALE

NOTE:

1. RIP RAP SLOPE MAY BE 1 : 1 OR GREATER.



TURTLE PROTECTION FENCE GATE
NOT TO SCALE



PLANTING NOTES:

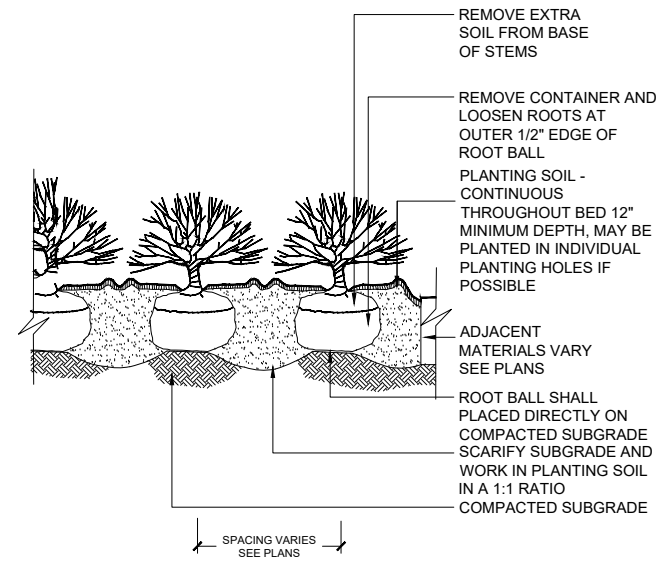
1. VERIFY EXISTING UTILITY LINES PRIOR TO PLANTING AND REPORT CONFLICTS TO THE RESIDENT ENGINEER.
2. CONTRACTOR SHALL COORDINATE PLANTING INSTALLATION WITH WORK BEING DONE BY OTHERS.
3. TREES TO BE SAVED SHALL BE PROTECTED. USE TREE AND PLANT PROTECTION - VISIBILITY STAKES. WORK SHALL NOT OCCUR BEYOND AREA DELINEATED BY STAKES.
4. NO PLANTING SHALL OCCUR PRIOR TO ACCEPTANCE OF FINAL GRADING.
5. PLANT MATERIAL SHALL CONFORM TO THE MINIMUM GUIDELINES ESTABLISHED BY THE AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. SEE SPECIFICATION FOR DETAILED REQUIREMENTS. PROPOSED SUBSTITUTIONS OF PLANT MATERIAL SHALL BE MADE WITH MATERIAL EQUIVALENT TO THE DESIRED MATERIAL IN OVERALL FORM, HEIGHT, BRANCHING HABIT, FLOWER, LEAF, COLOR, FRUIT AND CULTURE.
6. PLANT QUANTITIES NOTED IN THE PLANT SCHEDULE ARE APPROXIMATE AND ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FURNISHING AND INSTALLATION OF PLANT MATERIALS NOTED ON THE PLANTING PLAN.
7. PLANTED AREAS SHALL BE PITCHED A MINIMUM OF 0.75% TO 2% MAXIMUM FOR SALT MARSH AREA, AND 3:1 MAX OUTSIDE THE MITIGATION AREA.
8. INSTALL PLANTS WITH ROOT FLARES FLUSH WITH GRADE. IMMEDIATELY REPLANT PLANTS WHICH SETTLE OUT OF PLUMB OR BELOW FINISH GRADE. CAUTION SHALL BE USED NOT TO EXTEND MULCH LAYER ABOVE SOIL LEVEL AT TRUNKS/STEMS OF INSTALLED PLANT MATERIAL.
9. THE CONTRACTOR IS RESPONSIBLE FOR FULLY MAINTAINING PLANTING (INCLUDING BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) OF THE PLANTING AREAS UNTIL THE WORK IS ACCEPTED IN TOTAL BY THE RESIDENT ENGINEER. PROVIDE A MINIMUM

EQUIVALENT OF 1" OF RAIN PER WEEK DURING THE ESTABLISHMENT PERIOD. WATERING SHALL ONLY OCCUR UPLAND, MARSH WATERING IS NOT REQUIRED.

10. PLANT MATERIAL WHICH DIES, TURNS BROWN, OR DEFOLIATES (PRIOR TO FINAL ACCEPTANCE OF THE WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEET PLANT LIST SPECIFICATIONS.
11. THE CONTRACTOR SHALL COMPLETELY GUARANTEE PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR BEGINNING ON THE DATE OF FINAL ACCEPTANCE. THE CONTRACTOR SHALL PROMPTLY MAKE REPLACEMENTS BEFORE OR AT THE END OF THE GUARANTEE PERIOD, AS DIRECTED BY THE RESIDENT ENGINEER WITHIN THE SPECIFIED PLANTING WINDOW.

NOTES:

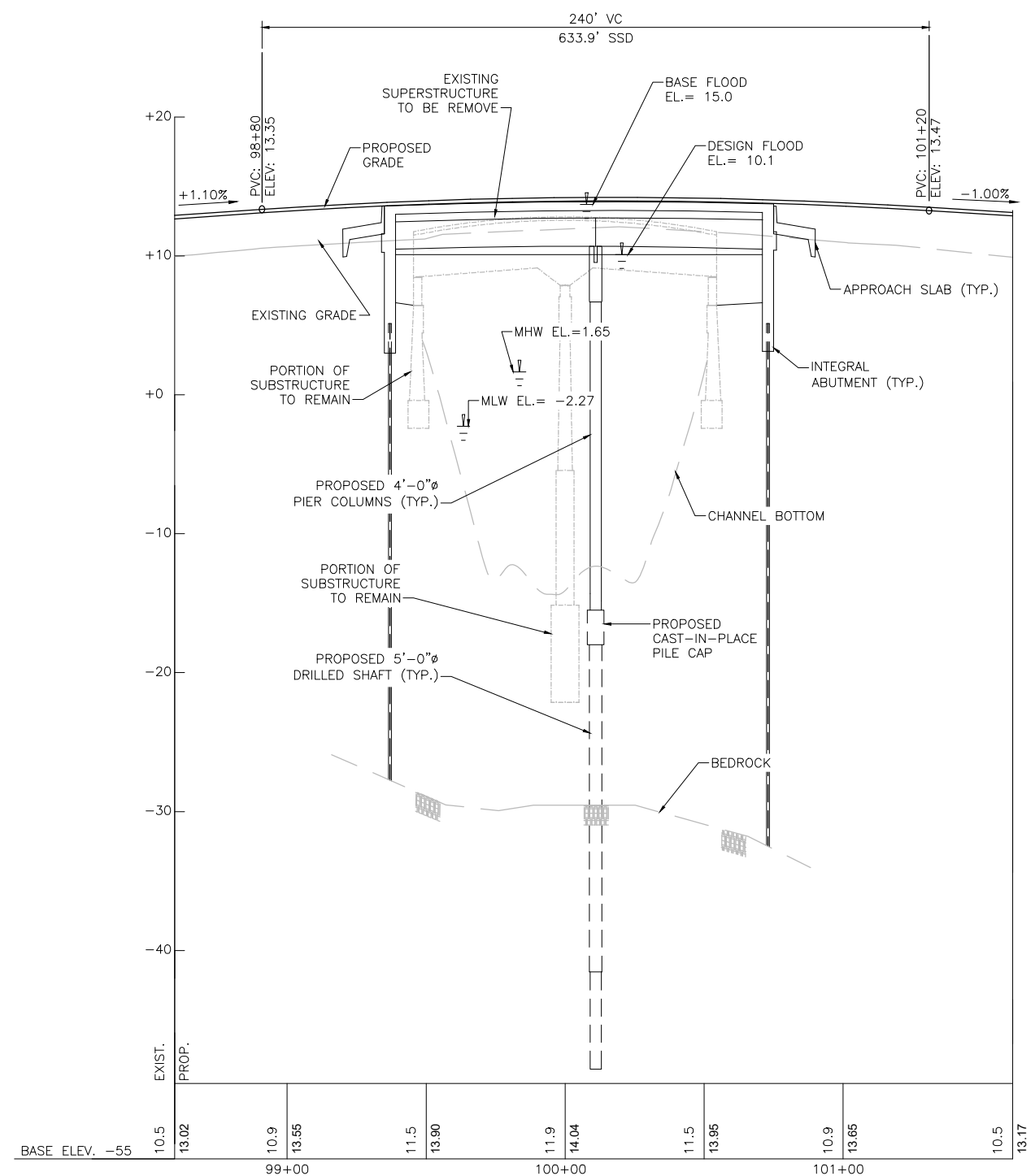
1. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. NO PRUNING OR CUTTING UNLESS DIRECTED BY THE WETLAND SPECIALIST.
3. SAUCER SHALL BE FLOODED TWICE DURING THE FIRST 24 HOURS AFTER PLANTING.
4. SHRUBS SHALL BE SET PLUMB AND PLANTED SO THAT THE TOP OF THE TOP OF THE ROOTS IS 1"-2" ABOVE FINISHED GRADE OR CONTAINER SURFACE IS AT GRADE.



SHRUB PLANTING BED

SCALE: NONE

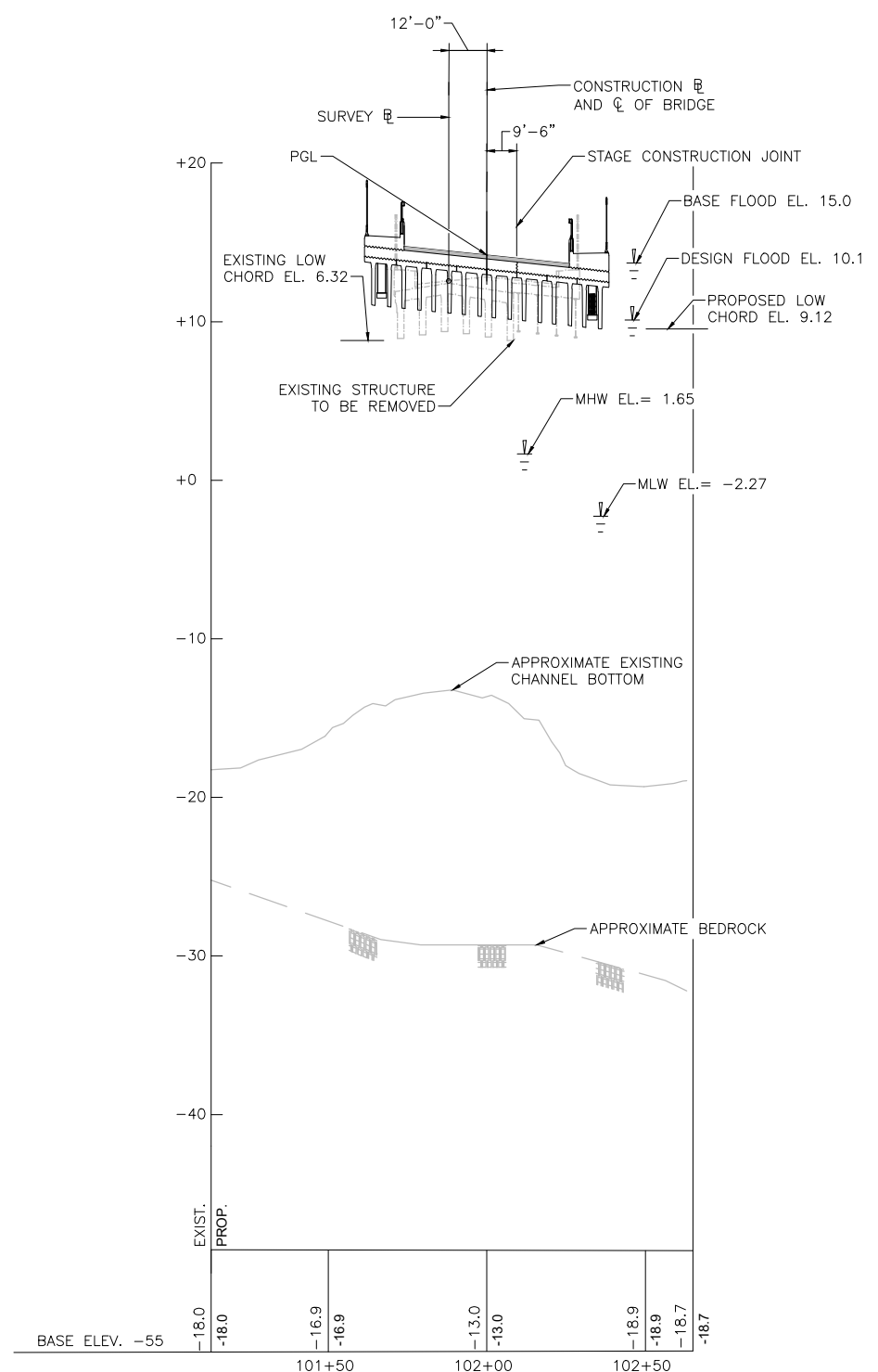
HIGH POINT ELEV = 14.04
 HIGH POINT STA = 100+05.71
 PVI STA = 100+00.00
 PVI ELEV = 14.67
 A.D. = -2.10%
 K = 114.29



PROFILE ALONG WAREHAM ROAD (US 6)

HORIZONTAL SCALE IN FEET 0 40 80

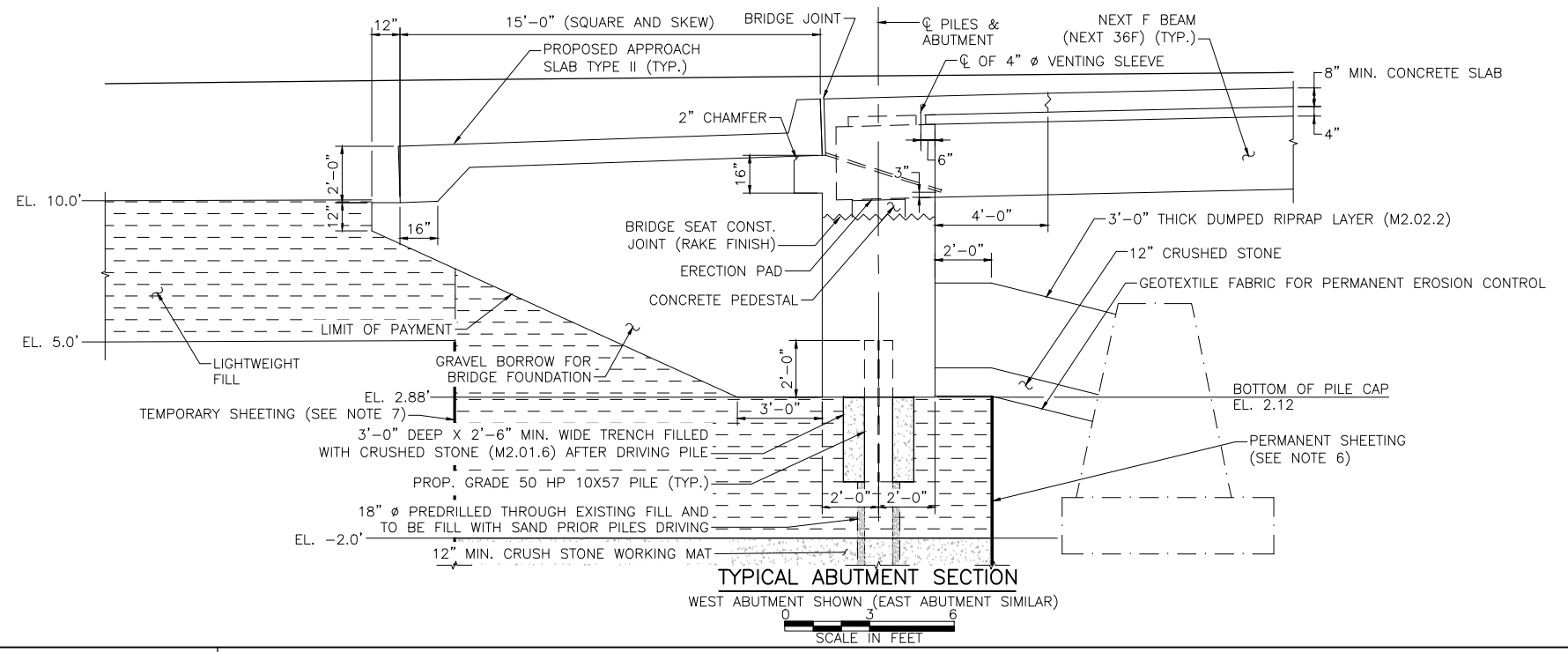
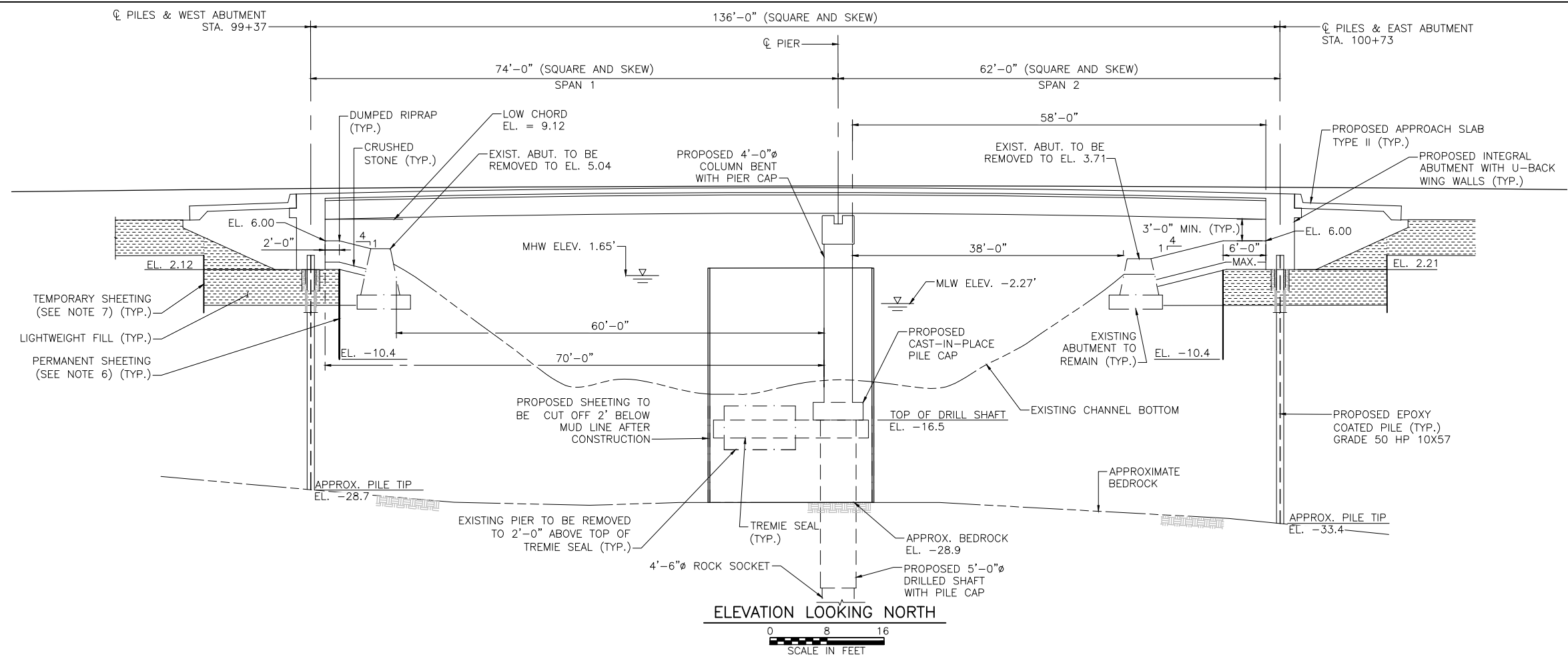
VERTICAL SCALE IN FEET 0 8 16



CHANNEL PROFILE (LOOKING UPSTATION)

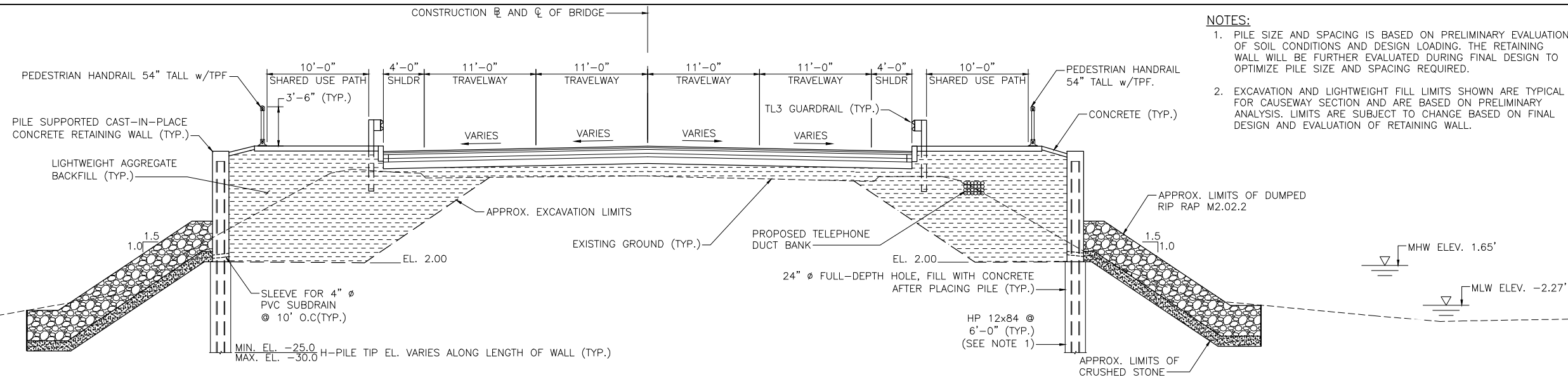
HORIZONTAL SCALE IN FEET 0 40 80

VERTICAL SCALE IN FEET 0 8 16



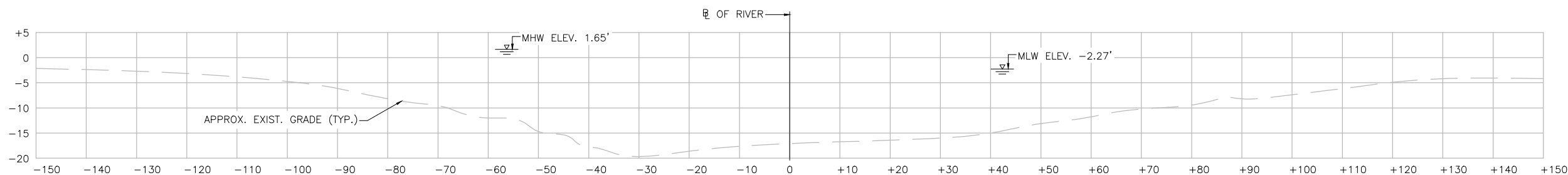
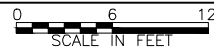
NOTES:

1. MINIMUM VERTICAL CLEARANCE AT MWH OCCURS AT THE SOUTHERN EXTERIOR GIRDER AT THE WEST END OF THE STRUCTURE. EXISTING VERTICAL CLEARANCE FROM MWH TO THE BOTTOM GIRDER FLANGE IS 4.92', PROPOSED MINIMUM VERTICAL CLEARANCE IS 7.42'.
2. THE FACTORED AXIAL DESIGN LOAD PER PILE IS 290 KIPS FOR WEST ABUTMENT AND 260 KIPS FOR EAST ABUTMENT PER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS STRENGTH I LOAD COMBINATION. THE FACTORED STRUCTURAL RESISTANCE PER PILE IS 417.5 KIPS.
3. THE FACTORED DRILLED SHAFT LOAD IS 1,067 KIPS. THE FACTORED DRILLED SHAFT RESISTANCE IS 5,535 KIPS.
4. THE DESIGN (25 YEAR) FLOOD ELEVATION IS 10.1'. THE BASE (100-YEAR) FLOOD ELEVATION IS 15.0'.
5. THE PRESSURE DESIGN SCOUR DEPTH IS 3.3', PRESSURE CHECK SCOUR DEPTH IS 7.1', PIER DESIGN SCOUR DEPTH IS 10.0', PIER CHECK SCOUR DEPTH IS 12.0'.
6. PERMANENT SHEETING FOR SCOUR PROTECTION, WATER CONTROL AND PLACEMENT OF LIGHTWEIGHT FILL. SHEETING TO BE DESIGNED TO MEET DESIGN SCOUR EVENT FOR PROTECTION OF PROPOSED ABUTMENTS. SEE SHEET 22 FOR PLAN LAYOUT.
7. TEMPORARY SHEETING FOR WATER CONTROL AND PLACEMENT OF LIGHTWEIGHT FILL. SEE SHEET 22 FOR PLAN LAYOUT.

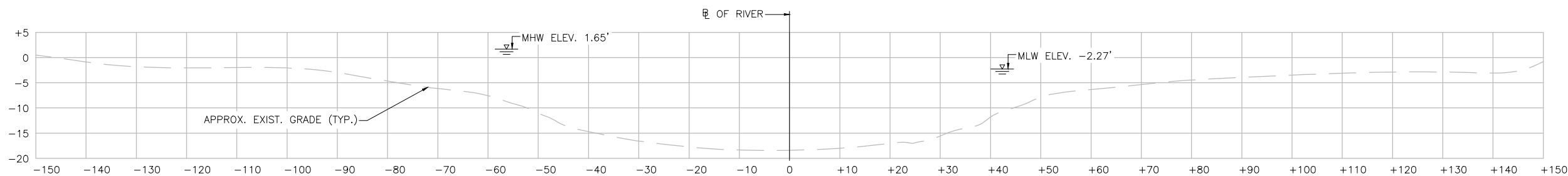


- NOTES:**
1. PILE SIZE AND SPACING IS BASED ON PRELIMINARY EVALUATION OF SOIL CONDITIONS AND DESIGN LOADING. THE RETAINING WALL WILL BE FURTHER EVALUATED DURING FINAL DESIGN TO OPTIMIZE PILE SIZE AND SPACING REQUIRED.
 2. EXCAVATION AND LIGHTWEIGHT FILL LIMITS SHOWN ARE TYPICAL FOR CAUSEWAY SECTION AND ARE BASED ON PRELIMINARY ANALYSIS. LIMITS ARE SUBJECT TO CHANGE BASED ON FINAL DESIGN AND EVALUATION OF RETAINING WALL.

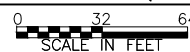
TYPICAL APPROACH SECTION

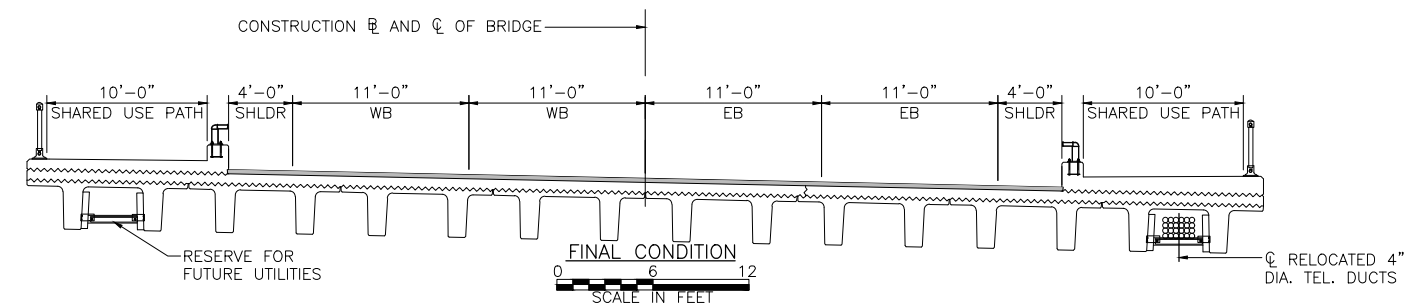
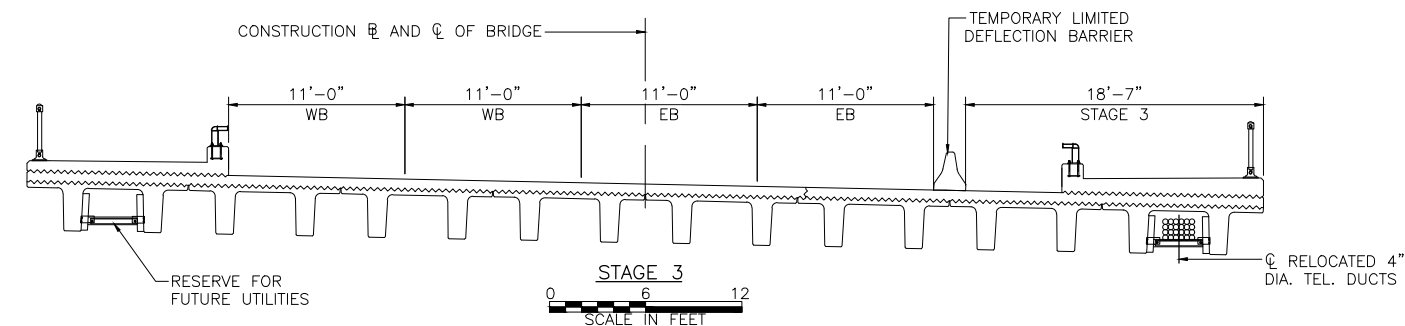
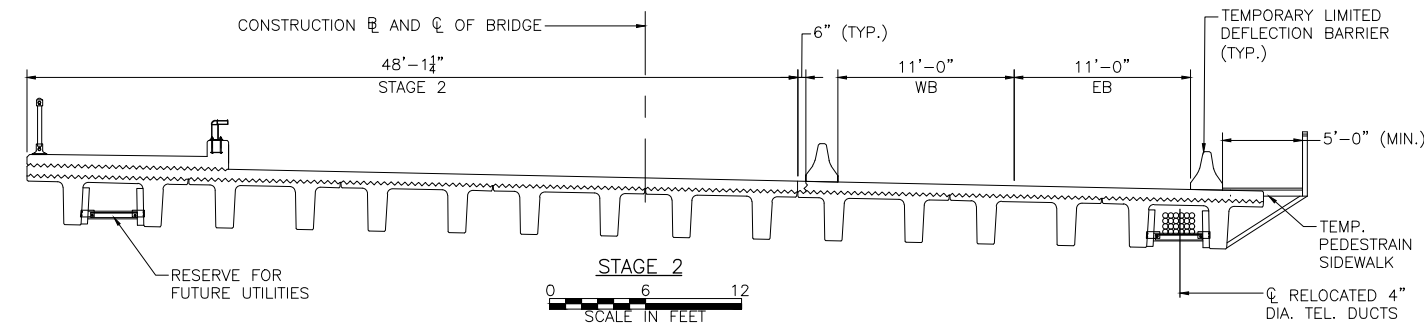
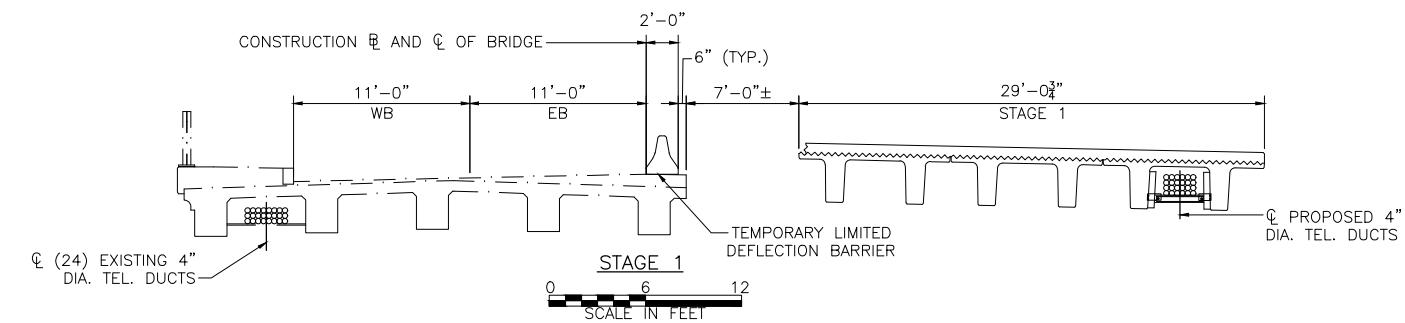
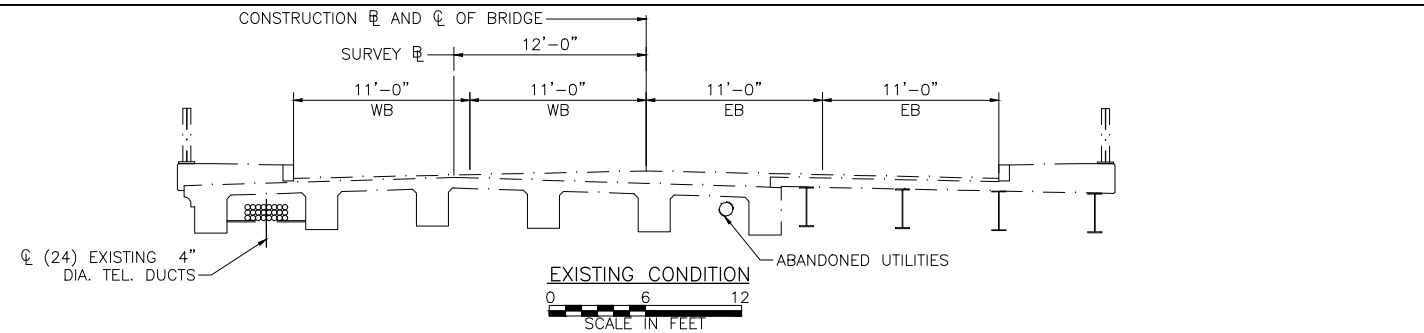


SECTION ACROSS RIVER CL AT STA. 101+28



SECTION ACROSS RIVER CL AT STA. 102+62
CHANNEL APPROACH SECTIONS (LOOKING NORTHWEST)



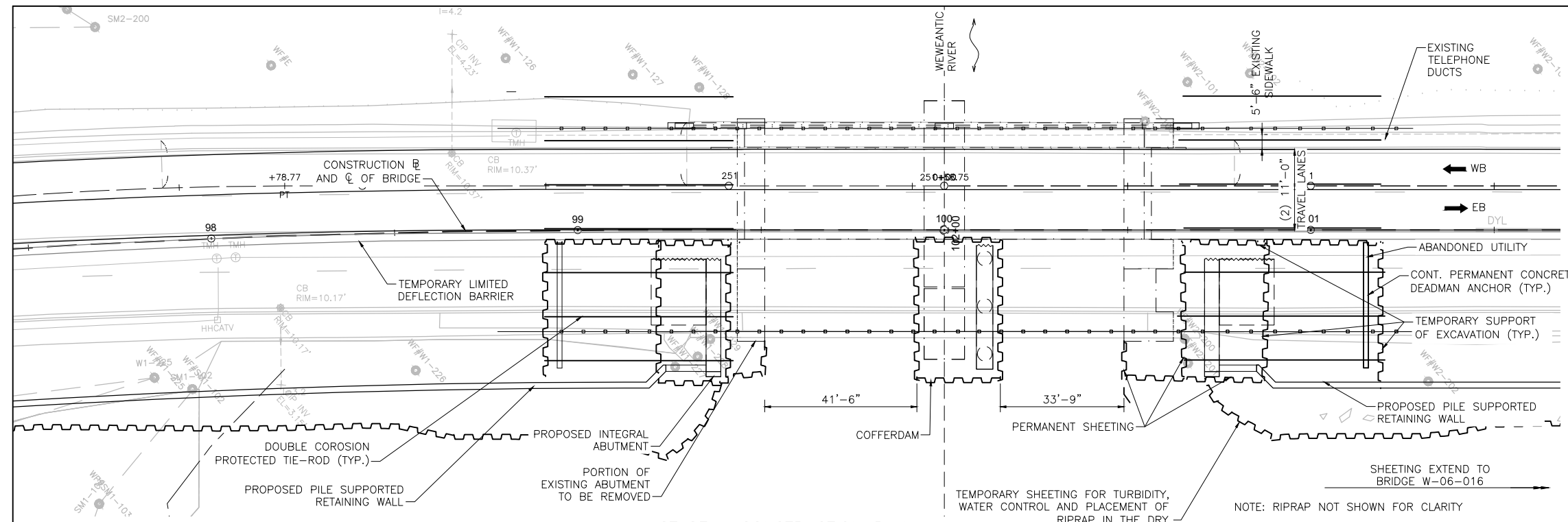


- STAGE 1:
- 1.1 SHIFT TRAFFIC TO THE NORTH MAINTAINING ONE LANE IN EACH DIRECTION.
 - 1.2 DEMOLISH SOUTHERLY PORTION OF EXISTING STRUCTURE.
 - 1.3 CONSTRUCT PORTION OF NEW STRUCTURE AS SHOWN.
 - 1.4 INSTALL 4" DIAMETER TELECOM DUCTS.

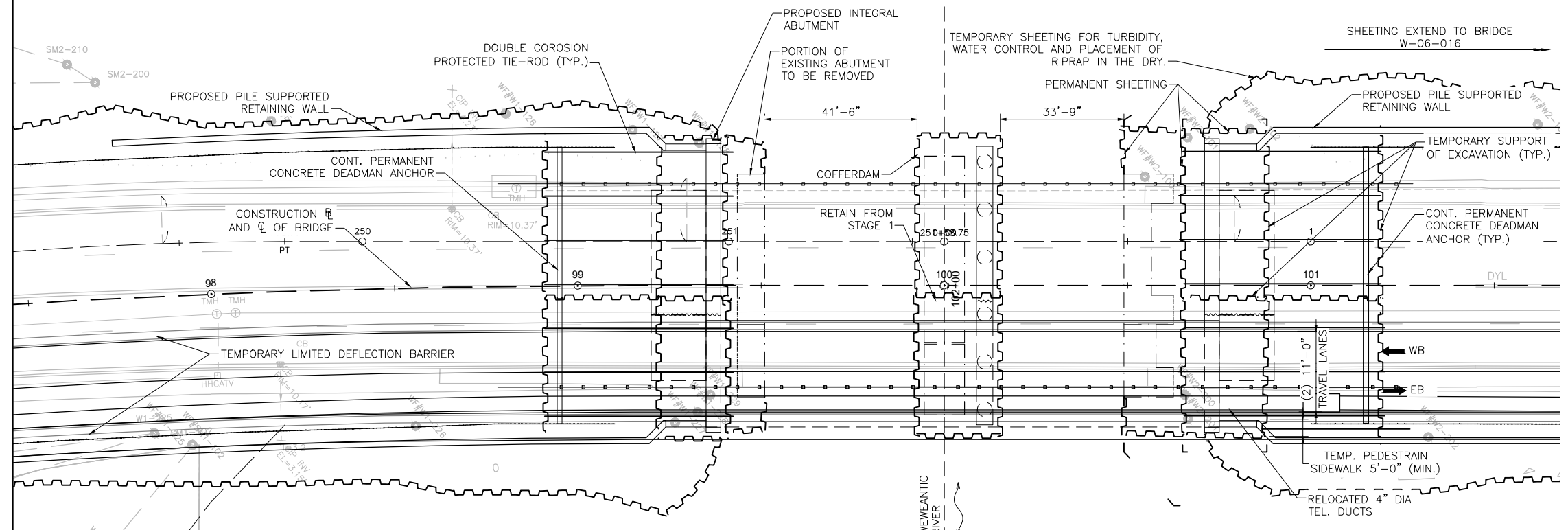
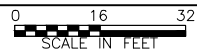
- STAGE 2:
- 2.1 SHIFT TRAFFIC TO SOUTHERLY PORTION OF NEW STRUCTURE MAINTAINING ONE LANE IN EACH DIRECTION.
 - 2.2 CONSTRUCT REMAINDER OF NEW STRUCTURE AS SHOWN.
 - 2.3 CONSTRUCT NORTHERLY SHARED USE PATH AND BRIDGE RAIL.
 - 2.4 RELOCATE FIBER CABLES IN 4" DIAMETER TELECOM DUCTS

- STAGE 3:
- 3.1 SHIFT TRAFFIC NORTHERLY MAINTAINING FOUR LANES OF TRAFFIC, TWO IN EACH DIRECTION.
 - 3.2 CONSTRUCT SOUTHERLY SHARED USE PATH AND BRIDGE RAIL

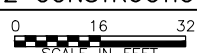
- FINAL STAGE:
- REMOVE BARRIER AND INSTALL SPRAY APPLIED WATER PROOFING MEMBRANE AND HMA WEARING SURFACE.



STAGE 1 CONSTRUCTION PLAN



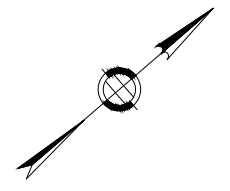
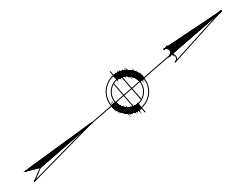
STAGE 2 CONSTRUCTION PLAN

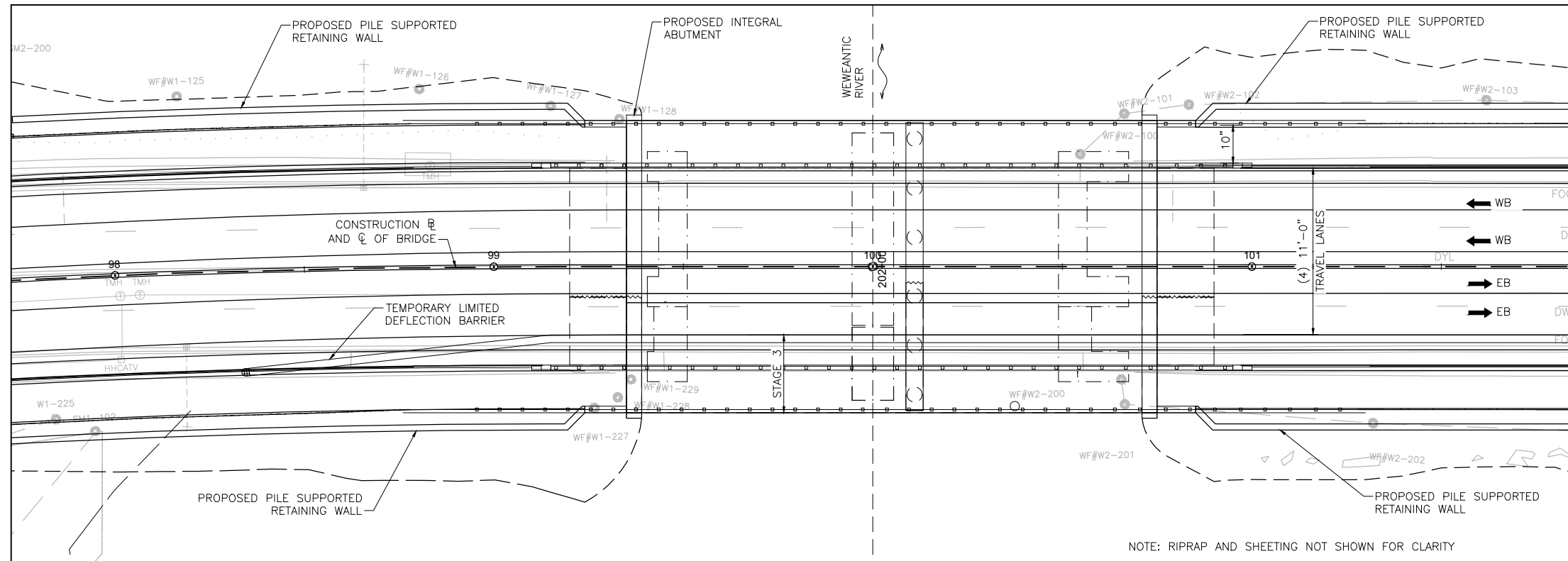


SUGGESTED SEQUENCE OF WATER CONTROL

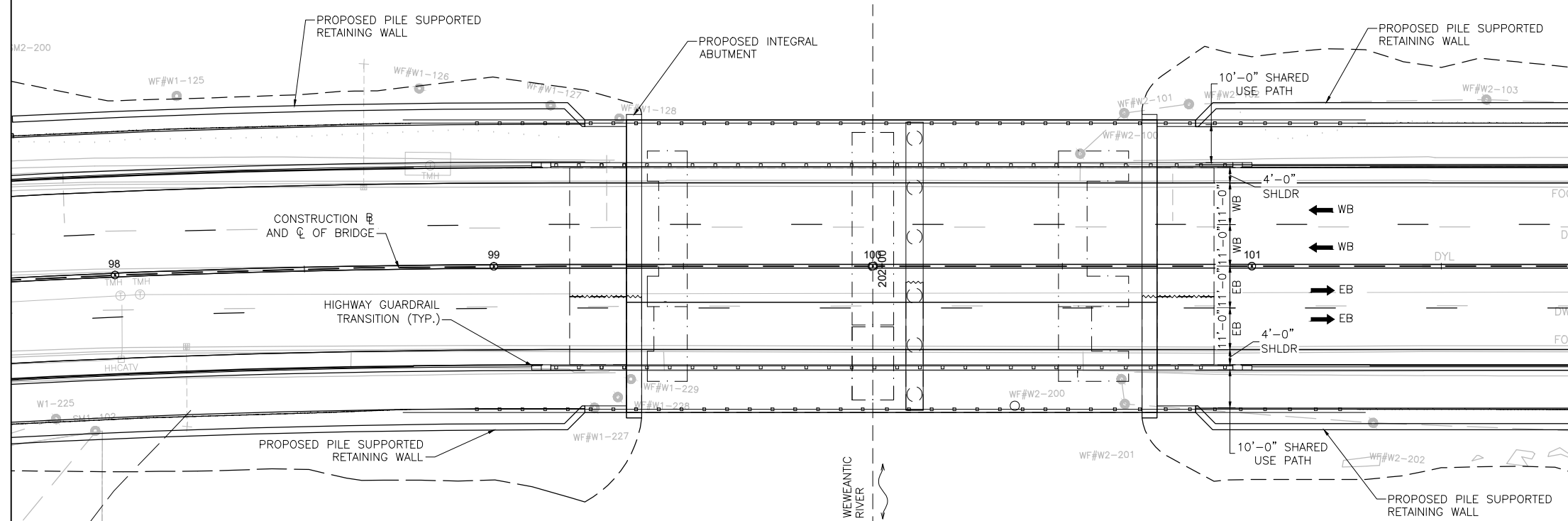
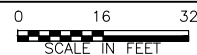
- STAGE 1:
- 1.1 DEMOLISH SOUTHERLY PORTION OF EXISTING STRUCTURE.
 - 1.2 INSTALL STAGE 1 PIER COFFERDAM AND TEMPORARY SHEETING.
 - 1.3 REMOVE SOUTHERLY PORTION OF PIER AND INTEGRAL ABUTMENTS.
 - 1.4 CONSTRUCT NEW SOUTHERLY PORTION OF PIER AND INTEGRAL ABUTMENTS.
 - 1.5 REMOVE STAGE 1 PIER COFFERDAM AND TEMPORARY SHEETING.

- STAGE 2:
- 2.1 DEMOLISH NORTHERLY PORTION OF EXISTING SUPERSTRUCTURE.
 - 2.2 INSTALL STAGE 2 PIER COFFERDAM AND TEMPORARY SHEETING.
 - 2.3 REMOVE NORTHERLY PORTIONS OF THE EXISTING PIER AND ABUTMENTS TO SPECIFIED LIMITS.
 - 2.4 CONSTRUCT NEW NORTHERLY PORTION OF PIER AND INTEGRAL ABUTMENTS.
 - 2.5 REMOVE STAGE 2 PIER COFFERDAM AND TEMPORARY SHEETING.

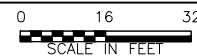




STAGE 3 CONSTRUCTION PLAN

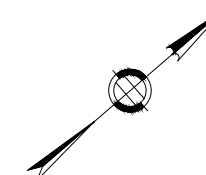
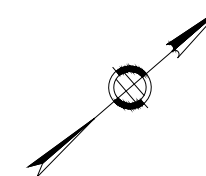


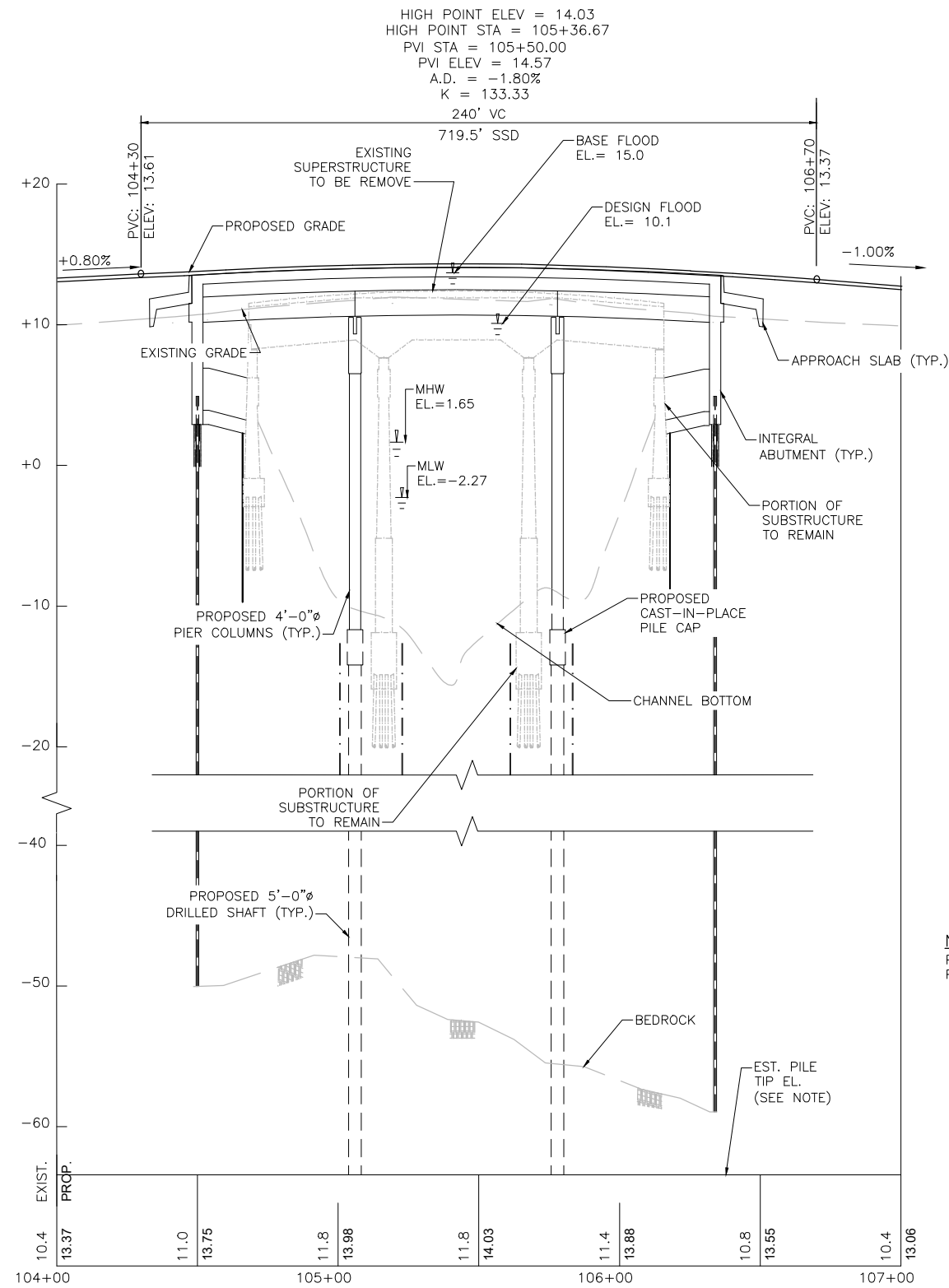
FINAL CONDITION



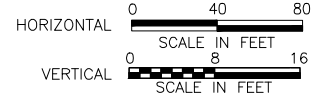
- STAGE 3:
- 3.1 SHIFT TRAFFIC NORTHERLY MAINTAINING FOUR LANES OF TRAFFIC, TWO IN EACH DIRECTION.
 - 3.2 CONSTRUCT SOUTHERLY SHARED USE PATH AND BRIDGE RAIL.

- FINAL STAGE:
- REMOVE BARRIER AND INSTALL SPRAY APPLIED WATER PROOFING MEMBRANE AND HMA WEARING SURFACE.

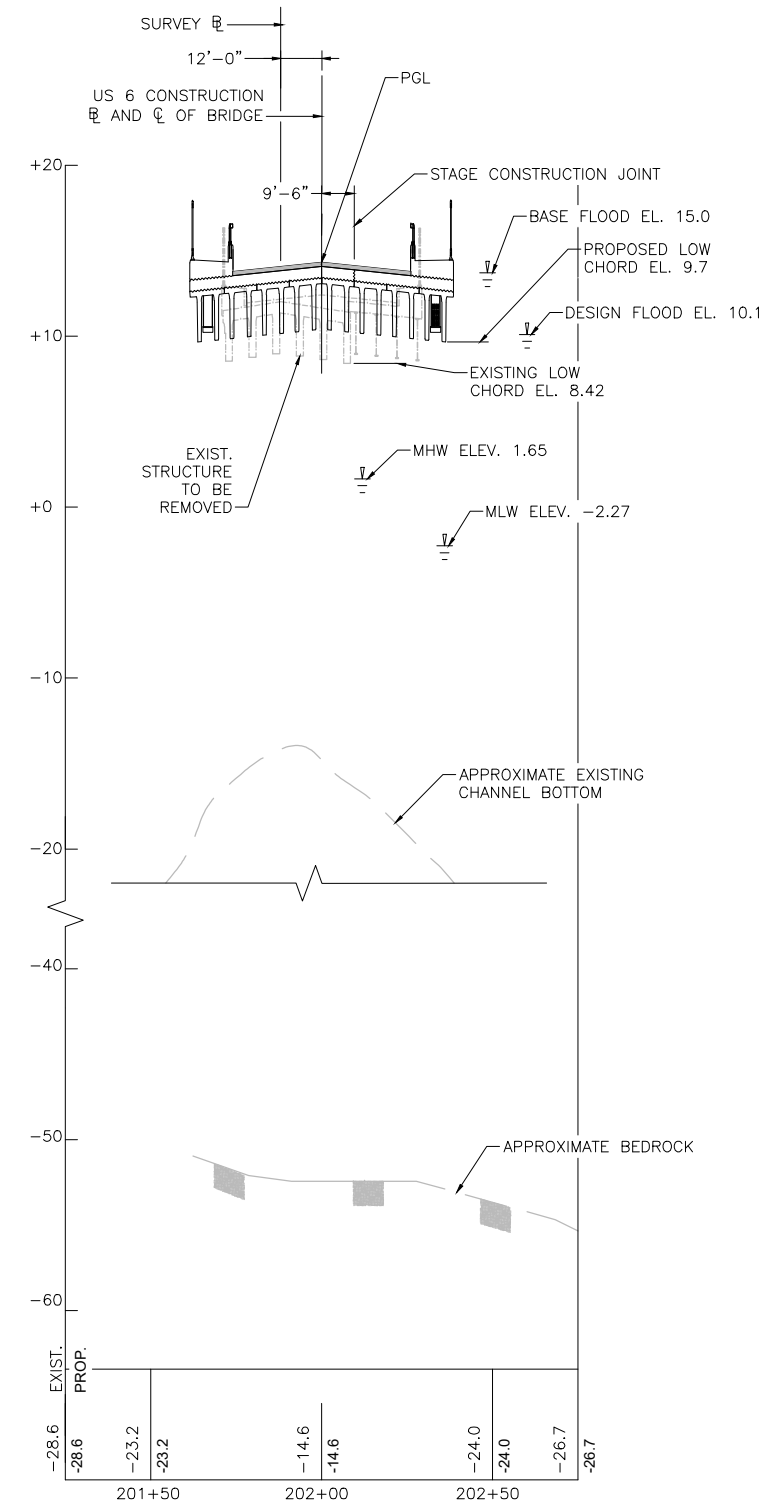




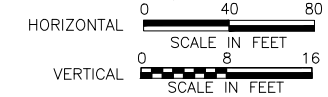
PROFILE ALONG MARION ROAD (US 6)

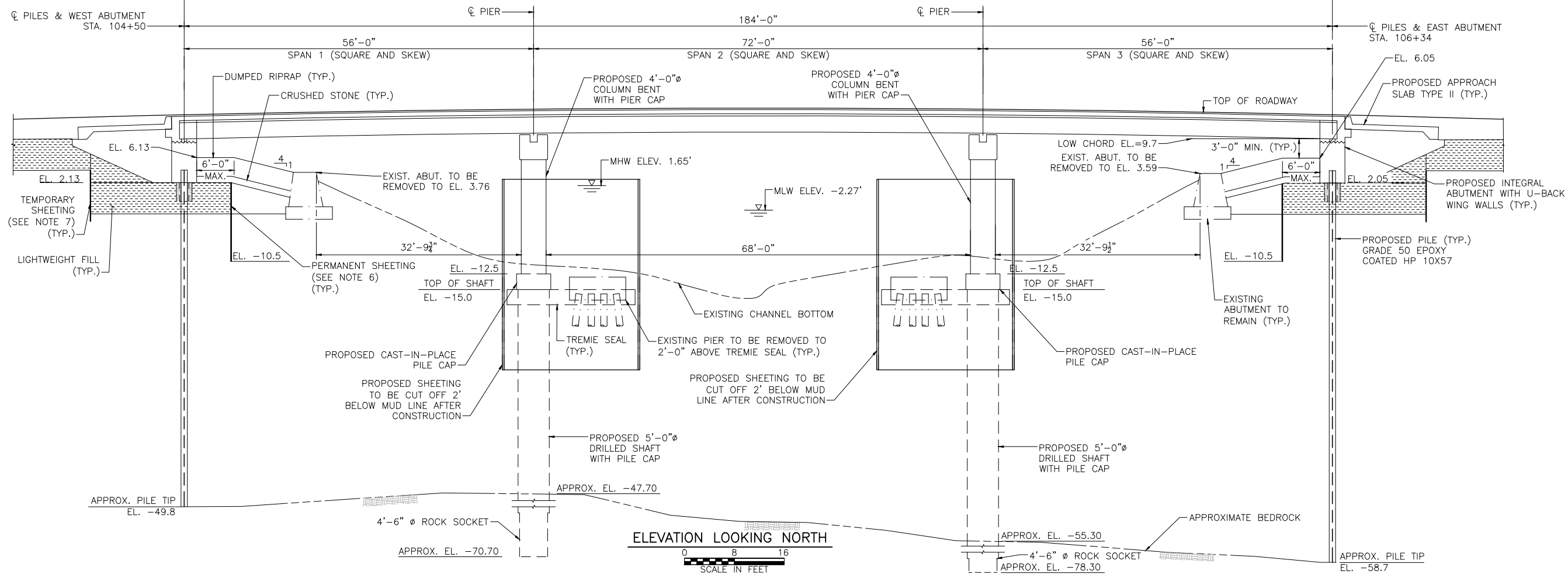


NOTE:
 PIER 1 EST. TIP EL. -70.70
 PIER 2 EST. TIP EL. -78.30

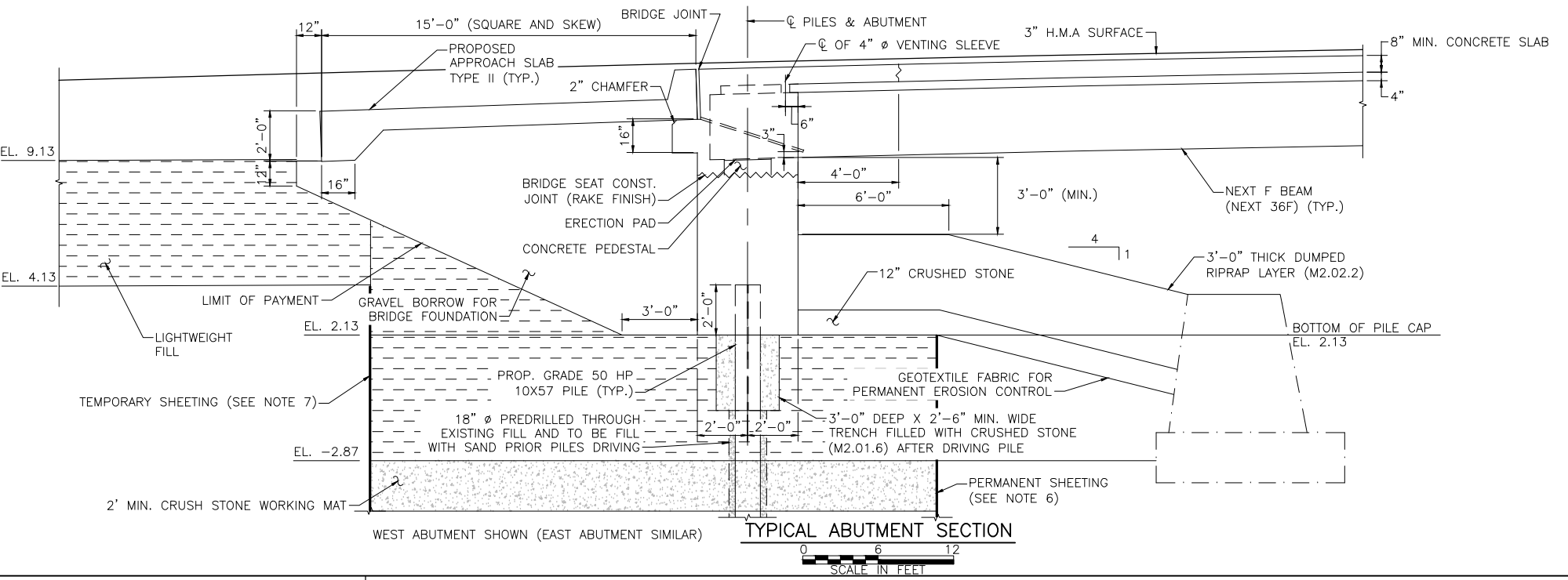


CHANNEL PROFILE (LOOKING UPSTATION)



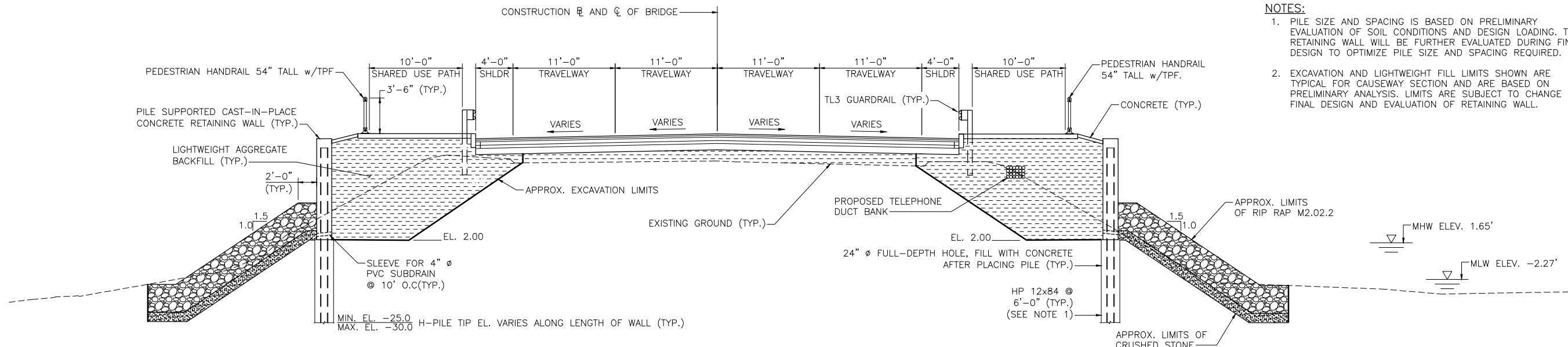


ELEVATION LOOKING NORTH
 0 8 16
 SCALE IN FEET



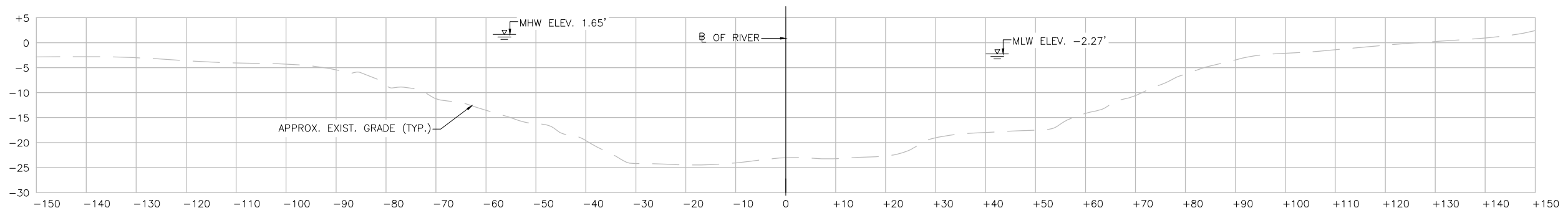
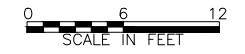
TYPICAL ABUTMENT SECTION
 0 6 12
 SCALE IN FEET

- NOTES:**
1. MINIMUM VERTICAL CLEARANCE AT MHW OCCURS AT THE SOUTHERN EXTERIOR GIRDER AT THE EAST END OF THE STRUCTURE. EXISTING VERTICAL CLEARANCE FROM MHW TO THE BOTTOM GIRDER FLANGE IS 5.90', PROPOSED MINIMUM VERTICAL CLEARANCE IS 6.05'.
 2. THE FACTORED AXIAL DESIGN LOAD PER PILE IS 337.1 KIPS PER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS STRENGTH I LOAD COMBINATION. THE FACTORED STRUCTURAL RESISTANCE PER PILE IS 417.5 KIPS.
 3. THE FACTORED DRILLED SHAFT LOAD IS 1,047 KIPS. THE FACTORED DRILLED SHAFT RESISTANCE IS 5,535 KIPS.
 4. THE DESIGN (25 YEAR) FLOOD ELEVATION IS 10.1'. THE BASE (100-YEAR) FLOOD ELEVATION IS 15.0'.
 5. THE PRESSURE DESIGN SCOUR DEPTH IS 2.0', PRESSURE CHECK SCOUR DEPTH IS 5.5', PIER DESIGN SCOUR DEPTH IS 10.0', PIER CHECK SCOUR DEPTH IS 12.0'.
 6. PERMANENT SHEETING FOR SCOUR PROTECTION, WATER CONTROL AND PLACEMENT OF LIGHTWEIGHT FILL. SHEETING TO BE DESIGNED TO MEET DESIGN SCOUR EVENT FOR PROTECTION OF PROPOSED ABUTMENTS. SEE SHEET 27 FOR PLAN LAYOUT.
 7. TEMPORARY SHEETING FOR WATER CONTROL AND PLACEMENT OF LIGHTWEIGHT FILL. SEE SHEET 27 FOR PLAN LAYOUT.

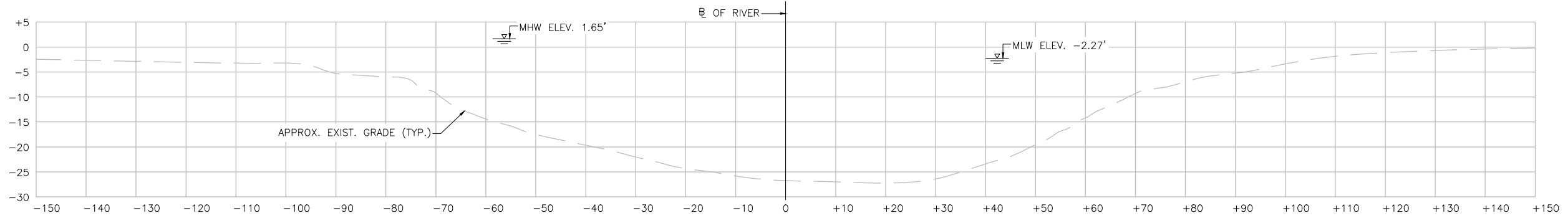


- NOTES:**
1. PILE SIZE AND SPACING IS BASED ON PRELIMINARY EVALUATION OF SOIL CONDITIONS AND DESIGN LOADING. THE RETAINING WALL WILL BE FURTHER EVALUATED DURING FINAL DESIGN TO OPTIMIZE PILE SIZE AND SPACING REQUIRED.
 2. EXCAVATION AND LIGHTWEIGHT FILL LIMITS SHOWN ARE TYPICAL FOR CAUSEWAY SECTION AND ARE BASED ON PRELIMINARY ANALYSIS. LIMITS ARE SUBJECT TO CHANGE ON FINAL DESIGN AND EVALUATION OF RETAINING WALL.

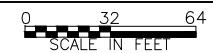
TYPICAL APPROACH SECTION

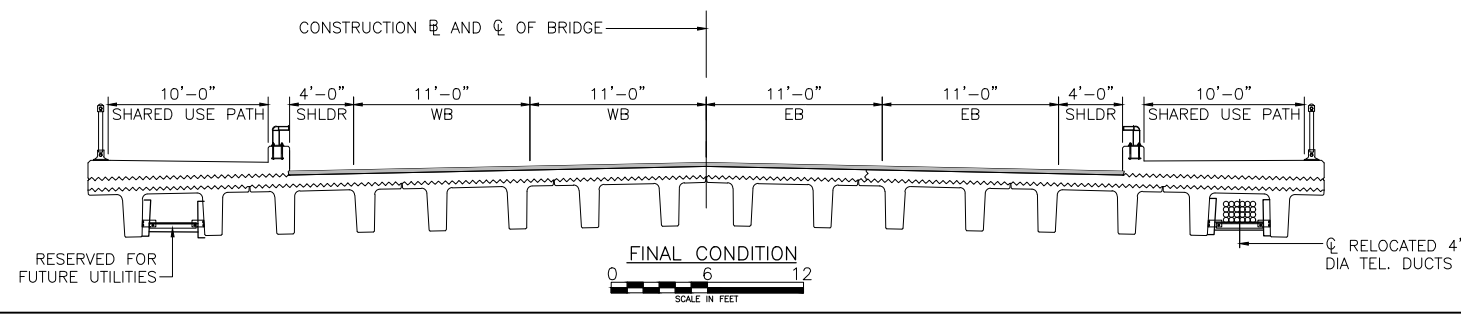
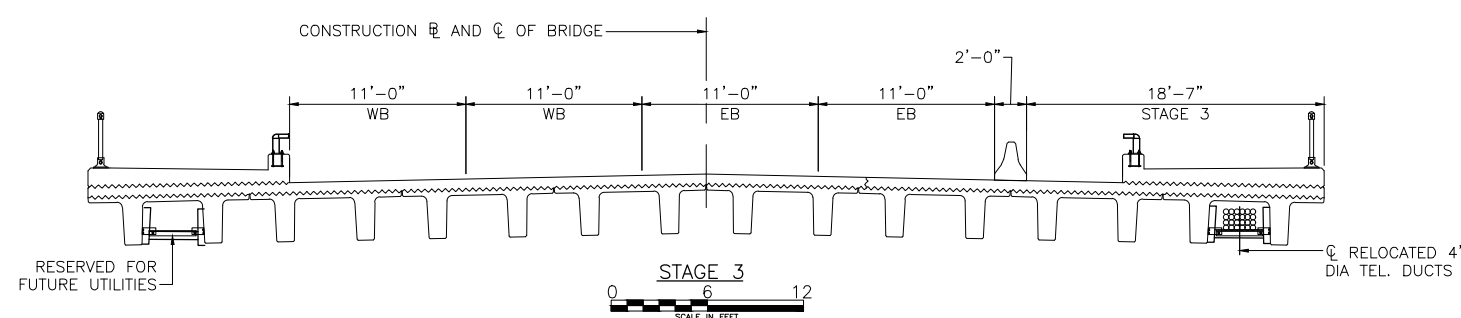
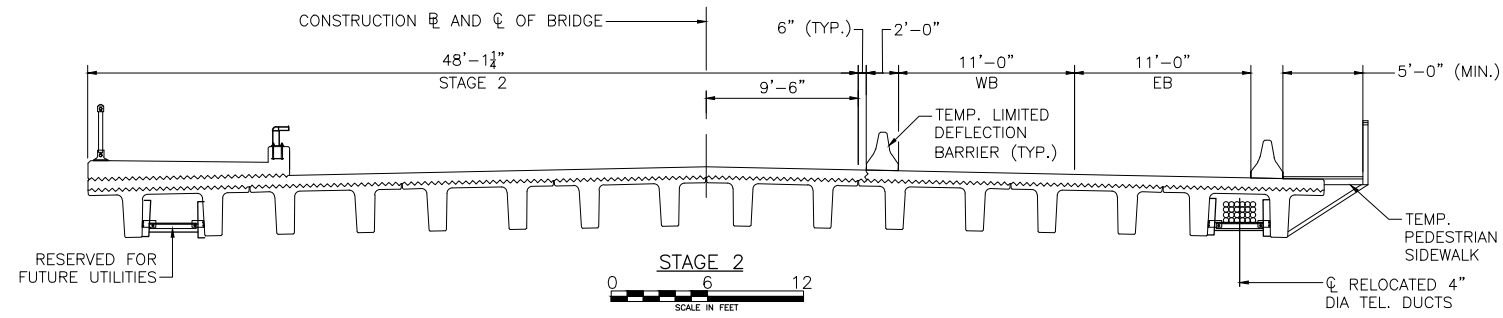
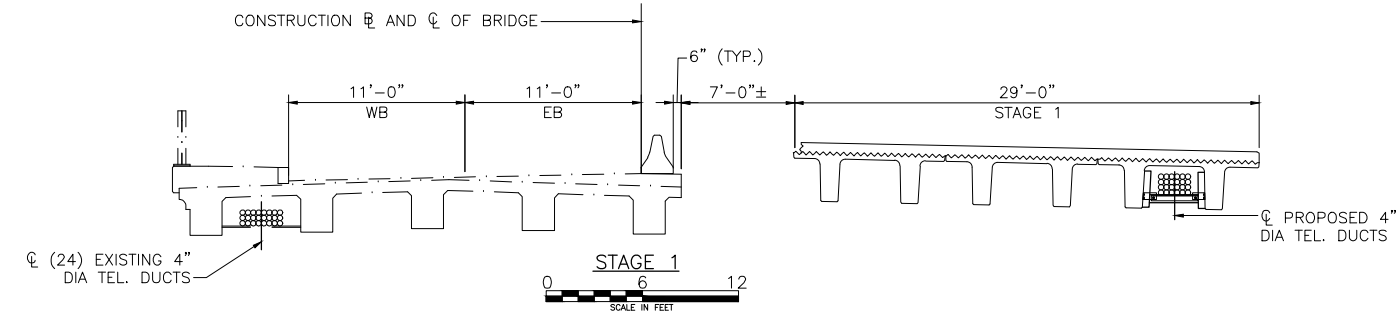
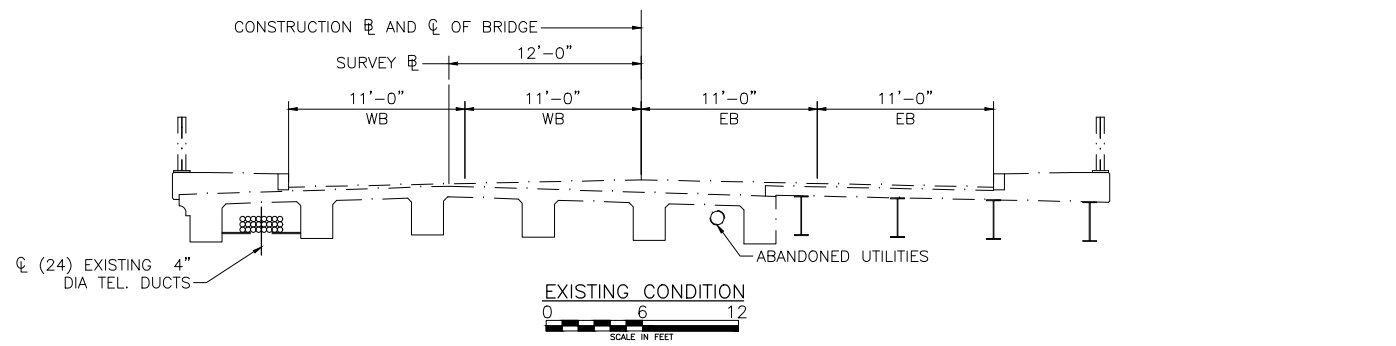


SECTION ACROSS RIVER CL AT STA. 201+38



**SECTION ACROSS RIVER CL AT STA. 202+62
CHANNEL APPROACH SECTIONS (LOOKING NORTHWEST)**



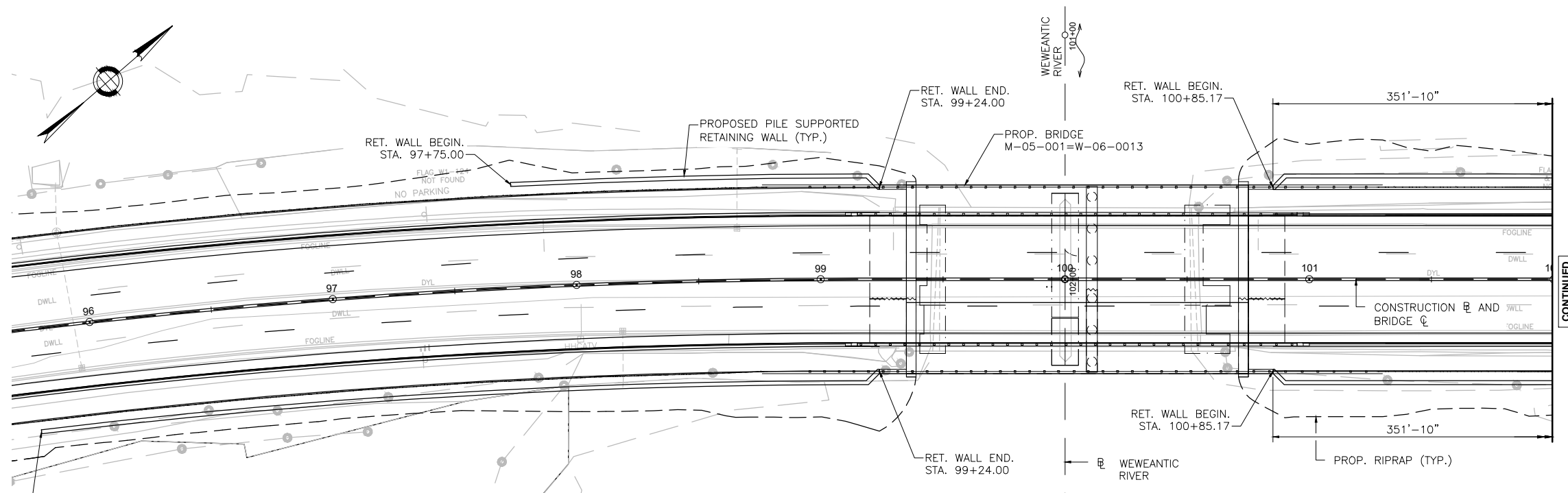


- STAGE 1:
- 1.1 SHIFT TRAFFIC TO THE NORTH MAINTAINING ONE LANE IN EACH DIRECTION.
 - 1.2 DEMOLISH SOUTHERLY PORTION OF EXISTING STRUCTURE.
 - 1.3 CONSTRUCT PORTION OF NEW STRUCTURE AS SHOWN.
 - 1.4 INSTALL 4" DIAMETER TELECOM DUCTS.

- STAGE 2:
- 2.1 SHIFT TRAFFIC TO SOUTHERLY PORTION OF NEW STRUCTURE MAINTAINING ONE LANE IN EACH DIRECTION.
 - 2.2 DEMOLISH NORTHERLY PORTION OF EXISTING STRUCTURE.
 - 2.3 CONSTRUCT REMAINDER OF NEW STRUCTURE AS SHOWN.
 - 2.4 RELOCATE FIBER CABLES IN 4" DIAMETER TELECOM DUCTS

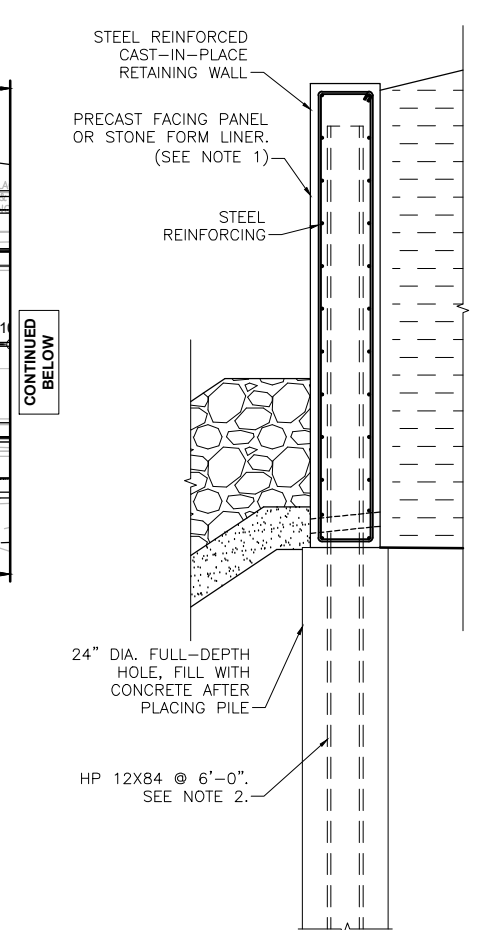
- STAGE 3:
- 3.1 SHIFT TRAFFIC TRAFFIC NORTHERLY MAINTAINING FOUR LANES OF TRAFFIC, TWO IN EACH DIRECTION.
 - 3.2 CONSTRUCT SOUTHERLY SHARED USE PATH AND BRIDGE RAIL.

- FINAL STAGE:
- REMOVE TEMPORARY BARRIER AND INSTALL SPRAY APPLIED WATER PROOFING MEMBRANE AND HMA WEARING SURFACE.

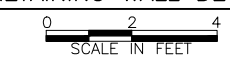


PILE SUPPORTED CONCRETE RETAINING WALL PLAN
NOT TO SCALE

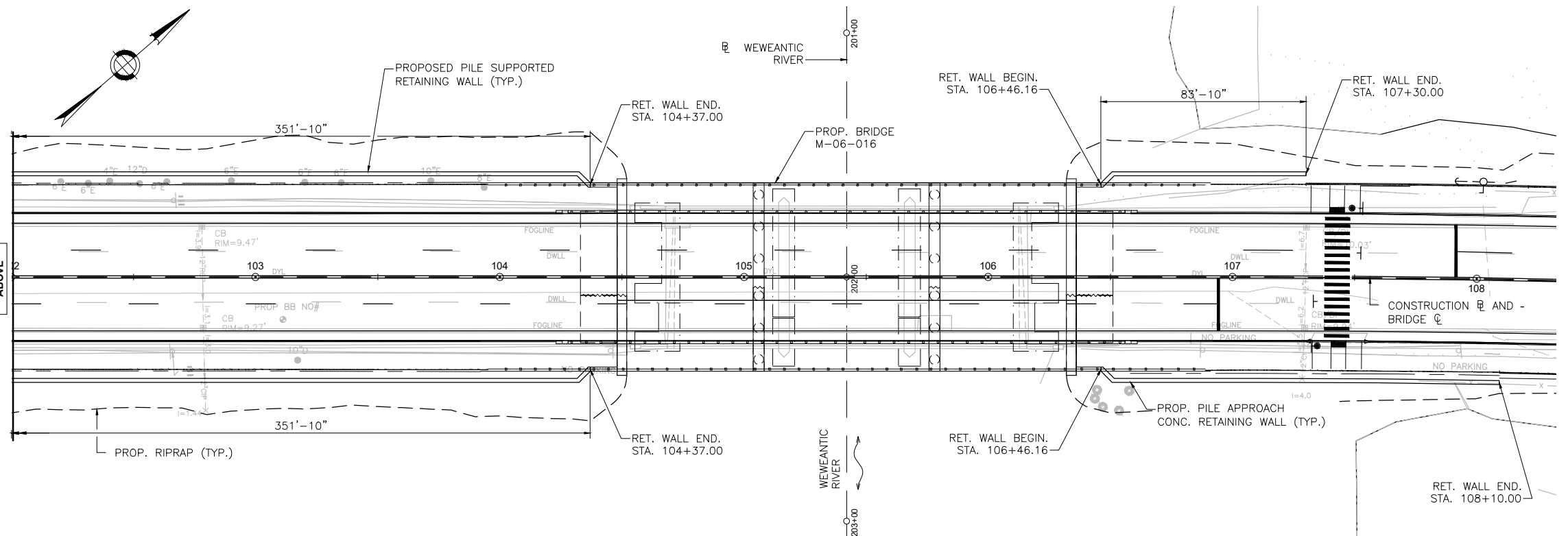
NOTE: RIPRAP AND SHEETING NOT SHOWN FOR CLARITY



PILE SUPPORTED CONCRETE RETAINING WALL DETAIL

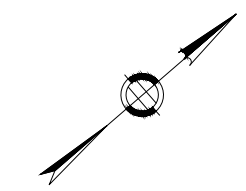
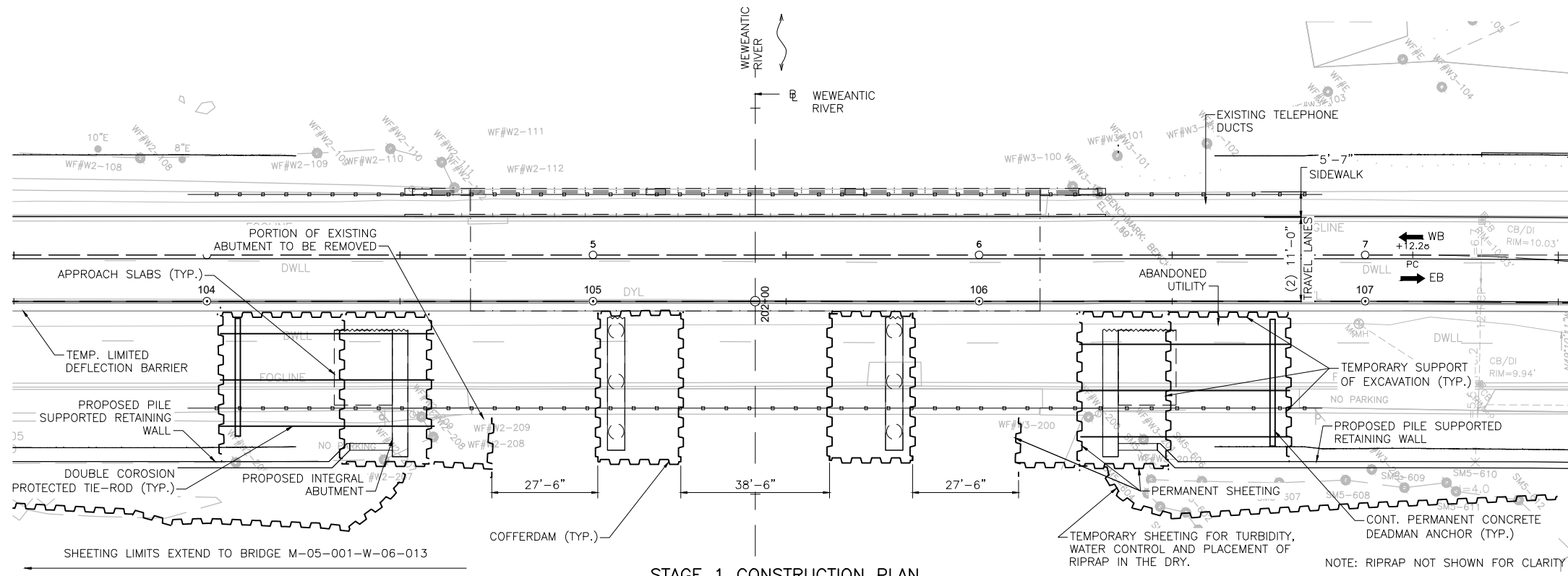


1. PRECAST CONCRETE FACING OR STONE TYPE FORM LINER TO PROVIDE AESTHETIC RETAINING WALL FINISH WILL BE EVALUATED FURTHER DURING FINAL DESIGN.
2. PILE SIZE AND SPACING IS BASED ON PRELIMINARY EVALUATION OF SOIL CONDITIONS AND DESIGN LOADING. THE RETAINING WALL WILL BE FURTHER EVALUATED DURING FINAL DESIGN TO OPTIMIZE PILE AND SPACING REQUIRED.

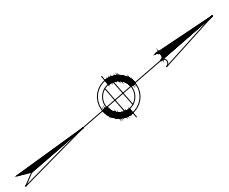
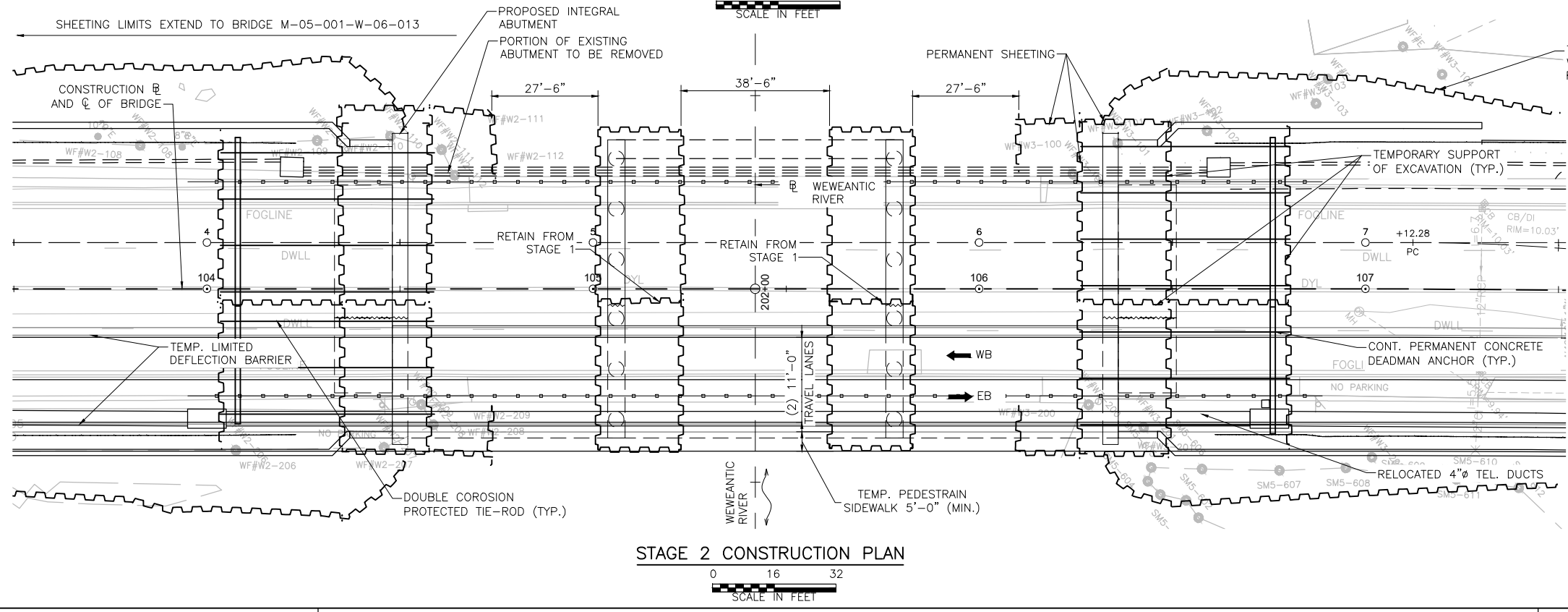


PILE SUPPORTED CONCRETE RETAINING WALL PLAN
NOT TO SCALE

NOTE: RIPRAP AND SHEETING NOT SHOWN FOR CLARITY

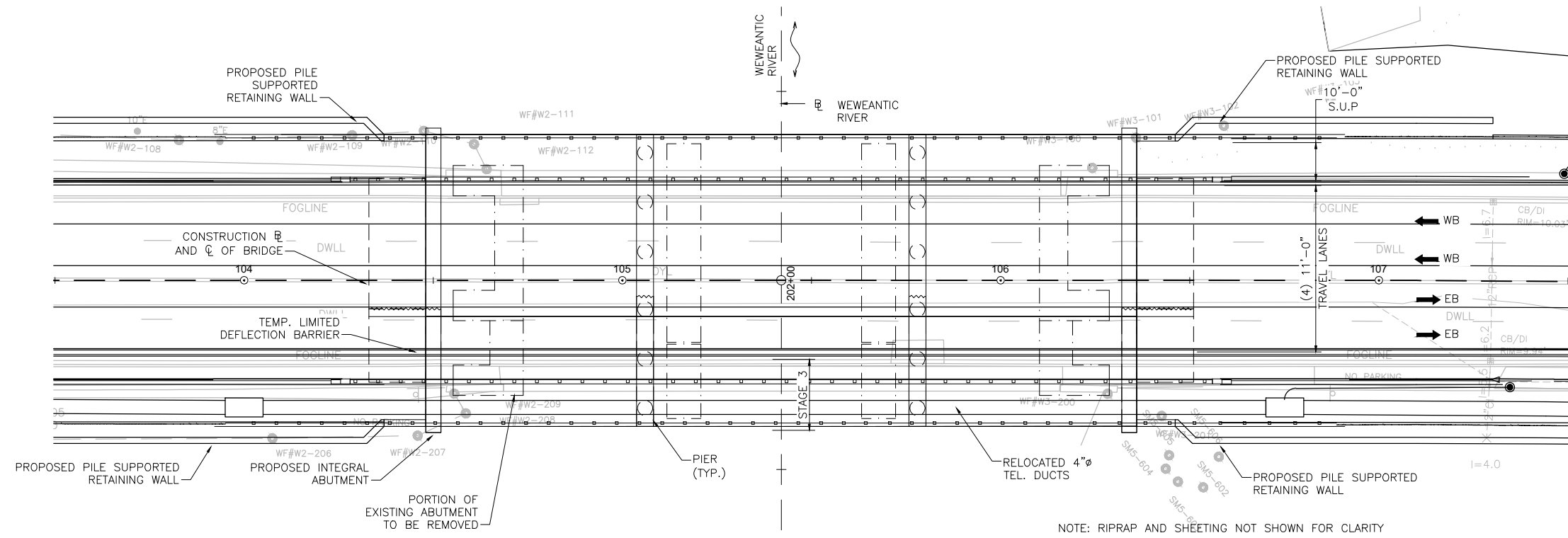


- SUGGESTED SEQUENCE OF WATER CONTROL
- STAGE 1:
- 1.1 DEMOLISH SOUTHERLY PORTION OF EXISTING STRUCTURE.
 - 1.2 INSTALL STAGE 1 PIER COFFERDAM AND TEMPORARY SHEETING.
 - 1.3 REMOVE SOUTHERLY PORTION OF PIER AND ABUTMENTS.
 - 1.4 CONSTRUCT NEW SOUTHERLY PORTION OF PIER AND INTEGRAL ABUTMENTS.
 - 1.5 REMOVE STAGE 1 PIER COFFERDAM AND TEMPORARY SHEETING.

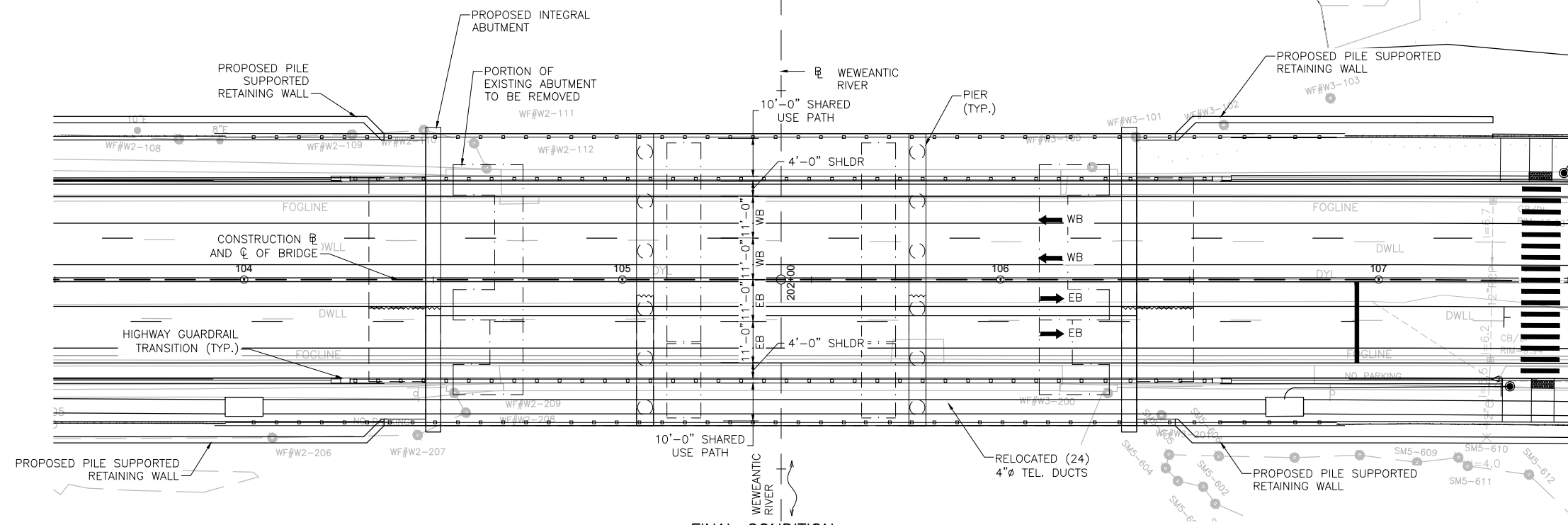
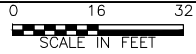


- STAGE 2:
- 2.1 DEMOLISH NORTHERLY PORTION OF EXISTING SUPERSTRUCTURE.
 - 2.2 INSTALL STAGE 2 PIER COFFERDAM AND TEMPORARY SHEETING.
 - 2.3 REMOVE NORTHERLY PORTIONS OF THE EXISTING PIER AND ABUTMENTS TO SPECIFIED LIMITS.
 - 2.4 CONSTRUCT NEW NORTHERLY PORTION OF PIER AND INTEGRAL ABUTMENTS.
 - 2.5 REMOVE STAGE 2 PIER COFFERDAM AND TEMPORARY SHEETING.

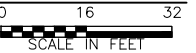
SHEET 50



STAGING 3 CONSTRUCTION PLAN



FINAL CONDITION



- STAGE 3:
- 3.1 SHIFT TRAFFIC NORTHERLY MAINTAINING FOUR LANES OF TRAFFIC, TWO IN EACH DIRECTION.
 - 3.2 CONSTRUCT SOUTHERLY SHARED USE PATH AND BRIDGE RAIL.

- FINAL STAGE:
- REMOVE BARRIER AND INSTALL SPRAY APPLIED WATER PROOFING MEMBRANE AND HMA WEARING SURFACE.

MASSACHUSETTS IN-LIEU FEE (ILF) PROJECT IMPACT WORKSHEET

Corps file number: NAE-2023-00894

Date permit issued: 7/25/2024

Corps project manager: Dan Vasconcelos

Permittee(s): MassDOT - Highway Division

Project location/address/Lat/Long (from ORM Location page):
41.738053 -70.746775

8-digit hydrologic unit code: 1090002

[Service area from ILF interactive statewide map \(include subarea\):](#) Coastal South

Service area rate/square foot or LF: \$17.97/SF

Area subject to compensation: 2677 SF

Number of credits to be purchased from spreadsheet :
Wetlands: 0.061455
Stream: 0

Comments

US Route 6 improvements, including replacement of bridges over Weweantic River



**US Army Corps
of Engineers**®
New England District

WORK-START NOTIFICATION FORM
(Minimum Notice: Two weeks before work begins)

EMAIL TO: daniel.b.vasconcelos@usace.army.mil and cenae-r-ma@usace.army.mil; or

MAIL TO: Daniel Vasconcelos
Regulatory Division
U.S. Army Corps of Engineers, New England District
696 Virginia Road
Concord, Massachusetts 01742-2751

A U.S. Army Corps of Engineers authorization, file # 2023-00894, was issued to MassDOT – Highway Division. The permit authorized the permanent discharge of fill material within 20,433 square feet (0.47 acres) of waters of the U.S., including 17,756 square feet within open water areas below the High Tide Line (HTL) of the Weweantic River, 1,764 square feet within salt marsh, and 913 square feet within non-tidal wetlands, associated with the reconstruction of approximately 3,000 linear feet of Route 6 (Marion and Wareham Roads) in Marion and Wareham, Massachusetts. The project includes roadway widening to accommodate four 11-foot travel lanes, 4-foot shoulders and two 10-foot shared use paths (SUPs), as well as the replacement of the two existing bridges conveying the road over the Weweantic River. The westernmost, two-span bridge in Marion will be replaced with a new two-span bridge. The easternmost, three-span bridge in Wareham will be replaced with a new three-span bridge. For both bridges, the new abutments will be constructed behind (landward of) the existing abutments, and the existing abutments retained to provide scour protection. The new in-river piers will be slightly relocated to increase the horizontal opening below the bridges, and the existing piers removed to below the mudline and overtopped with stockpiled natural river bottom material. Retaining walls and rip-rap will be installed along the widened approaches and the causeway between the bridges to provide scour protection. The project will also have temporary impacts within 7,016 square feet (0.16 acres) of waters of the U.S., including 6,088 square feet within open water areas below HTL, 709 square feet within salt marsh, and 219 square feet within non-tidal wetlands, due to the installation and dewatering of cofferdams to allow work to proceed in the dry.

The people (e.g., contractor) listed below will do the work, and they understand the permit's conditions and limitations.

PLEASE PRINT OR TYPE

Name of Person/Firm: _____

Business Address: _____

Phone: () _____ () _____

Email: _____

Proposed Work Dates: Start _____ **Finish** _____

Permittee/Agent Signature: _____ **Date:** _____

Printed Name: _____ **Title:** _____

Date Permit Issued: _____ **Date Permit Expires:** _____

FOR USE BY THE ARMY CORPS OF ENGINEERS

PM: _____ **Submittals Required:** _____

Inspection Recommendation: _____



**US Army Corps
of Engineers**®
New England District

COMPLIANCE CERTIFICATION FORM

(Minimum Notice: Permittee must sign and return notification
within one month of the completion of work.)

Permit Number: NAE-2023-00894

Project Manager: Dan Vasconcelos

Name of Permittee: MassDOT – Highway Division

Permit Issuance Date: 7/25/2024

Please sign this certification and return it to our office upon completion of the activity.

```

*****
* E-MAIL TO: cenae-r-ma@usace.army.mil; or *
* * * * *
* MAIL TO: Massachusetts Section *
* Regulatory Division *
* U.S. Army Corps of Engineers, New England District *
* 696 Virginia Road *
* Concord, MA 01742-2751 *
*****

```

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit was completed in accordance with the terms and conditions of the above referenced permit, and any required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date

Printed Name

Date of Work Completion

() _____
Telephone Number

() _____
Telephone Number



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

100 Cambridge Street Suite 900 Boston, MA 02114 • 617-292-5500

Maura T. Healey
Governor

Kimberley Driscoll
Lieutenant Governor

Rebecca L. Tepper
Secretary

Bonnie Heiple
Commissioner

June 28, 2024

Massachusetts Department of Transportation
Highway Division
10 Park Plaza, Room 7360
Boston, MA 02116
ATTN: Courtney Walker

RE: 401 WATER QUALITY CERTIFICATION
BRP WW 10, Major Fill Project
BRP WW 08, Minor Dredge Project
Route 6 (Marion and Wareham Roads) over Weweantic River Bridge Replacement Project
Bridges M-05-001=W-06-013 & W-06-016
Marion and Wareham, MA

401 WQC Filing Number: 24-WW10-0004-APP (Fill)/24-WW08-0003-APP (Dredge)
USACE Application No. NAE-2023-00894
MassDOT File Number: 605311

Dear Ms. Walker:

The Massachusetts Department of Environmental Protection (MassDEP) has reviewed your application for a Water Quality Certification (WQC), as referenced above; the Fill application was deemed complete on May 31, 2024, and the Dredge application was deemed complete on June 26, 2024. In accordance with the provisions of MGL Ch. 21, §§26-53 and Section 401 of the Federal Clean Water Act as amended (33 U.S.C. §1251 et seq.), it has been determined there is reasonable assurance the proposed project will be conducted in a manner which will not violate applicable water quality standards (314 CMR 4.00) and other applicable requirements of state law.

The proposed project consists of replacement of two bridges carrying U.S. Route 6 (Marion Road/Wareham Road) over the Weweantic River; full-depth roadway reconstruction and widening; construction of two shared use paths (SUPs); stormwater infrastructure improvements; and salt marsh mitigation. The bridges are stated as being structurally deficient and functionally obsolete. The purpose of the Project is to improve public safety, maintain through-travel on Route 6, accommodate anticipated sea level rise, improve navigability, and improve vehicle, bicycle, and pedestrian infrastructure.

This information is available in alternate format. Please contact Melixza Esenyie at 617-626-1282.

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Existing Conditions

U.S. Route 6 is classified as a minor arterial roadway and is aligned in a northeast/southwest orientation in the Project area. The Project extends from River Road in Marion at the southwest end to Sea Gull Lane in Wareham at the northeast end. The two bridges that cross the Weweantic River are connected by a 350-foot-long causeway lined with riprap. The roadway has two 11-foot-wide travel lanes, negligible shoulders, five-foot-wide sidewalks on each side, and no bicycle accommodations.

Bridge M-05-001=W-06-013 is located in the southwest portion of the Project in Marion. The bridge has a 139-foot-long span divided by a pier, creating two 49.75-foot clear spans. The hydraulic minimum clearance is 5.9 feet. Bridge W-06-016 is located in the northeast portion of the Project in Wareham. The bridge has a 178-foot-long span divided by two piers, creating two equal 46.5-foot end spans and a center span of 51.5 feet. The hydraulic minimum clearance is 4.9 feet. The roadway width over both bridges is approximately 58.5 feet and the abutments and piers of each bridge are timber pile supported.

The Weweantic River is tidally influenced and flows south under the bridges. The banks of the Weweantic River in the Project area are generally armored with riprap. Based on a tidal flushing study conducted in 2021 and field instrument observations, the causeway does not appear to impact tidal flushing of the river. Eight Bordering Vegetated Wetlands (BVWs) and seven salt marshes are present in the Project area. Stormwater flows through a closed drainage system with several existing outfalls that discharge untreated stormwater directly to the Weweantic River, BVWs, and salt marsh.

The Project will occur within two Federal Emergency Management Agency 1% annual chance of flooding zones; Zone AE with a Base Flood Elevation (BFE) ranging from 14 to 15 feet (NAVD88) and Zone VE with a BFE ranging from 18 to 21 feet (NAVD88). The Project will also occur within Massachusetts Natural Heritage and Endangered Species Program (NHESP) Priority and Estimated Habitats of Rare Species; specifically for Northern Diamond-backed Terrapin (*Malaclemys terrapin*; state-threatened), roseate tern (*Sterna dougallii*, state-endangered), and common tern (*Sterna hirundo*, state species of special concern).

Project Description

The new bridges will follow a similar horizontal alignment to the existing bridges and will accommodate four 11-foot-wide travel lanes (two in each direction), 4-foot-wide shoulders, and two 10-foot-wide SUPs. Including the SUPs, the overall roadway width will increase by 18 feet to 77.2 feet. Bridge M-05-001=W-06-013 will be raised 2.15 feet and Bridge W-06-016 will be raised 2.5 feet. Portions of the existing abutments will remain in place for scour protection, and new integral abutments will be constructed behind the existing abutments. Existing piers will be demolished and cut below the mudline. To allow wider navigation channels, new piers will be located to create unequal spans. Bridge M-05-001=W-06-013 will remain as two spans with lengths of 74 and 62 feet, and Bridge W-06-016 will remain as three spans with end span lengths of 56 feet and a center span of 72 feet. The longest clear spans will be 60 feet and 68 feet, respectively. Based on the hydraulic design, the new bridges will accommodate the 100-year flood frequency storm event and anticipated future sea level rise.

To accommodate the work, sheet pile cofferdams with a tremie seal will be installed around existing piers and in new pier locations and dewatered to create dry work areas. Following construction, sheet

piles will be cut two feet below the mudline at the piers and temporary sheet piles along the abutments and causeway will be removed. The bridges will be built in phases with the north and south elements being demolished and rebuilt independently and sequentially to maintain vehicular traffic. The navigable waterway will remain open at all times during construction.

Full-depth roadway reconstruction will extend approximately 800 feet south of the bridges and 650 north of the bridges. A combination of riprap slopes and retaining walls will be constructed to support the overall roadway widening. Riprap will also be placed in front of abutment wingwalls and retaining walls for scour protection and to accommodate the elevation changes. Stormwater infrastructure improvements include installation of deep sump catch basins and a grassed channel as discussed below.

BVW, LUW, and Salt Marsh Impacts

The Project will result in 12,580 square feet (sf) of permanent impacts and 2,459 sf of temporary impacts to Land Under Water (LUW); 913 sf of permanent impacts and 219 sf of temporary impacts to BVWs; and 1,764 sf of permanent impacts and 709 sf of temporary impacts to salt marsh. The Project will require 2,575 cubic yards (cy) of dredging. Permanent impacts will result from removal of the existing bridges, installation of the new bridges, and installation of riprap scour protection.

Alternatives Analysis

Several alternative designs were considered including removing the causeway and constructing a single span across the Weweantic River, alternate sidewalk and SUP configurations, and the use of retaining walls instead of side slopes. Constructing a single span was deemed not feasible for several reasons, most notably that a tidal flushing study concluded significant flooding would occur under storm surge conditions should the causeway be removed. A single span would also require a larger project area with more impacts to wetlands and waterbodies for a longer period of time than the selected alternative. Constructing only sidewalks on both sides or constructing an eastbound sidewalk and a westbound SUP were also considered. For safety reasons, SUPs are required on both sides of the roadway to prevent pedestrians and bicyclists from crossing. The use of retaining walls instead of side slopes significantly reduces the amount of permanent fill required in the Weweantic River and associated salt marsh. The selected alternative is the costliest but results in the least impacts to salt marsh and the least total amount of impacts to wetlands and waterbodies.

Salt Marsh, BVW, and LUW Replication and Restoration

Permanent impacts to BVWs and salt marsh will be mitigated at a single 5,930 sf salt marsh replication area to be constructed under the supervision of a qualified Wetland Scientist. Of this, 4,090 sf will be located below the High Tide Line (HTL) including 1,450 sf of low marsh and 1,840 sf will be high marsh that will extend from the HTL to transitional upland plantings. The replication area will be graded as depicted on the plans approved herein, seeded with a native grass species, and planted with native plugs. Existing Atlantic white cedar (*Chamaecyparis thyoides*) trees in and adjacent to the salt marsh replication area will be protected during construction and retained to the extent practicable. All temporary impacts to BVWs and salt marsh will be restored in place. Existing streambed material removed during dredge operations will be stockpiled and placed over areas where existing piers will be cut below the mudline.

Stormwater Management Standards

The Project will increase impervious surface by 30,100 sf (0.7 acres) and qualifies as a redevelopment project as defined at 314 CMR 9.02. Through installation of deep sump catch basins and a grassed channel, the Project will meet Stormwater Management Standards 2, 3, and the structural stormwater best management practice requirements of Standard 4, to the maximum extent practicable. A complete evaluation concluded infiltration Stormwater Control Measures are not practicable within the Project area. Standard 2 has been waived for portions of the Project within areas of land subject to coastal storm flowage as defined at 310 CMR 10.04 (Zone VE 1% annual chance of flooding), per Chapter 1, Volume 1 of the Stormwater Management Standards.

Stream Crossing Standards

The Massachusetts Stream Crossing Standards were developed specifically for freshwater, non-tidal rivers and streams and may not be appropriate for coastal waterways; however, the Project meets all Stream Crossing Standards except Standard 3, which is met to the maximum extent practicable. As previously discussed, based on a tidal flushing study conducted in 2021 and field instrument observations, the presence of the causeway does not appear to impact tidal flushing of the river and the existing crossing does not restrict tidal flow. Therefore, the Project is in compliance with 314 CMR 9.06(2)(b)5.

Sediment Chemistry

Sediment sample analytical results were compared to the Reportable Concentration (RC) S-1 criteria of the Massachusetts Contingency Plan (MCP). Results of the sediment samples analyzed indicated the presence of lead in Sample W-SS-04, and Benzo(a)pyrene and Dibenzo(a,h)anthracene in Sample W-SS-03 in concentrations above the RCS-1 criteria. Due to these contaminants within the sediments to be dredged, MassDOT will remove all 164 cy of sediment associated with excavation and installation of the bridge piers at these locations from the site, and dispose of it at an upland, lined landfill. Results were compared to the acceptable contaminant levels for soil reuse at landfills shown in Table 1 of the MassDEP Reuse and Disposal of Contaminated Soil at Massachusetts Landfills (Policy #COMM-97-001). There are no exceedances of the reuse levels for any of the contaminants listed. MassDEP is to be notified, in writing, of the name and location of the licensed facility accepting the dredged material for disposal or reuse as daily cover material.

Invasive Species

Invasive species will be managed in accordance with an Invasive Plant Management Strategy (IPMS) to be approved by MassDEP.

Rare Species

NHESP issued a Conditional No-Take Determination on February 8, 2024 for the Project. The Project is required to incorporate a construction-period Northern Diamond-backed Terrapin Turtle Protection Plan (TPP) to be approved by NHESP prior to construction, as conditioned herein. The bridge design will also incorporate permanent turtle barriers where practicable including retaining walls and exclusionary mesh/fencing.

Based on a review of information provided by the applicant, MassDEP finds that this project complies with the standards described under 314 CMR 9.06 and 9.07. Public notice was provided in both the Wareham Week and Sippican Week on February 1, 2024, and in the MEPA Monitor on February 7, 2024.

Therefore, based on information currently in the record, MassDEP grants a WQC for this project subject to the following conditions to maintain water quality, to minimize impact on waters and wetlands, and to ensure compliance with appropriate state law. The Department further certifies in accordance with 314 CMR 9.00 that there is reasonable assurance the project or activity will be conducted in a manner which will not violate applicable water quality standards (314 CMR 4.00) and other applicable requirements of state law. Finally, the Department has determined that upon satisfying the conditions and mitigation requirements of this approval, the project provides a level of water quality necessary to protect existing uses and accordingly finds that the project to be implemented satisfies the Surface Water Quality Standards at 314 CMR 4.00. The WQC is for all federal permits and licenses, including the U.S. Coast Guard Bridge Permit, pursuant to 40 CFR Part 121.

Pursuant to 314 CMR 9.09(1)(d); 314 CMR 9.06(6)(a); 310 CMR 9.06(2); 314 CMR 9.07; 314 CMR 9.07(1); 314 CMR 9.09(7)(5)(c); 314 CMR 9.11; and 314 CMR 9.09(1)(e), the following Special Conditions are necessary to ensure that construction practices and stormwater controls are implemented in such a manner as to prevent degradation to wetlands and waters; ensure that practicable steps have been taken which will avoid and minimize impacts to wetlands and waters; minimize turbidity and sediment caused by construction activities; ensure that water quality is not degraded, and that biology of the waters are not negatively impacted by potential discharges; and/or maintain a record of the dredged material for reference and to ensure accountability in its transportation.

Those Special Conditions that require direct submittals to MassDEP for either review, or review and approval, are denoted by the following notation (Submittal) at the end of the condition and are summarized in Attachment A. In addition, those conditions with the (Submittal) designation shall be included in the Special Provisions and, as applicable, reviewed at the Pre-Construction Meeting.

1. All work shall be performed in accordance with the following documents and plans:
 - Application for Water Quality Certification. Prepared by BSC Group, Inc. on behalf of MassDOT, dated January 2024, with cover letter and attachments. 401 WQC Filing Numbers: 24-WW10-0004-APP (Fill)/24-WW08-0003-APP (Dredge).
 - Plans entitled: "Massachusetts Department of Transportation Highway Division Plan and Profile of U.S. Route 6 (Wareham Road & Marion Road) (Bridge No. M-05-001=W-06-013 & W-06-016) in the City/Town of Marion & Wareham, Plymouth County". Sheets 1 through 48. Prepared by Parsons. Last revised October 20, 2023.
 - MassDEP Administrative Completeness Review. 401 WQC Transmittal No: 24-WW10-0004-APP (Fill)/24-WW08-0003-APP (Dredge). Dated January 31, 2024.
 - MassDEP Technical Deficiency Review. 401 WQC Transmittal No: 24-WW10-0004-APP (Fill)/24-WW08-0003-APP (Dredge). Dated February 16, 2024.
 - MassDOT Responses to MassDEP Technical Deficiency Review, with attachments. MassDOT Project 605311. Route 6 (Marion and Wareham Roads) over Weweantic River

(M-05-001=W-06-013 & W-06-016). Marion & Wareham, Massachusetts. Joint 401 WQC and 404 / 10 USACE Individual Permit Application. 401 WQC Transmittal No: 24-WW10-0004-APP (Fill)/24-WW08-0003-APP (Dredge). Dated April 10, 2024.

- MassDOT Supplemental Responses to MassDEP Technical Deficiency Review, with attachments, via email. RE: Route 6 (Marion and Wareham Roads) over Weweantic River Bridge Replacements Project WQC Technical Deficiency Letter. Dated May 31, 2024.
- NHESP Conditional No-Take Determination. NHESP File No. 24-17064. Dated February 8, 2024.
- DMF Comments via email. RE: MassDOT Project 605311 – Marion – Wareham – Bridge Replacement, M-05-001=W-06-013 & W-06-016, Wareham Street (US 6) Over Weweantic River. Dated September 11, 2023.

Pre-Construction

2. The permittee shall employ an **Environmental Monitor (EM)** to oversee all project activities with the potential to have an adverse impact on BVWs, salt marsh, and LUW and to ensure compliance with this WQC and the Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan (CP/PP) as required herein. The EM shall have a minimum of five years of professional experience with construction site CP/PP compliance. The EM shall complete the U.S. Environmental Protection Agency (EPA) Construction General Permit (CGP) Inspector Training, or other training that meets the CGP requirements, and provide proof of completion prior to the start of work. The name, contact information, and qualifications of the proposed EM shall be provided to MassDEP for approval prior to the Pre-Construction Meeting required in Condition 5. The name and contact information of the approved EM shall be provided to the Marion and Wareham Conservation Commissions prior to the start of work. **(Submittal)**
3. A qualified **Wetland Scientist (WS)** with a minimum of five years of relevant professional experience with wetland and stream replacement and restoration projects shall be employed to oversee all BVW, salt marsh, and LUW replacement and restoration activities, including but not limited to grading, placement of substrate, seeding, vegetation plantings, and placement of wildlife habitat features. The name, contact information, and qualifications of the WS shall be provided to MassDEP for approval prior to the Pre-Construction Meeting required in Condition 5. The name and contact information of the approved WS shall be provided to the Marion and Wareham Conservation Commissions prior to the start of work. The EM may also be the WS if the qualifications are met. **(Submittal)**
4. Prior to the Pre-Construction Meeting required in Condition 5, the applicant shall provide MassDEP with the name and contact information of the Resident Engineer (RE) responsible for ensuring that all work complies with the conditions of this WQC. **(Submittal)**
5. A minimum of 21 days prior to the start of work, MassDOT shall contact MassDEP to schedule an onsite Pre-Construction Meeting to review the approved plans and terms and conditions of this WQC. The RE, the construction contractor, the EM, the WS, a representative from the MassDOT

Environmental Section and/or the District Environmental Engineer shall attend the Pre-Construction Meeting.

6. MassDEP shall be copied on applicable submittals to the U.S. Army Corps of Engineers (USACE). These include but are not limited to: Self-Verification Notification Form (SVNF); Pre-Construction Notification (PCN); Work-Start Notification Form; Mitigation Work-Start Notification Form; and Compliance Certification Form. The Work-Start Notification Form shall be submitted at least 14 days before the anticipated start of work and the Compliance Certification Form shall be submitted within 30 days following the completion of the authorized work. **(Submittal)**
7. A CP/PP shall be developed and implemented as required by 314 CMR 9.06(6)(a)8. A minimum of 14 days prior to the start of work, MassDOT shall submit the CP/PP for review and approval. If the EPA CGP applies, the Stormwater Pollution Prevention Plan (SWPPP) may serve as the CP/PP, providing it includes the measures required to be in the CP/PP per these Special Conditions, in addition to the measures specifically required by the CGP. Any subsequent changes to the Final CP/PP (defined herein as including the construction period SWPPP if applicable) must be approved by MassDEP. **(Submittal)**
8. Training regarding erosion and sedimentation controls is required. The RE, CP/PP Inspector, and any other relevant personnel responsible for erosion and sedimentation controls shall complete the EPA CGP Inspector Training, or other training that meets the CGP requirements, as well as complete a comprehensive review of the Final CP/PP. Proof of completion of the training shall be submitted to MassDEP prior to the start of work. **(Submittal)**
9. The CP/PP shall identify, but shall not be limited to, staging and laydown areas in relation to BVWs, salt marsh, and LUW, proposed dewatering locations, proposed stockpile locations and their proximity to catch basins or other drainage conveyances that discharge to wetland resource areas, and the location of construction-period erosion and sedimentation controls.
10. A minimum of 14 days prior to the start of work, MassDOT shall submit a Water Management Plan for review and approval. The Plan shall include proposed methods to manage construction-period water including but not limited to dewatering methods and locations, specifications for any water bypass systems, and dredge and debris material dewatering prior to shipment off site, as applicable. The plan shall meet requirements of the CP/PP and be specific to the Project. Dewatering and water bypasses shall be conducted under the supervision of the EM and comply with the applicable conditions identified herein. **(Submittal)**
11. Prior to the start of work, approved erosion and sedimentation control measures shall be installed per the approved CP/PP and as applicable, the manufacturer specifications. Erosion and sedimentation control measures may consist of, but are not limited to, silt fence, staked straw bales, silt/turbidity curtains, compost filter tubes, etc.
12. Prior to the Pre-Construction Meeting, the boundaries of BVWs, salt marsh, and LUW shall be re-flagged where they are within 50 feet of the limits of work. In the event BVWs, salt marsh, and LUW boundaries overlap, the outermost boundary (i.e., closest to the proposed work) shall be flagged. All boundary markers, once in place, shall remain in place throughout construction

until all disturbed surfaces have been permanently stabilized. Boundary markers shall be fully evaluated annually and refreshed where needed. Implementation of and compliance with this requirement shall be documented by the EM. All construction personnel shall be made aware of these markers.

13. A Flood Contingency Plan shall be submitted to MassDEP for review and approval that addresses areas that fall within the 1% annual chance of flooding zone within project limits; this plan shall be submitted prior to any work within this zone. The Plan shall address the potential need for temporary relocation of construction and auxiliary equipment during flood events to designated upland locations above the Base Flood Elevation. The Plan shall be approved by MassDEP prior to any work within the 1% annual chance of flooding zone, including mobilization or storage of equipment and materials. **(Submittal)**
14. The applicant shall develop an Invasive Plant Management Strategy (IPMS) to be submitted to MassDEP for review and approval prior to the Pre-Construction Meeting. The IPMS shall be implemented as approved. **(Submittal)**
15. If needed, use of herbicides to control invasive species shall be implemented in accordance with the approved IPMS and with the following requirements:
 - a. Herbicides can only be applied by a Licensed Applicator;
 - b. Applicant must provide MassDEP Material Safety Data Sheets (MSDS) of the product being used and must also keep MSDS sheets on site;
 - c. Product registration in MA with Massachusetts Pesticide Product Registration Number must be confirmed with Massachusetts Department of Agricultural Resources Pesticide Division;
 - d. EPA Registration Number for the product must be identified;
 - e. Product label restricted use provisions must be followed; and
 - f. Applicant must contact MassDEP Division of Wetlands and Waterways to determine if a BWR WM 04 herbicide permit is required.
16. A minimum of 21 days prior to the start of work, a Demolition Plan shall be submitted for review and approval describing how the existing bridge will be demolished and what measures will be taken to assure that demo material is properly contained and does not enter the Weweantic River. **(Submittal)**
17. In accordance with the NHESP Conditional No-Take Determination, dated February 8, 2024, a Northern Diamond-backed Terrapin TPP shall be submitted to NHESP for review and approval prior to the start of work. Proof of NHESP approval of the TPP shall also be submitted to MassDEP prior to the start of work. **(Submittal)**

Construction Period

18. No more than **913 sf** of permanent and **219 sf** of temporary impacts to BVWs shall occur. No more than **12,580 sf** of permanent and **2,459 sf** of temporary impacts to LUW shall occur. No more than **1,764 sf** of permanent and **709 sf** of temporary impacts to salt marsh shall occur. No more than **2,575 cy** of dredging in LUW shall occur. All work shall avoid unapproved impacts to BVWs, salt marsh, and LUW.
19. The EM duties shall include, but are not limited to, oversight of installation and maintenance of erosion and sedimentation controls and Stormwater Control Measures (SCMs), dewatering activities, cofferdam installation and removal, concrete washout containment, dust control, and hazardous or toxic material containment, as applicable. The EM shall only be responsible for the oversight of hazardous and toxic materials to the extent that the CP/PP requires. All erosion and sedimentation controls shall be inspected by the EM prior to the start of work in each area, and all dewatering methods and locations shall be inspected by the EM prior to use. The EM shall have the authority to require modifications to or additional erosion and sedimentation controls or dewatering controls as they deem necessary to comply with this WQC and the CP/PP.
20. CP/PP inspections shall occur at least once every seven calendar days and within 24 hours of a storm event that produces 0.5 inches or more of rain within a 24-hour period, or at a more stringent frequency if the CP/PP requires.
21. Pursuant to Section 9.1.2.I of the EPA CGP, copies of the CP/PP Inspection Reports and Corrective Action Logs shall be submitted to MassDEP within 14 days upon request.
22. The EM shall submit to MassDEP and the Marion and Wareham Conservation Commissions at least one report every two calendar weeks during active construction and once every month while work is shut down until the site achieves final stabilization. The permittee shall not participate in the preparation of any EM report. The report shall include:
 - a. Relevant weather information including storm event amounts and durations since the last inspection;
 - b. A general description of current and foreseeable construction activities;
 - c. The status and effectiveness of erosion and sedimentation controls, stormwater control measures, and dewatering methods;
 - d. Evidence of erosion, sedimentation, or improper material containment or spills;
 - e. A description of any unauthorized discharges to BVWs, salt marsh or LUW, and actions taken to immediately stop the discharge;
 - f. Recommendations to correct any deficiencies identified during the inspection;
 - g. Due dates to resolve corrective actions as specified in the CP/PP and WQC, and dates and descriptions of the resolutions as they are completed;

- h. Representative photos of current site conditions, erosion and sedimentation controls, stormwater control measures, and dewatering methods;
 - i. Specific photos of any unauthorized discharges to BVWs, salt marsh, or LUW, deficiencies or non-compliance requiring corrective actions, and corrective actions that have been undertaken; and
 - j. Any other recommendations for site management to promote compliance with this WQC and the CP/PP.
- 23. The EM shall immediately report any unauthorized discharges to BVWs, salt marsh, or LUW, or any other significant non-compliance with this WQC or the CP/PP to MassDEP, MassDOT, the RE, and the Marion and Wareham Conservation Commissions. The EM shall have stop-work authority in the event of significant non-compliance with this WQC and/or the CP/PP. The EM shall be authorized to respond to and communicate directly with MassDEP on all matters related to compliance with this WQC. MassDEP may make any requests directly to the EM and copy MassDOT, and MassDOT shall authorize the EM to fulfill such request in direct coordination with MassDEP.
- 24. Inspection and maintenance of erosion and sediment controls in active work areas shall also be the responsibility of both the Contractor and RE. The project team shall include an individual with at least three years of experience with construction period erosion and sedimentation controls. The RE shall be ultimately responsible for inspection and maintenance of site controls. The EM, RE, and/or contractor shall immediately notify MassDEP and the Marion and Wareham Conservation Commissions if any unauthorized discharges to BVWs, salt marsh, or LUW occur.
- 25. Disturbed areas shall be stabilized immediately after activities have permanently ceased or will be temporarily inactive for 14 or more calendar days. The installation of stabilization measures shall be implemented as soon as practicable, but no later than 14 calendar days after stabilization has been initiated.
- 26. Work within LUW shall be conducted in low or no-flow conditions to the extent practicable. Notice shall be provided to MassDEP and the Marion and Wareham Conservation Commissions within 24 hours prior to the commencement of dewatering. Dewatering methods and location(s) shall be approved by the EM prior to use, and shall be documented in the CP/PP. There shall be no discharge of untreated dewatered stormwater or groundwater to BVWs, salt marsh, or LUW. Any discharges shall be visibly free of sediment.
- 27. Additional erosion and sedimentation control materials shall be stored on-site at all times for emergency and routine replacement. Materials shall be kept covered, dry, and accessible at all times. The RE and EM shall be responsible for anticipating the need for and installation of additional erosion and sedimentation controls and shall have the authority to require additional erosion control measures to protect wetland resource areas beyond what is shown on the plans if field conditions or professional judgment dictate that additional protection is necessary.

28. The RE shall monitor the National Weather Service forecast for updates, and upon issuance of a flood watch for the 1% annual chance of flooding zone, shall implement the flood contingency plan referenced in Condition 13.
29. Any storm drains with potential to receive discharge from stockpiled materials or construction operations shall be managed to inhibit the inflow of sediment while not increasing the likelihood of roadway flooding during periods of precipitation. Stockpiles shall be located no less than 50 feet from BVWs, salt marsh, LUW, catch basins, or other drainage conveyances that discharge to BVWs, salt marsh, or LUW. The CP/PP shall specify measures to implement this. Filter fabric stretched under storm drain inlet grates are not acceptable for this purpose.
30. The contractor shall have designated washout areas for concrete equipment that will be comprised of impermeable material and sized to contain project concrete wastes and wash water. Concrete wash out areas shall be located no less than 50 feet from BVWs, salt marsh, LUW, and catch basins or other drainage conveyances that discharge directly or indirectly to BVWs, salt marsh, or LUW.
31. Refueling, washing, and cleaning of vehicles and other construction equipment shall not take place within 50 feet of BVWs, salt marsh, or LUW and any wash water shall be contained such that it does not drain toward BVWs, salt marsh, or LUW. MassDEP shall explicitly approve in writing any deviation to this condition for oversized stationary vehicles.
32. The contractor shall have spill containment kits on site. In the event of a release of fuels and/or oils, the local fire department and MassDEP shall be notified.
33. The Northern Diamond-backed Terrapin TPP shall be implemented as approved by NHESP.
34. Existing Atlantic white cedar (*Chamaecyparis thyoides*) trees in and adjacent to the salt marsh replication area shall be protected during construction and retained to the extent practicable.
35. Sheet piles shall be cut to at least two feet below the mudline around the piers. Sheet piles shall be fully removed from wetland resource areas along the abutments and causeway upon stabilization of the area as required. No portion of sheet piles shall remain along the abutments and causeway unless approved by MassDEP in writing prior to installation. A request to leave sheet piles shall include, but not be limited to, demonstration that full removal of the sheet piles is not feasible or practicable, and an alternatives analysis demonstrating alternative methods to isolate the work area(s) are not feasible or practicable. At no time shall sheet piles be allowed to remain in LUW of a waterway that provides aquatic organism passage.
36. A temporary shielding system shall be in place beneath the bridge structure prior to removal and concrete demolition to prevent debris from falling into the water below. In the event that any debris accidentally enters the Weweantic River, it shall be immediately retrieved. Notice shall be provided to MassDEP if debris enters the river and that it has been removed with photo-documentation (if practicable) submitted by email.

Dredging

37. No later than 21 days prior to commencement of dredging activity, a Dredged Material Dewatering Plan shall be submitted to MassDEP for review and approval. At a minimum, the Plan shall include but not be limited to the type of containment, method of dewatering (i.e. mechanical or by gravity), method of collecting the dewatered effluent and method of disposal. **(Submittal)**
38. All sediment management activities authorized by this WQC shall be conducted under the supervision of a Licensed Site Professional (LSP). Prior to the Pre-Construction Meeting required in Condition 5, the applicant shall provide MassDEP with the name and contact information of the LSP. **(Submittal)**
39. A Health & Safety Plan shall be required for handling of sediment which has been characterized as exceeding MCP RCS-1 criteria. A copy shall be provided to MassDEP within six weeks of the effective of this WQC or two weeks prior to the commencement of the dredging operation, whichever comes first.
40. Best Management Practices (BMPs) shall be employed by the contractor to protect resource areas located adjacent to the proposed staging/temporary dredged material stockpiling and dewatering areas. Sediment stockpiles shall be constructed in accordance with the MassDEP approved project plans, stabilized, bottom-lined and securely covered with wind tear resistance tarpaulin, polyethylene sheeting or similar impermeable material at all times, and properly labeled. Stockpile covers shall be securely weighed down. Stockpiles shall also be secured to restrict access by the public and shall be set back at least 10 feet from temporary construction access roads or other areas and activities which could disturb the stockpiles and associated erosion controls. Inspection of the sediment containment and dewatering location and associated erosion controls shall be conducted daily and more frequently immediately before, during and after all precipitation and storm events. Any observed deficiency shall be corrected or repaired in a timely manner.
41. In the event of a precipitation or storm event, the site shall be secured beforehand in such a way as to protect resource areas and waters on site and downstream of the site, including covering of stockpiles of dredged material. Sediment stockpile areas shall be inspected immediately prior to, during and immediately after all precipitation and storm events. Any observed deficiency shall be corrected or repaired in a timely manner to prevent discharge from the stockpiled material. If stormwater runoff and erosion is observed from stockpiled dredged material, additional erosion and/or damage prevention controls measures shall be implemented.
42. Dredging, stockpiling of dredged material, and offsite transport of dredged material shall be sequenced and conducted in a manner to limit stockpiling time. Sediment characterized as having concentrations exceeding the RCS-1 criteria shall not be stockpiled at the site longer than 90 days from the date of generation.
43. Measures shall be in place to prevent turbid waters, due to dredging, demolition, or debris removal activities, from extending past the limits of work into the Weweantic River. These measures can be items such as turbidity curtains and/or sheet piles.

44. MassDEP shall be notified one week prior to the start of dredging so that staff may inspect the work for compliance throughout the project.
45. If visual turbidity escapes the controls in place, work shall stop immediately and MassDEP shall be notified within 24 hours. Work shall not resume until the issue is corrected and MassDEP to the satisfaction of MassDEP.
46. All turbidity controls shall be inspected daily by the RE. If any damage is observed the controls in place will be replaced or repaired immediately.
47. MassDEP shall be notified in writing of the name and location of the upland licensed facilities accepting the dredged material for disposal or reuse for review and approval. If the licensed facility is located out of state, documentation shall be provided to MassDEP that the dredged material disposal/reuse has been approved and will be accepted by the receiving State. The dredged material shall not be transported to the facility without concurrence of MassDEP.
48. Transportation and disposal of the dredged material shall be overseen by the LSP of record. A Bill-of-Lading (BOL) or a Material Shipping Record (MSR) shall be used to track the dredged material to the proposed intermediate (stockpiling /dewatering) facility. A fully executed copy of the BOL or MSR shall be provided to MassDEP within 30 days of final shipment to the reused location or facility.
49. BMPs shall be implemented during transportation of the dredged material to the licensed receiving facility. At a minimum, when transported upon public roadways, all dredged material shall have no free liquid as determined by the Paint Filter Test or other suitably analogous methodology acceptable to MassDEP, and a tarpaulin or other means shall be used to cover the dredged material during transport.

Wetland Mitigation

50. A minimum of 5,930 sf of salt marsh replication shall be completed in coordination with the approved WS. The WS shall oversee all salt marsh and BVW replication and restoration, including final grading, seeding, and planting. The WS shall confirm that constructed salt marsh and BVW replication and restoration areas have adequate soils and hydrology to promote wetland plant species prior to seeding and installation of plantings and shall recommend measures to amend soils and promote wetland hydrology as needed.
51. Planting and seeding shall not take place between November 15th and April 15th, except as allowed by MassDEP in writing. The WS shall inspect trees and shrubs to ensure they are healthy prior to planting. Trees and shrubs deemed unhealthy in the professional judgment of the WS shall be replaced. Plantings and seed mixes shall consist of native and non-invasive species. Species may be substituted at the recommendation of the WS, and review and approval by MassDEP.
52. At least 75% of the surface area of the salt marsh and BVW replication and/or restoration areas shall be vegetated with indigenous wetland plant species within two growing seasons, or the period required by the Section 404 permit, whichever is longer. Additionally, evidence of

hydrology, including hydric soil formation shall be submitted at the same time. Annual monitoring reports shall be submitted by the WS no later than January 15th each year. Monitoring reports shall include an assessment based on the approved success criteria, representative photos, and recommended corrective actions as needed. **(Submittal)**

53. MassDEP reserves the right to determine the success or failure of the salt marsh and BVW replication and restoration areas, and reserves the right to require additional plantings, regrading, or other measures deemed necessary to promote success.

Stream Mitigation

54. The WS shall oversee all LUW restoration. Placement of streambed materials shall take place in no- or low-flow conditions. The Water Management Plan required in Condition 10 shall include measures to create no-flow conditions for this work such as a pump bypass system or other dewatering method, if needed. Placement of streambed materials during greater than low-flow conditions shall require a placement plan, with a narrative describing turbidity control measures, submitted to MassDEP for review and approval.
55. Water shall be slowly introduced back into the restored and dewatered LUW work areas as to not cause erosion and sedimentation. This work shall be overseen by the EM and/or WS.
56. MassDEP reserves the right to determine the success or failure of the LUW restoration areas and reserves the right to require additional measures deemed necessary to promote success.

Post-Construction

57. All temporary erosion controls shall be removed at the conclusion of work once the surrounding area has achieved final stabilization.

General Conditions

58. Any proposed alterations, minor plan changes, or amendment requests, as well as any required submittals shall be sent by email for review and approval to heidi.davis@mass.gov and ryan.hale@mass.gov. **(Submittal)**
59. This WQC remains in effect for the same duration as the Section 404 permit that requires it.
60. No Special Condition set forth herein shall be construed or operate to prohibit MassDEP from taking enforcement against the MassDOT or its contractors for any failure to comply with the terms and requirements of this WQC.
61. No activity authorized by this WQC may begin prior to expiration of the 21-day appeal period, or until a final decision is issued by MassDEP in the event of an appeal.

Failure to comply with this Certification is grounds for enforcement, including civil and criminal penalties, under MGL Ch. 21 §42, MGL Ch. 21A §16, or other possible actions/penalties as authorized by the General Laws of the Commonwealth.

This Certification does not relieve the applicant of the obligation to comply with other appropriate state or federal statutes or regulations.

NOTICE OF APPEAL RIGHTS

a.) Appeal Rights and Time Limits

Certain persons shall have a right to request an adjudicatory hearing concerning certifications by MassDEP when an application is required: (a) the applicant or property owner; (b) any person aggrieved by the decision who has submitted written comments during the public comment period; (c) any ten (10) persons of the Commonwealth pursuant to M.G.L. c.30A where a group member has submitted written comments during the public comment period; or (d) any governmental body or private organization with a mandate to protect the environment which has submitted written comments during the public comment period. Any person aggrieved, any ten (10) persons of the Commonwealth, or a governmental body or private organization with a mandate to protect the environment may appeal without having submitted written comments during the public comment period only when the claim is based on new substantive issues arising from material changes to the scope or impact of the activity and not apparent at the time of public notice. To request an adjudicatory hearing pursuant to M.G.L. c.30A, § 10, a Notice of Claim must be made in writing, provided that the request is made by certified mail or hand delivery to MassDEP, with the appropriate filing fee specified within 310 CMR 4.10 along with a DEP Fee Transmittal Form within twenty-one (21) days from the date of issuance of this Certificate, and addressed to:

Case Administrator
Department of Environmental Protection
100 Cambridge Street, 9th Floor
Boston, MA 02114

A copy of the request shall at the same time be sent by certified mail or hand delivery to the Department of Environmental Protection at:

Department of Environmental Protection
Commissioner's Office
100 Cambridge Street, Suite 900
Boston, MA 02114

b.) Contents of Hearing Request

A Notice of Claim for Adjudicatory Hearing shall comply with MassDEP's Rules for Adjudicatory Proceedings, 310 CMR 1.01(6), and shall contain the following information pursuant to 314 CMR 9.10(3):

3. the 401 Certification Transmittal Number;
4. the complete name of the applicant and address of the project;
5. the complete name, address, and fax and telephone numbers of the party filing the request, and, if represented by counsel or other representative, the name, fax and telephone numbers, and address of the attorney;

6. if claiming to be a party aggrieved, the specific facts that demonstrate that the party satisfies the definition of “aggrieved person” found at 314 CMR 9.02;
7. a clear and concise statement that an adjudicatory hearing is being requested;
8. a clear and concise statement of (1) the facts which are grounds for the proceedings, (2) the objections to this Certificate, including specifically the manner in which it is alleged to be inconsistent with the MassDEP’s Water Quality Regulations, 314 CMR 9.00, and (3) the relief sought through the adjudicatory hearing, including specifically the changes desired in the final written Certification; and
9. a statement that a copy of the request has been sent by certified mail or hand delivery to the applicant, the owner (if different from the applicant), the conservation commission of the city or town where the activity will occur, the Department of Conservation and Recreation (when the certificate concerns projects in Areas of Critical Environmental Concern), the public or private water supplier where the project is located (when the certificate concerns projects in Outstanding Resource Waters), and any other entity with responsibility for the resource where the project is located.

c.) Filing Fee and Address

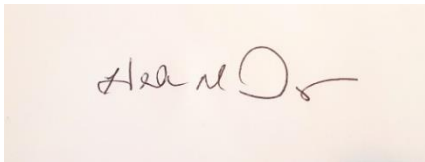
The hearing request along with a DEP Fee Transmittal Form and a valid check or money order payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100) must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
Commonwealth Master Lockbox
PO Box 4062
Boston, MA 02211

The request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority. MassDEP may waive the adjudicatory hearing filing fee pursuant to 310 CMR 4.06(2) for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file an affidavit setting forth the facts believed to support the claim of undue financial hardship together with the hearing request as provided above.

Should you have any questions relative to this permit, please contact myself or Ryan Hale at heidi.davis@mass.gov and ryan.hale@mass.gov.

Very truly yours,

A photograph of a handwritten signature in dark ink on a light-colored background. The signature appears to read "Heidi M. Davis" with a stylized flourish at the end.

Heidi M. Davis
Highway Unit Supervisor

Ecc: DEP SERO – Maissoun Reda
EEA Office of Coastal Zone Management – Sean Duffey
USACE – Dan Vasconcelos
USCG – Jeffrey Stieb
MassDOT – Bryan Cordeiro
MassDOT – Melissa Lenker
MassDOT – Kylie Abouzeid
MassDOT – Valerie Kilduff
BSC Group – Sara Kreisel
BSC Group – Matthew Creighton
Parsons – Paul Mancuso
Parsons – Shawn Demeule
Parsons – Seven Dylingowski
Marion Conservation Commission – Doug Guey-Lee, Conservation Agent,
dgueylee@marionma.gov
Wareham Conservation Commission – Joshua Faherty, Conservation Administrator
jfaherty@wareham.ma.us

**ATTACHMENT A
PRE-CONSTRUCTION SUBMITTAL CHECKLIST**

**Route 6 (Marion and Wareham Roads) over Weweantic River Bridge Replacement Project
Marion and Wareham, MA**

THIS CHECKLIST MUST BE COMPLETED PRIOR TO THE START OF WORK. NOTE THAT SOME CONDITIONS REQUIRE THAT INFORMATION BE SUBMITTED A SPECIFIC NUMBER OF DAYS PRIOR TO THE START OF WORK OR THE PRE-CONSTRUCTION MEETING.

Condition	Required Submittal	Due Date	Date Submitted	Date Approved
PRE-CONSTRUCTION SUBMITTAL REQUIREMENTS				
2 and 3	Name, contact information, and qualifications of the EM and WS, including specific experience and years to meet requirement	Prior to Pre-Construction Meeting		
4	Name and contact information of the RE	Prior to Pre-Construction Meeting		
6	USACE Work-Start Notification Form	14 days prior to work start		
7	CP/PP	14 days prior to work start		
8	EM Verification of SWPPP Training	Prior to work start		
10	Water Management Plan	14 days prior to work start		
13	Flood Contingency Plan	Prior to any work within 1% annual chance of flooding zone		
14	Invasive Plant Management Strategy	Prior to Pre-Construction Meeting		
16	Demolition Plan	21 days prior to work start		
17	NHESP Approval of Northern Diamond-backed Terrapin Turtle Protection Plan	Prior to start of work		
37	Dredged Material Dewatering Plan	21 days prior to dredging		

38	Name and contact information of the LSP	Prior to Pre-Construction Meeting		
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重要 महत्वपूर्ण σημαντικός
Important
կարևոր quan trọng مهم



Communication for Non-English-Speaking Parties

This document is important and should be translated immediately.

If you need this document translated, please contact MassDEP's Director of Environmental Justice at the telephone number listed below.

Español Spanish

Este documento es importante y debe ser traducido inmediatamente. Si necesita traducir este documento, póngase en contacto con el Director de Justicia Ambiental de MassDEP (*MassDEP's Director of Environmental Justice*) en el número de teléfono que figura más abajo.

Português Portuguese

Este documento é importante e deve ser traduzido imediatamente. Se você precisar traduzir este documento, entre em contato com o Diretor de Justiça Ambiental do MassDEP no número de telefone listado abaixo.

繁體中文 Chinese Traditional

本文檔很重要，需要即刻進行翻譯。
如需對本文檔進行翻譯，請透過如下列示電話號碼與 MassDEP 的環境司法總監聯絡。

简体中文 Chinese Simplified

这份文件非常重要，需要立即翻译。
如果您需要翻译这份文件，请通过下方电话与 MassDEP 环境司法主任联系。

Ayisyen Kreyòl Haitian Creole

Dokiman sa a enpòtan epi yo ta dwe tradui l imedyatman. Si w bezwen tradui dokiman sa a, tanpri kontakte Direktè. Jistis Anviwònmanal MassDEP a nan nimewo telefòn ki endike anba a.

Việt Vietnamese

Tài liệu này và quan trọng và phải được dịch ngay. Nếu quý vị cần bản dịch của tài liệu này, vui lòng liên hệ với Giám Đốc Phòng Công Lý Môi Trường của MassDEP theo số điện thoại được liệt kê bên dưới.

ប្រទេសកម្ពុជា Khmer/Cambodian

ឯកសារនេះមានសារៈសំខាន់
ហើយគួរត្រូវបានបកប្រែភ្លាមៗ។
ប្រសិនបើអ្នកត្រូវការអោយឯកសារនេះបកប្រែ
សូមទាក់ទងនាយកផ្នែកយុត្តិធម៌បរិស្ថានរបស់
MassDEPតាមរយៈលេខទូរស័ព្ទដែលបានរាយដូចខា
ងក្រោម។

Kriolu Kabuverdianu Cape Verdean

Es dokumentu sta important i tenki ser tradusidu imediatamenti. Se nho ta presisa ke es dokumentu sta tradisidu, por favor kontata O Diretor di Justisia di Environman di DEP ku es numero di telefoni menxionadu di baixo.

Contact Deneen Simpson 857-406-0738

**Massachusetts Department of Environmental Protection
100 Cambridge Street 9th Floor Boston, MA 02114**

TTY# MassRelay Service 1-800-439-2370 • <https://www.mass.gov/environmental-justice>
(Version revised 8.2.2023) 310 CMR 1.03(5)(a)

Русский Russian

Это чрезвычайно важный документ, и он должен быть немедленно переведен. Если вам нужен перевод этого документа, обратитесь к директору Департамента экологического правосудия MassDEP (MassDEP's Director of Environmental Justice) по телефону, указанному ниже.

العربية Arabic

هذه الوثيقة مهمة وتجب ترجمتها على الفور.

إذا كنت بحاجة إلى ترجمة هذه الوثيقة، فيرجى الاتصال بمدير العدالة البيئية في MassDEP على رقم الهاتف المذكور أدناه.

한국어 Korean

이 문서는 중대하므로 즉시 번역되어야 합니다. 본 문서 번역이 필요하신 경우, 매사추세츠 환경보호부의 "환경정의" 담당자 분께 문의하십시오. 전화번호는 아래와 같습니다.

հայերեն Armenian

Այս փաստաթուղթը կարևոր է, և պետք է անհապաղ թարգմանել այն:
Եթե Ձեզ անհրաժեշտ է թարգմանել այս փաստաթուղթը, դիմեք Մասսաչուսեթսի շրջակա միջավայրի պահպանության նախարարության (MassDEP) Բնապահպանական հարցերով արդարադատության ղեկավարին (Director of Environmental Justice)՝ ստորև նշված հեռախոսահամարով

فارسی Farsi Persian

این نوشتار بسیار مهمی است و باید فوراً ترجمه شود. اگر نیاز به ترجمه این نوشتار دارید لطفاً با مدیر عدالت محیط زیستی MassDEP در شماره تلفن ذکر شده زیر تماس بگیرید.

Français French

Ce document est important et doit être traduit immédiatement. Si vous avez besoin d'une traduction de ce document, veuillez contacter le directeur de la justice environnementale du MassDEP au numéro de téléphone indiqué ci-dessous.

Deutsch German

Dieses Dokument ist wichtig und muss sofort übersetzt werden. Wenn Sie eine Übersetzung dieses Dokuments benötigen, wenden Sie sich bitte an MassDEP's Director of Environmental Justice (*Direktor für Umweltgerechtigkeit in Massachusetts*) unter der unten angegebenen Telefonnummer.

Ελληνική Greek

Το έγγραφο αυτό είναι πολύ σημαντικό και πρέπει να μεταφραστεί αμέσως. Αν χρειάζεστε μετάφραση του εγγράφου αυτού, παρακαλώ επικοινωνήστε με τον Διευθυντή του Τμήματος Περιβαλλοντικής Δικαιοσύνης της Μασαχουσέτης στον αριθμό τηλεφώνου που αναγράφεται παρακάτω

Italiano Italian

Questo documento è importante e deve essere tradotto immediatamente. Se hai bisogno di tradurre questo documento, contatta il Direttore della Giustizia Ambientale di MassDEP al numero di telefono sotto indicato.

Język Polski Polish

Ten dokument jest ważny i powinien zostać niezwłocznie przetłumaczony. Jeśli potrzebne jest tłumaczenie tego dokumentu, należy skontaktować się z dyrektorem ds. sprawiedliwości środowiskowej MassDEP pod numerem telefonu podanym poniżej.

हिन्दी Hindi

यह दस्तावेज महत्वपूर्ण है और इसका अनुवाद तुरंत किया जाना चाहिए। यदि आपको इस दस्तावेज का अनुवाद कराने की जरूरत है, तो कृपया नीचे दिए गए टेलीफोन नंबर पर MassDEP के पर्यावरणीय न्याय निदेशक से संपर्क करें।

Contact Deneen Simpson 857-406-0738

Massachusetts Department of Environmental Protection
100 Cambridge Street 9th Floor Boston, MA 02114

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