



Connecticut Department of Energy and Environmental Protection License*

Section 401 Water Quality Certification Federal Coastal Consistency Concurrence

Licensee(s): National Railroad Passenger Corporation (Amtrak), c/o Jason Hoover

Licensee Address(s): 360 West 33rd Street
New York, NY 10001

License Number(s): 202304021-WQC FCC

Municipality: Town of Old Lyme and Town of Old Saybrook

Project Description: Construction of a new railroad bridge and the removal of the existing Amtrak Connecticut River Bridge

Project Address/Location: Connecticut River Bridge No. MB 106.89

Waters: Connecticut River and Lieutenant Rivers

Authorizing CT Statute(s) and/or Federal Law: CGS Section 22a-359 to 363g; CGS Section 22a-28 to 35; CGS Section 22a-90 to 112; Section 401 CWA (33 USC 1341); CZMA 307(c)(1), 15 CFR 930

Applicable Regulations of CT State Agencies: 22a-30-1 to 17, 22a-426-1 to 9

Agency Contact: Land & Water Resources Division,
Bureau of Water Protection & Land Reuse, 860-424-3019

License Expiration: Ten (10) years from the date of issuance of this license.

*Connecticut's Uniform Administrative Procedure Act defines License to include, "the whole or part of any agency permit, certificate, approval, registration, charter or similar form of permission required by law . . ."

Project Site Plan Set: Three sets of plans prepared by Hardesty & Hanover, LLC and collectively totaling one hundred fifty-eight (158) sheets including: a plan set entitled “ENVIRONMENTAL AND PERMIT PLANS” dated May 2, 2023; a plan set entitled “Replacement of Amtrak Connecticut River Bridge (MP 106.89) Tidal Marsh Mitigation Design 3.25-Acre Site” dated April 7, 2023; and a plan set entitled “Replacement of Amtrak Connecticut River Bridge (MP 106.89) Tidal Marsh Mitigation Design 17 Shore Road Site” dated April 7, 2023.

License Enclosures: LWRD Dredging and General Conditions; LWRD Dredging Report; LWRD Work Commencement Form; LWRD Compliance Certification Form; Site Plan Set

Authorized Activities:

The Licensee is hereby authorized to conduct the following work as described in application # 202304021-WQC FCC and as depicted on any site plan sheets / sets cited herein:

Construct a new bascule railroad bridge over the Connecticut River between Old Saybrook and Old Lyme, 52 feet south of the existing bridge location, with a two-track, electrified railroad movable bridge, approach spans, and at-grade approaches on either side of the river that tie into the existing railroad. Remove the existing Amtrak Connecticut River bridge between Old Saybrook and Old Lyme, including the superstructure, substructure elements, submarine cables, overhead contact systems, and all decommissioned track and rail systems. Remove and rebuild the CTDEEP Ferry Landing State Park boardwalk within the Connecticut River. Conduct compensatory wetland restoration and invasive species control.

Construction Mobilization and Access Activities [Phase I A/B]

1. Mobilize, clear and grub site, begin setting up temporary environmental controls, and install security safeguards within areas identified on the plans;
2. Relocate 480V-60HZ power to north side of tracks on embankment in upland areas at Block Point (BP) 107.6;
3. Initiate temporary access from existing access points in Old Saybrook and Old Lyme consisting of the following elements:
 - a. Old Saybrook (west) temporary access includes:
 - i. Improve existing upland access from Route 1 (Boston Post Road) through 60 Boston Post Road (N/F Gladeview LLC) and 70 Mulcahy Road/80 Mulcahy Road (N/F Lab Realty LLC) to Amtrak right-of-way (“ROW”);
 - ii. Widen the existing upland access road to 14’ wide by 3000’ long along the north side of embankment within the Amtrak ROW to the temporary west abutment trestle work platform;
 - iii. Using water-based equipment, perform dredging for a 50’ wide by 200’ long barge access and mooring adjacent to temporary trestle work platform located on the west side of the Connecticut River and dredge to the design depth of -10.11’ MLLW (-12.00’ NAVD88) with an

- allowable 1' over-dredge depth to an elevation of -11.11' MLLW (-13.0' NAVD88). Remove approximately 1820 cubic yards of dredged material (excluding an approximately 310 cubic yards of allowable over-dredge);
- iv. Construction of a temporary trestle work platform with a minimum deck elevation of +5.3' NAVD88 at the western abutment;
 - v. Construction of a temporary access road south of the existing embankment; including temporary impacts of approximately 7,199 square feet through a temporary easement at N/F State of Connecticut Ragged Rock Creek Wildlife Management Area ("WMA");
- b. Old Lyme (east) temporary access includes:
- i. Improve existing upland access road from Route 156 (Shore Road) through 17 Shore Road to Amtrak ROW;
 - ii. Construct a new temporary 14' wide by 7,400' long upland access road along the north side of embankment within the Amtrak ROW from 17 Shore Rd to east abutment temporary trestle work platform;
 - iii. Construct a temporary trestle bridge with a minimum low chord elevation of +12.5' NAVD88 over the Lieutenant River;
 - iv. Close and demolish the Ferry Landing State Park Boardwalk;
 - v. Using water-based equipment, perform dredging for a 50' wide by 200' long barge access and mooring adjacent to temporary trestle work platform located on the east side of the Connecticut River and dredge to the design depth of -10.11' MLLW (-12.00' NAVD88) with an allowable 1' over-dredge depth to an elevation of -11.11' MLLW (-13.0' NAVD88). Remove approximately 4,980 cubic yards of dredged material (excluding an approximately 940 cubic yards of allowable over-dredge);
 - vi. Temporarily impact approximately 5,312 square feet of wetlands for construction of a temporary trestle work platform (with a minimum deck elevation of +5.3' NAVD88) at east abutment and construction of temporary access road on south side of embankment accessed through a temporary easement at N/F State of Connecticut Ferry Landing State Park;
 - vii. Construct an upland temporary parking area as mitigation for planned use of existing parking areas during construction at CTDEEP Marine Headquarters at N/F State of Connecticut Ferry Landing State Park;
 - viii. Construct an upland temporary staging area at N/F State of Connecticut Ferry Landing State Park;
4. Begin implementation of mitigation measures defined under other phases which shall include, but not be limited to, the construction of exclusion barriers, excavation and transportation of state-listed plant species to an identified 3.25-acre mitigation site, the installation of fencing to protect sensitive areas, construction of measures to mitigate the loss of recreational fishing, treatment of *Phragmites australis*, and initial wetland mitigation activities to permit construction access;

Prepare Temporary Facilities Needed During Construction [Phase I B]

1. Install temporary facilities for the existing bridge and rail necessary to accommodate construction of the new bridge and rail on the south side of the existing bridge. This includes, but is not limited to:
 - a. Install temporary movable bridge power and control systems;
 - b. Install temporary bridge electrification and communications and signals (“C&S”) cable rerouting via aerial cables;
 - c. Install temporary aerial cable towers supported on existing bridge piers 5, 6 and 7;
 - d. Install temporary case C on platform between existing pier 6 and 7;
 - e. Install temporary C&S ESIC case on existing pier 5;
 - f. Install additional temporary C&S equipment located on the existing bridge;
 - g. Install temporary cable, trough, duct banks, vaults, and pull boxes on the existing bridge;
 - h. Move and/or protect southside high voltage line that is mounted on the south fascia of the existing bridge approach spans;
 - i. Install a temporary operator’s shanty and access platforms between existing bridge piers 6 and 7;

Major Construction Phase (Navigation Channel Width Reduced) [Phase I C/D/E, Phase II, Phase III]

1. Initiate construction on the eastern approach embankment and western approach embankment including embankment scour protection, including:
 - a. Install temporary erosion and sedimentation controls and temporary support of excavation;
 - b. Excavate for riprap embankment scour protection key-in and for unsuitable material under embankment;
 - c. Install free-draining material and construct embankment with embankment scour protection;
 - d. Install surcharge material in sequencing as specified on plans on the western approach;
2. Construct cast-in-place concrete west abutment;
 - a. Install turbidity curtain;
 - b. Install a cofferdam and construct a 6’ diameter drilled shaft foundation;
 - c. Construct a 50’ wide by 30’ long cast-in-place concrete footing;
 - d. Construct cast-in-place concrete abutment stem and wingwalls;
3. Construct cast-in-place concrete east abutment;
 - a. Install turbidity curtain;
 - b. Install cofferdam;
 - c. Construct a 50’ wide by 30’ long cast-in-place concrete spread footing;
 - d. Construct cast-in-place concrete abutment stem and wingwalls;
4. Construct Bridge Piers 1-5;
 - a. Install turbidity curtains;
 - b. Erect 14’ wide by 54’ long integral precast concrete cofferdams at Piers 1-5;
 - c. Install 6’ diameter drilled shafts for Piers 1-4 and an 8’ diameter drilled shaft for Pier 5;
 - d. Construct cast-in-place concrete pile caps, pier stems and pier caps;
5. Construct Pier 6;

- a. Install turbidity curtains;
 - b. Erect a 30' wide by 64' long trapezoidal integral precast concrete cofferdam;
 - c. Install 8' diameter drilled shafts;
 - d. Construct cast-in-place concrete pile caps, pier stems and pier caps;
6. Construct Pier 8 and control house pier;
- a. Install turbidity curtains;
 - b. Erect a 14' wide by 54' long integral precast concrete cofferdam at Pier 8;
 - c. Erect a 25' wide by 32' long integral precast concrete cofferdam at the Control House pier ;
 - d. Install 8' diameter drilled shafts for Pier 8 and 4' diameter drilled shafts for control house pier;
 - e. Construct cast-in-place concrete pile caps, pier stems and pier caps;
7. Construct Pier 9;
- a. Install turbidity curtain;
 - b. Install cofferdam;
 - c. Install rock anchors;
 - d. Construct a 14' wide by 54' long cast-in-place concrete spread footing;
 - e. Construct cast-in-place concrete pier stems and pier caps.
8. Construct West Approach Retaining Wall.
- a. Install turbidity curtain;
 - b. Install cofferdam;
 - c. Install five hundred forty-six (546) 14" wide steel H-piles over an approximately 14,000 square foot area;
 - d. Construct a 36' wide by 391' long cast-in-place concrete footing;
 - e. Construct cast-in-place concrete retaining wall stem;
 - f. Excavate for riprap wall scour protection key-in at west abutment and retaining wall;
 - g. Install riprap wall scour protection at west abutment and retaining wall;
9. Construct East Approach Retaining Wall
- a. Install turbidity curtain;
 - b. Install cofferdam;
 - c. Construct a 31' wide by 433' long cast-in-place concrete spread footing;
 - d. Construct cast-in-place concrete retaining wall stem;
 - e. Excavate for riprap wall scour protection key-in at east abutment and retaining wall;
 - f. Install riprap wall scour protection at east abutment and retaining wall;
10. Reduce the width of the existing navigation channel at the bridge from approximately 139' wide to 129' wide;
11. Demolish a portion of the existing west side and east side timber fender systems behind turbidity curtain and fully remove the timber piles;
12. Construct portion of west side and east side concrete filled drilled shaft fender systems;
- a. Install turbidity curtain;
 - b. Install approximately sixty-two (62) 3' diameter drilled shafts;
 - c. Construct a steel and composite lumber fender fencing;
13. Construct foundation and substructure of bascule Pier 7;
- a. Install turbidity curtain
 - b. Erect a 48' wide by 59' long octagon-shaped precast concrete cofferdam;

- c. Install 8' diameter drilled shafts ;
- d. Construct cast-in-place concrete pile caps and pier stems including approach span bridge seat and corbels for outrigger column bases;
14. Construct bridge approach spans superstructure;
 - a. Cast-in-place concrete composite deck on six (6) steel girders;
 - b. Typical out-to-out structure width of 38';
 - c. Span lengths (measured from centerline of piers);;
 - i. Span 1: 156-ft;
 - ii. Spans 2,3,4 and5: 158-ft;
 - iii. Span 6: 135-ft;
 - iv. Span 7 (bascule span): 206-ft-6-in
 - v. Span 8: 173-ft-9in;
 - vi. Span 9: 158-ft;
 - vii. Span 10: 156-ft;
15. Construct a new cast-in-place concrete control house built on stand-alone pier adjacent to bridge Pier 8;
16. Install pre-assembled and wired signal enclosures on the ROW and construct C&S facilities on approaches and bridge approach spans. Install all permanent trough, cable, conduit, or duct banks necessary between new locations. Install all temporary cable routing between the new C&S Central Instrument House ("CIH").
17. Erect two (2) steel box column trunnion towers (north and south) with seven (7) columns per tower anchored to the top surface of the concrete Pier 7;
18. Remove existing submarine cables and install permanent submarine and mounted cables. Submarine cables include two bridge control cables, six C&S cables, and an electric traction (ET) umbilical cable. Excavate and fill approximately 3,300 CY of material for submarine cable trench. Remove existing submarine cables and install permanent submarine and mounted cables, including two (2) bridge control cables, six (6) C&S cables, and an ET umbilical cable and excavate and fill approximately 3,300 CY of material for submarine cable trench;
19. Construct storm drainage systems at western approach including two (2) 24" reinforced concrete pipe ("RCP") stormwater outfalls;
20. Construct approximately 10,900 linear feet of trackwork and overhead catenary systems on approaches (including concrete foundations, poles, portal structures, and contact structures) and bridge approach spans in upland area;
21. Float-in forward portion of bascule span and connect bascule forward and rear portions;
22. Construct, on the new upland approach embankments, the new 2 track, electrification and associated C&S tie-ins at east and west ends of project;

Demolition Phase (Phase IV)

1. Demolish the existing movable span counterweights;
2. Deconstruct and/or remove and float-out an existing bascule span using water-based equipment;
3. Demolish the existing nine (9) bridge approach spans using a combination of water-based and trestle-based equipment;
4. Demolish existing bridge substructures and foundations designated for removal;
 - a. Install turbidity curtain;
 - b. Demolish piers within previously installed cofferdams;

- c. Granite piers to be removed below the mudline to the vertical limits shown on the plans (minimum 2 ft below the mudline);
5. Complete fender system construction with a 150' wide navigation channel;
 - a. Install turbidity curtain;
 - b. Install approximately thirty-four (34) 3' diameter drilled shafts within previously installed cofferdams;
 - c. Construct steel and composite lumber fender fencing;
6. Remove all remaining track and rail systems facilities no longer in service within the existing upland Amtrak ROW;
7. Remove an existing metal walkway and piles from the CT DEEP Ferry Landing parking lot to Amtrak ROW;
8. Install subsurface electrical, water, and sanitary utilities between the CT DEEP Ferry Landing parking lot and the Amtrak ROW;
9. Install a replacement metal walkway with piles from the CT DEEP Ferry Landing parking lot to the Amtrak ROW;
10. Install utility structures on grade and connect permanent electrical service for the new bridge consisting of the following elements:
 - a. Water tank (below grade) in the upland area;
 - b. Sanitary tank (below grade) in the upland area;
 - c. Sanitary waste and water ports in the upland area;
 - d. Stand-by generator and fuel tank (above grade) in the upland area;
 - e. Incoming service transformer, disconnect switch and meters in the upland area.
11. Construct a new publicly accessible Ferry Landing State Park boardwalk as shown on plan sheet FM-01 and consisting of the following elements:
 - a. Approximately twenty-three (23) spread footings;
 - b. An approximately 12' wide by 1026' long boardwalk structure with a top of deck elevation of approximately + 9.1' NAVD88 and railings;
12. Remove all temporary construction facilities, including but not limited to construction trailers and parking, access roads, erosion and sedimentation controls, trestle bridges, and mooring facilities;
13. Restore site in accordance with the requirements of the project environmental permit applications:
 - a. Evaluate temporary impacts to vegetated intertidal wetlands once temporary facilities have been removed based on existing condition data collected prior to beginning work;
 - b. Perform any required remedial activities including placement of additional wetland topsoil to restore any areas that do not match restoration criteria in the permit applications and installation of native tidal vegetation;
 - c. Conduct 3 years of post-construction monitoring of temporarily impacted tidal wetland impact areas and perform any remedial activities that may be required, including *Phragmites australis* treatment;

Barge Occupancy –

1. Barge operations shall be limited to occupancy zones delineated in the permit plans defined as extending approximately 250-feet to the north and 350-feet to the south of the centerline of the proposed tracks;

2. On-site barges will be moored in designated dredged areas south of the east and west abutments as shown on plan sheet SC-01;
3. Off-site barges mooring locations will be determined in accordance with United States Coast Guard regulations (CFR Title 33);

Mitigation Activities

17 Shore Road

1. Construct an 80' long box type culvert with an 8' height and 10' width hydraulic opening under the access road located at 17 Shore Road in Old Lyme, CT;
2. Decommission and fill the existing structurally deficient Amtrak culvert located under the existing Amtrak railroad embankment;
3. Construct an approximately 15' wide temporary access road;
4. Conduct herbicide control of *Phragmites australis*;
5. Excavation of approximately 1' of material from the entirety of the limits shown on the plans for the work on southeast side;
6. Excavation and grading for two (2) tidal pools and associated network of tidal creeks to connect with the new culvert in accordance with plan sheets C-101 and C-102 of the 17 Shore Road Tidal Marsh Mitigation Plan Set;
7. Placement of wetland topsoil to establish final lines and grades shown on the plans referenced in Item 6, above, for the appropriate tidal habitat to be restored;
8. Install native intertidal brackish wetland plants 18" on center within approximately 3.94 acres of restored habitat in accordance with planting plan C-103;
9. Perform monitoring of the mitigation site for 5 years with additional *Phragmites australis* treatment as determined necessary in annual monitoring;

3.25-Acre Mitigation Site

1. Utilize work boats and barges to mobilize equipment to the sites;
2. Conduct herbicide control of *Phragmites australis* and demarcate work areas;
3. Install environmental controls and establish temporary access routes and landing areas;
4. Plug three (3) existing mosquito ditches using salvaged marsh material or approved marsh substrate fill in accordance with plan sheet C-101 of the 3.25 Acre Site Tidal Marsh Mitigation Plan Set;
5. Excavate approximately 4,000 square feet of marsh edge to establish the transplant area for state-listed plant species;
6. Install state-listed plant species that were removed from bridge impact areas according to mitigation plan, with continued monitoring;
7. Restore temporarily disturbance areas to pre-construction conditions, including but not limited to remove temporary fill, stabilize disturbed areas, aerate compacted soil, and install native tidal wetland vegetation;
8. Perform monitoring of the mitigation site for 5 years with additional *Phragmites australis* treatment as determined necessary in annual monitoring; and

Phragmites Control at Ragged Rock Creek WMA

1. Survey Ragged Rock Creek Wildlife Management Area ("WMA") site for state-listed plant species, demarcate exclusion and buffer areas, and conduct herbicide control of *Phragmites australis* over a 3-year duration for the approximate 200-acre area WMA.

Conduct 1 year of monitoring during Year 4 and conduct 1 year of follow-up spot treatments if needed during Year 5.

Failure to comply with the terms and conditions of this license shall subject the Licensee and / or the Licensee's contractor(s) to enforcement actions and penalties as provided by law.

This license is subject to the following Terms and Conditions:

1. **License Enclosure(s) and Conditions.** The Licensee shall comply with all applicable terms and conditions as may be stipulated within the License Enclosure(s) listed above.
2. The Licensee shall place dredged material authorized herein in accordance with all applicable requirements of Chapter 446k Water Pollution Control, Chapter 445 Hazardous Waste, and Chapter 446d Solid Waste of the Connecticut General Statutes.
3. Prior to the driving of piles, steel sheeting or shaft casings authorized herein, the Licensee shall install full-depth turbidity curtains.
4. The Licensee shall only use vibratory hammers from April 1st through June 30th, inclusive of any calendar year in order to protect diadromous fish unless otherwise authorized in writing by the Commissioner. The Licensee may use impact hammers outside of this timeframe.
5. Construction or demolition of the piers shall be limited to either the western-most three (3) piers (Piers 1, 2 and 3) or the easternmost three (3) piers (Piers 7, 8 and 9) during the diadromous finfish spring migration period from April 1st through June 30th, inclusive of any calendar year unless otherwise authorized in writing by the Commissioner. At no time during this period shall in-water construction or demolition occur in the middle of the Connecticut River or simultaneously at more than three (3) piers.
6. The Licensee shall limit the use of artificial lighting to navigation lights and railroad operation lighting from April 1st through June 30th, inclusive of any calendar year unless otherwise authorized in writing by the Commissioner.
7. All non-vibratory pile driving and pile extraction (cutting/pulling) authorized herein is prohibited between April 1st through June 30th, inclusive, of any calendar year unless otherwise authorized in writing by the Commissioner.
8. The Licensee shall remove all timber piles and stone piers to a minimum of 2' below the existing mud line.
9. All unconfined dredging authorized herein shall be prohibited between April 1st through June 30th, inclusive of any calendar year to protect finfish unless otherwise authorized in writing by the Commissioner.
10. Use of a hoe ram shall be prohibited between April 1st through June 30th, inclusive of any calendar year to protect diadromous finfish unless otherwise authorized in writing by the Commissioner.
11. All work associated with the drilling of piles, driving sheet piles or shaft casing shall be prohibited from sunset to sunrise from April 1st through June 15th, inclusive of any calendar

year to protect commercial shad fishing unless otherwise authorized in writing by the Commissioner.

12. Prior to the commencement of the work authorized herein, the Licensee shall coordinate with DEEP Fisheries Division staff to obtain a list of shad fishermen and shall provide those fishermen with a schedule of planned activities that may impact the commercial shad fishery.
13. All construction-related activities, including, but not limited to drilling piles, driving sheet piles or shaft casing which exceed 90db (measured at the water surface) shall be prohibited from sunset to sunrise between April 1st through June 15th, inclusive of any calendar year to protect commercial shad fishing unless otherwise authorized in writing by the Commissioner.
14. The Licensee shall rebuild the Ferry Landing State Park public access boardwalk/fishing pier with observation deck and stairway in the location as shown on the plans attached hereto prior to the expiration of this license.
15. Installation and removal of the temporary trestle bridge over the Lieutenant River shall be prohibited between March 1st through June 1st, inclusive of any calendar year to protect diadromous fish unless otherwise authorized in writing by the Commissioner.
16. Prior to the commencement of the work authorized herein, the Licensee shall obtain all necessary approvals from the CT DEEP Land Acquisition & Management Unit.
17. Prior to the commencement of the work authorized herein the Licensee shall obtain all necessary approvals from the CT DEEP Stormwater Division.
18. Prior to the expiration of this License, the Licensee shall legally acquire the property identified as 17 Shore Road and perform the wetland mitigation measures authorized herein.
19. The Licensee shall follow the approved protocols to protect Northern diamondback terrapin (*Malaclemys t. terrapin*) during the active nesting season from April 1st through October 31st, inclusive of any calendar year in accordance with CT DOT Section 1.1 Environmental Compliance.
20. The issuance of this License does not relieve the Licensee of their obligations to obtain any other approvals required by applicable federal, State, and local law, including discharge permits for water handling.
21. The Licensee shall ensure that no debris enters the Connecticut River during the work authorized herein and shall immediately remove any debris that enters the water.
22. The Licensee shall install and maintain the sedimentation and erosion controls and the debris shield in optimal condition during the work authorized herein.
23. The Licensee shall conduct the activities identified in the Mitigation Areas authorized herein. In addition, the Licensee shall for the duration of the construction project following completion of the tidal wetland planting work described in the **Authorized Activities**, above, conduct the following maintenance procedures: 1) remove any debris such as garbage, floatables or excessive decayed plant material from the mitigation areas during the duration of the construction activities; 2) replace dead or missing plants up to one-year after their planting which have not already been compensated for by a suitable volunteer

species. The Licensee shall submit to the Commissioner no later than December 15th of each year following such procedures, documentation that indicates that such work has been completed.

24. The Licensee shall post a Notice to Mariners identifying closures of the Connecticut River federal navigation channel in coordination with the United States Coast Guard.
25. The Licensee shall install temporary aids to navigation at each barge mooring location authorized herein in coordination with the United States Coast Guard.
26. At no time shall the Licensee allow the barge or equipment to rest on the substrate. Any such barge must move to deeper waters during periods of low water in the area of the proposed activity. It shall not be a defense to this provision for the Licensee to assert that it has no control over the operation of the barge.

Issued under the authority of the Commissioner of Energy and Environmental Protection on:

Date

Emma Cimino
Acting Deputy Commissioner
Department of Energy & Environmental Protection

LWRD Dredging and General Conditions

1. **Time-of-Year Restriction.** Unless otherwise noted in the License, unconfined in-water excavation, dredging, filling or removal of debris or other material is prohibited, inclusive, in any year from June 1 through September 30 in order to protect spawning shellfish in the area unless otherwise authorized in writing by the Commissioner.
2. **Dredging Report.** Not later than two (2) weeks subsequent to the completion of any dredging activity authorized herein, the Licensee shall submit to DEEP.LWRDRegulatory@ct.gov a completed Dredging Report. A separate form shall be submitted by the Licensee for each distinct dredging activity conducted pursuant to this license.
3. **Bottom Disturbance.** Dragging the bottom with a spoil barge, scow, vessel, beam or similar equipment outside of any authorized area is prohibited.
4. **Material Handling.** Sidecasting or in-water rehandling of dredged or excavated material is prohibited.
5. **Barge Control.** Spoil scows or barges shall be loaded and navigated in a manner which prevents uncontrollable motion or spillage and washout of dredged or excavated materials.
6. **Sale of Sediment.** Sediment dredged pursuant to the license shall not be sold nor shall any fee for its use be charged without the express prior written authorization of the Commissioner and payment of a \$4.00 per yard royalty to the state of Connecticut Department of Energy & Environmental Protection, pursuant to CGS section 22a-361(e).
7. **Sediment Disposal.** The Licensee shall dispose of aquatic sediments in accordance with the terms and conditions of the license.
8. **Submission of As-Dredged Plans.** On or before ninety (90) days after completion of the work authorized herein, the Licensee shall submit to DEEP.LWRDRegulatory@ct.gov an “as-dredged” survey of the work area showing contours, bathymetries, tidal datums and structures, as applicable. Such survey shall be the original one and be signed and sealed by an engineer, surveyor or architect, as applicable, who is licensed in the State of Connecticut.

Open Water Disposal, if authorized in Project Description

1. **Material Disposal.** The Licensee shall dispose of dredged or excavated material in accordance with the requirements of the United States Army Corps of Engineers-New England District, except that if the authorized disposal site is modified, the Licensee shall submit a request for modification of the location to the Commissioner and shall not dispose of the material until such location modification has been approved in writing by the Commissioner.

2. **Disposal Site / Use Modification.** The Commissioner may modify the authorized disposal site and direct dredged sediment to an alternate site for use as cap material, provided that no modification will take effect if such modification imposes uncompensated additional costs solely attributable to such modification on the Licensee.
3. **Disposal Monitoring.** The Licensee shall not dispose of dredged or excavated material unless said disposal is supervised and witnessed by an on-board inspector or documented by an automated disposal monitoring program approved by the United States Army Corps of Engineers-New England District.
4. **Barge Navigation.** Spoil scows or barges used by the Licensee for disposal of dredged or excavated material shall travel to and from the authorized disposal site utilizing sea lanes defined by the United States Army Corps of Engineers-New England District.
5. **Point Dumping.** The Licensee shall point-dump dredged or excavated materials at a specified buoy or set of coordinates identified by United States Army Corps of Engineers-New England District within the authorized disposal site.

LWRD General Conditions

1. **Land Record Filing.** The Licensee shall file the Land Record Filing on the land records of the municipality in which the subject property is located not later than thirty (30) days after license issuance pursuant to Connecticut General Statutes (CGS) Section 22a-363g. A copy of the Notice with a stamp or other such proof of filing with the municipality shall be submitted to DEEP.LWRDRegulatory@ct.gov no later than sixty (60) days after license issuance. If a Land Record Filing form is not enclosed and the work site is not associated with an upland property, no filing is required.
2. **Contractor Notification.** The Licensee shall give a copy of the license and its attachments to the contractor(s) who will be carrying out the authorized activities prior to the start of construction and shall receive a written receipt for such copy, signed and dated by such contractor(s). The Licensee's contractor(s) shall conduct all operations at the site in full compliance with the license and, to the extent provided by law, may be held liable for any violation of the terms and conditions of the license. At the work site, the contractor(s) shall, whenever work is being performed, have on site and make available for inspection a copy of the license and the authorized plans.
3. **Work Commencement.** Not later than two (2) weeks prior to the commencement of any work authorized herein, the Licensee shall submit to DEEP.LWRDRegulatory@ct.gov, on the Work Commencement Form attached hereto, the name(s) and address(es) of all contractor(s) employed to conduct such work and the expected date for commencement and completion of such work, if any.
 - For water diversion activities authorized pursuant to 22a-377(c)-1 of the Regulations of Connecticut State Agencies, the Licensee shall also notify the Commissioner in writing two weeks prior to initiating the authorized diversion.
 - For emergency activities authorized pursuant Connecticut General Statutes Section

22a-6k, the Licensee shall notify the Commissioner, in writing, of activity commencement at least one (1) day prior to construction and of activity completion no later than five (5) days after conclusion.

4. **License Notice.** The Licensee shall post the first page of the License in a conspicuous place at the work area while the work authorized therein is undertaken.
5. **Unauthorized Activities.** Except as specifically authorized, no equipment or material, including but not limited to, fill, construction materials, excavated material or debris, shall be deposited, placed or stored in any wetland or watercourse on or off-site. The Licensee may not conduct work within wetlands or watercourses other than as specifically authorized, unless otherwise authorized in writing by the Commissioner. Tidal wetlands means “wetland” as defined by section 22a-29 and “freshwater wetlands and watercourses” means “wetlands” and “watercourses” as defined by section 22a-38.
6. **Excavated Materials.** Unless otherwise authorized, all excavated material shall be staged and managed in a manner which prevents additional impacts to wetlands and watercourses.
7. **Best Management Practices.** The Licensee shall not cause or allow pollution of any wetlands or watercourses, including pollution resulting from sedimentation and erosion. In constructing or maintaining any authorized structure or facility or conducting any authorized activity, or in removing any such structure or facility, the Licensee shall employ best management practices to control storm water discharges, to prevent erosion and sedimentation, and to otherwise prevent pollution of wetlands and other waters of the State. For purposes of the license, “pollution” means “pollution” as that term is defined by CGS section 22a-423. Best Management Practices include, but are not limited, to practices identified in the *Connecticut Guidelines for Soil Erosion and Sediment Control* as revised, *2004 Connecticut Stormwater Quality Manual*, Department of Transportation’s *ConnDOT Drainage Manual* as revised, and the Department of Transportation Standard Specifications as revised.
8. **In-Water Work Vessel Staging and Storage. (for Structures Dredging & Fill, Tidal Wetlands, Certificate of Permission, and Long Island Sound General Permit Licenses only).** For any barge, vessel, skiff or floating work platform (“work vessels”) utilized in the execution of the work authorized herein, the Licensee shall ensure that such work vessels:
 - do not rest on, or come in contact with, the substrate at any time, unless specifically authorized in the license.
 - are not stored over intertidal flats, submerged aquatic vegetation or tidal wetland vegetation or in a location that interferes with navigation. In the event any work vessel is grounded, no dragging or prop dredging shall occur to free it.
9. **Work Site Restoration.** Upon completion of any authorized work, the Licensee shall restore all areas impacted by construction, or used as a staging area or accessway in connection with such work, to their condition prior to the commencement of such work.
10. **Inspection.** The Licensee shall allow any representative of the Commissioner to inspect the project location at reasonable times to ensure that work is being or has been conducted in accordance with the terms and conditions of this license.

11. Change of Use. (Applies only if a use is specified within the License “Project Description”)

- a. The work specified in the license is authorized solely for the purpose set forth in the license. No change in purpose or use of the authorized work or facilities as set forth in the license may occur without the prior written approval of the Commissioner. The Licensee shall, prior to undertaking or allowing any change in use or purpose from that which is authorized by this license, request permission from the Commissioner for such change. Said request shall be in writing and shall describe the proposed change and the reason for the change.
- b. A change in the form of ownership of any structure authorized herein from a rental/lease commercial marina to a wholly-owned common interest community or dockominium may constitute a change in purpose as specified in paragraph (a) above.

12. De Minimis Alteration. The Licensee shall not deviate from the authorized activity without prior written approval from the Commissioner. The Licensee may request a de minimis change to any authorized structure, facility, or activity. A de minimis alteration means a change in the authorized design, construction or operation that individually and cumulatively has minimal additional environmental impact and does not substantively alter the project as authorized.

- For diversion activities authorized pursuant to 22a-377(c)-2 of the Regulations of Connecticut State Agencies, a de minimis alteration means an alteration which does not significantly increase the quantity of water diverted or significantly change the capacity to divert water.

13. Extension Request. The Licensee may request an extension of the license expiration date. Such request shall be in writing and shall be submitted to DEEP.LWRDRegulatory@ct.gov at least thirty (30) days prior to the license expiration. Such request shall describe the work done to date, what work still needs to be completed, and the reason for such extension. The Commissioner may extend the expiration date of this license for a period of up to one year, in order for the Licensee to complete the authorized activities. It shall be at the Commissioner’s sole discretion to grant or deny such request. No more than three (3) one-year extensions will be granted under this license.

14. No Work After License Expiration. Work conducted after the license expiration date is a violation of the license and may subject the licensee to enforcement action, including penalties, as provided by law.

15. License Transfer. The license is not transferable without prior written authorization of the Commissioner. A request to transfer a license shall be submitted in writing and shall describe the proposed transfer and the reason for such transfer. The Licensee’s obligations under the license shall not be affected by the passage of title to the license site to any other person or municipality until such time as a transfer is approved by the Commissioner.

16. Document Submission. Any document required to be submitted to the Commissioner under the license or any contact required to be made with the Commissioner shall, unless otherwise specified in writing by the Commissioner, be directed to:

DEEP.LWRDRegulatory@ct.gov or

Regulatory Section
Land & Water Resources Division
Department of Energy and Environmental Protection
79 Elm Street
Hartford, Connecticut 06106-5127
860-424-3019

- 17. Date of Document Submission.** The date of submission to the Commissioner of any document required by the license shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under the license, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three (3) days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in the license, the word “day” as used in the license means calendar day. Any document or action which is required by the license to be submitted or performed by a date which falls on a Saturday, Sunday or a Connecticut or federal holiday shall be submitted or performed on or before the next day which is not a Saturday, Sunday, or a Connecticut or federal holiday.
- 18. Certification of Documents.** Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under the license shall be signed by the Licensee and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows: “I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense.”
- 19. Accuracy of Documentation.** In evaluating the application for the license, the Commissioner has relied on information and data provided by the Licensee and on the Licensee’s representations concerning site conditions, design specifications and the proposed work, including but not limited to representations concerning the commercial, public or private nature of the work or structures, the water-dependency of said work or structures, its availability for access by the general public, and the ownership of regulated structures or filled areas. If such information proves to be false, deceptive, incomplete or inaccurate, the license may be modified, suspended or revoked, and any unauthorized activities may be subject to enforcement action.
- 20. Limits of Liability.** In granting the license, the Commissioner has relied on all representations of the Licensee, including information and data provided in support of the Licensee’s application. Neither the Licensee’s representations nor the issuance of the license shall constitute an assurance by the Commissioner as to the structural integrity, the engineering feasibility or the efficacy of such design.
- 21. Reporting of Violations.** In the event that the Licensee becomes aware that they did not or

may not comply, or did not or may not comply on time, with any provision of this license or of any document incorporated into the license, the Licensee shall immediately notify the agency contact specified within the license and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. In so notifying the agency contact, the Licensee shall provide, for the agency's review and written approval, a report including the following information:

- a. the provision(s) of the license that has been violated;
- b. the date and time the violation(s) was first observed and by whom;
- c. the cause of the violation(s), if known;
- d. if the violation(s) has ceased, the duration of the violation(s) and the exact date(s) and times(s) it was corrected;
- e. if the violation(s) has not ceased, the anticipated date when it will be corrected;
- f. steps taken and steps planned to prevent a reoccurrence of the violation(s) and the date(s) such steps were implemented or will be implemented; and
- g. the signatures of the Licensee and of the individual(s) responsible for actually preparing such report.

If the violation occurs outside of normal business hours, the Licensee shall contact the Department of Energy and Environmental Protection Emergency Dispatch at 860-424-3333. The Licensee shall comply with any dates which may be approved in writing by the Commissioner.

22. Revocation/Suspension/Modification. The license may be revoked, suspended, or modified in accordance with applicable law.

23. Other Required Approvals. License issuance does not relieve the Licensee of their obligations to obtain any other approvals required by applicable federal, state and local law.

24. Rights. The license is subject to and does not derogate any present or future property rights or powers of the State of Connecticut, and conveys no property rights in real estate or material nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the property or activity affected hereby.

25. Condition Conflicts. In the case where a project specific special condition listed on the license differs from, or conflicts with, one of the general conditions listed herein, the project specific special condition language shall prevail. It is the licensee's responsibility to contact the agency contact person listed on the license for clarification if needed prior to conducting any further regulated activities.



LWRD Work Commencement Form

To: DEEP.LWRDRegulatory@ct.gov or
Regulatory Section
Department of Energy and Environmental Protection
Land & Water Resources Division
79 Elm Street
Hartford, CT 06106-5127

Licensee Name: _____
Municipality in which the project is occurring: _____
DEEP License No(s): _____

CONTRACTOR(s):

1 Name: _____
Address: _____
Telephone: _____
E-mail: _____

2 Name: _____
Address: _____
Telephone: _____
E-mail: _____

3 Name: _____
Address: _____
Telephone: _____
E-mail: _____

Date Contractor(s) received a copy
of the license and approved plans: _____

EXPECTED DATE OF COMMENCEMENT OF WORK: _____

EXPECTED DATE OF COMPLETION OF WORK: _____

LICENSEE: _____
(Signature) (Date)



Compliance Certification Form

The following certification must be signed by the licensee working in consultation with a Connecticut-licensed design professional and must be submitted to the address indicated at the end of this form within ninety (90) days of completion of the authorized work.

1. Licensee Name: _____ DEEP License Number(s): _____ Municipality in which project is occurring: _____	
2. Check one: (a) <input type="checkbox"/> "I certify that the final site conditions and / or structures are in general conformance with the approved site plans". Identify and describe any deviations and attach to this form. (b) <input type="checkbox"/> "The final site conditions and / or structures are not in general conformance with the approved site plans. The enclosed "as-built" plans note the modifications".	
3. "I understand that any false statement in this certification is punishable as a criminal offence under section 53a-157b of the General Statutes and under any other applicable law."	
_____ Signature of Licensee	_____ Date
_____ Name of Licensee (print or type)	
_____ Signature of CT-Licensed Design Professional	_____ Date
_____ Name of CT-Licensed Design Professional (print or type)	
_____ Professional License Number (if applicable)	Affix Stamp Here
<ul style="list-style-type: none"> As-built plans shall include: elevations or tidal datums, as applicable, and structures, including any proposed elevation views and cross sections included in the approved license plans. Such as-built plans shall be the original ones and be signed and sealed by an engineer, surveyor or architect, as applicable, who is licensed in the State of Connecticut. The Licensee will be notified by staff of the Land and Water Resources Division (LWRD) if further compliance review is necessary. Lack of response by LWRD staff does not imply compliance. <p>Submit this completed form to : DEEP.LWRDRegulatory@ct.gov or Regulatory Section Department of Energy and Environmental Protection Land & Water Resources Division 79 Elm Street Hartford, CT 06106-5127</p>	

INDEX OF DRAWINGS

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SHEET NO.	DESCRIPTION	DRAWING NO.	SHEET NO.	DESCRIPTION	DRAWING NO.	SHEET NO.	DESCRIPTION	DRAWING NO.
1	TITLE SHEET	TTL-01	52	CUL STATE IMPACT PLAN	CUL-11	103	STAGING PLAN - PHASE I/DE-11	PH-ICDE-11
2	INDEX OF DRAWINGS	IXK-01	53	CUL STATE IMPACT PLAN	CUL-12	104	STAGING PLAN - PHASE I/DE	PH-ICDE-12
3	GENERAL CIVIL NOTES AND LEGEND	GEN-01	54	HIGH TIDE LINE IMPACT PLAN	HTL-01	105	STAGING PLAN - PHASE IV	PH-IV-01
4	EXISTING SITE PLAN	EX-1	55	HIGH TIDE LINE IMPACT PLAN	HTL-02	106	STAGING PLAN - PHASE IV	PH-IV-02
5	EXISTING SITE PLAN	EX-2	56	HIGH TIDE LINE IMPACT PLAN	HTL-03	107	STAGING PLAN - PHASE IV	PH-IV-03
6	EXISTING SITE PLAN	EX-3	57	HIGH TIDE LINE IMPACT PLAN	HTL-04	108	STAGING PLAN - PHASE IV	PH-IV-04
7	EXISTING SITE PLAN	EX-4	58	HIGH TIDE LINE IMPACT PLAN	HTL-05	109	STAGING PLAN - PHASE IV	PH-IV-05
8	EXISTING SITE PLAN	EX-5	59	HIGH TIDE LINE IMPACT PLAN	HTL-06	110	STAGING PLAN - PHASE IV	PH-IV-06
9	EXISTING SITE PLAN	EX-6	60	HIGH TIDE LINE IMPACT PLAN	HTL-07	111	STAGING PLAN - PHASE IV	PH-IV-07
10	EXISTING SITE PLAN	EX-7	61	HIGH TIDE LINE IMPACT PLAN	HTL-08	112	STAGING PLAN - PHASE IV	PH-IV-08
11	EXISTING SITE PLAN	EX-8	62	HIGH TIDE LINE IMPACT PLAN	HTL-09	113	STAGING PLAN - PHASE IV	PH-IV-09
12	EXISTING SITE PLAN	EX-9	63	HIGH TIDE LINE IMPACT PLAN	HTL-10	114	STAGING PLAN - PHASE IV	PH-IV-10
13	EXISTING SITE PLAN	EX-10	64	HIGH TIDE LINE IMPACT PLAN	HTL-11	115	STAGING PLAN - PHASE IV	PH-IV-11
14	EXISTING SITE PLAN	EX-11	65	HIGH TIDE LINE IMPACT PLAN	HTL-12	116	STAGING PLAN - PHASE IV	PH-IV-12
15	EXISTING SITE PLAN	EX-12	66	FEMA FLOODPLAIN IMPACT PLAN	FEMA-01	117	CIVIL DETAILS	DTL-01
16	EXISTING SITE PLAN	EX-13	67	FEMA FLOODPLAIN IMPACT PLAN	FEMA-02	118	CIVIL DETAILS	DTL-02
17	KEY PLAN	KEY-01	68	FEMA FLOODPLAIN IMPACT PLAN	FEMA-03	119	CIVIL DETAILS	DTL-03
18	SITE PLAN	SITE-01	69	FEMA FLOODPLAIN IMPACT PLAN	FEMA-04	120	CIVIL DETAILS	DTL-04
19	SITE PLAN	SITE-02	70	FEMA FLOODPLAIN IMPACT PLAN	FEMA-05	121	CIVIL DETAILS	DTL-05
20	SITE PLAN	SITE-03	71	FEMA FLOODPLAIN IMPACT PLAN	FEMA-06	122	CIVIL DETAILS	DTL-06
21	SITE PLAN	SITE-04	72	FEMA FLOODPLAIN IMPACT PLAN	FEMA-07	123	SUBSURFACE PROFILE 1	GEO-01
22	SITE PLAN	SITE-05	73	FEMA FLOODPLAIN IMPACT PLAN	FEMA-08	124	SUBSURFACE PROFILE 2	GEO-02
23	SITE PLAN	SITE-06	74	FEMA FLOODPLAIN IMPACT PLAN	FEMA-09	125	SUBSURFACE PROFILE 3	GEO-03
24	SITE PLAN	SITE-07	75	FEMA FLOODPLAIN IMPACT PLAN	FEMA-10	126	EMBANKMENT CONSTRUCTION SCHEME	GEO-04
25	SITE PLAN	SITE-08	76	FEMA FLOODPLAIN IMPACT PLAN	FEMA-11	127	FOUNDATION PLAN	GEO-05
26	SITE PLAN	SITE-09	77	FEMA FLOODPLAIN IMPACT PLAN	FEMA-12	128	PIER 9 AND EAST ABUTMENT	GEO-06
27	SITE PLAN	SITE-10	78	SUGGESTED CONSTRUCTION SEQUENCE	PH-01	129	DRILLED SHAFT TYPICAL DETAILS	GEO-07
28	SITE PLAN	SITE-11	79	STAGING PLANS - GENERAL NOTES	PH-02	130	DEMOLITION PLAN	DEM-01
29	SITE PLAN	SITE-12	80	ENVIRONMENTAL COMPLIANCE NOTES	PH-03	131	BARGE OCCUPANCY ZONES	SC-01
30	PROPOSED GROSS SECTIONS	XCS-01	81	STAGING PLAN - PHASE I/AB	PH-IAB-01	132	BARGE BERTHING 1 - PIER CONSTRUCTION	SC-02
31	PROPOSED GROSS SECTIONS	XCS-02	82	STAGING PLAN - PHASE I/AB	PH-IAB-02	133	BARGE BERTHING 2 - FENDER CONSTRUCTION	SC-03
32	PROPOSED GROSS SECTIONS	XCS-03	83	STAGING PLAN - PHASE I/AB	PH-IAB-03	134	BARGE BERTHING 3 - SUPERSTRUCTURE CONSTRUCTION	SC-04
33	PROPOSED GROSS SECTIONS	XCS-04	84	STAGING PLAN - PHASE I/AB	PH-IAB-04	135	BARGE BERTHING 4 - SUB CABLE CONSTRUCTION	SC-05
34	PROPOSED GROSS SECTIONS	XCS-05	85	STAGING PLAN - PHASE I/AB	PH-IAB-05	136	FERRY LANDING FIRING PIER	FV-01
35	PROPOSED GROSS SECTIONS	XCS-06	86	STAGING PLAN - PHASE I/AB	PH-IAB-06	137	EAGLE LANDING FIRING PIER	FM-02
36	PROPOSED GROSS SECTIONS	XCS-07	87	STAGING PLAN - PHASE I/AB	PH-IAB-07	138	TEMPORARY AERIAL CABLES	AC-01
37	PROPOSED GROSS SECTIONS	XCS-08	88	STAGING PLAN - PHASE I/AB	PH-IAB-08	139	FENDER SYSTEM DETAILS	FEN-01
38	PROPOSED GROSS SECTIONS	XCS-09	89	STAGING PLAN - PHASE I/AB	PH-IAB-09	140	LEUEMANT RIVER TEMPORARY CROSSING	TB-01
39	PROPOSED GROSS SECTIONS	XCS-10	90	STAGING PLAN - PHASE I/AB	PH-IAB-10			
40	BRIDGE ELEVATION PROPOSED CONDITIONS	EL-01	91	STAGING PLAN - PHASE I/AB	PH-IAB-11			
41	IMPACT SUMMARY SHEET	SUM-01	92	STAGING PLAN - PHASE I/AB	PH-IAB-12			
42	CUL STATE IMPACT PLAN	CUL-01	93	STAGING PLAN - PHASE I/DE	PH-ICDE-01			
43	CUL STATE IMPACT PLAN	CUL-02	94	STAGING PLAN - PHASE I/DE	PH-ICDE-02			
44	CUL STATE IMPACT PLAN	CUL-03	95	STAGING PLAN - PHASE I/DE	PH-ICDE-03			
45	CUL STATE IMPACT PLAN	CUL-04	96	STAGING PLAN - PHASE I/DE	PH-ICDE-04			
46	CUL STATE IMPACT PLAN	CUL-05	97	STAGING PLAN - PHASE I/DE	PH-ICDE-05			
47	CUL STATE IMPACT PLAN	CUL-06	98	STAGING PLAN - PHASE I/DE	PH-ICDE-06			
48	CUL STATE IMPACT PLAN	CUL-07	99	STAGING PLAN - PHASE I/DE	PH-ICDE-07			
49	CUL STATE IMPACT PLAN	CUL-08	100	STAGING PLAN - PHASE I/DE	PH-ICDE-08			
50	CUL STATE IMPACT PLAN	CUL-09	101	STAGING PLAN - PHASE I/DE	PH-ICDE-09			
51	CUL STATE IMPACT PLAN	CUL-10	102	STAGING PLAN - PHASE I/DE	PH-ICDE-10			

NOTE: SEE ATTACHMENT 1-44 FOR "3.25 AC MITIGATION SITE" AND "1.7 SHORE ROAD MITIGATION SITE" PLANS.



Office of Chief Engineer
STRUCTURES
 National Railroad Passenger Corporation
 300 Street Station, Philadelphia, Pennsylvania 19104



Amtrak
 The National Railroad Passenger Corporation
 300 Street Station, Philadelphia, Pennsylvania 19104



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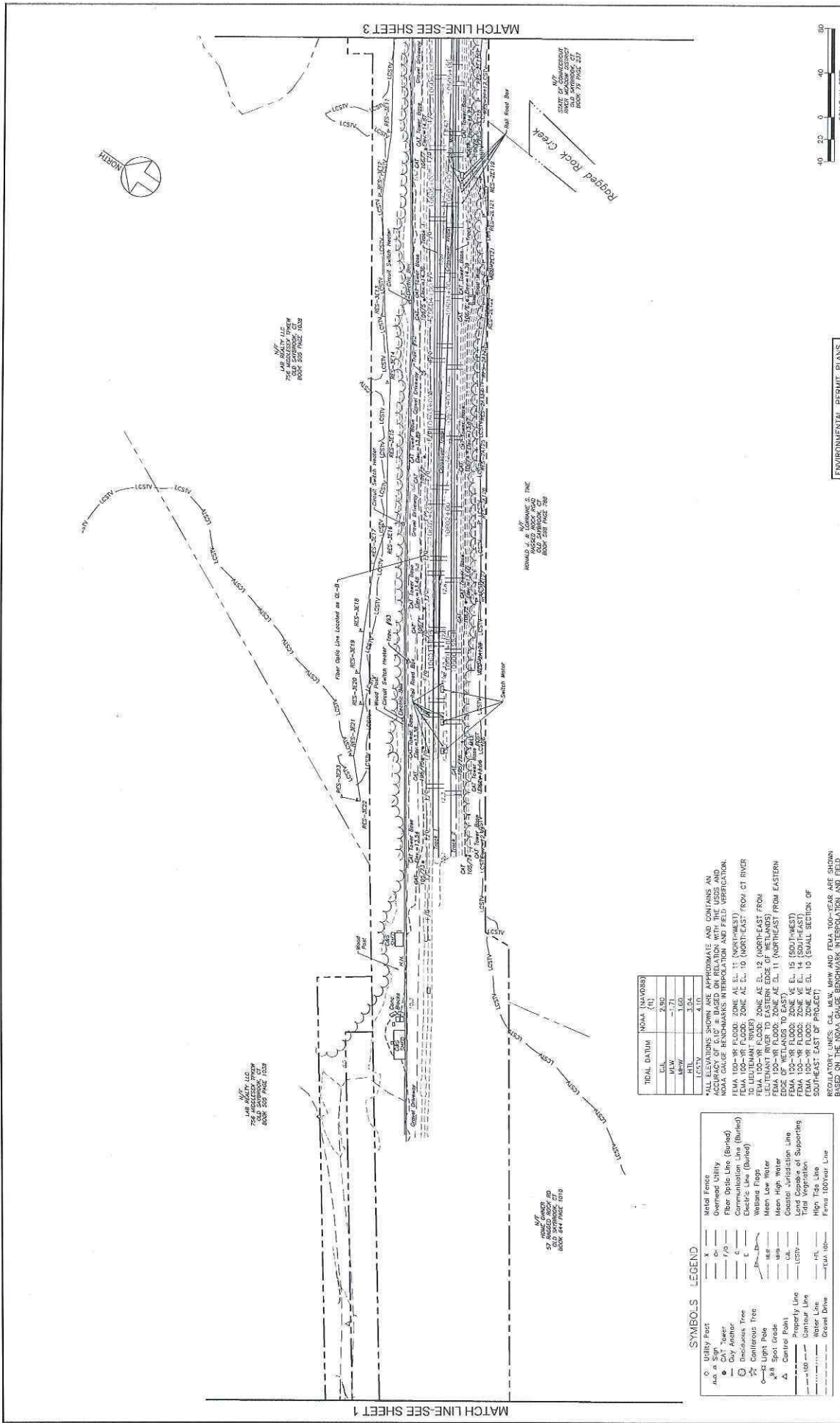
ENVIRONMENTAL PERMIT PLANS
 PLAN DATE: MAY 2, 2023

CONTRACT: REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER

INDEX OF DRAWINGS

Project Code: 106.89
 SHEET NO.: 2 OF 10
 DATE: 5/2/2023

DESIGNED BY: [Name]
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 APPROVED BY: [Name]



REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER EXISTING SITE PLAN

DESIGNED BY: JBR CHECKED BY: JBR DATE: 02/20/19

ENVIRONMENTAL PERMIT PLANS
 PLAN DATE: MAY 2, 2023

HARDESTY & HANOVER, LLC
 ENGINEERING
 1501 Broadway New York, NY 10036
 MCA
 Mammie Choia & Associates
 1000 Avenue of the Americas
 New York, NY 10022-2499
 www.mca-engineers.com

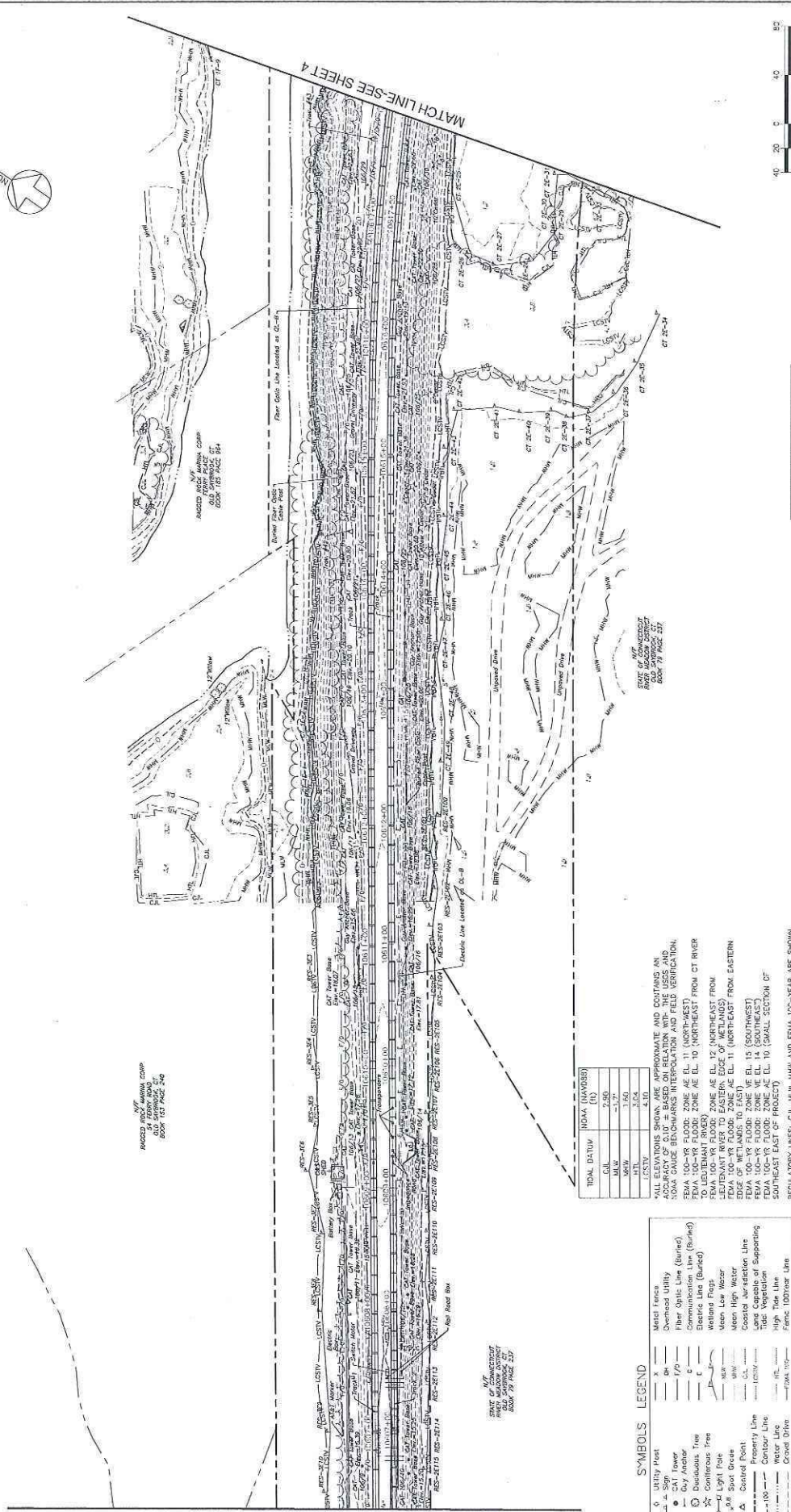
PERMIT PLANS

Office of Chief Engineer
STRUCTURES
 3205 Street Station, Philadelphia, Pennsylvania 19104

Amtrak®
 This drawing is submitted to the Office of Chief Engineer, New York State Department of Transportation, for review and approval. It is the responsibility of the submitter to ensure that all information is accurate and complete. The Office of Chief Engineer is not responsible for the design or construction of the project.

SYMBOLS LEGEND

Symbol	Description	Date	By
○	Utility Post		
○	As-Built Sign		
○	Overhead Utility		
○	Fiber Optic Line (Buried)		
○	Communication Line (Buried)		
○	Electric Line (Buried)		
○	Gas Line (Buried)		
○	Water Line (Buried)		
○	Sanitary Sewer (Buried)		
○	Storm Sewer (Buried)		
○	Spot Grade		
○	Control Point		
○	Proprietary Line		
○	Center Line		
○	Right-of-Way		
○	Gravel Drive		
○	High 100-Year Flood		
○	100-Year Flood		
○	500-Year Flood		
○	Wetland		
○	Vegetation		
○	Land		
○	Water		
○	High Water		
○	Coastal Jurisdiction Line		
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○	Land		
○	Water		
○	High Water	</	



ENVIRONMENTAL PERMIT PLANS
 PLAN DATE: MAY 2, 2023
 SCALE: 1" = 40'

REPLACEMENT OF MB 106.89
 OVER CONNECTICUT RIVER
 EXISTING SITE PLAN

PROJECT NO. 2023-001
 SHEET NO. 1 OF 140
 DATE: 05/02/23
 CHECKED: JAV
 DATE: 05/02/23

ENVIRONMENTAL PERMIT PLANS
 PLAN DATE: MAY 2, 2023
 SCALE: 1" = 40'

REPLACEMENT OF MB 106.89
 OVER CONNECTICUT RIVER
 EXISTING SITE PLAN

PROJECT NO. 2023-001
 SHEET NO. 1 OF 140
 DATE: 05/02/23
 CHECKED: JAV
 DATE: 05/02/23

TOTAL DATUM	NOAA (MVBSS)	TD
CAL	2.80	
M.W.	-1.7'	
M.P.	1.60	
LCSTV	4.10	

*ALL ELEVATIONS SHOWN ARE APPROXIMATE AND CONTAIN AN ACCURACY OF ±0.10' ± BASED ON RELATION WITH THE USGS AND NOAA GAUGE BENCHMARK INTERPOLATION AND FIELD VERIFICATION.
 FEMA 100-YR FLOOD: ZONE AE EL. 10 (NOR-EAST FROM CT RIVER TO LEDENHART RIVER) ZONE AE EL. 12 (NOR-EAST FROM LEDENHART RIVER TO EASTERN EDGE OF WETLANDS)
 FEMA 100-YR FLOOD: ZONE AE EL. 11 (SOUTHWEST)
 FEMA 100-YR FLOOD: ZONE AE EL. 14 (SOUTHWEST)
 FEMA 100-YR FLOOD: ZONE AE EL. 10 (SMALL SECTION OF 100-YR FLOOD ZONE)
 BASED ON THE NOAA GAUGE BENCHMARK INTERPOLATION AND FIELD VERIFICATION.

SYMBOLS LEGEND

○	Utility Point	—	Metals Fence
▲	Sign	—	Overhead Utility
□	Gate	—	Fiber Optic Line (Buried)
○	Gate Anchor	—	Communication Line (Buried)
○	Deciduous Tree	—	Water Main
○	Coniferous Tree	—	Mean Low Water
○	Light Pole	—	Mean High Water
○	Spot Grade	—	Coastal Air Section Line
○	Control Point	—	Line Capable of Supporting
○	Property Line	—	High Tide
○	Control Point	—	Franc. 100 Year Line
○	Control Point	—	

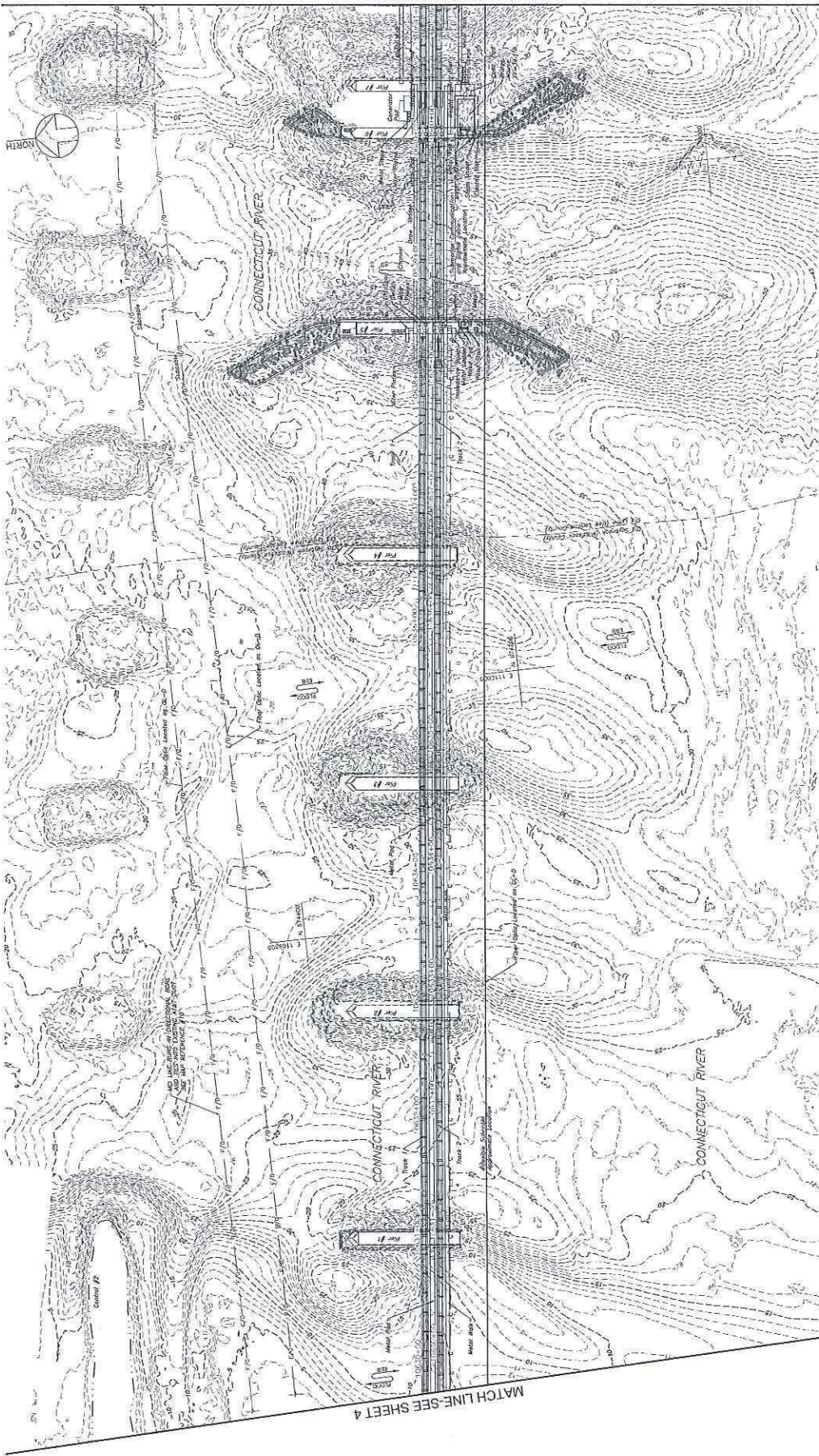
Office of Chief Engineer
STRUCTURES
 300 North Street, Philadelphia, Pennsylvania 19106

Amtrak
 1501 Broadway, New York, NY 10036

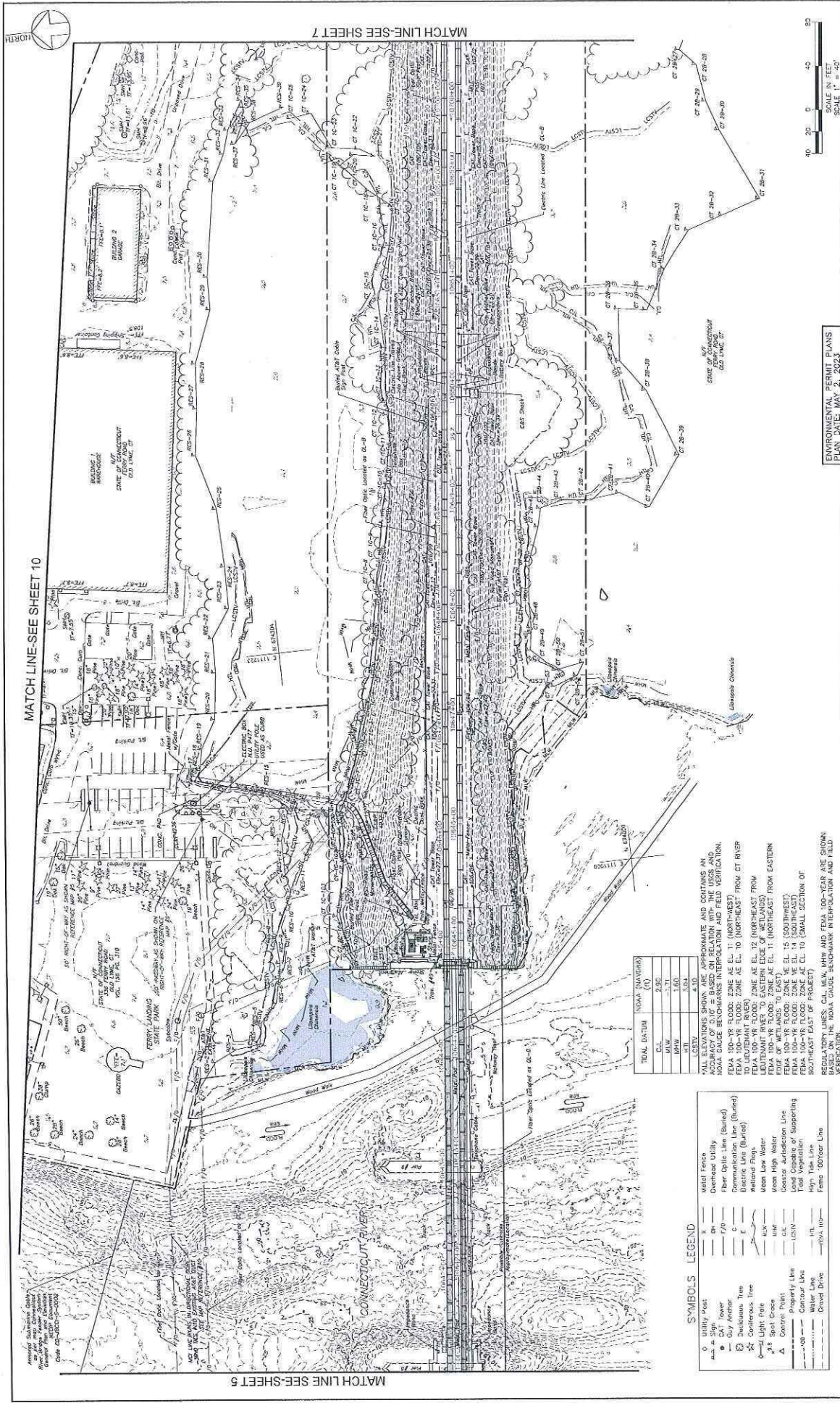
MICA
 1501 Broadway, New York, NY 10036

HARDSTY & HANOVER, LLC
 1501 Broadway, New York, NY 10036

REPLACEMENT OF MB 106.89
 OVER CONNECTICUT RIVER
 EXISTING SITE PLAN



ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023		REPLACEMENT OF MB-106.89 OVER CONNECTICUT RIVER EXISTING SITE PLAN	
AMTRAK NATIONAL RAILROAD PASSENGER CORPORATION 300 NORTH ZEEB ROAD, PHILADELPHIA, PENNSYLVANIA 19104		CONTRACTOR GCS BYRBEROCK	
Office of Chief Engineer STRUCTURES National Railroad Passenger Corporation 300 North Zeeb Road, Philadelphia, Pennsylvania 19104		PROJECT CODE 100.000 DATE 5.09.2023 PROJECT NAME EX-5	
Amtrak <small>The Amtrak logo is a registered trademark of the National Railroad Passenger Corporation. All other trademarks are the property of their respective owners. © 2023 Amtrak. All rights reserved.</small>		DESIGNER JBR CHECKER ANM DATE 02/28/23	
PERMIT PLANS		PROJECT CODE 100.000 DATE 5.09.2023 PROJECT NAME EX-5	
REVISIONS		PROJECT CODE 100.000 DATE 5.09.2023 PROJECT NAME EX-5	
NO.	DESCRIPTION	DATE	BY
1	ISSUED FOR CONSTRUCTION	05-09-2023	JBR
2	ISSUED FOR CONSTRUCTION - TRANSPORTATION & ENVIRONMENTAL	05-09-2023	JBR
3	ISSUED FOR CONSTRUCTION - TRANSPORTATION & ENVIRONMENTAL	05-09-2023	JBR
4	ISSUED FOR CONSTRUCTION - TRANSPORTATION & ENVIRONMENTAL	05-09-2023	JBR
5	ISSUED FOR CONSTRUCTION - TRANSPORTATION & ENVIRONMENTAL	05-09-2023	JBR
6	ISSUED FOR CONSTRUCTION - TRANSPORTATION & ENVIRONMENTAL	05-09-2023	JBR
7	ISSUED FOR CONSTRUCTION - TRANSPORTATION & ENVIRONMENTAL	05-09-2023	JBR
8	ISSUED FOR CONSTRUCTION - TRANSPORTATION & ENVIRONMENTAL	05-09-2023	JBR



ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023		PROJECT: REPLACEMENT OF MB 106.69 OVER CONNECTICUT RIVER EXISTING SITE PLAN	
PERMIT PLANS		DRAWN: [Name] CHECKED: [Name] DATE: 05/02/23	
Office of Chief Engineer STRUCTURES <small>National Railroad Passenger Corporation 300 Silver Station, Philadelphia, Pennsylvania 19104</small>		Hardesty & Hanover, LLC <small>ENGINEERING</small> 1501 Broadway, New York, NY 10036 MCA <small>MAINTENANCE CONTRACT ADMINISTRATION</small>	
SCALE: 1" = 40' SHEETS: 9 OF 10 DRAWING NO: EX-6		CONSTRUCTION SHEETS: 9 OF 10	

NOAA (NAVD83)	(1)
2.88	
1.71	
2.88	
4.10	

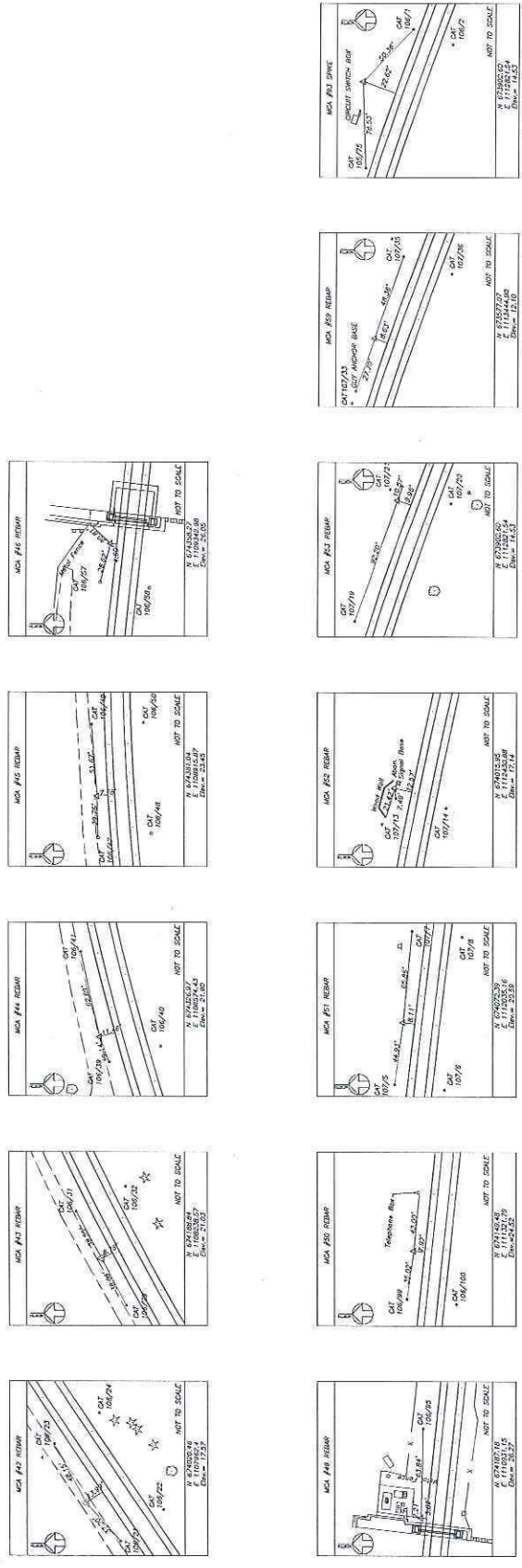
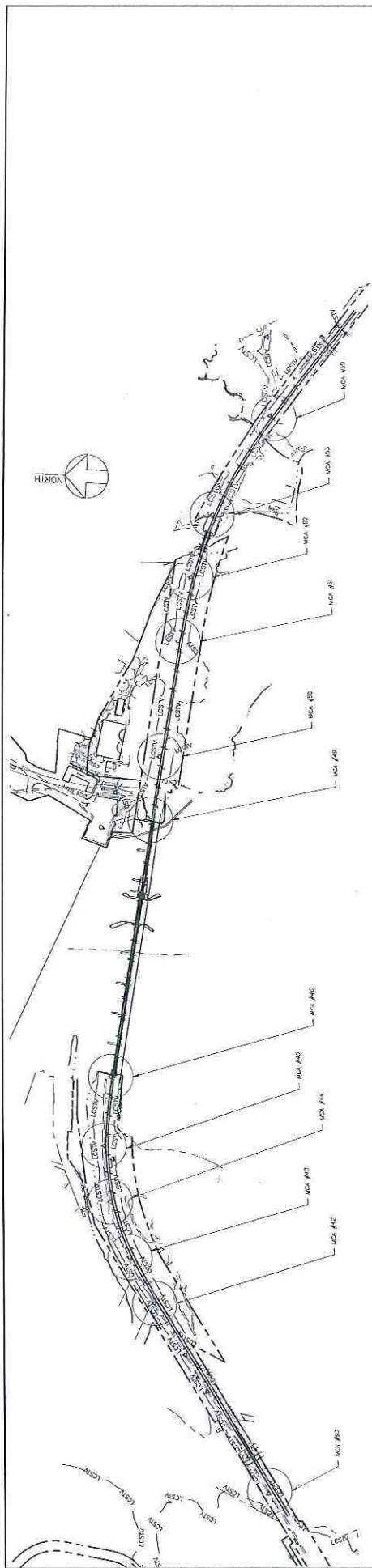
ALL ELEVATIONS SHOWN ARE APPROXIMATE AND CONTAINS AN ERROR OF ± 0.30 FEET.
 NOAA GAUGE BEHAVIORS IN REPLETION AND FIELD VERIFICATION.
 FEMA 100-YR FLOOD: ZONE AE EL. 11 (NORTH-WEST)
 FEMA 100-YR FLOOD: ZONE AE EL. 10 (NORTH-EAST)
 FEMA 100-YR FLOOD: ZONE AE EL. 12 (NORTH-EAST FROM LEUENANT RIVER TO EASTERN EDGE OF WETLANDS)
 FEMA 100-YR FLOOD: ZONE AE EL. 11 (NORTH-EAST FROM EASTERN EDGE OF WETLANDS TO EAST)
 FEMA 100-YR FLOOD: ZONE VE EL. 15 (SOUTHWEST)
 FEMA 100-YR FLOOD: ZONE AE EL. 11 (SMALL SECTION OF SOUTH-EAST EAST OF PROJECT)
 REGULATORY LINES: CUL, MLW, MHW AND FEMA 100-YEAR ARE SHOWN BASED ON THE NOAA GAUGE BENCHMARK REPLETION AND FIELD VERIFICATION.

SYMBOLS LEGEND

○	Utility Post	—	100' Year Flood
—	Overhead Utility	—	50' Year Flood
—	Fiber Optic Line (Buried)	—	10' Year Flood
—	Electric Line (Buried)	—	1' Year Flood
—	Wetland Flaps	—	1' Year Flood
—	Mean Low Water	—	1' Year Flood
—	Mean High Water	—	1' Year Flood
—	Coastal Jurisdiction Line	—	1' Year Flood
—	Center Point	—	1' Year Flood
—	2'5 Spot Cross	—	1' Year Flood
—	Center Point	—	1' Year Flood
—	Water Line	—	1' Year Flood
—	Computer Line	—	1' Year Flood
—	High Tide Line	—	1' Year Flood
—	Fence - 00' Year Line	—	1' Year Flood

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HORIZONTAL DATUM: NAD 1983
 VERTICAL DATUM: NAVD 1988

SCALE: 1" = 100'
 SCALE: 1" = 100'

Amtrak® Office of Chief Engineer STRUCTURES 30th Street Station, Philadelphia, Pennsylvania 19104		MCA 150 Broadway, New York, NY 10036 MCA Engineering & Architecture 100 West 25th Street, New York, NY 10011		ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023		REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER EXISTING SITE PLAN		CONSTRUCTION SHEET # 15 OF 150 EX-12	
NO. 1 DESIGNER: JAMES E. HARRISTY, P.E. DATE: 12/15/18	NO. 2 CHECKER: JAMES E. HARRISTY, P.E. DATE: 12/15/18	NO. 3 DESIGNER: JAMES E. HARRISTY, P.E. DATE: 12/15/18	NO. 4 CHECKER: JAMES E. HARRISTY, P.E. DATE: 12/15/18	NO. 5 DESIGNER: JAMES E. HARRISTY, P.E. DATE: 12/15/18	NO. 6 CHECKER: JAMES E. HARRISTY, P.E. DATE: 12/15/18	NO. 7 DESIGNER: JAMES E. HARRISTY, P.E. DATE: 12/15/18	NO. 8 CHECKER: JAMES E. HARRISTY, P.E. DATE: 12/15/18	NO. 9 DESIGNER: JAMES E. HARRISTY, P.E. DATE: 12/15/18	NO. 10 CHECKER: JAMES E. HARRISTY, P.E. DATE: 12/15/18

SUBSURFACE UTILITY ENGINEERING NOTES:

- 1) THIS PLAN WAS PREPARED IN CONFORMANCE WITH THE AMERICAN SOCIETY OF CIVIL ENGINEERS STANDARD PRACTICE 30-20 "STANDARD SPECIFICATIONS FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA".
- 2) CERTAIN UTILITIES SHOWN HAVE BEEN TRACED ON THE GROUND USING ELECTRONIC RESONANCE TECHNIQUES. SEVERATION OF ELECTROMAGNETIC UTILITY LOCATION IS DEFINED AS THE SURFACE LOCATION OF A UTILITY LINE BASED ON THE LOCATION OF THE POSSIBLE UTILITY.
- 3) CERTAIN UTILITIES SHOWN HAVE BEEN TAKEN FROM AVAILABLE RECORD INFORMATION. THESE UTILITIES MAY NOT HAVE BEEN VERIFIED (SEE NOTE #4 BELOW).
- 4) ALL EXISTING DEPICTED UTILITIES (AS DEPICTED) CONSTRUCTION SHOULD BE EXACTLY LOCATED UNLESS NON-DESTRUCTIVE AIR-VACUUM EXCAVATION, IF NOT ALREADY LOCATED BY AIR-VACUUM EXCAVATION (SEE QUALITY LEVEL A ABOVE).
- 5) UNLESS NON-DESTRUCTIVE AIR-VACUUM EXCAVATION IS UTILIZED AT A PARTICULAR LOCATION, MCA AND BSE DO NOT GUARANTEE THE EXISTENCE OR NON-EXISTENCE OF UTILITY LINES.
- 6) AT LOCATIONS WHERE BSE IS DIRECTED TO PERFORM NON-DESTRUCTIVE AIR-VACUUM EXCAVATION, THE TEST HOLE IS ADVANCED UNTIL A CONDITION OF PRACTICAL REFUSAL FOR AIR-VACUUM EXCAVATION IS REACHED OR UNTIL THE UTILITY IS REACHED. THIS CONDITION OF PRACTICAL REFUSAL MAY BE CAUSED BY A UTILITY OBSTACLE, WATER TABLE, LARGE ROCKS/COBBLES, SUSPECTED HAZARDOUS MATERIALS OR A CONDITION OF HOLE INSTABILITY.
- 7) WHERE BSE IS DIRECTED TO PERFORM NON-DESTRUCTIVE AIR-VACUUM EXCAVATION TO CONFIRM THE NON-EXISTENCE OF UTILITIES, BSE WILL ONLY REPORT NON-EXISTENCE OF UTILITIES WITHIN THE USABLE LIMITS OF LOCATION AS THE AIR-VACUUM EXCAVATION HOLE.
- 8) BELOW GROUND STRUCTURES UNLESS OTHERWISE SPECIFIED ARE SYMBOLIC ONLY.
- 9) ACCURACY AND COMPLETENESS.

UTILITY QUALITY LEVEL INFORMATION. INDEX: SEE SPECIAL SPECIFICATIONS.

QUALITY LEVEL: QUALITY LEVEL INFORMATION IS PLOTTED ON THE DRAWING BASED SOLELY ON RECORD INFORMATION. QUALITY LEVELS ARE NOT GUARANTEED. QUALITY LEVELS ARE NOT TO BE USED TO DETERMINE THE ACCURACY OF INFORMATION OTHER THAN AT TEST HOLE LOCATIONS. SEE QUALITY LEVEL A THROUGH QUALITY LEVEL D FOR A COMPLETE LIST OF QUALITY LEVELS. QUALITY LEVELS ARE NOT TO BE USED TO DETERMINE THE ACCURACY OF INFORMATION OTHER THAN AT TEST HOLE LOCATIONS. SEE QUALITY LEVEL A THROUGH QUALITY LEVEL D FOR A COMPLETE LIST OF QUALITY LEVELS. QUALITY LEVELS ARE NOT TO BE USED TO DETERMINE THE ACCURACY OF INFORMATION OTHER THAN AT TEST HOLE LOCATIONS. SEE QUALITY LEVEL A THROUGH QUALITY LEVEL D FOR A COMPLETE LIST OF QUALITY LEVELS. QUALITY LEVELS ARE NOT TO BE USED TO DETERMINE THE ACCURACY OF INFORMATION OTHER THAN AT TEST HOLE LOCATIONS. SEE QUALITY LEVEL A THROUGH QUALITY LEVEL D FOR A COMPLETE LIST OF QUALITY LEVELS.

- 1) THIS SURVEY HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20-3008-1 THRU 20-3008-20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES - MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT. THIS SURVEY IS A TOPOGRAPHIC SURVEY WITH THE AREAS OF CONVENTIONAL SURVEY CONFORMING TO THE HORIZONTAL ACCURACY CLASS A-2, TOPOGRAPHIC ACCURACY CLASS 1-2 AND VERTICAL ACCURACY CLASS V-2. THE SURVEY IS A TOPOGRAPHIC SURVEY WITH THE AREAS OF CONVENTIONAL SURVEY CONFORMING TO THE HORIZONTAL ACCURACY CLASS A-2, TOPOGRAPHIC ACCURACY CLASS 1-2 AND VERTICAL ACCURACY CLASS V-2. THE SURVEY IS A TOPOGRAPHIC SURVEY WITH THE AREAS OF CONVENTIONAL SURVEY CONFORMING TO THE HORIZONTAL ACCURACY CLASS A-2, TOPOGRAPHIC ACCURACY CLASS 1-2 AND VERTICAL ACCURACY CLASS V-2.
- 2) NORTH ORIENTATION REFERS TO CONNECTICUT GRID SYSTEM NAD 83.
- 3) ELEVATIONS ARE BASED ON NAVD 83.
- 4) THESE TIES WERE DEVELOPED FROM THE BASE CAD DRAWING AND ARE NOT FIELD GENERATED TIES. THE DISTANCES DEPICTED HEREON ARE BASED UPON THE DISTANCES FOUND ON THE ORIGINAL CONTROL POINTS TO THE CENTER OF THE CIRCULAR AS MEASURED FROM THE END OF THE MAIN LINE, INDIVIDUAL CONTROL POINTS TO THE CENTER OF THE CIRCULAR AS MEASURED FROM THE END OF THE MAIN LINE, INDIVIDUAL CONTROL POINTS TO THE CENTER OF THE CIRCULAR AS MEASURED FROM THE END OF THE MAIN LINE, INDIVIDUAL CONTROL POINTS TO THE CENTER OF THE CIRCULAR AS MEASURED FROM THE END OF THE MAIN LINE.
- 5) THE TIES DEPICTED HEREON ARE MEASURED AS A MEANS TO RE-LOCATE OR RE-SET ANY OF THE CONTROL POINTS.
- 6) SUBMARINE CABLES SHOWN HEREON ARE BASED ON AVAILABLE MAPPING AND FIELD OBSERVATION. LOCATION OF CABLES AS DEPICTED ARE APPROXIMATE. NO FIELD EVIDENCE FOUND BY BSI ENGINEERING INC. LOCATION OF CABLES AS DEPICTED ARE APPROXIMATE. NO FIELD EVIDENCE FOUND BY BSI ENGINEERING INC. LOCATION OF CABLES AS DEPICTED ARE APPROXIMATE. NO FIELD EVIDENCE FOUND BY BSI ENGINEERING INC.
- 7) ACCESS TO AND FROM SHIRE ROAD CURRENTLY IN USE. NO RIGHTS OR TRANSFER FOUND ON LAND RECORDS. LOCATION DEPICTED BY AERIAL IMAGERY.
- 8) ALL UTILITIES DEPICTED AT "QUALITY LEVEL C" UNLESS LABELED "CLT" OR "CLD".
- 9) REGULATORY LINES: ALL NEW AND EXISTING REGULATORY LINES SHOWN ON THE NOAA GAUGE BENCHMARK INTERPOLATION AND FIELD VERIFICATION. ELEVATIONS SHOWN IN TABLE ARE APPROXIMATE AND CONTAINS AN ACCURACY OF 0.10' ± BASED ON RELATION WITH THE USGS AND NOAA GAUGE BENCHMARKS INTERPOLATION AND FIELD VERIFICATION.
- 10) BASED ON FIELD MEASUREMENT, THE GROUND PILE UNDER THE SUBMERGED COMPRESSOR OF PIPE, ACTUAL PIPE DIAMETER IS DIFFICULT TO CONFIRM. THE PIPE ON THE SOUTH END OF THE COLLECTOR IS INTACT AND MEASURABLE.

TOTAL DATA		NOVA (NAD83)	
NOVA	NOVA	NOVA	NOVA
CLT	1.00	CLT	1.00
CLD	1.00	CLD	1.00
MW	-1.21	MW	-1.21
MW	1.00	MW	1.00
JTL	3.04	JTL	3.04
LOSV	4.10	LOSV	4.10

ENVIRONMENTAL PERMIT PLANS
 PLAN DATE: MAY 2, 2023

HARDESTY & HANOVER, LLC
 ENGINEERING
 501 Broadway New York, NY 10036
 MCA
 Member of the American
 Municipal Association
 www.mcausa.com

REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER EXISTING SITE PLAN

Drawn: JBR
 Checked: ARM
 Date: 02/20/19

CONTRACT NO. 15 OF 142
 SHEET NO. 2
EX-13

MAP REFERENCES:

- 1) "EASEMENT MAP SHOWING ACCESS EASEMENTS ACROSS THE PROPERTIES OF MORTON H. SILBERSTEIN AND COUVILLE DEVELOPMENT, LLC BOSTON POST ROAD OLD SAYBROOK CONNECTICUT, SCALE: 1"=100', BY ANGUS & ASSOCIATES, INC., TOWN OF OLD SAYBROOK MAP # 2403 AND DATED OCTOBER 17, 1986.
- 2) "SURVEY PLAN SHOWING EASEMENT" TO BE CONVEYED TO THE CONNECTICUT WATER COMPANY ON PROPERTY OF MORTON H. SILBERSTEIN, M.D. BOSTON POST ROAD OLD SAYBROOK, CONNECTICUT, SCALE: 1"=100', BY ANGUS & ASSOCIATES, INC., TOWN OF OLD SAYBROOK MAP # 1783 AND DATED OCTOBER 17, 1986.
- 3) "REVISION PLAN OF DEVELOPMENT FROM TREE INDUSTRIAL PARK USE OF MOSES WALKER & FRANK ASSOCIATES, INC., TOWN OF OLD SAYBROOK MAP # 1891, DATED APR. 26, 1976 AND LAST REVISED ON SEPT. 1, 1977.
- 4) "MAP OF PROPERTY OF RUSSELL F. MULLOY, DOUGLAS W. MURPHY AND JANE E. WHILL FERRY DISTRICT OF OLD SAYBROOK, CONN. SCALE: 1"=40', DATED OCT. 1957 AND LAST REVISED ON AUG. 3, 1981.
- 5) TITLE LAND TO BE ACQUIRED BY THE STATE OF CONNECTICUT FROM PRINCETAL PRESS INC. FERRY ROAD 2134 AND DATED APRIL 23, 1986.
- 6) "LAND IN OLD LIME, CONN TO BE CONVEYED TO JAMES AND LOUISE VIKENST, SCALE: 1"=100', TOWN OF OLD LIME MAP # 10 AND DATED MARCH, 1991.
- 7) "RESUBDIVISION PLAN PROPERTY OF DAVID A. EKLUND & MARY W. EKLUND FERRY ROAD & SANDPiper POINT ROAD OLD LIME, CONNECTICUT SHEET 3 OF 8, SCALE: 1"=40', BY ANGUS & ASSOCIATES, INC., TOWN OF OLD LIME MAP # 3024, DATED MARCH 17, 2002 AND LAST REVISED ON 11-11-09.
- 8) "REVISION SURVEY IN THE PROPERTY OF ROBERT S. VOLLAND & PATRICIA J. VOLLAND 17 SANDPiper POINT ROAD OLD LIME, CONNECTICUT SHEET 1 OF 1, SCALE: 1"=40', BY ANGUS & ASSOCIATES, INC., TOWN OF OLD LIME MAP # 3024, DATED AUGUST 9, 2012 AND LAST REVISED ON OCTOBER 21, 2014.
- 9) "EASEMENT PROPERTY PLAN, SLEP, SURFACE RECONSTRUCTION, OLD LIME, CONNECTICUT, EXHIBIT "A", SHEET 3 OF 4, SCALE: 1"=40', BY PATRICIA VIKENST, TOWN OF OLD LIME MAP # 2784.
- 10) "NORTHEND ELECTRIFICATION PROJECT MAP, PROJECT # 035161, BY WEST BURLINGTON, VT, NEW HAVEN, CT, SCALE: 1"=40', BY THE TELECOMMUNICATIONS CORPORATION LIGHTWAVE SYSTEMS, DATED 12/22/95.

NOTES:

- 1) THIS SURVEY HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20-3008-1 THRU 20-3008-20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES - MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT. THIS SURVEY IS A TOPOGRAPHIC SURVEY WITH THE AREAS OF CONVENTIONAL SURVEY CONFORMING TO THE HORIZONTAL ACCURACY CLASS A-2, TOPOGRAPHIC ACCURACY CLASS 1-2 AND VERTICAL ACCURACY CLASS V-2. THE SURVEY IS A TOPOGRAPHIC SURVEY WITH THE AREAS OF CONVENTIONAL SURVEY CONFORMING TO THE HORIZONTAL ACCURACY CLASS A-2, TOPOGRAPHIC ACCURACY CLASS 1-2 AND VERTICAL ACCURACY CLASS V-2. THE SURVEY IS A TOPOGRAPHIC SURVEY WITH THE AREAS OF CONVENTIONAL SURVEY CONFORMING TO THE HORIZONTAL ACCURACY CLASS A-2, TOPOGRAPHIC ACCURACY CLASS 1-2 AND VERTICAL ACCURACY CLASS V-2.
- 2) NORTH ORIENTATION REFERS TO CONNECTICUT GRID SYSTEM NAD 83.
- 3) ELEVATIONS ARE BASED ON NAVD 83.
- 4) THESE TIES WERE DEVELOPED FROM THE BASE CAD DRAWING AND ARE NOT FIELD GENERATED TIES. THE DISTANCES DEPICTED HEREON ARE BASED UPON THE DISTANCES FOUND ON THE ORIGINAL CONTROL POINTS TO THE CENTER OF THE CIRCULAR AS MEASURED FROM THE END OF THE MAIN LINE, INDIVIDUAL CONTROL POINTS TO THE CENTER OF THE CIRCULAR AS MEASURED FROM THE END OF THE MAIN LINE, INDIVIDUAL CONTROL POINTS TO THE CENTER OF THE CIRCULAR AS MEASURED FROM THE END OF THE MAIN LINE, INDIVIDUAL CONTROL POINTS TO THE CENTER OF THE CIRCULAR AS MEASURED FROM THE END OF THE MAIN LINE.
- 5) THE TIES DEPICTED HEREON ARE MEASURED AS A MEANS TO RE-LOCATE OR RE-SET ANY OF THE CONTROL POINTS.
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- 7) ACCESS TO AND FROM SHIRE ROAD CURRENTLY IN USE. NO RIGHTS OR TRANSFER FOUND ON LAND RECORDS. LOCATION DEPICTED BY AERIAL IMAGERY.
- 8) ALL UTILITIES DEPICTED AT "QUALITY LEVEL C" UNLESS LABELED "CLT" OR "CLD".
- 9) REGULATORY LINES: ALL NEW AND EXISTING REGULATORY LINES SHOWN ON THE NOAA GAUGE BENCHMARK INTERPOLATION AND FIELD VERIFICATION. ELEVATIONS SHOWN IN TABLE ARE APPROXIMATE AND CONTAINS AN ACCURACY OF 0.10' ± BASED ON RELATION WITH THE USGS AND NOAA GAUGE BENCHMARKS INTERPOLATION AND FIELD VERIFICATION.
- 10) BASED ON FIELD MEASUREMENT, THE GROUND PILE UNDER THE SUBMERGED COMPRESSOR OF PIPE, ACTUAL PIPE DIAMETER IS DIFFICULT TO CONFIRM. THE PIPE ON THE SOUTH END OF THE COLLECTOR IS INTACT AND MEASURABLE.

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 The National Railroad Passenger Corporation
 13th Street Station, Hoboken, Pennsylvania, 19080

Office of Chief Engineer
STRUCTURES

CONTRACT NO. 15 OF 142
 SHEET NO. 2
EX-13



SCALE IN FEET
 0 150 300 450

CONTRACT NO. 6528003
 SHEET NO. 17 OF 42
KEY PLAN
 DATE 05/20/23
 DRAWN CS
 CHECKED KF

REPLACEMENT OF MB 106.89
 OVER CONNECTICUT RIVER
 KEY PLAN

OLD SAYBROOK
 HARDESTY & HANOVER, LLC
 ENGINEERING
 1501 Broadway, New York, NY 10036
 700 Market Street, Philadelphia, PA 19105



OFFICE OF CHIEF ENGINEER
STRUCTURES
 National Railroad Passenger Corporation
 200 Street Station, Philadelphia, Pennsylvania 19104

Amtrak
 The National Railroad Passenger Corporation
 200 Street Station, Philadelphia, Pennsylvania 19104

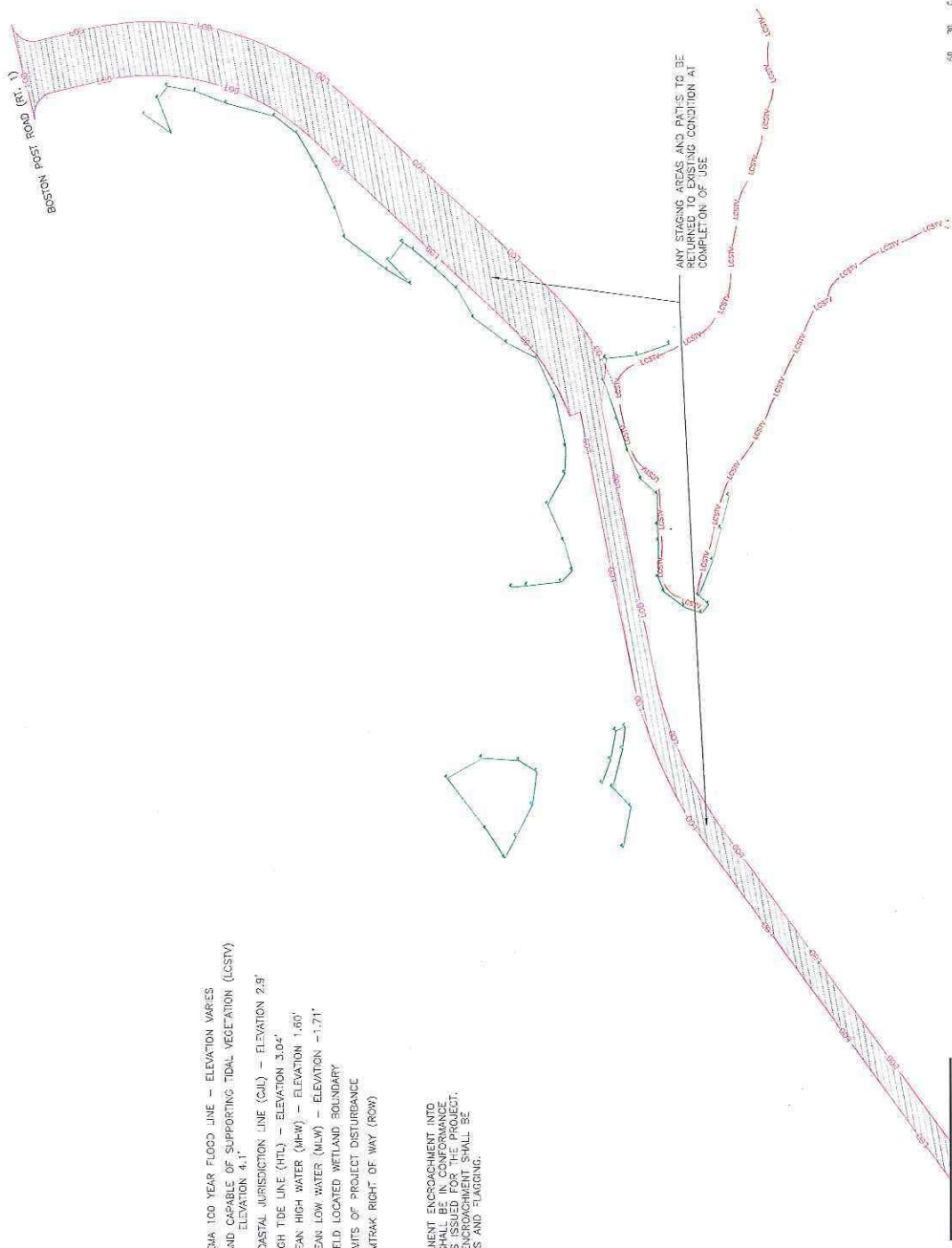
ENVIRONMENTAL PERMIT PLANS
 PLAN DATE: MAY 2, 2023

NO.	DATE	BY	REVISIONS

PROJECT NO. 6528003
 SHEET NO. 17 OF 42
 DATE 05/20/23

TO NEW HAVEN

TO BOSTON



LEGEND:

- FEAR 100 YEAR FLOOD LINE - ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) - ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CAL) - ELEVATION 2.9'
- HIGH TIDE LINE (HTL) - ELEVATION 3.04'
- MEAN HIGH WATER (MHW) - ELEVATION 1.60'
- MEAN LOW WATER (MLW) - ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)

NOTES:

1. TEMPORARY AND PERMANENT ENCROACHMENT INTO REGULATED WETLANDS SHALL BE IN CONFORMANCE WITH WETLANDS PERMITS ISSUED FOR THE PROJECT. LIMITS OF TEMPORARY ENCROACHMENT SHALL BE DELINEATED WITH STAKES AND FLAGGING.

MATCHLINE DWG SITE-0.2



ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023		OLD SAYBROOK HARDSTY & HANOVER, LLC ENGINEERING 1700 Market St., Suite 1020 Philadelphia, PA 19103		CONNECTICUT REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER SITE PLAN		Project Code: 1000002 VEP: 18 OF 42 Sheet No. 2 OF 3
				Drawn: CB Checked: NM Date: 5/2/2023		SITE-01
Office of Chief Engineer STRUCTURES National Railroad Passenger Corporation 12th Street Station, Philadelphia, Pennsylvania 19104				Amtrak logo and text: Amtrak (B) logo and 'Amtrak' text.		

TO NEW HAVEN

TO BRISTOL
MATCHLINE DWG SITE-01



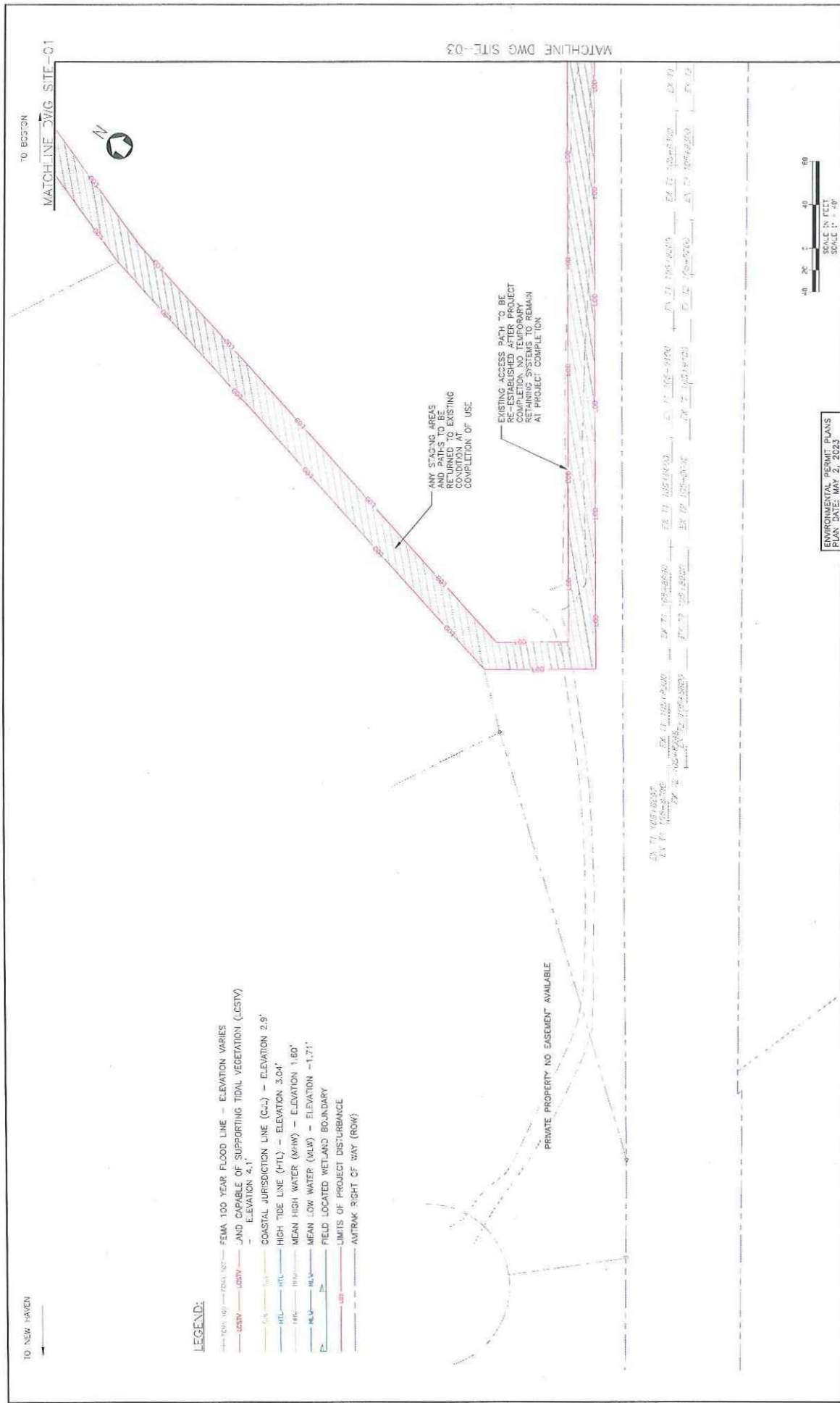
LEGEND:

- FEMA 100 YEAR FLOOD LINE — ELEVATION VARIES
- AND CAPABLE OF SUPPORTING TIDAL VEGETATION (LSTV) — ELEVATION 4.1
- COASTAL JURISDICTION LINE (CJL) — ELEVATION 2.9'
- HIGH TIDE LINE (HTL) — ELEVATION 3.04'
- MEAN HIGH WATER (MHW) — ELEVATION 1.80'
- MEAN LOW WATER (MLW) — ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)

PRIVATE PROPERTY NO EASEMENT AVAILABLE

ANY STAGING AREAS AND PATHS TO BE RETURNED TO EXISTING CONDITION AT COMPLETION OF USE

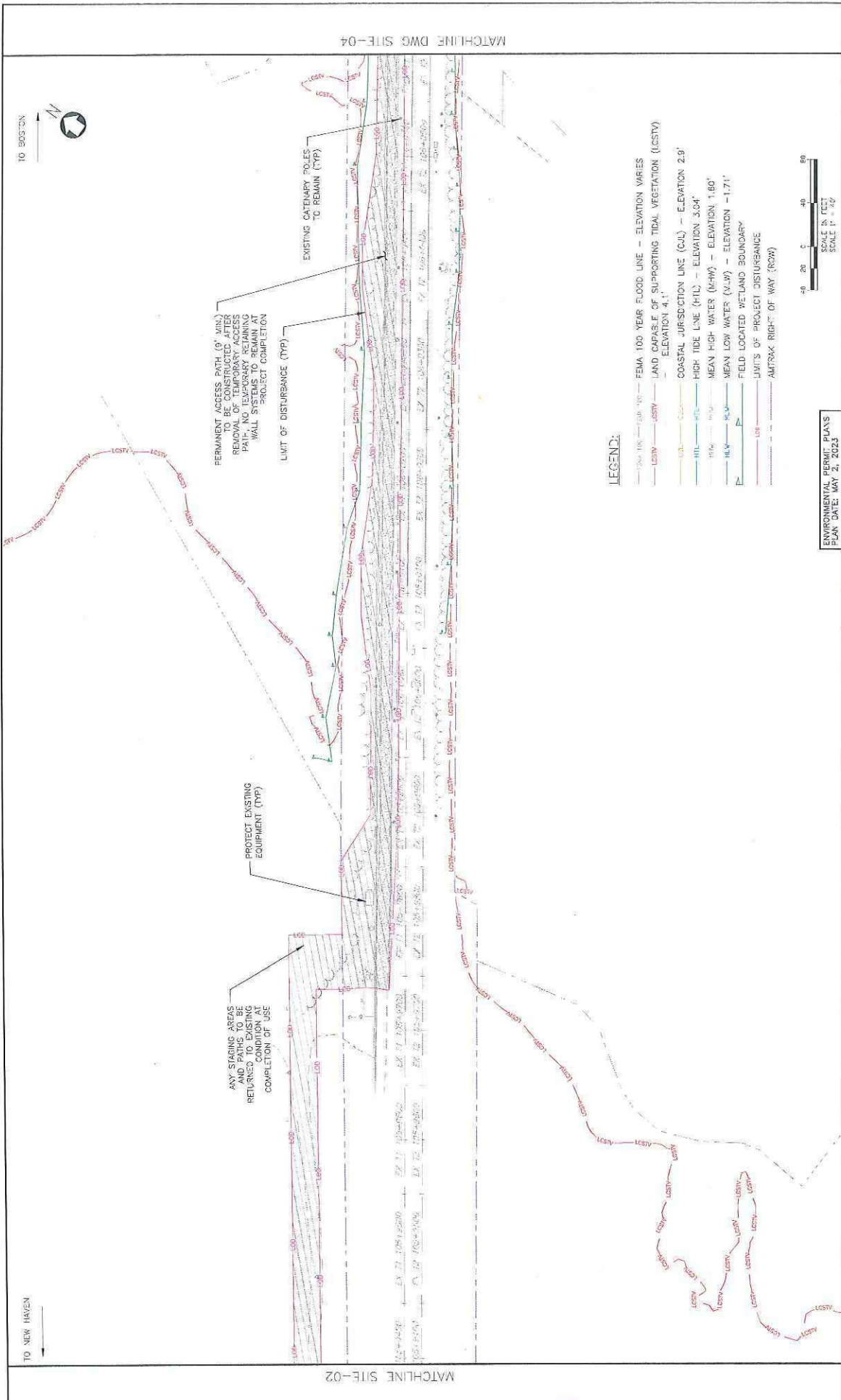
EXISTING ACCESS PATH TO BE RE-ESTABLISHED AFTER PROJECT COMPLETION. NO TEMPORARY REMAINING SYSTEMS TO REMAIN AT PROJECT COMPLETION



MATCHLINE DWG SITE-03



<p>Amtrak The National Railroad Passenger Corporation 300 North Capitol Street, Washington, DC 20004</p>	<p>Office of Chief Engineer STRUCTURES National Railroad Passenger Corporation 300 North Capitol Street, Washington, DC 20004</p>	<p>ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023</p>	<p>HARDESTY & HANOVER, LLC ENGINEERING 152 Broadway New York, NY 10036 700 Market Street, Suite 900 Philadelphia, PA 19103</p>	<p>OLD DRAWING REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER SITE PLAN</p>	<p>PROJECT CODE: 1006.000 SHEET NO.: 19 OF 110 DATE: 10/20/23</p>
	<p>Approved: _____ Date: _____</p>	<p>Designed: CB Drawn: CB/VD Checked: RN Date: 10/20/23</p>	<p>CONTRACT: CONNECTICUT</p>	<p>SITE-02</p>	<p>18 20 40 60 80 SCALE IN FEET SCALE 1" = 40'</p>



PERMANENT ACCESS PATH (9' MIN.) TO BE CONSTRUCTED AFTER REMOVAL OF EXISTING ACCESS PATH. NO TEMPORARY REMAINING WALL SYSTEMS TO REMAIN AT PROJECT COMPLETION.

EXISTING TEMPORARY POLES TO REMAIN (TYP)

ANY STAGING AREAS AND PATHS TO BE RETURNED TO ORIGINAL CONDITION AT COMPLETION OF USE.

PROTECT EXISTING EQUIPMENT (TYP)

LEGEND:

- FEMA 100 YEAR FLOOD LINE — ELEVATION VARIES
- LAND CAPSE E. OF SUPPORTING TIDAL VEGETATION (LSTV) ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CAL) — ELEVATION 2.9'
- HIGH TIDE LINE (HTL) — ELEVATION 3.04'
- MEAN HIGH WATER (MHW) — ELEVATION 1.80'
- MEAN LOW WATER (MLW) — ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT-OF-WAY (ROW)



TO NEW HAVEN

MATCHLINE DWG SITE-02

MATCHLINE DWG SITE-04

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

HARDSTY & HANOVER, LLC
ENGINEERS
1750 Market St., Suite 1050
Philadelphia, PA 19103



NO.	REVISIONS	DATE	BY

Office of Chief Engineer
STRUCTURES
30th Street Station, Philadelphia, Pennsylvania 19104

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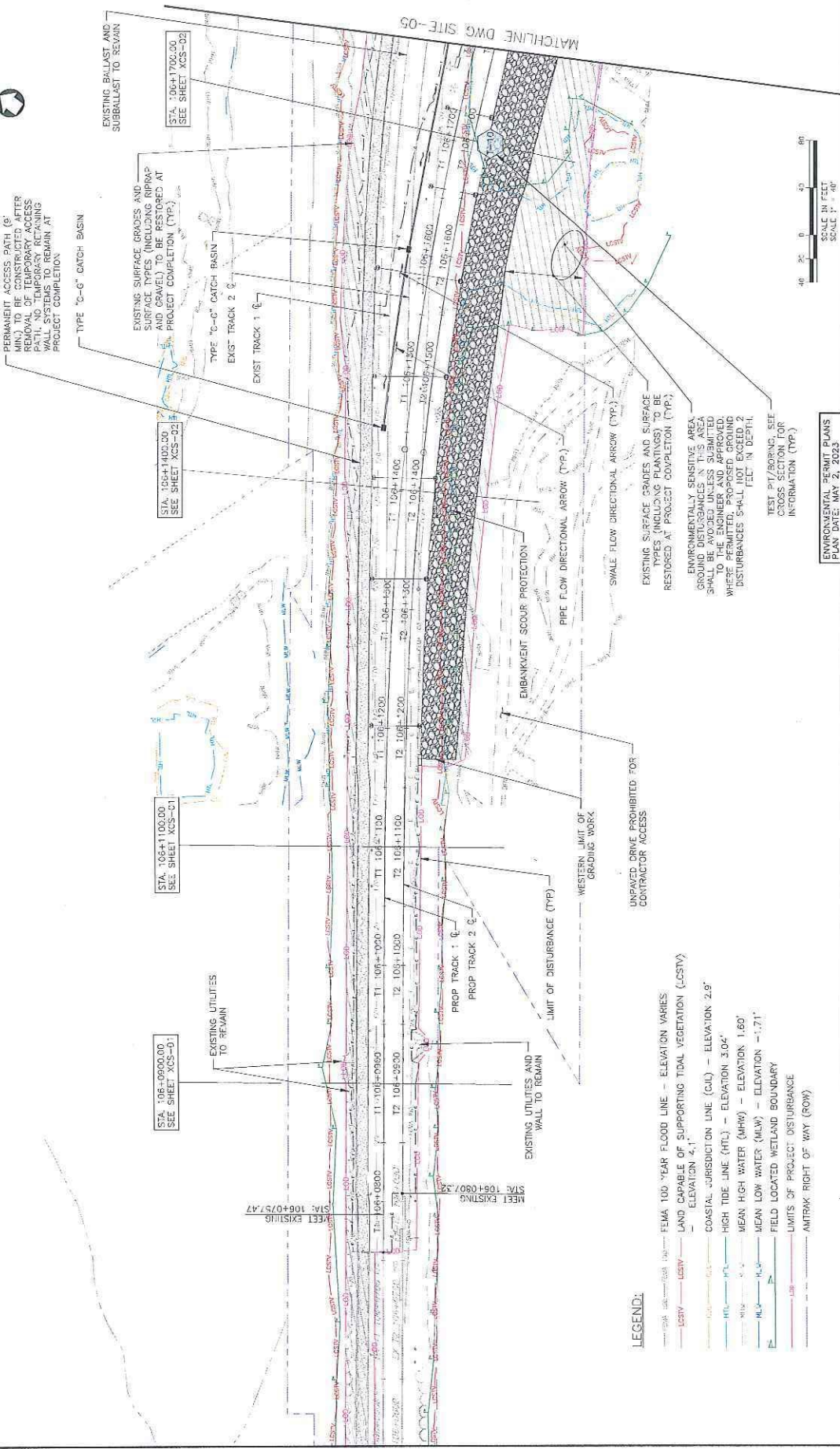
Project Code	XXXXXX
WBS	
Sheet No.	20 OF 40
Scale	
Drawn	
Checked	
Date	5/2/2023

SITE-03

REPLACEMENT OF MB 106.89
OVER CONNECTICUT RIVER
SITE PLAN

TO NEW HAVEN

TO BRISTOL



STA. 106+1700.00
SEE SHEET XCS-02

STA. 106+1400.00
SEE SHEET XCS-03

STA. 106+1100.00
SEE SHEET XCS-01

STA. 106+0900.00
SEE SHEET XCS-01

MEET EXISTING
SITE 106+0807.32

MATCHLINE DWG SITE-03

MATCHLINE DWG SITE-05

LEGEND:

- FEMA 100 YEAR FLOOD LINE - ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) - ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CJL) - ELEVATION 2.9'
- HIGH TIDE LINE (HTL) - ELEVATION 3.04'
- MEAN HIGH WATER (MHW) - ELEVATION 1.60'
- MEAN LOW WATER (MLW) - ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)



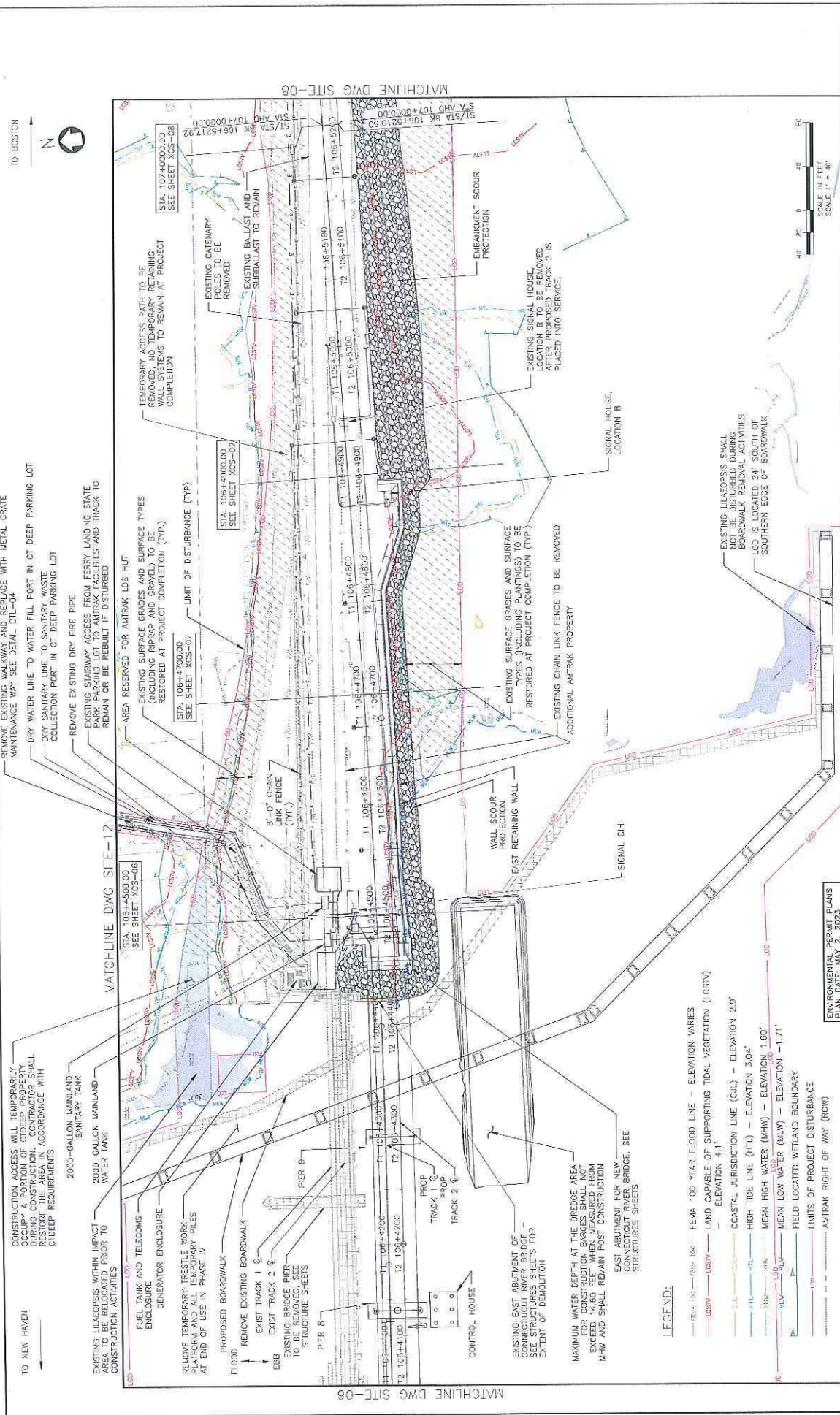
ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

	WSP WSP ENGINEERING 1500 Broadway, New York, NY 10036 17000 Market Street, Suite 1000 Philadelphia, PA 19103 Phone: (215) 381-1100	HARDESTY & HANOVER, LLC ENGINEERING 1500 Broadway, New York, NY 10036 17000 Market Street, Suite 1000 Philadelphia, PA 19103 Phone: (215) 381-1100	PROJECT: CONNECTICUT SHEET: 21 OF 140 DATE: 05/02/23
	PROJECT: REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER SITE PLAN	DRAWN: CE CHECKED: RW DATE: 02/02/23	PROJECT: 2023003

Office of Chief Engineer
STRUCTURES
National Railroad Passenger Corporation
300 Street Station, Philadelphia, Pennsylvania 19106

NO.	DESCRIPTION	DATE	BY

DATE PLOTTED: 05/02/23 10:45 AM
 PLOT SCALE: 1" = 40'
 PLOT SHEET: 21 OF 140



TO NEW HAVEN

TO BOSTON

CONSTRUCTION ACCESS WILL TEMPORARILY OCCUPY A PORTION OF CTDEEP PROPERTY DURING CONSTRUCTION. CONTRACTOR SHALL RESTORE THE AREA IN ACCORDANCE WITH CTDEEP REQUIREMENTS.

2000-GALLON MANLAND SANITARY TANK

2000-GALLON MANLAND WATER TANK

FUEL TANK AND TELECOMS ENCLOSURE

REMOVE TEMPORARY TRESTLE WORK PLATFORM AND ALL TEMPORARY PILES AT END OF USE IN PHASE IV

PROPOSED BOARDWALK

FLOOD: REMOVE EXISTING BOARDWALK

EXIST TRACK 1 C

EXIST TRACK 2 C

EXISTING BRIDGE PIER TO STRUCTURE SHEETS

PIER 8

CONTROL HOUSE

TRACK 1 C

TRACK 2 C

EXISTING EAST ABUTMENT OF CONNECTICUT RIVER BRIDGE - SEE STRUCTURES SHEETS FOR EXTENT OF DEMOLITION

MAXIMUM WATER DEPTH AT THE DREDGE AREA FOR CONSTRUCTION BARGES SHALL NOT EXCEED 14.60 FEET WHEN MEASURED FROM MHW AND SHALL REMAIN POST CONSTRUCTION

EAST ABUTMENT FOR NEW CONNECTICUT RIVER BRIDGE. SEE STRUCTURES SHEETS

WALL SCOUR PROTECTION EAST RETAINING WALL

8'-0" CHAIN LINK FENCE (TYP.)

EXISTING SURFACE GRADES AND SURFACE TYPES (INCLUDING RIPRAP AND GRAVEL) TO BE RESTORED AT PROJECT COMPLETION (TYP.)

EXISTING CHAIN LINK FENCE TO BE REMOVED

ADDITIONAL AMTRAK PROPERTY

AREA RESERVED FOR AMTRAK LDS "H"

EXISTING SURFACE GRADES AND SURFACE TYPES (INCLUDING RIPRAP AND GRAVEL) TO BE RESTORED AT PROJECT COMPLETION (TYP.)

STA. 106+3700.00 SEE SHEET XCS-07

LIMIT OF DISTURBANCE (TYP.)

STA. 106+4000.00 SEE SHEET XCS-07

TEMPORARY ACCESS PATH TO BE REMOVED. NO TEMPORARY RETAINING WALL SYSTEMS TO REMAIN AT PROJECT COMPLETION

EXISTING CATERWAY PILES TO BE REMOVED

EXISTING BALLAST AND SUBBALLAST TO REMAIN

EMBRANKMENT SCOUR PROTECTION

EXISTING SIGNAL HOUSE LOCATION B TO BE REMOVED AFTER PROPOSED TRACK 2 IS PLACED INTO SERVICE.

SIGNAL HOUSE LOCATION B

EXISTING LILAEOPSIS SHALL NOT BE DISTURBED DURING BOARDWALK REMOVAL ACTIVITIES

LOD IS LOCATED 24' SOUTH OF SOUTHERN EDGE OF BOARDWALK

SCALE: 1" = 40'

LEGEND:

- FEMA 100 YEAR FLOOD LINE - ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) - ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CAL) - ELEVATION 2.9'
- HIGH TIDE LINE (HTL) - ELEVATION 3.04'
- MEAN HIGH WATER (MHW) - ELEVATION 1.60'
- MEAN LOW WATER (MLW) - ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)

CONTRACTOR: CONNECTICUT

OLD DRAWING: REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER

DATE: 21-06-16

PROJECT: SITE PLAN

DESIGNED BY: CB

DRAWN BY: DM

CHECKED BY: DM

DATE: 02/20/20

PROJECT NO: 1003300

SHEET NO: 2

SITE-07

HARDESTY & HANOVER, LLC
ENGINEERING
1501 Broadway, New York, NY 10036
1700 Market St., Suite 1030
Philadelphia, PA 19103

Office of Chief Engineer
STRUCTURES
306 Street Station, Philadelphia, Pennsylvania 19104

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

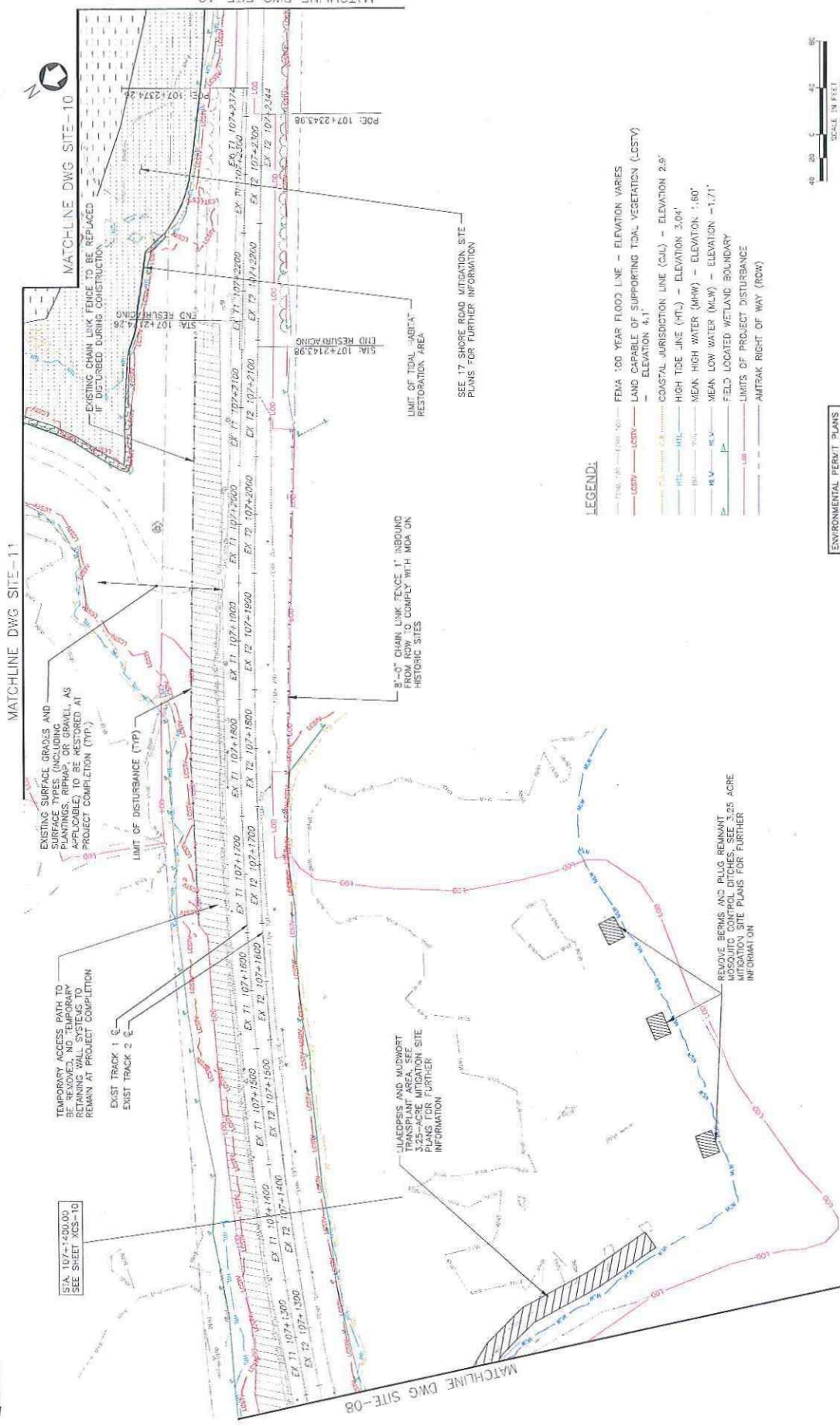
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TO NEW HAVEN

MATCHLINE DWG SITE-11

TO BOSTON



EXISTING SURFACE GRASSES AND SURFACE TYPES (INCLUDING PLANTINGS, RIPRAP, OR GRAVEL) AS APPLICABLE) TO BE RESTORED AT PROJECT COMPLETION (TYP).

TEMPORARY ACCESS PATH TO BE REMOVED, NO TEMPORARY RETAINING WALL SYSTEMS TO REMAIN AT PROJECT COMPLETION

EXIST TRACK 1
EXIST TRACK 2

LIMIT OF DISTURBANCE (LTD)

8'-0" CHAIN LINK FENCE 1" INBOUND FROM ROW TO COMPLY WITH MCA ON HISTORIC SITES

LILAEOPSIS AND MUDWORT TRANSPLANT AREA, SEE ATTACHED SITE PLANS FOR FURTHER INFORMATION

REMOVE BERMS AND PLUG REMNANT MOSQUITO CONTROL DITCHES, SEE 3.25 ACRE INFORMATION

SEE 17 SHORE ROAD MITIGATION SITE PLANS FOR FURTHER INFORMATION

LIMIT OF TOTAL "ABT" RESTORATION AREA

EXISTING CHAIN LINK FENCE TO BE REPLACED IF DISTURBED DURING CONSTRUCTION

STA 107+1400.00 SEE SHEET XCS-10

LEGEND:

- 100 YEAR FLOOD LINE - ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LSTV) - ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CJL) - ELEVATION 2.6'
- HIGH TIDE LINE (HTL) - ELEVATION 3.00'
- MEAN HIGH WATER (MHW) - ELEVATION 1.60'
- MEAN LOW WATER (MLW) - ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)



ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023



Office of Chief Engineer
STRUCTURES
1205 Street Station, Philadelphia, Pennsylvania 19108



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ENGINEERING
1501 Broadway, New York, NY 10036
1700 Market St, Suite 1050
Philadelphia, PA 19103

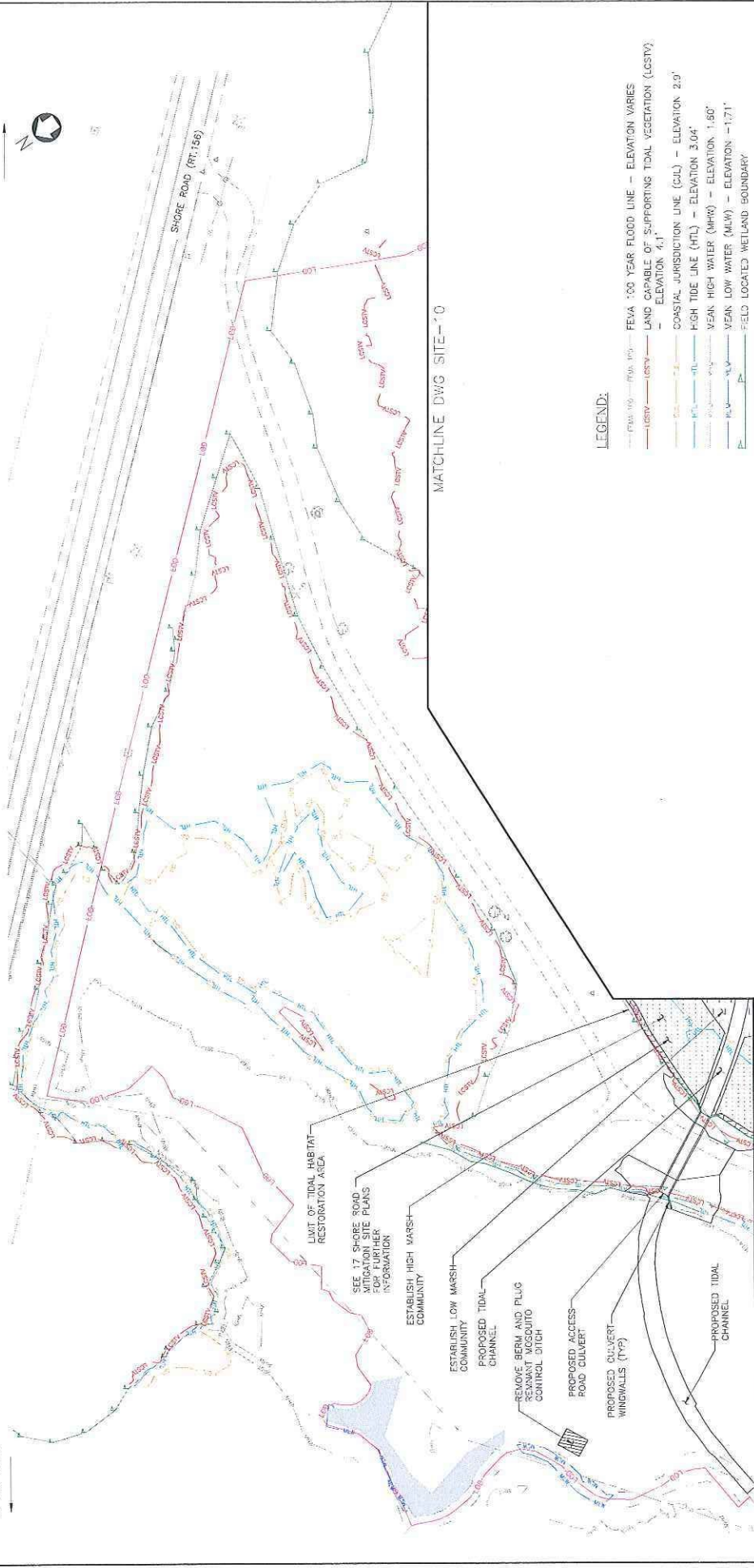
PROJECT NAME: 100335
CONTRACT: REPLACEMENT OF MB 106 89 OVER CONNECTICUT RIVER
SITE PLAN

DATE: 05/02/23
DRAWN: CS
CHECKED: CSB
SCALE: AS SHOWN
SHEET NO. 25 OF 142
PROJECT NO. 100335
JOB NO. 100335
JOB TITLE: SITE PLAN
JOB DATE: 05/02/23

SITE-09

TO NEW HAVEN

TO BOSTON



- LEGEND:**
- FWA 100' FWA 100'
 - FEVA 100 YEAR FLOOD LINE - ELEVATION VARIES
 - LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) - ELEVATION 4.1'
 - COASTAL JURISDICTION LINE (CAL) - ELEVATION 2.9'
 - HIGH TIDE LINE (HTL) - ELEVATION 3.04'
 - MEAN HIGH WATER (MHW) - ELEVATION 1.50'
 - MEAN LOW WATER (MLW) - ELEVATION -1.71'
 - FIELD LOCATED WETLAND BOUNDARY
 - LIMITS OF PROJECT DISTURBANCE
 - AMTRAK RIGHT OF WAY (ROW)

MATCHLINE DWG SITE-70

MATCHLINE DWG SITE-09

ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023		OLD SPUR ROW HARDESTY & HANOVER, LLC ENGINEERING 1501 Broadway New York, NY 10036 7300 TIGHE CT SUITE 1000 PHILADELPHIA, PA 19154		CONNECTICUT SHEET CADD 300.232 VASS SHEET 16 25 OF 162 SITE-11	
Scale: 1" = 40' SCALE IN FEET 0 20 40 60 80		DESIGNED: CD DRAWN: CADD CHECKED: RM DATE: 05/22/23		HARDESTY & HANOVER, LLC ENGINEERING 1501 Broadway New York, NY 10036 7300 TIGHE CT SUITE 1000 PHILADELPHIA, PA 19154	
OFFICE OF CHIEF ENGINEER STRUCTURES National Railroad Passenger Corporation 30th Street Station, Philadelphia, Pennsylvania 19104				DATE: _____ DRAWN: _____ CHECKED: _____	
		SEE SHORE ROAD PLANS FOR FURTHER INFORMATION		LIMIT OF TIDAL HABITAT RESTORATION AREA	
ESTABLISH HIGH MARSH COMMUNITY		ESTABLISH LOW MARSH COMMUNITY		PROPOSED TIDAL CHANNEL	
REMOVE BERM AND PLUG REMNANT ACCOQUITO CONTROL DITCH		PROPOSED ACCESS ROAD CULVERT		PROPOSED CULVERT WINDWALLS (TYP)	
PROPOSED TIDAL CHANNEL		PROPOSED TIDAL CHANNEL		PROPOSED TIDAL CHANNEL	

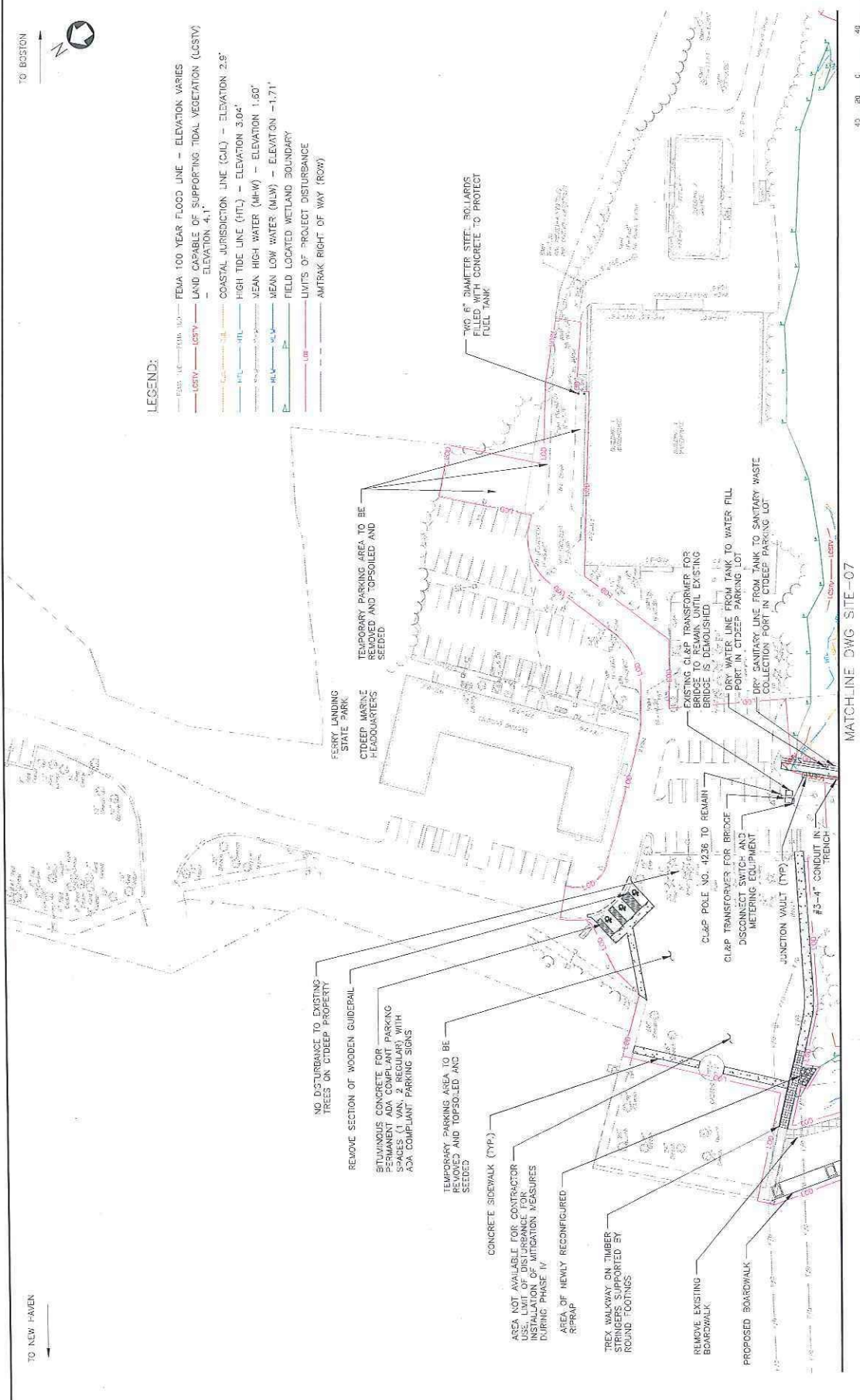
TO NEW HAVEN

TO BOSTON



LEGEND:

- FEMA 100 YEAR FLOOD LINE - ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) - ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CJL) - ELEVATION 2.9'
- HIGH TIDE LINE (HTL) - ELEVATION 3.04'
- MEAN HIGH WATER (MHW) - ELEVATION 1.60'
- MEAN LOW WATER (MLW) - ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)



SCALE IN FEET
1" = 40'

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

HARDESTY & HANOVER, LLC
ENGINEERING
1500 Broadway, New York, NY 10036
1700 Market St., Suite 1050
Philadelphia, PA 19103



NO.	REVISED	DATE	BY

Office of Chief Engineer
STRUCTURES
National Railroad Passenger Corporation
300 Street Station, Philadelphia, Pennsylvania 19106



PROJECT NO. 23-003
DATE: 05/02/23
SCALE: AS SHOWN
DRAWN BY: [Name]
CHECKED BY: [Name]

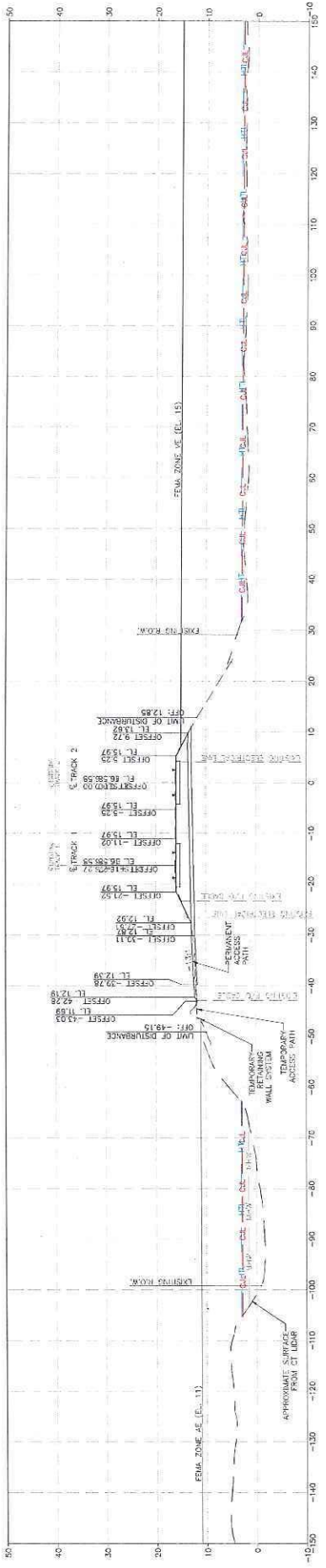
PROJECT CODE: 23-003
DATE: 05/02/23
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DRAWN BY: [Name]
CHECKED BY: [Name]

PROJECT CODE: 23-003
DATE: 05/02/23
SCALE: AS SHOWN
DRAWN BY: [Name]
CHECKED BY: [Name]

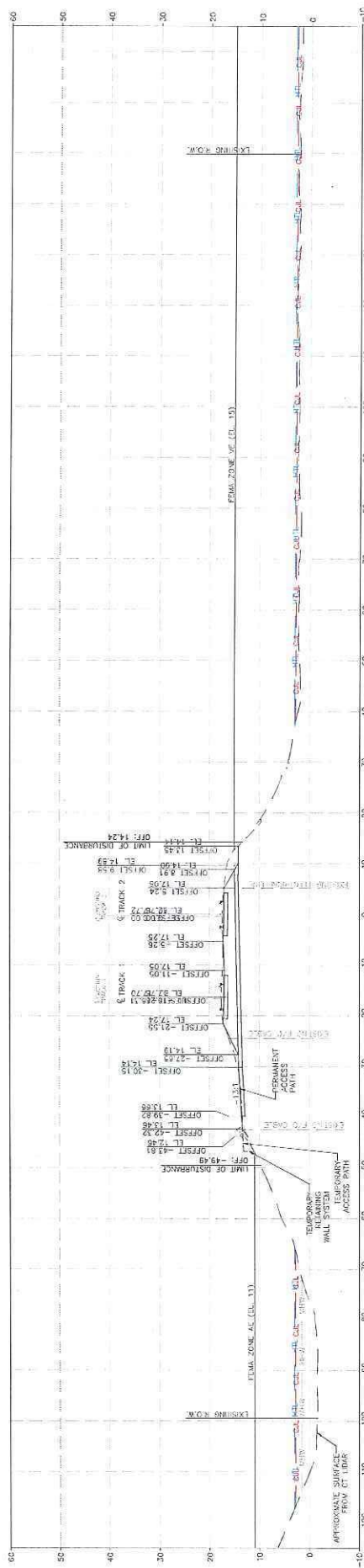
CONTRACT NO. 23-003
PROJECT NAME: REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER
SITE PLAN

DATE: 05/02/23
DRAWN BY: [Name]
CHECKED BY: [Name]

SITE-12



106+0900.00

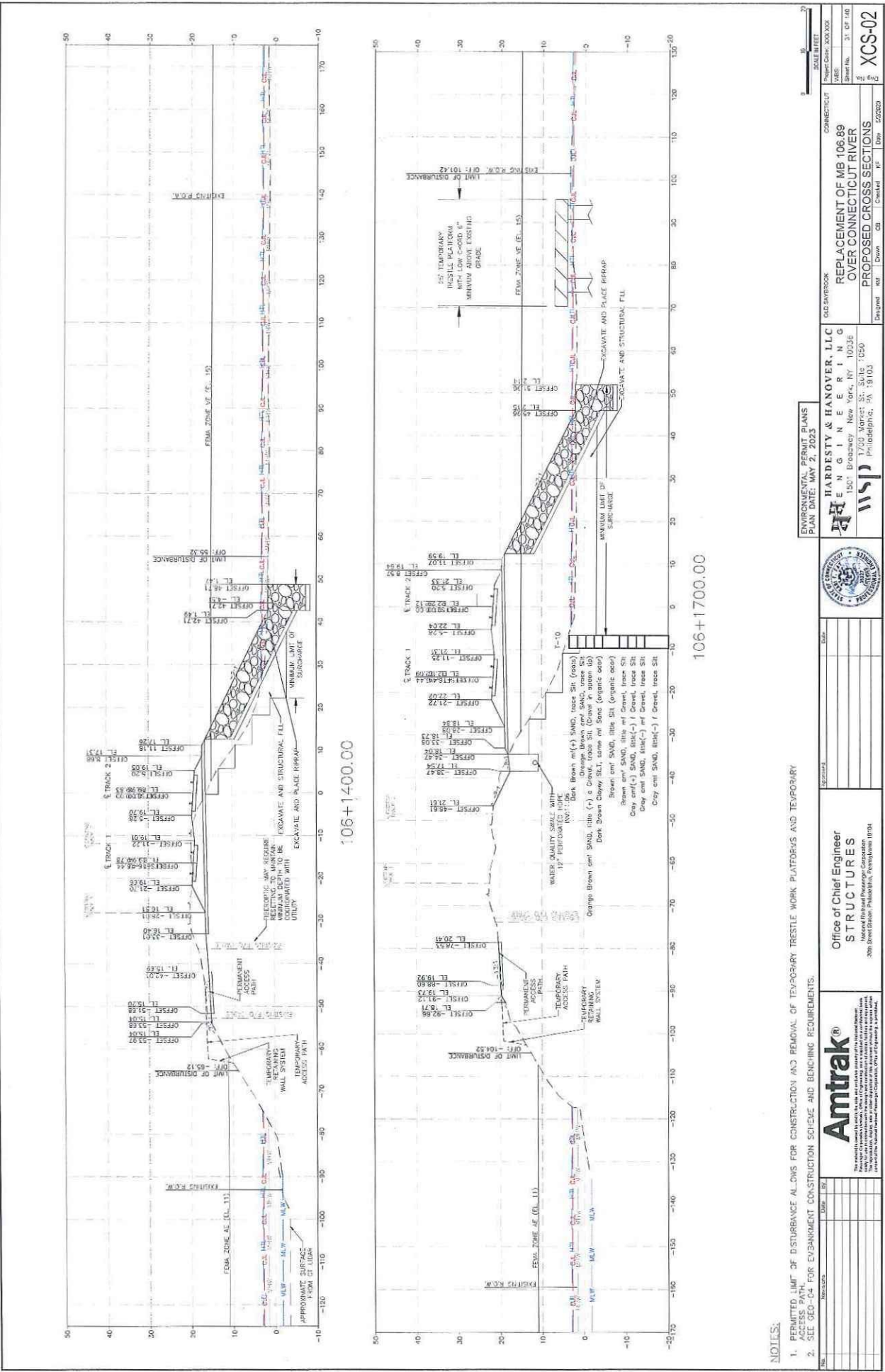


106+1100.00

NOTES:

1. PERMITTED LIMIT OF DISTURBANCE ALLOWS FOR CONSTRUCTION AND REMOVAL OF TEMPORARY TRELLIS WORK PLATFORMS AND TEMPORARY ACCESS PATH.

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	EMERGENCY PERMIT PLANS PLAN DATE: MAY 2, 2023	HARDESTY & HANOVER, LLC ENGINEERING 1501 Broadway New York, NY 10036 100 Airport Dr. Suite 1000 HARTFORD, CT 06183
PROJECT: REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER PROPOSED CROSS SECTIONS		SHEET NO. 36 OF 142 XCS-01



NOTES:

1. PERMITTED LIMIT OF DISTURBANCE ALLOWS FOR CONSTRUCTION AND REMOVAL OF TEMPORARY TRELLIS WORK PLATFORMS AND TEMPORARY ACCESS PATHS.
2. SEE GEO-04 FOR ENVIRONMENTAL CONSTRUCTION BENCHING REQUIREMENTS.



**Office of Chief Engineer
STRUCTURES**
National Railroad Passenger Corporation
1000 Broadway, Philadelphia, Pennsylvania 19106



WSP
1700 Market St, Suite 1050
Philadelphia, PA 19103

HARDESTY & HANOVER, LLC
ENGINEERING
1501 Broadway New York, NY 10036

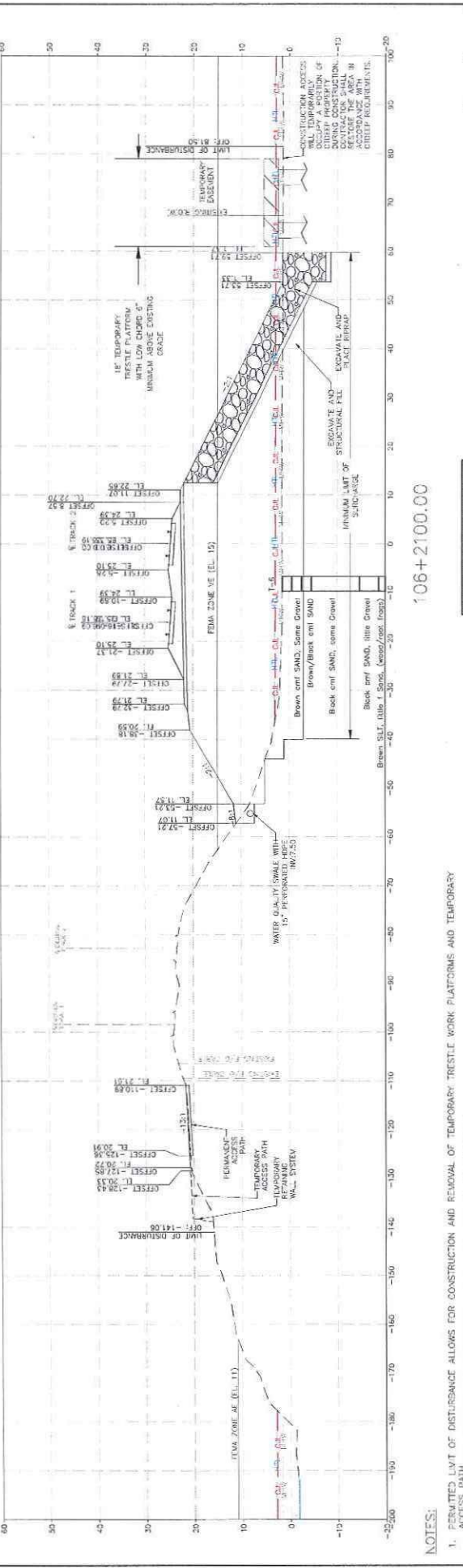
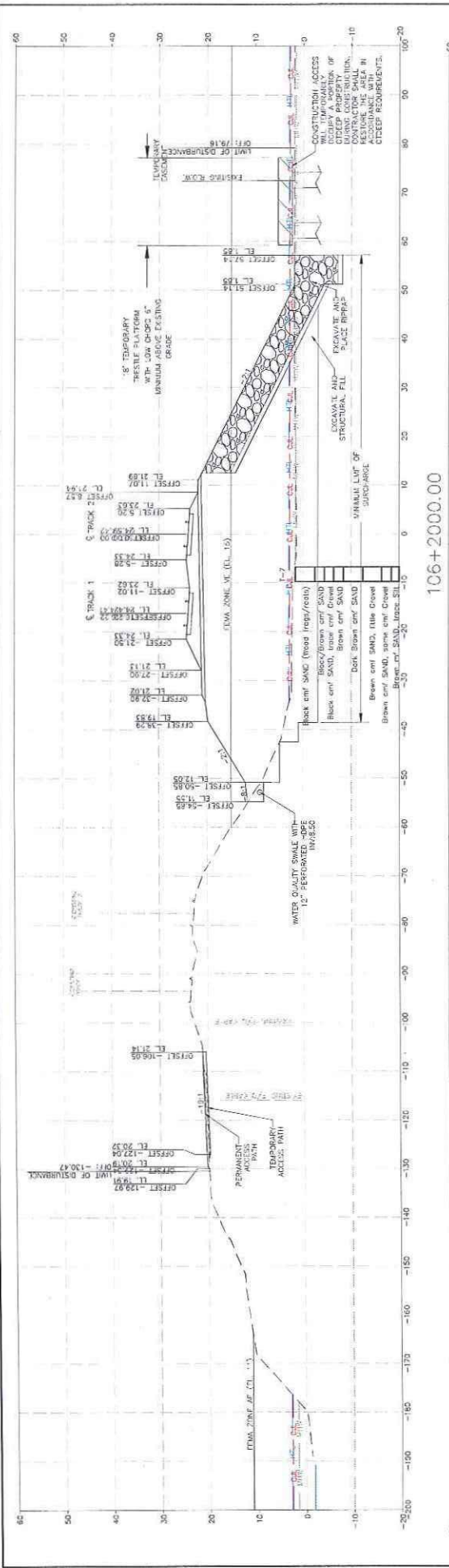
**REPLACEMENT OF MB 106.89
OVER CONNECTICUT RIVER
PROPOSED CROSS SECTIONS**

Project Code: 1006.000
Sheet No. 31 OF 140
Date: 02/28/20
Checked: []
Drawn: []

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023
SCALE: 1"=40'

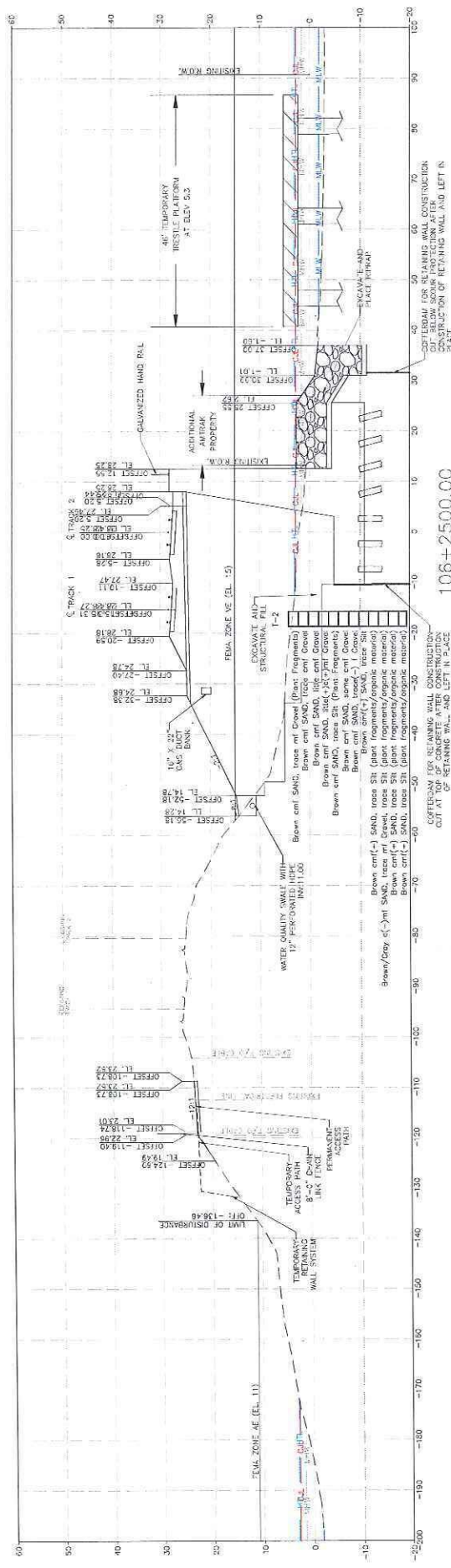
106+1700.00

106+1400.00



NOTES:
 1. PERMITTED LIMIT OF DISTURBANCE ALLOWS FOR CONSTRUCTION AND REMOVAL OF TEMPORARY TRETTLE WORK PLATFORMS AND TEMPORARY
 2. SEE 680-04 FOR EMBANKMENT CONSTRUCTION SCHEME AND BENCH-MARK REQUIREMENTS.

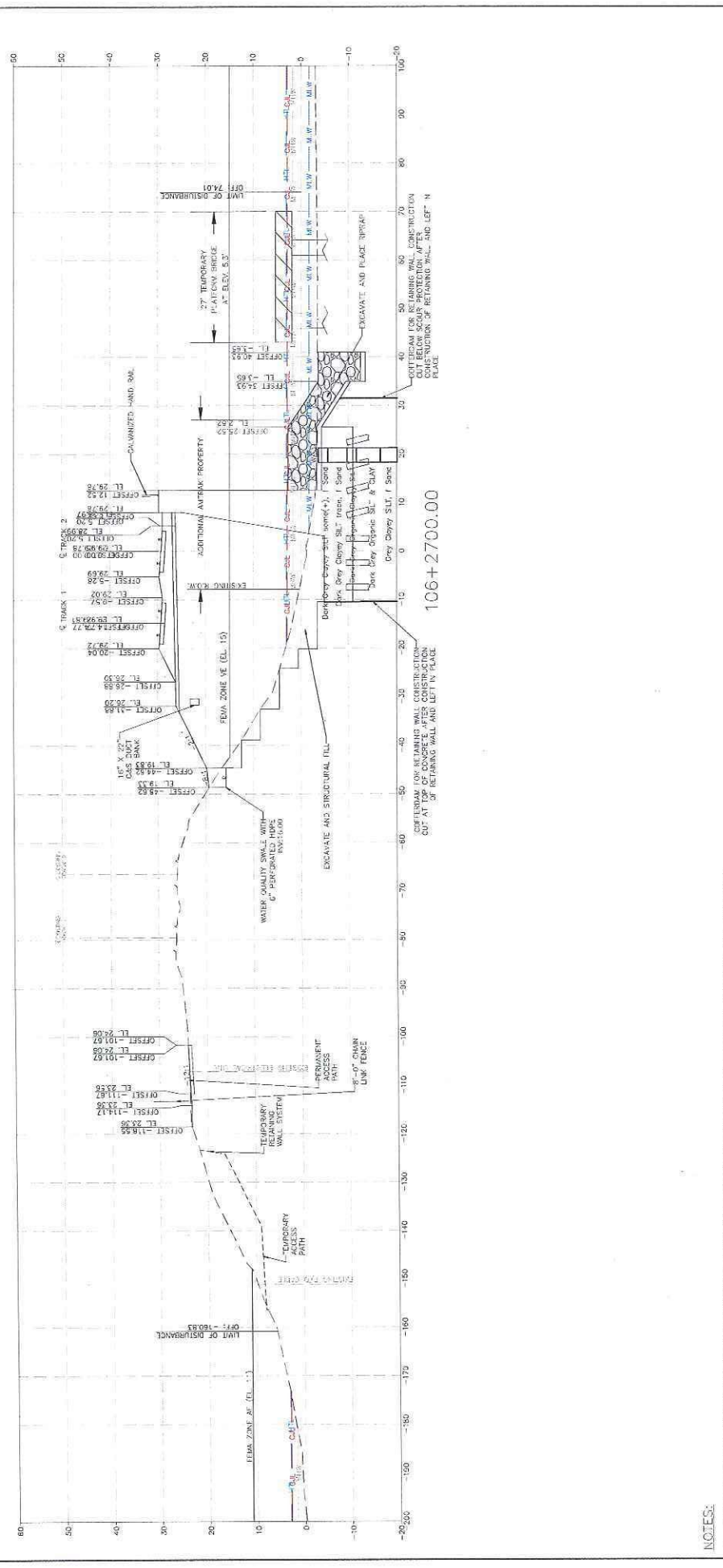
Office of Chief Engineer STRUCTURES <small>National Railroad Passenger Corporation 1000 Market Street, Philadelphia, Pennsylvania 19104</small>		HARDESTY & HANOVER, LLC ENGINEERING <small>1501 Broadway, New York, NY 10036 1700 Walnut St., Suite 1050 Philadelphia, PA 19103</small>	
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ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023		CONNECTICUT PROJECT NO: 106889 SHEET NO: 30 OF 40 REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER PROPOSED CROSS SECTIONS	
SCALE: 1" = 20'-0"		SHEET NO: 30 OF 40 PROJECT NO: 106889	



106+2500.00

NOTES:
 1. PERMITTED LIMIT OF DISTURBANCE ALLOWS FOR CONSTRUCTION AND REMOVAL OF TEMPORARY TRESTLE WORK PLATFORMS AND TEMPORARY ACCESS PATH.
 2. SEE DEO-04 FOR EMBANKMENT CONSTRUCTION SCHEME AND BENCHING REQUIREMENTS.

		ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023		OLD DRAWING REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER PROPOSED CROSS SECTIONS	
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PROJECT: MB 106.89 SHEET NO.: 33 OF 140 DATE: 05/02/23		PROJECT: MB 106.89 SHEET NO.: 33 OF 140 DATE: 05/02/23		PROJECT: MB 106.89 SHEET NO.: 33 OF 140 DATE: 05/02/23	



NOTES:

- PERMITTED LIMIT OF DISTURBANCE ALLOWS FOR CONSTRUCTION AND REMOVAL OF TEMPORARY FRETSTLE WORK PLATFORMS AND TEMPORARY PERMITS ONLY.
- SEE GEO-04 FOR EMBANKMENT CONSTRUCTION SCHEME AND BENCHING REQUIREMENTS.

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Office of Chief Engineer
STRUCTURES

National Railroad Passenger Corporation
300 North Capitol Street, N.W., Washington, D.C. 20540

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

HARDESTY & HANOVER, LLC
ENGINEERS ARCHITECTS PLANNERS
1750 Market St., Suite 1050
Philadelphia, PA 19103

PROJECT: 106+270.00

SCALE: 1"=20'

CONTRACT: 106+270.00

PROJECT NO.: 106+270.00

SHEET NO.: 24 OF 140

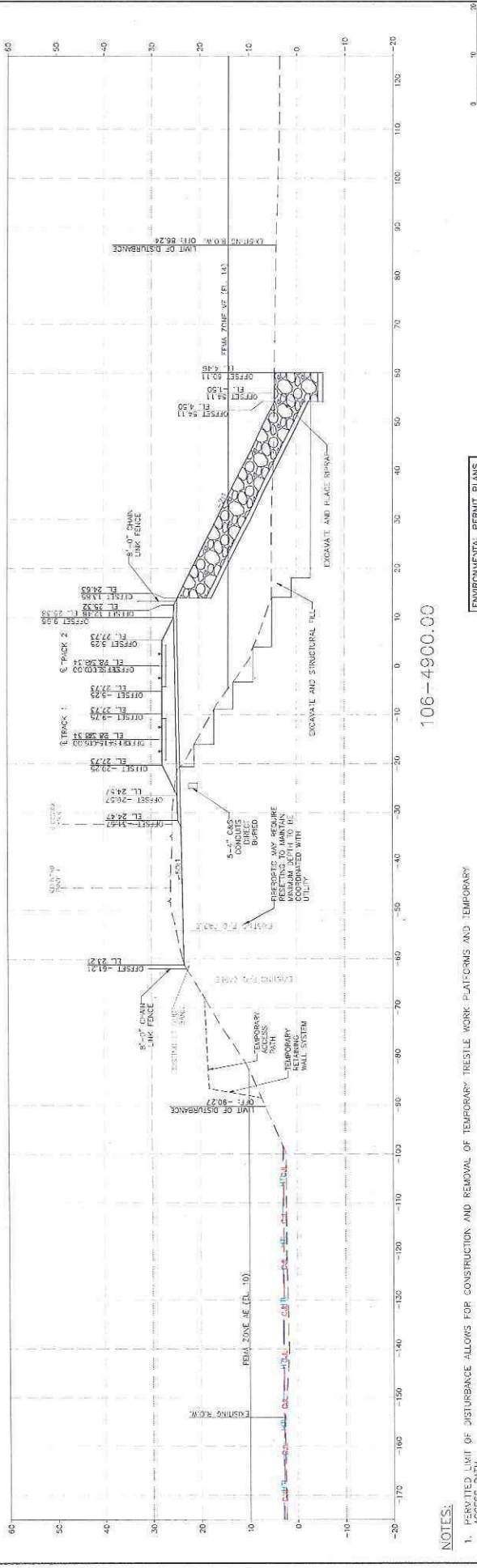
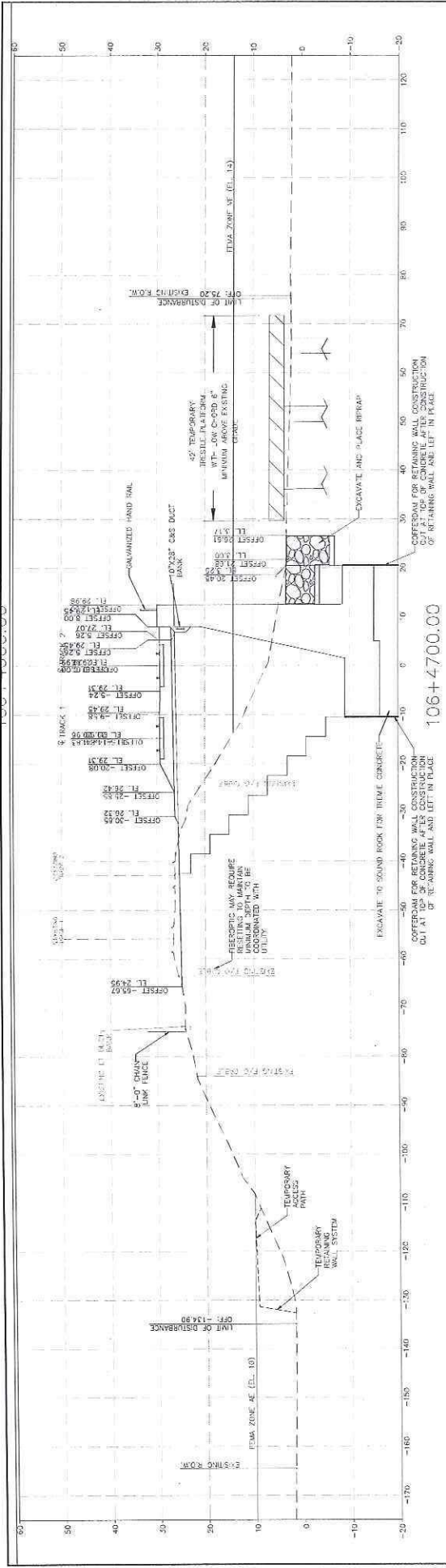
DATE: 05/02/23

DESIGNED BY: [Name]

CHECKED BY: [Name]

PROJECT: 106+270.00

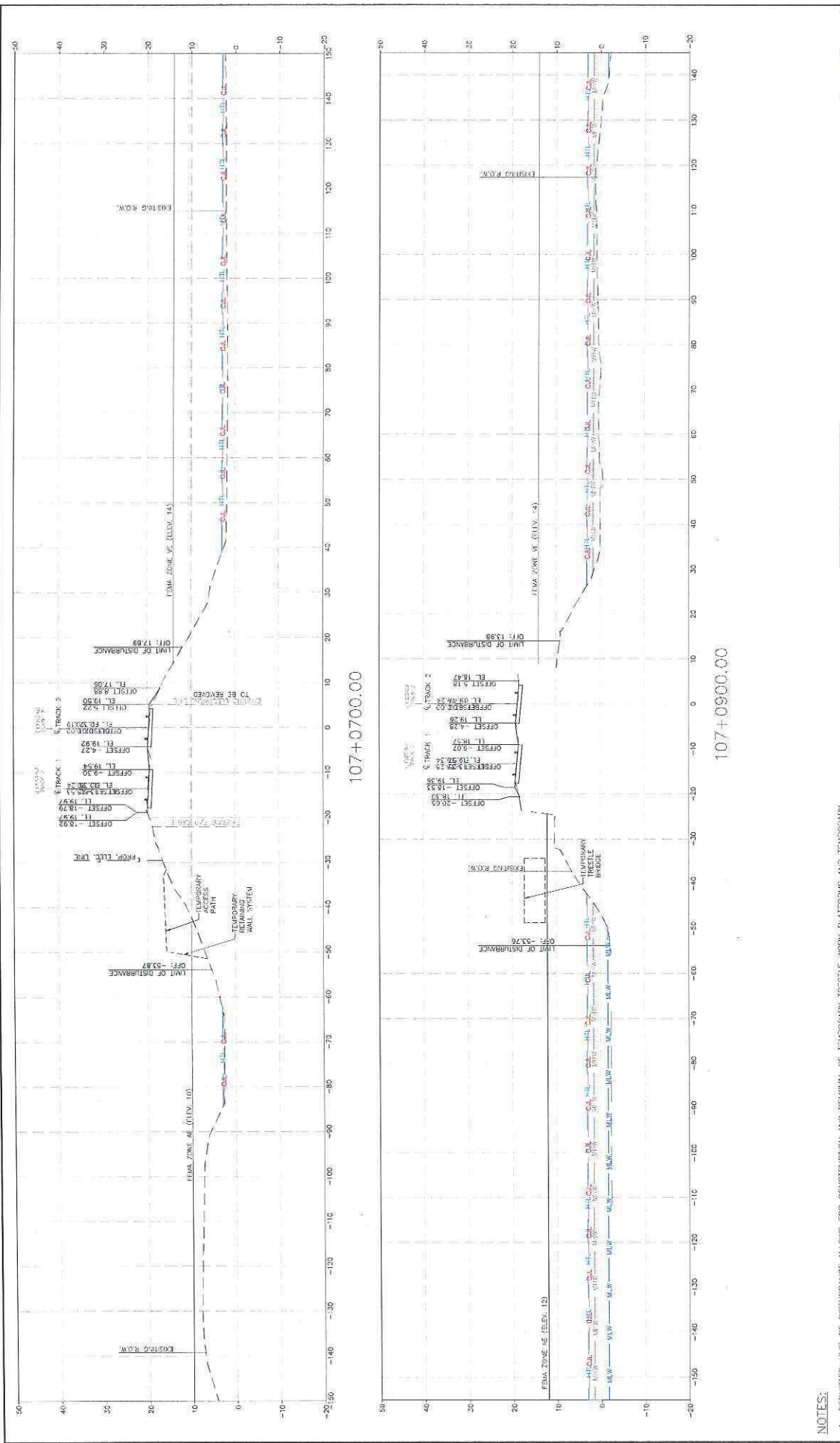
SCALE: 1"=20'



NOTES:

1. PERMITTED LIMIT OF DISTURBANCE ALLOWS FOR CONSTRUCTION AND REMOVAL OF TEMPORARY TRELLIS WORK PLATFORMS AND TEMPORARY ACCESS PATH. SEE SECTION FOR EMBANKMENT CONSTRUCTION SCHEME AND SCHEDULING REQUIREMENTS.
2. SEE SECTION FOR EMBANKMENT CONSTRUCTION SCHEME AND SCHEDULING REQUIREMENTS.

		ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023		CONNECTICUT PROJECT NO. 106-089 SHEETS: 35 OF 143 XCS-07	
		HARDESTY & HANOVER, LLC ENGINEERING 1025 Broadway, New York, NY 10036 Phone: (212) 691-1000 Philadelphia, Pa. 19103		CLIENT: CONNECTICUT PROJECT: REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER DRAWING: PROPOSED CROSS SECTIONS Drawn: KM, Checked: BF, Date: 10/20/23	
Office of Chief Engineer STRUCTURES <small>Department of Transportation, Connecticut State Police</small>					



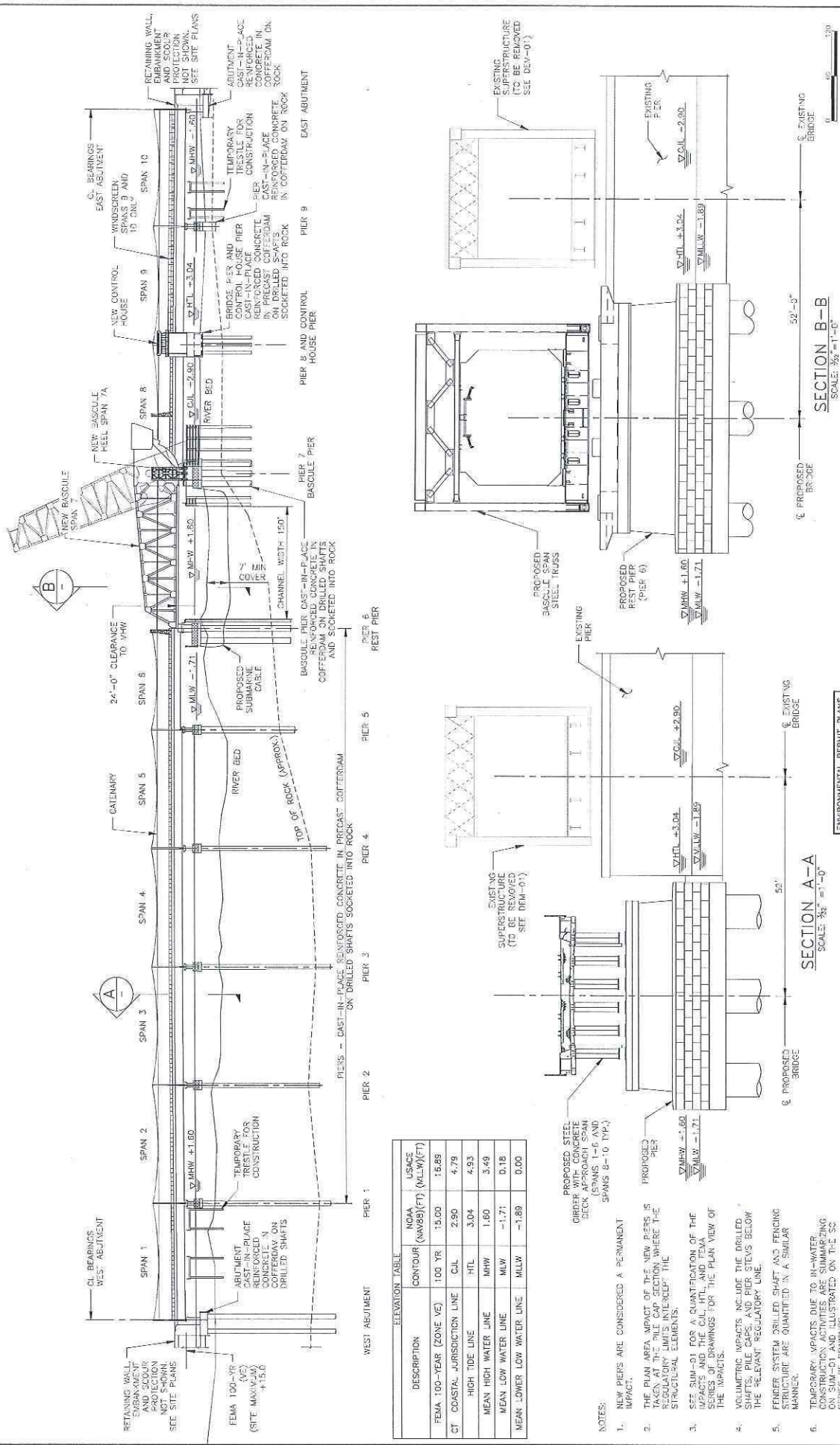
107+0700.00

107+0900.00

NOTES:

1. PERMITTED LIMIT OF DISTURBANCE ALLOWS FOR CONSTRUCTION AND REMOVAL OF TEMPORARY TRESTLE WORK PLATFORMS AND TEMPORARY ACCESS PATH.

		Amtrak <small>The original leader in both the rail and intermodal markets, Amtrak is the only U.S. railroad to offer both passenger and freight service. Amtrak is a member of the U.S. Department of Transportation. Amtrak is a subsidiary of the National Railroad Passenger Corporation, which is a wholly owned subsidiary of the United States Department of Transportation.</small>	
Office of Chief Engineer STRUCTURES <small>National Railroad Passenger Corporation 200 Street Station, Philadelphia, Pennsylvania 19104</small>			
ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 24, 2023		WSP Hardesty & Hanover, LLC ENGINEERING 150 Broadway, New York, NY 10038 7200 McGowan St., Suite 1000 Philadelphia, PA 19136	
PROJECT: MB 106.89 DRAWING: 35 OF 108 SHEET: 4 DATE: 5/22/23 CHECKED: DB DESIGNED: DB		CLIENT: CONNECTICUT PROJECT: REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER PROPOSED CROSS SECTIONS XCS-09	

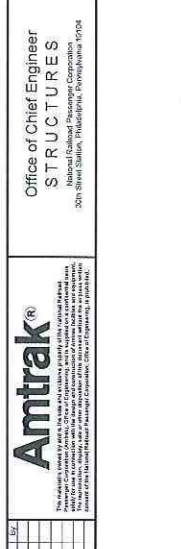


ELEVATION TABLE

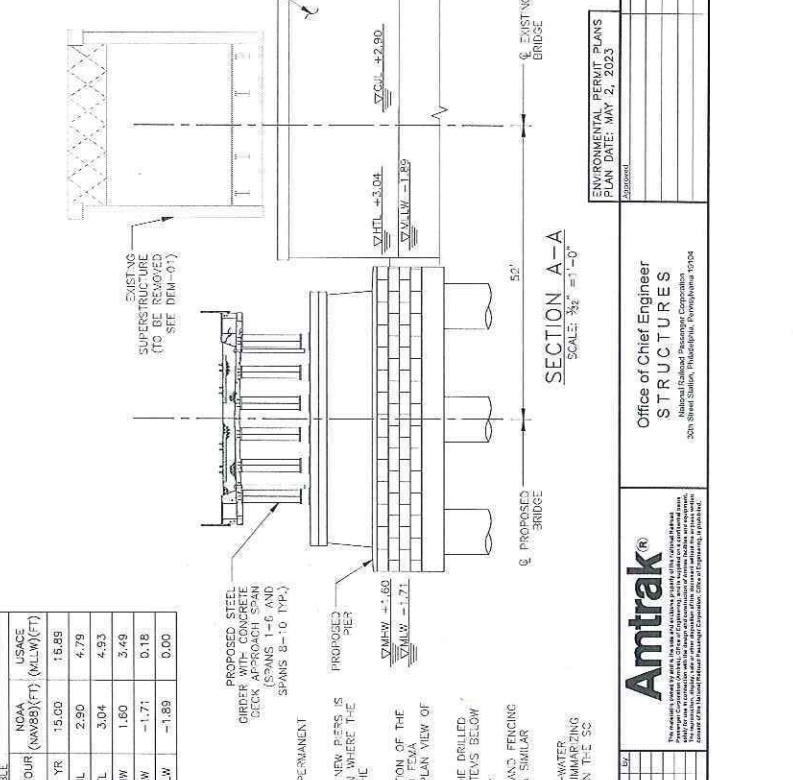
DESCRIPTION	NOMA CONTOUR (NAD83)(FT)	USACE (MLW)(FT)
FEMA 100-YR (ZONE VE)	15.00	15.89
CT COASTAL JURISDICTION LINE	2.90	4.79
HIGH TIDE LINE	3.04	4.93
MEAN HIGH WATER LINE	1.60	3.49
MEAN LOW WATER LINE	-1.71	0.18
MEAN LOWER LOW WATER LINE	-1.89	0.00

- NOTES:
- NEW PIERS ARE CONSIDERED A PERMANENT IMPACT.
 - THE PLAN AREA IMPACT OF THE NEW PIERS IS TAKEN AT THE PILE CAP SECTION WHERE THE REGULATORY LIMITS INTERSECT THE STRUCTURAL ELEMENTS.
 - SEE SUM-01 FOR A QUANTIFICATION OF THE IMPACTS AND THE CAL, HTL, AND FEMA SERIES OF DRAWINGS FOR THE PLAN VIEW OF THE IMPACTS.
 - VOLUMETRIC IMPACTS INCLUDE THE DRILLED SHAFTS, PILE CAPS, AND PIER STEPS BELOW THE RELEVANT REGULATORY LINE.
 - FENDER SYSTEM DRILLED SHAFT AND FENCING STRUCTURE ARE QUANTIFIED IN A SIMILAR MANNER.
 - TEMPORARY IMPACTS DUE TO IN-WATER CONSTRUCTION ACTIVITIES ARE SUMMARIZED ON SUM-01 AND ILLUSTRATED ON THE SC SERIES OF DRAWINGS.

SECTION A-A
SCALE: 3/32" = 1'-0"



SECTION B-B
SCALE: 3/32" = 1'-0"



ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

DESIGNED BY: [Signature]
CHECKED BY: [Signature]
DATE: 5/2/2023

PROJECT CODE: 100-000
SHEET NO.: 48 OF 162
PROJECT: REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER
BRIDGE ELEVATION PROPOSED CONDITIONS

Amtrak
Office of Chief Engineer
STRUCTURES
National Railroad Passenger Corporation
320 North Capitol, Washington, Pennsylvania 19007

HARDESTY & HANOVER, LLC
ENGINEERING
1501 Broadway, New York, NY 10008

OLD SAYBROOK
REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER
BRIDGE ELEVATION PROPOSED CONDITIONS
DESIGNED BY: [Signature]
CHECKED BY: [Signature]
DATE: 5/2/2023

EL-01

SUMMARY OF TEMPORARY IMPACTS (SF)				
SHEET (-##)	STATE (SEE CUL-## SHEETS)			FEDERAL (SEE HTL-## SHEETS)
	VEGETATED TIDAL WETLAND	BELOW CUL	BELOW LOSTV (ABOVE CUL)	BELOW HTL
-01	0	0	0	0
-02	0	0	0	0
-03	0	0	0	0
-04	6280	2500	7390	8630
-05	17200	30340	420	47940
-06	0	33910 (SEE NOTE 11)	0	33910 (SEE NOTE 11)
-07	21320	33460	9510	78050
-08	1060	3950	740	5270
-09	0	30	980	0
-10	0	0	0	0
-11	0	0	0	0
-12	460	10	140	3480
TOTAL	46120 SF (1.06 AC)	103700 SF (2.38 AC)	19570 SF (0.45 AC)	179600 SF (4.06 AC)

SUMMARY OF PERMANENT IMPACTS (SF)				
SHEET (-##)	STATE (SEE CUL-## SHEETS)			FEDERAL (SEE HTL-## SHEETS)
	VEGETATED TIDAL WETLAND	BELOW CUL	BELOW LOSTV (ABOVE CUL)	BELOW HTL
-01	0	0	0	0
-02	0	0	0	0
-03	0	0	0	0
-04	11780	3170	8440	15480
-05	57170	36540	6960	94710
-06	0	35990	0	35990
-07	160	28930	8900	31980
-08	0	0	0	0
-09	0	0	0	0
-10	0	0	0	0
-11	0	0	0	0
-12	0	0	0	160
TOTAL	69080 SF (1.59 AC)	105530 SF (2.42 AC)	22300 SF (0.51 AC)	178320 SF (4.06 AC)

SUMMARY OF IMPACTS (AC)		
STATE	FEDERAL	TOTAL
3.89 AC	4.06 AC	7.95 AC
4.52 AC	4.09 AC	8.61 AC

NOTES

- VERTICAL DATUM IS NAVD 88. REGULATORY ELEVATIONS BASED ON NOAA GAUGE BENCH-MARK.
- IMPACTS BELOW THE VEGETATED TIDAL WETLANDS INCLUDE AREAS FLAGGED IN THE FIELD, SHORE TO SHORE.
- IMPACTS BELOW THE CUL INCLUDE AREAS BELOW THE CUL ELEVATION, SHORE TO SHORE, THAT ARE NOT INCLUDED AS VEGETATED TIDAL WETLAND.
- IMPACTS BELOW THE LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LSTV) INCLUDE AREAS BELOW THE LSTV ELEVATION, SHORE TO SHORE, THAT ARE NOT INCLUDED AS VEGETATED TIDAL WETLAND, WHILE NOT BELOW THE HTL. THE SMALL AREAS OF FLOODED VEGETATED TIDAL WETLANDS LOCATED ABOVE THE HTL WERE INCLUDED IN THESE IMPACT NUMBERS.
- IMPACTS BELOW THE HTL INCLUDE ALL AREAS BELOW THE HTL ELEVATION, SHORE TO SHORE, INCLUDING THOSE DESIGNATED AS VEGETATED TIDAL WETLAND, WHILE NOT BELOW THE HTL. THE SMALL AREAS OF FLOODED VEGETATED TIDAL WETLANDS LOCATED ABOVE THE HTL WERE INCLUDED IN THESE IMPACT NUMBERS.
- THE 100-YEAR FLOOD ELEVATION VARIES THROUGHOUT THE SITE. SEE FLOOD INSURANCE RATE MAP (FIRM) PANELS 09030700351 J (E.T. 2/6/2013), 090102416 H (E.T. 8/5/2013), AND 090102416 S J (E.T. 8/5/2013) FOR ELEVATION VALUES AND LIMITS OF APPLICABILITY.
- TURBIDITY CURTAINS ARE REQUIRED FOR ALL CONSTRUCTION ACTIVITIES DISTURBING THE RIVER BOTTOM INCLUDING, BUT NOT LIMITED TO, DRILLED SHaft INSTALLATION, SUBMARINE CABLE REMOVAL AND INSTALLATION, EXISTING PIER REMOVAL, AND EXISTING TENDER REMOVAL.
- TURBIDITY CURTAINS THAT ARE REQUIRED TO ENVELOPE LARGER WORK AREAS WITH WALKABLE BARRERS ARE ASSUMED TO BE SUPPORTED WITH 10" DIA WATER PIN PILES SPACED AT APPROXIMATELY 10 FEET ON CENTER. PIN PILES FOR TURBIDITY CURTAINS ARE NOT SHOWN. TYPICAL WORK PILES ARE A TEMPORARY IMPACT. AREA OF IMPACT FOR EACH PIN PILE IS 0.55 SF.
- TURBIDITY CURTAINS ARE REQUIRED FOR ANY ACTIVITIES REQUIRING BARRERS TO BE SECURED TO THE RIVER BOTTOM WITH SPUD PILES, WHERE A TOTAL ENCLOSURE IS NOT REQUIRED. IT IS ASSUMED THAT TURBIDITY CURTAINS WILL BE SUPPORTED OFF OF THE SIDES OF THE WORK BARGES.
- SEE DRAWING SC-01 THROUGH SC-04 FOR SUGGESTED BARGE LAYOUTS AND TURBIDITY CURTAIN LIMITS FOR 4-WATER WORK ACTIVITIES.
- THE MAXIMUM TOTAL TEMPORARY IMPACTS DUE TO TURBIDITY CURTAIN PIN PILES AND BARGE SPUD PILES IS APPROXIMATE 9,500 SF AND IS INCLUDED IN THE VALUES LISTED IN THE SHEET. THESE IMPACTS ARE ASSUMED TO BE SUPPORTED WITH DRILLED SHaft INSTALLATION. WORK ASSOCIATED WITH EXISTING AND NEW FISHING BARRERS, EXISTING PIER REMOVAL AND INSTALLATION, EXISTING PIER REMOVAL, EXISTING SPAN REMOVAL, AND WORK ASSOCIATED WITH EXISTING AND NEW FISHING BARRERS.

TOTAL DATUM	NOAA
CUL	2.00
LSTV	1.00
HTL	3.04

*ALL ELEVATIONS SHOWN ARE APPROXIMATE AND CONTAINS AN ACCURACY OF 0'-0" ± BASED ON RELATION WITH THE USGS AND NOAA GAUGE BENCHMARKS INTERPOLATION AND FIELD VERIFICATION.

TEMP FLOODPLAIN VOLUMES	OUT/REMOVAL	FILL/INSTALLATION	NET
EMBANKMENTS AND RIPRAP =	29500 ± CY	56770 ± CY	38270 ± CY
RETAINING WALLS, ABUTMENTS, AND RIPRAP =	27620 ± CY	43840 ± CY	16220 ± CY
BARGE ACCESS FOR TEMPORARY TRESTLE WORK PLATFORM =	8600 ± CY	0 ± CY	-8600 ± CY
NEW SUBSTRUCTURE AND FENDER =	10480 ± CY	21900 ± CY	11420 ± CY
REMOVAL OF EXISTING SUBSTRUCTURE =	9820 ± CY	0 ± CY	-9820 ± CY
NEW FISHING PIER BOARDWALK =	580 ± CY	1810 ± CY	1050 ± CY
REMOVAL OF FISHING PIER BOARDWALK =	710 ± CY	0 ± CY	-710 ± CY
SUBMARINE CABLES =	3300 ± CY	3300 ± CY	0 ± CY
TOTAL:	79790 ± CY	129420 ± CY	49630 ± CY

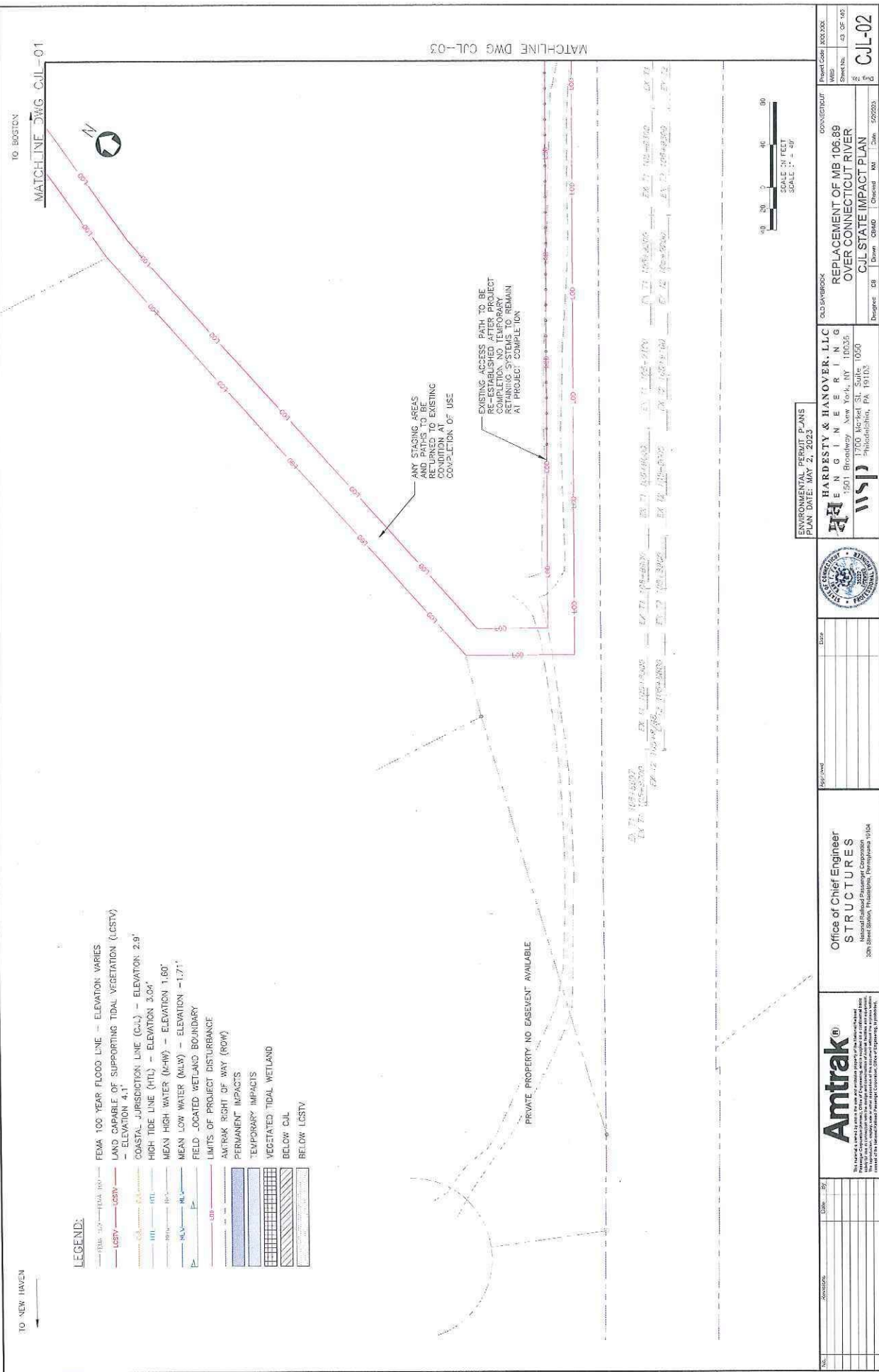
VOLUMES BELOW HTL	OUT/REMOVAL	FILL/INSTALLATION	NET
EMBANKMENTS AND RIPRAP =	14460 ± CY	17250 ± CY	2790 ± CY
RETAINING WALLS, ABUTMENTS, AND RIPRAP =	13240 ± CY	16690 ± CY	3450 ± CY
BARGE ACCESS FOR TEMPORARY TRESTLE WORK PLATFORM =	8600 ± CY	0 ± CY	-8600 ± CY
NEW SUBSTRUCTURE AND FENDER =	10480 ± CY	20070 ± CY	9580 ± CY
REMOVAL OF EXISTING SUBSTRUCTURE =	7010 ± CY	0 ± CY	-7010 ± CY
NEW FISHING PIER BOARDWALK =	560 ± CY	560 ± CY	0 ± CY
REMOVAL OF FISHING PIER BOARDWALK =	25 ± CY	0 ± CY	-25 ± CY
SUBMARINE CABLES =	3300 ± CY	3300 ± CY	0 ± CY
TOTAL:	55975 ± CY	57860 ± CY	1860 ± CY

PROJECT CODE: 100-0000
 SHEET NO.: 41 OF 145
 DATE: 05/20/23
HARDESTY & HANOVER, LLC
 ENGINEERING
 1700 Market St., Suite 1050
 Philadelphia, PA 19103
WSP
 DESIGNED BY: [] CHECKED BY: [] DATE: 05/20/23
 REVISIONS: []
 ENVIRONMENTAL PERMIT PLANS
 PLAN DATE: MAY 21, 2023
 Office of Chief Engineer
STRUCTURES
 National Railroad Passenger Corporation
 229 State Street, Philadelphia, Pennsylvania 19106
 FEDERAL
 STATE
 TEMPORARY
 PERMANENT

REPLACEMENT OF MB 106.89
 OVER CONNECTICUT RIVER
 IMPACT SUMMARY SHEET
 SUM-01



Amtrak logo and associated text.



TO NEW HAVEN

TO BOSTON
MATCHLINE DWG. CJI-01

MATCHLINE DWG. CJI-03

LEGEND:

- FEMA 100 YEAR FLOOD LINE — ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) — ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CJL) — ELEVATION 2.9'
- HIGH TIDE LINE (HTL) — ELEVATION 3.04'
- MEAN HIGH WATER (MHW) — ELEVATION 1.60'
- MEAN LOW WATER (MLW) — ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)
- PERMANENT IMPACTS
- TEMPORARY IMPACTS
- VEGETATED TIDAL WETLAND
- BELOW CJL
- BELOW LCSTV

ANY STAGING AREAS TO BE RETURNED TO EXISTING CONDITION AT COMPLETION OF USE

EXISTING ACCESS PATH TO BE RETURNED TO EXISTING CONDITION AT PROJECT COMPLETION

PRIVATE PROPERTY NO EASEMENT AVAILABLE



ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023



**Office of Chief Engineer
STRUCTURES**
National Railroad Passenger Corporation
30th Street Station, Philadelphia, Pennsylvania 19104



No.	Date	By

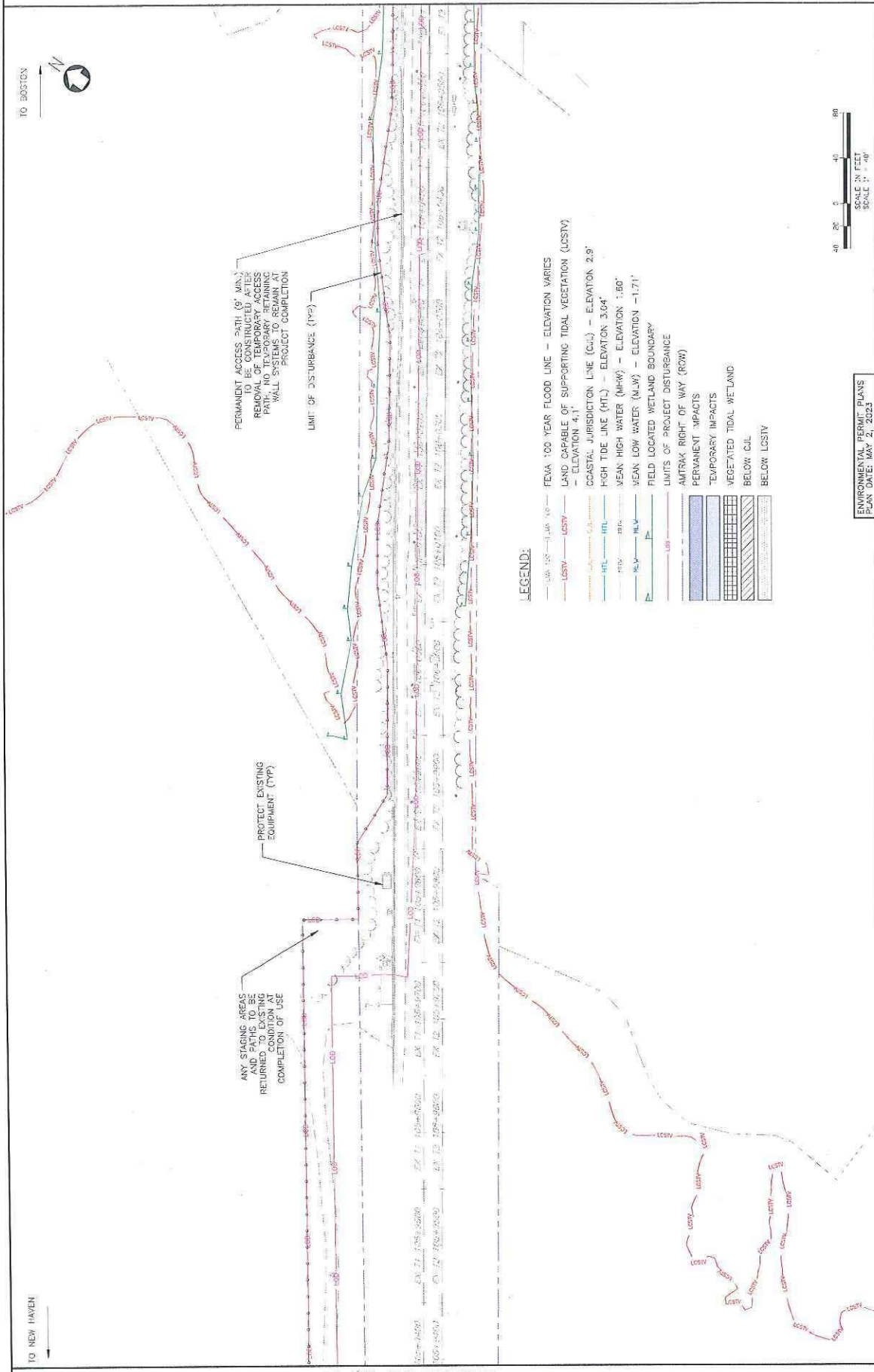
HARDSTY & HANOVER, LLC
ENGINEERING
1501 Broadway New York, NY 10036
1700 Locust St. Suite 1050
Philadelphia, PA 19103

PROJECT: REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER
JOB: CJI STATE IMPACT PLAN

PROJECT CODE: 3002003
SHEET NO.: 43 OF 48
JOB NO.: CJI-02

TO NEW HAVEN

TO BOSTON



LEGEND:

- 100 YEAR FLOOD LINE — ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) — ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CJL) — ELEVATION 2.9'
- HIGH TIDE LINE (HTL) — ELEVATION 3.04'
- MEAN HIGH WATER (MHW) — ELEVATION 1.80'
- MEAN LOW WATER (MLW) — ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)
- PERMANENT IMPACTS
- TEMPORARY IMPACTS
- VEGETATED TIDAL WETLAND
- BELOW CJL
- BELOW LCSTV



	REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER CJL STATE IMPACT PLAN	Project Code: 3003.000 WBS: 44 OF 140 CJL-03
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Environmental Permit Plans Plan Date: May 2, 2023	WSP <small>WSP CONSULTANTS, INC. 1000 Walnut Street, Suite 1000 Philadelphia, PA 19103</small>	Drawn: [Blank] Checked: [Blank] Date: [Blank]

NO. 106 2/10/04-04/07 4/07/13 1A, 2A, 2B, 2C, 2D, 2E, 2F, 2G, 2H, 2I, 2J, 2K, 2L, 2M, 2N, 2O, 2P, 2Q, 2R, 2S, 2T, 2U, 2V, 2W, 2X, 2Y, 2Z, 3A, 3B, 3C, 3D, 3E, 3F, 3G, 3H, 3I, 3J, 3K, 3L, 3M, 3N, 3O, 3P, 3Q, 3R, 3S, 3T, 3U, 3V, 3W, 3X, 3Y, 3Z, 4A, 4B, 4C, 4D, 4E, 4F, 4G, 4H, 4I, 4J, 4K, 4L, 4M, 4N, 4O, 4P, 4Q, 4R, 4S, 4T, 4U, 4V, 4W, 4X, 4Y, 4Z, 5A, 5B, 5C, 5D, 5E, 5F, 5G, 5H, 5I, 5J, 5K, 5L, 5M, 5N, 5O, 5P, 5Q, 5R, 5S, 5T, 5U, 5V, 5W, 5X, 5Y, 5Z, 6A, 6B, 6C, 6D, 6E, 6F, 6G, 6H, 6I, 6J, 6K, 6L, 6M, 6N, 6O, 6P, 6Q, 6R, 6S, 6T, 6U, 6V, 6W, 6X, 6Y, 6Z, 7A, 7B, 7C, 7D, 7E, 7F, 7G, 7H, 7I, 7J, 7K, 7L, 7M, 7N, 7O, 7P, 7Q, 7R, 7S, 7T, 7U, 7V, 7W, 7X, 7Y, 7Z, 8A, 8B, 8C, 8D, 8E, 8F, 8G, 8H, 8I, 8J, 8K, 8L, 8M, 8N, 8O, 8P, 8Q, 8R, 8S, 8T, 8U, 8V, 8W, 8X, 8Y, 8Z, 9A, 9B, 9C, 9D, 9E, 9F, 9G, 9H, 9I, 9J, 9K, 9L, 9M, 9N, 9O, 9P, 9Q, 9R, 9S, 9T, 9U, 9V, 9W, 9X, 9Y, 9Z, 10A, 10B, 10C, 10D, 10E, 10F, 10G, 10H, 10I, 10J, 10K, 10L, 10M, 10N, 10O, 10P, 10Q, 10R, 10S, 10T, 10U, 10V, 10W, 10X, 10Y, 10Z, 11A, 11B, 11C, 11D, 11E, 11F, 11G, 11H, 11I, 11J, 11K, 11L, 11M, 11N, 11O, 11P, 11Q, 11R, 11S, 11T, 11U, 11V, 11W, 11X, 11Y, 11Z, 12A, 12B, 12C, 12D, 12E, 12F, 12G, 12H, 12I, 12J, 12K, 12L, 12M, 12N, 12O, 12P, 12Q, 12R, 12S, 12T, 12U, 12V, 12W, 12X, 12Y, 12Z, 13A, 13B, 13C, 13D, 13E, 13F, 13G, 13H, 13I, 13J, 13K, 13L, 13M, 13N, 13O, 13P, 13Q, 13R, 13S, 13T, 13U, 13V, 13W, 13X, 13Y, 13Z, 14A, 14B, 14C, 14D, 14E, 14F, 14G, 14H, 14I, 14J, 14K, 14L, 14M, 14N, 14O, 14P, 14Q, 14R, 14S, 14T, 14U, 14V, 14W, 14X, 14Y, 14Z, 15A, 15B, 15C, 15D, 15E, 15F, 15G, 15H, 15I, 15J, 15K, 15L, 15M, 15N, 15O, 15P, 15Q, 15R, 15S, 15T, 15U, 15V, 15W, 15X, 15Y, 15Z, 16A, 16B, 16C, 16D, 16E, 16F, 16G, 16H, 16I, 16J, 16K, 16L, 16M, 16N, 16O, 16P, 16Q, 16R, 16S, 16T, 16U, 16V, 16W, 16X, 16Y, 16Z, 17A, 17B, 17C, 17D, 17E, 17F, 17G, 17H, 17I, 17J, 17K, 17L, 17M, 17N, 17O, 17P, 17Q, 17R, 17S, 17T, 17U, 17V, 17W, 17X, 17Y, 17Z, 18A, 18B, 18C, 18D, 18E, 18F, 18G, 18H, 18I, 18J, 18K, 18L, 18M, 18N, 18O, 18P, 18Q, 18R, 18S, 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72P, 72Q, 72R, 72S, 72T, 72U, 72V, 72W, 72X, 72Y, 72Z, 73A, 73B, 73C, 73D, 73E, 73F, 73G, 73H, 73I, 73J, 73K, 73L, 73M, 73N, 73O, 73P, 73Q, 73R, 73S, 73T, 73U, 73V, 73W, 73X, 73Y, 73Z, 74A, 74B, 74C, 74D, 74E, 74F, 74G, 74H, 74I, 74J, 74K, 74L, 74M, 74N, 74O, 74P, 74Q, 74R, 74S, 74T, 74U, 74V, 74W, 74X, 74Y, 74Z, 75A, 75B, 75C, 75D, 75E, 75F, 75G, 75H, 75I, 75J, 75K, 75L, 75M, 75N, 75O, 75P, 75Q, 75R, 75S, 75T, 75U, 75V, 75W, 75X, 75Y, 75Z, 76A, 76B, 76C, 76D, 76E, 76F, 76G, 76H, 76I, 76J, 76K, 76L, 76M, 76N, 76O, 76P, 76Q, 76R, 76S, 76T, 76U, 76V, 76W, 76X, 76Y, 76Z, 77A, 77B, 77C, 77D, 77E, 77F, 77G, 77H, 77I, 77J, 77K, 77L, 77M, 77N, 77O, 77P, 77Q, 77R, 77S, 77T, 77U, 77V, 77W, 77X, 77Y, 77Z, 78A, 78B, 78C, 78D, 78E, 78F, 78G, 78H, 78I, 78J, 78K, 78L, 78M, 78N, 78O, 78P, 78Q, 78R, 78S, 78T, 78U, 78V, 78W, 78X, 78Y, 78Z, 79A, 79B, 79C, 79D, 79E, 79F, 79G, 79H, 79I, 79J, 79K, 79L, 79M, 79N, 79O, 79P, 79Q, 79R, 79S, 79T, 79U, 79V, 79W, 79X, 79Y, 79Z, 80A, 80B, 80C, 80D, 80E, 80F, 80G, 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87Z, 88A, 88B, 88C, 88D, 88E, 88F, 88G, 88H, 88I, 88J,

TO NEW HAVEN

TO BOSTON



PERMANENT ACCESS PATH (6' MIN) TO BE CONSTRUCTED AFTER REMOVAL OF TEMPORARY ACCESS PATH. NO TEMPORARY ACCESS PATH SYSTEMS TO REMAIN AT PROJECT COMPLETION.

EXISTING SURFACE GRADES AND SURFACE TYPES (INCLUDING RIPRAP) SHALL BE RESTORED AT PROJECT COMPLETION (TYP).

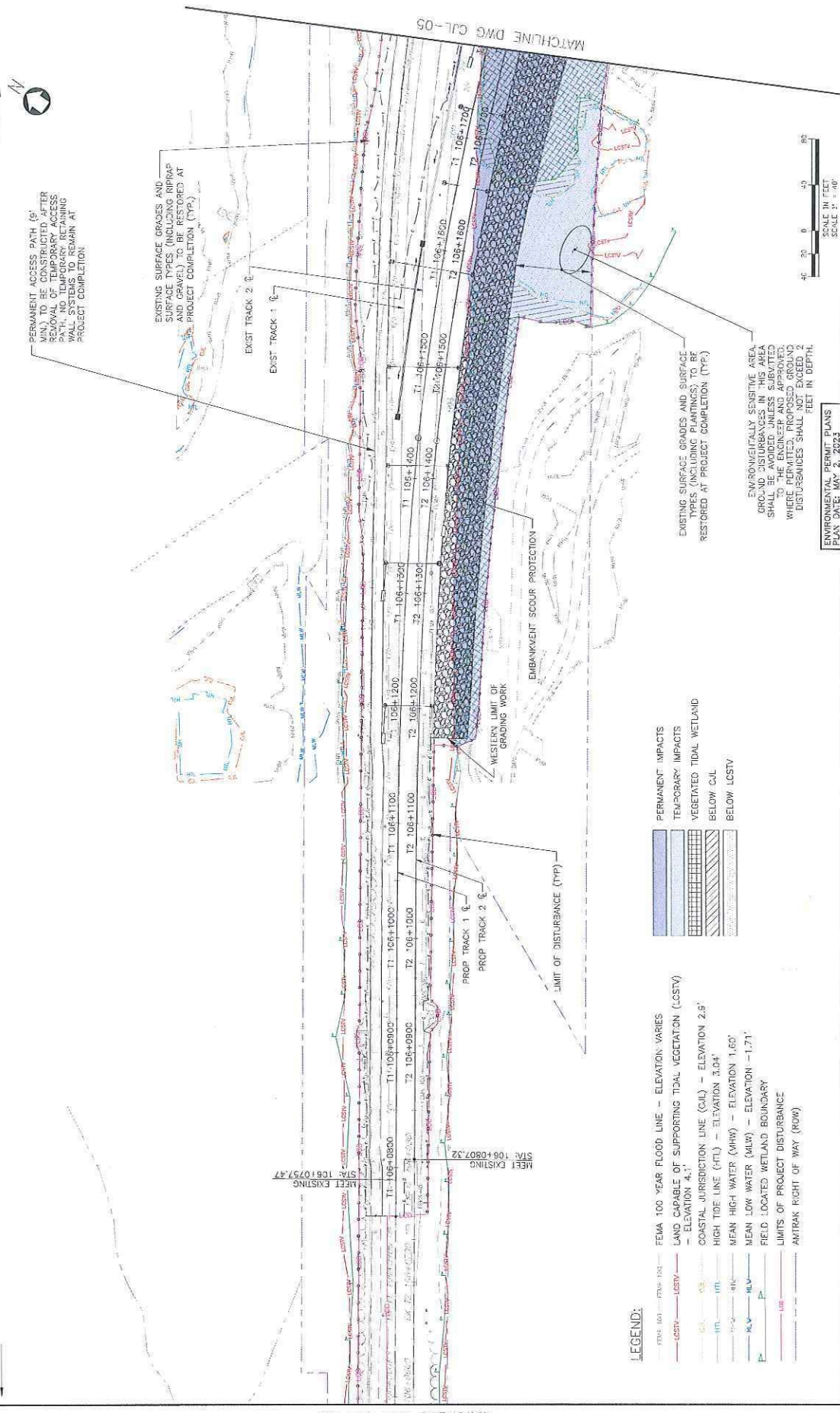
EXIST TRACK 1

EXIST TRACK 2

MEET EXISTING
STA: 106+10807.22
STA: 106+10957.47

MATCHLINE DWG CUL-03

MATCHLINE DWG CUL-05



- LEGEND:**
- FEMA 100 YEAR FLOOD LINE — ELEVATION VARIES
 - LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) — ELEVATION 4.1'
 - COASTAL JURISDICTION LINE (CJL) — ELEVATION 2.9'
 - HIGH TIDE LINE (HTL) — ELEVATION 3.04'
 - MEAN HIGH WATER (MHW) — ELEVATION 1.60'
 - MEAN LOW WATER (MLW) — ELEVATION -1.71'
 - FIELD LOCATED WETLAND BOUNDARY
 - LIMITS OF PROJECT DISTURBANCE
 - ANTRAK RIGHT OF WAY (ROW)

- PERMANENT IMPACTS
- TEMPORARY IMPACTS
- VEGETATED TIDAL WETLAND
- BELOW CJL
- BELOW LCSTV

EXISTING SURFACE GRADES AND SURFACE TYPES (INCLUDING PLUMBINGS) TO BE RESTORED AT PROJECT COMPLETION (TYP).

ENVIRONMENTALLY SENSITIVE AREA. GROUND DISTURBANCES IN THIS AREA SHALL BE AVOIDED, UNLESS SUBMITTED TO THE ENGINEER AND APPROVED. WHERE DISTURBANCES ARE NECESSARY, DISTURBANCES SHALL NOT EXCEED 2 FEET IN DEPTH.

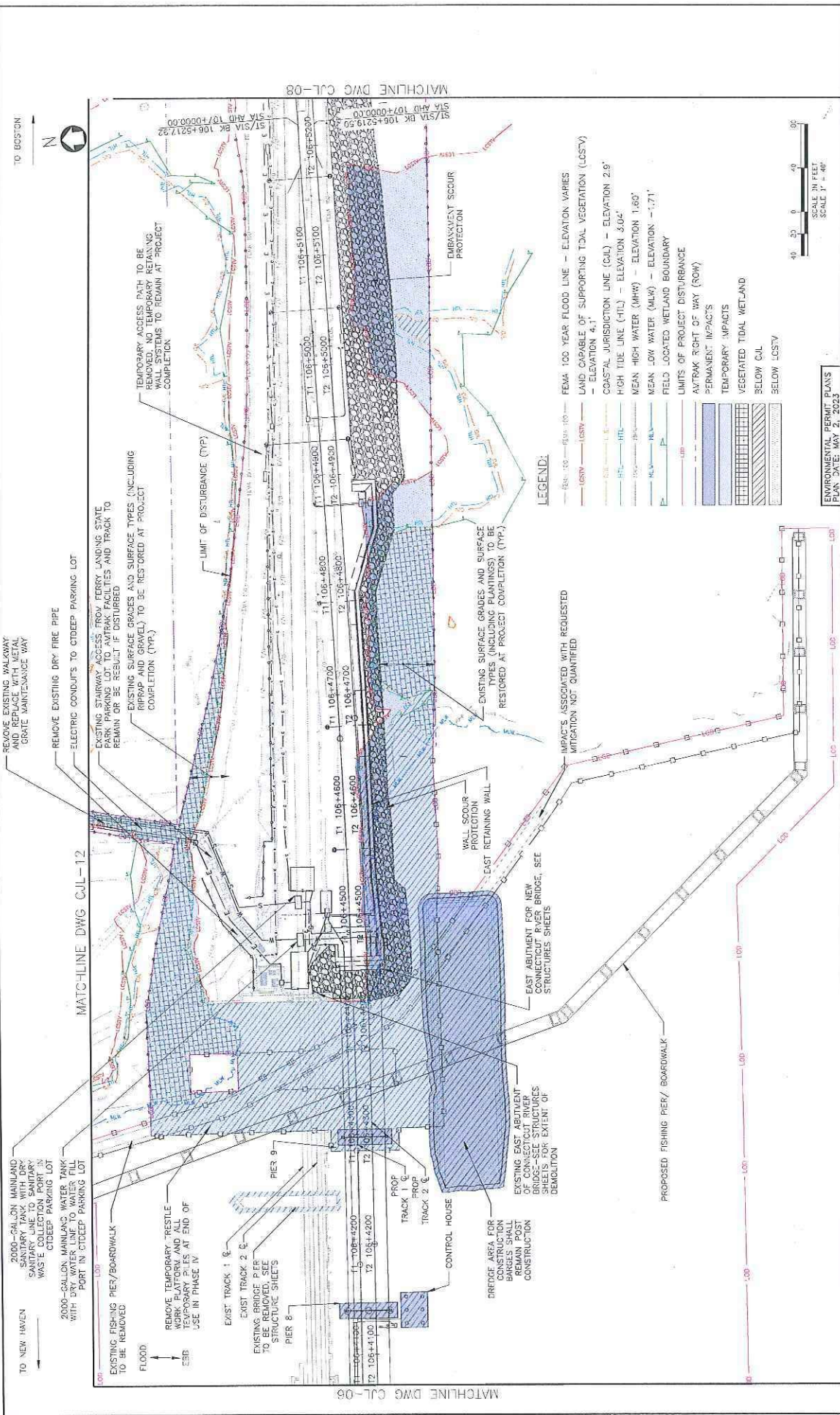


ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 21, 2023

	WSP WSP ENGINEERING 1501 Broadway, New York, NY 10036 1700 Market St., Suite 1000 Philadelphia, PA 19106	DESIGNER: WSP CHECKER: WSP DATE: WSP	PROJECT: WSP SHEET NO.: WSP OF WSP
	HARDESTY & HANOVER, LLC ENGINEERING 1501 Broadway, New York, NY 10036 1700 Market St., Suite 1000 Philadelphia, PA 19106	PROJECT: WSP SHEET NO.: WSP OF WSP	DESIGNER: WSP CHECKER: WSP DATE: WSP

Office of Chief Engineer
STRUCTURES
 National Railroad Passenger Corporation
 325 North Capitol Street, Washington, D.C. 20541

Amtrak
This seal is valid only if the seal and the signature are on the same document. It is not valid if the seal and the signature are on separate documents. It is not valid if the seal and the signature are on a document that has been altered. It is not valid if the seal and the signature are on a document that has been photocopied or scanned. It is not valid if the seal and the signature are on a document that has been printed on a computer. It is not valid if the seal and the signature are on a document that has been printed on a printer. It is not valid if the seal and the signature are on a document that has been printed on a scanner. It is not valid if the seal and the signature are on a document that has been printed on a copier. It is not valid if the seal and the signature are on a document that has been printed on a duplicator. It is not valid if the seal and the signature are on a document that has been printed on a reprographics service. It is not valid if the seal and the signature are on a document that has been printed on a print shop. It is not valid if the seal and the signature are on a document that has been printed on a digital printer. It is not valid if the seal and the signature are on a document that has been printed on a laser printer. It is not valid if the seal and the signature are on a document that has been printed on an inkjet printer. It is not valid if the seal and the signature are on a document that has been printed on a dot matrix printer. It is not valid if the seal and the signature are on a document that has been printed on a thermal printer. It is not valid if the seal and the signature are on a document that has been printed on a receipt printer. It is not valid if the seal and the signature are on a document that has been printed on a label printer. It is not valid if the seal and the signature are on a document that has been printed on a barcode printer. It is not valid if the seal and the signature are on a document that has been printed on a receipt printer. It is not valid if the seal and the signature are on a document that has been printed on a label printer. It is not valid if the seal and the signature are on a document that has been printed on a barcode printer.



ENVIRONMENTAL PERMIT PLANS
 PLAN DATE: MAY 2, 2023

Amtrak
 Office of Chief Engineer
 STRUCTURES
 600 Street Station, Philadelphia, Pennsylvania 19103

Hardisty & Hanover, LLC
 ENGINEERING
 1501 Broadway New York, NY 10036
 1720 Market St. Suite 1050
 Philadelphia, PA 19103

Project Code: 100.000
Sheet No: 49 OF 140
Project Name: REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER
Sheet Title: CUL STATE IMPACT PLAN

Scale: 1" = 40'
Scale Y: 40' 0" 20' 0" 40' 0" 80' 0"

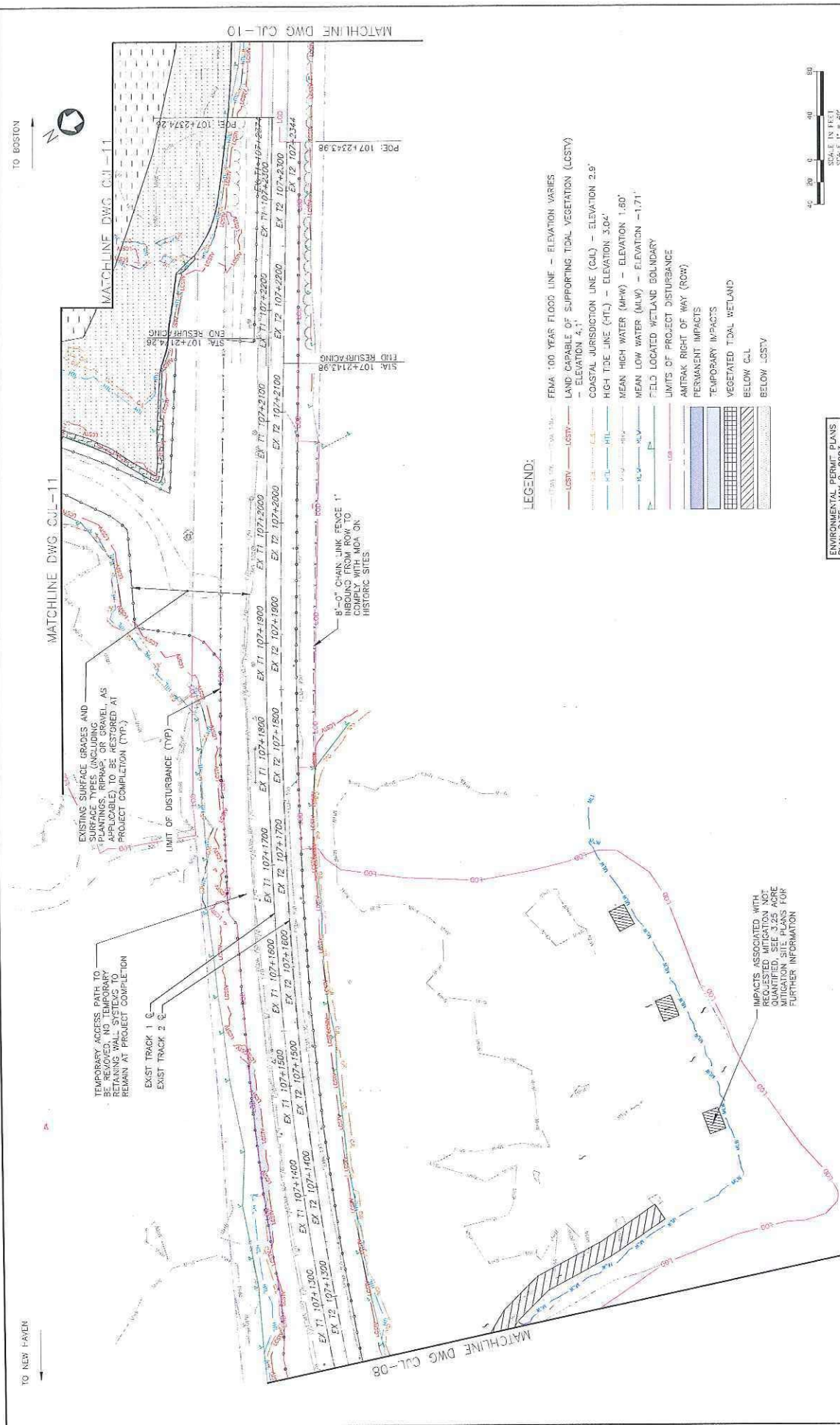
Drawn by: CB
Checked by: JCS
Date: 5/22/23

MATCHLINE DWG CUL-08 (top)

MATCHLINE DWG CUL-09 (bottom)

TO NEW HAVEN (left)

TO BOZON (right)



TO NEW HAVEN

TO BOSTON

MATCHLINE DWG. CUL-11

MATCHLINE DWG. CUL-08

EXISTING SURFACE GRADES AND PLANTINGS, RIPRAP, OR GRAVEL, AS APPLICABLE, TO BE RESTORED AT PROJECT COMPLETION (TYP.)

LIMIT OF DISTURBANCE (TOP)

EXISTING TRACK 1 & 2

TEMPORARY ACCESS PATH TO BE REMOVED, NO TEMPORARY RETAINING WALL SYSTEMS TO REMAIN AT PROJECT COMPLETION

8'-0" CHAIN LINK FENCE 1' INBOUND FROM ROW TO HISTORIC SITES

- LEGEND:**
- FEMA 100 YEAR FLOOD LINE — ELEVATION VARIES
 - LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSV) — ELEVATION 4.9'
 - COASTAL JURISDICTION LINE (CAL) — ELEVATION 2.9'
 - HIGH TIDE LINE (HTL) — ELEVATION 3.04'
 - MEAN HIGH WATER (MHW) — ELEVATION 1.80'
 - MEAN LOW WATER (MLW) — ELEVATION -1.71'
 - FIELD LOCATED WETLAND BOUNDARY
 - LIMITS OF PROJECT DISTURBANCE
 - AMTRAK RIGHT OF WAY (ROW)
 - PERMANENT IMPACTS
 - TEMPORARY IMPACTS
 - VEGETATED TIDAL WETLAND
 - BELOW LCSV



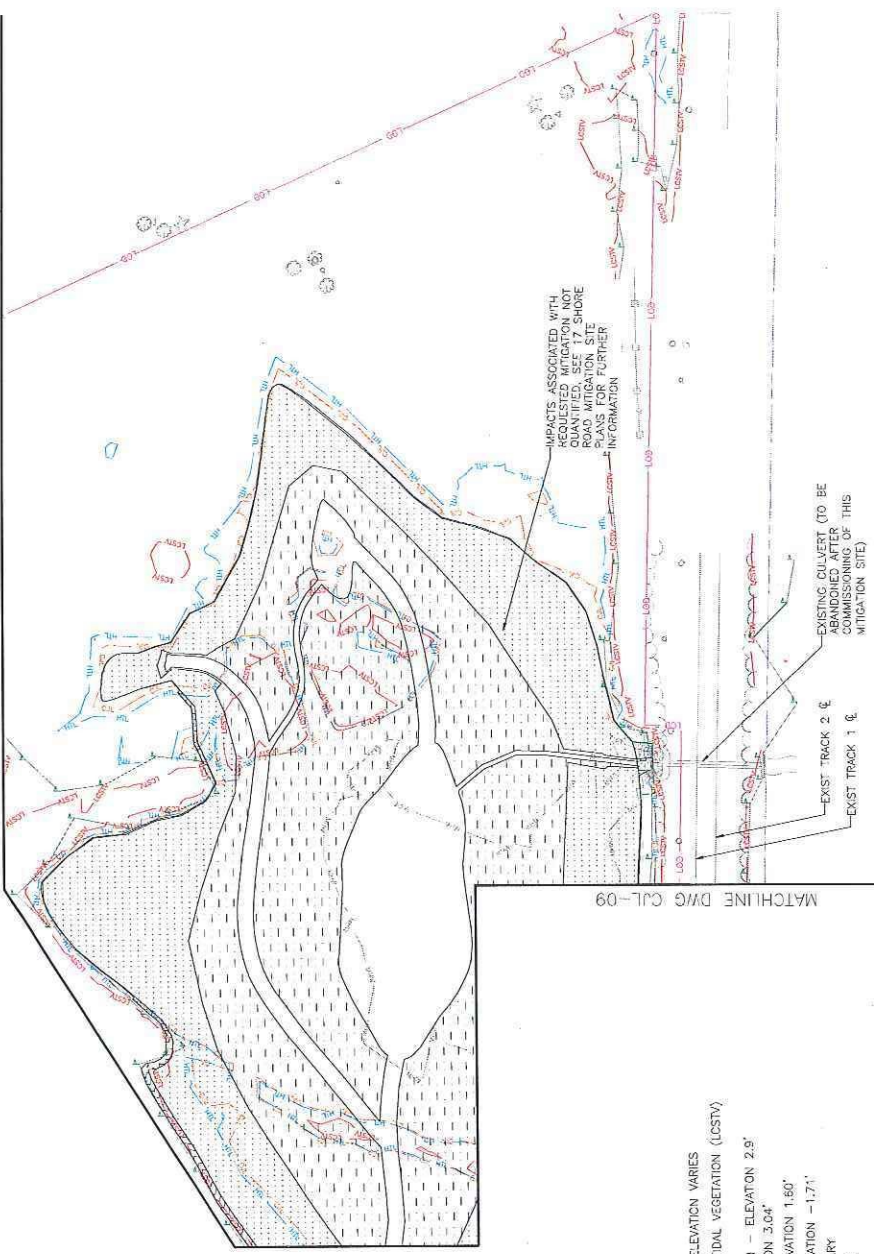
ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 21, 2023		OLD SAVERBOOK REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER CUL STATE IMPACT PLAN	PROJECT CODE: 1006.000 SHEETS: 25 OF 143 CUL-09
		HARDESTY & HANOVER, LLC ENGINEERING 1501 Broadway, New York, NY 10036 1735 Varney St., Suite 1050 Philadelphia, PA 19103	
NO.	DATE	BY	CHECKED
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IMPACTS ASSOCIATED WITH REQUESTED MITIGATION NOT QUANTIFIED. SEE 3.25 AGRE MITIGATION SITE PLANS FOR FURTHER INFORMATION

TO NEW HAVEN

TO BOSTON

MATCHLINE DWG. CJL-11



MATCHLINE DWG. CJL-09

- LEGEND:**
- FEMA 100 YEAR FLOOD LINE — ELEVATION VARIES
 - LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) — ELEVATION 4.1'
 - COASTAL JURISDICTION LINE (CJL) — ELEVATION 2.9'
 - HIGH TIDE LINE (HTL) — ELEVATION 3.04'
 - MEAN HIGH WATER (MHW) — ELEVATION 1.60'
 - MEAN LOW WATER (MLW) — ELEVATION -1.71'
 - FIELD LOCATED WETLAND BOUNDARY
 - LIMITS OF PROJECT DISTURBANCE
 - AMTRAK RIGHT OF WAY (ROW)
 - PERMANENT IMPACTS
 - TEMPORARY IMPACTS
 - VEGETATED TIDAL WETLAND
 - BELOW CIL
 - BELOW LCSTV



ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 21, 2023

Hardesty & Hanover, LLC
ENGINEERING
1501 Broadway, New York, NY 10036
1730 Market St., Suite 1000
Philadelphia, PA 19103



NO.	REVISIONS	DATE	BY

Office of Chief Engineer
STRUCTURES
National Railroad Passenger Corporation
30th Street Station, Philadelphia, Pennsylvania 19104



PROJECT CODE	XXX 000
WORK SHEET	51 OF 143
DESIGNED BY	CB
CHECKED BY	DM
DATE	5/22/23
PROJECT NAME	REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER
PROJECT LOCATION	CJL STATE IMPACT PLAN
PROJECT NUMBER	CJL-10

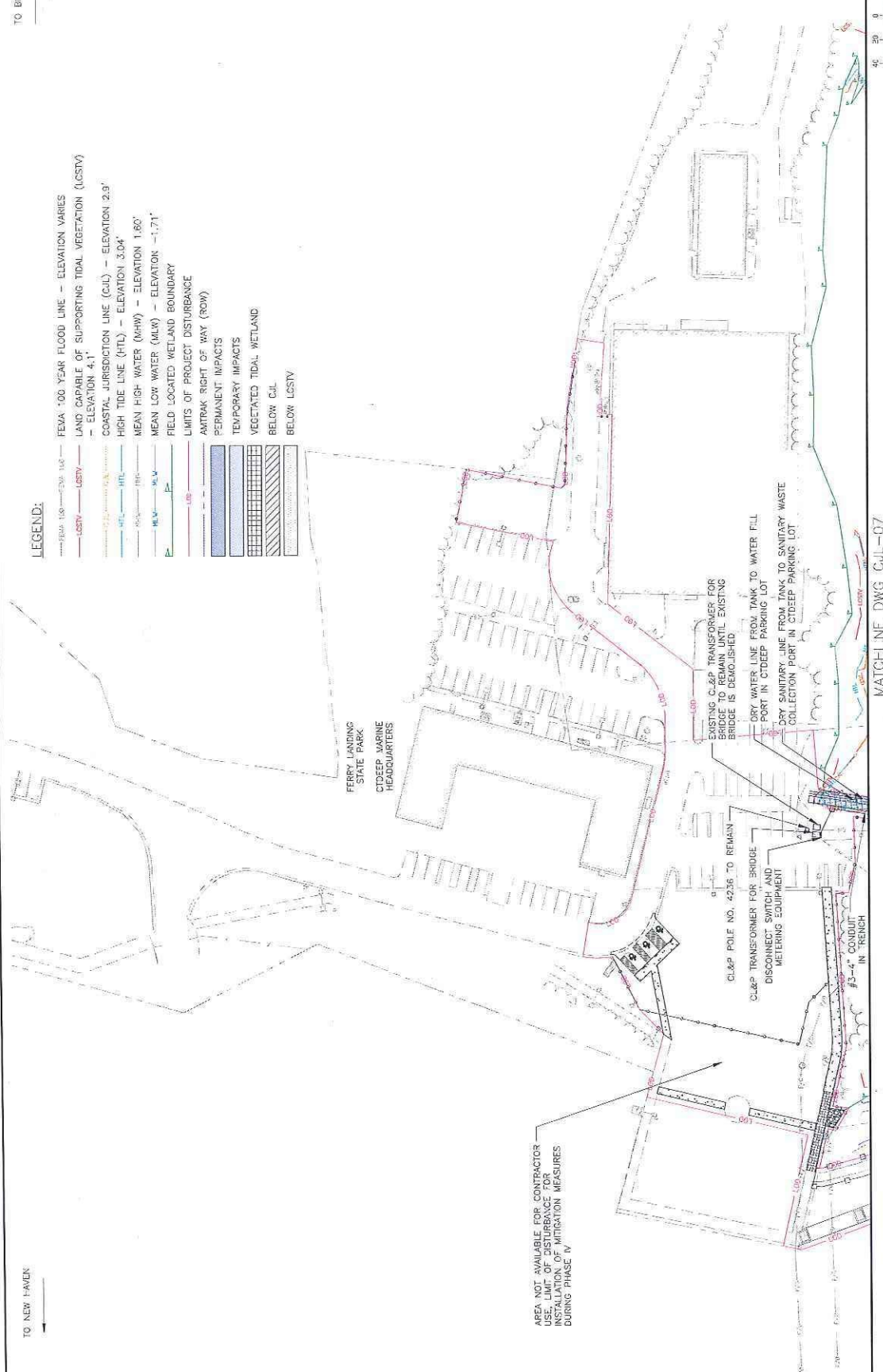
TO NEW HAVEN

TO BRISTOL



LEGEND:

- FEWA 100 YEAR FLOOD LINE - ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LSTV) - ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CJL) - ELEVATION 2.9'
- HIGH TIDE LINE (HTL) - ELEVATION 3.04'
- MEAN HIGH WATER (MHW) - ELEVATION 1.80'
- MEAN LOW WATER (MLW) - ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)
- PERMANENT IMPACTS
- TEMPORARY IMPACTS
- VEGETATED TIDAL WETLAND
- BELOW CJL
- BELOW LSTV



AREA NOT AVAILABLE FOR CONTRACTOR USE. LIMIT OF DISTURBANCE FOR BRIDGE REPLACEMENT DURING PHASE IV

MATCH-LINE DWG C-JL-07



ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023



HARDESTY & HANOVER, LLC
 ENGINEERING PERIT
 1007 Pennsylvania Ave, Suite 100
 Philadelphia, PA 19103

Office of Chief Engineer
STRUCTURES
 National Railroad Passenger Corporation
 300 North Station Philadelphia, Pennsylvania 19104



NO.	REVISIONS	DATE	BY

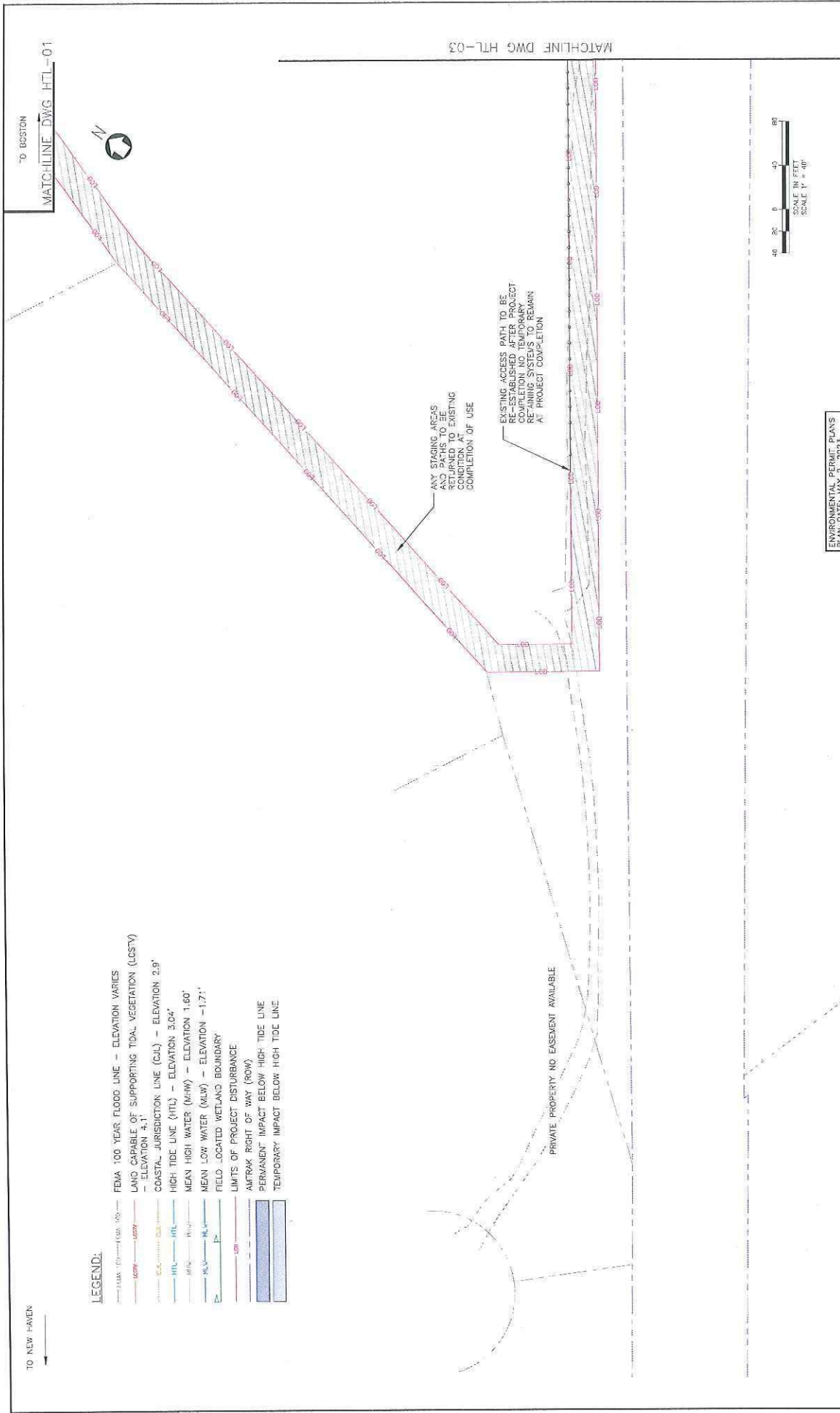
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PROJECT NAME	REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER
DESIGNED BY	CB
CHECKED BY	CB
DATE	05/02/23
PROJECT CODE	XXX-000
WSP	53 OF 140
Sheet No	6
Project	C-JL-12

TO NEW HAVEN

TO BOSTON
MATCHLINE DWG HTL-01

LEGEND:

- FFWA 100 YEAR FLOOD LINE — ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) — ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CJL) — ELEVATION 2.9'
- HIGH TIDE LINE (HTL) — ELEVATION 3.04'
- MEAN HIGH WATER (MHW) — ELEVATION 1.60'
- MEAN LOW WATER (MLW) — ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)
- PERMANENT IMPACT BELOW HIGH TIDE LINE
- TEMPORARY IMPACT BELOW HIGH TIDE LINE



MATCHLINE DWG HTL-03

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023



Approved: _____
Date: _____

Office of Chief Engineer
STRUCTURES
National Railroad Passenger Corporation
390 State Street, Philadelphia, Pennsylvania 19104



NO.	REVISIONS	DATE	BY

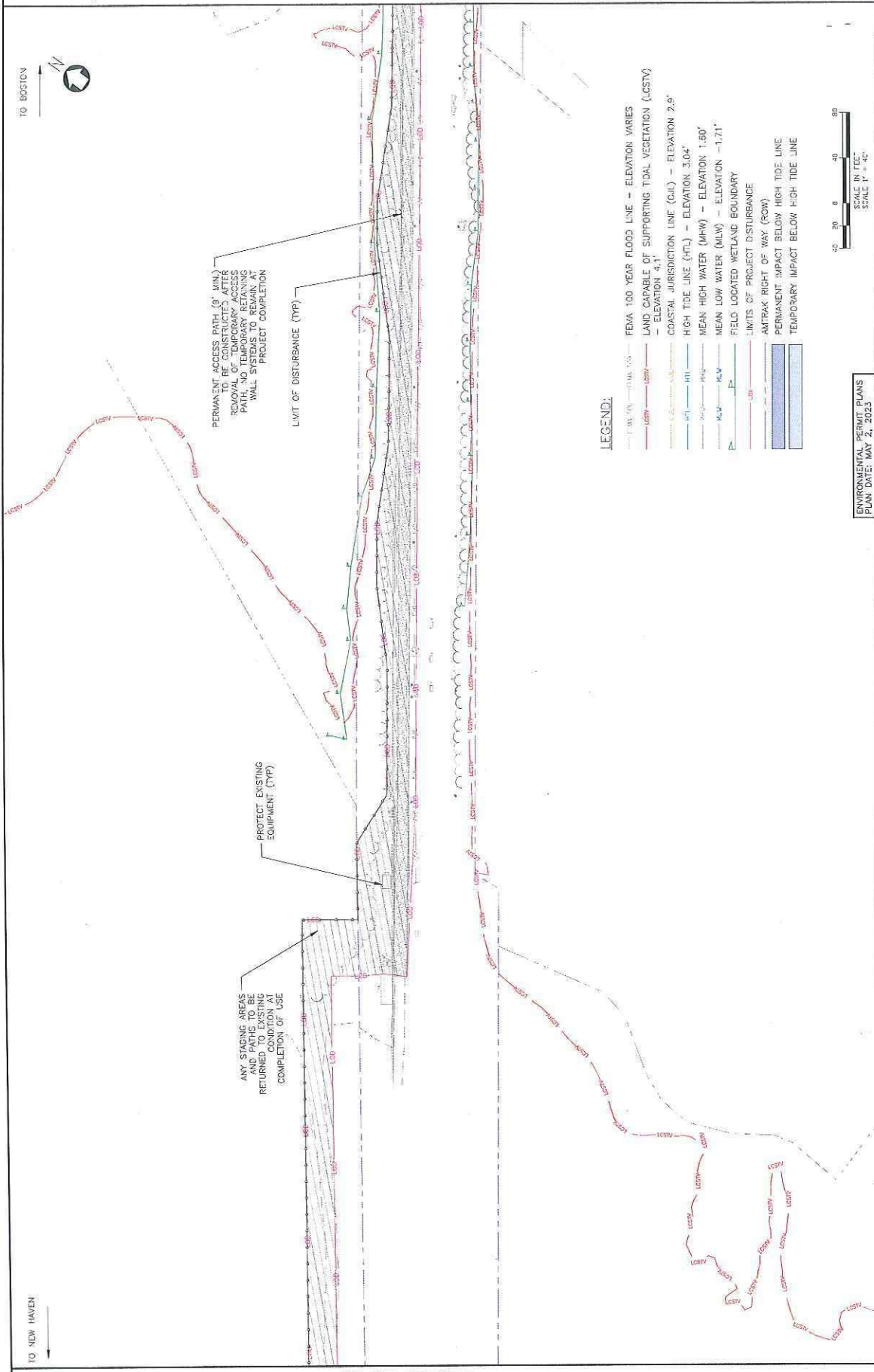
DESIGNED BY: GB
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CHECKED BY: _____
DATE: 05/02/23

PROJECT CODE: 33333333
PROJECT NAME: REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER
SHEET NO.: 52 OF 140
DATE: 05/02/23
DRAWN BY: GB
CHECKED BY: _____
DATE: 05/02/23

HTL-02

TO NEW HAVEN

TO BOSTON



MATCHLINE HTL-02

MATCHLINE DWG HTL-04

LEGEND:

- FEMA 100 YEAR FLOOD LINE — ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) — ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CJL) — ELEVATION 2.9'
- HIGH TIDE LINE (HTL) — ELEVATION 3.04'
- MEAN HIGH WATER (MHW) — ELEVATION 1.60'
- MEAN LOW WATER (MLW) — ELEVATION -1.71'
- LIMITS OF PROJECT DISTURBANCE
- AMPTRAK RIGHT OF WAY (ROW)
- PERMANENT IMPACT BELOW HIGH TIDE LINE
- TEMPORARY IMPACT BELOW HIGH TIDE LINE

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

HARBESTY & HANOVER, LLC
 ENGINEERS
 1501 Broadway, New York, NY 10036
 1501 Locust St., Suite 1050
 Philadelphia, PA 19103



DATE	DESCRIPTION

Office of Chief Engineer
STRUCTURES
 National Railroad Passenger Corporation
 200 Schuylkill, Philadelphia, Pennsylvania 19106-3601

Amtrak
 The National Railroad Passenger Corporation
 200 Schuylkill, Philadelphia, Pennsylvania 19106-3601
 Amtrak is a U.S. Department of Transportation entity.

DATE	DESCRIPTION

PROJECT: REPLACEMENT OF MB 106 89 OVER CONNECTICUT RIVER
 SHEET NO.: HTL-03
 DATE: 05/02/23

Project Code: 1006.000
 WBS: HTL-03
 Sheet No.: HTL-03
 Date: 05/02/23

OLD DRAWING: REPLACEMENT OF MB 106 89 OVER CONNECTICUT RIVER
 HIGH TIDE LINE IMPACT PLAN
 Drawn: CBR
 Checked: KM
 Date: 05/02/23

TO NEW HAVEN

TO BOSTON



PERMANENT ACCESS PATH (9' MIN.) TO BE CONSTRUCTED AFTER REMOVAL OF TEMPORARY ACCESS PATH. NO TEMPORARY RETAINING WALLS TO REMAIN AT PROJECT COMPLETION.

EXISTING SURFACE GRADES AND SURFACES (INCLUDING BRICK AND GRAVEL) TO BE RESTORED AT PROJECT COMPLETION (TYP.)

EXIST' TRACK 1

EXIST' TRACK 2

WESTERN LIMIT OF GRADING WORK

EMBANKMENT SCOUR PROTECTION

LIMIT OF DISTURBANCE (TYP.)

PROP TRACK 1

PROP TRACK 2

LEGEND:

- FLOOD 100 YEAR FLOOD LINE — ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) — ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CJL) — ELEVATION 2.9'
- HIGH TIDE LINE (HTL) — ELEVATION 3.64'
- MEAN HIGH WATER (MHW) — ELEVATION 1.60'
- MEAN LOW WATER (MLW) — ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)
- PERMANENT IMPACT BELOW HIGH TIDE LINE
- TEMPORARY IMPACT BELOW HIGH TIDE LINE

MEET EXISTING STA: 106+997.32
MEET EXISTING STA: 106+0757.47

MATCHLINE DWG HTL-03

MATCHLINE DWG HTL-05



ENVIRONMENTALLY SENSITIVE AREA GROUND DISTURBANCES IN THIS AREA SHALL BE RESTORED TO ORIGINAL CONDITIONS TO THE EXTENT AND APPROVED WHERE PERMITTED. PROPOSED GROUND DISTURBANCES SHALL NOT EXCEED 2 FEET IN DEPTH.

EXISTING SURFACE GRADES AND SURFACE TYPES (INCLUDING PLANTINGS) TO BE RESTORED AT PROJECT COMPLETION (TYP.)

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

PROJECT CODE: 30033003
SHEET NO: 57 OF 110
DATE: 05/02/23

REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER HIGH TIDE LINE IMPACT PLAN

DESIGNED BY: GEM Checked BY: Date: 05/02/23

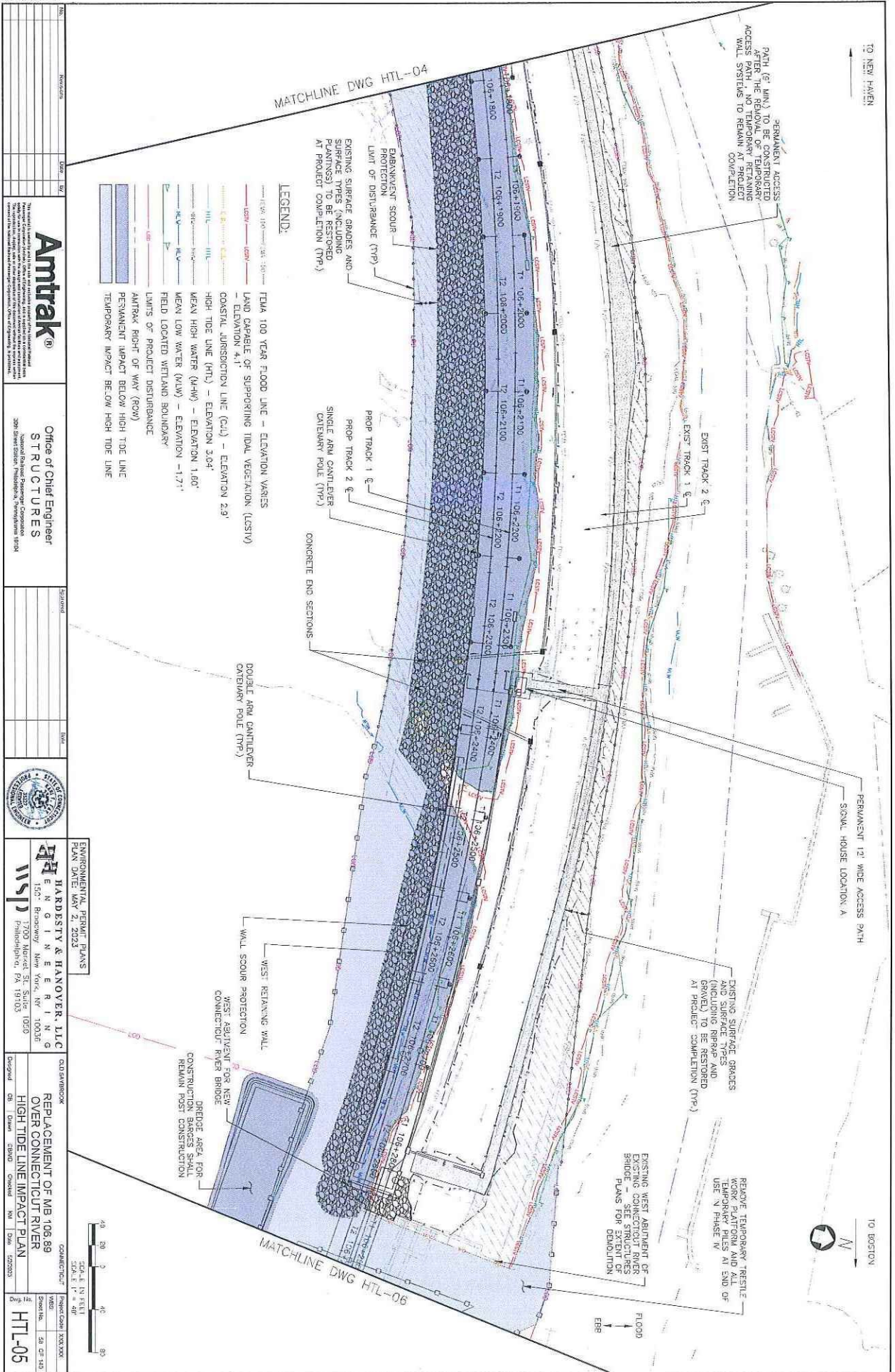


HADESTY & HANOVER, LLC
10026
1730 Market Street, Suite 1020
Philadelphia, PA 19103

Office of Chief Engineer
STRUCTURES
3008 Street Station, Philadelphia, Pennsylvania 19104



NO.	REVISION	DATE	BY	CHKD.



TO NEW HAVEN

TO BOSTON

PERMANENT ACCESS PATH (5' MIN.) TO BE RESTORED AFTER THE REMOVAL OF TEMPORARY ACCESS PATH. NO TEMPORARY RETAINING WALL SYSTEMS TO REMAIN AT PROJECT COMPLETION.

EXISTING SURFACE GRADES (INCLUDING RIPRAP AND GRAVEL) TO BE RESTORED AT PROJECT COMPLETION (TYP.)

REMOVE TEMPORARY TRESTLE WORK PLATFORM AND ALL TEMPORARY PILES AT END OF USE IN PHASE IV

EXISTING WEST ABUTMENT OF EXISTING CONNECTICUT RIVER BRIDGE - SEE STRUCTURES PLANS FOR REDUNDANT

EXISTING SURFACE GRADES AND SURFACE TYPES (INCLUDING RIPRAP AND GRAVEL) TO BE RESTORED AT PROJECT COMPLETION (TYP.)

PROPOSED TRACK 1 & 2

CONCRETE END SECTIONS

DOUBLE ARM CANTILEVER CANTILEVER POLE (TYP.)

WEST RETAINING WALL WEST SCOUR PROTECTION WEST ABUTMENT FOR NEW CONNECTICUT RIVER BRIDGE

DREDGE AREA FOR CONSTRUCTION BARBERS SHALL REMAIN POST CONSTRUCTION

MATCHLINE DWG HTL-04

MATCHLINE DWG HTL-06

LEGEND:

- TEMA 100 YEAR FLOOD LINE - ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LSTV) - ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CJL) - ELEVATION 2.9'
- HIGH TIDE LINE (HTL) - ELEVATION 3.04'
- MEAN HIGH WATER (MHW) - ELEVATION 1.60'
- MEAN LOW WATER (MLW) - ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- ANTRAK RIGHT-OF-WAY (ROW)
- PERMANENT IMPACT BELOW HIGH TIDE LINE
- TEMPORARY IMPACT BELOW HIGH TIDE LINE

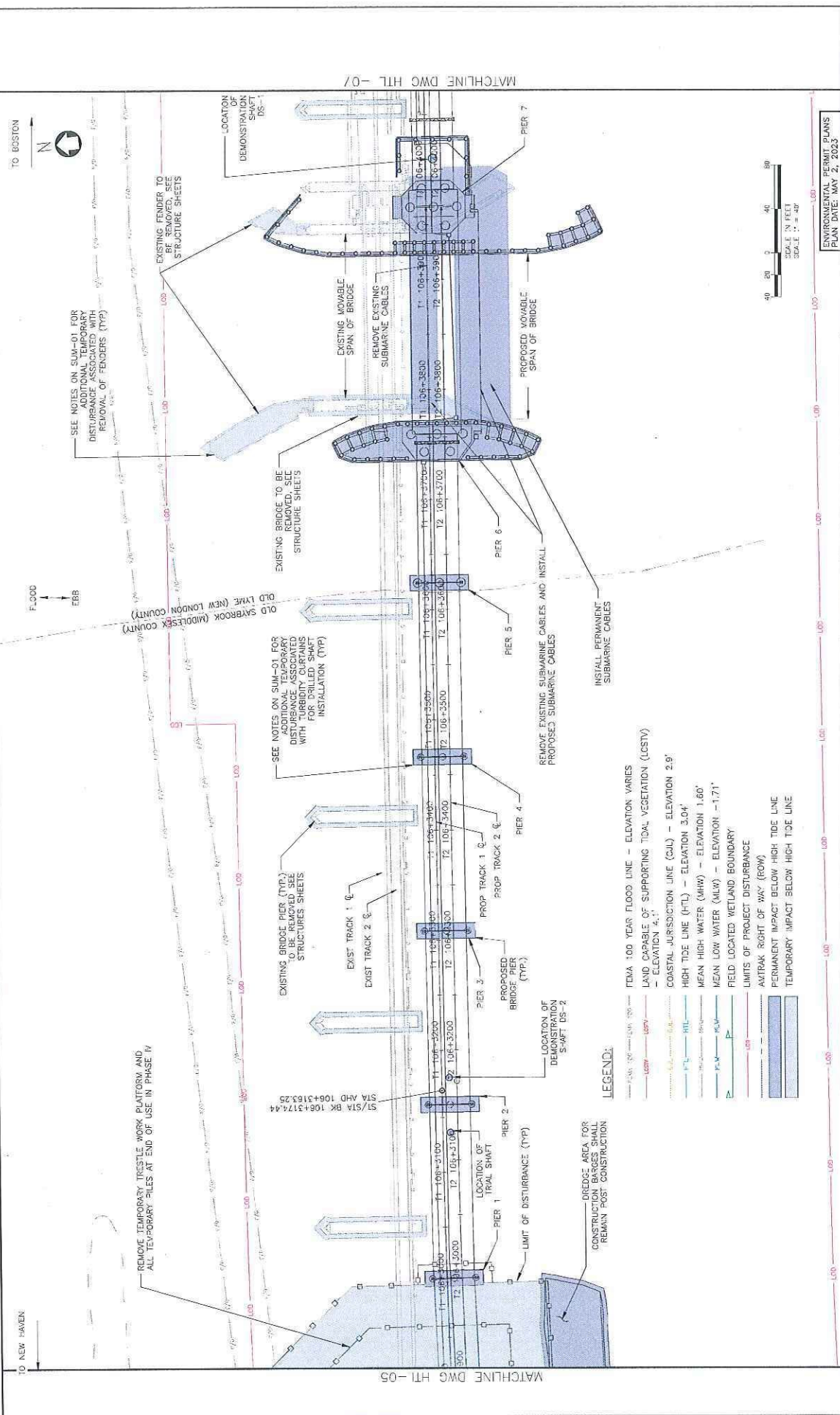
Amtrak
 Office of Chief Engineer
 STRUCTURES
 3000 Street Station, Philadelphia, Pennsylvania 19104



ENVIRONMENTAL PERMIT PLANS
 E-1-N-S-1-1-1
 HARRIS & HANOVER, LLC
 1507 Broadway, New York, NY 10036
 7700 Mercersville Road, Philadelphia, PA 19153

CONTRACT NO. 21050-IMPACT-REVISED-1-IMPACT
 DRAWING NO. HTL-05
 DATE 03/15/2024

SCALE: 1" = 40'
 0 40 80 120
 0 40 80 120



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ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023		CONTRACT REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER HIGH TIDE LINE IMPACT PLAN		Project Count: XXX-XXX Sheet No.: 05 OF 143 HTL-06 2 OF 2	
WSP HARDESTY & HANOVER, LLC ENGINEERING 150 Broadway New York, NY 10036 1730 Market St., Suite 19103 Philadelphia, PA 19103 Designed: CS Drawn: CS&D Checked: NV Edate: 5/2/2023		<small>OLD DRAWING</small> HARDESTY & HANOVER, LLC ENGINEERING 150 Broadway New York, NY 10036 1730 Market St., Suite 19103 Philadelphia, PA 19103 Designed: CS Drawn: CS&D Checked: NV Edate: 5/2/2023		ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023	

- LEGEND:**
- FLOOD 100 YEAR FLOOD LINE - ELEVATION VARIES
 - LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) - ELEVATION 4.1'
 - COASTAL JURISDICTION LINE (CAL) - ELEVATION 2.9'
 - HIGH TIDE LINE (HTL) - ELEVATION 3.04'
 - MEAN HIGH WATER (MHW) - ELEVATION 1.60'
 - MEAN LOW WATER (MLW) - ELEVATION -1.71'
 - FIELD LOCATED WETLAND BOUNDARY
 - LIMITS OF PROJECT DISTURBANCE
 - AMTRAK RIGHT OF WAY (ROW)
 - PERMANENT IMPACT BELOW HIGH TIDE LINE
 - TEMPORARY IMPACT BELOW HIGH TIDE LINE

TO NEW HAVEN

TO EASTON

SCALE: 1" = 40'

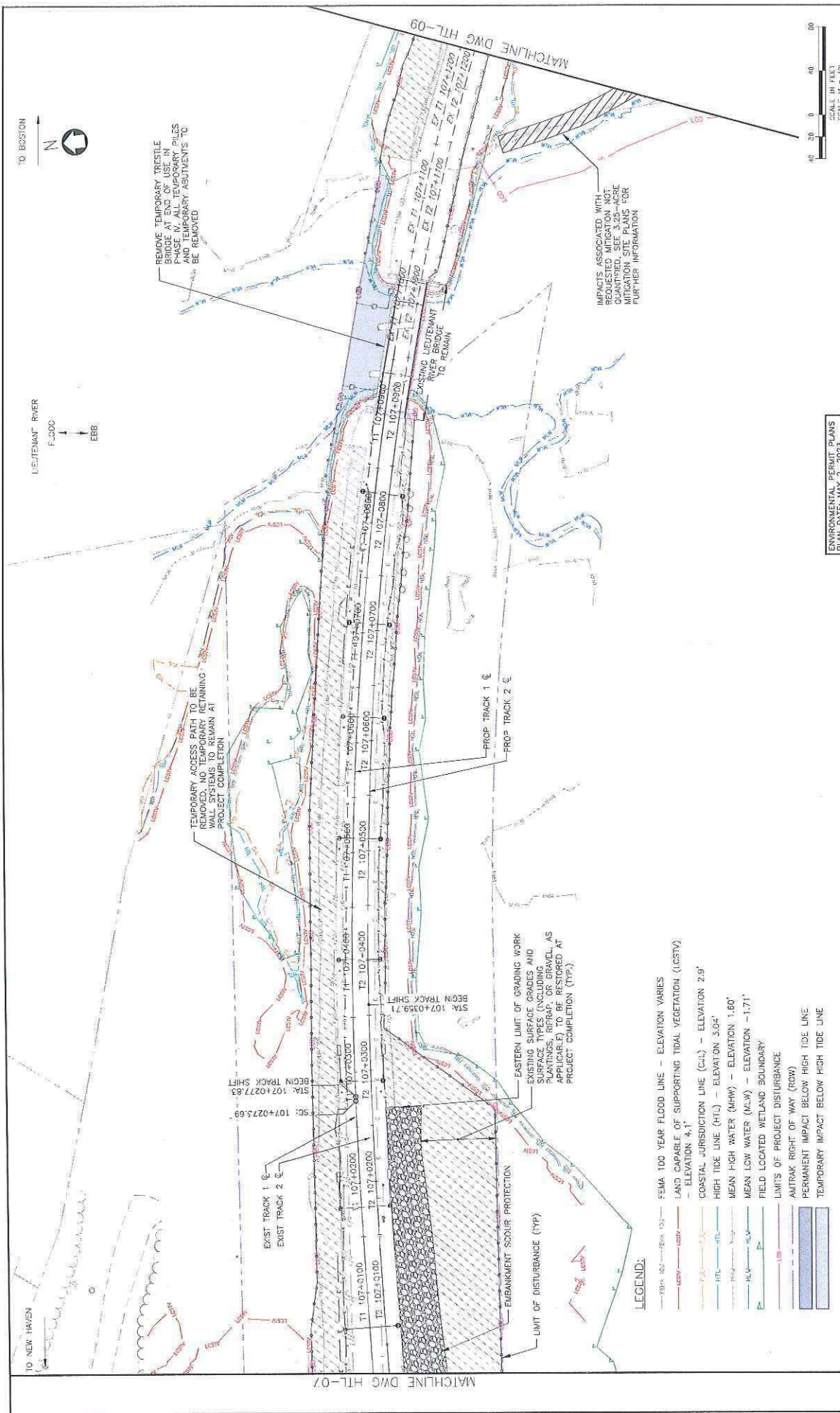
DATE: _____

ISSUE: _____

ASSIGNED: _____

PROJECT: REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER HIGH TIDE LINE IMPACT PLAN

DESIGNED: CS DRAWN: CS&D CHECKED: NV EDATE: 5/2/2023



TO NEW HAVEN

LIEUTENANTS RIVER
F=000
EBB

TO BOSTON

SCALE IN FEET
SCALE: 1" = 40'

PROJECT CASE: 300300

DESIGNED: CSJ
DRAWN: ESDAD
CHECKED: GAA
DATE: 02/20/23

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

OLD DRAWING: REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER
HIGH TIDE LINE IMPACT PLAN

HARDESTY & HANOVER, LLC
ENGINEERING
1501 Broadway, New York, NY 10036
1750 Market St., Suite 1050
Philadelphia, PA 19103
Ph: 484-414-1111

Office of Chief Engineer
STRUCTURES
National Railroad Passenger Corporation
326 Street Station, Philadelphia, Pennsylvania 19106

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TO NEW HAVEN

TO BOSTON

MATCHLINE DWG HTL-11

MATCHLINE DWG HTL-10

EXISTING SURFACE GRADES AND SURFACE TYPES (INCLUDING PLANTINGS, RIPRAP, OR GRAVEL, AS APPLICABLE) TO BE RESTORED AT PROJECT COMPLETION (TRP.)

EXISTING CATEWAY POLES TO REMAIN (TRP.)

EXIST TRACK 1 ☐

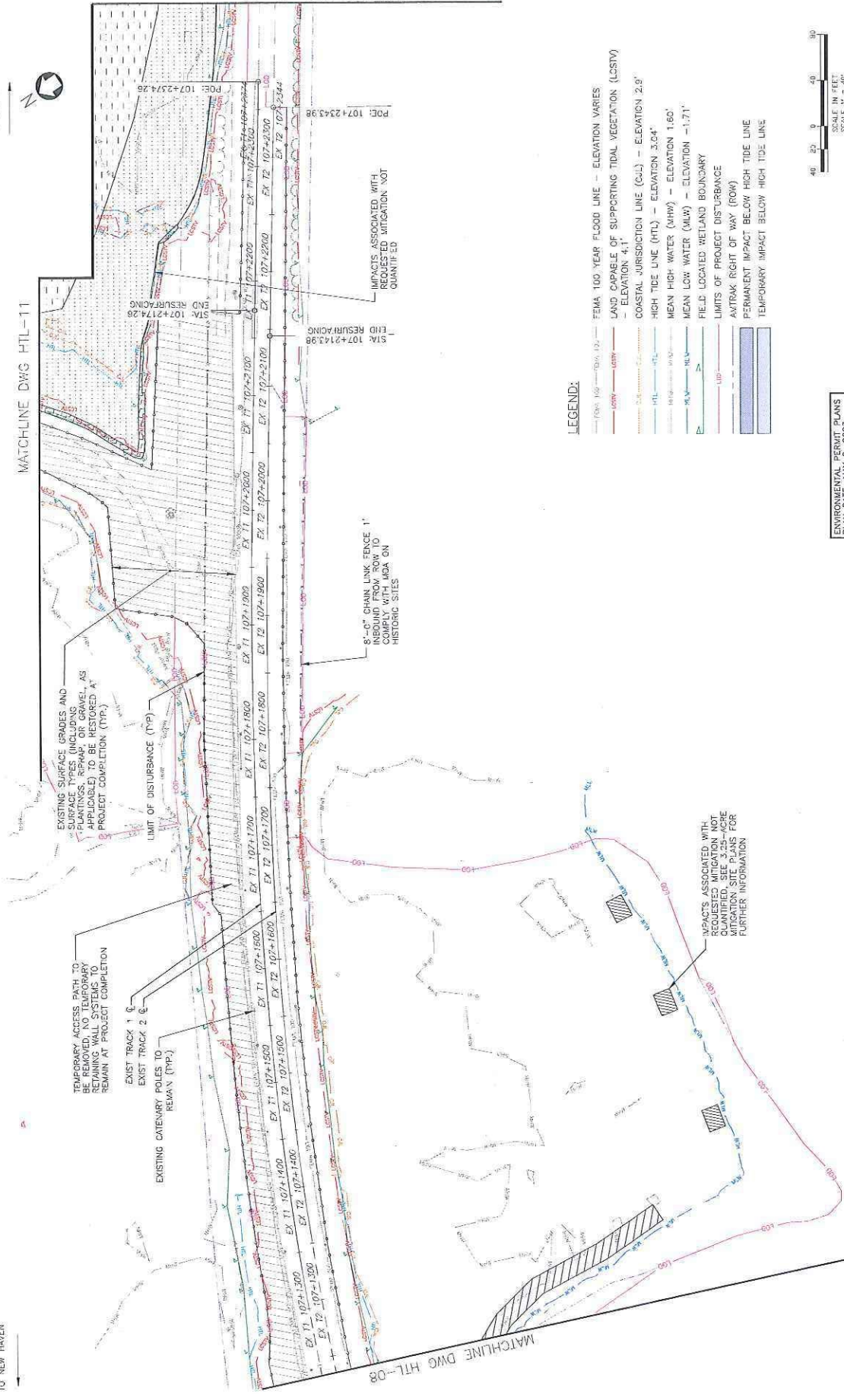
EXIST TRACK 2 ☐

LIMIT OF DISTURBANCE (LTD)

TEMPORARY ACCESS PATH TO BE REMOVED, NO TEMPORARY RETAINING WALL SYSTEMS TO REMAIN AT PROJECT COMPLETION

8'-0" CHAIN LINK FENCE 1' INBOUND FROM ROW TO COMPLY WITH ADA ON HISTORIC SITES

IMPACTS ASSOCIATED WITH REQUESTED MITIGATION NOT QUANTIFIED



LEGEND:

- FEMA 100 YEAR FLOOD LINE — ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) — ELEVATION 4.1'
- COASTAL JURISDICTION LINE (C-JL) — ELEVATION 2.9'
- HIGH TIDE LINE (HTL) — ELEVATION 3.04'
- MEAN HIGH WATER (MHW) — ELEVATION 1.60'
- MEAN LOW WATER (MLW) — ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)
- PERMANENT IMPACT BELOW HIGH TIDE LINE
- TEMPORARY IMPACT BELOW HIGH TIDE LINE



ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023



Office of Chief Engineer
STRUCTURES
1000 Locust Street, Philadelphia, Pennsylvania 19104
320 Street Station, Philadelphia, Pennsylvania 19104

Office of Chief Engineer
STRUCTURES
1000 Locust Street, Philadelphia, Pennsylvania 19104
320 Street Station, Philadelphia, Pennsylvania 19104

Amtrak
This project is being funded in whole or in part by the federal government through the National Infrastructure Bank. Amtrak is a subsidiary of the National Railroad Passenger Corporation. One of our partners is a contractor.

NO.	DESCRIPTION	DATE	BY

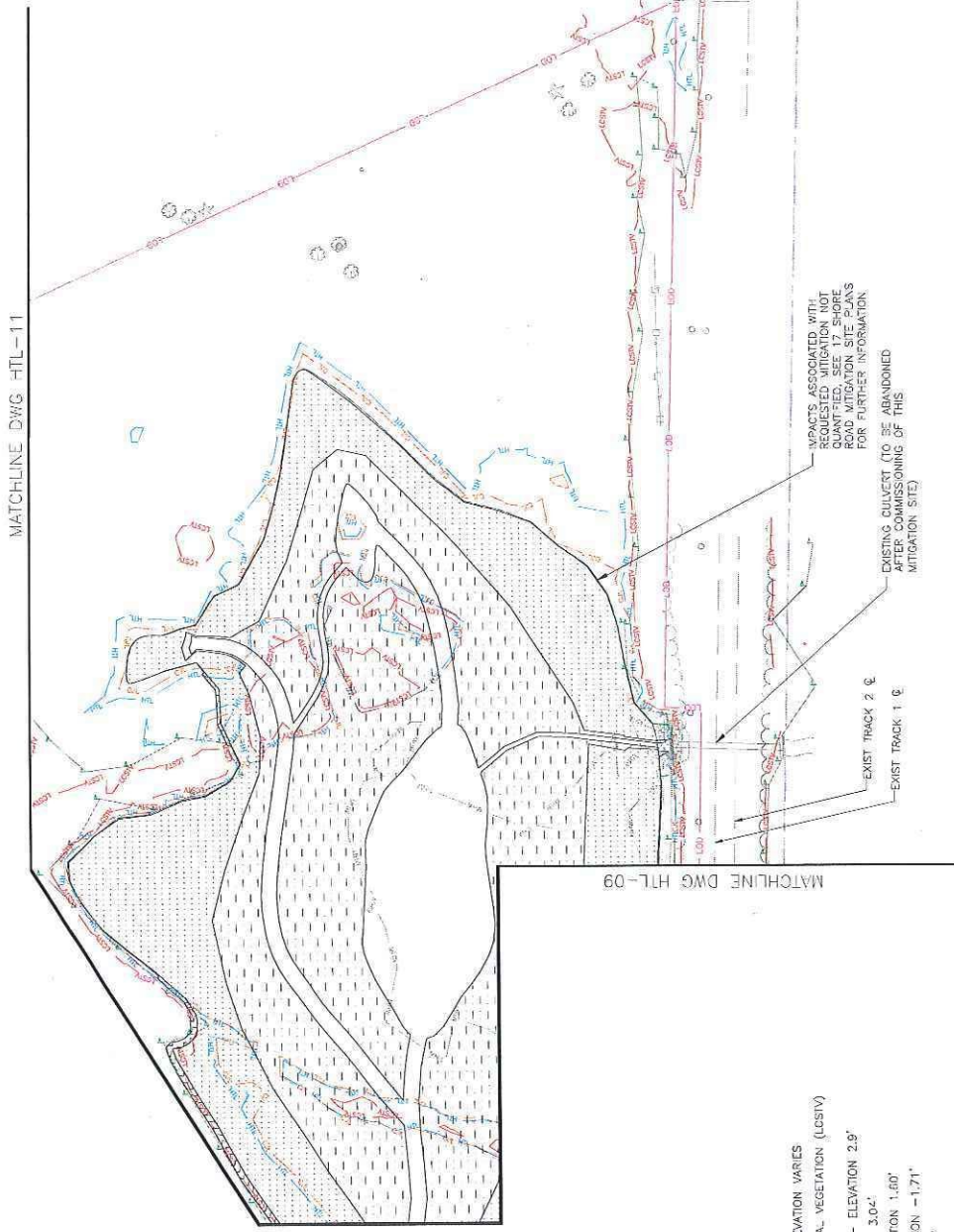
Project Code	XXX700
Sheet No.	02 OF 40
Drawn	
Checked	
Scale	AS SHOWN
Project Name	REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER HIGH TIDE LINE IMPACT PLAN
Drawn	
Checked	
Scale	AS SHOWN
Project Name	HTL-09

HARDESTY & HANOYER, LLC
ENGINEERING
1501 Broadway New York, NY 10036
1700 Market St., Suite 1050 Philadelphia, PA 19103

HTL-09

TO NEW HAVEN

TO BOSTON



MATCHLINE DWG HTL-11

MATCHLINE DWG HTL-09

LEGEND:

- FEMA 100 YEAR FLOOD LINE — ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDA- VEGETATION (LGSIV) ELEVATION 4.9'
- CONSTR- JURISDICTION LINE (CJL) — ELEVATION 2.9'
- HIGH TIDE LINE (HTL) — ELEVATION 3.04'
- MEAN HIGH WATER (MHW) — ELEVATION 1.60'
- MEAN LOW WATER (MLW) — ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)
- PERMANENT IMPACT BELOW HIGH TIDE LINE
- TEMPORARY IMPACT BELOW HIGH TIDE LINE



ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 21, 2023

OLD SAVEBROOK
HARDESTY & HANOVER, LLC
 ENGINEERING
 1501 Broadway New York, NY 10036
 1750 Market St., Suite, 1020
 Philadelphia, PA 19103



NO.	REVISIONS	DATE	BY

Office of Chief Engineer
STRUCTURES
 National Railroad Passenger Corporation
 300 North Street, Philadelphia, Pennsylvania 19104



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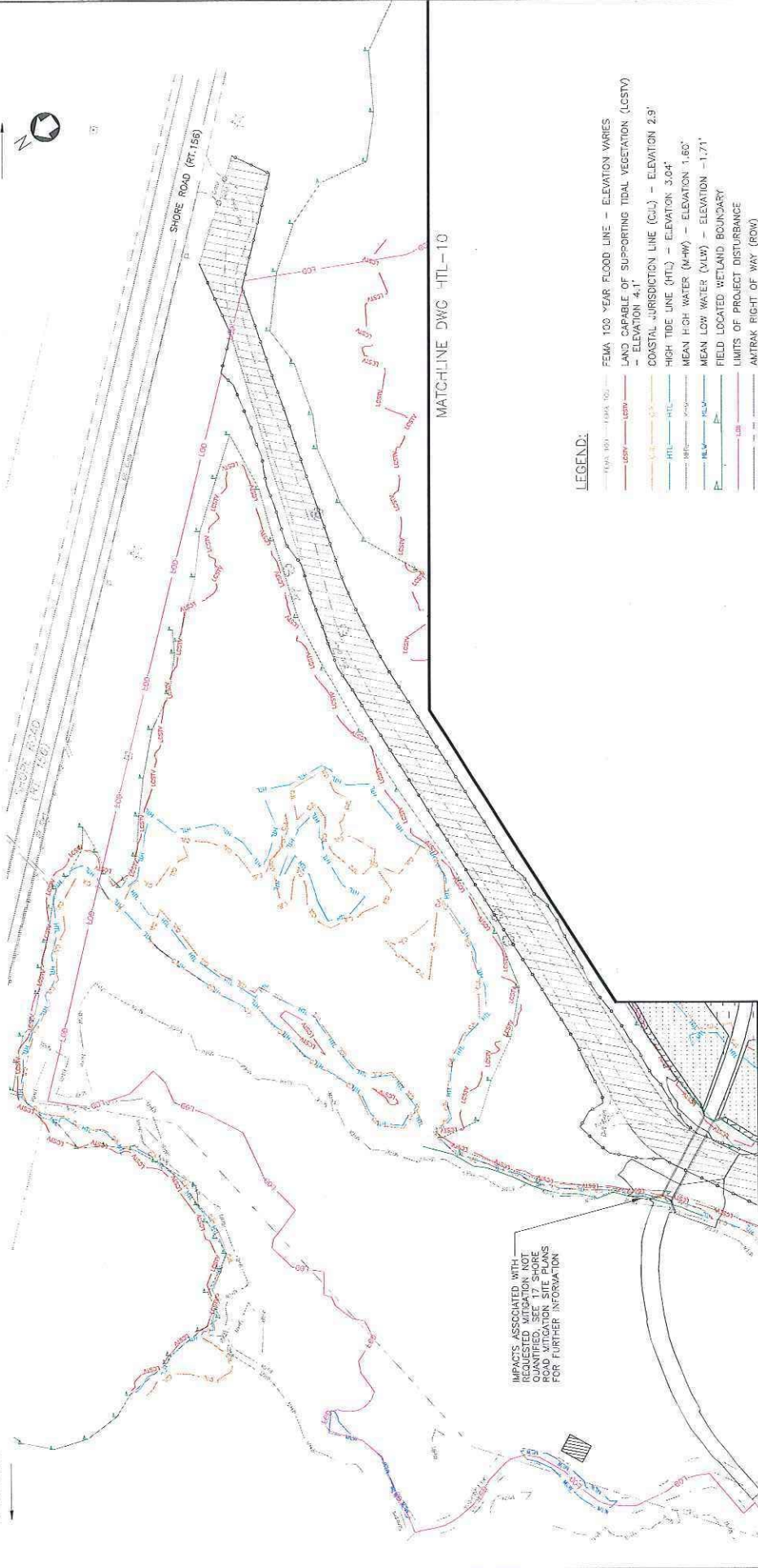
NO.	REVISIONS	DATE	BY

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 Plot Date: 01/20/23

Project Code: 2003-000
 Sheet No: 03 OF 145
 2
 HTL-10
 Design: CEI | Drawn: ESM/D | Checked: MA | Date: 02/22/23

TO NEW HAVEN

TO BOSTON



IMPACTS ASSOCIATED WITH PROPOSED AND EXISTING SHORE ROAD WITGATION SITE PLANS FOR FURTHER INFORMATION

MATCH-LINE DWG HTL-10

MATCH-LINE DWG HTL-09

LEGEND:

- FEMA 100 YEAR FLOOD LINE - ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) - ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CJL) - ELEVATION 2.9'
- HIGH TIDE LINE (HTL) - ELEVATION 3.04'
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- MEAN LOW WATER (MLW) - ELEVATION -1.71'
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- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)
- PERMANENT IMPACT BELOW HIGH TIDE LINE
- TEMPORARY IMPACT BELOW HIGH TIDE LINE



ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

HARDESTY & HANOVER, LLC
 ENGINEERS
 1501 Broadway, New York, NY 10036
 1760 Market St., Suite 10050
 Philadelphia, PA 19103



STRUC
 Office of Chief Engineer
 STRUCTURES
 National Railroad Passenger Corporation
 226 Silver Station, Philadelphia, Pennsylvania 19104

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PROJECT: REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER
 SHEET: HIGH TIDE LINE IMPACT PLAN
 DATE: 05/02/23
 DRAWN BY: [Name]
 CHECKED BY: [Name]

PROJECT CODE: XXX-2008
 SHEET NO.: 64 OF 140
 DRAWING NO.: HTL-11

TO NEW HAVEN

TO BOSTON



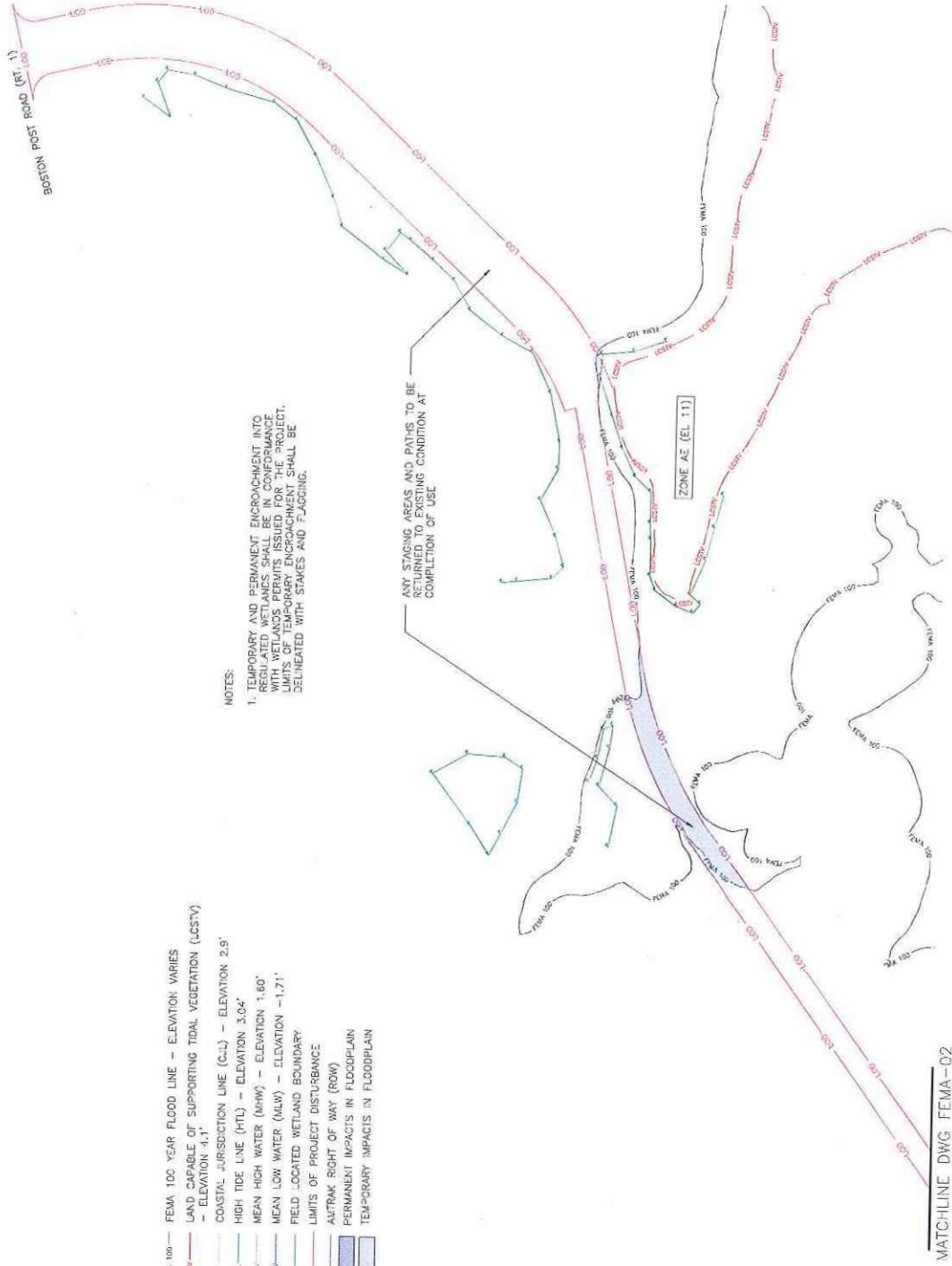
LEGEND:

- FEMA 100 YEAR FLOOD LINE - ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) - ELEVATION 4.1'
- CONSTITUTED JURISDICTION LINE (C-LJ) - ELEVATION 2.9'
- HIGH TIDE LINE (HTL) - ELEVATION 3.04'
- MEAN HIGH WATER (MHW) - ELEVATION 1.80'
- MEAN LOW WATER (MLW) - ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- ATRAK RIGHT OF WAY (ROW)
- PERMANENT IMPACTS IN FLOODPLAIN
- TEMPORARY IMPACTS IN FLOODPLAIN

NOTES:

1. TEMPORARY AND PERMANENT ENCROACHMENT INTO REGULATED WETLANDS SHALL BE IN CONFORMANCE WITH THE REGULATIONS FOR THE PROJECT. LIMITS OF TEMPORARY ENCROACHMENTS SHALL BE DELINEATED WITH STAKES AND FLAGGING.

ANY STATUS AREAS AND PATHS TO BE RETURNED TO EXISTING CONDITION AT COMPLETION OF USE



ENVIRONMENTAL RESUME PLANS
PLAN DATE: MAY 2, 2023



HARDESTY & HANOVER, LLC
ENGINEERING
1501 Broadway New York, NY 10035
7300 Market St. Suite 1000
Philadelphia, PA 19103
Ph: 484.961.1100

Office of Chief Engineer
STRUCTURES
National Flood Insurance Program
3001 Street Station, Philadelphia, Pennsylvania 19104



PROJECT CODE: 300300X	CONNECTION POINT
WASD	REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER
SHEET NO. 02 OF 148	FLOODPLAIN IMPACT PLAN
DATE: 5/2/2023	DESIGNER: CB
DATE: 5/2/2023	CHECKER: AM
DATE: 5/2/2023	DATE: 5/2/2023

FEMA-01

TO NEW HAVEN

TO BOSTON

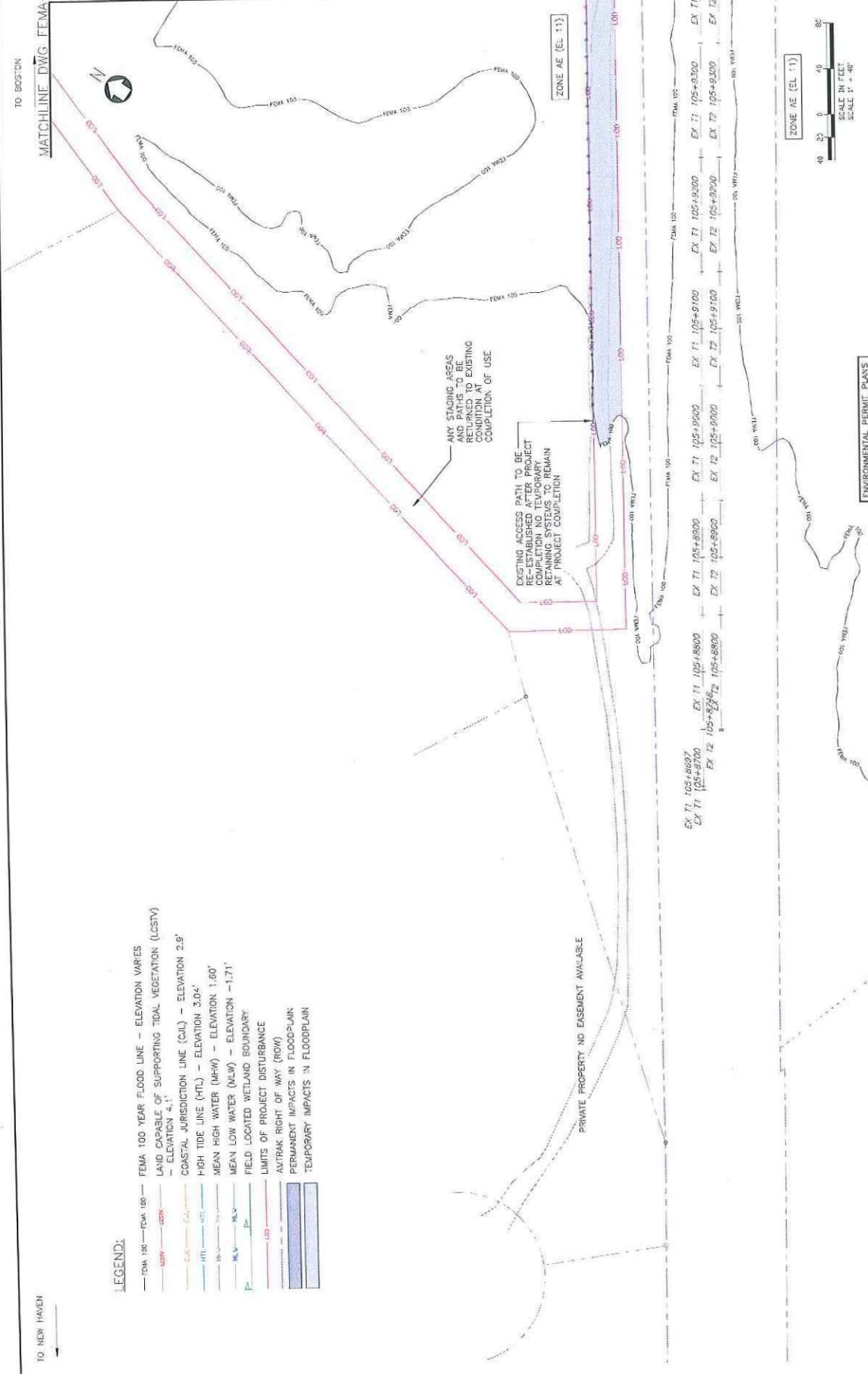
MATCHLINE DWG FEMA-01

MATCHLINE DWG FEMA-03

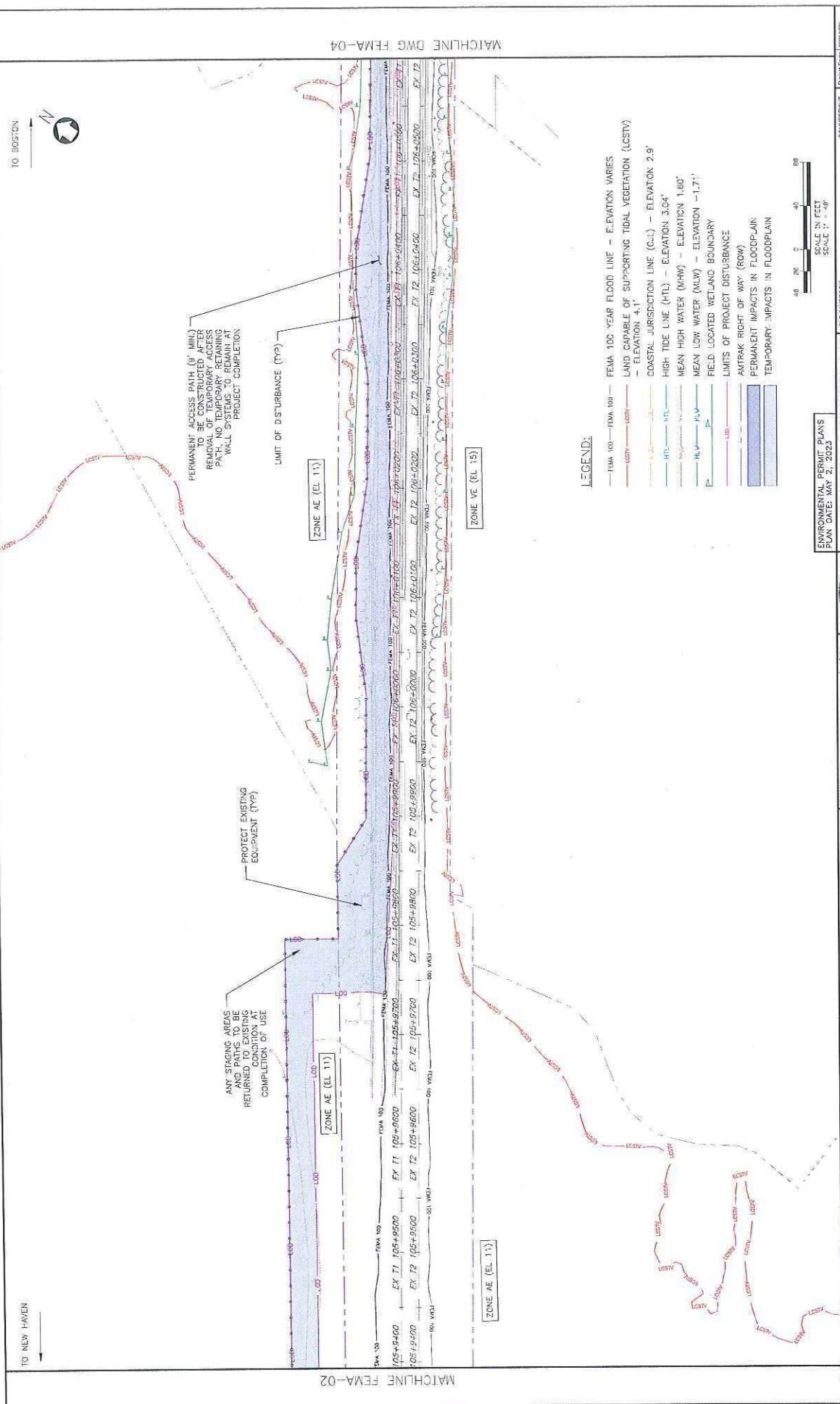


LEGEND:

- FEMA 100 YEAR FLOOD LINE - ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) - ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CAL) - ELEVATION 2.9'
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- MEAN HIGH WATER (MHW) - ELEVATION 1.60'
- MEAN LOW WATER (MLW) - ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)
- PERMANENT IMPACTS IN FLOODPLAIN
- TEMPORARY IMPACTS IN FLOODPLAIN



<p>PROJECT: CONN 2003.000</p> <p>DATE: 07 OF 140</p> <p>SHEET NO: 5</p> <p>FEMA-02</p>									
<p>DESIGNED BY: [Signature]</p> <p>CHECKED BY: [Signature]</p> <p>DATE: 09/20/20</p>									
<p>ENVIRONMENTAL PERMIT PLANS</p> <p>PLAN DATE: MAY 2, 2023</p>									
<p>HARDSTY & HANOVER, LLC</p> <p>ENGINEERING</p> <p>1507 Broadway, New York, NY 10036</p> <p>1730 Walnut St., Suite 1020 Philadelphia, PA 19103</p> <p>wsp</p>									
<p>Office of Chief Engineer</p> <p>STRUCTURES</p> <p>300 South Street, Philadelphia, Pennsylvania 19106</p>									
<p>REVISIONS:</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Description</th> <th>Date</th> <th>By</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		No.	Description	Date	By				
No.	Description	Date	By						



MATCHLINE DWG FEMA-04

MATCHLINE DWG FEMA-02

LEGEND:

- FEMA 100-YEAR FLOOD LINE — ELEVATION VARIES.
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) — ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CJL) — ELEVATION 2.9'
- HIGH TIDE LINE (HTL) — ELEVATION 3.04'
- MEAN HIGH WATER (MHW) — ELEVATION 1.60'
- MEAN LOW WATER (MLW) — ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)
- PERMANENT IMPACTS IN FLOODPLAIN
- TEMPORARY IMPACTS IN FLOODPLAIN



ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

Project Code	XXX 000
Sheet No.	03 OF 143
Client	CONNECTICUT
Project Name	REPLACEMENT OF MB 105.89 OVER CONNECTICUT RIVER FLOODPLAIN IMPACT PLAN
Designed by	CS
Checked by	CS
Date	5/2/2023
Drawn by	CS
Scale	AS SHOWN
Client Name	HARDESTY & HANOVER, LLC
Client Address	150 Broadway, New York, NY 10036
Client Phone	1-703-696-8100
Client Email	PH@hardesty.com



Office of Chief Engineer
STRUCTURES
Mark E. DeLoach, President/Chief Engineer
30th Street Station, Philadelphia, Pennsylvania 19104

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No.	Date	By

TO NEW HAVEN

TO BOSTON



PERMANENT ACCESS PATH (6')
SHALL BE MAINTAINED AFTER
REMOVAL OF TEMPORARY ACCESS
PATH. NO TEMPORARY RETAINING
WALL SYSTEMS TO REMAIN AT
PROJECT COMPLETION

EXISTING SURFACE GRADES AND
SURFACE TYPES (INCLUDING RIPRAP
AND GRAVEL) TO BE RESTORED AT
PROJECT COMPLETION (TYP.)

EXIST TRACK 1

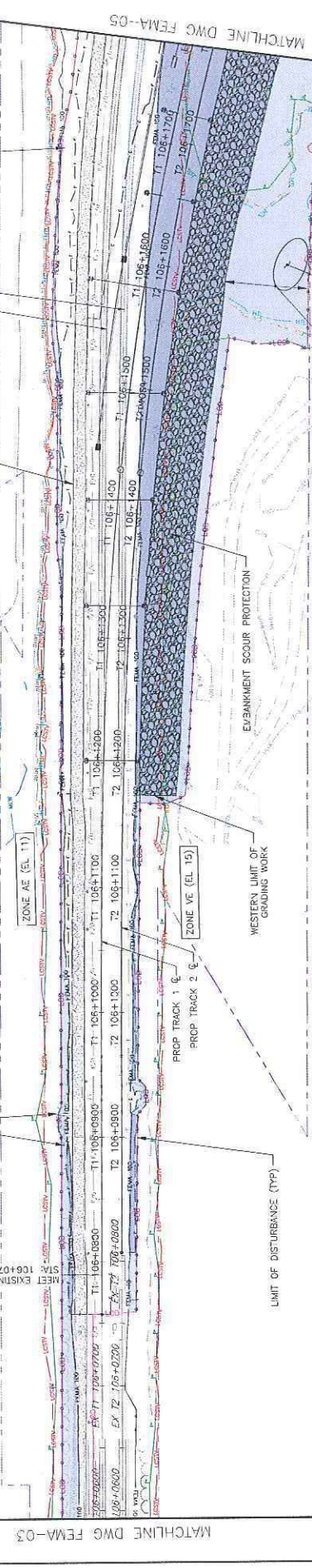
EXIST TRACK 2

EXISTING UTILITIES
TO REMAIN

WESTERN LIMIT OF
GRADING WORK

ENVIRONMENTAL SENSITIVE AREA
GROUND DISTURBANCES IN THIS AREA
SHALL BE AVOIDED UNLESS SUBMITTED
WHERE PERMITTED. PROPOSED GROUND
DISTURBANCES SHALL NOT EXCEED 2'
FEET IN DEPTH.

EXISTING SURFACE GRADES AND SURFACE
TYPES (INCLUDING PLANTINGS) TO BE
RESTORED AT PROJECT COMPLETION (TYP.)



- LEGEND:**
- FEMA 100 — FEMA 100 YEAR FLOOD LINE — ELEVATION VARIES
 - LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) — ELEVATION 4.1'
 - COASTAL JURISDICTION LINE (CAL) — ELEVATION 2.9'
 - HIGH TIDE LINE (HTL) — ELEVATION 3.04'
 - MEAN HIGH WATER (MHW) — ELEVATION 1.60'
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 - LIMITS OF PROJECT DISTURBANCE
 - AMTRAK RIGHT OF WAY (ROW)
 - PERMANENT IMPACTS IN FLOODPLAIN
 - TEMPORARY IMPACTS IN FLOODPLAIN

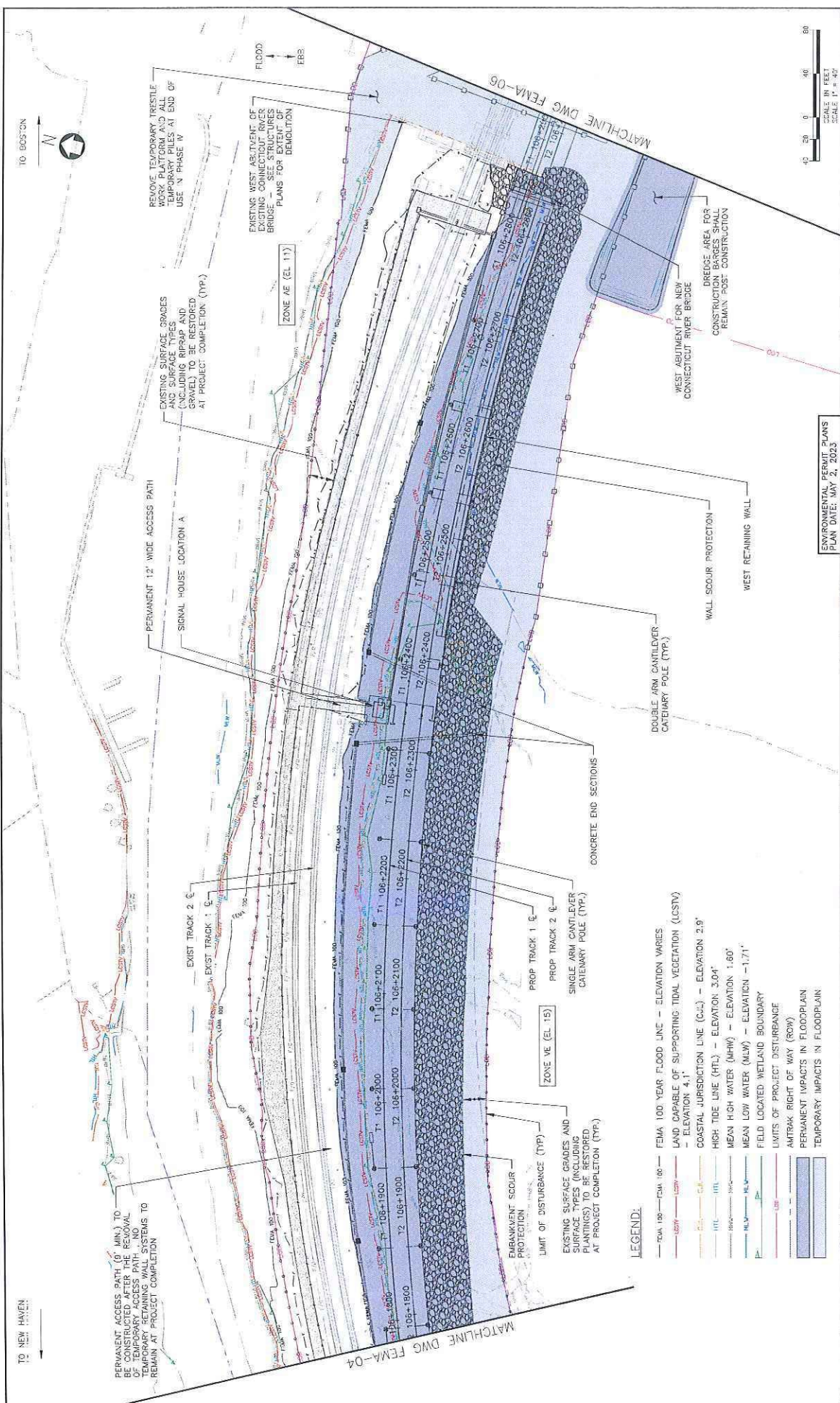
MATCHLINE DWG FEMA-03

MATCHLINE DWG FEMA-05

		Office of Chief Engineer STRUCTURES 30th Street Station, Philadelphia, Pennsylvania 19104		Amtrak® <small>This brand is used by permission of the Amtrak and is the exclusive name of the Amtrak Railroad. All other trademarks are the property of their respective owners. Amtrak and the Amtrak logo are registered trademarks of Amtrak. All other trademarks are the property of their respective owners. © 2013 Amtrak. All rights reserved.</small>	
ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2013	HARVESTY & HANOVER, LLC ENGINEERING 150 Broadway New York, NY 10036 1700 Market St., Suite 1050 Philadelphia, PA 19103	CONSENT/AGREEMENT Project Code: 100-330 Sheets: 08 OF 140 FEMA-04	OLD STATE/BOOK REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER FLOODPLAIN IMPACT PLAN	Designed: CB Drawn: CB/NO Checked: KV Date: 5/2/2013	Scale: 1" = 100' Scale: 1" = 100'

TO NEW HAVEN

TO BOSTON



PERMANENT ACCESS PATH (6' MIN.) TO BE CONSTRUCTED AFTER THE REMOVAL OF TEMPORARY ACCESS PATH. NO TEMPORARY TRAINING SYSTEMS TO REMAIN AT PROJECT COMPLETION

PERMANENT 12' WIDE ACCESS PATH

EXISTING SURFACE GRADES AND SURFACE TYPES (INCLUDING RIPRAP AND GRAVEL) TO BE RESTORED AT PROJECT COMPLETION (TYP.)

EXISTING WEST ABUTMENT OF EXISTING CONNECTICUT RIVER BRIDGE FOR EXTENT OF DEMOLITION PLANS

REMOVE TEMPORARY TRESTLE WORK PLATFORM AND ALL TEMPORARY PILES AT END OF USE IN PHASE W

MATCHLINE DWG FEMA-04

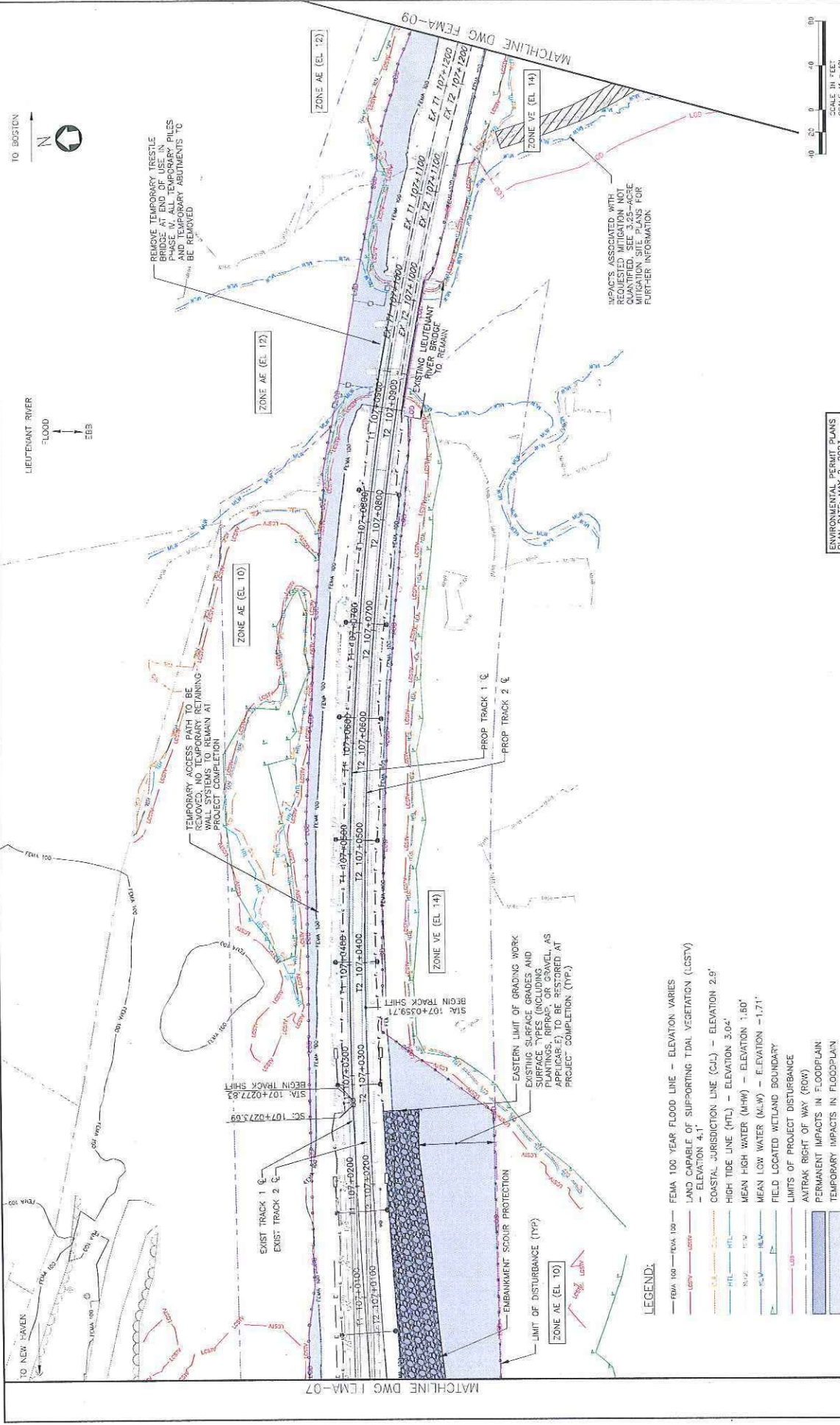
MATCHLINE DWG FEMA-06

LEGEND:

- FEMA 100 — FEMA 100 YEAR FLOOD LINE — ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) — ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CJL) — ELEVATION 2.9'
- HIGH TIDE LINE (HTL) — ELEVATION 3.04'
- MEAN HIGH WATER (MHW) — ELEVATION 1.60'
- MEAN LOW WATER (MLW) — ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)
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- TEMPORARY IMPACTS IN FLOODPLAIN

		ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023	OLD SANDWICH HARVESTY & HANOVER, LLC ENGINEERS 1501 Broadway, New York, NY 10036 1700 Market St, Suite 1050 Philadelphia, PA 19103 	PROJECT CODE: XXXXXX SHEET NO. 70 OF 140 FLOODPLAIN IMPACT PLAN FEMA-05
Office of Chief Engineer STRUCTURES 30th Street Station, Philadelphia, Pennsylvania 19104		PROJECT NO. 100-89 OVER CONNECTICUT RIVER FLOODPLAIN IMPACT PLAN		





TO NEW HAVEN
TO BOSTON



LIEUTENANT RIVER
FLOOD
EBS

REMOVE TEMPORARY TRESTLE BRIDGE AT END OF USE IN PHASE IV. ALL TEMPORARY PILES AND TEMPORARY ABUTMENTS TO BE REMOVED.

TEMPORARY ACCESS PATH TO BE REMOVED. NO TEMPORARY REMAINING WALL SYSTEMS TO REMAIN AT PROJECT COMPLETION.

IMPACTS ASSOCIATED WITH REQUESTED MITIGATION NOT QUANTIFIED. SEE 3.25-ACRE STUDY FOR FURTHER INFORMATION.

STA. 107+0272.83
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TO NEW HAVEN

MATCHLINE DWG FEMA-11

TO BOSTON



MATCHLINE DWG FEMA-09

LEGEND:

- FEMA-10 — FEMA-11 — FEMA-100 FLOOD LINE — ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) — ELEVATION 4.1'
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- PERMANENT IMPACTS IN FLOODPLAIN
- TEMPORARY IMPACTS IN FLOODPLAIN



ENVIRONMENTAL PERMIT PLANS
 PLAN DATE: MAY 2, 2023



PROJECT: _____
 DATE: _____

Office of Chief Engineer
STRUCTURES
 National Railroad Passenger Corporation
 308 Street Station, Philadelphia, Pennsylvania 19104



No.	Remarks	Date	By

OLD SAVERBOOK
HARDESTY & HANOVER, LLC
ENGINEERING
 1501 Broadway New York, NY 10036
 1700 Market St., Suite 1050
 Philadelphia, PA 19103

Project Code	CONSTRUCT	Sheet No.	75 OF 80
Drawn	CS	Checked	MA
Design	CS	Scale	AS SHOWN
Project Name	REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER FLOODPLAIN IMPACT PLAN		
Project No.	FEMA-10		

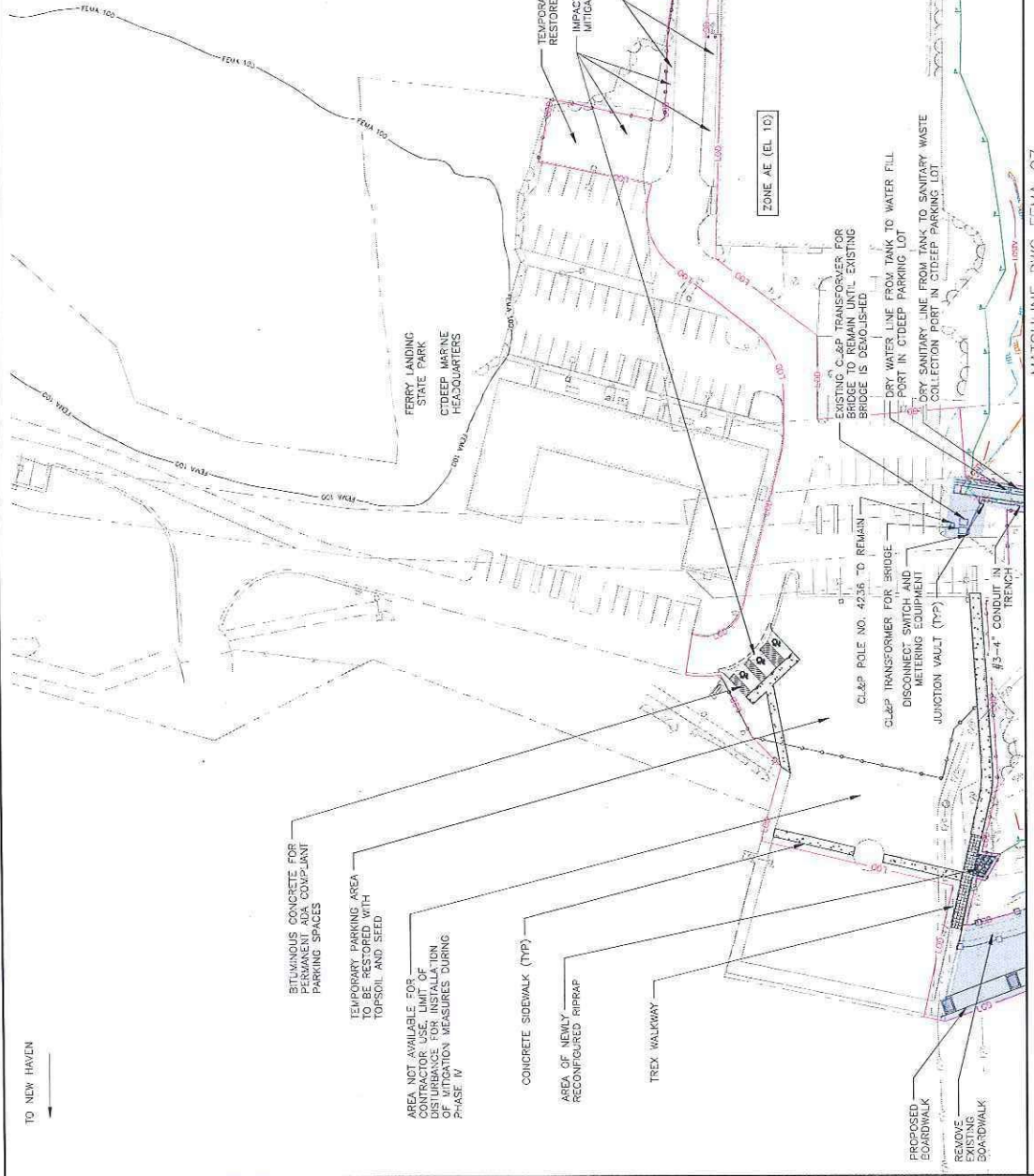
TO NEW HAVEN

TO BOY CTN



LEGEND:

- FEMA 100 — FEMA 100
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) — ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CJL) — ELEVATION 2.9'
- HIGH TIDE LINE (HTL) — ELEVATION 3.04'
- MEAN HIGH WATER (MHW) — ELEVATION 1.80'
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- AMTRAK RIGHT OF WAY (ROW)
- PERMANENT IMPACTS IN FLOODPLAIN
- TEMPORARY IMPACTS IN FLOODPLAIN



MATCHLINE DWG FEMA-07

SCALE IN FEET
SCALE P. # 40'

ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023		CONNECTICUT PROJECT CASE: 2023-000	
HARDESTY & HANOVER, LLC ENGINEERING 1561 Broadway New York, NY 10036 1/230 Market St, Suite 1020 Philadelphia, PA 19103		REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER FLOODPLAIN IMPACT PLAN	
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Office of Chief Engineer STRUCTURES National Board of Professional Examiners 320 Street Station, Philadelphia, Pennsylvania 19104		DESIGNED BY: [Blank] CHECKED BY: [Blank] DATE: 02/20/23	
NO.	REVISED	DATE	BY



CONSTRUCTION STAGING AND ENVIRONMENTAL SAFEGUARDS NOTES:

PHASE IA AND IB: INITIATE TEMPORARY ACCESS FROM OLD SAYBROOK AND FROM OLD LYME

1. MOBILIZE, CLEAR SITE, AND BEGIN SETTING UP TEMPORARY ENVIRONMENTAL AND SECURITY SAFEGUARDS. PLANT SPECIES WITH IMPACT AREAS SHALL BE RELOCATED PRIOR TO ANY WETLANDS MITIGATION PLAN REPORT FOR ADDITIONAL INFORMATION ON TRANSPANTING.
2. INITIATE OLD SAYBROOK TEMPORARY ACCESS:
3. INITIAL OLD SAYBROOK TEMPORARY ACCESS FROM OLD LYME (BOSTON POST ROAD) THROUGH BASEMENTS ALONG VEHICULAR SITE ACCESS FROM OLD LYME.
4. INITIAL TEMPORARY ENVIRONMENTAL AND SECURITY SAFEGUARDS IN ADVANCE OF SEQUENTIAL PORTIONS OF CONSTRUCTION.
5. CONSTRUCT TEMPORARY RETAINING WALL SYSTEMS AND TEMPORARY ACCESS PATH STARTING FROM EXISTING PAVED DRIVEWAY AND ADJACENT TRACK USAGE.
6. THE CONTRACTOR SHALL SUBMIT THE PLAN FOR TEMPORARY TRACK CROSSING TO THE ENGINEER FOR APPROVAL. THESE PERMITTED GROUND DISTURBANCES TO ENVIRONMENTALLY SENSITIVE AREAS SHALL BE OBTAINED BY CONTRACTOR FROM AMTRAK. INSTALL TEMPORARY TRACK CROSSING AND PLACE FLAG BY CONTRACTOR FROM AMTRAK. INITIAL TEMPORARY TRACK TRAVELABLE GRADE DOWN TO SOUTHERN TEMPORARY TRESTLE SYSTEM TO PROVIDE ACCESS TO SOUTHERN TEMPORARY TRESTLE PLATFORM AREA.
7. PLACE TEMPORARY TRESTLE CURTAINS AND PROPOSED RETAINING WALL WESTERLY TOWARDS THE SOUTHERN TEMPORARY CONSTRUCTION LAY DOWN AREA. ALL WORK TO BE DONE BEHIND SEGMANTATION CONTROL BARRIERS OR TURBIDITY CURTAINS.
8. INSTALL TURBIDITY CURTAINS AROUND AREA OF CONNECTICUT RIVER FROM BARGE WORKING TOWARDS THE SHORE MAINTAINING TURBIDITY CURTAIN AROUND AREAS OF DISTURBANCE. DREDGED MATERIAL TO BE REMOVED FROM SITE VIA BARGE.
9. INSTALL TURBIDITY CURTAINS AROUND AREA OF TEMPORARY TRESTLE WORK PLATFORM.
10. INSTALL TEMPORARY TRESTLE CURTAINS AND PROPOSED RETAINING WALL WESTERLY TOWARDS PATH PREVIOUSLY CONSTRUCTED AND PORTIONS OF THE TEMPORARY TRESTLE WORK PLATFORM COMPLETED, AND FROM BARGE LOCATED WITHIN CONNECTICUT RIVER WHERE DEPTH ACCESS ALLOWS WORK UNDER EXISTING BRIDGE TO BE PROVIDED SUCH THAT A MINIMUM OF 14' OF VERTICAL CLEARANCE IS AVAILABLE FOR VEHICULAR TRAFFIC ON THE WORK PLATFORM. THIS VERTICAL CLEARANCE MAY NOT BE MAINTAINED ONCE THE PROPOSED BRIDGE SPANS ARE INSTALLED WITH A LOWER LOW CHORD ELEVATION AND CONTRACTOR'S SEQUENCING SHOULD TAKE THIS INTO ACCOUNT FOR THE SOUTH PORTION OF THE TEMPORARY TRESTLE WORK PLATFORM. FOR THE PROPOSED SPANS THE CONTRACTOR MAY NEED TO ADJUST CONSTRUCTION SEQUENCING, LIMIT EQUIPMENT HEIGHT'S, ADJUST THE TEMPORARY TRESTLE ROADWAY ELEVATION, INITIALLY SET THE NEW SPANS STEEL TEMPORARILY HIGHER, OR OTHERWISE ALLOW FOR CONSTRUCTION EQUIPMENT.

4. INITIAL OLD LYME TEMPORARY ACCESS:
- A. CONSTRUCT 17 SHORE ROAD DIVERGENT AND INSTALL MITIGATION MEASURES AT 17 SHORE ROAD AND THE 325 ACRES PARCEL, SEE MITIGATION PLANS FOR ADDITIONAL INFORMATION.
- B. BEGIN VEHICULAR SITE ACCESS FROM ROUTE 155 (SHORE ROAD) THROUGH EASEMENT IN OLD LYME TO AMTRAK RIGHT OF WAY. ANY WORK REQUIRED TO CONSTRUCT AN ACCESS ROAD OR LAYDOWN AREA WILL BE DONE WITH TEMPORARY ENVIRONMENTAL SAFEGUARDS IN PLACE.
- C. INITIAL TEMPORARY ENVIRONMENTAL AND SECURITY SAFEGUARDS IN ADVANCE OF SEQUENTIAL PORTIONS OF CONSTRUCTION.
- D. CONSTRUCT TEMPORARY RETAINING WALL SYSTEMS AND TEMPORARY ACCESS PATH STARTING AT EAST END WORKING WESTWARD UTILIZING EXISTING TURBIDITY CURTAIN AND NEXT TO EXISTING PAVED DRIVEWAY AND ADJACENT TRACK USAGE.
- E. INITIAL TEMPORARY EASTERN ABUTMENT FOR TEMPORARY TRESTLE BRODGE ACROSS THE LIETENANT RIVER FROM PREVIOUSLY CONSTRUCTED TEMPORARY ACCESS PATH.
- F. INITIAL TEMPORARY WESTERN ABUTMENT AND ANY NECESSARY TEMPORARY TRESTLE CURTAINS AND PROPOSED RETAINING WALL WESTERLY TOWARDS THE SOUTHERN TEMPORARY CONSTRUCTION LAY DOWN AREA. ALL WORK TO BE DONE BEHIND SEGMANTATION CONTROL BARRIERS OR TURBIDITY CURTAINS.
- G. SMALL BARGE ACCESS FROM LIETENANT RIVER TO BE COORDINATED WITH AMTRAK. NAVIGATION OF LIETENANT RIVER TO MATCH OR EXCEED OPENING OF EXISTING NAVIGATION RESTRICTIONS OF EXISTING LIETENANT RIVER BRIDGE.
- H. INITIAL TEMPORARY TRESTLE BRIDGE AND PROPOSED RETAINING WALLS AND TEMPORARY ACCESS PATH FROM EAST END WORKING WESTWARD UTILIZING PATH AS CONSTRUCTION STAGING FOR NEXT PORTION OF PATH. NO DISRUPTION TO ADJACENT TRACK USAGE.
- I. INITIAL WORK-PUBLIC ACCESSION FOR TEMPORARY TRESTLE BRIDGE FROM EXISTING NORTH-SOUTH ACCESS. SIGN OVER THE EXISTING MAINTENANCE WALKWAY TO EXISTING ACCESS PATH AND STAIRS.
4. CONSTRUCT EAGLE LANDING BOARDWALK IN ADVANCE OF DECOMMISSIONING FERRY LANDING BOARDWALK.
5. INITIAL TEMPORARY TRESTLE BOARDWALK TO PUBLIC USE PRIOR TO DREDGING ACTIVITY AND INSTALLATION OF TEMPORARY TRESTLE WORK PLATFORM ON OLD LYME SHORE. INSTALL TURBIDITY CURTAINS AROUND AREA OF BOARDWALK. REMOVE PORTIONS OF FERRY PARK LANDING BOARDWALK WHICH WILL CONFLICT WITH DREDGING ACTIVITY AND TEMPORARY

1. TRESTLE WORK PLATFORMS:
- A. TURBIDITY CURTAINS AROUND AREA OF DREDGING FOR BARGE ACCESS. PERFORM DREDGING ACTIVITY ON THE EAST BANK OF THE CONNECTICUT RIVER FROM BARGE WORKING TOWARDS THE SHORE MAINTAINING TURBIDITY CURTAIN AROUND AREAS OF DISTURBANCE. DREDGED MATERIAL TO BE REMOVED FROM SITE VIA BARGE.
- B. INITIAL TEMPORARY TRESTLE FILINGS AND WORK PLATFORM INSTALLATION TO BE FROM A COMBINATION OF ACCESS FROM THE TEMPORARY ACCESS PATH PREVIOUSLY CONSTRUCTED AND PORTIONS OF THE TEMPORARY TRESTLE WORK PLATFORM, SUCH AS WELL AS FROM BARGE ACCESS FROM OLD LYME UNDER EXISTING BRIDGE TO BE PROVIDED SUCH THAT A MINIMUM OF 14' OF VERTICAL CLEARANCE IS AVAILABLE FOR VEHICULAR TRAFFIC ON THE WORK PLATFORM. THIS VERTICAL CLEARANCE MAY NOT BE MAINTAINED ONCE THE PROPOSED BRIDGE SPANS ARE INSTALLED WITH A LOWER LOW CHORD ELEVATION AND CONTRACTOR'S SEQUENCING SHOULD TAKE THIS INTO ACCOUNT FOR THE SOUTH PORTION OF THE TEMPORARY TRESTLE WORK PLATFORM. FOR THE PROPOSED SPANS THE CONTRACTOR MAY NEED TO ADJUST CONSTRUCTION SEQUENCING, LIMIT EQUIPMENT HEIGHT'S, ADJUST THE TEMPORARY TRESTLE ROADWAY ELEVATION, INITIALLY SET THE NEW SPANS STEEL TEMPORARILY HIGHER, OR OTHERWISE ALLOW FOR CONSTRUCTION EQUIPMENT.
- P. CONSTRUCTION ACCESS TO SOUTHERN IMPACTED AREA TO SOUTH OF EMBANKMENT OF THE EAST OF THE TEMPORARY TRESTLE WORK PLATFORM MAY EITHER BE A CONTINUATION OF THE TEMPORARY TRESTLE WORK PLATFORMS OR TEMPORARY WOODEN BRIS.

PHASE IC: INITIATE CONSTRUCTION ON EAST APPROACH EMBANKMENT AND WEST APPROACH EMBANKMENT

3. BEGIN APPROACH EMBANKMENT CONSTRUCTION IN OLD SAYBROOK AND OLD LYME. (SEE WEST EMBANKMENT CONSTRUCTION NOTES, SHEET GEO-04)
- A. MAINTAIN CONTINUED TEMPORARY ENVIRONMENTAL AND SECURITY SAFEGUARDS IN ADVANCE OF SEQUENTIAL PORTIONS OF CONSTRUCTION.
- B. INSTALL TEMPORARY EARTH RETAINING SYSTEM AT TOE OF PROPOSED RIPRAP PRIOR TO ANY EXCAVATION ACTIVITIES.
- C. FOR BOTH APPROACHES, PERFORM EXCAVATION ACTIVITIES FROM TEMPORARY TRESTLE WORK PLATFORMS TO EXPOSE EXISTING EARTH SURFACE. EXCAVATED MATERIAL WHICH ANTICIPATED AS UNSUITABLE FOR REUSE TO BE REMOVED FROM SITE EITHER VIA VEHICULAR ACCESS ON THE TEMPORARY ACCESS PATHS OR VIA E. SURCHANGED PORTIONS OF THE WEST EMBANKMENT SHALL NOT DISRUPT THE USE OF F. REMOVE PORTIONS OF THE TEMPORARY TRESTLE WORK PLATFORMS AS REQUIRED FOR CONTINUED CONSTRUCTION OF THE EMBANKMENTS.
- G. EXCAVATED MATERIAL FROM THE EXISTING EMBANKMENTS TO PROVIDE BENCHING BETWEEN THE EXISTING EMBANKMENT AND THE NEW EMBANKMENT SHALL BE REUSED ON-SITE.
- H. REMOVE TEMPORARY TRACK CROSSING PRIOR TO INITIATING PHASE II.

PHASE IC: TEMPORARY ENVIRONMENTAL SAFEGUARDS

1. INSTALL COFFERDAMS FOR BRIDGE WEST AND EAST ABUTMENTS; PIER 5; AND RETAINING WALLS.
2. INSTALL STEEL CASING WITH VIBRATORY HAWKERS AND DRILLED SHAFTS WITH CONCRETE CAPS FOR PIERS 1 TO 8 BEHIND TURBIDITY CURTAINS.
3. DREDGE AND APPROVED OFF-SITE LOCALON. BE REMOVED FROM SITE VIA BARGE AND DISPOSED.
4. CONSTRUCT ABUTMENT AND PIER SUBSTRUCTURES AND RETAINING WALLS ALL BEHIND COFFERDAMS. TEMPORARY EARTH RETAINING SYSTEMS, OR TURBIDITY CURTAINS AS PREVIOUSLY INSTALLED.
5. THINK TO RE-ROUTE TURBIDITY CURTAINS AROUND AND/OR IMMEDIATELY ADJACENT TO THE WORK AREA DURING EACH CONSTRUCTION ACTIVITY EXPECTED TO PRODUCE DEBRIS AND/OR SEDIMENT TO MINIMIZE CONSTRUCTION-RELATED TURBIDITY. A FULL-DEPTH TURBIDITY CURTAIN WILL BE DEPLOYED PRIOR TO DRIVING ANY SHEET PILE OR SHAFT CASINGS OR PERFORMING ANY DREDGING/EXCAVATING WORK. DUE TO STRONG TIDES AND CURRENTS, THE FABRIC FOR THE FLOW-THROUGH MEDIA SHOULD BE DEPLOYED TO THE EAST SIDE OF THE CURTAINS AND KEEP THEM IN THE SAME RELATIVE SHAPE AND LOCATION AT ALL TIDES AND RIVER FLOWS. DEBRIS NETS, TURBIDITY CURTAINS AND/OR FLOATING BOOMS WILL BE PLACED AS NECESSARY. TURBIDITY LIMITS WILL BE ESTABLISHED, AND MONITORS DEPLOYED TO MEASURE LEVELS DURING CONSTRUCTION.
6. BEHIND TURBIDITY CURTAINS, THE CONTRACTOR SHALL MAINTAIN EXISTING EAST SIDE FENDER SYSTEM.
7. CLOSE CHANNEL TO NAVIGATION. SEE SG-05 FOR SUBMARINE CABLE SUGGESTED CONSTRUCTION PHASING.

PHASE IWB: DEMOLITION ENVIRONMENTAL SAFEGUARDS

1. INSTALL TEMPORARY ENVIRONMENTAL SAFEGUARDS INCLUDING TEMPORARY TURBIDITY CURTAINS AND DEBRIS NETS FOR DEMOLITION OF APPROACH SPANS AND DEMOLISH EXISTING BRIDGE APPROACH SPANS.
2. INSTALL COFFERDAMS AROUND EACH OF THE EXISTING BRIDGE SUBSTRUCTURES AND EXISTING STONE PIERS WILL BE DEMOLISHED BEHIND COFFERDAMS. THE EXISTING TIMBER PILES COMPOSING THE PIER FOUNDATIONS AND THE TENDER SYSTEM WILL BE EITHER PULLED OR CUT OFF TWO (2) FEET BELOW THE MUDLINE. ALL BRIDGE COMPONENTS AND DEBRIS WILL BE REMOVED FROM THE CONNECTICUT RIVER. NO NEW MATERIAL SHALL BE PLACED IN THESE LOCATIONS. THE EXISTING MATERIAL FROM AROUND THE PIERS SHALL BE REDISTRIBUTED NATURALLY.

PHASE IWB6: REMOVE TEMPORARY CONSTRUCTION ACCESS AND RESTORE SITE

1. REMOVE TEMPORARY TRESTLE WORK PLATFORMS INCLUDING ALL TEMPORARY PIERS FROM EACH ABUTMENT AS THEY ARE NO LONGER NECESSARY. WALK AND CREEP PARKING LOT PERMANENT ADA PARKING SPACES, SIDEWALKS, AND TRAIL WALKWAYS AND OPEN TO PUBLIC.
2. REMOVE TEMPORARY ACCESS PATH FILL, TEMPORARY RETAINING WALL SYSTEMS, AND TEMPORARY TRESTLE BRIDGE INCLUDING TEMPORARY ABUTMENTS AND PILING AT LIETENANT RIVER IN A SIMILAR REVERSE SEQUENTIAL ORDER AS INSTALLED (MAY REQUIRE SHORT TRUCK SERVICE TO RETURN AREA DISTURBED BY TEMPORARY ACCESS PATH TO PRE-EXISTING GRADES AND SURFACING. SEE IDEAL WETLANDS MITIGATION PLAN REPORT FOR ADDITIONAL INFORMATION ON SITE RESTORATION OF TEMPORARILY DISTURBED VEGETATED WETLAND AREAS.
3. TEMPORARY CONSTRUCTION ACCESS PATHS AND SITES SHALL BE RESTORED TO ORIGINAL CONDITIONS. TEMPORARY SAFEGUARDS TO BE MAINTAINED IN APPLICABLE AREAS UNTIL STABILIZATION OF AREA AND THEN REMOVED IN FULL.
- NOTE:
1. CONTRACTOR IS RESPONSIBLE FOR ANY BORINGS NECESSARY TO FACILITATE THE DESIGN OF THE TEMPORARY RETAINING SYSTEMS FOR THE TEMPORARY ACCESS PATH'S.
2. CONTRACTOR IS RESPONSIBLE FOR ANY BORINGS NECESSARY TO FACILITATE THE DESIGN OF THE TEMPORARY WORK PLATFORMS.
3. CONTRACTOR IS RESPONSIBLE FOR ANY BORINGS NECESSARY TO FACILITATE THE DESIGN OF THE TEMPORARY TRESTLE BRIDGE FOR THE OLD LYME TEMPORARY ACCESS PATH.

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

NO.	REVISION	DATE	BY

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Office of Chief Engineer
STRUCTURES
 National Railroad Passenger Corporation
 300 Street Station, Philadelphia, Pennsylvania 19104



WSP
 HARDESTY & HANOVER, LLC
 ENGINEERING
 1001 Broadway New York, NY 10036
 1720 Market St., Suite 1920
 Philadelphia, PA 19103
 Designed By: David G. Wood, P.E. License No. 502929

SEE SHEET PH-01 FOR SUGGESTED CONSTRUCTION SEQUENCE.

PROJECT CODE: XXXXXX
 SHEET NO.: 75 OF 140
 DRAWING TITLE: REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER
 STAGING PLAN - CIVIL NOTES
 PH-02

ENVIRONMENTAL COMPLIANCE NOTES

1. ALL ON-SITE CONSTRUCTION START WILL ATTEND TRAINING BY A QUALIFIED ENVIRONMENTAL SCIENTIST AND RECEIVE A COPY OF FINAL WILDLIFE PROTECTION PLAN PRIOR TO BEGINNING WORK ON SITE.
2. A QUALIFIED ENVIRONMENTAL SCIENTIST WILL BE PRESENT WHEN WORK IS BEING CONDUCTED.
3. NOISE-GENERATING CONSTRUCTION ACTIVITIES MUST BEGIN PRIOR TO MAY 1 AND CONTINUE WITHOUT INTERRUPTION THROUGH AUGUST 31. NOISE-GENERATING CONSTRUCTION ACTIVITIES MUST NOT START PRIOR TO MAY 1, THEN A TIME OF YEAR RESTRICTION WILL APPLY, AND WORK MAY NOT BEGIN UNTIL SEPTEMBER 1 WITHOUT THE APPROVAL OF CTDEEP TO PROTECT LEAST BITTERN AND SALTWATER SHARP-SHINNED SPARROW.
4. IF BALD EAGLE NESTING ACTIVITY IS OBSERVED WITHIN 500 FT FROM CONSTRUCTION ACTIVITY, ALL CONSTRUCTION MUST STOP UNTIL NESTING OR ROOSTING ACTIVITY HAS CEASED.
5. CONSTRUCTION WITHIN Tidal Creeks of Similar Channelized Aquatic Habitat is Prohibited Between November 1 - March 31 to Protect Over-Wintering State-Listed Turtles.
6. CONSTRUCTION IN AREAS THAT FLOOD DAILY WILL BE CONDUCTED DURING LOW TIDE TO THE GREATEST EXTENT PRACTICAL FROM APRIL 1 - OCTOBER 31.
7. WORK LIMITS MUST BE ENCLOSED BY A WILDLIFE BARBER SYSTEM BETWEEN APRIL 1 - OCTOBER 31 (E.G. SILT FENCE OR ELEVATED WORK SURFACES) TO PREVENT ENTRY BY STATE-LISTED TURTLES. THE ISOLATED WORK LIMITS ARE TO BE INSPECTED DAILY BY TRAINED CONSTRUCTION WORKERS. ANY VIOLATIONS MUST BE REPORTED TO THE STATE-APPROVED WILDLIFE PROTECTOR PRIOR TO THE START OF WORK. TURTLES ARE TO BE RELOCATED IF OBSERVED IN WORK LIMITS AND REPORTED TO THE ON-SITE ENVIRONMENTAL MONITOR AND AMTRAK REPRESENTATIVE. DEFICIENCIES IN THE WILDLIFE BARRIER ARE TO BE PROMPTLY REPAIRED.
8. CONSTRUCTION AT TWO SANDY BEACHES AND ADJACENT DREDGING/EXCAVATION WILL BE INITIATED PRIOR TO JUNE 1 OR BEACHES WILL BE COVERED WITH DETRIMENT FROM JUNE 1 - JULY 15.
9. SPEED LIMIT ALONG ACCESS ROADS IS NOT TO EXCEED TO MPH.
10. REFUELING OR HANDLING OTHER BIO-TOXIC LIQUIDS IS PROHIBITED IN THE VICINITY OF LOW MARSH, RIVERBANKS, TIDAL CREEKS, OR JITCHES.
11. INACTIVE OSPREY NESTS MAY BE REMOVED FROM SEPTEMBER 1 - MARCH 31; CTDEEP IS TO BE NOTIFIED PRIOR TO REMOVING ANY OSPREY NEST.
12. OSPREY NESTING MATERIALS ALONG THE BRIDGE WILL BE REMOVED TO DISCOURAGE NESTING DURING THE MONTH OF MARCH.
13. TREE CLEARING IS PROHIBITED FROM JUNE 1 - JULY 31 TO PROTECT NORTHERN LONG-EARED SKS.
14. APPROPRIATE SOIL EROSION, SEDIMENT, AND TURBIDITY CONTROLS SHALL BE USED AND MAINTAINED DURING CONSTRUCTION, AND AREAS CAPABLE OF PRODUCING GREATER THAN MINIMAL TURBIDITY OR SEDIMENTATION WILL BE PROTECTED BY METHODS OF LOW-OR NO-FLOW TO PROTECT FISHERIES RESOURCES.
15. WORK THAT PRODUCES GREATER THAN MINIMAL TURBIDITY OR SEDIMENTATION (DONE OUTSIDE OF TURBIDITY CURTAINS OR COFFERDAMS) IS PROHIBITED FROM FEBRUARY 1 - JUNE 30 TO PROTECT FISHERIES RESOURCES.
16. TO REDUCE THE NOISE IMPACTS FROM DRIVING S-SHEET PILE AND S-SHAFT PILES, CONSTRUCTION SHALL BE LIMITED TO NIGHTTIME PERIODS DURING THE DIURNAL FISH MIGRATORY PERIOD FROM APRIL 1 - JUNE 30.
17. CONSTRUCTION OR DEVIATION OF PILES SHOULD BE LIMITED TO EITHER THE WESTERLY OR EASTERLY THREE PILES (PILES 7, 8, 9) DURING THE DIURNAL FISH S-PHASE MIGRATION PERIOD FROM APRIL 1 - JUNE 30. AT NO TIME DURING THIS PERIOD SHOULD IN-WATER CONSTRUCTION OR DEMOLITION OCCUR IN THE MIDDLE OF THE RIVER OR SIMULTANEOUSLY AT MORE THAN THREE PILES.
18. DURING THE SPRING MIGRATION PERIOD FROM APRIL 1 - JUNE 30, ARTIFICIAL LIGHTING OVER THE WATER SHALL BE LIMITED TO NAVIGATION AND ANY LIGHTING TYPICALLY REQUIRED FOR THE OPERATION OF THE BRIDGE.

19. TIMBER PILES AND STONE PIERS SHALL BE REMOVED FROM INSIDE COFFERDAMS, BELOW THE MAJUNE, PULLING AND CUTTING OF TIMBER PILES SHALL BE PROHIBITED FROM FEBRUARY 1 - JUNE 30.
20. TO MINIMIZE CONSTRUCTION RELATED TURBIDITY, FULL DEPTH TURBIDITY CURTAINS SHALL BE DEPLOYED PRIOR TO DRIVING ANY SHEET PILE OR SHAFT CASINGS. DUE TO STRONG TIDES AND CURRENTS THE FABRIC FOR CURTAINS SHOULD BE DEPLOYED THROUGH METEOROLOGICAL FORECAST MATERIAL TO CREATE A FLOW THROUGH METEOROLOGICAL FORECAST. THE PRESSURE ON THE CURTAINS AND KEEP THEM IN THE SAME RELATIVE SHAPE AND LOCATION AT ALL TIDES AND RIVER FLOWS.
21. DREDGING AND EXCAVATION OF BARGE DOCKING AREAS SHALL BE PROHIBITED FROM FEBRUARY 1 - JUNE 30.
22. HOE RAMS ARE PROHIBITED BETWEEN APRIL 1 - JUNE 30.
23. TO PREVENT DAMAGE TO BENTHIC AQUATIC ORGANISMS, ALL BARGE MOVEMENTS SHALL TAKE PLACE DURING CONDITIONS THAT MINIMIZE OR DO NOT CREATE RIVER BOTTOM DISTURBANCE. WORK DONE FROM BARGES SHOULD ONLY OCCUR WHEN SUFFICIENT TIDE TO PREVENT DROWNING.
24. LIQUID CONSTRUCTION ACTIVITIES INCLUDING DRILLING PILES AND DRIVING SHEET PILE OR SHAFT CASINGS (INCLUDING VIBRATORY MEANS) SHALL BE PROHIBITED FROM SUNSET TO SUNRISE DURING THE COMMERCIAL SHAD FISHING SEASON FROM APRIL 1 - JUNE 15.
25. AVIATION AND THE CONTRACTOR WILL MINIMIZE INTERFERENCE WITH SHAD FISHERY ACTIVITY, COORDINATE WORK EQUIPMENT LOCATIONS AND TIMING WITH LOCAL FISHERMEN.
26. THE INSTALLATION AND REMOVAL OF THE TEMPORARY TRESTLE BRIDGE CROSSING LEUTENANT RIVER SHALL BE PROHIBITED FROM MARCH 1 - JUNE 1, INCLUSIVE.
27. THE TEMPORARY TRESTLE BRIDGE CROSSING LEUTENANT RIVER SHALL ALLOW PASSAGE OF RECREATIONAL BOATS. THE CONTRACTOR SHALL COORDINATE WITH AMTRAK TO NOTIFY CTDEEP AND THE PUBLIC OF CONSTRUCTION ACTIVITIES AFFECTING THE WATERWAY INCLUDING ADVANCED NOTICE OF ANY NAVIGATION CLOSURES.
28. SUBMARINE CABLE INSTALLATION AND REMOVAL SHALL BE DONE WITHIN TURBIDITY CURTAINS AND WILL BE PROHIBITED FROM FEBRUARY 1 - JUNE 30.
29. WORK TRESTLE AND COFFERDAM CONSTRUCTION WILL BE DONE WITHIN TURBIDITY CURTAINS AND WILL BE PROHIBITED FROM FEBRUARY 1 - JUNE 30.
30. PULLING OR CUTTING PILES (INCLUDING TEMPORARY WORK TRESTLE PILES AND TURBIDITY CURTAIN SUPPORT PILES) WILL BE PROHIBITED FROM FEBRUARY 1 - JUNE 30.

ENVIRONMENTAL PERMIT PLAN DATE: MAY 2, 2023

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Produced in accordance with the National Wetlands Inventory and the National Wetlands Inventory Update. The National Wetlands Inventory is a map of the United States and its territories and possessions that shows the location and extent of wetlands and other aquatic resources. The National Wetlands Inventory is a map of the United States and its territories and possessions that shows the location and extent of wetlands and other aquatic resources.

Office of Chief Engineer
STRUCTURES

30th Street Station, Philadelphia, Pennsylvania 19104

HARDESTY & HANOVER, LLC
ENGINEERING

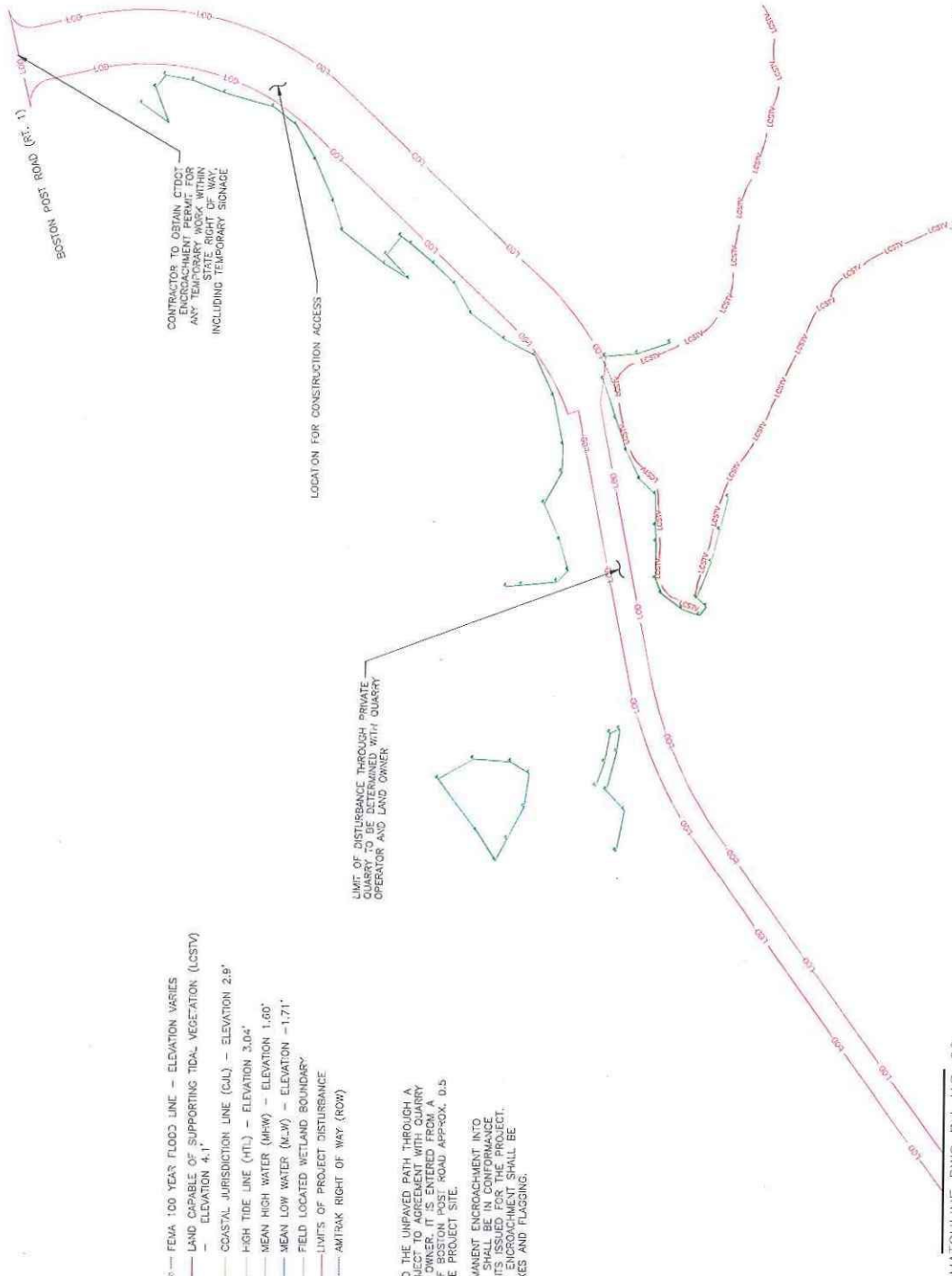
1507 Broadway, New York, NY 10036

CONNECTICUT
REPLACEMENT OF MB 106.89
OVER CONNECTICUT RIVER
ENVIRONMENTAL COMPLIANCE NOTES

Project Date: 05/02/2023
Sheet No.: 28 OF 140
PH-03

TO NEW HAVEN

TO BOSTON



LEGEND:

- FEMA 100 YEAR FLOOD LINE — ELEVATION VARIES
- LCSTV — LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV)
- CJL — COASTAL JURISDICTION LINE (CJL) — ELEVATION 2.9'
- HTL — HIGH TIDE LINE (HTL) — ELEVATION 3.04'
- MHW — MEAN HIGH WATER (MHW) — ELEVATION 1.60'
- MLW — MEAN LOW WATER (MLW) — ELEVATION -1.71'
- F — FIELD LOCATED WETLAND BOUNDARY
- L — LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)

NOTES:

1. VEHICULAR ACCESS TO THE UNPAVED PATH THROUGH A PRIVATE QUARRY, SUBJECT TO AGREEMENT WITH QUARRY OPERATOR AND LAND OWNER, IT IS ENTERED FROM A POINT WEST OF BOSTON POST ROAD APPROX. 0.5 MILES WEST FROM THE PROJECT SITE.
2. TEMPORARY AND PERMANENT ENCROACHMENT INTO REGULATED WETLANDS SHALL BE IN CONFORMANCE WITH PERMITS ISSUED FOR THE PROJECT. LIMITS OF TEMPORARY AND PERMANENT ENCROACHMENT SHALL BE DELINEATED WITH STAKES AND FLAGGING.

MATCHLINE DWG PH-IAB-02

SCALE IN FEET
SCALE 1" = 50'

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

Amtrak
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National Railroad Passenger Corporation
200 Street Station, Philadelphia, Pennsylvania 19104

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Philadelphia, PA 19102

REPLACEMENT OF MB 106.89
OVER CONNECTICUT RIVER
STAGING PLAN - PHASE IAB

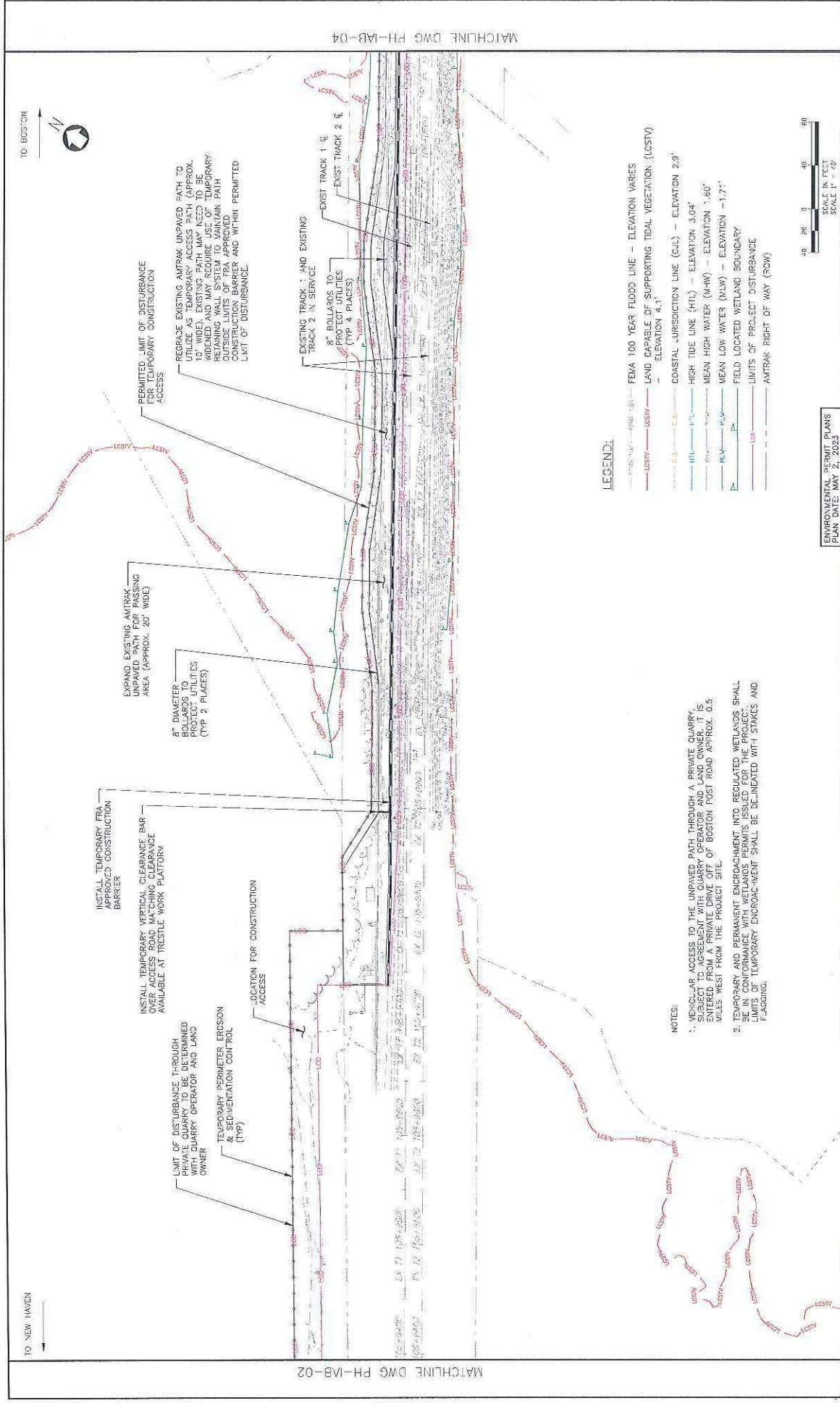
Project Code: K03300
Sheet No.: 31 OF 40
PH-IAB-01

Drawn: CS
Checked: KM
Date: 02/23/23



TO NEW HAVEN

TO BOSTON



MATCHLINE DWG PH-1AB-02

MATCHLINE DWG PH-1AB-04

LEGEND:

- FEWA 100 YEAR FLOOD LINE - ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CJL) - ELEVATION 2.9'
- HIGH TIDE LINE (HTL) - ELEVATION 3.04'
- MEAN HIGH WATER (MHW) - ELEVATION 1.90'
- MEAN LOW WATER (MLW) - ELEVATION -1.77'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)

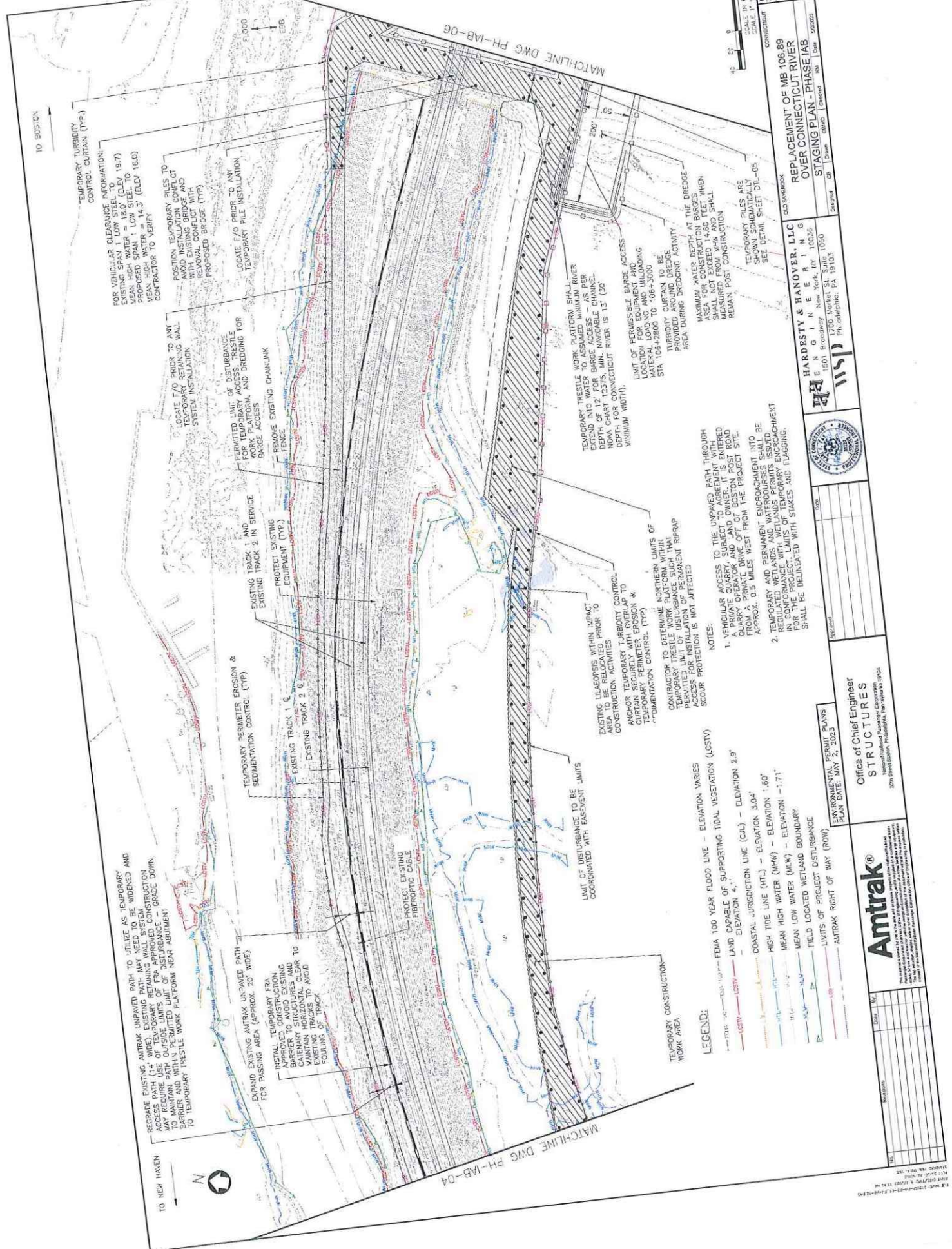
NOTES:

1. VEHICULAR ACCESS TO THE UNPAVED PATH THROUGH A PRIVATE QUARRY, SHALL BE PROVIDED BY THE QUARRY OPERATOR AND SHALL ENTERED FROM A PRIVATE DRIVE OFF OF BOSTON POST ROAD APPROX. 0.5 MILES WEST FROM THE PROJECT SITE.
2. TEMPORARY AND PERMANENT ENCROACHMENT INTO REGULATED WETLANDS SHALL BE PROHIBITED UNLESS PERMITS ISSUED FOR THE PROJECT. LIMITS OF TEMPORARY ENCROACHMENT SHALL BE DEMONSTRATED WITH STAKES AND FLAGGING.



ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

		HARDESTY & HANOVER, LLC ENGINEERING 1301 Broadway, New York, NY 10036 7600 Market Street, Philadelphia, PA 19103 PH-1AB-03	
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Office of Chief Engineer STRUCTURES <small>Amtrak Railroad Passenger Corporation 200 Street Station, Philadelphia, Pennsylvania 19104</small>		FIELD SUPERVISOR PROJECT NO. MB 106.89 SHEET NO. PH-1AB-03 DATE 05/02/23	



- NOTES:**
- VEHICULAR ACCESS TO THE UNPAVED PATH THROUGH A PRIVATE QUARTER SUBJECT TO AGREEMENT WITH QUARRY PRIVATE DRIVE OF AND WESTON POST ROAD APPROX. 0.5 MILES WEST FROM THE PROJECT SITE. TEMPORARY AND PERMANENT ENCROUSURES SHALL BE RECORDED WITH LANDS PERMITS FOR THE PROJECT. FOR THE PROJECT, LIMITS OF TEMPORARY ENCROUSUREMENT SHALL BE DELINEATED WITH STAKES AND FLAGGING.

CONTRACTOR TO DETERMINE NORTHERN LIMITS OF TEMPORARY RESTRICTION WORK PLATFORMS WITHIN PERMITTED LIMIT OF DISTURBANCE SUCH THAT ACCESS FOR INSTALLATION OF PERMANENT RIPRAP SCOUR PROTECTION IS NOT AFFECTED

TEMPORARY RESTRICTION SHALL BE MAINTAINED TO A MINIMUM RIVER DEPTH OF 12' FOR BARGE ACCESS - AS PER NOAA CHART 12338VIC RIVER IS 13' (36" MINIMUM WIDTH).
 LIMIT OF PERMISSIBLE BARGE ACCESS SHALL BE MAINTAINED TO A MINIMUM RIVER DEPTH OF 12' FOR BARGE ACCESS - AS PER NOAA CHART 12338VIC RIVER IS 13' (36" MINIMUM WIDTH).
 MATERIAL LOAD TO 106H-2000 SHALL BE MAINTAINED TO A MINIMUM RIVER DEPTH OF 12' FOR BARGE ACCESS - AS PER NOAA CHART 12338VIC RIVER IS 13' (36" MINIMUM WIDTH).
 TURBIDITY GROUND DREDGE ACTIVITY SHALL BE MAINTAINED TO A MINIMUM RIVER DEPTH OF 12' FOR BARGE ACCESS - AS PER NOAA CHART 12338VIC RIVER IS 13' (36" MINIMUM WIDTH).
 MAXIMUM WATER DEPTH AT THE DREDGE ACTIVITY SHALL NOT EXCEED 10 FEET WHEN MEASURED FROM BANK AND SHALL REMAIN POST CONSTRUCTION.
 TEMPORARY PILES ARE TO BE MAINTAINED TO A MINIMUM RIVER DEPTH OF 12' FOR BARGE ACCESS - AS PER NOAA CHART 12338VIC RIVER IS 13' (36" MINIMUM WIDTH).
 SEE DETAIL SHEET D11-05

FOR VEHICULAR CLEARANCE INFORMATION:
 EXISTING SPAN = 18.0' (ELEV. 18.7)
 MEAN HIGH WATER = 14.3' (ELEV. 16.0)
 PROPOSED SPAN = 14.3' (ELEV. 16.0)
 CONTRACTOR TO VERIFY

POSITION TEMPORARY PILES TO AVOID COLLISION WITH EXISTING BRIDGE AND TEMPORARY PILE INSTALLATION WITH PROPOSED BRIDGE (TYP.)

LOCATE F/D PRIOR TO ANY TEMPORARY PILE INSTALLATION

PERMITTED LIMIT OF DISTURBANCE FOR TEMPORARY ACCESS, RESTRICTION PLATFORM, AND DREDGING FOR BARGE ACCESS

REMOVE EXISTING CHAIN-LINK FENCE

PROTECT EXISTING EQUIPMENT (TYP.)

TEMPORARY PERIMETER EROSION & SEDIMENTATION CONTROL (TYP.)

EXISTING TRACK 1 & 2 IN SERVICE

PROTECT EXISTING EQUIPMENT (TYP.)

LOCATE F/D PRIOR TO ANY TEMPORARY RESTRICTION WALL SYSTEM INSTALLATION

EXPAND EXISTING AMTRAK UNPAVED PATH FOR PASSING AREA (APPROX. 20' WIDE)

INSTALL TEMPORARY FRA BARRIER TO AVOID ACCESS AND CAUTIONARY SIGNAGE CLEAR TO MAINTAIN TRACKS TO AVOID COLLISIONS

PROJECT EXISTING FIBEROPTIC CABLE

LIMIT OF DISTURBANCE TO BE COORDINATED WITH EASEMENT

TEMPORARY CONSTRUCTION WORK AREA

LEGEND:

- FEM 100 YEAR FLOOD LINE - ELEVATION 2.9'
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) - ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CJL) - ELEVATION 2.9'
- HIGH TIDE LINE (HTL) - ELEVATION 3.04'
- MEAN HIGH WATER (MHW) - ELEVATION -1.71'
- MEAN LOW WATER (MLW) - ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)

NO.	DATE	BY	REVISIONS

Office of Chief Engineer
STRUCTURES
 200 Park Avenue, Philadelphia, Pennsylvania 19103

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TO NEW HAVEN

TO BOSTON



LOCATE FIBER OPTIC PRIOR TO ANY TEMPORARY RETAINING WALL SYSTEM INSTALLATION WITHIN UTILITY EASEMENT

EXISTING STAIRWAY FOR PEDESTRIAN ACCESS TO TRACK, MAY REQUIRE MODIFICATIONS TO CROSS TEMPORARY ACCESS PATH (SEE NOTE 1)

EXISTING DRY FIRE PIPE TO BE REMOVED

LOCATE FIBER OPTIC PRIOR TO ANY TEMPORARY PILE INSTALLATION WITHIN UTILITY EASEMENT

PERMITTED LIMIT OF DISTURBANCE FOR TEMPORARY ACCESS PATH, PLATFORM AND DREDGING FOR BARGE ACCESS

TEMPORARY TURBIDITY CONTROL CURTAIN (TYP.)

EXISTING EAST ABUTMENT OF CONNECTICUT RIVER BRIDGE

EXIST TRACK 1 & 2

INSTALL TEMPORARY PILE PLATFORM WITH EXISTING BRIDGE AND REMOVAL CONFLICT WITH PROPOSED BRIDGE (TYP.)

EXISTING BRIDGE PIER

FOR VEHICULAR CLEARANCE INFORMATION EXISTING MEAN HIGH WATER = 18.0' (ELEV 19.7') MEAN PROPOSED SPAN TO LOW TIDE = 15.2' (ELEV 18.9')

TEMPORARY PILES ARE SHOWN SHEET DWG 105 SEE DETAIL SHEET DWG 105

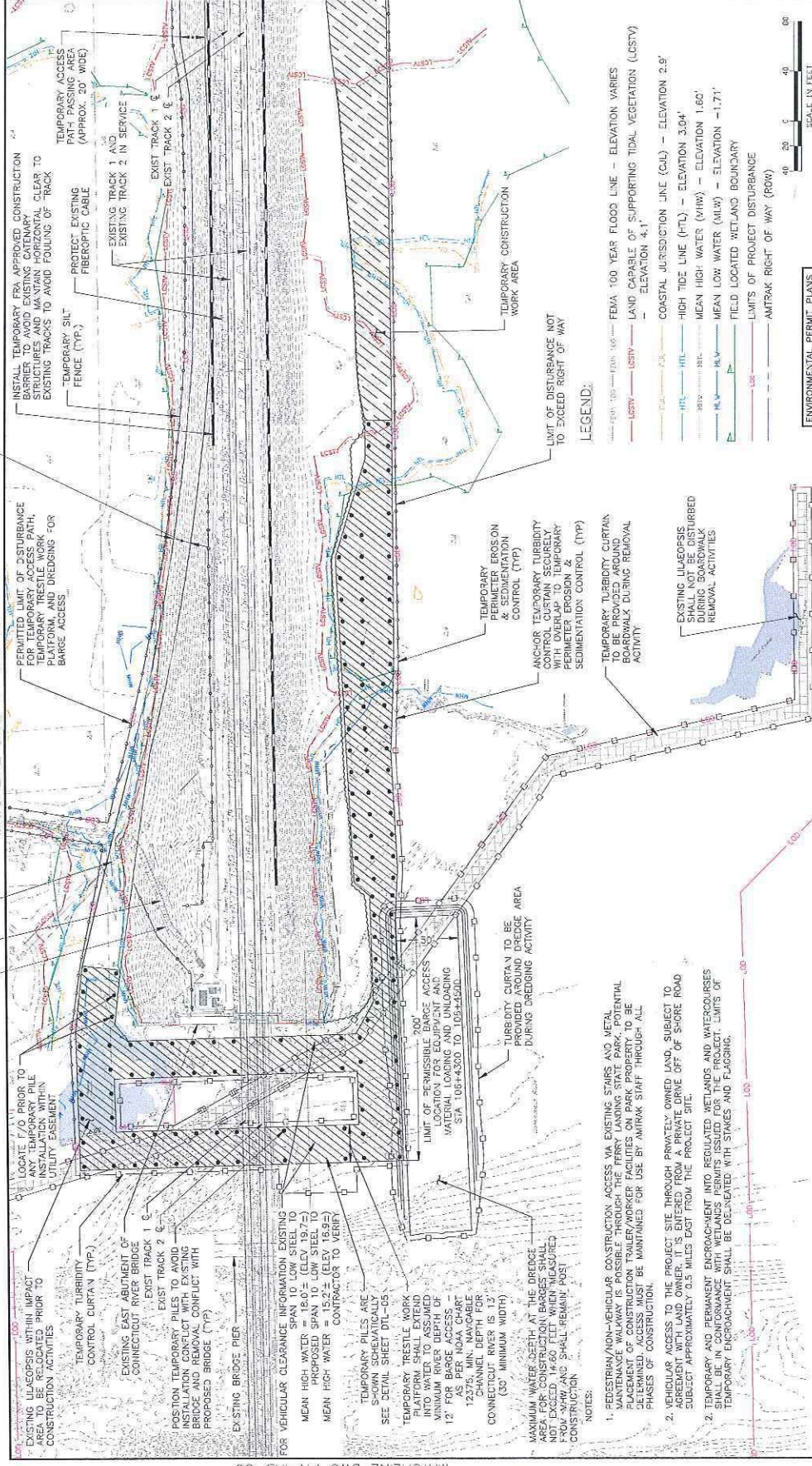
TEMPORARY TRELLIS WORK PLATFORM SHALL EXTEND MINIMUM BARGE DEPTH OF 12' FOR BARGE ACCESS - AS PER NOAA CHART 12375, MIN. NAVIGABLE CHANNEL DEPTH AT CONNECTICUT RIVER IS 12' (30' MINIMUM WIDTH)

MAXIMUM WATER DEPTH AT THE DREDGE AREA FOR CONSTRUCTION BARGES SHALL NOT EXCEED 14.60 FEET WHEN MEASURED FROM NAVY AND SHALL REMAIN POST CONSTRUCTION

NOTES:

- PEDESTRIAN/NON-VEHICULAR ACCESS VIA EXISTING STAIRS AND METAL WALKWAY IS POSSIBLE THROUGH STATE PARK. POTENTIAL PLACEMENT OF CONSTRUCTION TRAILER/WORKER FACILITIES ON PARK PROPERTY TO BE MAINTAINED FOR USE BY AMTRAK STAFF THROUGH ALL PHASES OF CONSTRUCTION.
- VEHICULAR ACCESS TO THE PROJECT SITE THROUGH PRIVATELY OWNED LAND, SUBJECT TO PERMITTING, IS APPROXIMATELY 0.5 MILES EAST FROM THE PROJECT SITE.
- TEMPORARY AND PERMANENT ENTOURAGEMENT INTO REGULATED WETLANDS AND WATERCOURSES SHALL BE DELETED WITH STAKES AND FLAGGING.

MATCHLINE DWG PH-IAB-12



MATCHLINE DWG PH-IAB-08

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

SCALE: 1" = 40'

PROJECT CODE: 1003.000	CONTRACT NO.
SHEET NO. 87 OF 110	
REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER STAGING PLAN - PHASE IAB	
DESIGNED BY: Danen CBAD	CHECKED BY: [Signature]
DATE: 05/02/2023	

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

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Geotechnical Engineering
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7709 Market Street, Suite 1020
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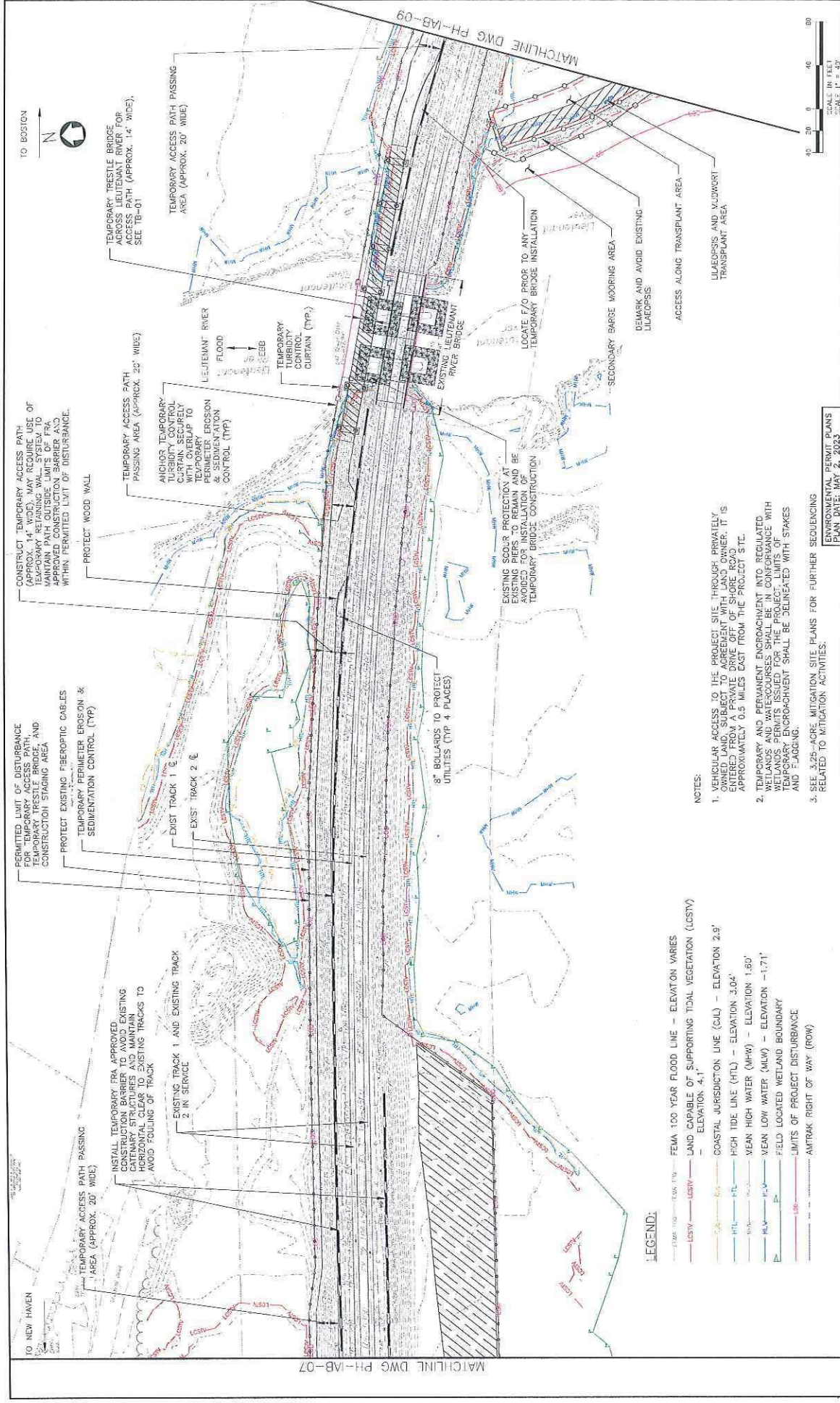
NO.	DATE	BY	REVISIONS

Office of Chief Engineer
STRUCTURES
National Railroad Transportation Corporation
300 State Street, Bridgeport, Connecticut 06608

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NO.	DATE	BY	REVISIONS



MATCHLINE DWG PH-1AB-07 TO NEW HAVEN

MATCHLINE DWG PH-1AB-09 TO BOSTON

- LEGEND:**
- FLOW 100' YEAR FLOOD LINE — ELEVATION VARIES
 - LAND CAPABLE OF SUPPORTING TOTAL VEGETATION (LCSV) — ELEVATION 4.1'
 - COASTAL JURISDICTION LINE (CJL) — ELEVATION 2.9'
 - HIGH TIDE LINE (HTL) — ELEVATION 3.04'
 - MEAN HIGH WATER (MHW) — ELEVATION 1.80'
 - MEAN LOW WATER (MLW) — ELEVATION -1.71'
 - FIELD LOCATED WETLAND BOUNDARY
 - LIMITS OF PROJECT DISTURBANCE
 - ANTRAK RIGHT OF WAY (ROW)

NOTES:

- VEHICULAR ACCESS TO THE PROJECT SITE THROUGH PRIVATELY OWNED PROPERTY SHALL BE MAINTAINED. IT IS REQUESTED THAT PRIVATE DRIVE OF SHORE ROAD APPROXIMATELY 0.5 MILES EAST FROM THE PROJECT SITE.
- TEMPORARY AND PERMANENT ENCROACHMENT INTO REGULATED WETLANDS AND WATERSHEDS SHALL BE IN CONFORMANCE WITH WETLANDS PERMITS ISSUED FOR THE PROJECT LIMITS OF TEMPORARY ENCROACHMENT SHALL BE DELINEATED WITH STAKES AND FLAGGING.
- SEE 3.25-ACRE MITIGATION SITE PLANS FOR FURTHER SEQUENCING RELATED TO MITIGATION ACTIVITIES.

<p>ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023</p>		<p>PROJECT NO. PH-1AB-08</p> <p>CONTRACTOR: HARDESTY & HANDOVER, LLC 1001 Broadway, New York, NY 10036 7200 Kettle Hill St., Suite 1000 Philadelphia, PA 19152</p>	<p>DESIGNED BY: [Signature]</p> <p>CHECKED BY: [Signature]</p> <p>DATE: 5/2/23</p>
<p>REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER STAGING PLAN - PHASE 1AB</p>			
<p>SCALE IN FEET 1" = 40'</p>		<p>PROJECT NO. PH-1AB-08</p>	

TO NEW HAVEN

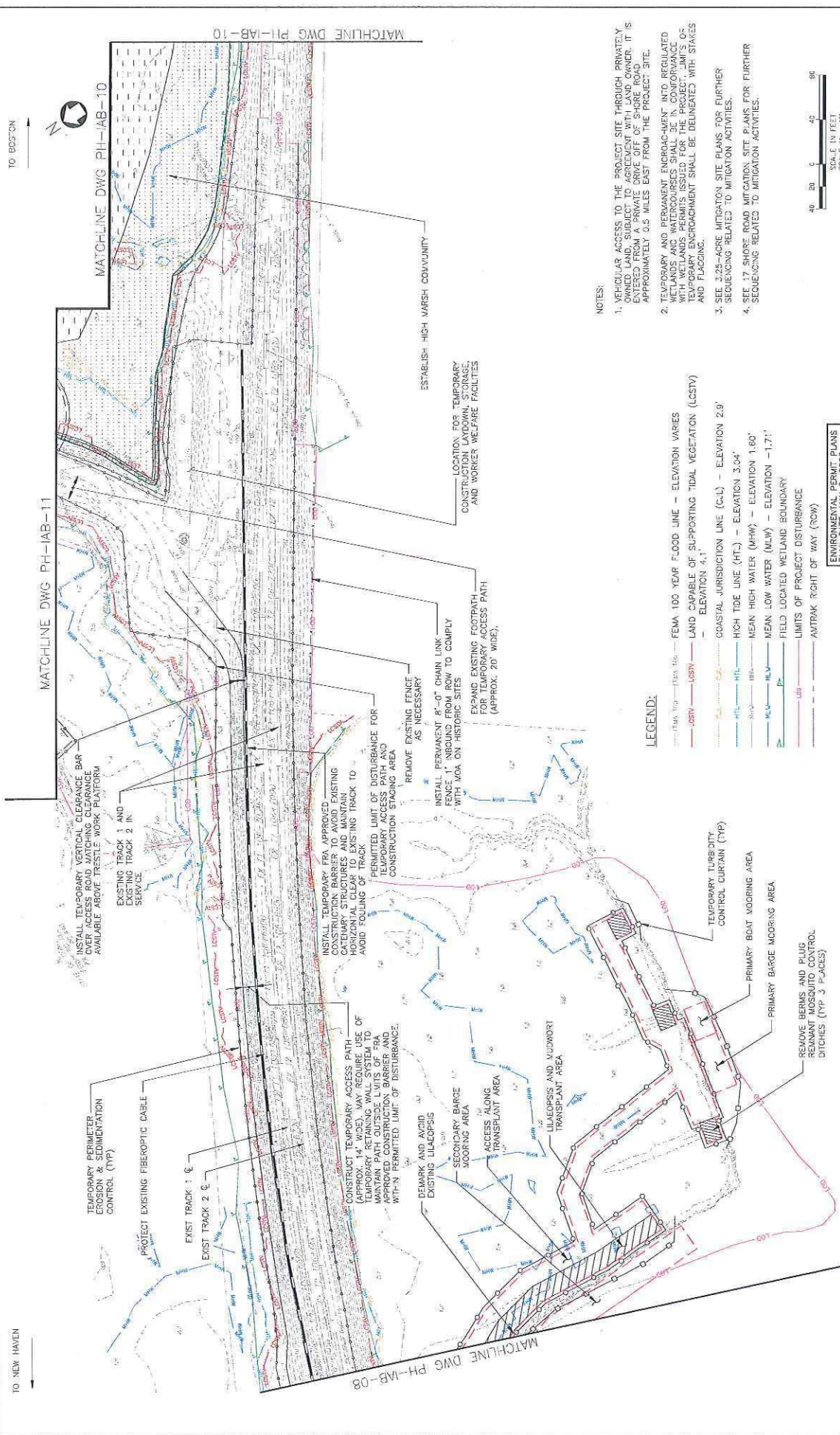
TO BOSTON

TO NEW HAVEN

TO BRISTOL

MATCHLINE DWG PH-IAB-11

MATCHLINE DWG PH-IAB-10



- NOTES:
1. VEHICULAR ACCESS TO THE PROJECT SITE THROUGH PRIVATELY OWNED LAND, SUBJECT TO AGREEMENT WITH LAND OWNER, IT IS ENTERED FROM A PRIVATE DRIVE OFF OF SHORE ROAD, APPROXIMATELY 0.5 MILES EAST FROM THE PROJECT SITE.
 2. TEMPORARY AND PERMANENT ENCROACHMENT INTO REGULATED WETLANDS AND WATERCOURSES SHALL BE IN CONFORMANCE WITH WETLANDS PERMITS ISSUED FOR THE PROJECT. LIMITS OF ENCROACHMENT SHALL BE DELINEATED WITH STAKES AND FLAGGING.
 3. SEE 3.25-ACRE MITIGATION SITE PLANS FOR FURTHER SEQUENCING RELATED TO MITIGATION ACTIVITIES.
 4. SEE 17 SHORE ROAD MITIGATION SITE PLANS FOR FURTHER SEQUENCING RELATED TO MITIGATION ACTIVITIES.

- LEGEND:
- FEMA 100 YEAR FLOOD LINE — ELEVATION VARIES
 - LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) — ELEVATION 4.1
 - COASTAL JURISDICTION LINE (C-L) — ELEVATION 2.9'
 - HIGH TIDE LINE (HTL) — ELEVATION 3.04'
 - MEAN HIGH WATER (MHW) — ELEVATION 1.60'
 - MEAN LOW WATER (MLW) — ELEVATION -1.71'
 - FIELD LOCATED WETLAND BOUNDARY
 - LIMITS OF PROJECT DISTURBANCE
 - AMTRAK RIGHT OF WAY (ROW)

		ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023		OLD SAYBROOK, CONNECTICUT REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER STAGING PLAN - PHASE IAB		SHEET NO. 58 OF 140 PH-IAB-09	
Amtrak® National Railroad Passenger Corporation 39th Street Station, Philadelphia, Pennsylvania 19104		Office of Chief Engineer STRUCTURES 39th Street Station, Philadelphia, Pennsylvania 19104		HARDESTY & HANOVER, LLC ENGINEERING 1507 Broadway, New York, NY 10036 7700 Market Street, Philadelphia, PA 19103		DESIGNED BY: [] DRAWN BY: [] CHECKED BY: [] DATE: 5/2/2023	

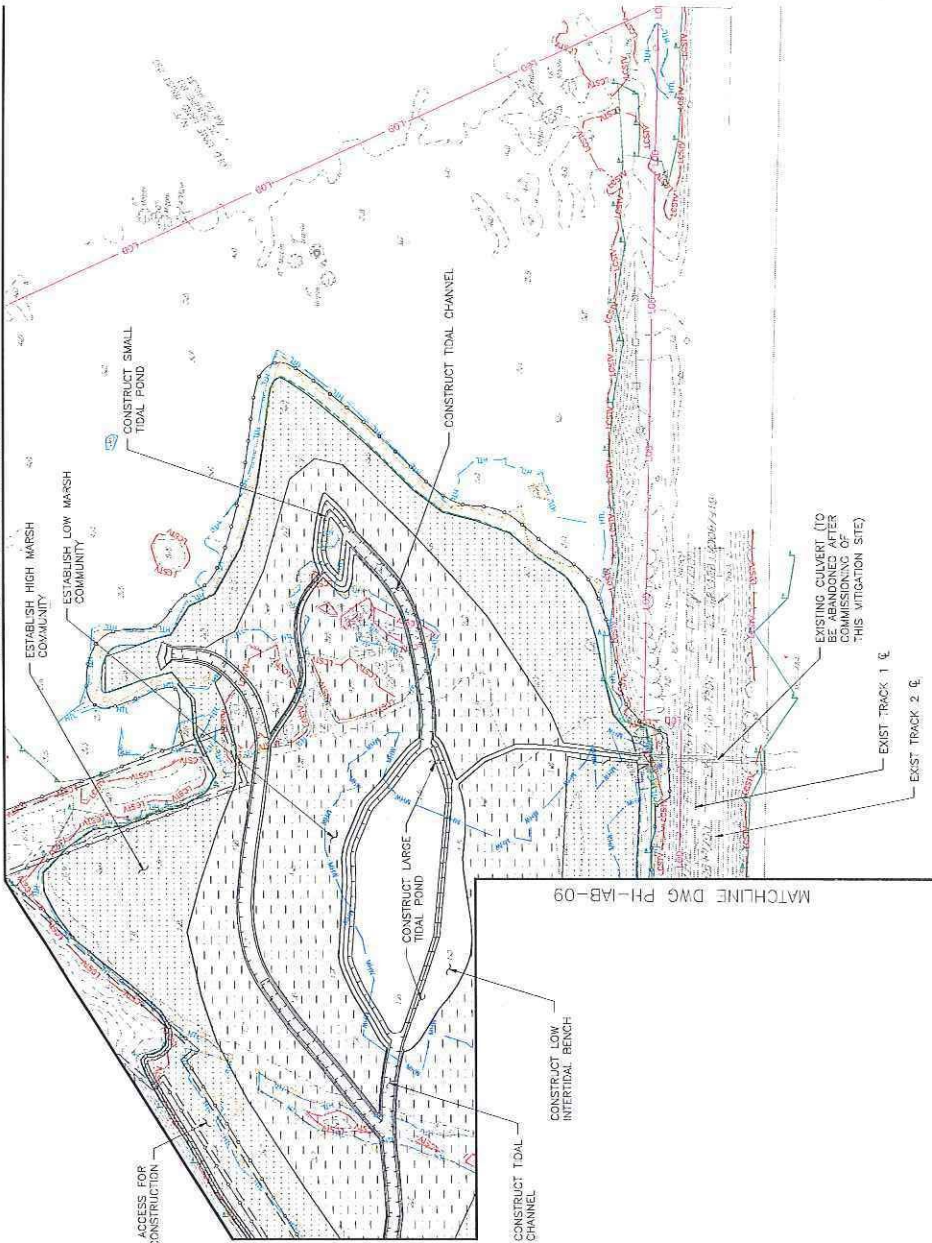
DATE: 5/2/23 11:48 AM
 PLOT DATE: 5/2/23 11:48 AM
 PLOT SCALE: 1" = 40'

TO NEW HAVEN

TO BOZON



MATCHLINE DWG PH-IAB-11



LEGEND:

- FEMA 100 YEAR FLOOD LINE — ELEVATION VARIES
- LOSTV — LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LOSTV) — ELEVATION 4.1'
- CUL — COASTAL JURISDICTION LINE (CUL) — ELEVATION 2.9'
- HTL — HIGH TIDE LINE (HTL) — ELEVATION 3.04'
- MLW — MEAN LOW WATER (MLW) — ELEVATION 1.60'
- FLD — FIELD LOCATED WETLAND BOUNDARY
- LID — LIMITS OF PROJECT DISTURBANCE
- ROW — AMTRAK RIGHT OF WAY (ROW)

NOTES:

1. VEHICULAR ACCESS TO THE PROJECT SITE THROUGH PRIVATELY OWNED LAND, SUBJECT TO AGREEMENT WITH LAND OWNER, IT IS ENTERED FROM A PRIVATE DRIVE OFF OF SHORE ROAD APPROXIMATELY 0.5 MILES EAST FROM THE PROJECT SITE.
2. TEMPORARY AND PERMANENT ENCROACHMENT INTO REGULATED WETLANDS AND WATERCOURSES SHALL BE IN CONFORMANCE WITH WETLANDS PERMITS ISSUED FOR THE PROJECT. LIMITS OF TEMPORARY ENCROACHMENT SHALL BE DELINEATED WITH STAKES AND FLAGGING.
3. SEE 17 SHORE ROAD MITIGATION SITE PLANS FOR FURTHER SEQUENCING RELATED TO MITIGATION ACTIVITIES.



ENVIRONMENTAL PERMIT PLANS
 PLAN DATE: MAY 27, 2023



PROJECT NO. _____
 DATE _____

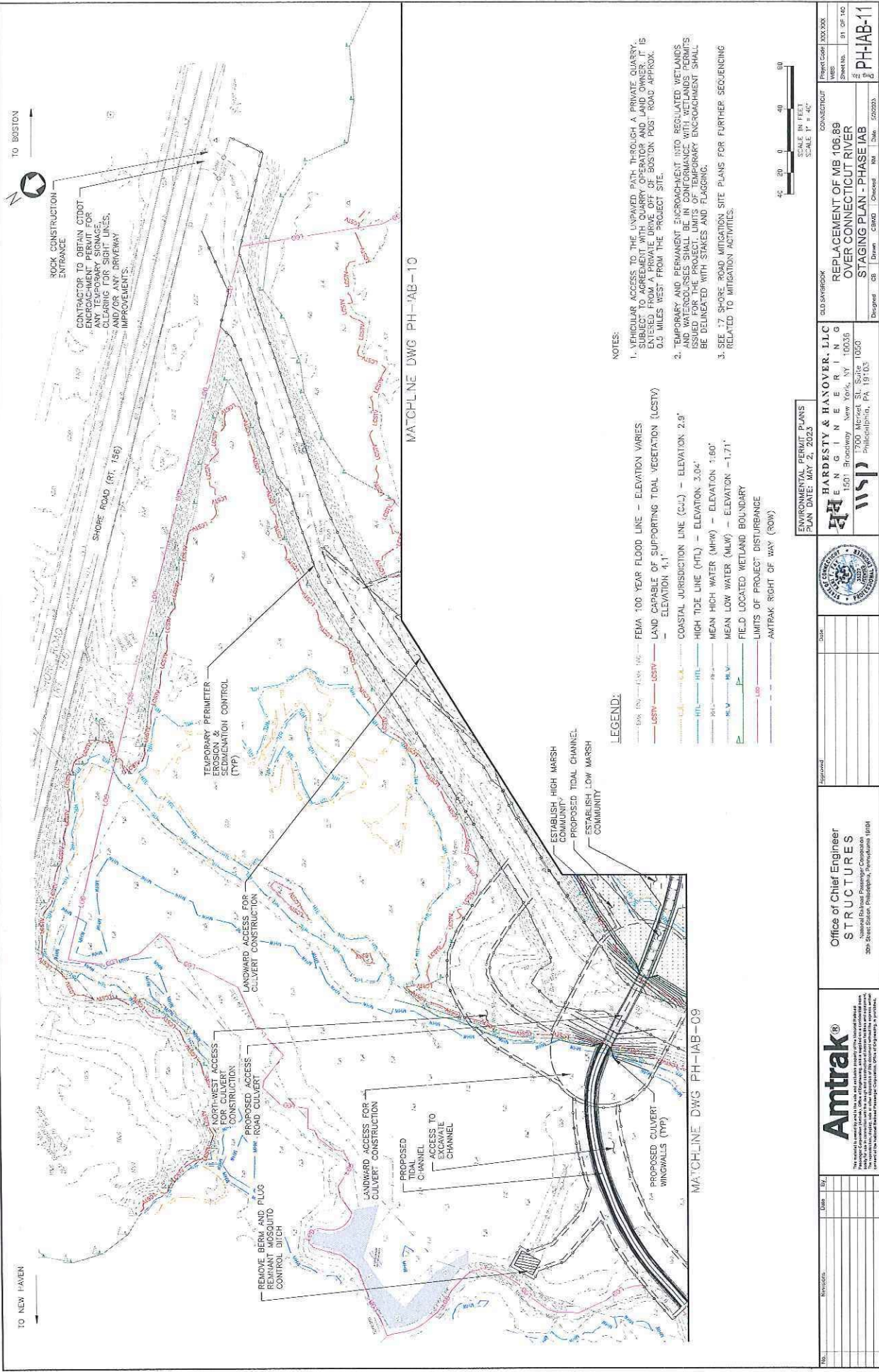
Office of Chief Engineer
STRUCTURES
 20th Street Station, Philadelphia, Pennsylvania 19104



No.	Revisions	Drawn By	Checked By

FILE NO. 21004-K-0015-1-04-00-000
 PRINTED ON 05/27/23 11:40 AM
 PLOT SCALE: 1"=40'

OLD DRAWING NO. _____
 CONSTRUCTION
 REPLACEMENT OF MB 106.89
 OVER CONNECTICUT RIVER
 STAGING PLAN - PHASE IAB
 Project Code: 20082008
 WBS: _____
 Sheet No.: 00 OF 143
 Date: 05/27/23
 PH-IAB-10
 Drawn: CS
 Checked: ML
 Date: 05/27/23



MATCHLINE DWG PH-1AB-10

MATCHLINE DWG PH-1AB-09

- LEGEND:**
- FEMA 100 YEAR FLOOD LINE - ELEVATION VARIES
 - LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) ELEVATION 4.1'
 - COASTAL JURISDICTION LINE (CJL) - ELEVATION 2.9'
 - HIGH TIDE LINE (HTL) - ELEVATION 3.04'
 - MEAN HIGH WATER (MHW) - ELEVATION 1.60'
 - MEAN LOW WATER (MLW) - ELEVATION -1.71'
 - FIELD LOCATED WETLAND BOUNDARY
 - LIMITS OF PROJECT DISTURBANCE
 - AMTRAK RIGHT OF WAY (ROW)

- NOTES:**
1. VEHICULAR ACCESS TO THE UNPAVED PATH THROUGH A PRIVATE QUARRY, SUBJECT TO AGREEMENT WITH QUARRY OPERATOR AND LAND OWNER, IT IS EXTENDED FROM A PRIVATE DRIVE OFF OF BOSTON POST ROAD APPROX. 0.5 MILES WEST FROM THE PROJECT SITE.
 2. TEMPORARY AND PERMANENT ENCROACHMENT INTO REGULATED WETLANDS AND WATERCOURSES SHALL BE IN CONFORMANCE WITH WETLANDS PERMITS. ALL PROPOSED LANDS WITH WETLANDS PERMITS SHALL BE DELINEATED WITH STAKES AND FLAGGING.
 3. SEE 17 SHORE ROAD MITIGATION SITE PLANS FOR FURTHER SEQUENCING RELATED TO MITIGATION ACTIVITIES.

	REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER STAGING PLAN - PHASE 1AB	PROJECT CODE: XXXXXX SHEETS: 91 OF 142 DRAWING NO: PH-1AB-11	PROJECT: CONNETQUIT DRAWN: CB CHECKED: BM DATE: 02/20/23
ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023			
HARDESTY & HANOVER, LLC ENGINEERING 1501 Broadway, New York, NY 10036 1700 Walnut St., Suite 1003 Philadelphia, PA 19103		Office of Chief Engineer STRUCTURES <small>National Railroad Passenger Corporation 200 Street Station, Philadelphia, Pennsylvania 19103</small>	
No. _____ Date _____ Rev. _____	Amtrak® <small>Amtrak is a registered trademark of Amtrak Corporation. All other marks and logos are the property of their respective owners. © 2023 Amtrak Corporation. All rights reserved.</small>		

TO NEW HAVEN

TO BOSTON

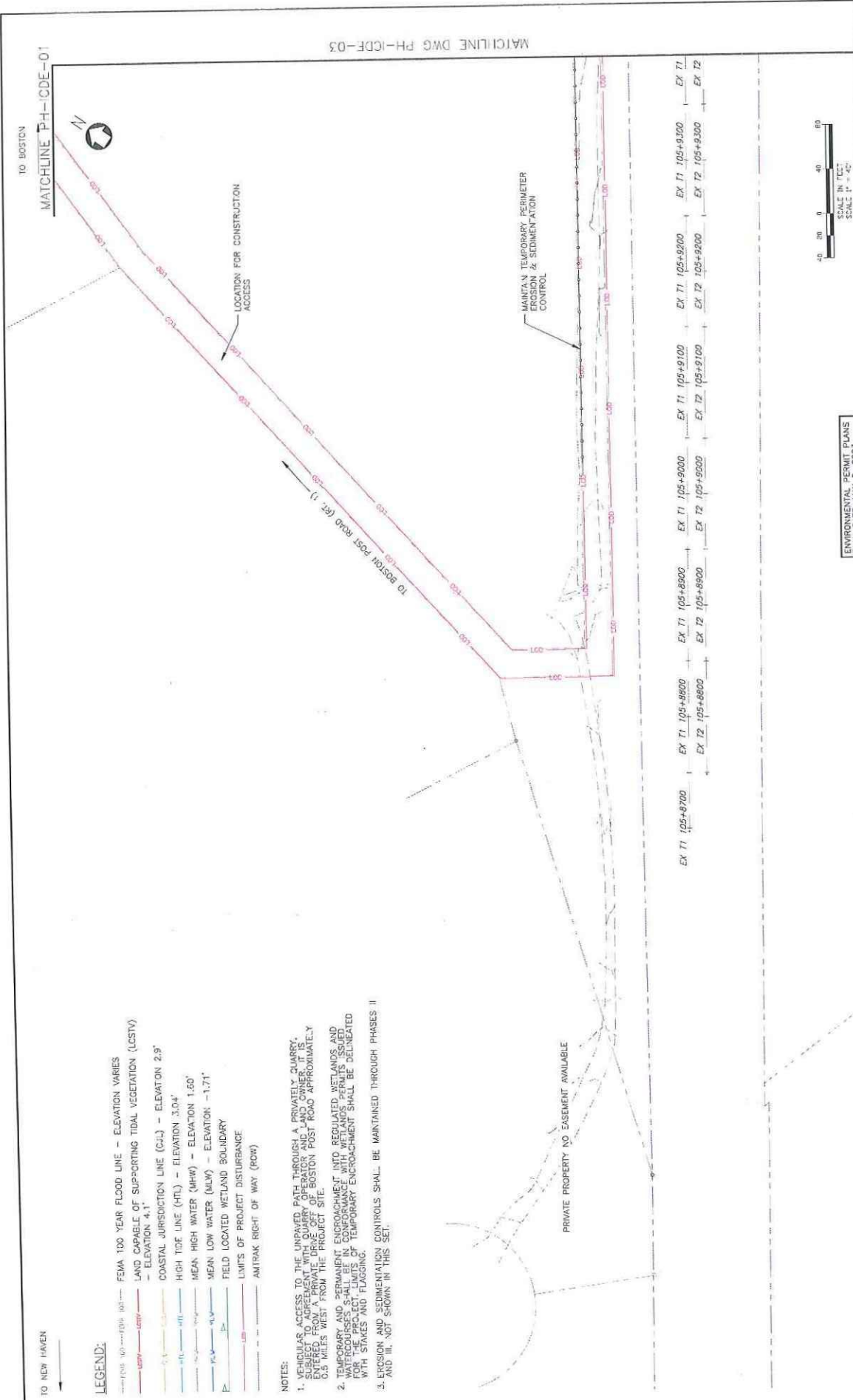
MATCHLINE PH-ICDE-01

LEGEND:

- FEM 100 YEAR FLOOD LINE - ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LSTV) - ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CJL) - ELEVATION 2.9'
- HIGH TIDE LINE (HTL) - ELEVATION 3.04'
- MEAN HIGH WATER (MHW) - ELEVATION 1.60'
- MEAN LOW WATER (MLW) - ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)

NOTES:

- VEHICULAR ACCESS TO THE UNPAVED PATH THROUGH A PRIVATELY OWNED QUARRY, ENCROACHMENT WITH QUARRY OPERATOR AND LAND OWNER, IT IS ENTERED FROM A PRIVATE DRIVE OFF OF BOSTON POST ROAD APPROXIMATELY 0.5 MILES WEST FROM THE PROJECT SITE.
- TEMPORARY AND PERMANENT ENCROACHMENT INTO REGULATED WETLANDS AND WATERCOURSES SHALL BE TEMPORARILY DELINEATED WITH STAKES AND FLAGGING.
- EROSION AND SEDIMENTATION CONTROLS SHALL BE MAINTAINED THROUGH PHASES II AND III, NOT SHOWN IN THIS SET.



MATCHLINE DWG PH-ICDE-03

EX T1 105+8700 EX T1 105+8800 EX T1 105+8900 EX T1 105+9000 EX T1 105+9100 EX T1 105+9200 EX T1 105+9300

EX T2 105+8800 EX T2 105+8900 EX T2 105+9000 EX T2 105+9100 EX T2 105+9200 EX T2 105+9300



ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2021		1000 SCHEDULE HARBESTY & HANOVER, LLC ENGINEERING 150.1 Broadway New York, NY 10036 1720 Market St. Suite 1050 Philadelphia, PA 19103		CONNECTICUT STATE OF CT PROJECT: MB 106.89 SHEET NO.: 04 OF 120 PH-ICDE-02	
				Checked: [] Drawn: [] Date: 5/2/2021	
Office of Chief Engineer STRUCTURES Maxwell Railroad Passenger Corporation 30th Street Station, Philadelphia, Pennsylvania 19104				PROJECT NO. PH-ICDE-02 SHEET NO. 04 OF 120 DATE: 5/2/2021	

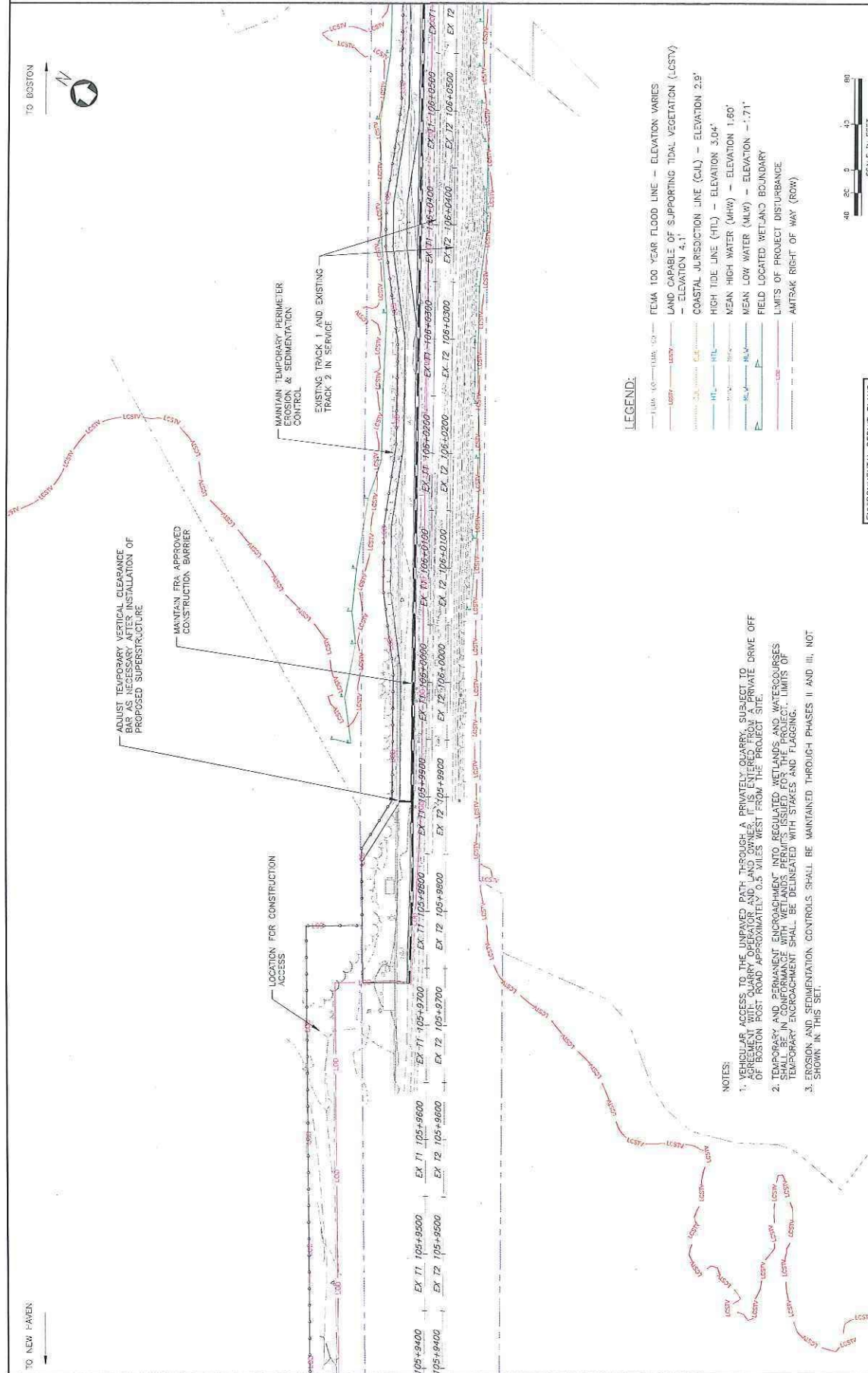
TO NEW HAVEN

TO BOSTON



MATCHLINE DWG PH-ICDE-02

MATCHLINE DWG PH-ICDE-04



LEGEND:

- FEMA 100 YEAR FLOOD LINE — ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) — ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CAL) — ELEVATION 2.9'
- HIGH TIDE LINE (HTL) — ELEVATION 3.04'
- MEAN HIGH WATER (MHW) — ELEVATION 1.60'
- MEAN LOW WATER (MLW) — ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)

NOTES:

1. VEHICULAR ACCESS TO THE UNPAVED PATH THROUGH A PRIVATE QUARRY, SUBJECT TO THE PERMITS OF THE TOWN OF BOSTON, IS LOCATED APPROXIMATELY 0.5 MILES WEST FROM THE PROJECT SITE.
2. TEMPORARY AND PERMANENT ENCROACHMENT INTO REGULATED WETLANDS AND WATERSOURCES SHALL BE IN CONFORMANCE WITH WETLANDS PERMITS ISSUED FOR THE PROJECT. LIMITS OF TEMPORARY ENCROACHMENT SHALL BE DELINEATED WITH STAKES AND FLAGGING.
3. EROSION AND SEDIMENTATION CONTROLS SHALL BE MAINTAINED THROUGH PHASES II AND III, NOT SHOWN IN THIS SET.



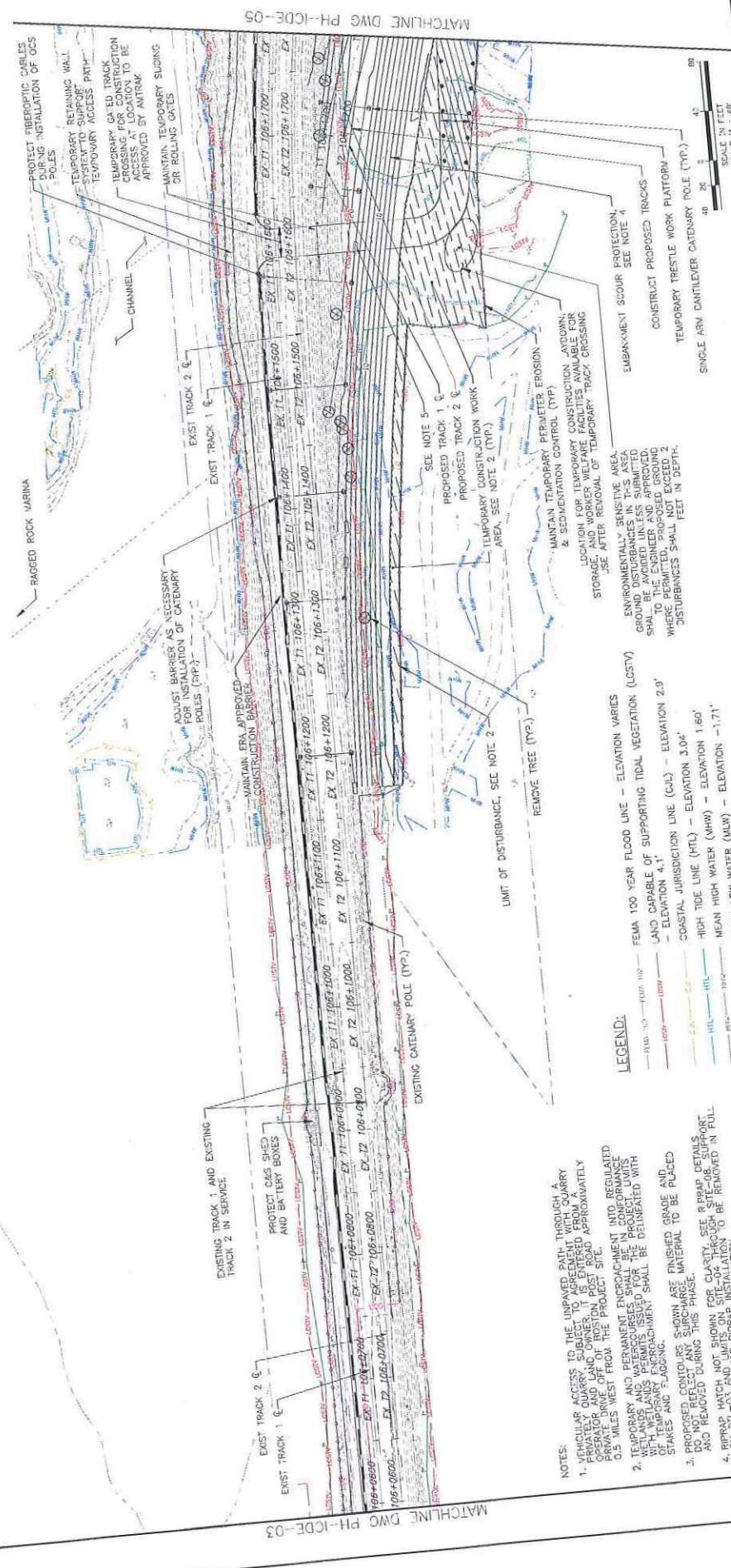
ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

<p>Amtrak <small>Amtrak is a United States Railroad Corporation, wholly owned by the U.S. Government.</small></p>	<p>Office of Chief Engineer STRUCTURES <small>National Railroad Passenger Corporation 30th Street Station, Philadelphia, Pennsylvania 19104</small></p>		<p>PROJECT: HARVEST & HANOVER, LLC 1500 Broadway, New York, NY 10036 1700 Market St., Suite 1005 Philadelphia, PA 19103</p>	<p>CLIENT: HARVEST & HANOVER, LLC 1500 Broadway, New York, NY 10036</p>	<p>DESIGNED BY: CS DRAWN BY: CS CHECKED BY: CS DATE: 02/20/23</p>
			<p>PROJECT: REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER STAGING PLAN - PHASE ICDE</p>	<p>PROJECT CODE: 3033.000 SHEET NO.: 55 OF 140 SHEET TITLE: PH-ICDE-03</p>	

TO BOSTON



TO NEW HAVEN



MATCHLINE DWG PH-ICDE-05

MATCHLINE DWG PH-ICDE-03

- NOTES:**
1. VEHICULAR ACCESS TO THE UNIMPAVED PATH THROUGH A VENEZUELA QUARRY IS DENIED. IT IS THE ROAD OPERATOR'S RESPONSIBILITY TO MAINTAIN APPROXIMATELY 0.5 MILES WEST FROM THE PROJECT SITE.
 2. TEMPORARY AND PERMANENT ENCROACHMENT INTO REGULATED WETLANDS AND WATERBODIES SHALL BE IN CONFORMANCE WITH WETLANDS ENCROACHMENT SHALL BE DELINEATED WITH STAKES AND FLAGGING.
 3. PROPOSED CONTROLS SHOWN ARE MATERIAL TO BE PLACED AND REMOVED DURING THIS PHASE.
 4. RIPRAP HATCH NOT SHOWN FOR CLARITY. SEE RIPRAP DETAILS ON DT-03 AND FOR RIPRAP INSTALLATION TO BE REMOVED IN FULL AT COMPLETION OF USE FOR EXCAVATION.
 5. TEMPORARY TRACK CROSSING TO BE REMOVED PRIOR TO INSTALLATION OF OCS STRUCTURES.
 6. SEDIMENT CONTROL AT CATCH BASINS TO BE UTILIZED TO REDUCE DURING CONSTRUCTION. CONTROLS SHALL BE MAINTAINED THROUGH PHASES II AND III, NOT SHOWN IN THIS SET.
 7. EROSION AND SEDIMENTATION CONTROLS SHALL BE MAINTAINED THROUGH PHASES II AND III, NOT SHOWN IN THIS SET.

- LEGEND:**
- FEMA 100 NEAR FLOOD LINE — ELEVATION VARIES
 - LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) — ELEVATION 2.9'
 - COASTAL JURISDICTION LINE (CJL) — ELEVATION 4.1'
 - HIGH TIDE LINE (HTL) — ELEVATION 3.04'
 - MEAN HIGH WATER (MHW) — ELEVATION 1.60'
 - MEAN LOW WATER (MLW) — ELEVATION -1.71'
 - FIELD LOCATED WETLAND BOUNDARY
 - LIMITS OF PROJECT DISTURBANCE
 - AMTRAK RIGHT OF WAY (ROW)

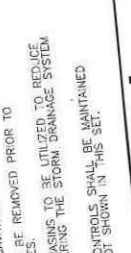
ENVIRONMENTAL PERMIT PLANS
 PLAN DATE: MAY 2, 2023
HARDESTY & HANOVER, LLC
 ENGINEERING
 1700 Locust Walk, Suite 1050
 Philadelphia, PA 19103
 (215) 261-1000
 www.hardesty.com

REPLACEMENT OF MB 106.89
 OVER CONNECTICUT RIVER
 STAGING PLAN - PHASE ICDE



NO.	DATE	DESCRIPTION

Office of Chief Engineer
STRUCTURES
 National Railroad Construction Corporation
 20th Street Station, Philadelphia, Pennsylvania 19104



NO.	DATE	DESCRIPTION

PH-ICDE-04

Sheet No. 2 of 2

Scale: 1" = 40'

CONTRACT NO. MB 106.89

DATE: MAY 2, 2023

PROJECT: REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER

PHASE: STAGING PLAN - PHASE ICDE

DESIGNED BY: [Name]

CHECKED BY: [Name]

DATE: [Date]

PROJECT LOCATION: [Location]

PROJECT NO.: [Number]

CONTRACT NO.: [Number]

SCALE: 1" = 40'

DATE: [Date]

PROJECT: [Project Name]

CONTRACT NO.: [Contract No.]

DATE: [Date]

PROJECT LOCATION: [Location]

PROJECT NO.: [Project No.]

CONTRACT NO.: [Contract No.]

DATE: [Date]

PROJECT: [Project Name]

CONTRACT NO.: [Contract No.]

DATE: [Date]

PROJECT LOCATION: [Location]

PROJECT NO.: [Project No.]

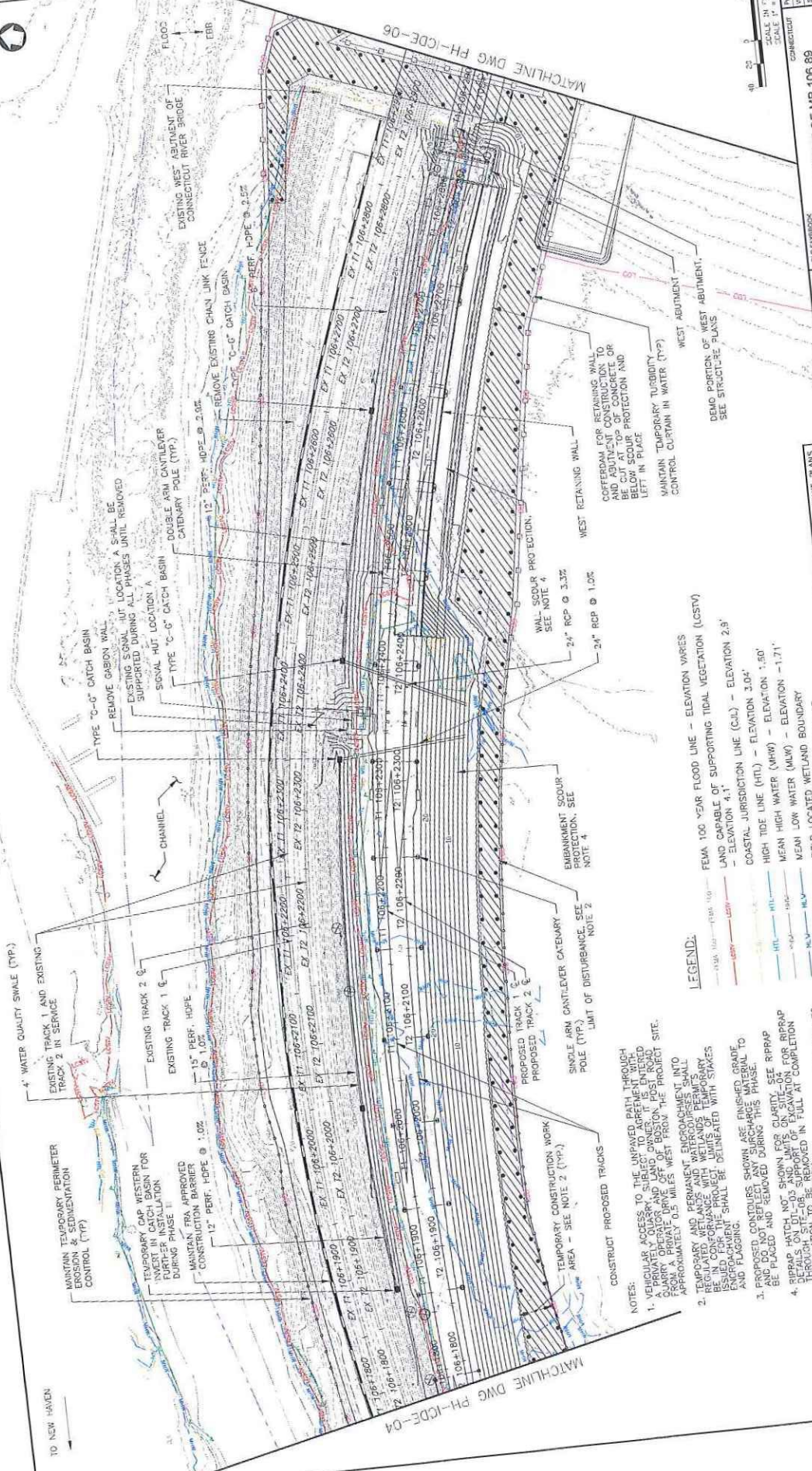
CONTRACT NO.: [Contract No.]

DATE: [Date]

TO BOSTON



TO NEW HAVEN



PH-ICDE-05
 Project Code: 300-200
 Sheet No. 17 OF 17
 Date: 07/20/23

CONTRACTOR
 PROJECT
 REPLACEMENT OF MB 106.89
 OVER CONNECTICUT RIVER
 STAGING PLAN - PHASE I (CDE)

OLD SITE/WORK
 HARDESTY & HANOVER, LLC
 ENGINEERING
 501 Broadway Street, Suite 1000
 Philadelphia, PA 19103
 Date: 07/20/23
 Plan Date: May 2, 2023



- LEGEND:**
- 1.5% 100-YEAR FLOOD LINE - ELEVATION 1.50'
 - 1.5% 100-YEAR FLOOD LINE (LSTV)
 - LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LSTV) - ELEVATION 2.5'
 - COASTAL JURISDICTION LINE (C.J.L.) - ELEVATION 3.04'
 - HIGH TIDE LINE (HTL) - ELEVATION 1.50'
 - MEAN HIGH WATER (MHW) - ELEVATION -1.71'
 - MEAN LOW WATER (MLW) - ELEVATION -1.71'
 - FIELD LOCATED WETLAND BOUNDARY
 - LIMITS OF PROJECT DISTURBANCE
 - AMTRAK RIGHT OF WAY (ROW)

- NOTES:**
1. VEHICULAR ACCESS TO THE UNPAVED PATH THROUGH QUARRY OPERATIONS SHALL BE TO AGREEMENT WITH THE LAND OWNER. THE UNPAVED PATH SHALL BE CARRIED OPERATED OFF OF EROSION FROM A PREVIOUSLY EXISTING ROAD APPROXIMATELY 0.5 MILES WEST FROM THE PROJECT SITE.
 2. TEMPORARY AND PERMANENT ENCROACHMENTS INTO TEMPORARY WETLANDS AND WETLANDS TEMPORARILY BEING CONFORMED TO LIMITS OF WITH STAKES ISSUED FOR THE PROJECT SHALL BE DELINEATED WITH STAKES AND FLAGGING.
 3. PROPOSED CONTOURS SHOWN ARE FINISHED GRADE AND DO NOT REFLECT SURCHARGE MATERIAL TO BE PLACED AND REMOVED DURING THIS PHASE.
 4. RIPRAP HATCH NOT SHOWN FOR CLARITY. SEE RIPRAP DETAILS ON PL-08. SUPPORT OF ELEVATION FOR RIPRAP SHALL BE TO BE REMOVED IN FULL AT COMPLETION OF USE FOR EXCAVATION.
 5. SEDIMENT CONTROL AT CATCH BASINS TO BE UTILIZED TO REDUCE THE AMOUNT OF SEDIMENT ENTERING THE STORM DRAINAGE SYSTEM DURING CONSTRUCTION SHALL BE MAINTAINED THROUGH PHASES 1 AND 2, NOT SHOWN IN THIS SET.
 6. EROSION AND SEDIMENTATION CONTROLS SHALL BE MAINTAINED THROUGH PHASES 1 AND 2, NOT SHOWN IN THIS SET.

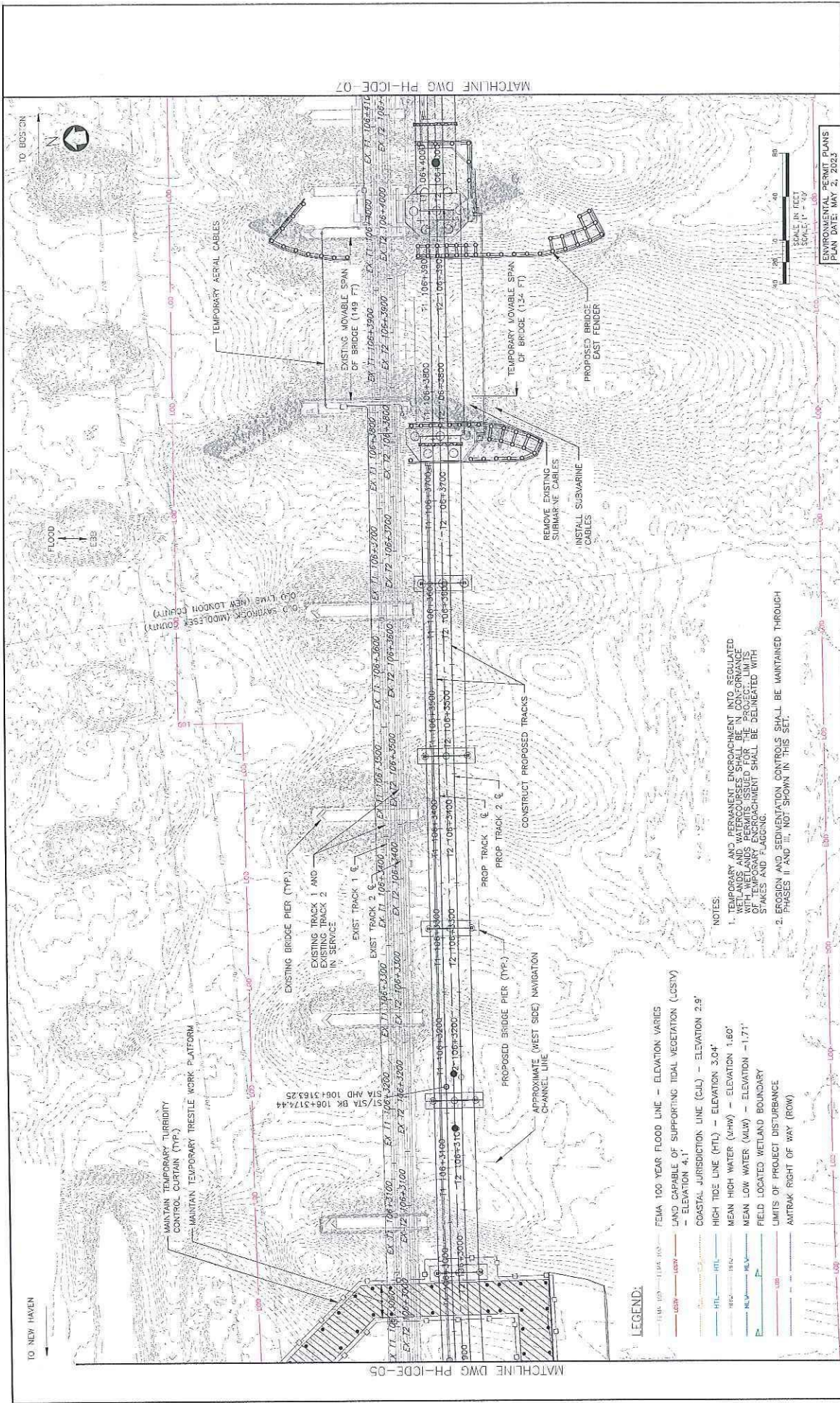
Office of Chief Engineer
STRUCTURES
 300 Street Station, Philadelphia, Pennsylvania 19106



Amtrak
 National Railroad Passenger Corporation
 1000 Market Street, Philadelphia, PA 19102
 PHILADELPHIA OFFICE

NO.	DATE	BY	REVISION

File Path: I:\2023-2024\PH-ICDE-05.dwg
 Date: 07/20/23 10:12 AM
 User: JHARRIS



LEGEND:

- 100' FLOOD LINE - ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSV) - ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CJL) - ELEVATION 2.8'
- HIGH TIDE LINE (HTL) - ELEVATION 3.04'
- MEAN HIGH WATER (MHW) - ELEVATION 1.60'
- MEAN LOW WATER (MLW) - ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)

NOTES:

- TEMPORARY AND PERMANENT ENCROACHMENT INTO REGULATED WETLANDS AND WATERCOURSES SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF THE ENCROACHMENT PERMIT. ENCROACHMENT SHALL BE DELINEATED WITH STAKES AND FLAGGING.
- EROSION AND SEDIMENTATION CONTROLS SHALL BE MAINTAINED THROUGH PHASES II AND III, NOT SHOWN IN THIS SET.

ENVIRONMENTAL PERMIT PLANS
 PLAN DATE: MAY 2, 2023

REPLACEMENT OF MB 106 88 OVER CONNECTICUT RIVER
STAGING PLAN - PHASE ICDE

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Office of Chief Engineer
STRUCTURES
 National Railroad Passenger Corporation
 300 North Station, Philadelphia, Pennsylvania 19103

HARDISTY & HANOVER, LLC
 6 N E 15th St, Suite 1001B
 530 Broadway, Newark, NJ 07102
 Philadelphia, PA 19103

WSP
 300 North Station, Philadelphia, Pennsylvania 19103

DESIGNED BY: _____
CHECKED BY: _____
DATE: _____

PROJECT CODE: 1006.000
WSP No.: 98 CF 142
PH-ICDE-06

Drawn: GEMD
Checked: NM
Date: 07/20/23

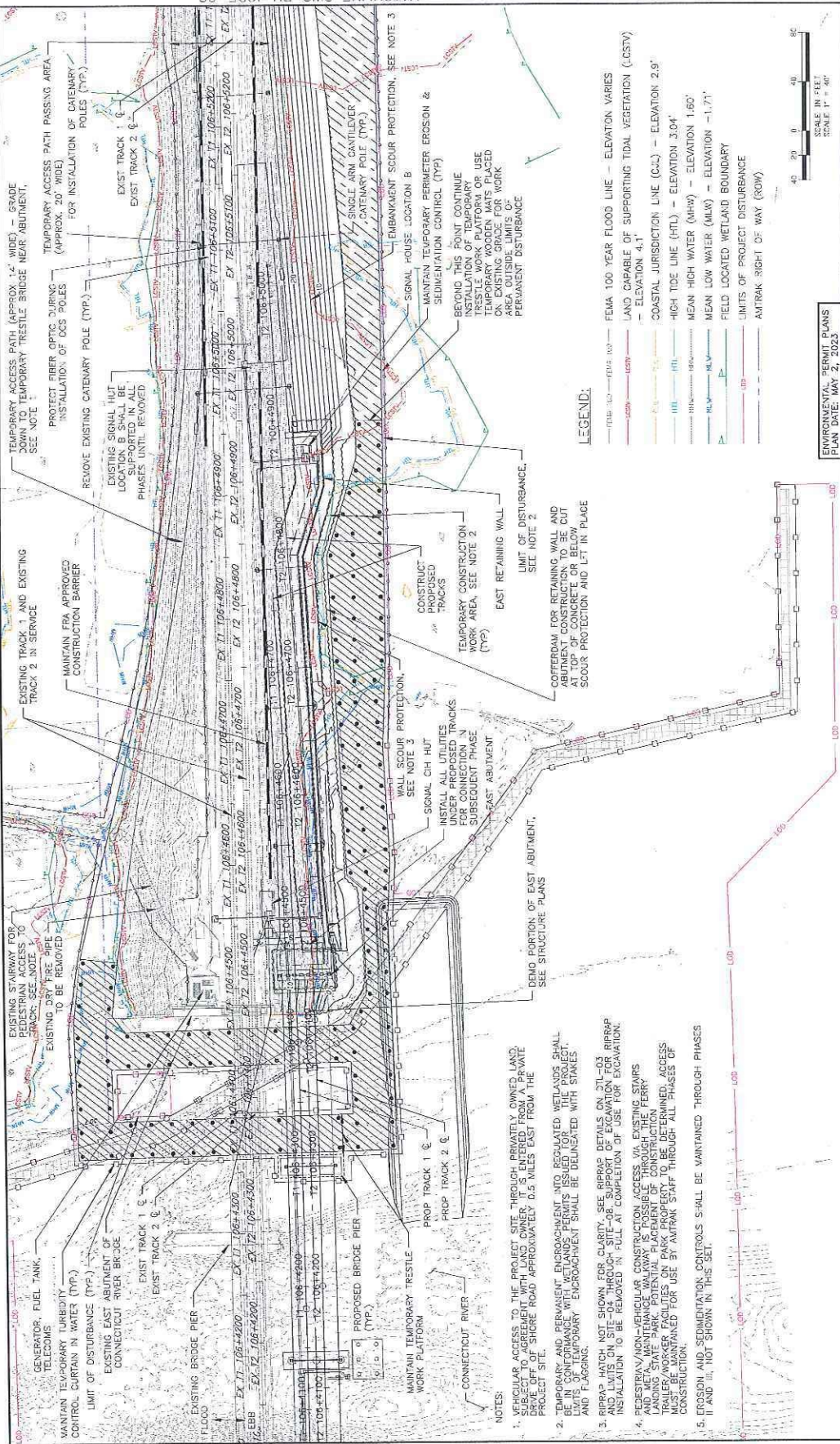
TO NEW HAVEN

TO BOOSTON



MATCHLINE DWG PH-ICDE-12

MATCHLINE DWG PH-ICDE-06



- NOTES:
- VEHICULAR ACCESS TO THE PROJECT SITE THROUGH PRIVATELY OWNED LANDS SHALL BE IN CONFORMANCE WITH WETLANDS REGULATIONS AND PERMITS FROM THE STATE AND FEDERAL AGENCIES. EMBANKMENT SHALL BE REINFORCED WITH STAKES.
 - TEMPORARY AND PERMANENT ENCRoACHMENT INTO REGULATED WETLANDS SHALL BE IN CONFORMANCE WITH WETLANDS REGULATIONS AND PERMITS FROM THE STATE AND FEDERAL AGENCIES.
 - RIPRAP HATCH NOT SHOWN FOR CLARITY. SEE RIPRAP DETAILS ON 211-03 AND LIMITS ON SITE 04 THROUGH SITE 06. SUPPORT OF EXCAVATION FOR RIPRAP INSTALLATION TO BE REMOVED IN FULL AT COMPLETION OF USE FOR EXCAVATION.
 - PEDESTRIAN/NON-VEHICULAR CONSTRUCTION ACCESS VIA EXISTING STAIRS AND MET WALKWAY TO MAINTAIN TRESTLE WORK PLATFORMS FOR CONSTRUCTION. TRAILER/WORKER FACILITIES ON PARK PROPERTY TO BE DETERMINED. ACCESS MUST BE MAINTAINED FOR USE BY AMTRAK STAFF THROUGH ALL PHASES OF CONSTRUCTION.
 - EROSION AND SEDIMENTATION CONTROLS SHALL BE MAINTAINED THROUGH PHASES II AND III, NOT SHOWN IN THIS SET.

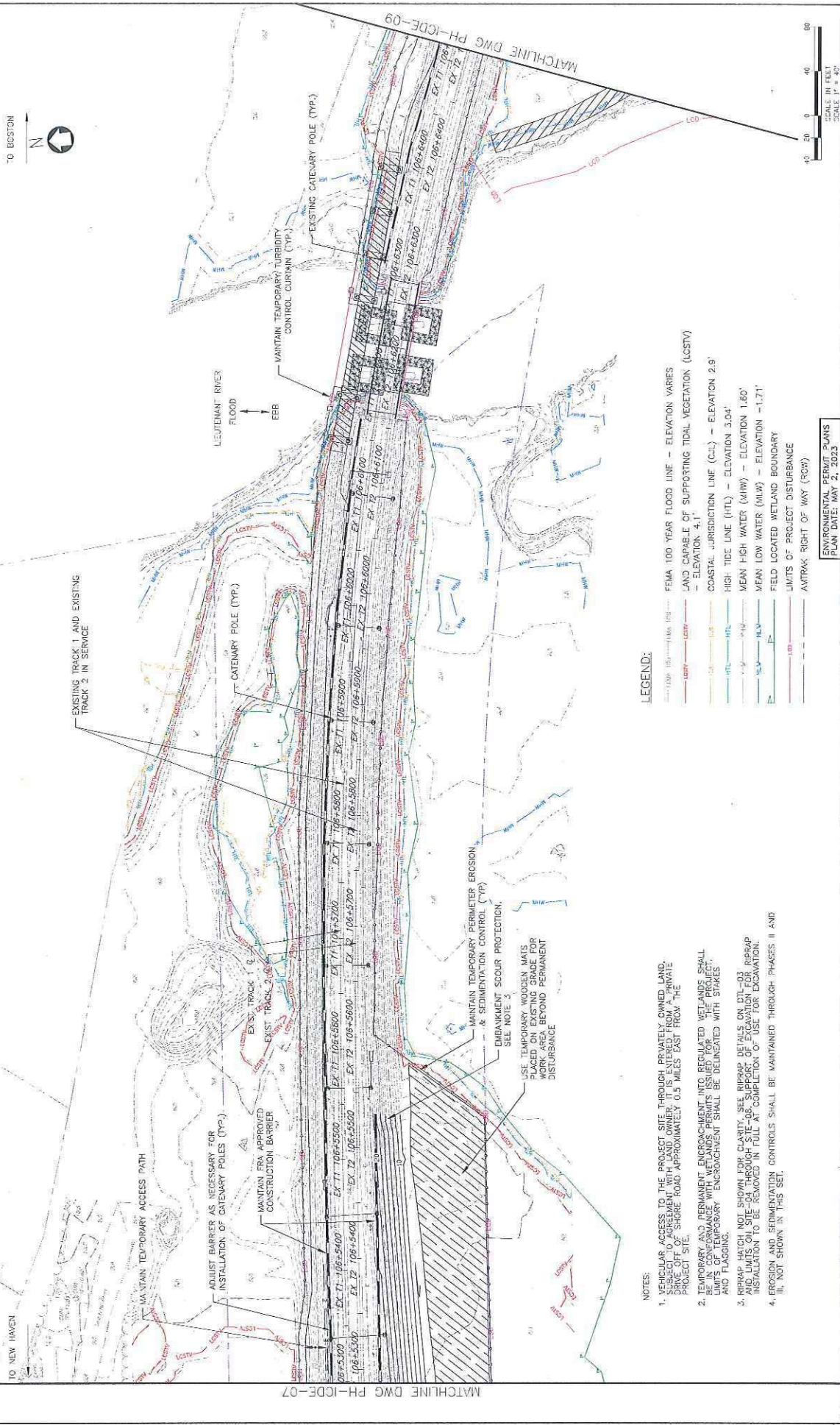
LEGEND:

- FEMA 100 YEAR FLOOD LINE - ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) - ELEVATION 4.1
- COASTAL JURISDICTION LINE (CAL) - ELEVATION 2.9
- HIGH TIDE LINE (HTL) - ELEVATION 3.04
- MEAN HIGH WATER (MHW) - ELEVATION 1.60
- MEAN LOW WATER (MLW) - ELEVATION -1.71
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)



ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

		HARDISTY & HANOVER, LLC ENGINEERING 103 Broadway, New York, NY 10006 Philadelphia, PA 19103		Project Code: PH-ICDE-07 WBS: 96 OF 140 Sheet No. 4 PH-ICDE-07
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- LEGEND:**
- FEMA 100 YEAR FLOOD LINE - ELEVATION VARIES
 - LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV)
 - ELEVATION 4.1'
 - COASTAL JURISDICTION LINE (CJL) - ELEVATION 2.9'
 - HIGH TIDE LINE (HTL) - ELEVATION 3.04'
 - MEAN HIGH WATER (MHW) - ELEVATION 1.60'
 - MEAN LOW WATER (MLW) - ELEVATION -1.71'
 - FIELD LOCATED WETLAND BOUNDARY
 - LIMITS OF PROJECT DISTURBANCE
 - AMTRAK RIGHT OF WAY (ROW)

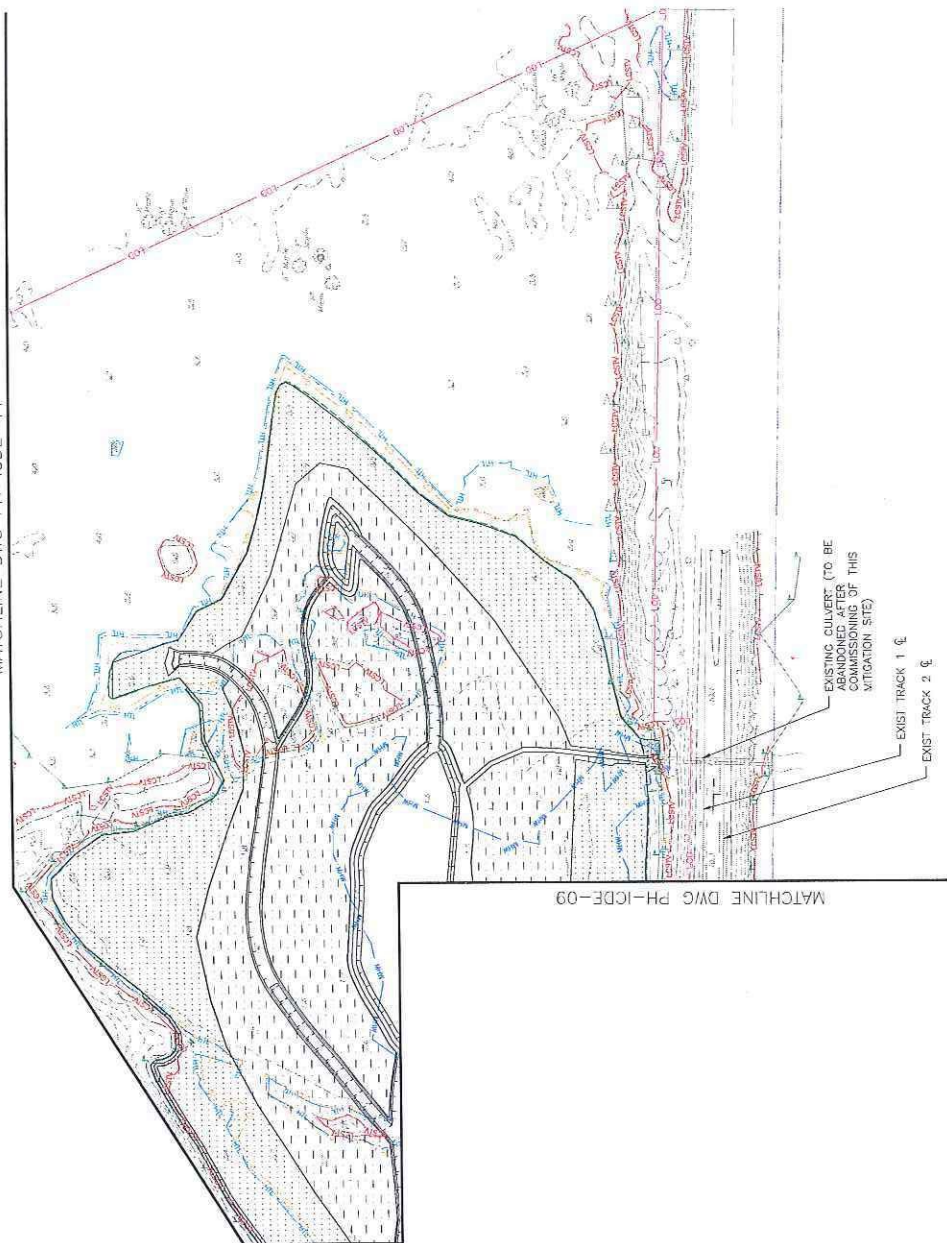
- NOTES:**
1. VEHICULAR ACCESS TO THE PROJECT SITE THROUGH PRIVATELY OWNED LAND, SUBJECT TO AGREEMENT WITH LAND OWNER, IS ENTERED FROM A PRIVATE DRIVE OFF OF SHORE ROAD APPROXIMATELY 0.5 MILES EAST FROM THE PROJECT SITE.
 2. TEMPORARY AND PERMANENT ENCROACHMENT INTO REGULATED WETLANDS SHALL BE LIMITED TO THE LIMITS OF TEMPORARY ENCROACHMENT WITH STAKES AND FLAGGING.
 3. RIPRAP HATCH NOT SHOWN FOR CLARITY. SEE RIPRAP DETAILS ON DTL-03 AND LIMITS ON SITE-04 THROUGH SITE-06. SUPPORT OF EXCAVATION FOR RIPRAP INSTALLATION TO BE REMOVED IN FULL AT COMPLETION OF USE FOR EXCAVATION.
 4. EROSION AND SEDIMENTATION CONTROLS SHALL BE MAINTAINED THROUGH PHASES II AND III, NOT SHOWN IN THIS SET.

	REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER STAGING PLAN - PHASE ICDE	PROJECT NAME: MB 106.89 VENDOR: PH-ICDE-08 SHEET NO. 100 OF 140 DATE: 11/11/2023	DESIGNED BY: [Blank] DRAWN BY: [Blank] CHECKED BY: [Blank] DATE: 11/11/2023
	HARDESTY & HANOVER, LLC 1501 Broadway, New York, NY 10036 wsp 1780 Vineyard St., Suite 10250 Philadelphia, PA 19103	ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023	
	Office of Chief Engineer STRUCTURES 20th Street Station, Philadelphia, Pennsylvania 19104		
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TO NEW HAVEN

TO BOSTON

MATCHLINE DWG PH-ICDE-11



LEGEND:

- FEMA 100 YEAR FLOOD LINE — ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LUSTV) — ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CAL) — ELEVATION 2.9'
- HIGH TIDE LINE (HTL) — ELEVATION 2.04'
- MEAN HIGH WATER (MHW) — ELEVATION 1.60'
- MEAN LOW WATER (MLW) — ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)

NOTES:

1. VEHICULAR ACCESS TO THE PROJECT SITE THROUGH PRIVATELY OWNED LAND SUBJECT TO AGREEMENT WITH LAND OWNER HAS ENTERED FROM A PRIVATE DRIVE OFF OF SHORE ROAD APPROXIMATELY 0.5 MILES EAST FROM THE PROJECT SITE.
2. TEMPORARY AND PERMANENT ENCROACHMENT INTO REGULATED WETLANDS AND WATERCOURSES SHALL BE IN CONFORMANCE WITH WETLANDS PERMITS ISSUED FOR THE PROJECT. LIMITS OF TEMPORARY ENCROACHMENT SHALL BE DELINEATED WITH STAKES AND FLAGGING.
3. EROSION AND SEDIMENTATION CONTROLS SHALL BE MAINTAINED THROUGH PHASES II AND III, NOT SHOWN IN THIS SET.



ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023



**Office of Chief Engineer
STRUCTURES**
National Railroad Passenger Corporation
30th Street Station, Philadelphia, Pennsylvania 19104

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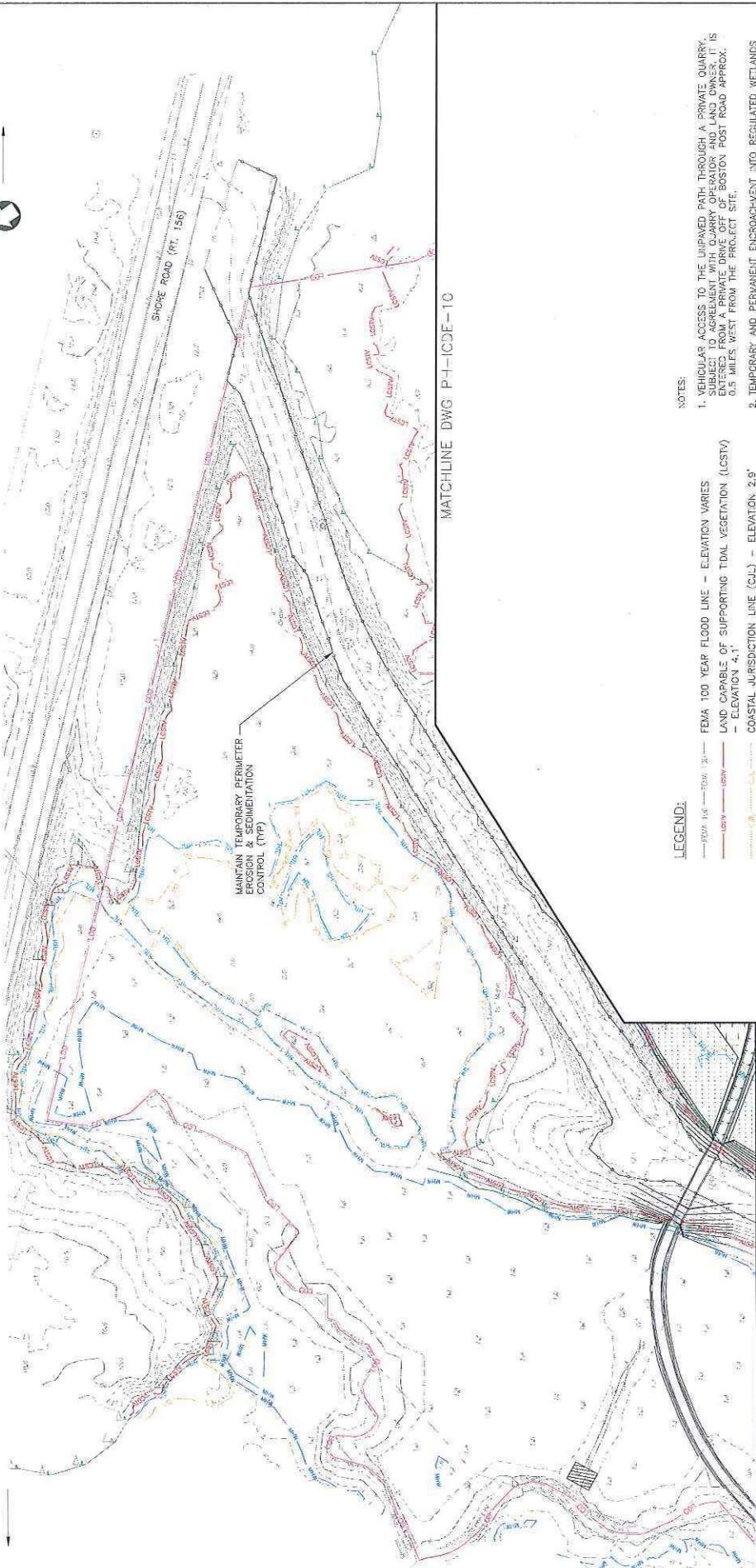
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HARDESTY & HANOVER, LLC
ENGINEERING
100 Broadway, New York, NY 10006
7500 Market St., Philadelphia, PA 19103
wsp

PROJECT NO.	10036
DATE	10/03
SCALE	1" = 40'
PROJECT CODE	PH-ICDE-10
DESIGNED BY	CS
CHECKED BY	CS
DATE	05/02/23

TO NEW HAVEN

TO BOSTON



LEGEND:

- FEMA 100 YEAR FLOOD LINE — ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) — ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CJL) — ELEVATION 2.9'
- HIGH TIDE LINE (HTL) — ELEVATION 3.04'
- MEAN HIGH WATER (MHW) — ELEVATION 1.60'
- MEAN LOW WATER (MLW) — ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)

NOTES:

1. VEHICULAR ACCESS TO THE UNPAVED PATH THROUGH A PRIVATE QUARRY, SUBJECT TO AGREEMENT WITH QUARRY OPERATOR AND LAND OWNER, IT IS ENTERED FROM A PRIVATE DRIVE OFF OF BOSTON POST ROAD APPROX. 0.5 MILES WEST FROM THE PROJECT SITE.
2. TEMPORARY AND PERMANENT ENCROACHMENT INTO REGULATED WETLANDS AND WATERCOURSES SHALL BE IN CONFORMANCE WITH WETLANDS PERMITS ISSUED FOR THE PROJECT. LIMITS OF TEMPORARY ENCROACHMENT SHALL BE DELINEATED WITH STAKES AND TAGS.
3. EROSION AND SEDIMENTATION CONTROLS SHALL BE MAINTAINED THROUGH PHASES II AND III, NOT SHOWN IN THIS SET.



ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

HARDESTY & HANOVER, LLC
BENNETT ENGINEERING
 1521 Broadway New York, NY 10030
 1521 Broadway Philadelphia, PA 19102
wsp



NO.	DATE	BY

Office of Chief Engineer
STRUCTURES
 National Railroad Passenger Corporation
 300 North Station, Washington, Pennsylvania 17101



PROJECT NAME	REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER STAGING PLAN - PHASE ICDE
PROJECT NO.	PH-ICDE-11
DATE	
DRAWN BY	
CHECKED BY	
DATE	

PROJECT CODE: 10030302
 SHEET NO. 03 OF 143
 DATE: 05/02/23

TO NEW HAVEN

TO BOSTON

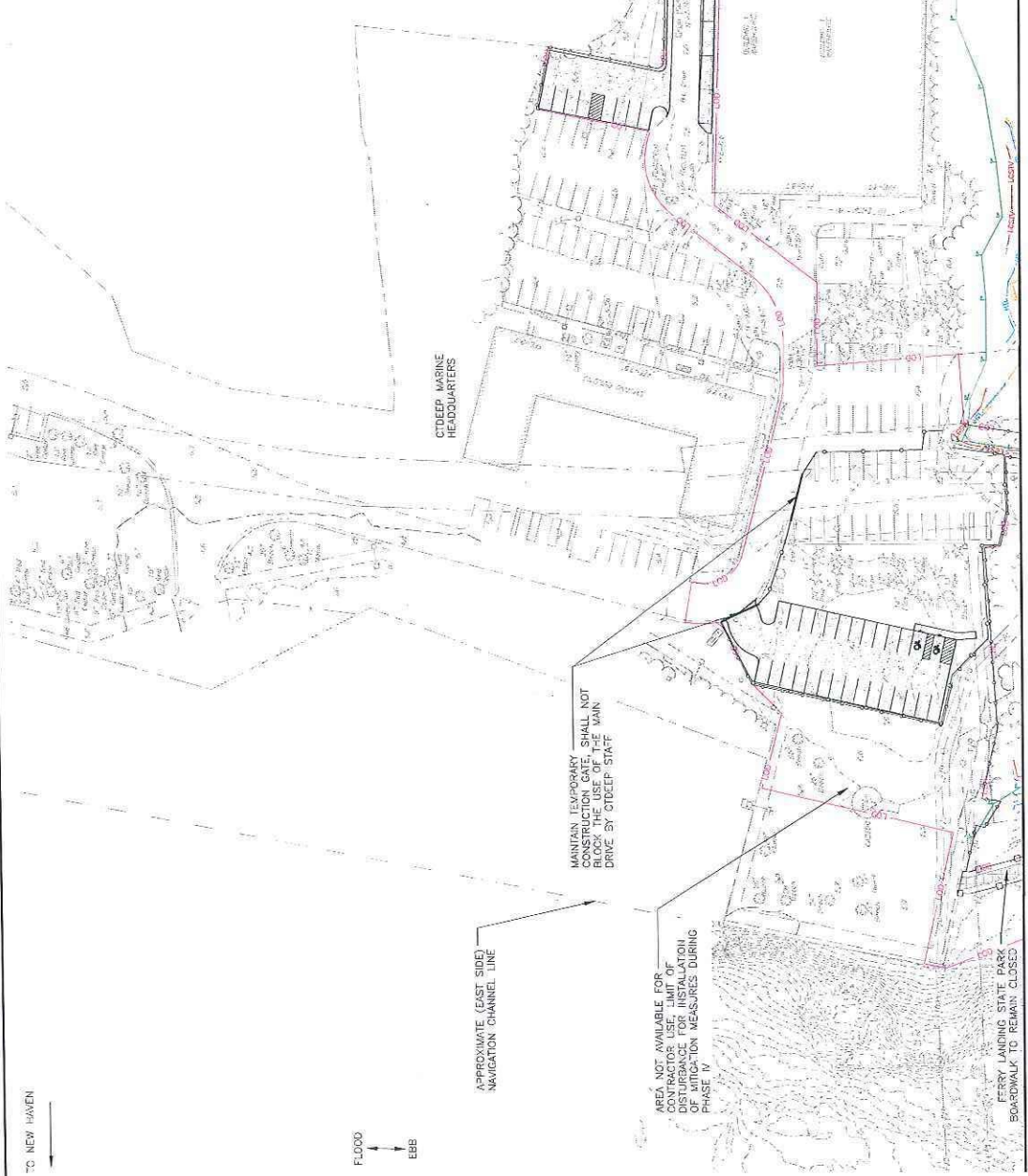


LEGEND:

- FWM 100 YEAR FLOOD LINE - ELEVATION VARIES - ELEVATION 4.1'
- COASTAL JURSDICTION LINE (CJL) - ELEVATION 2.9'
- HIGH TIDE LINE (HTL) - ELEVATION 3.04'
- MEAN HIGH WATER (MHW) - ELEVATION 1.86'
- MEAN LOW WATER (MLW) - ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)

NOTES:

1. PEDESTRIAN/NON-VEHICULAR CONSTRUCTION ACCESS VIA EXISTING STAIRS AND METAL MAINTENANCE WALKWAY IS POSSIBLE THROUGH THE FERRY BOARDWALK. CONTRACTOR SHALL MAINTAIN ACCESS THROUGHOUT CONSTRUCTION. TRAILER WORKER FACILITIES ON PARK PROPERTY TO BE DETERMINED. ACCESS MUST BE MAINTAINED FOR USE BY AMTRAK STAFF THROUGH ALL PHASES OF CONSTRUCTION.
2. VEHICULAR ACCESS TO THE PROJECT SITE THROUGH PRIVATELY OWNED LAND, SITUATED OFF OF SHORE ROAD APPROXIMATELY 0.5 MILES EAST FROM THE PROJECT SITE.
3. TEMPORARY AND PERMANENT ENCROACHMENT INTO REGULATED WETLANDS SHALL BE IN CONFORMANCE WITH WETLANDS PERMITS ISSUED FOR THE PROJECT. LAND FILLING AND TEMPORARY ENCROACHMENT SHALL BE DELINEATED WITH STAKES AND FLAGGING. EROSION AND SEDIMENTATION CONTROLS SHALL BE MAINTAINED THROUGH PHASES I AND II. EROSION NOT SHOWN IN THIS SET.



MATCHLINE DWG PH-ICDE-07



ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023



HARDESTY & HAYOVER, LLC
 ENGINEERING
 1503 Broadway, New York, NY 10036
 1700 Market St, Suite 1350
 Philadelphia, PA 19103
 PH

Office of Chief Engineer
STRUCTURES
 300B State Street, Philadelphia, Pennsylvania 19104



This contract is hereby void if the State and relevant parties of the relevant permit
 Amtrak and its contractors shall not be held responsible for any errors or omissions
 in any drawings, specifications, or other documents prepared by Amtrak or its
 contractors. Amtrak and its contractors shall not be held responsible for any
 errors or omissions in any drawings, specifications, or other documents prepared
 by Amtrak or its contractors.

Project Code	000.000
DATE	10/10/20
Sheet No.	101 OF 100
PHASE	PH-ICDE-12

Designed By	Jason GARCIA	Checked By		Date	5/2/2023
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NO.	DESCRIPTION	DATE	BY

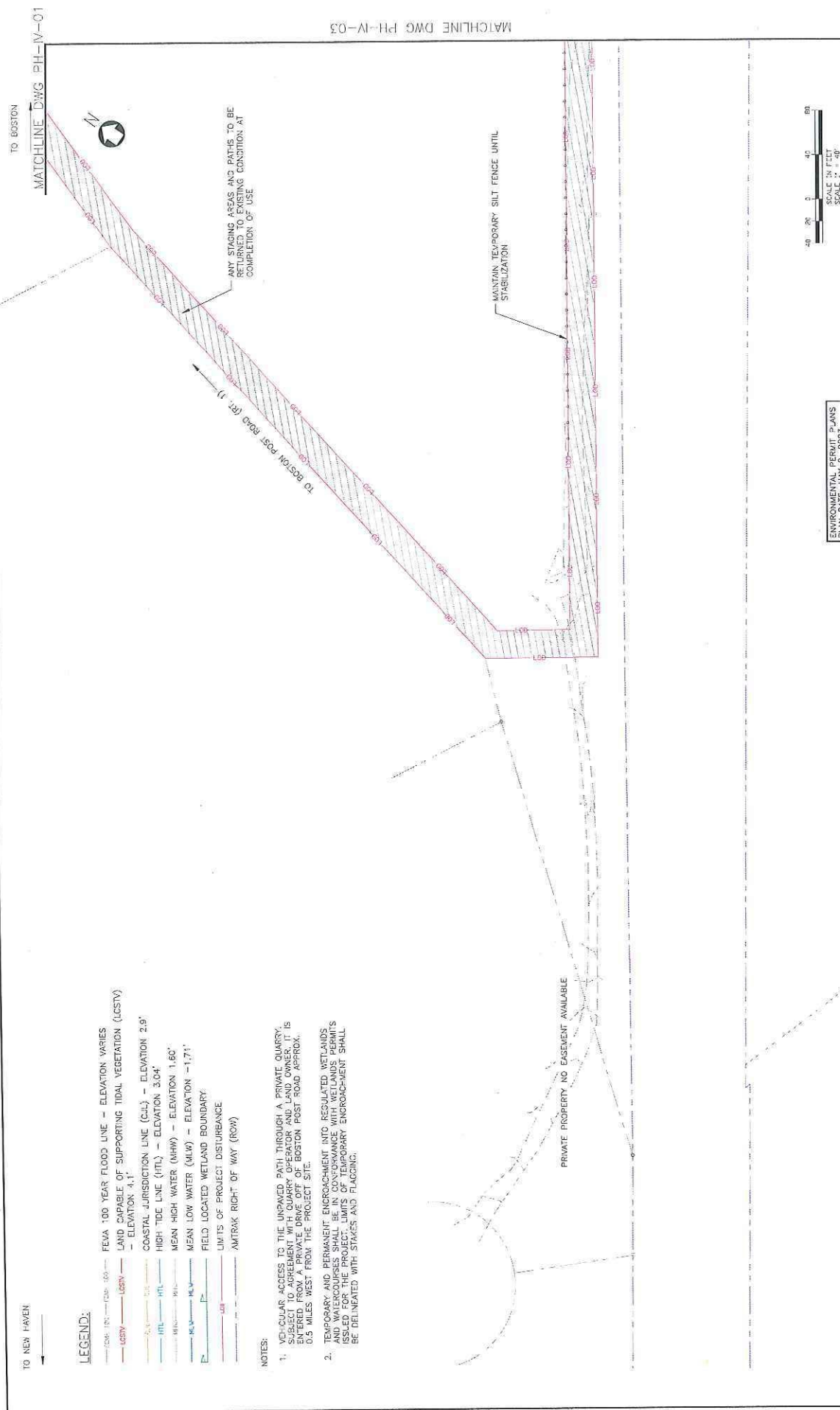
TO NEW HAVEN

LEGEND:

- FEVA 100 YEAR FLOOD LINE - ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) - ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CJL) - ELEVATION 2.9'
- HIGH TIDE LINE (HTL) - ELEVATION 3.04'
- MEAN HIGH WATER (MHW) - ELEVATION 1.60'
- MEAN LOW WATER (MLW) - ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)

NOTES:

1. VEHICULAR ACCESS TO THE UNPAVED PATH THROUGH A PRIVATE QUARRY, SUBJECT TO AGREEMENT WITH QUARRY OPERATOR AND LAND OWNER, IT IS ENTERED FROM A PRIVATE DRIVE OFF BOSTON POST ROAD APPROX. 0.3 MILES WEST FROM THE PROJECT SITE.
2. TEMPORARY AND PERMANENT ENCROACHMENT INTO REGULATED WETLANDS AND WATERCOURSES SHALL BE IN CONFORMANCE WITH THE REGULATIONS ISSUED UNDER THE PROPOSED PERMIT. TEMPORARY ENCROACHMENT SHALL BE DELINEATED WITH STAKES AND FLAGGING.



MATCHLINE DWG PH-IV-01

MATCHLINE DWG PH-IV-03



ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023



**Office of Chief Engineer
STRUCTURES**
300 Street Station, Philadelphia, Pennsylvania 19104

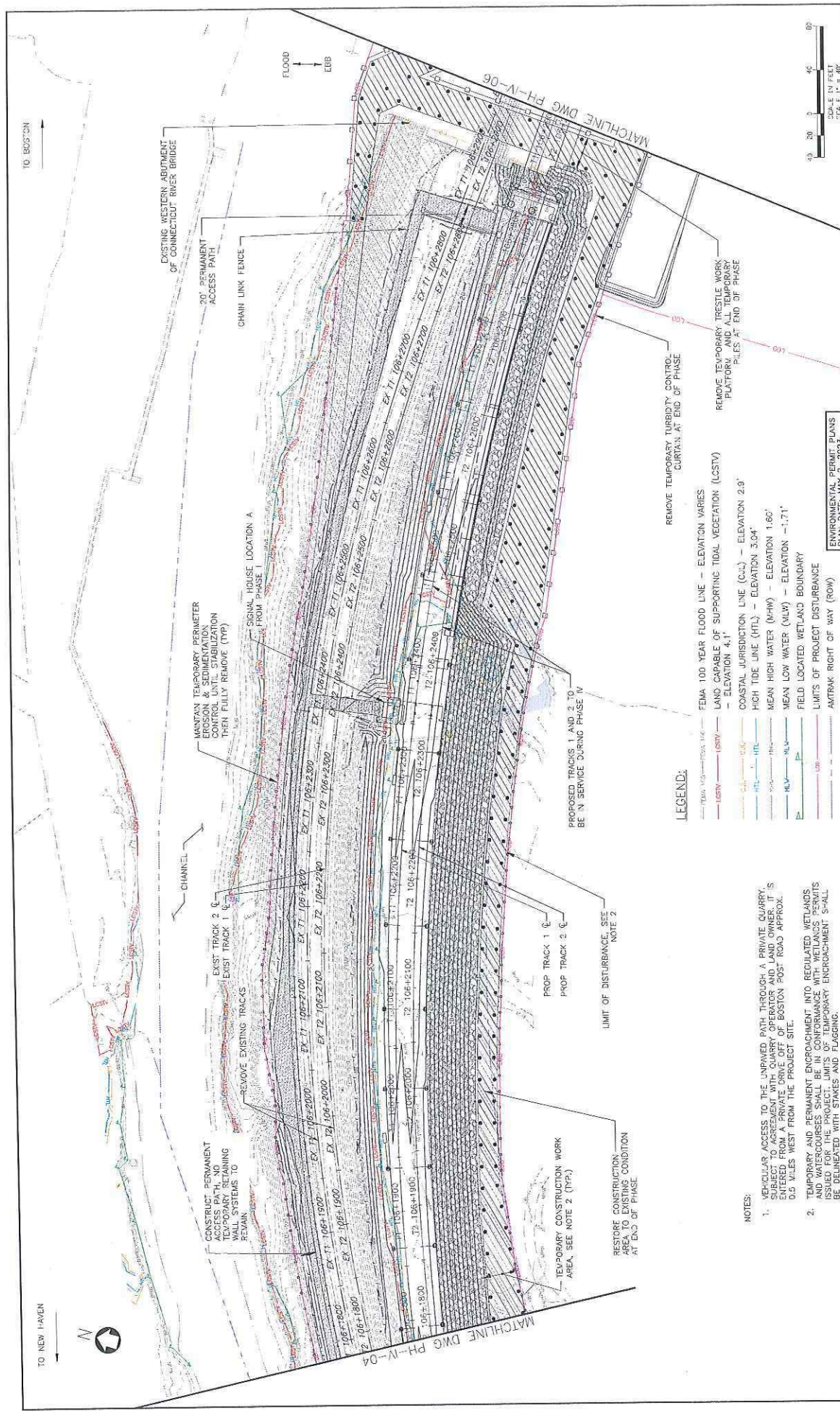


NO.	REVISIONS	DATE	BY

HARDESTY & HANOVER, LLC
ENGINEERING
1501 Broadway New York, NY 10036
1700 Market St. Suite 1010
Philadelphia, PA 19103

OLD SAYBROOK
REPLACEMENT OF MB 106.89
OVER CONNECTICUT RIVER
STAGING PLAN - PHASE IV

Project Code: 1000000
Sheet No. 106 OF 145
Checked: CB
Drawn: CS
Scale: ASB
Date: 02/22/23
PH-IV-02



LEGEND:

- FEMA 100 YEAR FLOOD LINE - ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LSTV) - ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CJL) - ELEVATION 2.9'
- HIGH TIDE LINE (HTL) - ELEVATION 3.04'
- MEAN HIGH WATER (MHW) - ELEVATION 1.66'
- MEAN LOW WATER (MLW) - ELEVATION -1.71'
- FIELD LOCATED WET-LAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)

NOTES:

- VEHICULAR ACCESS TO THE UNPAVED PATH THROUGH A PRIVATE QUARRY, SUBJECT TO AGREEMENT WITH QUARRY OPERATOR AND LAND OWNER, IS ENTERED FROM A PRIVATE DRIVE OFF BOSTON POST ROAD APPROX. 0.5 MILES WEST FROM THE PROJECT SITE.
- TEMPORARY AND PERMANENT ENCROACHMENT INTO REGULATED WETLANDS AND WATERCOURSES SHALL BE IN CONFORMANCE WITH THE PERMITS AND BE DELINEATED WITH STAKES AND FLAGGING.

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

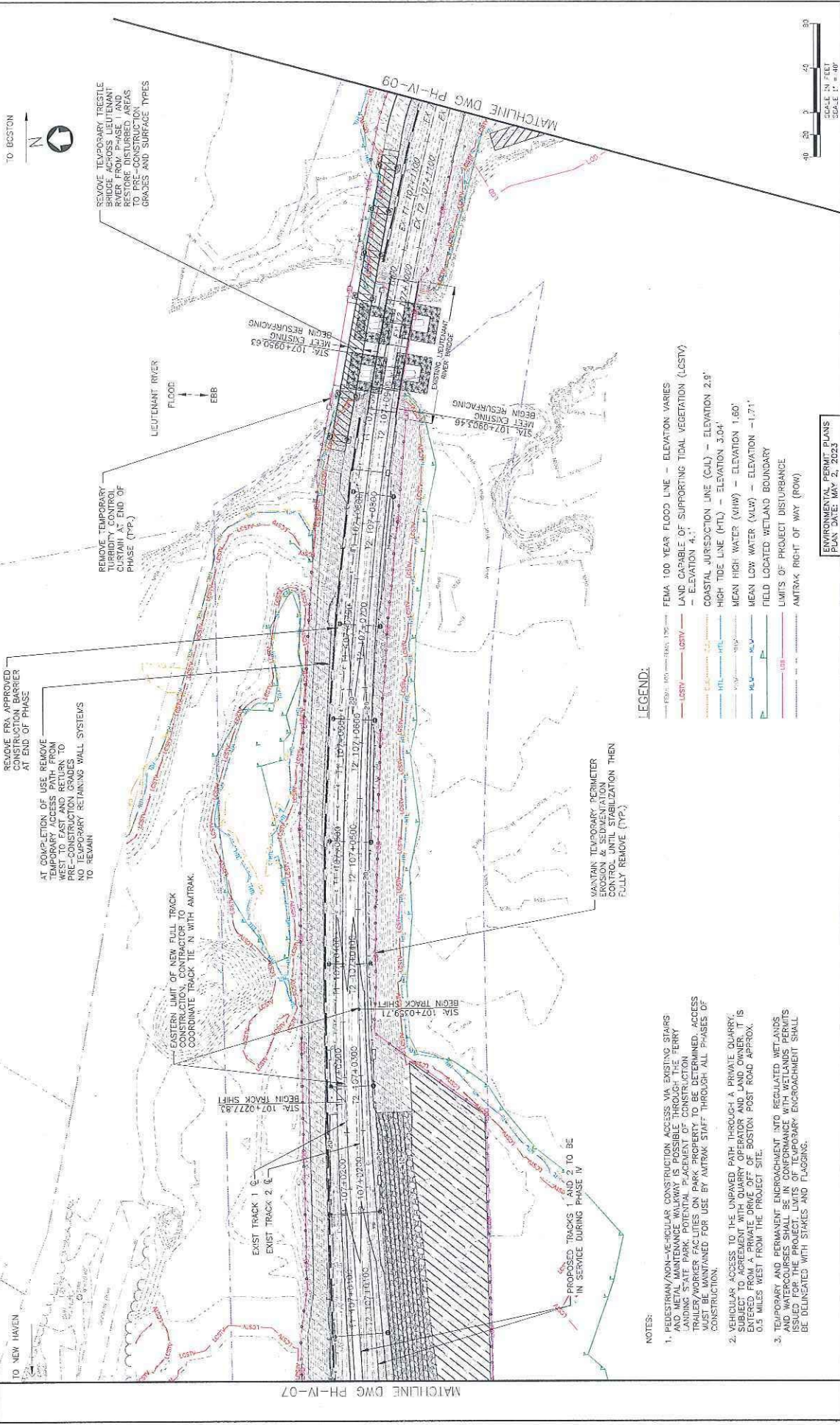
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STRUCTURES
326th Street Station, Philadelphia, Pennsylvania 19104

HARDESTY & HANOVER, LLC
ENGINEERING
1501 Broadway New York, NY 10035
1700 McNeil St. Suite 1000
Philadelphia, PA 19103

REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER
STAGING PLAN - PHASE IV

Project No. 106 OF 140
Sheet No. 106 OF 140
Scale: 1" = 40'
Date: 05/02/2023

Drawn: []
Checked: []
Design: []



TO BCSTON

N

TO NEW HAVEN

REMOVE TEMPORARY TRESTLE AND RESTORE ORIGINAL RIVER FROM PHASE I AND RESTORE DISTURBED AREAS TO PRE-CONSTRUCTION GRASSES AND SURFACE TYPES

REMOVE TEMPORARY TUBES AND CONTROL TIE-IN AT END OF PHASE (TYP.)

REMOVE FRA APPROVED CONSTRUCTION BARRIER AT END OF PHASE

AT COMPLETION OF USE REMOVE TEMPORARY ACCESS PATHS FROM PRE-CONSTRUCTION GRADES TO NO TEMPORARY REMAINING WALL SYSTEMS TO REMAIN

LEUTENANT RIVER

FLOOD

EBB

STA 107+0950.03

MEET EXISTING

BEGIN RESURFACING

EXISTING RESTURFACED RIVER

STA 107+0903.46

BEGIN RESURFACING

EXISTING RESTURFACED RIVER

STA 107+0800.00

STA 107+0700.00

STA 107+0600.00

STA 107+0500.00

STA 107+0400.00

STA 107+0300.00

STA 107+0200.00

STA 107+0100.00

STA 107+00.00

EXIST TRACK 1 & 2

STA 107+0277.93

BEGIN TRACK SHIFT

STA 107+0399.71

BEGIN TRACK SHIFT

MAINTAIN TEMPORARY PERMETER CONTROL UNTIL STABILIZATION THEN FULLY REMOVE (TYP.)

PROPOSED TRACKS 1 AND 2 TO BE IN SERVICE DURING PHASE IV

MATCHLINE DWG PH-IV-07

MATCHLINE DWG PH-IV-09

- LEGEND:**
- FEMA 100 YEAR FLOOD LINE — ELEVATION VARIES
 - LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) — ELEVATION 4.1'
 - COASTAL JURISDICTION LINE (CJL) — ELEVATION 2.9'
 - HIGH TIDE LINE (HTL) — ELEVATION 3.04'
 - MEAN HIGH WATER (MHW) — ELEVATION 1.60'
 - MEAN LOW WATER (MLW) — ELEVATION -1.71'
 - FIELD LOCATED WETLAND BOUNDARY
 - LIMITS OF PROJECT DISTURBANCE
 - AMTRAK RIGHT OF WAY (ROW)

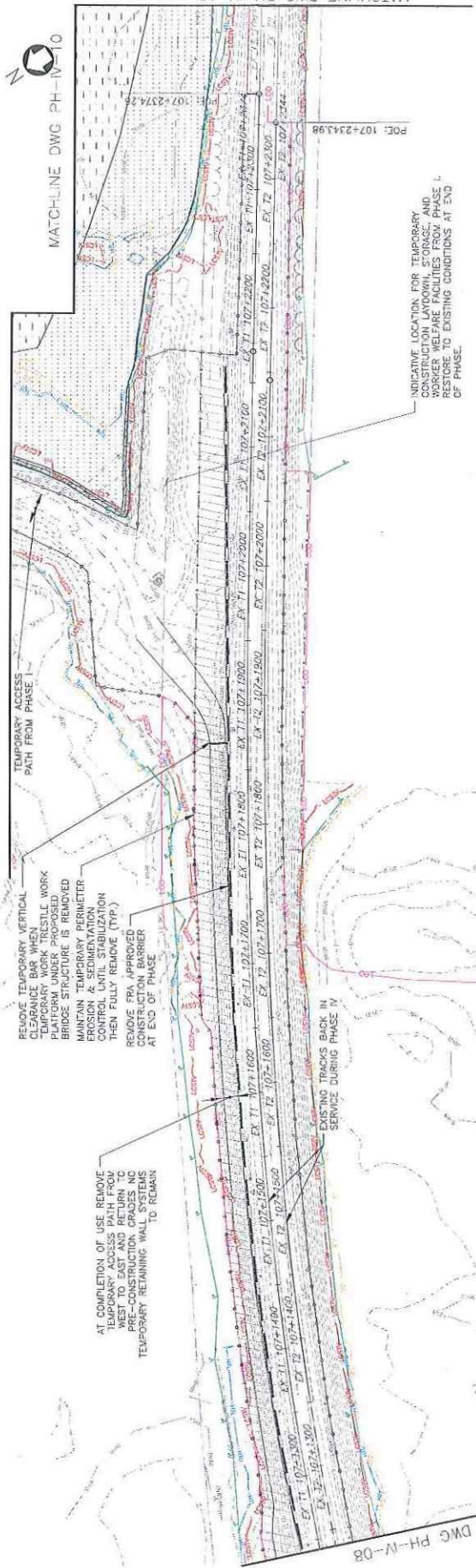
- NOTES:**
1. PEDESTRIAN/NON-VEHICULAR CONSTRUCTION ACCESS VIA EXISTING STAIRS AND METAL MAINTENANCE WALKWAY IS POSSIBLE THROUGH THE FERRY TRAILER/WORKER FACILITIES ON PARK PROPERTY TO BE DETERMINED. ACCESS MUST BE MAINTAINED FOR USE BY AMTRAK STAFF THROUGH ALL PHASES OF CONSTRUCTION.
 2. VEHICULAR ACCESS TO THE UNPAVED PATH THROUGH A PRIVATE QUARRY IS SUBJECT TO AGREEMENT WITH QUARRY OPERATOR AND LAND OWNER. IT IS ENTERED FROM A PRIVATE DRIVE OFF OF BOSTON POST ROAD APPROX. 0.5 MILES WEST FROM THE PROJECT SITE.
 3. TEMPORARY AND PERMANENT ENCROACHMENT INTO REGULATED WETLANDS AND WATERCOURSES SHALL BE IN CONFORMANCE WITH WETLANDS PERMITS ISSUED FOR THE PROJECT. LIMITS OF TEMPORARY ENCROACHMENT SHALL BE DELINEATED WITH STAKES AND FLAGGING.

ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023			HARDESTY & HANOVER, LLC 1500 Broadway, 15th Floor, Suite 1000 Philadelphia, PA 19103	PROJECT: OLD BAYBROOK CONNECTICUT SCALE: 1" = 20'
REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER STAGING PLAN - PHASE IV				WBS: 112 OF 112 SHEET NO.: PH-IV-08 DESIGNED: CB DRAWN: CB/MT CHECKED: RNF DATE: 05/02/23
		Office of Chief Engineer STRUCTURES <small>Statewide Rail-based Passenger Corporation 200 South Street, Philadelphia, Pennsylvania 19103</small>		
		PROJECT: OLD BAYBROOK CONNECTICUT SCALE: 1" = 20'		

TO NEW HAVEN

TO BOSTON

MATCHLINE DWG PH-IV-11



REMOVE TEMPORARY VERTICAL CLEARANCE BAR WHEN TEMPORARY WORK TRESTLE WORK PLATFORM UNDER PROPOSED BRIDGE STRUCTURE IS REMOVED. MAINTAIN TEMPORARY PERIMETER CONTROL UNTIL STABILIZATION THEN FULLY REMOVE (TYP.) REMOVE FRA APPROVED CONSTRUCTION BARRIER AT END OF PHASE

AT COMPLETION OF USE REMOVE TEMPORARY ACCESS PATH FROM WEST TO EAST AND REMOVE TEMPORARY PERIMETER. TEMPORARY RETAINING WALL SYSTEMS TO REMAIN

EXISTING TRACKS BACK IN SERVICE DURING PHASE IV

INDICATIVE LOCATION FOR TEMPORARY CONSTRUCTION LAYDOWN, STORAGE, AND WAREHOUSES. REMOVE FACILITIES FROM PHASE I, RESTORE TO EXISTING CONDITIONS AT END OF PHASE.

NOTES:

1. PEDESTRIAN/NON-VEHICULAR CONSTRUCTION ACCESS VIA EXISTING STAIRS AND BRIDGE STRUCTURE TO BE MAINTAINED THROUGHOUT CONSTRUCTION. FERRY LANDING STATE PARK, POTENTIAL PLACEMENT OF CONSTRUCTION TRAILER/WORKER FACILITIES ON PARK PROPERTY TO BE DETERMINED. ACCESS MUST BE MAINTAINED FOR USE BY AMTRAK STAFF THROUGHOUT ALL PHASES OF CONSTRUCTION.
2. VEHICULAR ACCESS TO THE UNPAVED PATH THROUGH A PRIVATE QUARRY, SUBJECT TO AGREEMENT WITH QUARRY OPERATOR AND LAND OWNER, IT IS ENTERED FROM A PRIVATE DRIVE OFF OF BOSTON POST ROAD APPROX. 0.5 MILES WEST FROM THE PROJECT SITE.
3. TEMPORARY AND PERMANENT ENCROACHMENT INTO REGULATED WETLANDS AND WATERCOURSES SHALL BE IN CONFORMANCE WITH WETLANDS PERMITS ISSUED FOR THE PROJECT. LIMITS OF TEMPORARY ENCROACHMENT SHALL BE DELINEATED WITH STAKES AND FLAGGING.

LEGEND:

- 100 YEAR FLOOD LINE - ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) - ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CJL) - ELEVATION 2.9'
- HIGH TIDE LINE (HTL) - ELEVATION 3.04'
- MEAN HIGH WATER (MHW) - ELEVATION 1.60'
- MEAN LOW WATER (MLW) - ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)



MATCHLINE DWG PH-IV-10

MATCHLINE DWG PH-IV-08

		Amtrak <small>National Railroad Passenger Corporation 320 N. Broad Street, Philadelphia, Pennsylvania 19104</small>	
Office of Chief Engineer STRUCTURES		Amtrak <small>National Railroad Passenger Corporation 320 N. Broad Street, Philadelphia, Pennsylvania 19104</small>	
ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023		HARDESTY & HANOVER, LLC ENGINEERING 1501 Broadway, New York, NY 10036 	
Project Code: 100-000 VBS: 113 OF 142 SHEET NO.: PH-IV-09		REPLACEMENT OF MB 106 89 OVER CONNECTICUT RIVER STAGING PLAN - PHASE IV	
Designer: CB	Checker: CMBP	Date: 02/20/23	Project Code: 100-000

TO NEW HAVEN

TO BOSTON

MATCHLINE DWG PH-IV-11

MATCHLINE DWG PH-IV-09



LEGEND:

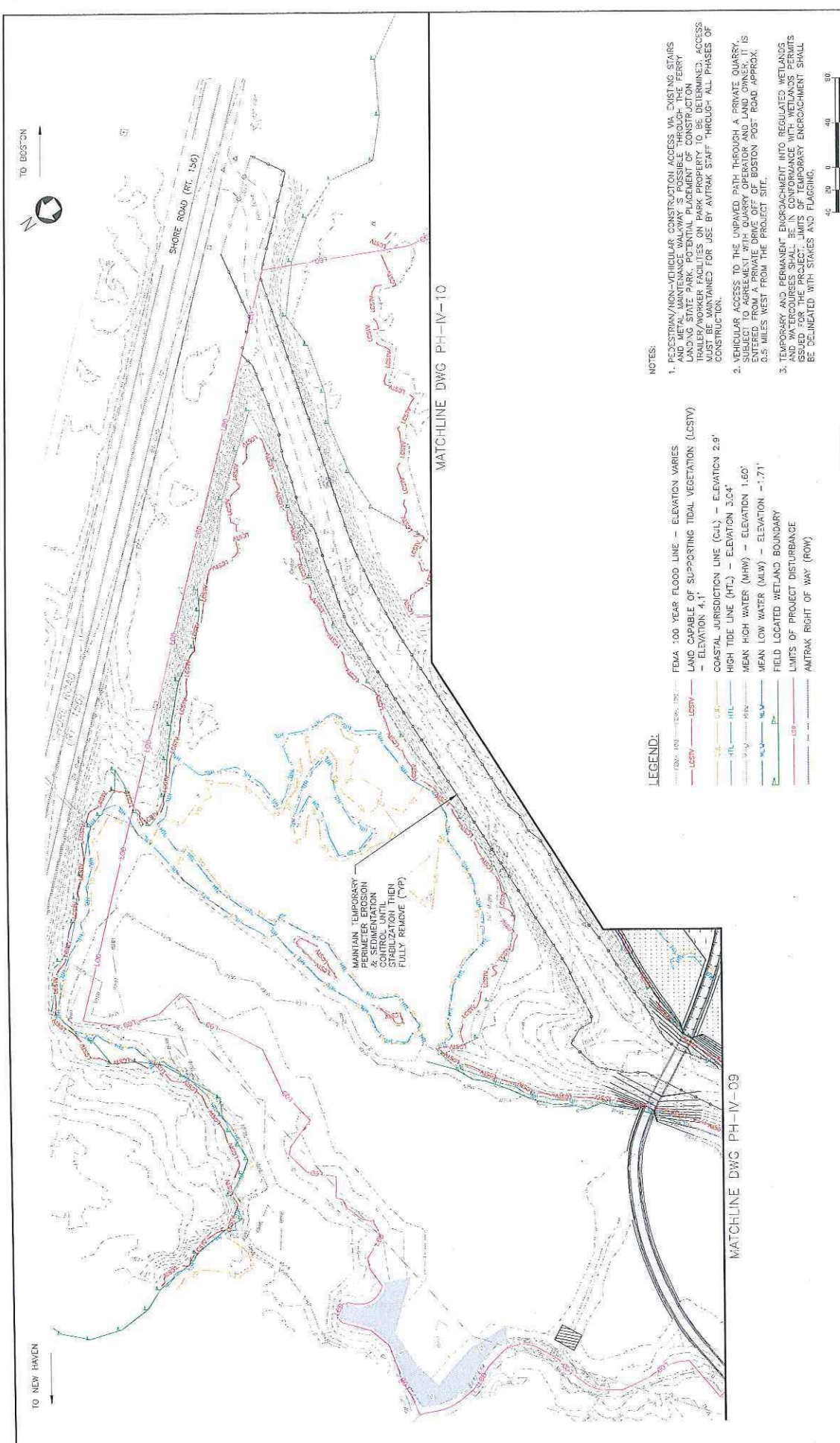
- FEMA 100 YEAR FLOOD LINE — ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LOSTV) — ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CJL) — ELEVATION 2.9'
- HIGH TIDE LINE (HTL) — ELEVATION 3.04'
- MEAN HIGH WATER (MHW) — ELEVATION 1.60'
- MEAN LOW WATER (MLW) — ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)

NOTES:

1. PEDESTRIAN/NON-VEHICULAR CONSTRUCTION ACCESS VIA EXISTING STAIRS AND METAL MAINTENANCE WALKWAY IS POSSIBLE THROUGH THE FERRY LANDING STATE PARK. POTENTIAL PLACEMENT OF CONSTRUCTION MATERIALS AND EQUIPMENT MUST BE MAINTAINED FOR USE BY AMTRAK STAFF THROUGH ALL PHASES OF CONSTRUCTION.
2. VEHICULAR ACCESS TO THE IN-SHOWER PATH THROUGH A PRIVATE QUARRY, SUBJECT TO AGREEMENT WITH QUARRY OPERATOR AND LAND OWNER, IT IS ENTERED FROM A PRIVATE DRIVE OFF OF BOSTON POST ROAD APPROX. 0.5 MILES WEST FROM THE PROJECT SITE.
3. TEMPORARY AND PERMANENT ENCROACHMENT INTO REGULATED WETLANDS AND WATERCOURSES SHALL BE IN CONFORMANCE WITH WETLANDS PERMITS ISSUED FOR THE PROJECT. LIMITS OF TEMPORARY ENCROACHMENT SHALL BE DELINEATED WITH STAKES AND FLAGGING.



	<p>ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 24, 2023</p>	<p>HARDESTY & HANOVER, LLC ENGINEERING 1501 Broadway, New York, NY 10036 Project: MB 108.89 Philadelphia, PA 19103</p>	<p>WSP CONSULTANT</p>	<p>Project Code: 1008.000 WBS: PH-IV-10 Sheet No. 111 OF 140</p>	<p>REPLACEMENT OF MB 108.89 OVER CONNECTICUT RIVER STAGING PLAN - PHASE IV</p>
<p>Approved</p>	<p>Drawn</p>	<p>Checked</p>	<p>AM</p>	<p>10/20/23</p>	<p>10/20/23</p>
<p>Office of Chief Engineer STRUCTURES National Railroad Passenger Corporation 30th Street Station, Philadelphia, Pennsylvania 19104</p>		<p>Amtrak The National Railroad Passenger Corporation 1000 Pennsylvania Avenue, N.W., Washington, D.C. 20004 Amtrak is a U.S. Department of Transportation enterprise.</p>		<p>Print Date/Time: 2/27/23 10:53 AM Printed on: 10/20/23</p>	



TO NEW HAVEN

TO BOSTON

MAINTAIN TEMPORARY PERIMETER EROSION & SEDIMENTATION CONTROL UNTIL FULLY REMOVE (TYP)

LEGEND:

- FEMA 100 YEAR FLOOD LINE — ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LGSV) — ELEVATION -4.1'
- COASTAL JURISDICTION LINE (CUL) — ELEVATION 2.9'
- HIGH TIDE LINE (HTL) — ELEVATION 3.04'
- MEAN HIGH WATER (MHW) — ELEVATION 1.60'
- MEAN LOW WATER (MLW) — ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)

NOTES:

1. PEDESTRIAN/NON-VEHICULAR CONSTRUCTION ACCESS VIA EXISTING STAIRS AND METAL WALKWAY SHALL BE MAINTAINED THROUGHOUT THE FERRY TRAILER/WORKER FACILITIES ON PARK PROPERTY TO BE DETERMINED. ACCESS MUST BE MAINTAINED FOR USE BY AMTRAK STAFF THROUGHOUT ALL PHASES OF CONSTRUCTION.
2. VEHICULAR ACCESS TO THE UNPAVED PATH THROUGH A PRIVATE QUARRY SUBJECT TO AGREEMENT WITH QUARRY OPERATOR AND LAND OWNER. IT IS ENTERED FROM A PRIVATE DRIVE OFF OF BOSTON POST ROAD APPROX. 0.5 MILES WEST FROM THE PROJECT SITE.
3. TEMPORARY AND PERMANENT ENCROACHMENT INTO REGULATED WETLANDS AND WATERCOURSES SHALL BE IN CONFORMANCE WITH WETLANDS PERMITS ISSUED FOR THE PROJECT. LIMITS OF TEMPORARY ENCROACHMENT SHALL BE DELINEATED WITH STAKES AND FLAGGING.



ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023



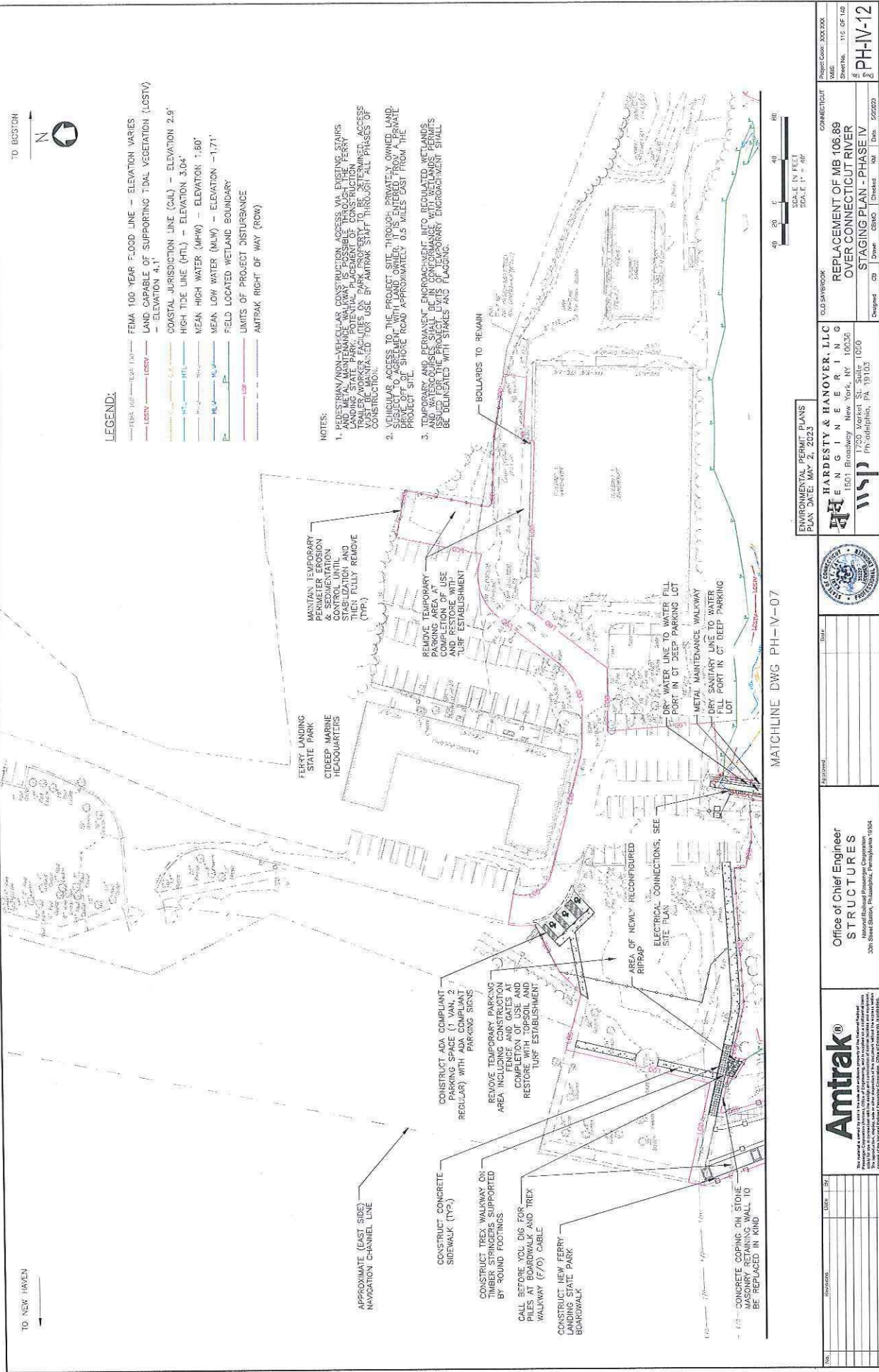
HARDESTY & HANOVER, LLC
ENGINEERING
1501 Broadway New York, NY 10036
1700 Market St, Suite 1020
Philadelphia, PA 19103

Office of Chief Engineer
STRUCTURES
300 South Station, Philadelphia, Pennsylvania 19106



NO.	REVISIONS	DATE	BY

PROJECT CODE: 000000
SHEET NO.: 15 OF 149
DATE: 5/2/23
DRAWN BY: PH-IV-11
CHECKED BY: [blank]
DATE: 5/2/23



TO NEW HAVEN

TO BOSTON



LEGEND:

- FEMA 100 YEAR FLOOD LINE — ELEVATION VARIES
- LAND CAPABLE OF SUPPORTING TIDAL VEGETATION (LCSTV) — ELEVATION 4.1'
- COASTAL JURISDICTION LINE (CAL) — ELEVATION 2.9'
- HIGH TIDE LINE (HTL) — ELEVATION 3.04'
- MEAN HIGH WATER (MHW) — ELEVATION 1.60'
- MEAN LOW WATER (MLW) — ELEVATION -1.71'
- FIELD LOCATED WETLAND BOUNDARY
- LIMITS OF PROJECT DISTURBANCE
- AMTRAK RIGHT OF WAY (ROW)

NOTES:

1. PEDESTRIAN/NON-VEHICULAR CONSTRUCTION ACCESS VIA EXISTING STAIRS AND RAMP. TEMPORARY FILL AND EROSION CONTROL SHALL BE INSTALLED TO MAINTAIN PROPER DRAINAGE AND TRAILER WORKER FACILITIES ON PARK PROPERTY TO BE DETERMINED. ACCESS TO CONSTRUCTION SHALL BE MAINTAINED THROUGHOUT THE PROJECT.
2. VEHICULAR ACCESS TO THE PROJECT SITE THROUGH PRIVATELY OWNED LAND SUBJECT TO AGREEMENT WITH LAND OWNER. IT IS ENTERED FROM A PRIVATE DRIVE OFF OF SHORE ROAD APPROXIMATELY 0.5 MILES EAST FROM THE PROJECT SITE.
3. TEMPORARY EROSION CONTROL AND SEDIMENTATION SHALL BE INSTALLED TO MAINTAIN PROPER DRAINAGE AND TRAILER WORKER FACILITIES ON PARK PROPERTY TO BE DETERMINED. ACCESS TO CONSTRUCTION SHALL BE MAINTAINED THROUGHOUT THE PROJECT. LIMITS OF TEMPORARY ENCROACHMENT SHALL BE DELINEATED WITH STAKES AND FLAGGING.

MAINTAIN TEMPORARY PERMITS EROSION CONTROL UNTIL STABILIZATION AND FULLY REMOVE (TYP.)

REMOVE TEMPORARY COMPLETION OF USE AND RESTORE WITH TURF ESTABLISHMENT

FERRY LANDING STATE PARK CODEP MARINE HEADQUARTERS

CONSTRUCT ADA COMPLIANT PARKING SPACE (1 VAN, 2 REGULAR) WITH ADA COMPLIANT PARKING SIGNS

REMOVE TEMPORARY PARKING AREA INCLUDING CONSTRUCTION FENCE AND GATES AT COMPLETION OF USE AND RESTORE WITH TOPSOIL AND TURF ESTABLISHMENT

CONSTRUCT CONCRETE SIDEWALK (TYP.)

CONSTRUCT TREX WALKWAY ON TIMBER STRUTTING SUPPORTED BY ROUND FOOTINGS

CALL BEFORE YOU DIG FOR PILES AT BOARDWALK AND TREX WALKWAY (F/O) CABLE

CONSTRUCT NEW FERRY BOARDWALK

AREA OF NEWLY RECONFIGURED RIPRAP ELECTRICAL CONNECTIONS, SEE SITE PLAN

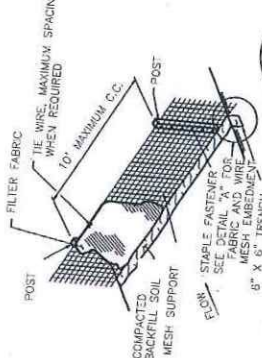
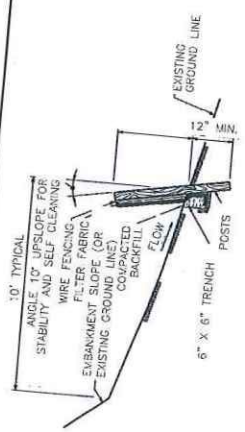
DRY WATER LINE TO WATER FILL PORT IN CT DEEP PARKING LOT
METAL MAINTENANCE WALKWAY
DRY SANITARY LINE TO WATER FILL PORT IN CT DEEP PARKING LOT

MATCHLINE DWG PH-V-07

		Amtrak <small>The material shown on this drawing is the property of Amtrak. It is to be used only for the project and location shown. It is not to be used for any other project or location without the written consent of Amtrak. All rights reserved.</small>	
Office of Chief Engineer STRUCTURES <small>Member of the Professional Corporation</small> <small>Don Sheet Station, Philadelphia, Pennsylvania 19104</small>		WSP <small>1700 Market St. Suite 1000 Philadelphia, PA 19103 Ph: (215) 562-1000</small>	
ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023		GOLD SAVORBOOK HARDESTY & HANOVER, LLC REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER STAGING PLAN - PHASE IV Drawn: CB Check: GSO Date: 5/22/23	
PROJECT CODE: 3003000 SHEETS: 115 OF 140 SHEET NO. 2 PH-IV-12		SCALE: 1" = 40' SCALE IN FEET 0 20 40 60 80	

EROSION AND SEDIMENTATION CONTROL PLAN NOTES

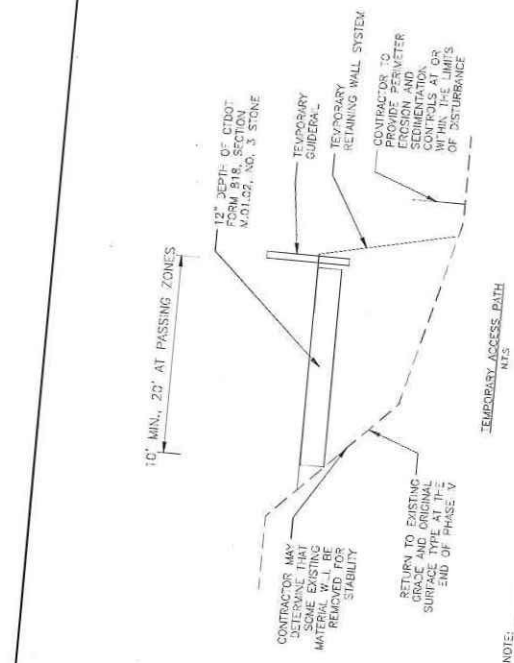
- EROSION AND SEDIMENTATION CONTROLS MUST BE CONSTRUCTED, STABILIZED, AND MAINTAINED BEFORE GENERAL SITE DISTURBANCE WITHIN THE TRIBUTARY AREAS OF THE PROJECT.
- AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENTATION CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF CONTROLS MUST BE STABILIZED IN ACCORDANCE WITH SECTION 1399.1.11.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR THE PROPER CONSTRUCTION, STABILIZATION, AND MAINTENANCE OF ALL EROSION AND SEDIMENTATION CONTROLS. THE CONTRACTOR MUST DEVELOP, AND HAVE APPROVED BY THE CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION, A BORROW AREA EROSION AND SEDIMENTATION CONTROL PLAN FOR EACH SPILL BORROW WITHIN OR OUTSIDE OF THE PERMITTED PLAN, WHETHER LOCATED WITHIN OR OUTSIDE OF THE PERMITTED PLAN.
- IF ANY MEASURES CONTAINED WITHIN THIS PLAN PROVE INCAPABLE OF PREVENTING EROSION OR SEDIMENTATION FROM ON-SITE FLOWS FROM BEING DISCHARGED OR OF CONTAMINATED SURFACES FROM BEING DISCHARGED TO THE TRIBUTARY, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND TAKE IMMEDIATE ACTION TO CORRECT THE PROBLEM. ALL EROSION AND SEDIMENTATION CONTROLS MUST BE MAINTAINED PROPERLY. IMMEDIATE REPAIRS MUST BE MADE TO ALL SUCH PROBLEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER CONSTRUCTION, STABILIZATION, AND MAINTENANCE OF ALL EROSION AND SEDIMENTATION CONTROLS. THE CONTRACTOR MUST DEVELOP, AND HAVE APPROVED BY THE CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION, A BORROW AREA EROSION AND SEDIMENTATION CONTROL PLAN FOR EACH SPILL BORROW WITHIN OR OUTSIDE OF THE PERMITTED PLAN.
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SEE CONSTRUCTION GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL (2002) FOR ADDITIONAL FILTER FENCE REQUIREMENTS.
 TEMPORARY SILT FENCE DETAIL
 N.T.S.

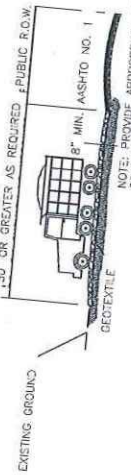


HMA 50.375 (TRAFFIC LEVEL 2) PLACED TWO EQUAL LIFTS
 N.T.S.

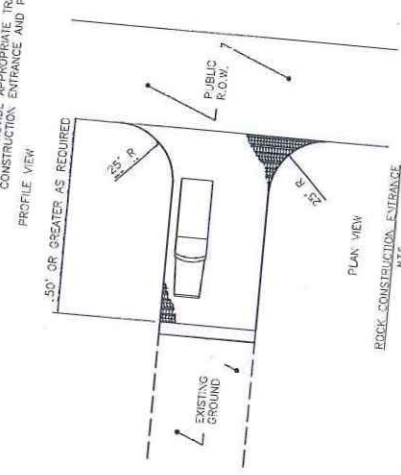


TEMPORARY ACCESS PATH
 N.T.S.

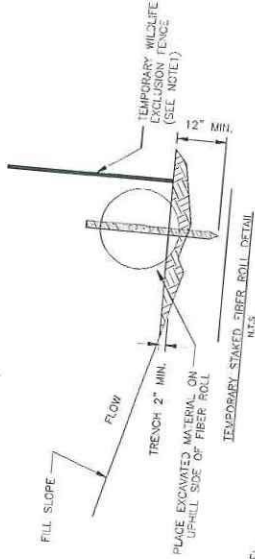
NOTE:
 1. CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING ANY BORROWS NECESSARY TO FACILITATE THE DESIGN OF THE TEMPORARY RETAINING WALL SYSTEMS.



NOTE: PROVIDE APPROPRIATE TRANSITION BETWEEN CONSTRUCTION ENTRANCE AND PUBLIC R.O.W.



ROCK CONSTRUCTION ENTRANCE
 N.T.S.



NOTE:
 1. USE TEMPORARY STAKED FIBER ROLL WITH TEMPORARY WILDLIFE EXCLUSION FENCE WHERE REQUIRED BY PERMITS.

ENVIRONMENTAL PERMIT PLANS
 PLAN DATE: MAY 2, 2023



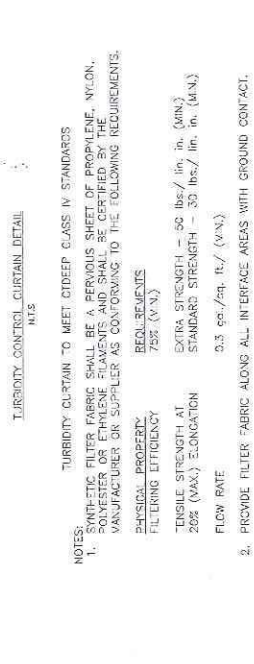
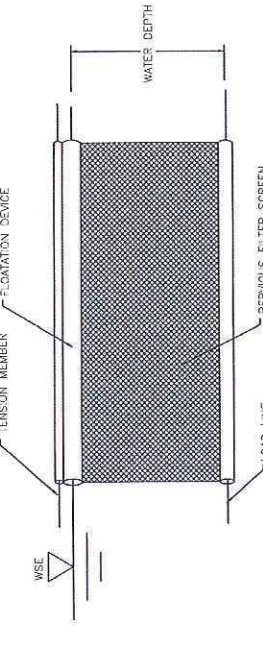
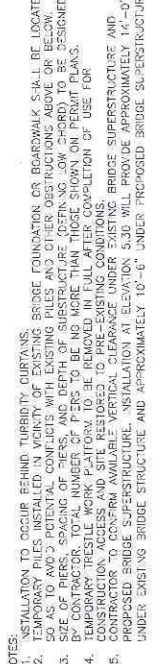
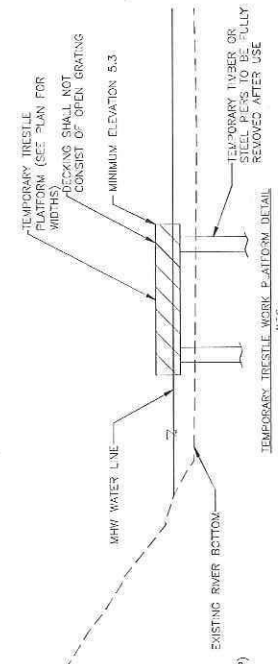
Office of Chief Engineer
 STRUCTURES
 National Railroad Passenger Corporation
 30th Street Station, Philadelphia, Pennsylvania 19104



HARDESTY & HANOVER, LLC
 ENGINEERING
 1501 Broadway, New York, NY 10036
 1700 Market St., Suite 1050
 Philadelphia, PA 19103

REPLACEMENT OF MB 106.89
 OVER CONNECTICUT RIVER
 CIVIL DETAILS

Project Code: 2003.000
 VMS: 117 OF 110
 Date: 05/20/23
 DTL-01

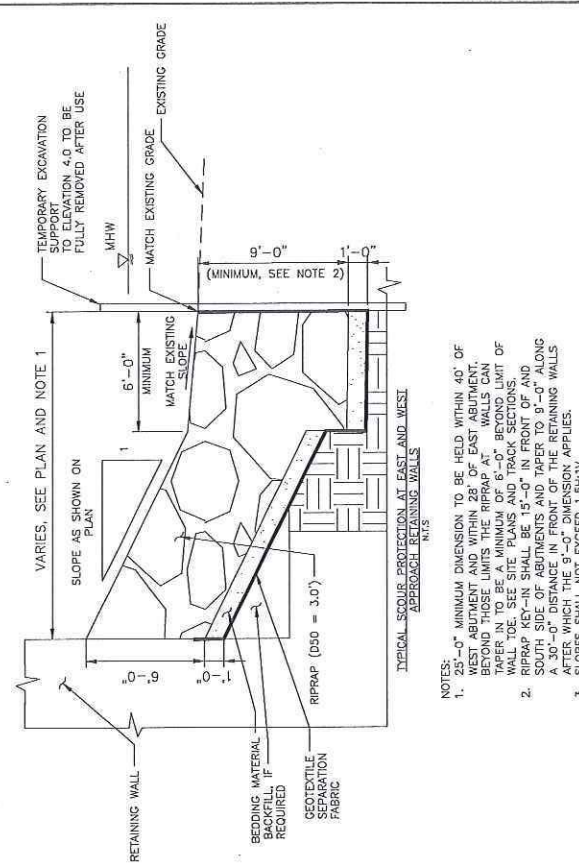


NOTES:
 1. INSTALLATION TO OCCUR BEHIND TURBIDITY CURTAINS.
 2. TEMPORARY PILES INSTALLED IN VICINITY OF EXISTING BRIDGE FOUNDATION OR BOARDWALK SHALL BE LOCATED 50 AS TO AVOID POTENTIAL CONFLICTS WITH EXISTING PILES AND OTHER OBSTRUCTIONS ABOVE BE DESIGNATED BY CONTRACTOR. TOTAL NUMBER OF PILES TO BE NO MORE THAN THOSE SHOWN ON PERMIT PLANS.
 3. TEMPORARY TRESTLE WORK PLATFORMS SHALL BE FULLY RESTORED TO ORIGINAL CONDITION TO BE FULLY REMOVED AFTER USE.
 4. TEMPORARY TRESTLE WORK PLATFORM TO BE REMOVED IN FULL AFTER COMPLETION OF USE FOR CONSTRUCTION, ACCESS, AND SITE RESTORED TO PRE-EXISTING CONDITIONS.
 5. CONTRACTOR TO CONFIRM AVAILABLE VERTICAL CLEARANCE UNDER EXISTING BRIDGE SUPERSTRUCTURE AND PROPOSED BRIDGE SUPERSTRUCTURE SHALL BE APPROXIMATELY 14'-0" UNDER EXISTING BRIDGE STRUCTURE AND APPROXIMATELY 10'-6" UNDER PROPOSED BRIDGE SUPERSTRUCTURE.

NOTE:
 1. MATERIAL TO BE PLACED ON MATERIAL BARGE, AS SHOWN, OR ON CONSTRUCTION VEHICLES LOCATED ON TRESTLE WORK PLATFORM, NOT SHOWN.

NOTE:
 1. SEE SC-01 THROUGH SC-05 FOR ADDITIONAL WORK BARGE INFORMATION.

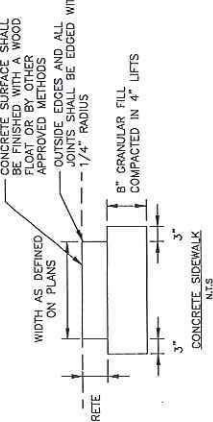
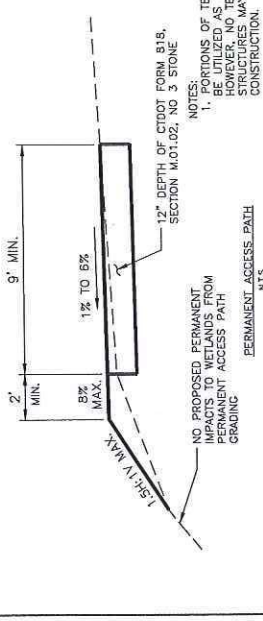
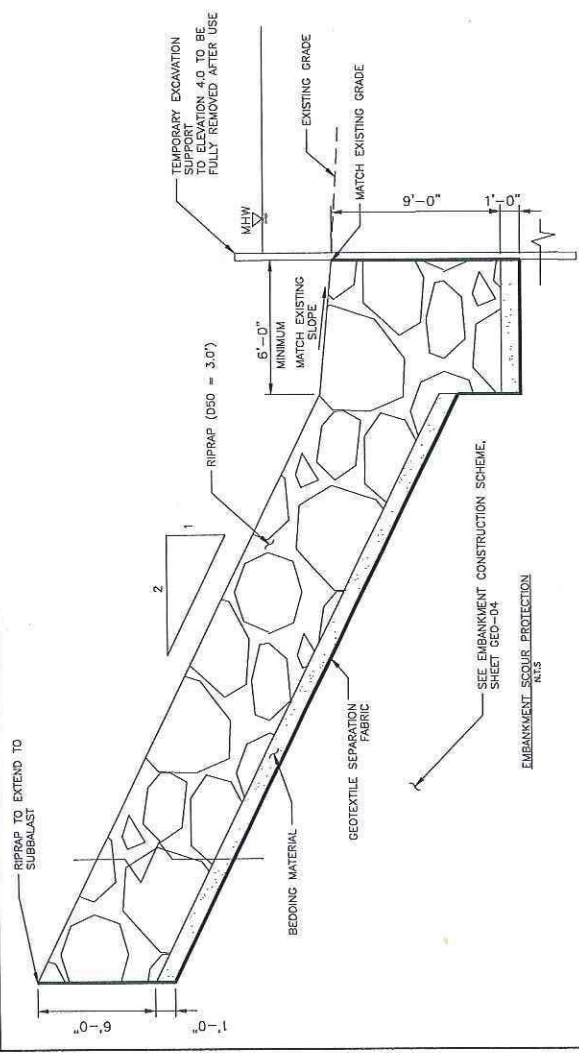
ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023				Office of Chief Engineer STRUCTURES National Suburban Operations Corporation 300 West Street, Philadelphia, Pennsylvania, 19104						HARDESTY & HANOVER, LLC ENGINEERING 1501 Broadway, New York, NY 10036 1700 Market St. Suite 1050 Philadelphia, PA 19103		REPLACEMENT OF MB 106.69 OVER CONNECTICUT RIVER CIVIL DETAILS		PROJECT CODE: 1000.000 SHEET NO.: 115 OF 140 DATE: 05/02/23 DTL-02		
NO.	DATE	BY	CHKD.	APP.	DATE	CHKD.	APP.	DATE	CHKD.	APP.	DATE	CHKD.	APP.	DATE	CHKD.	APP.



TYPICAL SCOUR PROTECTION AT EAST AND WEST APPROACH RETAINING WALLS
N.T.S.

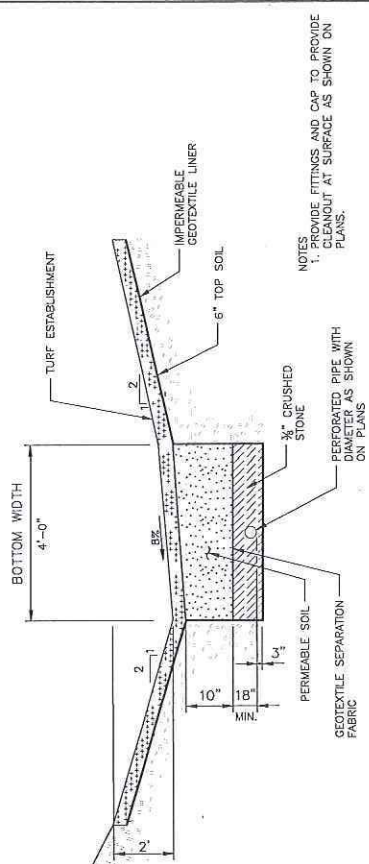
NOTES:

- 25'-0" MINIMUM DIMENSION TO BE HELD WITHIN 40' OF WEST ABUTMENT AND WITHIN 28' OF EAST ABUTMENT. BEFORE HOSE WITHIN THE 40' AND 28' DIMENSIONS, WALL TOE SEE SITE PLANS AND TRACK SECTIONS.
- RIPRAP KEY-IN SHALL BE 15'-0" IN FRONT OF AND SOUTH SIDE OF ABUTMENTS AND TAPER TO 9'-0" ALONG A 30'-0" DISTANCE IN FRONT OF THE RETAINING WALLS AFTER WHICH THE 9'-0" DIMENSION APPLIES.
- SLOPES SHALL NOT EXCEED 1:1.5.



NOTES:

- DUMMY JOINTS TO BE 4' TYPICAL
- EXPANSION JOINT TO BE 12' OR AS DIRECTED



NOTES:

- PROVIDE FITTINGS AND CAP TO PROVIDE CLEANOUT AT SURFACE AS SHOWN ON PLANS.

ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023		CONTRACT NO.		CONNECTICUT		PROJECT CODE: 1001332	
NO. 1		DATE: 05/02/23		SHEET NO.		SHEET NO. 113 OF 120	
NO. 2		DATE: 05/02/23		SHEET NO.		SHEET NO. 113 OF 120	
NO. 3		DATE: 05/02/23		SHEET NO.		SHEET NO. 113 OF 120	
NO. 4		DATE: 05/02/23		SHEET NO.		SHEET NO. 113 OF 120	
NO. 5		DATE: 05/02/23		SHEET NO.		SHEET NO. 113 OF 120	
NO. 6		DATE: 05/02/23		SHEET NO.		SHEET NO. 113 OF 120	
NO. 7		DATE: 05/02/23		SHEET NO.		SHEET NO. 113 OF 120	
NO. 8		DATE: 05/02/23		SHEET NO.		SHEET NO. 113 OF 120	
NO. 9		DATE: 05/02/23		SHEET NO.		SHEET NO. 113 OF 120	
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NO. 11		DATE: 05/02/23		SHEET NO.		SHEET NO. 113 OF 120	
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NO. 19		DATE: 05/02/23		SHEET NO.		SHEET NO. 113 OF 120	
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Amtrak®
National Railroad Passenger Corporation
300 Street Station, Washington, Pennsylvania 15104

Office of Chief Engineer
STRUCTURES
National Railroad Passenger Corporation
300 Street Station, Washington, Pennsylvania 15104

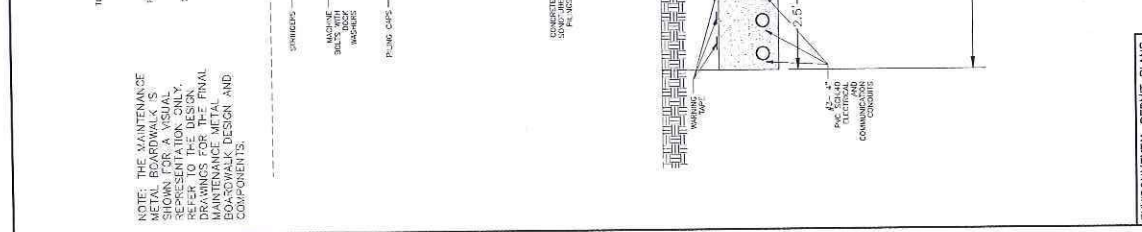
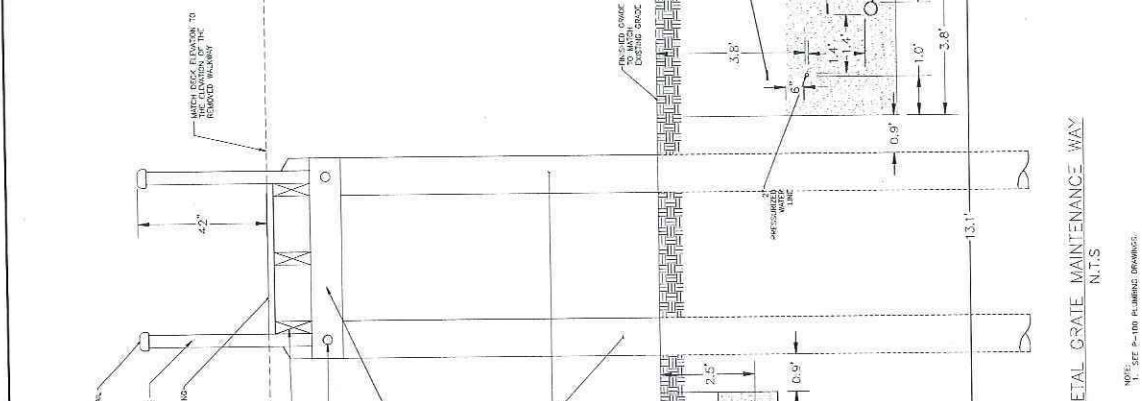
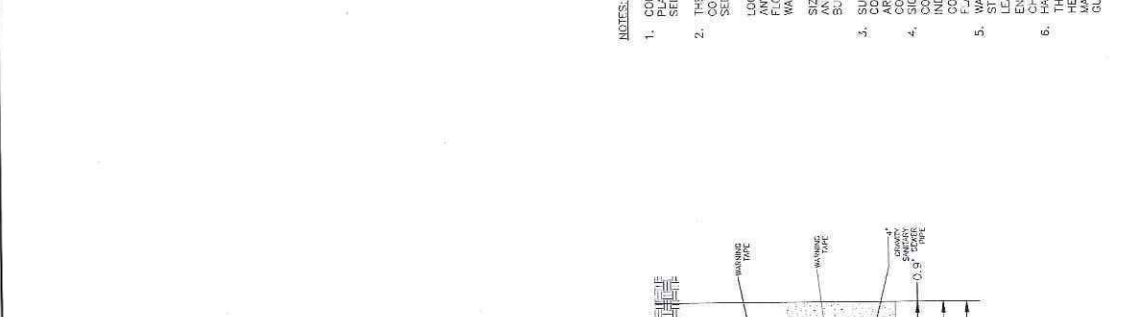
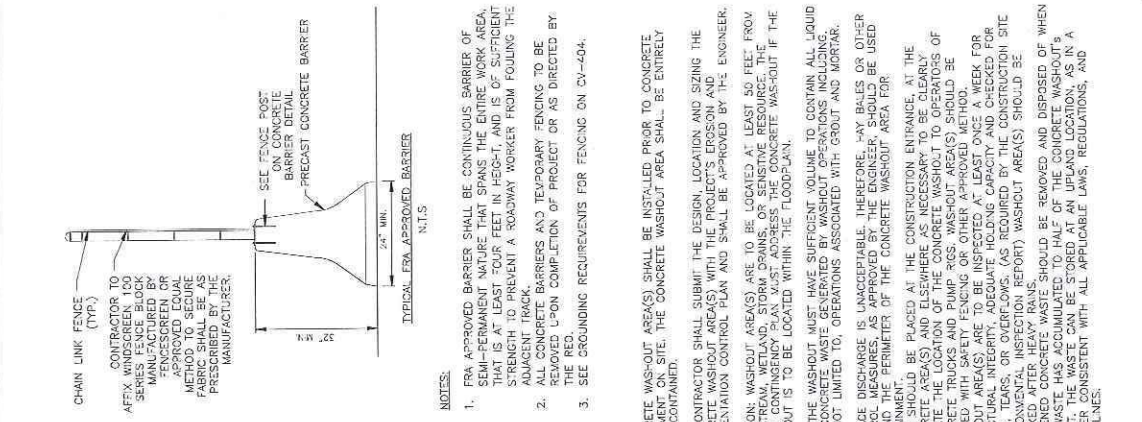
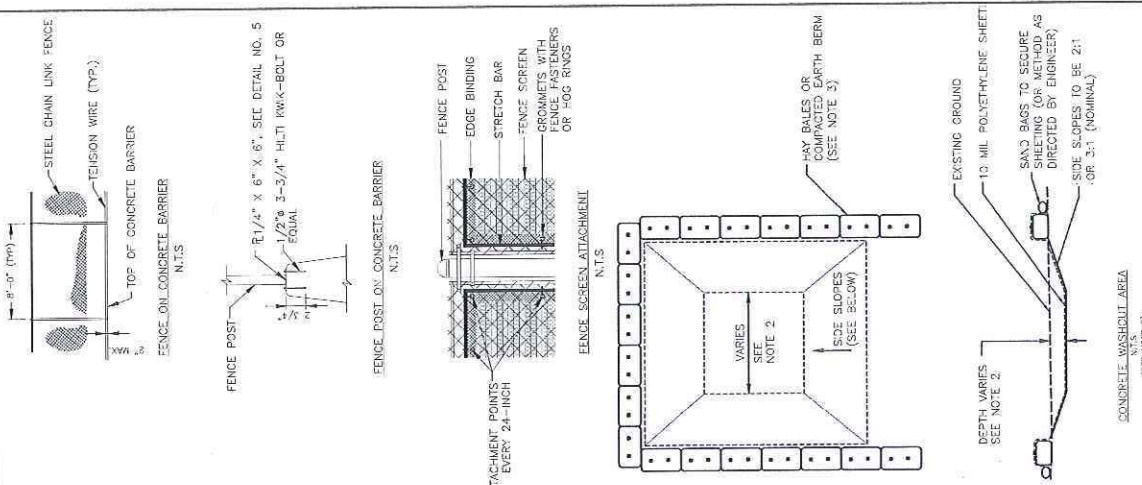
HARDESTY & HANOVER, LLC
ENGINEERING
1301 Broadway, New York, NY 10036
700 Market Street, Philadelphia, PA 19103

REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER
CIVIL DETAILS

Drawn: CHAD
Checked: RM
Date: 05/20/23

DESIGNED BY: [blank]
CHECKED BY: [blank]
DATE: [blank]

PROJECT NO. 1001332
SHEET NO. 113 OF 120



NOTE: THE MAINTENANCE METAL BOARDWALK SHALL SHOW FOR CONSTRUCTION ONLY. REFER TO THE DESIGN DRAWINGS FOR THE FINAL MAINTENANCE METAL COMPONENTS.

CONTRACTOR TO AFFIX WINDSCREEN 100 SERIES FENCE BLOCK MANUFACTURED BY APPROVED EQUAL METHOD TO SECURE FABRIC SHALL BE AS PRESIDENTIAL TYPE MANUFACTURE

CHAIN LINK FENCE (TYP.)

STEEL CHAIN LINK FENCE

TENSION WIRE (TYP.)

TOP OF CONCRETE BARRIER

FENCE POST ON CONCRETE BARRIER

IDEAL FOR APPROVED BARRIER

CONCRETE WASHOUT AREA (SP. NOTE 2)

METAL CRATE MAINTENANCE WAY

CONCRETE WASHOUT AREAS SHALL BE INSTALLED PRIOR TO CONCRETE POUR AT THE CONCRETE WASHOUT AREA SHALL BE ENTIRELY SELF-CONTAINED.

THE CONTRACTOR SHALL SUBMIT THE DESIGN LOCATION AND SIZING THE CONCRETE WASHOUT AREAS) WITH THE PROPOSED EROSION AND SEDIMENTATION CONTROL PLAN AND SHALL BE APPROVED BY THE ENGINEER.

LOCATION: WASHOUT AREAS) ARE TO BE LOCATED AT LEAST 50 FEET FROM ANY STREAM, WETLAND, STORM DRAINS, OR SENSITIVE RESOURCE. THE FLOOD CONTINGENCY LOCAL JURISDICTION'S ADDRESS FOR CONCRETE WASHOUT IF THE WASHOUT IS TO BE LOCATED WITHIN THE FLOODPLAIN.

SIZE: THE WASHOUT MUST HAVE SUFFICIENT VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS INCLUDING BUT NOT LIMITED TO, OPERATIONS ASSOCIATED WITH GROUT AND MORTAR.

SURFACE DISCHARGE IS UNACCEPTABLE. THEREFORE, HAY BALES OR OTHER AROUND THE PERIMETER OF THE CONCRETE WASHOUT AREA FOR CONCRETE AREAS) AND ELSEWHERE AS NECESSARY TO BE CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT TO OPERATORS OF CONCRETE TRUCKS AND PUMP TRUCKS. WASHOUT AREAS) SHOULD BE STRUCTURAL INTEGRITY, ADEQUATE HOLDING CAPACITY AND CHECKED FOR LEAKS, TEARS, OR OVERFLOWS. (AS REQUIRED BY THE CONSTRUCTION SITE ENVIRONMENTAL INSPECTION REPORT) WASHOUT AREAS) SHOULD BE CHECKED AFTER HEAVY RAINFALL SHOULD BE REMOVED AND DISPOSED OF WHEN THE WASTE HAS ACCUMULATED TO HALF OF THE CONCRETE WASHOUT'S HEIGHT. THE WASTE CAN BE STORED AT AN UPLAND LOCATION, AS IN A MANNER CONSISTENT WITH ALL APPLICABLE LAWS, REGULATIONS, AND GUIDELINES.

NOTES:

- FOR APPROVED BARRIER SHALL BE CONTINUOUS BARRIER OF SEMI-PERMANENT NATURE THAT SPANS THE ENTIRE WORK AREA, THAT IS AT LEAST FOUR FEET IN HEIGHT, AND IS OF SUFFICIENT STRENGTH TO PREVENT A ROADWAY WORKER FROM FOULING THE ADJACENT TRACK.
- ALL CONCRETE BARRIERS AND TEMPORARY FENCING TO BE REMOVED UPON COMPLETION OF PROJECT OR AS DIRECTED BY THE RED.
- SEE GROUNDING REQUIREMENTS FOR FENCING ON CV-404.

CONCRETE WASHOUT AREA (SP. NOTE 2)

METAL CRATE MAINTENANCE WAY

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 21, 2023

Office of Chief Engineer
STRUCTURES
286 South State Street, Philadelphia, Pennsylvania 19106

Amtrak®

Hardesty & Hanover, LLC
ENGINEERING
1501 Broadway New York, NY 10036
1700 Market St. Suite 1030
Philadelphia, PA 19103

REPLACEMENT OF MB 106.89
OVER CONNECTICUT RIVER
CIVIL DETAILS

CONTRACT NO. 2023-01-001

PROJECT NO. 100.000

SHEET NO. 100.001

DATE: 05/21/23

SCALE: AS SHOWN

DESIGNED BY: [Name]

CHECKED BY: [Name]

DATE: 05/21/23

PROJECT NO. 100.000

SHEET NO. 100.001

DATE: 05/21/23

SCALE: AS SHOWN

DESIGNED BY: [Name]

CHECKED BY: [Name]

DATE: 05/21/23

PROJECT NO. 100.000

SHEET NO. 100.001

DATE: 05/21/23

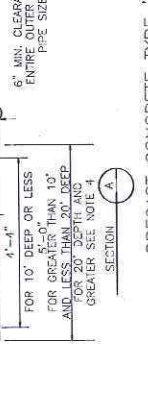
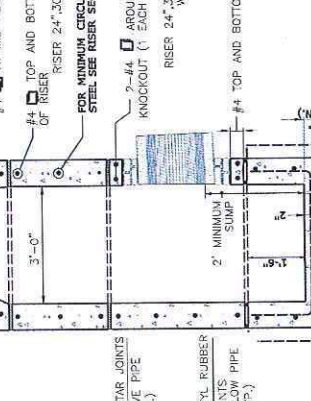
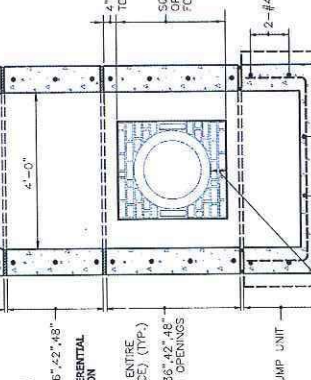
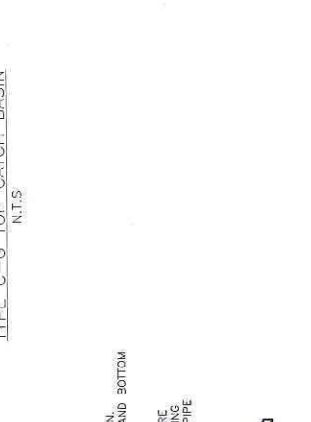
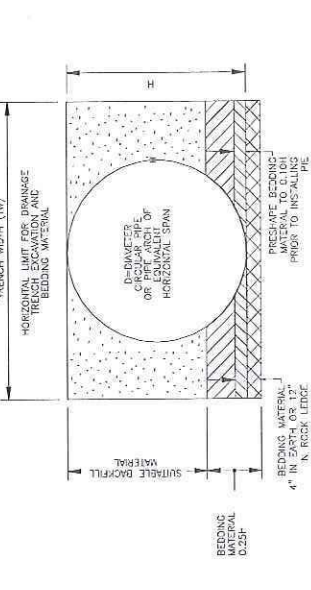
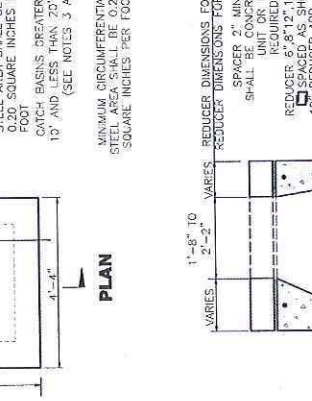
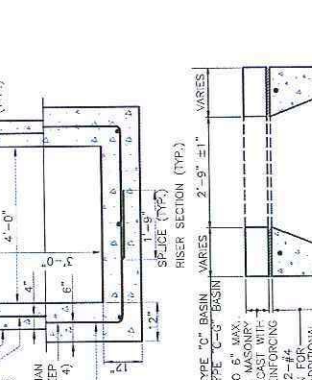
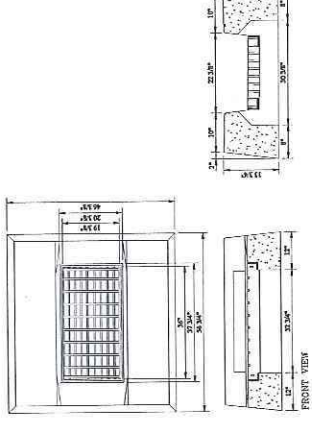
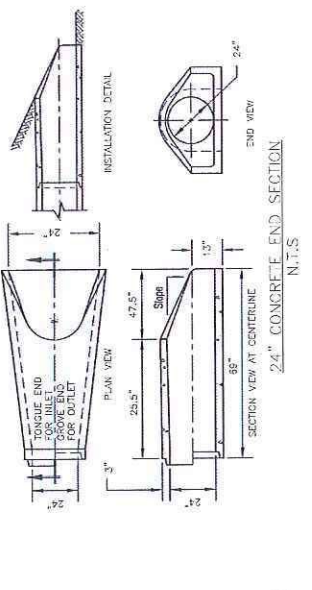
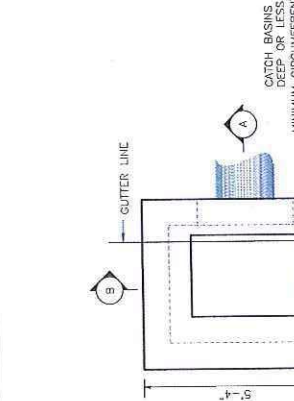
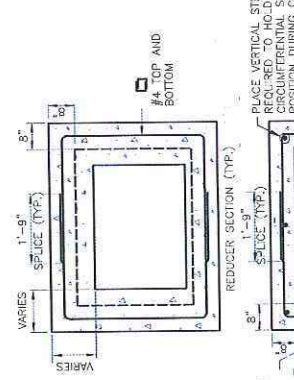
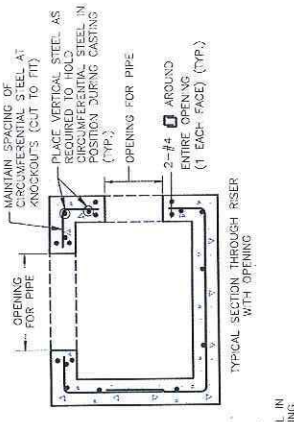
SCALE: AS SHOWN

DESIGNED BY: [Name]

CHECKED BY: [Name]

DATE: 05/21/23

- NOTE:
1. REINFORCING FABRIC WITH AN AREA EQUAL TO OR GREATER THAN THE REINFORCING SHOWN MAY BE SUBSTITUTED AS APPROVED BY THE ENGINEER.
 2. ALL REINFORCEMENT SHALL HAVE A MINIMUM CLEAR COVER OF 2 INCHES EXCEPT FOR BENEATH BOTTOM REINFORCEMENT IN TOP SLOPES, WHERE THE MINIMUM MAY BE 1 1/2 INCHES.
 3. WALL THICKNESS OF ALL CATCH BASINS OVER 12 FEET SHALL BE 12 INCHES UNLESS OTHERWISE NOTED. ALL OTHER CATCH BASINS SHALL BE 12 INCH THICK UNLESS OTHERWISE NOTED.
 4. BASES AND RISERS AT A DEPTH OF 20 FEET AND GREATER SHALL BE DESIGNED BY THE ENGINEER. CONTRACTOR AND WORKING DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW. AFTER THE RISER IS 10 FEET DEEPER, THE RISER SHALL BE REINFORCED WITH BRICK AS DIRECTED BY THE ENGINEER.
 5. CONTRACTOR SHALL PROVIDE PROTECTIVE COVERING AROUND ALL OPENINGS TO PREVENT DAMAGE TO THE OPENING IS TO REMAIN IN PLACE MUST BE FORWARDED UP WITH BRICK AS DIRECTED BY THE ENGINEER.
 6. RISERS SHALL NEVER HAVE A SQUARE RISE. SQUARE RISERS SHALL BE USED FOR ALL RISERS EXCEPT WHERE SHOWN OTHERWISE.
 7. SHRINKAGE AND TEMPERATURE REINFORCEMENT SHALL BE PROVIDED IN THE TOPS OF SLABS. THE TOTAL AREA OF REINFORCEMENT PROVIDED SHALL BE AT LEAST 0.255 SQUARE INCHES PER FOOT IN EACH DIRECTION. THE MAXIMUM SPACING OF THIS REINFORCEMENT SHALL NOT EXCEED 18 INCHES.
 8. THE DETAILS SHOWN IN THE PLAN VIEW FOR PRECAST CONCRETE ROUND STRUCTURES SHALL ALSO BE USED FOR CONCRETE VANHOLES TO CATCH BASINS.
 9. FOR CATCH BASIN TOPS, SEE SHEET NO. HW-586-07 FOR RECTANGULAR OPENING OR SHEET NOS. HW-586-10A, HW-586-10B OR HW-586-10C FOR CIRCULAR OPENING.



TRENCH WIDTH (TW) CHART	
PIPE OR PIPE ARCH STRUCTURE	TRENCH WIDTH
PIPE OR PIPE ARCH WITH NOMINAL SPACING INSIDE HORIZONTAL SPAN LESS THAN 30'	2" GREATER THAN NOMINAL INSIDE HORIZONTAL SPAN
DRAINAGE STRUCTURES	2" BEYOND FULL EXTERIOR OF FOUNDATION WALLS

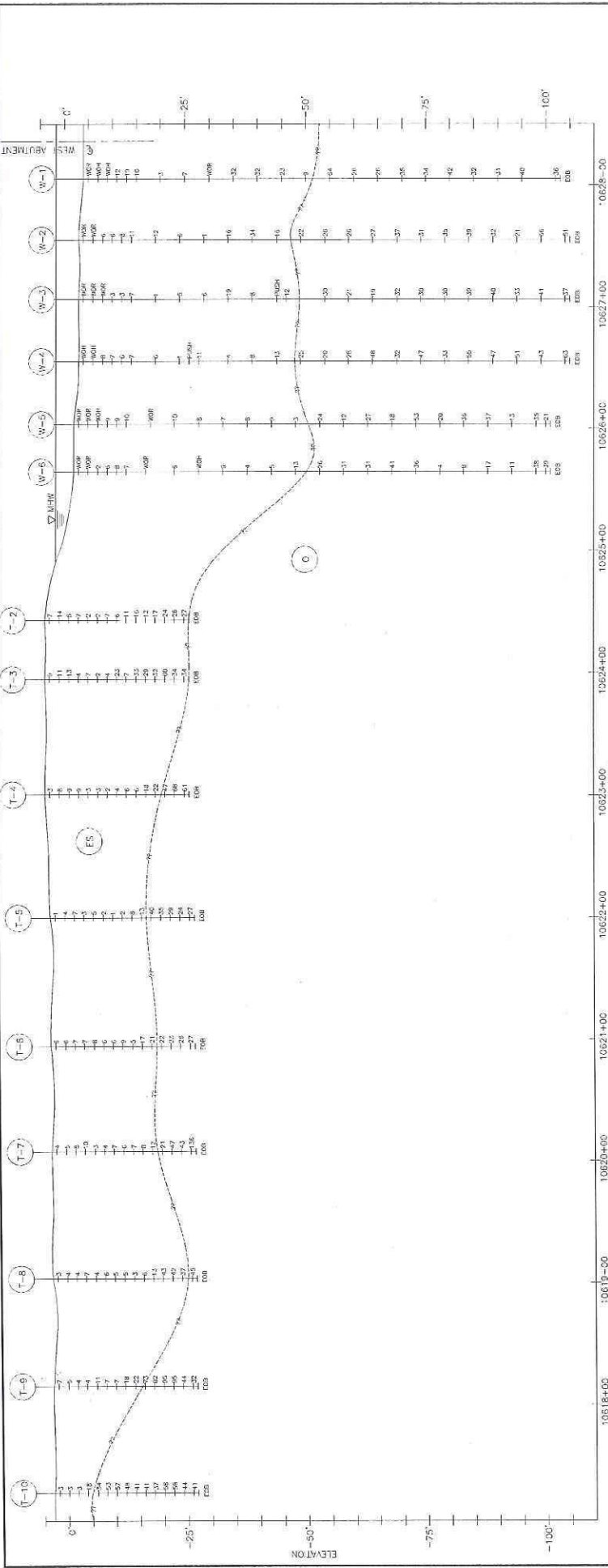
PIPE TRENCH DETAIL	
N.T.S.	
ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023	
HARDESTY & HANOVER, LLC ENGINEERING 1501 Broadway, New York, NY 10036 1700 Walnut St. Suite 1050 Philadelphia, PA 19103	
Prepared By: Dwan EBAD	Checked: NW
Date: 5/2/2023	

PIPE TRENCH DETAIL	
N.T.S.	
ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023	
HARDESTY & HANOVER, LLC ENGINEERING 1501 Broadway, New York, NY 10036 1700 Walnut St. Suite 1050 Philadelphia, PA 19103	
Prepared By: Dwan EBAD	Checked: NW
Date: 5/2/2023	

PIPE TRENCH DETAIL	
N.T.S.	
ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023	
HARDESTY & HANOVER, LLC ENGINEERING 1501 Broadway, New York, NY 10036 1700 Walnut St. Suite 1050 Philadelphia, PA 19103	
Prepared By: Dwan EBAD	Checked: NW
Date: 5/2/2023	

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STRUCTURES
300 Street Station, Philadelphia, Pennsylvania 19106

Project Date: 5/2/2023
Sheet No.: 122 OF 150
Drawing No.: DTL-06



WEST APPROACH SOIL PROFILE LOOKING NORTH



- LEGEND
- ES ESTUARINE SEDIMENTS
 - O OUTWASH

DESCRIPTION	ELEVATION	TABLE	CONTOUR	NOVA (NAVB8)(FT)	USAGE (NAVB8)(CT)
FEMA 100-YEAR (ZONE VE)	100	YR	15.00	16,890.00	
CT COASTAL JURISDICTION LINE	CUL		2.90	4,790.00	
HIGH TIDE LINE	HTL		3.04	4,930.00	
MEAN HIGH WATER LINE	MHW		1.80	3,490.00	
MEAN LOW WATER LINE	MLW		-1.71	0,180.00	
MEAN LOWER LOW WATER LINE	MLLW		-1.89	0.00	

NOTES

1. TOP OF ROCK ELEVATIONS ARE APPROXIMATE, ACTUAL TOP OF ROCK ELEVATION WILL VARY.
2. GRAPHIC LOGS MAY HAVE BEEN SHIFTED FROM THEIR TRUE STATION FOR CLARITY.
3. BORING LOCATIONS AND ELEVATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE. SEE BORING LOGS IN THE GEOTECHNICAL AND FOUNDATION RECOMMENDATIONS REPORT FOR ACTUAL COORDINATES AND ELEVATIONS.
4. THIS GENERALIZED INTERPRETATIVE SOIL PROFILE IS INTENDED TO CONVEY TRENDS IN SUBSURFACE CONDITIONS. THE BOUNDARIES BETWEEN THE STRATA ARE APPROXIMATE AND IDEALIZED, AND HAVE BEEN DEVELOPED BY INTERPRETATIONS OF WIDELY SPACED EXPLORATION BORINGS. FOR MORE SPECIFIC INFORMATION, REFER TO THE GEO TECHNICAL AND FOUNDATION RECOMMENDATION REPORT.
5. SUITABLE ROCK IS DEFINED AS THE TOP OF THE SHALLOWEST ROCK RUN WITH THE ROCK QUALITY DESIGNATION (RQD) EQUAL TO 25% OR GREATER AS DETERMINED BY THE FIELD INSPECTOR.
6. ELEVATIONS SHOWN ARE IN NORTH AMERICAN VERTICAL DATUM OF 1986 (NAVD83). FEMA 100-YEAR FLOOD ELEVATIONS VARY ACROSS THE PROJECT. VALUE SHOWN IN THE ELEVATION TABLE IS THE MINIMUM ELEVATION THROUGHOUT THE PROJECT.
7. STATIONS SHOWN ARE BASED ON PROPOSED PROJECT TRACK 1.

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

Office of Chief Engineer
STRUCTURES
National Railroad Passenger Corporation
300 North Station, Philadelphia, Pennsylvania 19104

PROJECT CODE: 10060002

REVISIONS: 127 OF 142

DATE: 5/2/2023

DESIGNED BY: [Signature]

CHECKED BY: [Signature]

PROJECT: CONNECTICUT OVERCONNECTICUT RIVER

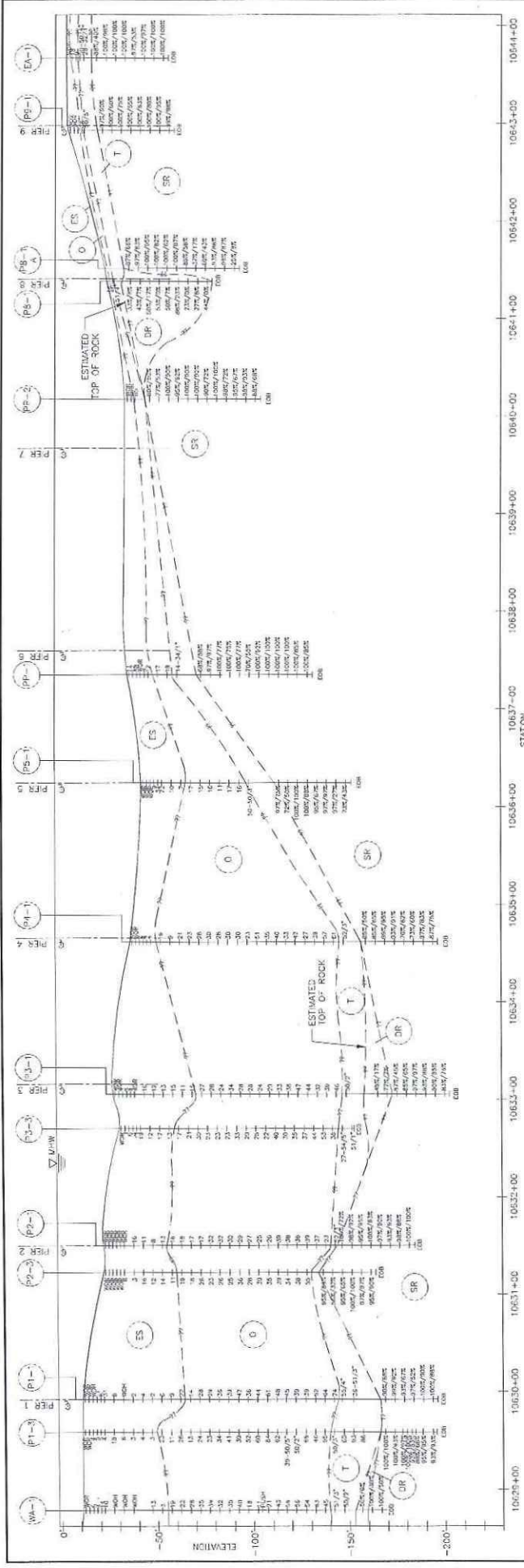
PROJECT NO: MB 106 89

SHEET NO: 1

SCALE: AS SHOWN

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BRIDGE SOIL PROFILE LOOKING NORTH



- LEGEND
- ES ESTUARINE SEDIMENTS
 - O OUTWASH
 - T TILL
 - DR DECOMPOSED ROCK
 - SR SUITABLE ROCK

DESCRIPTION	ELEVATION (AS E)	CONTOUR	NOMA (NAVB88)(FT)	USACE (NAVB88)(FT)	LSACE (NAVB88)(FT)
FEMA 100-YEAR (ZONE VE)	100 YR	15.00	15.00	16.8900	
CT COASTAL JURISDICTION LINE	CHL	2.80	4.7900		
HIGH TIDE LINE	HTL	3.04	4.9300		
MEAN HIGH WATER LINE	MHW	1.80	3.4900		
MEAN LOW WATER LINE	MLW	-1.71	0.1800		
MEAN LOWER LOW WATER LINE	MLLW	-1.89	0.00		

NOTES

- ELEVATIONS SHOWN ARE IN NORTH AMERICAN VERTICAL DATUM OF 1988 (NAV88).
- STATIONS SHOWN ARE BASED ON PROPOSED PROJECT TRACK.
- SEE INTERPRETIVE SUBSURFACE PROFILE SHEET GEO-01 FOR NOTES AND LEGEND.

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

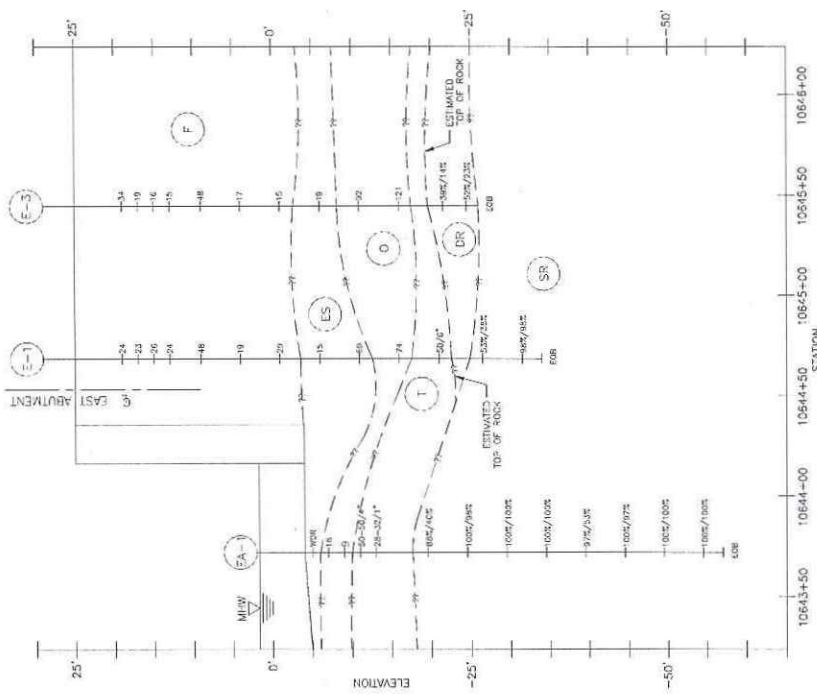
Office of Chief Engineer
STRUCTURES
National Railroad Passenger Corporation
30th Street Station, Philadelphia, Pennsylvania 19104

PROJECT: CONSTRUCTION
PROJECT NAME: REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER
SUBSURFACE PROFILE 2

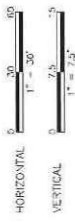
DESIGNED BY: DAWSON
CHECKED BY: [Signature]

PROJECT NO: 2003-000
DATE: 5/2/2023
SHEET NO: 02 OF 02
PROJECT: GEO-02

- LEGEND
- (F) FILL
 - (ES) ESTUARINE SEDIMENTS
 - (O) OUTWASH
 - (T) TILL
 - (DR) DECOMPOSED ROCK
 - (SR) SUITABLE ROCK



EAST APPROACH SOIL PROFILE
LOOKING NORTH

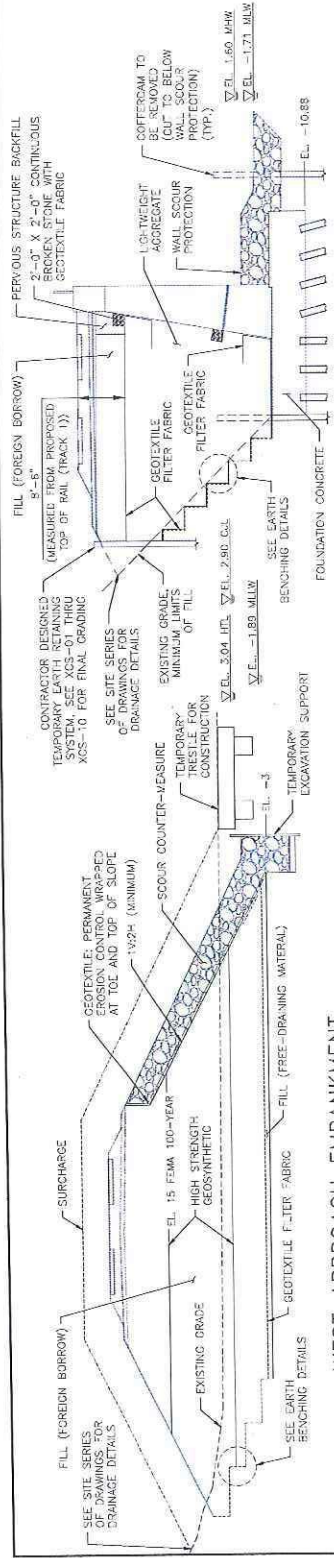


DESCRIPTION	ELEVATION LABEL	NOAA (NAVB88)(FT)	USACE (NAVB88)(FT)	USAGE
FEMA 100-YEAR (ZONE VE)	100 YR	15.00	16.8900	16.8900
CT COASTAL JURISDICTION LINE	C-L	2.90	4.7900	4.7900
HIGH TIDE LINE	HTL	3.04	4.9300	4.9300
MEAN HIGH WATER LINE	MHW	1.60	3.4800	3.4800
MEAN LOW WATER LINE	MLW	-1.71	0.1800	0.1800
MEAN LOWER LOW WATER LINE	MLLW	-1.89	0.00	0.00

- NOTES
- ELEVATIONS SHOWN ARE IN NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
 - STATIONS SHOWN ARE BASED ON PROPOSED PROJECT TRACK 1.
 - SEE INTERPRETIVE SUBSURFACE PROFILE SHEET GEO-01 FOR NOTES AND LEGEND.

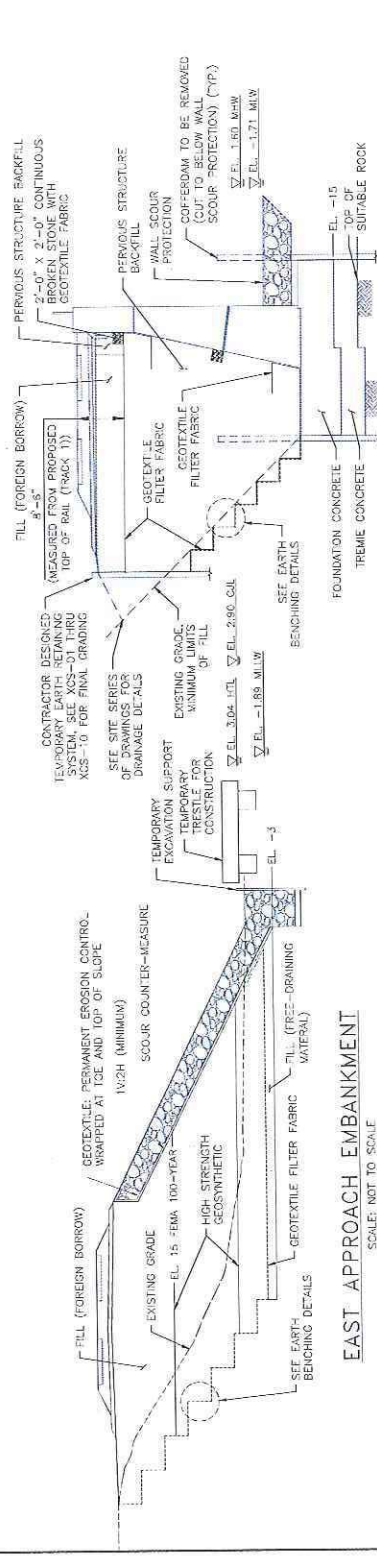
<p>ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023</p>	<p>Office of Chief Engineer STRUCTURES</p> <p><small>50th Street Corridor, Bridgeport, Connecticut 06610</small></p>		<p>HARDESTY & HANOVER, LLC ENGINEERING</p> <p><small>1501 Pennington New York, NY 10036</small></p>
<p>REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER SUBSURFACE PROFILE 3</p>		<p>DESIGNED BY: [Signature]</p> <p>CHECKED BY: [Signature]</p>	<p>PROJECT NO: 106.89 SHEET NO: 125 OF 142 DATE: 5/2/2023</p>

- NOTES:
- USE LIGHTWEIGHT AGGREGATE, AS SHOWN, WITHIN THE LIMITS OF THE WEST APPROACH RETAINING WALL. CONSTRUCT THE APPROACH EMBANKMENTS IN SEQUENTIAL STEPS AS FOLLOWS:
 - EXCAVATE TO REMAIN THE TOP SOFT SOIL ON THE EMBANKMENT FILL TO ELEVATION -2.03 FEET, OR AS DIRECTED BY THE ENGINEER.
 - BACKFILL WITH FREE-DRAINING MATERIAL TO ELEVATION -1.0 FEET TO CONSTRUCT WORKING PLATFORM. FREE-DRAINING MATERIAL SHALL MEET THE REQUIREMENTS OF CONDUIT FORM 818, SECTION M.02.02.
 - DEWATER TO CREATE DRY WORK AREA.
 - PLACE THE GEOTEXTILE FILTER FABRIC ON ALL PLACING SURFACES. GEOTEXTILE FILTER FABRIC SHALL MEET THE REQUIREMENTS OF 7.55 AND M.02.01-19 OF THE CONDUIT FORM 818 AND CONFORM TO THE REQUIREMENTS FOR SEPARATIONAVING HIGH SURVIVALITY.
 - CONSTRUCT EMBANKMENT FILLS TO ELEVATION +12.0 FEET USING FORE-ON BORROW AFTER PLACING GEOTEXTILE OVER THE ENTIRE FOOTPRINT OF THE FILL AREA. ALLOW FOR A 21-DAY CONSOLIDATION PERIOD, OR AS ORDERED BY THE ENGINEER BEFORE ADDING NEW FILL. MEET THE REQUIREMENTS OF 7.55 AND M.02.01-19 OF CONDUIT FORM 818 AND SHALL COMPLY WITH THE PROJECT SPECIFICATIONS.
 - CONSTRUCT EMBANKMENT FILLS TO ELEVATION +12.0 FEET USING FORE-ON BORROW AFTER PLACING GEOTEXTILE OVER THE ENTIRE FOOTPRINT OF THE FILL AREA. ALLOW FOR A 21-DAY CONSOLIDATION PERIOD, OR AS ORDERED BY THE ENGINEER BEFORE ADDING NEW FILL. MEET THE REQUIREMENTS OF 7.55 AND M.02.01-19 OF CONDUIT FORM 818 AND SHALL COMPLY WITH THE PROJECT SPECIFICATIONS.
 - CONTINUE CONSTRUCTION OF THE EMBANKMENT TO THE FINAL GRADE AFTER PLACING A GEOTEXTILE EMBANKMENT REINFORCEMENT AT ELEVATION -15.0 FEET ACROSS THE ENTIRE FOOTPRINT OF THE EMBANKMENT. THE REINFORCEMENT SHALL BE ORDERED BY THE ENGINEER BEFORE ADDING THE NEW SURCHARGE FILL.
 - AT THE WEST APPROACH EMBANKMENT, PLACE AN ADDITIONAL 5 FEET OF SURCHARGE. SURCHARGE SHALL BE PLACED SUCH THAT THE TEMPORARY ACCESS ROADS REMAIN ACCESSIBLE THROUGHOUT THE CONSOLIDATION PERIOD.
 - ALLOW FOR A 180-DAY CONSOLIDATION PERIOD AT THE WEST APPROACH EMBANKMENT AND A 180-DAY CONSOLIDATION PERIOD AT THE EAST APPROACH EMBANKMENT TO ACHIEVE THE COMPLETION OF PRIMARY CONSOLIDATION PRIOR TO THE PLACEMENT OF THE RAILROAD BALLAST. THE DESIGN SHALL BE REVIEWED AND APPROVED BY THE ENGINEER BASED ON THE SETTLEMENT PLATFORM AND SLOPE INCLINOMETER READINGS. DURING THE WAITING PERIOD, ALL CONSTRUCTION EQUIPMENT WILL BE PERMITTED. SEE C1-408 FOR EMBANKMENT MONITORING INSTRUMENTATION DETAILS.
 - RE-GRADE THE SITE TO FINAL GRADE AND CONSTRUCT THE RAILROAD TRACKS.
 - PRIOR TO COMMENCEMENT OF WEST APPROACH RETAINING WALL OR EMBANKMENT CONSTRUCTION, CONFIRMATORY BORINGS SHALL BE CONDUCTED AT 8 BORINGS WHICH EVER IS LARGER, MINIMUM SOILING DEPTH SHALL BE 70 FEET BELOW EXISTING GRADE.
 - DETAILS SHOWN ON THIS SHEET NOT TO SCALE FOR CLARITY.



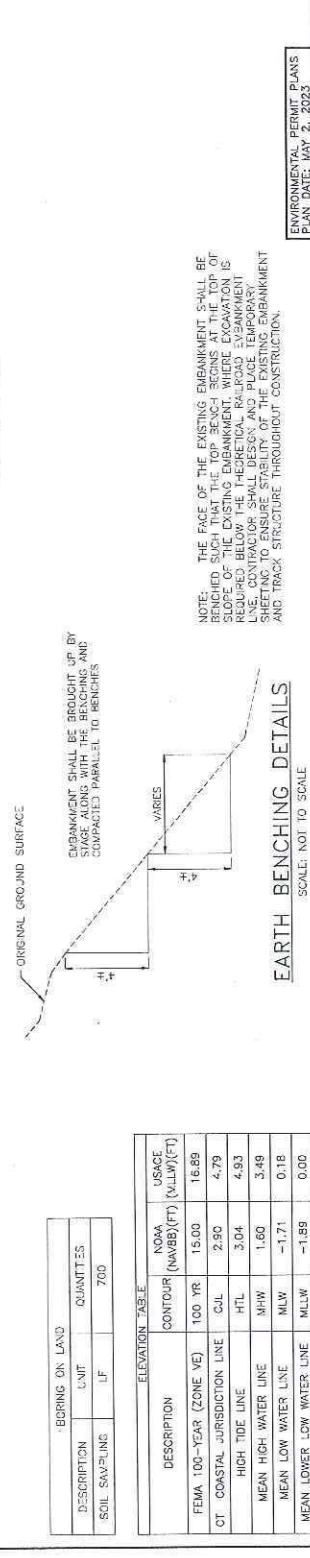
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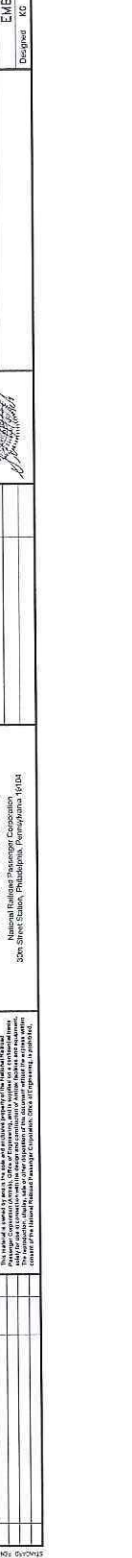
EAST APPROACH RETAINING WALL

SCALE: NOT TO SCALE



EARTH BENCHING DETAILS

SCALE: NOT TO SCALE



ELEVATION TABLE

DESCRIPTION	NO. OF BORINGS	USACE (MADBY)(FT)	(M-LW)(FT)
FEMA 100-YEAR (ZONE VE)	100 YR	15.00	16.89
CT. COASTAL JURISDICTION LINE	COL	2.90	4.79
HIGH TIDE LINE	HTL	3.04	4.93
MEAN HIGH WATER LINE	MHW	1.60	3.49
MEAN LOW WATER LINE	MLW	-1.71	0.18
MEAN LOWER LOW WATER LINE	MLLW	-1.89	0.00

BORING ON LAND

DESCRIPTION	UNIT	QUANTITIES
SOIL SAMPLING	LF	700

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

OLD DRAWING NO. 1003000
CONTRACTOR: HARDESTY & HANOVER, LLC
REPLACEMENT OF MB 105.89 OVER CONNECTICUT RIVER
EMBAKMENT CONSTRUCTION SCHEME
DESIGNED BY: [Signature] DATE: 5/7/2023

Scale: 1" = 20'-0"

Sheet No. 105 OF 145
GEO-04

Office of Chief Engineer
STRUCTURES

3200 Spring Street, Bridgeport, Connecticut 06610

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Office of Chief Engineer
STRUCTURES

3200 Spring Street, Bridgeport, Connecticut 06610

NOTES:

- SEE DRAWINGS GEO-06 AND GEO-07 FOR DRILLED SHAFT FOUNDATION AND BRIDGE PIER CONSTRUCTION DETAILS. ALL BRIDGE PIER FOUNDATIONS SHALL BE DESIGNED PER THE DETAILS SHOWN ON DRAWING DEM-01.
 - PROPOSED BRIDGE PIERS NOT SHOWN FOR CLARITY.
- CONSTRUCTION NOTES:**
- CARE SHALL BE EXERCISED TO AVOID UNDERMINING NEARBY SOIL SUPPORTING THE FOUNDATION OF EXISTING BRIDGE AND TO PROTECT UTILITIES DURING INSTALLATION AND CONSTRUCTION OF ANY TEMPORARY STRUCTURE, DRILLED SHAFTS, PILES AND/OR BRIDGE PIERS. BRIDGE PIERS SHALL BE CONSTRUCTED IN THE ORDER SHOWN FOR THE DRILLED SHAFTS FOR EACH SUBSTRUCTURE UNIT AT THE POINT CLOSEST TO THE EXISTING BRIDGE STRUCTURE.
 - CASE SHALL BE EXERCISED TO AVOID UNDERMINING NEARBY SOIL SUPPORTING THE FOUNDATION OF THE NEWLY CONSTRUCTED BRIDGE AND TO PROTECT UTILITIES DURING THE CONSTRUCTION OF THE EXISTING BRIDGE.
 - THE EXISTING FEATURES SHOWN ON THE PLAN (IF ANY) ARE FOR INFORMATION ONLY. THERE MAY BE ADDITIONAL UTILITIES OR STRUCTURES PROPOSED FOUNDATION LOCATION. CONTRACTOR SHALL LOCATE ANY FEATURES AND REMOVE OBSTRUCTIONS/RIIRAP PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.
 - CONTRACTOR SHALL EXERCISE CAUTION WHILE REMOVING OBSTRUCTIONS AND RIIRAP TO AVOID UNDERMINING THE SOIL SUPPORTING THE FOUNDATION OF THE EXISTING BRIDGE. SCOPE OF OBSTRUCTION AND RIIRAP REMOVAL SHALL BE LIMITED TO PERMIT INSTALLATION OF DRILLED SHAFTS AND SPREAD FOOTINGS.
 - THE DIMENSIONS SHOWN ON THIS SHEET INDICATING THE CLEARANCE DISTANCES BETWEEN THE EXISTING PER CAPS AND THE PROPOSED DRILLED SHAFTS AND SPREAD FOOTINGS ARE APPROXIMATE, AND SHALL BE VERIFIED BY THE CONTRACTOR, WHERE REQUIRED.
 - CONTRACTOR SHALL PROTECT EXISTING UTILITIES NOT ABANDONED FROM DAMAGE, DISTURBANCE AND/OR EXCESSIVE VIBRATION THROUGHOUT THE CONSTRUCTION OF THE PROPOSED STRUCTURE AND DEMOLITION OF THE EXISTING STRUCTURE.

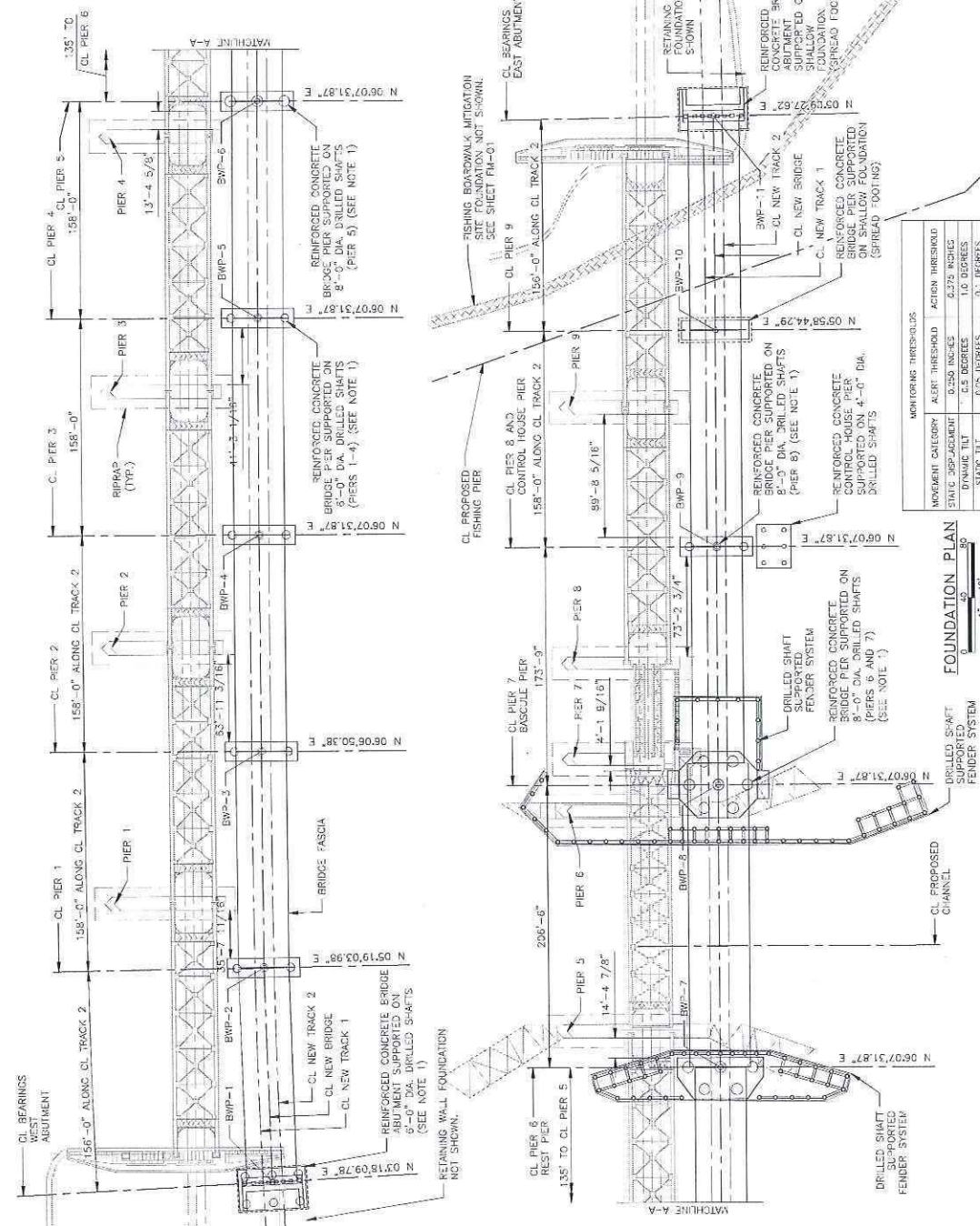
STRUCTURE MONITORING NOTES:

- THE EXISTING BRIDGE'S PILES AND ABUTMENTS SHALL BE MONITORED PER THE CONTRACT SPECIFICATIONS.
- EXISTING BRIDGE MEASUREMENT AND TILT MEASUREMENTS AS LISTED IN MONITORING TRESHOLDS TABLE BELOW. TRESHOLDS SUBJECT TO REVIEW AND REVISION BASED ON RESULTS OF THE BASELINE SURVEY.
- VIBRATION/TILT SENSORS PER EACH PIER (MINIMUM):
 - PIERS 1 THROUGH 4, PIS 9, AND ABUTMENTS: TWO SURVEY TARGETS, ONE TILT SENSOR, AND ONE VIBRATION SENSOR PER PIER.
 - PIERS 5 THROUGH 8, FOUR SURVEY TARGETS, TWO TILT SENSORS AND TWO VIBRATION SENSORS PER PIER. FOR SURVEY TARGETS, TWO SETS OF MONITORING POINTS ON THE UPSTREAM AND DOWNSTREAM SIDES OF THE PIER. FOR TILT, ONE TILT SENSOR ON THE UPSTREAM AND DOWNSTREAM SIDES OF THE PIER. FOR VIBRATION, ONE VIBRATION SENSOR ON THE UPSTREAM AND DOWNSTREAM SIDES OF THE PIER.

BRIDGE CENTERLINE WORKING POINTS

WORKING POINT	STATION A.M.C TRACK 2	OFFSET	NORTHING	EASTING
BWP-1	106+28.36	4857	7.74' LT.	672288.9932 1109335.4415
BWP-2	106+2892.4857	7.61' LT.	672276.7387	1109449.2302
BWP-3	106+3150.4857	7.00' LT.	672260.1025	1109648.4553
BWP-4	106+3308.4857	7.00' LT.	672243.9426	1109805.5543
BWP-5	106+3466.4857	7.00' LT.	672226.3829	1109962.6522
BWP-6	106+3624.4857	7.00' LT.	672209.5233	1110119.7501
BWP-7	106+3782.4857	7.00' LT.	672192.6636	1110276.8480
BWP-8	106+3940.4857	7.00' LT.	672175.8039	1110433.9459
BWP-9	106+4098.4857	7.00' LT.	672158.9442	1110591.0438
BWP-10	106+4256.4857	6.86' LT.	672142.0845	1110748.1417
BWP-11	106+4414.4857	6.92' LT.	672125.2248	1110905.2396

NOTE: BRIDGE CENTERLINE WORKING POINTS ARE PROVIDED AT INTERSECTIONS OF CL SUBSTRUCTURES AND CL BRIDGE.



MONITORING TRESHOLDS

MOVEMENT CATEGORY	ALERT THRESHOLD	ACTION THRESHOLD
STATIC DISPLACEMENT	0.250 INCHES	0.375 INCHES
DYNAMIC TILT	0.5 DEGREES	1.0 DEGREES
STATIC TILT	0.25 DEGREES	0.5 DEGREES
VIBRATION	0.40 IN/SEC	0.50 IN/SEC

FOUNDATION PLAN

Scale: 1" = 40'

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

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STRUCTURES

15501 Broadway, New York, NY 10036

HARDSTY & HANOVER, LLC
ENGINEERS

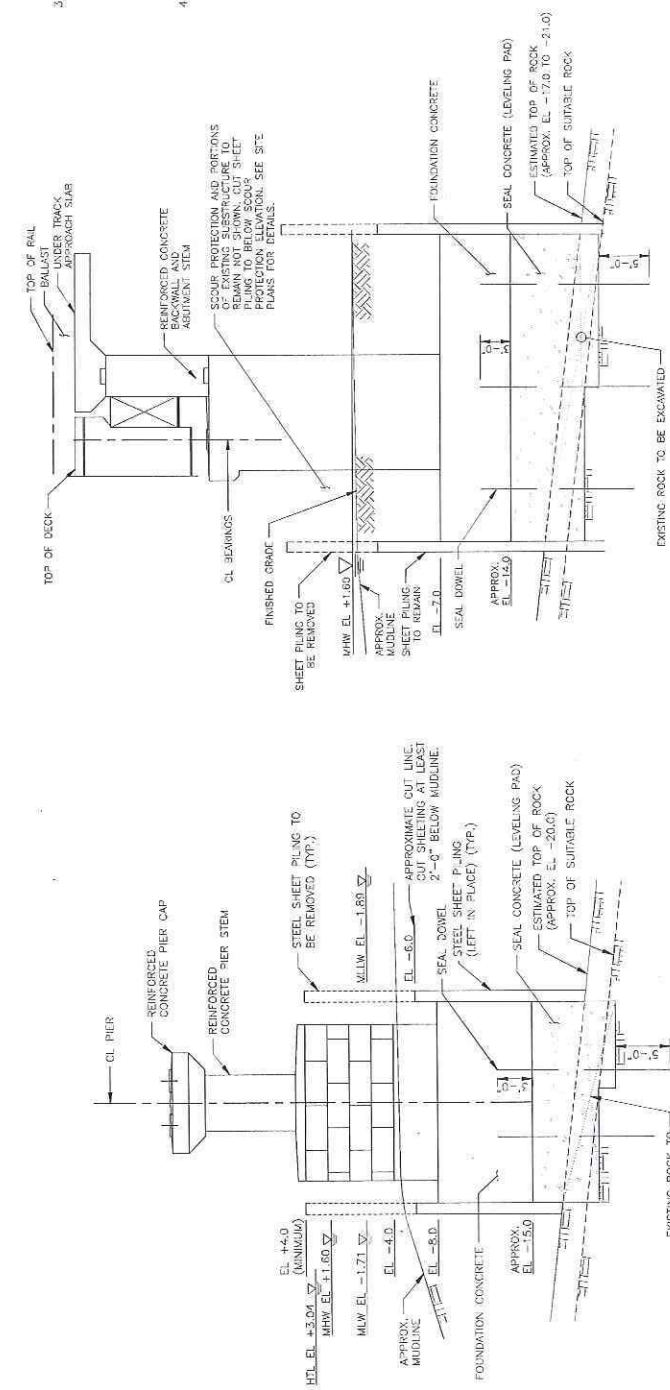
FOUNDATION PLAN
REPLACEMENT OF MB 108.89
OVER CONNECTION PIER

Project Code: 1003000
Sheet No.: 127 OF 142
Date: 5/2/2023
Designer: MS
Checker: AS/PAL

GEO-05

SKELTON FOUNDATION NOTES:

1. THE BEDROCK WILL VARY IN NATURE, SLOPE, AND DEGREE OF FRACTURING. AFTER THE FOUNDATION EXCAVATIONS ARE COMPLETED, THE CONTRACTOR SHALL SURVEY THE EXCAVATION BEDROCK AND PROVIDE THE EXACT BEDROCK ELEVATIONS TO THE PROJECT ENGINEER.
2. SEAL CONCRETE (LEVELING PAD) SHALL BE PLACED ON NON-FRACURED SUITABLE BEDROCK (CLEAN) OF ALL WEATHERED OR FRACTURED ROCK OR LOOSE SOIL. PRIOR TO PLACING THE FOOTING, THE BEARING SURFACE SHALL BE WASHED WITH HIGH PRESSURE WATER AND A SMOOTH BEDROCK SURFACE SHALL BE EXPOSED. THE BEDROCK SURFACE SHALL BE BLENDED IN LEVEL STEPS OR MADE COMPLETELY LEVEL. THE BEDROCK BEARING SURFACE SHALL BE NEARLY HORIZONTAL AND SHALL BE MINIMUM MEASURED PERPENDICULAR TO THE FACE.
3. WHEN BEDROCK PROTRUSIONS ABOVE THE BOTTOM OF THE FOOTING ARE FOUND, THE PROTRUSIONS MAY BE CUT IN THE FIELD BASES AND VERTICAL REINFORCING MAY BE CUT IN THE FIELD WITH THE APPROVAL OF THE PROJECT ENGINEER. THE MINIMUM ALLOWABLE FACTING THICKNESS IS SHOWN ON THE DRAWING. REINFORCING SHALL BE CUT TO THE MINIMUM AND ADJUSTING REINFORCING STEEL WILL BE CONSIDERED INCIDENTAL TO RELATED CONTRACT ITEMS. NO SEPARATE PAYMENT WILL BE MADE.
4. AT THE OPTION OF THE PROJECT ENGINEER, BEDROCK THAT PROTRUSSES ABOVE THE BOTTOM OF FOOTING/SEAL CONCRETE (LEVELING PAD) ELEVATION MAY BE REMOVED.



PIER 9
N.T.S

EAST ABUTMENT
N.T.S

ELEVATION TABLE			
DESCRIPTION	CONTOUR	NDA4 (NAV88)(CT)	USACE (MLW)(FT)
FEVA 100-YEAR (ZONE VE)	100 YR	15.00	16.89000
CT COASTAL JURISDICTION LINE	CUL	2.90	4.79000
HIGH TIDE LINE	HIL	3.04	4.93000
MEAN HIGH WATER LINE	MHW	1.60	3.49000
MEAN LOW WATER LINE	MLW	-1.71	0.18000
MEAN LOWER LOW WATER LINE	MLLW	-1.89	0.000

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023



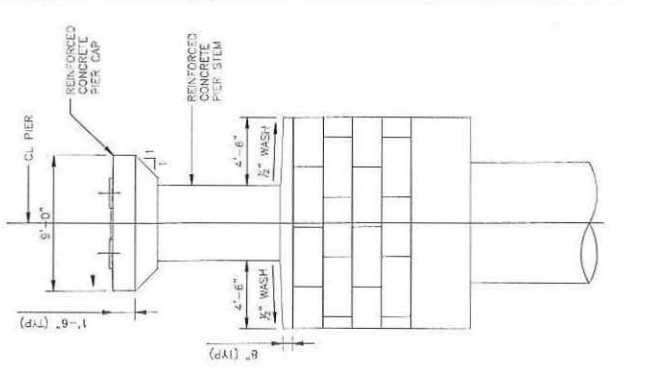
Office of Chief Engineer
STRUCTURES
National Railroad Passenger Corporation
200 Street Station, Philadelphia, Pennsylvania 19104



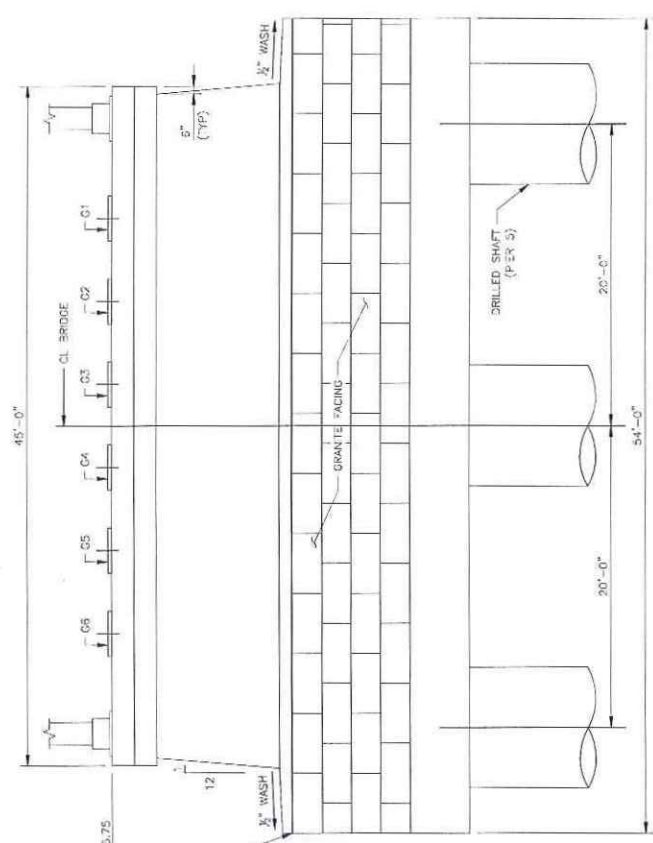
HARDESTY & HANOVER, LLC
ENGINEERING
1001 Broadway New York, NY 10018

CONTRACTOR
**REPLACEMENT OF MB 106.89
OVER CONNECTICUT RIVER**
PIER 9 AND EAST ABUTMENT

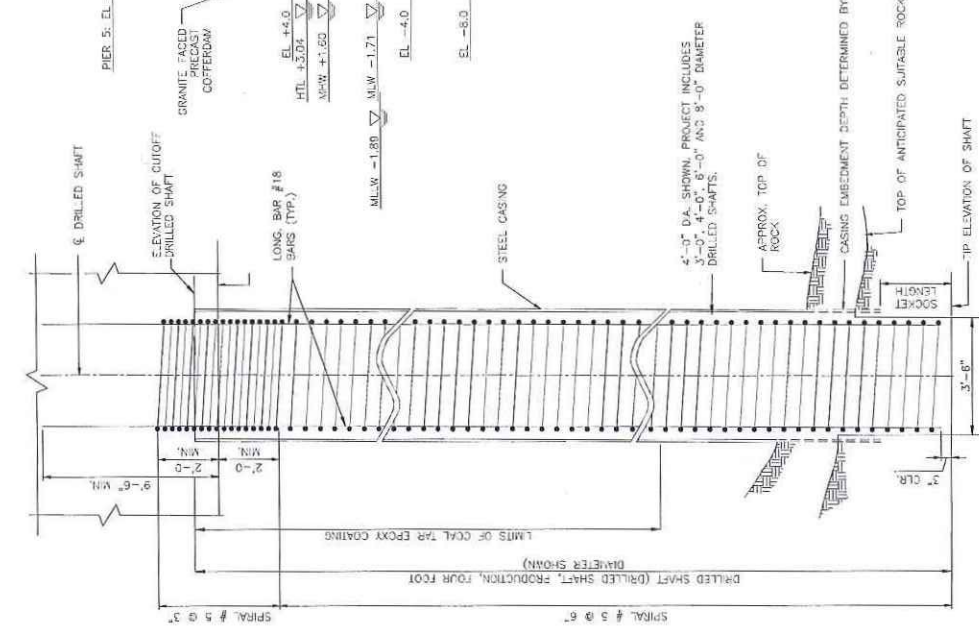
Drawn: KC
Checked: AR/EM
Date: 5/2/2023
Sheet Code: XXX-XXX
Sheet No: 128 OF 142
GEO-06



TYPICAL PIER SECTION



TYPICAL DRILLED SHAFT PIER ELEVATION
(REFER TO SHOW, OTHERS SIMILAR)



TYPICAL DRILLED SHAFT
SCALE: NOT TO SCALE

NOTES:

1. THE CONTRACTOR SHALL CONSTRUCT THE DRILLED SHAFTS CONFORMING TO THE REQUIREMENTS OF THIS DRAWING AND THE PROJECT SPECIFICATIONS.
2. PERMANENT STEEL CASING SHALL CONFORM TO ASTM A572, GR60.
3. REINFORCEMENT STEEL FOR CONCRETE SHALL BE HOT DIP GALVANIZED. SEE SPECIFICATIONS GENERAL NOTES.
4. SPECIAL CONSTRUCTION CONDITIONS OF DRILLED SHAFTS PRIOR TO COMMENCEMENT OF DRILLED SHAFT EXCAVATION, CONCRETE BORINGS SHALL BE CONDUCTED AT EACH SHAFT LOCATION FOR ALL PIERS AND CONTROL HOUSE TO CONFIRM TOP OF BEDROCK AND TYPE AND QUALITY OF BEDROCK. CONFIRMATORY BORINGS SHALL BE CONDUCTED AT EACH SHAFT LOCATION FOR ALL PIERS AND CONTROL HOUSE BORINGS FOR BOTH PIERS, WHICHEVER IS LARGER CONVEYOR ROCK BORING SHALL EXTEND AT LEAST 10 FEET DEEPER THAN THE ESTIMATED SOCKET LENGTH OF THE SUBSTRUCTURE.
5. DRILLED SHAFTS SHALL BE CONSTRUCTED TO A MINIMUM WATER TABLE ELEVATION OF 1.0 FEET BELOW THE FINISHED GRADE AT THE SHAFT LOCATION. THE CONTRACTOR SHALL MAINTAIN THE WATER TABLE AT LEAST 1.0 FEET BELOW THE FINISHED GRADE AT THE SHAFT LOCATION THROUGHOUT THE PERIODS OR TIME FRAMES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SAFEGUARD THE DRILLED SHAFT CONSTRUCTION ACTIVITIES AND OPERATIONS AGAINST THE CONSEQUENCE AND IMPACT OF TIDAL FLUCTUATIONS, UNUSUAL TIDES, AND UNUSUAL INSTALLATION OF THE CASING IN THE CORRECT LOCATION. VERTICAL ALIGNMENT AND SEATING CASING INTO THE BEDROCK, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ALLOW THE CASING TO BE INSTALLED IN THE CORRECT LOCATION AND MAINTAIN ITS POSITION THROUGHOUT THE PERIODS OF CONSTRUCTION. THE CONTRACTOR SHALL MAINTAIN THE WATER TABLE AT LEAST 1.0 FEET BELOW THE FINISHED GRADE AT THE SHAFT LOCATION THROUGHOUT THE PERIODS OF CONSTRUCTION. THE CONTRACTOR SHALL MAINTAIN THE WATER TABLE AT LEAST 1.0 FEET BELOW THE FINISHED GRADE AT THE SHAFT LOCATION THROUGHOUT THE PERIODS OF CONSTRUCTION.
6. THE CONTRACTOR SHALL MAINTAIN THE WATER TABLE AT LEAST 1.0 FEET BELOW THE FINISHED GRADE AT THE SHAFT LOCATION THROUGHOUT THE PERIODS OF CONSTRUCTION.
7. THE CONTRACTOR SHALL MAINTAIN THE WATER TABLE AT LEAST 1.0 FEET BELOW THE FINISHED GRADE AT THE SHAFT LOCATION THROUGHOUT THE PERIODS OF CONSTRUCTION.
8. THE CONTRACTOR SHALL MAINTAIN THE WATER TABLE AT LEAST 1.0 FEET BELOW THE FINISHED GRADE AT THE SHAFT LOCATION THROUGHOUT THE PERIODS OF CONSTRUCTION.

DESCRIPTION	CONTOUR	NOMA (MVBSS)(FT)	USACE (MLW)(FT)
FEMA 100-YEAR (ZONE VE)	100 YR	15.00	16.8900
CT COASTAL JURISDICTION LINE	CAL	2.90	4.7900
HIGH TIDE LINE	HTL	3.04	4.9300
MEAN HIGH WATER LINE	MHW	1.60	3.4900
MEAN LOW WATER LINE	MLW	-1.71	0.1800
MEAN LOWER LOW WATER LINE	MLLW	-1.89	0.00

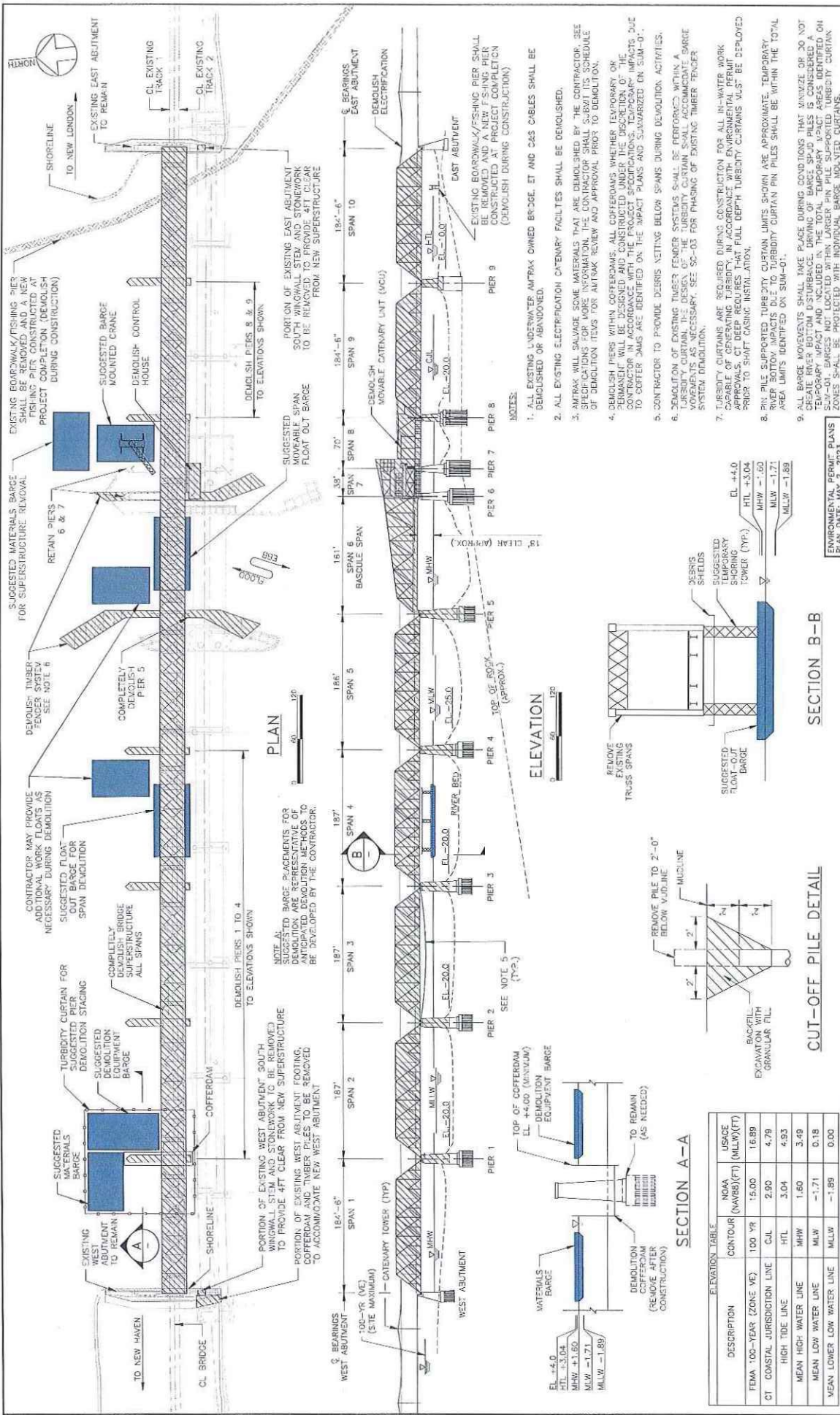
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Office of Chief Engineer
STRUCTURES
305 Street Station, Philadelphia, Pennsylvania 19104

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

REPLACEMENT OF MB 106.89
OVER CONNECTICUT RIVER
DRILLED SHAFT TYPICAL DETAILS

Project Code: XXX-XXX
Sheet No. 120 OF 147
Date: 5/27/2023
GEO-07

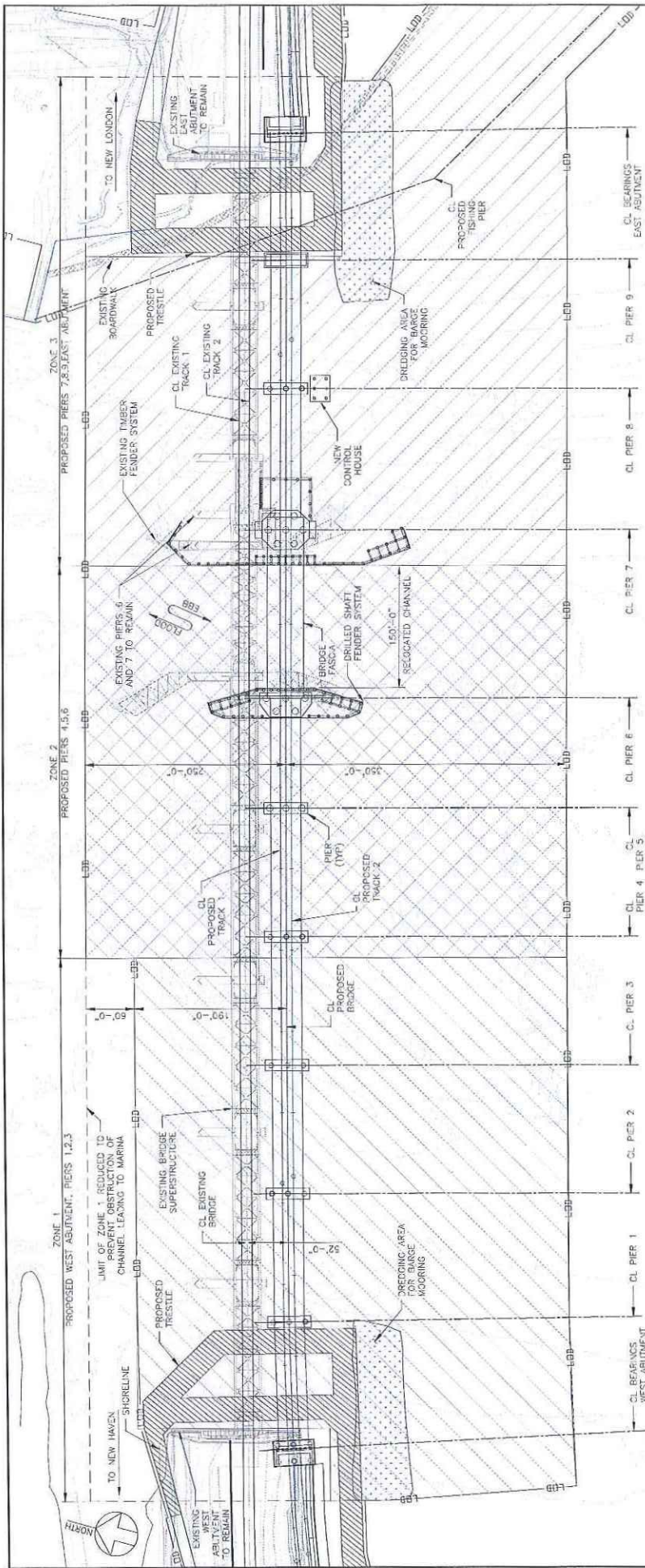


NO.	DESCRIPTION	NOAA (MHWBS)(FT)	CONTOUR	USACE (MLW)(FT)
1	MEAN HIGH WATER LINE	15.00	100 YR	16.89
2	MEAN LOW WATER LINE	2.90	CUL	4.79
3	MEAN LOWER LOW WATER LINE	3.04	HTL	4.83
4	MEAN HIGH WATER LINE	1.60	MHW	3.49
5	MEAN LOW WATER LINE	-1.71	MLW	0.18
6	MEAN LOWER LOW WATER LINE	-1.89	MLLW	0.00

NO.	DESCRIPTION	DATE	BY

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REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER <small>DEMOLITION PLAN</small>	DEMOLITION PLAN <small>Checked: SJT Date: 5/2/2023</small>

HARDESTY & HANOVER, LLC
 1501 Broadway New York, NY 10036
 ENVIRONMENTAL PERMIT PLANS
 PLAN DATE: MAY 21, 2023
 PROJECT NO: 10036
 SHEET NO: 130 OF 140
 SCALE: AS SHOWN
 PROJECT: DEM-01



- NOTES:**
- THE LIMITS OF DISTURBANCE SHOWN REPRESENT ANTICIPATED BOUNDARY OF BARGE OPERATIONS WITHIN THE PROJECT LIMITS. THE TOTAL BARGE OCCUPANCY ZONE AREA OBTAINED IN THE ABOVE PLAN VIEW IS 920,000 SF (21.12 ACRES).
 - THE BARGE OCCUPANCY ZONES SHOWN ON THIS SHEET HAVE BEEN DEVELOPED IN CONSULTATION WITH CTDEEP. THE RESTRICTIONS ON WORK WITHIN PARTICULAR ZONES ARE GOVERNED BY THE APPLICABLE TIME OF YEAR RESTRICTION DESCRIBED IN THE PERMIT AND HEREIN.
 - BARGES USED FOR CONSTRUCTION OR DEMOLITION WILL BE LOCATED WITHIN THE BOUNDARIES SHOWN ON THIS SHEET. ZONES ARE INTENDED TO LIMIT THE WORK TO A MAXIMUM OF 3 PIERS SIMULTANEOUSLY DURING THE PERIOD OF APRIL 1 TO JUNE 30. LATERAL BOUNDS OF THE ZONES ARE APPROXIMATE AND IT IS UNDERSTOOD THAT BARGES OR TURBIDITY CURTAINS MAY OVERLAP ZONES. THE ZONES ARE AS FOLLOWS:
 - AREA FROM WEST ABUTMENT PIER 3
 - AREA FROM WEST ABUTMENT PIER 3
 - AREA FROM PIER 7 TO EAST ABUTMENT
 - AT NO TIME DURING THE PERIOD OF APRIL 1 TO JUNE 30 SHALL IN-WATER CONSTRUCTION OR DEMOLITION OCCUR IN THE MIDDLE OF THE RIVER (ZONE 2) OR SIMULTANEOUSLY IN MORE THAN THREE ZONES (ZONES 1, 2, 3). BARBOUSSA FISH MIGRATION PERIOD IS FROM APRIL 1 TO JUNE 30. CONSTRUCTION OF THE RIVER PIER IS RELATIVELY UNDISTURBED DURING THE SPRING MIGRATION PERIOD FROM APRIL 1 TO JUNE 30. CONSTRUCTION OF PIERS WILL BE LIMITED TO EITHER THE THREE WESTERN-MOST (ZONE 1) OR THREE EASTERN-MOST (ZONE 3) PIERS, DURING THE SPRING MIGRATION, NO CONSTRUCTION OR DEMOLITION OF PIERS SHALL OCCUR WITHIN THE MIDDLE THREE PIERS (ZONE 2).
 - IMPACTORY HAMMERS SHALL BE USED DURING THE BARBOUSSA FISH MIGRATION PERIOD FROM APRIL 1 TO JUNE 30. IN ORDER TO REDUCE THE NOISE IMPACTS FROM DRIVING SHEET PILE SHAFT CASINGS, THE USE OF IMPACT HAMMERS IS ACCEPTABLE OUTSIDE OF THIS TIMEFRAME.
 - TO MINIMIZE CONSTRUCTION RELATED TURBIDITY, FULL DEPTH TURBIDITY CURTAINS SHALL BE DEPLOYED PRIOR TO DRIVING ANY SHEET PILE OR SHAFT CASINGS. DUE TO STRONG TIDES AND CURRENTS, THE FABRIC FOR THE CURTAINS WILL BE SELECTED TO BE COMPOSED OF HEAVY WOVEN PERVIOUS MATERIALS TO CREATE A FLOW THROUGH MEDIUM. THIS WILL REDUCE THE PRESSURE ON THE CURTAINS AND KEEP THEM IN THE SAME RELATIVE SHAPE AND LOCATION AT ALL TIDES AND RIVER FLOWS.
 - ARTIFICIAL LIGHTING OVER THE WATER SHALL BE LIMITED TO NAVIGATION, LIGHTS AND ANY LIGHTS TYPICALLY REQUIRED FOR THE OPERATION OF THE TRESTLE. LIGHTS SHALL BE LIMITED TO MIDDAY TO DUSK FROM APRIL 1 TO JUNE 30. BARBOUSSA FISH OPEN MIGRATE AT NIGHT, AND BRIGHT ARTIFICIAL LIGHTS CAN INTERFERE WITH THEIR MIGRATION.
 - THE PULLING OR CUTTING OF TIMBER PIERS SHALL BE PROHIBITED FROM FEBRUARY 1 TO JUNE 30.
 - ALL TIMBER PIERS AND STONE PIERS SHALL BE REMOVED TO AT LEAST TWO FEET BELOW THE MUD LINE.
 - ALL DREDGING AND SUBLICABLE INSTALLATION SHALL BE PROHIBITED FROM FEBRUARY 1 TO JUNE 30 INCLUSIVE.
 - DUE TO THE NOISE CONCERNS, THE USE OF HSE PANS SHALL BE PROHIBITED APRIL 1 TO JUNE 30, INCLUSIVE.
 - ANY WORK DONE FROM BARGES SHALL ONLY OCCUR WHEN THERE IS SUFFICIENT TIDE TO PREVENT VESSELS FROM GROUNDING IN ORDER TO PREVENT DAMAGE TO BENTHIC AQUATIC ORGANISMS. PERMANENT DREDGE AREAS WILL BE PROVIDED FOR BARGE MOORING ADJACENT TO TEMPORARY TRESTLE PLATFORMS.
 - ALL LOUD CONSTRUCTION RELATED ACTIVITIES, INCLUDING DRILLING PILES OR SHAFT CASINGS (EVEN BY VIBRATORY MEANS), SHALL BE PROHIBITED FROM SUNSET TO SUNRISE DURING THE COMMERCIAL SHAD FISHING SEASON FROM APRIL 1 TO JUNE 15, INCLUSIVE.
 - PROPOSED FISHING PIER NOT SHOWN DUE TO CLARITY. FISHING PIERS TO BE CONSTRUCTED AFTER CONSTRUCTION OF THE NEW BRIDGE HAS BEEN COMPLETED AND THE EXISTING BRIDGE HAS BEEN DEMOLISHED. LOW-DECK WORK FLOORS, ANTICIPATED FOR JUST CONSTRUCTING THE LOW FISHING PIER WILL NOT OCCUPY THE RIVER OCCUPANCY WITH THE BARGE BASED ACTIVITIES PRESENTED ON SC-02 THROUGH SC-05. SEE FV-01 FOR PIER DETAILS.

PROJECT: HARDESTY & HANOVER, LLC
 SHEET: REINFORCING
 SHEET NO.: 13 OF 140
 DATE: 5/2/2023
 DESIGNED: BSH
 CHECKED: GBE
 IN CHARGE: GBH
 SCALE: 1"=60'

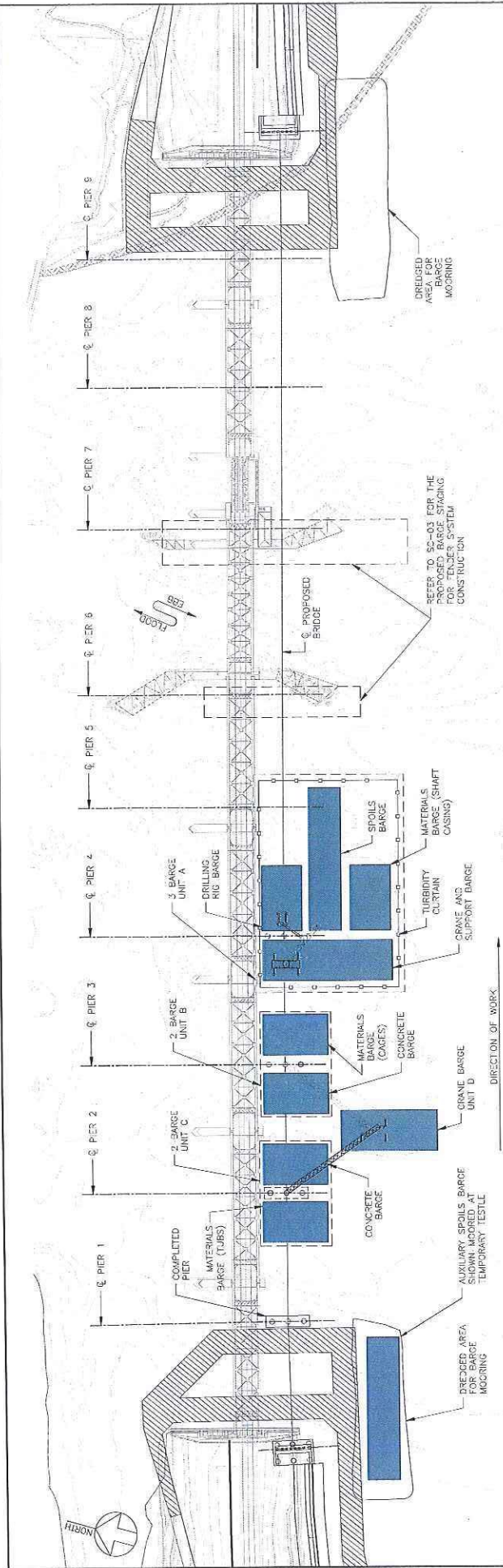
ENVIRONMENTAL PERMIT PLANS
 PLAN DATE: MAY 2, 2023

HARDESTY & HANOVER, LLC
 REINFORCING
 1501 Broadway New York, NY 10036

Office of Chief Engineer
 STRUCTURES
 30th Street Station, Philadelphia, Pennsylvania 19104

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Project Code: 2002000
 Sheet No.: 13 OF 140
 Date: 5/2/2023
 Scale: 1"=60'
 Drawing: BSH
 Checked: GBE
 In Charge: GBH
 Title: REPLACEMENT OF MB 105.89 OVER CONNECTICUT RIVER
 BARGE OCCUPANCY ZONES
 SC-01


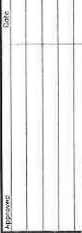



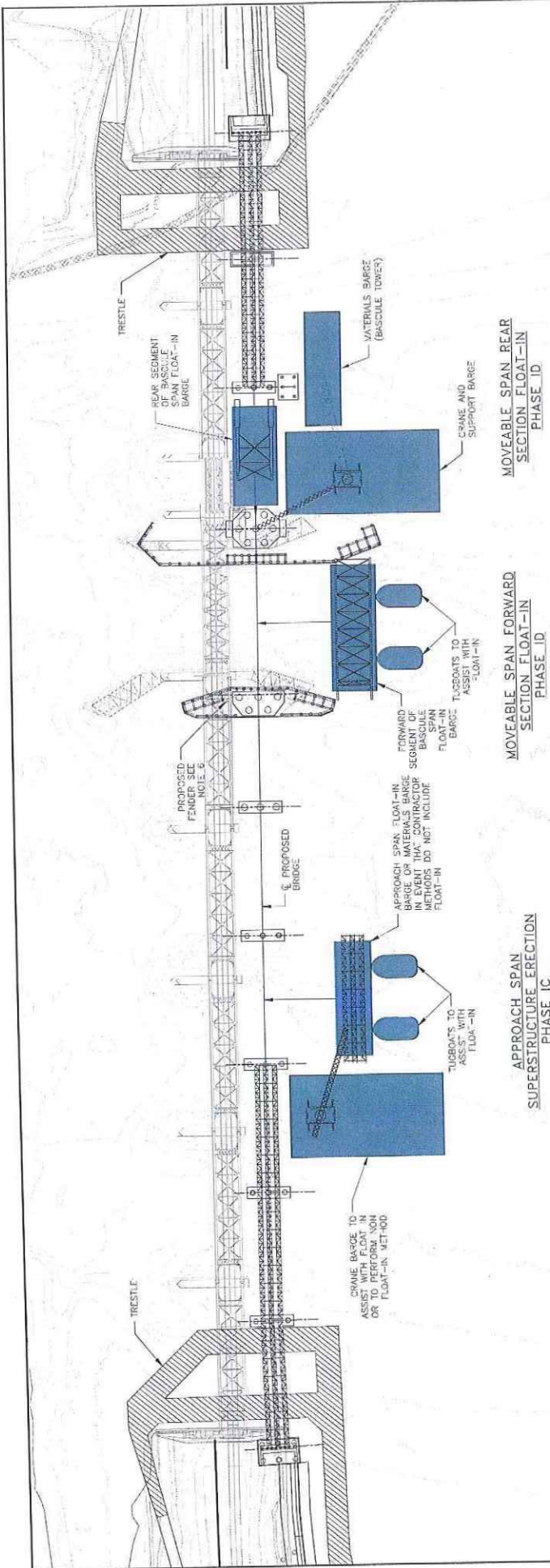
BARGE STAGING FOR PIER CONSTRUCTION

NOTES

1. THE PIER CONSTRUCTION SEQUENCE SHOWN IS A CONCEPTUAL BARGE BASED CONSTRUCTION SCHEME FOR IN-WATER WORK ACTIVITIES. SEE DRAWING P4-02 FOR SUGGESTED CONSTRUCTION PHASING.
2. BARGE PLACEMENTS ARE CONCEPTUAL AND WILL BE DESIGNED BY THE CONTRACTOR.
3. PIER CONSTRUCTION IS ANTICIPATED TO REQUIRE 3 GROUPS OF BARGES FOR CONSTRUCTION:
 - 3.1. BARGE GROUP A IS ANTICIPATED FOR DRILLED SHAFT CASING CONCRETE INSTALLATION
 - 3.2. BARGE GROUP B IS ANTICIPATED FOR DRILLED SHAFT REINFORCEMENT AND CONCRETE INSTALLATION
 - 3.3. BARGE GROUP C IS ANTICIPATED FOR PIER CAP AND CONCRETE CONSTRUCTION
 - 3.4. BARGE GROUP D IS ANTICIPATED TO BE A SINGLE CRANE BARGE THAT WILL ASSIST BOTH GROUPS B AND C
4. NEW SUPERSTRUCTURE ELEMENTS ARE SHOWN IN VARIOUS STATES OF COMPLETION BASED ON THE CONCEPTUAL SEQUENCE. WORK IS SHOWN TO PROGRESS FROM WEST TO EAST AND THEREFORE THE NEW STRUCTURES GENERALLY FOLLOW THE PROCEEDURE OF DRILLED SHAFT CASING INSTALLATION, EXCAVATION AND DRILLING, INSTALLATION OF SHAFT REINFORCEMENT AND CONCRETE, FOLLOWED BY CONCRETE PILE CAP, PIER STEM AND PIER CAP CONSTRUCTION.
5. STABLES ARE SHOWN TO PROGRESS FROM WEST TO EAST, BUT WILL BE SUBJECT TO THE FINAL PLAN DEVELOPED BY THE CONTRACTOR, IN ACCORDANCE WITH THE TIME OF THE YEAR RESTRICTIONS ON THE TYPE OF WORK PERMITTED AND AREAS OF THE RIVER THAT MAY BE OCCUPIED. SEE DRAWING SC-01 AND P4-02 FOR ENVIRONMENTAL SAFEGUARDS.

6. THE CONTRACTOR SHALL PROVIDE MEASURES, IN ACCORDANCE WITH THE CONTRACT PLANS, SPECIFICATIONS, AND ENVIRONMENTAL PERMITS TO PROTECT THE WATERWAY DURING EXCAVATION CONSTRUCTION, CONCRETE PLACEMENT AND CURING.
7. TURBIDITY CURTAINS ARE REQUIRED DURING CONSTRUCTION FOR ALL IN-WATER WORK CAPABLE OF GENERATING TURBIDITY, IN ACCORDANCE WITH ENVIRONMENTAL PERMIT APPROVALS. DEEP REQUIREMENTS THAT FULL DEPTH TURBIDITY CURTAINS MUST BE DEPLOYED PRIOR TO SHAFT CASING INSTALLATION.
8. PIN PILE SUPPORTED TURBIDITY CURTAIN LIMITS SHOWN ARE APPROXIMATE. TEMPORARY RIVER BOTTOM IMPACTS DUE TO TURBIDITY CURTAIN PIN PILES SHALL BE WITHIN THE TOTAL AREA LIMITS IDENTIFIED ON SUM-01.
9. ALL BARGE MOVEMENTS SHALL TAKE PLACE DURING CONDITIONS THAT MINIMIZE OR DO NOT CREATE RIVER BOTTOM DISTURBANCE. DRIVING OF BARGE SPUD PILES IS CONSIDERED A TEMPORARY IMPACT AND INCLUDED IN THE TOTAL TEMPORARY IMPACT ASSESSMENT. TURBIDITY CURTAIN ZONES SHALL BE PROTECTED WITH INDIVIDUAL BARGE MOUNTED CURTAINS.
10. NAVIGATIONAL IMPEDIMENTS ARE TO BE MARKED WITH WARNING LIGHTS.
11. CONTRACTOR IS RESPONSIBLE FOR THEIR OWN ICE MANAGEMENT PLAN.
12. ALL TEMPORARY WORK AND EQUIPMENT SHALL MEET THE REQUIREMENTS OF USCG AND DEEP BOATING.

TITLE NO. 106.89 DATE 05/2023	PROJECT CODE 106.89	SHEET NO. 106.89	SHEET OF 146	PROJECT NAME REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER	DATE 05/2023
ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023					
					
HANOVY & HANOVY, LLC ENGINEERING 1501 Broadway New York, NY 10035					
					
Office of Chief Engineer STRUCTURES 300 Street Station, Philadelphia, Pennsylvania 19104					
					



APPROACH SPAN SUPERSTRUCTURE ERECTION PHASE 1C

MOVEABLE SPAN FORWARD SECTION FLOOR-IN PHASE ID

MOVEABLE SPAN REAR SECTION FLOOR-IN PHASE ID

- NOTES**
- THE SUPERSTRUCTURE CONSTRUCTION SEQUENCE SHOWN IS A CONCEPTUAL BARGE BASED CONSTRUCTION SCHEME FOR IN-WATER WORK ACTIVITIES. SEE DRAWING PH-02 FOR SUGGESTED CONSTRUCTION PHASING.
 - BARGE PLACEMENTS ARE CONCEPTUAL AND WILL BE DESIGNED BY THE CONTRACTOR.
 - ALL IN-WATER WORK ACTIVITIES SHOWN ABOVE ARE NOT INDICATIVE OF PROPOSED CONCURRENT WORK. ALL IN-WATER WORK MUST BE PERFORMED IN ACCORDANCE WITH THE LIMITATIONS DEFINED ON SC-04.
 - SUPERSTRUCTURE CONSTRUCTION BARGE BASED ACTIVITIES ARE ANTICIPATED TO INCLUDE:
 - DELIVERY OF APPROACH SPAN STEEL SUPERSTRUCTURE COMPONENTS.
 - BARGE BASED CRANE LIFT-N OR BARGE FLOOR-IN OF APPROACH SPAN SUPERSTRUCTURE STEEL.
 - DELIVERY OF BASCULE PIER TRUNNION TOWERS STEEL COMPONENTS, BARGE BASED CRANE ERECTION OF TRUNNION TOWERS.
 - DELIVERY OF BASCULE SPAN REAR SECTION, CONCEPTUAL ERECTION PROCEDURE FOR REAR BOX SHOWN UTILIZES A BARGE TO DELIVER AND ASSEMBLE STEEL COMPONENTS TO THE REAR OF PIER 7 AND LONGITUDINAL SUBE THE COMPONENTS INTO PLACE ON THE TRUNNION TOWERS.
 - FLOOR-IN OF THE BASCULE SPAN FORWARD TRUSS SECTION, TEMPORARY NAVIGATION CLOSURE REQUIRED FOR THIS ACTIVITY, SEE NOTES THIS SHEET.
 - NEW SUPERSTRUCTURE ELEMENTS ARE SHOWN IN VARIOUS STATES OF COMPLETION, BASED ON THE CONCEPTUAL SEQUENCES PRESENTED. A FULLY CONSTRUCTED FENDER SYSTEM IS SHOWN IN THE PLAN VIEW ABOVE, HOWEVER NOTE THAT DURING SUPERSTRUCTURE ERECTION THE FENDER WILL ONLY BE PARTIALLY COMPLETE. SEE SC-05 FOR DETAILS.
 - PROGRESSION OF SUPERSTRUCTURE CONSTRUCTION WILL BE SUBJECT TO THE FINAL PLAN DEVELOPED BY THE CONTRACTOR, IN ACCORDANCE WITH THE TIME OF THE YEAR PERIODS FOR WHICH THE WORK IS PERMITTED AND AREAS OF THE RIVER THAT MAY BE OCCUPIED. SEE DRAWING SC-01 AND PH-02 FOR ENVIRONMENTAL SAFEGUARDS.

- THESE PLANS DO NOT IDENTIFY AREAS SUITABLE FOR OFFSITE SPAN ERECTION. THE CONTRACTOR SHALL IDENTIFY THESE AREAS IN THE PHASES OF CONSTRUCTION AND SHALL MEET ALL FEDERAL, STATE, AND LOCAL LAWS PERTAINING TO THE CONSTRUCTION AND TRANSPORT OF THE SPANS IF CONSTRUCTED IN THIS MANNER.
- THE CONTRACTOR SHALL PROVIDE MEASURES, IN ACCORDANCE WITH THE CONTRACT PLANS, SPECIFICATIONS, AND ENVIRONMENTAL PERMITS TO PROTECT THE WATERWAY DURING EXCAVATION CONSTRUCTION, CONCRETE PLACEMENT AND CURING.
- TURBIDITY CURTAINS ARE REQUIRED DURING CONSTRUCTION IN ACCORDANCE WITH ENVIRONMENTAL PERMIT APPROVALS. CIT DEEP REQUIRES THAT FULL SEPARATE TURBIDITY CURTAINS MUST BE DEPLOYED PRIOR TO SHIFT CHANGING INSTALLATION.
- PIN PILE SUPPORTED TURBIDITY CURTAIN LIMITS SHOWN ARE APPROXIMATE. TEMPORARY RIVER BOTTOM BOTTOM DISTURBANCE, DRIVING OF BARGE SPUD PILES IS CONSIDERED AS A TEMPORARY IMPACT INCLUDED IN THE TOTAL TURBIDITY CURTAIN LIMITS. BARGE NOT LOCATED WITHIN THE TURBIDITY CURTAIN LIMITS SHALL BE PROTECTED WITH INDIVIDUAL BARGE MOUNTED CURTAINS.
- NAVIGATIONAL IMPEDIMENT ARE TO BE MARKED WITH WARNING LIGHTS.
- CONTRACTOR IS RESPONSIBLE FOR THEIR OWN ICE MANAGEMENT PLAN.
- ALL TEMPORARY WORK AND EQUIPMENT SHALL MEET THE REQUIREMENTS OF USCO AND DEEP BOATING.

NAVIGATION CHANNEL CLOSURE NOTES

- A FULL NAVIGATION CHANNEL CLOSURE WILL BE REQUIRED FOR THE MOVEABLE SPAN FORWARD SECTION. THE CLOSURE WILL BE IN EFFECT DURING THE OFF-PEAK BOATING SEASON.
- WORK TO ENABLE THE MOVEABLE SPAN TO ROTATE TO THE OPEN POSITION DURING FALL DAYS IS EXPECTED TO REQUIRE FALL DAYS AND NIGHTS. NIGHT TIME ILLUMINATION WILL BE REQUIRED AND SHALL NOT BE SCHEDULED DURING SPRING MIGRATORY PERIODS WHEN LIMITATIONS ON ARTIFICIAL LIGHTING ARE IN EFFECT.
- ADVANCE COORDINATION WITH USCO AND EMERGENCY VESSELS WILL BE CONDUCTED AS TO THE NEED AND PROCEDURES FOR VESSEL PASSAGE DURING FULL CHANNEL CLOSURES.

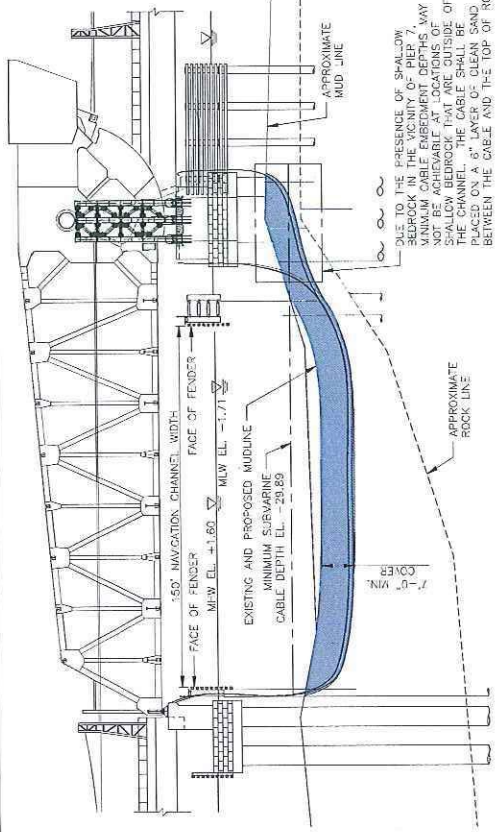
NO.	REVISIONS	DATE	BY	CHECKED	APPROVED	Office of Chief Engineer STRUCTURES <small>National Harbor Management Commission 300 West Street, Philadelphia, Pennsylvania 19104</small>	 HARDESTY & HANOVER, LLC ENGINEERING <small>1501 Broadway New York, NY 10036</small>	ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023 CONSTRUCTION REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER BARGE BERTHING 3 - SUPERSTRUCT. CONSTRUCT.	SHEET CODE SC-04 NO. OF SHEETS 134 OF 140

NOTES:

- EXCAVATION AND SUBMARINE CABLE LAYING UTILIZES CONVENTIONAL EXCAVATION TECHNIQUES AND WILL OCCUR DURING A SIX (6) WEEK WINTER PERIOD. WHEN A CHANNEL CLOSURE IS PERMITTED, THE NEW SUBMARINE CABLE LAYOUT WILL BE DETERMINED BY THE CONTRACTOR TO AVOID OBSTRUCTIONS THAT MAY BE IDENTIFIED DURING PRE-EXCAVATION RIVER SURVEYS.
- CONTRACTOR TO CONFIRM MINIMUM DEPTHS DURING SUBMARINE CABLE INSTALLATION USING A VERIFIABLE MEANS TO THE DEPTHS. CONTRACTOR TO PROVIDE SURVEY DATA AS PART OF THE PROJECT RECORD.
- IF INVASIVE MEANS ARE USED TO PERFORM THE PRE-CABLE LAYING SURVEY, THE WORK MUST BE CONFINED, OR PERFORMED DURING THE APPROPRIATE TIME OF YEAR LIMITS.
- SECTIONS FOR SUBMARINE CABLE TRENCH DETAILS, INCLUDING LIGHTS.
- CONTRACTOR IS RESPONSIBLE FOR THEIR OWN USE MANAGEMENT PLAN.
- ALL TEMPORARY WORK AND EQUIPMENT SHALL MEET THE REQUIREMENT OF USES AND DEEP BAKING. BARGE STAGING DETAILS BELOW SHOW CONCEPTUAL STAGING FOR NEW SUBMARINE CABLE INSTALLATION.
- CONTRACTOR SHALL PROVIDE MEASUREMENTS TO BE PERFORMED IN SIMILAR TURBIDITY CURTAIN LIMITS WITH REDUCED FLOW VELOCITY.
- THE CONTRACTOR SHALL PROVIDE MEASUREMENTS, IN ACCORDANCE WITH THE CONTRACT PLANS, SPECIFICATIONS, AND ENVIRONMENTAL PERMITS TO PROTECT THE WATERWAY DURING EXCAVATION CONSTRUCTION, CONCRETE PLACEMENT AND CURING.
- APPROVALS, AT DEEP REQUIREMENTS THAT FULL DEPTH TURBIDITY CURTAINS MUST BE EMPLOYED PRIOR TO SHAFT CASING INSTALLATION.
- PIN PILE SUPPORTED TURBIDITY CURTAIN LIMITS SHOWN ARE APPROXIMATE. TEMPORARY RIVER BOTTOM PROTECTION SHALL BE WITHIN THE TOTAL AREA LIMITS IDENTIFIED ON THE CONTRACT PLANS.
- ALL BARGE MOVEMENTS SHALL TAKE PLACE DURING CONDITIONS THAT MINIMIZE OR DO NOT CREATE RIVER BOTTOM DISTURBANCE. DRIVING OF BARGE SPUD PILES SHALL BE CONSIDERED A TEMPORARY IMPACT AND SHALL BE LIMITED TO THE BARGE SPUD PILES IDENTIFIED ON SUB-MARINE CABLE INSTALLATION. TEMPORARY IMPACTS SHALL BE LIMITED TO THE BARGE SPUD PILES IDENTIFIED ON SUB-MARINE CABLE INSTALLATION. SUPPORTED TURBIDITY CURTAIN ZONES SHALL BE PROTECTED WITH INDIVIDUAL BARGE MOUNTED CURTAINS.

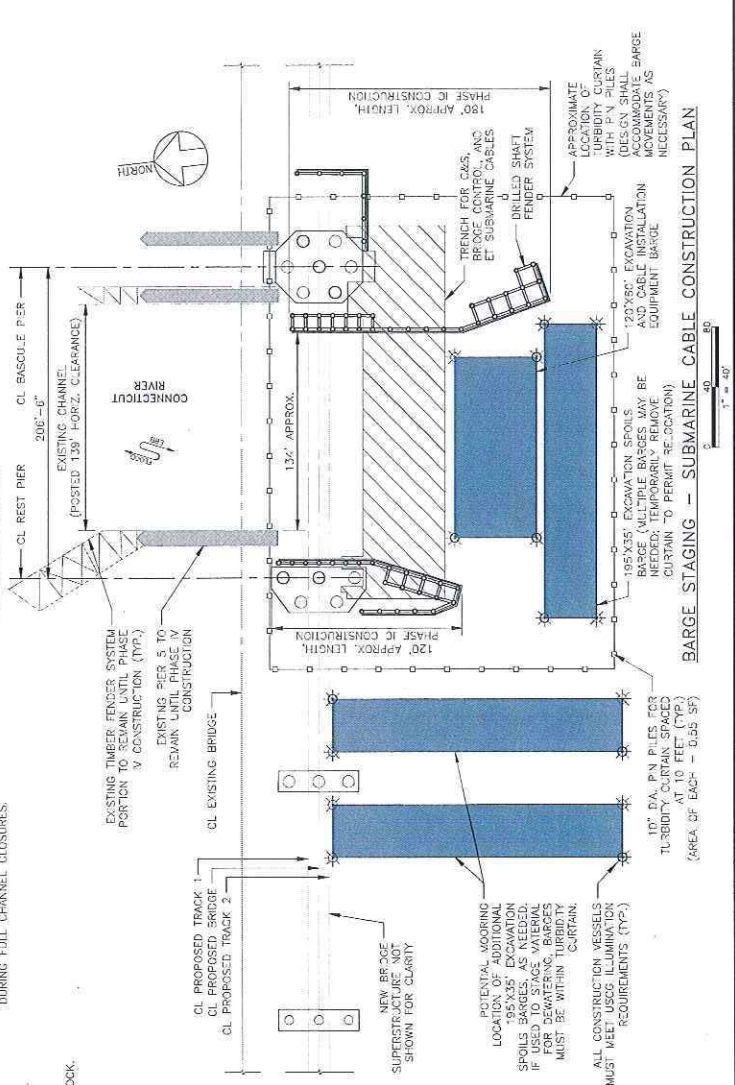
ELEVATION TABLE		
DESCRIPTION	NOVA (NAVBBS)(FT)	USACE (MILW)(FT)
FEMA 100-YEAR (ZONE VE)	15.00	16.89
CT COASTAL JURISDICTION LINE	CAI	2.90
HIGH TIDE LINE	HTL	3.04
MEAN HIGH WATER LINE	MHW	1.60
MEAN LOW WATER LINE	MLW	-1.71
MEAN LOWER LOW WATER LINE	MLLW	-1.89
		0.00

- NAVIGATION CHANNEL CLOSURE NOTES
- A FULL NAVIGATION CHANNEL CLOSURE WILL BE REQUIRED FOR THE SUBMARINE CABLE CONSTRUCTION AND REMOVAL OF THE ANTICIPATED 28 DAY WINTER PERIOD. THE ANTICIPATED 28 DAY WINTER PERIOD DURING THE WATER MONTHS OF DECEMBER AND JANUARY OUTSIDE OF PEAK BOATING SEASON AND WHEN ENVIRONMENTAL PERMITTING RESTRICTIONS ALLOW. SEE 28-DT, PH-02 AND ENVIRONMENTAL PERMITS FOR THE PERMITTED ENVIRONMENTAL CONTROLS AND TIME OF YEAR RESTRICTIONS.
 - ADVANCE RECONSTRUCTION WITH USGS AND EMERGENCY VESSELS WILL BE CONDUCTED AS TO THE NEED AND PROCEDURES FOR VESSEL PASSAGE DURING FULL CHANNEL CLOSURES.



BARGE STAGING - SUBMARINE CABLE CONSTRUCTION ELEVATION

- SUGGESTED CONSTRUCTION PHASING:
- THE CONTRACTOR SHALL PERFORM A PRE-CABLE LAYING SURVEY (INCLUDING SURFACE PROFILES) ALONG THE PROPOSED CABLE CENTERLINE TO IDENTIFY ALL OBSTRUCTIONS THAT MAY PROHIBIT CABLE EMBEDEDMENT TO THE LIMITS IDENTIFIED ON THIS PLAN. SEE NOTE 4.
 - BARGE AND EQUIPMENT MOBILIZATION.
 - SPUDDING OF BARGE.
 - INSTALLATION OF PIN PILES, CONTAINMENT, DEBRIS BARRIER, TURBIDITY CURTAIN, AND ASSOCIATED REMOVAL AS NECESSARY.
 - EXCAVATION AND REMOVAL OF CHANNEL BOTTOM MATERIAL IN ACCORDANCE WITH THE LIMITS IDENTIFIED ON THIS PLAN. SEE NOTE 4.
 - OF THE PERMIT DO NOT USE S/D-CASTING OR IN-WATER RE-HANDLING OF EXCAVATED OR DREDGED MATERIAL.
 - THE CONTRACTOR SHALL PROVIDE S/D-CASTING WHICH INCLUDE, AT A MINIMUM, RIGID SHIELDS AND PROTECTIVE SPALL BARRIERS AND FROM DEGREE SPILLS BARGES TO TRUCKS FOR HAULING. THE SHIELDING SHALL BE ADEQUATELY SIZED AND CONSTRUCTED FOR THE INTENDED PURPOSE AND SHALL BE MAINTAINED OR REPLACED IN THE EVENT ELEMENTS OF THE SHIELDING BECOME DAMAGED.
 - FOR TRANSPORTATION TO A PERMITTED UP AND LOCATION, THE DREDGED MATERIAL SHALL BE DREDGED EITHER ON A BARGE OR ON SHORE WITHIN A CONTAINMENT AREA. DEWATERING AND DISPOSAL OF THE DREDGED MATERIALS SHALL BE PERFORMED IN STAGES UNDER THE SUPERVISION OF THE CONTRACTOR. ALL DREDGED MATERIAL SHALL BE PERFORMED WITHIN TURBIDITY CURTAINS.
 - INSTALL SUBMARINE CABLES. THE CONTRACTOR SHALL BACKFILL THE TRENCH WITH S/D-CASTING SPALL BARRIERS TO THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS.
 - SPECIAL MATERIAL SHALL BE PLACED UNDERWATER AT THE BOTTOM OF THE EXCAVATED TRENCH OR REMOVAL AREA IN CLAMPING OF OTHER MATTER.
 - REMOVE PIN PILES, DEBRIS BOOMS, AND TURBIDITY CURTAINS.
 - NOTE THAT REMOVAL OF EXISTING ABANDONED SUBMARINE CABLES MAY HAPPEN AT ANYTIME DURING THE SEQUENCE, AND WITHIN THE TURBIDITY CURTAIN LIMITS SHOWN, IF POWER AND SIGNALS IS PROVIDED THROUGH TEMPORARY AERIAL CABLES. SEE AG-01.



BARGE STAGING - SUBMARINE CABLE CONSTRUCTION PLAN

HARDESTY & HANOVER, LLC
 ENGINEERING
 1501 Broadway, New York, NY, 10036

Project Code: XXXXXX
 SHEET No. 135 OF 140
 BARGE BERTHING 4 - SUB CABLE CONSTRUCTION
 Drawn: BSH
 Checked: BSH
 Date: 5/27/2023

SC-05

Office of Chief Engineer
STRUCTURES
 325 South Colton, Philadelphia, Pennsylvania 19104

ENVIRONMENTAL PERMIT PLANS
 PLAN DATE: MAY 2, 2023

Amtrak
 This drawing is issued by Amtrak and is the property of Amtrak. It is to be used only for the project and location specified on the drawing. It is not to be used for any other purpose without the written permission of Amtrak. All rights reserved.

DATE: _____ BY: _____

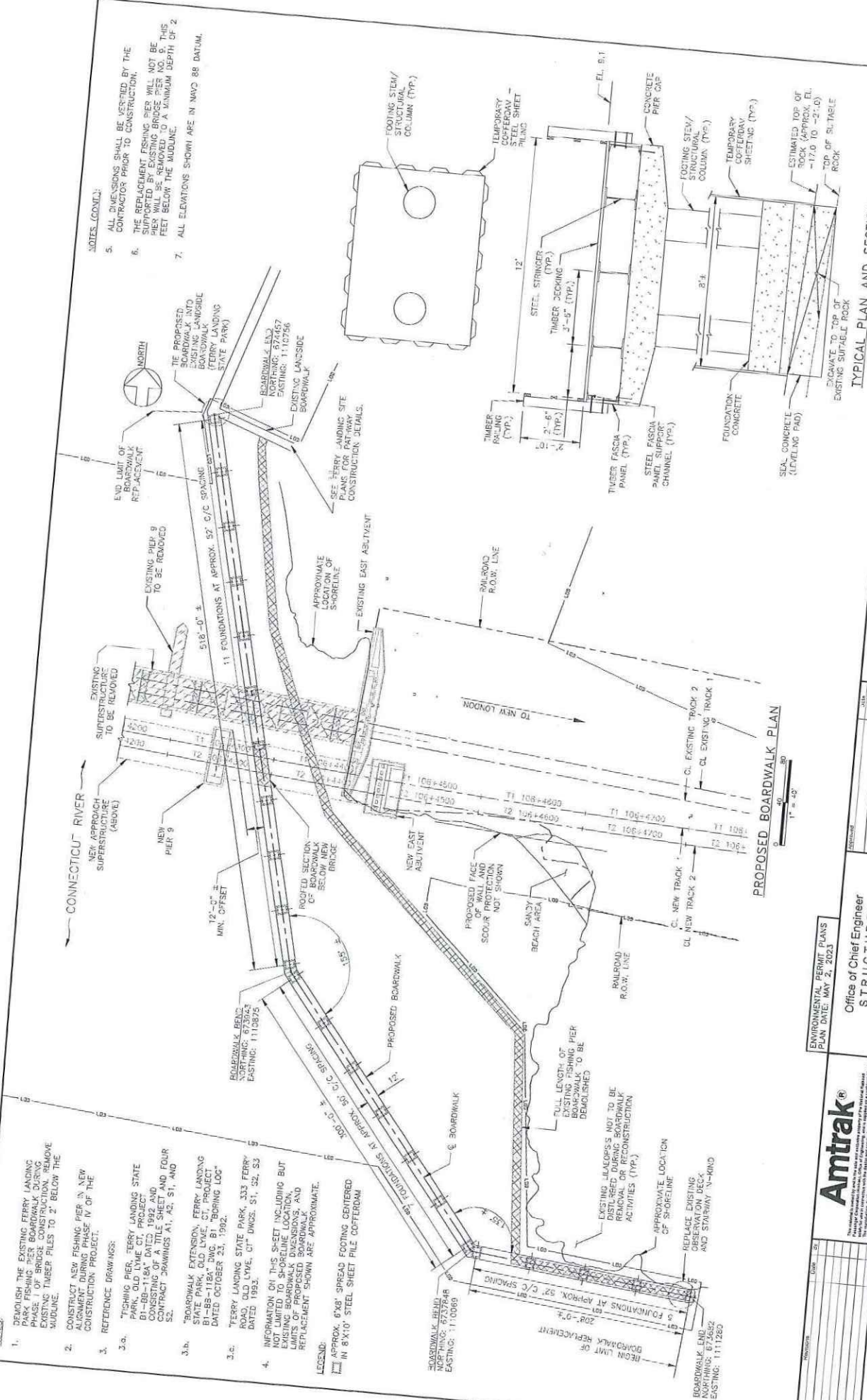
REVISIONS: _____

NOTES:

1. DEMOLISH THE EXISTING FERRY LANDING PARK FISHING PIER BOARDWALK DURING PHASE I OF BRIDGE CONSTRUCTION. REMOVE EXISTING TIMBER PILES TO 2' BELOW THE SURFACE.
2. CONSTRUCT NEW FISHING PIERS IN NEW CONSTRUCTION DURING PHASE IV OF THE CONSTRUCTION PROJECT.
3. REFERENCE DRAWINGS:
 - 3.a. "FISHING PIER, FERRY LANDING STATE PARK, OLD LYME CT, PROJECT CONSISTING OF TITLE SHEET AND FOUR CONTRACT DRAWINGS AT, A2, S1, AND S2."
 - 3.b. "BOARDWALK EXTENSION, FERRY LANDING STATE PARK, OLD LYME CT, PROJECT B1-BB-118A" DWG. 81, DATED OCTOBER 23, 1992."
 - 3.c. "FERRY LANDING STATE PARK, 333 FERRY ROAD, OLD LYME, CT DWGS. S1, S2, S3 DATED 1993."
4. INFORMATION ON THIS SHEET INCLUDING BUT NOT LIMITED TO, DIMENSIONS, LOCATIONS, LIMITS OF PROPOSED BOARDWALKS, AND REFACEMENT SHOWN ARE APPROXIMATE.

LEGEND:

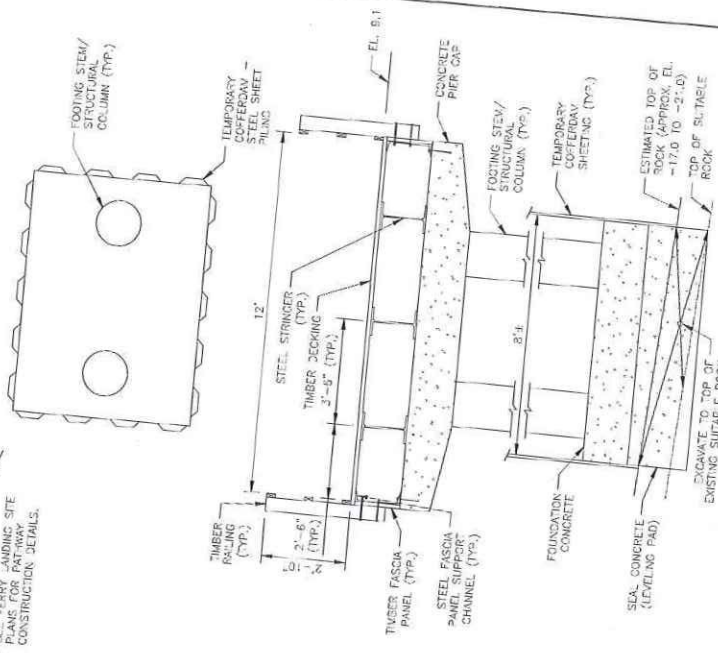
APPROX. 6'X8' SPREAD FOOTING CENTERED IN 8'X10' STEEL SHEET PILE COFFERDAM



NOTES (CONTD.):

5. ALL DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
6. THE REPLACEMENT FISHING PIERS WILL NOT BE PIERS SORTED BY EXISTING BRIDGE PIER NO. 9. THIS PIERS WILL BE REMOVED TO A MAXIMUM DEPTH OF 2 FEET BELOW THE MIDLINE.
7. ALL ELEVATIONS SHOWN ARE IN NAVD 88 DATUM.

TYPICAL PLAN AND SECTION
N.T.S.



HARDESTY & HANOVER, LLC
ENGINEERS
1501 Broadway New York, NY 10036



ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

Office of Chief Engineer
STRUCTURES
New York State Thruway Authority
32nd Street Albany, New York 12242



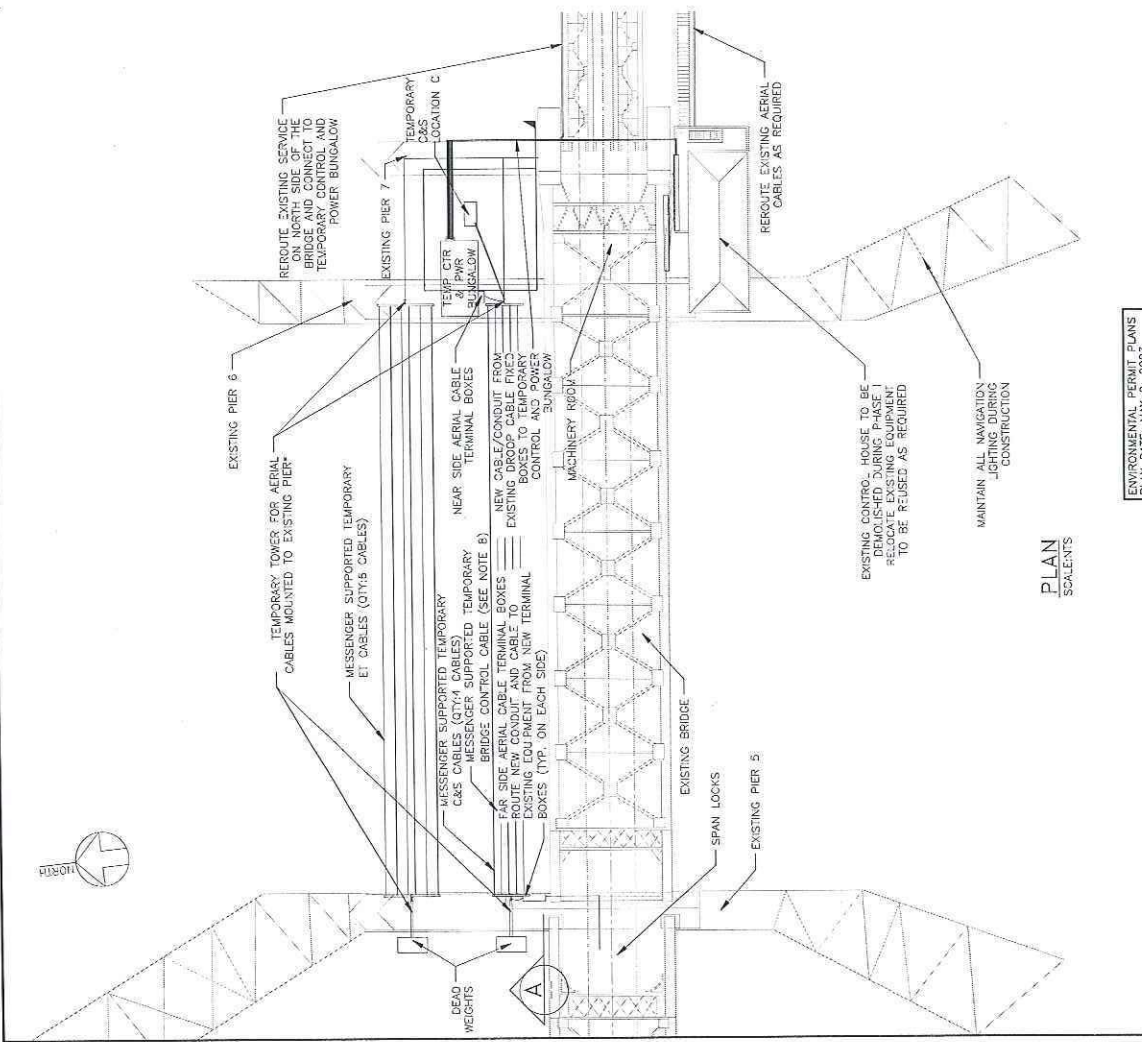
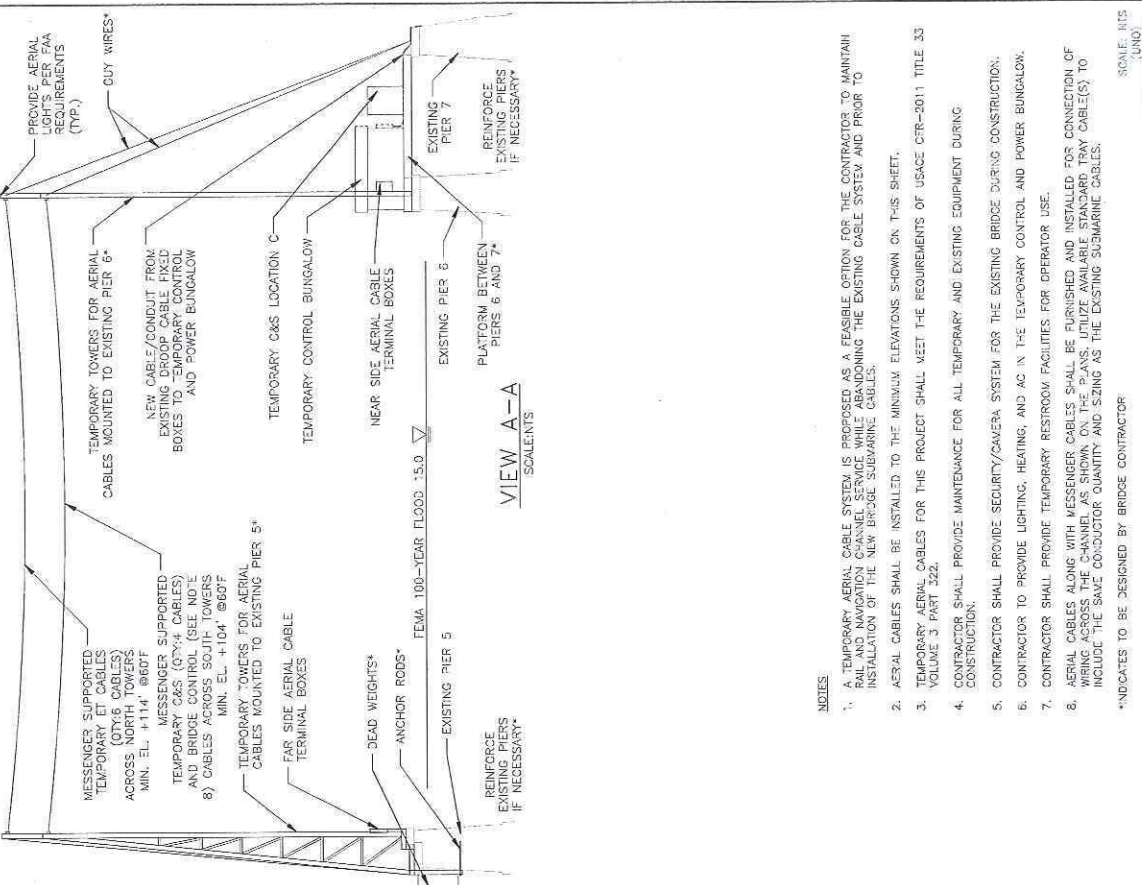
Amtrak logo and associated text.

REPLACE OF MB 106.89
OVER CONNECTICUT RIVER
FERRY LANDING FISHING PIER

DESIGNED BY: [] CHECKED BY: [] DATE: 5/2/2023

PROJECT NO. 100-XXX
SHEET NO. 106 OF 167
DATE 5/2/2023

FM-01



NOTES

1. A. TEMPORARY AERIAL CABLE SYSTEM IS PROPOSED AS A FEASIBLE OPTION FOR THE CONTRACTOR TO MAINTAIN RAIL AND NAVIGATION CHANNEL SERVICE WHILE ABANDONING THE EXISTING CABLE SYSTEM AND PRIOR TO INSTALLATION OF THE NEW BRIDGE SUBMARINE CABLES.
2. AERIAL CABLES SHALL BE INSTALLED TO THE MINIMUM ELEVATIONS SHOWN ON THIS SHEET.
3. TEMPORARY AERIAL CABLES FOR THIS PROJECT SHALL MEET THE REQUIREMENTS OF USACE CFR-2011 TITLE 33 VOLUME 3 PART 322.
4. CONTRACTOR SHALL PROVIDE MAINTENANCE FOR ALL TEMPORARY AND EXISTING EQUIPMENT DURING CONSTRUCTION.
5. CONTRACTOR SHALL PROVIDE SECURITY/CAMERA SYSTEM FOR THE EXISTING BRIDGE DURING CONSTRUCTION.
6. CONTRACTOR TO PROVIDE LIGHTING, HEATING, AND AC IN THE TEMPORARY CONTROL AND POWER BUNGALOW.
7. CONTRACTOR SHALL PROVIDE TEMPORARY RESTROOM FACILITIES FOR OPERATOR USE.
8. AERIAL CABLES ALONG WITH MESSENGER CABLES SHALL BE FURNISHED AND INSTALLED FOR CONNECTION OF WIRING ACROSS THE CHANNEL AS SHOWN ON THE PLANS. UTILIZE AVAILABLE STANDARD TRAY CABLE(S) TO INCLUDE THE SAME CONDUCTOR QUANTITY AND SIZING AS THE EXISTING SUBMARINE CABLES.

*INDICATES TO BE DESIGNED BY BRIDGE CONTRACTOR

SCALE: 1/8\"/>

		HARDESTY & HANOVER, LLC ENGINEERING 1501 Broadway, New York, NY 10036		CONSTRUCTION REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER TEMPORARY AERIAL CABLES		Project No. AC-01 Date 5/2/2023	
ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 2, 2023		Office of Chief Engineer STRUCTURES National Railroad Passenger Corporation 200 Street Station, Philadelphia, Pennsylvania 19104		Drawn: JVA Checked: CS		Project No. AC-01 Date 5/2/2023	



Amtrak
 NATIONAL RAILROAD PASSENGER CORPORATION
 200 STREET STATION, PHILADELPHIA, PENNSYLVANIA 19104

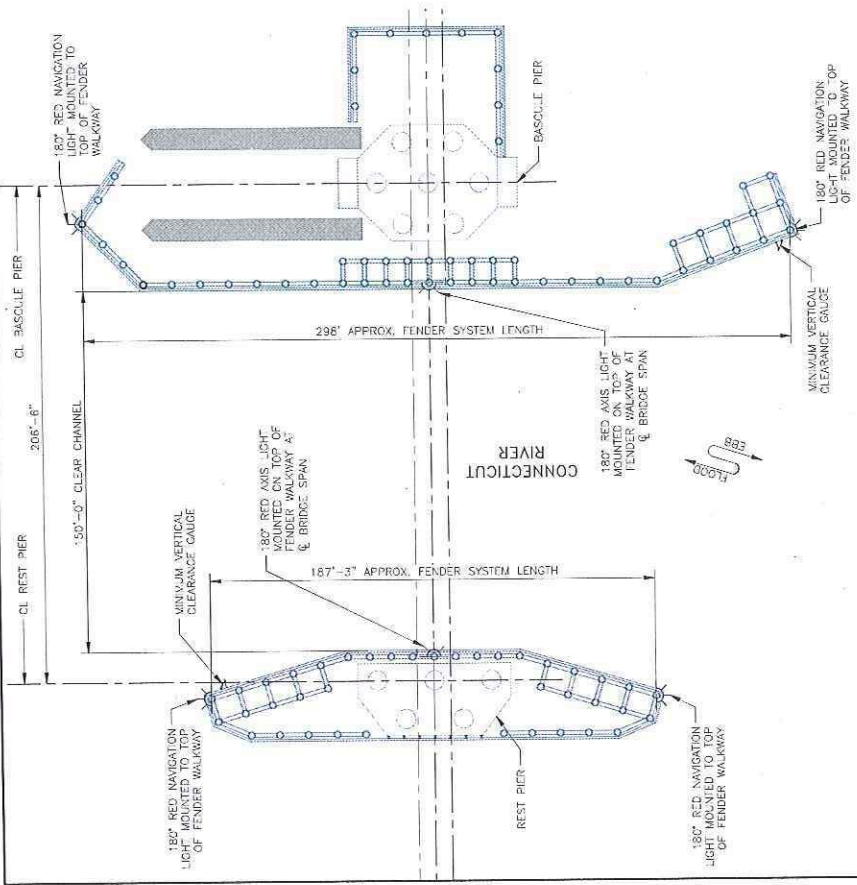
ENVIRONMENTAL PERMIT PLANS
 PLAN DATE: MAY 2, 2023

Office of Chief Engineer
 STRUCTURES

National Railroad Passenger Corporation
 200 Street Station, Philadelphia, Pennsylvania 19104

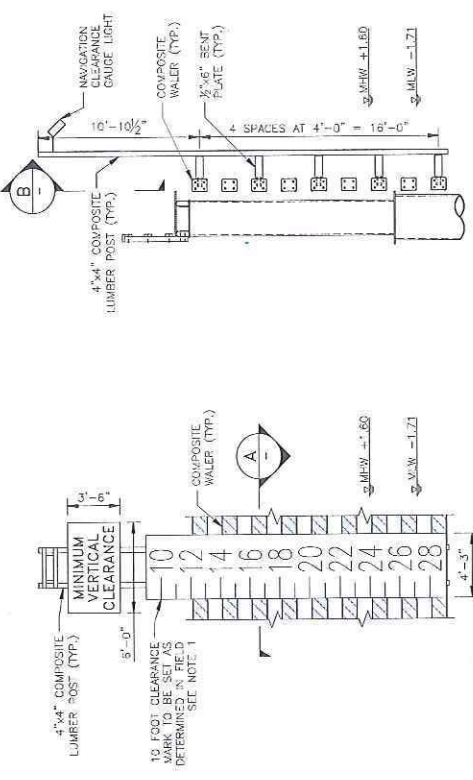
Drawn: JVA
 Checked: CS

Project No. AC-01
 Date 5/2/2023



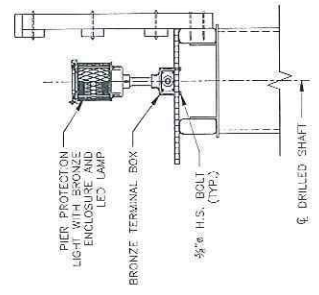
FENDER NAVIGATIONAL AID PLAN

- CLEARANCE GAUGE NOTES:
- CONTRACTOR TO SURVEY LOW STEEL OVER CHANNEL AT COMPLETION OF BRIDGE CONSTRUCTION, AND SET NAVIGATION CLEARANCE GAUGE WITH CENTER OF MARK AT 1.0 FEET EXACTLY TO FEET BELOW LOW STEEL.
 - ALL POSTS AND WASHERS USED FOR THE CONNECTION OF THE CLEARANCE GAUGE PANELS TO 4" X 4" POSTS SHALL BE GALVANIZED STEEL IN ACCORDANCE WITH THE TECHNICAL PROVISIONS.
 - ALL TEXT FOR CLEARANCE GAUGE SHALL BE IN BLACK ON WHITE BACKGROUND, LETTERS AND NUMBERS SHALL CONFORM TO THE CURRENT MANUAL PER SPECIAL PROVISIONS.
 - THE "MINIMUM VERTICAL CLEARANCE" SIGN PANEL OR SIGN SHALL BE MOUNTED TO THE SOUTH END OF THE TOP OF THE REFLECTIVE SHEETING, WHITE BACKGROUND WITH BLACK LETTERING AND NUMBERING. THE CLEARANCE GAUGE SIGN PANEL, AT BOTH THE NORTH AND SOUTH END OF THE FENDER SYSTEM SHALL BE A 7/8" THICK S.S. PANEL CONFORMING TO ASTM A666, TYPE 316 AND TYPE III REFLECTIVE SHEETING, WHITE BACKGROUND WITH BLACK LETTERING AND NUMBERING.
 - NUMBERS AND FOOT MARKS.



NAVIGATION GAUGE ELEVATION

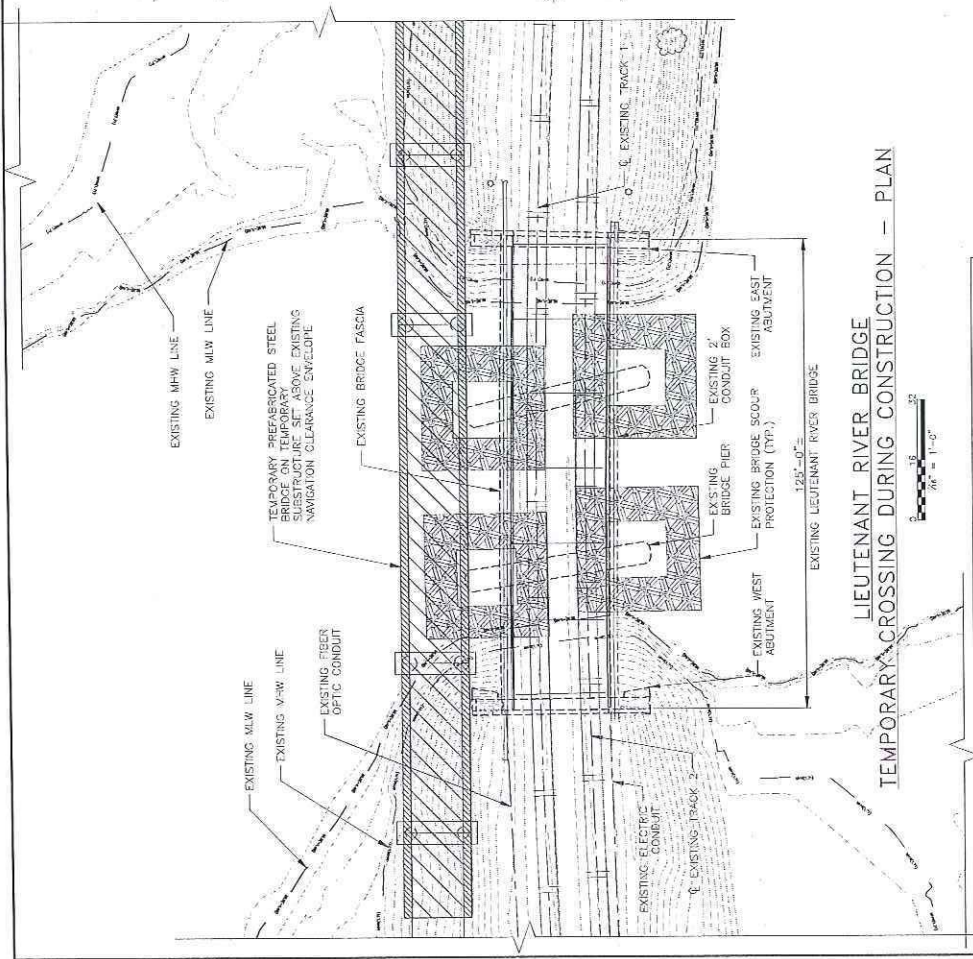
NAVIGATION GAUGE SECTION



NAVIGATION LIGHT ELEVATION

- NAVIGATION LIGHT NOTES:
- SEE TECHNICAL PROVISIONS FOR SPECIFICATIONS REGARDING NAVIGATION LIGHT, NAVIGATION LIGHT AND ELECTRICAL WORK.

Amtrak <small>Amtrak is a registered trademark of Amtrak Corporation, a U.S. Government owned corporation. ©2023 Amtrak Corporation. All rights reserved.</small>		Office of Chief Engineer STRUCTURES <small>National Railroad Passenger Corporation 30th Street Station, Philadelphia, Pennsylvania 19104</small>	
ENVIRONMENTAL PERMIT PLANS PLAN DATE: MAY 21, 2023		DESIGNER: SRM CHECKER: SRM DATE: 5/2/2023	
PROJECT: REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER		SHEET: FEN-01	



LIEUTENANT RIVER BRIDGE TEMPORARY CROSSING DURING CONSTRUCTION - PLAN



DESCRIPTION	NOAA CONTOUR (NAVD83)(FT)	USACE CONTOUR (NAVD83)(FT)	USACE (MLW)(FT)
FEMA 100-YR (ZONE VE)	15.00	16.85	16.85
CT COASTAL JURISDICTION LINE	CUL	2.00	4.79
HIGH TIDE LINE	HIL	3.04	4.93
MEAN HIGH WATER LINE	MHW	1.60	3.49
MEAN LOW WATER LINE	MLW	-1.71	0.18
MEAN LOWER LOW WATER LINE	MLLW	-7.89	0.00

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: MAY 2, 2023

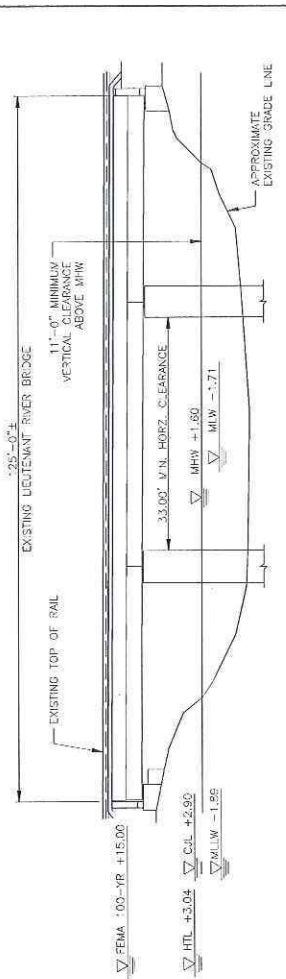


Office of Chief Engineer
STRUCTURES
National Railroad Passenger Corporation
320 Street Station, Philadelphia, Pennsylvania 19104

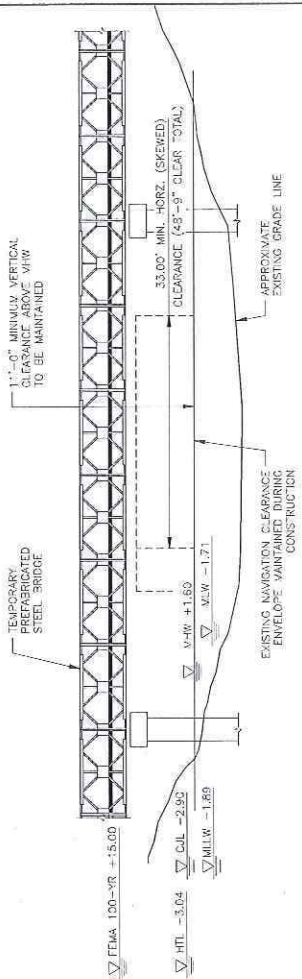


HARDESTY & HANOVER, LLC
ENGINEERING
150 Broadway New York, NY 10036

Project Code: 1003.000	CONTRACTOR
Drawn: [blank]	REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER
Checked: [blank]	LIEUTENANT RIVER TEMPORARY CROSSING
Scale: [blank]	Designed: [blank]
Sheet No. 5	Date: 5/2/2023
105 OF 140	Drawn: [blank]
106 OF 140	Checked: [blank]
107 OF 140	Scale: [blank]
108 OF 140	Project Code: [blank]
109 OF 140	Sheet No. [blank]
110 OF 140	Scale: [blank]
111 OF 140	Project Code: [blank]
112 OF 140	Sheet No. [blank]
113 OF 140	Scale: [blank]
114 OF 140	Project Code: [blank]
115 OF 140	Sheet No. [blank]
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137 OF 140	Scale: [blank]
138 OF 140	Project Code: [blank]
139 OF 140	Sheet No. [blank]
140 OF 140	Scale: [blank]



LIEUTENANT RIVER BRIDGE EXISTING BRIDGE ELEVATION



LIEUTENANT RIVER BRIDGE TEMPORARY CROSSING DURING CONSTRUCTION - ELEVATION



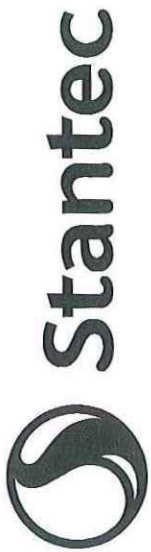
NOTES:

- THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTING AND MAINTAINING A TEMPORARY BRIDGE ADEQUATE FOR CROSSING THE LIEUTENANT RIVER BRIDGE AND REMOVING THE TEMPORARY BRIDGE WHEN NO LONGER REQUIRED FOR USE.
- THE TEMPORARY BRIDGE SHALL MEET OR EXCEED THE MINIMUM CLEARANCES SHOWN ON THIS PLAN.
- THE PREFABRICATED STEEL BRIDGE SYSTEM SHOWN IS A SUGGESTED STRUCTURAL SOLUTION.
- THE TEMPORARY BRIDGE SHALL HAVE A SOLID FLOOR TO KEEP DEBRIS FROM ENTERING THE RIVER BELOW.
- INSTALLATION OF TEMPORARY BRIDGE SHALL NOT RESTRICT THE EXISTING LIEUTENANT RIVER NAVIGATION CLEARANCES.
- THE TEMPORARY BRIDGE CROSSING SHALL NOT RESTRICT THE EXISTING NAVIGATION CLEARANCES.
- TEMPORARY PIERS IN THE VICINITY OF THE EXISTING BRIDGE FOUNDATION OR EXISTING SCOUR PROTECTION SHALL BE LOCATED SO AS TO AVOID POTENTIAL CONFLICTS WITH EXISTING PILES AND OTHER OBSTRUCTIONS.
- SIZE OF PIERS, SPACING, AND DEPTH OF SUPERSTRUCTURE (DEFINING HIGH CHORD) TO BE DESIGNED BY CONTRACTOR. PIER SPACING TO BE NO CLOSER SPACED THAN THOSE SHOWN ON THE PERMIT PLANS.
- TEMPORARY TRUSS BRIDGE TO BE REMOVED IN FULL AFTER COMPLETION OF USE FOR CONSTRUCTION ACCESS AND SITE RESTORED TO PRE-EXISTING CONDITIONS.

NAVIGATION CHANNEL CLOSURE NOTES:

- ANY ANTICIPATED 7 DAY FULL NAVIGATION CHANNEL CLOSURE WILL BE REQUIRED FOR THE INSTALLATION AND REMOVAL OF THE LIEUTENANT RIVER BRIDGE TEMPORARY CROSSING.
- ADVANCE COORDINATION WITH USCG AND EMERGENCY VESSELS WILL BE CONDUCTED AS TO THE NEED AND PROCEDURES FOR VESSEL PASSAGE DURING FULL CHANNEL CLOSURES. ALL TEMPORARY WORK AND EQUIPMENT SHALL MEET THE REQUIREMENTS OF USCG AND DEEP BOATING.

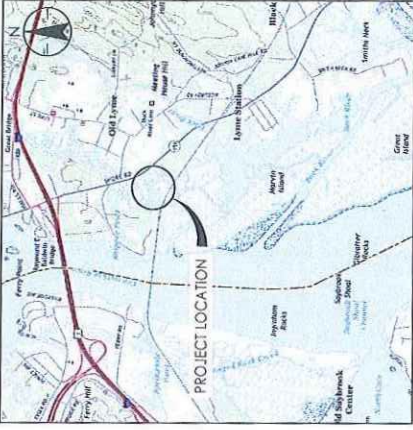
100% Scale: 1/8" = 1'-0" (Vertical)
100% Scale: 1/8" = 1'-0" (Horizontal)



Replacement of Amtrak Connecticut River Bridge (MP 106.89) Tidal Marsh Mitigation Design 17 Shore Road Site Old Lyme and Old Saybrook, CT



LOCATION MAP



VICINITY MAP
1"=2000'

INDEX OF SHEETS

DRAWING NO.	TITLE
G-100	COVER SHEET
G-002	GENERAL NOTES AND LEGEND
C-100	EXISTING CONDITIONS PLAN
C-101	PROPOSED GRADING PLAN
C-102	PROPOSED CONSTRUCTION ACCESS, SITE PREPARATION AND STAGING/LOADING PLAN
C-103	PLANTING PLAN
C-104	PROPOSED CULVERT GRADING PLAN
C-200	SECTIONS AND PROFILES
C-300	EROSION AND SEDIMENT CONTROL NOTES & DETAILS



DIG SAFE NOTE:

UTILITIES ARE LOCATED FROM FIELD LOCATION AND SHOWN ON THIS PLAN. CONTRACTORS MUST CONTACT ALL UTILITY COMPANIES BEFORE ANY EXCAVATION OR OTHER WORK IS PERFORMED IN CONNECTICUT TO ENSURE YOU OBTAIN THE CORRECT INFORMATION. VISIT OUR WEBSITE: WWW.ACTSD.COM



PLANS FOR PERMITTING
APRIL 2023



Hardesty & Hanover, LLC
850 Bear Tavern Road, Suite 206
West Trenton, NJ

2023.04.07
PROJECT NUMBER: 195602497



Stantec Consulting Services Inc.
 100 Water Street, 20th Floor
 New Haven, CT 06510
 Tel: 203.387.4779 Fax: 203.387.4778
 www.stantec.com

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Consultant

- NOTES
1. EXISTING CONDITIONS PLANNED/PROPOSED USING INFORMATION IN THESE DRAWINGS.
 2. ALL PROPOSED CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE CONNECTICUT DEPARTMENT OF TRANSPORTATION (DOT) STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.
 3. ALL PROPOSED CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE CONNECTICUT DEPARTMENT OF TRANSPORTATION (DOT) STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.
 4. THE PROJECT TEAM SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

NO.	DATE	DESCRIPTION	BY	CHKD.	APP'D.
1	04/10/2023	ISSUED FOR PERMITTING	JL	MS	MS
2	04/10/2023	ISSUED FOR PERMITTING	JL	MS	MS
3	04/10/2023	ISSUED FOR PERMITTING	JL	MS	MS
4	04/10/2023	ISSUED FOR PERMITTING	JL	MS	MS
5	04/10/2023	ISSUED FOR PERMITTING	JL	MS	MS
6	04/10/2023	ISSUED FOR PERMITTING	JL	MS	MS
7	04/10/2023	ISSUED FOR PERMITTING	JL	MS	MS
8	04/10/2023	ISSUED FOR PERMITTING	JL	MS	MS
9	04/10/2023	ISSUED FOR PERMITTING	JL	MS	MS
10	04/10/2023	ISSUED FOR PERMITTING	JL	MS	MS
11	04/10/2023	ISSUED FOR PERMITTING	JL	MS	MS
12	04/10/2023	ISSUED FOR PERMITTING	JL	MS	MS
13	04/10/2023	ISSUED FOR PERMITTING	JL	MS	MS
14	04/10/2023	ISSUED FOR PERMITTING	JL	MS	MS
15	04/10/2023	ISSUED FOR PERMITTING	JL	MS	MS
16	04/10/2023	ISSUED FOR PERMITTING	JL	MS	MS
17	04/10/2023	ISSUED FOR PERMITTING	JL	MS	MS
18	04/10/2023	ISSUED FOR PERMITTING	JL	MS	MS
19	04/10/2023	ISSUED FOR PERMITTING	JL	MS	MS
20	04/10/2023	ISSUED FOR PERMITTING	JL	MS	MS



Client/Project Logo



Client/Project
 Amtrak, Hardsy & Hanover
 17 Shore Road Mitigation Site
 Replacement of Amtrak Connecticut River
 Bridge (MS 104.89)

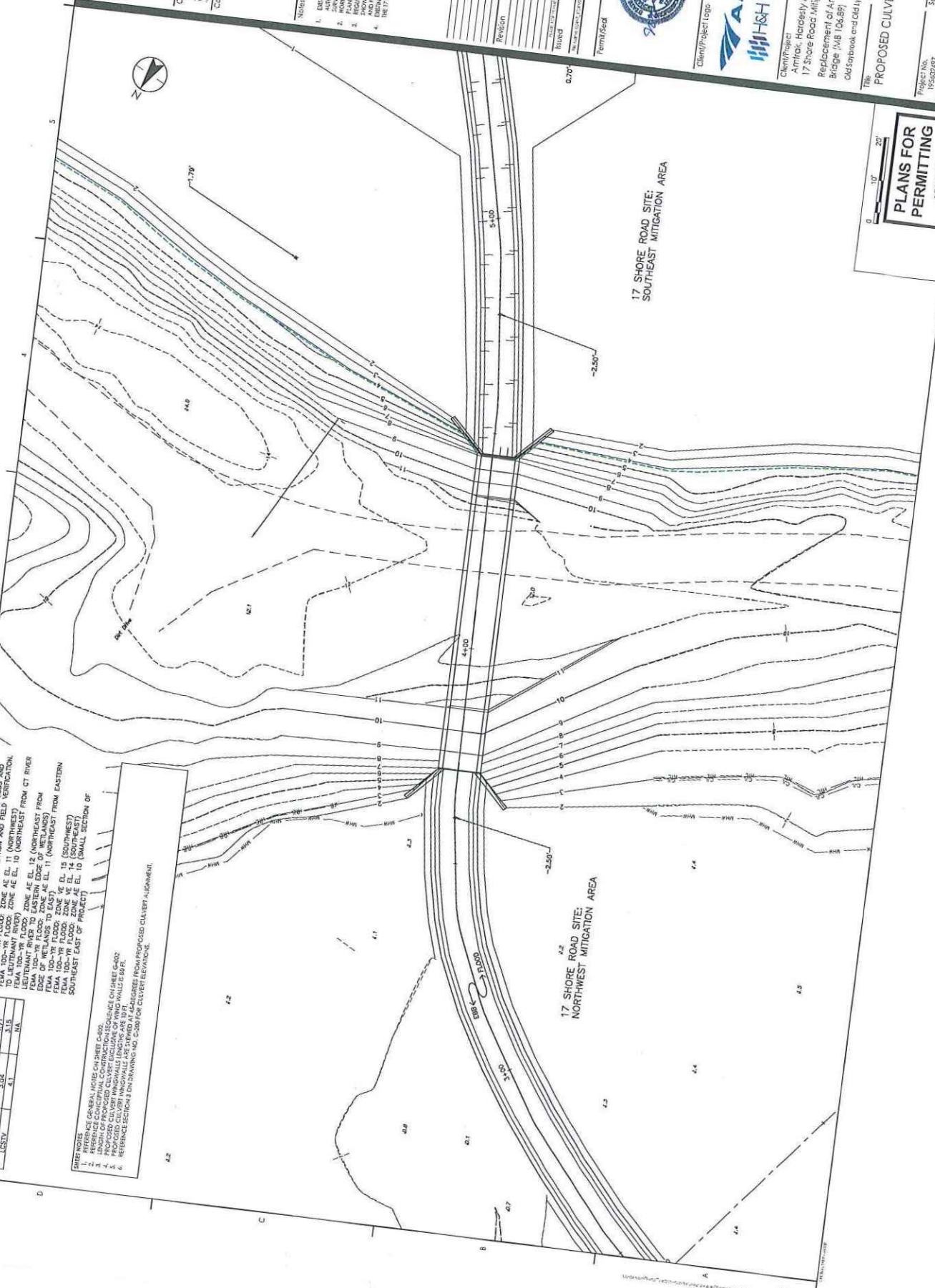
17A
 PROPOSED CULVERT GRADING PLAN

Project No. 15562697
 Scale AS SHOWN
 Revision 0
 Date 7/01/9

C-104

PLANS FOR PERMITTING
 APRIL 2023

0 10' 20'



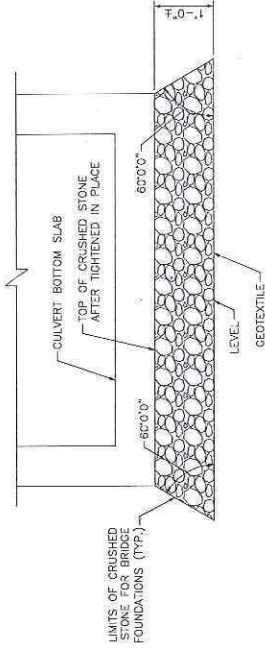
ALL ELEVATIONS SHOWN ARE APPROXIMATE AND CONTAIN AN INHERENT RISK OF ERROR. THE USER SHALL VERIFY ALL ELEVATIONS AND BENCHMARKS INTERFERED WITH BY THE PROPOSED CONSTRUCTION. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

TOTAL DATUM	NOAA (NAVD83) (FEET)	NGA (NAVD83) (FEET)	DIFFERENCE (FEET)
CGA	-2.03	-3.01	-0.98
MHW	-1.21	-1.49	-0.28
MTH	1.00	1.17	0.17
LOSTV	3.34	3.17	-0.17
MA	4.1	NA	NA

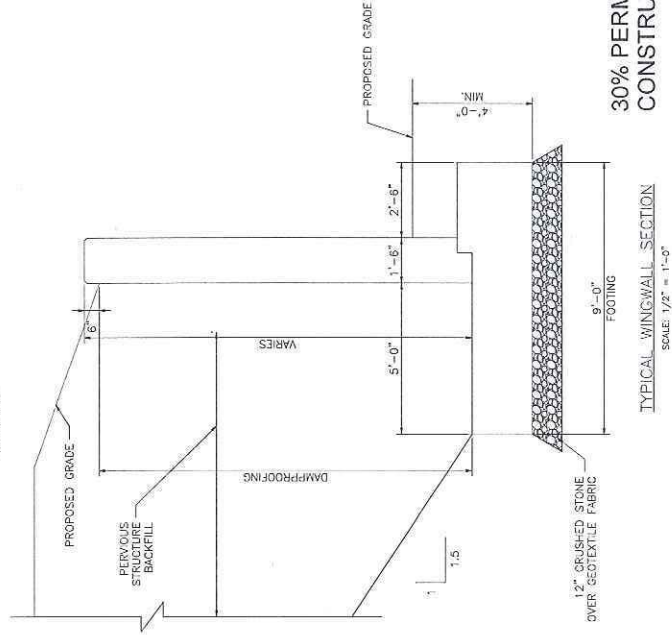
- INTERFERENCE CONSIDERATIONS:
1. INTERFERENCE CONSIDERATIONS: NOTES ON SHEET C-103.
 2. INTERFERENCE CONSIDERATIONS: NOTES ON SHEET C-104.
 3. INTERFERENCE CONSIDERATIONS: NOTES ON SHEET C-105.
 4. INTERFERENCE CONSIDERATIONS: NOTES ON SHEET C-106.
 5. INTERFERENCE CONSIDERATIONS: NOTES ON SHEET C-107.
 6. INTERFERENCE CONSIDERATIONS: NOTES ON SHEET C-108.
 7. INTERFERENCE CONSIDERATIONS: NOTES ON SHEET C-109.
 8. INTERFERENCE CONSIDERATIONS: NOTES ON SHEET C-110.
 9. INTERFERENCE CONSIDERATIONS: NOTES ON SHEET C-111.
 10. INTERFERENCE CONSIDERATIONS: NOTES ON SHEET C-112.
 11. INTERFERENCE CONSIDERATIONS: NOTES ON SHEET C-113.
 12. INTERFERENCE CONSIDERATIONS: NOTES ON SHEET C-114.
 13. INTERFERENCE CONSIDERATIONS: NOTES ON SHEET C-115.
 14. INTERFERENCE CONSIDERATIONS: NOTES ON SHEET C-116.
 15. INTERFERENCE CONSIDERATIONS: NOTES ON SHEET C-117.
 16. INTERFERENCE CONSIDERATIONS: NOTES ON SHEET C-118.
 17. INTERFERENCE CONSIDERATIONS: NOTES ON SHEET C-119.
 18. INTERFERENCE CONSIDERATIONS: NOTES ON SHEET C-120.
 19. INTERFERENCE CONSIDERATIONS: NOTES ON SHEET C-121.
 20. INTERFERENCE CONSIDERATIONS: NOTES ON SHEET C-122.

NOTES:

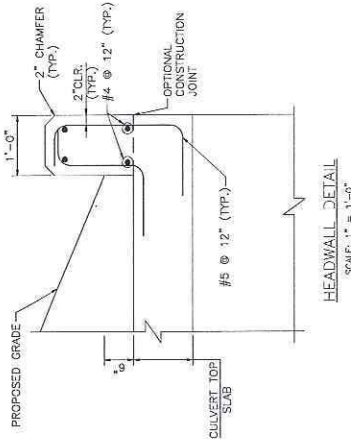
- SUBSTRUCTURE TYPE AND DEPTH OF FOUNDATION MATERIAL SUBJECT TO CHANGE FOLLOWING GEOTECHNICAL EXPLORATION AND ANALYSIS.



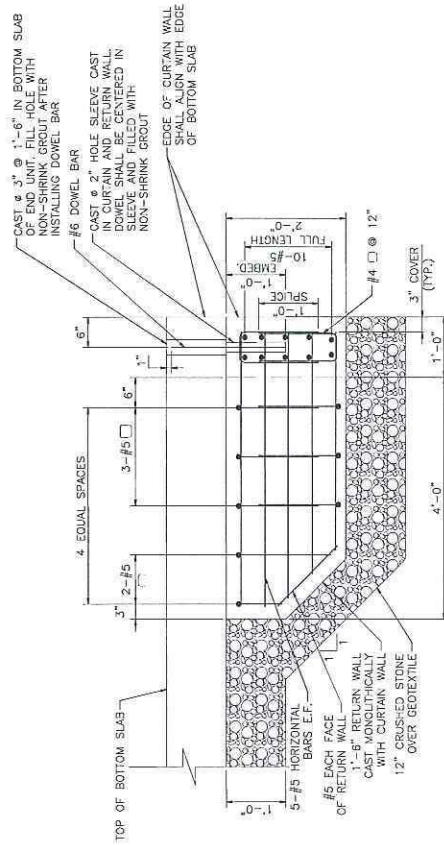
LIMITS OF CRUSHED STONE
NET TO SCALE



TYPICAL WINGWALL SECTION
SCALE: 1/2" = 1'-0"



HEADWALL DETAIL
SCALE: 1" = 1'-0"



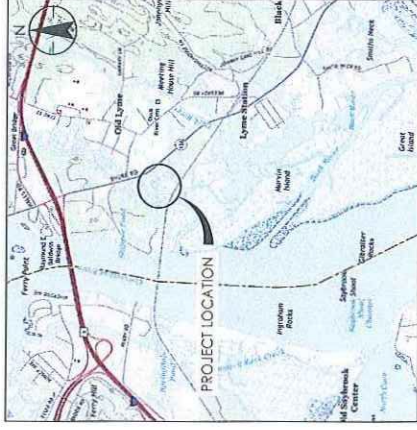
CUT-OFF AND RETURN WALL SECTION
SCALE: 1" = 1'-0"

30% PERMIT SET-NOT FOR CONSTRUCTION

Project Code: XXXXXX		CONTRACT NO.	
WBS: 00000		REPLACEMENT OF MB 106.89 OVER CONNECTICUT RIVER	
Sheet No. 8		17-1000-0000-0000-0000	
OF 300		Drawn: JF	
Date: 4/20/23		Checked: EFS	
<p>Amtrak®</p> <p>Office of Chief Engineer STRUCTURES 3500 Street Station, 27th Floor, Philadelphia, PA 19104</p>			
<p>HARDESTY & HANOVER, LLC 1501 Broadway, New York, NY 10036 1700 Market St., Suite 1050 Philadelphia, PA 19103</p>			
<p>OLDENBROOK CONNECTICUT</p>			



Replacement of Amtrak Connecticut River Bridge (MP 106.89) Tidal Marsh Mitigation Design 3.25-Acre Site Old Lyme and Old Saybrook, CT



INDEX OF SHEETS

DRAWING NO.	TITLE
C-000	GENERAL NOTES AND LEGEND
C-100	EXISTING CONDITIONS PLAN
C-101	PROPOSED CONDITIONS PLAN
C-102	CONSTRUCTION ACCESS, SITE PREPARATION, AND STAGING/LANDOWN PLAN
C-200	SECTIONS AND SECTION DETAILS
C-300	EROSION AND SEDIMENT CONTROL NOTES & DETAILS



Hardesty & Hanover, LLC
850 Bear Tavern Road, Suite 206
West Trenton, NJ

2023.04.07
PROJECT NUMBER: 195602497

