

APPLICATION FOR ACTIVITY IN A FLOOD ZONE:
Pursuant to Flood Plain Management Regulations, effective 3/28/98

PROPERTY OWNER/APPLICANT

Name: Town of Weston Public Works, Larry Roberts, Director

Address: Public Works Garage, 78 Old Hyde Road, Weston, CT 06883

Telephone: 860-222-2662

OWNER REPRESENTATIVE

Name: BL Companies, Sean Laudati, Project Manager

Address: 100 Constitution Plaza, 10th Floor, Hartford CT 06103

Telephone: 860-249-2200

DEVELOPMENT SITE LOCATION

ADDRESS: Michael's Way over West Branch Saugatuck River

The following items are required before consideration of the application.

FEE:-----Check for ~~\$130~~ ^{8/60.00} made out to the "Town of Weston"
~~ENVELOPES:-----Stamped business envelopes addressed to plotting instruments and across the road, plus a list of owners.~~

PROJECT

DESCRIPTION:----- Short narrative description of the project/plan per regulations.

*CERTIFIED

DEVELOPMENT MAP:--Include topes, flood way & 100 year flood plain lines, existing and proposed structures and location of septic tank and leaching fields, per regulations.

*CERTIFIED

PROFILES:-----Include flood plain, floodway and access & structure elevation profiles, per regulations.

*CONSTRUCTION

DESIGN DATA:-----Detail on proposed construction per regulations.

WATERCOURSE


ALTERATION DETAIL:---When appropriate

*CERTIFIED FLOODWAY

NO-IMPACT STATEMENT:--When appropriate

COMMISSION

APPROVALS:-----When appropriate


signature of applicant

8/7/2023
date

A preliminary discussion with the Commission is recommended for regulation clarification, guidance and possible requirement waivers.

Date received:-----
Date of hearing:-----
Date of decision:-----

Flood Zone Development Certification

Property Address : _____

Record Owner : _____

Date of Application : _____

The undersigned hereby acknowledges the right of the Town of Weston Planning and Zoning Commission and its agents to rely upon the statements and representations of the undersigned contained in this Certificate and further acknowledges that any permit issued with respect to the above-referenced application will be issued in material reliance on this Certificate.

Given the foregoing, the undersigned hereby covenants, certifies and represents to the Town of Weston Planning and Zoning Commission and its agents, as follows:

(i) I am a professional engineer registered in the State of Connecticut and am duly qualified to make the statements and representations set forth herein.

(ii) I am familiar with the Floodplain Management Regulations of the Town of Weston, Connecticut adopted June 18, 2010 (the "Regulations").

(iii) I have examined the A-2 Property Survey entitled _____ prepared by _____ bearing a date of last revision of _____.

(iii) I have examined the construction plans entitled _____ prepared by _____ bearing a date of last revision of _____ consisting of sheets ____ through ____.

(iv) I have performed hydrologic and hydraulic analyses of the proposed New Construction, Substantial Improvements, and/or other Development (as such terms are defined in the Regulations) in accordance with standard engineering practice. A true and complete copy of the hydrologic and hydraulic data on which I relied is attached hereto.

(v) the proposed New Construction, Substantial Improvements, and/or other Development conform with the requirements of Section IV(D) of the Town of Weston Floodplain Management Regulations including, and not by way of limitation, as follows:

(a) The proposed New Construction, Substantial Improvements, and/or other Development will not result in any increase in Flood levels or hazards during the occurrence of a 100-year storm.

(b) The Lowest Floor of any New Construction or Substantial Improvement of any Structure shall be elevated one foot or more above the Base Flood Elevation. The design of all areas elevated less than one foot above the Base Flood Elevation comply with Section IV(B)(4) of the Regulations.

(c) the proposed New Construction, Substantial Improvements, and/or other Development will not result in any increased (a) danger to life or property due to increased flood heights or velocities; (b) danger that materials may be swept downstream or onto other property; (c) hazard for emergency or ordinary vehicles accessing the property during flooding; or (d) adverse impact any aquifer, water supply or sanitary supply system on the subject or adjoining properties.

Name:
CT Lic. No.:

State of Connecticut)
) ss:
County of Fairfield)

The foregoing instrument was acknowledged before me this _____, 20__ by
_____.

Notary Public
My commission expires:
Commissioner of the Superior Court

[Attachment]

**ALL ADDITIONS MADE TO THIS CERTIFICATE FORM MUST
BE UNDERLINED AND DELETIONS SHOWN AS A STRIKE OUT (~~Example~~).
ANY REVISION WILL REQUIRE ADDITIONAL REVIEW AND MAY
NECESSITATE A PUBLIC HEARING**

Effective October 1, 2009

(Grid Revised May 14, 2015 to reflect current Zoning Regulations)

The Weston Planning & Zoning Commission requires submission of an A-2 Property Survey with all applications for subdivision approvals, zoning permits, certificates of zoning compliance, flood zone permits, and special permits except as set forth in Section 415 and 416 of the Zoning Regulations (however, pursuant to Section 417, only a *limited* certificate of zoning compliance will be issued if the foregoing exemptions are utilized) **Effective October 1, 2009, all surveys of parcels within the R-2A district must contain the following grids:**

General Requirements District R-2A

	<u>Section</u>	<u>Required</u>	<u>Actual/ Proposed</u>	<u>Claimed Exemptions/Variances</u>
Min. Lot Area	321.4	2 acre		
Min. Rectangle	321.5	170' x 200'		
Min. Lot Frontage	321.5	170'		
Setbacks	321.6	-		
Front	321.6	50'		
Side	321.6	30'		
Rear	321.6	30'		
Farming Structures	321.1	100'		
Max. Bldg. Coverage	321.7	15%		
Max. Bldg. Height	321.8	35'		

Subdivision / Construction

Parcel No. _____	
Has this lot been the subject of a previous subdivision?	[Y/N]
Does this lot conform with Regulation s.311.7 (Odd Shaped Lots)?	[Y/N]
Can this lot contain a rectangle measuring 170' x 200' (s.321.4)?	[Y/N]

Minimum Lot Area Calculation per s.311.4 (required for each lot of subdivision applications)

Parcel No. _____	
Gross lot area	
Road, right of way, access way	
Above-ground utility easements	
Exclusive-use easements	
Land under water or very poorly drained in excess of 20% of total	
Net Lot Area:	

Attachment to Applications to the Weston Conservation Commission, Planning & Zoning Commission and Board of Zoning Appeals

Notification Process for Applicants with Projects in Public Water Supply Watersheds or Aquifer Protection Areas

Effective October 1, 2006, the Commissioner of the Connecticut Department of Public Health (CTDPH) must be notified by applicants before the Town's Conservation Commission, Planning & Zoning Commission, Zoning Board of Appeals for any project located within a public water supply watershed or aquifer protection area. This notification is in addition to the required notification to the water companies. Any forms of past notification to the water companies are not changing with this new CTDPH notification requirement.

The process that an applicant must follow to satisfy the new CTDPH notification requirement is:

1. Refer to the map "Weston, CT Public Drinking Water Source Protection Areas" to determine whether your project falls within a public water supply watershed or aquifer protection area. The map is available for viewing at Weston Town Hall in the Planning & Zoning Commission's Office and in the Conservation Planner's Office.
2. Go to the CTDPH website at <http://www.dph.state.ct.us>
3. Click on "Programs and Services"
4. Click on "D" and then "Drinking Water Section"
5. Click on "Source Water Protection" on the right hand side menu
6. Click on "Notification Process Under PA0653"
7. Click on "Notifying us using our online form"
8. Complete the Public Water Supply Watershed or Aquifer Area Project Notification Form and submit the form by clicking on the "Submit Form" button.

The project area is not within a public water supply watershed or aquifer protection area. This has been confirmed with DPH mapping, Aquarion mapping and coordination with Aquarion Water Company.

Project Description

The purpose and need for this project are to address the structural deficiencies of Bridge No. 07001 carrying Michaels Way over West Branch Saugatuck River.

Bridge No. 07001 was constructed in 1995. Bridge No. 07001 consists of a single-span, six rolled steel girder superstructure with a timber deck on pile supported concrete abutments. The existing bridge has an overall structure length of approximately 65 feet. The existing structure has a true clear span of approximately 40 ft measured perpendicular to the flow and a skewed clear span of 59 feet measured along the roadway. The curb-to-curb width over the bridge is 22 feet, composed of two 11-foot travel lanes. There are 4-foot sidewalks located on both sides of the roadway, and there are no shoulders present along the roadway. The bridge is on a 45-degree skew from the roadway.

Bridge No. 07001 is in poor condition (Rating = 4) primarily due to the deteriorated condition of the steel superstructure. The rolled steel girders have moderate to heavy rust throughout, and section loss up to 3/16" deep. The neoprene pad bearing devices exhibit minor deformation and bulging with heavy rust on the anchor bolts and nuts. The existing substructure is in good condition with some vertical hairline cracks with efflorescence along the abutment and wingwalls.

Michael's Way is a two-lane rural local road with no posted speed limit, so the assumed speed limit of the roadway is 25 mph. The Average Daily Traffic (ADT) is approximately 210 vehicles (2022 ADT from the 2022 Routine Inspection Report). Michael's Way has a 22-foot wide curb-to-curb width with no shoulders. The bridge is not located on a horizontal curve.

There are two stormwater drainage outfalls within the bridge site. Approximately 50 feet east of the bridge are two catch basins on either side of the road. The catch basins are connected with 15" CPP and the stormwater drainage outfall is located on the upstream northeast embankment. Approximately 160 feet west of the bridge are two additional catch basins. These catch basins are connected with 15" CPP and the stormwater drainage outfall is located on the downstream southwest embankment.

Multiple utility conduits cross the bridge, including a 2.5" diameter gas conduit and four 5" diameter telecommunications/electric conduits.

The proposed alternative consists of replacing the structure with a single span steel superstructure with an approximately 43-foot clear span measured perpendicular to the flow, and a skewed clear span of 59 feet measured along the roadway. The proposed bridge will be comprised of steel beams, an 8.5-inch concrete deck with membrane waterproofing, and 3-inches of asphalt. The length of the proposed structure will match the existing structure of 44 ft. The vertical alignment will slightly increase from existing, and the horizontal alignment will not be changed. The low chord will be raised to 221.21 ft. The proposed bridge is hydraulically adequate with 4.33 ft of freeboard to the roadway low point and 1.12 ft of underclearance to the low chord during the 100-year design storm.

Initial coordination has been made with the CT DEEP Fisheries Division. Initial recommendations from Fisheries are to provide unrestricted upstream fish passage at this location. It was also recommended that proper erosion and sedimentation control measures be installed and maintained throughout the duration of this project and special care be exercised to not increase the turbidity levels during construction. As a best management practice, it was recommended that any unconfined instream work within the West Branch Saugatuck River be restricted to the period between June 1 to September 30, inclusive.

The proposed structure will be installed in the dry, and flow around the abutments will be diverted with temporary water handling cofferdams. Temporary water handling cofferdams consisting of sandbags, will be utilized along each abutment to elevation 217.55 ft.

The estimated construction duration for the structure replacement is once construction season, approximately 6 months. In accordance with the ConnDOT Drainage Manual (Section 6.15), the 2-year storm frequency will be used for the temporary condition.

During construction, the proposed replacement will be completed in the dry. Temporary water handling devices include cofferdams around each abutment. A minimum 20-foot channel will be maintained.

Replacement of Bridge No. 07001
Michael's Way over West Branch Saugatuck River
Town of Weston

Certified No-Impact Statement

I hereby certify the proposed replacement of the bridge carrying Michael's Way over West Branch Saugatuck River:

- a) will not cause a rise in flood heights exceeding 0.00 feet in the regulatory floodway as compared to the existing conditions.
- b) will not cause a rise in flood heights exceeding 0.00 feet within the regulatory floodplain as compared to the existing conditions.
- c) will not result in an increase in damaging velocities in either the channel or overbank areas as compared to the existing conditions.



DESIGNED BY:



BL COMPANIES, INC.
355 RESEARCH PARKWAY
MERIDEN, CT 06450

David Cicia, PE

BL Companies

Name

Company

23439



7/21/2023

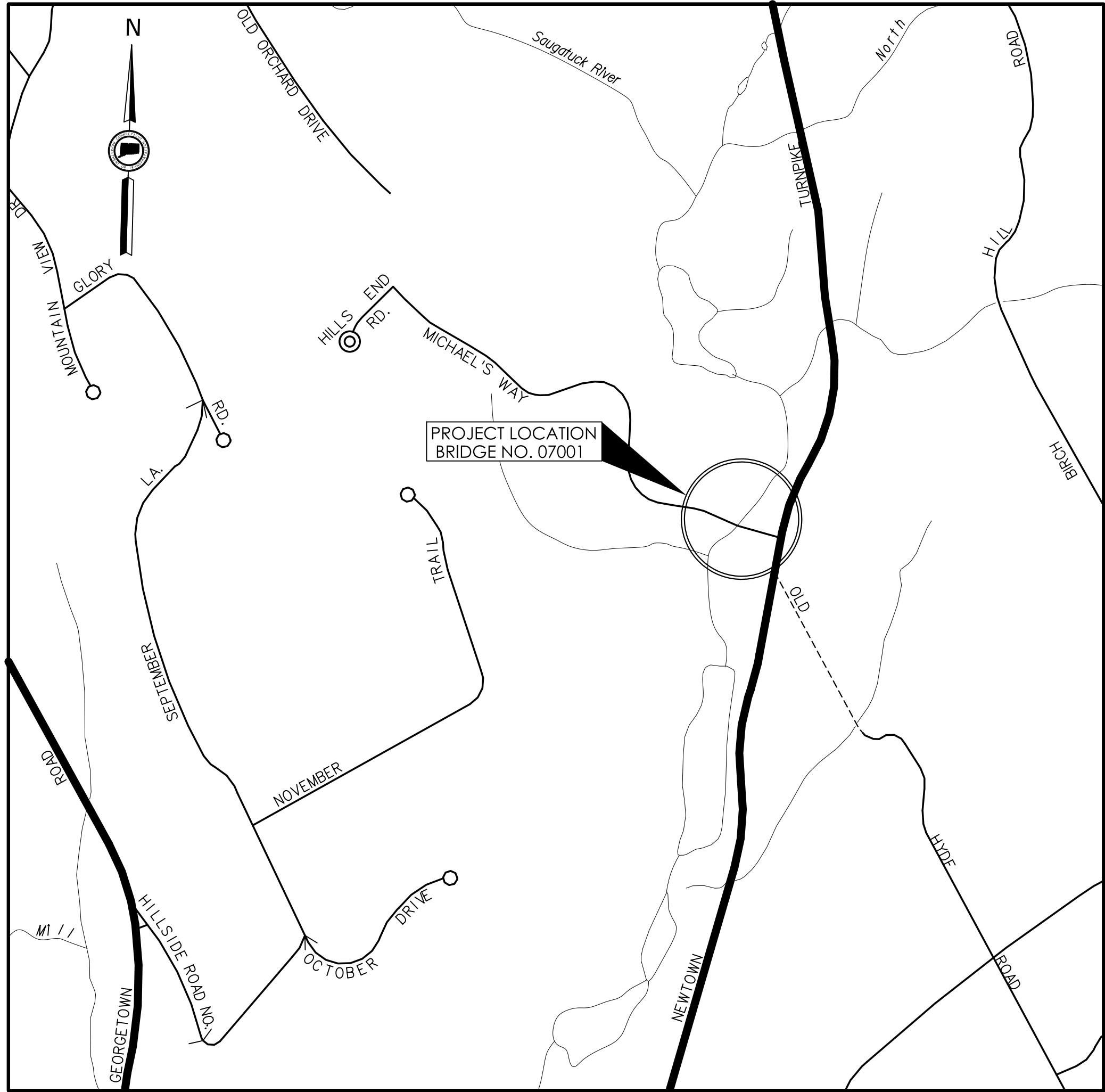
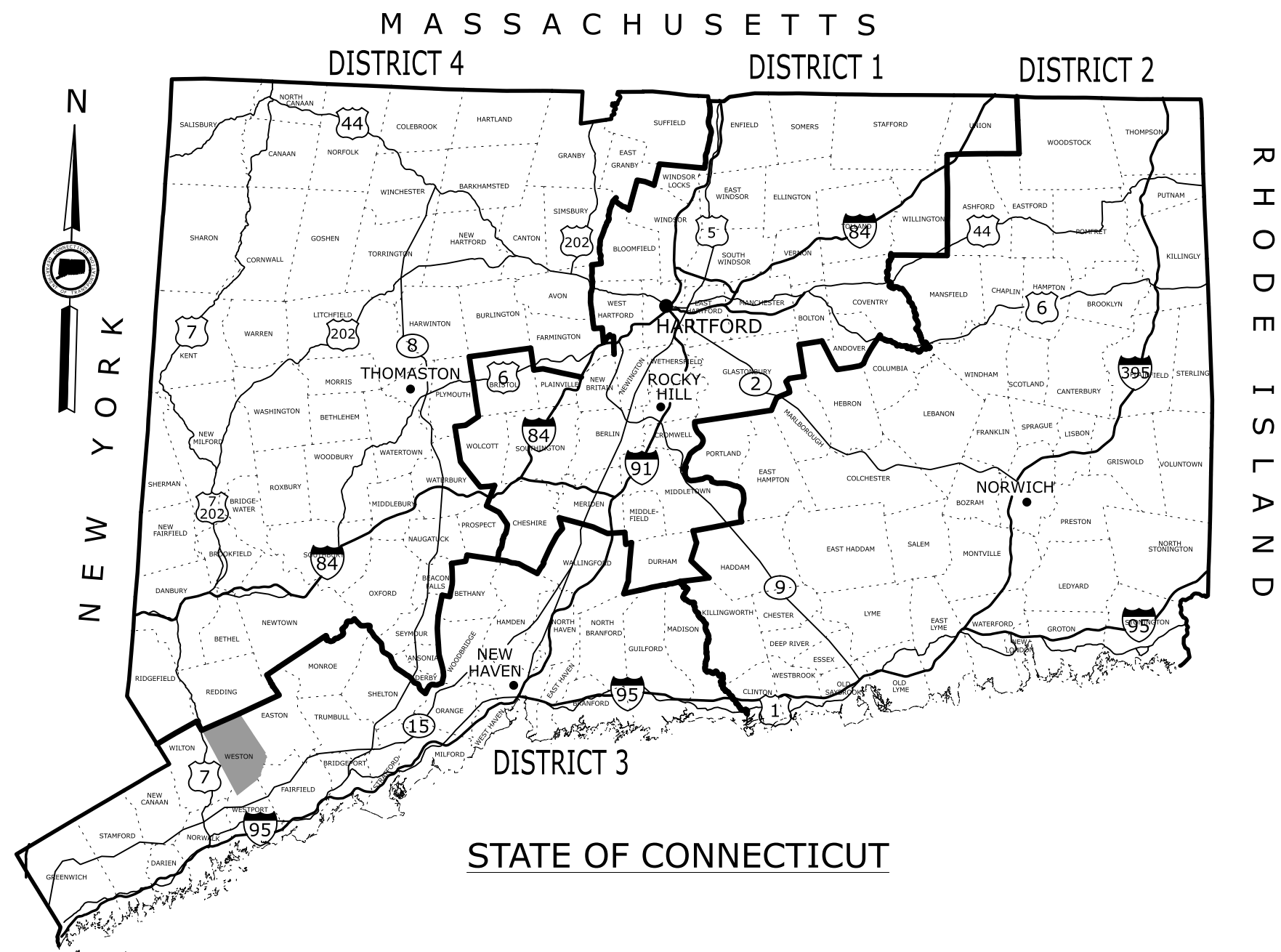
PE License No.

Signature

Date

ENVIRONMENTAL PERMIT PLANS STATE PROJECT NO. 0157-0088

REPLACEMENT OF BRIDGE NO. 07001 MICHAEL'S WAY OVER WEST BRANCH SAUGATUCK RIVER Town of WESTON, CT



LOCATION PLAN
NOT TO SCALE

GENERAL NOTES

1. THESE PLANS ARE NOT FOR CONSTRUCTION AND ARE INTENDED ONLY FOR ENVIRONMENTAL PERMITTING PURPOSES. THESE PLANS HOLD AUTHORITY FOR ALL ACTIVITIES CONCERNING THE REGULATED AREA. FOR DETAILED PLANIMETRIC INFORMATION AND PAYMENT REFER TO THE APPLICABLE CONTRACT DOCUMENTS.
2. FOR A DESCRIPTION OF THE WATERCOURSES, WETLAND AND WETLAND SOILS SEE RELEVANT SECTIONS OF THE PERMIT APPLICATION.
3. ALL CONSTRUCTION ACTIVITIES WILL BE CONDUCTED IN ACCORDANCE WITH THE DEPARTMENT'S STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, FACILITIES, AND INCIDENTAL CONSTRUCTION, FORM 818, SECTION 1.10 AND WILL ALSO FOLLOW BEST MANAGEMENT PRACTICES (BMPs) AND SEDIMENT AND EROSION CONTROL MEASURES IN ACCORDANCE WITH THE 2002 EROSION & SEDIMENTATION CONTROL GUIDELINES AND THE 2004 STORMWATER QUALITY MANUAL.
4. FEDERAL AID PROJECT NO. 6157(006)
5. CONSTRUCTION SPECIFICATIONS: CONNECTICUT DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, FACILITIES, AND INCIDENTAL CONSTRUCTION, FORM 818, DATED 2020; SUPPLEMENTAL SPECIFICATIONS, DATED JULY 2021; AND SPECIAL PROVISIONS
6. 400 FOOT GRID BASED ON CONNECTICUT COORDINATE SYSTEM N.A.D. 1983. VERTICAL DATUM NAVD OF 1988.

LIST OF DRAWINGS

DRAWING NO.	DRAWING TITLE
PMT-01	TITLE SHEET
PMT-02	GENERAL PLAN
PMT-03	ENVIRONMENTAL IMPACTS PLAN - WETLANDS
PMT-04	ENVIRONMENTAL IMPACTS PLAN - FLOODPLAINS
PMT-05	TYPICAL SECTIONS AND ELEVATION
PMT-06	WATER HANDLING PLAN
PMT-07	PERMIT PLANTING PLAN

DESIGNED BY:
McFARLAND JOHNSON

ENVIRONMENTAL PERMIT PLANS
DATED: 7/11/2023

DESIGNER/DRAFTER: SB/MAD CHECKED BY: EWM

SIGNATURE/
BLOCK:

MCFARLAND JOHNSON
53 REGIONAL DRIVE
TOWNSEND, NH 03868

TOWN OF
WESTON, CT.

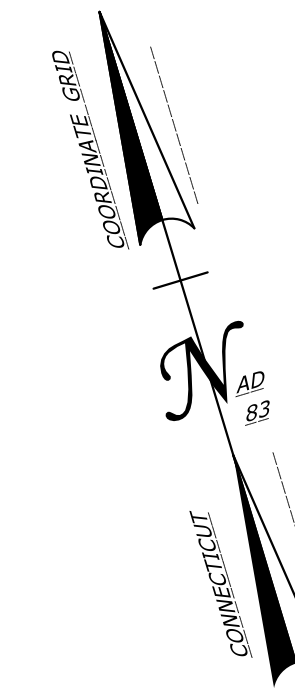
PROJECT NUMBER: 0157-0088
PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 07001 MICHAEL'S WAY OVER WEST BRANCH SAUGATUCK RIVER
TOWN(S): WESTON
DRAWING TITLE: TITLE SHEET

DRAWING NO.
PMT-01
SHEET NO.

N/F
7 MICHAELS WAY
LLC

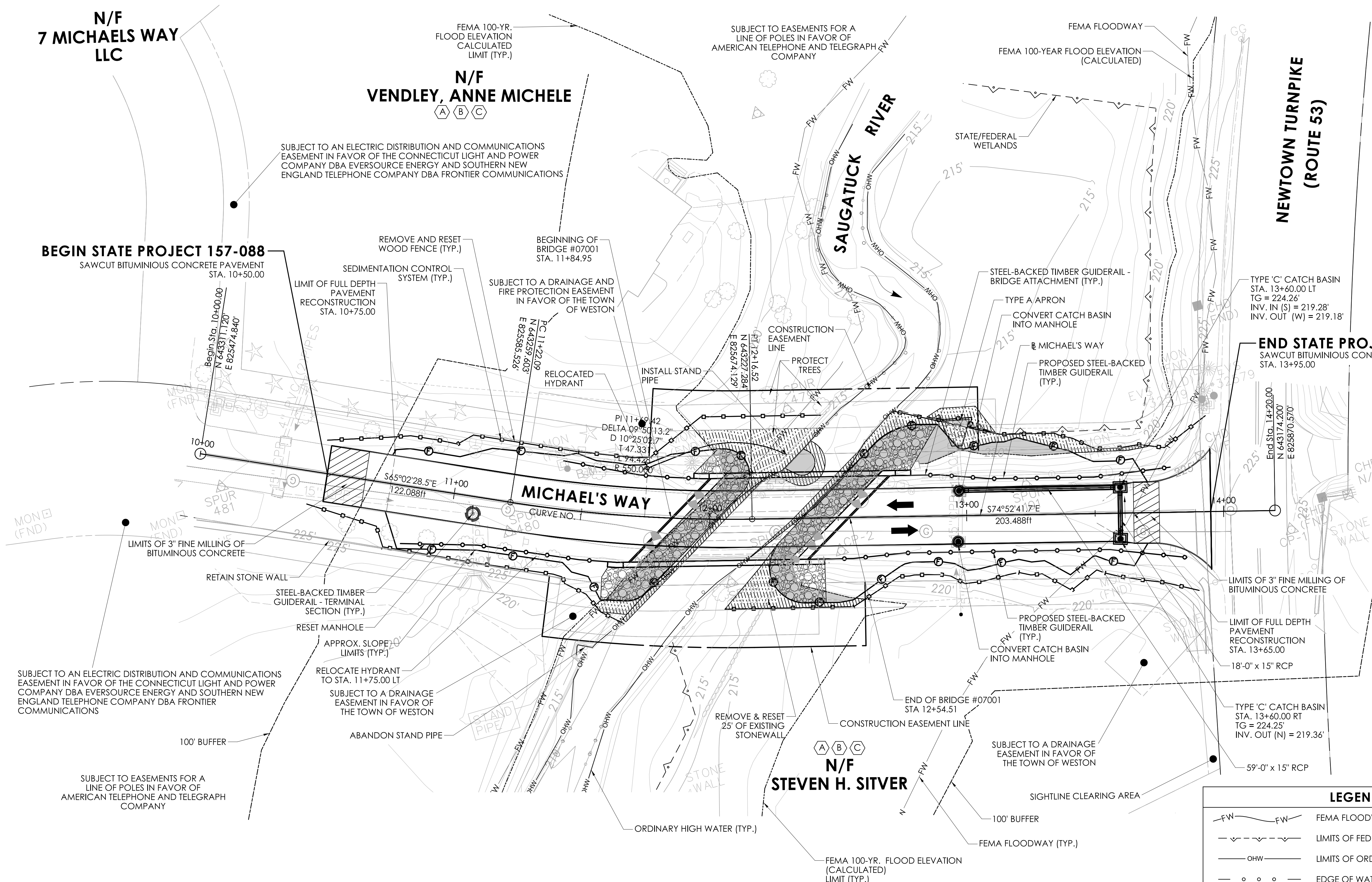
N/F
VENDLEY, ANNE MICHELE
A B C

NEWTOWN TURNPIKE
(ROUTE 53)



BEGIN STATE PROJECT 157-088
SAWCUT BITUMINIOUS CONCRETE PAVEMENT
STA. 10+50.00

END STATE PROJECT 157-088
SAWCUT BITUMINIOUS CONCRETE PAVEMENT
STA. 13+95.00



SUBJECT TO AN ELECTRIC DISTRIBUTION AND COMMUNICATIONS EASEMENT IN FAVOR OF THE CONNECTICUT LIGHT AND POWER COMPANY DBA EVERSOURCE ENERGY AND SOUTHERN NEW ENGLAND TELEPHONE COMPANY DBA FRONTIER COMMUNICATIONS

SUBJECT TO AN ELECTRIC DISTRIBUTION AND COMMUNICATIONS EASEMENT IN FAVOR OF THE CONNECTICUT LIGHT AND POWER COMPANY DBA EVERSOURCE ENERGY AND SOUTHERN NEW ENGLAND TELEPHONE COMPANY DBA FRONTIER COMMUNICATIONS

BEGINNING OF BRIDGE #07001
STA. 11+84.95

SUBJECT TO A DRAINAGE AND FIRE PROTECTION EASEMENT IN FAVOR OF THE TOWN OF WESTON

SUBJECT TO EASEMENTS FOR A LINE OF POLES IN FAVOR OF AMERICAN TELEPHONE AND TELEGRAPH COMPANY

FEMA 100-YEAR FLOOD ELEVATION (CALCULATED)

REMOVE AND RESET WOOD FENCE (TYP.)

SEDIMENTATION CONTROL SYSTEM (TYP.)

LIMIT OF FULL DEPTH PAVEMENT RECONSTRUCTION
STA. 10+75.00

RELOCATED HYDRANT

INSTALL STAND PIPE

CONSTRUCTION EASEMENT LINE

STEEL-BACKED TIMBER GUIDERAIL - BRIDGE ATTACHMENT (TYP.)

TYPE A APRON

CONVERT CATCH BASIN INTO MANHOLE

PROPOSED STEEL-BACKED TIMBER GUIDERAIL (TYP.)

TYPE 'C' CATCH BASIN
STA. 13+60.00 LT
TG = 224.26'
INV. IN (S) = 219.28'
INV. OUT (W) = 219.18'

MICHAEL'S WAY
CURVE NO. 1

LIMITS OF 3" FINE MILLING OF BITUMINIOUS CONCRETE

RETAIN STONE WALL

STEEL-BACKED TIMBER GUIDERAIL - TERMINAL SECTION (TYP.)

RESET MANHOLE

APPROX. SLOPE LIMITS (TYP.)

RELOCATE HYDRANT TO STA. 11+75.00 LT

SUBJECT TO A DRAINAGE EASEMENT IN FAVOR OF THE TOWN OF WESTON

ABANDON STAND PIPE

SUBJECT TO EASEMENTS FOR A LINE OF POLES IN FAVOR OF AMERICAN TELEPHONE AND TELEGRAPH COMPANY

100' BUFFER

REMOVE & RESET 25' OF EXISTING STONEWALL

END OF BRIDGE #07001
STA 12+54.51

CONSTRUCTION EASEMENT LINE

SUBJECT TO A DRAINAGE EASEMENT IN FAVOR OF THE TOWN OF WESTON

N/F
STEVEN H. SITVER
A B C

SIGHTLINE CLEARING AREA

100' BUFFER

FEMA FLOODWAY (TYP.)

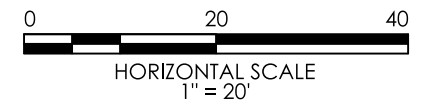
FEMA 100-YR. FLOOD ELEVATION (CALCULATED) LIMIT (TYP.)

LEGEND	
	FEMA FLOODWAY
	LIMITS OF FEDERAL AND STATE WETLANDS
	LIMITS OF ORDINARY HIGH WATER
	EDGE OF WATER
	SEDIMENTATION CONTROL SYSTEM
	FEMA 100-YR. FLOOD ELEVATION (CALCULATED) LIMIT
	INTERMEDIATE RIPRAP SLOPE PROTECTION

NOTES

1. SEDIMENTATION CONTROL SYSTEM TO BE PLACED AT CATCH BASIN(S) AS NEEDED OR AS DIRECTED BY THE ENGINEER
2. PLACE 1'-0" OF NATURAL STREAMBED MATERIAL OVER RIPRAP WITHIN THE OHW LIMITS

ENVIRONMENTAL PERMIT PLANS
DATED: 7/11/2023



SIGNATURE/BLOCK:

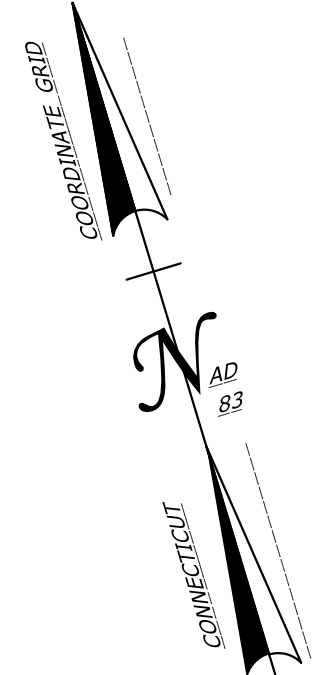
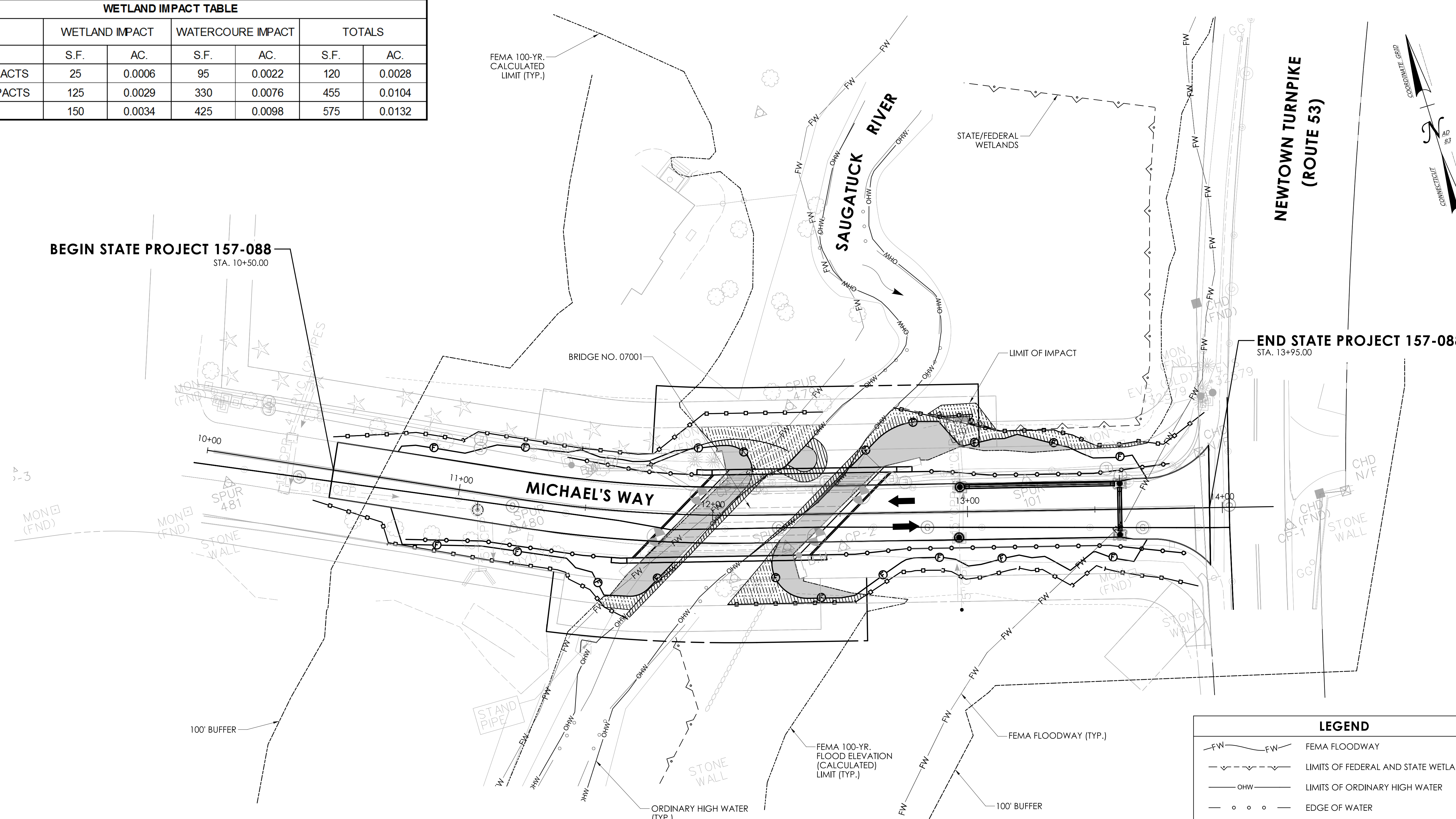


TOWN OF WESTON, CT.

PROJECT NUMBER: 0157-0088
PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 07001 MICHAEL'S WAY OVER WEST BRANCH SAUGATUCK RIVER
TOWN(S): WESTON
DRAWING TITLE: GENERAL PLAN

DRAWING NO.
PMT-02
SHEET NO.

WETLAND IMPACT TABLE						
	WETLAND IMPACT		WATERCOURSE IMPACT		TOTALS	
	S.F.	AC.	S.F.	AC.	S.F.	AC.
PERMANENT IMPACTS	25	0.0006	95	0.0022	120	0.0028
TEMPORARY IMPACTS	125	0.0029	330	0.0076	455	0.0104
TOTAL IMPACTS	150	0.0034	425	0.0098	575	0.0132



**NEWTOWN TURNPIKE
(ROUTE 53)**

BEGIN STATE PROJECT 157-088
STA. 10+50.00

END STATE PROJECT 157-088
STA. 13+95.00

MICHAEL'S WAY

SAUGATUCK RIVER

BRIDGE NO. 07001

STATE/FEDERAL WETLANDS

LIMIT OF IMPACT

3-3

10+00

11+00

12+00

13+00

14+00

100' BUFFER

STAND PIPE

STONE WALL

FEMA 100-YR. FLOOD ELEVATION (CALCULATED) LIMIT (TYP.)

FEMA FLOODWAY (TYP.)

100' BUFFER

ORDINARY HIGH WATER (TYP.)

CHD N/F

CHD (FND)

CP-1

STONE WALL

GG

MON (FND)

SPUR 101

EL. 332.579

CHD (FND)

CP-2

STONE WALL

MON (FND)

SPUR 481

MON (FND)

SPUR 480

MON (FND)

SPUR 478

MON (FND)

SPUR 101

MON (FND)

SPUR 101

MON (FND)

SPUR 101

MON (FND)

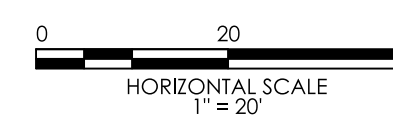
LEGEND	
	FEMA FLOODWAY
	LIMITS OF FEDERAL AND STATE WETLANDS
	LIMITS OF ORDINARY HIGH WATER
	EDGE OF WATER
	SEDIMENTATION CONTROL SYSTEM
	FEMA 100-YR. FLOOD ELEVATION (CALCULATED) LIMIT
	PERMANENT WATER COURSE / WETLANDS IMPACTS
	TEMPORARY WATER COURSE / WETLAND IMPACTS
	INTERMEDIATE RIPRAP SLOPE PROTECTION

NOTES

1. THE CONTRACTOR SHALL NOT WORK WITHIN THE LIMITS OF THE WETLANDS AND WATERCOURSE WITH THE EXCEPTION OF THOSE AREAS DELINEATED AS TEMPORARY OR PERMANENT IMPACTS TO THE WETLANDS AND WATERCOURSES. ALL DISTURBED AREAS SHALL BE RESTORED.
2. UNCONFINED INSTREAM WORK WITHIN THE WATERCOURSES IS RESTRICTED TO THE PERIOD FROM JUNE 1 TO SEPTEMBER 30, INCLUSIVE.

REV.	DATE	REVISION DESCRIPTION

ENVIRONMENTAL PERMIT PLANS
DATED: 7/11/2023



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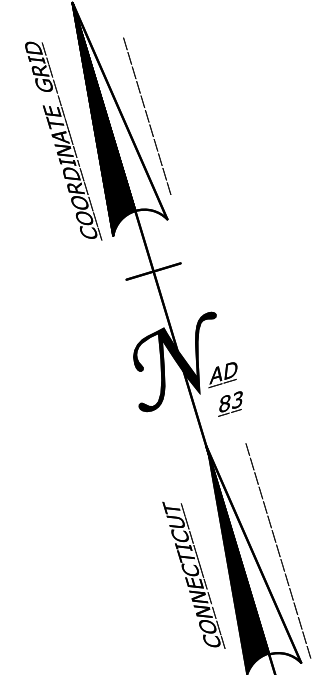
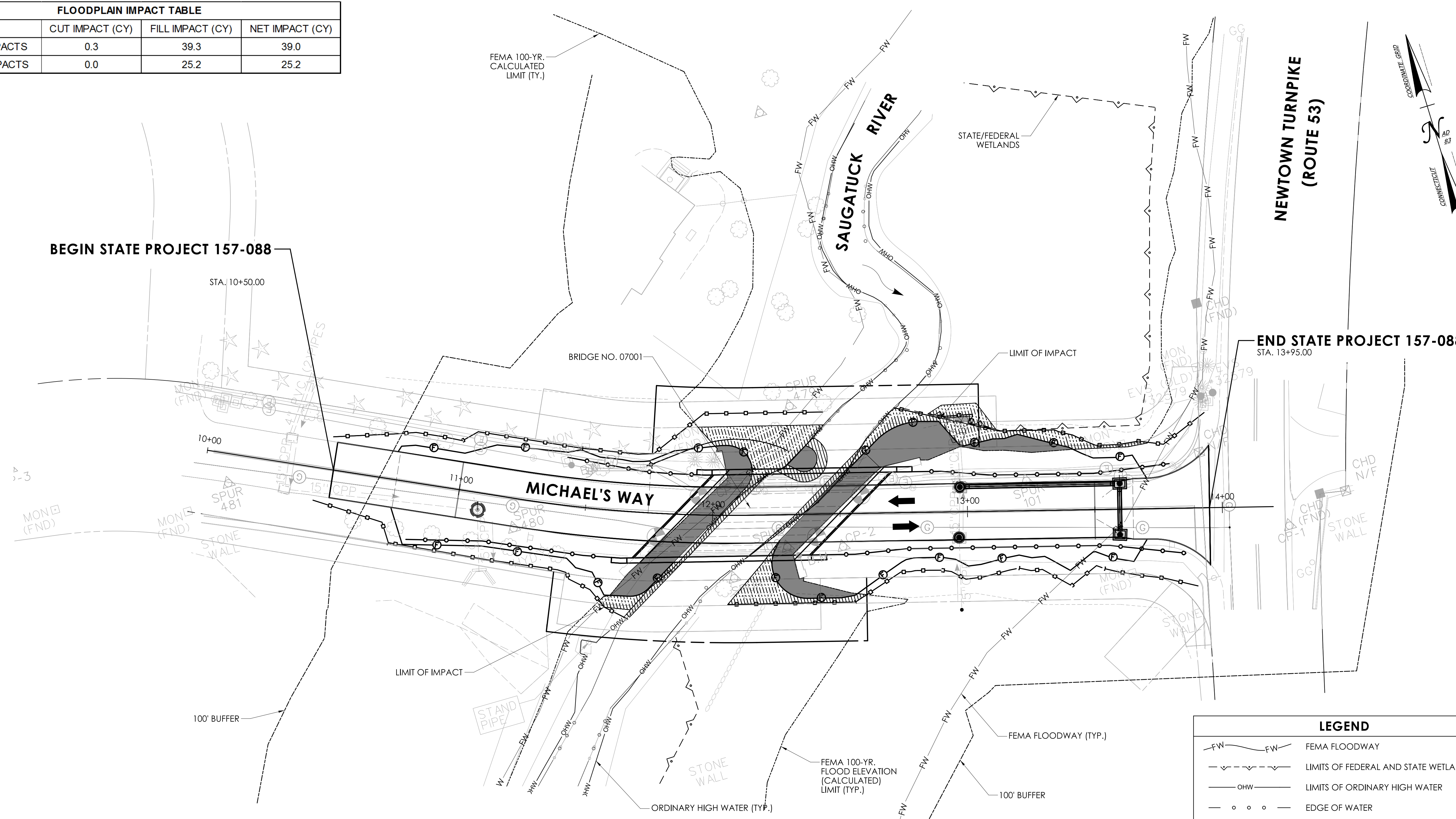
 MCFARLAND JOHNSON
 53 REGIONAL DRIVE
 CONCORD, NH 03301

TOWN OF WESTON, CT.

PROJECT NUMBER: 0157-0088
 PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 07001 MICHAEL'S WAY OVER WEST BRANCH SAUGATUCK RIVER
 TOWN(S): WESTON
 DRAWING TITLE: ENVIRONMENTAL IMPACTS PLAN - WETLANDS

DRAWING NO. PMT-03
 SHEET NO.

FLOODPLAIN IMPACT TABLE			
	CUT IMPACT (CY)	FILL IMPACT (CY)	NET IMPACT (CY)
PERMANENT IMPACTS	0.3	39.3	39.0
TEMPORARY IMPACTS	0.0	25.2	25.2



**NEWTOWN TURNPIKE
(ROUTE 53)**

BEGIN STATE PROJECT 157-088

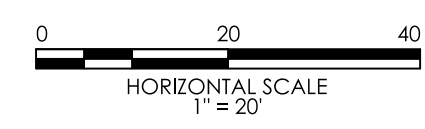
END STATE PROJECT 157-088
STA. 13+95.00

LEGEND	
	FEMA FLOODWAY
	LIMITS OF FEDERAL AND STATE WETLANDS
	LIMITS OF ORDINARY HIGH WATER
	EDGE OF WATER
	SEDIMENTATION CONTROL SYSTEM
	FEMA 100-YR. FLOOD ELEVATION (CALCULATED) LIMIT
	PERMANENT FLOODPLAIN IMPACTS
	TEMPORARY FLOODPLAIN IMPACTS
	INTERMEDIATE RIPRAP SLOPE PROTECTION

- NOTES**
1. SEDIMENTATION CONTROL SYSTEM TO BE PLACED AT CATCH BASIN(S) AS NEEDED OR AS DIRECTED BY THE ENGINEER
 2. THE ENTIRE PROJECT AREA IS WITHIN THE 100 YEAR FLOODPLAIN

REV.	DATE	REVISION DESCRIPTION

ENVIRONMENTAL PERMIT PLANS
DATED: 7/11/2023

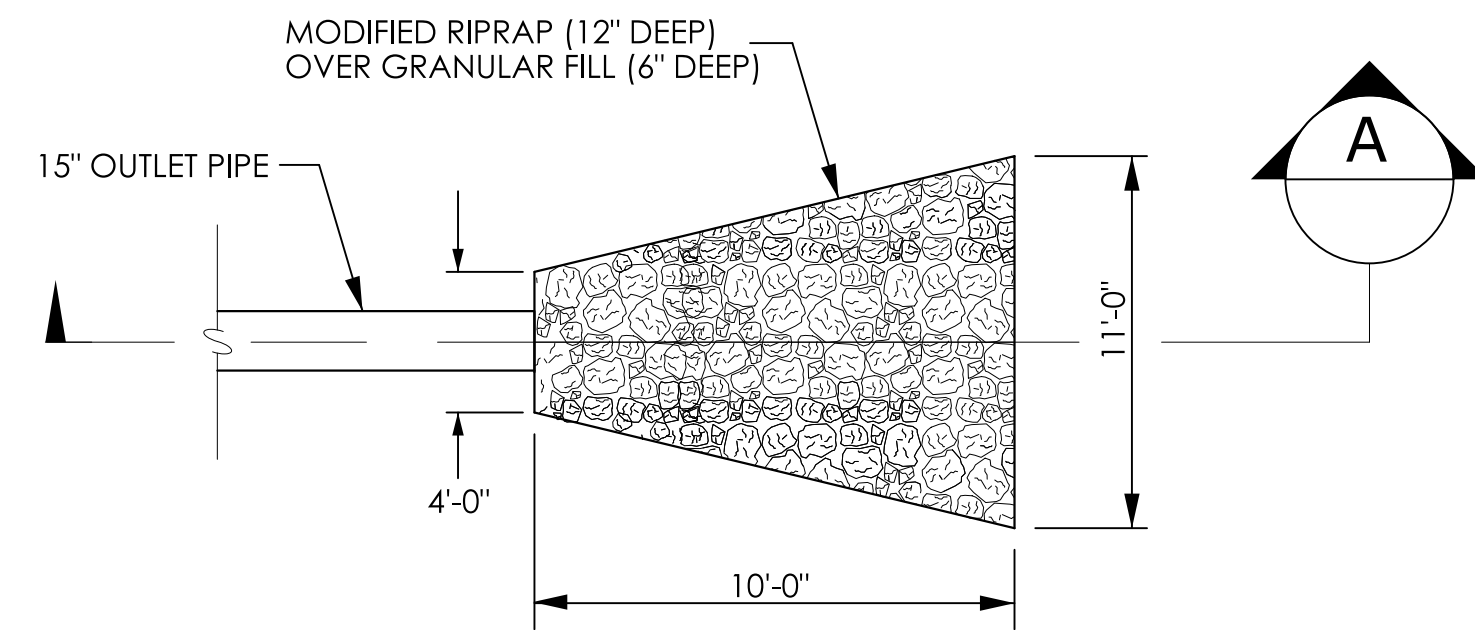


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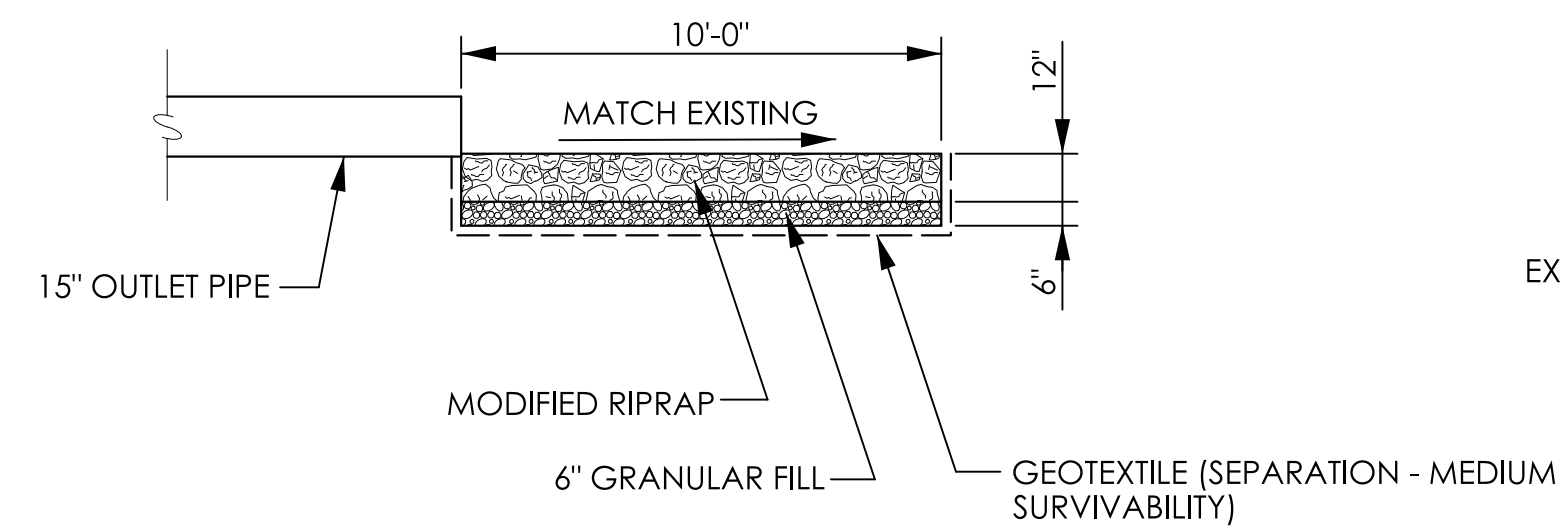
TOWN OF WESTON, CT.

PROJECT NUMBER: 0157-0088
PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 07001 MICHAEL'S WAY OVER WEST BRANCH SAUGATUCK RIVER
TOWN(S): WESTON
DRAWING TITLE: ENVIRONMENTAL IMPACTS PLAN - FLOOD PLAIN

DRAWING NO. PMT-04
SHEET NO.

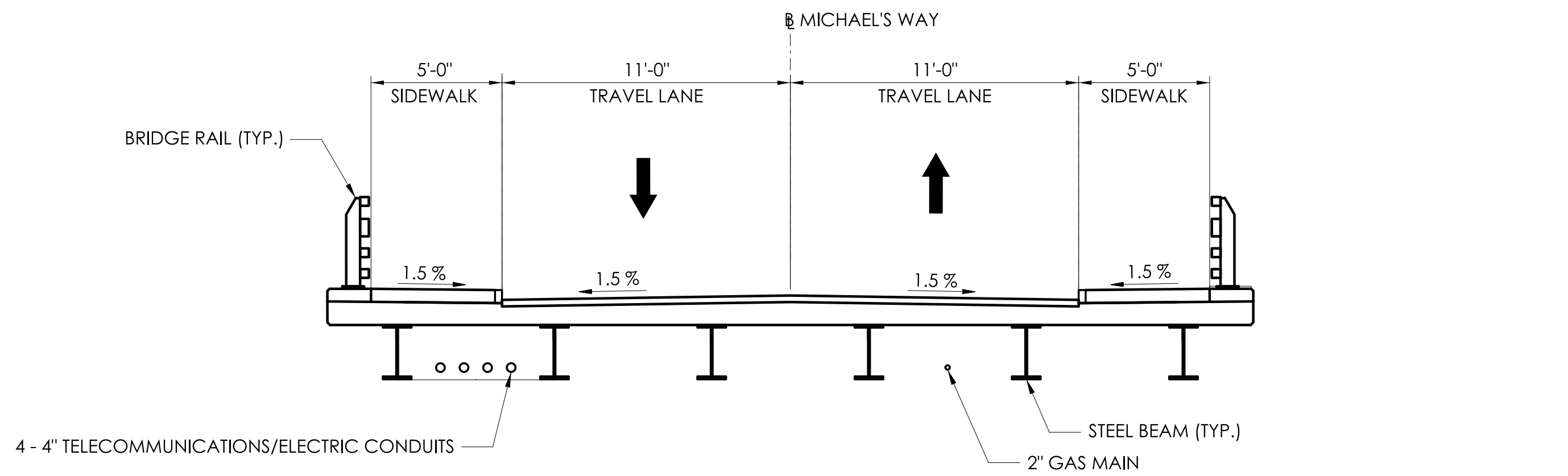


PLAN



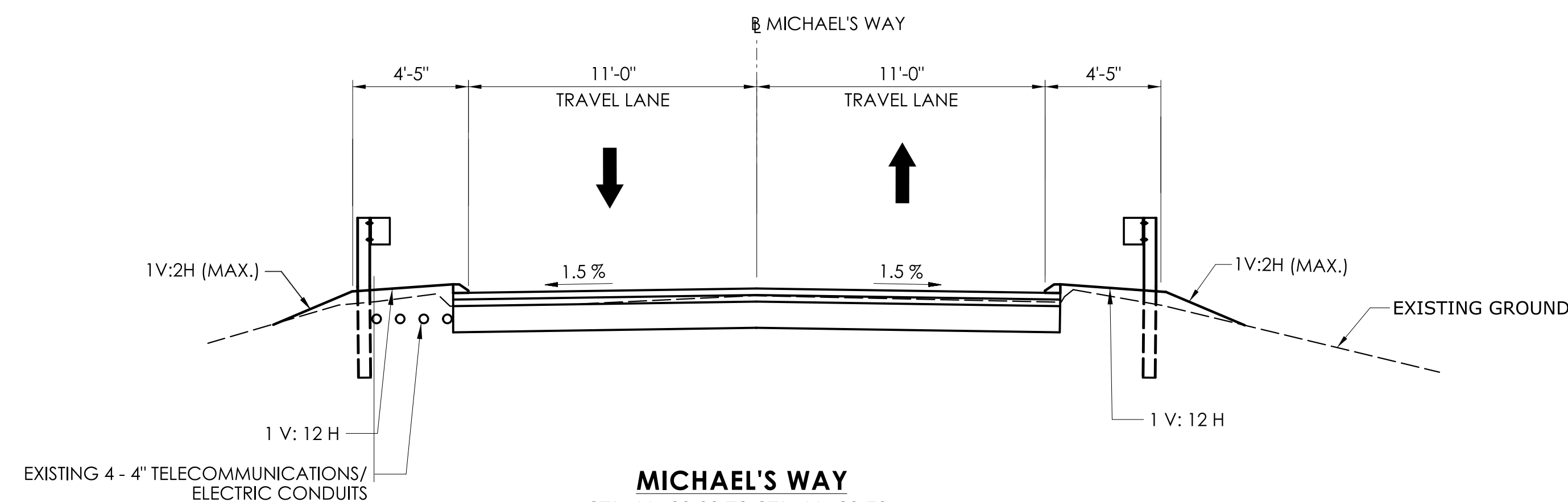
SECTION A

TYPE A APRON
NOT TO SCALE



BRIDGE NO. 07001 ON MICHAEL'S WAY

STA. 11+89.70 ± TO STA. 12+47.65 ±



MICHAEL'S WAY

STA. 11+00.00 TO STA. 11+89.70 ±
STA. 12+47.65 ± TO STA. 13+50.00

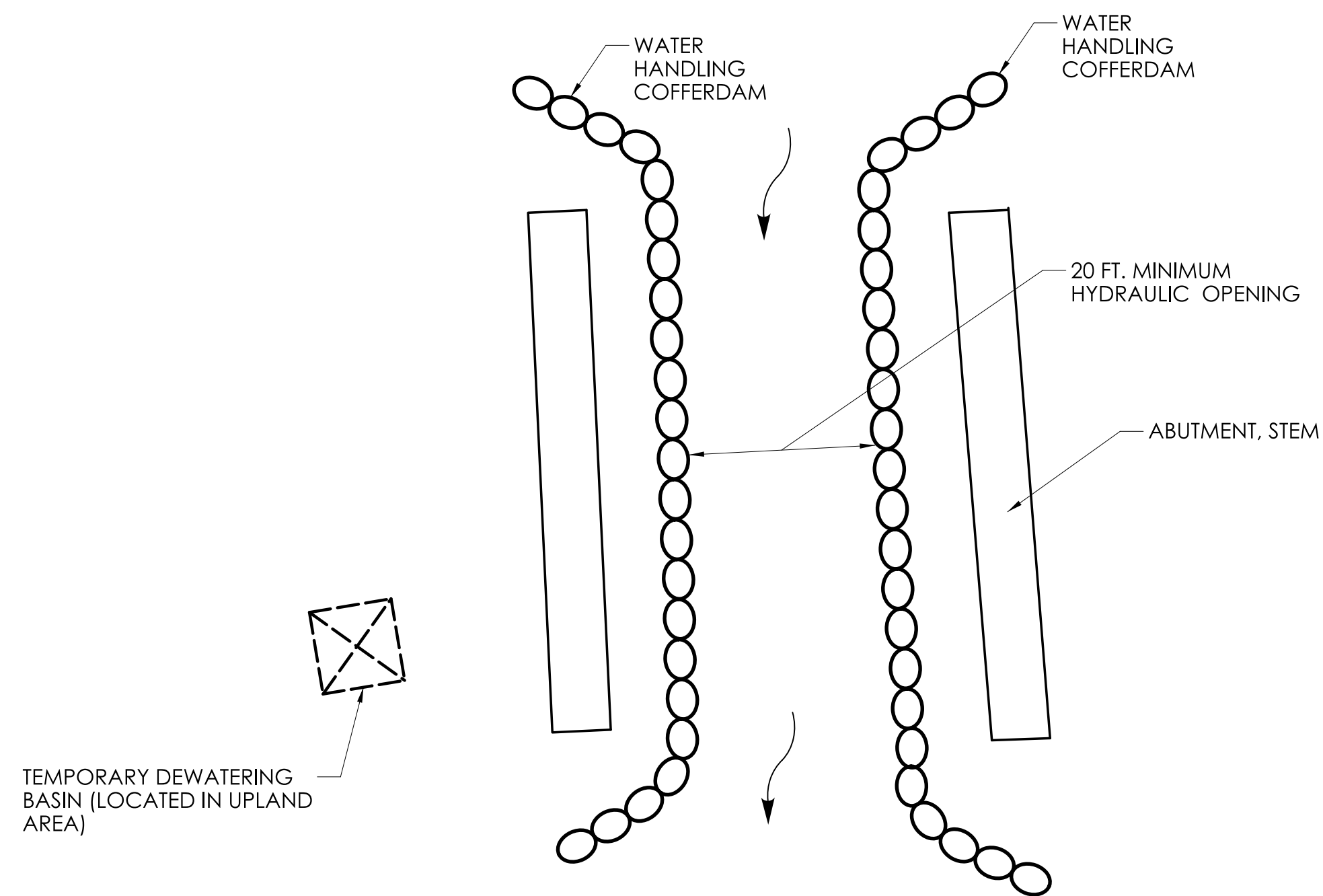
ELEVATION
SCALE 1"=10'

HYDRAULIC DATA	
DRAINAGE AREA	6.25 SQ. MILES
DESIGN FREQUENCY	100 YEAR
DESIGN DISCHARGE	1,530 CFS
AVERAGE DAILY FLOW ELEVATION	212.45 FT (ESTIMATED)
UPSTREAM DESIGN WATER SURFACE ELEVATION	220.09 FT
DOWNSTREAM DESIGN WATER SURFACE ELEVATION	217.20 FT
MAXIMUM SCOUR ELEVATION	201.00 FT
FREQUENCY	500 YEAR
DISCHARGE	1,960 CFS
WORST CASE SCOUR SUB-STRUCTURE UNIT	ABUTMENT 2

NOTE

- 1'-0" OF NATURAL STREAMBED MATERIAL SHALL BE PLACED OVER ANY RIPRAP WITHIN THE OHW LIMITS

REV.	DATE	REVISION DESCRIPTION



HANDLING WATER AROUND ABUTMENTS
NOT TO SCALE

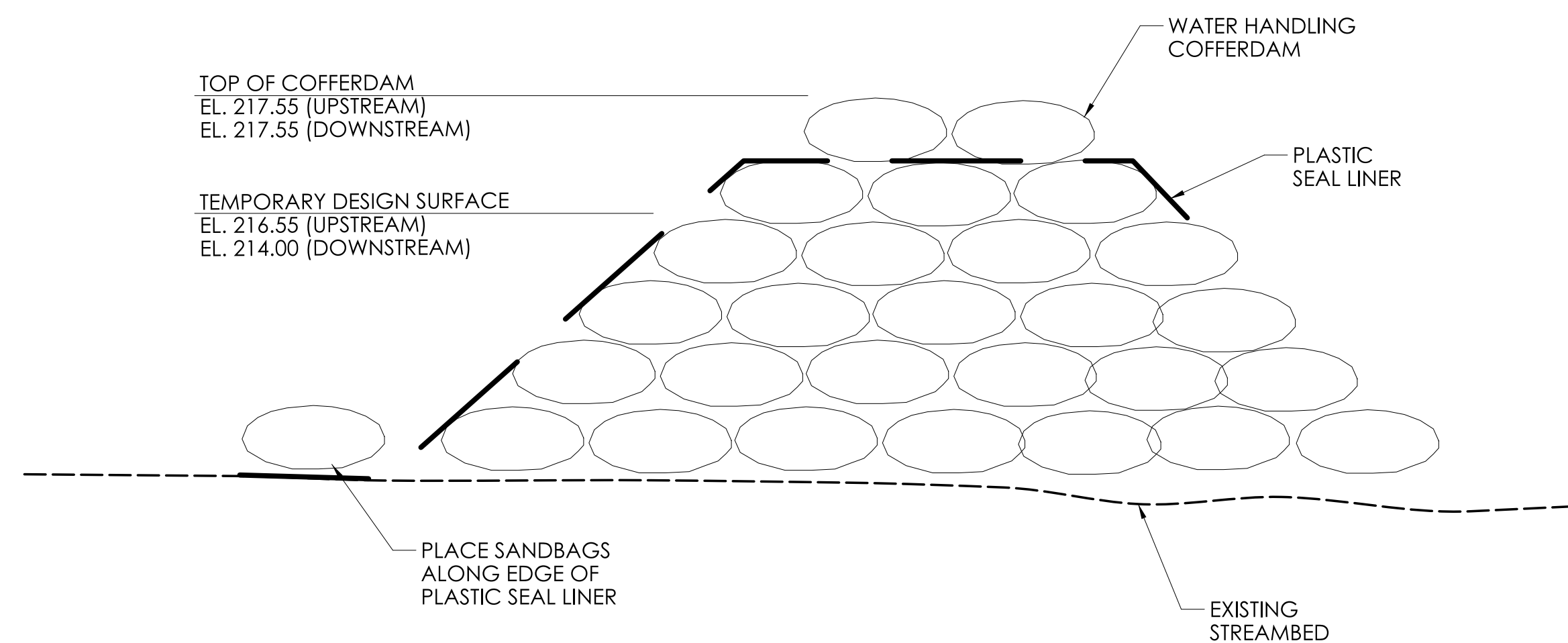
TEMPORARY HYDRAULIC SUMMARY DATA	
AVERAGE DAILY FLOW (ADF)	12.0 CFS
AVERAGE SPRING FLOW (ASF)	23.0 CFS
2 - YEAR DESIGN FREQUENCY	564 CFS
TEMPORARY DESIGN SURFACE ELEVATION (UPSTREAM)	216.55 FT
TEMPORARY DESIGN SURFACE ELEVATION (DOWNSTREAM)	214.00 FT

WATER HANDLING NOTES:

1. THE CONTRACTOR SHALL DESIGN THE TEMPORARY COFFERDAMS AND SUBMIT MEANS AND METHODS OF HANDLING WATER TO THE ENGINEER FOR APPROVAL.
2. THE COST OF THE TEMPORARY COFFERDAMS, TEMPORARY BYPASS PIPES, TEMPORARY DRAINAGE PIPES, STREAM DIVERSION STRUCTURES, PUMPS, AND ANY OTHER NECESSARY INCIDENTAL APPURTENANCES REQUIRED TO HANDLE THE WATER SHALL BE INCLUDED IN THE COST OF THE ITEM "HANDLING WATER".
3. ALL WATER PUMPED FROM WITHIN THE TEMPORARY COFFERDAMS TO BE HANDLED THROUGH THE TEMPORARY DEWATERING BASIN. THE SMALL TEMPORARY SEDIMENTATION BASIN AND PUMP(S) SHALL BE SIZED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL. COST OF TEMPORARY DEWATERING BASIN SHALL BE INCLUDED IN THE COST OF ITEM "HANDLING WATER".
4. TOP OF TEMPORARY WATER HANDLING COFFERDAM SHALL BE MINIMUM EL. 217.55.
5. UNCONFINED INSTREAM WORK WITHIN THE WATERCOURSE IS RESTRICTED TO THE PERIOD FROM JUNE 1 TO SEPTEMBER 30, INCLUSIVE.

SUGGESTED SEQUENCE OF CONSTRUCTION

1. IMPLEMENT THE DETOUR (SEE DETOUR PLAN).
2. INSTALL SEDIMENTATION CONTROL SYSTEM AND CLEAR AND GRUB SITE AS REQUIRED.
3. INSTALL TEMPORARY COFFERDAMS AND WATER HANDLING.
4. INSTALL TEMPORARY UTILITY SUPPORT SYSTEM AND TRANSFER UTILITIES FROM THE EXISTING BRIDGE TO THE TEMPORARY SUPPORT STRUCTURES. NOTE UTILITIES ARE TO REMAIN IN PLACE FOR THE DURATION OF CONSTRUCTION. THE CONTRACTOR SHALL TAKE PROPER PRECAUTIONS DURING DEMOLITION NOT TO DAMAGE EXISTING UTILITIES.
5. EXCAVATE AND DEMOLISH EXISTING BRIDGE STRUCTURE, WHICH INCLUDES COMPLETE REMOVAL OF THE EXISTING SUPERSTRUCTURE, SUBSTRUCTURES, AND STEEL PILES. DEBRIS SHIELD TO BE INSTALLED.
6. CONSTRUCT DEWATERING BASINS AND DEWATER SITE AS REQUIRED.
7. INSTALL MICROPILES AND PERFORM MICROPILE TESTS AS REQUIRED.
8. CONSTRUCT PROPOSED ABUTMENT PILE CAPS AND WINGWALLS TO ELEVATIONS SHOWN.
9. ESTABLISH GRADES IN THE STREAMBED AND ALONG BANKS. NOTE THAT THE ABUTMENTS ARE NOT TO BE BACKFILLED UNTIL THE DECK CONSTRUCTION IS COMPLETE AND HAS CURED. STOCKPILE MATERIAL UNDER THE BRIDGE AS REQUIRED PRIOR TO THE SUPERSTRUCTURE INSTALLATION.
10. INSTALL STRUCTURAL STEEL PLATE GIRDERS AND DIAPHRAGMS.
11. TRANSFER UTILITIES FROM THE TEMPORARY UTILITY SUPPORT STRUCTURES TO THEIR PERMANENT LOCATIONS. REMOVE TEMPORARY UTILITY SUPPORT STRUCTURES.
12. CONSTRUCT DECK, END DIAPHRAGMS, AND WINGWALLS PER THE DECK PLACEMENT SEQUENCE PROVIDED.
13. BACKFILL ABUTMENTS AND FINALIZE GRADES IN THE STREAM BED AND ALONG BANKS. REMOVE ALL WATER HANDLING.
14. CONSTRUCT SIDEWALKS, END BARRIERS, AND APPROACH SLABS.
15. INSTALL METAL BRIDGE RAIL - FOUR RAIL.
16. REMOVE SEDIMENTATION AND CONTROL SYSTEMS UPON PERMANENT STABILIZATION.
17. FINALIZE ROADWAY ITEMS AND OPEN BRIDGE TO TRAFFIC.



TYPICAL SECTION
WATER HANDLING COFFERDAM
NOT TO SCALE

REV.	DATE	REVISION DESCRIPTION

ENVIRONMENTAL PERMIT PLANS
DATED: 7/11/2023

DESIGNER/DRAFTER: SVO/RJT CHECKED BY: EWM

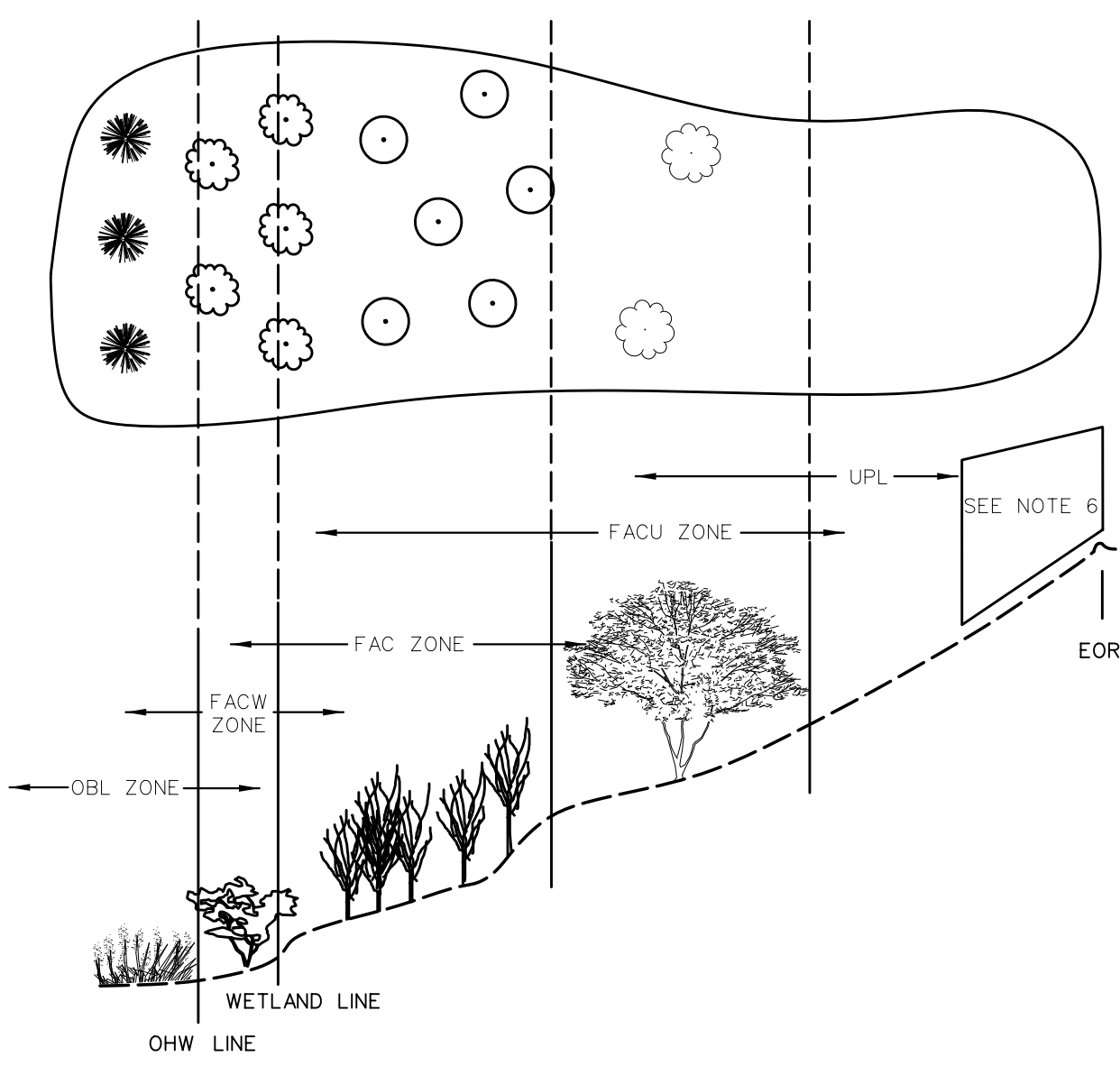
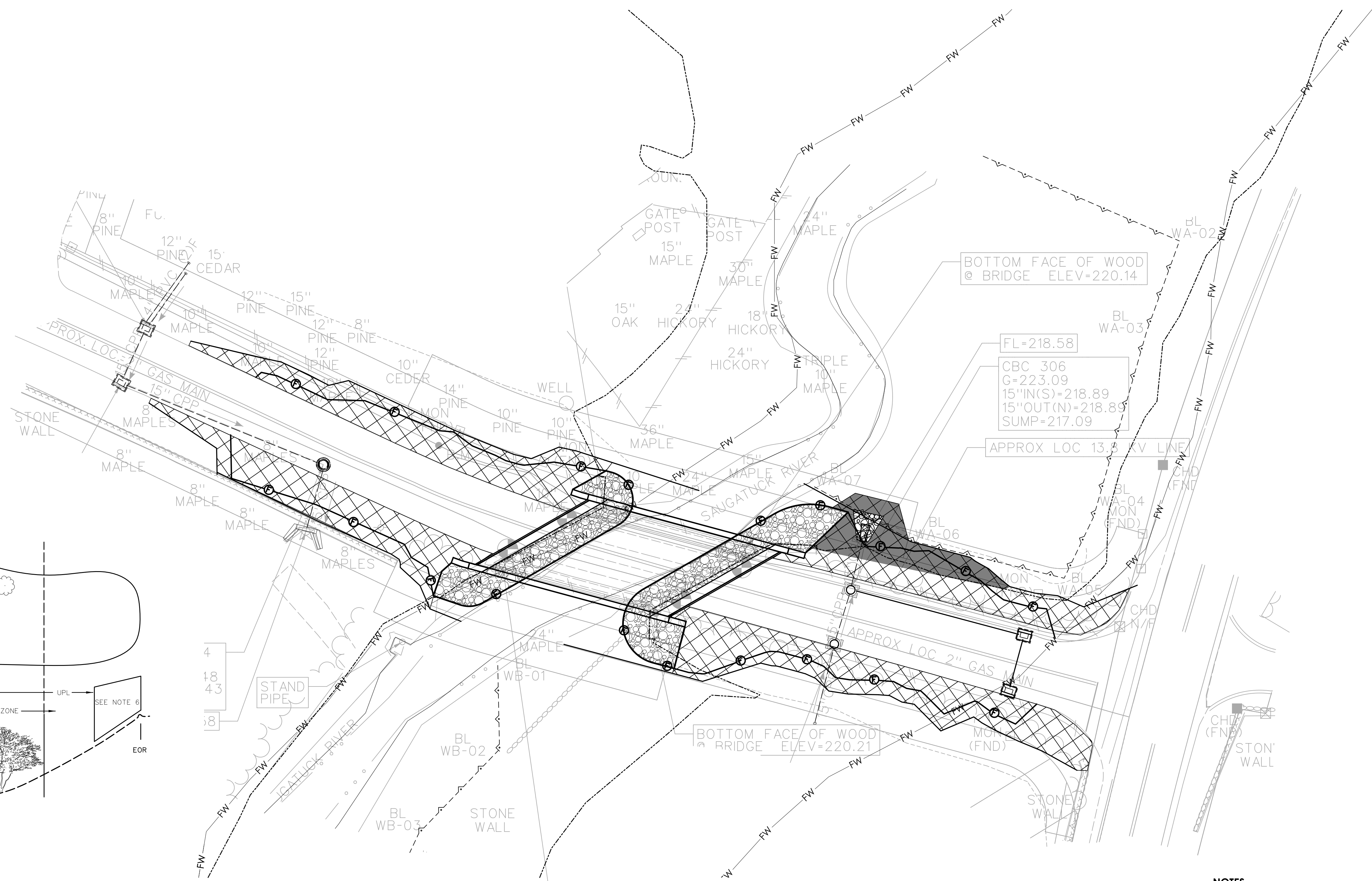
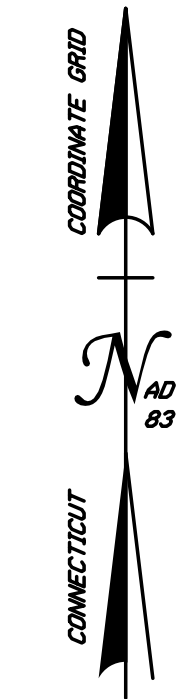
SIGNATURE/
BLOCK:

McFARLAND JOHNSON
53 REGIONAL DRIVE
CONCORD, NH 03301

**TOWN OF
WESTON, CT.**

PROJECT NUMBER: 0157-0088
PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 07001 MICHAEL'S WAY OVER WEST BRANCH SAUGATUCK RIVER
TOWN(S): WESTON
DRAWING TITLE: WATER HANDLING PLAN

DRAWING NO.
PMT-06
SHEET NO.



SCHEMATIC PLANTING

PERMIT PLANT LIST

BOTANICAL NAME	COMMON NAME	SIZE	QTY.	SPACING	WETLAND INDICATOR
<i>Lindera benzoin</i>	Common Spicebush	18"-24" HT. B.B.	10	Field Located	FAC
<i>Baccharis halimifolia</i>	Groundsel Tree	2'-3' HT. B.B.	5	Field Located	FACW
<i>Cornus amomum</i>	Silky Dogwood	18"-24" HT. Container	5	Field Located	FACW
<i>Asclepias incarnata</i>	Swamp Milkweed	2" Plug	20	Field Located	OBL
<i>Asclepias tuberosa</i>	Butterfly Milkweed	2" Plug	20	Field Located	UPL
TOTAL			60		

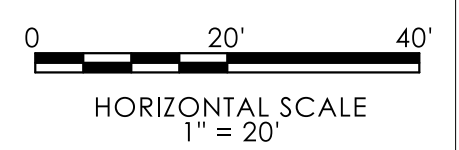
LEGEND

- RIPRAP PROTECTION
 - CONTROL AND REMOVAL OF INVASIVE VEGETATION (SEE NOTE 7)
 - AREA TO BE RESTORED WITH PLANTINGS
 - STATE/FEDERAL WETLANDS
 - ORDINARY HIGH WATER
 - EDGE OF STREAM
 - FEMA FLOODWAY LIMIT
 - 100-YEAR FEMA (CALCULATED)
- TOTAL PLANTS = 60
TOTAL PLANTING AREA = 85 S.Y.

NOTES

1. PLANTINGS ON THIS SHEET ARE FOR ENVIRONMENTAL PERMITTING.
2. PROPOSED PLANTINGS TO BE FIELD LOCATED.
3. WOOD CHIP MULCH SHALL NOT BE PLACED IN THE WETLAND AREA. ABOVE THE WETLAND AREA THE WOOD CHIP MULCH IS TO BE PLACED AROUND THE PLANTINGS, PER STANDARD DETAIL.
4. DISTURBED AREAS BELOW THE WETLAND LIMIT SHALL BE SEEDED WITH WETLAND GRASS ESTABLISHMENT. DISTURBED AREAS ABOVE THE WETLAND LIMIT SHALL BE SEEDED WITH CONSERVATION SEEDING FOR SLOPES, OR OTHER SEED MIX AS SPECIFIED. ALL AREAS SHALL BE RESTORED.
5. ALL PLANT MATERIAL SHALL BE NURSERY GRADE STRAIGHT SPECIES, CONFORMING TO SECTION 3 OF THE AMERICAN STANDARDS FOR NURSERY STOCK. NO VARIETIES OR CULTIVARS WILL BE ACCEPTED.
6. NO PLANTINGS TO BE PLACED IN A MOWED AREA.
7. AREA TO BE TREATED FOR INVASIVES AND PROPERLY REPAIRED FOR FINAL PLANTING, SEEDING, AND RESTORATION.

ENVIRONMENTAL PERMIT PLANS
DATED: 7/11/2023



SIGNATURE/BLOCK:

TOWN OF WESTON, CT.

PROJECT NUMBER: 0157-0088
PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 07001 MICHAEL'S WAY OVER WEST BRANCH SAUGATUCK RIVER
TOWN(S): WESTON
DRAWING TITLE: PERMIT PLANTING PLAN

DRAWING NO. PMT-07
SHEET NO.