

HYDRAULIC SUMMARY DATA		
DRAINAGE AREA (MI^2)		
DESIGN FREQUENCY (YEAR)		
DESIGN DISCHARGE (CFS)		
AVERAGE DAILY FLOW ELEVATION (FT)		
	DOWNSTREAM	UPSTREAM
100-YR DESIGN WATER SURFACE ELEVATION		
MAXIMUM SCOUR ELEVATION (FT)		
WORST CASE SCOUR SUBSTRUCTURE UNIT		

NOTICE TO BRIDGE INSPECTORS

THE DEPARTMENT'S BRIDGE SAFETY PROCEDURES REQUIRE THIS BRIDGE TO BE INSPECTED FOR, BUT NOT LIMITED TO, ALL APPROPRIATE COMPONENTS INDICATED IN THE GOVERNING MANUALS FOR BRIDGE INSPECTION. ATTENTION MUST BE GIVEN TO INSPECTING THE FOLLOWING SPECIAL COMPONENTS AND DETAILS, (THE LISTING FOR COMPONENTS FOR SPECIFIC ATTENTION SHALL NOT BE CONSTRUED TO REDUCE THE IMPORTANCE OF INSPECTION OF ANY OTHER COMPONENT OF THE STRUCTURE.) THE FREQUENCY OF INSPECTION OF THIS STRUCTURE SHALL BE IN ACCORDANCE WITH THE GOVERNING MANUAL FOR BRIDGE INSPECTION, UNLESS OTHERWISE DIRECTED BY THE MANAGER OF BRIDGE SAFETY AND EVALUATION

COMPONENT OR DETAIL	STRUCTURE SHEET REFERENCE

GENERAL NOTES:

SPECIFICATIONS: CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 818 (2020), SUPPLEMENTAL SPECIFICATIONS DATED JULY 2021 AND SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS (9TH EDITION - 2020), AS SUPPLEMENTED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL (2003).

MATERIAL STRENGTHS:
PCC03340..... f'_c = 3,000 PSI
PCC04462..... f'_c = 4,000 PSI

THE CONCRETE STRENGTH, f'_c , USED IN DESIGN OF THE CONCRETE COMPONENT IS NOTED ABOVE. THE CONSTRUCTED COMPONENTS SHALL CONFORM TO THE REQUIREMENTS OF 6.01 - CONCRETE FOR STRUCTURES, AND M.03 - PORTLAND CEMENT CONCRETE.

REINFORCEMENT:
(ASTM A615 GRADE 60)Fy = 60,000 PSI

LIVE LOAD: HL-93, LEGAL AND PERMIT VEHICLES

FUTURE PAVING ALLOWANCE: NONE

BITUMINOUS CONCRETE OVERLAY: THIS SHALL CONSIST OF 4" HMA S0.5 (IN TWO EQUAL LIFTS) ON 6" HMA S1.0 (IN TWO EQUAL LIFTS)

DIMENSIONS: WHEN DIMENSIONS ARE GIVEN TO LESS THAN THREE DECIMAL PLACES, THE OMITTED DIGITS SHALL BE ASSUMED TO BE ZEROS.

CONCRETE NOTES:

REMAIN-IN-PLACE FORMS: THE USE OF REMAIN-IN-PLACE FORMS ON THIS STRUCTURE IS NOT ALLOWED.

ITEM	BRIDGE COMPONENTS	PCC CLASS
FOOTING CONCRETE	RIGID FRAME PEDESTALS AND FOOTINGS, WINGWALL FOOTINGS	PCC03340
WINGWALL CONCRETE	WINGWALL STEMS	PCC03340
RIGID FRAME CONCRETE	PRECAST RIGID FRAME SECTIONS	PCC04462
PARAPET CONCRETE	HEADWALLS AND PARAPETS	PCC04462

PENETRATING SEALER : PENETRATING SEALER PROTECTIVE COMPOUND SHALL BE APPLIED TO ALL EXPOSED SURFACES, INCLUDING RAIL BASE, SEE SPECIAL PROVISIONS.

JOINT SEAL: SEE SPECIAL PROVISIONS.

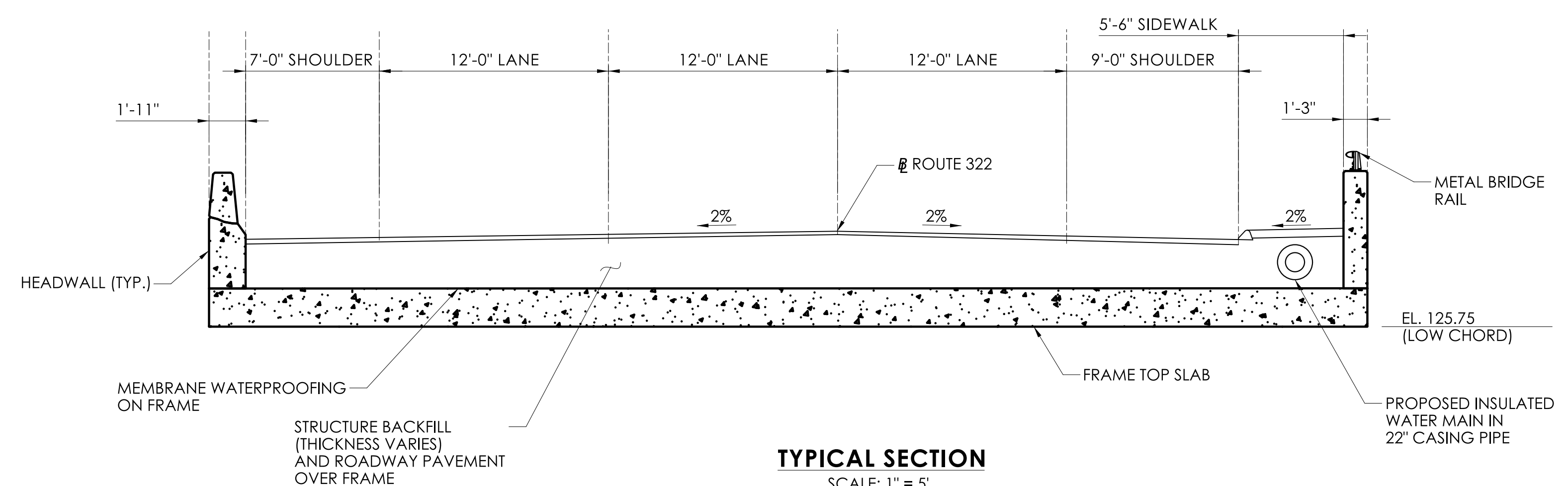
EXPOSED EDGES: EXPOSED EDGES OF CONCRETE SHALL BE BEVELED 1" x 1" UNLESS DIMENSIONS OTHERWISE.

CONCRETE COVER: ALL REINFORCEMENT SHALL HAVE TWO INCHES COVER UNLESS DIMENSIONED OTHERWISE.

REINFORCEMENT: ALL REINFORCEMENT SHALL BE GALVANIZED AFTER FABRICATION UNLESS NOTED OTHERWISE. ALL REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM A767, CLASS 1, INCLUDING SUPPLEMENTAL REQUIREMENTS. THE COST OF FURNISHING AND PLACING THIS REINFORCEMENT SHALL BE INCLUDED IN THE ITEM "DEFORMED STEEL BARS - GALVANIZED."

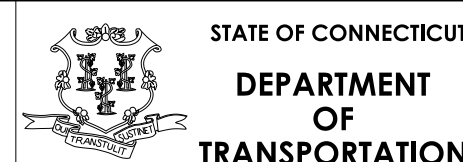
CONSTRUCTION JOINTS: CONSTRUCTION JOINTS, OTHER THAN THOSE SHOWN ON THE PLANS WILL NOT BE PERMITTED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.

PREFORMED EXPANSION JOINT FILLED: THE COST OF FURNISHING AND INSTALLING PREFORMED EXPANSION JOINT FILLER SHALL BE INCLUDED IN THE COST OF THE ITEM " X" PREFORMED EXPANSION JOINT FILLER FOR BRIDGES."

[illegible]

DESIGNER/DRAFTER:	CHECKED BY:	
LASTED SAVED BY: ECoFrancesco FILE NAME: J:\DWG\2005\1059\B52\0131-0190\Bridge\Contract_Plans\SB_CP_Br05753_0131-0190_PLN.dgn PLOTTED DATE: 1/21/2022		

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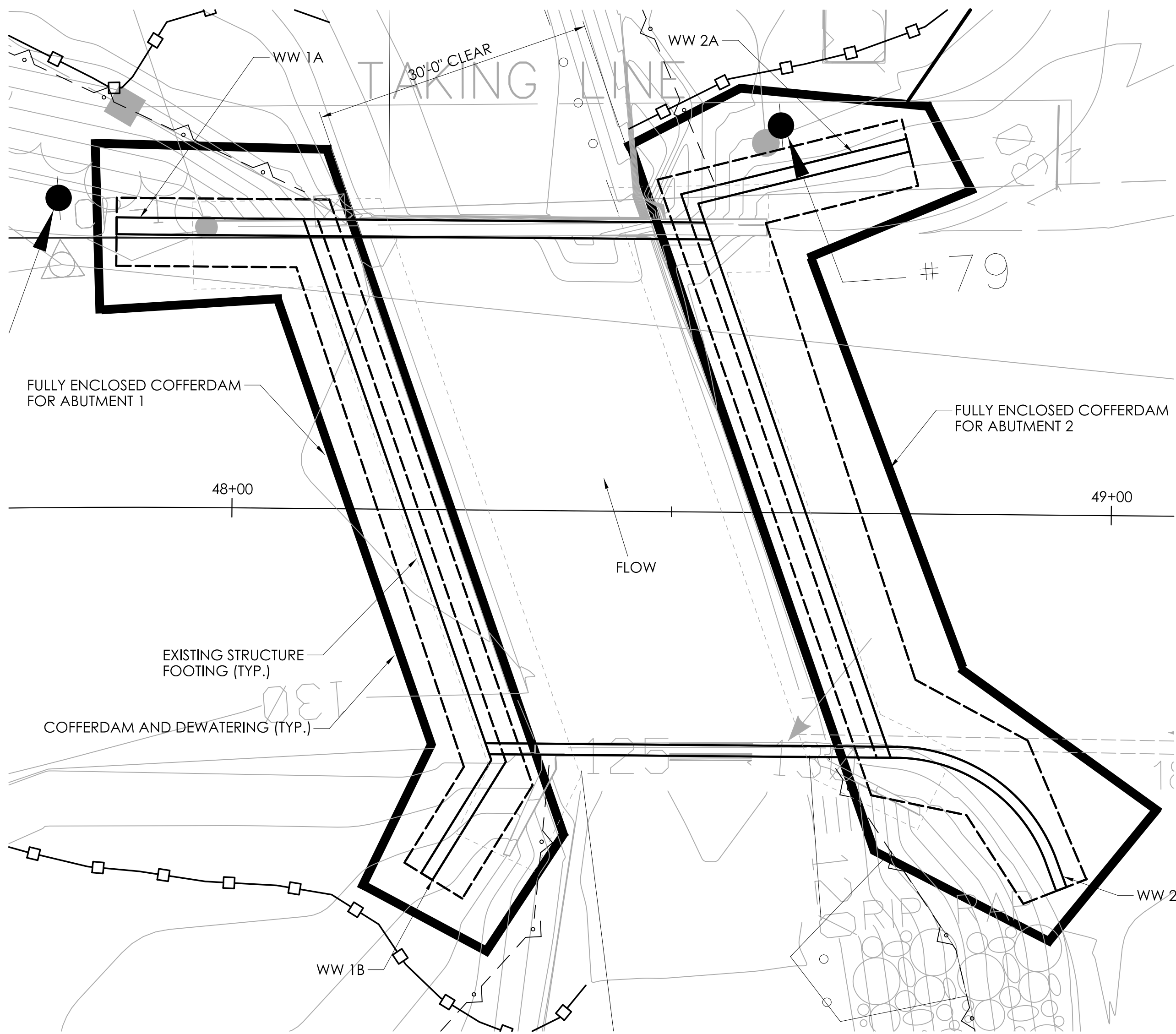


PROJECT NUMBER: 0131-0190
PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 05753 ROUTE 322 OVER THE TEN MILE RIVER
TOWN(S): SOUTHLINGTON
DRAWING TITLE: GENERAL PLAN & ELEVATION

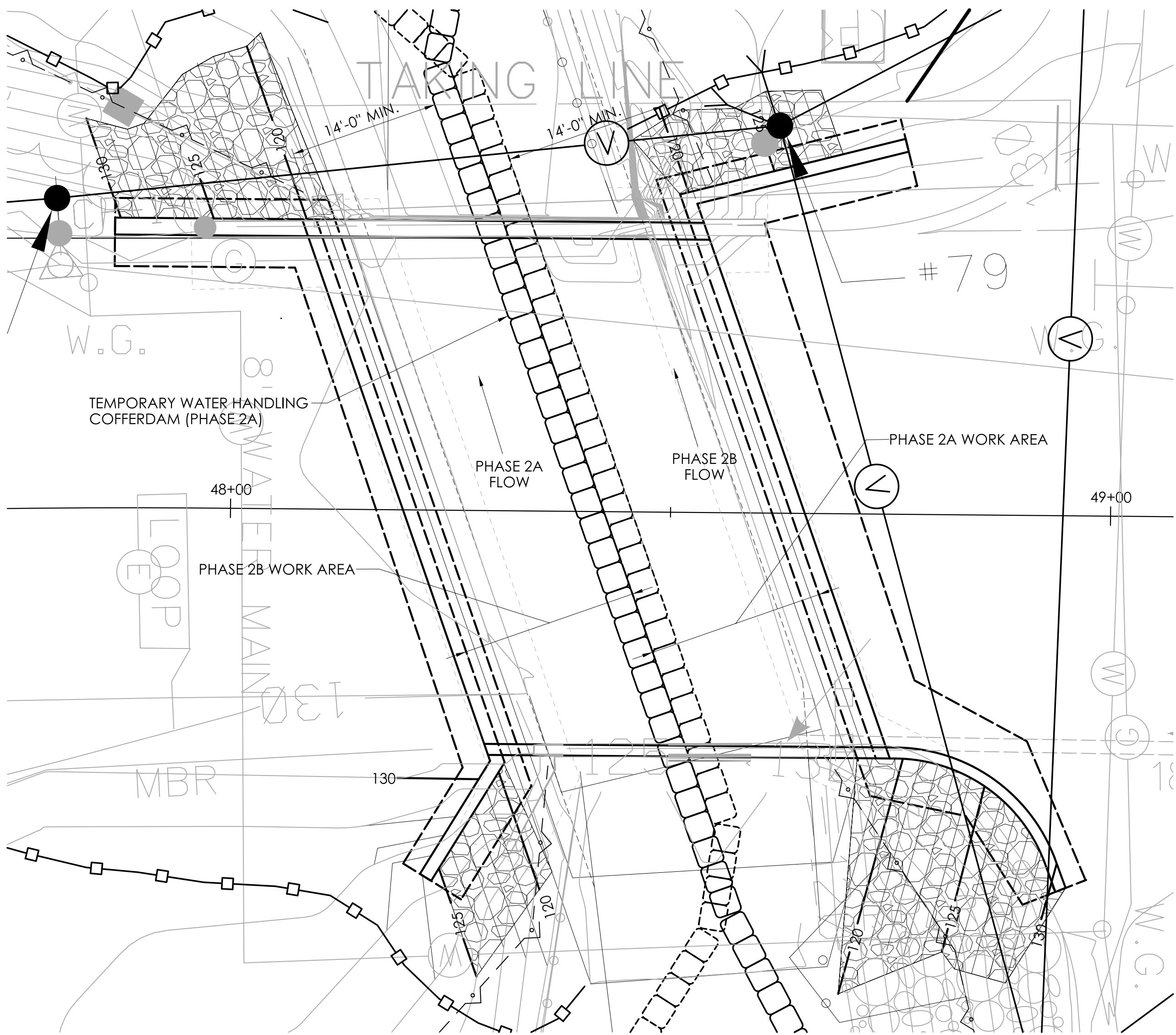
DRAWING NO.	001
SHEET NO.	

Driller:	C. Bennett	Connecticut DOT Boring Report		Hole No.:	B-5753-1				
Inspector:	M Shuler/G. Arzt	Town:	Southington, Connecticut	Stat./Offset:					
Engineer:	Rob Pion	Project No.:	0131-0190	Northing:	766585				
Start Date:	6-30-20	Route No.:	322	Easting:	961599				
Finish Date:	7-1-20	Bridge No.:	05753	Surface Elevation:	130.2				
Project Description: Bridge 646 Replacement									
Casing Size/Type: 3" HFJ, Spun		Sampler Type/Size: 2"SS			Core Barrel Type: NX				
Hammer Wt.: Fall: in.		Hammer Wt.: 140 Fall: 30in.							
Groundwater Observations: @10 after 24+ hours									
Depth (ft)	SAMPLES					Generalized Strata Description	Material Description and Notes	Elevation (ft)	
	Sample Type/No.	Blows on Sampler per 6 inches							Pen. (in.)
0									130
	S-1	25	27	27	30	24	18		
	S-2	20	23	19	22	24	12		
5									125
	S-3	7	9	7	5	24	3		
10									120
	S-4	2	1	1	3	24	6		
15									115
	S-5	20/0.5"				0.5	0.5		
20	C-1					60	52	50	
25	C-2					60	60	95	
30									100
35									95
40									90
45									85
50									
Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%									
Total Penetration in Earth: 18ft Rock: 10ft						NOTES: Pavement structure consits of 8" of bituminous concrete pavement on 24 inches of subbase Rollerbitted through cobbles at a depth of 6.7 feet		Sheet 1 of 1	
No. of Soil Samples: 5						No. of Core Runs: 2		SM-001-M REV. 1/02	

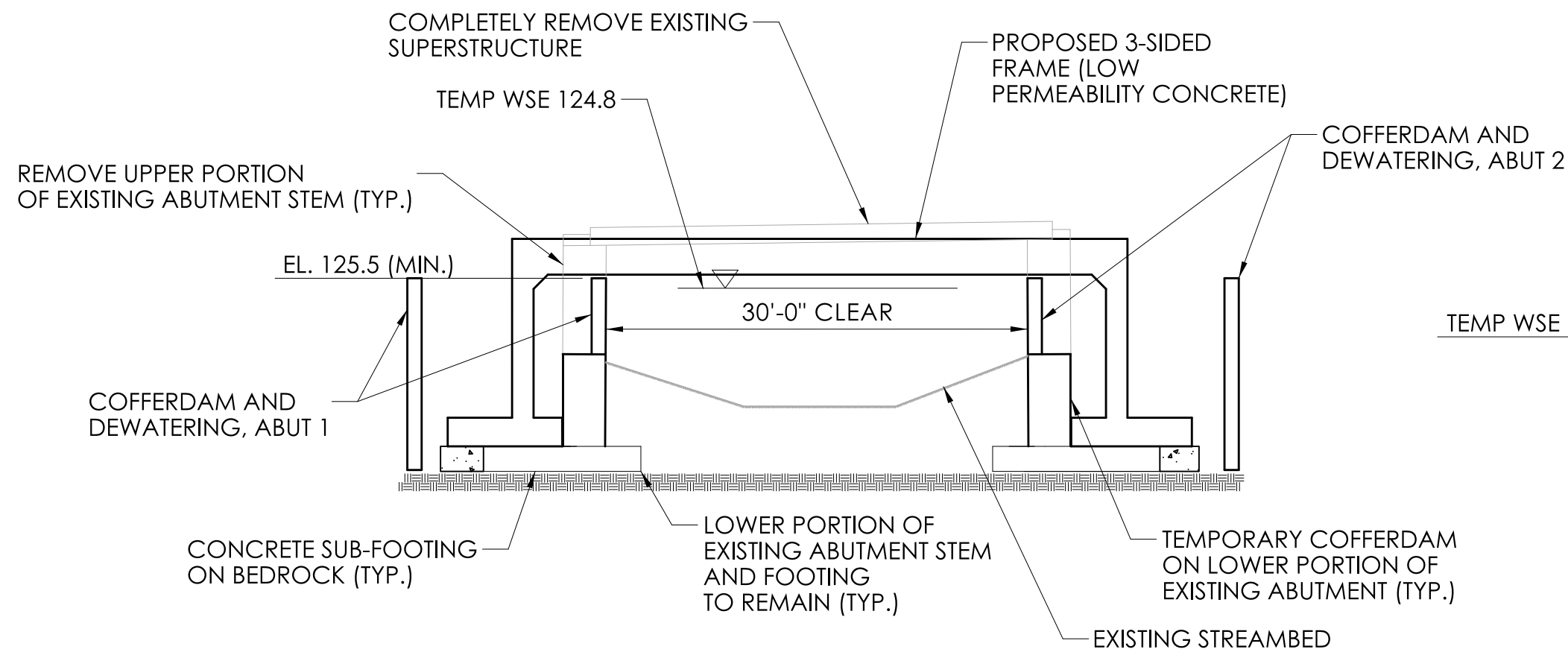
Driller:	B. Perry/C. Bennet	Connecticut DOT Boring Report		Hole No.:	B-5753-2				
Inspector:	M Shuler/G. Arzt	Town:	Southington, Connecticut	Stat./Offset:					
Engineer:	Rob Pion	Project No.:	0131-0190	Northing:	766543				
Start Date:	6-26-20	Route No.:	322	Easting:	961659				
Finish Date:	6-30-20	Bridge No.:	05753	Surface Elevation:	129.8				
Project Description: Bridge 646 Replacement									
Casing Size/Type: 3" HFJ, Spun		Sampler Type/Size: 2"SS			Core Barrel Type: NX				
Hammer Wt.: Fall: in.		Hammer Wt.: 140 Fall: 30in.							
Groundwater Observations: @8.5 after 24+ hours, @10 after 0 hours									
Depth (ft)	SAMPLES					Generalized Strata Description	Material Description and Notes	Elevation (ft)	
	Sample Type/No.	Blows on Sampler per 6 inches							Pen. (in.)
0									
	S-1	10	11	17	20	24	11		
	S-2	32	42	24	23	24	11		
5									125
	S-3	20	17	15	20	24	12		
10									120
	S-4	19	19	40/4.5"		16.5	2		
15									115
	C-1					60	28	28	
20	C-2					18	24	30	
25	C-3					60	57	90	
30	C-4					60	59	80	
35	C-5					60	60	81	
40									90
45									85
50									80
Sample Type: S = Split Spoon C = Core UP = Undisturbed Piston V = Vane Shear Test Proportions Used: Trace = 1 - 10%, Little = 10 - 20%, Some = 20 - 35%, And = 35 - 50%									
Total Penetration in Earth: 14.5ft Rock: 21.5ft						NOTES: Pavement structure consits of 8" of bituminous concrete pavement with no discernable subbase Rollerbit through cobble from 5-8' and 11-13'		Sheet 1 of 1	
No. of Soil Samples: 4						No. of Core Runs: 5		SM-001-M REV. 1/02	



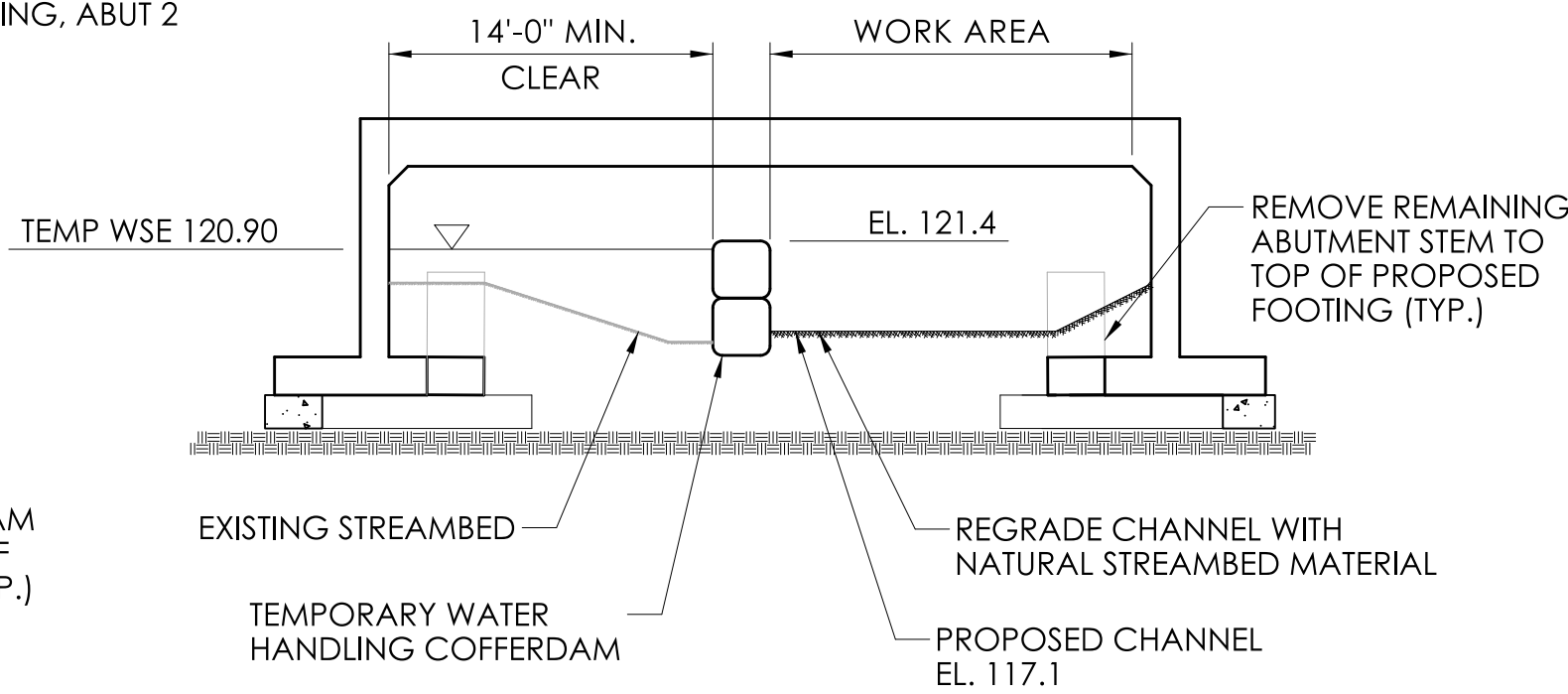
PLAN - PHASE 1
BRIDGE RECONSTRUCTION
SCALE: 1" = 10'



PLAN - PHASE 2
CHANNEL RECONSTRUCTION
SCALE: 1" = 10'



SECTION - PHASE 1
SCALE: 1" = 10'



SECTION - PHASE 2A (PHASE 2B SIMILAR)
SCALE: 1" = 10'

NOTES:

- SEE SPECIAL PROVISIONS, ITEM #0204101A - COFFERDAM AND DEWATERING.
- COFFERDAM LAYOUT AND TYPE SHOWN SCHEMATICALLY ONLY, FINAL DESIGN TO BE PROVIDED BY THE CONTRACTOR.
- A MINIMUM TEMPORARY HYDRAULIC OPENING OF 30' DURING PHASE 1 AND 14' DURING PHASE 2 SHALL BE MAINTAINED AT ALL TIMES, AS SHOWN ON THE PLANS.

SUGGESTED SEQUENCE:

- EXCAVATE AND DEMOLISH EXISTING SUPERSTRUCTURE AND PORTIONS OF EXISTING ABUTMENT STEMS AND WINGWALLS.
- INSTALL FULLY ENCLOSED COFFERDAM SYSTEMS.
- INSTALL PROPOSED SUBFOOTINGS AND FOOTINGS. INSTALL PRECAST RIGID FRAME SECTIONS AND WINGWALLS.
- REMOVE FULLY ENCLOSED COFFERDAMS.
- INSTALL BULK BAG COFFERDAM ALONG CENTER OF RIVER, MAINTAINING A MINIMUM HYDRAULIC WIDTH OF 14' AS SHOWN ON THE PLANS. REMOVE EXISTING ABUTMENT STEMS TO TOP OF PROPOSED FOOTING. PERFORM CHANNEL RECONSTRUCTION AND GRADING INSIDE COFFERDAM.
- RELOCATE BULK BAGS TO RECONSTRUCTED SIDE AND PERFORM ABUTMENT REMOVAL, BED AND GRADING ON OPPOSITE SIDE.
- REMOVE BULK BAG COFFERDAM.

REV.	DATE	REVISION DESCRIPTION

DESIGNER/DRAFTER:	CHECKED BY:
SIGNATURE/ BLOCK:	

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PLOTTED DATE: 1/21/2022



STATE OF CONNECTICUT
DEPARTMENT
OF
TRANSPORTATION



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PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 05753 ROUTE 322 OVER THE TEN MILE RIVER
TOWN(S): SOUTHTONING
DRAWING TITLE: GENERAL PLAN & ELEVATION

DRAWING NO.
003
SHEET NO.