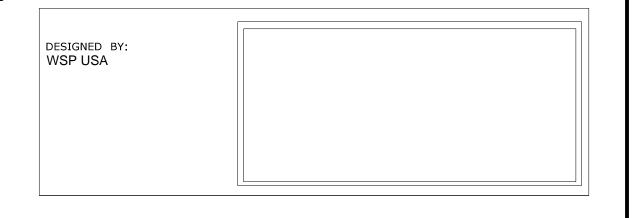
04 - STRUCTURES INDEX OF DRAWINGS

SHEET NUMBER	DRAWING TITLE	SHEET NUMBER	DRAWING TITLE
04.01	STRUCTURE INDEX OF DRAWINGS		
04.02	GENERAL PLAN AND ELEVATION		
04.03	BRIDGE SECTION AND GENERAL NOTES		
04.04	LAYOUT PLAN		
04.05	BORING LOGS - 1		
04.06	BORING LOGS - 2		
04.07	ROADWAY CLOSURE PLAN		
04.08	STAGING AND WATER HANDLING PLAN - 1		
04.09	STAGING AND WATER HANDLING PLAN - 2		
04.10	WATER HANDLING DETAILS		
04.11	FOOTING PLAN		
04.12	EAST SUPPORT WALL AND WINGWALL PLAN		
04.13	WEST SUPPORT WALL AND WINGWALL PLAN		
04.14	FRAME SUPPORT WALL/WINGWALL DETAILS		
04.15	PRECAST FRAME DETAILS		
04.16	PARAPET DETAILS - 1		
04.17	PARAPET DETAILS - 2		



SIGNATU BLOCK:





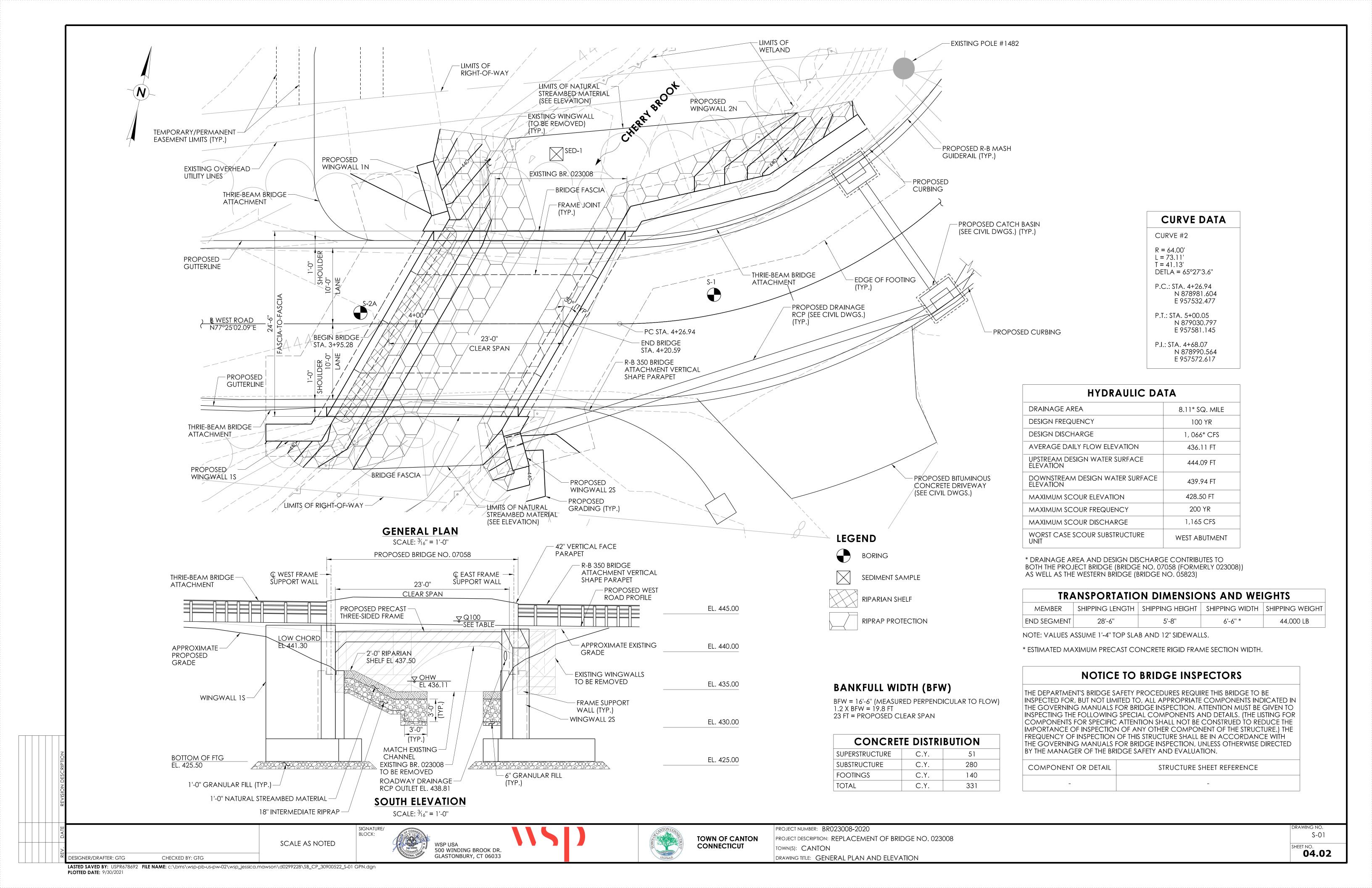


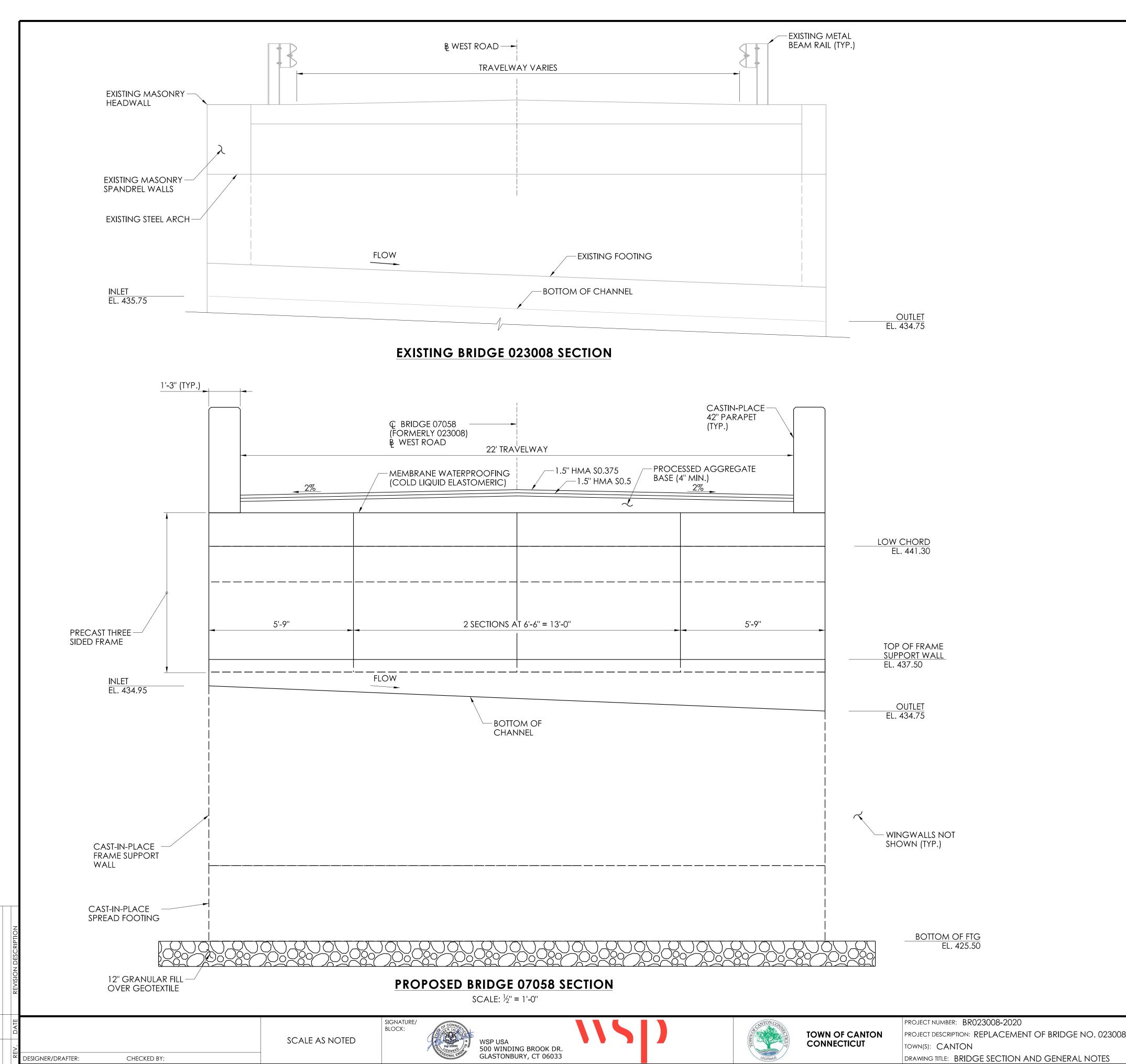
PROJECT NUMBER: BR023008-2020

PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 023008

TOWN(S): CANTON

DRAWING TITLE: STRUCTURE INDEX OF DRAWINGS





GENERAL NOTES:

SPECIFICATIONS: CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 818 (2020), SUPPLEMENTAL SPECIFICATION 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) WITH 12/19 REVISIONS.

MATERIAL STRENGTHS:

CONCRETE:

CLASS PCC 03340 f'c = 3,000 PSICLASS PCC 04462 f'c = 4,000 PSIf'c = 5,000 PSIPRECAST FRAME.

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

REINFORCEMENT:

f'y = 60,000 PSI(ASTM A615 GRADE 60) ...

LIVE LOAD: HL-93, LEGAL AND PERMIT VEHICLES

FUTURE PAVING ALLOWANCE: NONE

BITUMINOUS CONCRETE OVERLAY: 1.5" HMA \$0.375 (TOP COURSE), 1.5" HMA \$0.5 (BOTTOM COURSE) OVER 4" MIN. PROCESSED AGGREGATE BASE.

FOUNDATION PRESSURES: THE VARIOUS GROUP LOADINGS NOTED ON THE SUBSTRUCTURE PLAN SHEETS REFER TO THE GROUP LOADS AS GIVEN IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

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

EXISTING DIMENSIONS: DIMENSIONS OF THE EXISTING STRUCTURE SHOWN ON THESE PLANS ARE FOR GENERAL REFERENCE ONLY. THEY HAVE BEEN TAKEN FROM THE ORIGINAL DESIGN DRAWINGS AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL TAKE ALL FIELD MEASUREMENTS NECESSARY TO ASSURE PROPER FIT OF THE FINISHED WORK AND SHALL ASSUME FULL RESPONSIBILITY FOR THEIR ACCURACY. WHEN SHOP DRAWINGS BASED ON FIELD MEASUREMENTS ARE SUBMITTED FOR REVIEW, THE FIELD MEASUREMENTS SHALL ALSO BE SUBMITTED FOR REFERENCE BY THE REVIEWER.

UTILITIES: THE FOLLOWING UTILITIES ARE LOCATED WITHIN THE PROJECT LIMITS AND SHALL BE PROTECTED DURING CONSTRUCTION: CABLE, COMMUNICATION AND ELECTRIC. THE CONTRACTOR SHALL COORDINATE ALL WORK RELATED TO UTILITY RELOCATION WITH THE RESPECTIVE UTILITY COMPANIES.

MASH TEST LEVEL: THE 42" PARAPET MEETS THE TL-3 CRITERIA FOR MASH 2016.

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

THE FOLLOWING PAY ITEMS AND CONCRETE CLASSES ARE REQUIRED FOR CAST-IN-PLACE BRIDGE COMPONENTS:

ITEM	BRIDGE COMPONENTS	PCC CLASS
FOOTING CONCRETE	FRAME FOOTINGS AND WINGWALL FOOTINGS	PCC03340
ABUTMENT AND WALL CONCRETE	WINGWALLS AND SUPPORT WALLS	PCC03340
PARAPET CONCRETE	BRIDGE PARAPET	PCC04462

EXPOSED EDGES: EXPOSED EDGES OF CONCRETE SHALL BE BEVELED 1"X1" UNLESS DIMENSIONED OTHERWISE. OR AS REQUIRED BY PRECAST MANUFACTURER STANDARDS.

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, EXCEPT AS REQUIRED IN THREE-SDED RIGID FRAME, SHALL BE INCLUDED IN THE ITEM "DEFORMED STEEL BARS -GALVANIZED."

PREFORMED EXPANSION JOINT FILLER: THE COST OF FURNISHING AND INSTALLING PREFORMED EXPANSION JOINT FILLER IS PAID FOR AS "1/2" PREFORMED EXPANSION JOINT FILLER FOR BRIDGES".

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

BRIDGE IDENTIFICATION: FOR THIS CONTRACT, THE NEW BRIDGE SHALL BE IDENTIFIED AS FOLLOWS: **BRIDGE 07058**

BRIDGE IDENTIFICATION PLACARDS: THE CONTRACTOR SHALL PROVIDE AND INSTALL NEW BRIDGE IDENTIFICATION SIGNS AT THE LEADING END OF EACH BRIDGE PARAPET ON THE TRAFFIC SIDE. THE SIGNS SHALL BE FABRICATED WITH 40 GAUGE ALUMINUM SHEET METAL. THE SIGN SHALL BE 4"X12" WITH 3" WHITE REFLECTIVE BLOCK LETTERS ON GREEN REFLECTIVE SHEETING. EACH SIGN SHALL READ "07058". ALL COST ASSOCIATED WITH PROVIDING AND INSTALLING THE BRIDGE SIGNS SHALL BE COVERED UNDER THE ITEM "SIGN FACE SHEET ALUMINUM (TYPE IV RETROFLECTIVE SHEETING)". THE FINAL LOCATION AND ATTACHMENT METHOD FOR THE SIGNS SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

EXISTING PLANS: NO PLANS FOR THE EXISTING BRIDGE ARE AVAILABLE

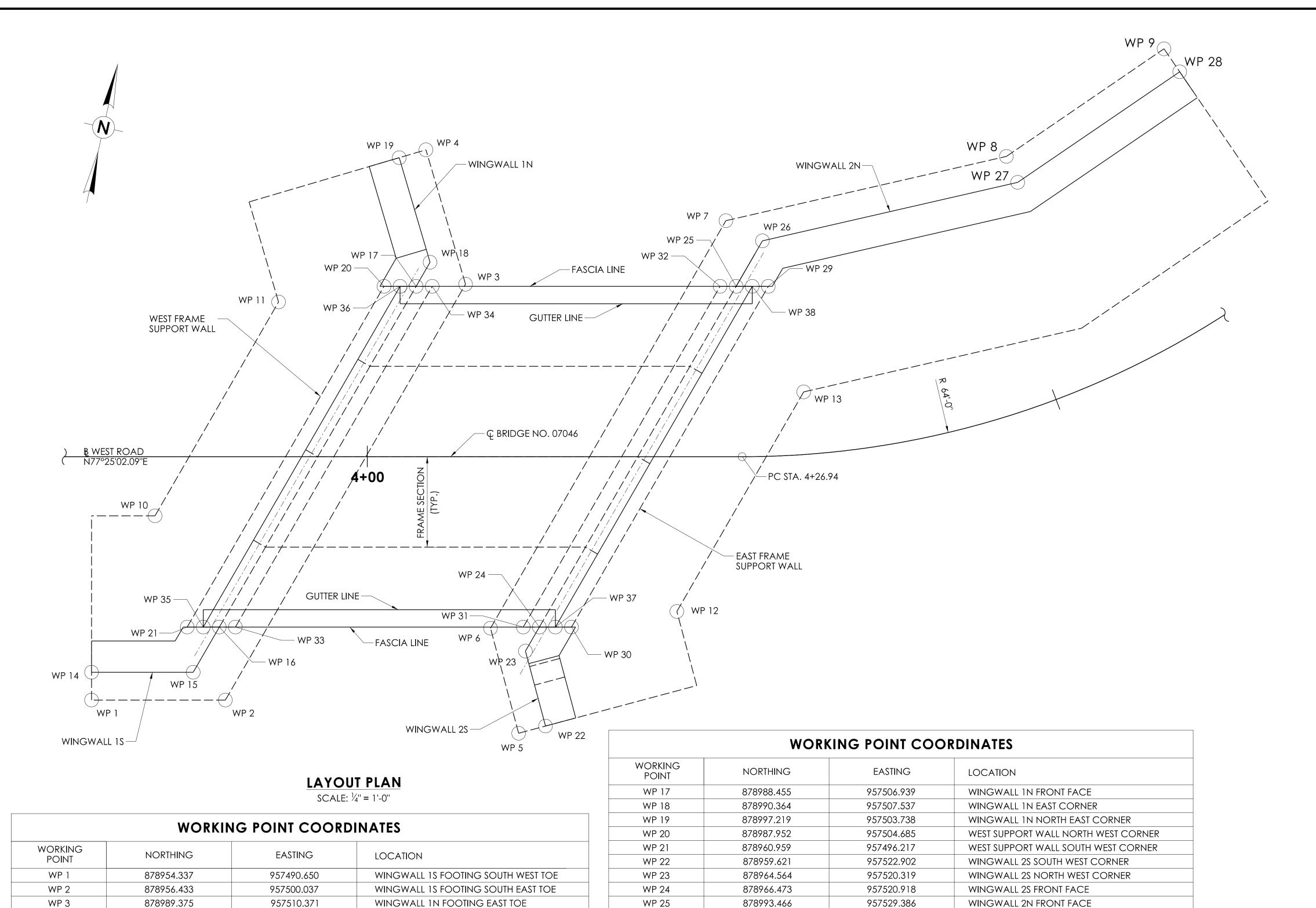
BY OTHERS: WHEN "BY OTHERS" IS NOTED, IT IS TO SIGNIFY THAT THE WORK CALLED OUT IS TO BE PERFORMED BY THE ASSOCIATED UTILITY COMPANY, AND NOT THE CONTRACTOR.

TRAFFIC: ALL WORK SHALL BE DONE IN ACCORDANCE WITH SECTION 1.08 PROSECUTION AND PROGRESS, SPECIAL PROVISION "MAINTENANCE AND PROTECTION OF TRA, AND THE CONSTRUCTION STAGES SHOWN ON THE PLANS.

S-02

04.03

LASTED SAVED BY: USPR678692 FILE NAME: c:\bms\wsp-pb-us-pw-02\wsp_patrick.tizk\d0299228\SB_CP_30900522_S-02 SECTION.dgn **PLOTTED DATE:** 9/30/2021



WP 25 878993.466 957529.386 WP 26 878997.070 957530.517 WP 27 879005.171 957547.507 957557.139 WP 28 879015.467 WP 29 878993.969 957531.640 WP 30 878966.976 957523.172 WP 31 878966.221 957519.791 WP 32 878993.214 957528.259 878961.714 957499.597 WP 33 878988.707 957508.066 WP 34 878961.211 957497.344 WP 35 WP 36 878988.204 957505.812 WP 37 878966.724 957522.045 878993.717 957530.513 WP 38

Ç BRG. WEST FRAME Ç BRG. EAST FRAME SUPPORT WALL SUPPORT WALL STA. 4+20.01 STA. 3+95.86 GRADE = -1.00% EXISTING BRIDGE NO. 023008 TO BE REMOVED 440 -PROPOSED BRIDGE NO. 07058 430 3+50 4+00 4+50

PROFILE

VERTICAL SCALE: 5/16" = 1'-0" HORIZONTAL SCALE: $\frac{1}{32}$ " = 1'-0"

WORKING I CHAI COORDINAILS									
WORKING POINT	NORTHING	EASTING	LOCATION						
WP 1	878954.337	957490.650	WINGWALL 1S FOOTING SOUTH WEST TOE						
WP 2	878956.433	957500.037	WINGWALL 1S FOOTING SOUTH EAST TOE						
WP 3	878989.375	957510.371	WINGWALL IN FOOTING EAST TOE						
WP 4	878998.189	957505.487	WINGWALL IN FOOTING NORTH TOE						
WP 5	878958.695	957521.129	WINGWALL 2S FOOTING SOUTH WEST TOE						
WP 6	878965.626	957517.508	WINGWALL 2S FOOTING NORTH WEST TOE						
WP 7	878997.913	957527.637	WINGWALL 2N FOOTING NORTH WEST TOE						
WP 8	879006.814	957546.305	WINGWALL 2N FOOTING NORTH CENTRAL TOE						
WP 9	879016.833	957555.678	WINGWALL 2N FOOTING NORTH EAST TOE						
WP 10	878968.264	957492.220	WINGWALL 1S FOOTING NORTH HEEL						
WP 11	878954.337	957490.650	WINGWALL IN FOOTING SOUTH HEEL						
WP 12	878969.717	957530.320	WINGWALL 2S FOOTING NORTH HEEL						
WP 13	878987.116	957535.779	WINGWALL 2N FOOTING SOUTH HEEL						
WP 14	878956.289	957490.214	WINGWALL 1S SOUTH WEST CORNER						
WP 15	878957.882	957497.347	WINGWALL 1S SOUTH EAST CORNER						

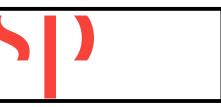
957498.470

SCALE AS NOTED

SIGNATURE/ BLOCK:

WINGWALL 1S FRONT FACE

WSP USA 500 WINDING BROOK DR. GLASTONBURY, CT 06033



TOWN OF CANTON CONNECTICUT

PROJECT NUMBER: BR023008-2020 PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 023008 town(s): CANTON DRAWING TITLE: LAYOUT PLAN

WINGWALL 2N SOUTH WEST CORNER

WINGWALL 2N NORTH EAST CORNER

EAST SUPPORT WALL NORTH EAST CORNER

EAST SUPPORT WALL SOUTH EAST CORNER

EAST SUPPORT WALL SOUTH WEST CORNER

EAST SUPPORT WALL NORTH WEST CORNER

WEST SUPPORT WALL SOUTH EAST CORNER

WEST SUPPORT WALLNORTH EAST CORNER

SW 1S FASCIA

NW 1N FASCIA

SE 2S FASCIA

NE 2N FASCIA

WINGWALL 2N CENTRAL CORNER

S-03

04.04

DESIGNER/DRAFTER: GTG CHECKED BY: GTG LASTED SAVED BY: mawsonj FILE NAME: c:\bms\wsp-pb-us-pw-02\wsp_patrick.tizk\d0299228\SB_CP_30900522_layout 2.dgn PLOTTED DATE: 9/30/2021

878961.462

WP 16

Driller:	R	. Posa			С	onne	ectic	ut DC	OT Boring R	eport Format	Hole No.:	S-1		
Inspecto	or: G	3. Jacol	oson		Т	own:		Canto	on	_	Stat./Offset:	4+40.0	/-2.6 (L)	
·						roject I	No.:	2020-	0401		Northing:		· · · · · · · · · · · · · · · · · · ·	
Start Da	ate: 1	2-7-20			R	oute N	o.:	West	Rd		Easting:			
Finish D	Date: 1	2-7-20			В	ridge N	lo.:	02300	08		Surface Eleva	ation: 44	4	
Project	Descripti	ion: Re	eplac	emer	nt of E	Bridge	02300	08 ove	er Cherry Broo	·				
Casing	Size/Type	e· 4" H	\/\		S	amnler	· Tyne/	Size: S	SS 1-3/8		Core Barrel T	vne: NX		
	er Wt.: 30		Fall: 2	24in		lamme			Fall: 30in.		Oole Baller 1	<u>ypc. 1470</u>		
	water Ob							1 1010	1 all. 3011.					
Ground	water or	ooi vada		SAMP										
Depth (ft)	Sample Type/No.		Blow Sam	s on		Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Ma	terial Descrip and Notes	otion		Elevation (ft)
0-									Pavement	Pavement Structu	re - Asphalt P	avement		†
	S-1	18	18	17	19	24	14		Structure / Fill	Brown c-f SAND,	somo o f CDA	.\/⊏I li##I/	o cilt	
	0 1		10	.,	10		'-			BIOWIT C-I SAIND,	Some C-1 GIVE	VCL, IIIII	5 SIIL	
	S-2	9	8 !	50/3"		15	10		Sand	Brown c-f SAND,	some c-f GRA	VEL, little	e silt	
5-	S-3	30 8	50/1"			7	3		Carra	Gray-brown c-f SA	AND, little c-f g	ıravel, little	e silt	
10-	S-4 S-6	60 5	11	10	19	10	8		Decomposed Sandstone	Gray-brown c-f SA sandstone chips in	AND, little c-f g n tip of split-sp	ıravel, little oon	e silt; red	- - - -435 - - - -430 - - - - - - - - - - - - - - - - - - -
		Samp	ole Ty	уре:	S = 5	Split Sp	poon	C = 0	Core UP = Un	disturbed Piston	V = Vane Sh	near Tes	st	
		Propo	rtions	s Use	d: T	race =	= 1 - 1	0%, I	_ittle = 10 - 20	%, Some = 20 - 3	35%, And =	35 - 50	%	
Total Pe	enetration	n in						ugers	to 10 ft; drove 4	casing to 15 ft; roll	er bit open ho	le to	She	
 Earth: 3	30ft	Rock:	10ft			30 ft		d mad	arataly band from	15 5 to 20 ff			1 of	2
No. of	· •		o. of						erately hard from tedly blocked by	i 15.5 to 30 π soft soil-like layers	from 38 to 40	ft.		
Soil Sar	mples: 7	Co	re Ru	ıns: 3				•	, -,	,			SM-001-M F	REV. 1/02

Driller:	R		Conn	ectic	ut DO	OT Boring R	Report Format	Hole No.: S-	 1	
Inspecto	or: G	3. Jacobson	Town:		Canto	on		Stat./Offset: 4+	40.0/-2.6 (L)	
Enginee	Project	No.:	2020-	-0401	Northing:					
				lo.:	West	Rd	Easting:			
inish D	ate: 1	2-7-20	Bridge N	No.:	0230	08		Surface Elevation	: 444	
Project I	Descripti	ion: Replacement o	f Bridge	0230	08 ove	er Cherry Broo	k			
Casing S	Size/Tvp	e: 4" HW	Sample	r Type/	/Size: \$	SS 1-3/8		Core Barrel Type:	NX	
	r Wt.: 30		Hamme					<u> </u>		
Ground	water Ob	servations: 4 ATD								
		SAMPLE	S			-				
Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Ма	terial Description and Notes		Elevation (ft)
25	S-7	100/5"	5	5		Decomposed Sandstone (con't)	Red f SAND and	SILT (Decomposed	d Sandstone)	- - - - -415
30						Sandstone				-
- - - -	C-1		60	48	28		SANDSTONE. G indistinct, primary dip, open, weathe	weath, aphanitic, re ranite seam at 32 t joints 1-20 in spac red. Secondary cr t, mod. weathered.	ft, bedding ed, shallow acks and	- - - -410
35	C-2		36	28	31		SANDSTONE; modistinct, primary dipping, open, we	. weathered, aphared grained at 38 ft. joints 2-8 in space ath. Secondary crt, mod. weath. Co	Bedding d, shallow acks and	- - -
40	C-3		24	11	0		Soft weathered ap Primary joints are	phanitic red SANDS 1 to 2 in. spaced, vovered). Core Rat	with probably	-405
							END OF BORING	6 40ft		_
- 45										-400 - -
										_ _ 395
E0					L					
50 —		Sample Type: S = Proportions Used:	•	•						-
otal Pe	enetration	n in	NOT	TES: A	Augers	to 10 ft; drove 4	" casing to 15 ft; roll	er bit open hole to	She	 et
arth: 3		Rock: 10ft	30 ff						2 of	
No. of No. of Soil Samples: 7 Core Runs: 3 Roller bitted moderate Core barrel repeatedly								from 38 to 40 ft.	SM-001-M F	REV. 1/02

NOT TO SCALE







Driller:	A	A. McKe	ernor	1		Conne	ectic	ut DO	OT Boring R	Report Format	Hole No.:	S-2A				
Inspecto	or: C	3. Jaco	bsor	1	-	Town:		Canto	on		Stat./Offset:	3+92.7/-1.5 (L)				
Engine	er: N	lathan	Whe	etten	F	Project I	No.:	2020-	-0401		Northing:					
Start Da	ate: 1	2-7-20			F	Route N	lo.:	West	Rd		Easting:					
Finish D	Date: 1	2-7-20			E	Bridge N	ridge No.: 023008 Surface Elevation: 444									
Project	Descript	ion: R	epla	ceme	nt of	Bridge	0230	08 ove	er Cherry Broo	k						
Casing	Size/Typ	e: 4" H	łW			Sampler	Type/	/Size: \$	SS 1-3/8		Core Barrel Ty	/pe: NX				
Hamme	er Wt.: 3	00lb	Fall:	24in.	. H	Hamme	r Wt.:	140lb	Fall: 30in.							
Ground	water Ol	bservati	ons:	4 A	TD								_			
_		1	,	SAMF	PLES		ı		و ج				l Œ			
Depth (ft)	Sample Type/No.	р	San	vs on npler inche		Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Ma	iterial Descrip and Notes	tion	Elevation (ft)			
0-									Pavement	Pavement Structu	ıre - Asphalt Pa	vement	T			
+		+							Structure /				-			
_	S-1	16	18	20	14	24	14		"	Brown c-f SAND	and c-f GRAVE	L, little silt	H			
4		-											-			
_	S-2	20	28	24	16	24	3			Brown c-f SAND	and c-f GRAVE	L. little silt	440			
5—									Sand			,	L			
	S-3	4	7	21	36	24	8			Brown to dark bro	own fine SAND	and SILT, trace	L			
	0-0	~	,	21	30	27	"			roots						
		1														
7																
-													-435			
10		-											-			
_	S-4	18	12	12	16	24	14			10 - 11 ft: Brown silt; 11 - 12 ft: Re			-			
4		-								Siit, 11 - 12 it. 13	sa biowii Sili i	and line SAND.	-			
													-430			
45													750			
15—		Ī							Decomposed Sandstone							
	S-5	46	30	47	47	24	12		Sandstone	Red brown fine S	AND and SILT					
+		1											 			
\dashv													F			
4													-425			
20—	\ S-6	30/0"				0	0		Sandstone				-			
	\	<u>'</u>							Sanusione							
-	C-1	100/5	"			60	54	70		Mod strong, mod SANDSTONE. B 3-16 in spaced, s Secondary joints Core Rate (min/ft)	sedding indistind hallow dip, oper vertical, tight, sl	ct, primary joints n, weathered. ightly weathered.	-			
											, , , , 		-420			
25—			•	• •		•	•			ndisturbed Piston						
		Propo	ortion	ns Use	ed: 7	Trace =	= 1 - 1	0%,	Little = 10 - 20	%, Some = 20 -	35%, And = 3	35 - 50%				
Total Penetration in									abandoned); started	sampling at 10						
Earth: 2	20ft	Rock:	10ft	· ·						open hole to 30 ft. ft; roller bitted mode	rately hard 15 to	20 1 of	2			
No. of No. of Soil Samples: 2 Core Runs: 2				ft.		53011	, 12 13 13	,			.					
SOII Sar	mples: 2	C	ore R	uns: 2								SM-001-M I	KEV. 1/(

			,	SAM	PLES				. .			-
Depth (ft)	Sample Type/No.	þ		vs on npler inche		Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes		Elevation (ft)
0-									Pavement Structure	Pavement Structure - Asphalt Pavemer	nt	
_	S-1	16	18	20	14	24	14		Fill	Brown c-f SAND and c-f GRAVEL, little	e silt	
_	S-2	20	28	24	16	24	3			Brown c-f SAND and c-f GRAVEL, little	e silt	—44(
5— –	S-3	4	7	21	36	24	8		Sand	Brown to dark brown fine SAND and S roots	ILT, trace	<u>-</u>
- - 10-												_ _ _43
- - -	S-4	18	12	12	16	24	14			10 - 11 ft: Brown c-f SAND, some c-f g silt; 11 - 12 ft: Red brown SILT and fin		_
- 15 - -	S-5	46	30	47	47	24	12		Decomposed Sandstone	Red brown fine SAND and SILT		-43 - - -
- 20- -	S-6 C-1	30/0"				0	0 54	70	Sandstone	Mod strong, mod weath, fine grained, re SANDSTONE. Bedding indistinct, prim	nary joints	_ 42
- 25-										3-16 in spaced, shallow dip, open, wea Secondary joints vertical, tight, slightly v Core Rate (min/ft): 1, 1, 1, 1, 1.25	veathered.	_ 42
			-	• •		-				ndisturbed Piston V = Vane Shear To %, Some = 20 - 35%, And = 35 - 5		
Total P Earth: <i>1</i>	enetration 20ft	Rock:	: 10ft o. of			drov	e 4" ca	asing to	o 15 ft; roller bit o	abandoned); started sampling at 10 ft; open hole to 30 ft. ft; roller bitted moderately hard 15 to 20	Shee 1 of	
	mples: 2		o. oi ore R	uns: 2	2	11.					SM-001-M RI	FV 1/

Inspecto	or: G	. Jacobson	Town:		Canto	on	Stat./Offset: 3+92.7	/-1.5 (L)				
Engine	er: N	athan Whetten	Project I	No.:	2020-	-0401	Northing:					
Start Da	ate: 1	2-7-20	Route N	lo.:	West	Rd	Easting:					
Finish D	Date: 1	2-7-20	Bridge N	ridge No.: 023008 Surface Elevation: 444								
Project	Descripti	on: Replacement o	f Bridge	0230	08 ove	er Cherry Broo	k					
Casing	Size/Typ	e: 4" HW	Sampler	r Type/	Size: \$	SS 1-3/8	Core Barrel Type: NX					
	er Wt.: 30		Hamme				, , , , , , , , , , , , , , , , , , ,					
		servations: 4 ATD					<u> </u>					
		SAMPLE	S			_						
Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material Description and Notes	Elevation (ft)				
25—						Sandstone						
- - -	C-2		54	54	50	(con't)	Mod strong, mod weath, aphanitic, red, SANDSTONE soft below 28 ft, bedding in primary joints 1-3 in spaced, shallow dip, weathered. Core Rate (min/ft): 1.25, 1.2 1.25, 1.25	open,				
30—							END OF BORING 29.5ft	-				
-								T T				
-								-				
_								F				
_								-4 10				
35—												
								Γ				
_												
_								-				
_								-405				
40-								_				
-								F				
_								-400				
45—								<u> </u>				
								Γ				
								F				
_								— 395				
50												
			•	-			ndisturbed Piston V = Vane Shear Tes %, Some = 20 - 35%, And = 35 - 509					
Total D	on otrotic	•										
	enetratior		drov	e 4" ca	asing to	o 15 ft; roller bit o	abandoned); started sampling at 10 ft; open hole to 30 ft.	Sheet 2 of 2				
Earth: 2	∠UIT.	Rock: 10ft No. of		er bitte	d easily	y from 10 to 15 f	t; roller bitted moderately hard 15 to 20					
	mples: 2		ft.					SM-001-M REV. 1/02				

Connecticut DOT Boring Report Format Hole No.: S-2A

NOT TO SCALE DESIGNER/DRAFTER: CJC CHECKED BY: GTG

SIGNATURE/ BLOCK:







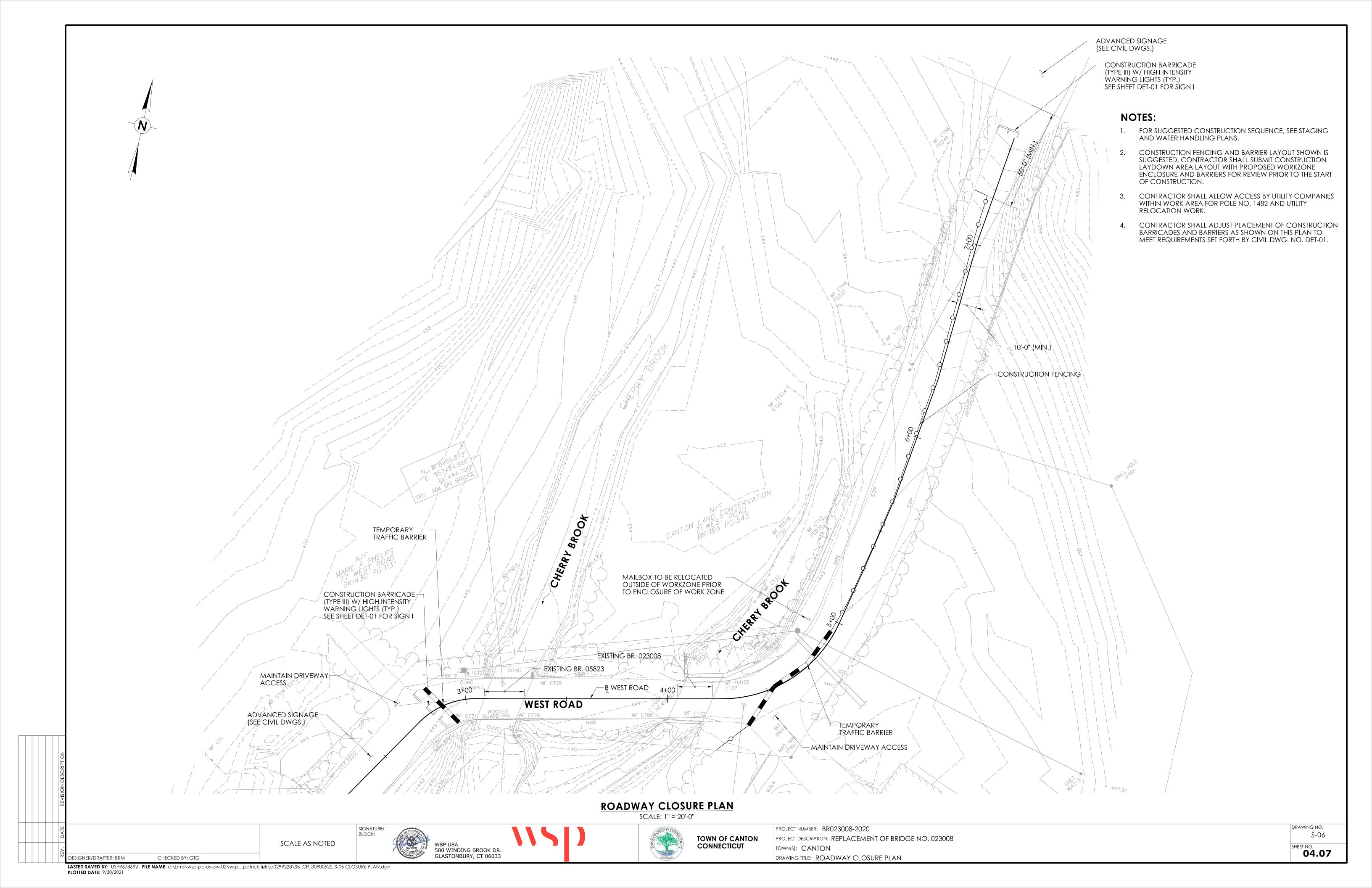


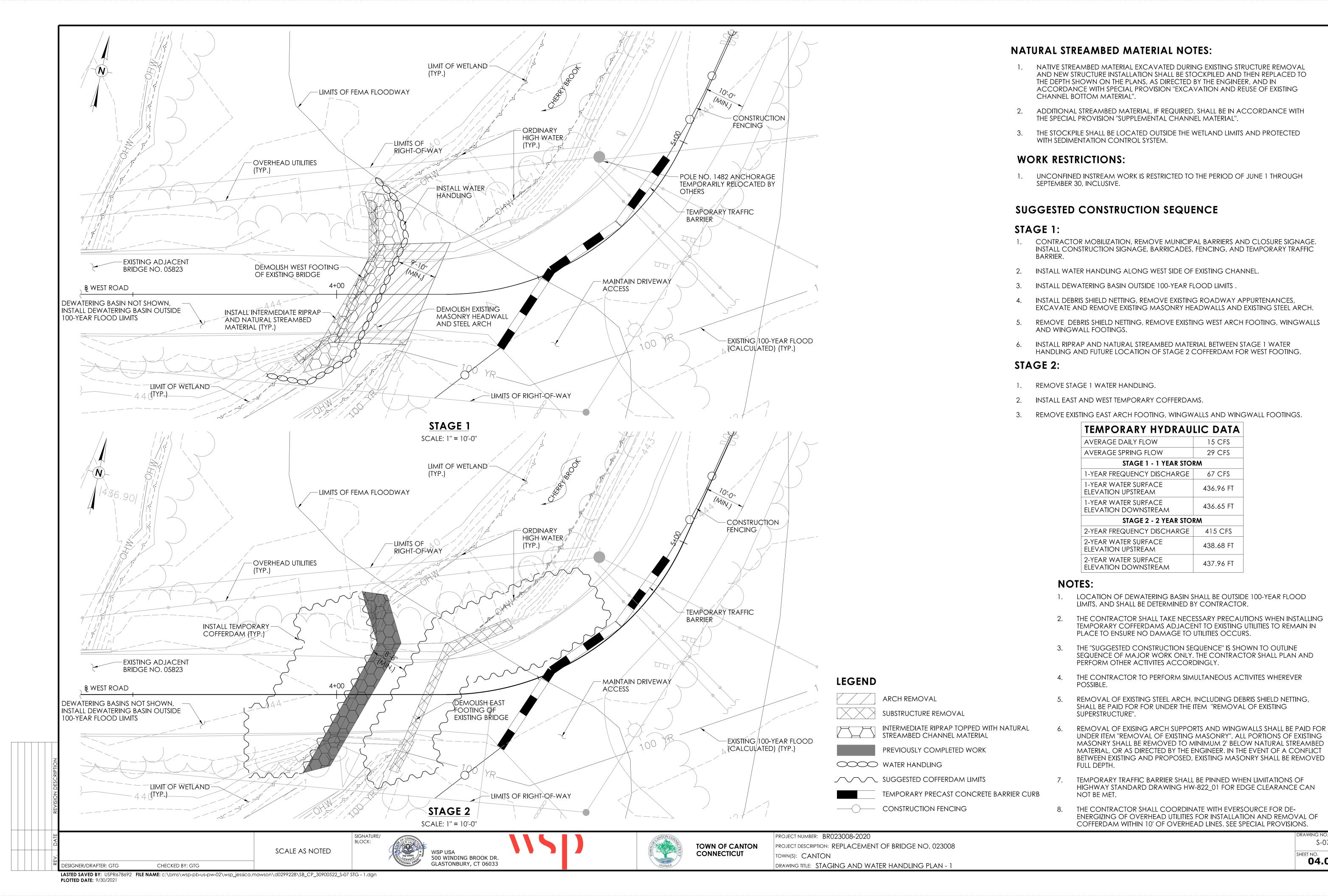
PROJECT NUMBER: BR023008-2020 PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 023008 TOWN(S): CANTON DRAWING TITLE: BORING LOGS - 2

A. McKernon

S-05

04.06





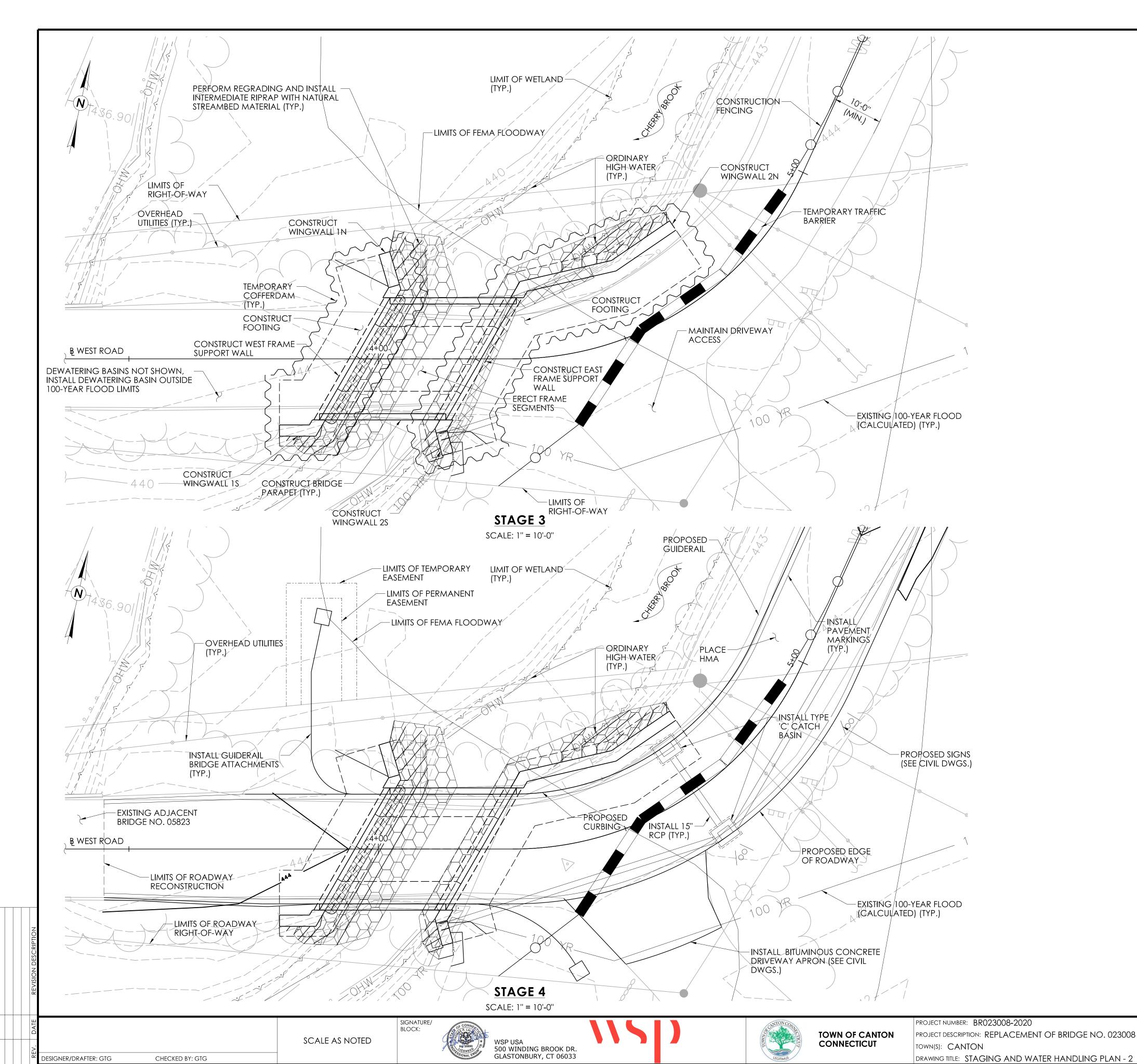
15 CFS

29 CFS

67 CFS

S-07

04.08



SUGGESTED CONSTRUCTION SEQUENCE

STAGE 3:

- 1. PLACE COMPACTED GRANULAR FILL OVER GEOTEXTILE.
- CONSTRUCT EAST AND WEST FRAME SUPPORT WALL AND WINGWALL FOOTINGS.
- CONSTRUCT EAST AND WEST FRAME SUPPORT WALLS, AND WINGWALLS.
- PLACE RIPRAP AND NATURAL STREAMBED MATERIAL WITHIN LIMITS OF THE TEMPORARY COFFERDAMS, AND REMOVE TEMPORARY COFFERDAMS.
- ERECT PRECAST THREE SIDED FRAME SECTIONS.
- PERFORM FINAL GRADING OF BROOK EMBANKMENTS.
- INSTALL PORTION OF ROADWAY DRAINAGE RCP FOR STAGE 4 CONNECTION AND TIE-IN. BACKFILL BEHIND WINGWALL 2S AS NEEDED.

STAGE 4:

- CONSTRUCT BRIDGE PARAPETS.
- INSTALL MEMBRANE WATERPROOFING OVER THREE SIDED FRAME.
- CONSTRUCT PROPOSED DRAINAGE STRUCTURES, CONNECT TO OUTLET RCP THROUGH WINGWALL 2S.
- BACKFILL BEHIND WINGWALLS AND THREE SIDED FRAME, PERFORM FINAL GRADING OF SITE. REMOVE TEMPORARY TRAFFIC BARRIER AND CONSTRUCTION FENCING.
- PERFORM ROADWAY RECONSTRUCTION WITHIN PROJECT LIMITS AND INSTALL DRIVEWAY APRON.
- INSTALL ROADWAY GUIDERAIL.
- REMOVE CONSTRUCTION SIGNAGE, AND CONSTRUCT BARRICADES, AND OPEN ROAD TO TRAFFIC.

TEMPORARY HYDRAU	LIC DATA
AVERAGE DAILY FLOW	15 CFS
AVERAGE SPRING FLOW	29 CFS
STAGES 3 - 2 YEAR STO	RM
2-YEAR FREQUENCY DISCHARGE	415 CFS
2-YEAR WATER SURFACE ELEVATION UPSTREAM	438.68 FT
2-YEAR WATER SURFACE ELEVATION DOWNSTREAM	437.96 FT

LEGEND

ARCH REMOVAL SUBSTRUCTURE REMOVAL INTERMEDIATE RIPRAP TOPPED WITH NATURAL STREAMBED CHANNEL MATERIAL ∞ WATER HANDLING SUGGESTED COFFERDAM LIMITS TEMPORARY PRECAST CONCRETE BARRIER CURB ——— CONSTRUCTION FENCING

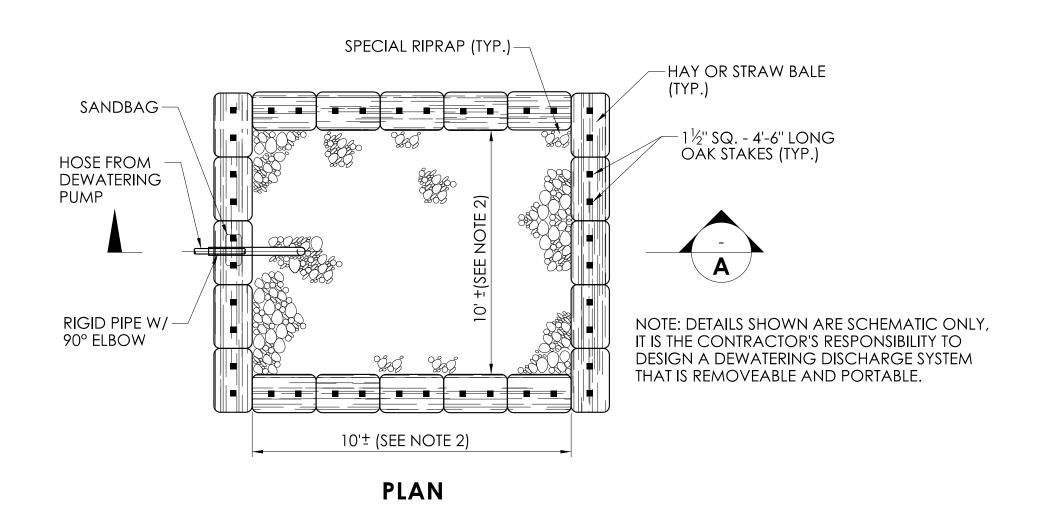
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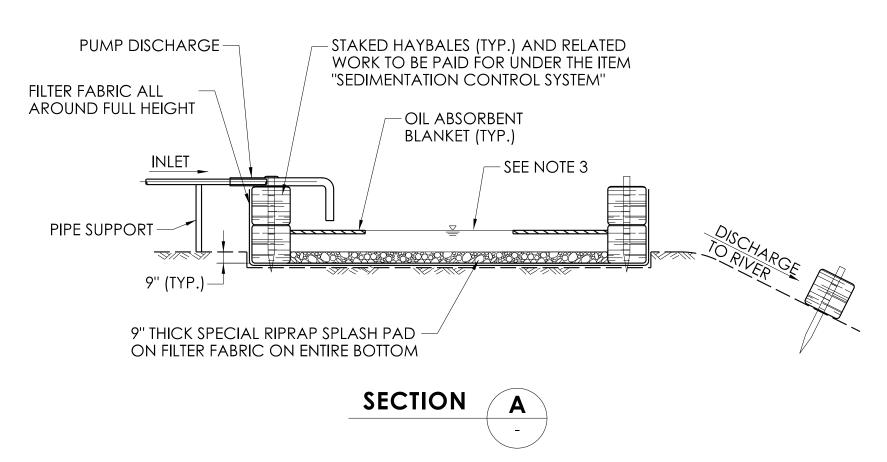
1. FOR STAGING NOTES, SEE DWG. NO. S-07.

S-08

04.09

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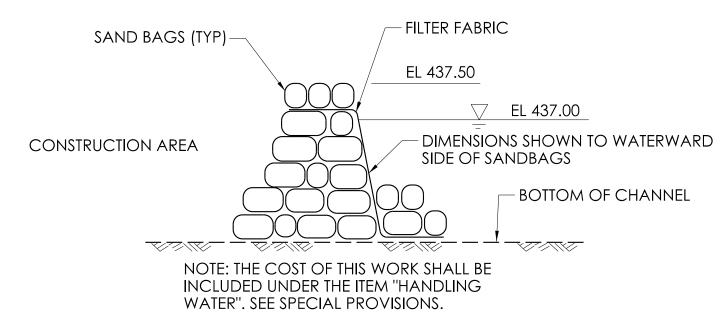
TEMPORARY SEDIMENT BASIN FOR **DEWATERING DISCHARGE**

BASIN NOTES:

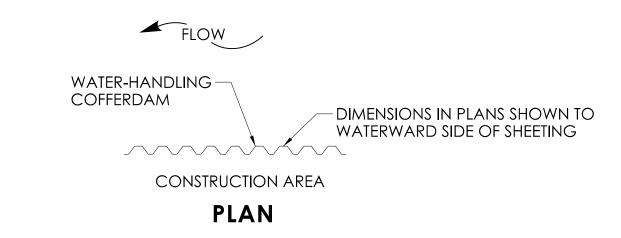
CONTRACTOR TO BRACE HAY BALES AS REQUIRED FOR STABILITY.

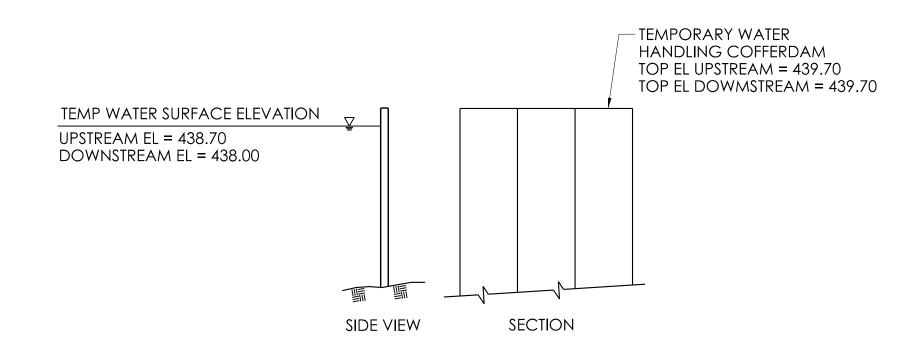
NOT TO SCALE

- DIMENSIONS TO VARY DEPENDENT UPON DE-WATERING RATE.
- VOLUME OF BASIN IS EQUAL TO THE MAXIMUM VOLUME OF WATER CAPABLE OF BEING PUMPED.
- SPECIAL RIPRAP STONE SHALL CONFORM TO NO. 3 STONE AS SHOWN IN SECTION M.01.01 OF CONNDOT FORM 818.
- AT THE COMPLETION OF THE WORK, THE BASIN AND ALL RELATED MATERIALS SHALL BE REMOVED FROM THE SITE, AND THE AREA SHALL BE RETURNED TO ITS ORIGINAL CONDITION BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK WILL BE INCLUDED UNDER EACH ITEM, EXCEPT THE CLEAN-UP WHICH WILL NOT BE MEASURED FOR PAYMENT BUT INCLUDED IN THE GENERAL COST OF THE WORK.
- THE TEMPORARY SEDIMENT BASIN SHALL BE DESIGNED IN ACCORDANCE WITH 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL.
- TEMPORARY SEDIMENT BASIN SHALL BE LOCATED OUTSIDE OF 100-YEAR FLOOD LIMITS AS SHOWN ON THE PLANS.



SUGGESTED WATER-HANDLING-COFFERDAM **DETAIL - SANDBAGS**





SUGGESTED WATER-HANDLING-COFFERDAM **DETAIL - SHEET PILING**

NOTE: THE COST OF THIS WORK SHALL BE INCLUDED UNDER THE ITEM "COFFERDAM AND DEWATERING".

IF PILE DRIVING IS OCCURRING, A "SOFT START" IS REQUIRED TO ALLOW ANIMALS AN OPPORTUNITY TO LEAVE THE PROJECT VICINITY BEFORE SOUND PRESSURE LEVELS INCREASE. IN ADDITION TO USING A SOFT START AT THE BEGINNING OF THE WORK DAY FOR PILE DRIVING, ONE MUST ALSO BE USED AT ANY TIME FOLLOWING CESSATION OF PILE DRIVING FOR A PERIOD OF 30 MINUTES OR LONGER.

FOR IMPACT PILE DRIVING: PILE DRIVING WILL COMMENCE WITH AN INITIAL SET OF THREE STRIKES BY THE HAMMER AT 40% ENERGY, FOLLOWED BY A ONE MINUTE WAIT PERIOD, THEN TWO SUBSEQUENT THREE-STRIKE SETS AT 40% ENERGY, WITH ONE-MINUTE WAITING PERIODS, BEFORE INITIATING CONTINUOUS IMPACT DRIVING.

FOR VIBRATORY PILE INSTALLATION: PILE DRIVING WILL BE INITIATED FOR 15 SECONDS AT REDUCED ENERGY FOLLOWED BY A ONE-MINUTE WAITING PERIOD. THIS SEQUENCE OF 15 SECONDS OF REDUCED ENERGY DRIVING, ONE-MINUTE WAITING PERIOD WILL BE REPEATED TWO ADDITIONAL TIMES, FOLLOWED IMMEDIATELY BY PILE-DRIVING AT FULL RATE AND ENERGY.

WATER HANDLING NOTES:

- THE CONTRACTOR SHALL MAINTAIN THE MINIMUM HYDRAULIC OPENINGS OF BROOK SHOWN ON THE STAGING PLANS THROUGHOUT LIMITS OF CONSTRUCTION DURING THE CONSTRUCTION OF THE NEW STRUCTURE.
- EQUIPMENT SHALL NOT BE PERMITTED IN THE BROOK WHEN TEMPORARY WATER HANDLING SYSTEM IS NOT IN PLACE WITHOUT APPROVAL FROM THE ENGINEER.
- A DEWATERING BASIN SHALL BE ESTABLISHED OUTSIDE OF THE 100-YEAR FLOOD LIMITS.
- TEMPORARY WATER-HANDLING-COFFERDAM SYSTEM SHOWN IS FOR INFORMATION ONLY. THE PROPOSED TEMPORARY WATER-HANDLING-COFFERDAM SHALL CONSIST OF AN APPROVED SYSTEM THAT THE CONTRACTOR ELECTS TO USE WHICH SHALL SAFELY CONVEY WATER FLOWS THROUGH THE CONSTRUCTION AREAS, SHALL BE SUITABLE FOR EXISTING SUBSTRATE CONDITIONS, SHALL BE ABLE TO SUPPORT CONSTRUCTION ACTIVITY, AND SHALL CONFORM TO PERMITS.
- WATER HANDLING MEASURES SHALL NOT EXCEED IMPACT AREAS SHOWN ON THE WETLAND AND FLOODPLAIN IMPACT SHEETS OF THE PERMIT PLANS.
- IF A SHORT DURATION PUMP SYSTEM IS PROPOSED DURING LOW FLOW CONDITIONS, THE PUMP SYSTEM SHALL BE DESIGNED BY THE CONTRACTOR AND HAVE A MINIMUM CAPACITY AS SHOWN IN THE TEMPORARY HYDRAULIC TABLE. PUMP SYSTEM PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL.
- THE CONTRACTOR SHALL TAKE NOTE THAT SHALLOW BEDROCK MAY BE ENCOUNTERED, AN ALTERNATIVE COFFERDAM METHOD MAY BE REQUIRED IN LIEU OF STANDARD SHEET PILE COFFERDAM.

BLOCK:

WSP USA

500 WINDING BROOK DR.

GLASTONBURY, CT 06033

TOWN(S): CANTON DRAWING TITLE: WATER HANDLING DETAILS S-09

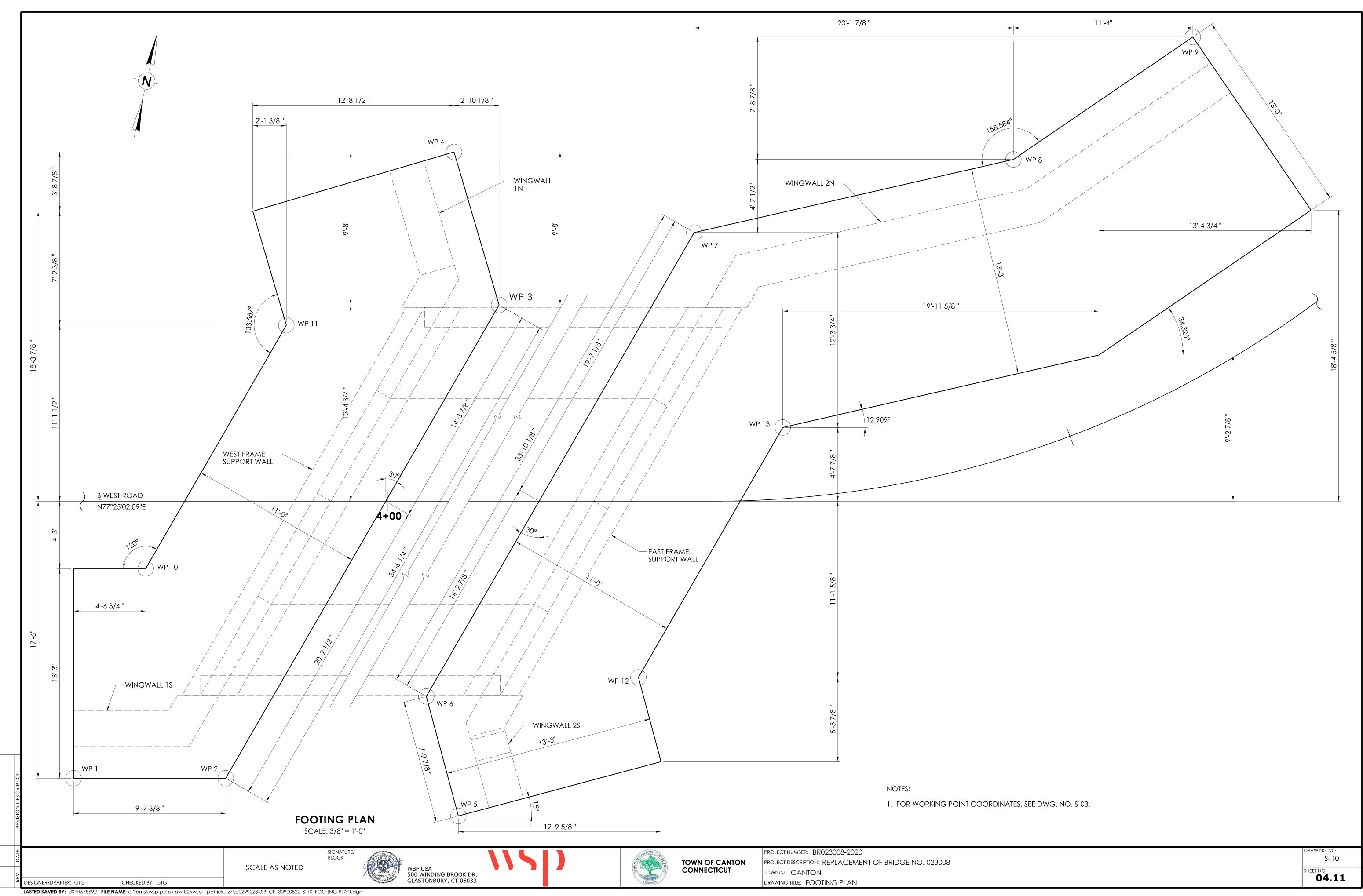
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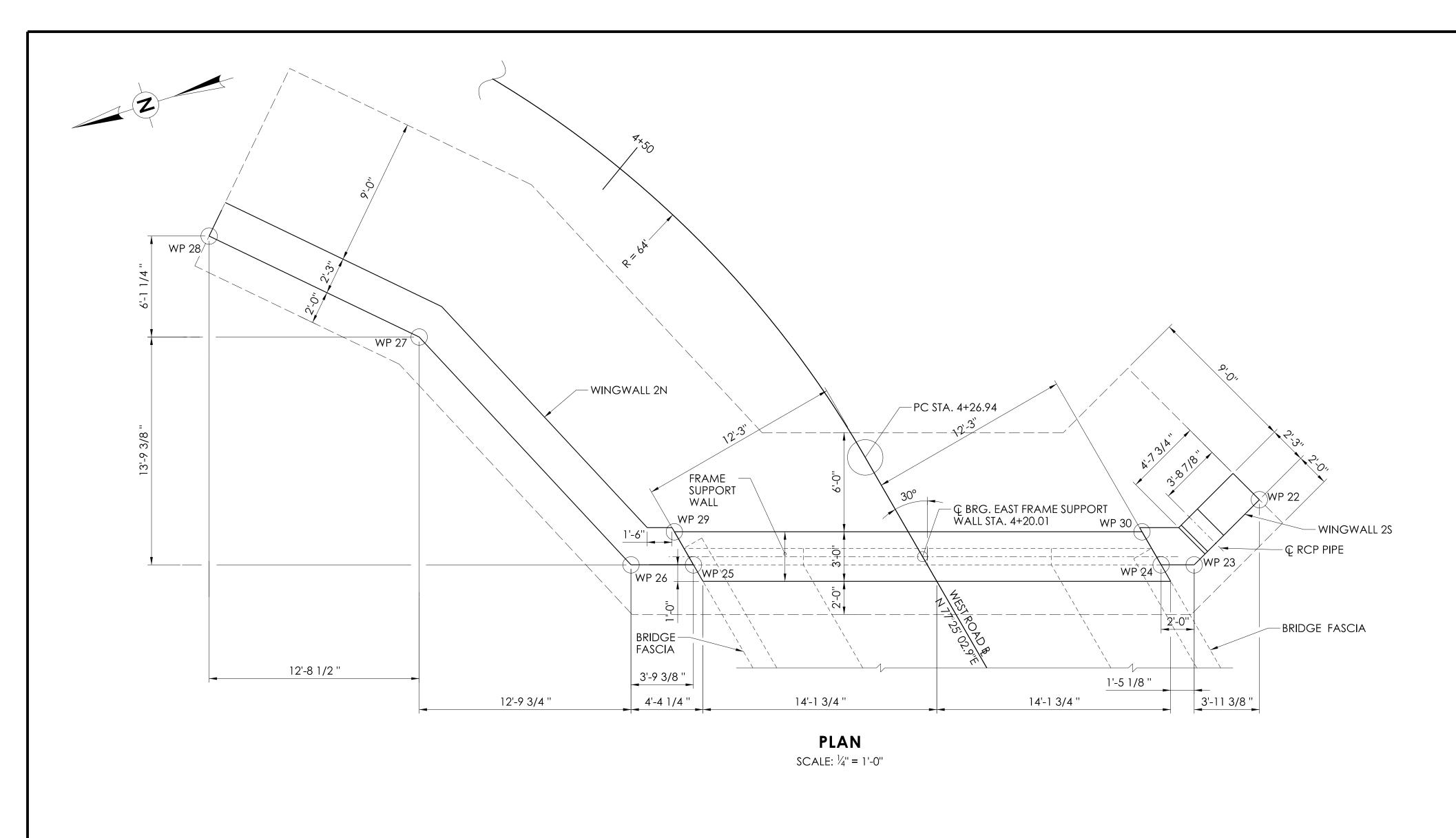
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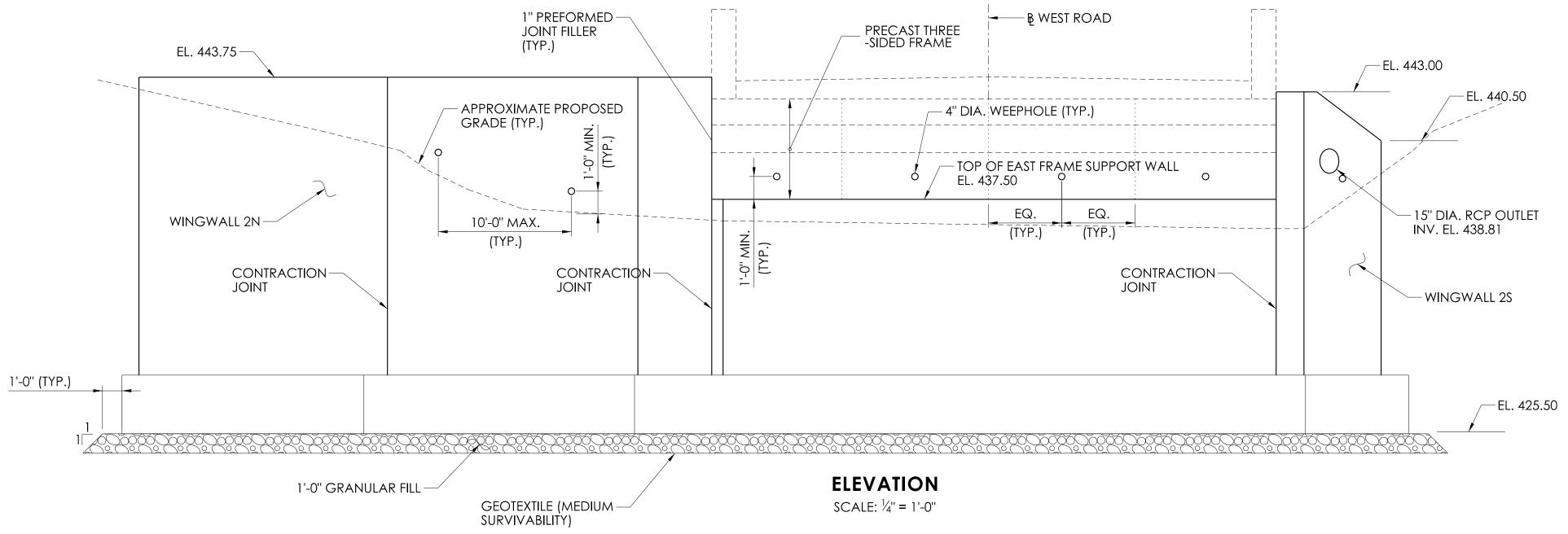
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DESIGNER/DRAFTER: MD

PLOTTED DATE: 9/30/2021







WSP USA 500 WINDING BROOK DR. GLASTONBURY, CT 06033

NOTES:

PROJECT NUMBER: BR023008-2020

DRAWING TITLE: EAST SUPPORT WALL AND WINGWALL PLAN

TOWN(S): CANTON

TOWN OF CANTON CONNECTICUT

- 1. FOR FURTHER DETAILS OF FRAME SUPPORT WALL AND WINGWALLS, SEE DWG. NO. S-13.
- FOR WORKING POINT COORIDNATES, SEE DWG. S-03.
- MAXIUMUM DESIGN FOUNDATION PRESSURE: STRENGTH I: 5.49 KSF SERVICE I: 3.71 KSF

S-11 PROJECT DESCRIPTION: REPLACEMENT OF BRIDGE NO. 023008

04.12

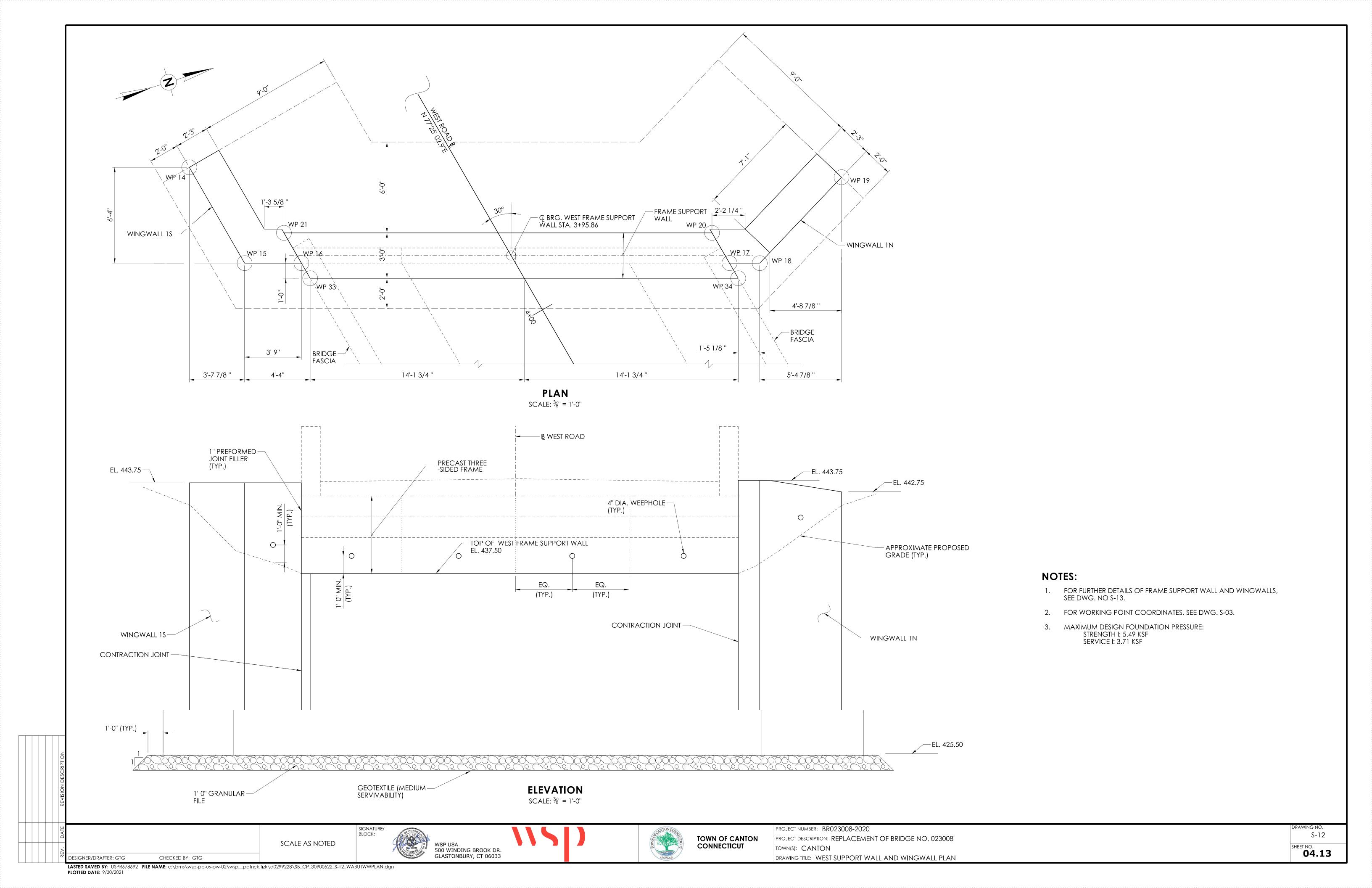
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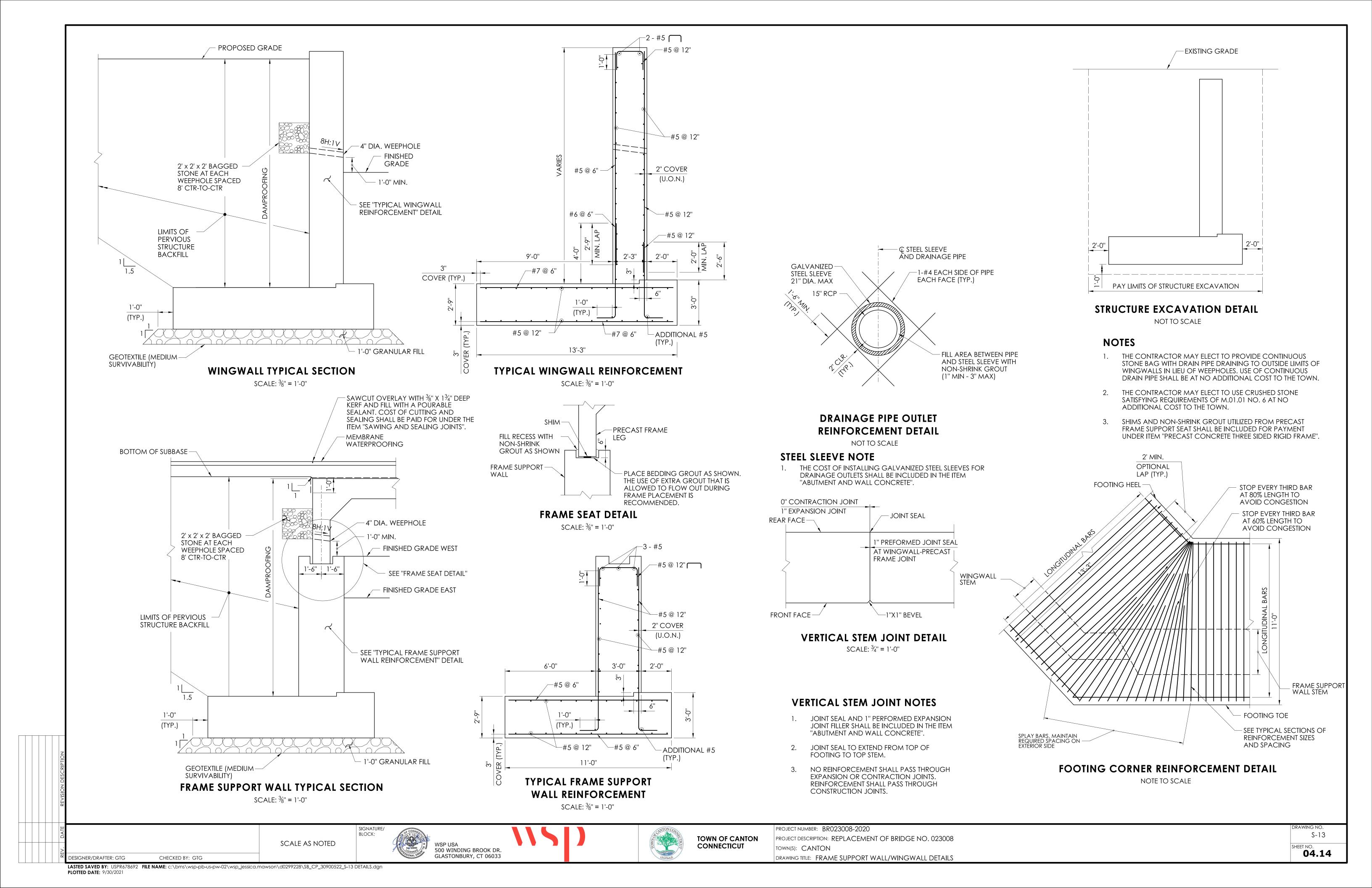
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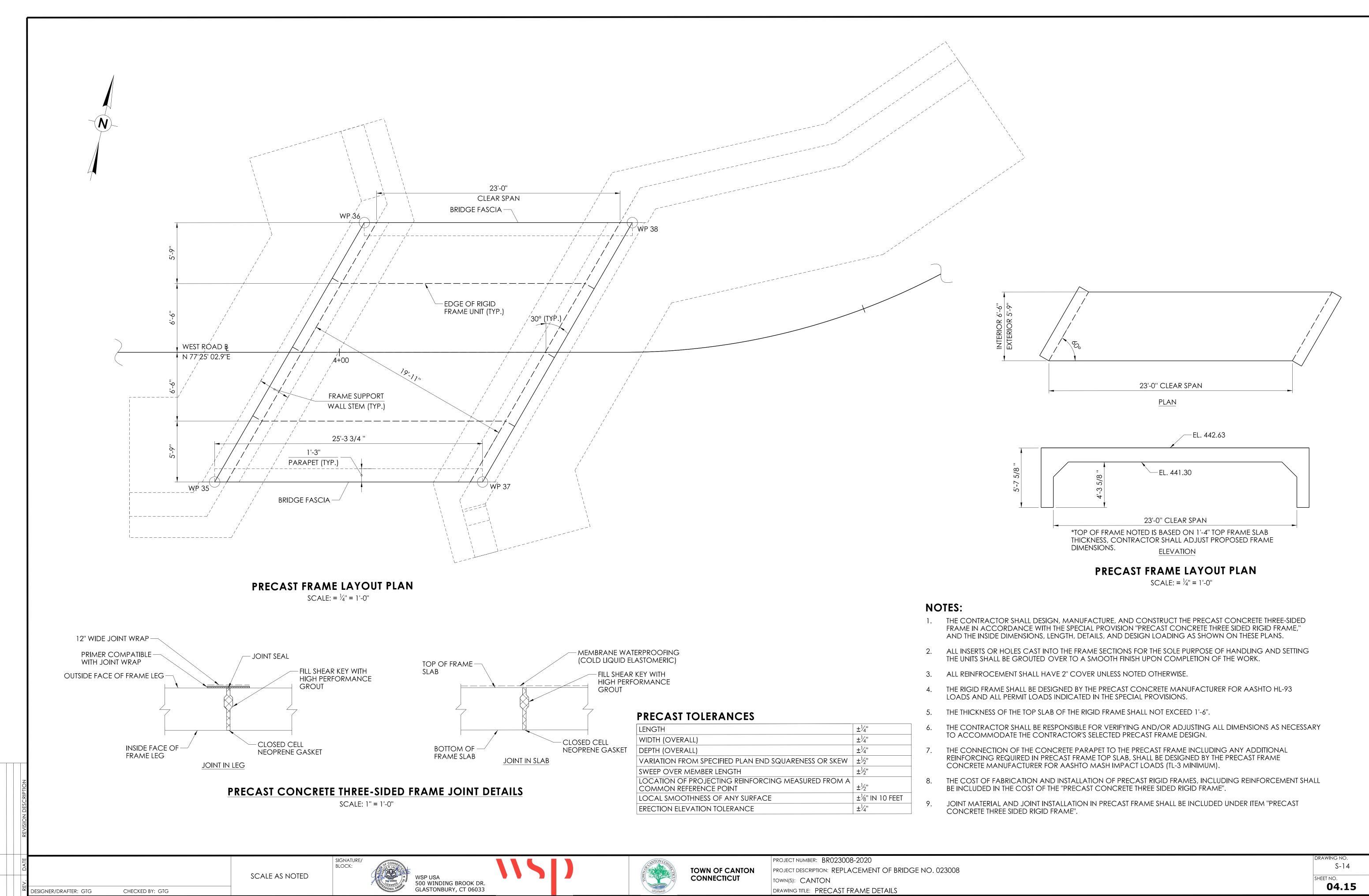
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SIGNATURE/ BLOCK:

SCALE AS NOTED







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PLOTTED DATE: 9/30/2021

