04 - STRUCTURE
INDEX OF DRAWINGS

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S-02	GENERAL PLAN AND ELEVATION	S-22	WATER HANDLING PLAN - PHASE 3
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S-18	3-TUBE CURB MOUNTED BRIDGE RAIL - REINFORCEMENT		
S-19	WATER HANDLING PLAN - PHASE 1		
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DESIGNED BY: **BENESCH**

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200 Glastonbury Blvd
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2026.09.25
13:29:57-04'00'

REV.	DATE	REVISION DESCRIPTION

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DESIGNER/DRAFTER: A. BISI CHECKED BY: M. HABEK

CTDOT **CONNECTICUT DEPARTMENT OF TRANSPORTATION**

PROJECT TITLE:
REPLACEMENT OF BRIDGE NO. 05350
BOSWORTH ROAD OVER MASHAMOQUET BROOK

TOWN(S): **POMFRET**

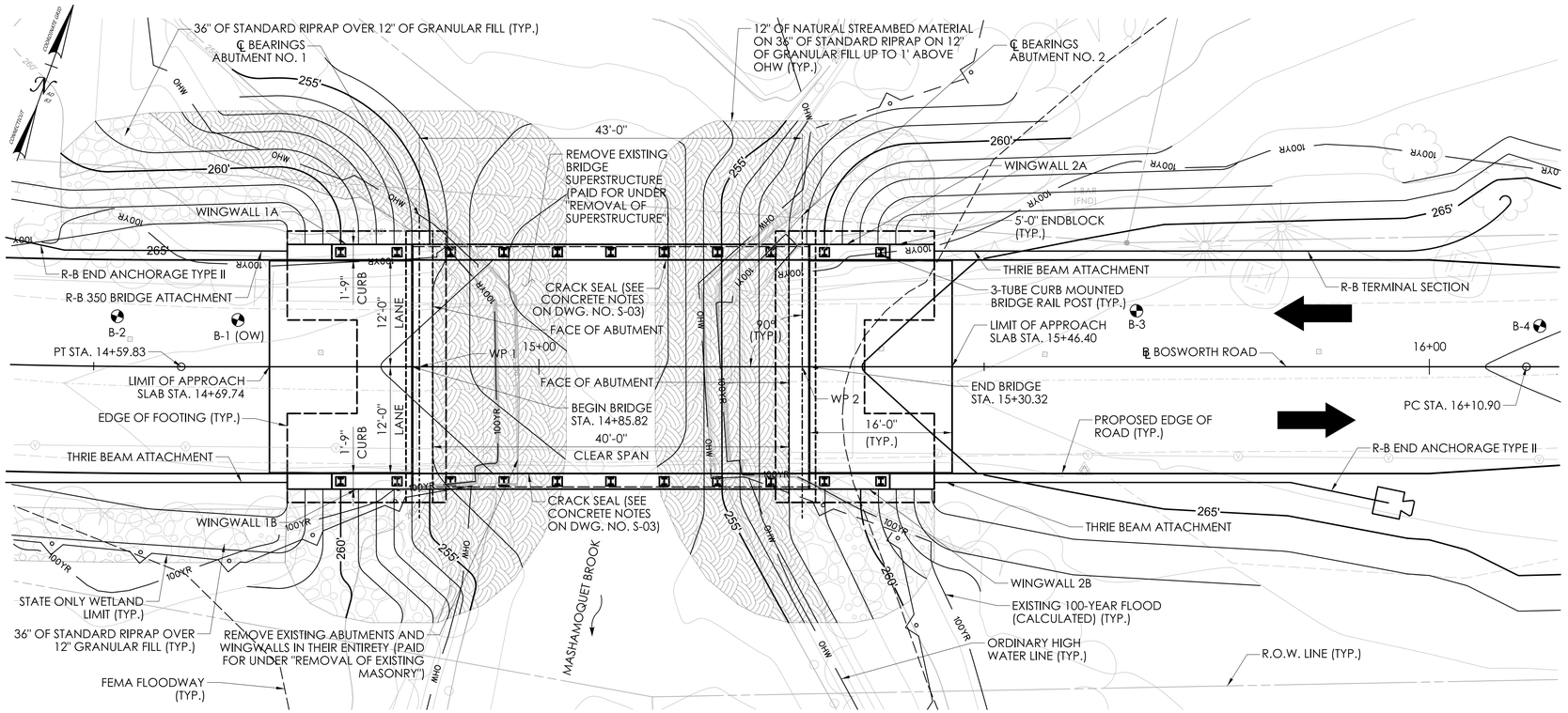
DRAWING TITLE:
INDEX OF STRUCTURE DRAWINGS

PROJECT NO.: **0111-0127**

DRAWING NO.: **S-01**

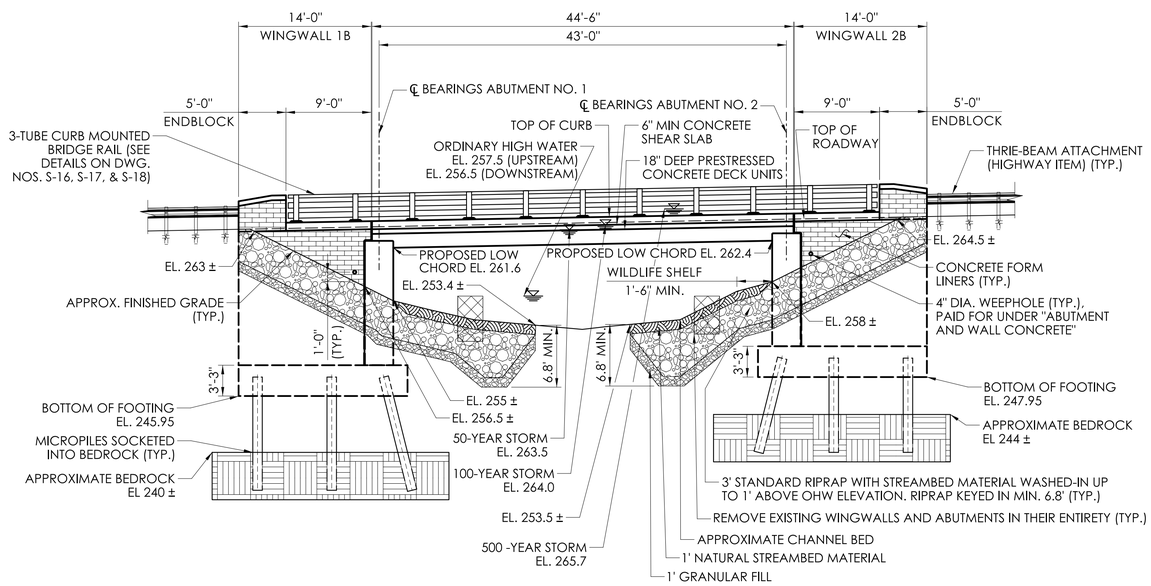
SHEET NO.: **04.01**

LASTED SAVED BY: abisi **FILE NAME:** c:\pwwordir\benesch projects\projects\d0254439\SB_CB_0111_0127__INDEX.dgn
PLOTTED DATE: 9/18/2026



GENERAL PLAN
SCALE: ⅛"=1'-0"

: INDICATES LOCATION OF BORING



ELEVATION
SCALE: ⅛"=1'-0"

GENERAL NOTES

SPECIFICATIONS: CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 819 (2024), SUPPLEMENTAL SPECIFICATIONS DATED JANUARY 2026 AND SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS (2024, 10TH EDITION) AS SUPPLEMENTED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION BRIDGE AND ROADWAY STRUCTURE DESIGN MANUAL (RELEASE 1).

MATERIAL DESIGN STRENGTHS:
CONCRETE:

CLASS PCC03340	f'c = 3,000 PSI
CLASS PCC04460	f'c = 4,000 PSI
CLASS PCC04462	f'c = 4,000 PSI
PRESTRESSED DECK UNITS (4'-0" X 1'-6" AND 3'-0" X 1'-6") CLASS PRC08062	f'c = 8,000 PSI

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, OR 5.14 - PREFABRICATED CONCRETE STRUCTURAL COMPONENTS AND M.14 - PREFABRICATED CONCRETE MEMBERS.

REINFORCEMENT:
(ASTM A615 GRADE 60) Fy = 60,000 PSI (GALVANIZED, SEE DWG. NO. S-03 FOR MORE INFORMATION)

DESIGN VEHICLE LIVE LOAD: HL-93

FUTURE PAVING ALLOWANCE: NONE

BITUMINOUS CONCRETE OVERLAY: THE 3" LAYER OF HMA SHALL CONSIST OF TWO LIFTS. THE FIRST SHALL BE HMA S 0.25 (1 INCH THICK). THE SECOND SHALL BE HMA S 0.50 (2 INCHES THICK). MIXES SHALL BE TRAFFIC LEVEL 2.

FOUNDATION PRESSURES AND PILE LOADS: 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 BE SUBMITTED FOR REFERENCE BY THE REVIEWER.

BRIDGE IDENTIFICATION PLACARDS: THE CONTRACTOR SHALL PROVIDE AND INSTALL A NEW BRIDGE IDENTIFICATION SIGN AT THE LEADING END OF EACH BRIDGE PARAPET ON THE TRAFFIC SIDE. THE SIGNS SHALL BE FABRICATED WITH 40 GAUGE ALUMINUM SHEET METAL. THE SIGNS SHALL BE 4" BY 12" WITH 3" WHITE REFLECTIVE BLOCK LETTERS ON GREEN REFLECTIVE SHEETING. EACH SIGN SHALL READ: 05350. THE FINAL LOCATION AND ATTACHMENT METHOD FOR THE SIGNS SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. THE BRIDGE SIGNS SHALL BE PAID FOR UNDER ITEM "SIGN FACE - SHEET ALUMINUM (TYPE XI RETROREFLECTIVE SHEETING)."

UTILITIES: THE FOLLOWING UTILITIES ARE LOCATED WITHIN THE PROJECT LIMITS AND SHALL BE PROTECTED DURING CONSTRUCTION: OVERHEAD UTILITIES (EVERSOURCE, FRONTIER). THE CONTRACTOR SHALL COORDINATE ALL WORK RELATED TO UTILITY RELOCATION WITH THE RESPECTIVE UTILITY COMPANIES.

MASH TEST LEVEL: THE 3-TUBE CURB MOUNTED BRIDGE RAIL MEETS THE TL-3 CRITERIA FOR MASH 2016.

NATIVE STREAMBED MATERIAL NOTES:

1. NATIVE STREAMBED MATERIAL EXCAVATED DURING CONSTRUCTION SHALL BE STOCKPILED AND THEN REPLACED AS DIRECTED BY THE ENGINEER, AND IN ACCORDANCE WITH THE PERMIT DOCUMENTS (PAID FOR UNDER "EXCAVATION AND REUSE OF EXISTING CHANNEL BOTTOM MATERIAL").
2. THE STOCKPILE SHALL BE LOCATED OUTSIDE THE WETLAND LIMITS AND PROTECTED WITH SEDIMENTATION CONTROL SYSTEM.
3. IF A SUFFICIENT QUANTITY OF MATERIALS IS NOT AVAILABLE FROM THE EXISTING STREAMBED CHANNEL WITHIN THE PERMITTED FOOTPRINT OF THE SITE, THE CONTRACTOR SHALL FURNISH VISUALLY INSPECTED AND ACCEPTED (BY DEEP FISHERIES) SUPPLEMENTAL STREAMBED CHANNEL MATERIAL FROM AN OFF-SITE SOURCE (PAID FOR UNDER THE ITEM "SUPPLEMENTAL STREAMBED CHANNEL MATERIAL").
4. WASHING-IN OF THE INSTALLED SUPPLEMENTAL STREAMBED MATERIAL SHALL BE PAID FOR UNDER ITEM NO. 0202218 - "WASHING-IN SUPPLEMENTAL STREAMBED MATERIAL" AND IN ACCORDANCE WITH THE SPECIAL PROVISION "WASHING-IN SUPPLEMENTAL STREAMBED MATERIAL."
5. THE ENGINEER SHALL CONTACT MICHAEL STEEVES OF CTDEEP FISHERIES AT MICHAEL.STEEVES@CT.GOV FOR REVIEW AND APPROVAL OF THE WASHING-IN SUPPLEMENTAL STREAMBED MATERIAL PLAN. FOLLOWING THE APPROVAL, THE CONTRACTOR SHALL NOTIFY MICHAEL STEEVES AT LEAST 10 DAYS BEFORE INSTALLING AND WASHING-IN THE NATURAL STREAMBED MATERIAL. MICHAEL STEEVES OR ANOTHER MEMBER OF CTDEEP FISHERIES MUST BE PRESENT ON-SITE DURING INSTALLATION OF THESE MATERIALS.

HYDRAULIC SUMMARY TABLE

DRAINAGE AREA [SQ. MI.]	27.6
DESIGN FREQUENCY [YEAR]	100
DESIGN DISCHARGE [CFS]	3,188
UPSTREAM DESIGN WATER SURFACE ELEVATION	264.0
DOWNSTREAM DESIGN WATER SURFACE ELEVATION	261.3
AVERAGE DAILY FLOW [CFS]	48
AVERAGE DAILY FLOW ELEVATION [FT]	255.1
MAXIMUM SCOUR ELEVATION [FT]	242.3
FREQUENCY [YEAR]	500
WORST CASE SCOUR SUBSTRUCTURE UNIT	ABUTMENT NO. 2

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 MANUALS FOR BRIDGE INSPECTION, UNLESS OTHERWISE DIRECTED BY THE MANAGER OF BRIDGE SAFETY AND EVALUATION.

COMPONENT OR DETAIL	STRUCTURE SHEET REFERENCE
N/A	N/A

ESTIMATED TRANSPORTATION DIMENSIONS AND WEIGHTS

MEMBER	LENGTH (FT)	HEIGHT (FT)	WIDTH (FT)	WEIGHT (LBS)
PRESTRESSED DECK UNIT (4'-0" X 1'-6") (EXTERIOR)	44'-6"	2'-8"	4'-0"	33,000
PRESTRESSED DECK UNIT (4'-0" X 1'-6") (INTERIOR)	44'-6"	1'-9"	4'-0"	29,000
PRESTRESSED DECK UNIT (3'-0" X 1'-6")	44'-6"	1'-9"	3'-0"	22,000

REVISION DESCRIPTION | DATE | REV.

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DESIGNER/DRAFTER: A. BISI CHECKED BY: M. HABEK

CTDOT CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE:
REPLACEMENT OF BRIDGE NO. 05350
BOSWORTH ROAD OVER MASHAMOQUET BROOK

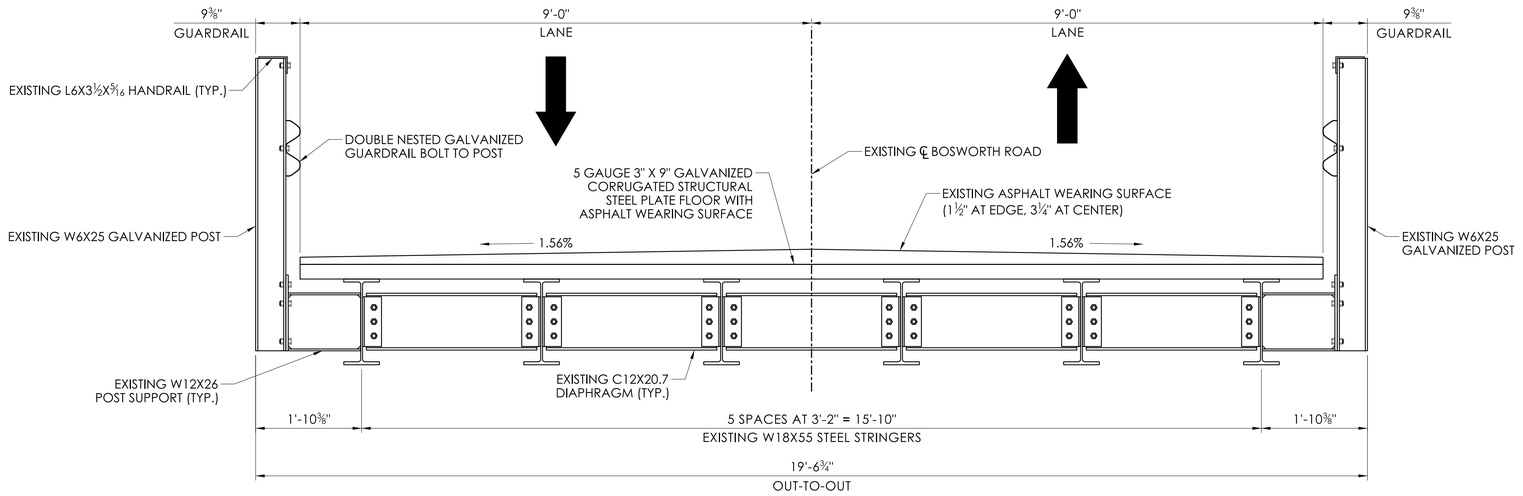
TOWN(S): **POMFRET**

DRAWING TITLE: **GENERAL PLAN AND ELEVATION**

PROJECT NO.: **0111-0127**

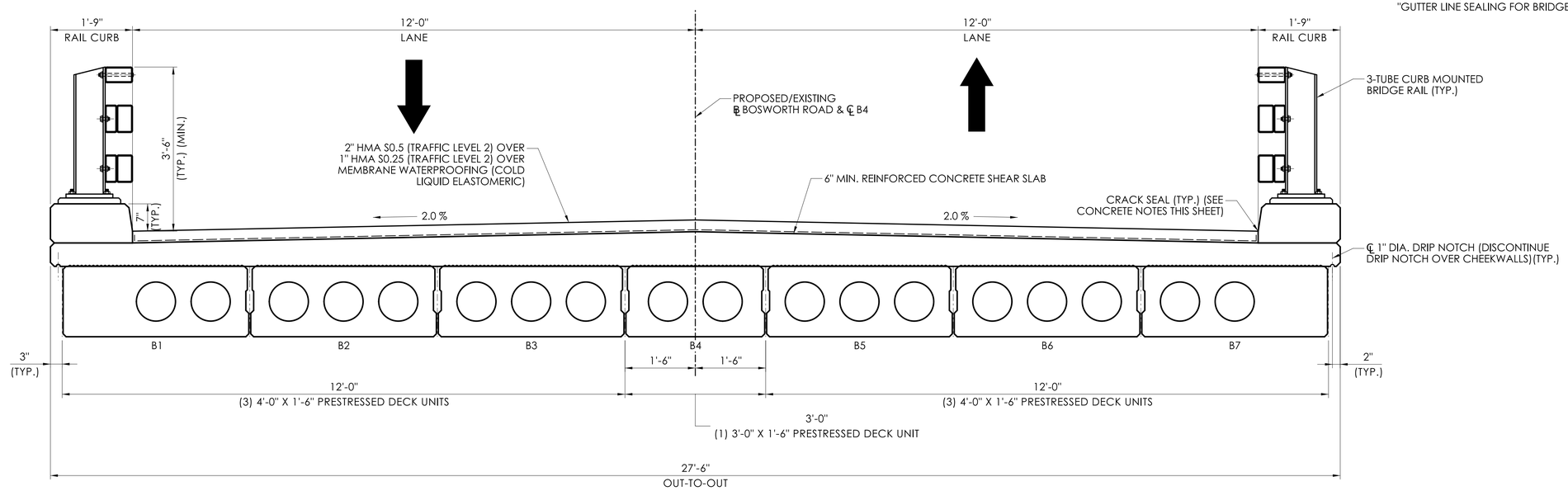
DRAWING NO.: **S-02**
SHEET NO.: **04.02**

LASTED SAVED BY: abisi FILE NAME: c:\pwwordir\benesch projects\projects\d0254439\SB_CB_0111_0127_GPN.dgn
PLOTTED DATE: 9/18/2026



EXISTING CROSS SECTION

SCALE: ¾"=1'-0"



PROPOSED CROSS SECTION

SCALE: ¾"=1'-0"

CONCRETE NOTES:

COMPOSITE CONSTRUCTION: NO TEMPORARY INTERMEDIATE SUPPORTS SHALL BE USED PRIOR TO AND DURING THE PLACING AND SETTING OF THE CONCRETE DECK SLAB. CONSTRUCTION LOADS AND DEAD LOADS WILL BE PERMITTED WHEN DIRECTED BY THE ENGINEER BUT ONLY WHEN THE CONTRACTOR'S TEST RESULTS SHOW THAT THE CONCRETE HAS REACHED A STRENGTH OF f'c = 3500 PSI. LIVE LOADS (TRAFFIC) WILL BE PERMITTED ON THE STRUCTURE AFTER THE CONTRACTOR'S TEST RESULTS SHOW THAT THE CONCRETE HAS REACHED A STRENGTH OF f'c = 4000 PSI.

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

ITEM	BRIDGE COMPONENTS	PCC CLASS
FOOTING CONCRETE	ABUTMENT AND WINGWALL FOOTINGS	PCC03340
ABUTMENT AND WALL CONCRETE	CHEEKWALLS, ABUTMENT AND WINGWALL STEMS	PCC03340
BRIDGE DECK CONCRETE	SHEAR SLAB AND CURBS ON BRIDGE	PCC04462
APPROACH SLAB CONCRETE	APPROACH SLABS	PCC04460
PARAPET CONCRETE	WINGWALL END BLOCKS AND CURBS ON WINGWALLS	PCC04462

THE FOLLOWING PAY ITEMS AND CONCRETE CLASSES ARE REQUIRED FOR PRECAST STRUCTURAL COMPONENTS:

ITEM	BRIDGE COMPONENTS	PRC CLASS
PRESTRESSED DECK UNITS (3'-0" X 1'-6")	PRESTRESSED DECK UNITS	PRC08062
PRESTRESSED DECK UNITS (4'-0" X 1'-6")	PRESTRESSED DECK UNITS	PRC08062

EXPOSED EDGES: EXPOSED EDGES OF CONCRETE SHALL BE BEVELED ¾" X ¾" UNLESS DIMENSIONED 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 - HDG."

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

PENETRATING SEALER PROTECTIVE COMPOUND SHALL BE APPLIED TO THE FOLLOWING CONCRETE SURFACES EXPOSED TO SALT SPRAY: CURBS AND END BLOCKS. THE FRONT FACE AND TOP FACE OF THE CONCRETE SURFACES SHALL BE SEALED, EXCLUDING FORMLINED SURFACES. THE COST SHALL BE INCLUDED IN THE ITEM "PENETRATING SEALER PROTECTIVE COMPOUND".

CRACK SEAL SHALL BE INSTALLED AT THE CURB LINE ALONG THE LENGTH OF THE BRIDGE AND WINGWALLS, BOTH SIDES. CRACK SEALING SHALL BE INCLUDED FOR PAYMENT UNDER THE ITEM, "GUTTER LINE SEALING FOR BRIDGES". SEE SPECIAL PROVISIONS.

REV.	DATE	REVISION DESCRIPTION

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CHECKED BY: M. HABEK

CTDOT
CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE:
REPLACEMENT OF BRIDGE NO. 05350
BOSWORTH ROAD OVER MASHAMOQUET BROOK

TOWN(S):
POMFRET

DRAWING TITLE:
CROSS SECTIONS

PROJECT NO.: **0111-0127**

DRAWING NO.: **S-03**
SHEET NO.: **04.03**

LASTED SAVED BY: abisi **FILE NAME:** c:\pwwordir\benesch projects\projects\d0254439\SB_CB_0111_0127_SEC.dgn
PLOTTED DATE: 9/18/2026

Driller: M. St. John	**Connecticut DOT Boring Report**		Hole No.: B-1 (OW)
Inspector: M. Cyr	Town: Pomfret		Stat./Offset: Sta. 5+66/5'L
Engineer: A. McCauliffe	Project No.: 0111-0127		Northing: 874262.1
Start Date: 1-3-24	Route No.:		Easting: 1216620.9
Finish Date: 1-3-24	Bridge No.: 05350		Surface Elevation: 263
Project Description: Replacement of Bridge 05350 - Bosworth Road over Mashamoquet Brook			
Casing Size/Type: 4-inch	Sampler Type/Size: 1 3/8 inch		Core Barrel Type: NX
Hammer Wt.: 300lb Fall: 30in.	Hammer Wt.: 140lb Fall: 30in.		
Groundwater Observations: @7ft ATD, @ 7 ft after 18 hrs, @ 7ft after 42 hrs, @8ft on 08/05/2024			

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)
0						Asphalt	ASPHALT - 3 inches	
	S-1	15 8 3 4	24	5		Misc. Fill	Brown, f-c SAND, trace f gravel, trace silt	
	S-2	3 3 3 3	24	2			Brown, f SAND, little silt	260
5	S-3	4 4 5 5	24	6		Sand (Alluvial Deposit)	Brown, f-c SAND, little silt, trace roots	
	S-4	4 3 3 5	24	8			Brown, f-c SAND, little silt, trace f-gravel	255
10	S-5	13 14 22 30	24	9		Gravelly Sand (Alluvial Deposit)	Brown, f SAND, little f-c gravel, little silt	
								250
15	S-6	35 39 50/4	16	12			Brown, f SAND, some f-c gravel, little silt	
								245
20	S-7	50/5	5	0			No Recovery (Possible Boulder, Seam between boulder and bedrock, change in wash color between boulder and bedrock indicating soil between the two)	
						Bedrock		240
25							Dark gray and silvery gray, interlayered GNEISS	

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	NOTES: Difficuty drilling from 13-15 ft, 18-19 ft, 21-23 ft	Sheet
Earth: 23ft Rock: 10ft	2 seams during core run C-1 from 0 to 2 ft	1 of 2
No. of Soil Samples: 7 No. of Core Runs: 2	Well Construction : well set at 20 ft, 10 ft of screen, 10 ft of riser, sand from 20 to 8 ft, betonite from 8 to 5 ft, spoils to surface, road box set at ground surface	SM-001-M REV. 1/02

BORING B-1 (OW)

Driller: M. St. John	**Connecticut DOT Boring Report**		Hole No.: B-1 (OW)
Inspector: M. Cyr	Town: Pomfret		Stat./Offset: Sta. 5+66/5'L
Engineer: A. McCauliffe	Project No.: 0111-0127		Northing: 874262.1
Start Date: 1-3-24	Route No.:		Easting: 1216620.9
Finish Date: 1-3-24	Bridge No.: 05350		Surface Elevation: 263
Project Description: Replacement of Bridge 05350 - Bosworth Road over Mashamoquet Brook			
Casing Size/Type: 4-inch	Sampler Type/Size: 1 3/8 inch		Core Barrel Type: NX
Hammer Wt.: 300lb Fall: 30in.	Hammer Wt.: 140lb Fall: 30in.		
Groundwater Observations: @7ft ATD, @ 7 ft after 18 hrs, @ 7ft after 42 hrs, @8ft on 08/05/2024			

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	C-1		60	45	8	Bedrock *(cont'd)*	and SCHIST, fine to medium grained, medium bedded, highly fractured, fresh, medium strong, 0 to 75 degree bedding angle, (4-4-4-4-6 min/ft)	
								235
30	C-2		60	60	80		Dark gray and silvery gray, interlayered GNEISS and SCHIST, fine to medium grained, medium bedded, highly fractured, fresh, medium strong, 0 to 75 degree bedding angle (5-5-5-5 min/ft)	
							END OF BORING 33ft	230
35								
								225
40								
								220
45								
								215
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	NOTES: Difficuty drilling from 13-15 ft, 18-19 ft, 21-23 ft	Sheet
Earth: 23ft Rock: 10ft	2 seams during core run C-1 from 0 to 2 ft	2 of 2
No. of Soil Samples: 7 No. of Core Runs: 2	Well Construction : well set at 20 ft, 10 ft of screen, 10 ft of riser, sand from 20 to 8 ft, betonite from 8 to 5 ft, spoils to surface, road box set at ground surface	SM-001-M REV. 1/02

BORING B-1 (OW) (CONT.)

Driller: M. St. John	**Connecticut DOT Boring Report**		Hole No.: B-2
Inspector: M. Cyr	Town: Pomfret		Stat./Offset: Sta. 5+53/5'L
Engineer: A. McCauliffe	Project No.: 0111-0127		Northing: 874257.6
Start Date: 1-2-24	Route No.:		Easting: 1216608.1
Finish Date: 1-2-24	Bridge No.: 05350		Surface Elevation: 262.9
Project Description: Replacement of Bridge 05350 - Bosworth Road over Mashamoquet Brook			
Casing Size/Type: 4-inch	Sampler Type/Size: 1 3/8 inch		Core Barrel Type: NX
Hammer Wt.: 300lb Fall: 30in.	Hammer Wt.: 140lb Fall: 30in.		
Groundwater Observations: @7 ft ATD			

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)
0						Ashpalt	ASPHALT - 3 inches	
	S-1	9 7 7 5	24	5		Misc. Fill	Brown, f SAND and f-m GRAVEL, trace silt	
	S-2	4 4 4 5	24	5			Brown, f SAND, some silt, little f-c gravel, trace roots	260
5	S-3	3 3 4 4	24	17			Brown, f-c SAND, little silt	
	S-4	3 2 1 3	24	18		Sand (Alluvial Deposit)	Brown, f SAND, some silt, trace roots	255
10	S-5	16 25 28 27	24	9		Sand and Gravel (Alluvial Deposit)	Brown, f-c SAND and f-c GRAVEL, little silt	
								250
15	S-6	15 16 18 17	24	5			Brown, f-c GRAVEL and f-c SAND, little silt	
								245
20	S-7	44 50/2	24	3			Gray, f SAND, some f-c gravel, some silt	
						Bedrock		240
25							Dark gray and silvery gray, interlayered GNEISS	

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	NOTES: Difficuty drilling at 13 ft, 18 ft, 23 ft	Sheet
Earth: 23ft Rock: 15ft	Core run C-1 had multiple large seams	1 of 2
No. of Soil Samples: 7 No. of Core Runs: 3		SM-001-M REV. 1/02

BORING B-2

Driller: M. St. John	**Connecticut DOT Boring Report**		Hole No.: B-2
Inspector: M. Cyr	Town: Pomfret		Stat./Offset: Sta. 5+53/5'L
Engineer: A. McCauliffe	Project No.: 0111-0127		Northing: 874257.6
Start Date: 1-2-24	Route No.:		Easting: 1216608.1
Finish Date: 1-2-24	Bridge No.: 05350		Surface Elevation: 262.9
Project Description: Replacement of Bridge 05350 - Bosworth Road over Mashamoquet Brook			
Casing Size/Type: 4-inch	Sampler Type/Size: 1 3/8 inch		Core Barrel Type: NX
Hammer Wt.: 300lb Fall: 30in.	Hammer Wt.: 140lb Fall: 30in.		
Groundwater Observations: @7 ft ATD			

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	C-1		60	60	43	Bedrock *(cont'd)*	and SCHIST, fine to medium grained, medium bedded, highly fractured, slightly weathered, medium strong, 0 to 30 degrees, (5-5-3-5-4 min/ft)	
								235
30	C-2		60	60	95		Dark gray and silvery gray, interlayered GNEISS and SCHIST, fine to medium grained, thickly bedded, moderately fractured, fresh, mediurn strong, 15 to 30 degrees bedding angle, (6-6-6-6-6 min/ft)	
								230
35	C-3		60	58	85		Dark gray and silvery gray, interlayered GNEISS and SCHIST, fine to medium grained, thickly bedded, moderately fractured, slightly weathered, medium strong, 15 to 30 degrees bedding angle, (5-5-5-5-5 min/ft)	
							END OF BORING 38ft	225
40								
								220
45								
								215
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	NOTES: Difficuty drilling at 13 ft, 18 ft, 23 ft	Sheet
Earth: 23ft Rock: 15ft	Core run C-1 had multiple large seams	2 of 2
No. of Soil Samples: 7 No. of Core Runs: 3		SM-001-M REV. 1/02

BORING B-2 (CONT.)

REVISION DESCRIPTION | DATE | REV.

SIGNATURE BLOCK: benesch — Alfred Benesch & Company, 200 Glastonbury Boulevard Suite 201, Glastonbury, CT
DESIGNER/DRAFTER: A. BISI CHECKED BY: M. HABEK

CTDOT — CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE: REPLACEMENT OF BRIDGE NO. 05350 BOSWORTH ROAD OVER MASHAMOQUET BROOK

TOWN(S): POMFRET

DRAWING TITLE: BORING LOGS - 1

PROJECT NO.: 0111-0127

DRAWING NO.: S-04

SHEET NO.: 04.04

LASTED SAVED BY: hcooper **FILE NAME:** c:\pwwordir\benesch projects\projects\d0254439\SB_CB_0111_0127_BORING 1.dgn
PLOTTED DATE: 9/18/2026

Driller: M. St. John	**Connecticut DOT Boring Report**		Hole No.: B-3
Inspector: M. Cyr	Town: Pomfret		Stat./Offset: Sta. 6+64/4'L
Engineer: A. McCauliffe	Project No.: 0111-0127		Northing: 874297.2
Start Date: 1-4-24	Route No.:		Easting: 1216715.5
Finish Date: 1-4-24	Bridge No.: 05350		Surface Elevation: 264.2
Project Description: Replacement of Bridge 05350 - Bosworth Road over Mashamoquet Brook			
Casing Size/Type: 4-inch	Sampler Type/Size: 1 3/8 inch		Core Barrel Type: NX
Hammer Wt.: 300lb Fall: 30in.	Hammer Wt.: 140lb Fall: 30in.		
Groundwater Observations: @7 ft ATD			

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)
0						Asphalt	ASPHALT - 3 inches	
						Misc Fill		
	S-1	6 4 5 6	24	7			Brown, f-c SAND, some f-c gravel, trace silt	
	S-2	5 6 6 5	24	2			Brown, f-c SAND, some f-c gravel, trace silt	260
5						Sand (Alluvial		
	S-3	5 3 5 5	24	14		Deposit)	Brown, f SAND, little silt	
	S-4	5 4 6 7	24	4			Brown, f SAND, little silt	
10								255
	S-5	50/0	0	0		Sandy Gravel (Alluvial Deposit)	No Recovery (Boulder from 10 to 13.5 ft)	
15	S-6	19 31 50/5	17	8			Gray, f-c GRAVEL, some f-c sand, some silt	250
	S-7	50/0	0	0		Bedrock	No Recovery (bedrock)	
20								245
	C-1		60	60	72		Silvery gray, SCHIST, fine to medium grained, thickly bedded, intensely to highly fractured, fresh, strong, 15 to 75 degree bedding angle, (4-4-4-4-4 min/ft)	
25								240

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: 20ft Rock: 10ft No. of Soil Samples: 7 No. of Core Runs: 2	NOTES: Difficulty drilling from 10-13.5 ft Sparatic grinding from 17-20 ft	Sheet 1 of 2 SM-001-M REV. 1/02

BORING B-3

Driller: M. St. John	**Connecticut DOT Boring Report**		Hole No.: B-3
Inspector: M. Cyr	Town: Pomfret		Stat./Offset: Sta. 6+64/4'L
Engineer: A. McCauliffe	Project No.: 0111-0127		Northing: 874297.2
Start Date: 1-4-24	Route No.:		Easting: 1216715.5
Finish Date: 1-4-24	Bridge No.: 05350		Surface Elevation: 264.2
Project Description: Replacement of Bridge 05350 - Bosworth Road over Mashamoquet Brook			
Casing Size/Type: 4-inch	Sampler Type/Size: 1 3/8 inch		Core Barrel Type: NX
Hammer Wt.: 300lb Fall: 30in.	Hammer Wt.: 140lb Fall: 30in.		
Groundwater Observations: @7 ft ATD			

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						Bedrock (cont'd)		
	C-2		60	60	77		Dark gray and silvery gray, interlayered GNEISS and SCHIST, fine to medium grained, medium bedded, highly fractured, fresh, medium strong, 15 to 30 degree bedding angle, (4-4-4-4-4 min/ft)	
30								235
							END OF BORING 30ft	
35								230
40								225
45								220
50								215

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: 20ft Rock: 10ft No. of Soil Samples: 7 No. of Core Runs: 2	NOTES: Difficulty drilling from 10-13.5 ft Sparatic grinding from 17-20 ft	Sheet 2 of 2 SM-001-M REV. 1/02

BORING B-3 (CONT.)

Driller: M. St. John	**Connecticut DOT Boring Report**		Hole No.: B-4
Inspector: M. Cyr	Town: Pomfret		Stat./Offset: Sta. 7+13/4'L
Engineer: A. McCauliffe	Project No.: 0111-0127		Northing: 874311.3
Start Date: 1-5-24	Route No.:		Easting: 1216758.6
Finish Date: 1-5-24	Bridge No.: 05350		Surface Elevation: 264.8
Project Description: Replacement of Bridge 05350 - Bosworth Road over Mashamoquet Brook			
Casing Size/Type: 4-inch	Sampler Type/Size: 1 3/8 inch		Core Barrel Type: NX
Hammer Wt.: 300lb Fall: 30in.	Hammer Wt.: 140lb Fall: 30in.		
Groundwater Observations: @7 ft ATD			

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)
0						Asphalt	ASPHALT - 3 inches	
	S-1	12 22 30 28	24	5		Sand and Gravel (Alluvial Deposit)	Brown, f-c SAND and f-c GRAVEL, little silt	
	S-2	44 39 37 35	24	10			Brown, f-c GRAVEL, some f-c sand, little silt	260
5								
	S-3	27 43 49 48	24	8			Brown, f-c SAND and f-c GRAVEL, little silt	
	S-4	35 42 40 40	24	6			Brown, f-c SAND and f-c GRAVEL, little silt	
10								255
	S-5	43 42 33 31	24	8		Sand (Alluvial Deposit)	Brown, f SAND, little silt	
15	S-6	29 25 31 29	24	7			Brown, f SAND, little silt, trace f gravel	250
						Bedrock		
20								245
	C-1		60	60	88		Silvery gray, SCHIST, fine to medium grained, medium bedded, intensely to highly fractured, fresh, strong, 15 to 75 degree bedding angle, (6-6-6-6-6 min/ft)	
25								240

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: 17ft Rock: 13ft No. of Soil Samples: 6 No. of Core Runs: 2	NOTES: Difficulty drilling from 17 - 20 ft	Sheet 1 of 2 SM-001-M REV. 1/02

BORING B-4

Driller: M. St. John	**Connecticut DOT Boring Report**		Hole No.: B-4
Inspector: M. Cyr	Town: Pomfret		Stat./Offset: Sta. 7+13/4'L
Engineer: A. McCauliffe	Project No.: 0111-0127		Northing: 874311.3
Start Date: 1-5-24	Route No.:		Easting: 1216758.6
Finish Date: 1-5-24	Bridge No.: 05350		Surface Elevation: 264.8
Project Description: Replacement of Bridge 05350 - Bosworth Road over Mashamoquet Brook			
Casing Size/Type: 4-inch	Sampler Type/Size: 1 3/8 inch		Core Barrel Type: NX
Hammer Wt.: 300lb Fall: 30in.	Hammer Wt.: 140lb Fall: 30in.		
Groundwater Observations: @7 ft ATD			

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						Bedrock (cont'd)		
	C-2		60	52	53		Silvery gray, SCHIST, fine to medium grained, medium bedded, intensely to highly fractured, fresh, strong, 15 to 75 degree bedding angle,(6-6-7-8-7 min/ft)	
30								235
							END OF BORING 30ft	
35								230
40								225
45								220
50								215

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: 17ft Rock: 13ft No. of Soil Samples: 6 No. of Core Runs: 2	NOTES: Difficulty drilling from 17 - 20 ft	Sheet 2 of 2 SM-001-M REV. 1/02

BORING B-4 (CONT.)

REVISION DESCRIPTION | DATE | REV.

SIGNATURE BLOCK:
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Alfred Benesch & Company
200 Glastonbury Boulevard Suite 201
Glastonbury, CT
DESIGNER/DRAFTER: A. BISI CHECKED BY: M. HABEK

CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE:
REPLACEMENT OF BRIDGE NO. 05350
BOSWORTH ROAD OVER MASHAMOQUET BROOK

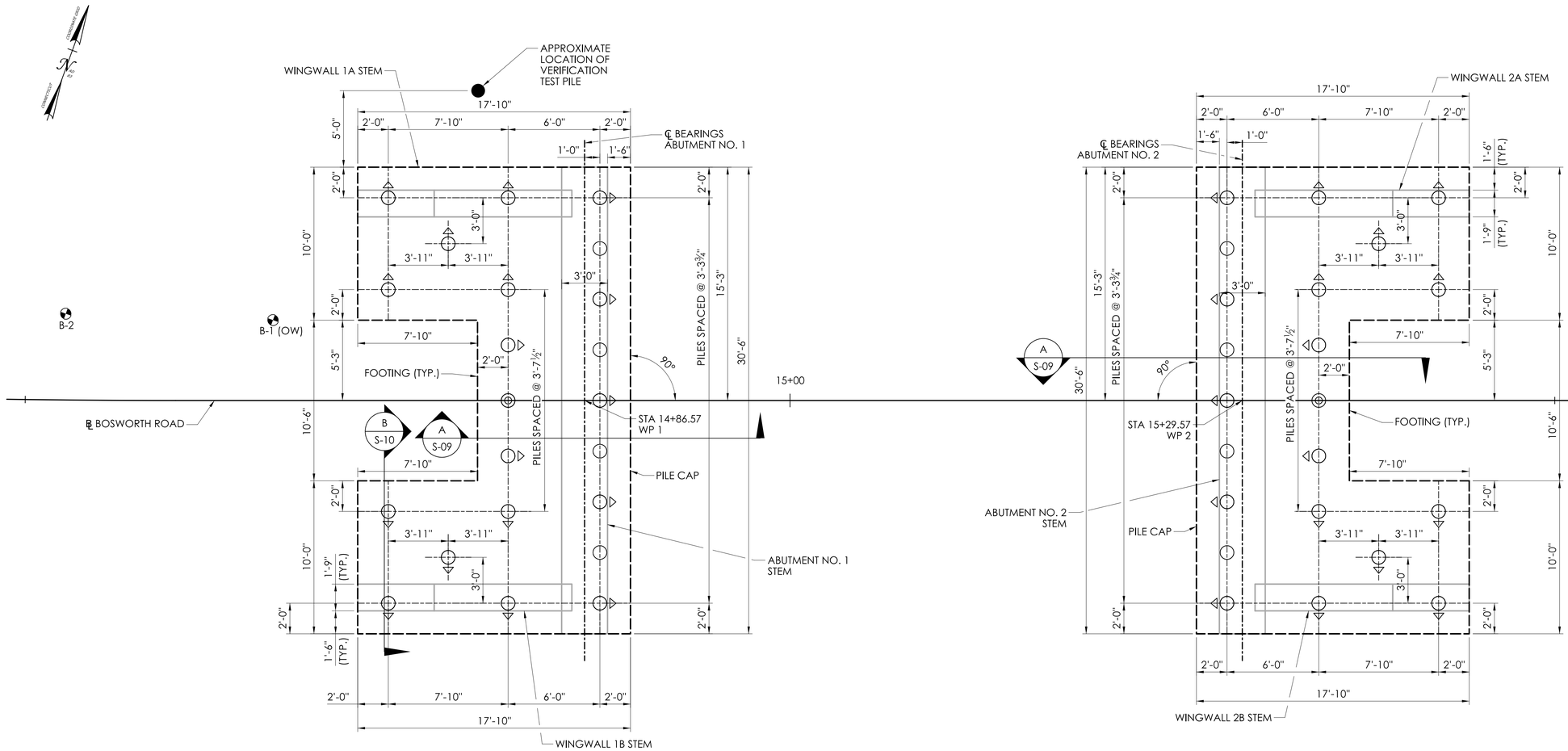
TOWN(S): **POMFRET**

DRAWING TITLE: **BORING LOGS - 2**

PROJECT NO.: **0111-0127**

DRAWING NO.: **S-05**
SHEET NO.: **04.05**

LASTED SAVED BY: hcooper **FILE NAME:** c:\pwwordir\benesch projects\projects\d0254439\SB_CB_0111_0127_BORING 2.dgn
PLOTTED DATE: 9/18/2026



ABUTMENT, FOUNDATION AND PILE LAYOUT PLAN

SCALE: ¼"=1'-0"

NOTES:
1. FOR WORKING POINT COORDINATES, SEE DWG. NO. S-14.
2. SACRIFICIAL VERIFICATION TEST MIRCOPILE SHALL BE CUT OFF AT THE PROPOSED BOTTOM OF FOOTING ELEVATION.

KEY:

- : LOCATION OF BORING
- : MICROPILE (VERTICAL)
- : MICROPILE WITH 1:4 BATTER (IN DIRECTION OF ARROW)
- : LOCATION OF VERIFICATION TEST FOR MICROPILES
- : LOCATION OF PROOF TEST FOR MICROPILES
- : CENTERLINE OF PILE ROW

MAXIMUM DESIGN PILE LOADS:

STRENGTH (I): 140 KIPS
SERVICE (I): 100 KIPS

ULTIMATE MICROPILE CAPACITY = 217 KIPS
(BASED ON 0.70 RESISTANCE FACTOR AND INCLUDES SCOUR, OVERBURDEN AND DOWNDRAG FORCES)

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK: benesch — Alfred Benesch & Company, 295 Glastonbury Boulevard Suite 201, Glastonbury, CT
DESIGNER/DRAFTER: H .COOPER CHECKED BY: M. HABEK

CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE: REPLACEMENT OF BRIDGE NO. 05350 BOSWORTH ROAD OVER MASHAMOQUET BROOK

TOWN(S): POMFRET

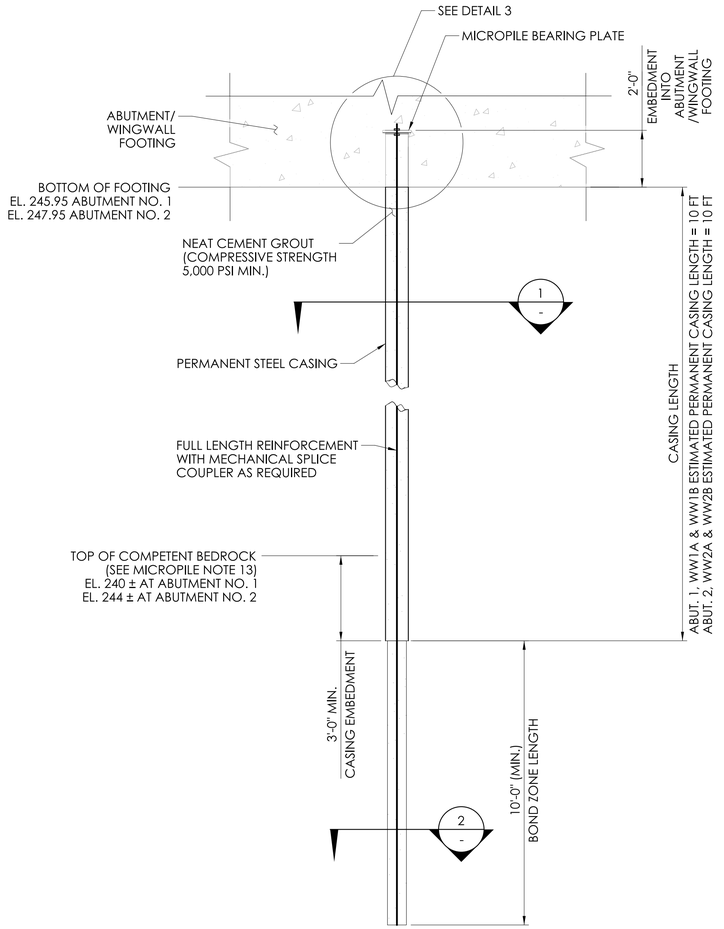
DRAWING TITLE: ABUTMENT, FOUNDATION, AND PILE LAYOUT PLAN

PROJECT NO.: 0111-0127

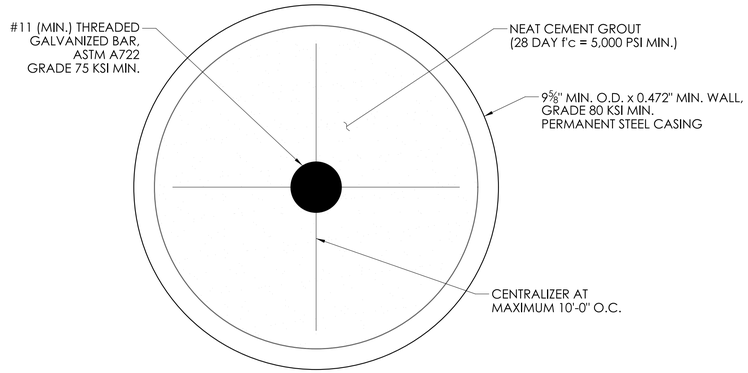
DRAWING NO.: S-06

SHEET NO.: 04.06

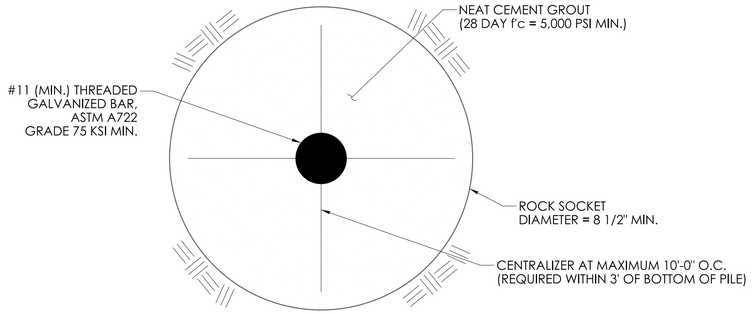
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PLOTTED DATE: 9/18/2026



MICROPILE ELEVATION
SCALE: 3/8" = 1'-0"



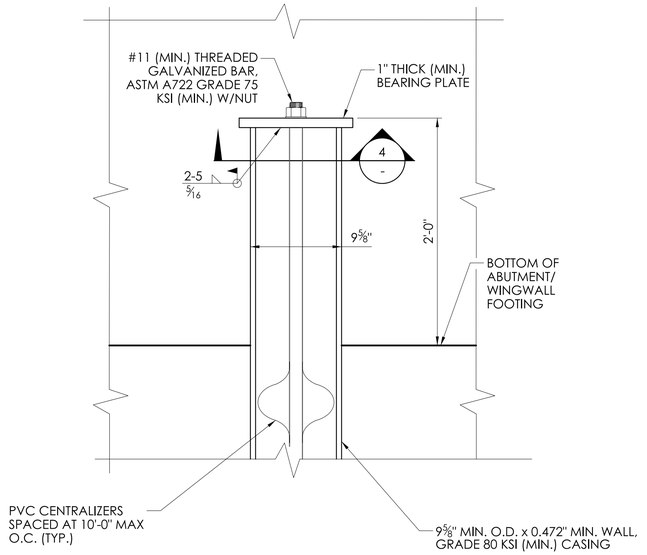
1 - CASED MICROPILE
SCALE: 6" = 1'-0"



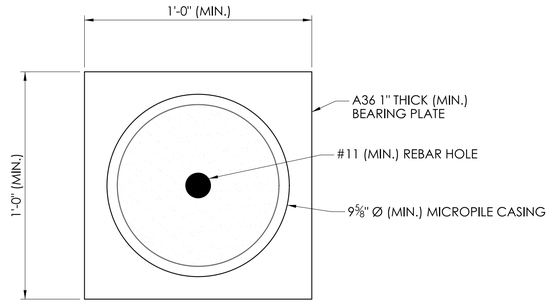
2 - UNCASED MICROPILE
SCALE: 6" = 1'-0"

FINAL MICROPILE DESIGN IS TO BE PROVIDED BY THE CONTRACTOR. SEE S-06 FOR MAXIMUM PILE LOADS.

MICROPILE DETAILS



3 - MICROPILE DETAIL
SCALE: 1 1/2" = 1'-0"



4 - MICROPILE BEARING PLATE DETAIL
SCALE: 3" = 1'-0"

NOTE: THE COST OF FURNISHING AND INSTALLING THE BEARING PLATE SHALL BE INCLUDED FOR PAYMENT UNDER THE ITEM "MICROPILES."

MICROPILE NOTES:

1. THE MICROPILES SHALL BE DESIGNED, INSTALLED, AND TESTED BY THE CONTRACTOR IN ACCORDANCE WITH THE ITEM "MICROPILES." THE MICROPILES SHALL BE DESIGNED ACCORDING TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 10TH EDITION (2024), AS SUPPLEMENTED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION BRIDGE AND ROADWAY STRUCTURE DESIGN MANUAL (RELEASE 1).
2. A VERIFICATION TEST FOR MICROPILES SHALL BE PERFORMED ON A SINGLE NON-PRODUCTION MICROPILE AT THE LOCATION SHOWN ON THE PLANS. WORK INCIDENTAL TO VERIFICATION TESTING SHALL BE PAID FOR UNDER THE PAY ITEM "VERIFICATION TEST FOR MICROPILES."
3. A PROOF TEST FOR MICROPILES SHALL BE PERFORMED ON TWO PRODUCTION MICROPILES (ONE AT EACH ABUTMENT). THE PROOF TEST LOCATIONS FOR EACH PILE AT EACH ABUTMENT SHALL BE AS SHOWN ON THE PLANS. WORK FOR PROOF TESTING SHALL BE PAID FOR UNDER PAY ITEM "PROOF TEST FOR MICROPILES."
4. THE CONNECTION OF THE STEEL CASING TO THE CAST-IN-PLACE PILE CAP SHALL BE DESIGNED TO RESIST, IN COMPRESSION, A FORCE OF NO LESS THAN THE MAXIMUM STRENGTH LIMIT PILE LOAD.
5. THE CASING AND THE REINFORCEMENT SHALL EXTEND INTO THE PILE CAP AS SHOWN ON THE PLANS AT A MINIMUM. THE CASING, REINFORCEMENT AND BEARING PLATE DIMENSIONS SHALL BE DETERMINED BY CONTRACTOR'S DESIGN.
6. THE MICROPILE CASING SHALL EXTEND INTO BEDROCK TO THE EMBEDMENT SHOWN ON THIS SHEET. THE BOND ZONE SHALL BE A MINIMUM OF 10'-0" IN LENGTH AND SHALL BE LOCATED COMPLETELY BELOW BEDROCK.

MICROPILE NOTES CONTINUED:

7. MECHANICAL SPLICE COUPLERS ARE NOT ALLOWED IN THE TOP 10 FEET OF THE PERMANENT MICROPILES. THE GROUT MUST EXTEND TO THE CUTOFF ELEVATION OF THE MICROPILE OR HIGHER. COLD JOINTS IN THE MICROPILE GROUT WILL NOT BE ALLOWED.
8. ON THE CENTRAL REINFORCEMENT, THE MECHANICAL SPLICE COUPLERS SHALL DEVELOP 125% IN TENSION AND COMPRESSION OF THE SPECIFIED YIELD STRENGTH OF THE BAR BEING SPLICED.
9. CASING JOINTS ARE NOT PERMITTED IN THE UPPER 10 FEET OF MICROPILE.
10. MICROPILES SHALL BE INSTALLED WITH A LATERAL TOLERANCE OF 3" IN PLAN. PILE INSTALLATION TOLERANCES APPLY TO THE LEVEL OF THE FINAL PILE CUT-OFF.
11. NEAT CEMENT GROUT SHALL ATTAIN A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF f'c = 5000 PSI.
12. PAY ITEM "MICROPILE LENGTH ADJUSTMENT" SHALL BE USED TO PAY FOR THE DIFFERENCES BETWEEN ESTIMATED LENGTHS AND ACTUAL LENGTHS OF THE CASING.
13. ELEVATION OF COMPETENT BEDROCK TO BE CONFIRMED BY THE GEOTECHNICAL ENGINEER OF RECORD IN THE FIELD DURING INSTALLATION OF MICROPILES.

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK: benesch — Alfred Benesch & Company, 200 Glastonbury Boulevard Suite 201, Glastonbury, CT
DESIGNER/DRAFTER: H. COOPER CHECKED BY: M. HABEK

CTDOT — CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE: REPLACEMENT OF BRIDGE NO. 05350 BOSWORTH ROAD OVER MASHAMOQUET BROOK

TOWN(S): POMFRET

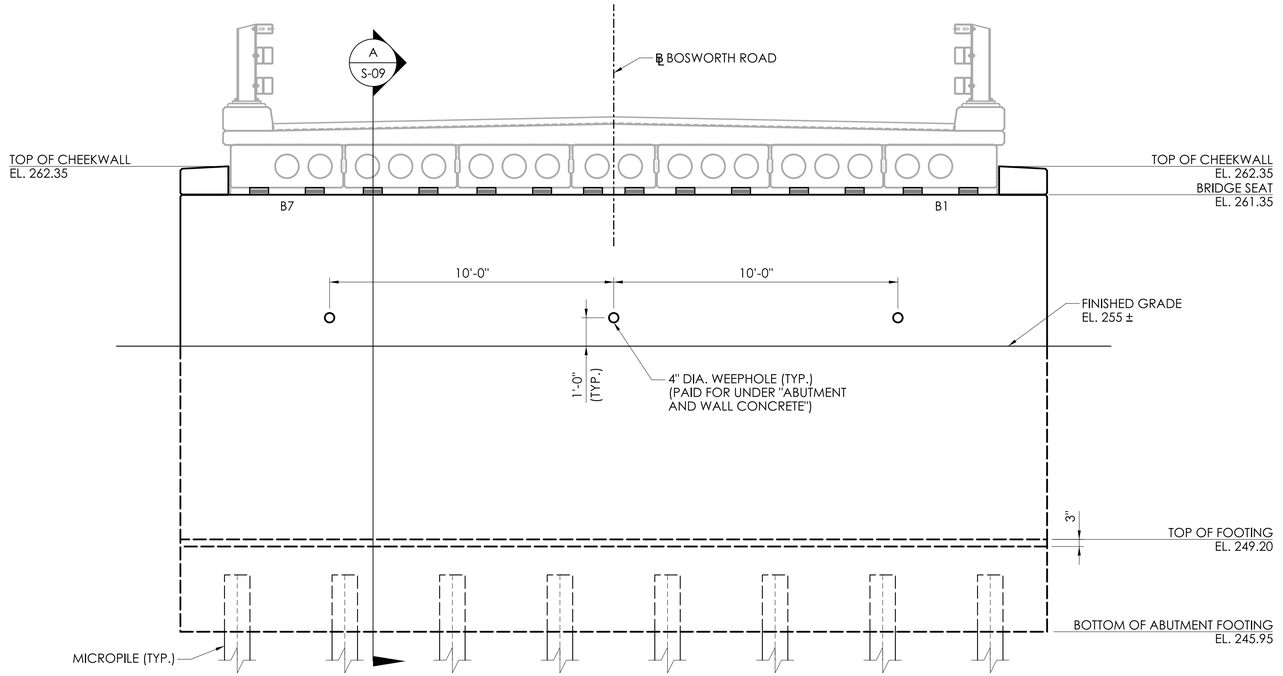
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PROJECT NO.: 0111-0127

DRAWING NO.: S-07

SHEET NO.: 04.07

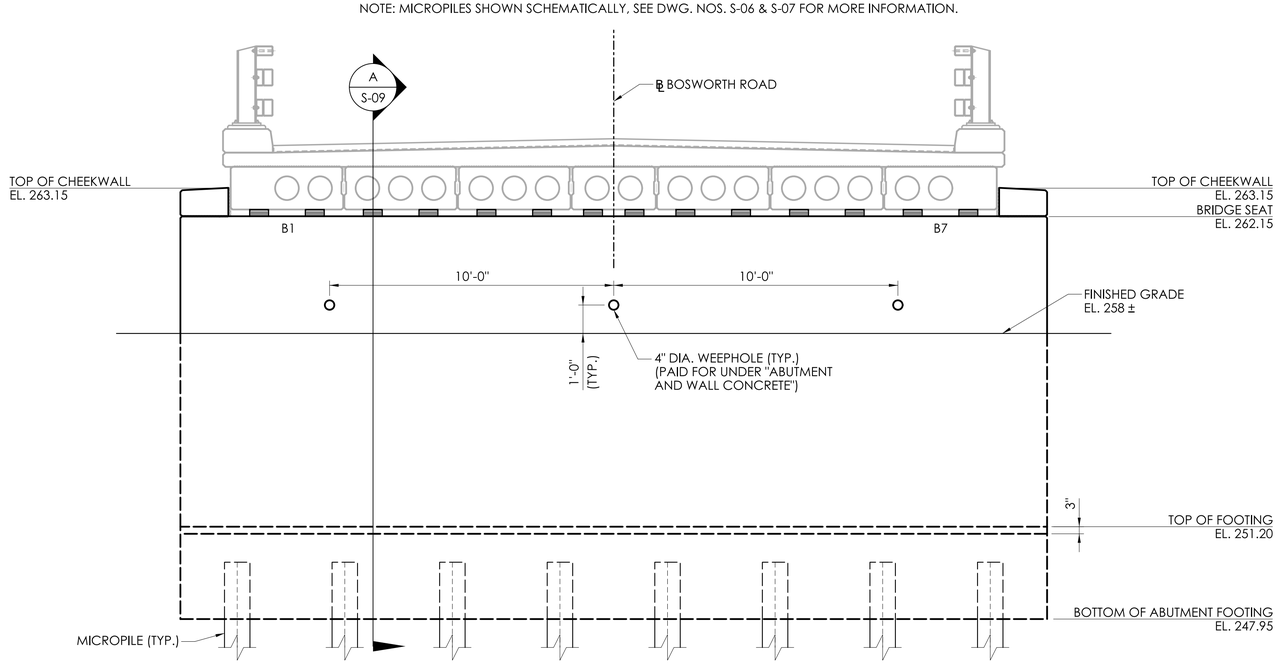
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PLOTTED DATE: 9/18/2026



ABUTMENT NO. 1 ELEVATION

SCALE: 3/8"=1'-0"

NOTE: MICROPILES SHOWN SCHEMATICALLY, SEE DWG. NOS. S-06 & S-07 FOR MORE INFORMATION.



ABUTMENT NO. 2 ELEVATION

SCALE: 3/8"=1'-0"

NOTE: MICROPILES SHOWN SCHEMATICALLY, SEE DWG. NOS. S-06 & S-07 FOR MORE INFORMATION.

REV. | DATE | REVISION DESCRIPTION

SIGNATURE BLOCK:

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Glastonbury, CT

DESIGNER/DRAFTER: A. BISI CHECKED BY: M. HABEK

CTDOT CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE:
REPLACEMENT OF BRIDGE NO. 05350
BOSWORTH ROAD OVER MASHAMOQUET BROOK

TOWN(S): **POMFRET**

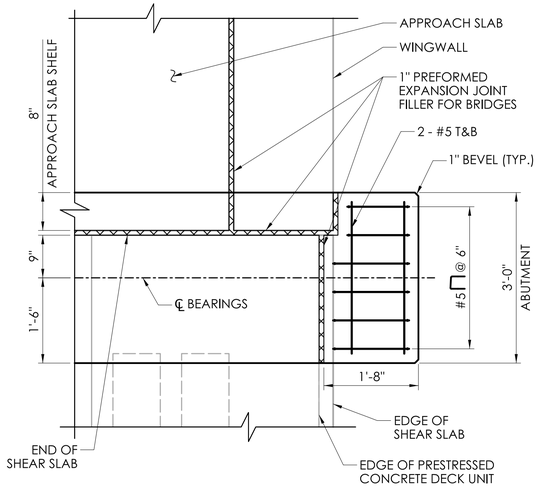
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PROJECT NO.: **0111-0127**

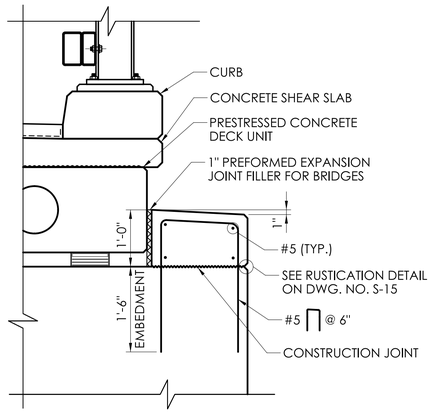
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SHEET NO.: **04.08**

LASTED SAVED BY: csorensen **FILE NAME:** c:\pwwordir\benesch projects\projects\d0254439\SB_CB_0111_0127_ABUT ELEVATION.dgn
PLOTTED DATE: 9/18/2026



PLAN



ELEVATION

NOTES:
1. CHEEKWALL AT WINGWALL 1A SHOWN. OTHERS SIMILAR.
2. CURB NOT SHOWN FOR CLARITY.
3. DRIP NOTCHES ALONG EDGE OF CONCRETE SHEAR SLAB (SEE DWG. NO. S-03) SHALL BE DISCONTINUED ABOVE CHEEKWALLS.

CHEEKWALL DETAILS

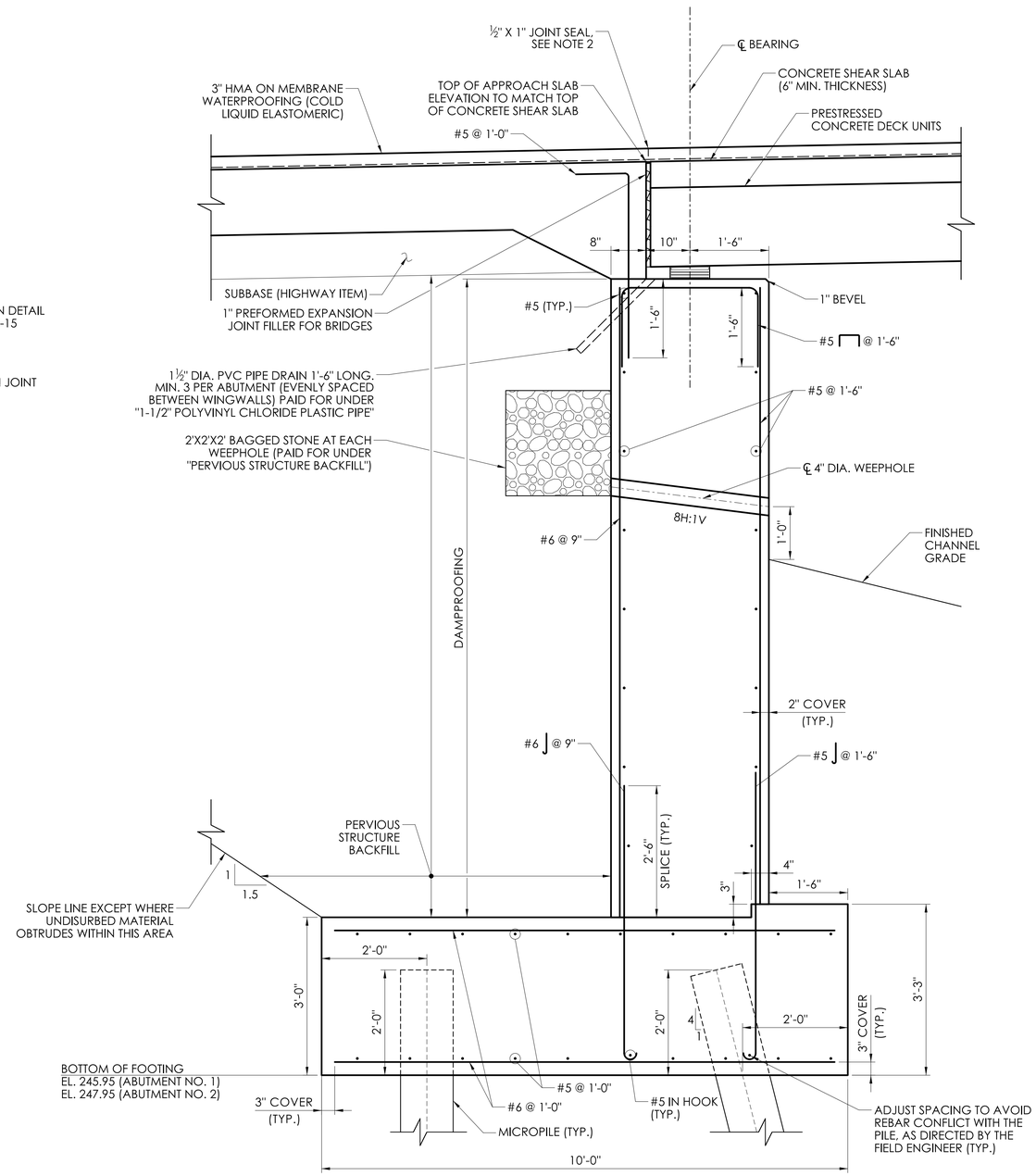
SCALE: ¾" =1'-0"

NOTES:

1. TYPICAL ABUTMENT CROSS SECTION IS TAKEN PERPENDICULAR TO ABUTMENT FACE.
2. CUT BITUMINOUS OVERLAY WITH ½" WIDE X 1½" DEEP KERF AND FILL WITH POURABLE SEALANT. TO BE PAID FOR UNDER THE ITEM "SAWING AND SEALING JOINTS."
3. VERTICAL LIMITS OF "STRUCTURE EXCAVATION - EARTH (EXCLUDING COFFERDAM AND DEWATERING)" AND "STRUCTURE EXCAVATION - ROCK (EXCLUDING COFFERDAM AND DEWATERING)" SHALL EXTEND TO EXISTING GRADE.

EXCAVATION NOTES:

1. EXCAVATION WITHIN 2 FEET, HORIZONTALLY, OF ANY PROPOSED SUBSTRUCTURE FOOTING SHALL BE PAID FOR UNDER THE ITEMS "STRUCTURE EXCAVATION - EARTH (EXCLUDING COFFERDAM AND DEWATERING)" AND "STRUCTURE EXCAVATION - ROCK (EXCLUDING COFFERDAM AND DEWATERING)."
2. EXCAVATION BETWEEN EXISTING ABUTMENTS AND 2 FEET IN FRONT OF PROPOSED ABUTMENTS SHALL BE PAID FOR UNDER THE ITEM "CHANNEL EXCAVATION - EARTH." REMOVAL OF EXISTING ABUTMENTS AND WINGWALLS SHALL BE PAID FOR UNDER THE ITEM "REMOVAL OF EXISTING MASONRY."
3. ANY EXCAVATION OUTSIDE OF THE LIMITS DESCRIBED IN NOTES 1 AND 2 ABOVE, AND WITHIN THE EXISTING CHANNEL (BELOW OHW ELEVATION) SHALL BE PAID FOR UNDER THE ITEM "EXCAVATION AND REUSE OF EXISTING CHANNEL BOTTOM MATERIAL."
4. ANY EXCAVATION OUTSIDE OF THE LIMITS DESCRIBED IN NOTES 1 AND 2 ABOVE, AND OUTSIDE THE EXISTING CHANNEL (ABOVE OHW ELEVATION) SHALL BE PAID FOR UNDER "EARTH EXCAVATION."



TYPICAL ABUTMENT SECTION

SCALE: ¾" =1'-0"

A
S-06
S-08

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK: benesch — Alfred Benesch & Company, 200 Glastonbury Boulevard Suite 201, Glastonbury, CT

DESIGNER/DRAFTER: A. BISI CHECKED BY: M. HABEK

CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE: REPLACEMENT OF BRIDGE NO. 05350 BOSWORTH ROAD OVER MASHAMOQUET BROOK

TOWN(S): POMFRET

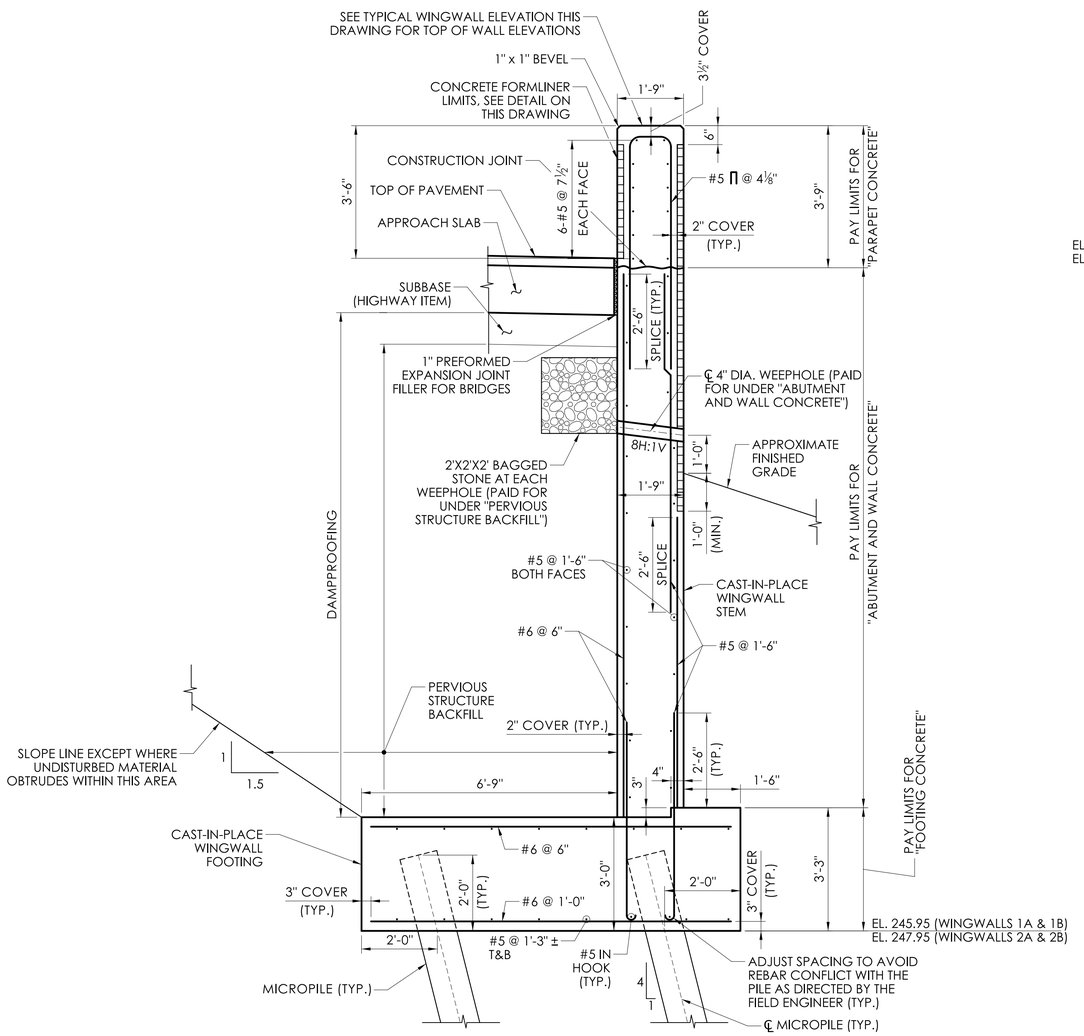
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PROJECT NO.: 0111-0127

DRAWING NO.: S-09

SHEET NO.: 04.09

LASTED SAVED BY: abisi **FILE NAME:** c:\pwwordir\benesch projects\projects\d0254439\SB_CB_0111_0127_ABUT DETAILS.dgn
PLOTTED DATE: 9/18/2026

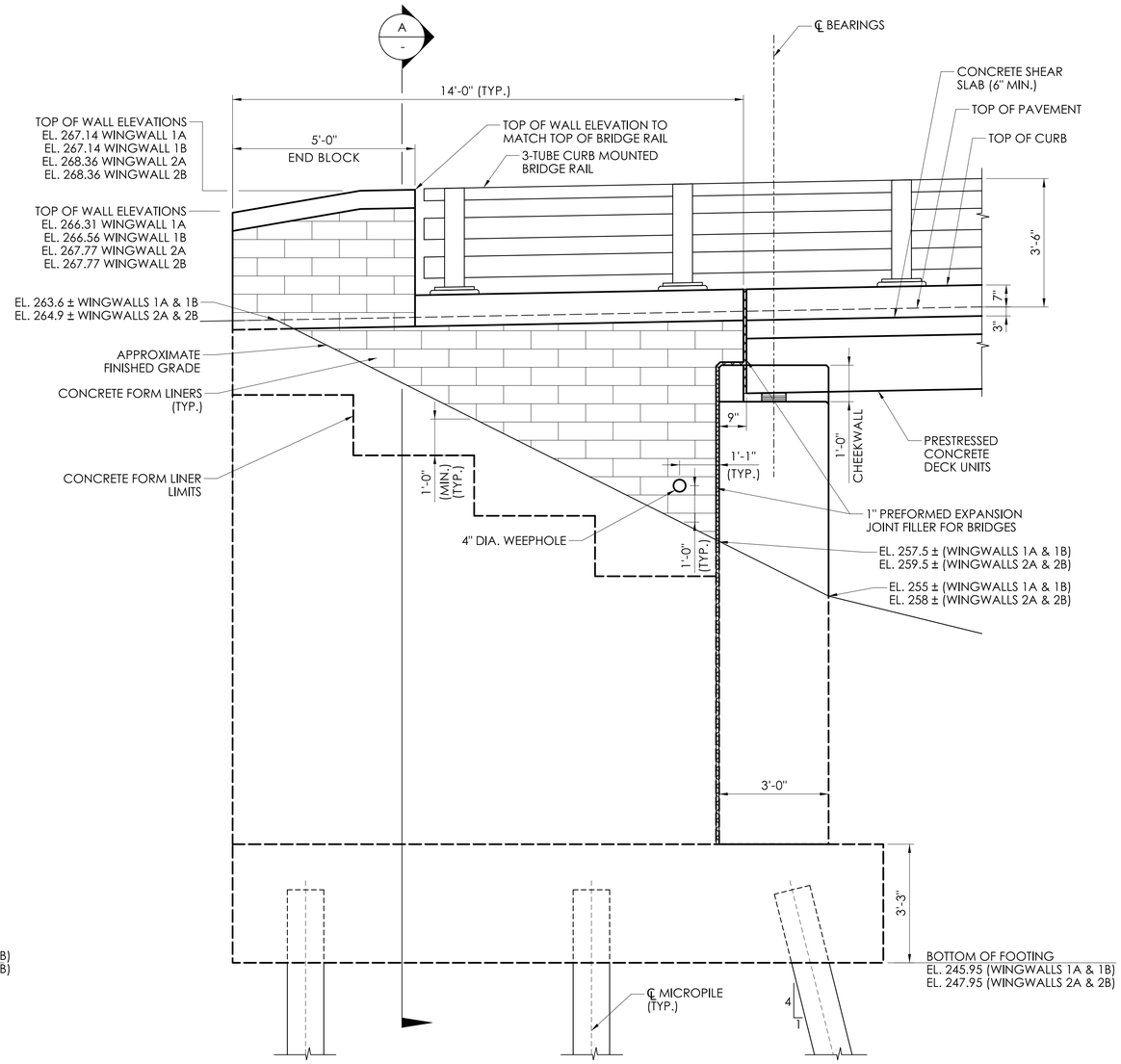


TYPICAL WINGWALL SECTION

A - B S-06

SCALE: ½"=1'-0"

(WINGWALL 1B SHOWN, OTHERS SIMILAR)

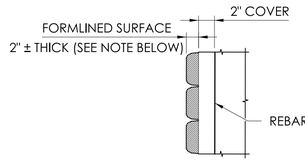


TYPICAL WINGWALL ELEVATION

SCALE: ½"=1'-0"

(WINGWALL 1B SHOWN, OTHERS SIMILAR)

NOTES:
1. SEE DWG NO. S-18 FOR ADDITIONAL REINFORCEMENT IN WINGWALLS.
2. VERTICAL LIMITS OF "STRUCTURE EXCAVATION - EARTH (EXCLUDING COFFERDAM AND DEWATERING)" AND "STRUCTURE - ROCK (EXCLUDING COFFERDAM AND DEWATERING)" SHALL EXTEND TO EXISTING GRADE. REFER FOR EXCAVATION NOTES ON DWG. NO. S-09 FOR ADDITIONAL INFORMATION.
3. SEE DWG. NO. S-09 FOR EXCAVATION NOTES.



NOTE:
FOR ACCEPTABLE CONCRETE FORMLINER MANUFACTURERS AND PATTERNS SEE SPECIAL PROVISION "CONCRETE FORM LINERS".

CONCRETE FORMLINER DETAIL

NTS

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK: benesch — Alfred Benesch & Company, 200 Glastonbury Boulevard Suite 201, Glastonbury, CT

DESIGNER/DRAFTER: H. COOPER CHECKED BY: M. HABEK

CTDOT — CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE: REPLACEMENT OF BRIDGE NO. 05350 BOSWORTH ROAD OVER MASHAMOQUET BROOK

TOWN(S): POMFRET

DRAWING TITLE: WINGWALL DETAILS

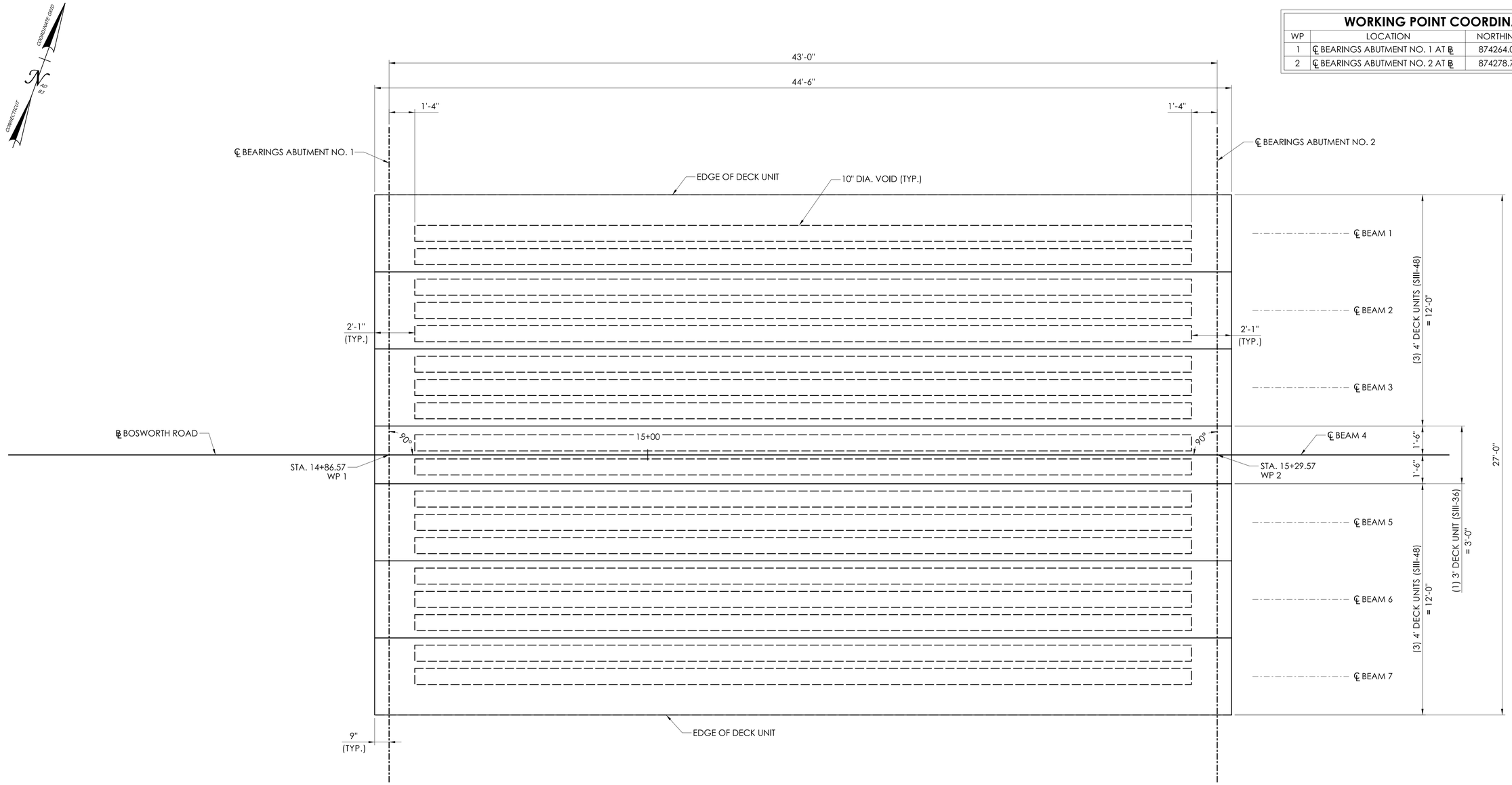
PROJECT NO.: 0111-0127

DRAWING NO.: S-10

SHEET NO.: 04.10

LASTED SAVED BY: hcooper **FILE NAME:** c:\pwwordir\benesch projects\projects\d0254439\SB_CB_0111_0127_WINGWALL DETAILS.dgn
PLOTTED DATE: 9/18/2026

WORKING POINT COORDINATES			
WP	LOCATION	NORTHING	EASTING
1	℄ BEARINGS ABUTMENT NO. 1 AT ℄	874264.08	1216641.87
2	℄ BEARINGS ABUTMENT NO. 2 AT ℄	874278.74	1216682.29



FRAMING PLAN
SCALE: 3/8"=1'-0"

ESTIMATED CAMBER AT MIDSPAN			
BEAM LOCATION	AT TRANSFER (INCHES)	AT ERECTION (INCHES)	FINAL (INCHES)
BEAMS 1 & 7	0.905	1.220	0.922
BEAMS 2, 3, 5 & 6	0.905	1.291	1.125
BEAM 4	0.615	0.747	0.421

CAMBER NOTES:

AT TRANSFER: CAMBER DUE TO PRESTRESS FORCE AT TRANSFER MINUS THE DEFLECTION DUE TO BEAM WEIGHT.

AT ERECTION: CAMBER (DUE TO PRESTRESS FORCE AT TRANSFER MINUS DEFLECTION DUE TO BEAM WEIGHT) THAT IS PRESENT AT APPROXIMATELY 30-60 DAYS AFTER TRANSFER.

FINAL: LONG-TERM CAMBER THAT IS PRESENT AFTER ALL DEAD LOADS ARE APPLIED TO THE STRUCTURE AND AFTER LONG TERM CREEP AND RELAXATION HAVE TAKEN PLACE.

CAMBER TABLE NOTES:

1. CAMBER DATA GIVEN IS POSITIVE (+) FOR UPWARD CAMBER.
2. PRESTRESS CAMBER CALCULATED BASED ON "PCI-DESIGN HANDBOOK - PRECAST AND PRESTRESSED CONCRETE" MULTIPLIERS BY BENTLEY LEAP BRIDGE CONCRETE SOFTWARE.

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK: benesch — Alfred Benesch & Company, 200 Glastonbury Boulevard Suite 201, Glastonbury, CT
DESIGNER/DRAFTER: A. BISI CHECKED BY: M. HABEK

CTDOT — CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE: REPLACEMENT OF BRIDGE NO. 05350 BOSWORTH ROAD OVER MASHAMOQUET BROOK

TOWN(S): POMFRET

DRAWING TITLE: FRAMING PLAN

PROJECT NO.: 0111-0127

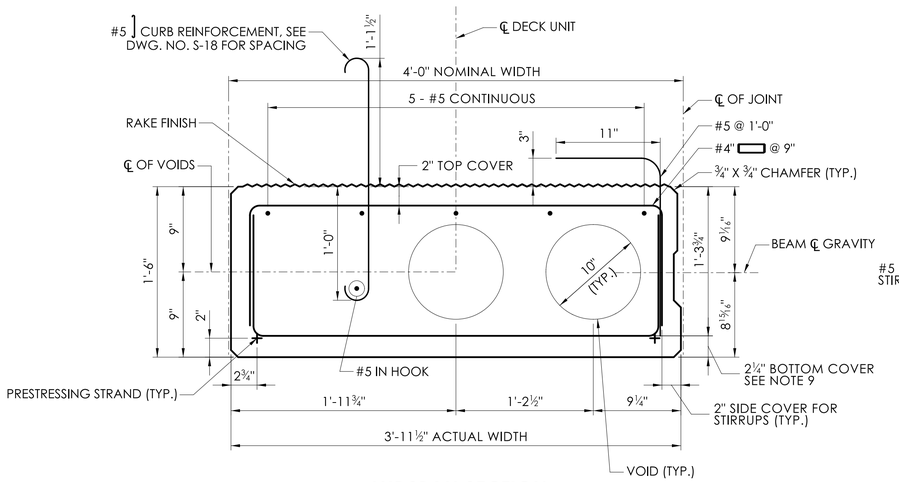
DRAWING NO.: S-11

SHEET NO.: 04.11

LASTED SAVED BY: csorensen **FILE NAME:** c:\pwwordir\benesch projects\projects\d0254439\SB_CB_0111_0127_FRAME.dgn
PLOTTED DATE: 9/18/2026

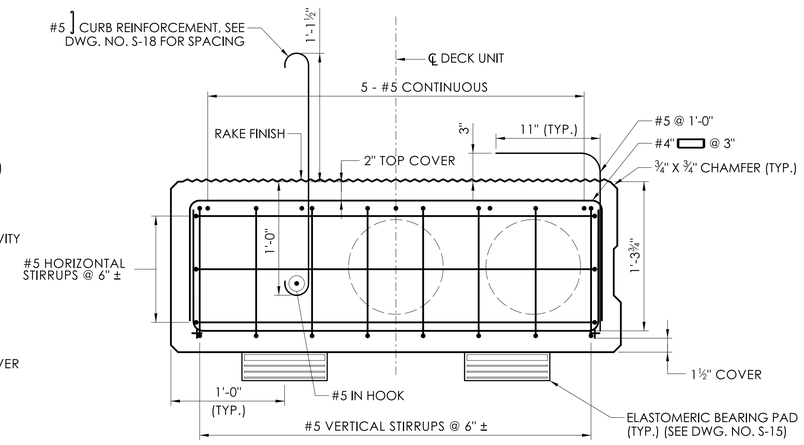
PRESTRESSED DECK UNIT NOTES:

1. PRESTRESSED DECK UNITS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
   28 DAY COMPRESSIVE STRENGTH: f'c = 8,000 PSI
   COMPRESSIVE STRENGTH AT TRANSFER: f'ci = 6,800 PSI
2. PRESTRESSED STRANDS SHALL BE 0.6" DIAMETER, UNCOATED, LOW RELAXATION STRANDS CONFORMING TO THE REQUIREMENTS OF AASHTO M203, GRADE 270 AND SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
   ULTIMATE STRENGTH: f's = 270 KSI
   JACKING TENSION fsi = 44 KIPS PER STRAND
3. PRESTRESSED STRANDS SHALL BE PLACED 2" (MIN.) ON CENTER AND SHALL HAVE A MINIMUM COVER OF 2".
4. ENDS OF DECK UNITS SHALL BE VERTICAL AFTER APPLICATION OF FULL DEAD LOAD.
5. THE DRILLING OF HOLES IN PRESTRESSED DECK UNITS, OR USE OF POWDER ACTUATED TOOLS ON PRESTRESSED DECK UNITS WILL NOT BE PERMITTED.
6. THE DECK UNITS SHALL BE PLACED AT THE NOMINAL SPACING SHOWN ON THE PLANS WITH A ½" WIDE GAP BETWEEN THE UNITS. THE WIDTH OF THIS GAP CAN VARY DUE TO THE SWEEP OF THE UNITS.
7. GROUT FOR SHEAR KEYS SHALL BE RODDED OR VIBRATED TO ENSURE THAT ALL VOIDS IN THE SHEAR KEY ARE FILLED.
8. THE FABRICATOR IS FULLY RESPONSIBLE FOR THE DESIGN OF THE LIFTING DEVICE WHICH SHALL BE ADEQUATE FOR THE SAFETY FACTOR REQUIRED BY THE ERECTION PROCEDURE.
9. 2¼" COVER FOR DEFORMED STEEL BARS SHOWN IS REQUIRED TO FACILITATE THE PLACEMENT OF THE BOTTOM PRESTRESSING STRANDS. THE FABRICATOR MAY MODIFY COVER FOR DEFORMED STEEL BARS (1½" MIN.) IF NO CONFLICTS EXIST WITH THE PRESTRESSING STRANDS.



MIDSPAN SECTION

TOTAL NUMBER OF STRANDS AT MIDSPAN = 15
PRESTRESSING STRANDS CENTER OF GRAVITY AT MIDSPAN: 2.00" (FROM BOTTOM OF BEAM)

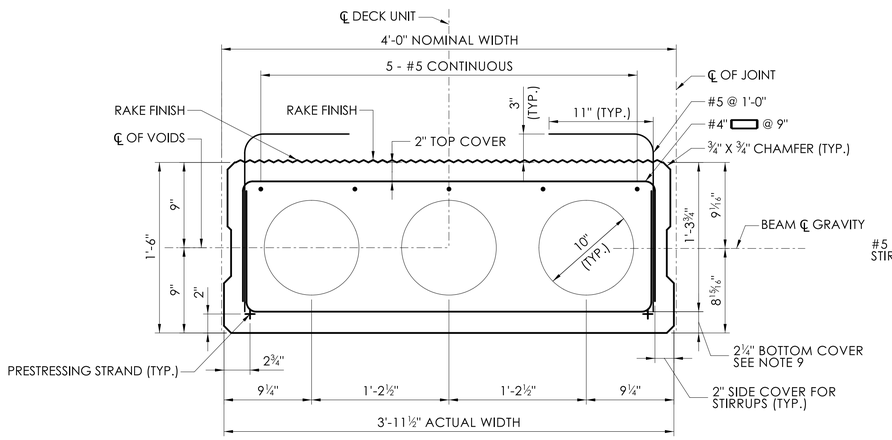


SECTION AT BEARINGS

TOTAL NUMBER OF STRANDS AT MIDSPAN = 15
PRESTRESSING STRANDS CENTER OF GRAVITY AT MIDSPAN: 2.00" (FROM BOTTOM OF BEAM INCLUDING EFFECTS OF DEBONDING)
DEBOND 3 STRANDS FOR 4'-0"

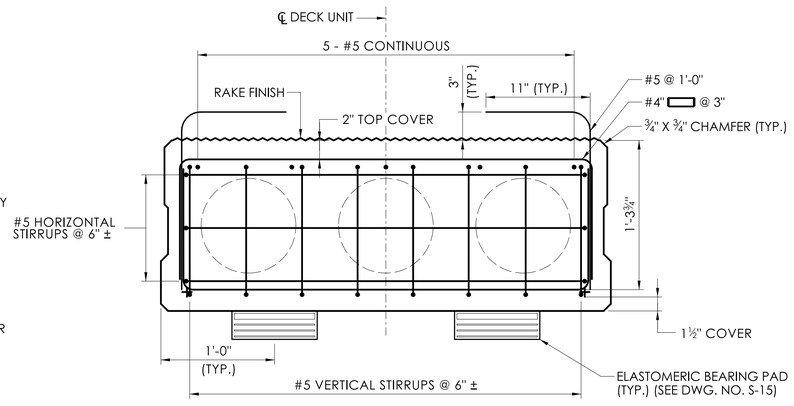
BEAMS 1 & 7 (SIII-48)

SCALE: 1½"=1'-0"



MIDSPAN SECTION

TOTAL NUMBER OF STRANDS AT MIDSPAN = 15
PRESTRESSING STRANDS CENTER OF GRAVITY AT MIDSPAN: 2.00" (FROM BOTTOM OF BEAM)



SECTION AT BEARINGS

TOTAL NUMBER OF STRANDS AT MIDSPAN = 15
PRESTRESSING STRANDS CENTER OF GRAVITY AT MIDSPAN: 2.00" (FROM BOTTOM OF BEAM INCLUDING EFFECTS OF DEBONDING)
DEBOND 3 STRANDS FOR 4'-0"

BEAMS 2, 3, 5 & 6 (SIII-48)

SCALE: 1½"=1'-0"

REVISION DESCRIPTION | DATE | REV.

SIGNATURE BLOCK: benesch — Alfred Benesch & Company, 200 Glastonbury Boulevard Suite 201, Glastonbury, CT
DESIGNER/DRAFTER: C. SORENSEN CHECKED BY: M. HABEK

CTDOT — CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE: REPLACEMENT OF BRIDGE NO. 05350 BOSWORTH ROAD OVER MASHAMOQUET BROOK

TOWN(S): POMFRET

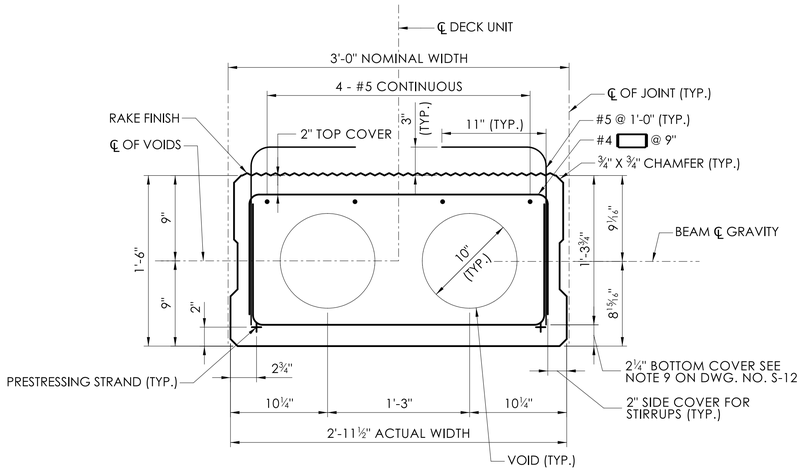
DRAWING TITLE: PRESTRESSED DECK UNIT DETAILS - 1

PROJECT NO.: 0111-0127

DRAWING NO.: S-12

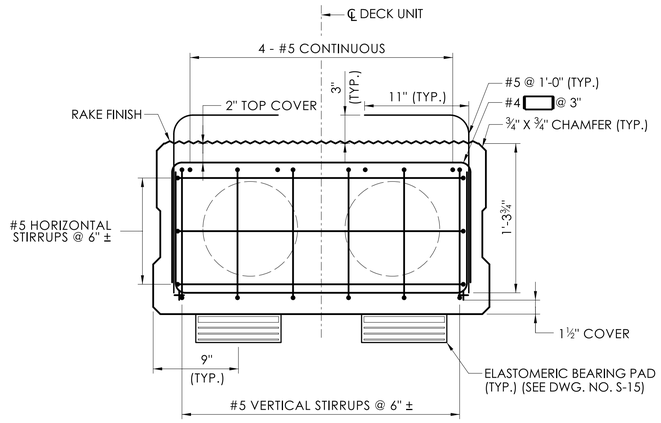
SHEET NO.: 04.12

LASTED SAVED BY: abisi **FILE NAME:** c:\pwwordir\benesch projects\projects\d0254439\SB_CB_0111_0127_DECK UNIT 1.dgn
PLOTTED DATE: 9/18/2026



MIDSPAN SECTION

TOTAL NUMBER OF STRANDS AT MIDSPAN = 11
PRESTRESSING STRANDS CENTER OF GRAVITY AT MIDSPAN: 2.00" (FROM BOTTOM OF BEAM)

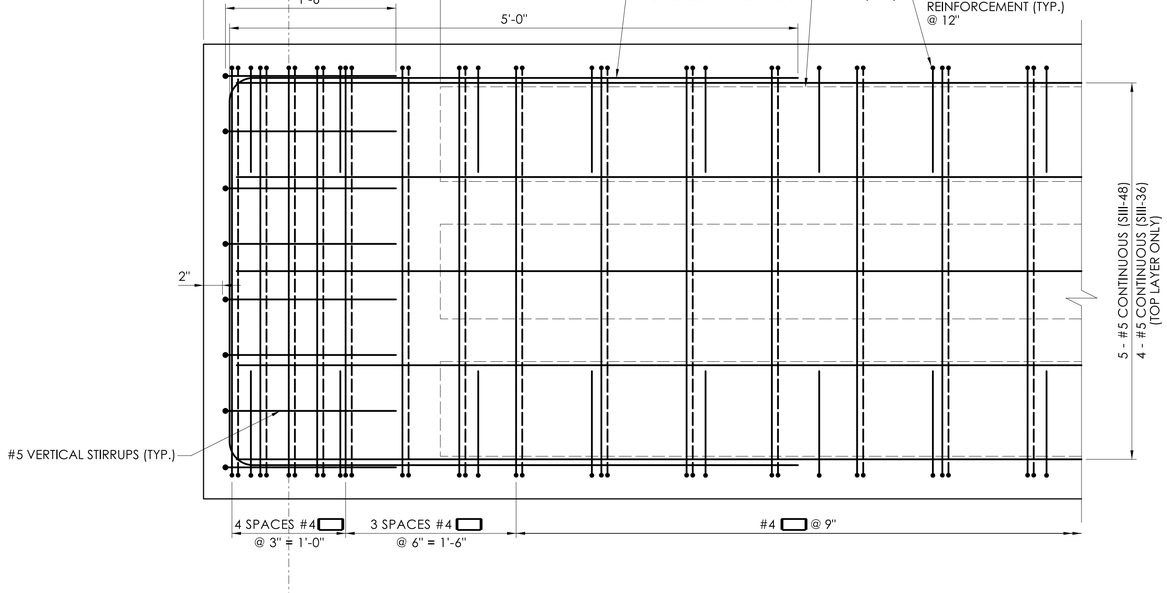


SECTION AT BEARING

TOTAL NUMBER OF STRANDS AT MIDSPAN = 11
PRESTRESSING STRANDS CENTER OF GRAVITY AT MIDSPAN: 2.00" (FROM BOTTOM OF BEAM INCLUDING EFFECTS OF DEBONDING)
DEBOND 2 STRANDS FOR 4'-0"

BEAM 4 (SIII-36)

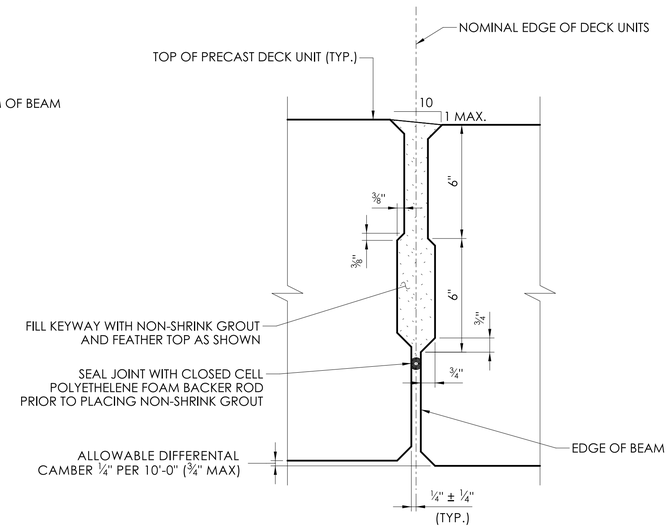
SCALE: 1½"=1'-0"



TYPICAL DECK UNIT PLAN

SCALE: 1½"=1'-0"

NOTE: BEAMS 2, 3, 5 & 6 SHOWN. BEAMS 1, 4 & 7 SIMILAR.



TYPICAL SECTION THRU LONGITUDINAL JOINT

SCALE: 3"=1'-0"

NOTE: NON-SHRINK GROUT SHALL BE INCLUDED UNDER THE ITEMS "PRESTRESSED DECK UNITS (3'-0" X 1'-6")" AND "PRESTRESSED DECK UNITS (4'-0" X 1'-6")."

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK: benesch — Alfred Benesch & Company, 200 Glastonbury Boulevard, Suite 201, Glastonbury, CT
DESIGNER/DRAFTER: C. SORENSEN CHECKED BY: M. HABEK

CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE: REPLACEMENT OF BRIDGE NO. 05350 BOSWORTH ROAD OVER MASHAMOQUET BROOK

TOWN(S): POMFRET

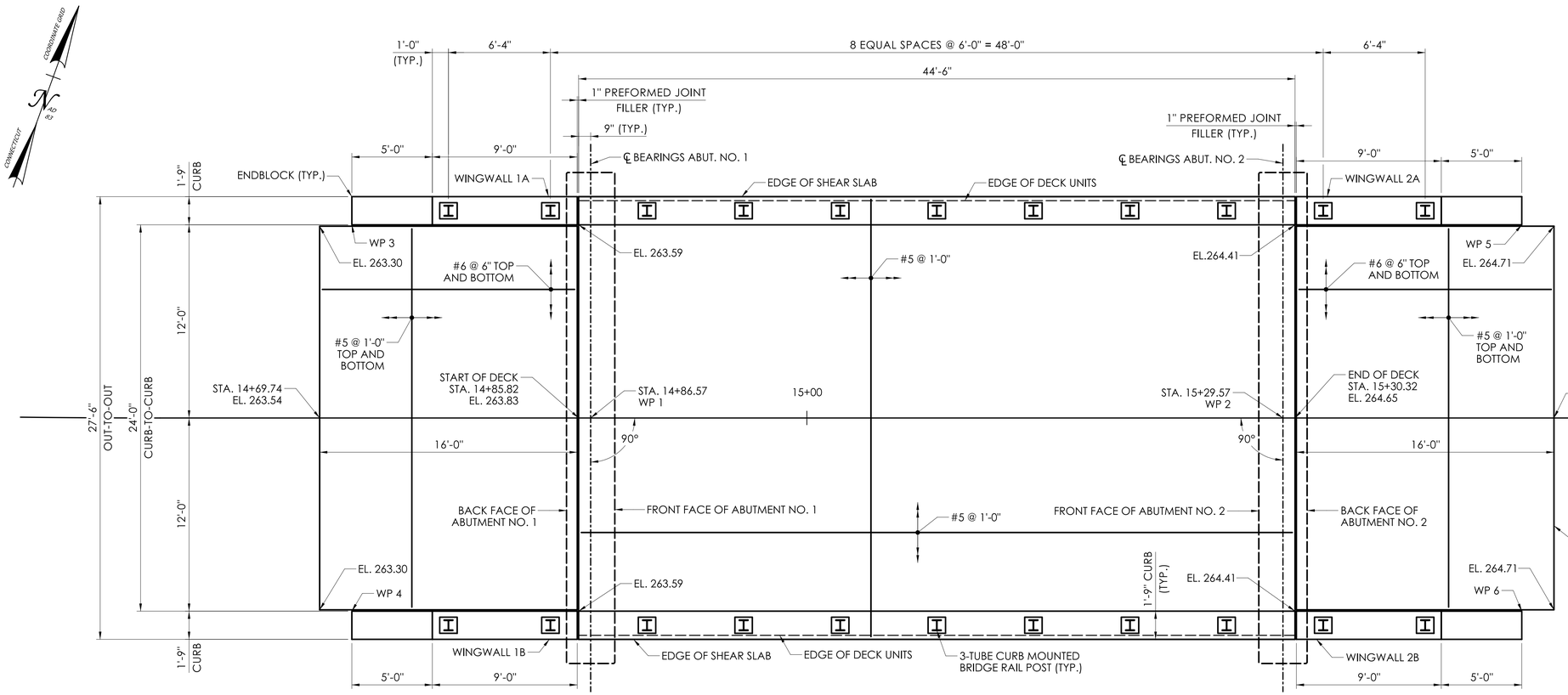
DRAWING TITLE: PRESTRESSED DECK UNIT DETAILS - 2

PROJECT NO.: 0111-0127

DRAWING NO.: S-13

SHEET NO.: 04.13

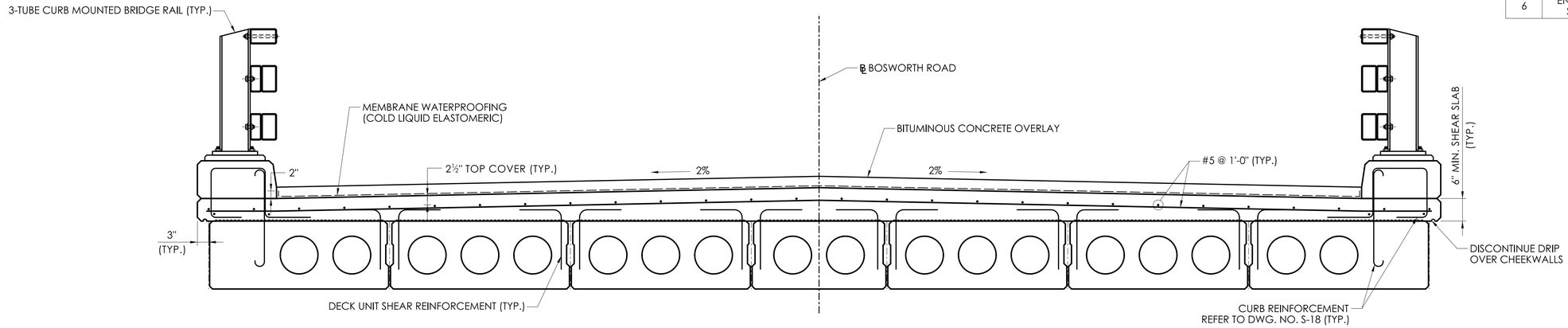
LASTED SAVED BY: csorensen **FILE NAME:** c:\pwwordir\benesch projects\projects\d0254439\SB_CB_0111_0127_DECK UNIT 2.dgn
PLOTTED DATE: 9/18/2026



DECK SLAB PLAN

SCALE: ¼"=1'-0"

NOTES:
1. PRESTESSED DECK UNIT VOIDS NOT SHOWN FOR CLARITY.
2. ALL ELEVATIONS SHOWN REFER TO TOP OF CONCRETE SHEAR SLAB/APPROACH SLAB, UNLESS NOTED OTHERWISE.



SHEAR SLAB REINFORCEMENT

SCALE: ¾"=1'-0"

TOP OF DECK ELEVATIONS AND DEAD LOAD DEFLECTIONS

BEAM NO.		℄ BRG ABUT. 1	0.25L	0.5L	0.75L	℄ BRG ABUT. 2
1	TOP OF DECK ELEVATION	263.61	263.81	264.01	264.21	264.41
	DEAD LOAD DEFLECTION	0.00	0.02	0.03	0.02	0.00
2	TOP OF DECK ELEVATION	263.69	263.89	264.09	264.29	264.49
	DEAD LOAD DEFLECTION	0.00	0.02	0.03	0.02	0.00
3	TOP OF DECK ELEVATION	263.77	263.97	264.17	264.37	264.57
	DEAD LOAD DEFLECTION	0.00	0.02	0.03	0.02	0.00
4	TOP OF DECK ELEVATION	263.84	264.04	264.24	264.44	264.64
	DEAD LOAD DEFLECTION	0.00	0.02	0.03	0.02	0.00
5	TOP OF DECK ELEVATION	263.77	263.97	264.17	264.37	264.57
	DEAD LOAD DEFLECTION	0.00	0.02	0.03	0.02	0.00
6	TOP OF DECK ELEVATION	263.69	263.89	264.09	264.29	264.49
	DEAD LOAD DEFLECTION	0.00	0.02	0.03	0.02	0.00
7	TOP OF DECK ELEVATION	263.61	263.81	264.01	264.21	264.41
	DEAD LOAD DEFLECTION	0.00	0.02	0.03	0.02	0.00

ELEVATION AND DEFLECTION TABLE NOTES:

1. L IS SPAN LENGTH BETWEEN ℄ OF BEARINGS.
2. DATA IS GIVEN IN FEET AT THE CENTERLINE OF EACH BEAM.
3. DEAD LOAD DEFLECTION IS TOTAL DEFLECTION DUE TO SHEAR SLAB, RAIL CURBS, RAILINGS, AND WEARING SURFACE.

WORKING POINTS COORDINATES

WP	LOCATION	NORTHING	EASTING
1	℄ BEARINGS ABUT NO. 1 AT ℄	874264.08	1216641.87
2	℄ BEARINGS ABUT NO. 2 AT ℄	874278.74	1216682.29
3	END OF WW1A STREETSIDE	874270.31	1216623.83
4	END OF WW1B STREETSIDE	874247.75	1216632.01
5	END OF WW2A STREETSIDE	874295.07	1216692.15
6	END OF WW2B STREETSIDE	874272.51	1216700.33

REVISION DESCRIPTION | DATE | REV.

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DESIGNER/DRAFTER: A. BISI CHECKED BY: M. HABEK

CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE: REPLACEMENT OF BRIDGE NO. 05350 BOSWORTH ROAD OVER MASHAMOQUET BROOK

TOWN(S): POMFRET

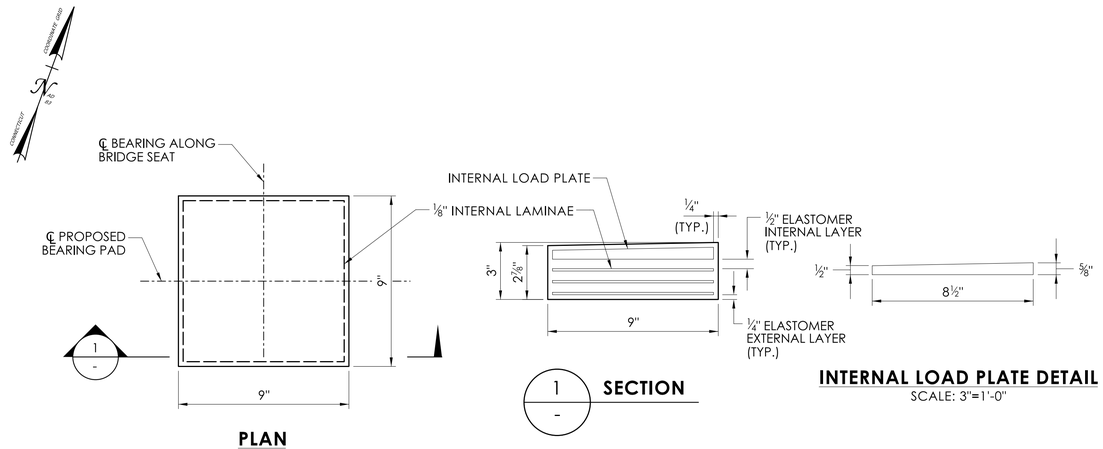
DRAWING TITLE: DECK SLAB PLAN

PROJECT NO.: 0111-0127

DRAWING NO.: S-14

SHEET NO.: 04.14

LASTED SAVED BY: hcooper **FILE NAME:** c:\pwwordir\benesch projects\projects\d0254439\SB_CB_0111_0127_DECK.dgn
PLOTTED DATE: 9/18/2026



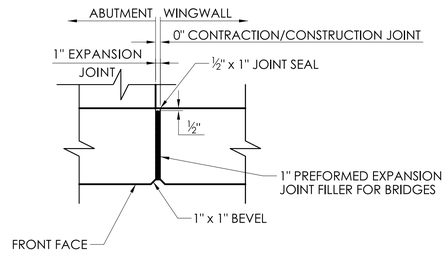
ELASTOMERIC BEARING PAD
SCALE: 3"=1'-0"

INTERNAL LOAD PLATE DETAIL
SCALE: 3"=1'-0"

STEEL-LAMINATED ELASTOMERIC BEARING NOTES:

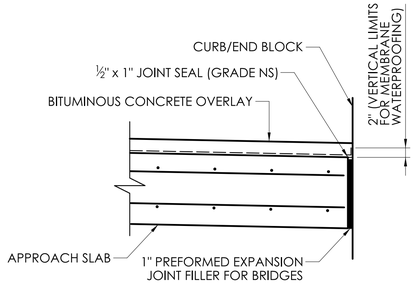
1. METHOD A WAS USED TO DESIGN STEEL REINFORCED RECTANGULAR ELASTOMERIC BEARING PADS.
2. ELASTOMER SHALL HAVE A HARDNESS (SHORE 'A') 60 DUROMETER AND A SHEAR MODULUS WITHIN THE RANGE OF 0.13 KSI TO 0.20 KSI AT 73°F.
3. STEEL LAMINAE SHALL CONFORM TO ASTM A1011, GRADE 36.
4. TAPERED INTERNAL LOAD PLATE SHALL CONFORM TO AASHTO M 270 GRADE 36.
5. ELASTOMERIC BEARING PADS SHALL BE INSTALLED AT AN AMBIENT TEMPERATURE BETWEEN 40°F AND 80°F.

ELASTOMERIC BEARING DESIGN LOADS:	
DL (KIPS)	LL+I (KIPS)
14.3	27.3

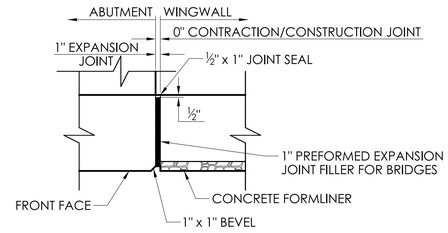


VERTICAL STEM JOINT DETAILS AT ABUTMENT/WINGWALL INTERFACE
SCALE: ¾" = 1'-0"

1. NO REINFORCEMENT SHALL PASS THROUGH EXPANSION JOINTS OR CONTRACTION JOINTS. REINFORCEMENT SHALL PASS THROUGH CONSTRUCTION JOINTS.
2. JOINT SEAL TO EXTEND FROM TOP OF FOOTING TO TOP OF WALL.

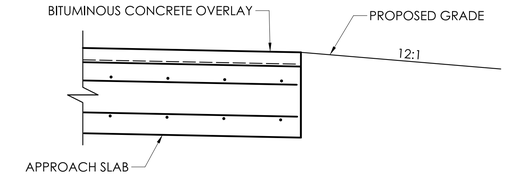


APPROACH SLAB AT WINGWALL DETAIL
SCALE: ¾"=1'-0"

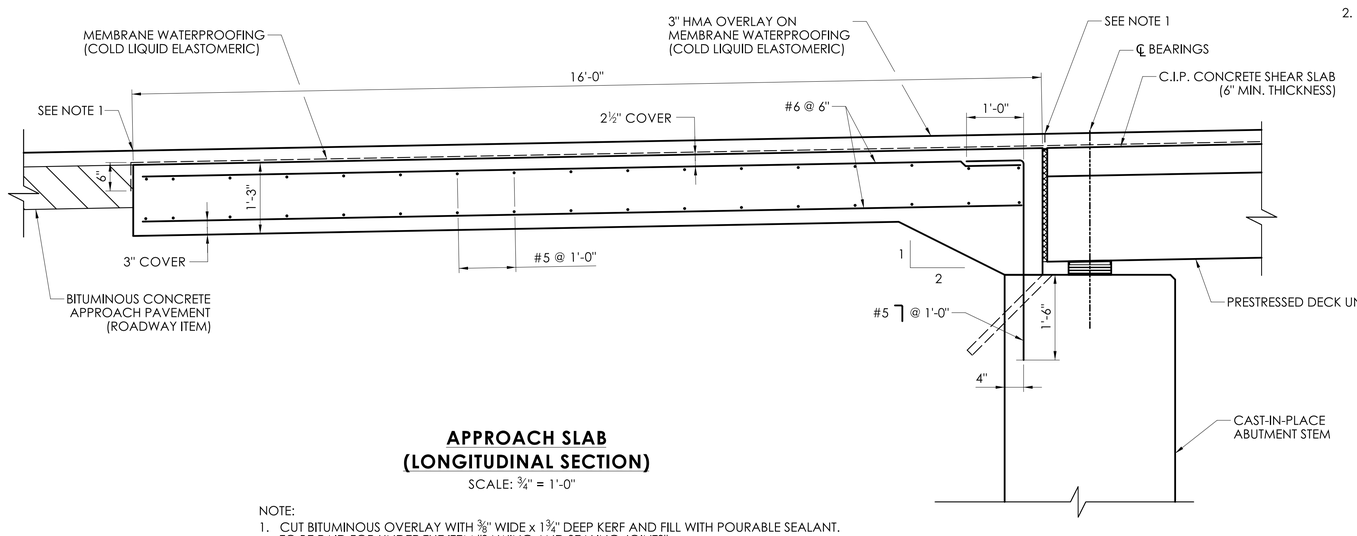


VERTICAL STEM JOINT DETAILS AT ABUTMENT/WINGWALL INTERFACE WITH FORMLINER
SCALE: ¾" = 1'-0"

1. NO REINFORCEMENT SHALL PASS THROUGH EXPANSION JOINTS OR CONTRACTION JOINTS. REINFORCEMENT SHALL PASS THROUGH CONSTRUCTION JOINTS.
2. JOINT SEAL TO EXTEND FROM TOP OF FOOTING TO TOP OF WALL.

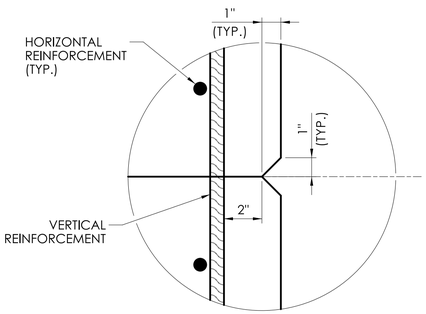


APPROACH SLAB AT GRADE DETAIL
SCALE: ¾"=1'-0"



APPROACH SLAB (LONGITUDINAL SECTION)
SCALE: ¾" = 1'-0"

NOTE:
1. CUT BITUMINOUS OVERLAY WITH ⅜" WIDE x 1¾" DEEP KERF AND FILL WITH POURABLE SEALANT. TO BE PAID FOR UNDER THE ITEM "SAWING AND SEALING JOINTS".
2. SEE HIGHWAY SUBSET FOR SUBBASE INFORMATION.



TYPICAL RUSTICATION DETAIL
SCALE: 3"=1'-0"

NOTE: NO RUSTICATION AT CONSTRUCTION JOINT BETWEEN BOTTOM OF CONCRETE CURB AND TOP OF WINGWALL STEM

REVISION DESCRIPTION | DATE | REV.

SIGNATURE BLOCK: benesch — Alfred Benesch & Company, 200 Glastonbury Boulevard Suite 201, Glastonbury, CT
DESIGNER/DRAFTER: H. COOPER CHECKED BY: M. HABEK

CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE: REPLACEMENT OF BRIDGE NO. 05350 BOSWORTH ROAD OVER MASHAMOQUET BROOK

TOWN(S): POMFRET

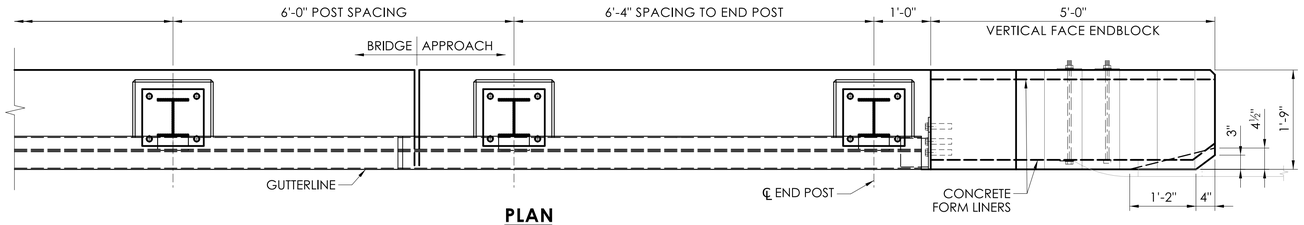
DRAWING TITLE: MISCELLANEOUS DETAILS

PROJECT NO.: 0111-0127

DRAWING NO.: S-15

SHEET NO.: 04.15

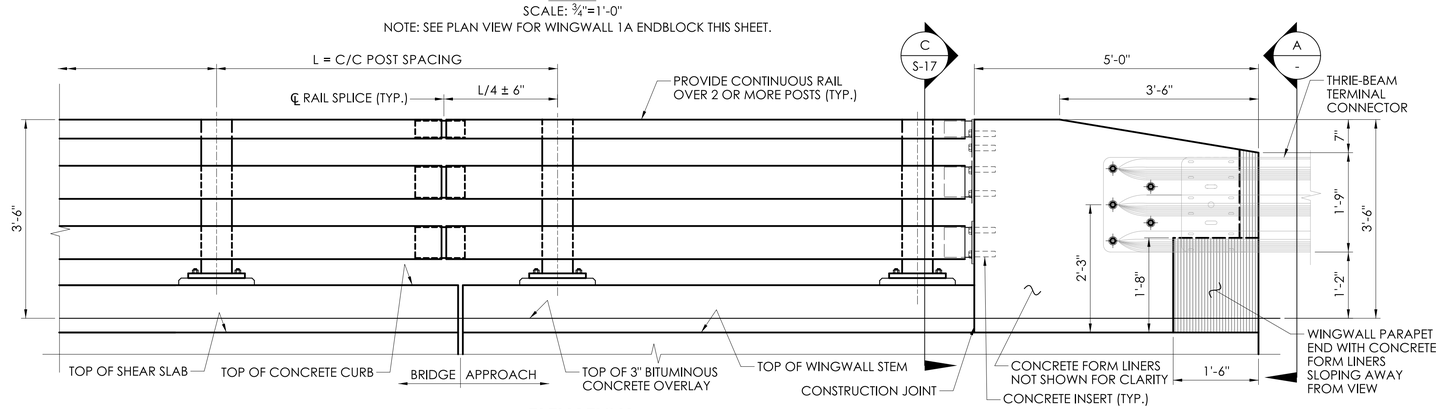
LASTED SAVED BY: csorensen **FILE NAME:** c:\pwwordir\benesch projects\projects\d0254439\SB_CB_0111_0127_MIS DETAILS.dgn
PLOTTED DATE: 9/18/2026



PLAN

SCALE: ¾"=1'-0"

NOTE: SEE PLAN VIEW FOR WINGWALL 1A ENDBLOCK THIS SHEET.



ELEVATION

SCALE: ¾"=1'-0"

NOTE:
SEE DWG. NO. S-10 FOR WINGWALL DIMENSIONS.
SEE ELEVATION VIEW FOR WINGWALL 1A THIS SHEET.

BRIDGE RAIL NOTES

THE STANDARD 3-TUBE CURB MOUNTED BRIDGE RAIL HAS BEEN EVALUATED AT TEST LEVEL 4 (TL-4) AND COMPLIES WITH MASH 2016. THE 3-TUBE CURB MOUNTED BRIDGE RAILS ON THIS PROJECT HAVE BEEN DESIGNED USING TEST LEVEL 3 (TL-3).

CONCRETE ON THE CURB AND WINGWALL PARAPET/ENDBLOCK SHALL BE CLASS PCC04462. THE COMPRESSIVE STRENGTH OF THE CONCRETE, BASED ON TEST CYLINDERS, SHALL BE NO LESS THAN 4,000 PSI PRIOR INSTALLING THE EPOXY GROUT BELOW THE BASEPLATES. PRIOR TO ALLOWING THE RAIL, CURB AND WINGWALL TO BE PLACED IN SERVICE FOR THE PROTECTION OF VEHICULAR TRAFFIC, THE COMPRESSIVE STRENGTH OF THE GROUT, BASED ON STRENGTH GAIN OVER TIME LISTED IN THE GROUT MANUFACTURER'S DATA SHEET, SHALL BE NO LESS THAN 5,000 PSI.

THE 1 IN. DIAMETER PIPE SHALL CONFORM TO ASTM A53, GRADE B OR ASTM A501 AND SHALL BE GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A123.

THE REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE 60 AND BE HOT-DIP GALVANIZED.

HOLLOW STRUCTURAL SHAPES SHALL CONFORM TO ASTM A500 GRADE C OR ASTM A501, GRADE B.

ALL OTHER STEEL SHALL CONFORM TO ASTM A572, GRADE 50 UNLESS NOTED OTHERWISE.

THE SILICON CONTENT OF THE STEEL USED FOR THE EXPOSED MEMBERS AND PLATE COMPONENTS SHALL FALL WITHIN THE RANGE OF 0 TO 0.04% OR 0.15% TO 0.25%.

THE ANCHOR BOLTS SHALL CONFORM TO ASTM F1554, GRADE 105. THE NUTS SHALL CONFORM TO ASTM A563, GRADE DH. THE WASHERS SHALL CONFORM TO ASTM F436. THE BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM F2329.

ALL HIGH STRENGTH BOLTS SHALL CONFORM TO ASTM F3125 GRADE A325, TYPE 1. NUTS SHALL CONFORM TO ASTM A563, GRADE DH. CIRCULAR, FLAT, HARDENED STEEL WASHERS SHALL CONFORM TO ASTM F436. THE BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM F2329 OR ASTM B695, CLASS 55.

DOME HEAD BOLTS WITH WRENCH SLOTS USED FOR THE TOP RAIL SHALL CONFORM TO ASTM F3125 GRADE A325, TYPE 1 OR ASTM A449, GRADE 1. SUBSTITUTION OF DOME HEAD BOLTS WITH BOLTS MEETING DIFFERENT MATERIAL REQUIREMENTS IS NOT PERMITTED. NUTS SHALL CONFORM TO ASTM A563, GRADE DH. CIRCULAR, FLAT, HARDENED STEEL WASHERS SHALL CONFORM TO ASTM F436. THE BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM F2329 OR ASTM B695, CLASS 55.

RAIL ELEMENTS SHALL BE FABRICATED TO THE HORIZONTAL AND VERTICAL ALIGNMENT OF THE STRUCTURE. POSTS SHALL BE INSTALLED NORMAL TO GRADE IN THE LONGITUDINAL DIRECTION AND VERTICAL IN THE TRANSVERSE DIRECTION.

ALL BRIDGE MATERIALS, INCLUDING ANCHOR PLATES, ANCHOR BOLTS, CONCRETE INSERTS, HARDWARE AND EPOXY GROUT, SHALL BE PAID FOR UNDER THE ITEM "3-TUBE CURB MOUNTED BRIDGE RAIL."

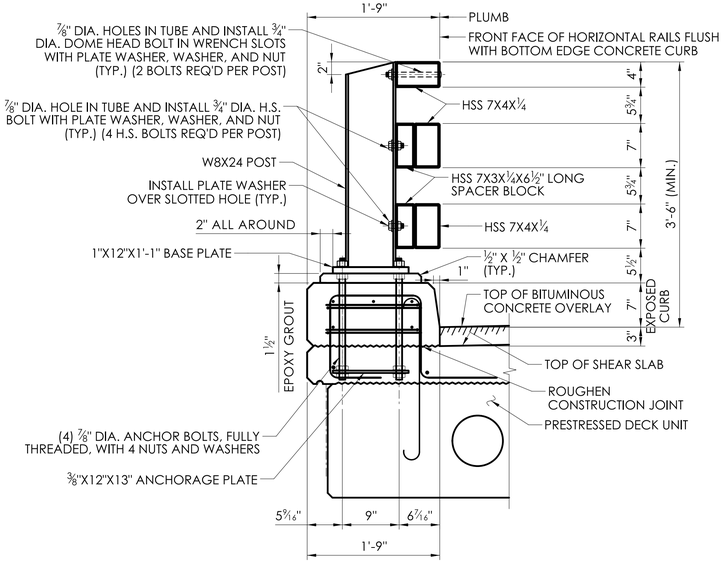
ALL STEEL SHAPES, PLATES AND HOLLOW STRUCTURAL SECTIONS SHALL BE SHOP METALLIZED IN ACCORDANCE WITH THE SPECIAL PROVISION "METALLIZING STRUCTURAL STEEL (SITE NO. 1)." ALL STEEL SHALL BE TOPCOATED. THE COLOR OF THE TOPCOAT SHALL BE DETERMINED BY THE TOWN OF POMFRET. THE CONTRACTOR SHALL PROVIDE SAMPLES FOR AMS-STD-595 COLOR NOS. 20040, 10032 AND 10049 FOR THE TOWN TO MAKE A SELECTION. THE APPLICATION OF THE TOPCOAT SHALL BE IN ACCORDANCE WITH THE SPECIAL PROVISION "METALLIZING STRUCTURAL STEEL (SITE NO. 1)."

ALL EXPOSED GALVANIZED BOLT HEADS, WASHERS AND NUTS SHALL BE HAND TOOL CLEANED TO THE SATISFACTION OF THE ENGINEER.

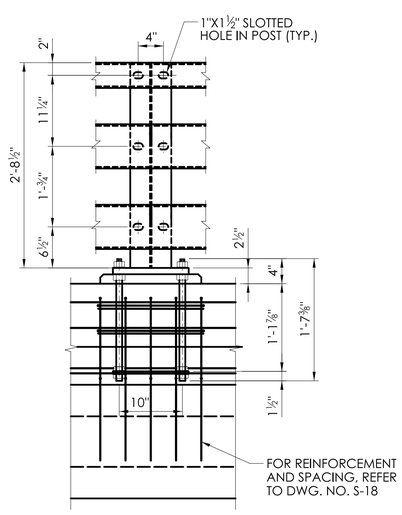
THE METALLIZING ALONG WITH THE FIELD TOUCH UP AND SEALING OF THE STEEL PLATES, POSTS AND RAILS ARE INCLUDED FOR PAYMENT UNDER THE ITEM "METALLIZING STRUCTURAL STEEL (SITE NO. 1)."

THE FIELD TOUCH UP PAINTING OF THE GALVANIZED FASTENERS IS INCLUDED FOR PAYMENT UNDER THE ITEM "METALLIZING STRUCTURAL STEEL (SITE NO. 1)."

A SILICONE SEALANT SHALL BE APPLIED AT RAIL SPLICE LOCATIONS AND END BLOCK CONNECTIONS TO PREVENT MOISTURE INFILTRATION. SILICONE SEALANT SHALL BE PAID FOR UNDER THE ITEM "3-TUBE CURB MOUNTED BRIDGE RAIL."



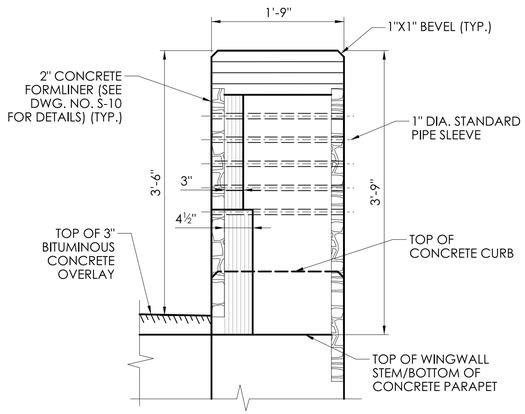
TYPICAL SECTION AT POST



ELEVATION AT POST

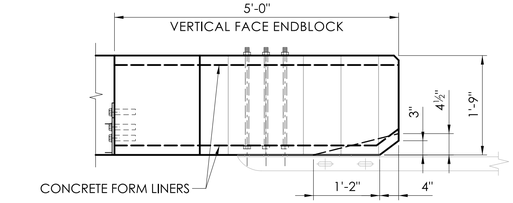
CURB AND POST DETAILS

SCALE: 1½"=1'-0"



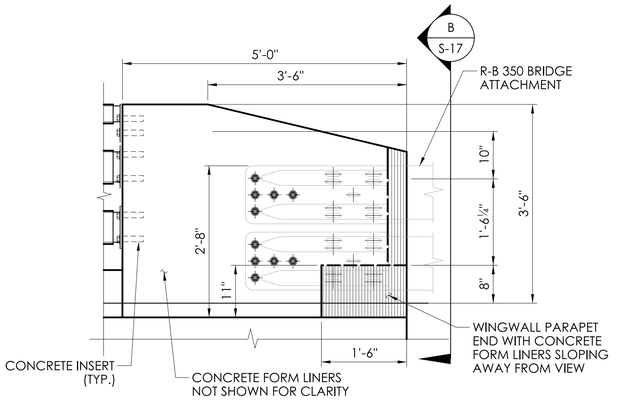
SECTION A - -

SCALE: 1½"=1'-0"



PLAN (WINGWALL 1A ENDBLOCK)

SCALE: ¾"=1'-0"



ELEVATION (WINGWALL 1A ENDBLOCK)

SCALE: ¾"=1'-0"

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK: benesch — Alfred Benesch & Company, 295 Glastonbury Boulevard Suite 201, Glastonbury, CT

DESIGNER/DRAFTER: A. BISI CHECKED BY: M. HABEK

CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE: REPLACEMENT OF BRIDGE NO. 05350 BOSWORTH ROAD OVER MASHAMOQUET BROOK

TOWN(S): POMFRET

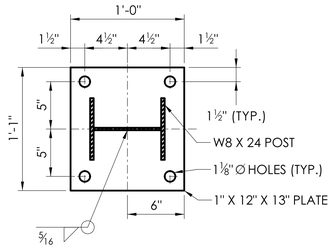
DRAWING TITLE: 3-TUBE CURB MOUNTED BRIDGE RAIL DETAILS - 1

PROJECT NO.: 0111-0127

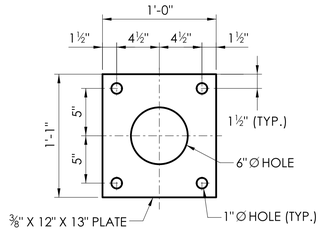
DRAWING NO.: S-16

SHEET NO.: 04.16

LASTED SAVED BY: abisi **FILE NAME:** c:\pwwordir\benesch projects\projects\d0254439\SB_CB_0111_0127_RAIL 1.dgn
PLOTTED DATE: 9/22/2026



BASE PLATE DETAIL
SCALE: 1½"=1'-0"



ANCHOR PLATE DETAIL
SCALE: 1½"=1'-0"

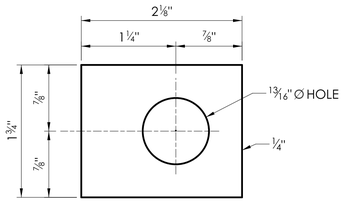
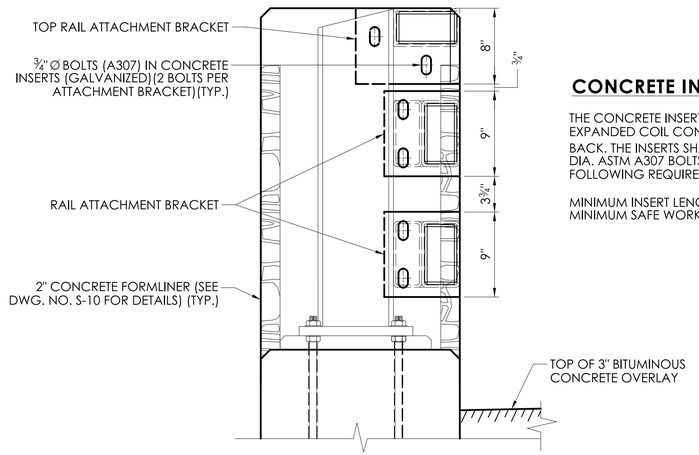


PLATE WASHER "C"
SCALE: FULL SCALE

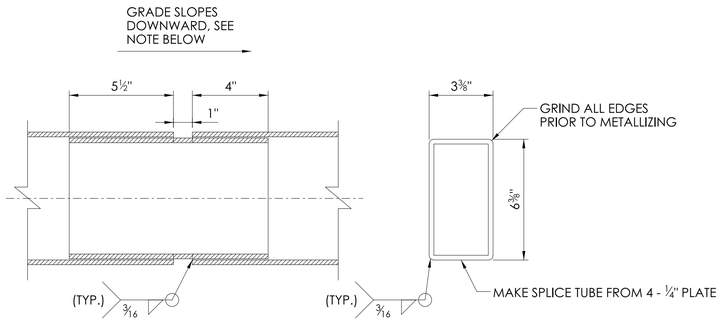


SECTION C
SCALE: 1½"=1'-0"
S-16

CONCRETE INSERT NOTES

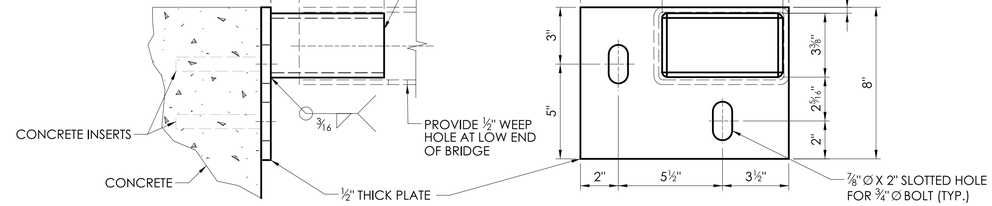
THE CONCRETE INSERTS SHALL BE HOT-DIP GALVANIZED, EXPANDED COIL CONCRETE INSERTS WITH A CLOSED-BACK. THE INSERTS SHALL BE THREADED TO RECEIVE ¾" DIA. ASTM A307 BOLTS. THE INSERTS SHALL MEET THE FOLLOWING REQUIREMENTS:

MINIMUM INSERT LENGTH = 4½"
MINIMUM SAFE WORKING LOAD IN TENSION = 4000 LBS.

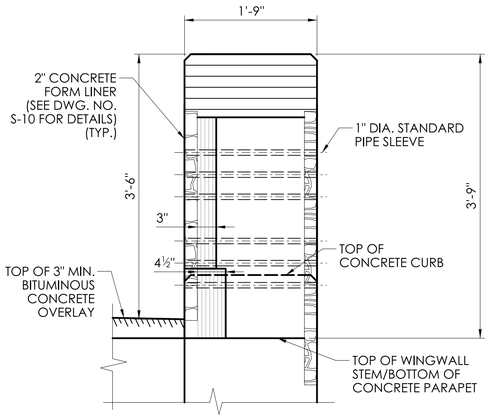


RAIL SPLICE DETAILS
SCALE: 3"=1'-0"

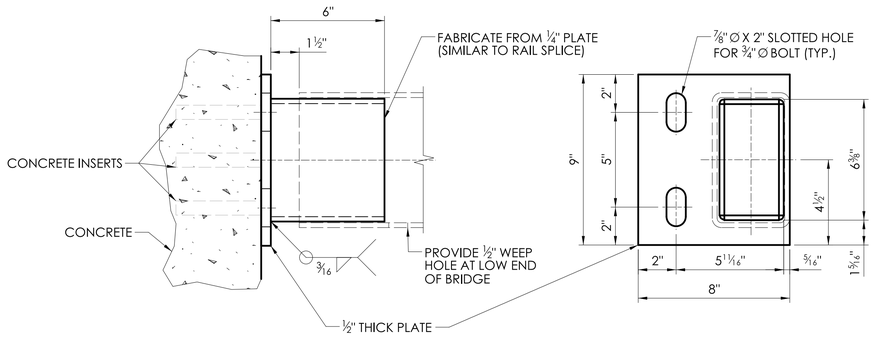
NOTE: MALE END OF SPLICE SHALL BE AT THE LOW END.



TOP RAIL ATTACHMENT BRACKET
SCALE: 3"=1'-0"



SECTION B
SCALE: 1"=1'-0"
S-16



RAIL ATTACHMENT BRACKET
SCALE: 3"=1'-0"

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK: benesch — Alfred Benesch & Company, 200 Glastonbury Boulevard Suite 201, Glastonbury, CT
DESIGNER/DRAFTER: A. BISI CHECKED BY: M. HABEK

CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE: REPLACEMENT OF BRIDGE NO. 05350 BOSWORTH ROAD OVER MASHAMOQUET BROOK

TOWN(S): POMFRET

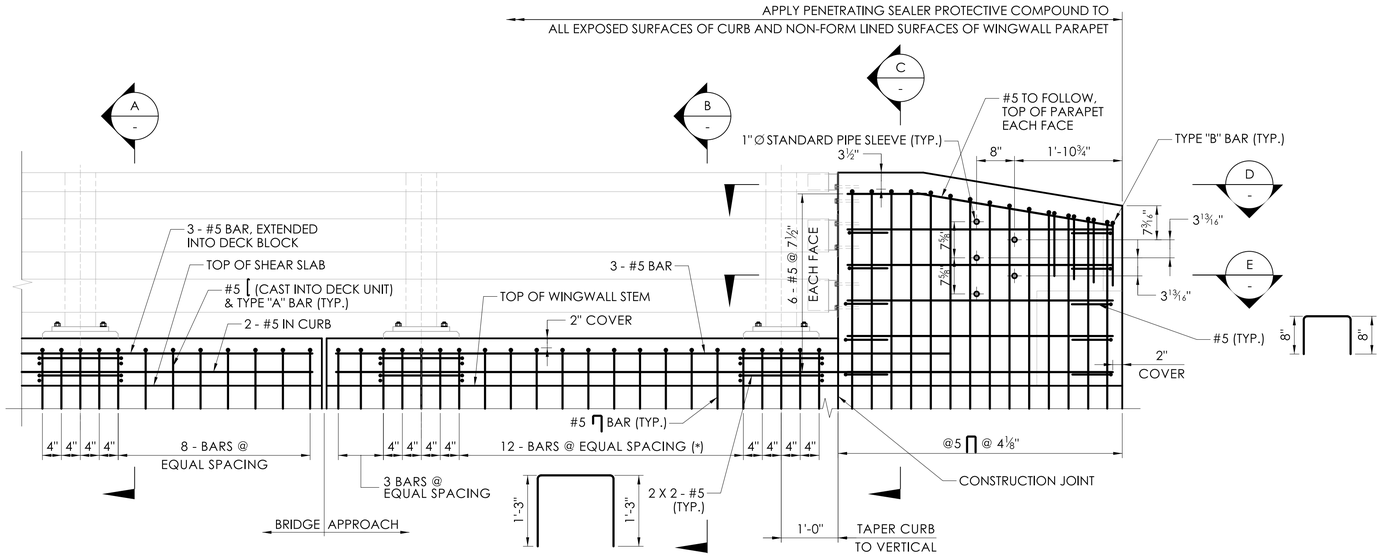
DRAWING TITLE: 3-TUBE CURB MOUNTED BRIDGE RAIL DETAILS - 2

PROJECT NO.: 0111-0127

DRAWING NO.: S-17

SHEET NO.: 04.17

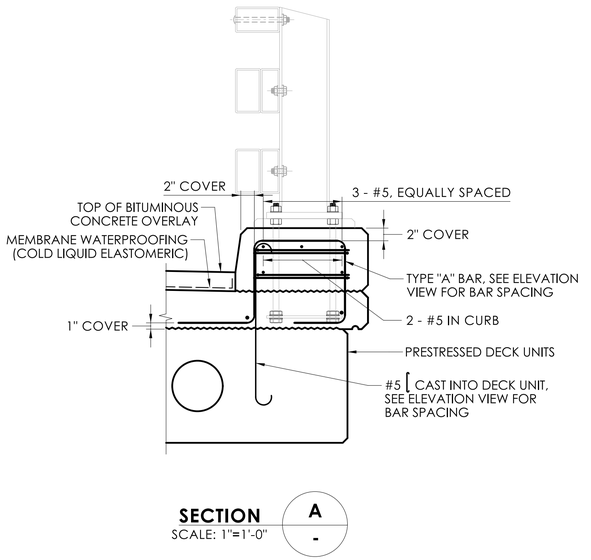
LASTED SAVED BY: hcooper **FILE NAME:** c:\pwwordir\benesch projects\projects\d0254439\SB_CB_0111_0127_RAIL 2.dgn
PLOTTED DATE: 9/18/2026



(*) BAR SPACING BETWEEN POSTS ALSO APPLIES TO #5 ⌈ (CAST INTO DECK UNIT) AND TYPE "A" BARS ON BRIDGE.

ELEVATION - TYPICAL CURB AND ENDBLOCK REINFORCEMENT

SCALE: ¾"=1'-0"



SECTION A

SCALE: 1"=1'-0"

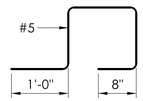
NOTE: REINFORCEMENT IN SHEAR SLAB AND PRESTRESSED DECK UNITS NOT SHOWN FOR CLARITY.

REINFORCEMENT SPLICE NOTES:

1. THE SPLICE LENGTH FOR THE LONGITUDINAL REINFORCEMENT IN THE CURB AND WINGWALL PARAPET SHALL BE AS FOLLOWS UNLESS DIMENSIONED OTHERWISE:

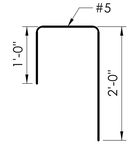
BAR SIZE	SPLICE LENGTH
#5	2'-4"

2. THE SPLICES SHALL BE ALTERNATED SO THAT 50% OR LESS OF THE LONGITUDINAL BARS ARE SPLICED AT THE SAME LOCATION.



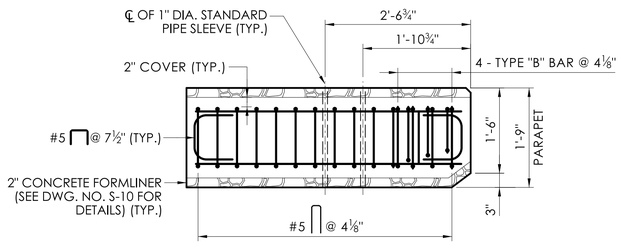
TYPE "A" BAR

SCALE: N.T.S.



TYPE "B" BAR

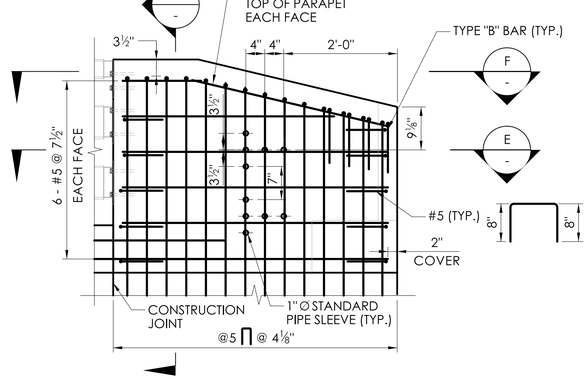
SCALE: N.T.S.



PLAN SECTION - ENDBLOCK REINFORCEMENT

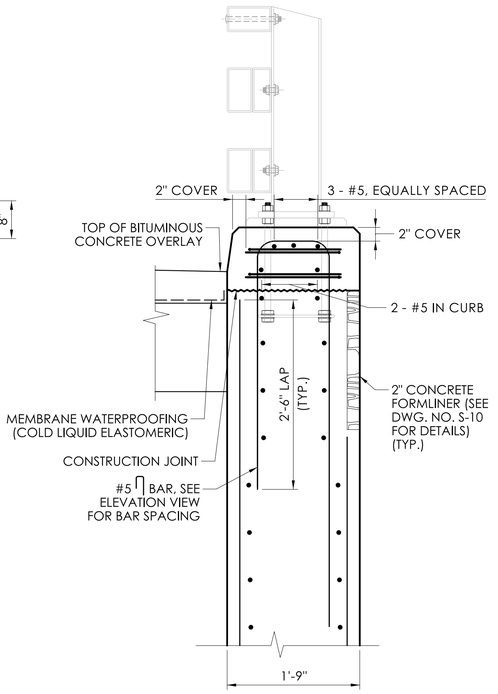
SCALE: ¾"=1'-0"

D



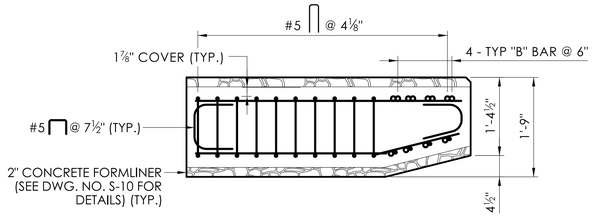
ELEVATION - ENDBLOCK REINFORCEMENT AT WINGWALL 1A

SCALE: ¾"=1'-0"



SECTION B

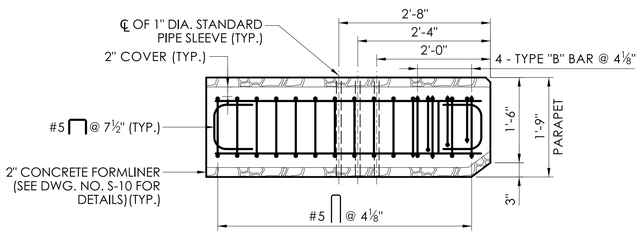
SCALE: 1"=1'-0"



PLAN SECTION - ENDBLOCK REINFORCEMENT

SCALE: ¾"=1'-0"

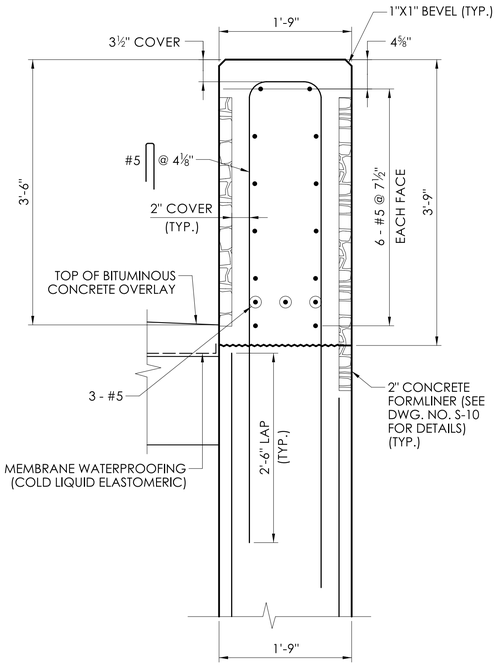
E



PLAN SECTION - ENDBLOCK REINFORCEMENT AT WINGWALL 1A

SCALE: ¾"=1'-0"

F



SECTION C

SCALE: 1"=1'-0"

REVISION DESCRIPTION | DATE | REV.

SIGNATURE BLOCK: benesch — Alfred Benesch & Company, 200 Glastonbury Boulevard Suite 202, Glastonbury, CT
DESIGNER/DRAFTER: A. BISI CHECKED BY: M. HABEK

CTDOT — CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE: REPLACEMENT OF BRIDGE NO. 05350 BOSWORTH ROAD OVER MASHAMOQUET BROOK

TOWN(S): POMFRET

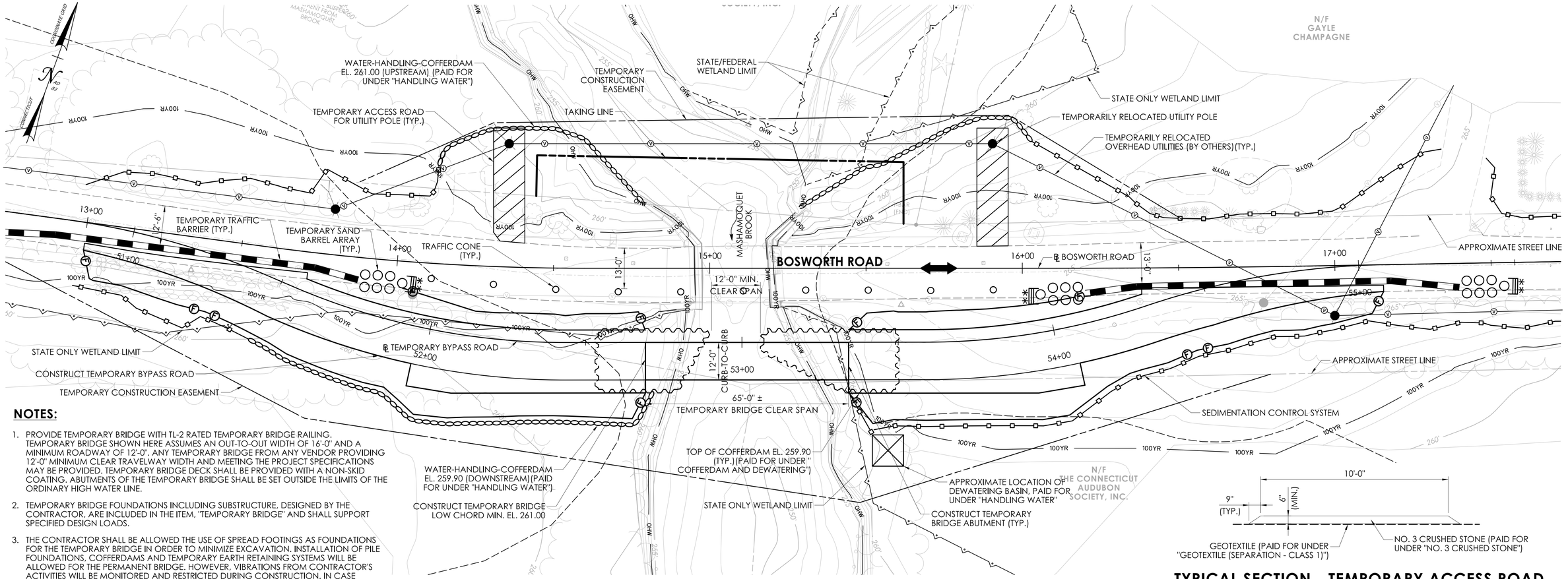
DRAWING TITLE: 3-TUBE CURB MOUNTED BRIDGE RAIL - REINFORCEMENT

PROJECT NO.: 0111-0127

DRAWING NO.: S-18

SHEET NO.: 04.18

LASTED SAVED BY: hcooper FILE NAME: c:\pwwordir\benesch projects\projects\d0254439\SB_CB_0111_0127_RAIL REINFORCEMENT.dgn
PLOTTED DATE: 9/18/2026



WATER HANDLING PLAN - PHASE 1

SCALE: 1/16"=1'-0"

TYPICAL SECTION - TEMPORARY ACCESS ROAD

SCALE: 1"=10'

NOTES:

1. PROVIDE TEMPORARY BRIDGE WITH TL-2 RATED TEMPORARY BRIDGE RAILING. TEMPORARY BRIDGE SHOWN HERE ASSUMES AN OUT-TO-OUT WIDTH OF 16'-0" AND A MINIMUM ROADWAY OF 12'-0". ANY TEMPORARY BRIDGE FROM ANY VENDOR PROVIDING 12'-0" MINIMUM CLEAR TRAVELWAY WIDTH AND MEETING THE PROJECT SPECIFICATIONS MAY BE PROVIDED. TEMPORARY BRIDGE DECK SHALL BE PROVIDED WITH A NON-SKID COATING. ABUTMENTS OF THE TEMPORARY BRIDGE SHALL BE SET OUTSIDE THE LIMITS OF THE ORDINARY HIGH WATER LINE.
2. TEMPORARY BRIDGE FOUNDATIONS INCLUDING SUBSTRUCTURE, DESIGNED BY THE CONTRACTOR, ARE INCLUDED IN THE ITEM, "TEMPORARY BRIDGE" AND SHALL SUPPORT SPECIFIED DESIGN LOADS.
3. THE CONTRACTOR SHALL BE ALLOWED THE USE OF SPREAD FOOTINGS AS FOUNDATIONS FOR THE TEMPORARY BRIDGE IN ORDER TO MINIMIZE EXCAVATION. INSTALLATION OF PILE FOUNDATIONS, COFFERDAMS AND TEMPORARY EARTH RETAINING SYSTEMS WILL BE ALLOWED FOR THE PERMANENT BRIDGE. HOWEVER, VIBRATIONS FROM CONTRACTOR'S ACTIVITIES WILL BE MONITORED AND RESTRICTED DURING CONSTRUCTION. IN CASE VIBRATIONS EXCEED ACCEPTABLE VALUES, CONTRACTOR'S OPERATIONS WILL NOT BE ALLOWED TO CONTINUE UNTIL MITIGATION EFFORTS ARE UNDERTAKEN TO REDUCE THE VIBRATIONS BELOW ACCEPTABLE VALUES.
4. BOTTOM OF FOOTING SHALL BE AT OR BELOW FROST DEPTH.

SUGGESTED SEQUENCE OF CONSTRUCTION:

THE SUGGESTED SEQUENCE OF CONSTRUCTION DEPICTED ON THE WATER HANDLING PLAN REPRESENTS ONE POTENTIAL SCHEME. ALTERNATE CONSTRUCTION SCHEMES MAY BE USED WITH THE APPROVAL OF THE ENGINEER.

ADVANCE WORK

1. TEMPORARILY RELOCATE EXISTING OVERHEAD UTILITIES (BY OTHERS). SEE UTILITY RELOCATION (FIO) SUBSET FOR DETAILS. TEMPORARY UTILITY RELOCATION SHOWN ON THIS DRAWING IS SCHEMATIC. TEMPORARY UTILITY RELOCATION LAYOUT SHALL BE DESIGNED AND PROVIDED BY EVERSOURCE.

PHASE 1

1. INSTALL SIGNAGE, TRAFFIC DRUMS AND TEMPORARY SIGNALS FOR ALTERNATING ONE-WAY TRAFFIC ON BOSWORTH ROAD.
2. CLEAR & GRUB AND INSTALL SEDIMENTATION CONTROL SYSTEMS.
3. INSTALL PHASE 1 COFFERDAM, WATER-HANDLING-COFFERDAM AND DEWATERING FOR CONSTRUCTION OF TEMPORARY BRIDGE ABUTMENTS.
4. CONSTRUCT TEMPORARY BRIDGE. TEMPORARY BRIDGE TO BE DESIGNED BY THE CONTRACTOR TO THE REQUIREMENTS SPECIFIED IN THE SPECIAL PROVISIONS FOR ITEM NO. 0502195A TEMPORARY BRIDGE.
5. CONSTRUCT TEMPORARY BYPASS ROAD SOUTH OF THE EXISTING BRIDGE.

WOOD TURTLE STATE SPECIES OF CONCERN BMP NOTES:

1. TO PROTECT WOOD TURTLE, DO NOT BEGIN INSTREAM ACTIVITY AND BANK DISTURBANCE IN SUITABLE OVERWINTERING HABITAT WITHIN A RIVER OR STREAM DURING THE TURTLES DORMANT PERIOD (NOVEMBER 1 - MARCH 31).
2. TO PREVENT TURTLE ACCESS AND ENTRY INTO THE WORK ZONE BETWEEN APRIL 1 - OCTOBER 31:
   - A. EXCLUSIONARY PRACTICES WILL BE REQUIRED TO PREVENT ANY TURTLE ACCESS INTO CONSTRUCTION AREAS. THESE MEASURES WILL NEED TO BE INSTALLED AT THE LIMITS OF DISTURBANCE AS SHOWN ON THE PLANS, OR BE SPECIFICALLY DESIGNATED BY A QUALIFIED HERPETOLOGIST.
   - B. EXCLUSIONARY FENCING SHALL BE AT LEAST 20 INCHES TALL AND MUST BE SECURED TO AND REMAIN IN CONTACT WITH THE GROUND AND BE REGULARLY MAINTAINED (AT LEAST BI-WEEKLY AND AFTER MAJOR WEATHER EVENTS) TO SECURE ANY GAPS OR OPENINGS AT GROUND LEVEL THAT MAY LET ANIMALS PASS THROUGH.
   - C. PRIOR TO CONSTRUCTION, ALL TURTLES OCCURRING WITHIN FENCING WORK AREA SHALL BE RELOCATED TO SUITABLE HABITAT OUTSIDE DISTURBANCE AREA. THIS SHALL BE PERFORMED BY A QUALIFIED PROFESSIONAL FAMILIAR WITH HABITAT REQUIREMENTS AND BEHAVIOR OF THE SPECIES.
   - D. THE CONTRACTOR MUST SEARCH THE WORK AREA EACH MORNING PRIOR TO ANY WORK BEING DONE.
   - E. ALL CONSTRUCTION PERSONNEL WORKING WITHIN THE TURTLE HABITAT MUST BE APPRISED OF THE SPECIES DESCRIPTION AND THE POSSIBLE PRESENCE OF A LISTED SPECIES.
   - F. ANY TURTLES ENCOUNTERED WITHIN THE IMMEDIATE WORK AREA SHALL BE CAREFULLY MOVED TO AN ADJACENT AREA OUTSIDE OF THE EXCLUDED AREA AND FENCING SHALL BE INSPECTED TO IDENTIFY AND REMOVE ACCESS POINT.
   - G. THESE ANIMALS ARE PROTECTED BY LAW AND NO TURTLES SHALL BE RELOCATED FROM THE SITE. IN AREAS WHERE SILT FENCE IS USED FOR EXCLUSION, IT SHALL BE REMOVED AS SOON AS THE AREA IS STABLE TO ALLOW FOR REPTILE AND AMPHIBIAN PASSAGE TO RESUME.

WATER HANDLING NOTES

1. THE CONTRACTOR SHALL MAINTAIN WATER THROUGH THE COFFERDAM (12'-0" MIN. OPENING) DURING CONSTRUCTION OF THE TEMPORARY BRIDGE AND NEW STRUCTURE.
2. A DEWATERING BASIN SHALL BE ESTABLISHED OUTSIDE OF THE WETLAND LIMITS.
3. COFFERDAM SHALL CONSIST OF AN APPROVED SYSTEM THAT THE CONTRACTOR ELECTS TO USE WHICH WILL SAFELY CONVEY WATER FLOWS THROUGH THE CONSTRUCTION AREA, SHALL BE ABLE TO SUPPORT CONSTRUCTION ACTIVITY AND EXCAVATION, AND SHALL CONFORM TO PERMITS. COFFERDAMS SHALL BE PAID FOR UNDER "COFFERDAM AND DEWATERING."
4. TEMPORARY WATER HANDLING SYSTEM SHALL CONSIST OF AN APPROVED SYSTEM THAT THE CONTRACTOR ELECTS TO USE WHICH WILL SAFELY CONVEY WATER FLOWS THROUGH THE CONSTRUCTION AREA, SHALL BE ABLE TO SUPPORT CONSTRUCTION ACTIVITY AND SHALL CONFORM TO PERMITS. TO BE PAID FOR UNDER "HANDLING WATER."
5. ANY WATER HANDLING SCHEME DEPICTED WITHIN THE DEPARTMENTS 'HANDLING WATER TYPICAL SCHEMATICS' MAY BE UTILIZED UNLESS SPECIFICALLY PROHIBITED. A MEANS AND METHOD FOR WATER HANDLING SYSTEM SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER FOR APPROVAL.
6. WATER HANDLING SYSTEM SHALL NOT EXCEED IMPACT AREAS SHOWN ON THE WETLAND AND FLOODPLAIN IMPACT SHEETS OF THE PERMIT PLANS.

CONTINGENCY PLAN NOTE:

THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A CONTINGENCY PLAN FOR WATER HANDLING TO PROTECT OUT BUILDINGS AT 39 BOSWORTH ROAD FROM FLOODING. THIS SHALL BE PAID FOR UNDER ITEM NO. 0502195A - "TEMPORARY BRIDGE."

TIME-OF-YEAR RESTRICTION NOTE:

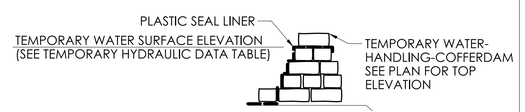
ANY TREE CLEARING WORK INCLUDING TRIMMING, CUTTING AND REMOVAL OF TREES WITH A 3" DBH OR GREATER SHOULD BE RESTRICTED TO THE PERIOD FROM NOVEMBER 1 TO APRIL 14. SEE SECTION 1.10 ENVIRONMENTAL COMPLIANCE FOR TIME-OF-YEAR RESTRICTIONS FOR WOOD TURTLES.

UNCONFINED IN-STREAM WORK BMP NOTE:

ANY UNCONFINED IN-STREAM WORK WITHIN THE WATERCOURSE SHALL BE RESTRICTED TO THE PERIOD FROM JUNE 1 TO SEPTEMBER 30, INCLUSIVE.

THE TOWN WILL REVIEW AND MAY APPROVE THE METHODS OF UNCONFINED IN-WATER WORK WITH CONSIDERATION OF THE FOLLOWING:

* PROPOSED SCHEDULE FOR WORK OPERATIONS
* ALL UNCONFINED IN-WATER WORK SHALL BE MINOR IN NATURE
* DISTURBANCE SHALL BE LIMITED TO AREAS THAT HAVE BEEN APPROVED FOR TEMPORARY AND PERMANENT IMPACT
* BEST MANAGEMENT PRACTICE SHALL BE UTILIZED WHEREVER POSSIBLE TO MINIMIZE TURBIDITY/SEDIMENT TRANSPORT DOWNSTREAM
* DISTURBED AREAS AND THE DURATION OF DISTURBANCE SHALL BE MINIMALIZED TO THE EXTENT POSSIBLE
* IN-STREAM WORK SHALL BE DONE DURING PERIODS OF LOW FLOW



WATER-HANDLING-COFFERDAM SANDBAGS

NOT TO SCALE

LEGEND

WETLAND LIMIT (STATE & FEDERAL)	
FEMA 100-YEAR FLOOD (CALCUATED)	100YR
ORDINARY HIGH WATER	OHW
FEMA FLOODWAY	
COFFERDAM	
WATER-HANDLING-COFFERDAM	
SEDIMENTATION CONTROL SYSTEM	

TEMPORARY HYDRAULIC DATA

AVERAGE DAILY FLOW (ADF) [CFS]	48
AVERAGE SPRING FLOW (ASF) [CFS]	96
TEMPORARY DESIGN DISCHARGE [CFS]	655
TEMPORARY DESIGN FREQUENCY	5-YEAR
TEMP. WATER SURFACE EL. AT BRIDGE - UPSTREAM	260.8
TEMP. WATER SURFACE EL. AT BRIDGE - DOWNSTREAM	258.9
MINIMUM CLEAR OPENING AT BRIDGE [FT]	12.0
WATER SURFACE ELEVATION AT TEMPORARY BRIDGE	259.1

REVISION DESCRIPTION | DATE | REV.

SIGNATURE BLOCK: benesch — Alfred Benesch & Company, 200 Glastonbury Boulevard Suite 201, Glastonbury, CT
DESIGNER/DRAFTER: A. BISI CHECKED BY: M. HABEK

CTDOT CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE: REPLACEMENT OF BRIDGE NO. 05350 BOSWORTH ROAD OVER MASHAMOQUET BROOK

TOWN(S): POMFRET

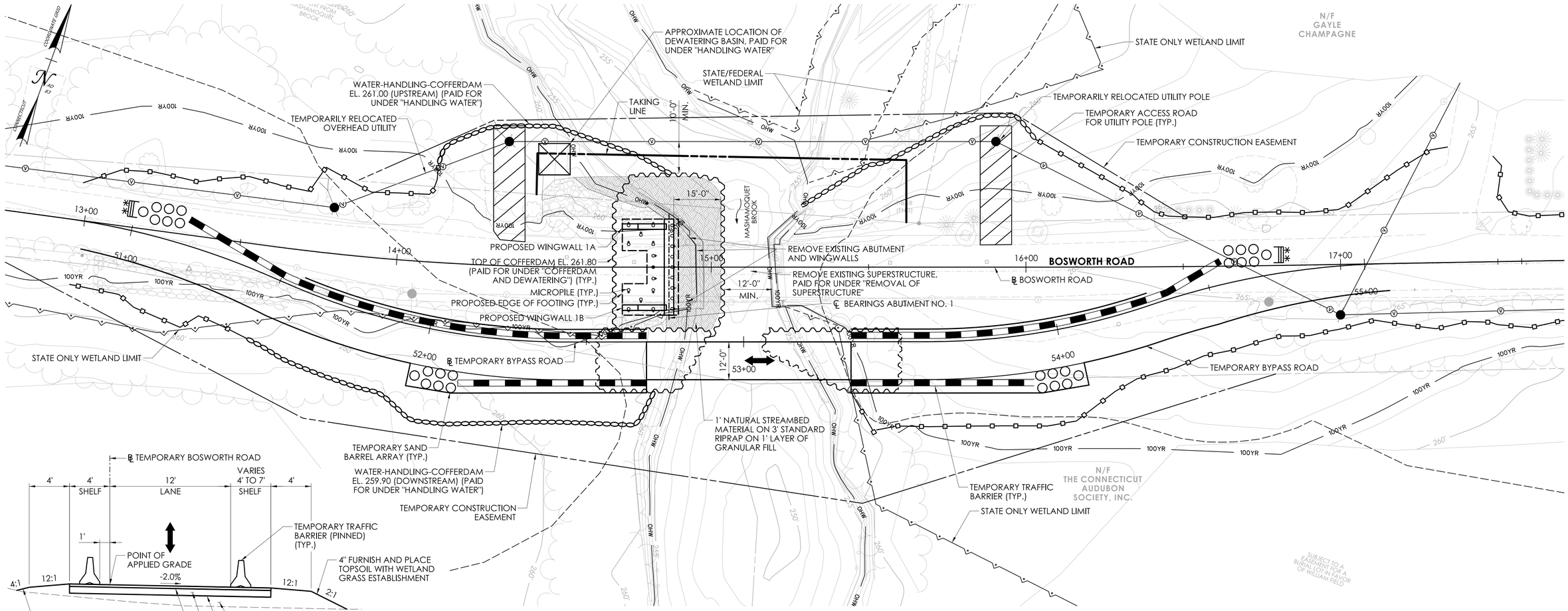
DRAWING TITLE: WATER HANDLING PLAN - PHASE 1

PROJECT NO.: 0111-0127

DRAWING NO.: S-19

SHEET NO.: 04.19

LASTED SAVED BY: abisi FILE NAME: c:\pwwordir\benesch projects\projects\d0254439\SB_CB_0111_0127_WATER HANDLING 1.dgn
PLOTTED DATE: 9/25/2026



WATER HANDLING PLAN - PHASE 2A

SCALE: 1/16"=1'-0"

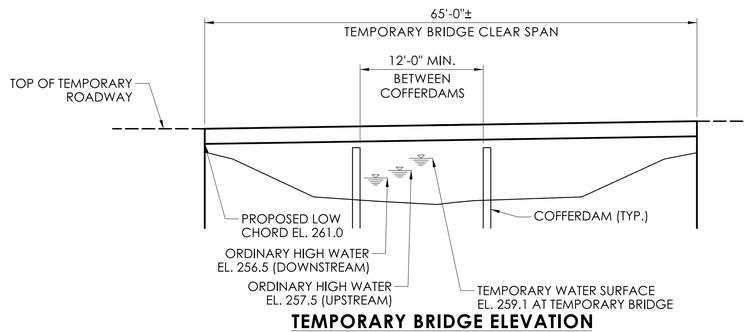
TEMPORARY ROADWAY SECTION

SCALE: 1" =5'

SUGGESTED SEQUENCE OF CONSTRUCTION:

PHASE 2A

1. INSTALL SIGNAGE, TEMPORARY TRAFFIC BARRIERS AND BARREL ARRAYS AND RE-ROUTE ALTERNATING ONE-WAY TRAFFIC ONTO TEMPORARY BYPASS ROAD.
2. INSTALL TEMPORARY DEBRIS SHIELD FOR REMOVAL OF EXISTING SUPERSTRUCTURE (PAID FOR UNDER "REMOVAL OF SUPERSTRUCTURE"). MINIMUM ELEVATION OF TEMPORARY DEBRIS SHIELD EL. 260.8. EXISTING LOW CHORD EL. 261.3.
3. REMOVE EXISTING BRIDGE SUPERSTRUCTURE AND REMOVE DEBRIS SHIELD.
4. INSTALL PHASE 2A COFFERDAM AND WATER-HANDLING-COFFERDAM. REMOVE EXISTING WEST ABUTMENT AND WINGWALLS IN THEIR ENTIRETY.
5. EXCAVATE INSIDE COFFERDAMS TO APPROXIMATE BOTTOM OF NEW SUBSTRUCTURES.
6. INSTALL AND TEST VERIFICATION TEST PILE. INSTALL MICROPILES FOR PROPOSED ABUTMENT NO. 1 AND WINGWALLS 1A & 1B.
7. CONSTRUCT ABUTMENT NO. 1 AND WINGWALL 1A & 1B FOOTINGS AND STEMS.
8. INSTALL 1' NATURAL STREAMBED MATERIAL ON 3' STANDARD RIPRAP ON 1' LAYER OF GRANULAR FILL WITHIN COFFERDAM.
9. BACKFILL AND GRADE SLOPES AROUND ABUTMENT NO. 1 AND WINGWALLS 1A & 1B.
10. REGRADE CHANNEL BEHIND WATER-HANDLING-COFFERDAM NORTHWEST OF BRIDGE.
11. REMOVE PHASE 2A COFFERDAM AND WATER-HANDLING-COFFERDAM.



TEMPORARY BRIDGE ELEVATION

SCALE: 1" =10'

LEGEND

WETLAND LIMIT (STATE & FEDERAL)	
FEMA 100-YEAR FLOOD (CALCUATED)	100YR
ORDINARY HIGH WATER	OHW
FEMA FLOODWAY	
COFFERDAM	
WATER-HANDLING-COFFERDAM	
SEDIMENTATION CONTROL SYSTEM	

TEMPORARY HYDRAULIC DATA

AVERAGE DAILY FLOW (ADF) [CFS]	48
AVERAGE SPRING FLOW (ASF) [CFS]	96
TEMPORARY DESIGN DISCHARGE [CFS]	655
TEMPORARY DESIGN FREQUENCY	5-YEAR
TEMP. WATER SURFACE EL. AT BRIDGE - UPSTREAM	260.8
TEMP. WATER SURFACE EL. AT BRIDGE - DOWNSTREAM	258.9
MINIMUM CLEAR OPENING AT BRIDGE [FT]	12.0
WATER SURFACE ELEVATION AT TEMPORARY BRIDGE	259.1

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK: benesch — Allied Benesch & Company, 200 Glastonbury Boulevard Suite 201, Glastonbury, CT

DESIGNER/DRAFTER: A. BISI CHECKED BY: M. HABEK

CTDOT — CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE: REPLACEMENT OF BRIDGE NO. 05350 BOSWORTH ROAD OVER MASHAMOQUET BROOK

TOWN(S): POMFRET

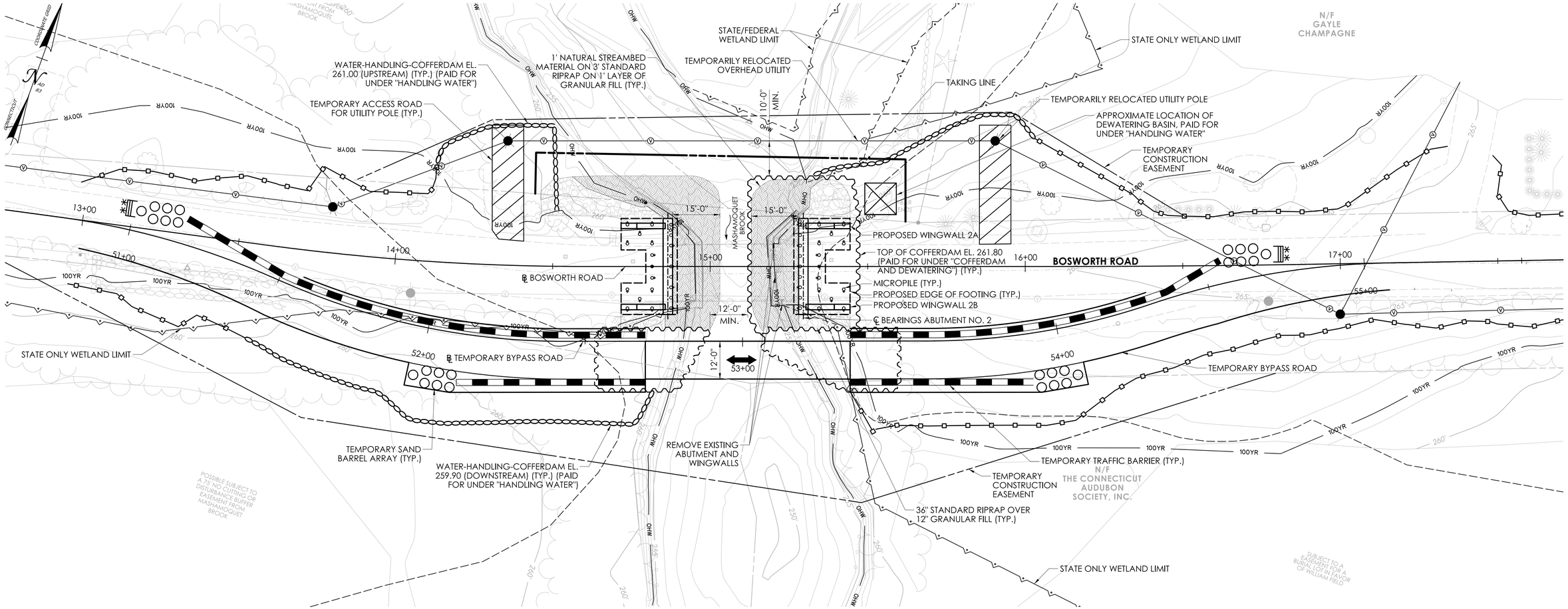
DRAWING TITLE: WATER HANDLING PLAN - PHASE 2A

PROJECT NO.: 0111-0127

DRAWING NO.: S-20

SHEET NO.: 04.20

LASTED SAVED BY: abisi **FILE NAME:** c:\pwwordir\benesch projects\projects\d0254439\SB_CB_0111_0127_WATER HANDLING 2A.dgn
PLOTTED DATE: 9/18/2026



WATER HANDLING PLAN - PHASE 2B

SCALE: 1/16"=1'-0"

LEGEND	
WETLAND LIMIT (STATE & FEDERAL)	
FEMA 100-YEAR FLOOD (CALCUATED)	100YR
ORDINARY HIGH WATER	OHW
FEMA FLOODWAY	
COFFERDAM	
WATER-HANDLING-COFFERDAM	
SEDIMENTATION CONTROL SYSTEM	

SUGGESTED SEQUENCE OF CONSTRUCTION:

PHASE 2B

1. MAINTAIN ALTERNATING ONE-WAY TRAFFIC OVER TEMPORARY BRIDGE.
2. INSTALL PHASE 2B COFFERDAM AND WATER-HANDLING-COFFERDAM. REMOVE EXISTING EAST ABUTMENT AND WINGWALLS.
3. EXCAVATE INSIDE COFFERDAMS TO APPROXIMATE BOTTOM OF NEW SUBSTRUCTURES.
4. INSTALL MICROPILES FOR PROPOSED ABUTMENT NO. 2 AND WINGWALLS 2A & 2B.
5. CONSTRUCT ABUTMENT NO. 2 AND WINGWALL 2A & 2B FOOTINGS AND STEMS.
6. INSTALL 1' NATURAL STREAMBED MATERIAL ON 3' STANDARD RIPRAP ON 1' LAYER OF GRANULAR FILL WITHIN COFFERDAM.
7. BACKFILL AND GRADE SLOPES AROUND ABUTMENT NO. 2 AND WINGWALLS 2A & 2B.
8. REMOVE PHASE 2B COFFERDAM AND WATER-HANDLING-COFFERDAM.

TEMPORARY HYDRAULIC DATA	
AVERAGE DAILY FLOW (ADF) [CFS]	48
AVERAGE SPRING FLOW (ASF) [CFS]	96
TEMPORARY DESIGN DISCHARGE [CFS]	655
TEMPORARY DESIGN FREQUENCY	5-YEAR
TEMP. WATER SURFACE EL. AT BRIDGE - UPSTREAM	260.8
TEMP. WATER SURFACE EL. AT BRIDGE - DOWNSTREAM	258.9
MINIMUM CLEAR OPENING AT BRIDGE [FT]	12.0
WATER SURFACE ELEVATION AT TEMPORARY BRIDGE	259.1

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK: benesch — Alfred Benesch & Company, 295 Glastonbury Boulevard Suite 201, Glastonbury, CT

DESIGNER/DRAFTER: A. BISI CHECKED BY: M. HABEK

CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE: REPLACEMENT OF BRIDGE NO. 05350 BOSWORTH ROAD OVER MASHAMOQUET BROOK

TOWN(S): POMFRET

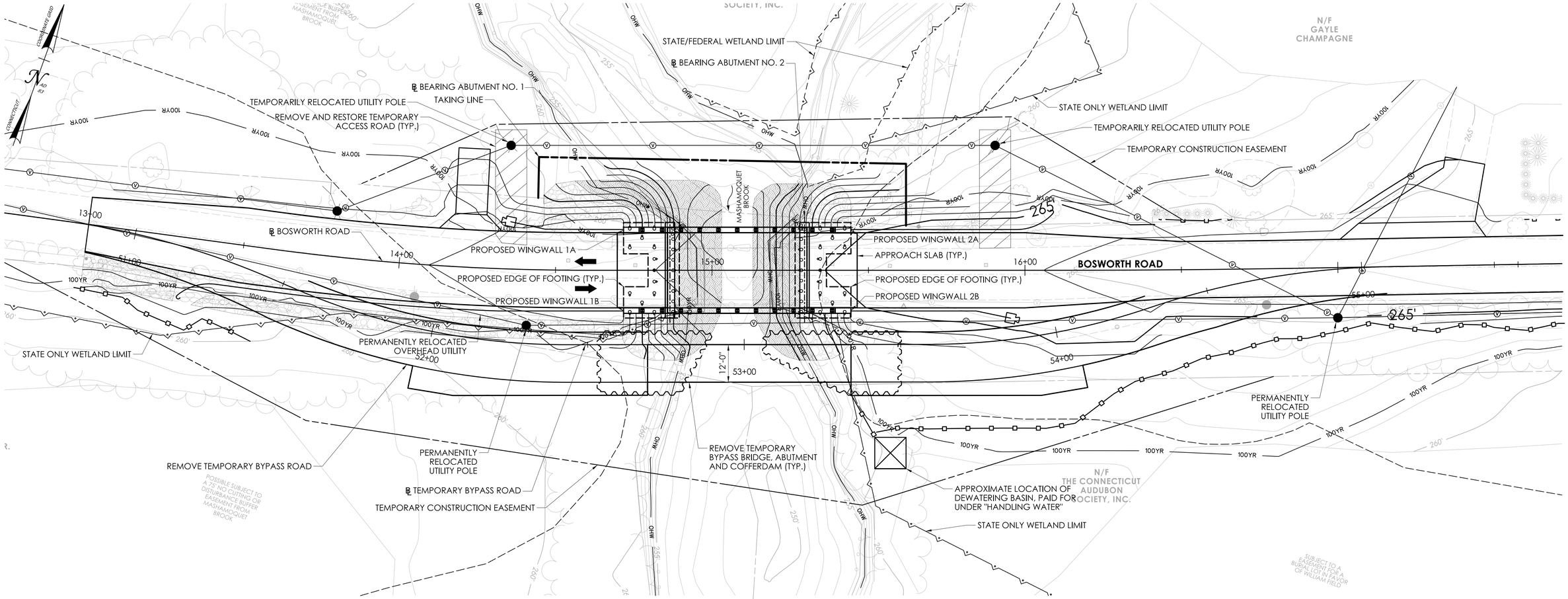
DRAWING TITLE: WATER HANDLING PLAN - PHASE 2B

PROJECT NO.: 0111-0127

DRAWING NO.: S-21

SHEET NO.: 04.21

LASTED SAVED BY: abisi **FILE NAME:** c:\pwwordir\benesch projects\projects\d0254439\SB_CB_0111_0127_WATER HANDLING 2B.dgn
PLOTTED DATE: 9/18/2026



WATER HANDLING PLAN - PHASE 3

SCALE: 1/16"=1'-0"

SUGGESTED SEQUENCE OF CONSTRUCTION:

PHASE 3

1. MAINTAIN ALTERNATING ONE-WAY TRAFFIC OVER TEMPORARY BRIDGE.
2. INSTALL PRECAST CONCRETE DECK UNITS.
3. TIE REBAR, FORM AND POUR CAST-IN-PLACE CONCRETE SHEAR SLAB.
4. TIE REBAR, FORM AND POUR CONCRETE CURBS AND END BLOCKS.
5. CONSTRUCT APPROACH SLABS.
6. INSTALL MEMBRANE WATERPROOFING AND HMA S0.25.
7. COMPLETE ROADWAY WORK AT BRIDGE APPROACHES.
8. INSTALL 3-TUBE CURB MOUNTED BRIDGE RAIL.
9. CONSTRUCT EASTBOUND SIDE OF BOSWORTH ROAD AND TIE IN AT BOTH APPROACHES.
10. REMOVE MPT PHASE 2 SIGNAGE AND TEMPORARY TRAFFIC BARRIERS. RE-ROUTE TRAFFIC ONTO NEWLY CONSTRUCTED BRIDGE AND NEWLY CONSTRUCTED EASTBOUND SIDE OF BOSWORTH ROAD UTILIZING ALTERNATING ONE-WAY TRAFFIC. REMOVE TEMPORARY BYPASS ROAD AND TEMPORARY BRIDGE.
11. COMPLETE INSTALLATION OF RIPRAP SOUTH AND SOUTHWEST OF THE BRIDGE. REMOVE REMAINING COFFERDAM.
12. CONSTRUCT WESTBOUND SIDE OF BOSWORTH ROAD AND TIE IN AT BOTH APPROACHES UTILIZING ALTERNATING ONE-WAY TRAFFIC (TRAFFICPERSON).
13. INSTALL ROADWAY GUIDERAILS AND PAVE ROADWAY.
14. INSTALL PLANTINGS, SEEDINGS AND TURF ESTABLISHMENT - LAWN (SEE DWG. NO. LSD-01, HIGHWAY SUBSET).
15. REMOVE SEDIMENTATION CONTROL AND WATER-HANDLING-COFFERDAM SYSTEMS UPON PERMANENT STABILIZATION.

POST-CONSTRUCTION PHASE

1. PERMANENTLY RELOCATE OVERHEAD UTILITIES. SEE UTILITY RELOCATION (FIO) SUBSET FOR DETAILS. PERMANENT UTILITY RELOCATION SHOWN ON THIS DRAWING IS SCHEMATIC. PERMANENT UTILITY RELOCATION LAYOUT SHALL BE DESIGNED AND PROVIDED BY EVERSOURCE.
2. REMOVE TEMPORARY ACCESS ROADS AND REGRADE.

LEGEND

WETLAND LIMIT (STATE & FEDERAL)	
FEMA 100-YEAR FLOOD (CALCUATED)	100YR
ORDINARY HIGH WATER	OHW
FEMA FLOODWAY	
COFFERDAM	
WATER-HANDLING-COFFERDAM	
SEDIMENTATION CONTROL SYSTEM	

TEMPORARY HYDRAULIC DATA

AVERAGE DAILY FLOW (ADF) [CFS]	48
AVERAGE SPRING FLOW (ASF) [CFS]	96
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MINIMUM CLEAR OPENING AT BRIDGE [FT]	12.0
WATER SURFACE ELEVATION AT TEMPORARY BRIDGE	259.1

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CTDOT — CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE: REPLACEMENT OF BRIDGE NO. 05350 BOSWORTH ROAD OVER MASHAMOQUET BROOK

TOWN(S): POMFRET

DRAWING TITLE: WATER HANDLING PLAN - PHASE 3

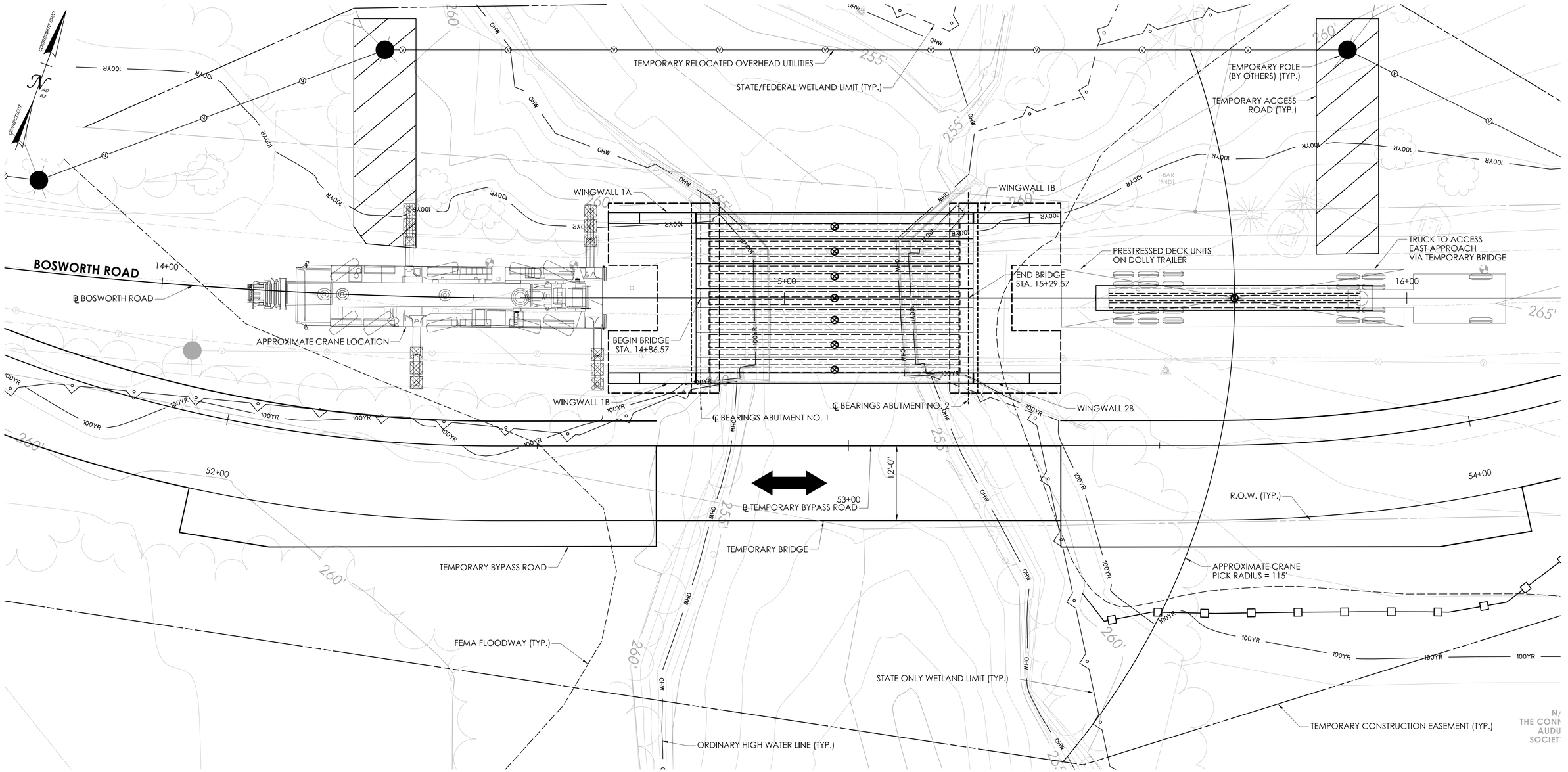
PROJECT NO.: 0111-0127

DRAWING NO.: S-22

SHEET NO.: 04.22

LASTED SAVED BY: abisi FILE NAME: c:\pwwordir\benesch projects\projects\d0254439\SB_CB_0111_0127_WATER HANDLING 3.dgn

PLOTTED DATE: 9/22/2026



CRANE LAYOUT

SCALE: ⅛"=1'-0"

CRANE AND ERECTION NOTES:

1. THE CONTRACTOR SHALL EVALUATE ANY CRANE SURCHARGE ON COFFERDAMS, TEMPORARY BRIDGE AND PROPOSED BRIDGE SUBSTRUCTURE ELEMENTS.
2. THE SUGGESTED SEQUENCE OF CONSTRUCTION DEPICTED ON THE WATER HANDLING PLAN REPRESENTS ONE POTENTIAL SCHEME. ALTERNATE CONSTRUCTION SCHEMES MAY BE USED WITH THE APPROVAL OF THE ENGINEER.
3. THE COST OF THE CRANE, FOR ERECTION OF THE SUPERSTRUCTURE, SHALL BE INCLUDED UNDER THE ITEMS "PRESTRESSED DECK UNITS (4'-0" X 1'-6")" AND "PRESTRESSED DECK UNITS (3'-0" X 1'-6")."
4. TREE REMOVAL OR TRIMMING TO ACCOMMODATE CRANE MOVEMENTS SHALL BE DONE WITHIN THE ALLOWABLE PERIOD (SEE HIGHWAY SUBSET DWG. NO. LSD-01) AND SHALL BE AS DIRECTED BY THE ENGINEER, PAID FOR UNDER THE ITEM, "CLEARING AND GRUBBING."
5. TEMPORARY UTILITY RELOCATION SHOWN ON THIS DRAWING IS SCHEMATIC. TEMPORARY UTILITY RELOCATION LAYOUT SHALL BE DESIGNED AND PROVIDED BY EVERSOURCE.

					CRANE		
PIECE	PIECE WT. (KIPS)	RIG WT. (KIPS)	SAFETY FACTOR	PICK WT. (KIPS)	PICK WT. (KIPS)	PICK RAD (FT)	CAPACITY (KIPS)
PRESTRESSED DECK UNITS (4'-0" X 1'-6") (EXTERIOR)	33	2.5	1.5	53.25	53.25	115	54

NOTE: CRANE CAPACITIES ARE BASED ON GROVE GMK 6400. OTHER CRANES MAY VARY.

REVISION DESCRIPTION | DATE | REV.

SIGNATURE BLOCK:
benesch
Alfred Benesch & Company
200 Glastonbury Boulevard
Suite 201
Glastonbury, CT
DESIGNER/DRAFTER: A. BISI CHECKED BY: M. HABEK

CONNECTICUT DEPARTMENT OF TRANSPORTATION

PROJECT TITLE:
REPLACEMENT OF BRIDGE NO. 05350
BOSWORTH ROAD OVER MASHAMOQUET BROOK

TOWN(S): **POMFRET**

DRAWING TITLE:
CRANE LAYOUT AND ERECTION PLAN

PROJECT NO.: **0111-0127**

DRAWING NO.: **S-23**

SHEET NO.: **04.23**

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PLOTTED DATE: 9/18/2026