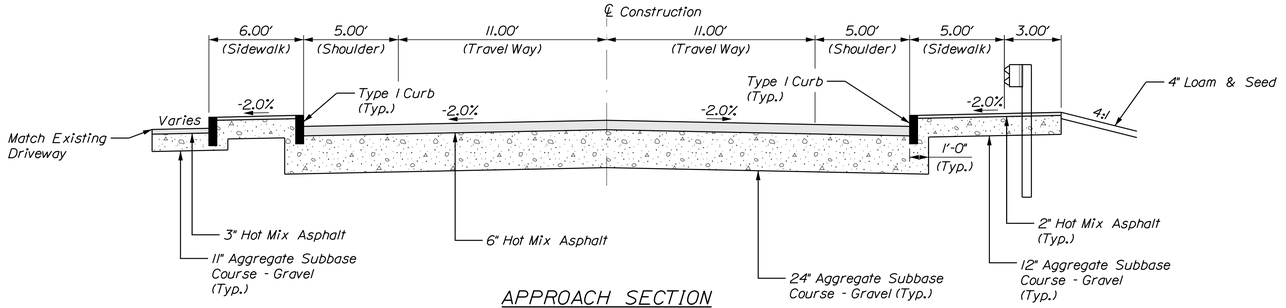
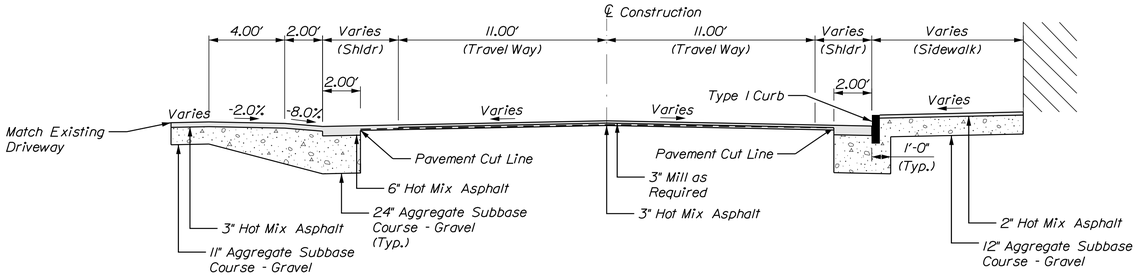


APPROACH SECTION

Full Depth Construction

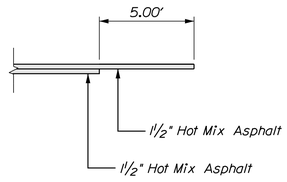
Sta. 3+00 to Bridge
Bridge to Sta. 5+00



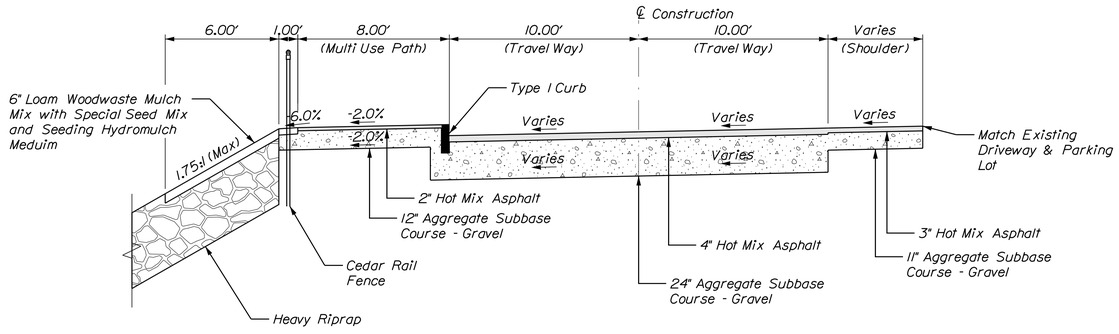
APPROACH SECTION

Mill & Pave

Sta. 2+62.67 to Sta. 3+00
Sta. 5+00 to Sta. 5+27



LONGITUDINAL MILLING DETAIL



APPROACH SECTION

Arcade

Stantec

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098 BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	L. TIMBERLAKE	
DESIGN-DETAILED	PLP	SEPT 2018
CHECKED-REVIEWED	LEM	SEPT 2018
DESIGN2-DETAILED2	LEM/TWM	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

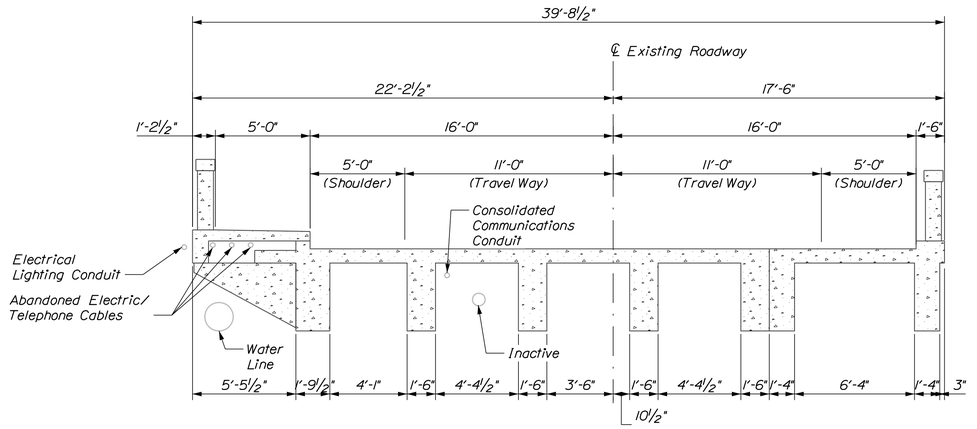
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SHEET NUMBER

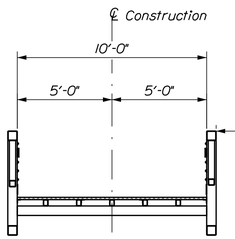
B15

OF B52

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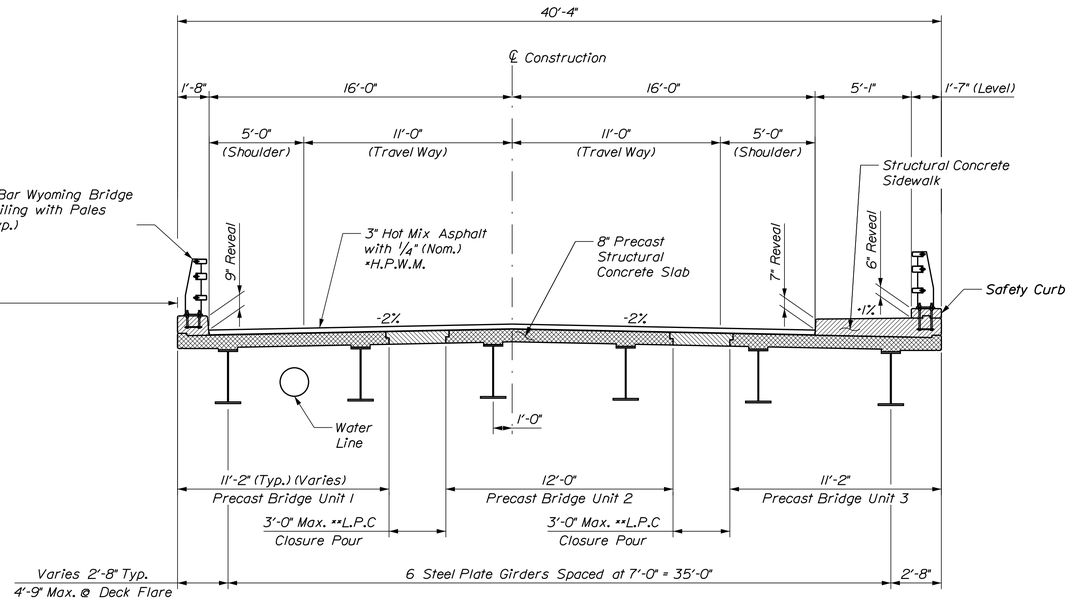


SECTION - EXISTING STRUCTURE



SECTION - MULTI-USE BRIDGE
(See WIN 18736.10 Plans for Details)

50' ±



SECTION - PROPOSED SUPERSTRUCTURE
* High Performance Waterproofing Membrane
** Low Permeability Concrete

Stantec

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	L. TIMBERLAKE	
DESIGN-DETAILED	LSF	SEPT 2018
CHECKED-REVIEWED	DDT	SEPT 2018
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1	KLW	
REVISIONS 2	TWM	
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
KENNEBEC COUNTY
GARDINER

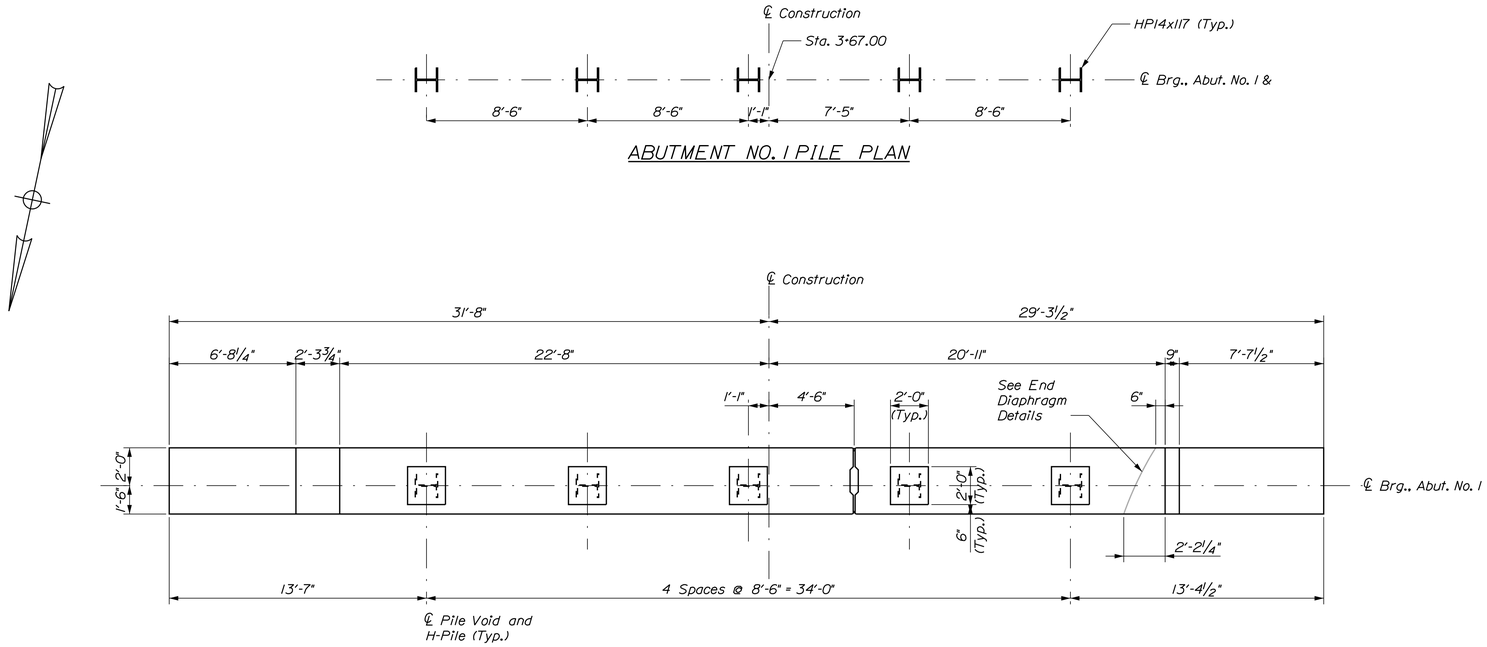
BRIDGE
TYPICAL SECTIONS

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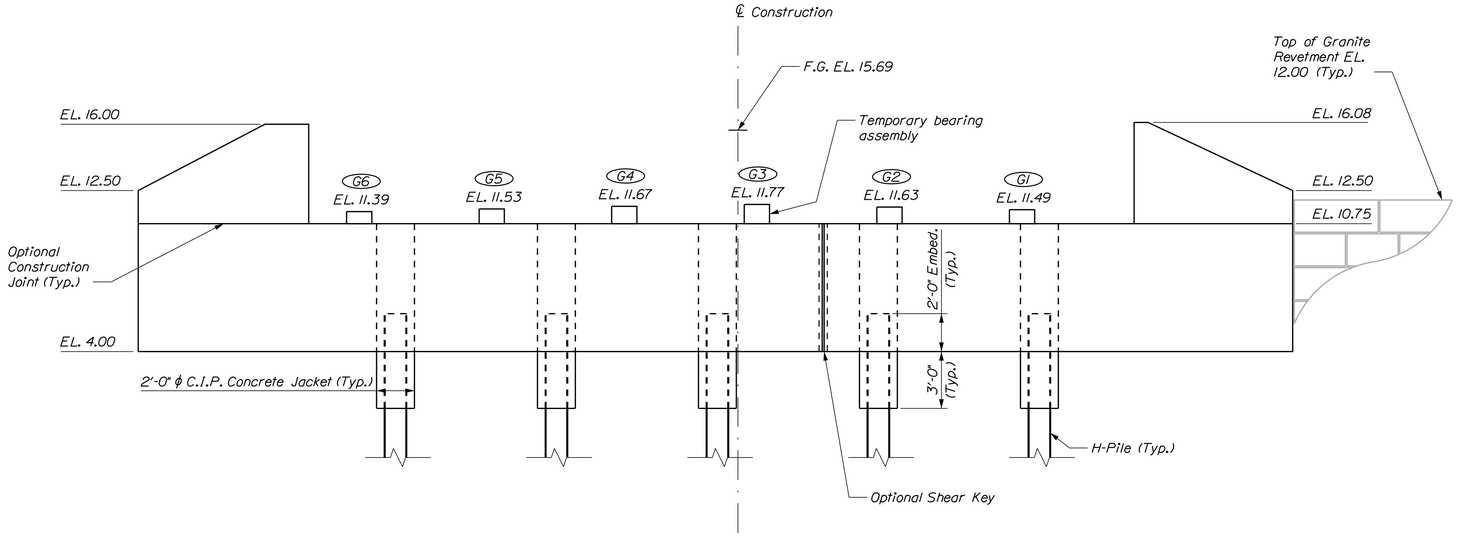
OF B52

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ABUTMENT NO. 1 PILE PLAN

ABUTMENT NO. 1 PLAN



ABUTMENT NO. 1 ELEVATION

ABUTMENT NOTES

1. Payment for excavation necessary to construct the concrete pile jackets shall be considered incidental to related Contract items.

2. Reinforcing steel shall have a minimum concrete cover of 2 inches in unless otherwise noted.

4. Place 4-in. diameter drains in the breastwall and wingwalls at 10-ft maximum spacing. The exact location will be determined by the Resident.

5. Cover joints where waterstops are not required in accordance with Standard Details Section 502.

6. Install drainage geocomposite behind the abutments and wingwalls up to the approach slab seat elevation and in accordance with Special Provision Section 620, Drainage Geocomposite.

7. Abutments and wingwalls shall be backfilled with Granular Borrow. Pay limits will be as shown on the Bridge Profile Sheet.

8. Payment for the northeast retaining wall concrete shall be made using Item 502.219.

9. Install two layers of 6 mil polyethylene sheeting under approach slabs. Payment will be considered incidental to Item 534.7601 Precast Approach Slab.

10. The construction, handling, and assembly of the Precast Abutments shall be in accordance weith Special Provision Section 534, Precast Structural Concrete - Precast Abutment & Approach Slab, and with the Manufacturer's specifications as applicable.

11. Payment for the concrete to fill the voids after precast abutment placement shall be incidental to the precast abutment.

12. Payment for the concrete jackets around the top of the H-piles will be considered incidental to related Contract items. No separate payment will be made. Fill concrete may be used for the concrete jackets.

13. The Contractor shall have the option to cast the wings in place. If a cast-in-place option is chosen, payment for this shall be incidental to related Contract items. No separate payment or adjustment in schedule will be made.

14. The Contractor shall have the option to omit mechanical couplers and extend reinforcing into end diaphragm closure pour. Payment for this reinforcing and all components of mechanical couplers shall be incidental to Item 534.76 Precast Abutment.

15. See Abutment No. 2 Precast Reinforcing sheet for the optional shear key detail.

H-PILE NOTES

1. The maximum factored pile load is 358 kips.

2. H-pile material shall be ASTM A 572, Grade 50.

3. Estimate of piles required:

   Abutment No. 1: 5 ~ HP 14x117 @ 63 feet
   Abutment No. 2: 5 ~ HP 14x117 @ 63 feet

5. All piles shall be equipped with a pile tip in accordance with Standard Specifications Section 501.10, Prefabricated Pile Tips.

6. Piles shall not be out of position shown by more than 4 inches in any direction.

7. The Contractor shall perform and submit a wave equation analysis for review and acceptance by the Resident. The maximum allowable driving stress is 0.90 times Fy. The submittal analyses shall include the proposed stopping criteria based on the wave equation analysis and the proposed driving system. The stopping criteria shall include the blows per inch and the number of 1-inch intervals at which pile installation may be terminated. The cost of performing the wave equation analysis will be considered incidental to Item No. 501.92, Pile Driving Equipment Mobilization.

8. The Contractor shall perform 4 dynamic load tests (2 at each abutment) to confirm the ultimate capacity of the piles. The required nominal resistance for the pile is the factored axial pile load divided by a resistance factor of 0.65 per LRFD Specifications. The dynamic test shall be performed on the first production pile driven.

9. Debris was encountered within the fill soils behind the existing bridge abutments and included, but was not limited to, concrete pieces, asphalt pieces, wood fragments, stones, and pieces of granite blocks. These materials could impede production pile installation at the new abutments. These materials may be cleared using methods approved by the Resident in accordance with the Standard Specifications with no additional payment.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

PROJ. MANAGER	L. TIMBERLAKE		
DESIGN-DETAILED	LSF	SEPT 2018	
CHECKED-REVIEWED	TEK	DOT/TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

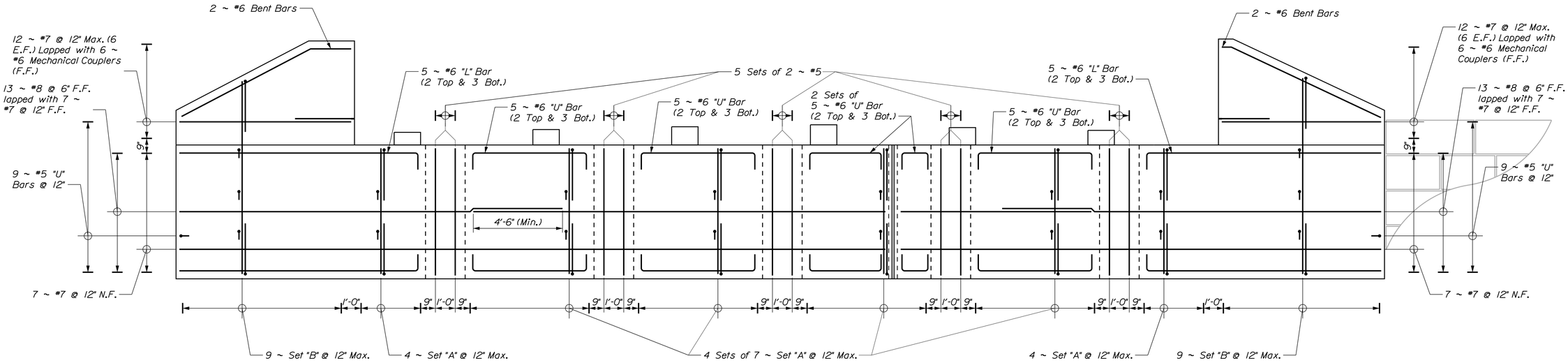
ABUTMENT NO. 1

SHEET NUMBER

B17

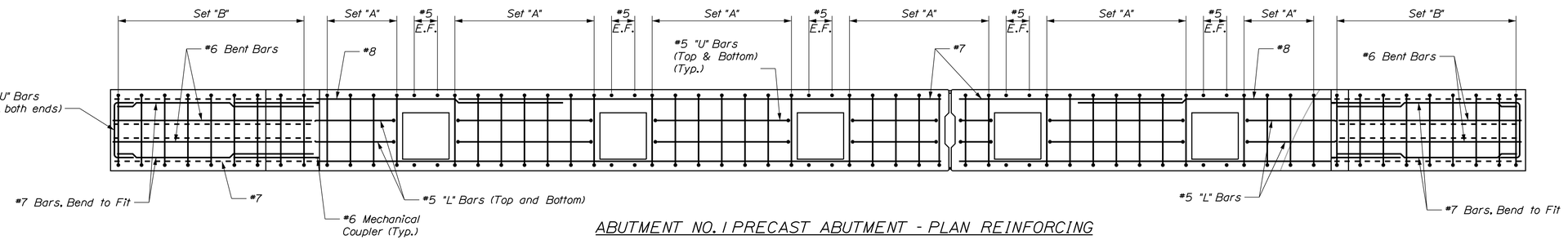
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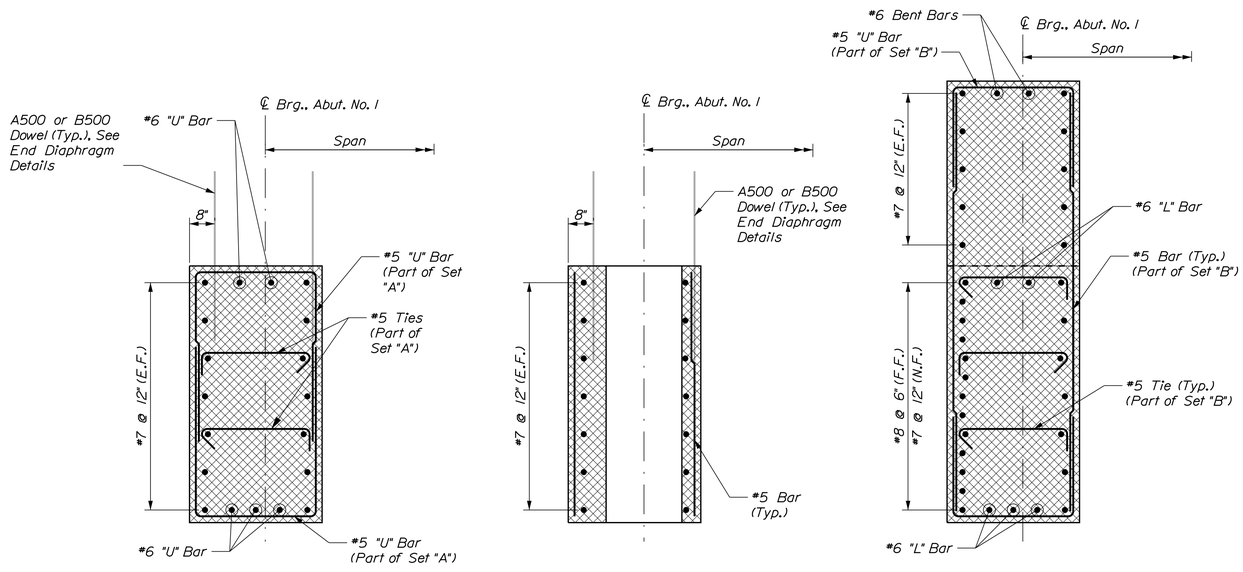


ABUTMENT NO. 1 PRECAST ABUTMENT - ELEVATION OF REINFORCING

Set "A" = 2 ~ #5 "U" Bars and 2 ~ #5 Ties
Set "B" = 2 ~ #5 "U" Bars, 3 ~ #5 Ties, and 2 ~ #5 Straight Bars



ABUTMENT NO. 1 PRECAST ABUTMENT - PLAN REINFORCING



SECTION BETWEEN PILE VOIDS
(Typical Both Abutments)

SECTION THROUGH PILE VOID
(Typical Both Abutments)

SECTION THROUGH WINGWALL
(Typical Both Abutments)

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

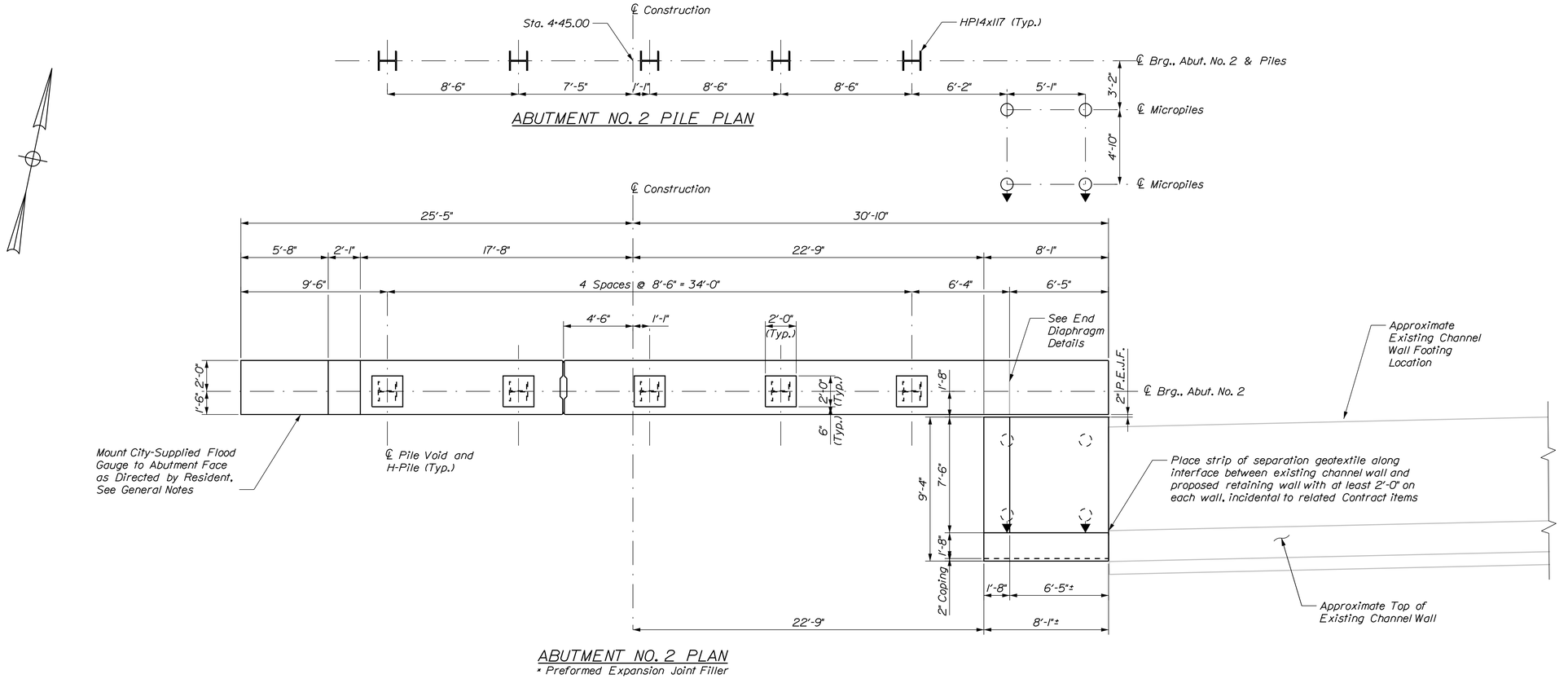
PROJ. MANAGER	L. TIMBERLAKE		
DESIGN-DETAILED	LSF	SEPT 2018	
CHECKED-REVIEWED	TEK	SEPT 2018	SIGNATURE
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			P.E. NUMBER
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			DATE
REVISIONS 4			
FIELD CHANGES			

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

ABUTMENT NO. 1
PRECAST REINFORCING

SHEET NUMBER
B18
OF B52

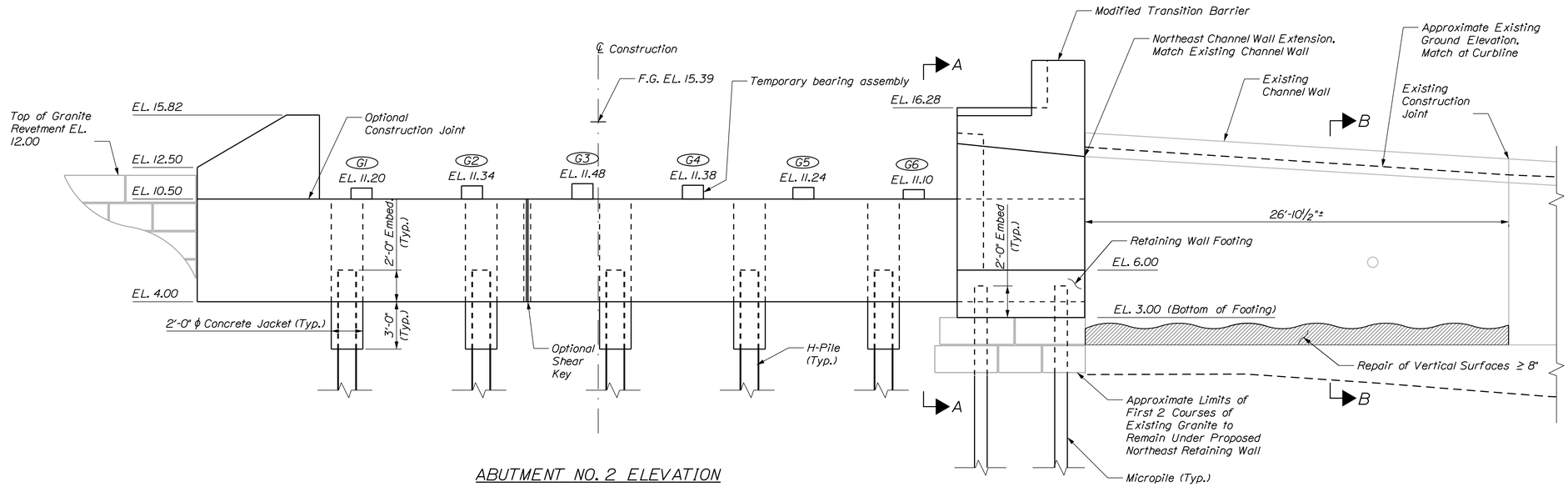
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ABUTMENT NO. 2 PILE PLAN

ABUTMENT NO. 2 PLAN

* Preformed Expansion Joint Filler



ABUTMENT NO. 2 ELEVATION

Stantec

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

		DATE
PROJ. MANAGER	L. TIMBERLAKE	
DESIGN-DETAILED	LSF	SEPT 2018
CHECKED-REVIEWED	TEK	SEPT 2018
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

BY

SIGNATURE

P.E. NUMBER

DATE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

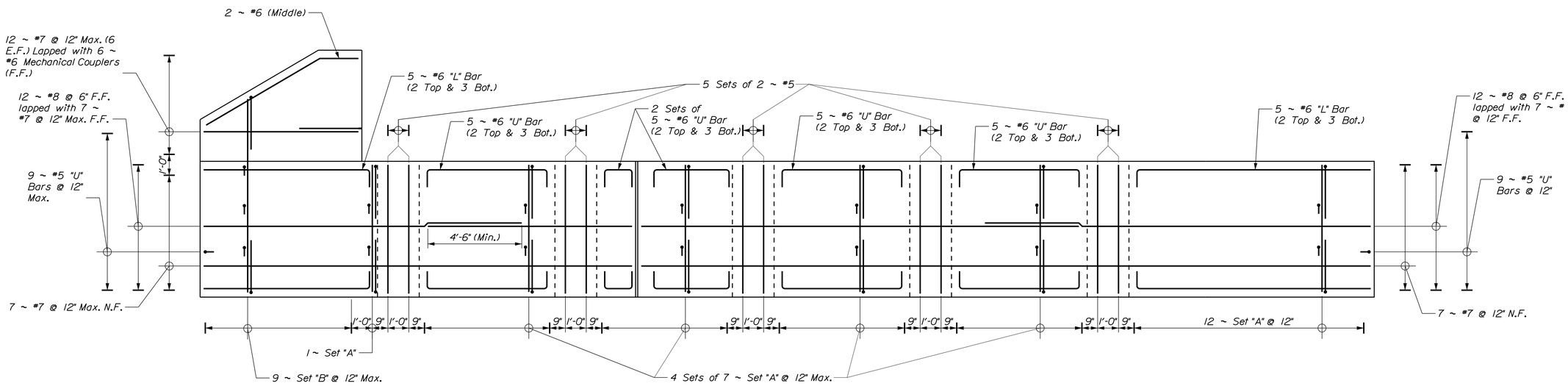
ABUTMENT NO. 2

SHEET NUMBER

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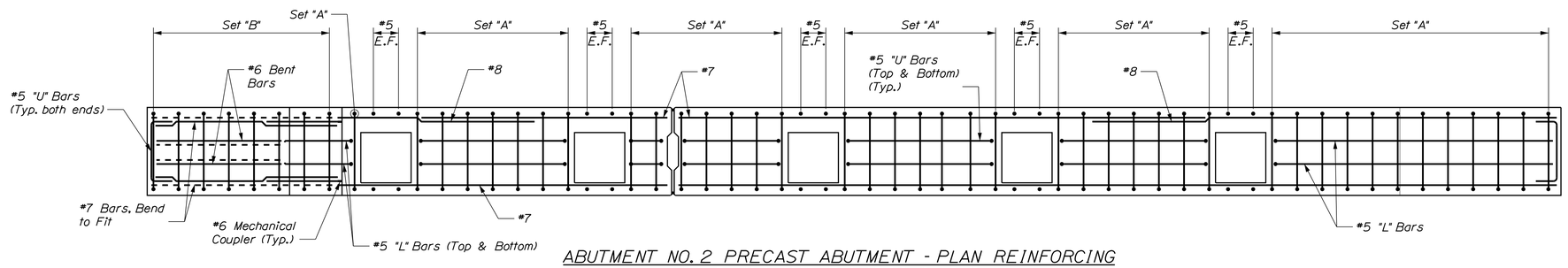
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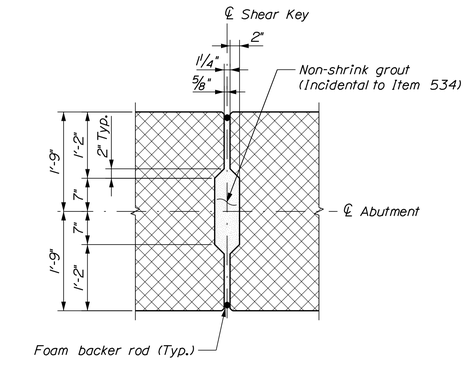
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Set "B" = 2 ~ #5 "U" Bars, 3 ~ #5 Ties, and 2 ~ #5 Straight Bars



ABUTMENT NO. 2 PRECAST ABUTMENT - PLAN REINFORCING

Note: See Abutment 1 for Typical Reinforcing Sections



OPTIONAL ABUTMENT SHEAR KEY DETAIL

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	L. TIMBERLAKE	
DESIGN-DETAILED	LSF	SEPT 2018
CHECKED-REVIEWED	TEK	SEPT 2018
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

ABUTMENT NO. 2
PRECAST REINFORCING

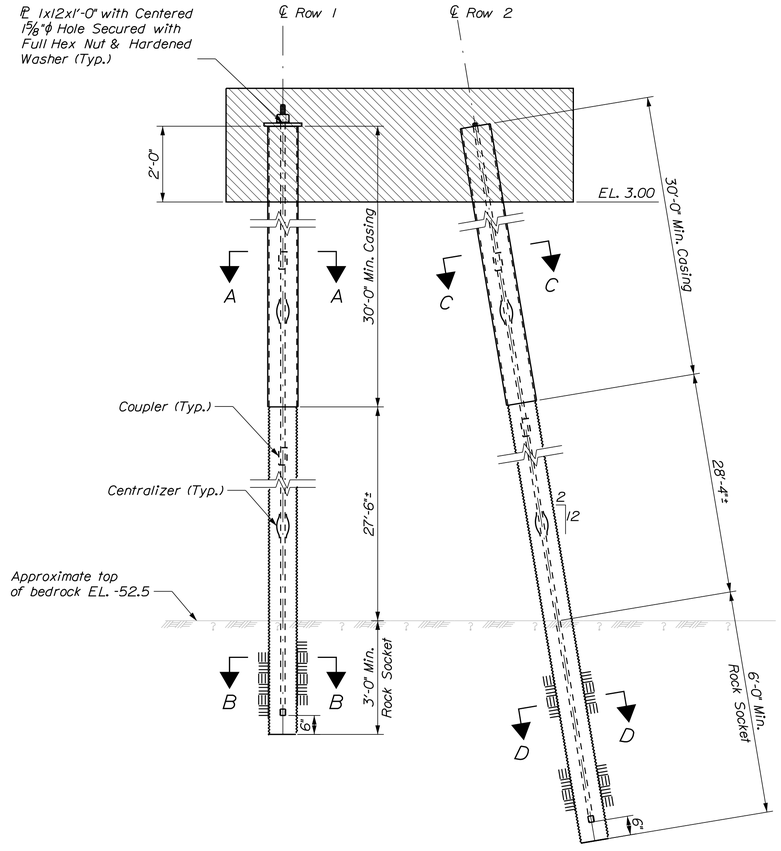
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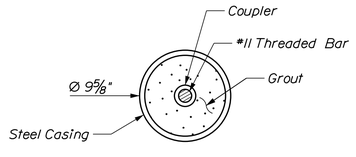
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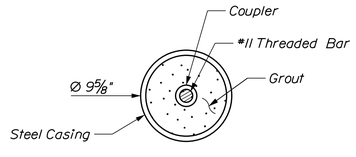
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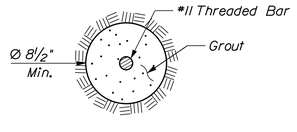
NORTHEAST RETAINING WALL - MICROPILE ELEVATION



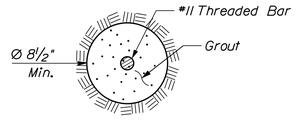
SECTION A-A
Cased Zone



SECTION C-C
Cased Zone



SECTION B-B
Rock Socket



SECTION D-D
Rock Socket

MICROPILE NOTES

1. Construct micropiles in accordance with Special Provision Section 501.

2. Load testing shall not be required.

3. Micropiles shall be constructed as plumb or battered as shown on the Plans.

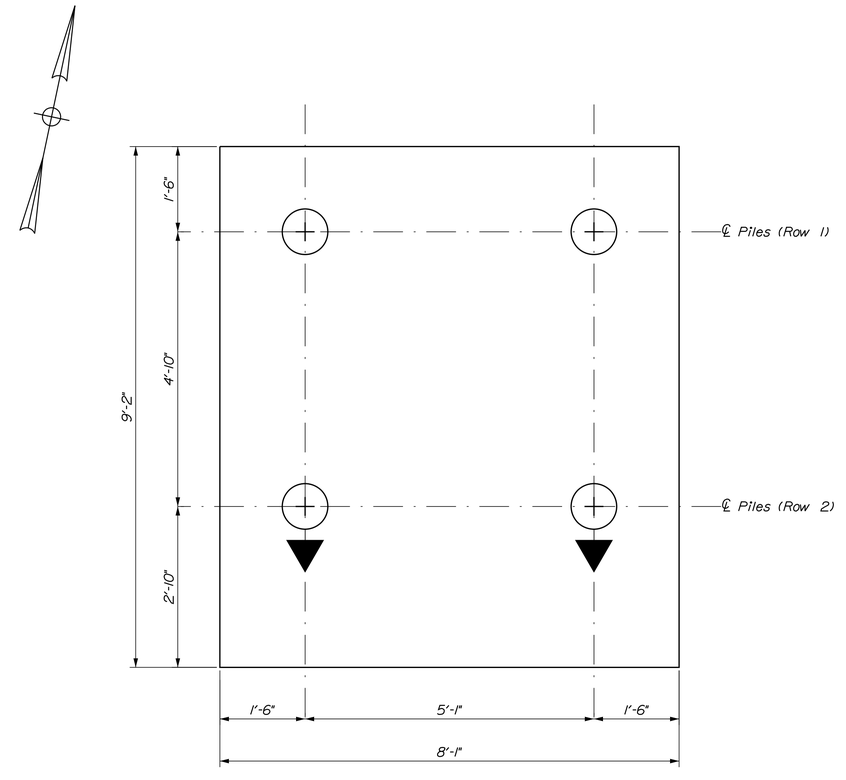
4. Grout shall be placed in accordance with Special Provision Section 501. Micropiles.

5. Stacked granite blocks that form the wall at the existing north abutment may be present at some or all of the micropile locations. These materials shall not be considered obstructions for payment under Item 501.807. Removal of Obstructions. Penetration.

6. Open or unsupported drill holes shall not be permitted. The Contractor shall not drill or flush ahead of the drill casing by more than one foot. The drill casing shall be extended to top of rock and seated prior to drilling of the rock socket.

7. Micropiles may be installed from existing finish grade during the Pre-closure Period. The casing, grout, and reinforcing shall be removed to final elevations shown on the Plan using methods that will not cause damage to the portion of the pile to remain. Torch cutting shall be prohibited and bond breakers may be warranted. Any temporary pile length installed shall not be measured for payment.

		Row 1		Row 2	
		Factored Design Load		Factored Design Load	
Item	DESCRIPTION	Compression	Tension	Compression	Tension
501.222	MICROPILES (MAINE AVE NE RETAINING WALL - 9⅝" DIAMETER)	71 kips	-81 kips	135 kips	0 kips



NORTHEAST RETAINING WALL PILE PLAN

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

	L. TIMBERLAKE	BY	DATE
DESIGN-DETAILED	DOT/LSF	DOT/KLW	SEPT 2018
CHECKED-REVIEWED	JGS	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

PROJ. MANAGER

SIGNATURE

P.E. NUMBER

DATE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

NORTHEAST RET. WALL
MICROPILE DETAILS

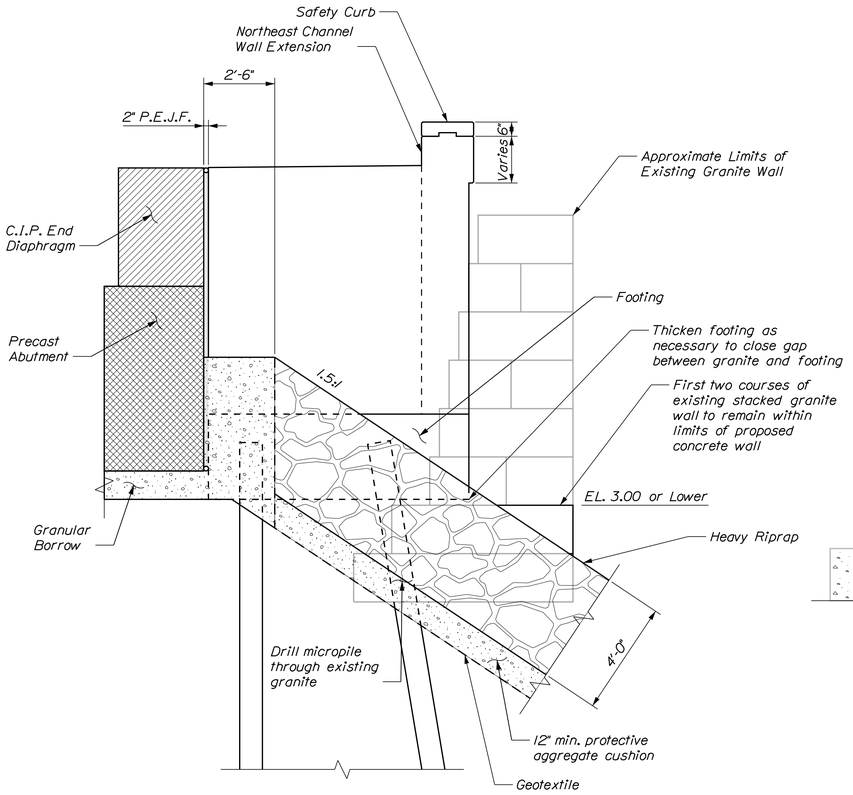
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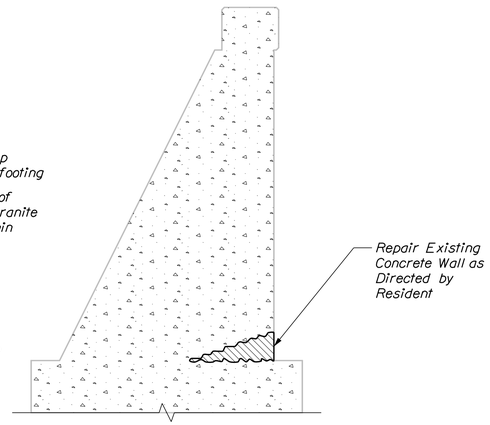
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Stantec

Username: dataylor Date:9/27/2018
Division: BRIDGE
Filename: ...\MSTA\B21_Micropile_Details.dgn



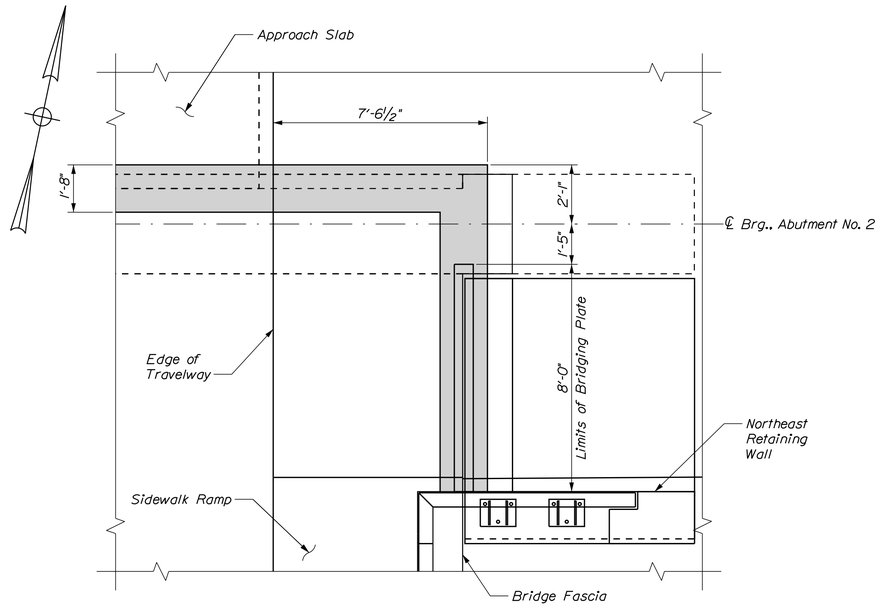
SECTION A-A



SECTION B-B

NOTES

1. See Abutment No. 2 Plan & Elevation sheet for locations of sections.



ASPHALTIC PLUG JOINT DETAIL AT NORTHEAST WALL

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

PROJ. MANAGER	L. TIMBERLAKE		
DESIGN-DETAILED	LSF	SEPT 2018	SIGNATURE
CHECKED-REVIEWED	DOT	TWM	SEPT 2018
DESIGN2-DETAILED2			P.E. NUMBER
DESIGN3-DETAILED3			
REVISIONS 1			DATE
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

NORTHEAST CHANNEL WALL SECTIONS

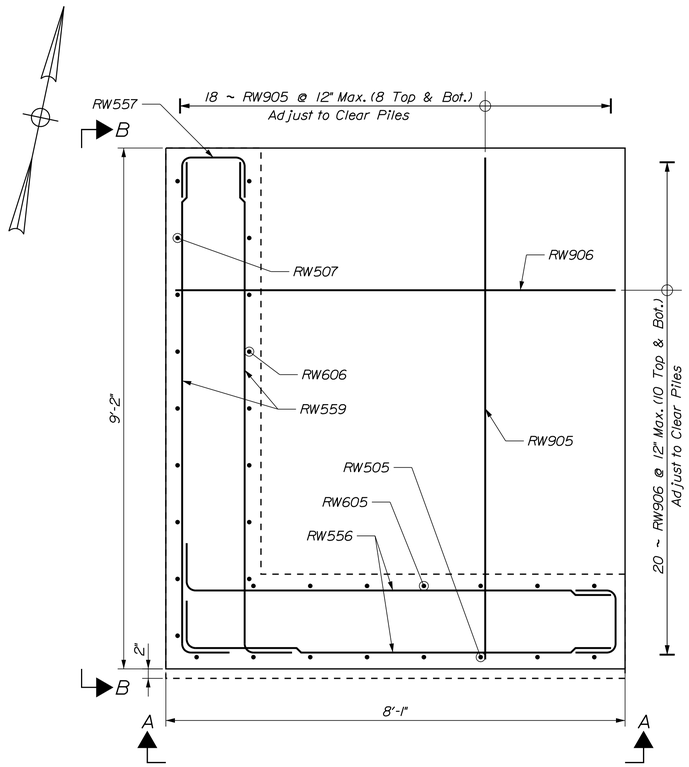
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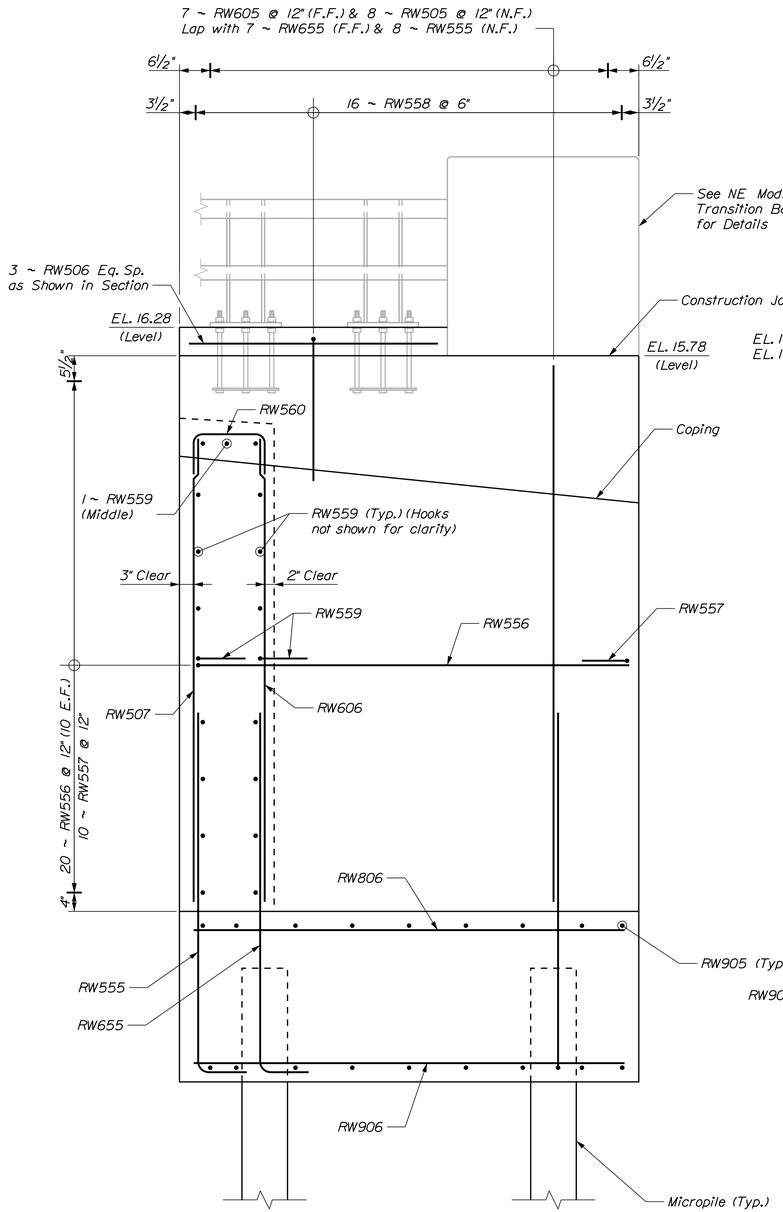
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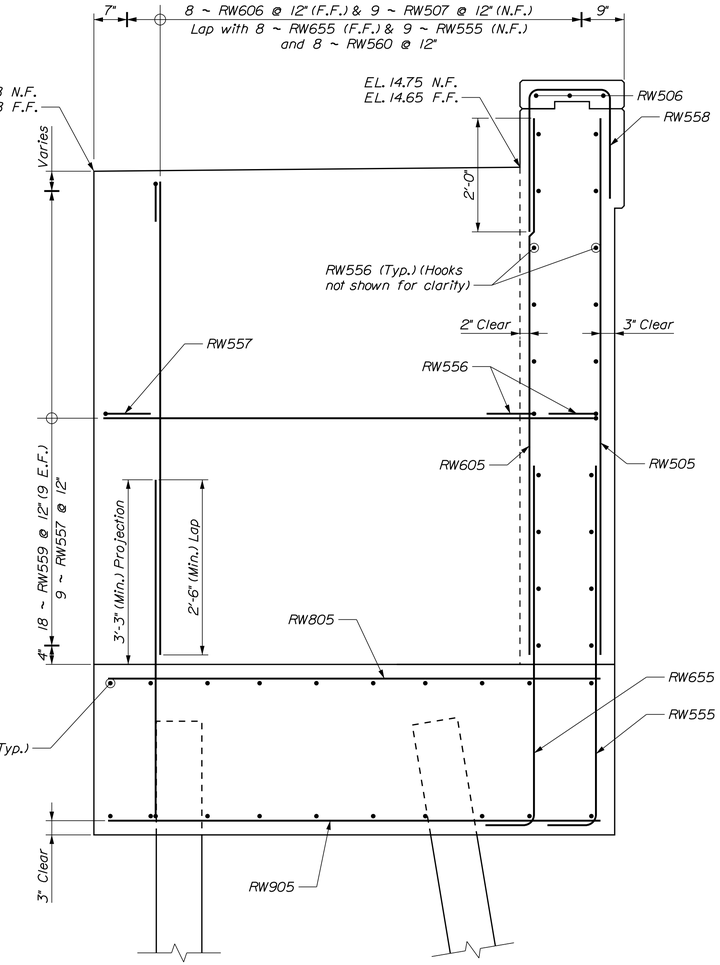
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FOOTING AND STEM PLAN
(Curb and Top of Wall Reinforcing Not Shown)



VIEW A-A - FRONT ELEVATION
(Looking North)



VIEW B-B - SIDE ELEVATION
(Looking East)

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

PROJ. MANAGER	L. TIMBERLAKE			
DESIGN-DETAILED	LSF	SEPT 2018		
CHECKED-REVIEWED	JGS	SEPT 2018		
DESIGN2-DETAILED2				
DESIGN3-DETAILED3				
REVISIONS 1				
REVISIONS 2				
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

P.E. NUMBER

SIGNATURE

DATE

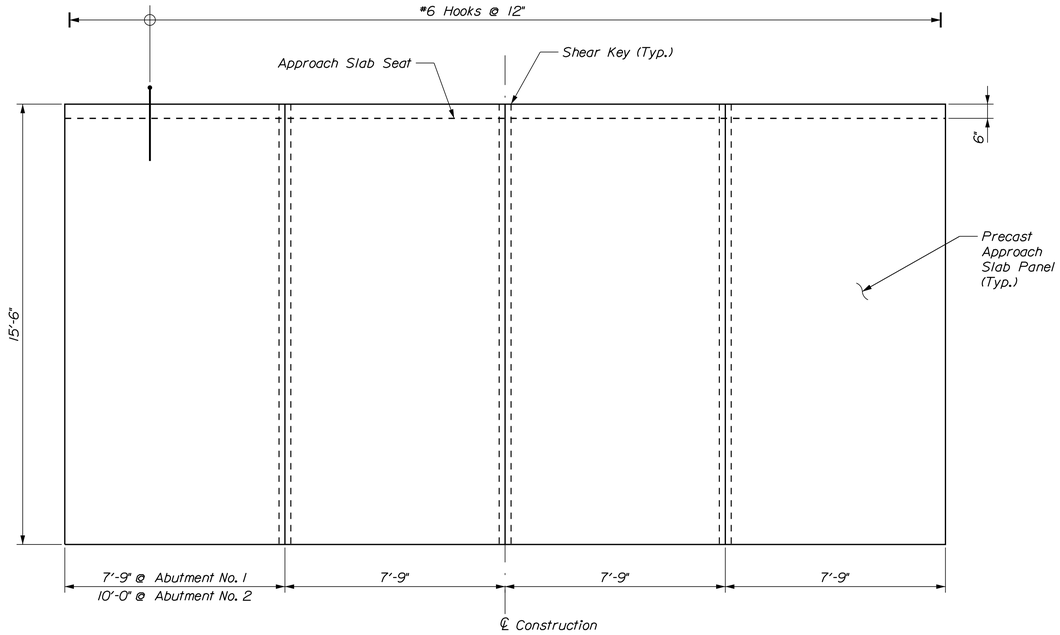
MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

NORTHEAST RET. WALL REINFORCING

SHEET NUMBER

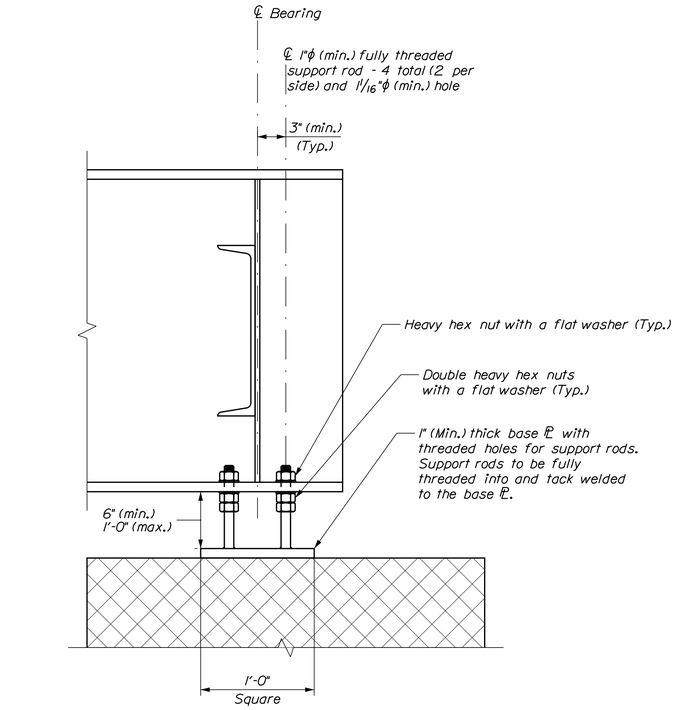
B23

OF B52



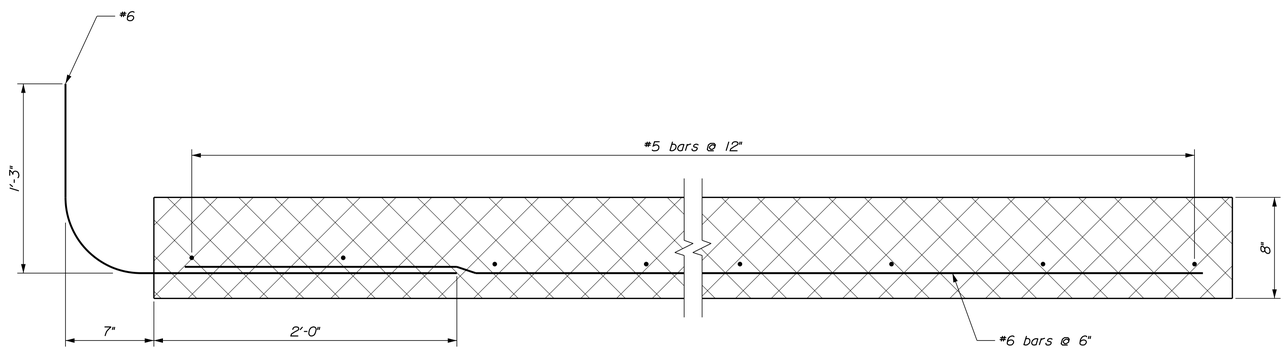
APPROACH SLAB PLAN

Refer to Standard Detail 502(02) for information and reinforcing not shown

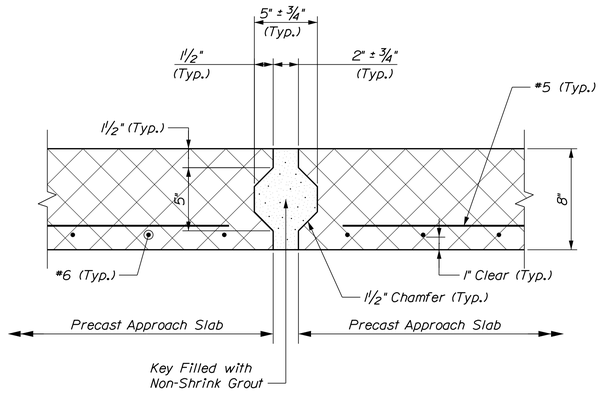


CONCEPTUAL TEMPORARY BEARING ASSEMBLY

Note: Contractor may submit alternative for review and approval. Temporary bearing assemblies shall be incidental to Item 530.04 Prefabricated Bridge Structure and Assembly.



PRECAST APPROACH SLAB SECTION



APPROACH SLAB SHEAR KEY

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

PROJ. MANAGER	L. TIMBERLAKE		
DESIGN-DETAILED	LSF	KLW	SEPT 2018
CHECKED-REVIEWED	DOT	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

P.E. NUMBER

DATE

SIGNATURE

DATE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

PRECAST APPROACH SLAB & TEMPORARY BEARING

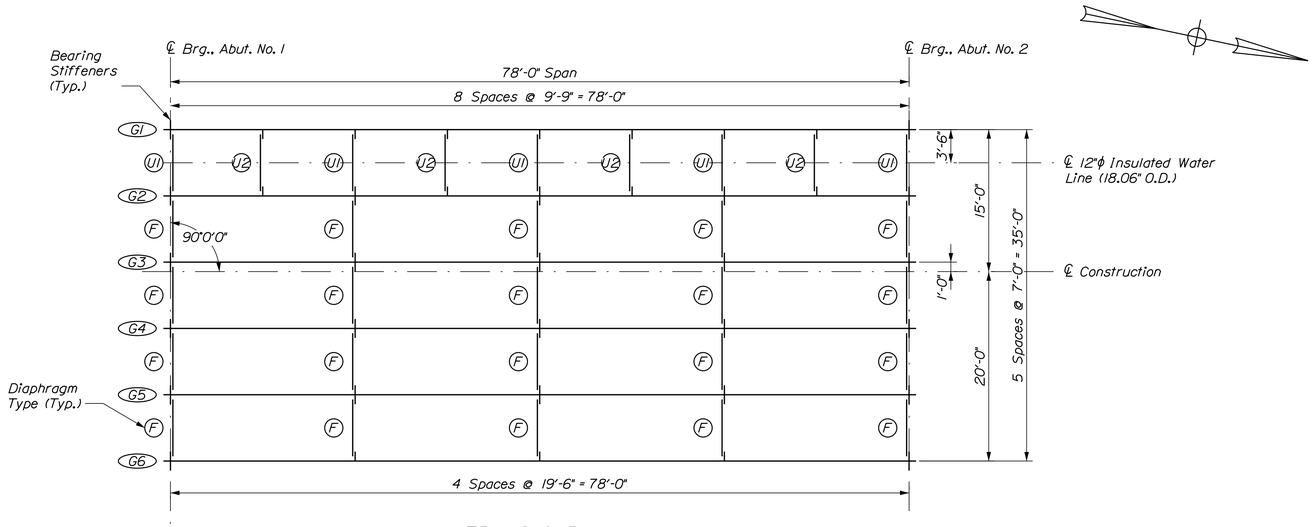
SHEET NUMBER

B24

OF B52

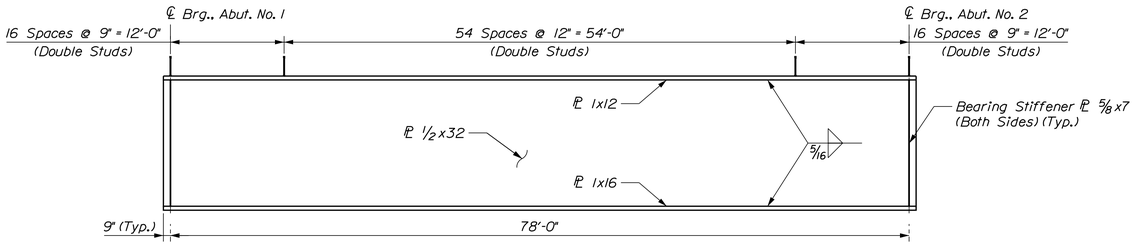
Stantec

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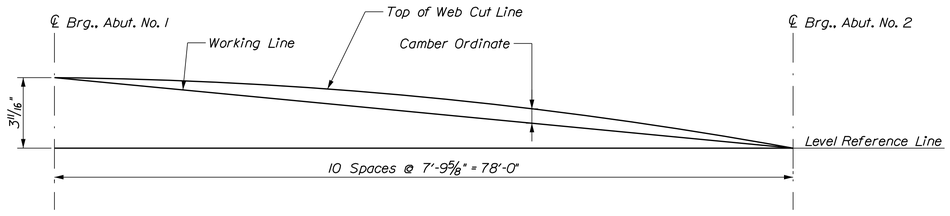
FRAMING PLAN

(Dimensions are Horizontal)



GIRDER ELEVATION AND STUD LAYOUT

(174 Studs per Girder x 6 Girders = 1044 Studs)



CAMBER DIAGRAM

TABLE OF CAMBER ORDINATES "CO" (IN)											
PBU	Abut. No. 1	7'-9⅜"	15'-7¼"	23'-4¾"	31'-2⅜"	39'-0"	46'-9⅜"	54'-7¼"	62'-4¾"	70'-2⅜"	Abut. No. 2	PBU
1	0"	1 9/16"	2 15/16"	4"	4 5/8"	4 13/16"	4 9/16"	3 7/8"	2 13/16"	1 7/16"	0"	1
2	0"	1 9/16"	2 15/16"	4"	4 5/8"	4 13/16"	4 9/16"	3 7/8"	2 13/16"	1 7/16"	0"	2
3	0"	1 9/16"	2 15/16"	4"	4 5/8"	4 13/16"	4 9/16"	3 7/8"	2 13/16"	1 7/16"	0"	3

STRUCTURAL STEEL NOTES

1. Camber ordinates, as shown, are computed to compensate for all dead load deflections and for the curvature of the finished grade profile.

2. No transverse butt weld splices will be allowed in the flange plates or web plates within 10 feet or 10 percent of the span length (whichever is greater) from the points of maximum negative moment or maximum positive moment. Butt weld splices in flanges shall be not less than one foot from transverse butt welds in the web plates and no transverse web or flange butt welds shall be located within one foot of other transverse welds (e.g. connection plates to web welds) on either flange or web. No transverse butt weld splices will be allowed in areas of stress reversal.

3. Sections of flange plates or web plates between transverse shop splices or between a transverse shop splice and a field splice shall be not less than 20 feet in length unless otherwise shown on the plans.

4. Bearing stiffeners shall be plumb after erection and dead loading of the structure. Intermediate web stiffeners may be either plumb or normal to the top flange.

5. Connection plates and gussets shall be 1/2-inch minimum thickness.

6. Crossframe or diaphragm connection plates may be either plumb or normal to the top flange.

7. All connection plates and stiffeners shall be welded to the top and bottom flanges using a 5/16-inch weld.

8. Girders, diaphragms, and cross frames shall be thermal spray coated and seal coated in accordance with Standard Specifications Subsections 506.30 thru 506.39.

9. At the Contractor's option, the Diaphragms and Cross Frames may be Hot-Dipped Galvanized in accordance with Standard Specifications Section 506, Shop Applied Protective Coating, as approved by the Resident. Payment will be considered incidental to Item 506.9104, Thermal Spray Coating (Shop Applied). No separate payment will be made.

10. At the Contractor's option, all Structural Steel may be Hot Dipped Galvanized in accordance with Standard Specifications Section 506, Shop Applied Protective Coating, as approved by the Resident. Double Hot Dipped galvanizing shall be approved by the Resident. Payment will be considered incidental to Item 506.9104, Thermal Spray Coating (Shop Applied). No separate payment will be made.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

PROJ. MANAGER	L. TIMBERLAKE		
DESIGN-DETAILED	LSF	KLW	SEPT 2018
CHECKED-REVIEWED	DOT	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BY | DATE

SIGNATURE

P.E. NUMBER

DATE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

FRAMING PLAN

SHEET NUMBER

B25

OF B52

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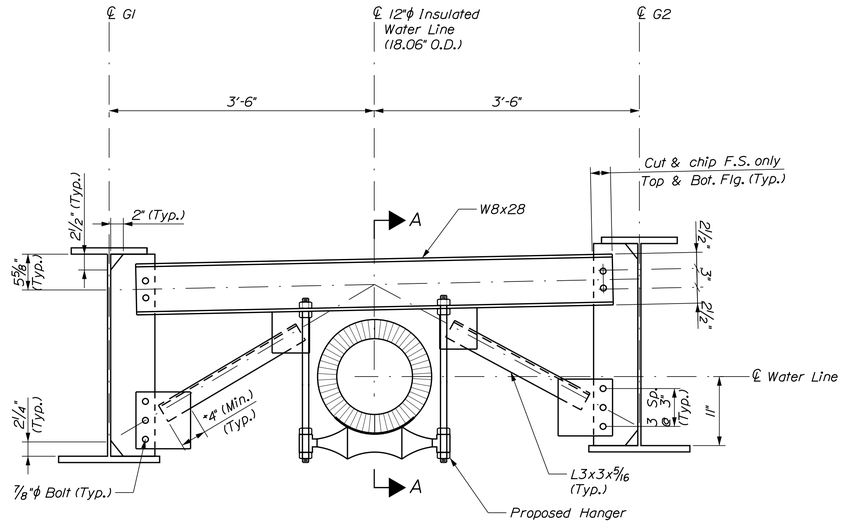
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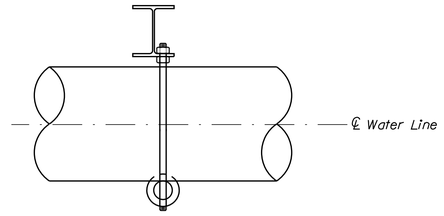
NOTES

1. See water plans for water main details.

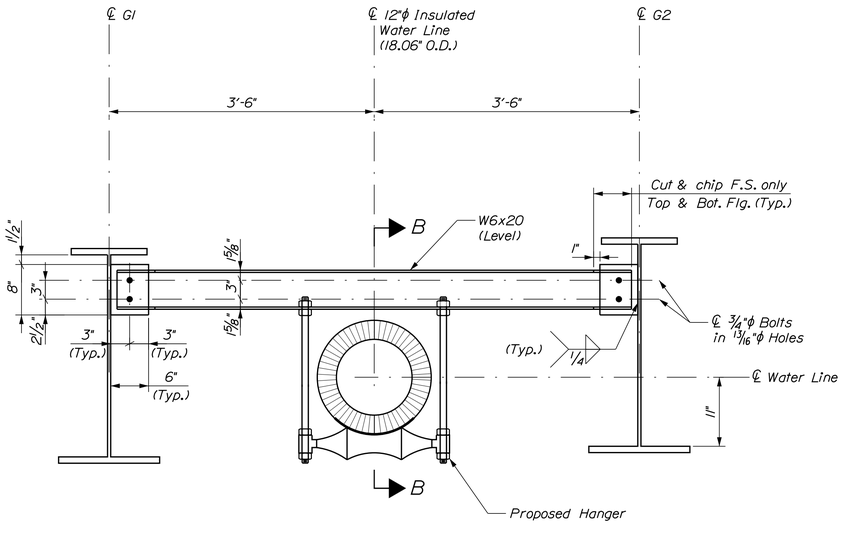


DIAPHRAGM TYPE U1

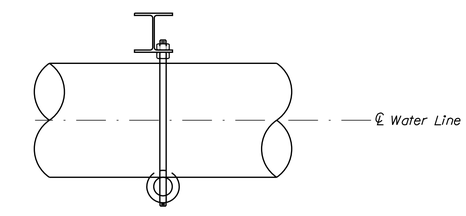
*See "Typical Weld Details" & Notes on Standard Detail 504(07)



SECTION A-A



DIAPHRAGM TYPE U2



SECTION B-B

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18735.00

BRIDGE NO. 3098

BRIDGE PLANS

STATE OF MAINE BARRIN D. LARY No. 10749 REGISTERED PROFESSIONAL ENGINEER

P.E. NUMBER		
SIGNATURE		
DATE		

PROJ. MANAGER	L. TIMBERLAKE	
DESIGN-DETAILED	LSF	SEPT 2018
CHECKED-REVIEWED	DDTYLER	LEMYTWM SEPT 2018
DESIGN2-DETAILED2	DDTYLER	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

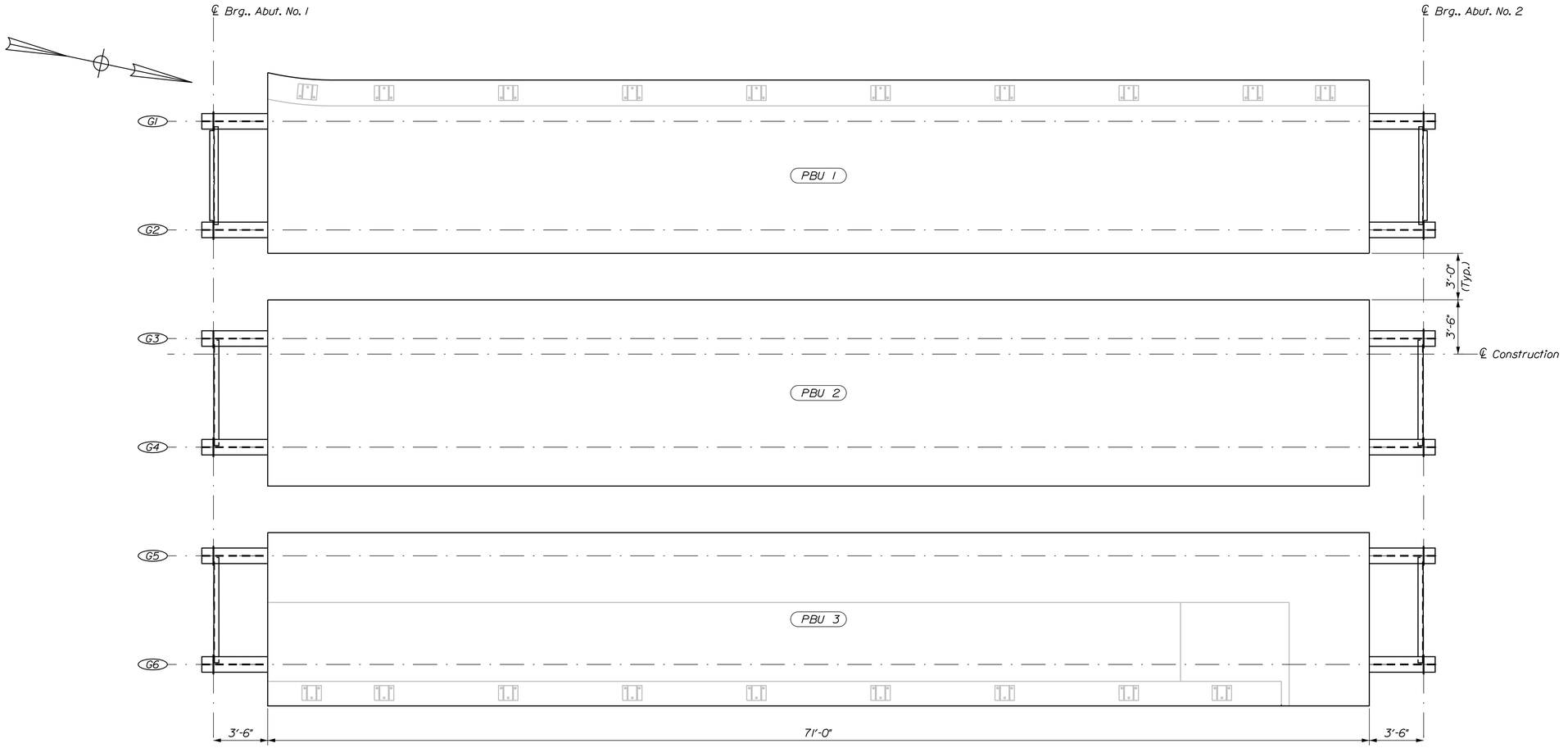
MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

STRUCTURAL STEEL DETAILS

SHEET NUMBER

B26

OF B52



PRECAST BRIDGE UNIT LAYOUT PLAN

BOTTOM OF SLAB ELEVATIONS (FT)

Girder	Abut. No. 1	7'-9⅝"	15'-7½"	23'-4¾"	31'-2⅜"	39'-0"	46'-9⅝"	54'-7½"	62'-4¾"	70'-2⅜"	Abut. No. 2	Girder
1	14.45	14.54	14.61	14.66	14.68	14.66	14.61	14.54	14.43	14.29	14.16	1
2	14.59	14.68	14.75	14.80	14.82	14.80	14.75	14.68	14.57	14.43	14.30	2
3	14.73	14.82	14.89	14.94	14.96	14.95	14.90	14.82	14.71	14.58	14.44	3
4	14.63	14.72	14.79	14.84	14.86	14.85	14.80	14.72	14.61	14.48	14.34	4
5	14.49	14.58	14.65	14.70	14.72	14.70	14.65	14.58	14.47	14.33	14.20	5
6	14.35	14.44	14.51	14.56	14.58	14.56	14.51	14.44	14.33	14.19	14.06	6

PRECAST BRIDGE UNIT NOTES

1. See Superstructure Plan for additional notes.

2. The theoretical blocking used for design of the structure is 2½ inches at the centerline of bearing of the abutments. Refer to Standard Detail 502(02) for blocking details.

3. The Contractor shall have the option to omit mechanical couplers and extend reinforcing into the closure pours using straight lap splices or overlapping 180 degree hooks. Payment for this reinforcing and all components of mechanical couplers shall be incidental to Item 530.04 Prefabricated Bridge Structure and Assembly. Any alternative reinforcing designs shall be submitted for review and approval.

4. The Contractor shall have the option to vary the width of the closure pour between Precast Bridge Units and the width of the end diaphragm closure pour.

5. The approximate pick weights of the PBUs are:
   PBU 1: 54 tons
   PBU 2: 56 tons
   PBU 3: 54 tons

6. Bottom of slab elevations in the table are based on the design profile shown on Sheet B3. The Contractor shall determine revised bottom of slab elevations for off-site PBU construction based upon their actual off-site working profile, layout, and conditions.

7. After the beams are erected but before the forms are built, elevations on top of the flange of the beams are to be obtained at the points indicated in the site specific bottom of slab elevation table. The difference between the elevations obtained and those shown in the table gives the actual blocking distance from the top of beam to the bottom of slab at centerline of beam.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

		BY	DATE
PROJ. MANAGER	L. TIMBERLAKE		
DESIGN-DETAILED	LSF	LSF	SEPT 2018
CHECKED-REVIEWED	TEK	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

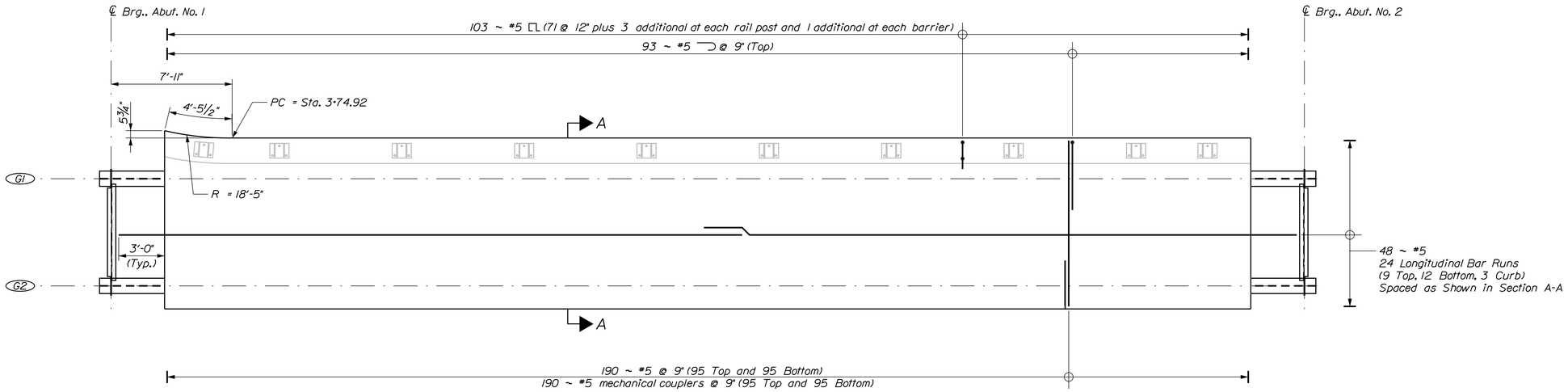
PRECAST BRIDGE UNIT LAYOUT PLAN

SHEET NUMBER

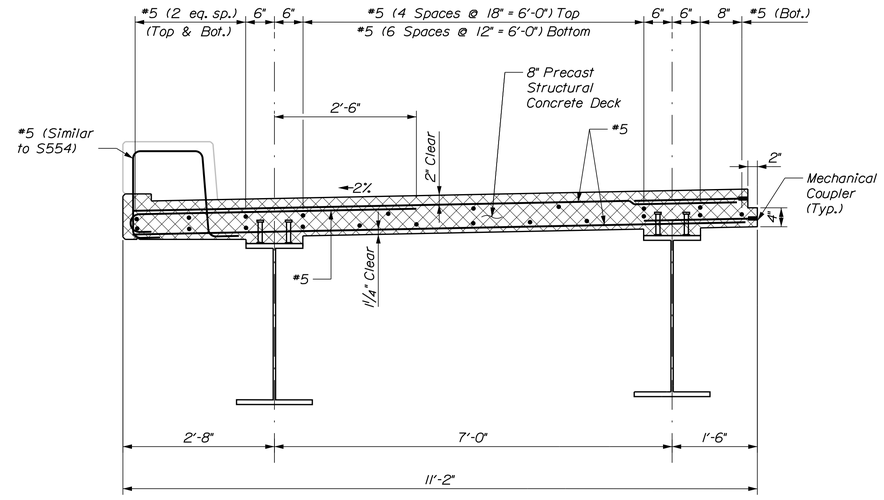
B27

OF B52

Filename: ...\MSTA\B27_PBU_layout.dgn Division: BRIDGE Username: dataylor Date:9/27/2018



PRECAST BRIDGE UNIT 1



SECTION A-A

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

PROJ. MANAGER	L. TIMBERLAKE		
DESIGN-DETAILED	LSF	SEPT 2018	
CHECKED-REVIEWED	TEK	SEPT 2018	
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

PRECAST BRIDGE UNIT 1

SHEET NUMBER

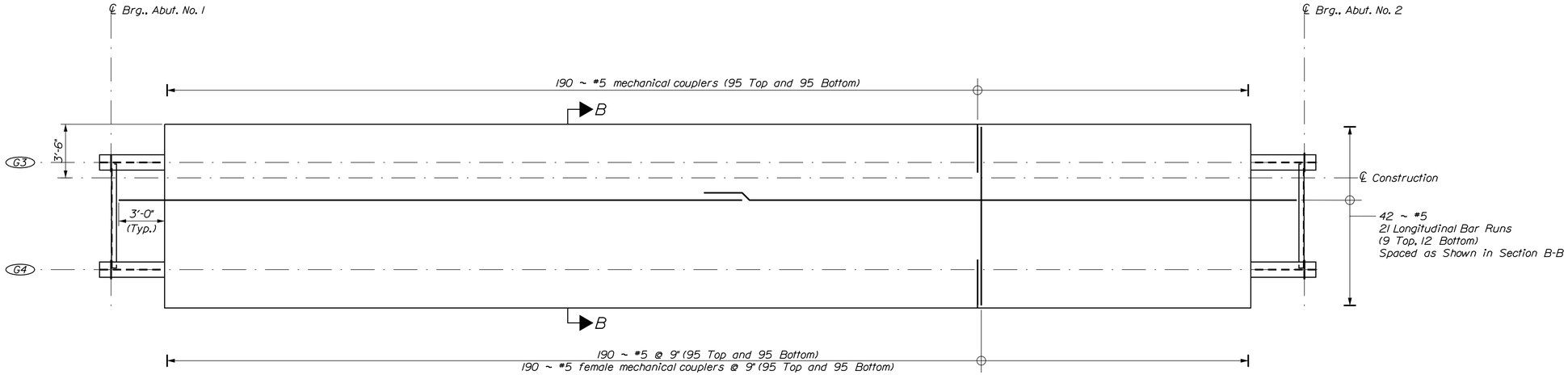
B28

OF B52

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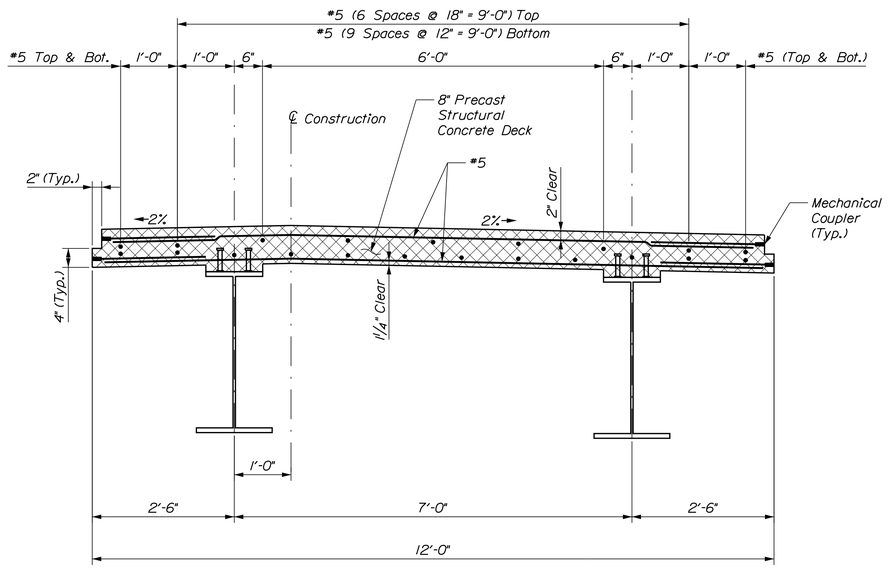
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Filename: ...\BRIDGE_maine\MST\B29_PBU2.dgn Division: BRIDGE Username: dtaylor Date:9/27/2018



PRECAST BRIDGE UNIT 2

*Contractor may adjust length of end closure pour.



SECTION B-B

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STATE OF MAINE
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STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098 BRIDGE PLANS

PROJ. MANAGER	L. TIMBERLAKE	BY	DATE
DESIGN-DETAILED	LSF	LSF	SEPT 2018
CHECKED-REVIEWED	TEK	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

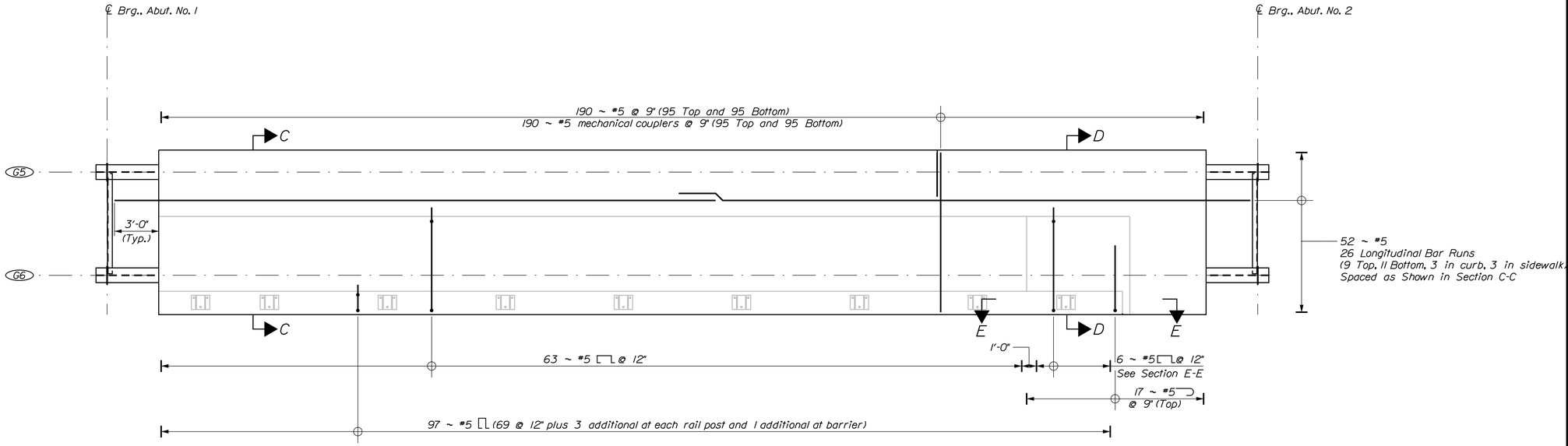
MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

PRECAST BRIDGE UNIT 2

SHEET NUMBER

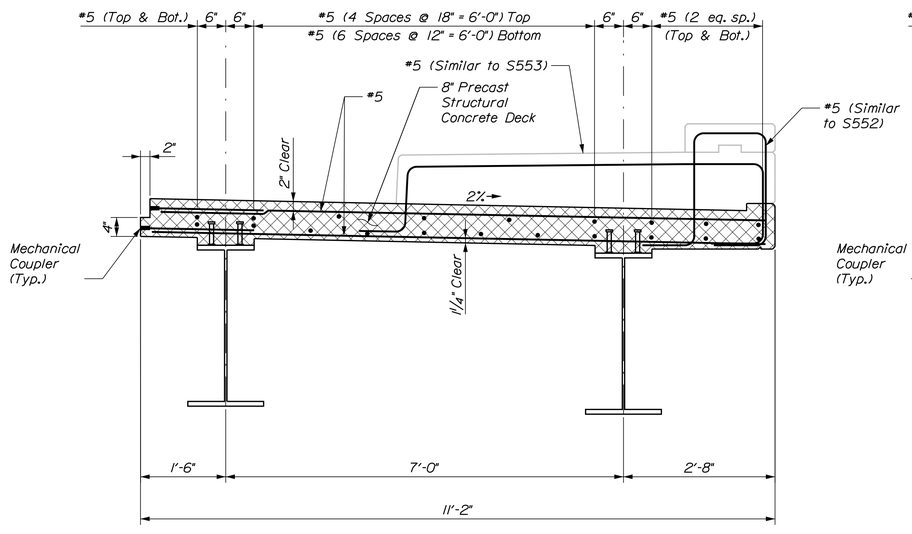
B29

OF B52

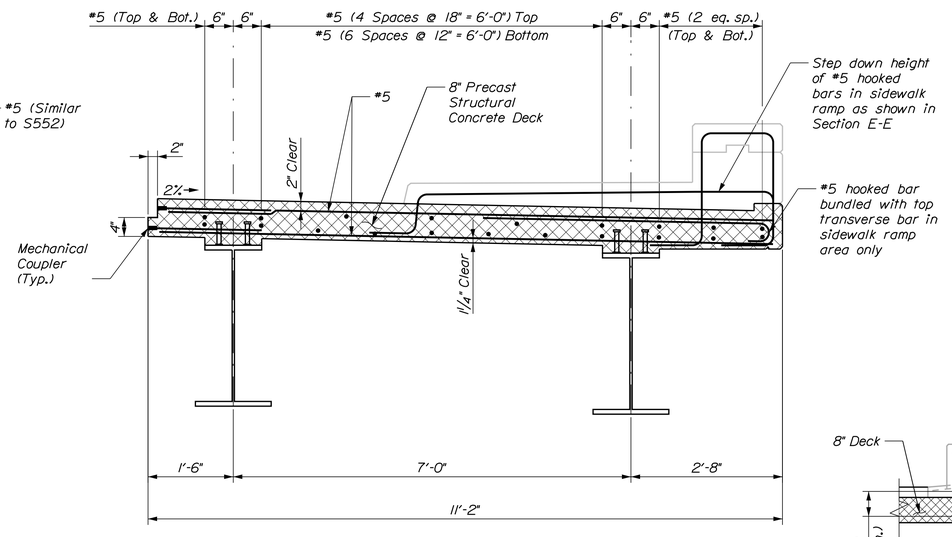


PRECAST BRIDGE UNIT 3

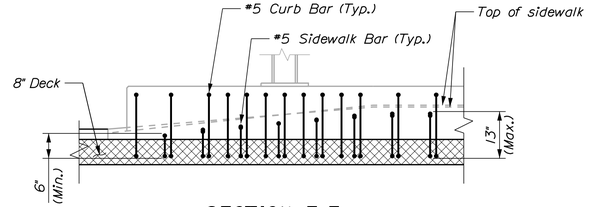
*Contractor may adjust length of end closure pour.



SECTION C-C



SECTION D-D



SECTION E-E

Deck bars not shown for clarity.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

PROJ. MANAGER	L. TIMBERLAKE		
DESIGN-DETAILED	LSF	SEPT 2018	
CHECKED-REVIEWED	TEK	SEPT 2018	
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

P.E. NUMBER

SIGNATURE

DATE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

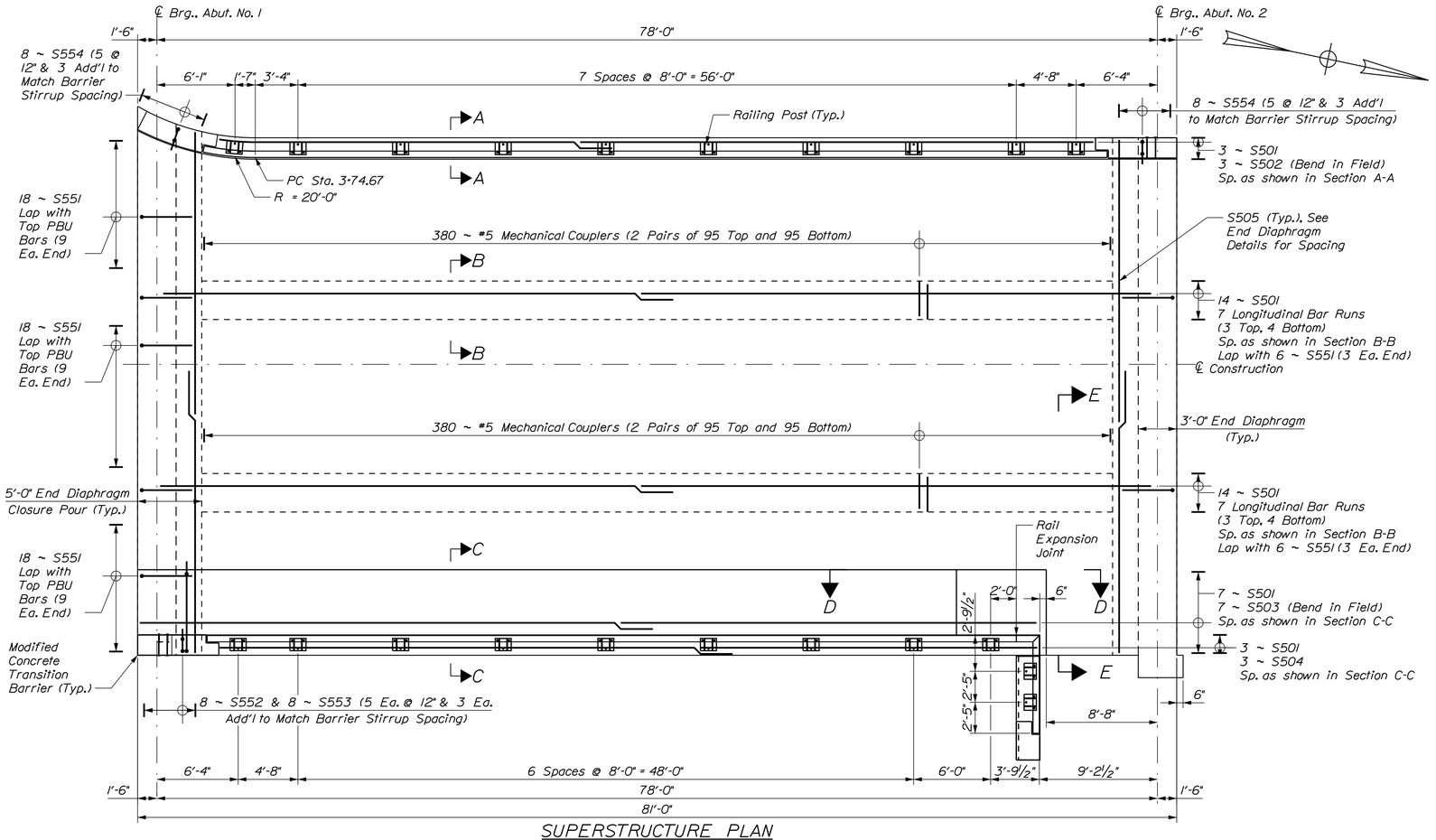
PRECAST BRIDGE UNIT 3

SHEET NUMBER

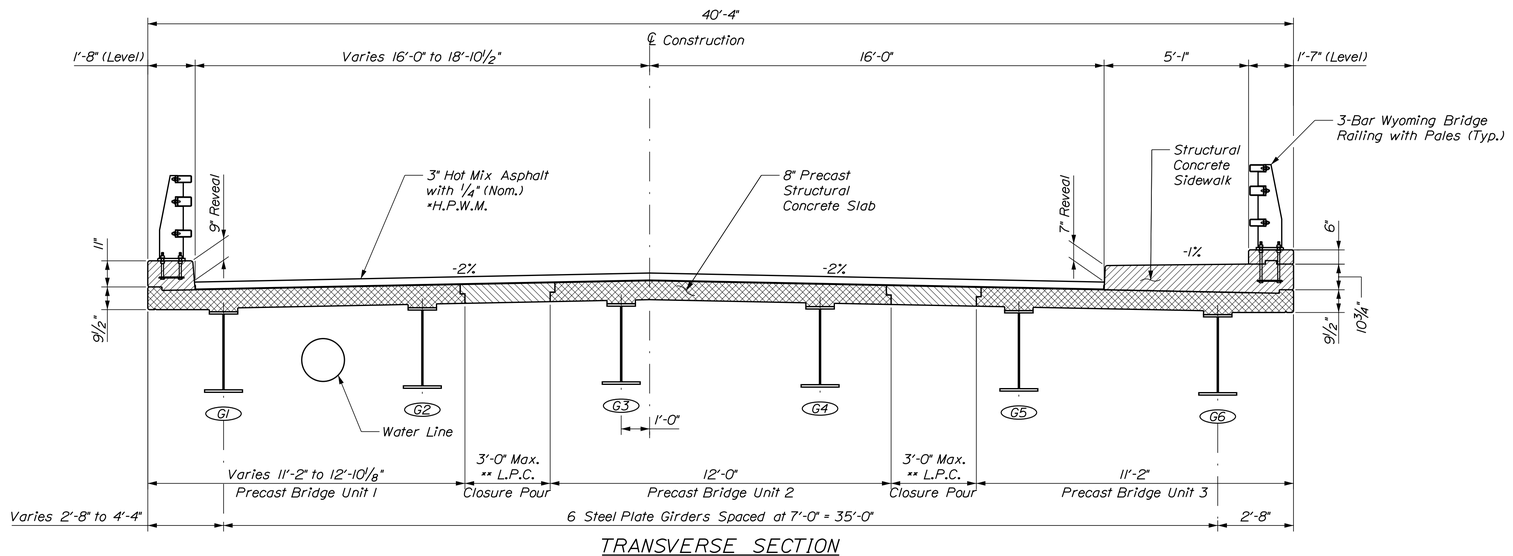
B30

OF B52

Filename: ...\BRIDGE_maine\MST\B30_PBU3.dgn Division: BRIDGE Username: dtaylor Date:9/27/2018



SUPERSTRUCTURE PLAN



TRANSVERSE SECTION

SUPERSTRUCTURE NOTES

1. Reinforcing steel shall have a minimum concrete cover of 2 inches unless otherwise noted.

2. Form a one inch V-groove on the fascias at the horizontal joint between the curb and slab.

3. The superstructure slab concrete for each span shall be placed continuously and shall be kept plastic until the entire placement has been made.

4. Payment for closure pour and end diaphragm concrete and reinforcing steel fabricated, delivered, and placed shall be incidental to Item 530.04 Prefabricated Bridge Structure and Assembly.

5. The Contractor shall install Transition Barrier vertical closed stirrups, as shown in Standard Details Section 526, prior to the placement of the curb or sidewalk concrete.

6. The minimum lap splice for #5 bars shall be 2'-6" unless noted otherwise.

7. The Contractor may cast the curb, sidewalk, and safety curb with the precast bridge units.

8. The use of Precast Concrete Deck Panels will not be allowed on this project.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

PROJ. MANAGER	L. TIMBERLAKE	BY	DATE
DESIGN-DETAILED	LSF	LSF	SEPT 2018
CHECKED-REVIEWED	TEK	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

SUPERSTRUCTURE PLAN

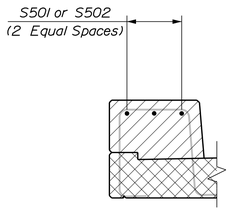
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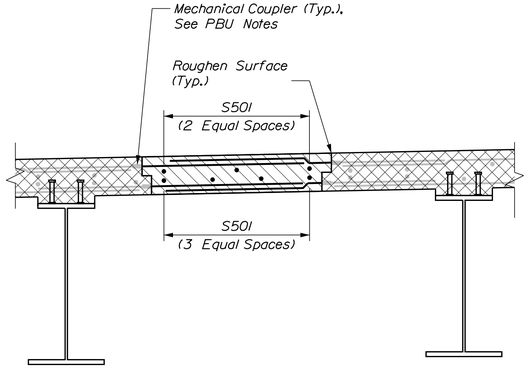
OF B52

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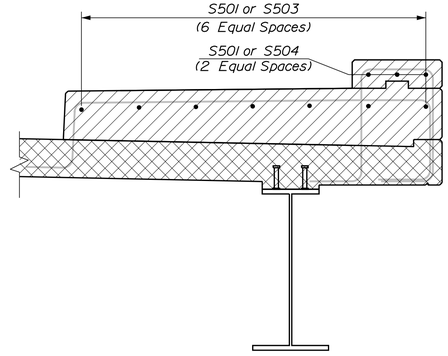
Username: dataylor Date:9/27/2018
Division: BRIDGE
Filename: ...\B31_Superstructure_maine.dgn



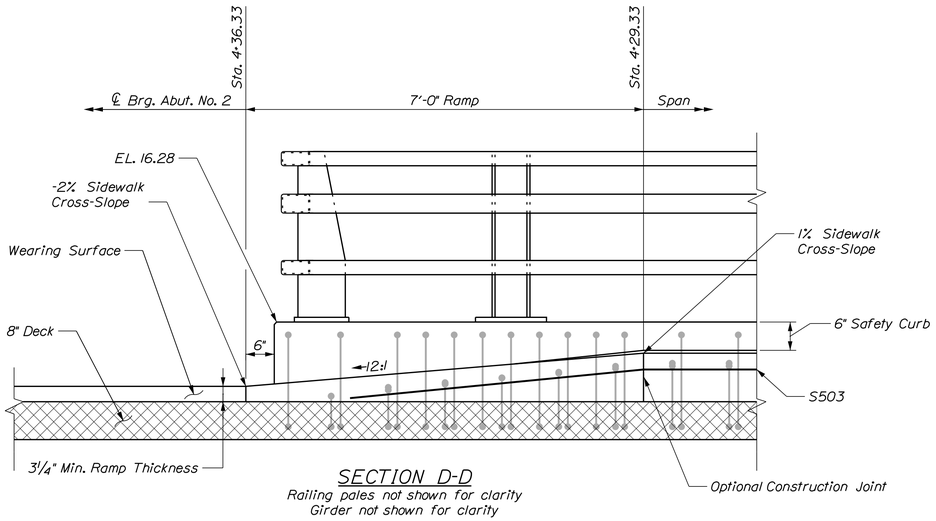
SECTION A-A



SECTION B-B

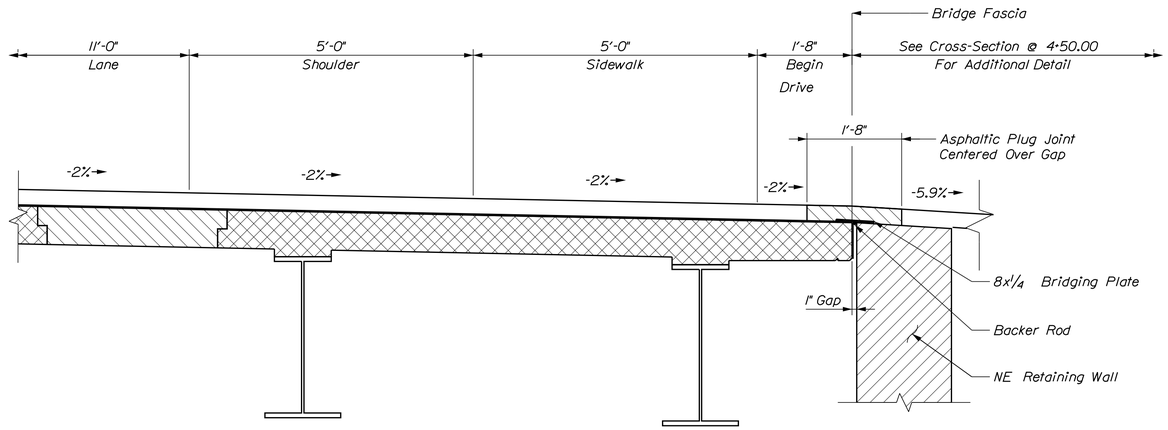


SECTION C-C



SECTION D-D

Railing pales not shown for clarity
Girder not shown for clarity



SECTION E-E

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

PROJ. MANAGER	L. TIMBERLAKE	BY	DATE
DESIGN-DETAILED	LSF	LSF	SEPT 2018
CHECKED-REVIEWED	TEK	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

SUPERSTRUCTURE DETAILS

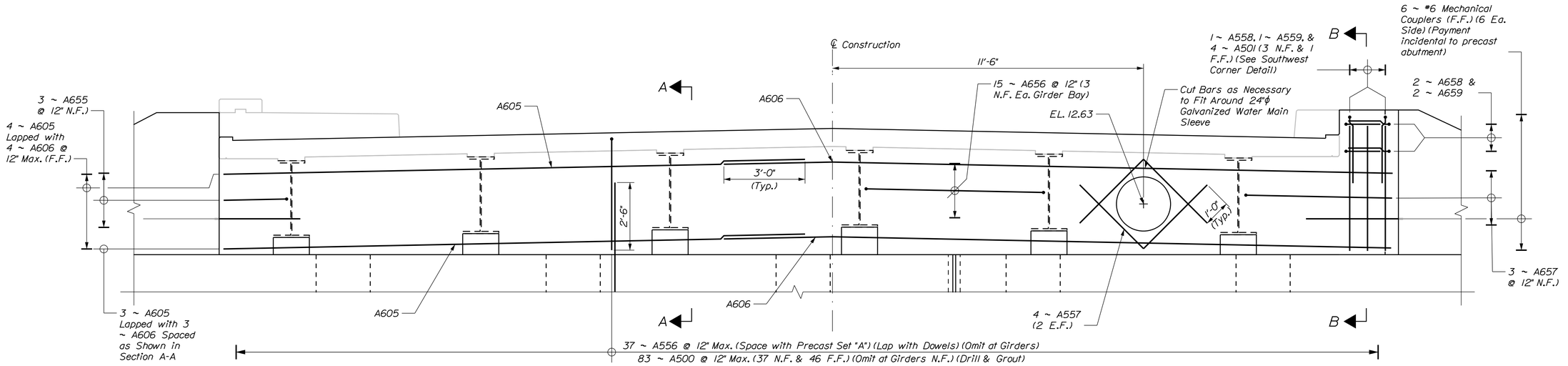
SHEET NUMBER

B32

OF B52

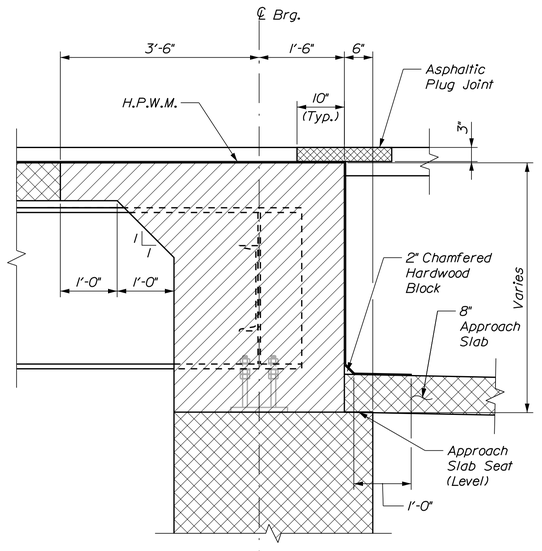
Stantec

Filename: ...\B32_Superstructure_maine_details.dgnDivision: BRIDGE Username: dataylor Date:9/27/2018

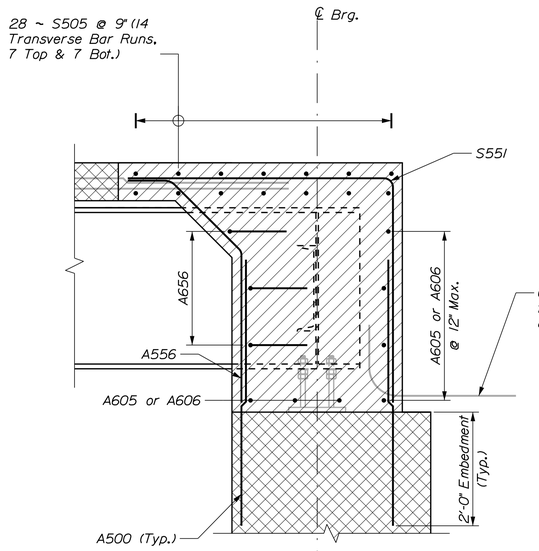


ABUTMENT NO. 1 CAST-IN-PLACE END DIAPHRAGM ELEVATION

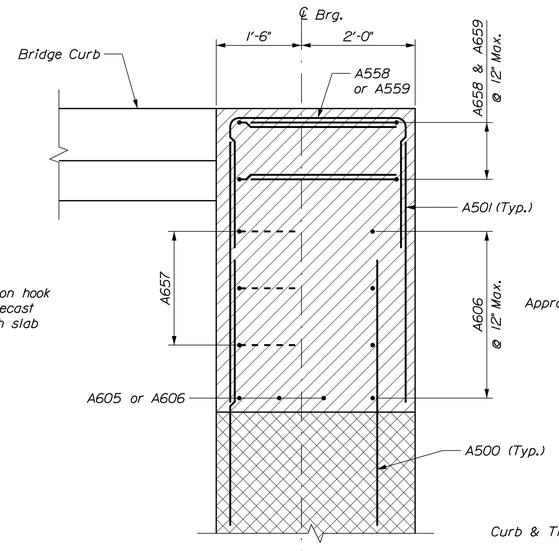
Deck reinforcing not shown for clarity



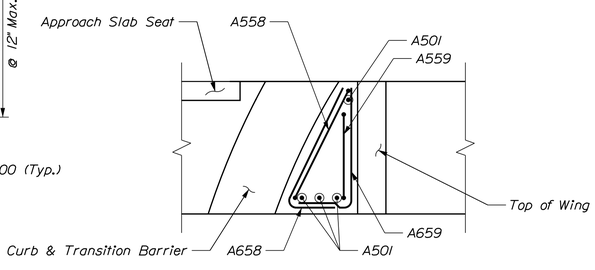
TYPICAL END DIAPHRAGM SECTION



SECTION A-A



SECTION B-B



SOUTHWEST CORNER DETAIL PLAN

Stantec

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

PROJ. MANAGER	L. TIMBERLAKE		
DESIGN-DETAILED	LSF	SEPT 2018	
CHECKED-REVIEWED	TEK	SEPT 2018	
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

P.E. NUMBER

SIGNATURE

DATE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

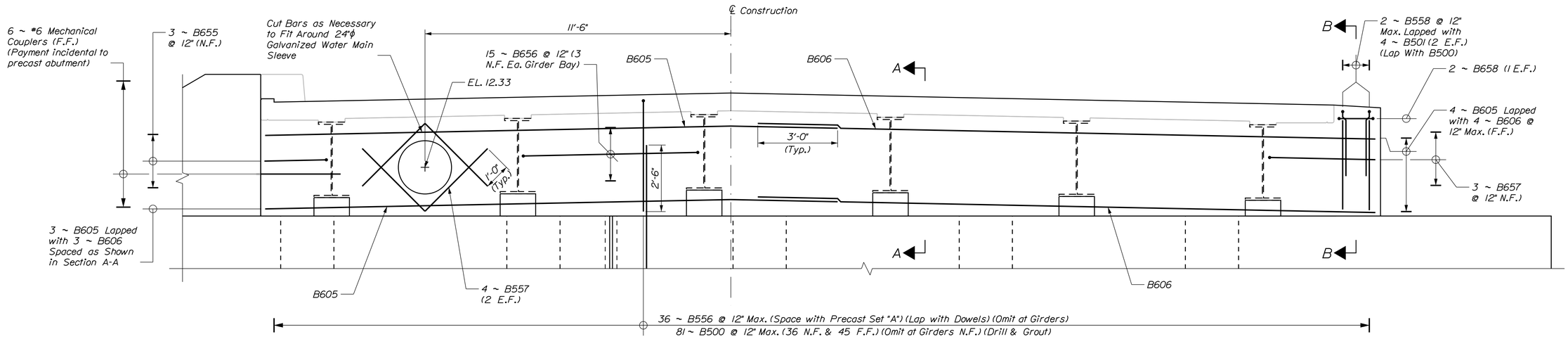
END DIAPHRAGM DETAILS

SHEET NUMBER

B33

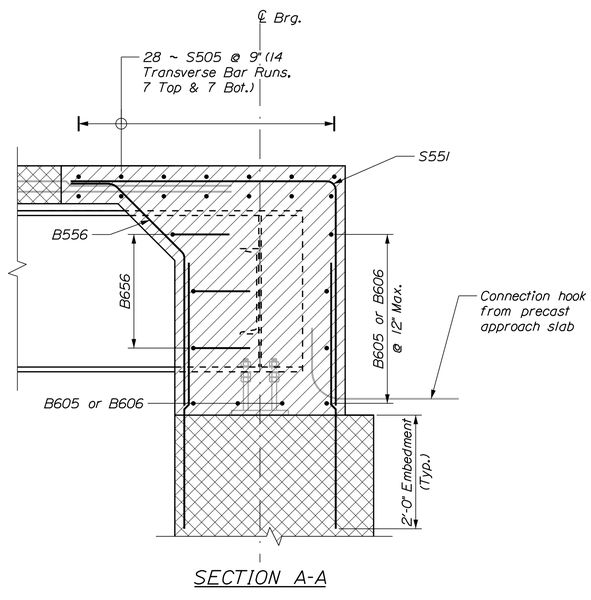
OF B52

Filename: ...\MSTA\B33_End_Diaphragm_1.dgn Division: BRIDGE Username: dataylor Date:9/27/2018

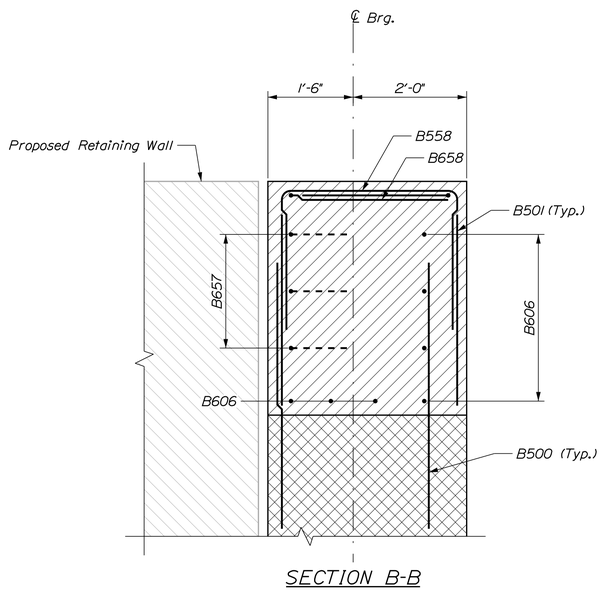


ABUTMENT NO. 2 CAST-IN-PLACE END DIAPHRAGM ELEVATION

Deck reinforcing not shown for clarity



SECTION A-A



SECTION B-B

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

PROJ. MANAGER	L. TIMBERLAKE		
DESIGN-DETAILED	LSF	BY	SEPT 2018
CHECKED-REVIEWED	TEK	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

P.E. NUMBER

SIGNATURE

DATE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

END DIAPHRAGM DETAILS

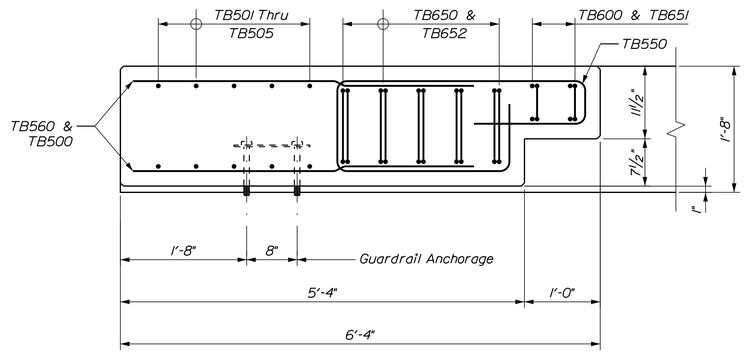
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B34

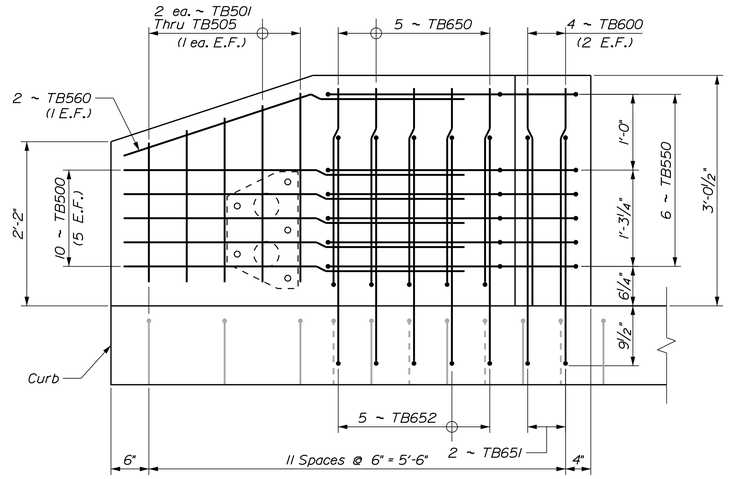
OF B52

Stantec

Filename: ...\MSTA\B34_End_Diaphragm_2.dgn Division: BRIDGE Username: dataylor Date:9/27/2018



PLAN - CONCRETE TRANSITION BARRIER ON CURB



ELEVATION - CONCRETE TRANSITION BARRIER ON CURB

TRANSITION BARRIER NOTES

1. All work and materials shall conform to the requirements of Standard Detail Section 526, Permanent Concrete Barrier.

2. Reinforcing steel shall have a minimum concrete cover of 2 inches.

3. The quantities of reinforcing bars shown are for one transition barrier only.

4. Payment for the guardrail anchorage is considered incidental to the transition barrier pay item.

5. After installation of the guardrail is complete, upset the threads on the anchor bolts in 3 places around each bolt, at the junction of the nut and exposed thread, with a center punch or similiar tool. Payment for nuts will be considered incidental to the guardrail pay item.

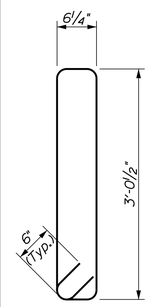
6. The height of transition barriers shall be measured from the top of curb or top of safety curb.

MATERIALS

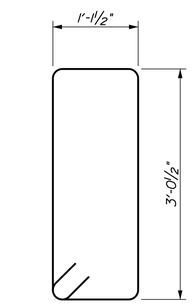
Concrete	Class "LP"
Stainless Reinforcing Steel	ASTM A 995/A 995M, Grade 75
Spacer Plate	ASTM A 709/A 709 M, Grade 50
Anchor Bolts	ASTM A 325M, Type 1

REINFORCING STEEL SCHEDULE

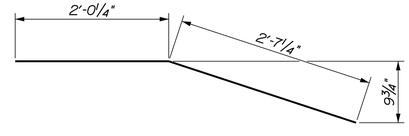
Mark	Qty.	Length
TB500	10	4'-6"
TB501	2	1'-10"
TB502	2	2'-0"
TB503	2	2'-2"
TB504	2	2'-4"
TB505	2	2'-6"
TB550	6	9'-11½"
TB560	2	4'-7½"
TB600	4	2'-10"
TB650	5	6'-4½"
TB651	2	8'-1½"
TB652	5	9'-4"



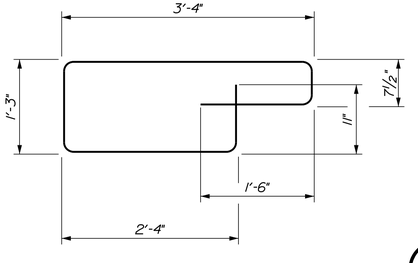
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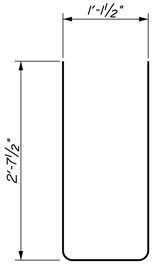
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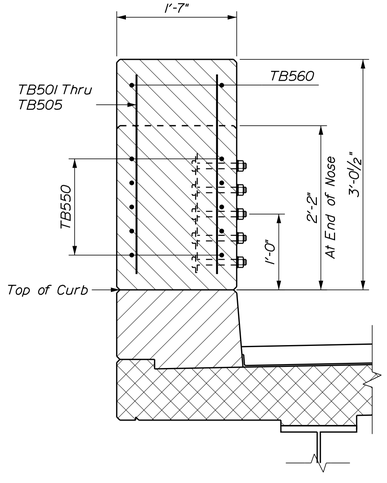
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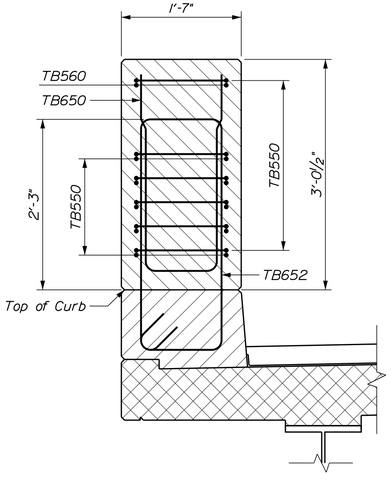
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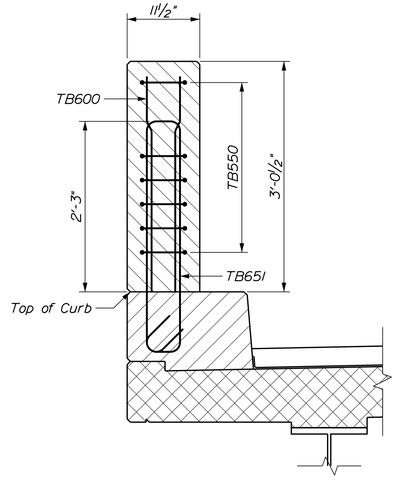
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BARRIER SECTION AT NOSE



BARRIER SECTION AT STEM



BARRIER SECTION AT RECESS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

	BY	DATE
DESIGNED	KLW	SEPT 2018
DETAILED	KLW	SEPT 2018
CHECKED	TWM	
QUANTITIES		
PROJ. MANAGER	L. TIMBERLAKE	
DESIGN-DETAILED	KLW	
CHECKED-REVIEWED	SJW	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

TRANSITION BARRIER
(1 OF 4)

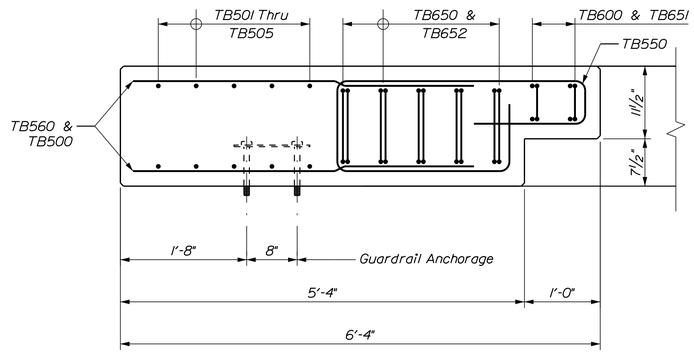
SHEET NUMBER

B35

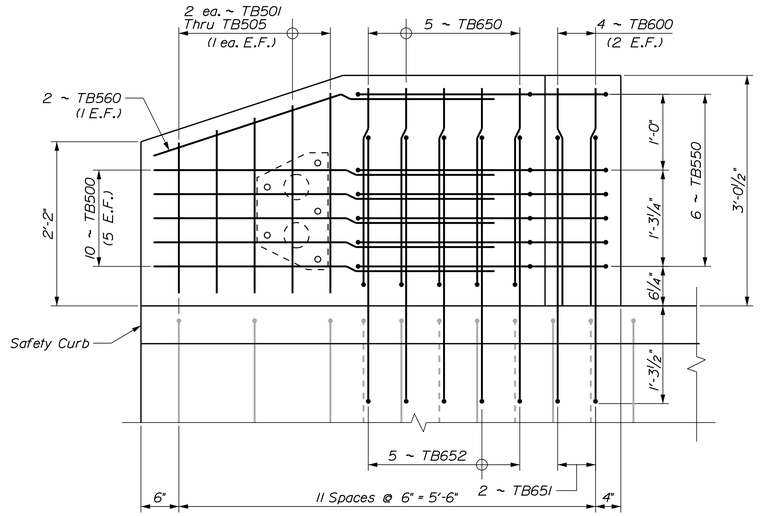
OF B52

Stantec

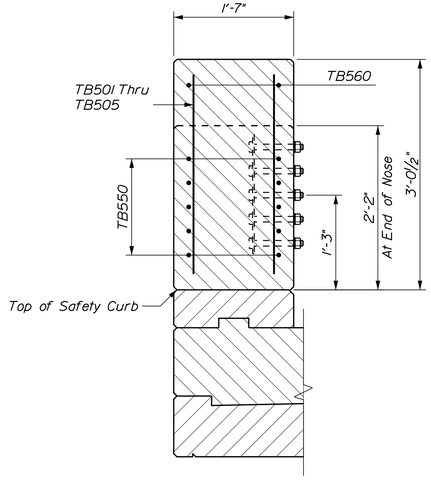
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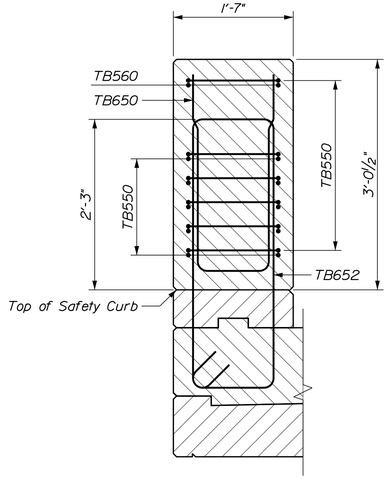
PLAN - CONCRETE TRANSITION BARRIER ON SIDEWALK



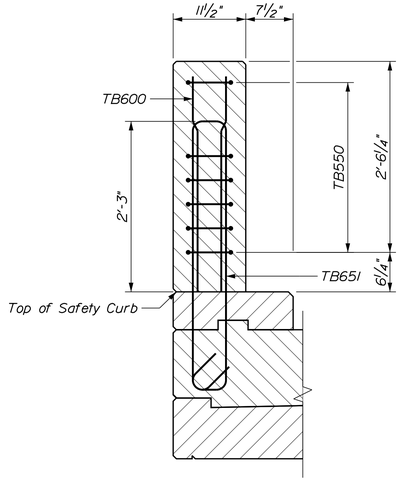
ELEVATION - CONCRETE TRANSITION BARRIER ON SIDEWALK



BARRIER SECTION AT NOSE



BARRIER SECTION AT STEM



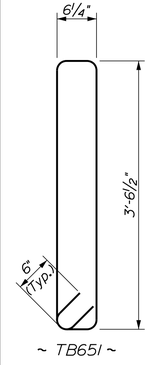
BARRIER SECTION AT RECESS

TRANSITION BARRIER NOTES

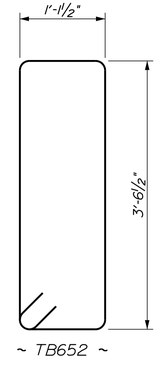
1. See Transition Barrier Sheet 1 of 4 for Notes and Materials.

REINFORCING STEEL SCHEDULE

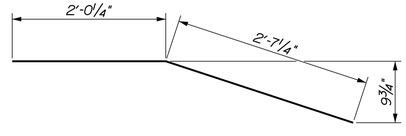
Mark	Qty.	Length
TB500	10	4'-6"
TB501	2	1'-10"
TB502	2	2'-0"
TB503	2	2'-2"
TB504	2	2'-4"
TB505	2	2'-6"
TB550	6	9'-11½"
TB560	2	4'-7½"
TB600	4	2'-10"
TB650	5	6'-4½"
TB651	2	9'-1½"
TB652	5	10'-4"



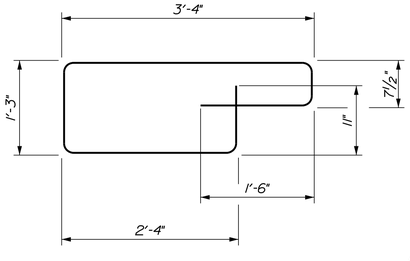
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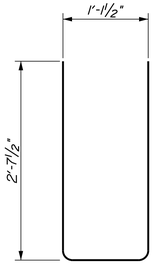
~ TB652 ~



~ TB560 ~



~ TB550 ~



~ TB650 ~

Stantec

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	L. TIMBERLAKE	
DESIGN-DETAILED	KLW	SEPT 2018
CHECKED-REVIEWED	SJW	SEPT 2018
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

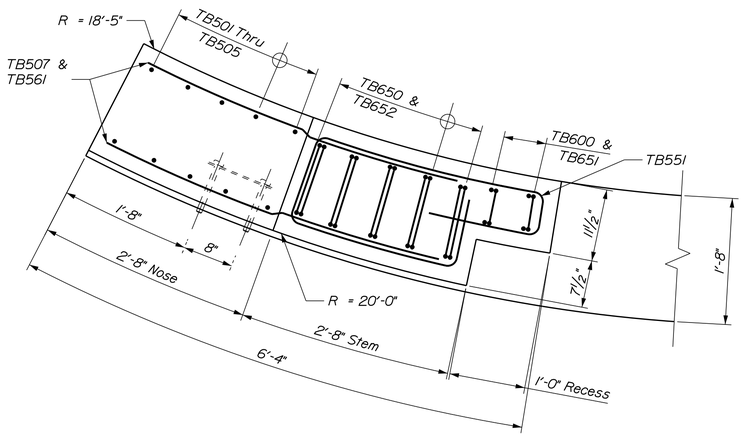
TRANSITION BARRIER
(2 OF 4)

SHEET NUMBER

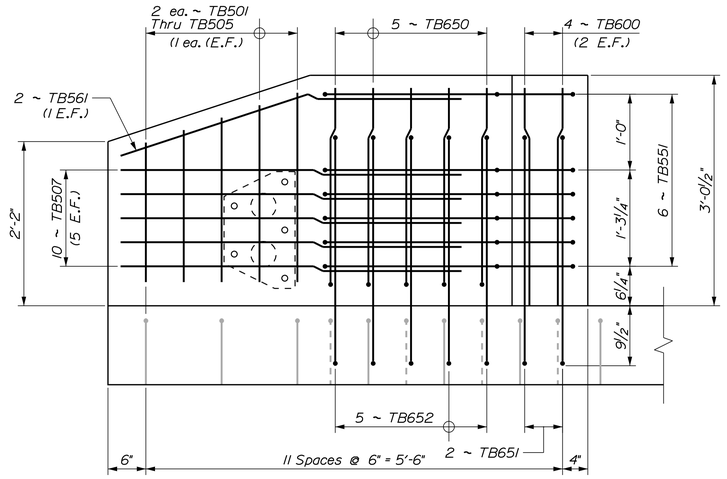
B36

OF B52

Filename: ...\B36_Transition_Barrier_2.dgn Division: BRIDGE Username: dataylor Date:9/27/2018



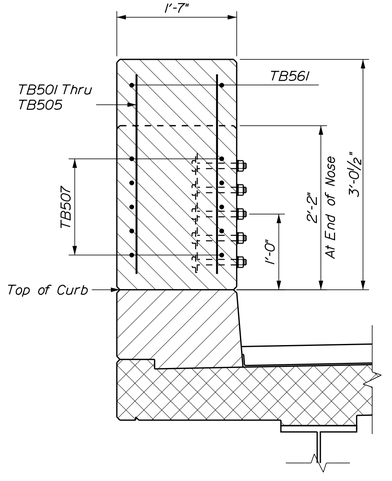
PLAN - SOUTHWEST CONCRETE TRANSITION BARRIER



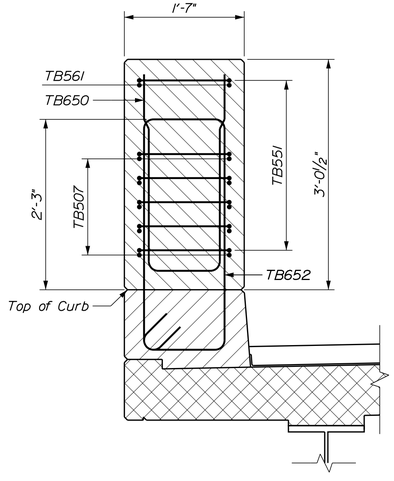
ELEVATION - SOUTHWEST CONCRETE TRANSITION BARRIER

TRANSITION BARRIER NOTES

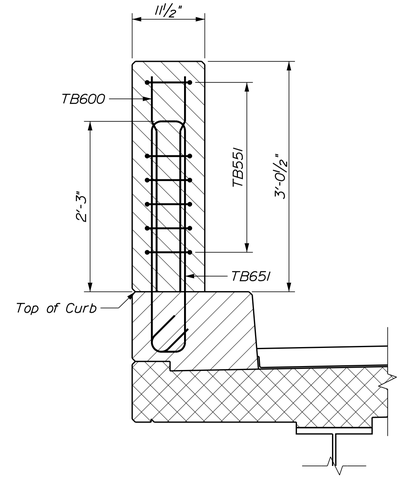
1. See Transition Barrier Sheet 1 of 4 for Notes and Materials.



BARRIER SECTION AT NOSE



BARRIER SECTION AT STEM

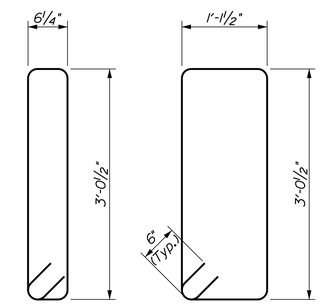


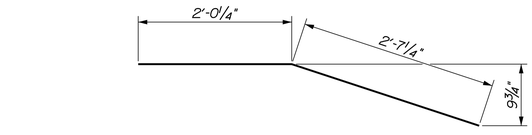
BARRIER SECTION AT RECESS

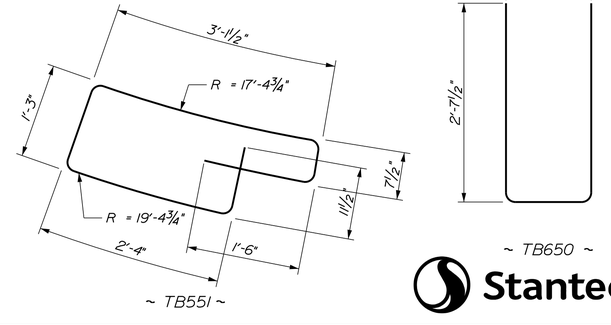
REINFORCING STEEL SCHEDULE

Mark	Qty.	Length
TB501	2	1'-10"
TB502	2	2'-0"
TB503	2	2'-2"
TB504	2	2'-4"
TB505	2	2'-6"
TB507*	10	4'-6"
TB551	6	4'-7½"
TB561*	2	9'-9½"
TB600	4	2'-10"
TB650	5	6'-4½"
TB651	2	8'-11½"
TB652	5	9'-4"

*Curve Bar in Field







Stantec

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

	BY	DATE
DESIGNED	KLW	SEPT 2018
DRAWN	KLW	SEPT 2018
CHECKED	TWM	

P.E. NUMBER

DATE

SIGNATURE

PROJ. MANAGER	L. TIMBERLAKE
DESIGN-DETAILED	KLW
CHECKED-REVIEWED	SJW
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

TRANSITION BARRIER (3 OF 4)

SHEET NUMBER

B37

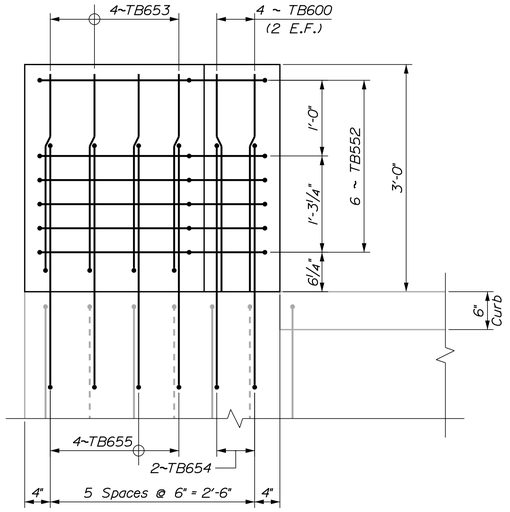
OF B52

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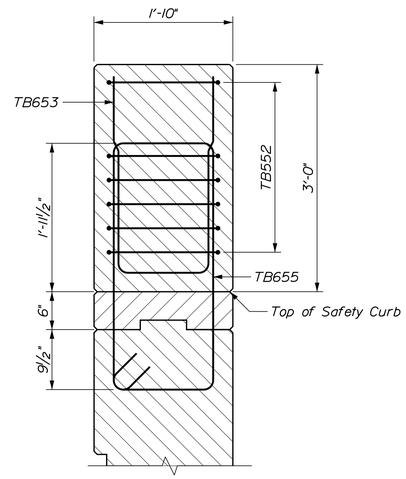
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TRANSITION BARRIER NOTES

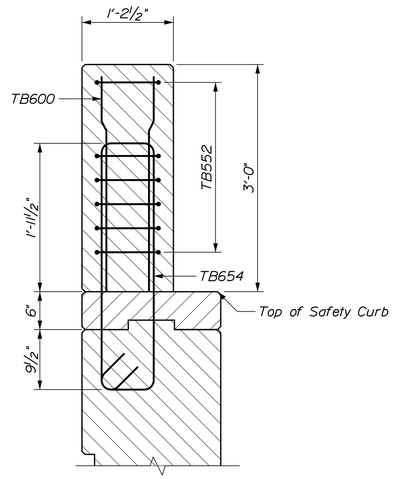
1. See Transition Barrier Sheet 1 of 4 for Notes and Materials.



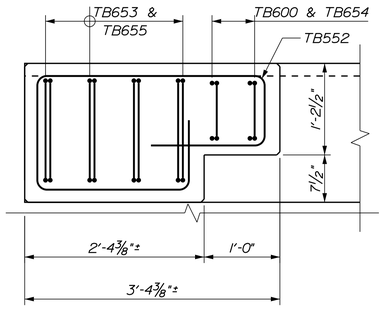
ELEVATION - NORTHEAST CONCRETE TRANSITION BARRIER



TYPICAL BARRIER SECTION



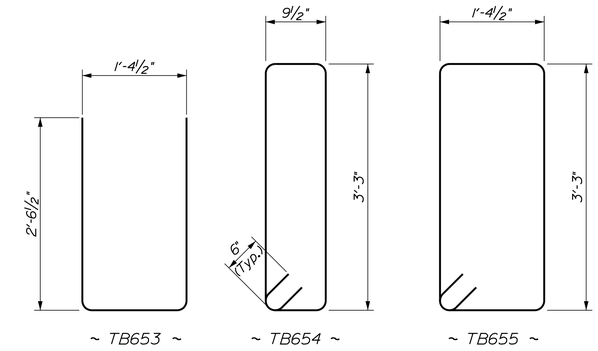
BARRIER SECTION AT RECESS

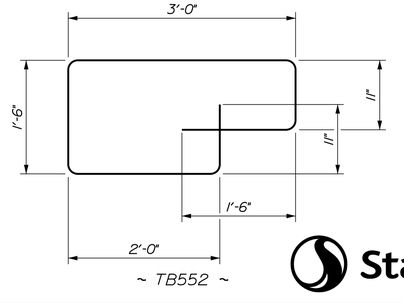


PLAN - NORTHEAST CONCRETE TRANSITION BARRIER

REINFORCING STEEL SCHEDULE

Mark	Qty.	Length
TB552	6	9'-10"
TB600	4	2'-10"
TB653	4	6'-5½"
TB654	2	9'-1"
TB655	4	10'-3"





Stantec

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

	BY	DATE
L. TIMBERLAKE		
PROJ. MANAGER	KLW	SEPT 2018
DESIGN-DETAILED	KLW	SEPT 2018
CHECKED-REVIEWED	SJW	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

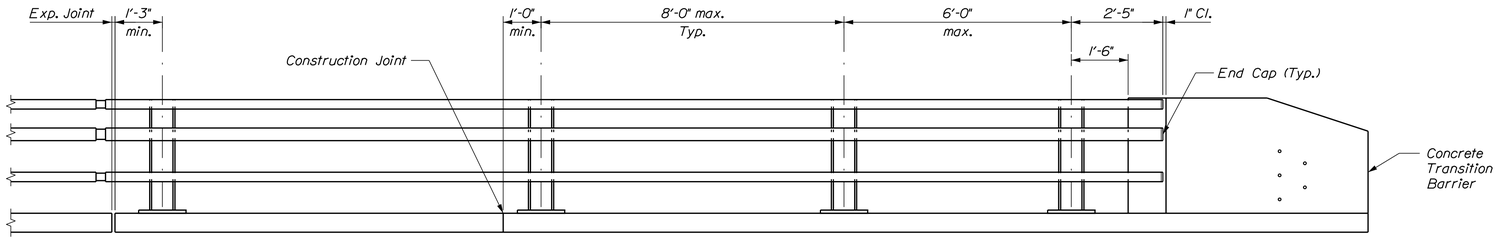
MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

TRANSITION BARRIER (4 OF 4)

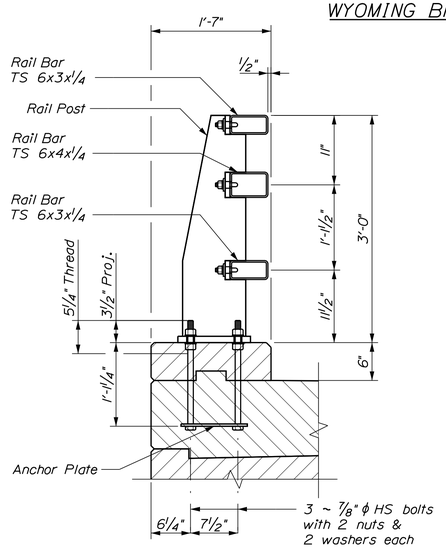
SHEET NUMBER

B38

OF B52

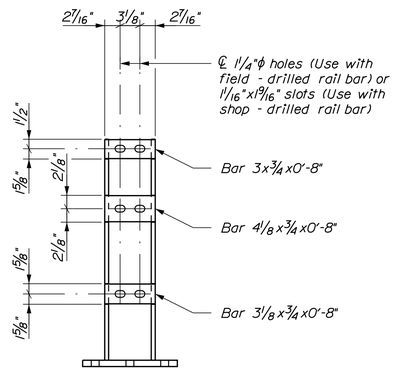


WYOMING BRIDGE RAILING ELEVATION

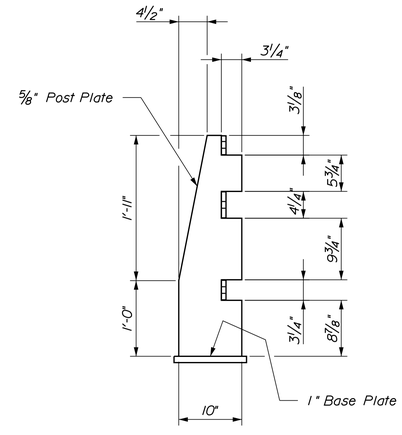


TYPICAL RAILING SECTION AT SIDEWALK

Pale Panel Not Shown for Clarity



RAIL POST FRONT ELEVATION



RAIL POST SIDE ELEVATION

BRIDGE RAILING NOTES

1. All work and materials shall conform to the provisions of Section 507 - Railings of the Standard Specifications.

2. Tubing shall meet the longitudinal CVN requirements of 15 ft. lb. at 0 °F. or proportional values of sub - size specimens. Testing shall be done in accordance with ASTM A 673. The "H" frequency shall be used and the material shall be as - rolled.

3. Twenty - five percent of the post - to - base welds in a production lot shall be tested by the Magnetic Particle Method. If rejectable discontinuities are found, another twenty - five percent of that production lot shall be tested. If rejectable discontinuities are found in the second twenty - five percent, all post - to - base welds in that lot shall be tested. Acceptance criteria shall be in accordance with the latest edition of the AWS D1.5 Bridge Welding Code.

4. All exposed cut or sheared edges shall be broken and free of burrs.

5. Rail posts shall be set normal to grade unless otherwise shown.

6. Post base plates shall be flat after fabrication.

7. Lengths of rail bar shall be attached to a minimum of 2 rail posts and to at least 4 posts whenever possible.

8. Rail bars shall not be shop spliced.

9. A rail bar expansion joint shall be provided at the southwest corner. The rail bar expansion joint width shall be one inch at 45 °F.

10. All parts except the post anchorage, the reinforcement assembly and the anchor plate shall be galvanized after fabrication in accordance with ASTM A 123, except that hardware shall meet the requirements of either ASTM A 153 or ASTM B 695, Class 50, Type 1. Parts except hardware to be galvanized shall be blast cleaned prior to galvanizing in accordance with SSPC - SP6.

11. Venting and pick - up holes shall be shown on the shop drawings.

12. Anchor bolts may be tack welded to anchorage.

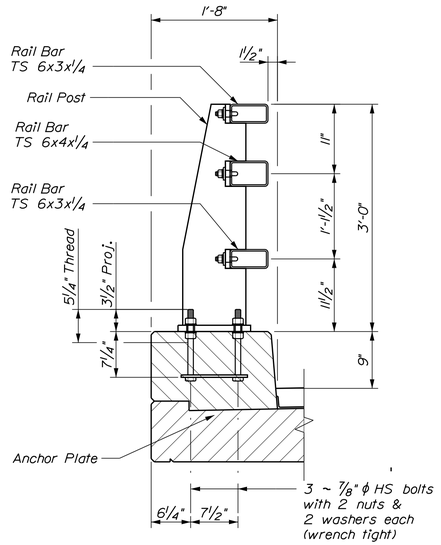
13. Rail posts shall be in place and in proper alignment prior to placing the curb concrete.

14. After installation of the rail bars, the exposed rail bolt threads shall receive two coats of zinc - rich paint.

15. Bridge Railing shall be color galvanized in accordance with the Specifications. The railing color shall match Duncan "Rain Forest Green" (SW 4071, LRV 8%, Semi-Gloss). A sample and/or color chip to be used shall be provided to MaineDOT for approval prior to fabrication.

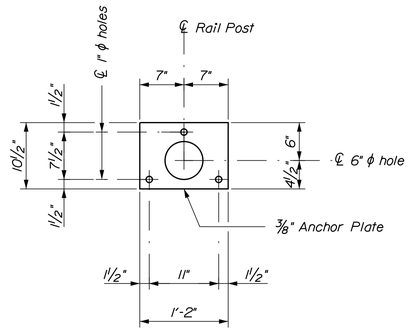
MATERIALS

Rail Bars	ASTM A 500, Grade B
Rail Post Plates & Bases	ASTM A 572, Grade 50
Rail Bar Splice Sleeves	ASTM A 572, Grade 50
Anchor & Reinforcement Assemblies	ASTM A 36
Plate Washers	ASTM A 36
Anchor Bolts	ASTM A 325, ASTM A 449, or ASTM F 1554, Grade 105
Rail Bolts	ASTM A 36
Nuts for Rail Bolts	ASTM A 563
Splice Bolts	ASTM A 325
Lock Washers	ANSI/ASME B18.21.1-1994

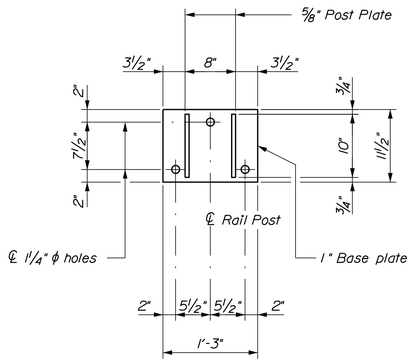


TYPICAL RAILING SECTION AT CURB

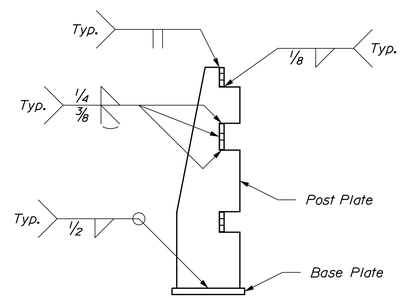
Pale Panel Not Shown for Clarity



ANCHOR PLATE PLAN



RAIL POST PLAN



RAIL POST WELD DETAIL

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

		BY	DATE
PROJ. MANAGER	L. TIMBERLAKE		
DESIGN-DETAILED	KLW	KLW	SEPT 2018
CHECKED-REVIEWED	TEK	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
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FIELD CHANGES			

SIGNATURE

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MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

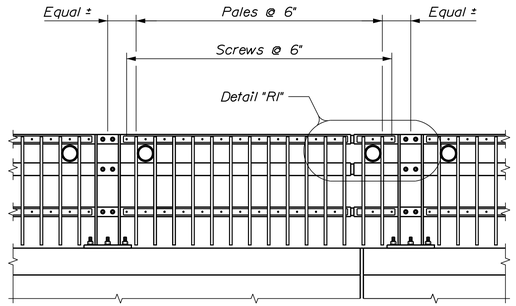
BRIDGE RAILING DETAILS

SHEET NUMBER

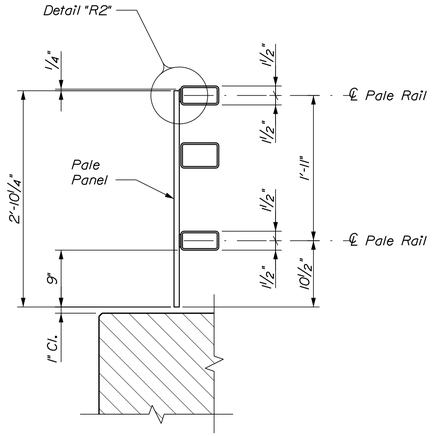
B39

OF B52

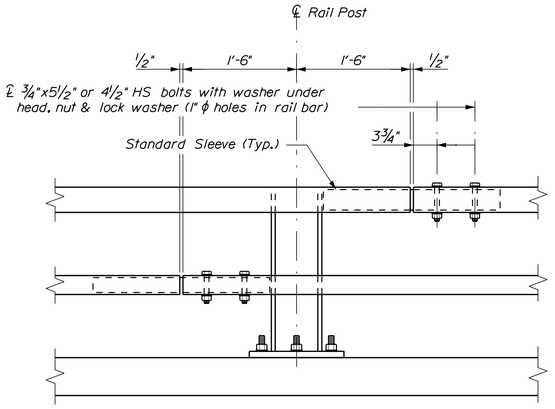
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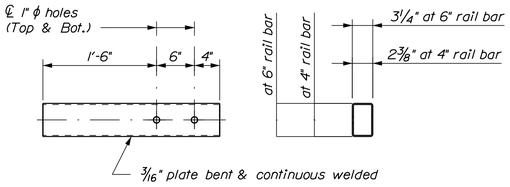
PALE PANEL REAR ELEVATION



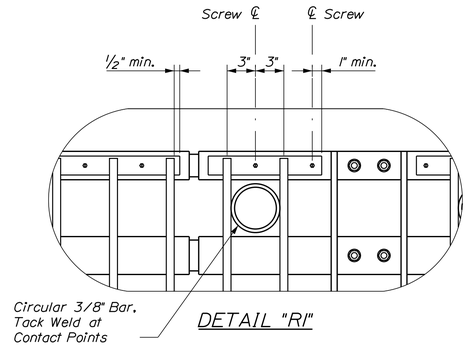
PALE PANEL SECTION



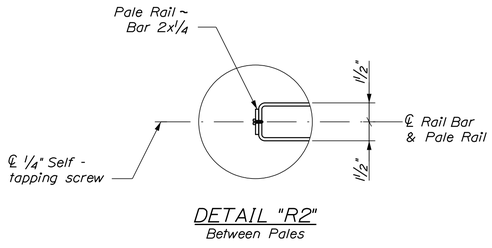
STANDARD SPLICE ELEVATION



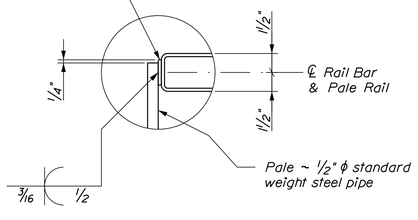
STANDARD SLEEVE DETAILS



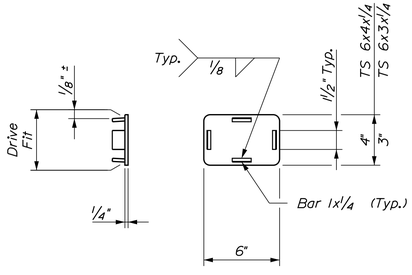
DETAIL "R1"



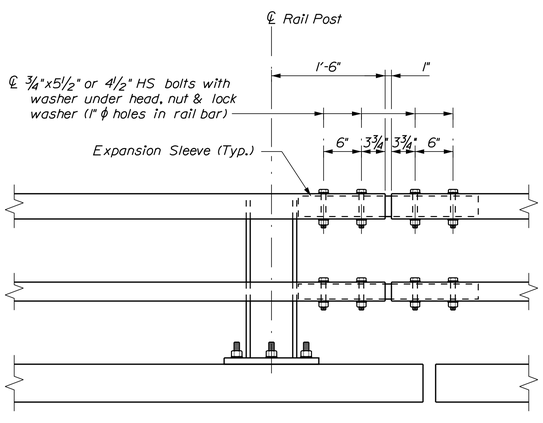
DETAIL "R2"
Between Pales



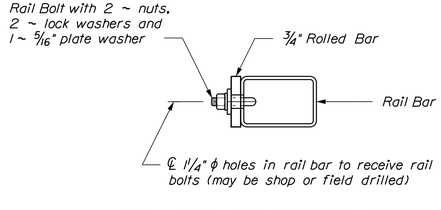
DETAIL "R2"
At Pale



RAIL BAR END CAP



EXPANSION SPLICE ELEVATION



RAIL BAR CONNECTION DETAIL

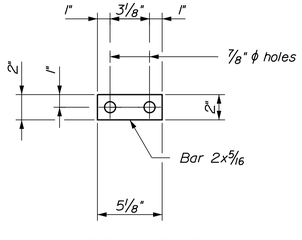
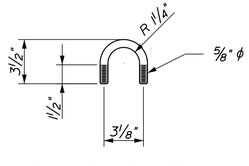
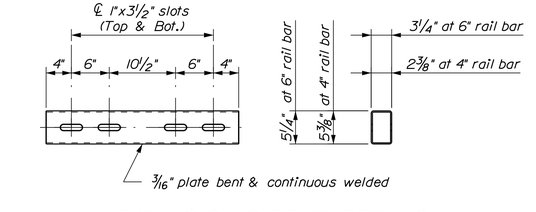


PLATE WASHER



RAIL BOLT DETAIL



EXPANSION SLEEVE DETAILS

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

		DATE	BY
PROJ. MANAGER	L. TIMBERLAKE		
DESIGN-DETAILED	KLW	SEPT 2018	KLW
CHECKED-REVIEWED	TEK	SEPT 2018	TWM
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
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REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

BRIDGE RAILING DETAILS

SHEET NUMBER

B40

OF B52

Filename: ...\MSTA\B40_Rail_Details2.dgn Division: BRIDGE Username: dotaylor Date:9/27/2018

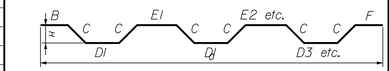
STRAIGHT BARS

MARK	QTY.	LENGTH	LOCATION
			Abutment No. 1
A500	83	4'-8"	Backwall Dowels
A501	4	5'-0"	SW Corner Vertical
A605	7	21'-6"	F.F. Transverse & Bottom
A606	7	24'-5"	F.F. Transverse & Bottom
			Abutment No. 2
B500	81	4'-8"	Backwall Dowels
B501	4	3'-8"	NE Corner Vertical
B605	7	21'-6"	F.F. Transverse & Bottom
B606	7	23'-3"	F.F. Transverse & Bottom
			Northeast Retaining Wall
*RW505	8	9'-5"	N.F. Front Vertical
*RW506	3	4'-4"	Curb
*RW507	9	8'-4"	N.F. Side Vertical
*RW605	7	9'-5"	F.F. Front Vertical
*RW606	8	8'-3"	F.F. Side Vertical
*RW905	18	8'-8"	Footing
*RW906	20	7'-7"	Footing
			Superstructure
S501	41	40'-0"	Longitudinal closure pour bars
S502	3	30'-8"	Upstream Curb Longitudinal
S503	7	32'-4"	Sidewalk longitudinal
S504	3	26'-3"	Downstream Curb Longitudinal
S505	56	22'-0"	End closure pour transverse

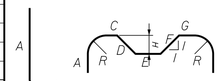
BENT BARS

MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
														Abutment No. 1
A556	37	5'-1"	P1	9"	1'-9"	2'-7"					1'-3 3/4"			N.F. T&S
A557	4	6'-8"	L	3'-4"	3'-4"									Water Main Sleeve Blockout
A558	1	8'-2"	U	2'-6"	3'-2"	2'-6"								SW Corner
A559	1	7'-11"	U	2'-6"	2'-11"	2'-6"								SW Corner
A655	3	3'-4"	L	2'-4"	1'-0"									N.F. SE Wing Connection
A656	15	8'-7"	U	1'-0"	6'-7"	1'-0"								N.F. Girder Bay Horizontal
A657	3	6'-0"	L	5'-0"	1'-0"									N.F. SW Wing Connection
A658	2	5'-3"	A				1'-9"	3'-6"			3'-1 3/4"			SW Corner
A659	2	4'-11"	L	3'-2"	1'-9"									SW Corner
														Abutment No. 2
B556	36	5'-1"	P1	9"	1'-9"	2'-7"								N.F. T&S
B557	4	6'-8"	L	3'-4"	3'-4"									Water Main Sleeve Blockout
B558	2	8'-2"	U	2'-6"	3'-2"	2'-6"								NE Corner
B655	3	3'-4"	L	2'-4"	1'-0"									N.F. NW Wing Connection
B656	15	8'-7"	U	1'-0"	6'-7"	1'-0"								N.F. Girder Bay Horizontal
B657	3	5'-0"	L	4'-0"	1'-0"									N.F. NE Corner
B658	2	7'-5"	U	3'-0"	1'-5"	3'-0"								NE Corner
														Northeast Retaining Wall
*RW555	17	6'-10"	L	6'-0"	10"									N.F. Footing Hooks
*RW556	20	8'-6"	L	7'-8"	10"									E.F. Front Horizontal
*RW557	19	2'-10"	U	10"	1'-2"	10"								Ends of Walls
*RW558	16	5'-11"	U	2'-6"	1'-6"	1'-11"								Curb
*RW559	19	9'-7"	L	8'-9"	10"									E.F. Side Horizontal
*RW560	8	2'-11"	U	10"	1'-3"	10"								Top of Side Wall
*RW655	15	7'-0"	L	6'-0"	1'-0"									F.F Footing Hooks
														Superstructure
S551	66	8'-7"	L	4'-8"	3'-11"									End closure bent bars
S552	8	6'-9"	SC	10"	1'-11"	1'-3"	1'-11"			10"		1'-3"		Safety Curb Bars
S553	8	10'-9"	SC	10"	1'-5"	6'-3"	1'-5"			10"		6'-4"		Sidewalk Bars
S554	16	5'-10 1/2"	SC	10"	1'-5 1/4"	1'-4"	1'-5 1/4"			10"		1'-5"		Curb Bars

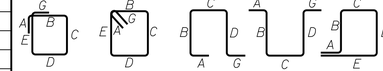
TYPE - BENDING DIAGRAMS



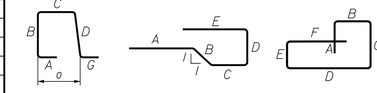
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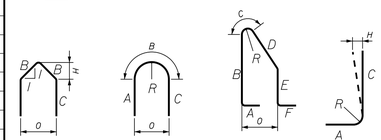
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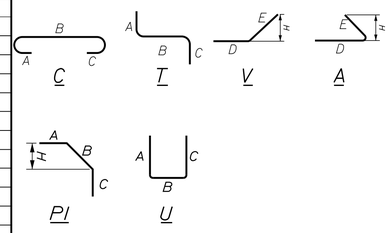
HB H S SL SB



SC SJ EP



PA PR CB J



C T V A PI U

All dimensions are out-to-out of bar.

Bending details and hooks shall conform to the recommendations of the current revision of ACI Standard 315 and ACI Standard 318.

Reinforcing Bar: ASTM A615/A615M, Grade 60 (marked •) or ASTM A995/A995M, Grade 75 (all others).

GENERAL NOTES

1. The first two digits following the letter(s) of the mark indicate the size ofthe bar:

   Mark "A502" = bar size #5
   Mark "P805" = bar size #8
   Mark "S650" = bar size #6

2. Bars marked with a • are plain bars. All other bars are stainless steel.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

		BY	DATE
PROJ. MANAGER	L. TIMBERLAKE		
DESIGN-DETAILED	LSF	KLW	SEPT 2018
CHECKED-REVIEWED	SJW	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

REINFORCING STEEL SCHEDULE

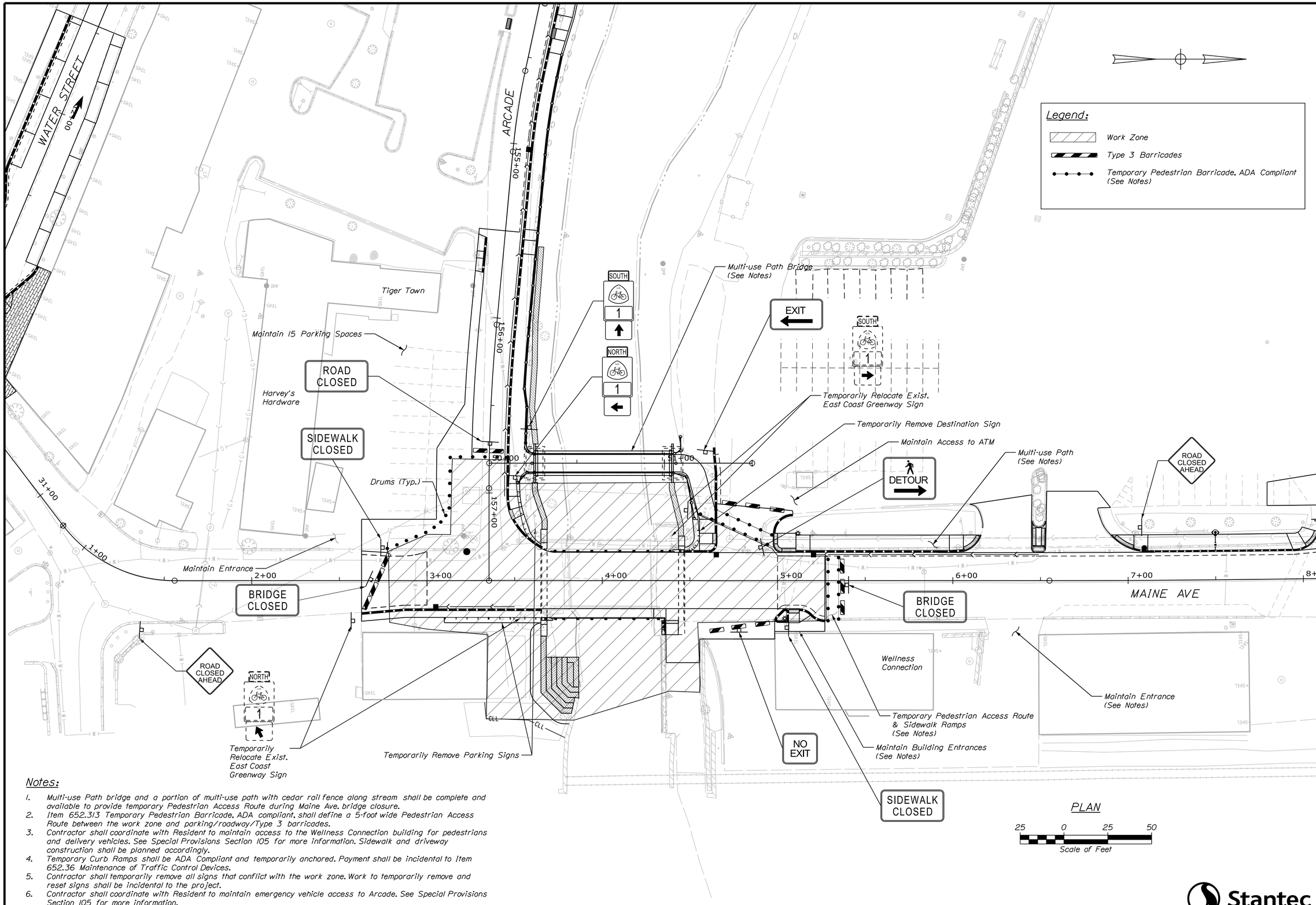
SHEET NUMBER

B41

OF B52

Filename: ...\MSTA\B41_Rebar_Schedule.dgn Division: BRIDGE Username: dataylor Date:9/27/2018

Filename: ...\B42_Temp_Roadway_Closure_Plan.dgn Division: BRIDGE Username: dotaylor Date:9/27/2018



Notes:

1. Multi-use Path bridge and a portion of multi-use path with cedar rail fence along stream shall be complete and available to provide temporary Pedestrian Access Route during Maine Ave. bridge closure.
2. Item 652.313 Temporary Pedestrian Barricade, ADA compliant, shall define a 5-foot wide Pedestrian Access Route between the work zone and parking/roadway/Type 3 barricades.
3. Contractor shall coordinate with Resident to maintain access to the Wellness Connection building for pedestrians and delivery vehicles. See Special Provisions Section 105 for more information. Sidewalk and driveway construction shall be planned accordingly.
4. Temporary Curb Ramps shall be ADA Compliant and temporarily anchored. Payment shall be incidental to Item 652.36 Maintenance of Traffic Control Devices.
5. Contractor shall temporarily remove all signs that conflict with the work zone. Work to temporarily remove and reset signs shall be incidental to the project.
6. Contractor shall coordinate with Resident to maintain emergency vehicle access to Arcade. See Special Provisions Section 105 for more information.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	L. TIMBERLAKE	
DESIGN-DETAILED	PLP	E.JB
CHECKED-REVIEWED	LEM	TWM
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

TEMPORARY ROADWAY CLOSURE PLAN

SHEET NUMBER

B42

OF B52

Stantec

Filename: ...\MSTA\B43_MOT_LaneShift.dgn Username: dataylor Division: BRIDGE Date:9/27/2018

WATER STREET

ARCADE

MAINE AVE

DETOUR

DETOUR

DETOUR

SIDEWALK CLOSED

SIDEWALK CLOSED AHEAD CROSS HERE

SIDEWALK CLOSED AHEAD CROSS HERE

NO EXIT

50' Lane Shift

50' Tangent

50' Lane Shift

Temporary Solid Yellow Tape

Temporary Concrete Barrier

5:1 Taper (Typ.)

Work Zone Crash Cushion (Typ.)

Retaining Wall Work Area

Type III Barrier (Typ.)

50.00'

5.0'

11.0'

15.00'

12+00

31+00

1+00

2+00

3+00

4+00

5+00

6+00

7+00

8+

50+00

51+00

52+00

53+00

54+00

55+00

56+00

Notes:

1. This temporary lane shift is for the northeast channel wall work that may occur in the Bridge Post-closure Period.

PLAN

25 0 25 50

Scale of Feet

Stantec

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

		DATE
PROJ. MANAGER	L. TIMBERLAKE	
DESIGN-DETAILED	PLP	SEPT 2018
CHECKED-REVIEWED	LEM	SEPT 2018
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

BY: E.JB, TWM

P.E. NUMBER

DATE

SIGNATURE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

TEMPORARY LANE SHIFT PLAN

SHEET NUMBER

B43

OF B52

Filename: ...\B44_Roadway_Detour_Overoll_Plan.dgn Division: BRIDGE Username: dataylor Date:9/27/2018

Site 2

Site 1

Site 3

Site 4

Maine Ave. (US Rte. 201 & SR 27)

Spring St.

Highland Ave.

St. (SR 9 & 126, US Rte 201)

Maine Ave. (SR 24)

SR 126, 27, 9

Summer St.

Bridge St. (SR

Winter St.

Arcade St.

Water St.

Mechanic St.

Cobbosseecontee Stream

Brunswick Ave. (US Rte. 201)

Church St.

State Route 24

Water St. (SR 9 & 126)

BRIDGE CLOSED
MAINE AVENUE
0.4 MILES
ALL DOWNTOWN BUSINESSES OPEN & ACCESSIBLE

BRIDGE CLOSED
MAINE AVENUE
0.4 MILES
ALL DOWNTOWN BUSINESSES OPEN & ACCESSIBLE

Maine Ave
Bridge Closure

N

LAYOUT SCALE
200 0 200 400
Scale of Feet

Stantec

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

PROJ. MANAGER	L. TIMBERLAKE		
DESIGN-DETAILED	PLP	E.JB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

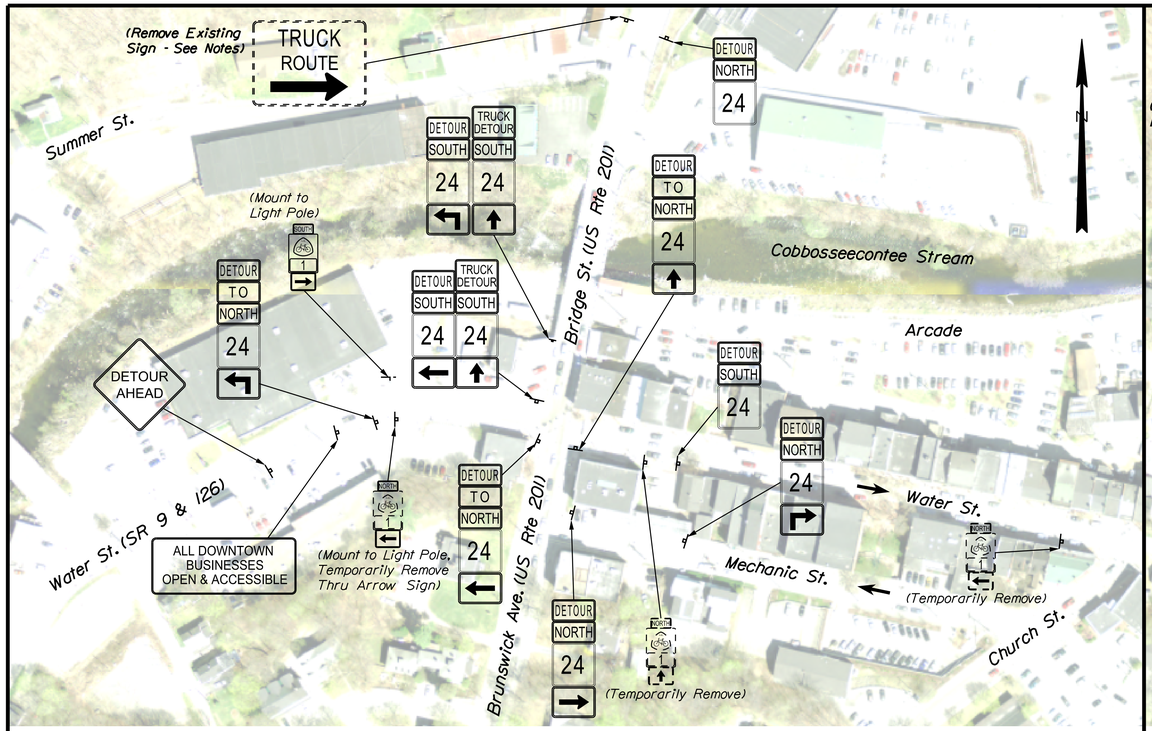
MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
KENNEBEC COUNTY
GARDINER

ROADWAY DETOUR OVERALL PLAN

SHEET NUMBER

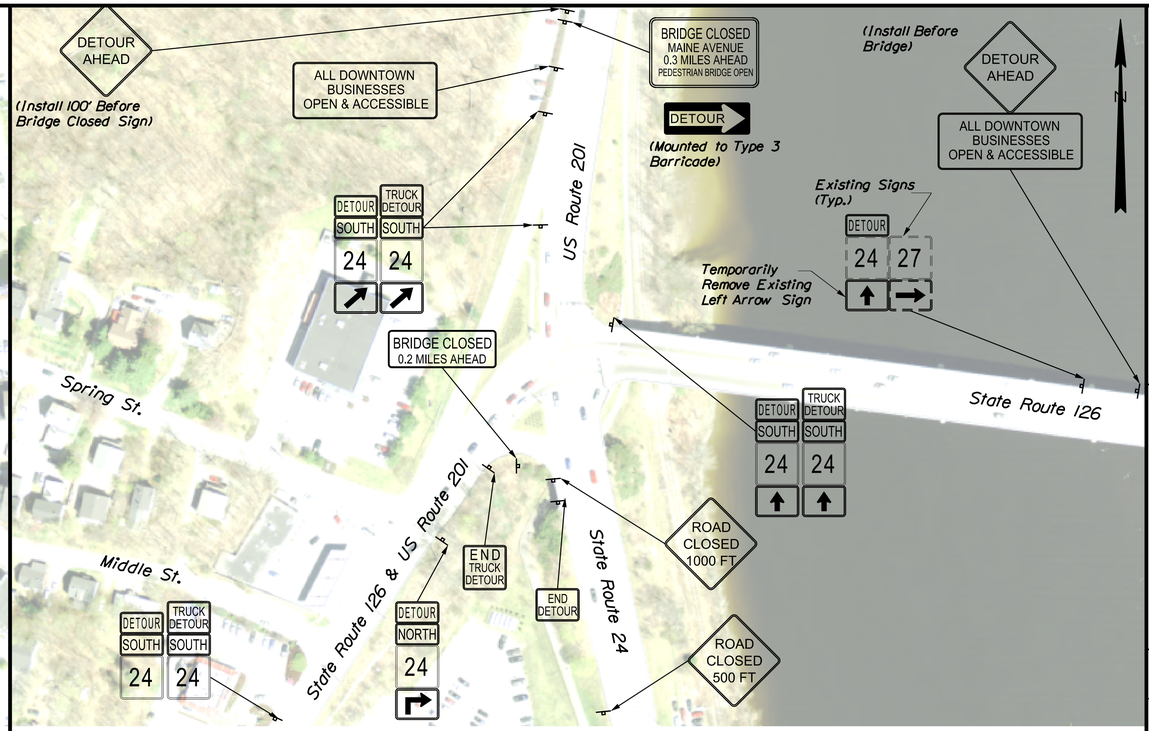
B44

OF B52

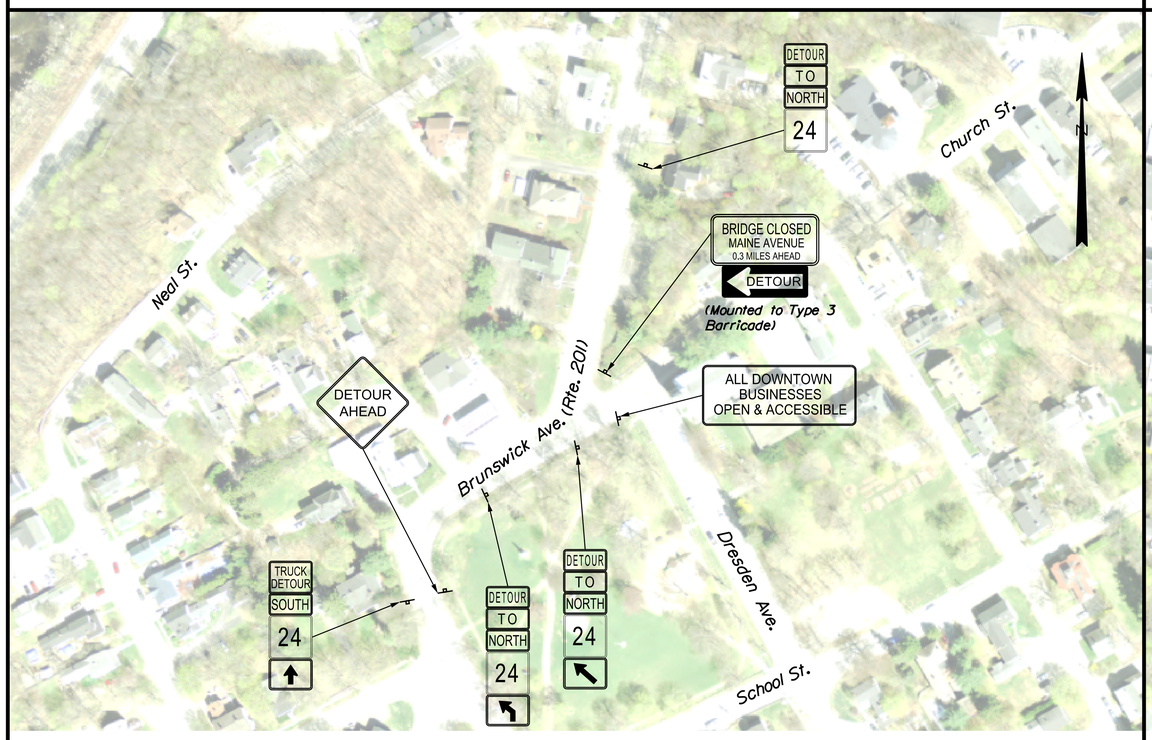


SITE 1

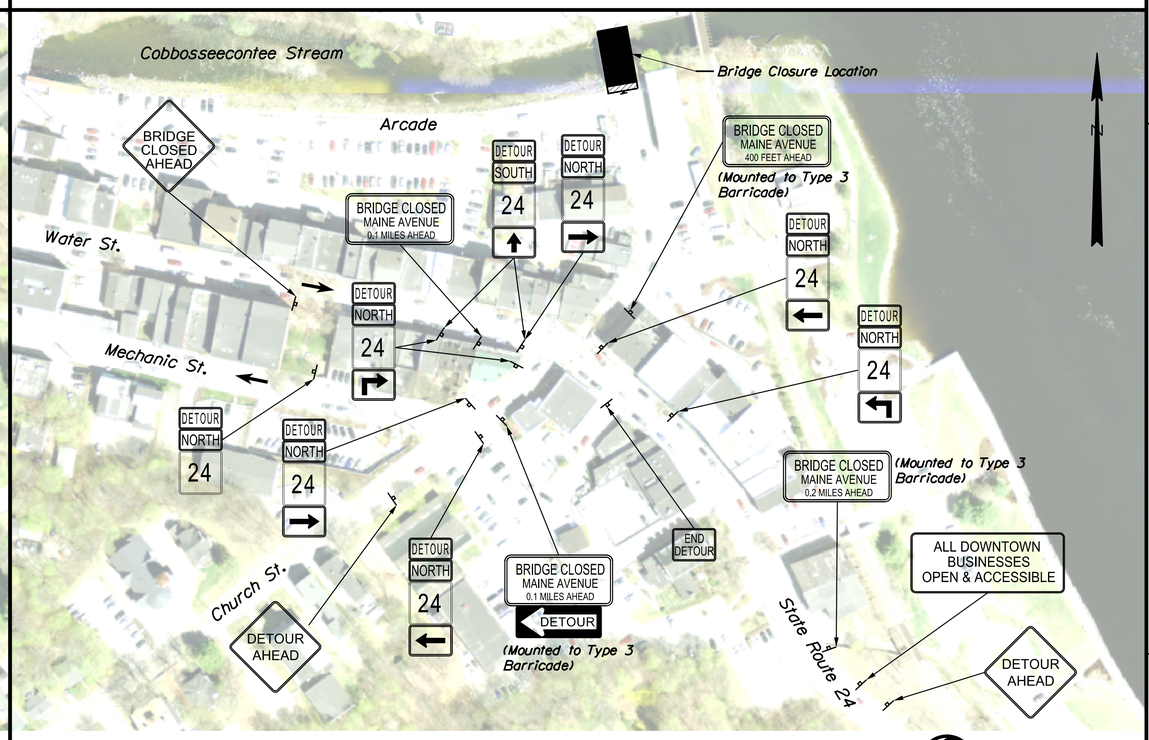
1. Sign to be removed after right turn lane from Bridge Street onto Water Street has been constructed.



SITE 2



SITE 3



SITE 4

100 0 100 200
Scale of Feet

Stantec

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

		DATE
PROJ. MANAGER	L. TIMBERLAKE	
DESIGN-DETAILED	PLP	SEPT 2018
CHECKED-REVIEWED	LEM	SEPT 2018
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

BY: E.JB, TWM

SIGNATURE

P.E. NUMBER

DATE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

ROADWAY DETOUR SIGNING PLAN

SHEET NUMBER

B45

OF B52

Filename: ...\B45_MOT_roadway_detour_signing_plot.dgn Username: datoylor Date:9/27/2018

Filename: ...\MST\A\B46_MOT_truck_detour.dgn Division: BRIDGE Username: dataylor Date:9/27/2018

TRUCK DETOUR SOUTH 24 ←
TRUCK DETOUR SOUTH 24 ↗
TRUCK DETOUR SOUTH 24 ↑
TRUCK DETOUR NORTH 24 →
TRUCK DETOUR NORTH 24 ↱
TRUCK DETOUR NORTH 24
TRUCK DETOUR SOUTH 24 ←
TRUCK DETOUR SOUTH 24
TRUCK DETOUR SOUTH 24 ↑
TRUCK DETOUR NORTH 24 ↗
TRUCK DETOUR NORTH 24
END TRUCK DETOUR
TRUCK DETOUR NORTH 24
TRUCK DETOUR NORTH 24 →
TRUCK DETOUR NORTH 24 ↱
TRUCK DETOUR NORTH 24
TRUCK DETOUR NORTH 24 ←
TRUCK DETOUR NORTH 24 ↰
TRUCK DETOUR NORTH 24
TRUCK DETOUR NORTH 24
BRIDGE CLOSED 11 MILES AHEAD TRUCKS USE DETOUR DETOUR
(On Type 3 Barricade)
BRIDGE CLOSED 6.8 MILES AHEAD TRUCKS USE DETOUR DETOUR
BRIDGE CLOSED 4 MILES AHEAD TRUCKS USE DETOUR DETOUR
(Install across from Recycling Center on Type 3 Barricade)
TRUCK DETOUR AHEAD
US Route 201
I-295 Northbound
I-295 Southbound
I-95 Maine Turnpike
State Route 197
Beedle Rd
Marston Rd
Lincoln St
Pleasant Pond
Cobbosseecontee Stream
State Route 126
West Gardiner
High St
Richmond
Gardiner
Costello Rd
Capen Rd
State Route 24
Kennebec River
US Route 201
See Site 1 from Roadway Detour Signing Plan
See Site 3 from Roadway Detour Signing Plan
Maine Ave Bridge Location
See Site 2 from Roadway Detour Signing Plan
LAYOUT SCALE
2000 0 2000 4000
Scale of Feet
Stantec

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-1873(600)
WIN 18736.00
BRIDGE NO. 3098 BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	L. TIMBERLAKE	
DESIGN-DETAILED	PLP	SEPT 2018
CHECKED-REVIEWED	LEM	SEPT 2018
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

TRUCK DETOUR
OVERALL PLAN

SHEET NUMBER
B46
OF B52

MAINLINE CONSTRUCTION SIGN SUMMARY

ID NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR		NOMINAL AREA (S.F.)	TOTAL AREA (S.F.)
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND BORDER		
M1-5	24"	24"	24	TEXT DIMENSIONS SHALL CONFORM TO 2004 EDITION-STANDARD HIGHWAY SIGNS-2012 SUPPLEMENT			47	WHITE	BLACK	4.00	188.00
CS-5	18"	24"	US 1				3	WHITE	BLACK	3.00	9.00
M3-1	24"	12"	NORTH				28	WHITE	BLACK	2.00	56.00
M3-3	24"	12"	SOUTH				19	WHITE	BLACK	2.00	38.00
M4-5	24"	12"	TO				6	WHITE	BLACK	2.00	12.00
M4-10 R	48"	18"	DETOUR →				1	ORANGE	BLACK	6.00	6.00
M4-10 L	48"	18"	← DETOUR				4	ORANGE	BLACK	6.00	24.00
M4-8	24"	12"	DETOUR				25	ORANGE	BLACK	2.00	50.00
M4-8a	24"	18"	END DETOUR				2	ORANGE	BLACK	3.00	6.00
M4-9	30"	24"	DETOUR →				1	ORANGE	BLACK	5.00	5.00
M4-9bR	30"	24"	DETOUR →				3	ORANGE	BLACK	5.00	15.00
M4-9bL	30"	24"	DETOUR ←				2	ORANGE	BLACK	5.00	10.00
M4-8c	24"	24"	END TRUCK DETOUR	4"D 4"D 4"D	3" 3"	-	2	ORANGE	BLACK	4.00	8.00

MAINLINE CONSTRUCTION SIGN SUMMARY

ID NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR		NOMINAL AREA (S.F.)	TOTAL AREA (S.F.)
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND BORDER		
M4-8d	24"	18"	TRUCK DETOUR	4"D 4"D	3"	-	23	ORANGE	BLACK	3.00	69.00
CS-6	36"	24"	EXIT	TEXT DIMENSIONS SHALL CONFORM TO 2004 EDITION-STANDARD HIGHWAY SIGNS-2012 SUPPLEMENT			1	WHITE	BLACK	6.00	6.00
M5-1 L	21"	15"					4	WHITE	BLACK	2.19	8.75
M5-1 R	21"	15"					5	WHITE	BLACK	2.19	10.94
M5-2 L	21"	15"					1	WHITE	BLACK	2.19	2.19
M6-1 L	21"	15"					7	WHITE	BLACK	2.19	15.31
M6-1 R	21"	15"					5	WHITE	BLACK	2.19	10.94
M6-2 L	21"	15"					1	WHITE	BLACK	2.19	2.19
M6-2 R	21"	15"					4	WHITE	BLACK	2.19	8.75
M6-3	21"	15"					10	WHITE	BLACK	2.19	21.88
R9-9	24"	12"	SIDEWALK CLOSED				3	WHITE	BLACK	2.00	6.00
R11-2	48"	30"	BRIDGE CLOSED				2	WHITE	BLACK	10.00	20.00
R11-2	48"	30"	ROAD CLOSED				1	WHITE	BLACK	10.00	10.00

Stantec

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

PROJ. MANAGER	L. TIMBERLAKE	BY	DATE
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

MOT SIGN SUMMARY

SHEET NUMBER

B47

OF B52

Filename: ...\MSTA\B47_Sign_Summary.dgn Division: BRIDGE Username: dataylor Date:9/27/2018

MAINLINE CONSTRUCTION SIGN SUMMARY

ID NUMBER	SIZE OF SIGN WIDTH	SIZE OF SIGN HEIGHT	TEXT	TEXT DIMENSIONS (INCHES) LETTER HEIGHT	TEXT DIMENSIONS (INCHES) VERTICAL SPACING	TEXT DIMENSIONS (INCHES) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACK-GROUND	COLOR LEGEND BORDER	NOMINAL AREA (S.F.)	TOTAL AREA (S.F.)
R9-11 R	24"	18"	SIDEWALK CLOSED AHEAD → CROSS HERE	TEXT DIMENSIONS SHALL CONFORM TO 2004 EDITION-STANDARD HIGHWAY SIGNS-2012 SUPPLEMENT			1	WHITE	BLACK	3.00	3.00
R9-11 L	24"	18"	SIDEWALK CLOSED AHEAD ← CROSS HERE				1	WHITE	BLACK	3.00	3.00
CS-8	60"	42"	BRIDGE CLOSED MAINE AVENUE X MILE AHEAD PEDESTRIAN BRIDGE OPEN	6"C 5"C 4"C 4"C	3.375" 3.375" 3.375"	-	2	WHITE	BLACK	17.50	35.00
CS-9	60"	30"	BRIDGE CLOSED MAINE AVENUE X MILE AHEAD	6"C 5"C 4"C	3.375" 3.375"	-	6	WHITE	BLACK	12.50	75.00
CS-10	60"	30"	BRIDGE CLOSED X MILES AHEAD TRUCKS USE DETOUR	6"C 5"C 4"C	3.375" 3.375"	-	3	WHITE	BLACK	12.50	37.50
CS-3	60"	30"	ALL DOWNTOWN BUSINESSES OPEN & ACCESSIBLE	5"C 5"C 5"C	3.375" 3.375"	-	6	WHITE	BLACK	12.50	75.00
CS-11	60"	30"	BRIDGE CLOSED MAINE AVENUE 0.4 MILES AHEAD →	TEXT DIMENSIONS SHALL CONFORM TO 2004 EDITION-STANDARD HIGHWAY SIGNS-2012 SUPPLEMENT			1	WHITE	BLACK	12.50	12.50
CS-12	60"	30"	BRIDGE CLOSED MAINE AVENUE 0.4 MILES AHEAD ←				1	WHITE	BLACK	12.50	12.50
W1-4 L	36"	36"					1	ORANGE	BLACK	9.00	9.00
W1-4 R	36"	36"					1	ORANGE	BLACK	9.00	9.00
CS-7	18"	18"	NO EXIT				2	WHITE	BLACK	2.25	4.50
W20-2	36"	36"	DETOUR AHEAD				6	ORANGE	BLACK	9.00	54.00
W20-3	36"	36"	ROAD CLOSED AHEAD				2	ORANGE	BLACK	9.00	18.00

ID NUMBER	SIZE OF SIGN WIDTH	SIZE OF SIGN HEIGHT	TEXT	TEXT DIMENSIONS (INCHES) LETTER HEIGHT	TEXT DIMENSIONS (INCHES) VERTICAL SPACING	TEXT DIMENSIONS (INCHES) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACK-GROUND	COLOR LEGEND BORDER	NOMINAL AREA (S.F.)	TOTAL AREA (S.F.)
W20-3	36"	36"	ROAD CLOSED X FT	TEXT DIMENSIONS SHALL CONFORM TO 2004 EDITION-STANDARD HIGHWAY SIGNS-2012 SUPPLEMENT			2	ORANGE	BLACK	9.00	18.00
W20-2	36"	36"	TRUCK DETOUR AHEAD				1	ORANGE	BLACK	9.00	9.00
W20-3	36"	36"	BRIDGE CLOSED AHEAD				1	ORANGE	BLACK	9.00	9.00
M6-3 (BIKE)	12"	9"					1	GREEN	WHITE	0.75	0.75
M6-1 L (BIKE)	12"	9"					2	GREEN	WHITE	0.75	1.50
M6-1 R (BIKE)	12"	9"					1	GREEN	WHITE	0.75	0.75
M3-1 (BIKE)	12"	9"	NORTH				2	GREEN	WHITE	0.75	1.50
M3-3 (BIKE)	12"	9"	SOUTH				2	GREEN	WHITE	0.75	1.50

Stantec

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

		BY	DATE
PROJ. MANAGER	L. TIMBERLAKE		
DESIGN-DETAILED	LSF	PLP	EJB
CHECKED-REVIEWED	DDT/TEK	LEM	TWM
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

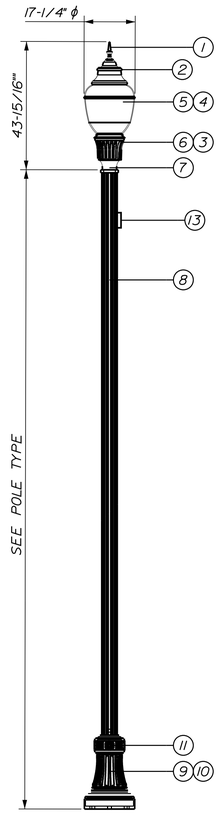
MOT SIGN SUMMARY

SHEET NUMBER

B48

OF B52

Filename: ...\MSTA\B48_Sign_Summary2.dgn Division: BRIDGE Username: dotaylor Date:9/27/2018



TYPE A/B SINGLE LUMINAIRES DETAIL

NOT TO SCALE

Description of Components:

Type 'A' Luminaire: WAUE2-P10-40K-AS-GN-3-GN-4-S
Type 'AL' Luminaire: WAUE2-P20-40K-AS-GN-3-GN-4-S
Type 'A' Series Pole: NYA-14-L5J-17_I-P07-ABG-GN

Type 'B' Luminaire: WAUE2-P20-40K-AS-GN-3-GN-4-S
Type 'B' Pole: NYA-18-L5J-17_I-P07-ABG-GN

Type 'C' Luminaire: (2)WAUE2-P20-40K-AS-GN-3-GN-4-S
Type 'C' Arm: PCP48-CA/DG (Color to Match Pole)
Type 'C' Pole: NYA-18-L5J-17_I-P07-ABG-GN

1. Finial: Spike, made of cast aluminum.
2. Hood: made of cast aluminum, acorn shape with shorewood style cover.
3. Lumen package: P10 = 26W LED, 3433LMNS, 132IPW
   P20 = 39W led, 5171LMNS, 133IPW
   P30 = 60W led, 7281LMNS, 121IPW
   4000 CCT, 70 CRI
4. Lens and optics: borosilicate glass reflector and refractor. upper system incorporates reflecting prisms and lower system uses molded refracting prisms to control distribution. Type 3 (asymmetrical) distribution.
5. Driver: auto-sensing voltage, 120-277V, programmable dimmable driver, with 0-10V control leads.
6. Housing: made of cast aluminum, with tool-less swing door.
7. Fitter: made of cast aluminum, mechanically secured.
8. Pole: made of fluted aluminum with channels, 5" O.D., .25" wall thickness, welded to the base.
9. Base: made of aluminum, welded to the anchor plate.
10. Access Door: made of aluminum, covering an opening of 4"x 9", giving access to a ground lug.
11. Base Cover: made of a two-piece cast aluminum components, mechanically secured c/w four (4) decorative medallions.
12. Wiring: included, from luminaire to the base.
    gasketing: neoprene and/or silicone gasketing is applied.
    hardware: all exposed screws will be stainless steel.
    Finish: an application of a thermosetting polyester powder coat paint, color to be green (GN) that matches Duncan "Rain Forest Green" (SW 4071, LRV 8%, Semi-Gloss) specified for other project components.
13. WRGFCI DWPLEX receptacle with WP In-Use cover

General Notes:

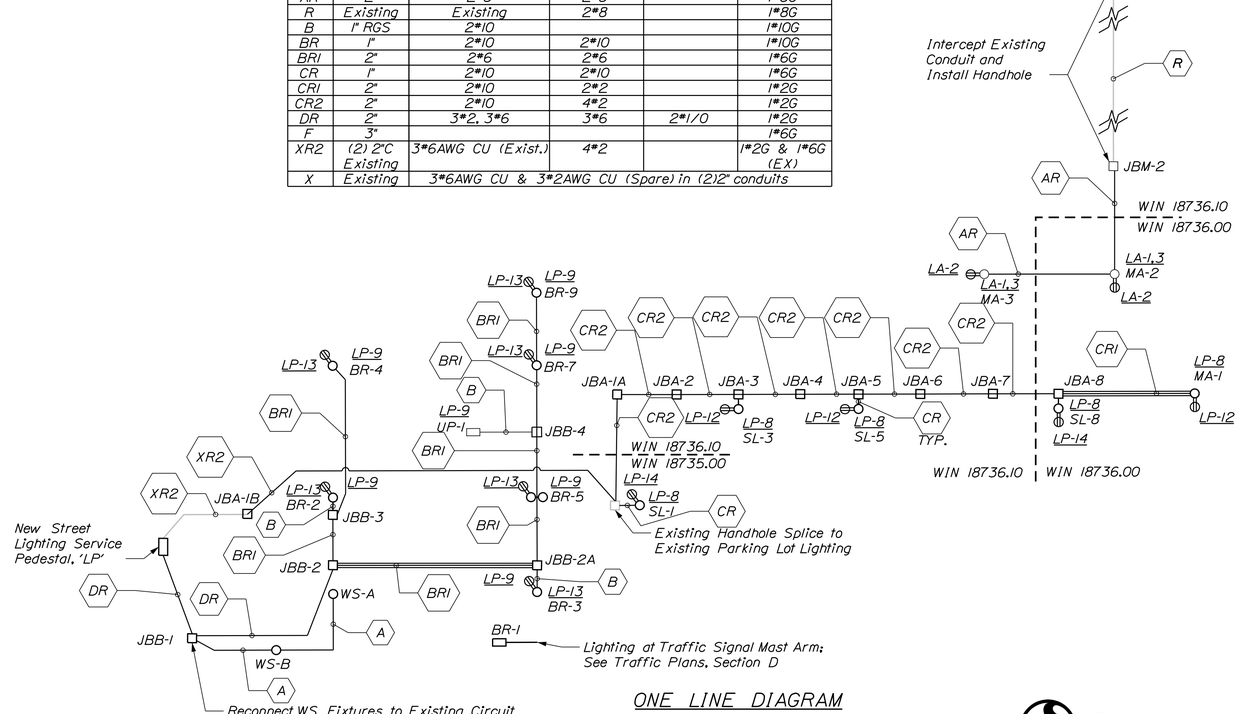
1. Maximum of 270 degrees in total bends permitted in single run of conduit.
2. Lights shall be fused at base with Y-Type fuse kit with waterproof insulated seal "Flood Seal". Size of seal shall match wire and have a 10 AMP fuse.
3. Circuit conductors including neutral conductor shall be clearly identified by corrosion resistant tags indicating circuit number and panel sources at every pole base and handhole.
4. Utilize approved dual-rated parallel tap connector with insulated watertight cover for taps at pole base.
5. Utilize approved dual-rated parallel tap connector with watertight connector, suitable for direct burial in junction boxes and handholes.
6. The new power service, control cabinets, and meter disconnects and enclosures shall be paid for under Item 634.160

Lighting Schedule

WIN	Light No.	Station	Offset	Break-Away	Fixture Type	IES Dist. Type	Mounting	Panel/ Circuit	Luminaire Watts	Luminaire Lumens	Luminaire Type	Remarks Type
18735.00	SL-1	218+39.72	17.00 Rt.	Y	AI	III	Foundation	LP/8	39W	5171	LED	New
18736.10	SL-3	221+22.50	33.00 Lt.	N	A	III	Foundation	LP/8	26W	3433	LED	New
18736.10	SL-5	154+40.58	21.07 Lt.	Y	A	III	Foundation	LP/8	26W	3433	LED	New
18736.00	SL-8	156+68.27	19.57 Lt.	N	A	III	Foundation	LP/8	26W	3433	LED	New
18736.00	MA-1	3+57.81	24.66 Rt.	N	AI	III	Foundation	LP/8	39W	5171	LED	New
18736.00	MA-2	4+49.20	22.45 Lt.	N	Existing	III	Foundation	LA/1,3	Exist.	Exist.	HID	Relocated
18736.10	MA-3	4+48.42	74.28 Lt.	Y	Existing	III	Foundation	LA/1,3	26W	3433	LED	Relocated
18735.00	WS-A	71+20.97	45.47 Lt.	Y	Existing	III	Foundation	Match Ex.	Exist.	Exist.	HID	Relocated
18735.00	WS-B	19+02.00	30.52 Lt.	Y	Existing	III	Foundation	Match Ex.	Exist.	Exist.	HID	Relocated
22684.00	BR-1	-	-	N	(See Signal)	III	12' Arm On Traffic Pole	See Traf.	133W	13221	LED	New
18735.00	BR-2	71+89.07	30.19 Lt.	N	B	III	Foundation	LP/9	39W	5171	LED	New
18735.00	BR-3	71+43.08	29.02 Rt.	N	C	III	Foundation	LP/9	(2)39W	(2)5171	LED	New
18735.00	BR-4	72+80.50	31.67 Lt.	N	B	III	Bridge	LP/9	39W	5171	LED	New
18735.00	BR-5	72+04.50	31.25 Rt.	N	B	III	Retaining Wall	LP/9	39W	5171	LED	New
18735.00	BR-7	72+80.50	30.67 Rt.	N	B	III	Bridge	LP/9	39W	5171	LED	New
18735.00	BR-9	73+87.34	32.68 Rt.	N	B	III	Foundation	LP/9	39W	5171	LED	New
18735.00	UP-1	72+47.05	20.96 Rt.	N	U	NA	Under Bridge	LP/9	79W	9040	LED	New

Conduit & Conductor Schedule

KEY	Conduit Size	Conductors For Fixtures	For Receptacles	For Equipment	For Ground
A	2"	3#6AWG CU (Exist.)			1#6G
AR	2"	2#8	2#8		1#8G
R	Existing	Existing	2#8		1#8G
B	1" RGS	2#10			1#10G
BR	1"	2#10	2#10		1#10G
BRI	2"	2#6	2#6		1#6G
CR	1"	2#10	2#10		1#6G
CRI	2"	2#10	2#2		1#2G
CR2	2"	2#10	4#2		1#2G
DR	2"	3#2, 3#6	3#6	2#1/0	1#2G
F	3"				1#6G
XR2	(2) 2"C Existing	3#6AWG CU (Exist.)	4#2		1#2G & 1#6G (EX)
X	Existing	3#6AWG CU & 3#2AWG CU (Spare) in (2)2" conduits			



ONE LINE DIAGRAM

Stantec

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1873(600)

WIN 18736.00

BRIDGE NO. 3098

BRIDGE PLANS

		DATE
PROJ. MANAGER	L. TIMBERLAKE	
DESIGN-DETAILED	PLP	SEPT 2018
CHECKED-REVIEWED	LEM	SEPT 2018
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

	BY	
	EJB	
	TWM	

SIGNATURE

P.E. NUMBER

DATE

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

LIGHTING DETAILS

SHEET NUMBER

B49

OF B52

Filename: ...\MSTA\B49_Lighting_plan.dgn Division: BRIDGE Username: dataylor Date:9/28/2018

Filename: ...\00\ROW\MSTA\001_RWPLAN1.dgn Division: ROW Username: Don.Burns Date:11/9/2018

PLAN LEGEND

Town, County, State		New R/W Along Existing R/W		Existing	Proposed	Existing	Proposed
Approx. Property Lines	P.L.	Building	Clearing Limit Line CLL	Sanitary Sewer		Traveled Way	
Existing Right of Way		Trees Conifer	Deciduous	Telephone Line	T	Ditch	
Limits of Wrought Portion	L.O.W.P.	Tree Line	Bush Line	Electric Line	E	Catch Basin	
Control Of Access	C.O.A.	Water Edge		Water Line	W	Manhole	
New Right of Way		Ledge	Rock/Boulder Flag Pole	Underdrain Line		Sewer Manhole	
New Easement		Fence CHAIN LINK	BARB WIRE STOCKADE	Gas Line	G	Utility Pole	
New Temporary Rights		Sign	Well WELL Mailbox	Guardrail		Fire Hydrant	
New R/W Wthhn Existing R/W				Culvert		Curbing	

Cut Line C C C	Fill Line F F F	Monument	Traverse Point
Stonewall	Retaining Wall	Iron Rod Found IRF	Pipe Found IPF
Baseline 10+00 11+00 12+00		Replacement Pin Set	

STATE OF MAINE
REGISTRY OF DEEDS

COUNTY _____
RECEIVED _____, _____
at _____h _____m _____M and recorded in
Plan Book _____, Page _____
Attest: _____
REGISTER

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100
Scale of Feet

CURVE DATA #2
PI = 219+53.79
D = 11°27'33.0"
Δ = 7°24'35.4" Lt.
R = 500.00'
L = 64.67'
T = 32.38'
E = 1.05'

CITY OF GARDINER

CURVE DATA #3
PI = 220+53.35
D = 2°34'22.2"
Δ = 3°27'38.8" Lt.
R = 2226.96'
L = 134.51'
T = 67.28'
E = 1.02'

CURVE DATA #4
PI = a 154+81.31
D = 14°19'26.2"
Δ = 6°40'55.4" Lt.
R = 400.00'
L = 46.65'
T = 23.35'
E = 0.68'

HORIZONTAL DATUM-US STATE PLANE NAD83 (2011)
ZONE-MAINE 2000 WEST
VERTICAL DATUM-NAVD 88
COMBINED FACTOR-1.000010

BOUNDARY SURVEY
CITY OF GARDINER
TAX MAP 37, LOTS 103, 104, 106, 136 & 138
BY CAPITAL SURVEYING SERVICES, INC.
DATED OCTOBER 30, 2001

COBBOSSEECONTEE STREAM

PC = STA. 219+21.41
PCC = STA. 219+86.08
PT = STA. 221+20.59 BK. = STA. 152+37.79 AHD.
PC = STA. 154+37.96
PT = STA. 155+04.61

CITY OF GARDINER
ITEM NO. (3)
DRAINAGE EASE. = (1)
CONST. & MAINT. EASE. = 629± SF. (2)
TEMP. CONST. RIGHTS = 0.90± AC. (1)
TOTAL AREA = 2.87± AC. (TAX RECORD)

CURVE DATA #5
PI = a 156+80.59
D = 5°43'06.5"
Δ = 5°21'1.4" Lt.
R = 1000.00'
L = 93.45'
T = 46.76'
E = 1.09'

THOMAS MOODY
ITEM NO. (7)
TEMP. CONST. RIGHTS = 734± S.F. (1)
TOTAL AREA = 0.22± AC. (DEED)

HARVEY DISTRIBUTING COMPANY
ITEM NO. (2)
CONST. & MAINT. EASE. = 233± S.F. (1)
MAINT. EASE. = 1739± S.F. (1)
TEMP. CONST. RIGHTS = 0.90± AC. (CALC.)
TOTAL AREA = 0.28± AC. (TAX RECORD)
CONST. & MAINT. EASE. LIMITS

CASEY'S SPORTS PUB, LLC

MAINE AVE. BRIDGE OVER COBBOSSEECONTEE STREAM
BRIDGE NO. 3098
WIN 018736.00 + 018736.10

WATER STREET
(EAST OF BRUNSWICK STREET)
KENNEBEC COUNTY COMMISSIONERS RECORDS
VOL. 6, PAGE 96
WIDTH VARIES
1829

KENNEBEC COUNTY COMMISSIONERS RECORDS
VOL. 10, PAGE 206
NORTH LINE DOWNTOWN
1850
ALTERATION

MAINE AVE.
FORMERLY / CAUSEWAY (STREET)

KENNEBEC COUNTY COMMISSIONERS RECORDS
VOL. 6, PAGE 398
1833
3 RODS

GARDINER STREETS BOOK
VOL. 1, PAGE 110
1856
55' 6"
ALTERATION (PART OF STREET)

S.H.C. FILE NO. 6-82 (1956)
D.O.T. FILE NO. 6-190 (1976)

DEPOT SQUARE
f/k/a DEPOT STREET

GARDINER STREETS BOOK
VOL. 1, PAGE 156
1884
30' WIDE

ALSO BOOK 545, PAGE 139 TO CITY (1915)

NOTE: PRESCRIPTIVE EASEMENT FOR HIGHWAY PURPOSES WITHIN LIMITS OF WROUGHT PORTION (L.O.W.P.)

REVISIONS				PLAN FILED IN PLAN BOOK PAGE		COUNTY RECORD			
NO.	DATE	DESCRIPTION	BY	NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE
						COND.	9/24/18	13033	284

DAVID BERNHARDT
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

ITEM	CHECKED
EXISTING CONDITION PLAN	D.W.B.
FINAL RIGHT OF WAY	D.W.B.
AREAS	D.W.B.
	P.N.S.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460
GARDINER
RIGHT OF WAY MAP

STATE AID HIGHWAY NO. 1
MAINE AVENUE
GARDINER KENNEBEC COUNTY
FEDERAL AID PROJECT NO. STP-1873(600)
FEDERAL AID PROJECT NO. 1873610-MULTIUSE PATH

JULY 2018	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 6-476
SCALE 1" = 25'	SHEET 1 OF 3	

SHEET NUMBER
1
OF _

PLAN LEGEND

Town, County, State		New R/W Along Existing R/W		Sanitary Sewer	Existing / Proposed
Approx. Property Lines	P.L.	Building	Clearing Limit Line CLL	Telephone Line	Existing / Proposed
Existing Right of Way		Trees Conifer / Deciduous		Electric Line	Existing / Proposed
Limits of Wrought Portion	L.O.W.P.	Tree Line	Bush Line	Water Line	Existing / Proposed
Control Of Access	C.O.A.	Water Edge		Underdrain Line	Existing / Proposed
New Right of Way		Ledge	Rock/Boulder Flag Pole	Gas Line	Existing / Proposed
New Easement		Fence CHAIN LINK / BARB WIRE / STOCKADE		Guardrail	Existing / Proposed
New Temporary Rights		Sign	Well WELL Mailbox	Culvert	Existing / Proposed
New R/W Within Existing R/W				Curbing	Existing / Proposed

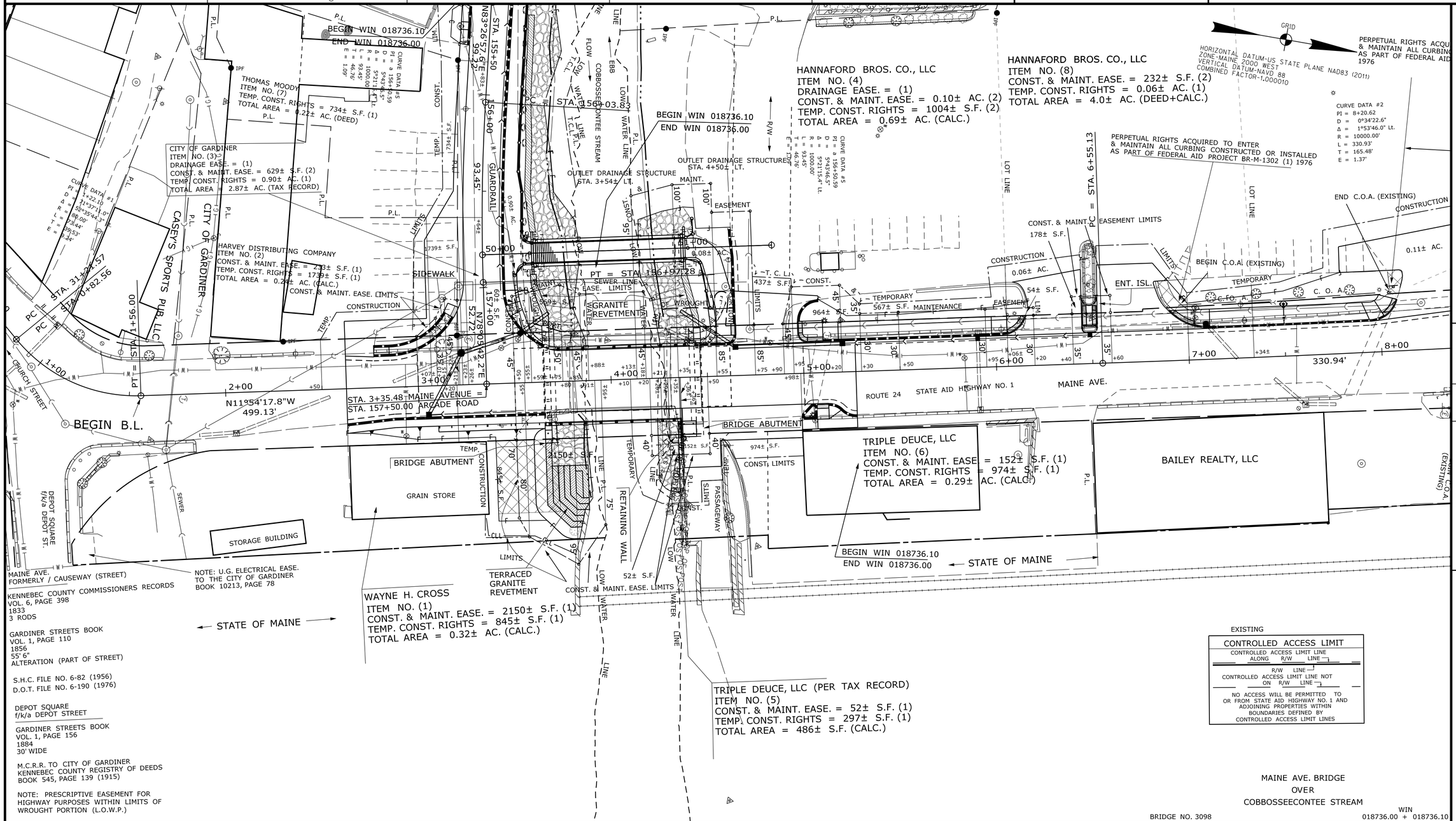
	Existing	Proposed
Traveled Way		
Ditch		
Catch Basin		
Manhole		
Sewer Manhole		
Utility Pole		
Fire Hydrant		

Cut Line C C C — Fill Line F F F
Stonewall — Retaining Wall
Baseline 10+00 11+00 12+00
Monument — Traverse Point
Iron Rod Found ● IRF — Pipe Found ● IPF
Replacement Pin Set ⊙

STATE OF MAINE
REGISTRY OF DEEDS
COUNTY _____
RECEIVED _____, _____
at _____h _____m _____M and recorded in
Plan Book _____, Page _____
Attest: _____
REGISTER

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100
Scale of Feet



ITEM	CHECKED
EXISTING CONDITION PLAN	D.W.B.
FINAL RIGHT OF WAY	D.W.B.
AREAS	P.N.S.
TECH	D.W.B.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460
GARDINER
RIGHT OF WAY MAP

REVISIONS

NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE COUNTY RECORD

NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE
		COND.	9/24/18	13033	284

DAVID BERNHARDT
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE AID HIGHWAY NO. 1
MAINE AVENUE
GARDINER KENNEBEC COUNTY
FEDERAL AID PROJECT NO. STP-1873(600)
FEDERAL AID PROJECT NO. 1873610-MULTIUSE PATH

JULY 2018	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 6-476
SCALE 1" = 25'	SHEET 2 OF 3	

SHEET NUMBER
2
OF _

Filename: ...\00\ROW\MSTA\002_RWPLAN2.dgn Division: ROW Username: Don.Burns Date:11/9/2018

Filename: ...\00\ROW\MSTA\003_RWPLAN3.dgn Division: ROW Username: Don.Burns Date:11/9/2018

PLAN LEGEND

Town, County, State		New R/W Along Existing R/W		Existing	Proposed	Existing	Proposed
Approx. Property Lines	P.L.	Building	Clearing Limit Line CLL	Sanitary Sewer	S	Traveled Way	
Existing Right of Way		Trees Conifer	Deciduous	Telephone Line	T	Ditch	
Limits of Wrought Portion	L.O.W.P.	Tree Line	Bush Line	Electric Line	E	Catch Basin	
Control Of Access	C.O.A.	Water Edge		Water Line	W	Manhole	
New Right of Way		Ledge	Rock/Boulder Flag Pole	Underdrain Line		Sewer Manhole	
New Easement		Fence CHAIN LINK	BARB WIRE STOCKADE	Gas Line	G	Utility Pole	
New Temporary Rights		Sign	Well WELL Mailbox	Guardrail		Fire Hydrant	
New R/W Within Existing R/W				Culvert		Curbing	

Cut Line C C C	Fill Line F F F	Monument	Traverse Point
Stonewall	Retaining Wall	Iron Rod Found IRF	Pipe Found IPF
Baseline 10+00 11+00 12+00		Replacement Pin Set	

STATE OF MAINE
REGISTRY OF DEEDS
COUNTY _____
RECEIVED _____, _____
at _____h _____m _____M and recorded in
Plan Book _____, Page _____
Attest: _____
REGISTER

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100
Scale of Feet

GRID
HORIZONTAL DATUM-US STATE PLANE NAD83 (2011)
ZONE-MAINE 2000 WEST
VERTICAL DATUM-NAVD 88
COMBINED FACTOR-1.000010

PERPETUAL RIGHTS ACQUIRED TO ENTER & MAINTAIN ALL CURBING CONSTRUCTED OR INSTALLED AS PART OF FEDERAL AID PROJECT BR-M-1302 (1) 1976

HANNAFORD BROS. CO., LLC
ITEM NO. (4)
DRAINAGE EASE. = (1)
CONST. & MAINT. EASE. = 0.10± AC. (2)
TEMP. CONST. RIGHTS = 1004± S.F. (2)
TOTAL AREA = 0.69± AC. (CALC.)

HANNAFORD BROS. CO., LLC
ITEM NO. (8)
CONST. & MAINT. EASE. = 232± S.F. (2)
TEMP. CONST. RIGHTS = 0.06± AC. (1)
TOTAL AREA = 4.0± AC. (DEED+CALC.)

HANNAFORD BROS. CO., LLC
ITEM NO. (9)
CONST. & MAINT. EASE. = 0.16± AC. (1)
TEMP. CONST. RIGHTS = 0.11± AC. (1)
TOTAL AREA = 1.0± AC. (DEEDS)

CURVE DATA #2
PI = 8+20.62
D = 0°34'22.6"
Δ = 1°53'46.0" Lt.
R = 10000.00'
L = 330.93'
T = 165.48'
E = 1.37'

CURVE DATA #5
PI = a 156+50.59
D = 5°43'46.5"
Δ = 5°21'15.4" Lt.
R = 1000.00'
L = 93.45'
E = 4.36'

BEGIN WIN 018736.10
END WIN 018736.00

OUTLET DRAINAGE STRUCTURE STA. 4+50± LT.

PERPETUAL RIGHTS ACQUIRED TO ENTER & MAINTAIN ALL CURBING CONSTRUCTED OR INSTALLED AS PART OF FEDERAL AID PROJECT BR-M-1302 (1) 1976

= STA. 6+55.13

CONST. & MAINT. EASEMENT LIMITS
178± S.F.
437± S.F.
54± S.F.
964± S.F.
567± S.F. MAINTENANCE
0.06± AC.
0.08± AC.
0.11± AC.
0.16± AC.

END C.O.A. (EXISTING)
BEGIN C.O.A. (EXISTING)
ENT. ISL.
EXISTING CONCRETE ISLAND (TO BE REMOVED)
SEE D.O.T. FILE NO. 6-190 (1976)
STA. 9+86.07

ROUTE 24 STATE AID HIGHWAY NO. 1
MAINE AVE.
330.94'
N13°48'03.8"W
13.93'
END B.L.

BRIDGE ABUTMENT

TRIPLE DEUCE, LLC
ITEM NO. (6)
CONST. & MAINT. EASE = 152± S.F. (1)
TEMP. CONST. RIGHTS = 974± S.F. (1)
TOTAL AREA = 0.29± AC. (CALC.)

BAILEY REALTY, LLC

BEGIN WIN 018736.10
END WIN 018736.00
STATE OF MAINE

TRIPLE DEUCE, LLC (PER TAX RECORD)
ITEM NO. (5)
CONST. & MAINT. EASE. = 52± S.F. (1)
TEMP. CONST. RIGHTS = 297± S.F. (1)
TOTAL AREA = 486± S.F. (CALC.)

EXISTING
CONTROLLED ACCESS LIMIT

CONTROLLED ACCESS LIMIT LINE ALONG R/W LINE
CONTROLLED ACCESS LIMIT LINE NOT ON R/W LINE
NO ACCESS WILL BE PERMITTED TO OR FROM STATE AID HIGHWAY NO. 1 AND ADJOINING PROPERTIES WITHIN BOUNDARIES DEFINED BY CONTROLLED ACCESS LIMIT LINES

MAINE AVE.
FORMERLY / CAUSEWAY (STREET)
KENNEBEC COUNTY COMMISSIONERS RECORDS
VOL. 6, PAGE 398
1833
3 RODS

GARDINER STREETS BOOK
VOL. 1, PAGE 110
1856
55' 6"
ALTERATION (PART OF STREET)

S.H.C. FILE NO. 6-82 (1956)
D.O.T. FILE NO. 6-190 (1976)

DEPOT SQUARE
f/k/a DEPOT STREET

GARDINER STREETS BOOK
VOL. 1, PAGE 156
1884
30' WIDE

ALSO BOOK 545, PAGE 139 TO CITY (1915)

NOTE: PRESCRIPTIVE EASEMENT FOR HIGHWAY PURPOSES WITHIN LIMITS OF WROUGHT PORTION (L.O.W.P.)

MAINE AVE. BRIDGE
OVER
COBBOSSEECONTEE STREAM
BRIDGE NO. 3098
WIN 018736.00 + 018736.10

TECH	CHECKED
D.W.B.	
D.W.B.	P.N.S.
D.W.B.	

ITEM	
EXISTING CONDITION PLAN	
FINAL RIGHT OF WAY	
AREAS	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460
GARDINER
RIGHT OF WAY MAP

REVISIONS

NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE COUNTY RECORD

NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE
		COND.	9/24/18	13033	284

DAVID BERNHARDT
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE AID HIGHWAY NO. 1
MAINE AVENUE
GARDINER KENNEBEC COUNTY
FEDERAL AID PROJECT NO. STP-1873(600)
FEDERAL AID PROJECT NO. 1873610-MULTIUSE PATH

JULY 2018	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 6-476
SCALE 1" = 25'	SHEET 3 OF 3	

SHEET NUMBER
3
OF _

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

PLAN LEGEND

Town, County, State		Centerline-Existing	
Property Lines		Centerline-Proposed	10+00
R/W Lines-Existing		Travelway-Existing	
R/W Lines-Proposed		Travelway-Proposed	
Culvert-Existing		Railroad	
Culvert Proposed		Catch Basins	Existing ■ Proposed
Curbing	Existing / Proposed	Manholes	Existing ● Proposed
Type 1		Proposed Underdrain	
Type 3		Proposed Ditch	
Type 5		Existing Ditch	
Outline of Bodies of Water		Utility Poles	Existing ♦ Proposed
Ledge		Fire Hydrants	Existing ◆ Proposed
Buildings		Existing Water Line	W
Trees	Conifer / Deciduous	Existing San. Sewer	
Tree Line		Existing San. Sewer Manhole	
Clearing Limit Line	CLL	Guardrail-Existing	
		Guardrail-Proposed	
		Guardrail-Cable, Other	

GARDINER

KENNEBEC COUNTY

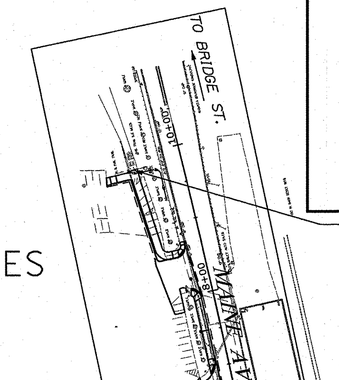
STATE ROUTE 24

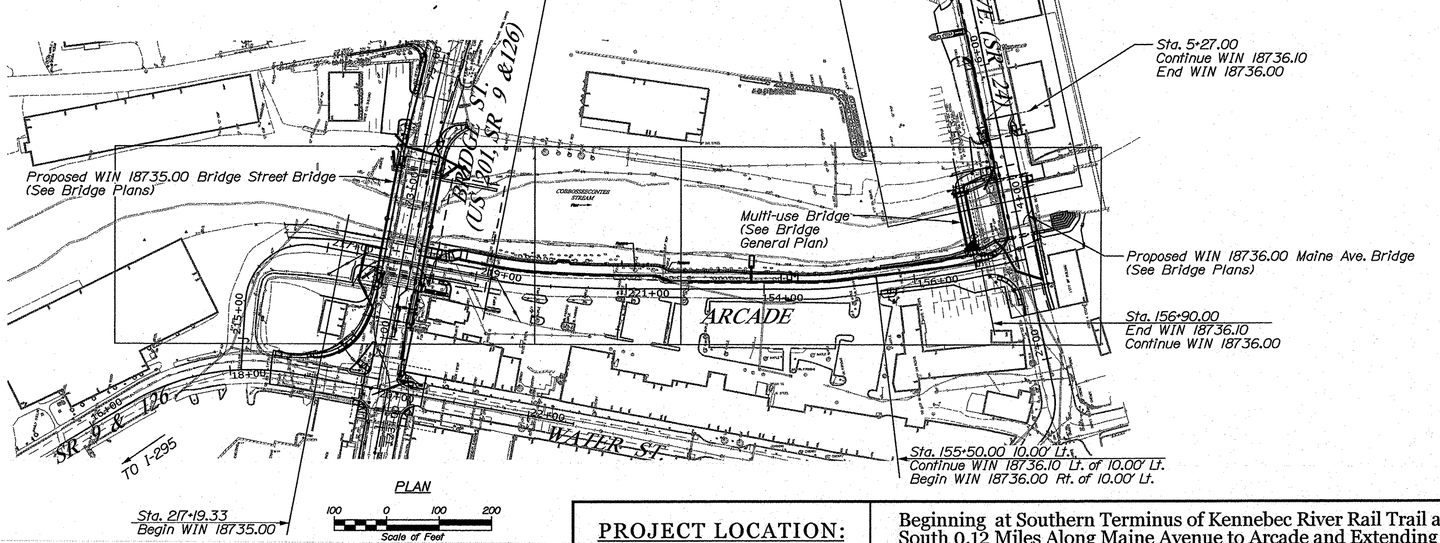
1873610

PROJECT LENGTH : 0.28 MILES

INDEX OF SHEETS

Description	Sheet No.
Title Sheet	C1
Typical Sections	C2-C3
General Plans	C4-C5
Arcade Profile	C6
Geometry, Striping & Curb Plan	C7-C8
Multi-Use Bridge Plan & Profile	C9
Boring Plans & Logs	C10-C12
Abutment Details	C13-C14
Miscellaneous Details	C15
Lighting Details	C16
Right-of-Way Plan	See WINs 18735.00 & 18736.00





TRAFFIC DATA

	Arcade	Maine Ave
Current (2017) AADT	751	9070
Future (20XX) AADT	N/A	9980
DHV - % of AADT	N/A	12%
Design Hour Volume	N/A	1198
% Heavy Trucks (AADT)	N/A	5%
% Heavy Trucks (DHV)	N/A	4%
Directional Distribution (DHV)	N/A	55%
18 kip Equivalent P 2.0	N/A	186
18 kip Equivalent P 2.5	N/A	177
Design Speed (mph)	25	25
Functional Class:	Local	Major Collector

PROJECT LOCATION:	Beginning at Southern Terminus of Kennebec River Rail Trail and Extending South 0.12 Miles Along Maine Avenue to Arcade and Extending West 0.16 Miles Along the Cobbosseecontee Stream to Crossing Under the Route 201 Bridge Street Bridge.
PROGRAM AREA:	Multimodal
SCOPE OF WORK:	Multi-Use Path and Bridge Construction

Stantec

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED — DATE 11/14/18

COMMISSIONER: [signature]

CHIEF ENGINEER: [signature] — DATE 11-13-18

STATE OF MAINE * LAUREN E. MEEK No. 10679 LICENSED PROFESSIONAL ENGINEER *

[signature] — SIGNATURE
10679 — P.E. NUMBER
9/27/18 — DATE

PROJECT INFORMATION	
PROGRAM	MULTIMODAL
PROJECT MANAGER	B. KEEZER
DESIGNER	L. MEEK
CONSULTANT	STANTEC
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

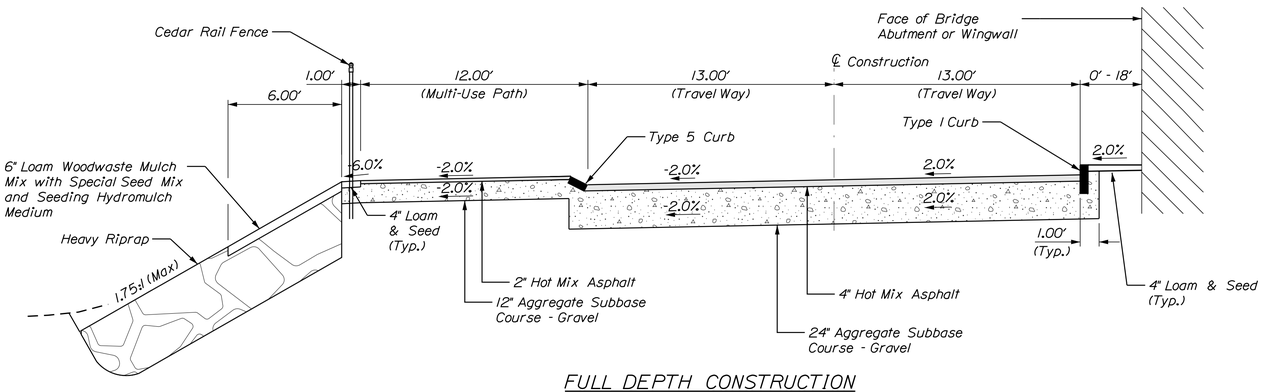
GARDINER
STATE ROUTE 24

TITLE SHEET

WIN 018736.10 1873610

SHEET NUMBER
C1
OF C15

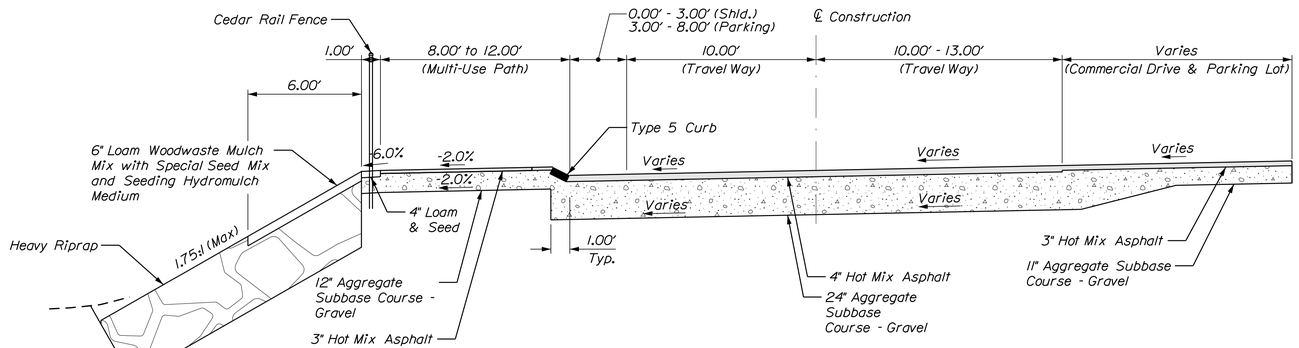
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FULL DEPTH CONSTRUCTION
ARCADE

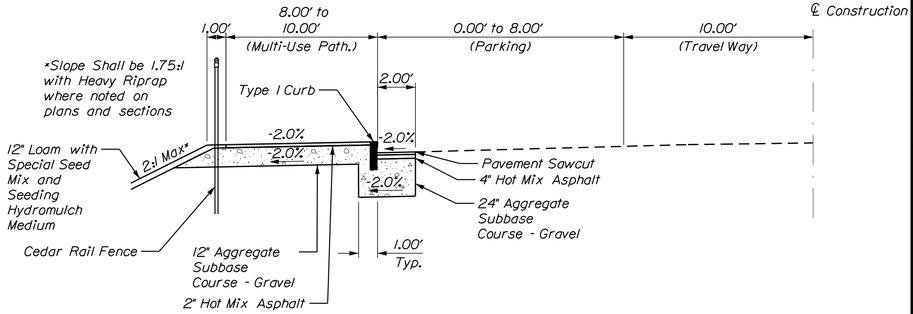
Sta. 217+40 to Sta. 218+31.67

Notes:
1. The pavement, base and subbase depths as shown on the plans are intended to be nominal.
2. When superelevation exceeds the slope of the low side shoulder, the low side shoulders pavement shall have the same cross slope as the travel way.
3. Crowns for both normal and superelevation sections for all courses of subbase and pavement shall be straight.
4. The gravel quantity calculation is based on a 4" loam or dirty borrow depth. The actual depth may vary. see the general notes.
5. The algebraic difference between shoulder and travel lane cross slopes "rollover" shall not exceeed 8%.



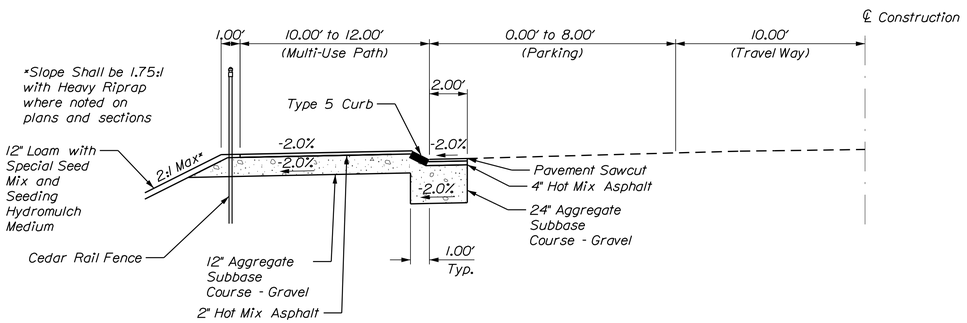
FULL DEPTH CONSTRUCTION
ARCADE

Sta. 218+31.67 to Sta. 219+20
Sta. 155+50 to Sta. 156+92



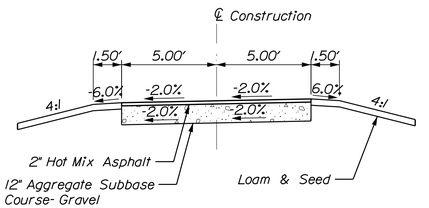
SAWCUT AND MULTI-USE PATH CONSTRUCTION
ARCADE

Sta. 153+81.10 to Sta. 155+50



SAWCUT AND MULTI-USE PATH CONSTRUCTION
ARCADE

Sta. 217+19.33 to Sta. 217+40
Sta. 219+20 to Sta. 221+20.59
Sta. 152+37.59 to Sta. 153+81.10



FULL CONSTRUCTION
MULTI-USE PATH BRIDGE APPROACHES

Stantec

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

1873610

WIN 18736.10

HIGHWAY PLANS

PROJ. MANAGER			
DESIGN-DETAILED	B. KEEZER	BY	DATE
CHECKED-REVIEWED	PLP	E.JB	SEPT 2018
DESIGN2-DETAILED2	LEM	TWM	SEPT 2018
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

P.E. NUMBER

SIGNATURE

DATE

GARDINER
ARCADE \ MAINE AVE.

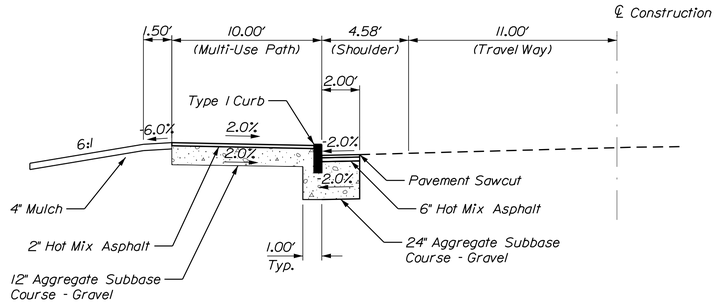
TYPICAL SECTIONS

SHEET NUMBER

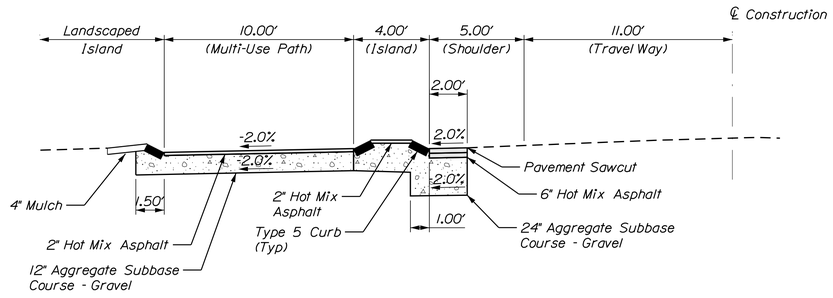
C2

OF C16

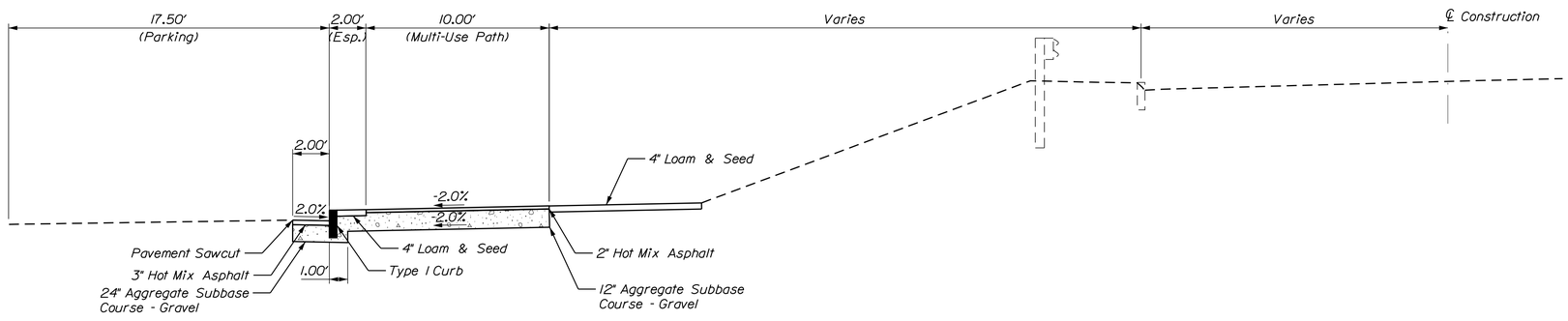
Filename: ...\MSTA\DC2_Arcade_Typ.dgn Division: BRIDGE Username: dataylor Date:9/27/2018



SAWCUT AND MULTI-USE PATH CONSTRUCTION
MAINE AVE
Sta. 5+10 to Sta. 8+10



PAVED RAISED ISLAND
MAINE AVE
Sta. 6+49 to Sta. 6+53



SAWCUT AND MULTI-USE PATH CONSTRUCTION
MAINE AVE
Sta. 8+52 to Sta. 9+68

LAYOUT SCALE



Stantec

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

1873610

WIN
18736.10

HIGHWAY PLANS

PROJ. MANAGER	B. KEEZER		
DESIGN-DETAILED	PLP	E.JB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

GARDINER
ARCADE \ MAINE AVE.

TYPICALS

SHEET NUMBER

C3

OF C16

Username: dataylor Date:9/27/2018
Division: BRIDGE
Filename: ...\MSTA\0C3_MaineAve_Typ.dgn

Notes

1. Contractor shall relocate 16 granite blocks and boulders to locations along arcade. Locations shall be coordinated with the Resident and City of Gardiner. Work shall be paid for under hourly items as directed by the Resident.
2. Contractor shall relocate informational sign to the stream side of the trail. Sign is on metal posts with no concrete foundation. Location shall be coordinated with the Resident and the City Of Gardiner. Work shall be paid for under hourly items.
3. Refer to Bridge Street Bridge and Maine Avenue Bridge Utility Plans and Trail Lighting Plans for lighting and utility modifications along Areade.
4. Upper 6' of Heavy Riprap slopes shall have 6" layer of Loam Woodwaste Mulch Mix with Special Seed Mix and Seeding Hydromulch Medium. Fill slopes without riprap adjacent to Cobbosseecontee Stream shall have 12" loam with Special Seed Mix and Seeding Hydromulch Medium. See Typical Sections and Special Provisions Sections 615, 618, and 621.
5. Contractor shall machine transplant Rugosa bushes to stockpile area for replanting at a later date as directed by the Resident. Work shall be paid for under hourly items.

LEGEND

- - - - = Match Line with WIN 18735.00 & 18736.00

= Interpretive Panel

CURVE DATA #1
PI = 216+40.79
D = 71°37'11.0"
Δ = 97°16'29.0" Rt.
R = 80.00'
L = 135.82'
T = 90.86'
E = 41.06'

CURVE DATA #2
PI = 219+53.79
D = 11°27'33.0"
Δ = 7°24'35.4" Lt.
R = 500.00'
L = 64.66'
T = 32.38'
E = 1.05'

CURVE DATA #3
PI = 220+53.35
D = 2°34'22.2"
Δ = 3°27'38.8" Lt.
R = 2226.96'
L = 134.51'
T = 67.28'
E = 1.02'

CURVE DATA #4
PI = a 154+81.31
D = 14°19'26.2"
Δ = 6°40'55.4" Lt.
R = 400.00'
L = 46.65'
T = 23.35'
E = 0.68'

CURVE DATA #5
PI = a 156+50.59
D = 5°43'46.5"
Δ = 5°21'15.4" Lt.
R = 1000.00'
L = 93.45'
T = 46.76'
E = 1.09'

COBBOSSEECONTEE STREAM

ARCADE

MAINE AVE

PLAN

Scale of Feet: 25 0 25 50

Stantec

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

1873610

WIN 18736.10

HIGHWAY PLANS

P.E. NUMBER

DATE

SIGNATURE

	B. KEEFER	DATE
PROJ. MANAGER		
DESIGN-DETAILED	PLP	SEPT 2018
CHECKED-REVIEWED	LEM	SEPT 2018
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

GARDINER \ ARCADE \ MAINE AVE.

MULTI-USE PATH PLANS

SHEET NUMBER

C4

OF C16

Filename: ...\multimode\MSTA\0C4_GenPlan.dgn Division: BRIDGE Username: dataylor Date:9/27/2018

Notes

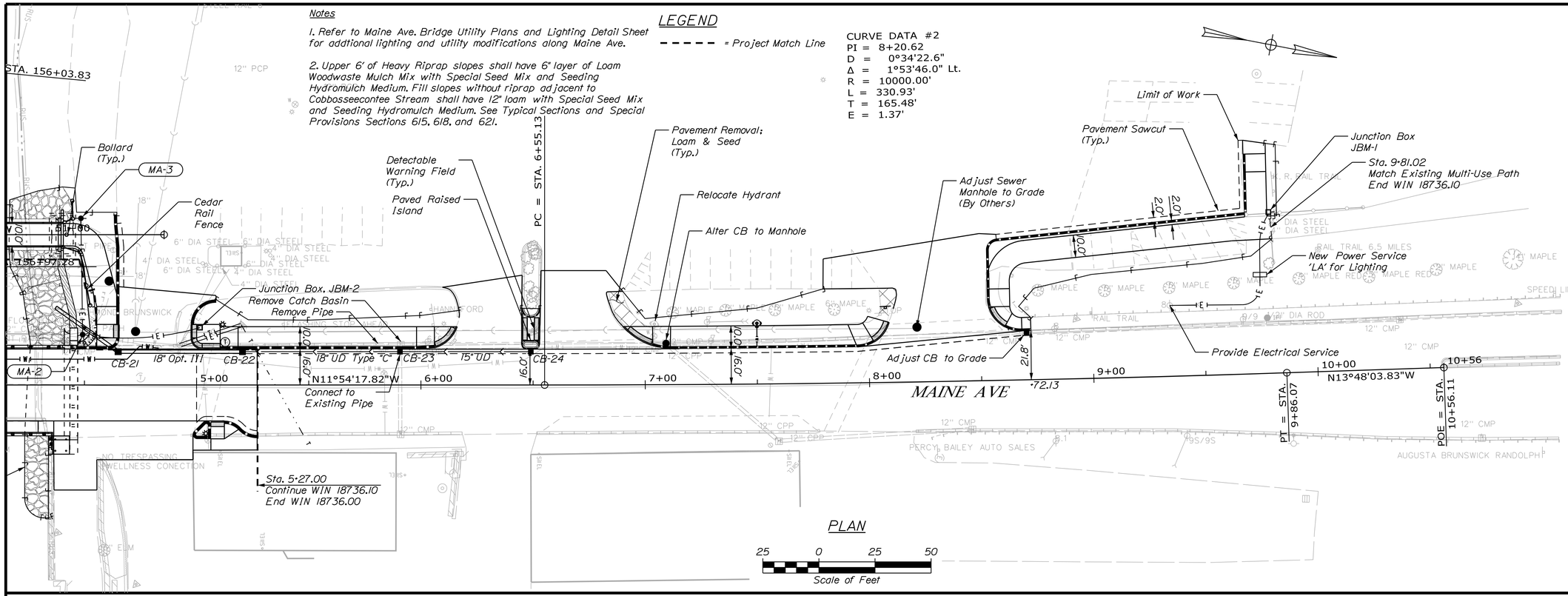
1. Refer to Maine Ave. Bridge Utility Plans and Lighting Detail Sheet for addtional lighting and utility modifications along Maine Ave.

2. Upper 6' of Heavy Riprap slopes shall have 6" layer of Loam Woodwaste Mulch Mix with Special Seed Mix and Seeding Hydromulch Medium. Fill slopes without riprap adjacent to Cobbosseecontee Stream shall have 12" loam with Special Seed Mix and Seeding Hydromulch Medium. See Typical Sections and Special Provisions Sections 615, 618, and 621.

LEGEND

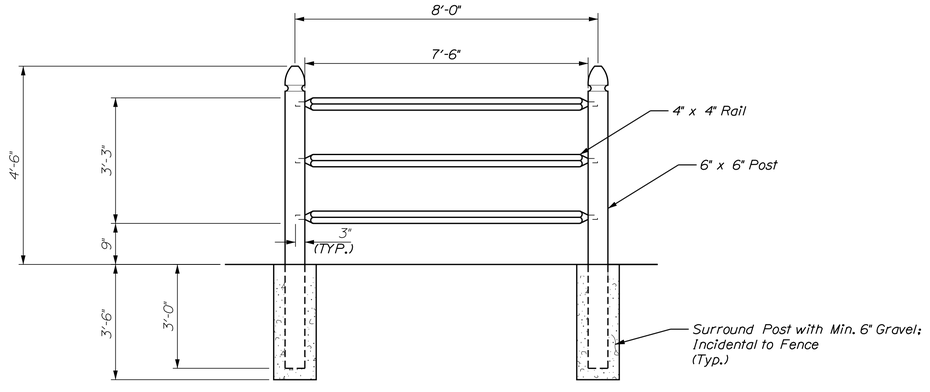
- - - - - = Project Match Line

CURVE DATA #2
PI = 8+20.62
D = 0°34'22.6"
Δ = 1°53'46.0" Lt.
R = 10000.00'
L = 330.93'
T = 165.48'
E = 1.37'



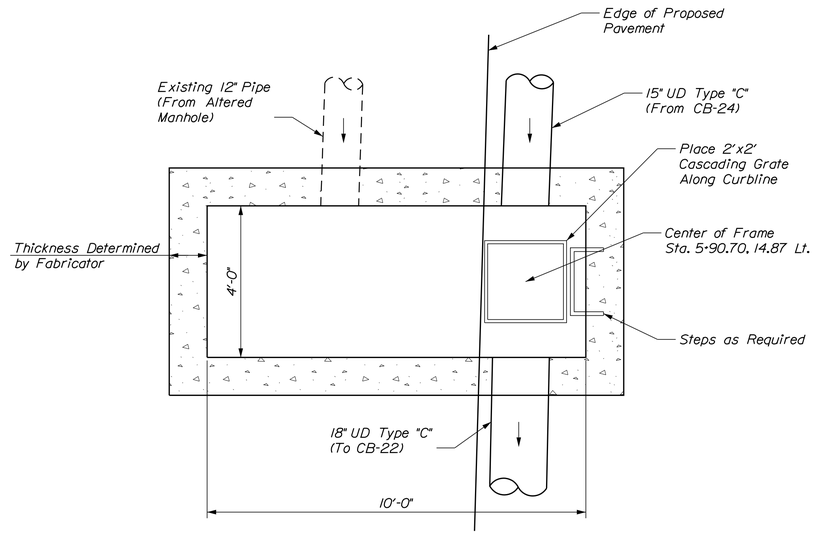
PLAN

25 0 25 50
Scale of Feet



CEDAR RAIL FENCE
NOT TO SCALE

Notes:
1. Post and Rail Fence to be 6"x6" Post with 4"x4".
2. All Fence Materials Shall be Clear White Cedar.



CATCH BASIN PLAN (CB-23)
Not to Scale

Notes:
1. Pipes enter structures in different configurations. See plans and cross sections for pipe size, material, invert elevation and configuration.
2. Exact structure dimensions may vary based on fabricators recommendations. Shop drawings shall be submitted and approved prior to casting structures.
3. Refer to Special Provision 604.30 Special Catch Basin.

Stantec

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

1873610

WIN 18736.10

HIGHWAY PLANS

	B. KEEZER	DATE
PROJ. MANAGER		
DESIGN-DETAILED	PLP	SEPT 2018
CHECKED-REVIEWED	LEM	SEPT 2018
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

P.E. NUMBER

SIGNATURE

DATE

GARDINER
ARCADE \ MAINE AVE.

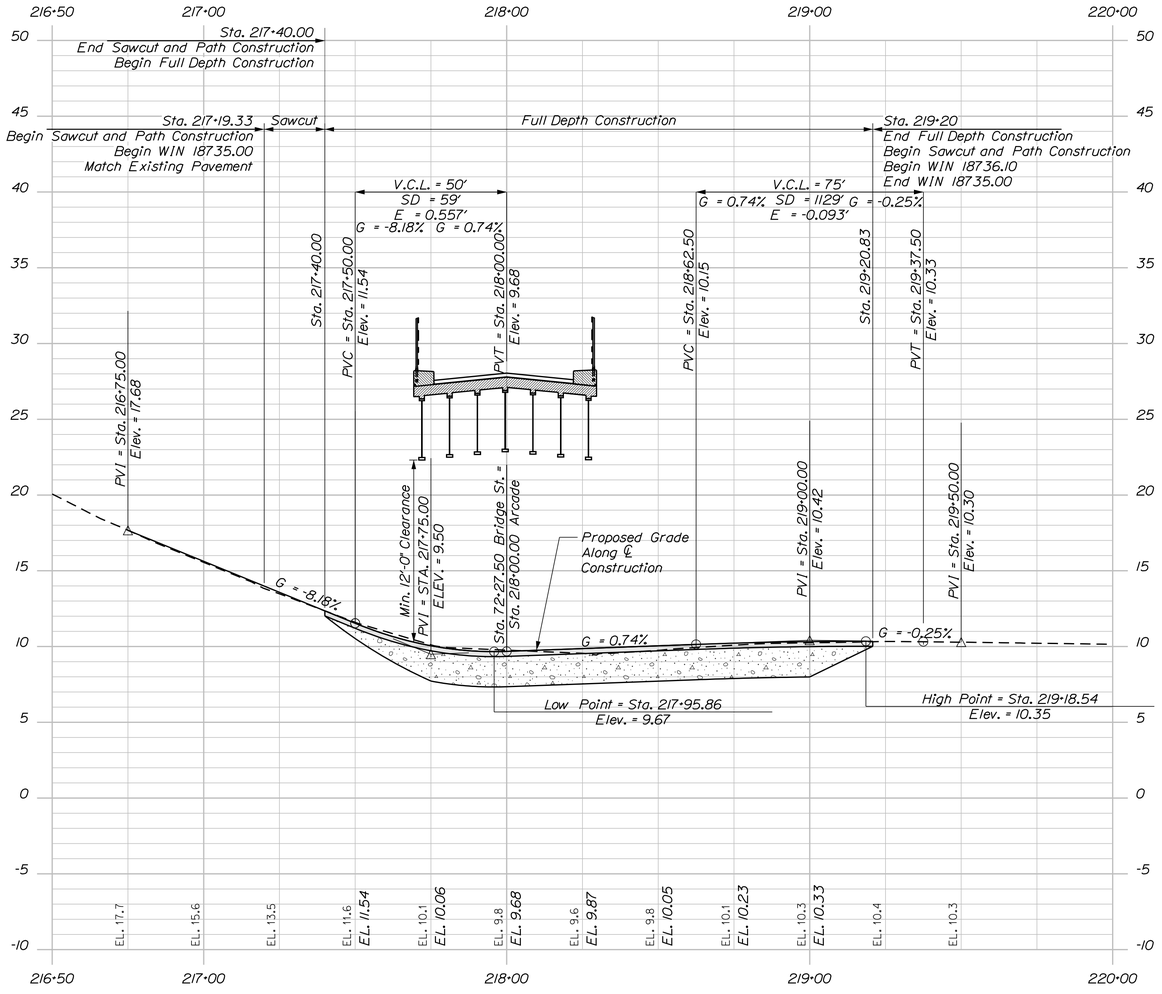
MULTI-USE PATH PLANS

SHEET NUMBER

C5

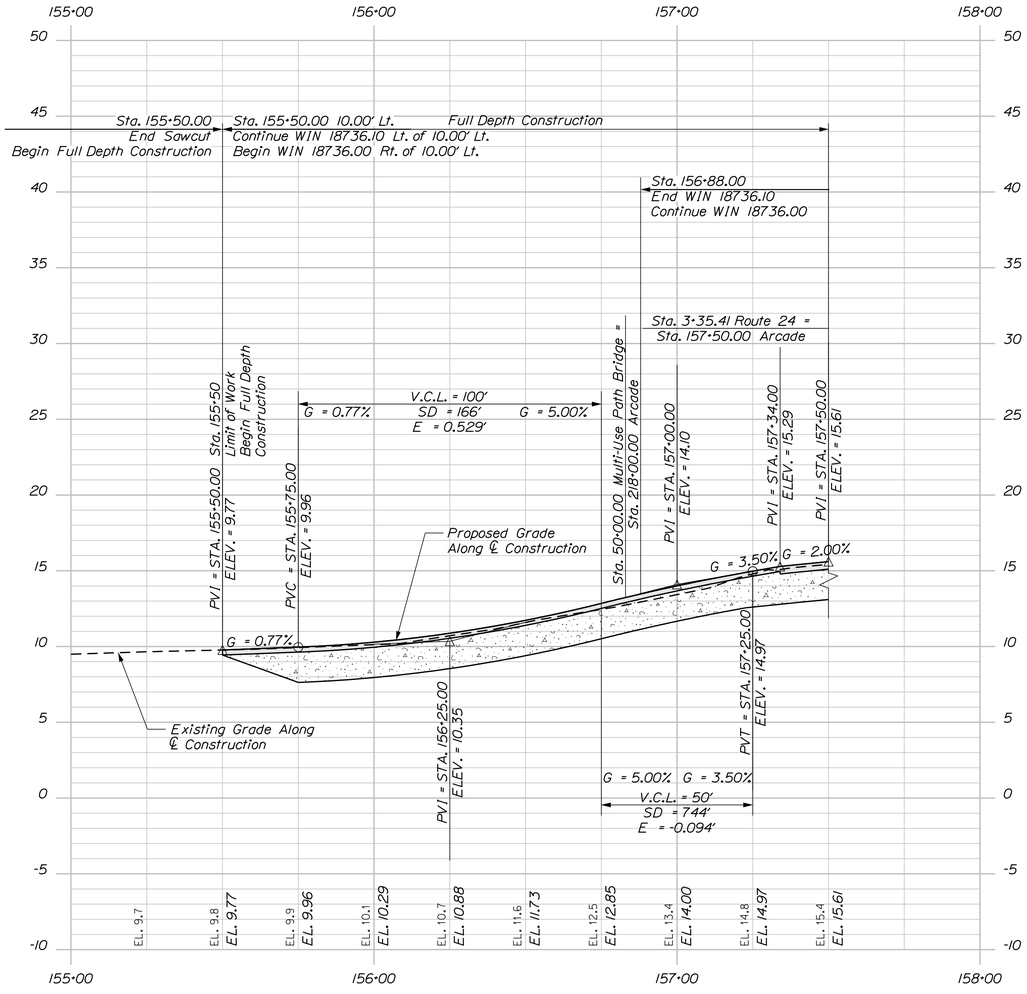
OF C16

Filename: ...\multimode\MSTA\0C5_GenPlan.dgn Division: BRIDGE Username: dataylor Date:9/27/2018



ARCADE PROFILE

Horiz. 25 0 25 50
Vert. 5 0 5 10
Scale of Feet



ARCADE PROFILE

Horiz. 25 0 25 50
Vert. 5 0 5 10
Scale of Feet

Stantec

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

1873610

WIN
18736.10

HIGHWAY PLANS

PROJ. MANAGER	B. KEEZER		
DESIGN-DETAILED	PLP		
CHECKED-REVIEWED	LEM		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BY	DATE
E.JB	SEPT 2018
TWM	SEPT 2018

SIGNATURE

P.E. NUMBER

DATE

GARDINER
ARCADE \ MAINE AVE.

ARCADE PROFILE

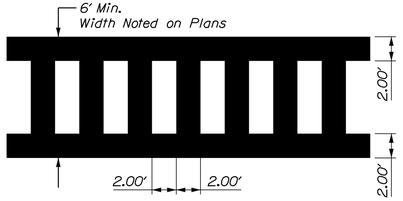
SHEET NUMBER

C6

OF C16

Filename: ...\multimode\MSTA\0C6_Profile.dgn Username: dataylor Division: BRIDGE Date:9/27/2018

Control Points For Arcade				
Point	Station	Offset	X Coord.	Y Coord.
600	217+19.33	12.46, LT.	1141584.3371	509816.1974
601	217+37.30	13.00, LT.	1141602.0770	509813.2970
604	218+35.77	13.00, LT.	1141698.7377	509794.5046
605	218+43.77	13.00, LT.	1141706.5907	509792.9778
606	218+49.77	13.00, LT.	1141712.4804	509791.8327
607	218+57.77	13.00, LT.	1141720.3333	509790.3060
608	218+61.77	13.00, LT.	1141724.2598	509789.5426
609	218+68.39	15.50, LT.	1141731.2297	509790.7344
610	218+75.00	18.00, LT.	1141738.1997	509791.9261
611	218+83.00	18.00, LT.	1141746.0526	509790.3994
612	219+21.41	18.00, LT.	1141783.7597	509783.0685
613	219+86.08	18.00, LT.	1141845.5468	509775.1565
614	152+37.79	18.00, LT.	1141978.8820	509770.8223
615	217+39.87	39.71, RT.	1141594.5363	509761.0648
616	217+39.87	23.00, RT.	1141597.7256	509777.4690
617	217+49.87	13.00, RT.	1141609.4502	509785.3768
618	217+69.33	13.00, RT.	1141628.5589	509781.6617
619	218+33.25	13.00, RT.	1141691.3009	509769.4636
620	218+49.77	13.00, RT.	1141707.5184	509766.3106
621	218+53.77	13.00, RT.	1141711.4449	509765.5472
622	218+59.77	13.00, RT.	1141717.3346	509764.4020
623	218+67.16	15.63, RT.	1141724.0860	509760.4081
624	218+71.45	24.67, RT.	1141726.5701	509750.7166
625	218+71.45	33.58, RT.	1141724.8703	509741.9733
626	218+71.45	37.58, RT.	1141724.1069	509738.0468



Crosswalk Detail
N.T.S

Item 609.11 Curb Type 1

Point	Length (Ft)	Radius (Ft)
605 To 606*	6.00	-
609 To 610*	7.07	-
615 To 616	16.71	-
617 To 618	18.97	-
619 To 620	16.52	-
621 To 622*	6.00	-
624 To 625	8.91	-

* No Curb Reveal, Flush with Pavement

Item 609.12 Curb Type 1 - Circular

Point	Length (Ft)	Radius (Ft)
616 To 617	15.71	10.00
623 To 624	10.34	11.67

Item 609.234 Terminal Curb Type 1, 4 Foot

Point	Length (Ft)	Radius (Ft)
620 To 621	4.00	-
625 To 626	4.00	-

Item 609.238 Terminal Curb Type 1 - 8 Foot - Circular

Point	Length (Ft)	Radius (FT)
622 To 623	8.00	11.70

Item 609.34 Curb Type 5

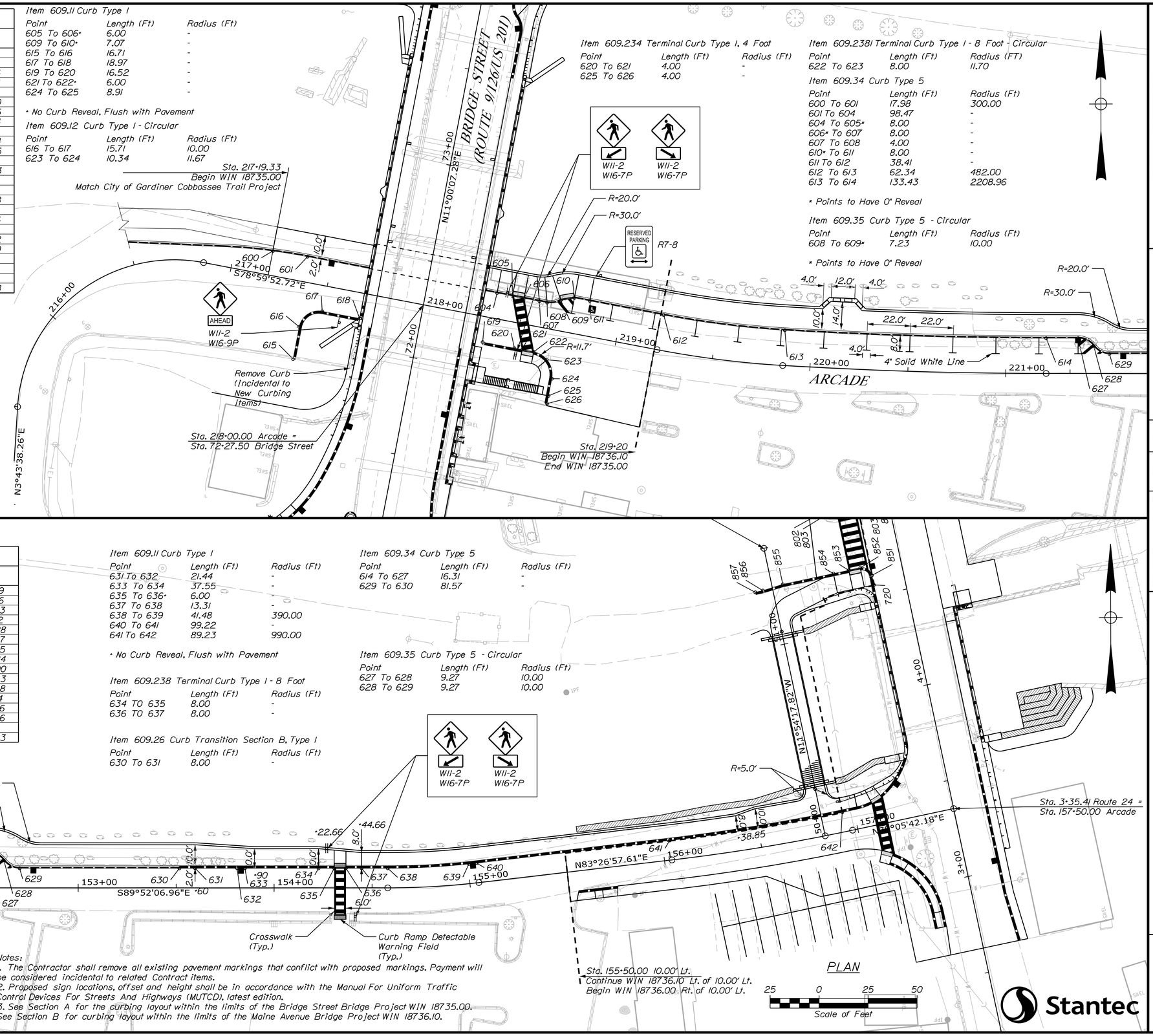
Point	Length (Ft)	Radius (Ft)
600 To 601	17.98	300.00
601 To 604	98.47	-
604 To 605*	8.00	-
606* To 607	8.00	-
607 To 608	4.00	-
610* To 611	8.00	-
611 To 612	38.41	-
612 To 613	62.34	482.00
613 To 614	133.43	2208.96

* Points to Have 0" Reveal

Item 609.35 Curb Type 5 - Circular

Point	Length (Ft)	Radius (Ft)
608 To 609*	7.23	10.00

* Points to Have 0" Reveal



Control Points For Arcade				
Point	Station	Offset	X Coord.	Y Coord.
627	152+54.10	18.00, LT.	1141995.1901	509770.7849
628	152+62.10	14.00, LT.	1142003.1809	509766.7666
629	152+70.10	10.00, LT.	1142011.1717	509762.7483
630	153+51.67	10.00, LT.	1142092.7424	509762.5612
631	153+59.67	10.00, LT.	1142100.7424	509762.5428
632	153+81.10	10.00, LT.	1142122.1785	509762.4937
633	153+85.10	10.00, LT.	1142126.1785	509762.4845
634	154+22.66	10.00, LT.	1142163.7309	509762.3984
635	154+30.66	10.00, LT.	1142171.7308	509762.3800
636	154+36.66	10.00, LT.	1142177.7308	509762.3663
637	154+44.66	10.00, LT.	1142185.7308	509762.3478
638	154+57.96	10.00, LT.	1142199.0384	509762.3174
639	155+00.51	10.00, LT.	1142240.4486	509764.4266
640	155+04.61	10.00, LT.	1142244.4247	509764.8626
641	156+03.83	10.00, LT.	1142342.9979	509776.1819
642	156+93.97	10.00, LT.	1142431.0692	509790.3403

Item 609.11 Curb Type 1

Point	Length (Ft)	Radius (Ft)
631 To 632	21.44	-
633 To 634	37.55	-
635 To 636*	6.00	-
637 To 638	13.31	-
638 To 639	41.48	390.00
640 To 641	99.22	-
641 To 642	89.23	990.00

* No Curb Reveal, Flush with Pavement

Item 609.238 Terminal Curb Type 1 - 8 Foot

Point	Length (Ft)	Radius (Ft)
634 TO 635	8.00	-
636 TO 637	8.00	-

Item 609.26 Curb Transition Section B, Type 1

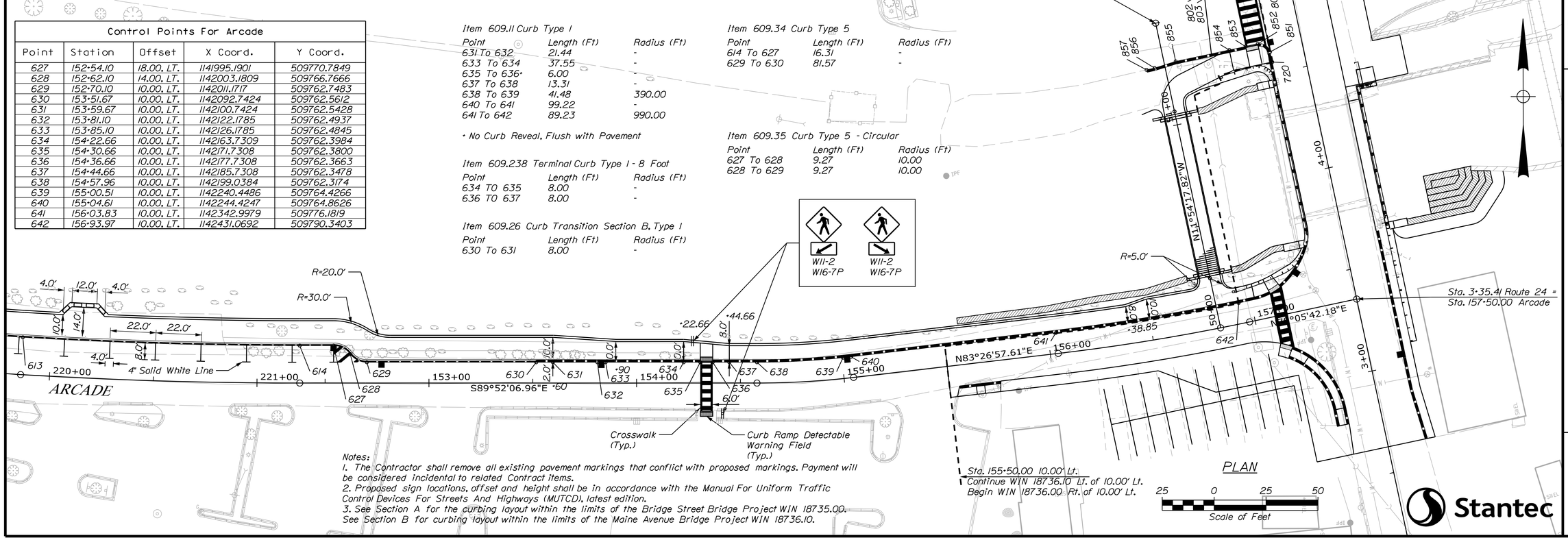
Point	Length (Ft)	Radius (Ft)
630 To 631	8.00	-

Item 609.34 Curb Type 5

Point	Length (Ft)	Radius (Ft)
614 To 627	16.31	-
629 To 630	81.57	-

Item 609.35 Curb Type 5 - Circular

Point	Length (Ft)	Radius (Ft)
627 To 628	9.27	10.00
628 To 629	9.27	10.00



PLAN

25 0 25 50
Scale of Feet

Notes:
1. The Contractor shall remove all existing pavement markings that conflict with proposed markings. Payment will be considered incidental to related Contract items.
2. Proposed sign locations, offset and height shall be in accordance with the Manual For Uniform Traffic Control Devices For Streets And Highways (MUTCD), latest edition.
3. See Section A for the curbing layout within the limits of the Bridge Street Bridge Project WIN 18735.00.
See Section B for curbing layout within the limits of the Maine Avenue Bridge Project WIN 18736.10.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

1873610

WIN
18736.10

HIGHWAY PLANS

PROJ. MANAGER	B. KEEFER			
DESIGN-DETAILED	PLP	E.JB	SEPT 2018	
CHECKED-REVIEWED	LEM	TWM	SEPT 2018	
DESIGN2-DETAILED2				
DESIGN3-DETAILED3				
REVISIONS 1				
REVISIONS 2				
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

P.E. NUMBER

SIGNATURE

DATE

GARDINER
ARCADE \ MAINE AVE.
GEOMETRY,
STRIPING & CURB PLAN

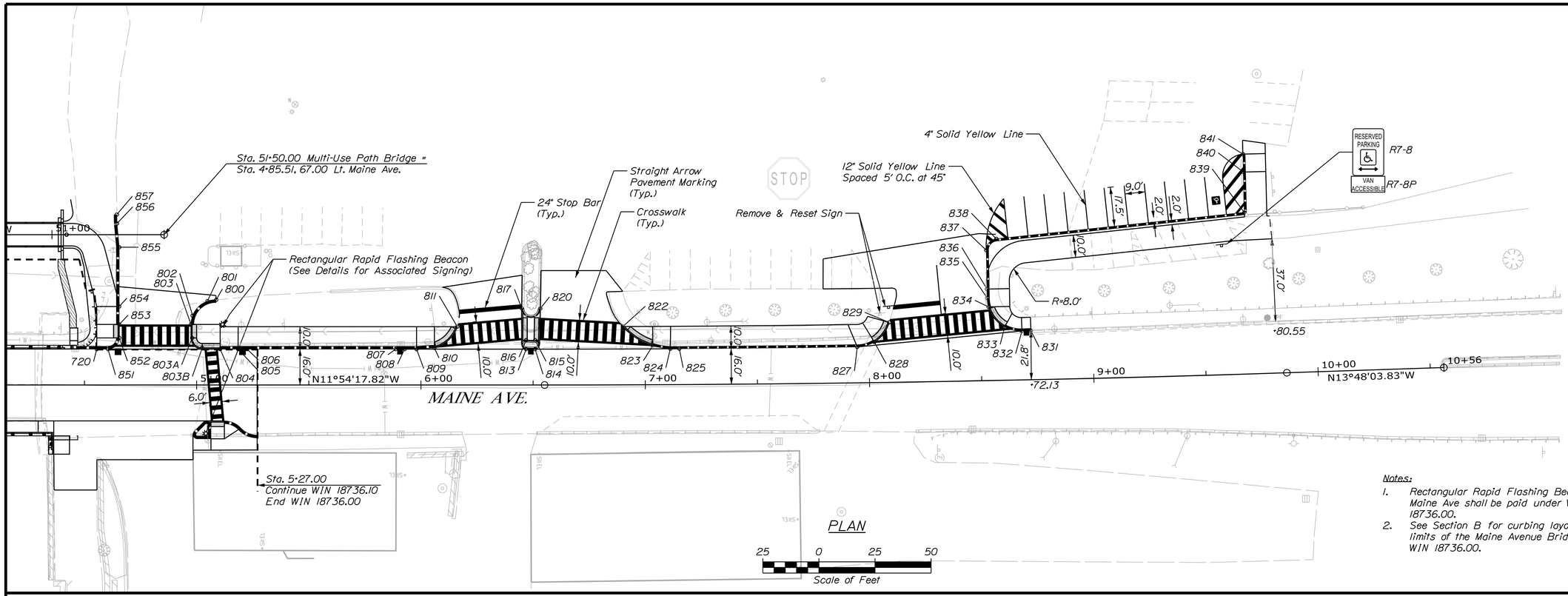
SHEET NUMBER

C7

OF C16

Stantec

Filename: ...\MSTA\0C7_Geometry5.dgn Division: BRIDGE Username: dataylor Date:9/27/2018



Notes:

1. Rectangular Rapid Flashing Beacon on Maine Ave shall be paid under WIN 18736.00.
2. See Section B for curbing layout within the limits of the Maine Avenue Bridge project WIN 18736.00.

Control Points For Maine Ave.				
Point	Station	Offset	X Coord.	Y Coord.
720	4+55.50	16.00, LT	1142447.4686	509906.3102
800	5+08.77	38.00, LT	1142414.9862	509953.8960
801	5+04.84	37.37, LT	1142416.4065	509950.1803
802	4+98.22	30.91, LT	1142424.0944	509945.0344
803	4+97.50	27.00, LT	1142428.0711	509945.1376
803A	4+98.00	21.00, LT	1142433.839	509946.8650
803B	5+02.50	16.50, LT	1142437.314	509952.1960
804	5+10.50	16.00, LT	1142436.1527	509960.1272
805	5+18.50	16.00, LT	1142434.5024	509967.9551
806	5+22.50	16.00, LT	1142433.6772	509971.8691
807	5+88.70	16.00, LT	1142420.0210	510036.6450
808	5+92.70	16.00, LT	1142419.1958	510040.5590
809	5+98.05	16.00, LT	1142418.0921	510045.7943
810	6+06.00	16.53, LT	1142415.9327	510053.4666
811	6+16.19	26.00, LT	1142404.5647	510061.4833
813	6+46.90	16.00, LT	1142408.0146	510093.5950
814	6+50.90	16.00, LT	1142407.1894	510097.5089
815	6+50.90	20.00, LT	1142403.2755	510096.6838
816	6+46.90	20.00, LT	1142404.1006	510092.7698
817	6+44.93	34.19, LT	1142390.6281	510087.9103
820	6+53.21	34.07, LT	1142389.0370	510090.0370

Control Points For Maine Ave.				
Point	Station	Offset	X Coord.	Y Coord.
822	6+90.10	26.00, LT	1142389.2770	510133.7017
823	7+03.42	17.41, LT	1142394.8772	510148.4957
824	7+11.28	16.03, LT	1142394.5722	510156.4661
825	7+15.29	16.00, LT	1142393.7500	510160.3807
827	7+94.72	16.00, LT	1142376.6168	510237.8098
828	8+02.36	18.08, LT	1142372.9073	510244.7910
829	8+09.13	26.74, LT	1142362.9697	510249.4617
831	8+72.40	21.86, LT	1142353.5552	510312.0669
832	8+68.39	21.82, LT	1142354.5092	510308.1823
833	8+60.72	23.81, LT	1142354.3048	510300.2794
834	8+53.69	32.88, LT	1142347.0575	510291.4001
835	8+53.16	36.83, LT	1142343.3263	510289.9918
836	8+53.16	40.83, LT	1142339.4295	510289.0893
837	8+53.16	58.13, LT	1142322.5727	510285.1853
838	8+57.76	63.11, LT	1142316.6890	510288.5125
839	9+69.35	72.03, LT	1142282.3538	510394.2718
840	9+69.48	90.03, LT	1142264.8368	510390.1303
841	9+69.53	98.03, LT	1142257.0514	510388.2897
720	4+55.50	16.00, LT	1142447.7986	509906.3102
851	4+60.50	16.00, LT	1142446.4671	509911.2026
852	4+65.50	21.00, LT	1142440.5432	509915.0636
853	4+65.50	27.00, LT	1142434.6723	509913.8259
854	4+65.50	35.00, LT	1142426.8444	509912.1756
855	4+65.50	61.41, LT	1142401.0073	509906.7285
856	4+64.51	72.00, LT	1142390.8445	509903.3739
857	4+64.46	76.00, LT	1142386.9416	509902.6979

Item 609.11 Curb Type 1

Point	Length (Ft)	Radius (Ft)
803 To 803A*	6.00	-
803B To 804*	8.00	-
806 To 807	66.20	-
808 To 809	5.35	-
824 To 825	4.00	-
825 To 827	79.30	9984.00
836 To 837	17.30	-
838 To 839	111.19	-
839 To 840	18.00	-
720 To 851	5.00	-
852 To 853*	6.00	-
854 To 855	26.41	-
855 To 856	10.64	-

*No Curb Reveal, Flush with Pavement

Item 609.12 Curb Type 1 - Circular

Point	Length (Ft)	Radius (Ft)
801 To 802	9.55	11.00
803A To 803B*	7.85	5.00
810 To 811*	14.46	15.00
822 To 823*	16.00	30.00
828 To 829*	11.24	15.00
833 To 834	11.76	15.00
837 To 838	7.42	5.00

* No Curb Reveal, Flush with Pavement

Item 609.234 Terminal Curb Type 1 - 4 Foot

Point	Length (Ft)	Radius (Ft)
856 To 857	4.00	-

Item 609.2341 Terminal Curb Type 1 - 4 Foot - Circular

Point	Length (Ft)	Radius (Ft)
800 To 801	4.00	11.00
802 To 803	4.00	11.00

Item 609.238 Terminal Curb Type 1 - 8 Foot

Point	Length (Ft)	Radius (Ft)
804 To 805	8.00	-
809 To 810	8.00	-
840 To 841	8.00	-
853 To 854	8.00	-

Item 609.2381 Terminal Curb Type 1 - 8 Foot - Circular

Point	Length (Ft)	Radius (Ft)
851 To 852	7.85	5.00
823 To 824	8.00	30.00
827 To 828	8.00	15.00
832 To 833	8.00	15.00
834 To 835*	4.00	15.00
835 To 836*	4.00	-

* Pts. 834 to 836 paid as 1 Each

Item 609.35 Curb Type 5 - Circular

Point	Length (Ft)	Radius (Ft)
814 To 815		
816 To 813		
817 To 820	6.28	2.00
	6.28	2.00
	12.97	4.14

Item 609.34 Curb Type 5

Point	Length (Ft)	Radius (Ft)
813 To 814		
815 To 816	4.00	-
	4.00	-

Stantec

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

1873610

WIN 18736.10

HIGHWAY PLANS

P.E. NUMBER

DATE

SIGNATURE

PROJ. MANAGER	B. KEEFER		
DESIGN-DETAILED	PLP	SEPT 2018	
CHECKED-REVIEWED	LEM	SEPT 2018	
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

GARDINER \ ARCADE \ MAINE AVE.

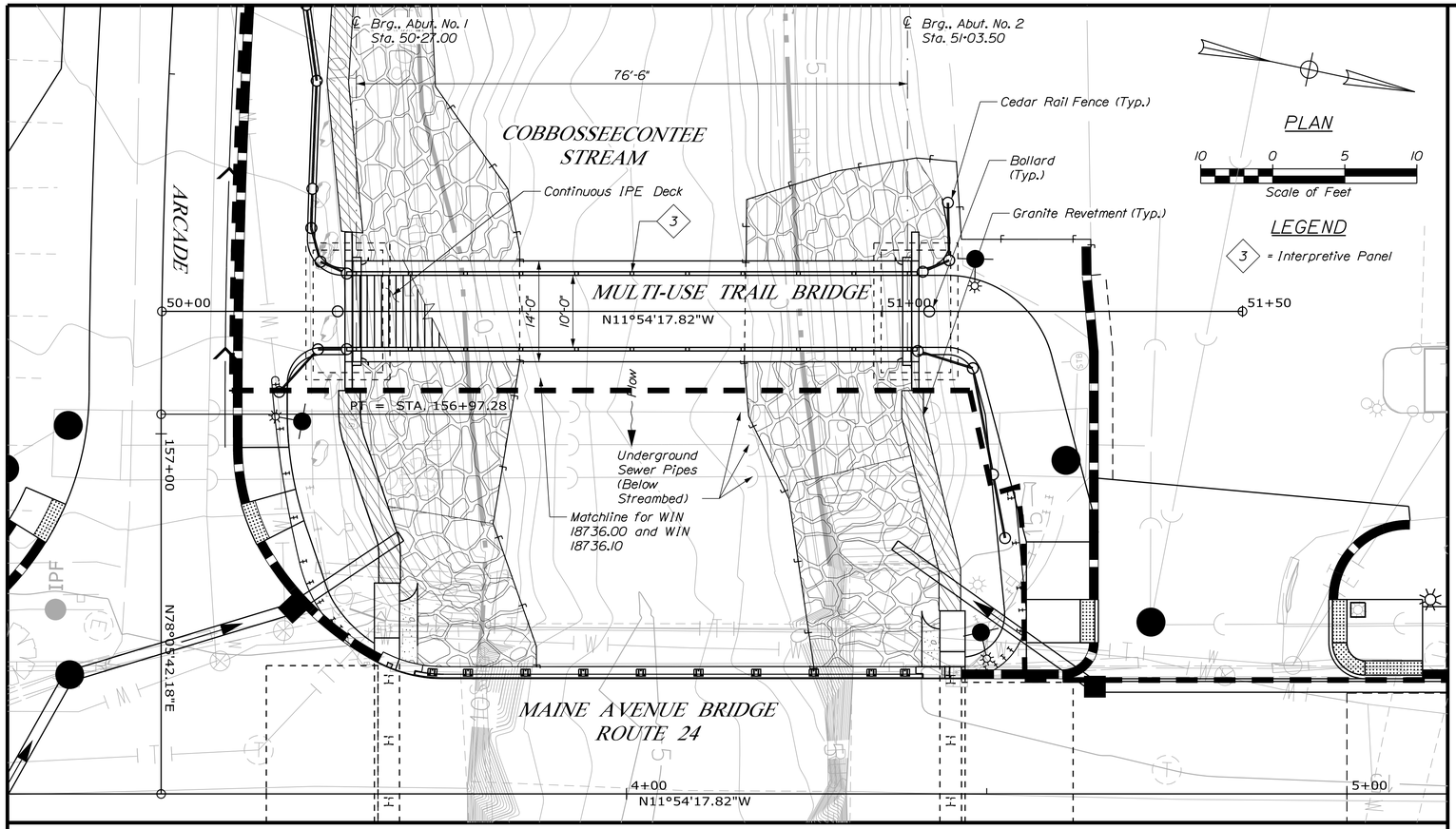
GEOMETRY, STRIPING & CURB PLAN

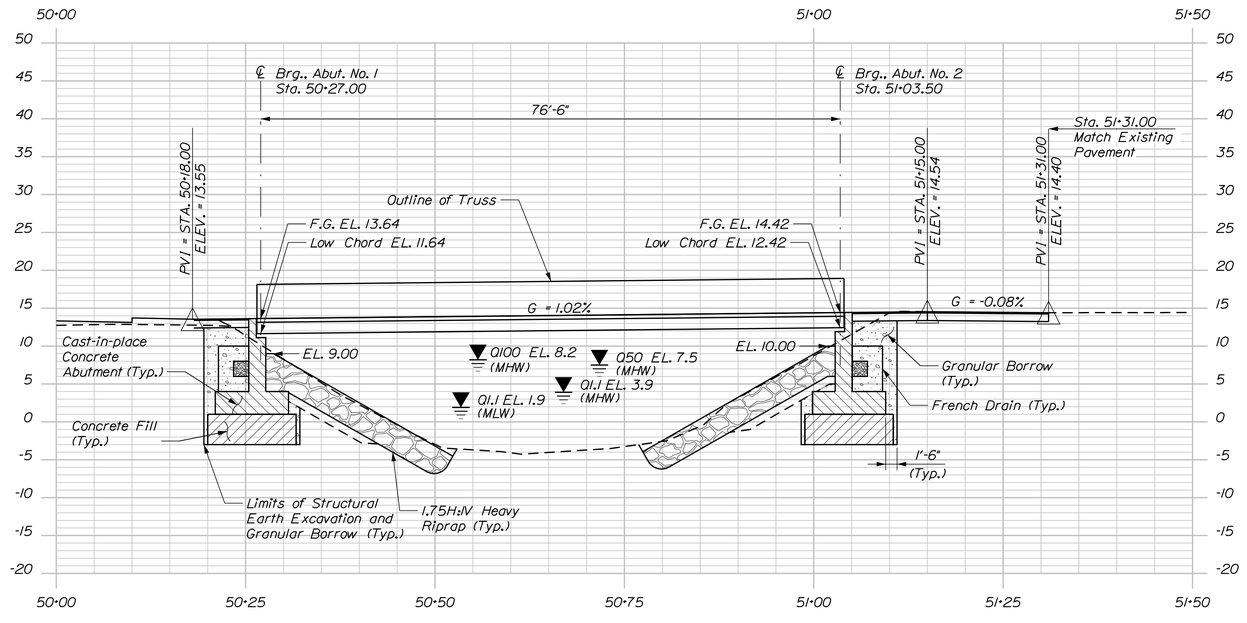
SHEET NUMBER

C8

OF C16

Filename: ...\MSTA\OC8_Geometry6.dgn Division: BRIDGE Username: dataylor Date:9/27/2018





PROFILE

SPECIFICATIONS

Design: The Prefabricated Pedestrian Bridge shall be designed in accordance with the AASHTO LRFD Bridge Design Specifications, Seventh Edition 2014 with 2015-2016 Interim Revisions and AASHTO LRFD Guide Specifications for the Design of Pedestrian Bridges, 2nd Edition, with 2015 Interim Revisions.

DESIGN LOADING

Live Load:
- Pedestrian ..... 90 p.s.f. (pedestrian)
- Single Vehicle Loading H10

HYDROLOGIC DATA

Drainage Area	219 sq mi
Design Discharge (Q50)	5290 cfs
Check Discharge (Q100)	5910 cfs
Headwater Elevation (Q50)	7.5 ft
Headwater Elevation (Q100)	8.2 ft
Discharge Velocity (Q50)	10.6 fps
Discharge Velocity (Q100)	10.7 fps
Mean Lower Low Water (MLLW)	-2.3 ft
Mean Low Water (MLW)	-2.1 ft
Mean Tide Level (MTL)	0.9 ft
Mean High Water (MHW)	3.8 ft
Mean Higher High Water (MHHW)	4.2 ft

MATERIALS

Concrete:
- Fill ..... "Fill"
- All Other ..... Class "A"

Reinforcing Steel:
- Plain ..... ASTM A 615/A 615M, Grade 60

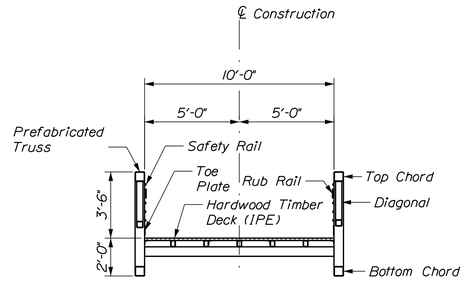
Structural Steel:
- Truss ..... ASTM A500 Gr. C or A847, ASTM A588, A572, A36 (Galv. & Paint.)
- High Strength Bolts ..... ASTM A 325, Type 1 (Galvanized)

BASIC DESIGN STRESSES

Concrete, Fill	f 'c = 3,000 psi
Concrete, Class "A"	f 'c = 4,000 psi
Reinforcing Steel	f y = 60,000 psi
Structural Steel:	
Truss	F y = 36,000 psi (Minimum)
ASTM F3125, Grade A325	F μ = 120,000 psi

GENERAL NOTES

1. The prefabricated bridge and railing shall be galvanized and painted in accordance with the Standard Specifications.



TYPICAL SECTION

Stantec

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

1873610

WIN
18736.10

HIGHWAY PLANS

	B. KEEZER		
PROJ. MANAGER			
DESIGN-DETAILED	LSF/KLW	LSF/KLW	SEPT 2018
CHECKED-REVIEWED	SJW	SJW	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

GARDINER
ARCADE \ MAINE AVE.

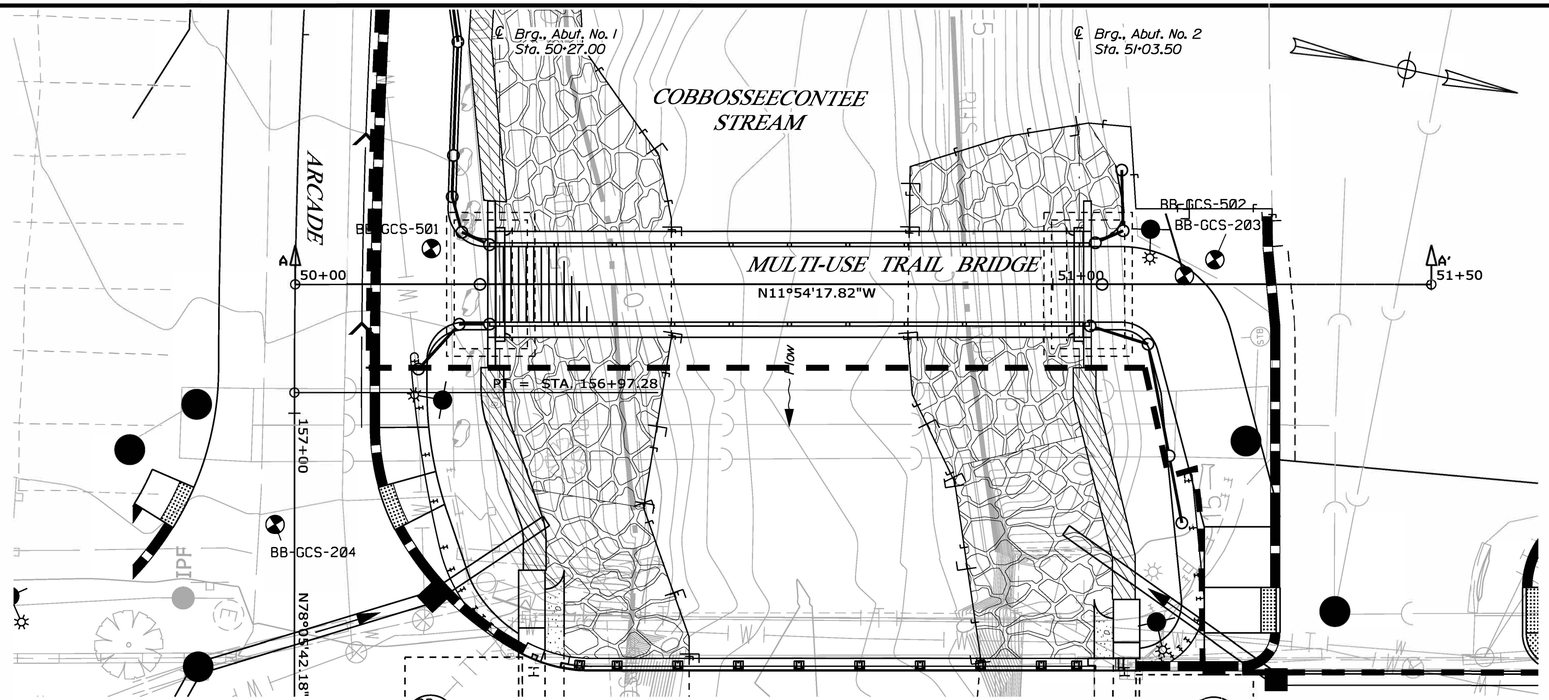
BRIDGE PLAN AND PROFILE

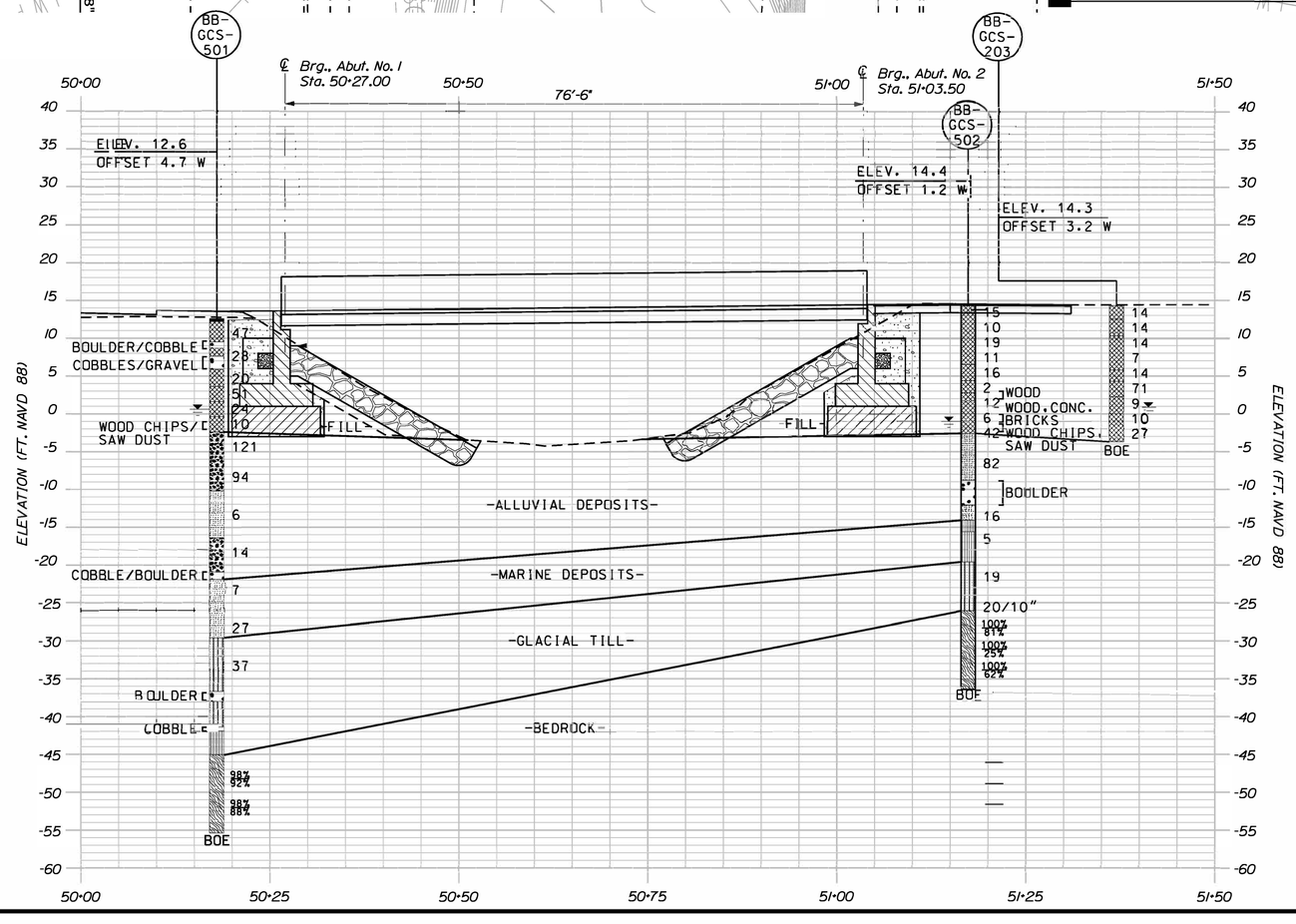
SHEET NUMBER

C9

OF C16

Filename: ...\0C9_HDPlan_BikePedBridgePlan.dgn Division: BRIDGE Username: dataylor Date:9/27/2018





LEGEND

BB-BGC-501 — DESIGNATION AND LOCATION OF TEST BORING DRILLED BY NEW ENGLAND BORING CONTRACTORS FROM 5 TO 24 JULY 2017.

BB-BGC-203 — DESIGNATION AND LOCATION OF TEST BORING DRILLED BY NEW ENGLAND BORING CONTRACTORS ON 30 NOVEMBER 2015.

A — A′ — LOCATION AND ORIENTATION OF SUBSURFACE PROFILE

NOTES

1. EXISTING AND PROPOSED SITE CONDITIONS AND CONTOURS OF EXISTING GROUND SURFACE ELEVATIONS ARE TAKEN FROM ELECTRONIC MICTROSTATION FILES PROVIDED BY STANTEC ON 19 JULY 2017.
2. AS-DRILLED LOCATIONS OF TEST BORINGS WERE DETERMINED IN THE FIELD BY MAINEDOT USING GPS SURVEY EQUIPMENT.
3. SUBSURFACE EXPLORATIONS SHOWN WERE MONITORED BY HALEY & ALDRICH PERSONNEL.
4. ELEVATIONS ARE IN FEET AND REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

BORING LEGEND

TEST BORING DESIGNATION

GROUND SURFACE ELEVATION AT TEST BORING
APPROXIMATE PERPENDICULAR OFFSET DISTANCE AND DIRECTION MEASURED FROM PROPOSED CENTERLINE

CORRECTED STANDARD PENETRATION TEST (SPT) N-VALUE (N60 BLOWS PER FOOT)

STRATA INTERFACE

PERCENT RECOVERY
PERCENT ROCK QUALITY DESIGNATION (RQD)

DENOTES BOTTOM OF EXPLORATION AT APPROXIMATE DEPTH SHOWN

STRATA SYMBOLS

- BITUMINOUS CONCRETE
- TOPSOIL
- FILL
- COBBLES\BOULDERS
- WELL GRADED GRAVEL AND SAND
- POORLY GRADED SAND
- WELL GRADED GRAVEL
- SILTY SAND, LITTLE GRAVEL
- SILTY SAND
- BEDROCK
- INTERLAYERED WELL POORLY, GRADED SAND
- POORLY GRADED SAND, LITTLE GRAVEL, TRACE SILT
- SILT

PROFILE

HORIZ. 10 0 10 20
VERT. 10 0 10 20
SCALE

HALEY ALDRICH

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

1873610

WIN 18736.10

HIGHWAY PLANS

STATE OF MAINE — WAYNE A. CHADBOURNE — No. 10620 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE 10620 — P.E. NUMBER

9/26/2018 — DATE

PROJ. MANAGER	B. KEEZER		
DESIGN-DETAILED	KFP	DEC 2017	
CHECKED-REVIEWED	EAF	DEC 2017	
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

GARDINER
ARCADE / MAINE AVE

BORING LOCATION PLAN AND INTERPRETIVE SUBSURFACE PROFILE

SHEET NUMBER
C10
OF C16

Filename: ...\0C8_Trail\Bridge Plan and Profile.dgn Division: BRIDGE Username: dataylor Date:9/25/2018

Filename: ...\0C9_Trail\Bridge Boring Logs.dgn Division: BRIDGE Username: dotaylor Date:9/25/2018

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Multi-Use Bridge over Cobbosseecontee Stream
Location: Gardiner, Maine

Boring No.: BB-GCS-501
PIN: 18736.10

Driller:	New England Boring Contractors	**Elevation (ft.)**	12.6	**Auger ID/OD:**	--
Operator:	T.Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. ID
Logged By:	K.Russ	**Rig Type:**	Mobile B53 Track	**Hammer Wt./Fall:**	SS1406/30;HW&NW3006/
Date Start/Finish:	7-11-17/7-24-17	**Drilling Method:**	HW DriveNW Drive	**Core Barrel:**	NQ-1.875 in. ID
Boring Location:	E1142414, N509795	**Casing ID/OD:**	HW-4.0 in. ID/NW-3.0 in. ID	**Water Level**:**	12.0 ft
Hammer Efficiency Factor:	0.743	**Hammer Type:**	Automatic☒ Hydraulic☐		Rope & Cathead☐

Definitions:
D = Split Spoon Resplit
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WOSP = Weight of one person
Su = Insitu Field Vane Shear Strength (psf)
Tv = Pocket Torvane Shear Strength (psf)
qp = Unconfined Compressive Strength (tsf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N60 = SPT N-uncorrected corrected for hammer efficiency
N60 = Hammer Efficiency Factor/60%*N-uncorrected
Su(tsf) = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Sample Information

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (ft lb.) Shear Strength (psf) or RQD (%)	N-uncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							PUSH	12.2		-BITUMINOUS CONCRETE-	
								0.4		Brown, dry, dense gravelly SAND, well graded -FILL-(SW) PID=0.0 ppm	
	1D	24/12	1.0 - 3.0	11/17/21/20	38	47					
								9.5		-BOULDER/COBBLE-	
								3.1			
								8.7		Brown, dry, medium dense gravelly SAND, little silt -FILL-(SM) PID=0.0 ppm	
	2D	24/8	4.0 - 6.0	7/9/14/9	23	28	17	3.9		Note: Advanced HW to 6 ft, advanced rollerbit to 7 ft.	GH14626a A-1-b SM
							26	7.6		-COBBLES/GRAVEL-	
							10	5.0			
								5.9		Brown, dry, medium dense sandy GRAVEL, well graded -FILL-(GW) PID=0.0 ppm	
	3D	24/6	7.0 - 9.0	13/9/7/5	16	20	14	6.7			
							8	9.0			
	4D	24/6	9.0 - 11.0	4/5/36/7	41	51	7	3.6		Dark brown, wet, dense fine to medium SAND, little gravel, trace silt and coarse sand, poorly graded, contains brick, ash, and coal -FILL-(SP) PID=0.0 ppm	
							39	11.0			
	5D	24/8	11.0 - 13.0	8/14/5/12	19	24	23	1.6		Olive-green to olive-brown, wet, medium dense silty fine SAND, little medium to coarse sand, trace fine gravel, contains coal and brick -FILL-(SM) PID=0.0 ppm	
							26	13.0			
	6D	24/12	13.0 - 15.0	7/5/3/6	8	10	19	0.4		Wood chips and saw dust -FILL- PID=0.3 ppm	
							17	15.0			
	MD		15.0 - 15.0	50(0.0)			36	2.4		Note: Split-spoon refusal at 15 ft, advanced rollerbit to 16 ft.	
	7D	24/9	16.0 - 18.0	17/35/63/71	98	121	82			Gray-brown, wet, very dense sandy GRAVEL, well graded -ALLUVIAL DEPOSIT-(GW)	
							65				
							45				
							62				
	8D	24/9	20.0 - 22.0	25/40/36/24	76	94	109			Gray-brown, wet, very dense GRAVEL, little fine to coarse sand, trace silt, well graded -ALLUVIAL DEPOSIT-(GW)	GH14626b A-1-a GW
							101				
							54				
							30	22.8		Note: Drill wash water contains gray fine sand from 22.8 to 25.0 ft.	
							14				
	9D	24/11	25.0 - 27.0	1/1/4/6	5	6	17			Gray, wet, loose fine SAND, little silt, little gravel, trace medium to coarse sand -ALLUVIAL DEPOSIT-(SM)	GH14626c A-2-4(0) SM
							25				
							30				
							44				
							25	29.0			
	10D	24/6	30.0 - 32.0	6/4/7/5	11	14	32			Gray, wet, medium dense sandy GRAVEL, trace silt, slight bonding of silty fine sand on gravel pieces, well graded -ALLUVIAL DEPOSIT-(GW)	
							45				
							55				
							94	33.5		Note: Advanced rollerbit through boulder from 33.5 to 34.5 ft.	
							22	34.5		-COBBLE/BOULDER-	
	MD	24/0	35.0 - 37.0	3/2/4/4	6	7	28			No recovery, rock in spoon tip	
							29				
							31			Note: Drill wash water from 35 to 40 ft contains gray fine to medium sand, trace gravel at approximately 39 ft.	
							46				
							49			Gray, wet, medium dense SAND, poorly graded -MARINE DEPOSIT-(SP)	
	11D	24/10	40.0 - 42.0	8/11/11/12	22	27	83	42.2			
							73			Note: Drill wash water from 40 to 45 ft contains gray fine sand, becomes coarser with depth. Gravel at approximately 42 ft.	
							103				
							111				
							101			Olive-gray, wet, dense silty SAND, some gravel, loosely to moderately bonded -GLACIAL TILL-(SM)	
	12D	24/9	45.0 - 47.0	16/13/17/23	30	37	22				
							35				
							43				
							52			Note: Cored through boulder from 49.3 to 50.6 ft.	
							71	49.3		-BOULDER-	

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

** Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 2

Boring No.: BB-GCS-501

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Multi-Use Bridge over Cobbosseecontee Stream
Location: Gardiner, Maine

Boring No.: BB-GCS-501
PIN: 18736.10

Driller:	New England Boring Contractors	**Elevation (ft.)**	12.6	**Auger ID/OD:**	--
Operator:	T.Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. ID
Logged By:	K.Russ	**Rig Type:**	Mobile B53 Track	**Hammer Wt./Fall:**	SS1406/30;HW&NW3006/
Date Start/Finish:	7-11-17/7-24-17	**Drilling Method:**	HW DriveNW Drive	**Core Barrel:**	NQ-1.875 in. ID
Boring Location:	E1142414, N509795	**Casing ID/OD:**	HW-4.0 in. ID/NW-3.0 in. ID	**Water Level**:**	12.0 ft
Hammer Efficiency Factor:	0.743	**Hammer Type:**	Automatic☒ Hydraulic☐		Rope & Cathead☐

Definitions:
D = Split Spoon Resplit
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WOSP = Weight of one person
Su = Insitu Field Vane Shear Strength (psf)
Tv = Pocket Torvane Shear Strength (psf)
qp = Unconfined Compressive Strength (tsf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N60 = SPT N-uncorrected corrected for hammer efficiency
N60 = Hammer Efficiency Factor/60%*N-uncorrected
Su(tsf) = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Sample Information

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (ft lb.) Shear Strength (psf) or RQD (%)	N-uncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
50							48	-38.0		Note: Drill wash water from 50.6 to 54 ft contains sand, silt and gravel.	
							29	50.6			
							49			Note: Encountered cobble from 54 to 54.5 ft.	
							73	-41.4		-COBBLE-	
							20	54.0			
55							25	-41.9		Note: Drill wash water contains coarse gravel from 54.5 to 57.7 ft.	
							38	54.5			
							71	-45.1			
	R1	60/59	58.0 - 63.0	RQD = 92%				57.7		Top of Bedrock El. -44.7 Olive-gray to dark gray, aphanitic to fine-grained SCHIST. Very hard to moderately hard, fresh. Joints dipping low angle, parallel to foliation, very close to moderately close, tight, <1/16-in. silt infilling on joint surfaces, joint surfaces slightly weathered. Joint surfaces smooth to rough, undulating to stepped. Quartz/feldspar intrusion from 60.7 to 61.3 ft. Occasional calc-silicate zones Rock Mass Quality=Excellent Recovery=98% R1 Core Times (min:sec): 58.0-59.0' (2:55); 59.0-60.0' (2:39); 60.0-61.0' (3:15); 61.0-62.0' (2:11); 62.0-63.0' (2:46) Olive-gray to dark gray, aphanitic to fine-grained SCHIST. Hard to moderately hard, fresh to slightly weathered. Joints dipping at low to moderate angles, parallel to foliation, close to moderately close, open, 1/16 to 1/8-in. silt/clay infilling on joint surfaces, joints slightly weathered. Joint surfaces stepped to planar, rough. Rock Mass Quality=Good Recovery=98% R2 Core Times (min:sec): 63.0-64.0' (3:25); 64.0-65.0' (2:45); 65.0-66.0' (3:07); 66.0-67.0' (2:44); 67.0-68.0' (2:20)	
60								-55.4		-VASSALBORO FORMATION-	
	R2	60/59	63.0 - 68.0	RQD = 88%				68.0		Bottom of Exploration at 68.0 feet below ground surface.	
65											
70											
75											

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

** Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 2 of 2

Boring No.: BB-GCS-501

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Multi-Use Bridge over Cobbosseecontee Stream
Location: Gardiner, Maine

Boring No.: BB-GCS-502
PIN: 18736.10

Driller:	New England Boring Contractors	**Elevation (ft.)**	14.4	**Auger ID/OD:**	--
Operator:	M.Porter	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. ID
Logged By:	K.Russ/M.Snow	**Rig Type:**	Mobile B53 Track	**Hammer Wt./Fall:**	SS-1406/30;HW&NW-3006/
Date Start/Finish:	7-5-17/7-6-17	**Drilling Method:**	HW DriveNW Drive	**Core Barrel:**	NQ-1.875 in. ID
Boring Location:	E1142397, N509893	**Casing ID/OD:**	HW-4.0 in. ID/NW-3.0 in. ID	**Water Level**:**	15.4 ft
Hammer Efficiency Factor:	0.743	**Hammer Type:**	Automatic☒ Hydraulic☐		Rope & Cathead☐

Definitions:
D = Split Spoon Resplit
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WOSP = Weight of one person
Su = Insitu Field Vane Shear Strength (psf)
Tv = Pocket Torvane Shear Strength (psf)
qp = Unconfined Compressive Strength (tsf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N60 = SPT N-uncorrected corrected for hammer efficiency
N60 = Hammer Efficiency Factor/60%*N-uncorrected
Su(tsf) = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Sample Information

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (ft lb.) Shear Strength (psf) or RQD (%)	N-uncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0	1D	24/15	0.0 - 2.0	2/5/7/11	12	15	Sptn	14.3		-TOPSOIL-	
								0.1		Brown, dry, medium dense, fine SAND, little medium to coarse sand, little gravel, trace silt, poorly graded -FILL-(SP) PID=0.1 ppm	
	2D	24/6	2.0 - 4.0	7/5/3/2	8	10				Brown, dry, loose, fine SAND, little medium to coarse sand, little gravel, trace silt, poorly graded -FILL-(SP) PID=0.2 ppm	
	3D	24/13	4.0 - 6.0	5/4/11/8	15	19				Brown, dry, medium dense, fine SAND, little medium to coarse sand, little gravel, contains trace concrete and trace wood, poorly graded -FILL-(SP) PID=0.0 ppm	
5	4D	24/14	6.0 - 8.0	6/5/4/7	9	11				Brown, dry, loose, fine to medium SAND, little coarse sand, little silt, trace fine gravel -FILL-(SM) PID=0.1 ppm	GH14626d A-1-b SM
	5D	24/9	8.0 - 10.0	3/3/10/6	13	16		6.5			
								7.9		Olive-brown, wet, medium dense, fine SAND, little medium to coarse sand, little silt, trace gravel, contains black sand with creosote-like odor, poorly graded -FILL-(SP-SM) PID=0.2 ppm	
10	6D	24/4	10.0 - 12.0	2/1/1/22	2	2		4.4			
								10.0		Very loose, sample contains trace brown fine sand. Contains mostly wood, concrete and brick chips. -FILL- PID=0.7 ppm	
	7D	24/6	12.0 - 14.0	6/5/5/5	10	12		2.8			
								11.6		-WOOD- (based on drill wash)	
								1.7		Dark brown, wet, loose, SAND, some gravel, trace silt, well graded -FILL-(SW) PID=0.6 ppm	
	8D	24/3	14.0 - 16.0	5/2/3/5	5	6	16	12.7		Wood and concrete pieces -FILL- PID=0.5 ppm	
15							19				
	9D	24/16	16.0 - 18.0	9/11/23/22	34	42	54			Wood chips and saw dust -FILL-	
							88	-2.6			
							150	17.0		Olive-brown to gray-brown, wet, dense, gravelly SAND, well graded -ALLUVIAL DEPOSIT-(SW)	
							148				
20	10D	24/12	20.0 - 22.0	19/39/27/20	66	82	83			Olive-brown to gray-brown, wet, very dense, sandy GRAVEL, little silt -ALLUVIAL DEPOSIT-(GM)	GH14626e A-1-b GM
							169				
							202				
							100(2.0	-8.8		Note: Casing refusal at 23.2 ft, advance rollerbit to 25 ft.	
							58	23.2		-BOULDER-(Granite)	
25	R1	24/22	25.0 - 27.0				-			Recovery=92% R1 Core Times (min:sec): 25.0-26.0' (3:39); 26.0-27.0 (3:40)	
							-	-12.1			
	11D	24/9	27.0 - 29.0	7/7/6/10	13	16	-	26.5		Gray, wet, medium dense, fine to medium SAND, little gravel, trace coarse sand, trace silt -ALLUVIAL DEPOSIT-(SP-SM)	
							-	-14.1			
							-	28.5		Gray, wet, medium dense, fine to coarse SAND, some gravel, little silt, moderately bonded -ALLUVIAL DEPOSIT-(SM)	
30	12D	24/17	30.0 - 32.0	3/2/2/3	4	5	8	-15.6			
							10	30.0		Gray, wet, very loose, SILT, some sand, trace clay, few fine sand layers (1-in. thickness) -MARINE DEPOSIT-(ML)	GH14626f A-4(0) ML
							26				
							27				
							45	-19.6		Note: Drill action indicates strata change at 34 ft.	
	13D	24/7	35.0 - 37.0	8/5/10/10	15	19	25	34.0		Gray, wet, medium dense, silty SAND, little gravel, well bonded -GLACIAL TILL-(SM)	
35							32				
							41				
							40				
							51				
	14D	6/4	40.0 - 40.5	44/20(0.0)			14/.5	-26.1		Gray, wet, very dense, silty SAND, little gravel, well bonded -GLACIAL TILL-(SM)	
	R2	36/36	41.5 - 44.5	RQD = 81%				40.5		Top of Bedrock El.-26.5 Gray, fine-grained to aphanitic, granite SCHIST. Hard, fresh to slightly weathered. Joints dipping at low to steep angles, very close to moderately close, open, planar to undulating, rough. Pegmatitic intrusion at approximately 44 to 44.3 ft. Rock Mass Quality=Good Recovery=100% R2 Core Times (min:sec): 41.5-42.5' (6:08); 42.5-43.5' (4:33); 43.5-44.5' (4:25) Same R2, except joints very close to close, silt coatings on some joint surfaces, pegmatitic intrusion at approximately 44.8 to 45.1 ft. Rock Mass Quality=Very Poor Recovery=100% R3 Core Times (min:sec): 44.5-45.8' (2:50) Gray, fine-grained granite SCHIST grading to coarse-grained pegmatitic GRANITE at approximately 46.5 ft. Hard, fresh to slightly weathered, joints dipping at low to moderate angles, very close to moderately close, tight to open, planar to undulating, rough, slight oxidation on some joint surfaces, occasional high angle secondary joint, and silt coatings. Rock Mass Quality=Fair Recovery=100% R4 Core Times (min:sec): 45.8-46.8' (2:09); 46.8-47.8' (2:50); 47.8-48.8' (4:20); 48.8-49.8' (4:25); 49.8-50.8' (4:49)	
45	R3	16/16	44.5 - 45.8	RQD = 25%				-36.4			
	R4	60/60	45.8 - 50.8	RQD = 62%						-VASSALBORO FORMATION-	
								50.8		Bottom of Exploration at 50.8 feet below ground surface.	
50											
55											
60											
65											
70											
75											

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

** Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1

Boring No.: BB-GCS-502

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

1873610

WIN 18736.10

HIGHWAY PLANS

STATE OF MAINE — WAYNE A. CHADBOURNE — No. 10620 — REGISTERED PROFESSIONAL ENGINEER

PROJ. MANAGER	B. KEEZER	BY	DATE
DESIGN-DETAILED	MLS	KFP	DEC 2017
CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE
10620
P.E. NUMBER
9/26/2018
DATE

GARDINER
ARCADE \ MAINE AVE.

BORING LOGS (1 OF 2)

SHEET NUMBER
C11
OF C16

HALEY ALDRICH

Filename: ...\OC9_TrailBridge Boring Logs.dgn Division: BRIDGE Username: dotaylor Date:9/25/2018

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Bridges Over Cobbosseecontee Stream
Location: Gardiner, Maine

Boring No.: BB-GCS-203
PIN: 18736

Driller:	New England Boring Contractors	**Elevation (ft.)**	14.3	**Auger ID/OD:**	HSA-2-1/4 in. ID
Operator:	M. Porter	**Datum:**	NAVD 88	**Sampler:**	Split Spoon-1.375 in. ID
Logged By:	K. Russ	**Rig Type:**	Mobile B53 Truck	**Hammer Wt./Fall:**	SS-140#/30
Date Start/Finish:	11-30-2015/11-30-2015	**Drilling Method:**	Auger	**Core Barrel:**	--
Boring Location:	E1 142394; N509896	**Casing ID/OD:**	--	**Water Level*/:**	13.5
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic☐ Hydraulic☐ Rope & Cathead☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test
R = Rock Core Sample
HSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
MD = SPT hammer efficiency corrected for hammer efficiency
Su = Insitu Field Vane Shear Strength (psf)
Tv = Pocket Torvane Shear Strength (psf)
qp = Unconfined Compressive Strength (tsf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N60 = SPT N-value corrected for hammer efficiency
Su(lab) = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Sample Information

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (#s in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0	1D	24/12	0.0 - 2.0	5/6/8/6	14	14	HSA			Olive-brown, moist, medium dense, fine SAND, little silt, trace medium sand, trace fine gravel, poorly graded -FILL-(SP-SM) PID=0.1ppm	
								12.5		1.8	
	2D	24/13	2.0 - 4.0	3/8/6/4	14	14		10.5		Olive-brown, dry, medium dense, fine SAND, some medium to coarse sand and gravel, little silt -FILL-(SW-SM) PID=0.1ppm	
								10.3		3.0	
5	3D	24/13	4.0 - 6.0	10/8/6/4	14	14				Olive-brown, dry, stiff, fine sandy SILT -FILL-(ML) PID=0.1ppm	
										4.0	
	4D	24/2	6.0 - 8.0	5/4/3/5	7	7				Olive-brown, dry, medium dense, silty fine SAND, little medium to coarse sand, trace fine gravel -FILL-(SM) PID=0.1ppm	
	5D	24/9	8.0 - 10.0	9/11/3/3	14	14		5.8		Olive-brown, dry, loose, silty fine SAND, little medium sand, trace coarse sand, trace fine gravel -FILL-(SM) PID=0.6ppm	
10	6D	24/6	10.0 - 12.0	1/2/69/43	71	71		4.3		Olive-brown, dry, medium dense, silty fine SAND, little medium to coarse sand, trace coarse gravel -FILL-(SM) PID=0.5ppm	
								2.3		8.5	
	MD	24/0	12.0 - 14.0	4/4/5/4	9	9				Olive-brown, dry, medium dense, fine to coarse sandy GRAVEL, trace silt -FILL-(GW) PID=2.4ppm	
										10.0	
15	7D	24/16	14.0 - 16.0	3/5/5/6	10	10				Black, moist, very dense, gravelly fine to coarse SAND, little silt, contains cardboard fabric -FILL-(SW-SM) PID=0.1ppm	
										12.0	
	8D	24/10	16.0 - 18.0	11/17/10/33	27	27				No recovery, wet(split spoon sampler), wood fragment in spoon tip -FILL- Recovered 16 in. wood, strong gasoline-like odor PID=182.0ppm Similar to above PID=8.0ppm	
								-3.7		18.0 Bottom of Exploration at 18.0 feet below ground surface.	
20											
25											

Remarks:

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Page 1 of 1

Boring No.: BB-GCS-203

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Bridges Over Cobbosseecontee Stream
Location: Gardiner, Maine

Boring No.: BB-GCS-204
PIN: 18736

Driller:	New England Boring Contractors	**Elevation (ft.)**	14.1	**Auger ID/OD:**	HSA-2-1/4 in. ID
Operator:	M. Porter	**Datum:**	NAVD 88	**Sampler:**	Split Spoon-1.375 in. ID
Logged By:	K. Russ	**Rig Type:**	Mobile B53 Truck	**Hammer Wt./Fall:**	SS-140#/30
Date Start/Finish:	11-30-2015/11-30-2015	**Drilling Method:**	Auger	**Core Barrel:**	--
Boring Location:	E1142454; N509782	**Casing ID/OD:**	--	**Water Level*/:**	12.0
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic☐ Hydraulic☐ Rope & Cathead☒		

Definitions:
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MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test
R = Rock Core Sample
HSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
MD = SPT hammer efficiency corrected for hammer efficiency
Su = Insitu Field Vane Shear Strength (psf)
Tv = Pocket Torvane Shear Strength (psf)
qp = Unconfined Compressive Strength (tsf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N60 = SPT N-value corrected for hammer efficiency
Su(lab) = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Sample Information

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (#s in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0	1D	24/12	0.5 - 2.5	17/13/15/10	28	28	HSA	13.9		-BITUMINOUS CONCRETE- 0.2	
										Brown, dry, medium dense, fine to coarse SAND, trace silt, little gravel, well graded -FILL-(SW) PID=0.0ppm Similar to 1D, except contains bituminous concrete pieces PID=0.3ppm	
	2D	24/7	2.5 - 4.5	11/11/7/3	18	18					
5	3D	24/2	4.5 - 6.5	4/2/2/2	4	4				Brown, dry, medium dense, fine to coarse SAND, trace silt, trace fine gravel, well graded -FILL-(SW) PID=0.2ppm	
	4D	24/3	6.5 - 8.5	2/3/11/16	14	14		7.6		6.5	
	5D	24/9	8.5 - 10.5	64/92/44/32	136	136				Brown, dry, medium dense, sandy GRAVEL, trace silt, poorly graded, rock piece in tip of split spoon -FILL-(GP) PID=0.1ppm	
10	6D	24/16	10.5 - 12.5	8/4/4/4	8	8		3.6		Lightbrown, dry, very dense, sandy GRAVEL, strong cement-like odor, poorly graded, contains concrete -FILL-(GP) PID=0.0ppm	
										10.5	
	7D	24/24	12.5 - 14.5	5/5/4/5	9	9		0.2		Dark olive-brown, wet, medium stiff, SILT, little fine sand, trace gravel, contains roots, wood, glass, slight organic odor -FILL-(ML) PID=0.0ppm	
								-0.4		Dark olive-brown, wet, stiff, fine sandy SILT, contains wood and organics -FILL-(ML) PID=0.0ppm	
15										13.9 Gray, wet, loose, silty fine SAND -MARINE DEPOSIT-(SM) PID=0.0ppm	
										14.5 Bottom of Exploration at 14.5 feet below ground surface.	
20											
25											

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1

Boring No.: BB-GCS-204

HALEY ALDRICH

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

1873610

WIN
18736.10

HIGHWAY PLANS

STATE OF MAINE * WAYNE A. CHADBOURNE * No. 10620 * PROFESSIONAL ENGINEER

	SIGNATURE	
	10620	
P.E. NUMBER		
9/26/2018		
DATE		

PROJ. MANAGER	B. KEEZER	
DESIGN-DETAILED	MLS	DEC 2017
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

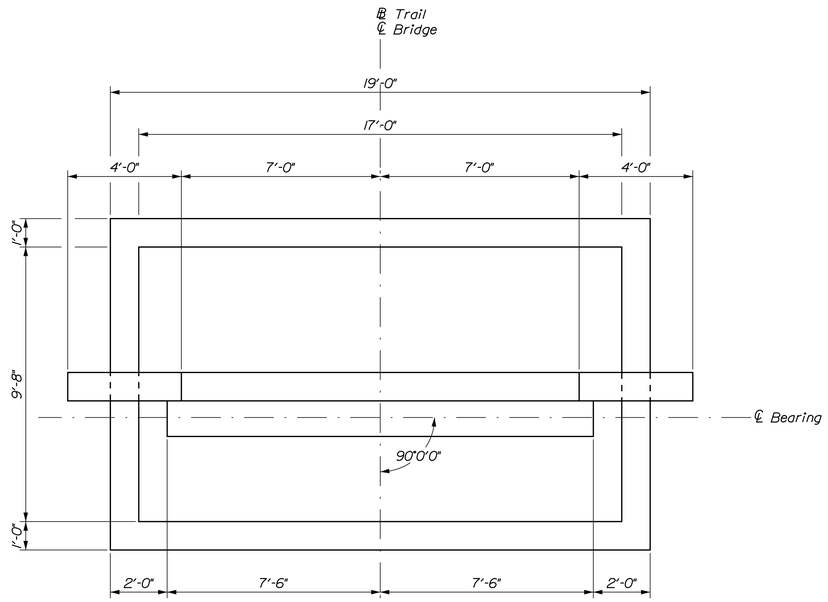
GARDINER
ARCADE \ MAINE AVE.

BORING LOGS (2 OF 2)

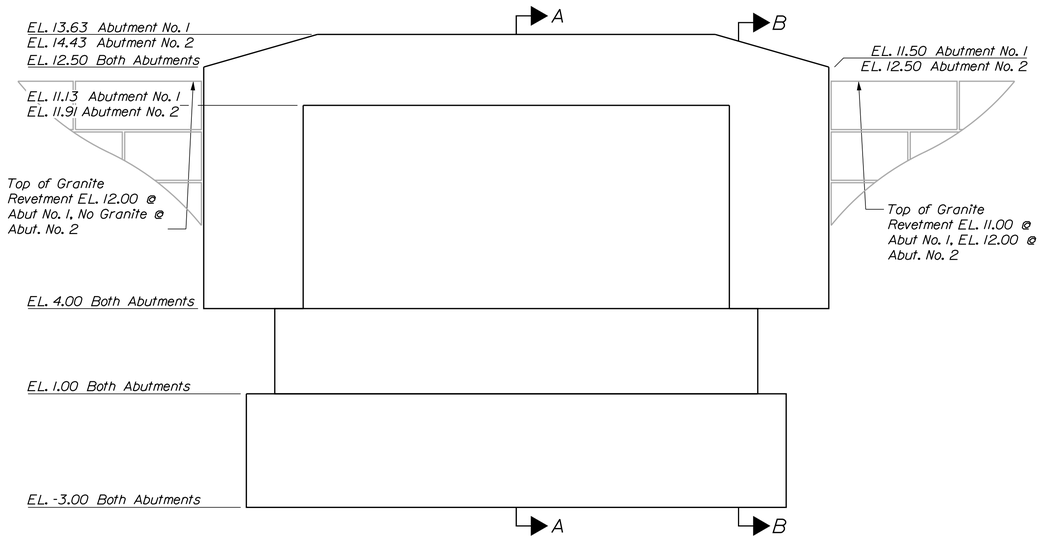
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C12

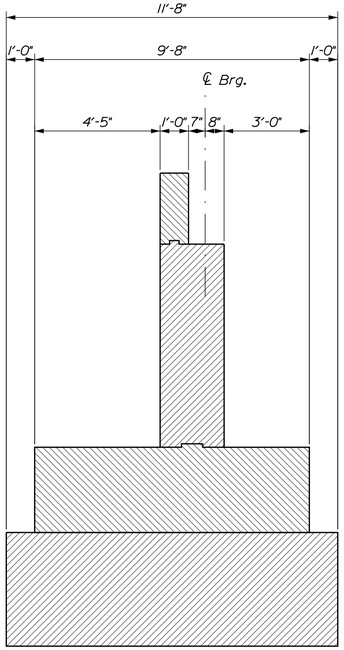
OF C16



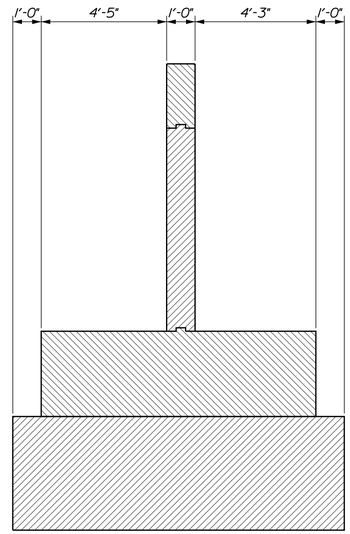
ABUTMENT PLAN



ABUTMENT ELEVATION



SECTION A-A



SECTION B-B

ABUTMENT NOTES

1. The maximum factored applied footing pressure is 5 ksf.

2. Reinforcing steel shall have a minimum concrete cover of 2 inches in the walls and 3 inches in the footings unless otherwise noted.

3. Place 4-in. diameter drains in the breastwall and wingwalls at 10-ft maximum spacing. The exact location will be determined by the Resident.

4. Cover joints where waterstops are not required in accordance with Standard Details Section 502.

5. Abutments, wingwalls and their footings shall be backfilled with Granular Borrow. Pay limits will be the structural excavation limits in cut areas and a vertical plane located 10 feet behind the walls in fill areas.

6. Final excavation to and preparation of sub-footing bearing surfaces, and placement of sub-footing concrete shall be completed in the dry. Subgrades that become disturbed due to Contractor's activities, including disturbance due to water infiltration, shall be over-excavated and stabilized to the satisfaction of the Resident at no additional cost to the Department. Exposed subgrades shall be examined in the field by the Resident prior to placement of sub-footing concrete. Over-excavation may be necessary to remove weak, disturbed or otherwise unacceptable soils (e.g., debris, topsoil, organic material and fill) as determined by the Resident. Over-excavated areas shall be backfilled with approved granular material or additional sub-footing concrete. Final subgrade surfaces shall be proof-compacted until firm as determined by the Resident.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

1873610

WIN
18736.10

HIGHWAY PLANS

	BY	DATE
B. KEEZER		
DESIGN-DETAILED	LSF/KLW	SEPT 2018
CHECKED-REVIEWED	SJW	SEPT 2018
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
PROJ. MANAGER		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

GARDINER
ARCADE \ MAINE AVE.

ABUTMENT PLAN
& ELEVATION

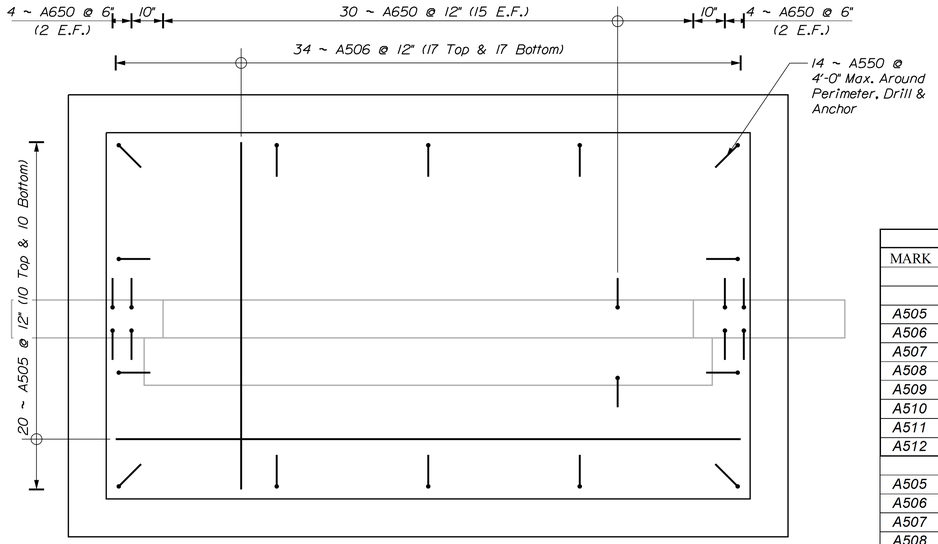
SHEET NUMBER

C13

OF C16

Stantec

Filename: ...\MST\C13_AbutPlanElev.dgn Division: BRIDGE Username: datoylor Date:9/27/2018



FOOTING PLAN

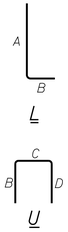
REINFORCING NOTES

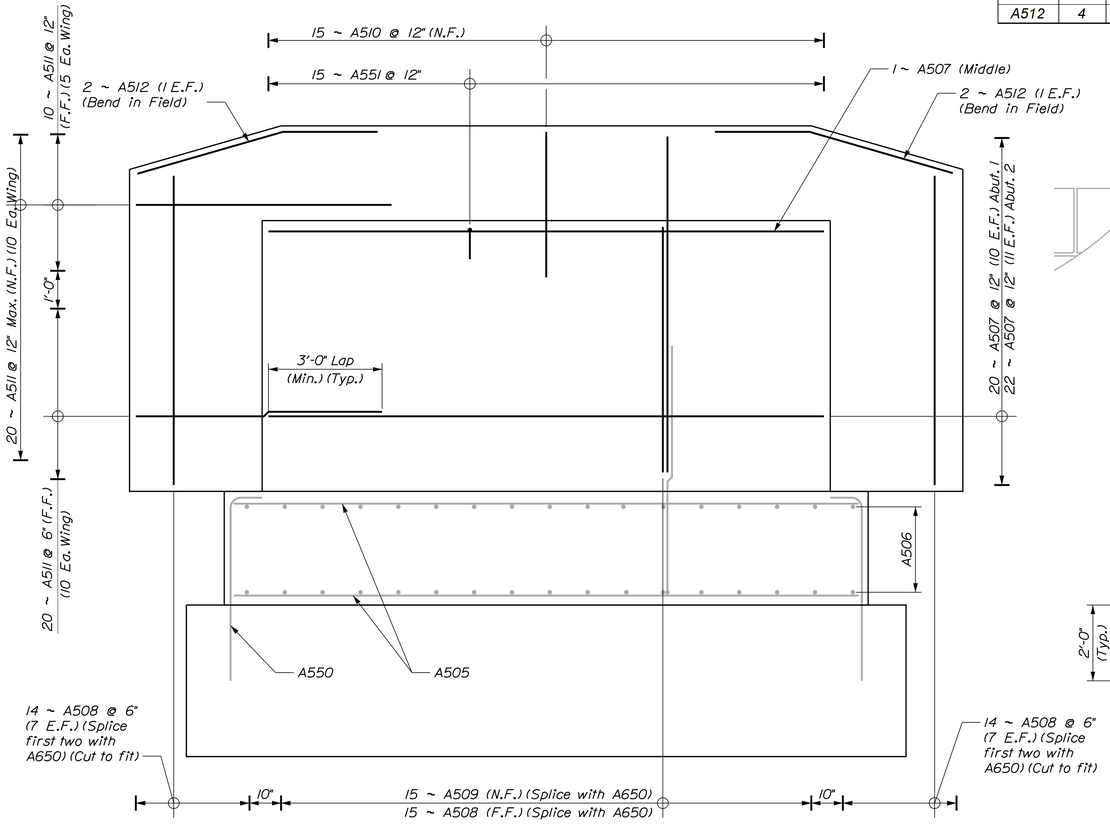
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2. The first two digits following the letters of the mark indicate the size of the bar (i.e. Mark A502 = bar size #5)

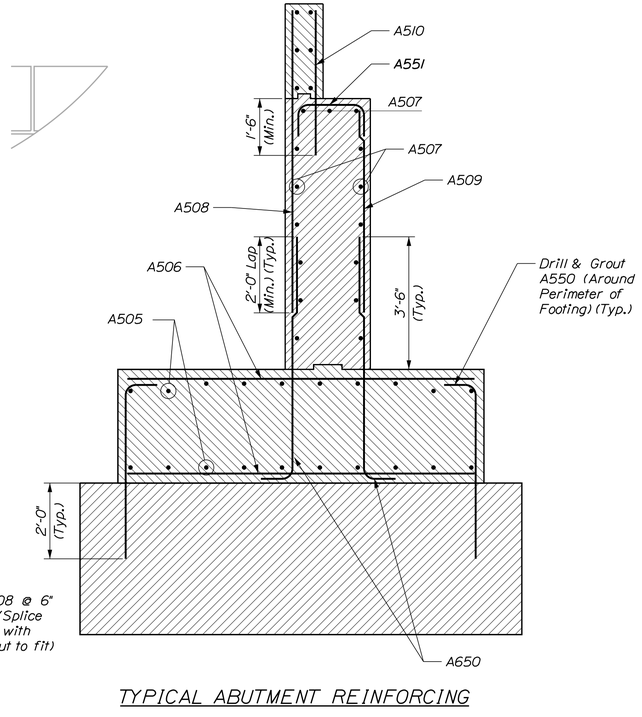
STRAIGHT BARS				BENT BARS								
MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	TYPE	A	B	C	D	LOCATION
Abutment No. 1				**Abutment No. 1**								
A505	20	16'-6"	Footing transverse (Top & Bot)	A550	14	5'-7"	L	4'-9"	10"			Dowels
A506	34	9'-2"	Footing longitudinal (Top & Bot)	A551	15	3'-7"	U		10"	1'-11"	10"	Bearing seat compression reinf.
A507	21	14'-8"	Stem transverse (E.F.)	A650	38	7'-8"	L	6'-10"	10"			Footing to stem connection
A508	43	8'-11"	Stem/wing vertical (F.F.)									
A509	15	6'-6"	Stem vertical (N.F.)									
A510	15	3'-10"	Backwall vertical (N.F.)									
A511	50	5'-6"	Wing transverse bars (E.F.)									
A512	4	6'-6"	Top of wing (E.F.)									
Abutment No. 2				**Abutment No. 2**								
A505	20	16'-6"	Footing transverse (Top & Bot)	A550	14	5'-9"	L	3'-9"	2'-0"			Dowels
A506	34	9'-2"	Footing longitudinal (Top & Bot)	A551	15	3'-7"	U		10"	1'-11"	10"	Bearing seat compression reinf.
A507	23	14'-8"	Stem transverse (E.F.)	A650	38	7'-4"	L	6'-6"	10"			Footing to stem connection
A508	43	8'-11"	Stem/wing vertical (F.F.)									
A509	15	6'-6"	Stem vertical (N.F.)									
A510	15	3'-10"	Backwall vertical (N.F.)									
A511	50	6'-6"	Wing transverse bars (E.F.)									
A512	4	6'-6"	Top of wing (E.F.)									

REINFORCING SCHEDULE

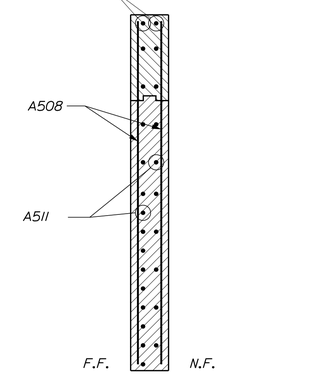




TYPICAL ABUTMENT REINFORCING ELEVATION



TYPICAL ABUTMENT REINFORCING



TYPICAL WINGWALL REINFORCING

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

1873610

WIN 18736.10

HIGHWAY PLANS

PROJ. MANAGER	B. KEEZER		
DESIGN-DETAILED	LSF/KLW	SEPT 2018	
CHECKED-REVIEWED	SJW	SEPT 2018	
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

GARDINER
ARCADE \ MAINE AVE.

ABUTMENT REINFORCING

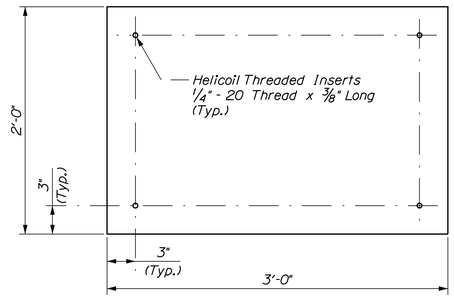
SHEET NUMBER

C14

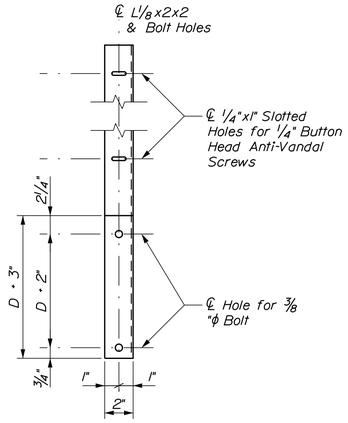
OF C16

Stantec

Filename: ...\MSTA\C14_AbutReinforcing.dgn Username: dotaylor Division: BRIDGE Date:9/27/2018

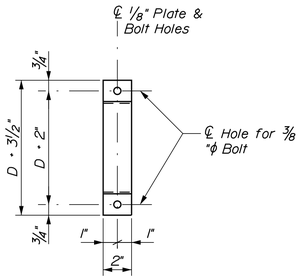


PLAN



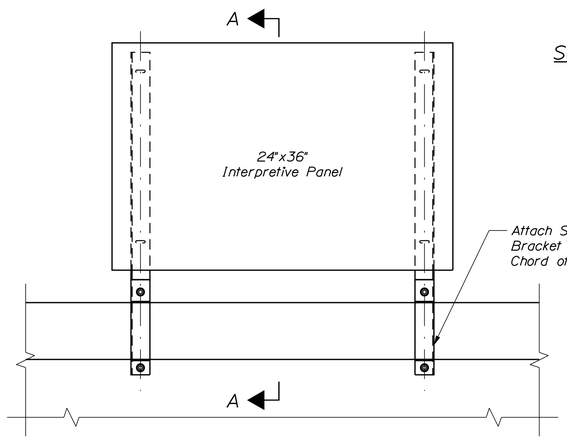
SUPPORT ARM ELEVATION

D = Depth of Truss Top Chord
(2 per Panel)
(Right Support Shown,
Left Opposite Hand)

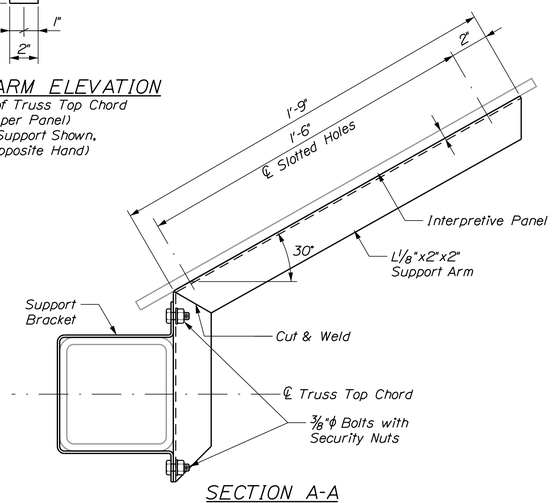


SUPPORT BRACKET

D = Depth of Truss Top Chord
(2 per Panel)



ELEVATION



SECTION A-A

INTERPRETIVE PANEL NOTES

1. See General Plan for location of interpretive sign.
2. See Special Provision Section 645 for additional details.
3. All hardware shall be color galvanized in accordance with the Specifications. The color shall match Duncan "Rain Forest Green" (SW 4071, LRV 8%, Semi-Gloss). A sample and/or color chip to be used shall be provided to MaineDOT for approval prior to fabrication.
4. All sharp edges shall be ground smooth.

③ INTERPRETIVE PANEL ASSEMBLY

Stantec

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

1873610

WIN
18736.10

HIGHWAY PLANS

PROJ. MANAGER	B. KEEZER		
DESIGN-DETAILED	LSF/KLW	SEPT 2018	SIGNATURE
CHECKED-REVIEWED	SJW	SEPT 2018	
DESIGN2-DETAILED2			P.E. NUMBER
DESIGN3-DETAILED3			
REVISIONS 1			DATE
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

GARDINER
ARCADE \ MAINE AVE.

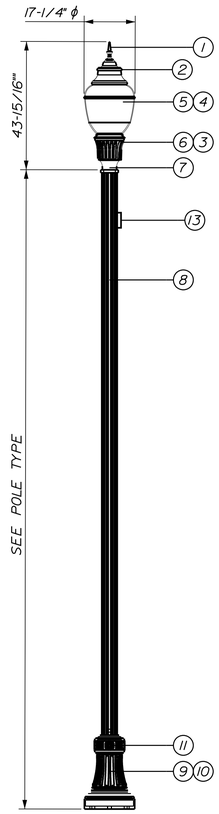
MISCELLANEOUS DETAILS

SHEET NUMBER

C15

OF C16

Filename: ...\MSTA\C15_MiscStructDetails.dgn Division: BRIDGE Username: dataylor Date:9/27/2018



TYPE A/B SINGLE LUMINAIRES DETAIL

NOT TO SCALE

Description of Components:

Type 'A' Luminaire:	*WAUE2-P10-40K-AS-GN-3-GN-4-S*
Type 'AL' Luminaire:	*WAUE2-P20-40K-AS-GN-3-GN-4-S*
Type 'A' Series Pole:	*NYA-14-L5J-17_I-P07-ABG-GN*
Type 'B' Luminaire:	*WAUE2-P20-40K-AS-GN-3-GN-4-S*
Type 'B' Pole:	*NYA-18-L5J-17_I-P07-ABG-GN*
Type 'C' Luminaire:	*(2)WAUE2-P20-40K-AS-GN-3-GN-4-S*
Type 'C' Arm:	*PCP48-CA/DG (Color to Match Pole)*
Type 'C' Pole:	*NYA-18-L5J-17_I-P07-ABG-GN*

1. *Finial: Spike, made of cast aluminum.*
2. *Hood: made of cast aluminum, acorn shape with shorewood style cover.*
3. *Lumen package: P10 = 26W LED, 3433LMNS, 132IPW*
   P20 = 39W led, 5171LMNS, 133IPW
   P30 = 60W led, 7281LMNS, 121IPW
   4000 CCT, 70 CRI
4. *Lens and optics: borosilicate glass reflector and refractor. upper system incorporates reflecting prisms and lower system uses molded refracting prisms to control distribution. Type 3 (asymmetrical) distribution.*
5. *Driver: auto-sensing voltage, 120-277V, programmable dimmable driver, with 0-10V control leads.*
6. *Housing: made of cast aluminum, with tool-less swing door.*
7. *Fitter: made of cast aluminum, mechanically secured.*
8. *Pole: made of fluted aluminum with channels, 5" O.D., .25" wall thickness, welded to the base.*
9. *Base: made of aluminum, welded to the anchor plate.*
10. *Access Door: made of aluminum, covering an opening of 4"x 9", giving access to a ground lug.*
11. *Base Cover: made of a two-piece cast aluminum components, mechanically secured c/w four (4) decorative medallions.*
12. *Wiring: included, from luminaire to the base.*
    gasketing: neoprene and/or silicone gasketing is applied.
    hardware: all exposed screws will be stainless steel.
    Finish: an application of a thermosetting polyester powder coat paint, color to be green (GN) that matches Duncan "Rain Forest Green" (SW 4071, LRV 8%, Semi-Gloss) specified for other project components.
13. *WRGFCI DWPLEX receptacle with WP In-Use cover*

Typical Unit Panel "LA"
100A, 120/240V, 1 Phase, 3 Wire. 22 KAIC Rated Panel

CKT Label	CKT BKR#	Breaker	Pole	Wire	Cond.	Description	Load
1,3	1,3	20A	2	See One-Line		Street Lights Maine Ave	640
2	2	20A	1	See One-Line		RECP - MA-2 MA-3	360
4	4	20A	1	2*12, 1*12G	3/4"	Panel Receptacle - GFCI/WP	180
5	5	20A	1			Spare	
6	6	20A	1			Spare	
						Total Connected Load	1180
* Provide Lock-On Device for Breaker						Amperes	5
Panel Type: 00 Load CTR - SQ. D						Main Breaker *	100A,2P

Notes:
1. See One-Line for feeder size.

General Notes:

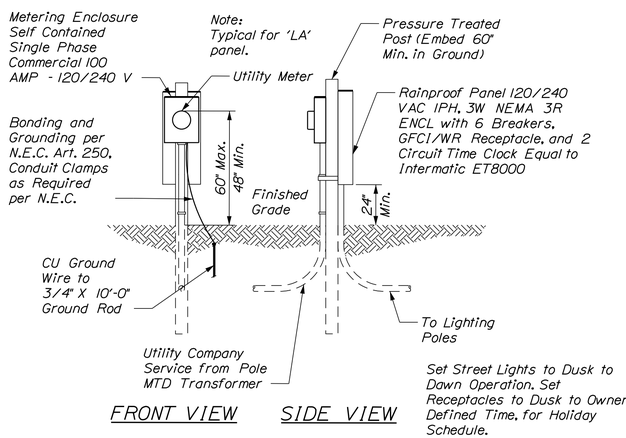
1. *Maximum of 270 degrees in total bends permitted in single run of conduit.*
2. *Lights shall be fused at base with Y-Type fuse kit with waterproof insulated seal "Flood Seal". Size of seal shall match wire and have a 10 AMP fuse.*
3. *Circuit conductors including neutral conductor shall be clearly identified by corrosion resistant tags indicating circuit number and panel sources at every pole base and handhole.*
4. *Utilize approved dual-rated parallel tap connector with insulated watertight cover for taps at pole base.*
5. *Utilize approved dual-rated parallel tap connector with watertight connector, suitable for direct burial in junction boxes and handholes.*
6. *The new power service, control cabinets, and meter disconnects and enclosures shall be paid for under Item 634.160*

Lighting Schedule

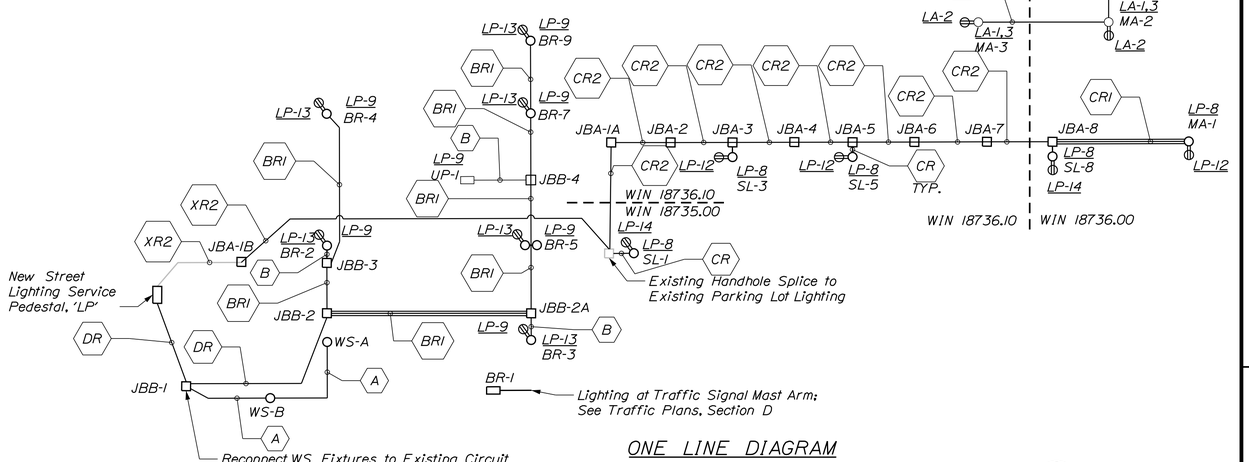
WIN	Light No.	Station	Offset	Break-Away	Fixture Type	IES Dist. Type	Mounting	Panel/ Circuit	Luminaire Watts	Luminaire Lumens	Luminaire Type	Remarks Type
18735.00	SL-1	218+39.72	17.00 Rt.	Y	AI	III	Foundation	LP/8	39W	5171	LED	New
18736.10	SL-3	221+22.50	33.00 Lt.	N	A	III	Foundation	LP/8	26W	3433	LED	New
18736.10	SL-5	154+40.58	21.07 Lt.	Y	A	III	Foundation	LP/8	26W	3433	LED	New
18736.00	SL-8	156+68.27	19.57 Lt.	N	A	III	Foundation	LP/8	26W	3433	LED	New
18736.00	MA-1	3+57.81	24.66 Rt.	N	AI	III	Foundation	LP/8	39W	5171	LED	New
18736.00	MA-2	4+49.20	22.45 Lt.	N	Existing	III	Foundation	LA/1,3	Exist.	Exist.	HID	Relocated
18736.10	MA-3	4+48.42	74.28 Lt.	Y	Existing	III	Foundation	LA/1,3	26W	3433	LED	Relocated
18735.00	WS-A	71+20.97	45.47 Lt.	Y	Existing	III	Foundation	Match Ex.	Exist.	Exist.	HID	Relocated
18735.00	WS-B	19+02.00	30.52 Lt.	Y	Existing	III	Foundation	Match Ex.	Exist.	Exist.	HID	Relocated
22684.00	BR-1	-	-	N	(See Signal)	III	12' Arm On Traffic Pole	See Traf.	133W	13221	LED	New
18735.00	BR-2	71+89.07	30.19 Lt.	N	B	III	Foundation	LP/9	39W	5171	LED	New
18735.00	BR-3	71+43.08	29.02 Rt.	N	C	III	Foundation	LP/9	(2)39W	(2)5171	LED	New
18735.00	BR-4	72+80.50	31.67 Lt.	N	B	III	Bridge	LP/9	39W	5171	LED	New
18735.00	BR-5	72+04.50	31.25 Rt.	N	B	III	Retaining Wall	LP/9	39W	5171	LED	New
18735.00	BR-7	72+80.50	30.67 Rt.	N	B	III	Bridge	LP/9	39W	5171	LED	New
18735.00	BR-9	73+87.34	32.68 Rt.	N	B	III	Foundation	LP/9	39W	5171	LED	New
18735.00	UP-1	72+47.05	20.96 Rt.	N	U	NA	Under Bridge	LP/9	79W	9040	LED	New

Conduit & Conductor Schedule

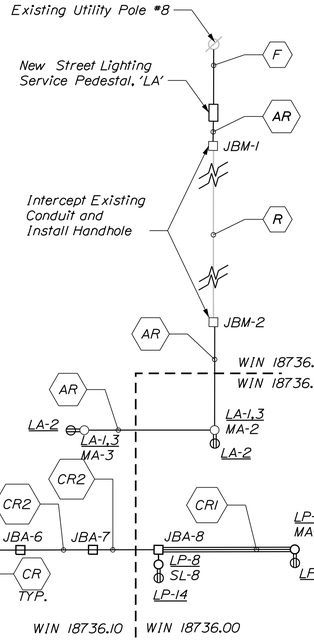
KEY	Conduit Size	Conductors For Fixtures	Conductors For Receptacles	Conductors For Equipment	Conductors For Ground
A	2"	3#6AWG CU (Exist.)			1#6G
AR	2"	2#8	2#8		1#8G
R	Existing	Existing	2#8		1#8G
B	1" RGS	2#10			1#10G
BR	1"	2#10	2#10		1#10G
BRI	2"	2#6	2#6		1#6G
CR	1"	2#10	2#10		1#6G
CRI	2"	2#10	2#2		1#2G
CR2	2"	2#10	4#2		1#2G
DR	2"	3#2, 3#6	3#6	2#1/0	1#2G
F	3"				1#6G
XR2	(2) 2"C Existing	3#6AWG CU (Exist.)	4#2		1#2G & 1#6G (EX)
X	Existing	3#6AWG CU & 3#2AWG CU (Spare) in (2)2" conduits			



MAINE AVE
SERVICE PANEL AND METER "LA" DETAIL



ONE LINE DIAGRAM



Stantec

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

1873610

WIN 18736.10

HIGHWAY PLANS

P.E. NUMBER

DATE

SIGNATURE

	BY	DATE
PROJ. MANAGER	B. KEEZER	
DESIGN-DETAILED	PLP	SEPT 2018
CHECKED-REVIEWED	LEM	SEPT 2018
DESIGN2-DETAILED2	TWM	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

GARDINER
ARCADE \ MAINE AVE.

LIGHTING DETAILS

SHEET NUMBER

C16

OF C16

Filename: ...\MSTA\C16_lighting_plan.dgn Division: BRIDGE Username: dataylor Date:9/28/2018

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

PLAN LEGEND

Town, County, State		Catch Basins	Existing ■ Proposed
Property Lines		Manholes	Existing ● Proposed
R/W Lines-Existing		Proposed Underdrain	
R/W Lines-Proposed		Proposed Ditch	
Culvert-Existing		Existing Ditch	
Culvert Proposed		Utility Poles	Existing ♦ Proposed
Curbing	Existing / Proposed	Fire Hydrants	Existing ◈ Proposed
Type 1		Existing Water Line	
Type 3		Existing San. Sewer	
Type 5		Existing San. Sewer Manhole	
Outline of Bodies of Water		Guardrail-Existing	
Exposed Bedrock		Guardrail-Proposed	
Buildings		Guardrail-Cable, Other	
Trees	Conifer, Deciduous	Centerline-Existing	
Tree Line		Centerline-Proposed	10+00
Clearing Limit Line		Travelway-Existing	
Railroad		Travelway-Proposed	

Boring — HB-XXX-###

Pavement Core — PC-#

Test Pit — TP-XXX-###

Probe — P-#.#X

#.# = Depth

X = W (Weathered Rock)

R (Refusal)

NR (No Refusal)

GARDINER

KENNEBEC COUNTY

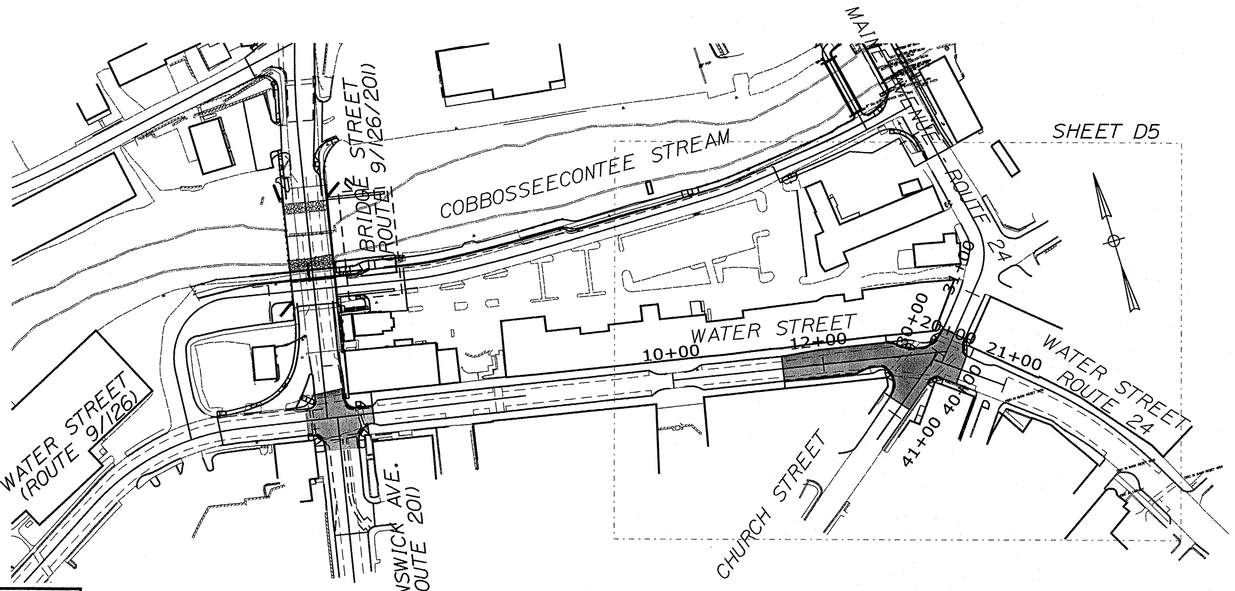
WATER STREET / CHURCH STREET / MAINE AVE.

STP-2268(400)

PROJECT LENGTH : 0.00 MILES

INDEX OF SHEETS

Description	Sheet No.
Title Sheet	D1
Signal Plan - Water St. / Bridge St.	D2
Signal Details - Water St. / Bridge St.	D3
Temporary Signal Details - Water St. / Maine Ave.	D4
Plan - Water St. / Maine Ave.	D5
Geometric Curb Layout	D6



LAYOUT SCALE

100 0 100 200

Scale in Feet

TRAFFIC DATA

	SR 9/126/US 201 N/O WATER ST.	SR 24 S/O RAMP FROM BRIDGE ST.
Current (2018) AADT	14,430	9,070
Future (2038) AADT	15,870	9,980
DHV - % of AADT	9%	12%
Design Hour Volume	1,428	1.,198
% Heavy Trucks (AADT)	6%	5%
% Heavy Trucks (DHV)	4%	4%
Directional Distribution (DHV)	55%	55%
18 kip Equivalent P 2.0	354	186
18 kip Equivalent P 2.5	337	177
Design Speed (mph)	25 MPH	25 MPH
Functional Class:	Minor Art.	Maj. Urb. Coll.
Corridor Priority	2	3

PROJECT LOCATION:	INTERSECTION OF WATER STREET/CHURCH STREET/MAINE AVENUE IN DOWNTOWN GARDINER
PROGRAM AREA:	BRIDGE
SCOPE OF WORK:	TRAFFIC SAFETY IMPROVEMENTS

WIN 22684.00 STP-2268(400)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED — DATE 11/14/18

COMMISSIONER: [signature] — DATE 11-13-18

CHIEF ENGINEER: [signature]

ALBERT L. GODFREY JR. No. 4226 REGISTERED PROFESSIONAL ENGINEER — SIGNATURE — 4226 — P.E. NUMBER — 9/13/18 — DATE

PROJECT INFORMATION	
PROGRAM	BRIDGE
PROJECT MANAGER	L. TIMBERLAKE
DESIGNER	A. GODFREY / J. EASON
CONSULTANT	TERRA MAGNA SERVICES, INC.
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

GARDINER
WATER ST. / CHURCH ST.

TITLE SHEET

SHEET NUMBER

D1

OF 6

Filename: ...\FinalPlans\D1_Title_01.dgn Division: HIGHWAY Username: common Date:9/18/2018

Filename: ...\D2_Signal_Plan.dgn Division: HIGHWAY Username: common Date:9/13/2018

EMERGENCY VEHICLE PREEMPTION NOTES

1. EMERGENCY VEHICLE PREEMPTION SIGNALS SHALL BE TRANSMITTED BY OPTICAL EMITTERS INSTALLED BY OTHERS IN EMERGENCY VEHICLES.
2. OPTICAL PREEMPTION RECEIVERS AND CONFIRMATION STROBE TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR SHALL BE MANUFACTURED BY TOMAR ELECTRONICS, INC. THE CONTRACTOR SHALL CONFIRM OPERATIONAL COMPATIBILITY OF NEW EQUIPMENT WITH EXISTING TOMAR PREEMPTION EMITTERS OF CITY OF GARDINER EMERGENCY VEHICLES.
3. EMERGENCY OPTICAL PREEMPTION RECEIVERS AND CONFIRMATION STROBE SHALL BE ATTACHED TO MAST ARMS WITH APPROVED MAST ARM MOUNT HARDWARE MANUFACTURED BY TOMAR OR OTHER APPROVED MANUFACTURER.
4. PREEMPTION SIGNALS SHALL BE SERVICED ON A PRIORITY BASIS WITH WESTBOUND RECEIVER 'RI' HAVING FIRST PRIORITY.
5. IN RESPONSE TO A PREEMPTION SIGNAL RECEIVED BY AN OPTICAL RECEIVER, THE CONTROLLER SHALL HOLD OR ADVANCE TO AND HOLD THE GREEN INDICATION FOR BRUNSWICK AVENUE PHASE 2 FOR A MINIMUM OF TEN SECONDS OR UNTIL THE PREEMPTION SIGNAL CEASES. THE CONTROLLER THEN SHALL TIME PREEMPTION PHASE CLEARANCE OF 3.0 SECONDS YELLOW AND 2.5 SECONDS ALL RED AND SERVICE SUBSEQUENT EMERGENCY VEHICLE PREEMPTION PHASES AS NECESSARY. THE CONTROLLER SHALL RESUME NORMAL SIGNAL OPERATION AFTER SERVICING THE LAST PREEMPTION CALL AND PREEMPTION CLEARANCE.
6. MINIMUM GREEN AND NORMAL VEHICLE CLEARANCE SHALL BE PROVIDED ON PHASES THAT ARE TERMINATED BY PREEMPTION DEMAND.
7. THE CONFIRMATION STROBE SHALL BE ILLUMINATED WHENEVER ANY EMERGENCY VEHICLE PREEMPTION GREEN INDICATION IS ON.
8. PREEMPTION SHALL BE FUNCTIONAL PRIOR TO THE FULL BRIDGE CLOSURES. INSTALL STROBE TEMPORARILY ON SPANWIRE AND CONNECT TO RECEIVER. TRANSFER TO MAST ARM POLE AFTER MAST ARM POLE INSTALLATION.

LUMINAIRE NOTES

1. PROPOSED LIGHTING ON THE TRAFFIC SIGNAL MAST ARM POLE SHALL BE PHOTOCELL ACTIVATED BY A PHOTOCELL ON THE TRAFFIC SIGNAL CONTROL CABINET.
2. LIGHTING FIXTURE VOLTAGE SHALL BE 240 VOLTS.
3. LIGHTING FIXTURE SHALL BE AN IES FULL CUTOFF LIGHT EMITTING DIODE (LED) FIXTURE. IES DISTRIBUTION TYPE 3. MOUNTED ON A 12 FOOT ARM ATTACHED TO THE TRAFFIC SIGNAL MAST ARM POLE. ARM COLOR SHALL MATCH POLE COLOR. MOUNTING HEIGHT SHALL BE 30 FEET. LED COLOR TEMPERATURE SHALL BE 4000K.
4. THE LIGHTING FIXTURE SHALL BE GASKETED AND HAVE SURGE PROTECTION AND A DOUBLE FUSE KIT. FIXTURE SHALL BE HOLOPHANE STANDARD GREEN.
5. THE LUMINAIRE SHALL BE AN AMERICAN ELECTRIC LIGHTING 'AUTOBAHN' ATB2 SERIES. 130 WATT 700 MA LED FIXTURE. CATALOG NUMBER ATB2 60BLEDE70 MVOLT R3 4K.

LEGEND

- RI — OPTICAL PREEMPTION RECEIVER
- CS — PREEMPTION CONFIRMATION STROBE
- AI — SIGNAL HEAD ASSEMBLY
- P — COUNTDOWN PEDESTRIAN SIGNAL
- VI — VIDEO DETECTOR
- CONTROLLER CABINET - GROUND MOUNTED
- BURIED CONDUIT
- JB — JUNCTION BOX
- OVERHEAD LANE SIGN
- BLINKER SIGN ASSEMBLY

STA. 19+77.5, 27.5' RT.
PEDESTAL POLE
24" FOUNDATION
PEDESTRIAN SIGNAL (2)
APS PUSHBUTTON (2)
SPEECH MESSAGING
CONSTRUCT RAMP WITH
2% MAX. SLOPE

STA. 20+45, 26.0' RT.
PEDESTAL POLE
24" FOUNDATION
PEDESTRIAN SIGNAL (2)
APS PUSHBUTTON (2)
SPEECH MESSAGING
CONSTRUCT RAMP WITH
2% MAX. SLOPE

REMOVE SIGNAL POLE AND FOUNDATION

STA. 172+03 LT.

INSTALL OPTICAL PREEMPTION RECEIVER AND CONDUIT RISER ON UTILITY POLE.

INSTALL BURIED CONDUIT FROM UTILITY POLE TO PEDESTAL POLE AT STA. 19+77.5 RT. FOR PREEMPTION CABLES.

NOTE

INSTALL OPTICAL PREEMPTION RECEIVER ON MAST ARM FOR BRIDGE STREET APPROACH TO EXISTING SIGNAL AT ROUTE 201/24/27 INTERSECTION (VETERAN'S BRIDGE). INSTALL PREEMPTION CABLES TO CONNECT TO THE CONTROLLER FOR THAT INTERSECTION. INCLUDING CONDUIT AS REQUIRED.

STA. 70+85.5, 19.5' LT.
PEDESTAL POLE
24" FOUNDATION
PEDESTRIAN SIGNAL (2)
APS PUSHBUTTON (2)
SPEECH MESSAGING
CONSTRUCT RAMP WITH
2% MAX. SLOPE

WIN 18735.00
BLINKER SIGN
ASSEMBLY

STA. 70+80.5, 26.5' LT.
71+06, 59.5' LT.
BLINKER SIGN ASSEMBLIES
APS PUSHBUTTONS
24" FOUNDATIONS

WIN 18735.00
BLINKER
SIGN
ASSEMBLY

REMOVE SIGNAL POLE AND FOUNDATION

REMOVE SIGNAL POLE AND FOUNDATION

REMOVE SIGNAL POLE AND FOUNDATION

INSTALL LIGHTING CABINET ON 24" PEDESTAL FOUNDATION

ADJUST ELECTRICAL JUNCTION BOX TO GRADE. COST INCIDENTAL TO ITEM 643.80.

STA. 71+00±, 28'± RT.
INSTALL JUNCTION BOX

PROTECT EXISTING CONDUIT DURING BRIDGE DEMOLITION

STA. 70+84, 32.0' RT.
PEDESTAL POLE
24" FOUNDATION
PEDESTRIAN SIGNAL AND
APS PUSHBUTTON

STA. 20+35.5, 16.5' LT.
35' SIGNAL POLE
50' MAST ARM
SIDE-MOUNT SUPPLEMENTAL SIGNAL
PEDESTRIAN SIGNAL AND
APS PUSHBUTTON
42" FOUNDATION
LED LUMINAIRE ON 12' ARM
CONSTRUCT RAMP WITH
2% MAX. SLOPE.

STA. 20+53, 14.5' LT.
3'X4' GROUND-MOUNT
CONTROLLER FOUNDATION

TO POWER SOURCE

NEW

EXISTING

JB

IPF

RI

CI V2 BI V3 B2 C2 AI CS VI A2 A3

19+00

20+00

21+00

71+00

172+00

173+00

WATER STREET (ROUTE 9/126)

BRUNSWICK AVE. (ROUTE 201)

BRIDGE STREET (ROUTE 9/126/201)

WATER STREET

HISTORICAL DISTRIC

BB CS-301

CHERRY

ROUTE 9/126/201

LAYOUT SCALE

10 0 10 20
Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2268(400)

WIN 22684.00

HIGHWAY PLANS

ALBERT I. GOLDTHWAIT JR. 4226 LICENSED PROFESSIONAL ENGINEER

SIGNATURE
4226
P.E. NUMBER
9/13/18
DATE

PROJ. MANAGER	L. TIMBERLAKE
DESIGN-DETAILED	ALG
CHECKED-REVIEWED	ALG
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	

	BY	DATE
REVISIONS 1	JLE	8-18
REVISIONS 2	ALG	9-18
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

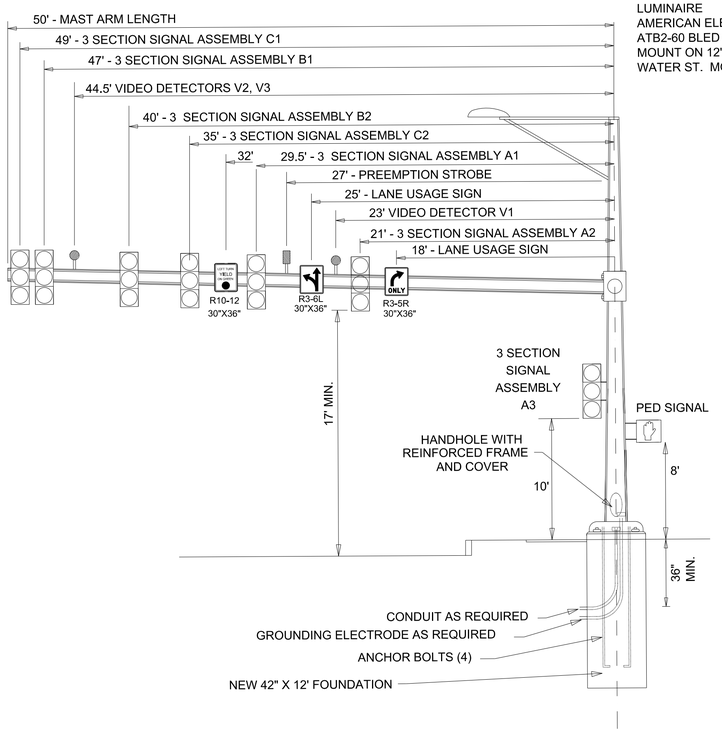
GARDINER WATER ST. / BRIDGE ST.

SIGNAL PLAN

SHEET NUMBER

D2

OF 6



LUMINAIRE
AMERICAN ELECTRIC "AUTOBAHN"
ATB2-60 BLED E70-MVOLT-R3 4K
MOUNT ON 12' ARM PARALLEL TO
WATER ST. MOUNTING HEIGHT 30'.

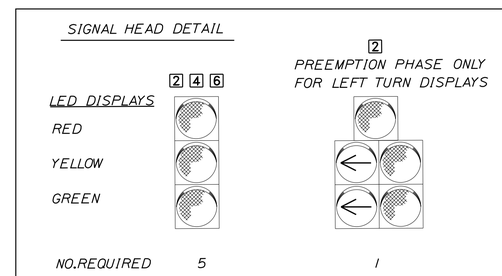
MAST ARM SIGNAL ASSEMBLY
STA. 20+35.5, 16.5' LT.

OVERHEAD SIGNS DETAIL

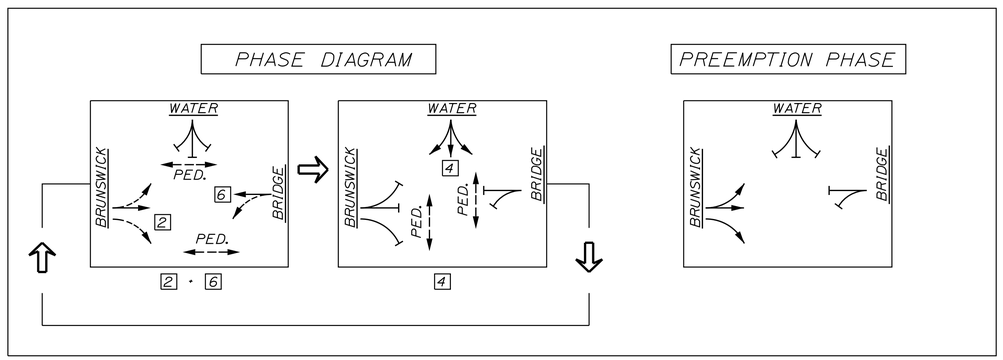


R3-5R	R3-6L (THRU/LEFT)	R10-12
1 REQUIRED (OVERHEAD)	1 REQUIRED (OVERHEAD)	1 REQUIRED (OVERHEAD)

SIGNAL HEAD DETAIL



1. ALL SIGNAL FACE DISPLAYS SHALL BE 12" LED.
2. ALL SIGNAL FACE DISPLAYS SHALL HAVE TUNNEL VISORS.
3. ALL SIGNAL DISPLAYS SHALL HAVE BACKPLATES WITH 2" MINIMUM WIDTH YELLOW RETROREFLECTIVE TAPE AROUND DISPLAY FACE.

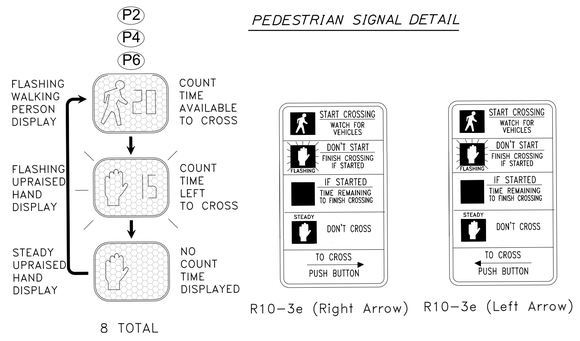


INITIAL SIGNAL TIMING

PHASE	1	2	3	4	5	6	7	8
MIN. INITIAL	-	6.0	-	6.0	-	6.0	-	-
VEH. EXT.	-	3.0	-	3.0	-	3.0	-	-
MAX. GREEN	-	50.0	-	50.0	-	50.0	-	-
YELLOW	-	3.0	-	3.0	-	3.0	-	-
ALL RED	-	2.5	-	2.5	-	2.5	-	-
WALK	-	4.0	-	4.0	-	4.0	-	-
PED CLEAR	-	9.0	-	11.0	-	9.0	-	-
FLASH	-	Y	-	R	-	Y	-	-
RECALL	-	SOFT	-	-	-	SOFT	-	-

INITIAL TIMING MAY BE ADJUSTED IN THE FIELD BY MAINEDOT AND THE ENGINEER. MOVEMENTS 2 AND 6 SHALL BE GREEN IN THE ABSENCE OF OTHER CALLS.

PEDESTRIAN SIGNAL DETAIL



TRAFFIC SIGNAL NOTES

1. TRAFFIC SIGNAL WORK FOR THIS INTERSECTION WILL INCLUDE, BUT NOT BE LIMITED TO, FURNISHING AND INSTALLING A COMPLETE NEW ATC CONTROLLER IN A NEMA GROUND-MOUNTED TRAFFIC SIGNAL CABINET WITH REMOTE COMMUNICATION CAPABILITIES, CONTROLLER CABINET FOUNDATION, MMU, FLASHER UNIT, DETECTOR RACK, AND OTHER NECESSARY COMPONENTS; TRAFFIC SIGNAL MAST ARM POLE AND FOUNDATION; TRAFFIC SIGNAL ASSEMBLIES; PEDESTRIAN SIGNALS AND APS PUSHBUTTONS; INTERSECTION LIGHTING; EMERGENCY VEHICLE OPTICAL PREEMPTION RECEIVERS AND CONFIRMATION STROBES; VIDEO DETECTION; AND RELATED INCIDENTAL WORK AND MATERIALS.
2. ALL WORK SHALL BE COMPLETED IN CONFORMANCE WITH THE LATEST REVISIONS OF THE STATE OF MAINE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE NATIONAL ELECTRICAL CODE, AND ANY REQUIREMENTS OF THE POWER COMPANY.
3. THE POWER SOURCE FOR THE TRAFFIC SIGNAL IS AT A UTILITY POLE IN THE ARCADE PARKING LOT BEHIND A-1 DINER. A NEW METERED SERVICE SHALL BE INSTALLED AT THE POLE. EXISTING CONDUIT FROM THE POLE IS ATTACHED TO THE EAST END OF THE EXISTING SOUTHERLY BRIDGE ABUTMENT. THEN FOLLOWING THE BRIDGE STREET SIDEWALK TO THE EXISTING TRAFFIC SIGNAL. CONTRACTOR SHALL EXPOSE AND INTERCEPT EXISTING CONDUIT IN THE SIDEWALK. INSTALL A NEW JUNCTION BOX WHERE SHOWN ON PLANS, AND INSTALL NEW CONDUIT FROM THE JUNCTION BOX TO THE NEW TRAFFIC SIGNAL CONTROLLER. EXISTING WIRING SHALL BE REMOVED FROM THE OLD CONDUIT AND NEW WIRING INSTALLED FROM THE POWER SOURCE TO THE CONTROLLER. AN EXTERNAL, STANDALONE BREAKER TO DISCONNECT POWER TO THE NEW CONTROL CABINET SHALL BE INSTALLED AT THE POWER SOURCE IN A LOCKABLE NEMA 3R ENCLOSURE BETWEEN THE METER AND THE CABINET.
4. THE CONTROL CABINET AND THE POWER DISCONNECT ENCLOSURE EACH SHALL BE MARKED WITH ARC HAZARD TYPE 2, 3 OR 4 AND THE APPROPRIATE PPE REQUIRED. SEE SECTION 643.09 FOR OTHER REQUIREMENTS.
5. WIRING AND CONTROL HARDWARE FOR INTERSECTION LIGHTING SHALL BE INSTALLED IN A SEPARATE CABINET ON A 24 INCH FOUNDATION ADJACENT TO THE SIGNAL CONTROLLER CABINET. CABINETS SHALL BE METERED SEPARATELY.
6. THE TRAFFIC SIGNAL MAST ARM POLE, MAST ARM, LUMINAIRE BRACKET ARM, AND PEDESTRIAN SIGNAL PEDESTAL POLES SHALL BE POWDER-COATED GREEN, SEMI-GLOSS, TO MATCH SHERWIN WILLIAMS COLOR SW4071 'RAIN FOREST', OR APPROVED EQUAL.
7. SIGNAL ASSEMBLIES SHALL BE POLYCARBONATE.
8. PEDESTRIAN SIGNALS SHALL BE POLYCARBONATE, EITHER 16 INCH SINGLE DISPLAY HOUSINGS OR DOUBLE 12 INCH DISPLAY HOUSINGS.
9. PEDESTRIAN PUSHBUTTONS SHALL BE INSTALLED AT 3.5 FEET ABOVE ADJACENT ACCESSIBLE SURFACE GRADE.
10. MAXIMUM ALLOWABLE REACH DISTANCE FOR PEDESTRIAN PUSHBUTTONS IS 10 INCHES. INSTALL EXTENSION BRACKETS IF REQUIRED. PAYMENT FOR EXTENSION BRACKETS WILL BE INCIDENTAL TO ITEM 643.80.
11. ACCESSIBLE PEDESTRIAN PUSHBUTTONS ON SHARED PEDESTAL POLES SHALL BE PROVIDED WITH A SPEECH WALK MESSAGE AND A SPEECH PUSHBUTTON INFORMATION MESSAGE. WALK MESSAGES SHALL BE "WATER STREET. WALK SIGN IS ON TO CROSS WATER STREET", OR "BRIDGE STREET. WALK SIGN IS ON TO CROSS BRIDGE STREET", OR "BRUNSWICK AVENUE. WALK SIGN IS ON TO CROSS BRUNSWICK AVENUE", AS APPLICABLE. INFORMATION MESSAGES SHALL BE "WAIT TO CROSS WATER STREET", "WAIT TO CROSS BRIDGE STREET", OR "WAIT TO CROSS BRUNSWICK AVENUE", AS APPLICABLE.
12. LOCATIONS OF ANY EXISTING UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE PRESENCE OF UNDERGROUND UTILITY FACILITIES PRIOR TO COMMENCING ANY EXCAVATION WORK OR INSTALLATION OF POLES, FOUNDATIONS, JUNCTION BOXES, CONDUIT OR GROUND-MOUNTED SIGNAGE AND SHALL NOTIFY UTILITIES OF PROPOSED WORK IN ACCORDANCE WITH MRSA TITLE 23 SECTION 3360-A, MAINE "DIG SAFE" SYSTEM. CONTRACTOR SHALL CONTACT DIG SAFE AT LEAST THREE WORKING DAYS PRIOR TO THE BEGINNING OF EXCAVATION. ALL UTILITIES SHALL BE LOCATED BEFORE BEGINNING EXCAVATION.
13. THE CONTRACTOR SHALL NOTIFY UTILITY COMPANIES AT LEAST 48 HOURS BEFORE ANY OPERATIONS ARE CONDUCTED THAT POTENTIALLY COULD CONFLICT WITH AERIAL UTILITIES.
14. NEW CONDUIT NOT UNDER PAVEMENT OR SIDEWALK SHALL BE 3 INCH MINIMUM, PVC SCHEDULE 40. NEW CONDUIT UNDER PAVEMENT SHALL BE 3 INCH MINIMUM SCHEDULE 80 PVC OR RIGID METAL CONDUIT. MINIMUM BURIAL DEPTH FOR CONDUIT SHALL BE 36". TOP 3 INCHES OF CONDUIT SHALL BE SEALED TO PREVENT ENTRY BY RODENTS.
15. THERE SHALL BE NO SPLICES OR JUNCTION BOXES EXCEPT AS NOTED ON THE PROJECT PLANS OR APPROVED BY THE RESIDENT.
16. JUNCTION BOX COVERS SHALL BE LABELED "TRAFFIC".
17. SPECIFIED TRAFFIC AND PEDESTRIAN SIGNAL POLE LOCATIONS ARE MEASURED TO THE CENTER OF THE FOUNDATIONS. SPECIFIED LOCATION FOR THE CONTROLLER IS MEASURED TO THE CENTER OF THE CONTROLLER FOUNDATION.
18. ALL FIELD WIRING SHALL BE NEATLY BUNDLED AND CLEARLY IDENTIFIED WITH PERMANENT, LEGIBLE, WEATHERPROOF TAGS SECURELY ATTACHED TO EACH CABLE.
19. AT THE TIME OF FINAL PROJECT INSPECTION, THE CONTRACTOR SHALL FURNISH TO THE RESIDENT THREE COMPLETE SETS OF AS-BUILT TRAFFIC SIGNAL PLANS. ONE ADDITIONAL SET SHALL REMAIN IN EACH CABINET.
20. THE MAINTENANCE OF TRAFFIC SIGNALS SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR UNTIL FINAL ACCEPTANCE BY MAINEDOT.
21. PAYMENT UNDER ITEM 643.80 SHALL INCLUDE, BUT NOT BE LIMITED TO, POWER SERVICE AND METERS, METER DISCONNECTS AND ENCLOSURES, LIGHTING BRACKET ARM, PEDESTRIAN SIGNALS AND APS PUSHBUTTONS, SIGNAL ASSEMBLIES AND LED LAMPS, BACKPLATES, VISORS, CONTROLLER AND CABINET, LUMINAIRE AND LIGHTING CABINET, TOMAR EMERGENCY VEHICLE PREEMPTION EQUIPMENT, WIRING, CABLE, POLE RISERS, AND ALL APPURTENANCES AND INCIDENTALS NECESSARY FOR A COMPLETELY FUNCTIONING TRAFFIC SIGNAL INSTALLATION, OTHER THAN RELATED LABOR, MATERIALS AND EQUIPMENT INCLUDED IN OTHER PAY ITEMS OF THE CONTRACT.
22. SEE SECTION 643 AND SECTION 718 SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2268(400)

WIN 22684.00

HIGHWAY PLANS

STATE OF MAINE — ALBERT I. GOFFSTEIN — 4226 — PROFESSIONAL ENGINEER

SIGNATURE

P.E. NUMBER

9/13/18
DATE

	L. TIMBERLAKE	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	ALG	JLE	9-2018
CHECKED-REVIEWED	ALG	ALG	9-2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

GARDINER
WATER ST. / BRIDGE ST.

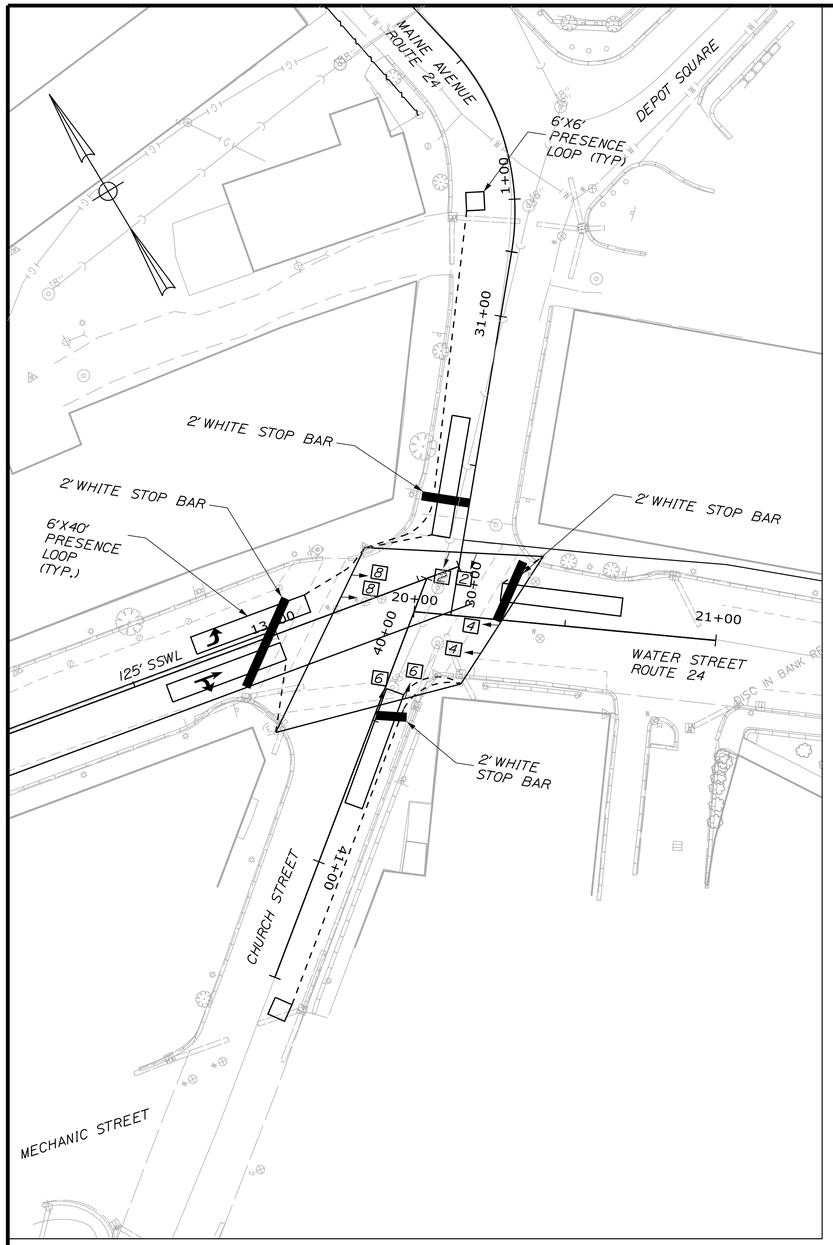
SIGNAL DETAILS

SHEET NUMBER

D3

OF 6

Filename: ...\D3_SIGNAL_DETAIL_01.dgn Division: HIGHWAY Username: common Date:9/25/2018



TEMPORARY TRAFFIC SIGNAL NOTES

1. TRAFFIC SIGNAL WORK FOR THIS INTERSECTION WILL INCLUDE, BUT NOT BE LIMITED TO, REACTIVATION OF EXISTING TRAFFIC SIGNALS; INSTALLATION OF TEMPORARY VEHICLE DETECTION; TEMPORARY PAVEMENT MARKINGS; REMOVAL OF TRAFFIC SIGNALS, PEDESTRIAN SIGNALS, AND FOUNDATIONS AT THE END OF THE TEMPORARY TRAFFIC DETOUR; AND RELATED INCIDENTAL WORK AND MATERIALS.

2. ALL WORK SHALL BE COMPLETED IN CONFORMANCE WITH THE LATEST REVISIONS OF THE STATE OF MAINE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE NATIONAL ELECTRICAL CODE, AND ANY REQUIREMENTS OF THE POWER COMPANY.

3. CONTRACTOR SHALL COVER STOP SIGNS AND ADVANCE WARNING SIGNAGE PERTAINING TO THE FOUR-WAY STOP CONDITION AT THE INTERSECTION.

4. CONTRACTOR SHALL UNCOVER EXISTING TRAFFIC SIGNAL ASSEMBLIES. THE SIGNALS SHALL BE REACTIVATED AND THE TEMPORARY SIGNAL TIMING PLAN SHALL BE INPUT TO THE CONTROLLER. CONTRACTOR WILL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY FAILED OR MALFUNCTIONING COMPONENTS OF THE TRAFFIC SIGNALS FOR THE DURATION OF THE TEMPORARY TRAFFIC DETOUR.

5. CONTRACTOR SHALL INSTALL LOOP DETECTORS OR OTHER ACCEPTABLE MEANS OF TEMPORARY TRAFFIC DETECTION FOR STOP LINE PRESENCE DETECTION ON ALL APPROACHES AND QUEUE DETECTION ON THE MAINE AVENUE AND CHURCH STREET APPROACHES. QUEUE DETECTION SHALL BE PROVIDED AT MAINE AVENUE STATION 1+00 AND CHURCH STREET STATION 41+50. QUEUE DETECTION SHALL BE SET FOR PRESENCE WITH 5 SECONDS DELAY. WHEN ACTIVATED, THE CONTROLLER SHALL PREEMPT THE TIMING PLAN AND INITIATE PHASES 2 AND 6.

6. CONTRACTOR SHALL PLACE TEMPORARY STOP BARS, LANE LINES AND LANE USE MARKINGS ON APPROACHES AS DIRECTED.

7. UPON COMPLETION OF THE TEMPORARY DETOUR, CONTRACTOR SHALL UNCOVER SIGNAGE FOR THE FOUR-WAY STOP; DEACTIVATE TRAFFIC SIGNALS; AND REMOVE TRAFFIC SIGNAL ASSEMBLIES, SPANWIRE, CONDUCTORS, STRAIN POLES, STRAIN POLE FOUNDATIONS, JUNCTION BOXES, CONTROLLER CABINET, POWER SERVICE, AND ALL INCIDENTALS ABOVE GROUND THAT ARE RELATED TO THE TRAFFIC SIGNAL.

8. LOCATIONS OF ANY EXISTING UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE PRESENCE OF UNDERGROUND UTILITY FACILITIES PRIOR TO COMMENCING ANY EXCAVATION WORK OR INSTALLATION OF POLES, FOUNDATIONS, JUNCTION BOXES, CONDUIT OR GROUND-MOUNTED SIGNAGE AND SHALL NOTIFY UTILITIES OF PROPOSED WORK IN ACCORDANCE WITH MRSA TITLE 23 SECTION 3360-A, MAINE "DIG SAFE" SYSTEM. CONTRACTOR SHALL CONTACT DIG SAFE AT LEAST THREE WORKING DAYS PRIOR TO THE BEGINNING EXCAVATION.

9. THE CONTRACTOR SHALL NOTIFY UTILITY COMPANIES AT LEAST 48 HOURS BEFORE ANY OPERATIONS ARE CONDUCTED THAT POTENTIALLY COULD CONFLICT WITH AERIAL UTILITIES.

10. NEW CONDUIT NOT UNDER PAVEMENT OR SIDEWALK SHALL BE 3 INCH MINIMUM, PVC SCHEDULE 40. NEW CONDUIT UNDER PAVEMENT SHALL BE 3 INCH MINIMUM SCHEDULE 80 PVC OR RIGID METAL CONDUIT. MINIMUM BURIAL DEPTH FOR CONDUIT SHALL BE 36". TOP 3 INCHES OF CONDUIT SHALL BE SEALED TO PREVENT ENTRY BY RODENTS.

11. ALL FIELD WIRING SHALL BE NEATLY BUNDLED AND CLEARLY IDENTIFIED WITH PERMANENT, LEGIBLE, WEATHERPROOF TAGS SECURELY ATTACHED TO EACH CABLE.

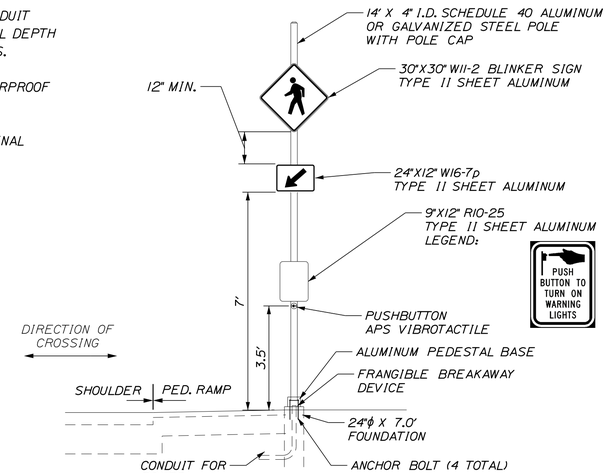
12. THE MAINTENANCE OF TRAFFIC SIGNALS SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR UNTIL FINAL ACCEPTANCE BY MAINEDOT.

13. PAYMENT UNDER ITEM 643.71 SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL WORK AND COST NECESSARY TO REACTIVATE EXISTING TRAFFIC SIGNALS, IMPLEMENT TEMPORARY TRAFFIC DETECTION, IMPLEMENT TEMPORARY TIMING PLAN, AND ALL INCIDENTALS NECESSARY FOR A COMPLETELY FUNCTIONING TEMPORARY TRAFFIC SIGNAL SYSTEM, AND REMOVAL OF TRAFFIC SIGNALS UPON COMPLETION OF THE TEMPORARY DETOUR. OTHER THAN RELATED LABOR, MATERIALS AND EQUIPMENT INCLUDED IN OTHER PAY ITEMS OF THE CONTRACT.

SIGNAL HEAD DETAIL

2 4
6 8

DISPLAYS	
RED	
YELLOW	
GREEN	
NO. REQUIRED	0



NOTES:

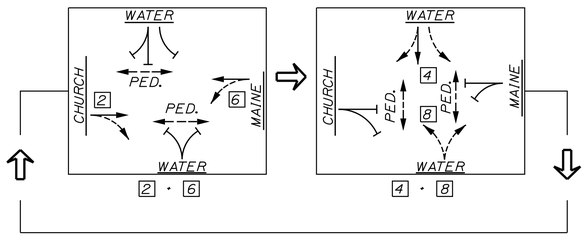
1. FLASH DURATION FOR CROSSINGS SHALL BE 12 SECONDS.
2. INSTALL R10-25 SIGNAGE AND PUSHBUTTONS TO ALIGN TO DIRECTION OF CROSSING.
3. PUSHBUTTONS MUST BE LOCATED NO MORE THAN 10' FROM EDGE OF ACCESSIBLE SURFACE.
4. ALIGN W11-2 AND W16-7p TO FACE TRAFFIC.
5. ACCESSIBLE PUSHBUTTONS SHALL BE PROVIDED WITH A PUSHBUTTON LOCATOR TONE AND A SPEECH MESSAGE. SPEECH MESSAGE SHALL BE "BRIDGE STREET TURN LANE. YELLOW LIGHTS ARE FLASHING FOR BRIDGE STREET TURN LANE." SPEECH MESSAGE SHALL BE REPEATED AT LEAST TWICE FOR EACH PUSHBUTTON ACTIVATION.

WIN 18735.00

ITEM 643.64
FLASHING SIGN ASSEMBLY

NOT TO SCALE
SEE SPECIAL PROVISION

PHASE DIAGRAM



INITIAL SIGNAL TIMING

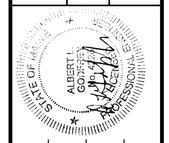
PHASE	1	2	3	4	5	6	7	8
MIN. INITIAL	-	6.0	-	6.0	-	6.0	-	6.0
VEH. EXT.	-	3.0	-	3.0	-	3.0	-	3.0
MAX. GREEN	-	60.0	-	40.0	-	60.0	-	40.0
YELLOW	-	3.0	-	3.0	-	3.0	-	3.0
ALL RED	-	2.5	-	2.5	-	2.5	-	2.5
WALK	-	4.0	-	4.0	-	4.0	-	4.0
PED CLEAR	-	12.0	-	12.0	-	12.0	-	12.0
FLASH	-	R	-	R	-	R	-	R
RECALL	-	SOFT	-	-	-	SOFT	-	-

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2268(400)

WIN 22684.00

HIGHWAY PLANS



SIGNATURE		
4226	P.E. NUMBER	
9/13/18	DATE	

PROJ. MANAGER	L. TIMBERLAKE	
DESIGN-DETAILED	ALG	JLE
CHECKED-REVIEWED	ALG	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

	DATE	BY
1	9-2018	JLE
2	9-2018	
3		
4		

GARDINER
WATER / MAINE / CHURCH

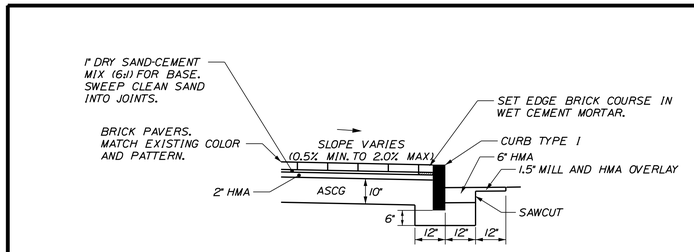
TEMPORARY SIGNAL DETAILS

SHEET NUMBER

D4

OF 6

Filename: ...\D4_SIGNAL_DETAIL_02.dgn Division: HIGHWAY Username: common Date:9/25/2018



INSTALL 4" WIDE X 8.5" HIGH PIECE OF FILTER FABRIC AT BACK OF CURB AT EACH CURB JOINT. PAYMENT WILL BE INCIDENTAL TO CURB.

1/2" PREFORMED EXPANSION JOINT FILLER W/ 5/8" BACKER ROD AND JOINT SEALANT TYP. AT ALL WALL, STEP, SIDEWALK, AND BUILDING INTERFACES

BRICK SIDEWALK

NOT TO SCALE

CURVE DATA #5
PI = 156+50.59
D = 5°43'46.5"
Δ = 5°21'15.4" Lt.
R = 1000.00'
L = 93.45'
T = 46.76'
E = 1.09'

CURVE DATA #1
PI = 1+22.10
D = 71°37'11.0"
Δ = 52°35'44.3" Lt.
R = 80.00'
L = 73.44'
T = 39.53'
E = 9.24'

MAINE AVENUE ROUTE 24

WATER STREET S79°12'56.85"E

CHURCH STREET S52°01'18.29"W

WATER STREET ROUTE 24 S53°21'51.94"E

N40°41'26.54"E

REMOVE 14" ELM AND STUMP. REBUILD BITUMINOUS SIDEWALK WITH 2" HMA AND 12" A.S.C.G.

LIMIT OF 1.5" MILL AND OVERLAY (TYP.)

2'X6' DWF

7.5 LF FLUSH GRANITE

REMOVE POLE AND FOUNDATION

7.1 LF FLUSH GRANITE

2'X6' WHITE BAR 4' OC (TYP.)

ADJUST DMH TO GRADE

8.7 LF FLUSH GRANITE

24" WHITE STOP BAR (TYP.)

SAWCUT (TYP.)

ADJ SMH TO GRADE

ADJUST CB TO GRADE

ALTER CB TO MH

6.4 LF FLUSH GRANITE

10.6 LF FLUSH GRANITE

2'X8' DWF

REMOVE PAINT STRIPE

NOTE: BACK EDGE OF SIDEWALK IS L.O.W.P.

WHITE OR YELLOW PAVEMENT AND CURB MARKING ITEM 627.75					
FROM		TO			
STATION	OFFSET	STATION	OFFSET	DESCRIPTION	AREA (SF)
31+08	LT.			"AHD"	16
0+93	LT.			"STOP"	22
12+86	RT	13+17	LT.	X-WALK	108
12+88.5	LT.	13+43	RT.	X-WALK	156
13+49	LT.	20+32	LT.	X-WALK	96
40+27	LT.	30+28	RT.	X-WALK	144
12+89	RT			STOP BAR	37
40+46.8	LT.			STOP BAR	24
30+35.2	LT.			STOP BAR	36
20+17.8	LT.			STOP BAR	23
11+46.3	LT.	12+96	LT.	4" WH. PARK	63
10+39	RT.	12+37.5	RT.	4" WH. PARK.	90

REM OR MOD FOUNDATION - ITEM 626.36
LOCATION
STA. 12+88.4, 30.3' RT.
STA. 13+37.1, 16.7' LT.
STA. 20+17.7, 22.3' RT.
STA. 20+40.7, 22.2' LT.

REMOVE EXISTING SIGN		
STATION	OFFSET	DESCR.
12+78±	19'± RT.	STOP/ALL WAY
12+81	22' LT.	STOP/ALL WAY
12+81	22' LT.	DO NOT ENTER
13+20	21' LT.	DO NOT ENTER
20+68±	19'± LT.	STOP/ALL WAY
30+37	19' LT.	STOP/ALL WAY
30+42±	19'± RT.	STOP/ALL WAY
40+64.5	16' LT.	STOP/ALL WAY

DEMOUNT REG. WRNG. CONF & RTE MARKER SIGN - ITEM 645.106 REINSTALL REG. WRN. CONF. & RTE MARKER SIGN - 645.116				
FROM		TO		
STATION	OFFSET	STATION	OFFSET	DESCRIPTION
7+50±	LT.	1+98	20.5' LT.	W3-1 "STOP AHEAD"

DETECTABLE WARNING FIELD (ITEM 608.26)	
LOCATION	AREA
STA. 12+87 RT.	12 SF
STA. 13+14 LT.	14 SF
STA. 13+43 RT.	20 SF
STA. 13+52 LT.	16 SF
STA. 20+32 LT.	14 SF

WALKS	
LOCATION	DESCRIPTION
STA. 11+46.3 RT. TO STA. 40+84.6 RT.	BRICK
STA. 12+84.7 LT. TO STA. 30+40.0 LT .	BRICK
STA. 30+41.3 RT. TO STA. 20+36.6 LT.	BRICK
STA. 20+21.4 RT. TO STA. 40+42.2 LT.	BRICK

REG. WRNG. CONF & RTE MARKER SIGN TYPE II ITEM 645.292				
STATION	OFFSET	DESCR.		SIZE
1+97.5	20.5' LT.	STOP AHEAD	W3-1	30"X30"
12+74.5	16.0' RT.	STOP	RI-1	36"X36
12+74.5	16.0' RT.	ALL WAY	RI-4	24"X6"
12+81	22' LT.	DO NOT ENTER	R5-1	36"X36"
13+11.0	16.0' LT.	STOP	RI-1	36"X36"
13+11.0	16.0' LT.	ALL WAY	RI-4	24"X6"
13+20	21' LT.	DO NOT ENTER	R5-1	36"X36"
20+68±	19'± LT.	STOP	RI-1	36"X36"
20+68±	19'± LT.	ALL WAY	RI-4	24"X6"
30+37	19' LT.	STOP	RI-1	36"X36"
30+37	19' LT.	ALL WAY	RI-4	24"X6"
30+42±	19'± RT.	STOP	RI-1	36"X36"
30+42±	19'± RT.	ALL WAY	RI-4	24"X6"
40+64.5	16' LT.	STOP	RI-1	36"X36"
40+64.5	16' LT.	ALL WAY	RI-4	24"X6"

* ALL STOP SIGNS TO INCLUDE TWO 12"X12" WARNING FLAGS.
* REMOVE EXISTING 'STOP', 'ALL WAY', & 'DO NOT ENTER' SIGNAGE.

ADJUST MH OR CB TO GRADE - ITEM 604.18	
LOCATION	REMARK
STA. 12+91.4, 27.4' RT.	CB
STA. 40+40.4, 11.7' LT.	CB
STA. 20+17.3, 19.1' RT.	CB
STA. 40+37.6, 2.2' LT.	SMH
STA. 20+07.1, 8.6' LT.	SMH
STA. 20+08.8, 9.5' RT.	DMH
STA. 30+31.8, 9.9' RT.	DMH

ITEM 201.23 REMOVING TREE AND ITEM 201.24 REMOVING STUMP		
LOCATION	TREE DESC.	STUMP SIZE
STA. 30+53.5, 18.0' LT.	14" ELM	14"

ALTER CB TO MH - ITEM 604.16
LOCATION
STA. 12+83.2, 16.3' RT.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2268(400)

WIN 22684.00

HIGHWAY PLANS

STATE OF MAINE — JAMES L. EASON No. 7960 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE 7960
P.E. NUMBER
9/13/18
DATE

PROJ. MANAGER	L. TIMBERLAKE	BY
DESIGN-DETAILED		JLE
CHECKED-REVIEWED		JLE
DESIGN2-DETAILED2		ALG
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

DATE
9-2018
9-2018

GARDINER
WATER ST. \ CHURCH ST.

PLAN

SHEET NUMBER

D5

OF 6

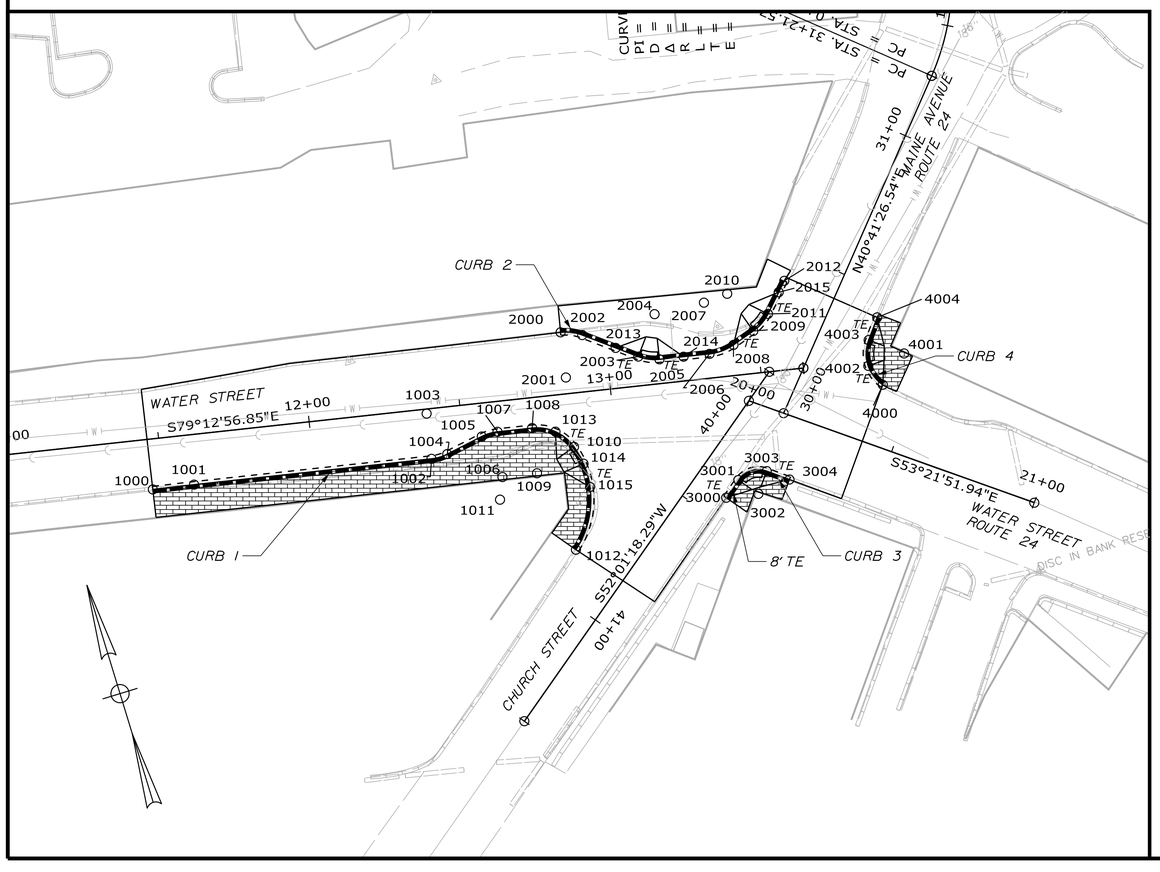
Filename: ...\05_HDPLAN_01.DGN Division: HIGHWAY Username: common Date:9/13/2018

CONTROL POINTS FOR CURB 1				
Point	Station	Offset	NORTHING	EASTING
1000	11+46.29	16.60	509492.49377	1142221.62567
1001	11+60.00	16.50	509490.02310	1142235.11121
1002	12+38.82	16.50	509475.27567	1142312.53585
1003	12+38.82	1.50	509490.01075	1142315.34251
1004	12+44.14	15.52	509475.23930	1142317.95099
1005	12+56.11	10.98	509477.46514	1142330.55564
1006	12+61.43	25.00	509462.69369	1142333.16412
1007	12+61.43	10.00	509477.42877	1142335.97078
1008	12+72.92	10.00	509475.28027	1142347.25050
1009	12+72.92	25.00	509460.54519	1142344.44385
1010	12+86.00	17.66	509465.31284	1142358.66599
1011	12+59.84	32.34	509455.77754	1142330.22170
1012	12+82.95	51.47	509432.66719	1142349.35051
1013	12+80.45	12.03	509471.88142	1142354.26677
1014	12+88.51	23.52	509459.08023	1142360.03935
1015	12+89.82	31.39	509451.10602	1142359.85575

CONTROL POINTS FOR CURB 2				
Point	Station	Offset	NORTHING	EASTING
2000	12+85.67	-20.38	509502.73294	1142365.46004
2001	12+85.81	-5.38	509487.97236	1142362.79073
2002	12+92.66	-18.72	509499.79630	1142372.02082
2003	13+10.30	-9.66	509487.59670	1142387.64876
2004	13+17.15	-23.00	509499.42063	1142396.87885
2005	13+17.15	-8.00	509484.68555	1142394.07219
2006	13+33.77	-8.00	509481.57705	1142410.39196
2007	13+33.77	-25.00	509498.27681	1142413.57284
2008	13+41.96	-10.10	509482.11052	1142418.83129
2009	13+48.94	-13.95	509484.57709	1142426.41438
2010	13+41.72	-27.09	509498.84146	1142421.77457
2011	13+54.36	-19.02	509488.54604	1142432.68348
2012	13+60.92	-29.30	509497.41748	1142441.05602
2013	13+03.18	-13.31	509492.51941	1142381.34266
2014	13+25.15	-8.00	509483.18866	1142401.93090
2015	13+58.66	-25.76	509494.36412	1142438.17437

CONTROL POINTS FOR CURB 3				
Point	Station	Offset	NORTHING	EASTING
3000	20+03.70	32.65	509434.56222	1142401.78687
3001	20+05.53	25.80	509438.96181	1142407.34007
3002	20+13.26	27.87	509432.69126	1142412.30799
3003	20+13.34	19.87	509439.05865	1142417.15117
3004	20+21.34	19.96	509434.21546	1142423.51856

CONTROL POINTS FOR CURB 4				
Point	Station	Offset	NORTHING	EASTING
4000	20+39.83	-19.84	509455.11283	1142462.10299
4001	20+42.97	-31.93	509462.94964	1142471.84128
4002	20+33.23	-24.10	509462.47944	1142459.35013
4003	20+30.47	-32.16	509470.58921	1142461.94750
4004	20+30.62	-40.16	509476.92123	1142466.83682



Horizontal Alignment Name: Curb 1

STATION	NORTHING	EASTING
POB (1000) 0+00.00	509492.49377	1142221.62567
PI (1001) 0+13.71	509490.02310	1142235.11121
Tangent Direction: S 79°37'04.9" E		
Tangent Length: 13.71		
PC (1002) 0+92.53	509475.27567	1142312.53585
Tangent Direction: S 79°12'56.8" E		
Tangent Length: 78.82		
PI ( ) 0+95.28	509474.76058	1142315.24008
CC (1003)	509490.01075	1142315.34251
PT (1004) 0+97.97	509475.23930	1142317.95099
Radius: 15.00		
Delta: 20°47'55.6" Left		
Length: 5.45		
Tangent: 2.75		
External: 0.25		
PC (1005) 1+10.77	509477.46514	1142330.55564
Tangent Direction: N 79°59'07.6" E		
Tangent Length: 12.80		
PI ( ) 1+13.52	509477.94386	1142333.26655
CC (1006)	509462.69369	1142333.16412
PT (1007) 1+16.22	509477.42877	1142335.97078
Radius: 15.00		
Delta: 20°47'55.6" Right		
Length: 5.45		
Tangent: 2.75		
External: 0.25		
PC (1008) 1+27.70	509475.28027	1142347.25050
Tangent Direction: S 79°12'56.8" E		
Tangent Length: 11.48		
PI ( ) 1+36.48	509473.63746	1142355.87536
CC (1009)	509460.54519	1142344.44385
PCC (1010) 1+43.59	509465.31284	1142358.66599
Radius: 15.00		
Delta: 60°40'59.7" Right		
Length: 15.89		
Tangent: 8.78		
External: 2.38		
PI ( ) 1+64.17	509445.79378	1142365.20931
CC (1011)	509455.77754	1142330.22170
PT (1012) 1+79.67	509432.66719	1142349.35051
Radius: 30.00		
Delta: 68°55'02.8" Right		
Length: 36.09		
Tangent: 20.59		
External: 6.38		

Horizontal Alignment Name: Curb 2

STATION	NORTHING	EASTING
PC (2000) 0+00.00	509502.73294	1142365.46004
PI (2001) 0+03.70	509502.07418	1142369.10280
CC (2001)	509487.97236	1142362.79073
PT (2002) 0+07.26	509499.79630	1142372.02082
Radius: 15.00		
Delta: 27°43'33.4" Right		
Length: 7.2586		
Tangent: 3.70		
External: 0.45		
PC (2003) 0+27.08	509487.59670	1142387.64876
Tangent Direction: S 52°01'24.3" E		
Tangent Length: 19.83		
PI ( ) 0+30.71	509485.36435	1142390.50843
CC (2004)	509499.42063	1142396.87885
PT (2005) 0+34.20	509484.68555	1142394.07219
Radius: 15.00		
Delta: 27°11'32.5" Left		
Length: 7.12		
Tangent: 3.63		
External: 0.43		
PC (2006) 0+50.82	509481.57705	1142410.39196
Tangent Direction: S 79°12'56.8" E		
Tangent Length: 16.61		
PI ( ) 0+55.18	509480.76026	1142414.68012
CC (2007)	509498.27681	1142413.57284
PT (2008) 0+59.36	509482.11052	1142418.83129
Radius: 17.00		
Delta: 28°48'09.0" Left		
Length: 8.55		
Tangent: 4.37		
External: 0.55		
PC (2009) 0+67.34	509484.57709	1142426.41438
Tangent Direction: N 71°58'54.2" E		
Tangent Length: 7.97		
PI ( ) 0+71.17	509485.76144	1142430.05548
CC (2010)	509498.84146	1142421.77457
PT (2011) 0+74.83	509488.54604	1142432.68348
Radius: 15.00		
Delta: 28°38'20.2" Left		
Length: 7.50		
Tangent: 3.89		
External: 0.48		
POE (2012) 0+87.03	509497.41748	1142441.05602
Tangent Direction: N 43°20'34.0" E		
Tangent Length: 12.20		

Horizontal Alignment Name: Curb 3

STATION	NORTHING	EASTING
POB (3000) 0+00.00	509434.56222	1142401.78687
PC (3001) 0+07.08	509438.96181	1142407.34007
Tangent Direction: N 51°36'41.5" E		
Tangent Length: 7.08		
PI ( ) 0+13.30	509442.81852	1142412.20803
CC (3002)	509432.69126	1142412.30799
PT (3003) 0+17.65	509439.05865	1142417.15117
Radius: 8.00		
Delta: 75°38'45.5" Right		
Length: 10.56		
Tangent: 6.21		
External: 2.13		
POE (3004) 0+25.65	509434.21546	1142423.51856
Tangent Direction: S 52°44'33.0" E		
Tangent Length: 8.00		

Horizontal Alignment Name: Curb 4

STATION	NORTHING	EASTING
PC (4000) 0+00.00	509455.11283	1142462.10299
PI ( ) 0+04.14	509458.34000	1142459.50595
CC (4001)	509462.94964	1142471.84128
PCC (4002) 0+08.00	509462.47944	1142459.35013
Radius: 12.50		
Delta: 36°40'09.5" Right		
Degree of Curvature(Arc): 458°21'58.4"		
Length: 8.00		
Tangent: 4.142		
External: 0.67		
PI ( ) 0+12.53	509467.00482	1142459.17978
CC (4001)	509462.94964	1142471.84128
PT (4003) 0+16.69	509470.58921	1142461.94750
Radius: 12.50		
Delta: 39°49'46.5" Right		
Length: 8.69		
Tangent: 4.53		
External: 0.80		
POE (4004) 0+24.69	509476.92123	1142466.83682
Tangent Direction: N 37°40'25.7" E		
Tangent Length: 8.00		

VERTICAL CURB TYPE I - ITEM 609.11	
LOCATION	LENGTH
STA. 11+46.3, 16.6' RT. TO STA. 12+38.8, 16.5' RT.	92.5 LF
STA. 12+44.1, 15.5' RT. TO STA.12+56.1, 11.0' RT.	12.8 LF
STA. 12+61.4, 10.0' RT. TO STA. 12+72.9, 10.0' RT.	11.5 LF
STA. 12+92.7, 18.7' LT. TO STA.13+03.2, 13.3' LT.	11.8 LF
STA. 13+25.2, 8.0' LT. TO STA.13+33.8, 8.0' LT.	8.6 LF
STA. 30+35.9, 17.5' LT. TO STA. 30+40.1, 17.3' LT.	4.2 LF

VERTICAL CURB TYPE I - CIRCULAR ITEM 609.12		
LOCATION	LENGTH	REMARK
STA. 12+38.8, 16.5' RT. TO STA. 12+44.1, 15.5' RT.	5.4 LF	R=15'
STA. 12+56.1, 11.0' RT. TO STA. 12+61.4, 10.0' RT.	5.4 LF	R=15'
STA. 12+72.9, 10.0' RT. TO STA. 12+80.5, 12.0' RT.	7.9 LF	R=15'
STA. 12+86.0, 17.7' RT. TO STA. 12+88.5, 23.5' RT.	6.4 LF	R=30'
STA. 40+65.1, 26.6' RT. TO STA. 40+84.7, 18.5' RT.	21.7 LF	R=30'
STA. 12+85.7, 20.4' LT. TO STA. 12+92.7, 18.7' LT.	7.3 LF	R=15'
STA. 13+10.3, 9.7' LT. TO STA. 13+17.2, 8.0' LT.	7.1 LF	R=15'
STA. 13+33.8, 8.0' LT. TO STA. 13+42.0, 10.1' LT.	8.5 LF	R=15'
STA. 30+20.8, 20.0' LT. TO STA. 30+27.9, 17.9' LT.	7.5 LF	R=15'
STA. 30+25.5, 19.3' RT. TO STA. 30+33.4, 16.0' RT.	8.7 LF	R=12.5'
STA. 40+27.3, 18.1' LT. TO STA. 40+35.1, 12.2' LT.	10.6 LF	R=8'

TERMINAL CURB TYPE I - 8 LF ITEM 609.238
LOCATION
STA. 13+03.2, 13.3' LT. TO STA. 13+10.3, 9.7' LT.
STA. 13+17.2, 8.0' LT. TO STA. 13+25.2, 8.0' LT.
STA. 13+41.9, 10.1' LT. TO STA. 13+49.0, 14.0' LT.
STA. 30+27.9, 17.9' LT. TO STA. 30+35.9, 17.5' LT.
STA. 30+33.4, 16 .0' RT. TO STA. 30+41.4, 15.6' RT.
STA. 20+13.3, 19.9' RT. TO STA. 20+21.3, 20.0' RT.
STA. 40+35.2, 12.2; 'LT. TO STA. 40+42.2, 12.2' LT.

TERMINAL CURB TYPE I - 8 LF ITEM 609.2381 - CIRCULAR
LOCATION
STA. 12+80.5, 12.0' RT. TO STA. 12+86.0, 17.7' RT., R=15
STA. 40+60.1, 32.7' RT. TO STA. 40+65.1, 26.6' RT., R=30
STA. 20+33.2, 24.1' LT. TO STA. 20+39.8, 19.8' LT., R=12.5

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2268(400)

WIN 22684.00

HIGHWAY PLANS

STATE OF MAINE — JAMES L. EASON No. 7960 — REGISTERED PROFESSIONAL ENGINEER

SIGNATURE

7960 — P.E. NUMBER

9/13/2018 — DATE

PROJ. MANAGER	L. TIMBERLAKE
DESIGN-DETAILED	JLE
CHECKED-REVIEWED	ALG
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	

DATE	BY
9-2018	JLE
9-2018	

REVISIONS
REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

GARDINER
WATER ST. \ CHURCH ST.
GEOMETRY PLAN

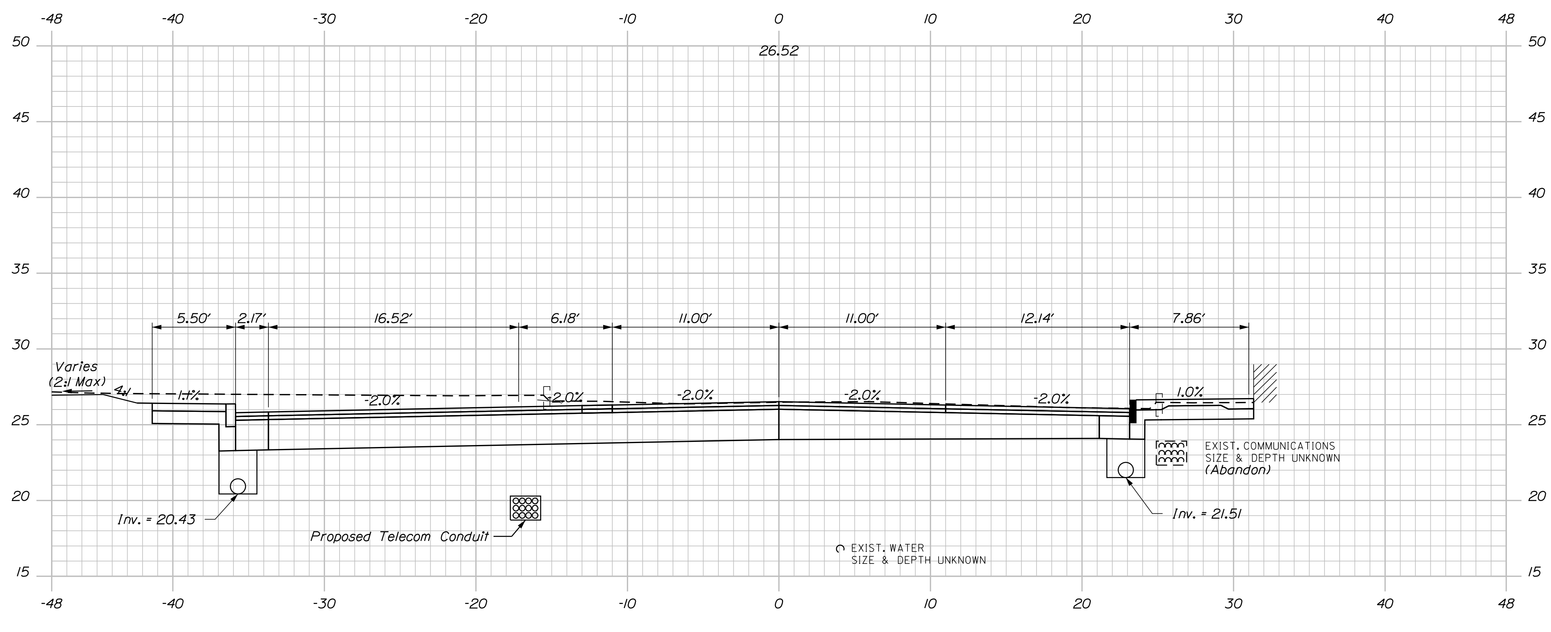
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D6

OF 6

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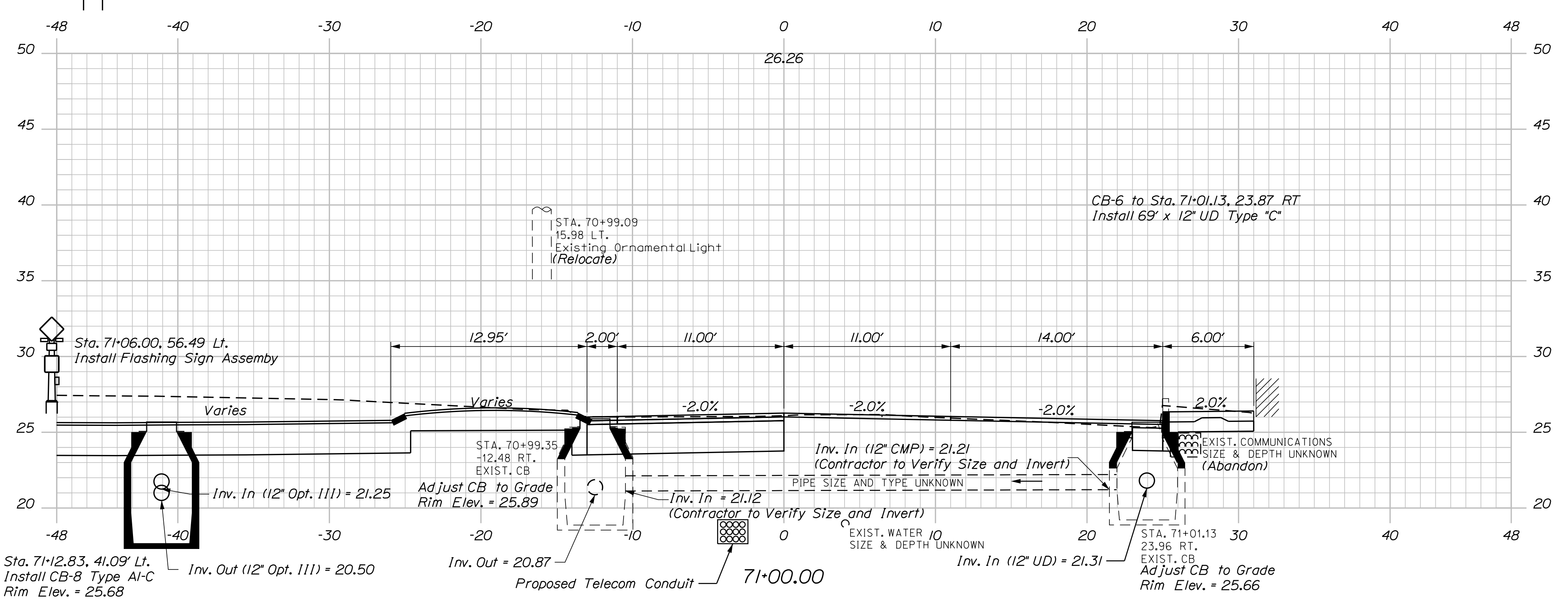
Sta. 71+40.00
End Transition
Begin Project
End Mill & 3" Pave Right
Begin Full Depth Construction



CB-8 to CB-9
Install 46' x 12" Opt. III

71+25.00

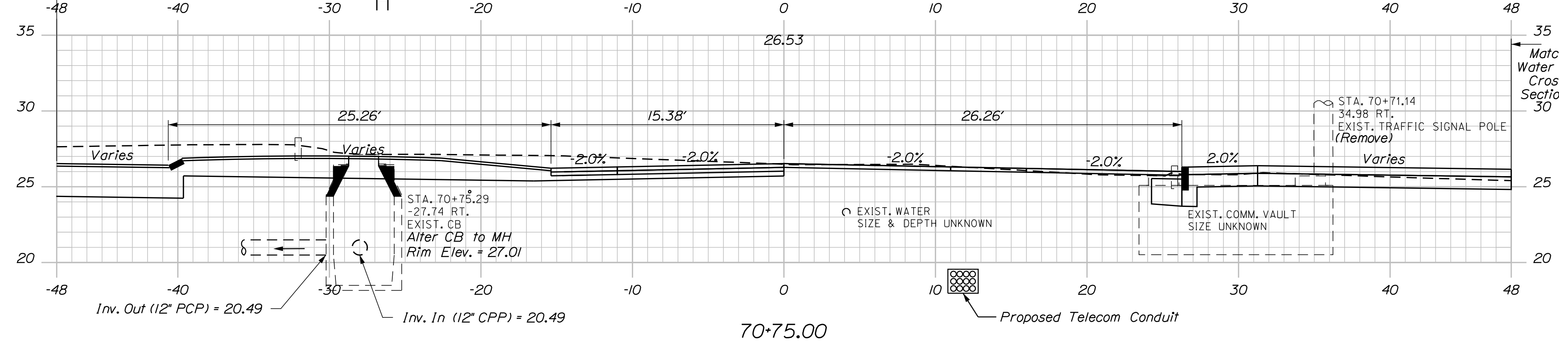
Sta. 71+20.97, 45.47 Lt.
Relocated Ornamental Light



71+00.00

Match Water St Cross Sections

Sta. 71+80.53, 26.47 Lt.
Install Flashing Sign Assemby



70+75.00

Bridge Street Sta. 70+75.00 to Sta. 71+25.00

SHEET NUMBER E1 OF E26

GARDINER
RTE 9\126\US 201 & RTE 24
CROSS SECTIONS

PROJ. MANAGER		BY	DATE
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

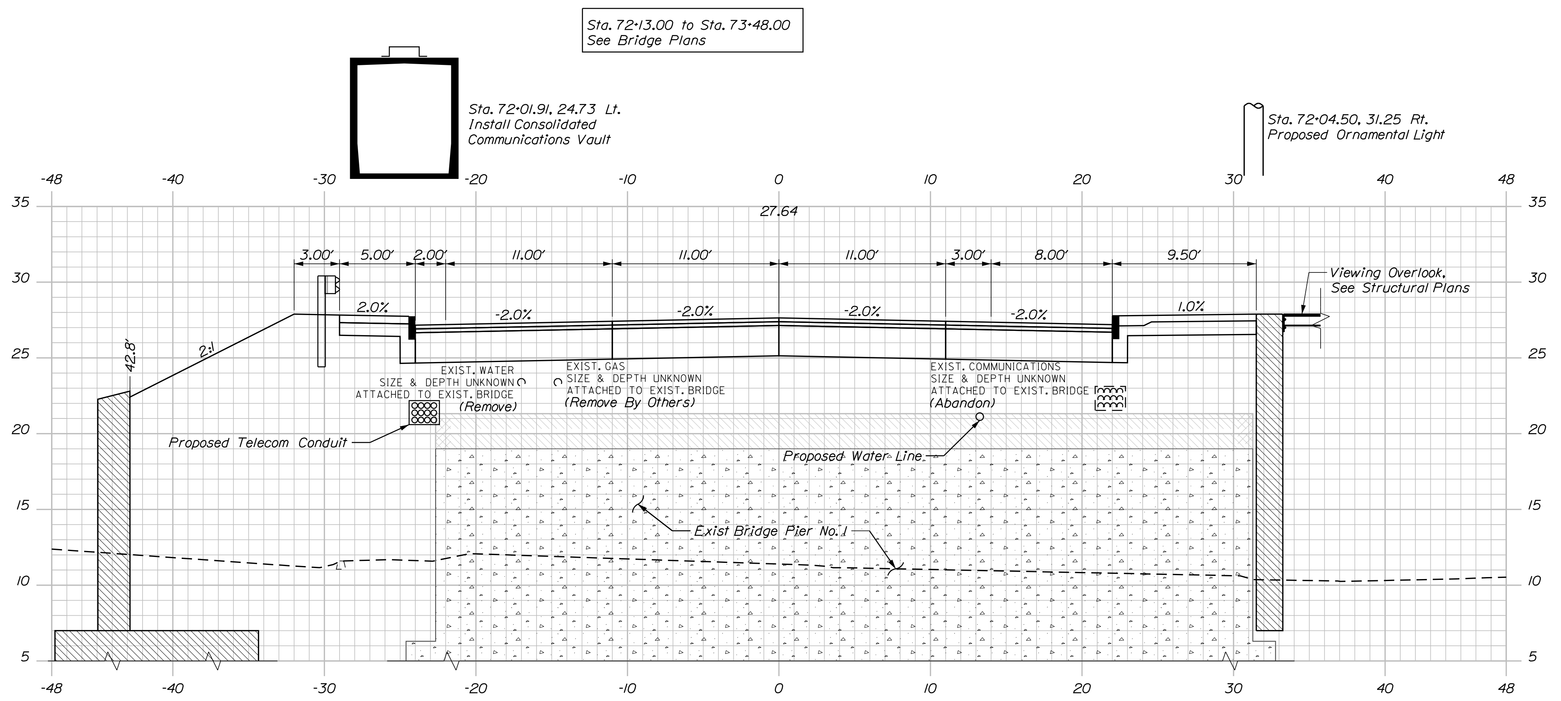
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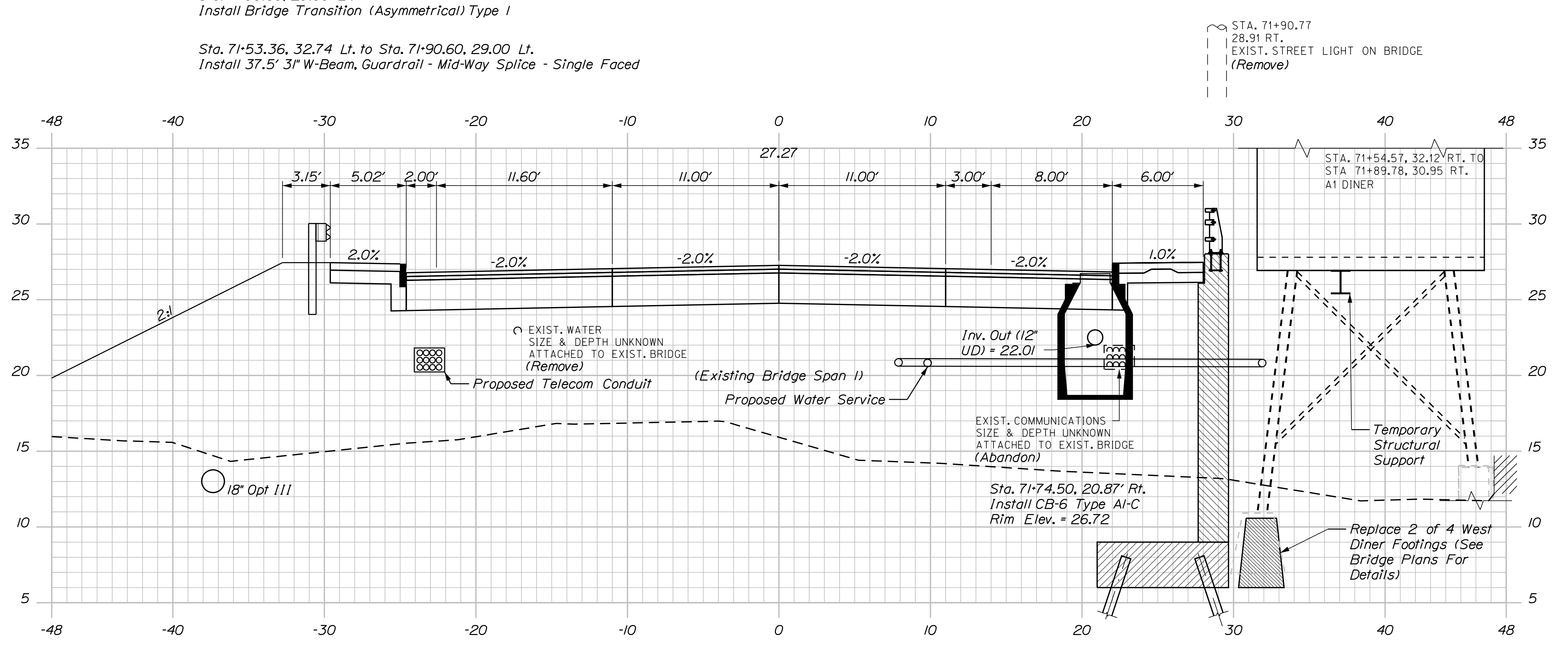
P.E. NUMBER

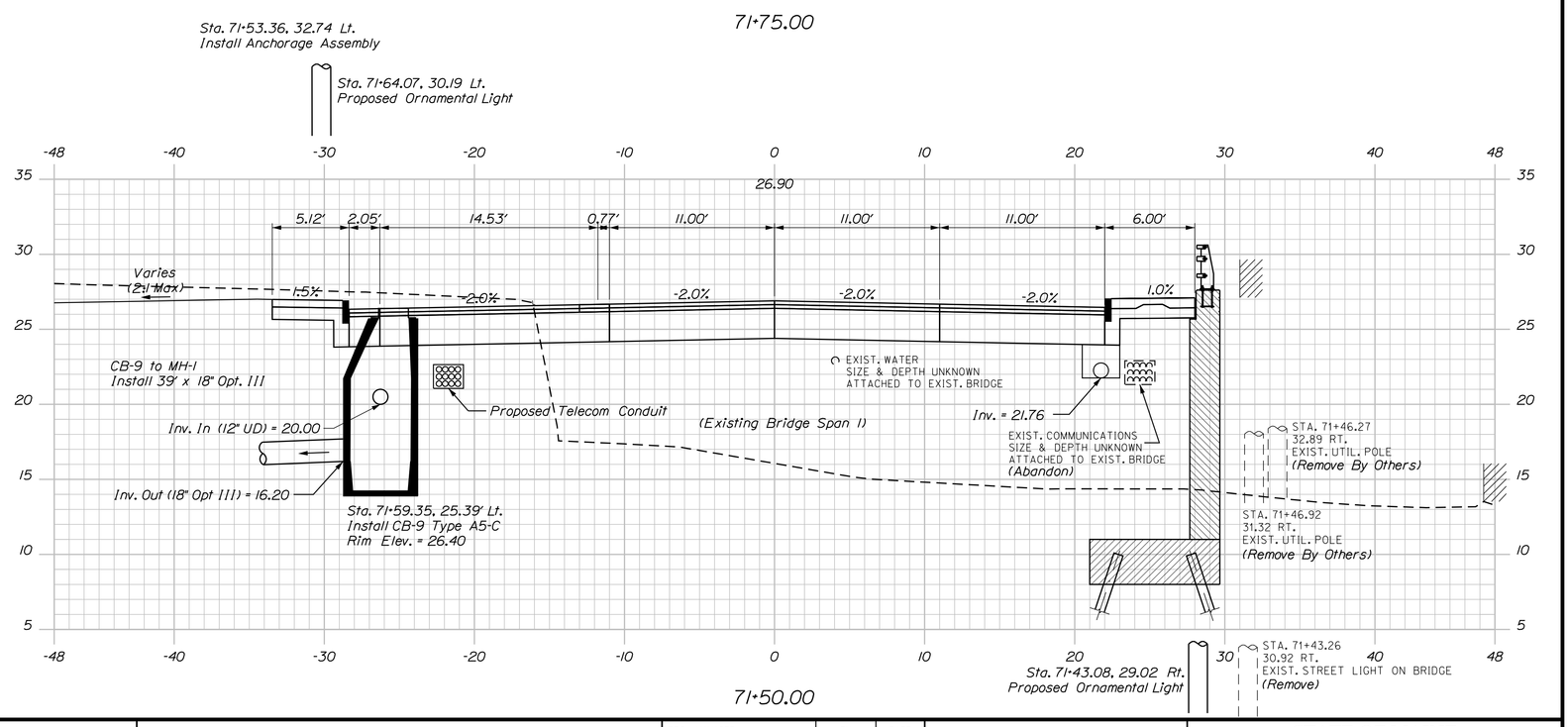
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
MULTI-WIN
HIGHWAY PLANS







Bridge Street Sta. 71+50.00 to Sta. 72+00.00

SHEET NUMBER E2 OF E26

GARDINER
RTE 9\126\US 201 & RTE 24
CROSS SECTIONS

PROJ. MANAGER		BY	DATE
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

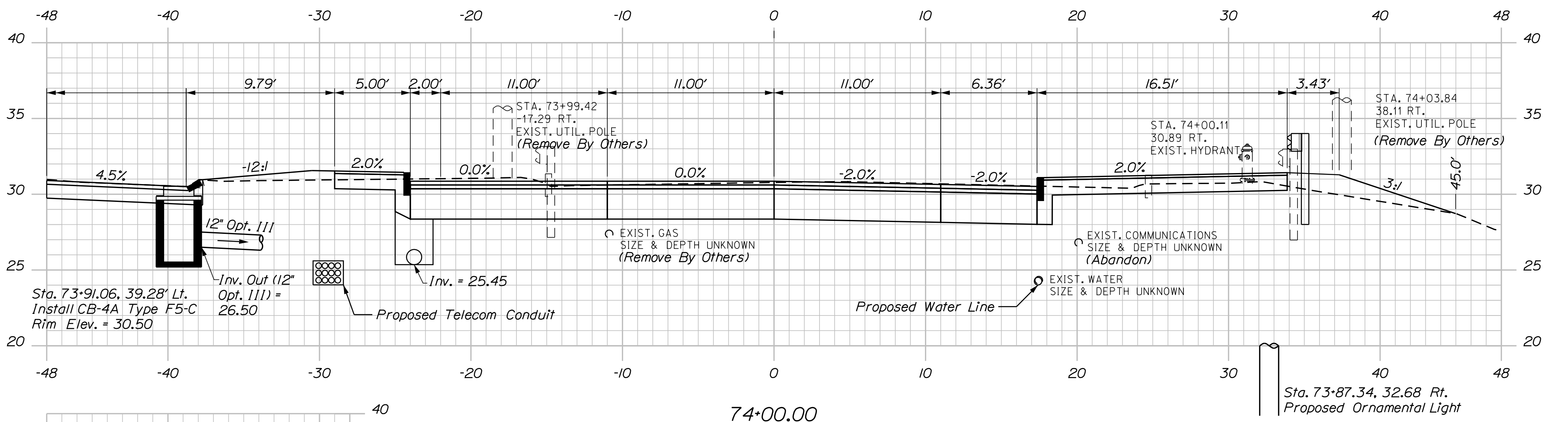
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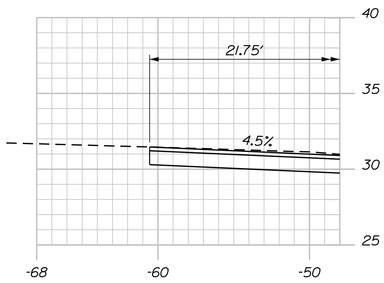
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
MULTI-WIN
HIGHWAY PLANS

Sta. 74+18.72, 51.07 Rt.
Install Anchorage Assembly





Sta. 73+76.65, 28.08 Rt. to Sta. 74+19.77, 52.77 Rt.
Install 50.0' 31" W-Beam Guardrail - Mid-Way Splice (Over 15' Radius)

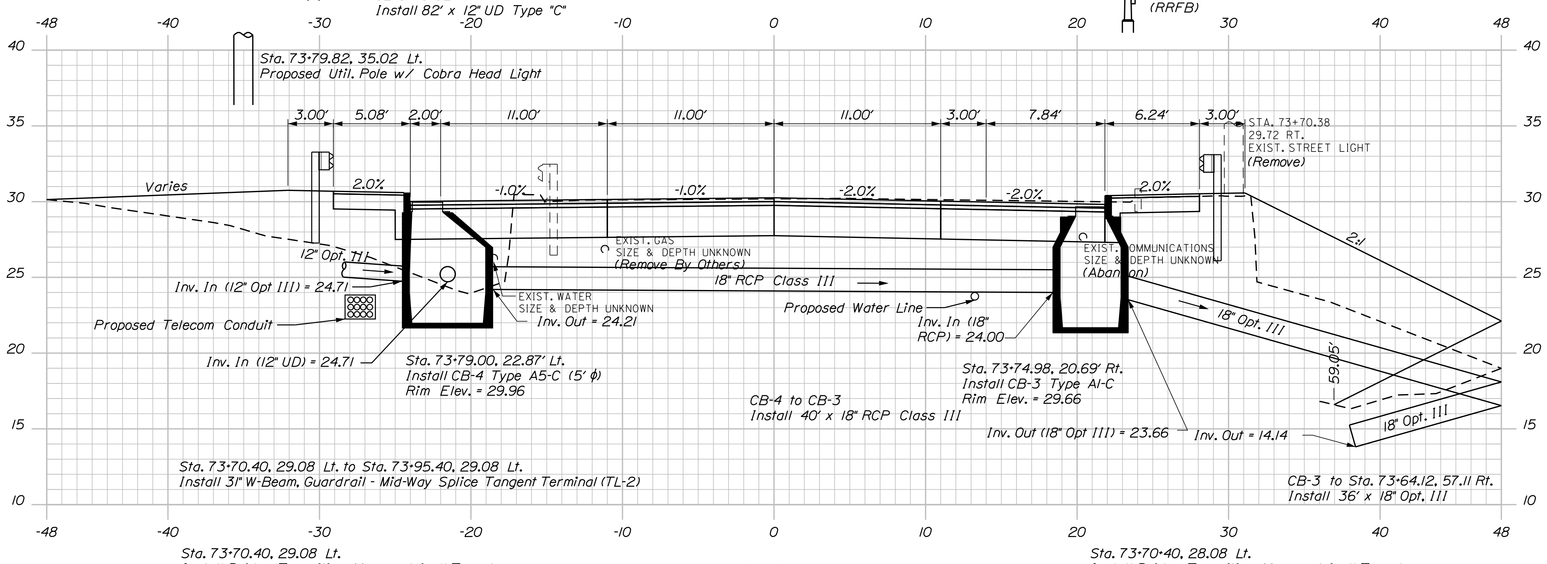
Sta. 73+70.40, 28.08 Rt. to Sta. 73+76.65, 28.08 Rt.
Install 6.25' 31" W-Beam Guardrail - Mid-Way Splice - Single Faced

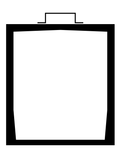
Sta. 73+94.06, 31.24 Lt.
Install Rectangular Rapid Flashing Beacon Assemby (RRFB)

CB-4A to CB-4
Install 17' x 12" Opt III

CB-5 to CB-4
Install 82' x 12" UD Type "C"

Sta. 73+95.48, 23.41 Rt.
Install Rectangular Rapid Flashing Beacon Assemby (RRFB)





Sta. 73+59.08, 24.73 Lt.
Install Consolidated Communications Vault

Bridge Street Sta. 73+75.00 to Sta. 74+00.00

SHEET NUMBER E3 OF E26

GARDINER
RTE 9\126\US 201 & RTE 24
CROSS SECTIONS

PROJ. MANAGER		BY	DATE
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

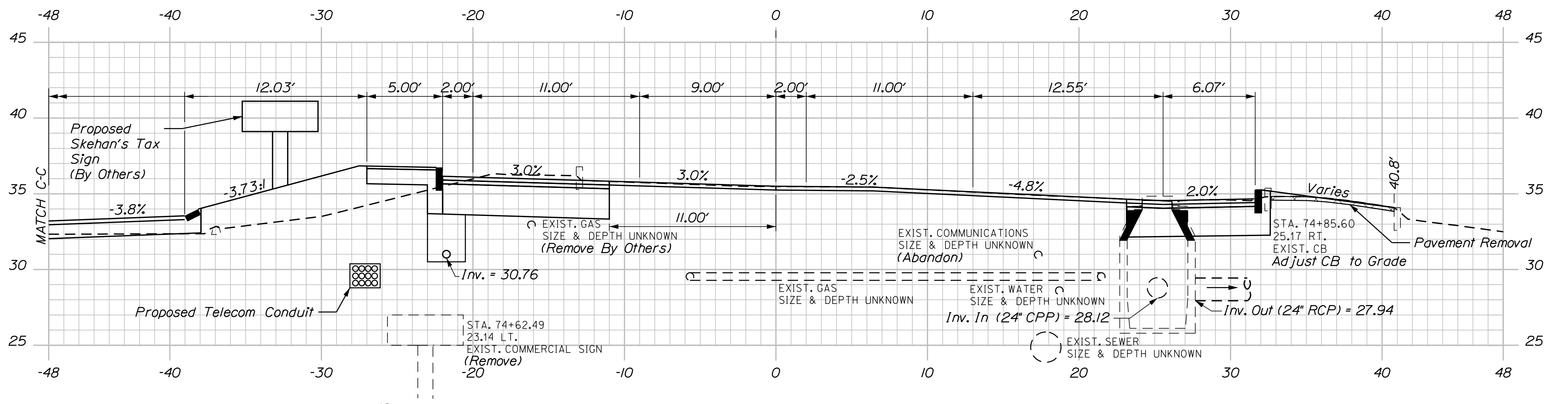
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

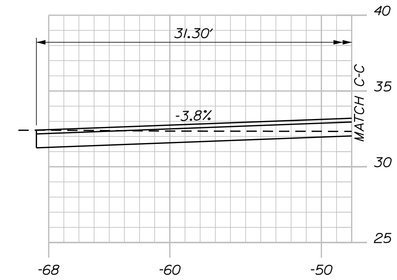
WIN
MULTI-WIN
HIGHWAY PLANS

Sta. 75+08.14, 52.44 Lt. to Sta. 74+89.15, 98.14 Lt.
Install 50' 31" W-Beam, Guardrail - Mid-Way Splice - Single Faced

Sta. 74+96.31, 27.70 Lt. to Sta. 75+08.14, 52.44 Lt.
Install 31.25' 31" W-Beam, Guardrail - Mid-Way Splice - Over 15' Radius



74+75.00

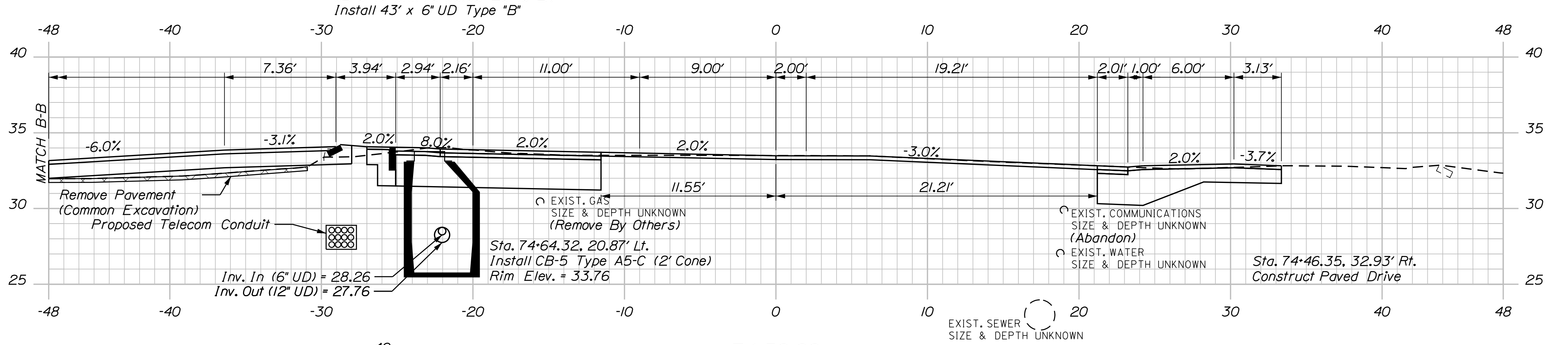


Sta. 74+84.13, 27.00 Lt. to Sta. 74+96.31, 27.70 Lt.
Install 12.5' 31" W-Beam, Guardrail - Mid-Way Splice - Single Faced

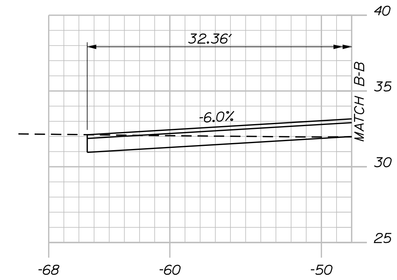
Sta. 74+84.13, 27.00 Lt.
Install Anchorage Assembly

74+75.00

CB-5 to Sta. 75+06.65 26.49' Lt.
Install 43' x 6" UD Type "B"



74+50.00

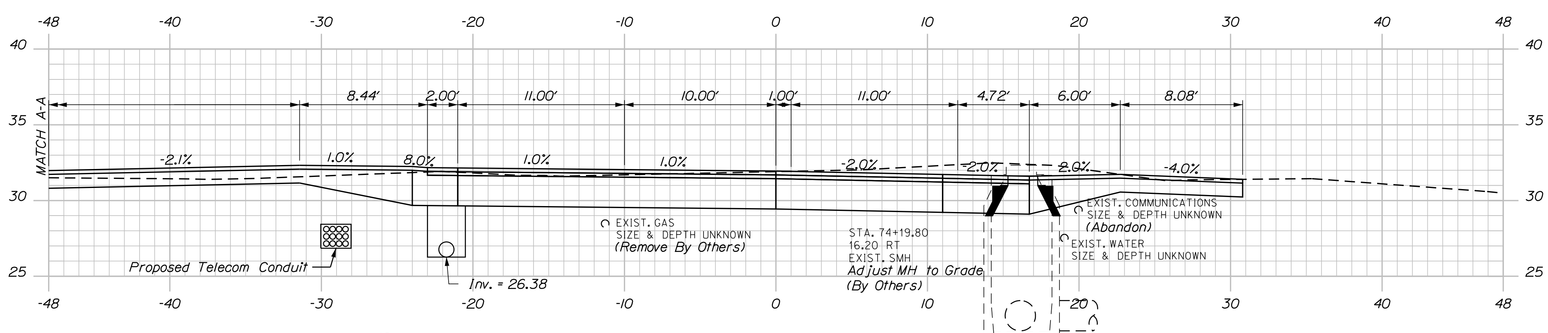


Sta. 74+33.00 Lt.
Construct Commercial Entrance

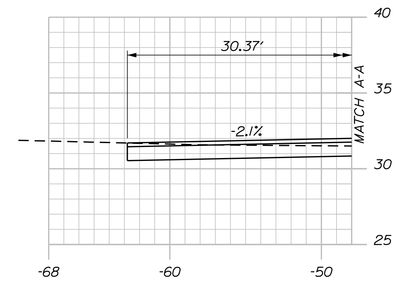
Sta. 74+50.00 Rt.
Construct Commercial Entrance

Sta. 74+50.00
End Project
Begin Transition
End Full Depth Construction
Begin Mill & 3" Pave

74+50.00



74+25.00



74+25.00

Bridge Street Sta. 74+25.00 to Sta. 74+75.00

SHEET NUMBER E4 OF E26

GARDINER ARCADE \ MAINE AVE.

CROSS SECTIONS

PROJ. MANAGER	B. KEEZER	BY	DATE
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

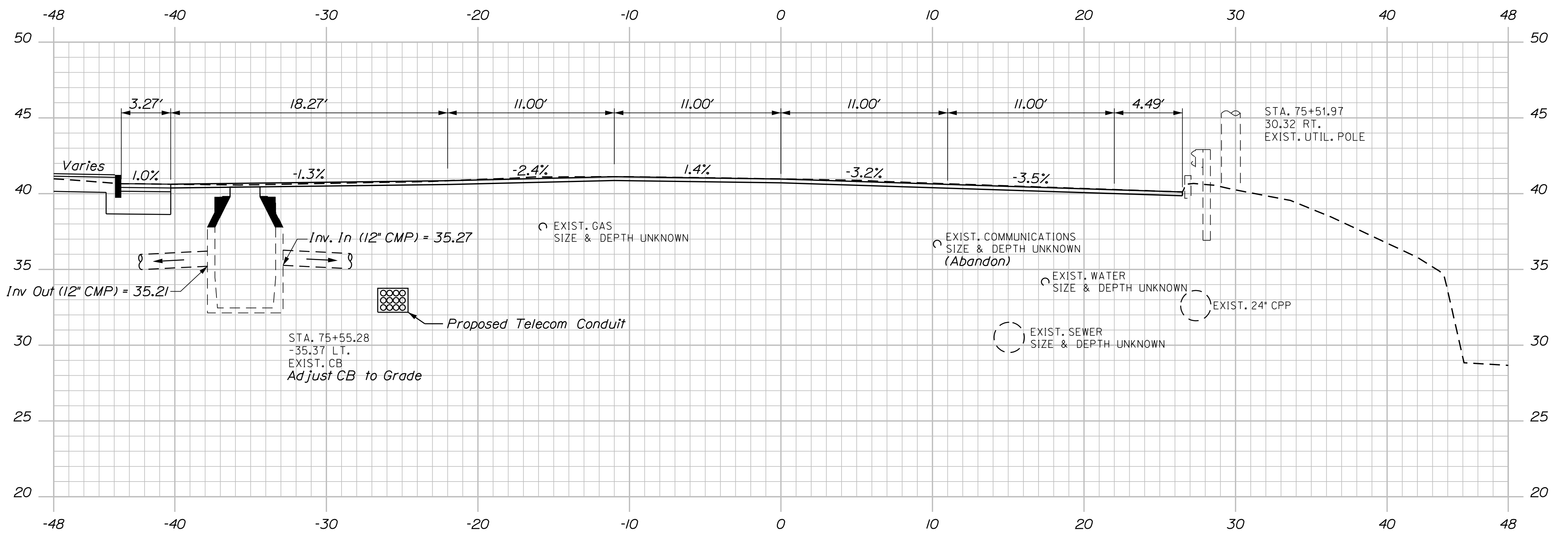
P.E. NUMBER

DATE

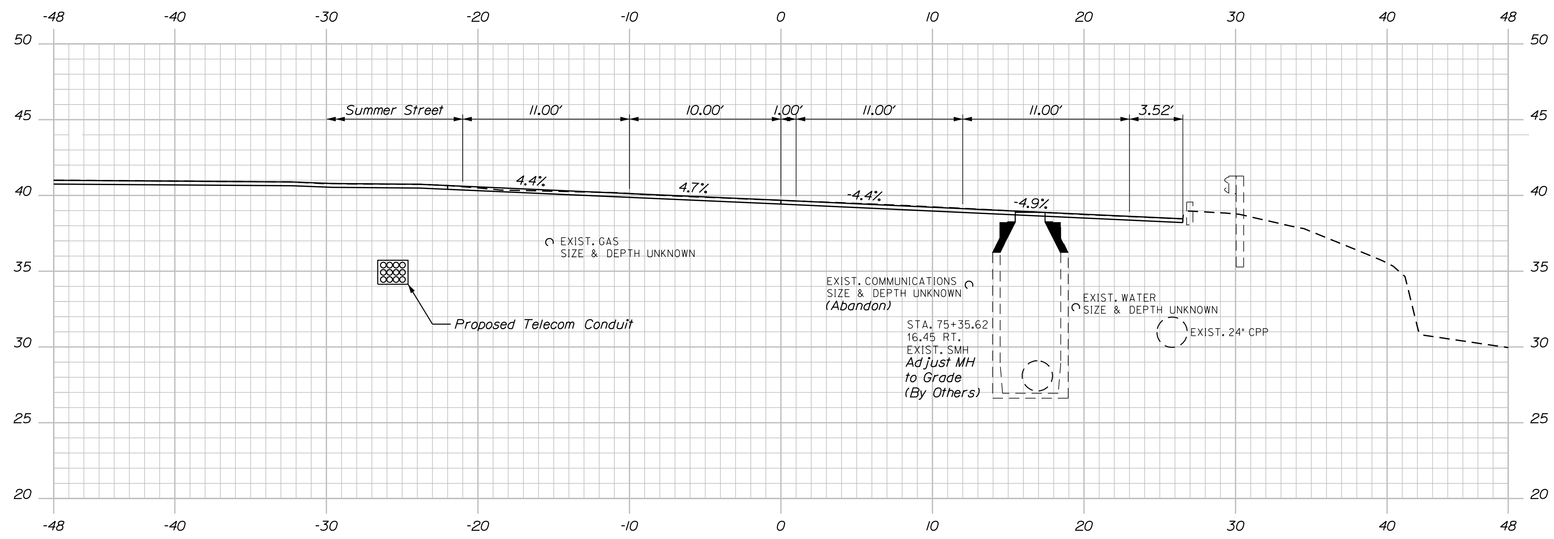
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

1873610

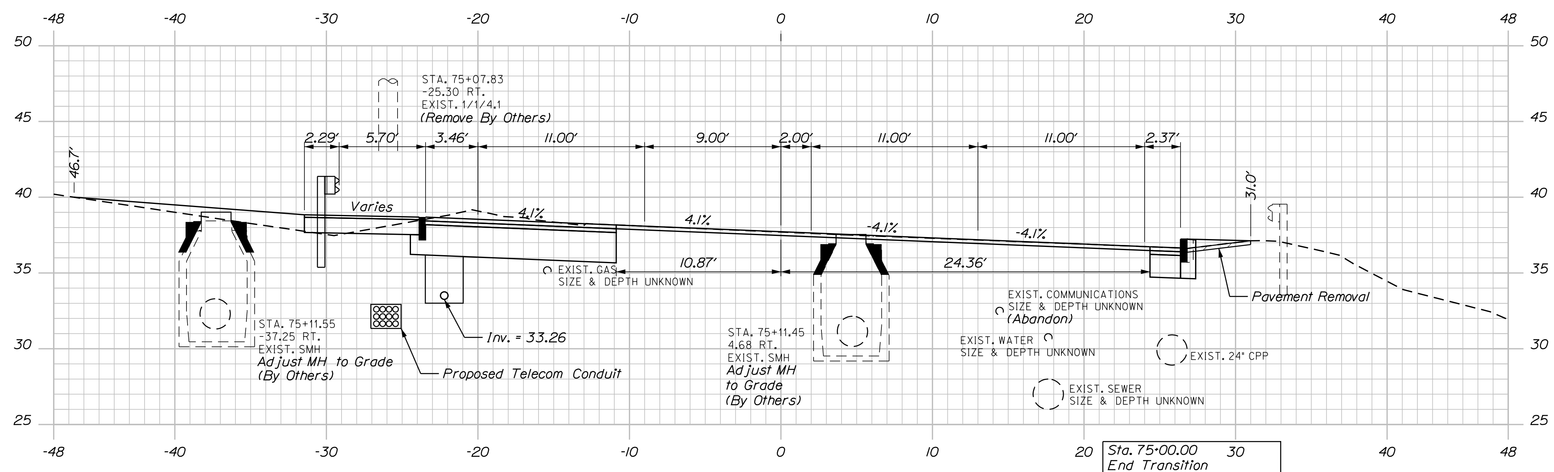
WIN 18735.00 HIGHWAY PLANS



75+50.00



75+25.00



Sta. 74+89.15, 98.14 Lt.
Install 31' W-Beam, Guardrail - Mid-Way Splice Tangent Terminal (TL-2)

75+00.00

Sta. 75+00.00 30
End Transition
End Mill & 3" Pave
Match Existing Pavement

Bridge Street Sta. 75+00.00 to Sta. 75+50.00

SHEET NUMBER E5 OF E26

GARDINER
RTE 9\126\US 201 & RTE 24
CROSS SECTIONS

		BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

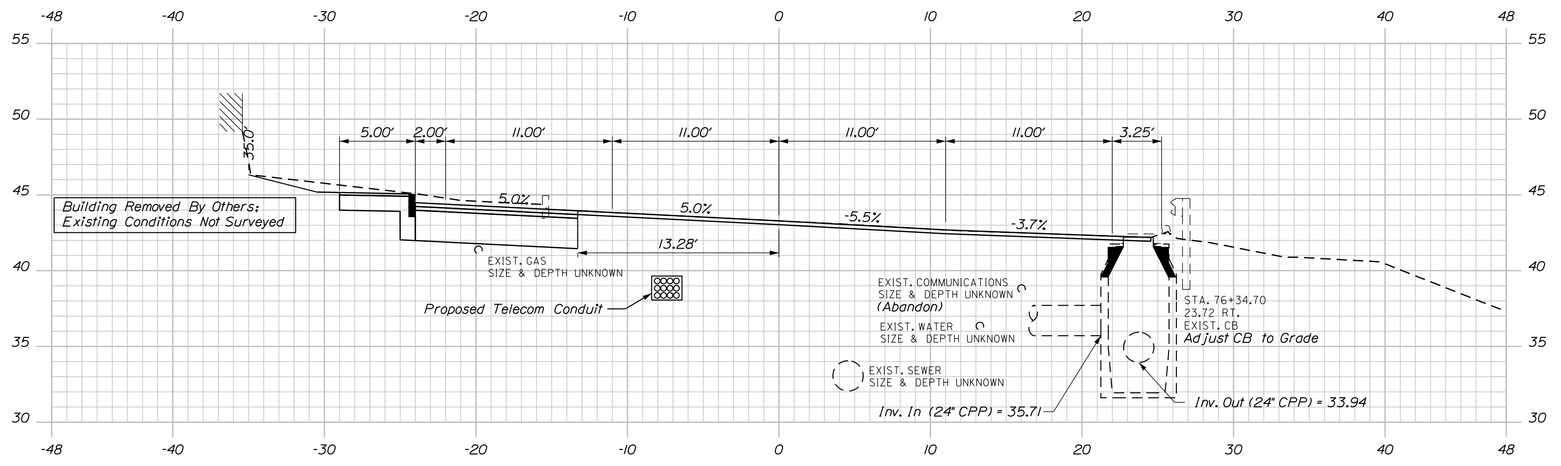
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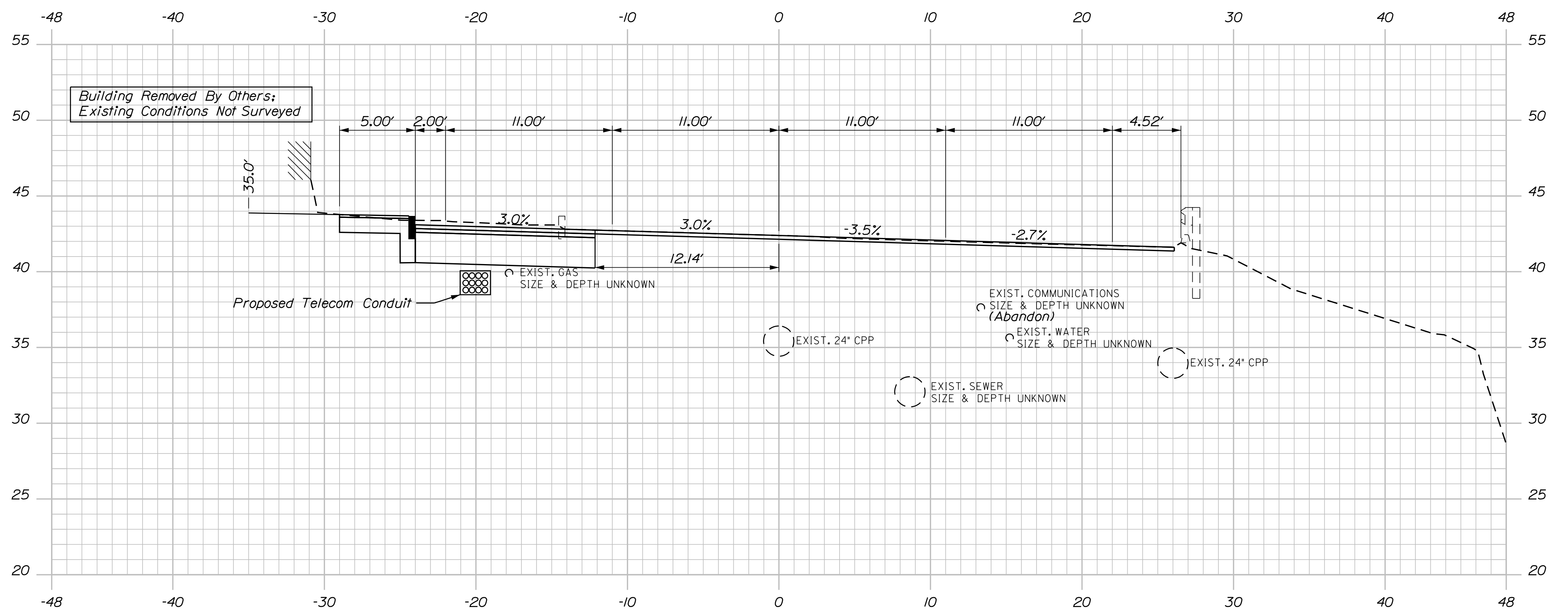
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

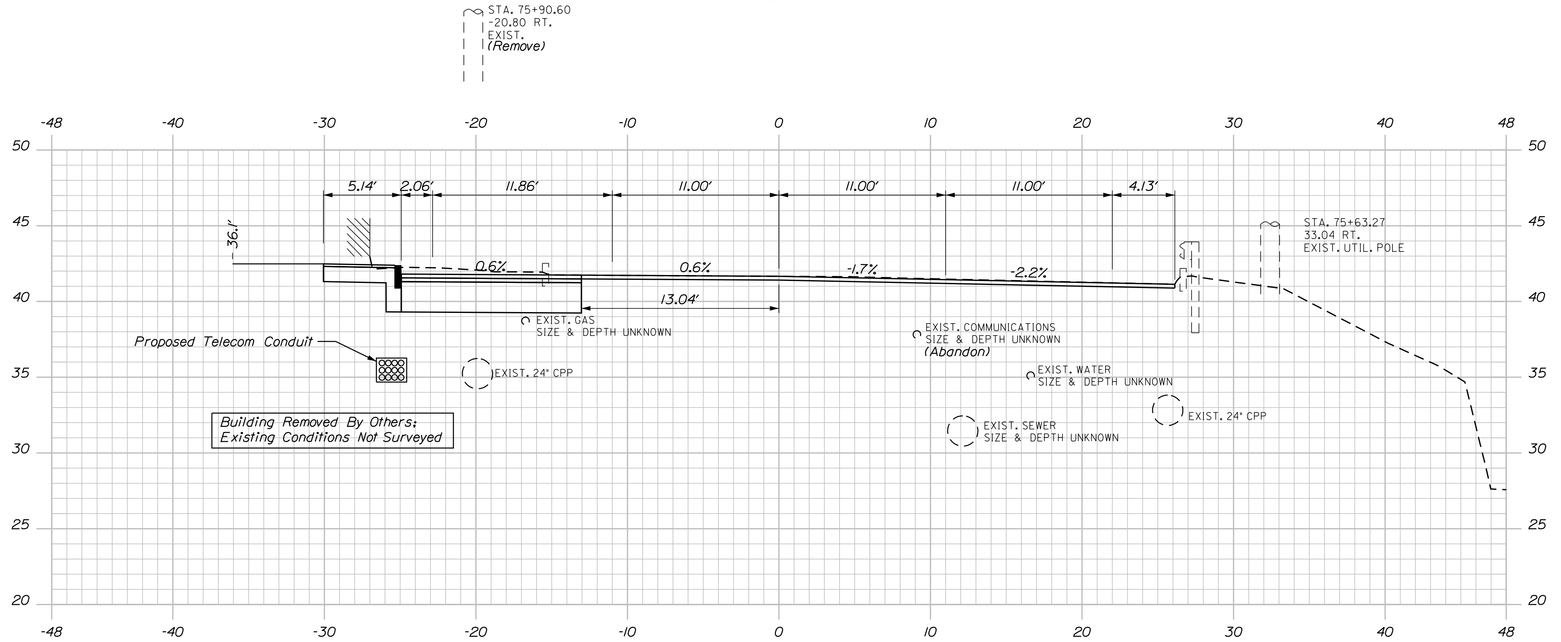
WIN
MULTI-WIN
HIGHWAY PLANS



76+25.00



76+00.00



75+75.00

Bridge Street Sta. 75+75.00 to Sta. 76+25.00

SHEET NUMBER E6 OF E26

GARDINER
RTE 9\126\US 201 & RTE 24
CROSS SECTIONS

		BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

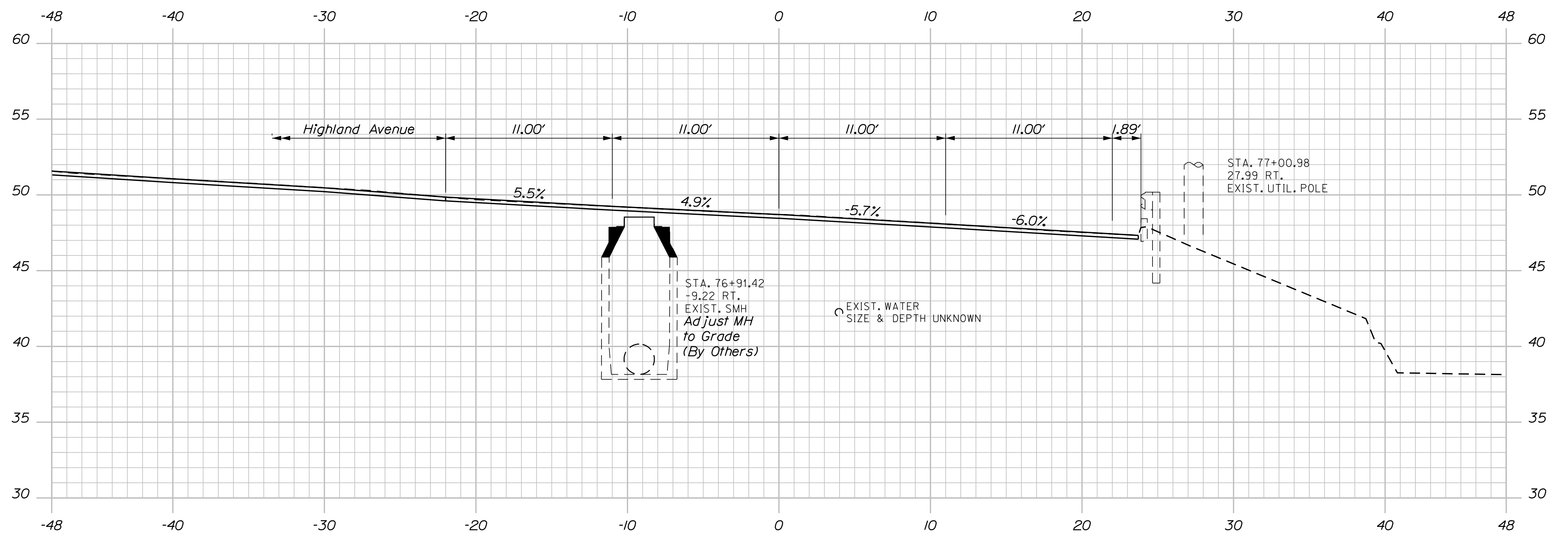
P.E. NUMBER

DATE

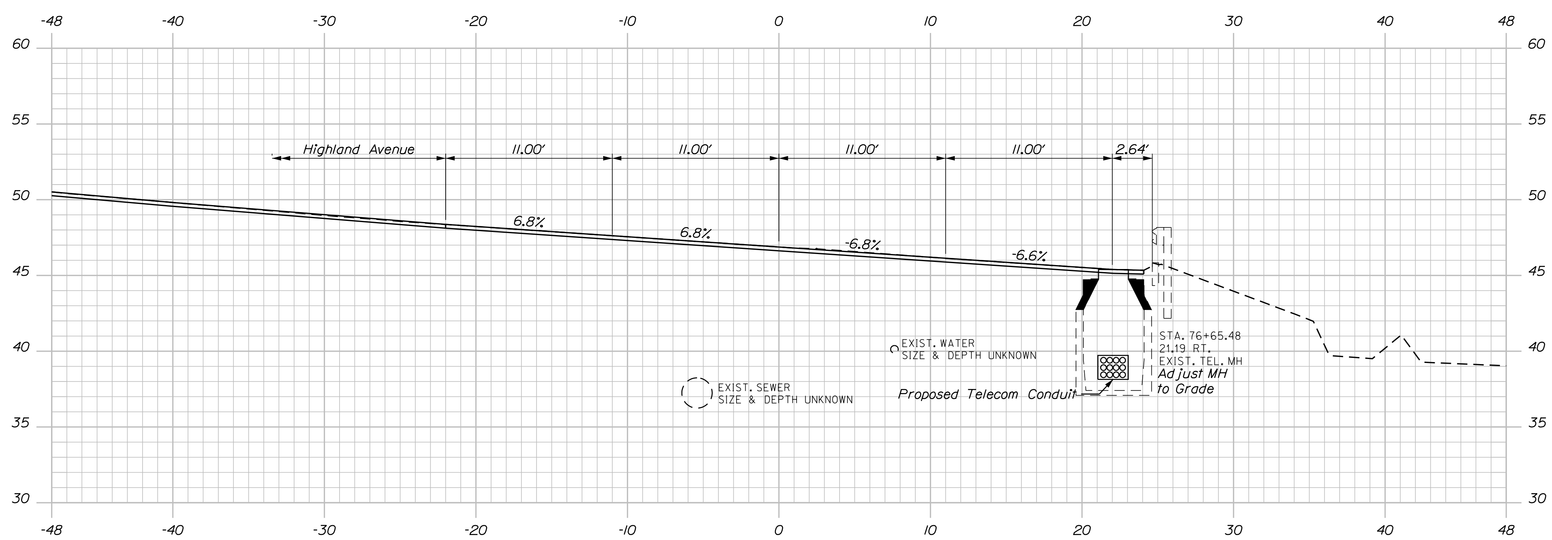
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
MULTI-WIN

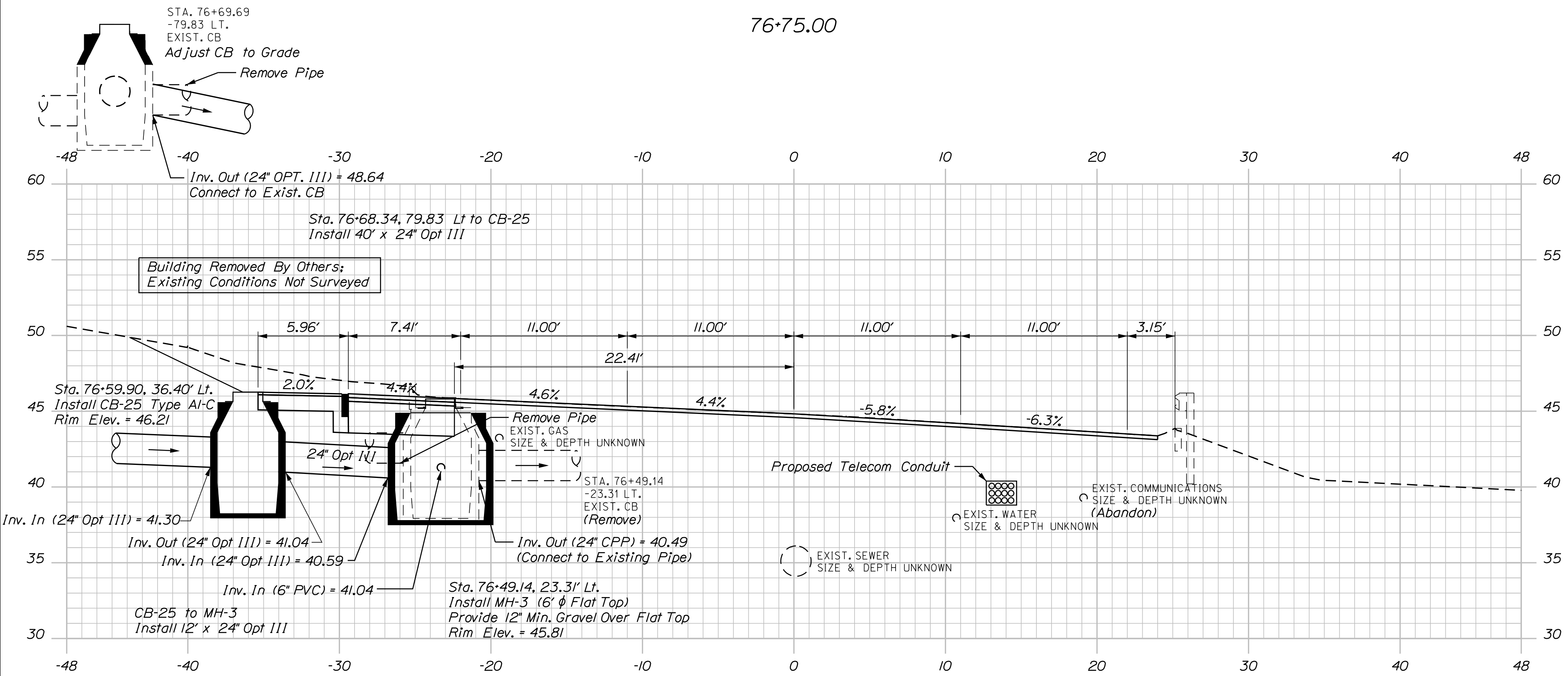
HIGHWAY PLANS



77+00.00



76+75.00



76+50.00

Bridge Street Sta. 76+50.00 to Sta. 77+00.00

SHEET NUMBER E7 OF E26

GARDINER
RTE 9\126\US 201 & RTE 24
CROSS SECTIONS

		BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

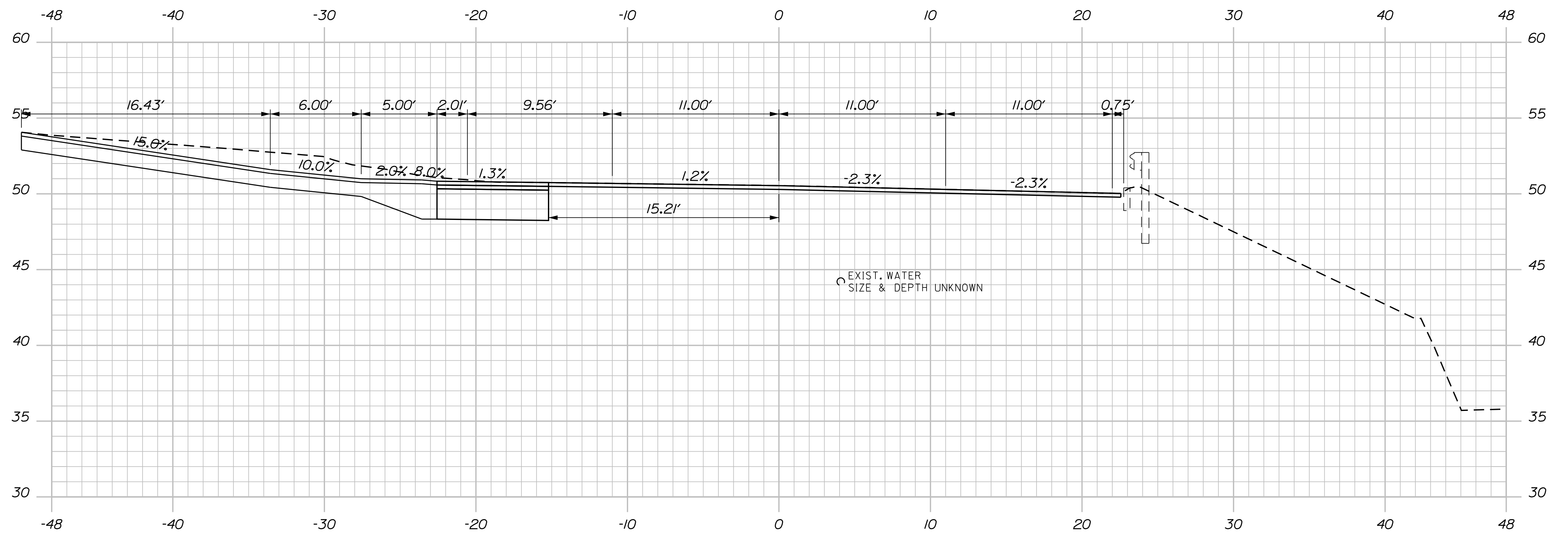
P.E. NUMBER

DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

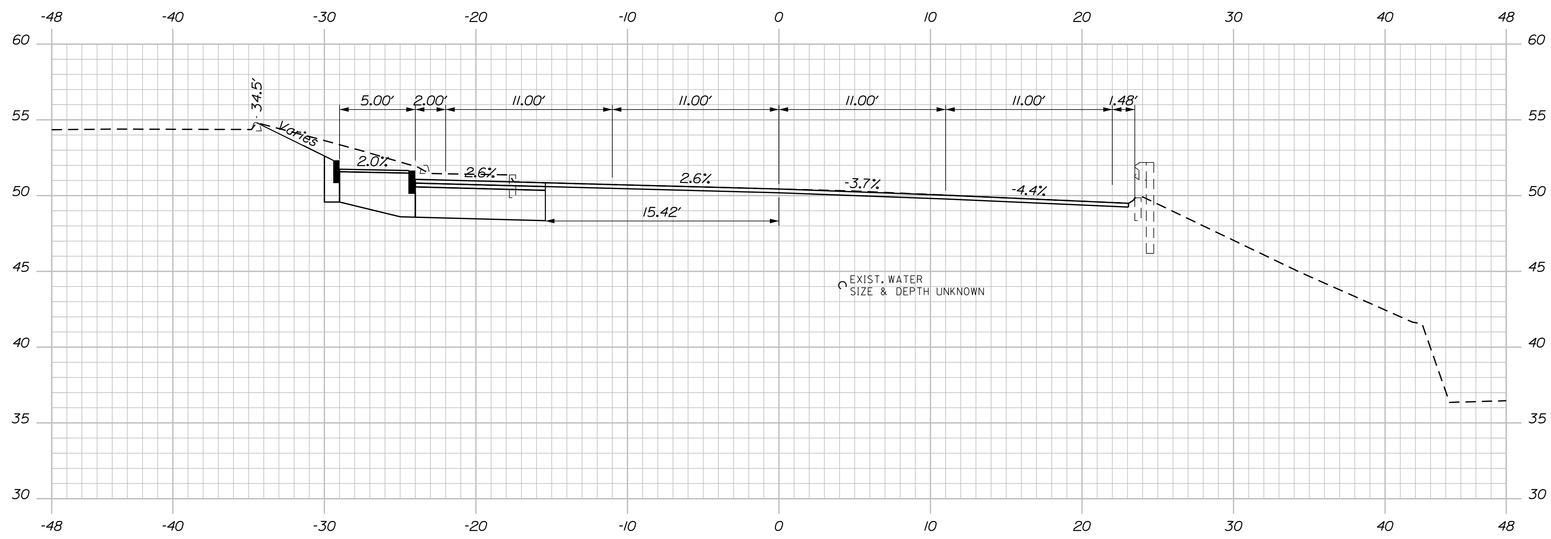
WIN
MULTI-WIN

HIGHWAY PLANS

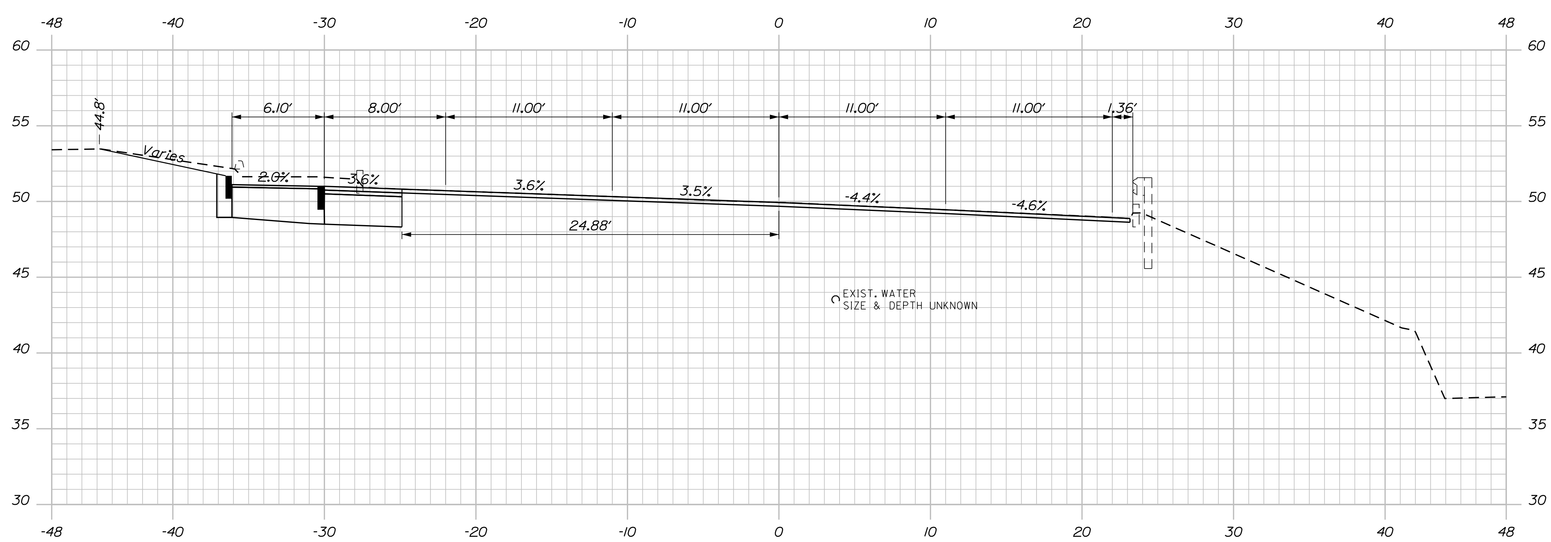


Sta. 77+83.25
Construct Paved Drive

77+75.00



77+50.00



77+25.00

Bridge Street Sta. 77+25.00 to Sta. 77+75.00

SHEET NUMBER E8 OF E26

GARDINER
RTE 9\126\US 201 & RTE 24

CROSS SECTIONS

		BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

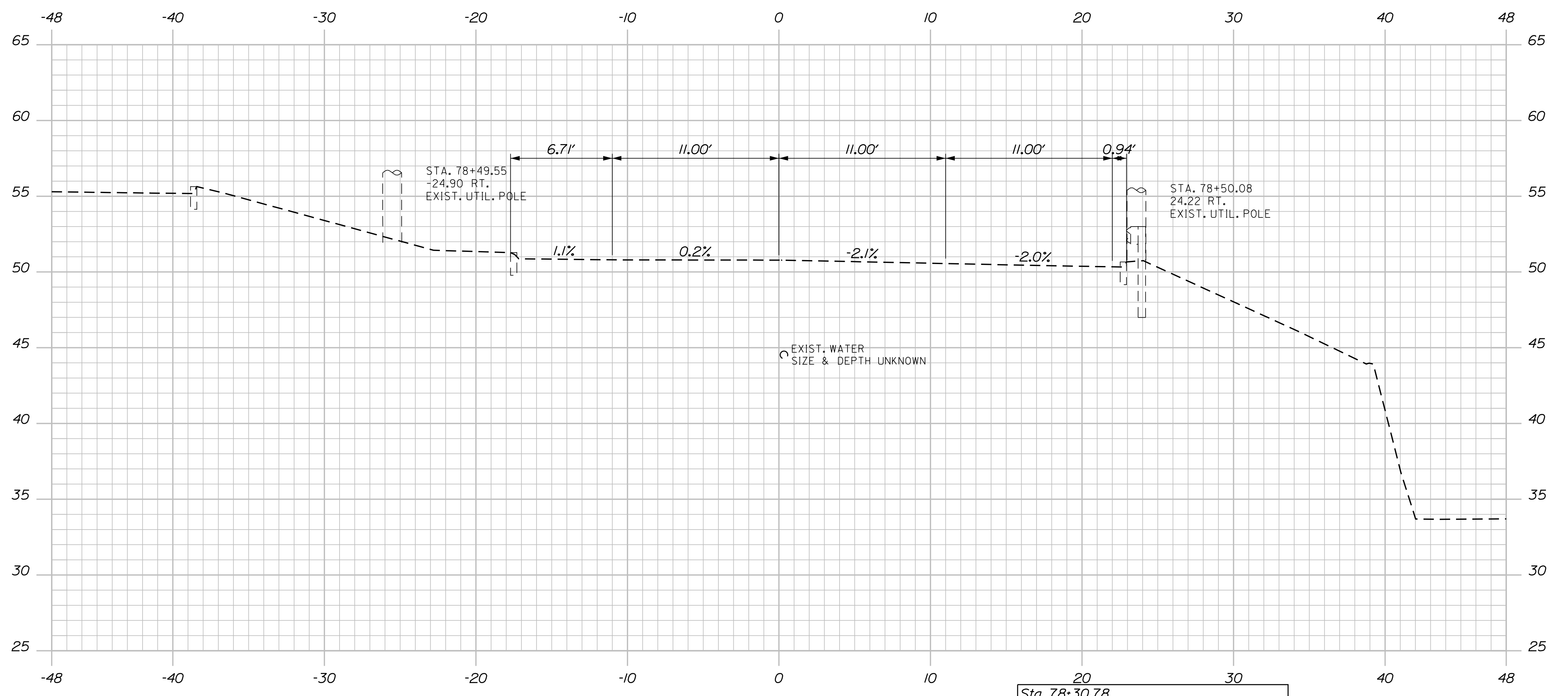
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P.E. NUMBER

DATE

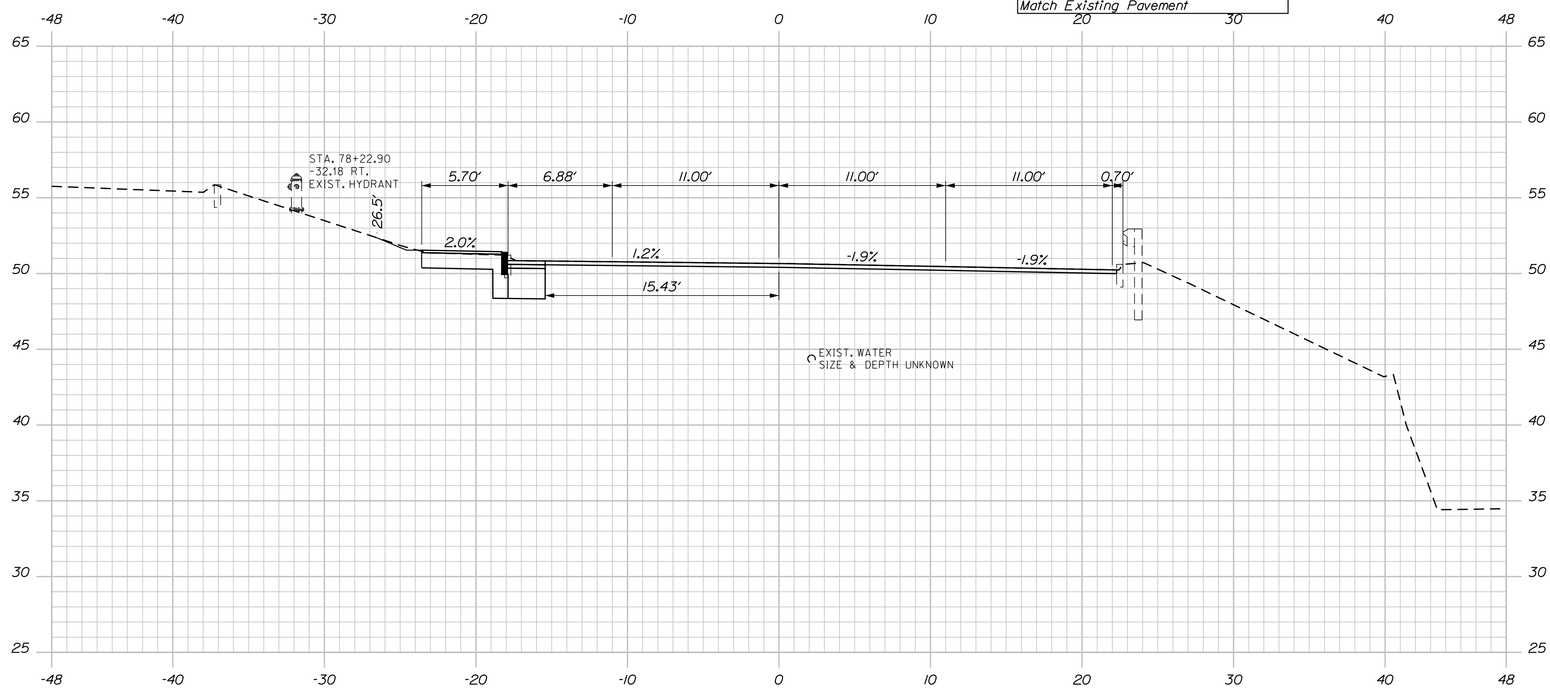
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
MULTI-WIN
HIGHWAY PLANS

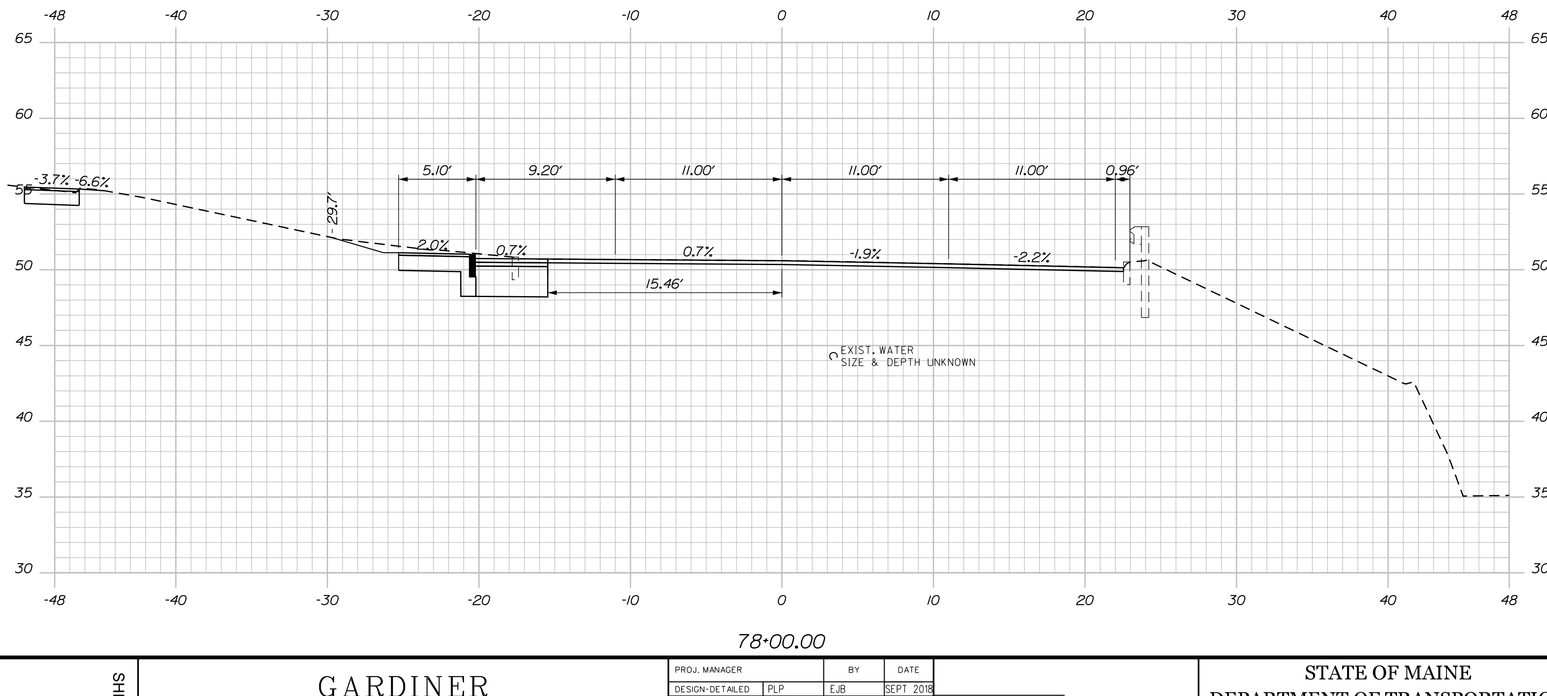


78+50.00

Sta. 78+30.78
Limit of Work
End Sawcut & Sidewalk Reconstruction
End Mill & 3" Pave
Match Existing Pavement



78+25.00



78+00.00

Bridge Street Sta. 78+00.00 to Sta. 78+50.00

SHEET NUMBER E9 OF E26

GARDINER
RTE 9\126\US 201 & RTE 24

CROSS SECTIONS

PROJ. MANAGER		BY	DATE
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

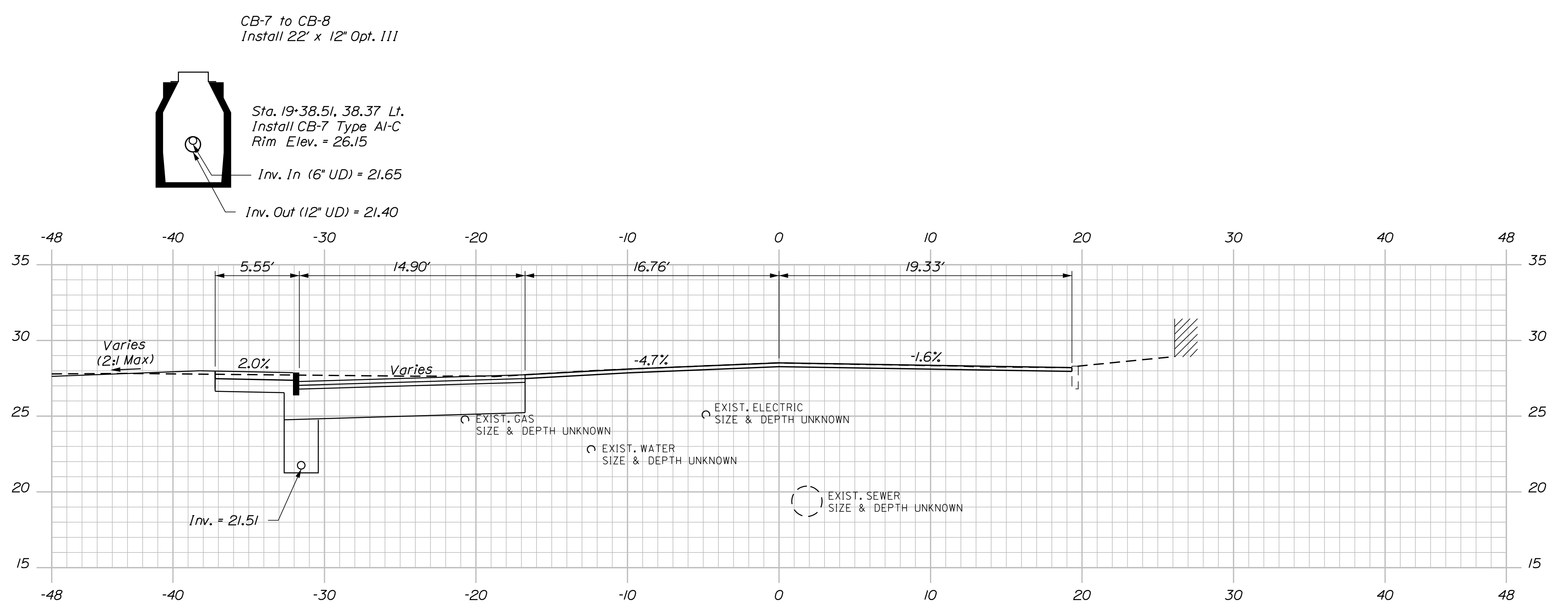
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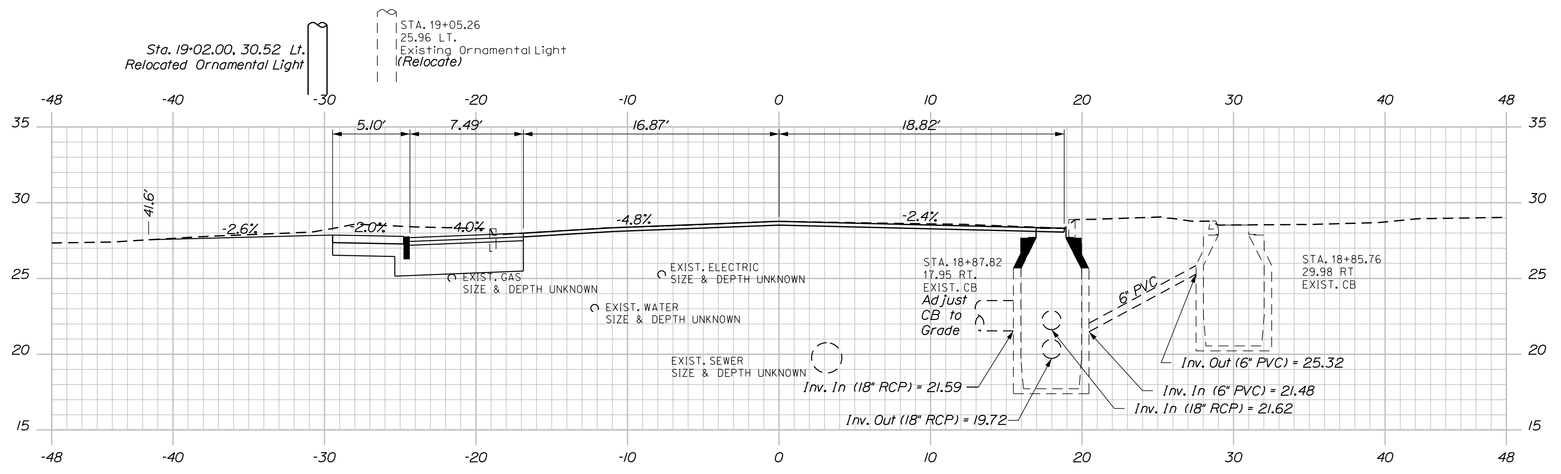
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

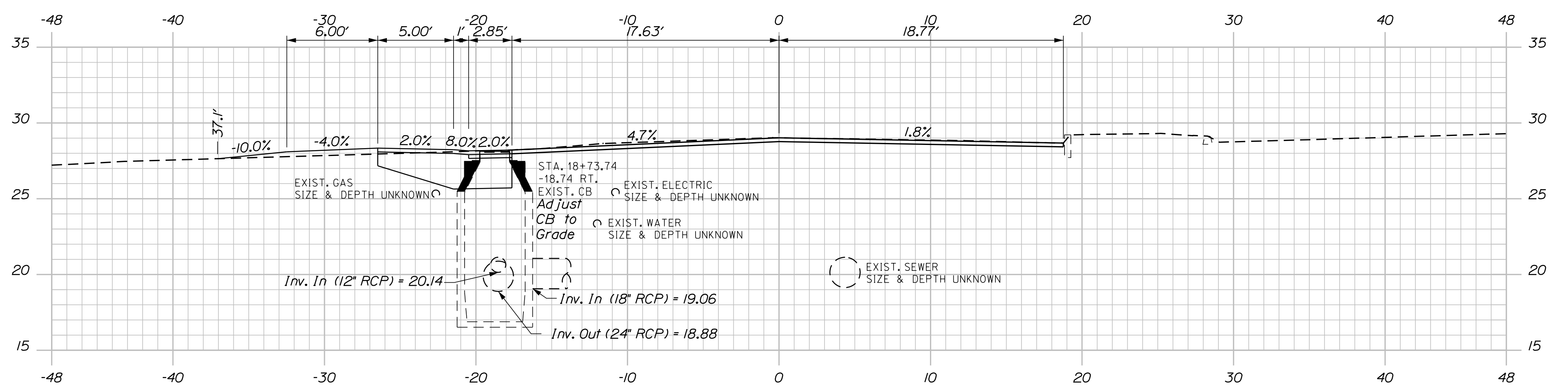
WIN
MULTI-WIN
HIGHWAY PLANS



19+25.00

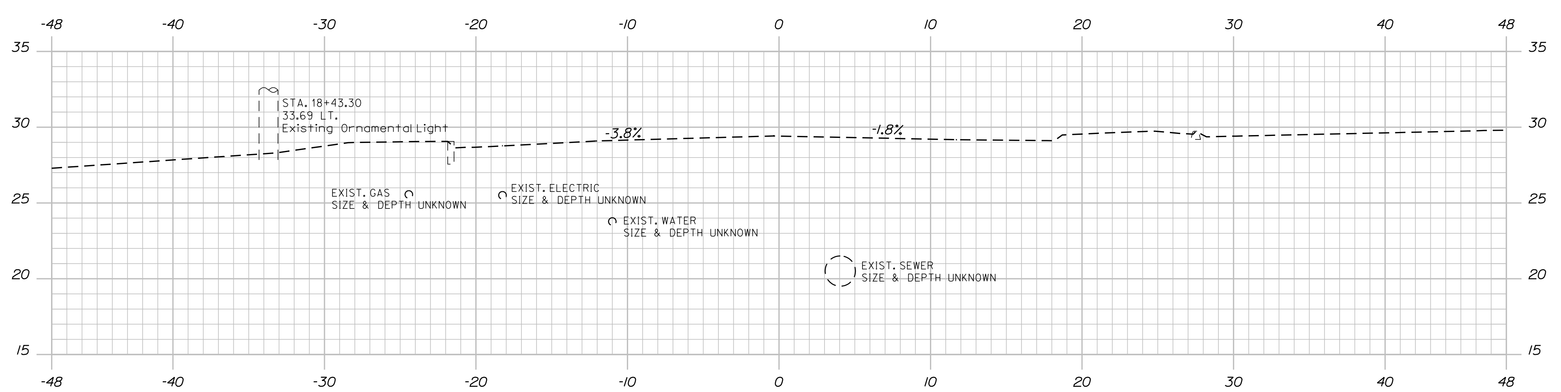


19+00.00



18+75.00

Sta. 18+54.06
Limit of Work
Begin Sawcut & Sidewalk Reconstruction
Begin Mill & 3" Pave



18+50.00

Water Street Sta. 18+50.00 to Sta. 19+25.00

SHEET NUMBER E10 OF E26

GARDINER
RTE 9\126\US 201 & RTE 24

CROSS SECTIONS

PROJ. MANAGER		BY	DATE
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

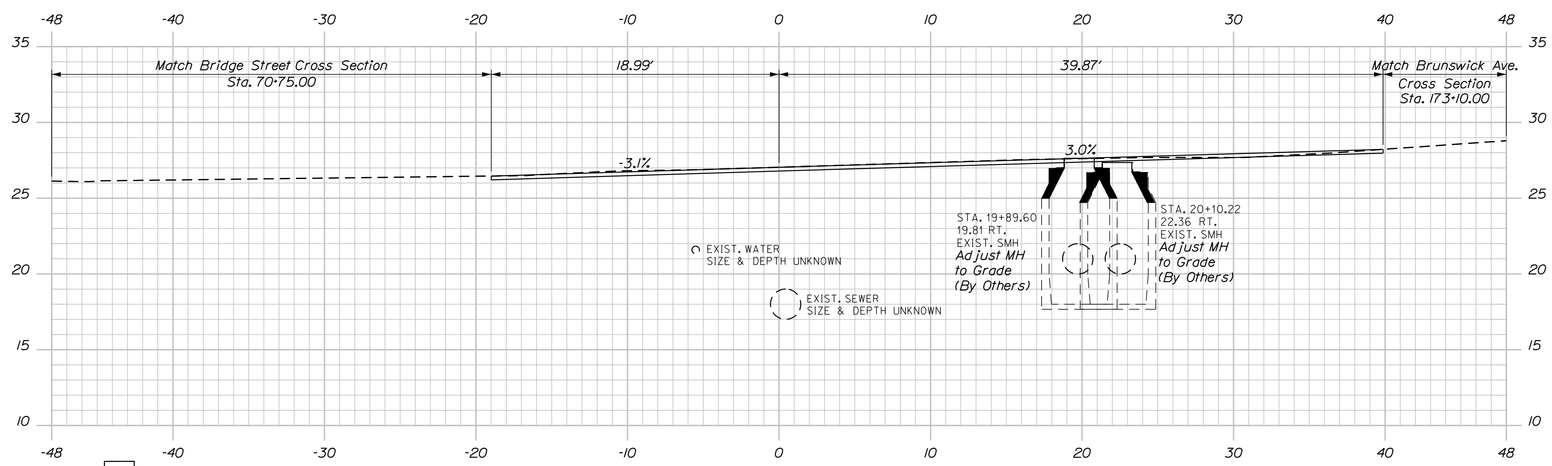
P.E. NUMBER

DATE

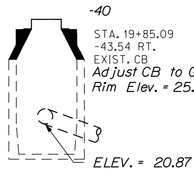
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

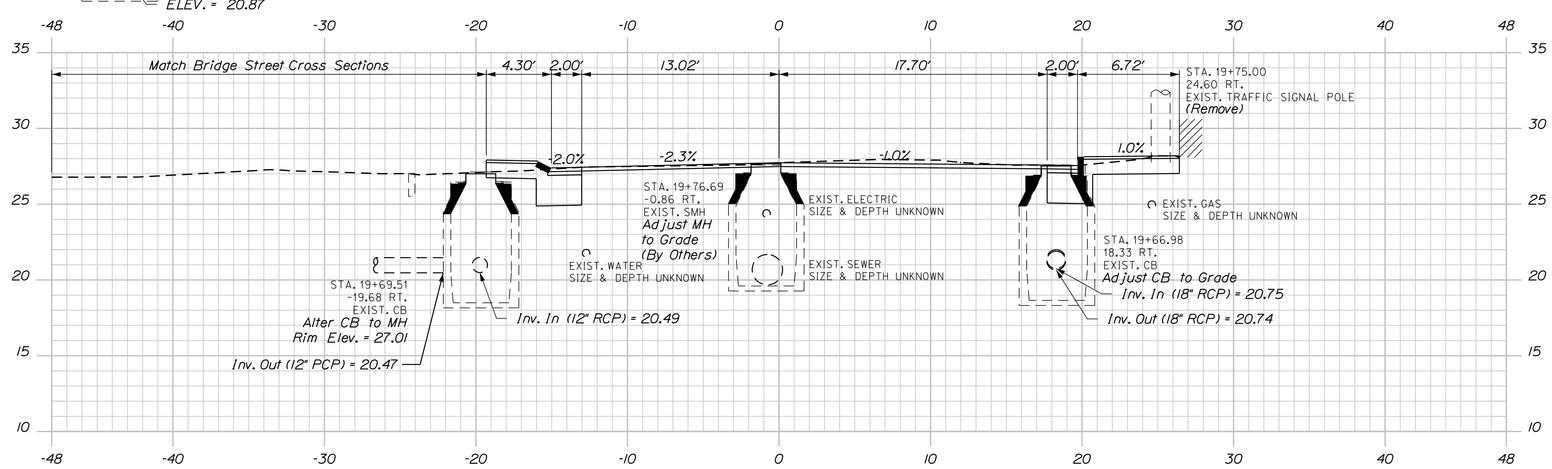
WIN
MULTI-WIN

HIGHWAY PLANS

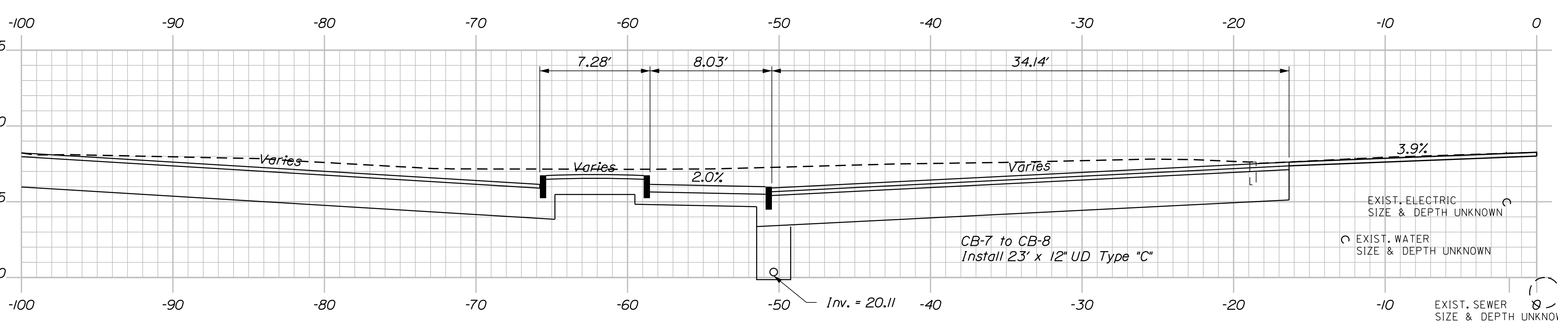


20+00.00





19+75.00



19+50.00

Water Street Sta. 19+50.00 to Sta. 20+00.00

SHEET NUMBER E11 OF E26

GARDINER
RTE 9\126\US 201 & RTE 24

CROSS SECTIONS

PROJ. MANAGER		BY	DATE
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

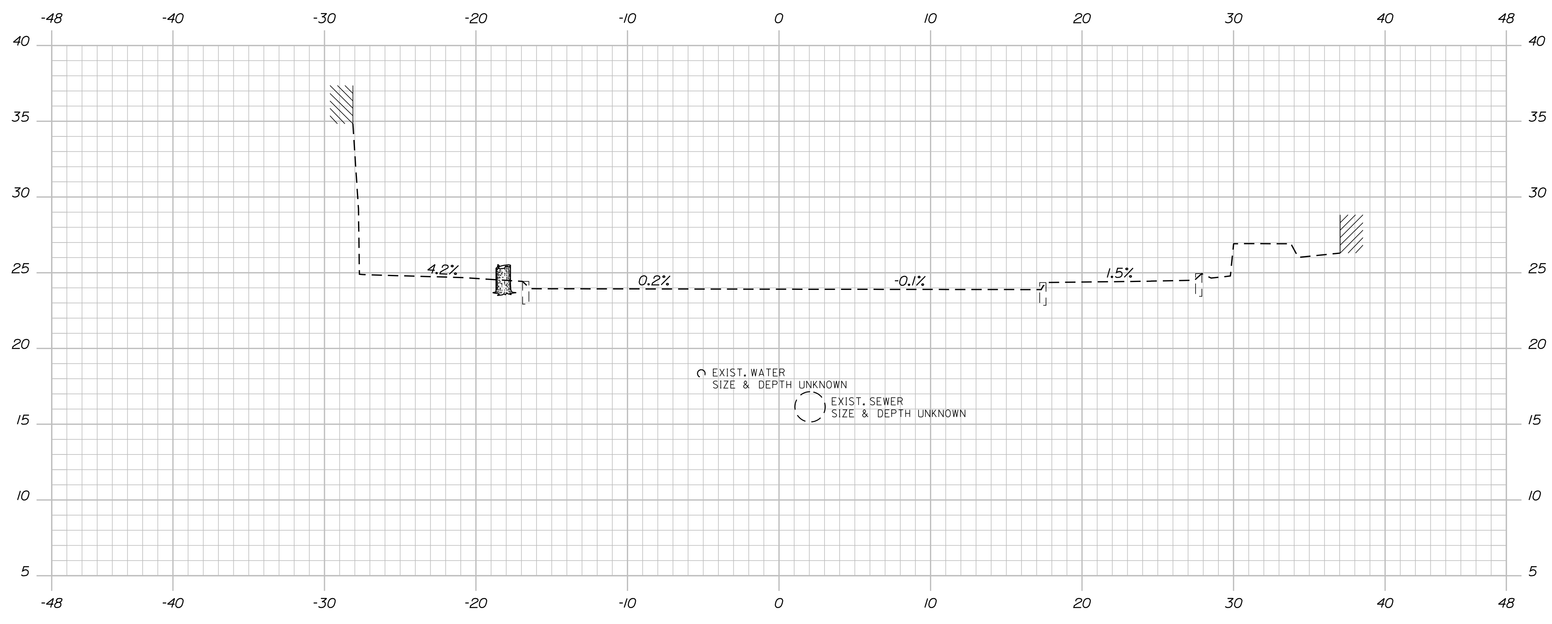
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P.E. NUMBER

DATE

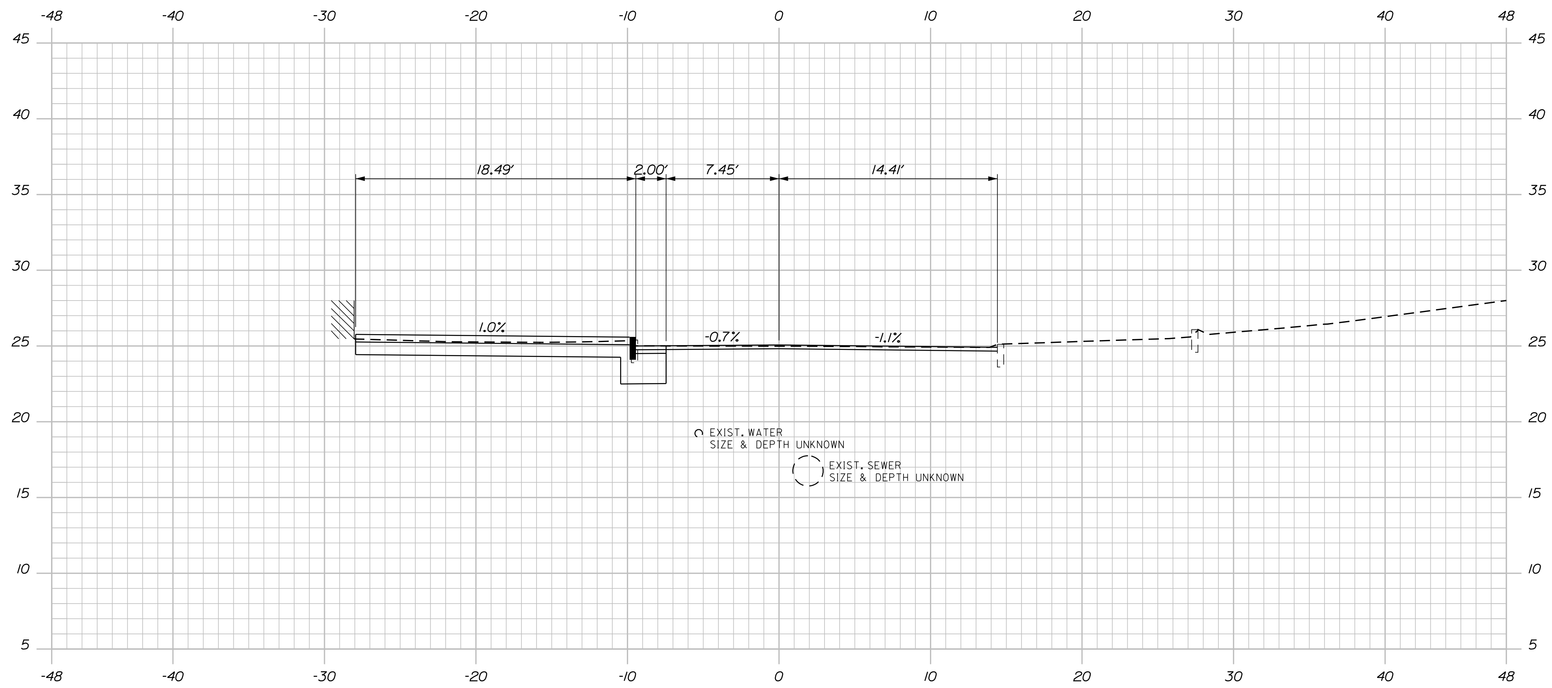
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
MULTI-WIN
HIGHWAY PLANS

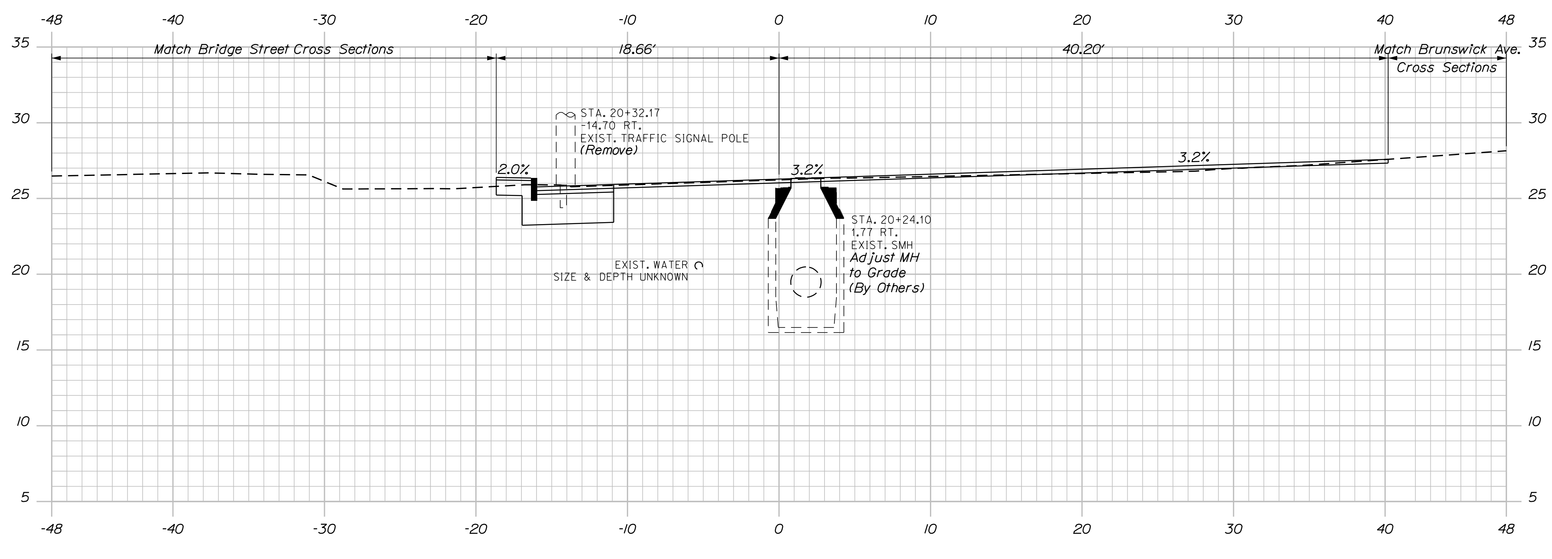


20+75.00

Sta. 20+57.84
Limit of Work
End Mill & 3" Pave
End Sawcut & Sidewalk Reconstruction
Match Existing Pavement



20+50.00



20+25.00

Water Street Sta. 20+25.00 to Sta. 20+75.00

SHEET NUMBER E12 OF E26

GARDINER
RTE 9\126\US 201 & RTE 24

CROSS SECTIONS

PROJ. MANAGER		BY	DATE
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

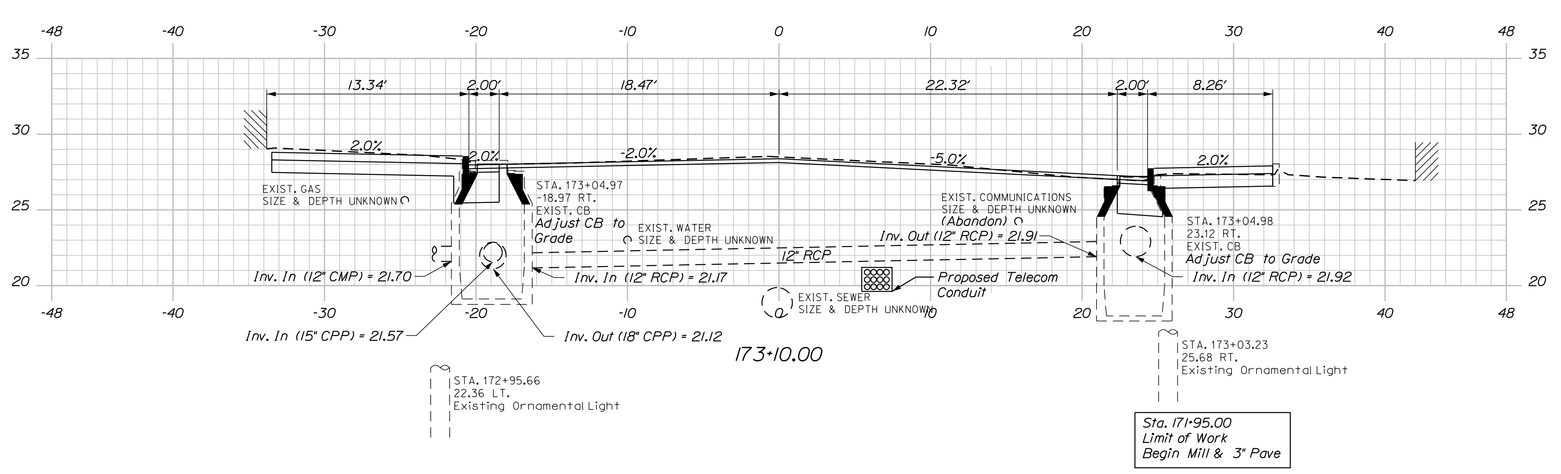
SIGNATURE

P.E. NUMBER

DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
MULTI-WIN HIGHWAY PLANS



Brunswick Avenue Sta. 173+10.00

SHEET NUMBER E13 OF E26

GARDINER
RTE 9\126\US 201 & RTE 24

CROSS SECTIONS

		BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

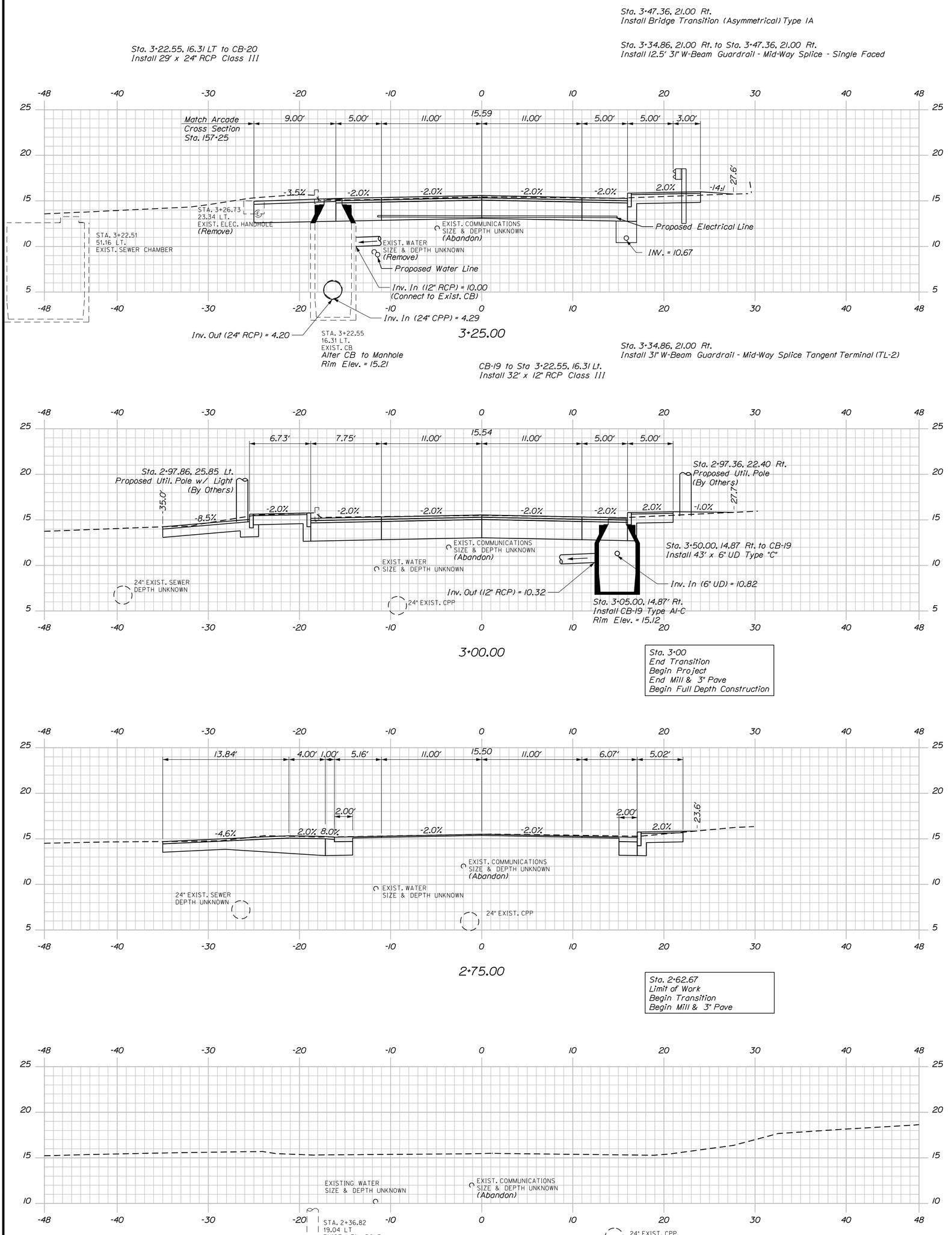
P.E. NUMBER

DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
MULTI-WIN

HIGHWAY PLANS



Maine Ave Sta. 2+50.00 to Sta. 3+25.00

SHEET NUMBER E14 OF E26

GARDINER
ROUTE 24/9/126/US 201

CROSS SECTIONS

PROJ. MANAGER		BY	DATE
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

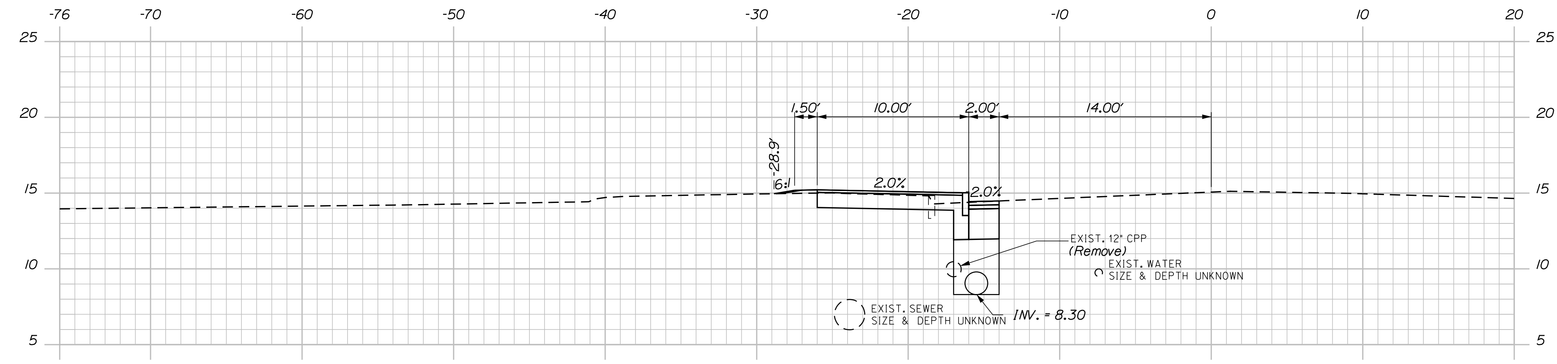
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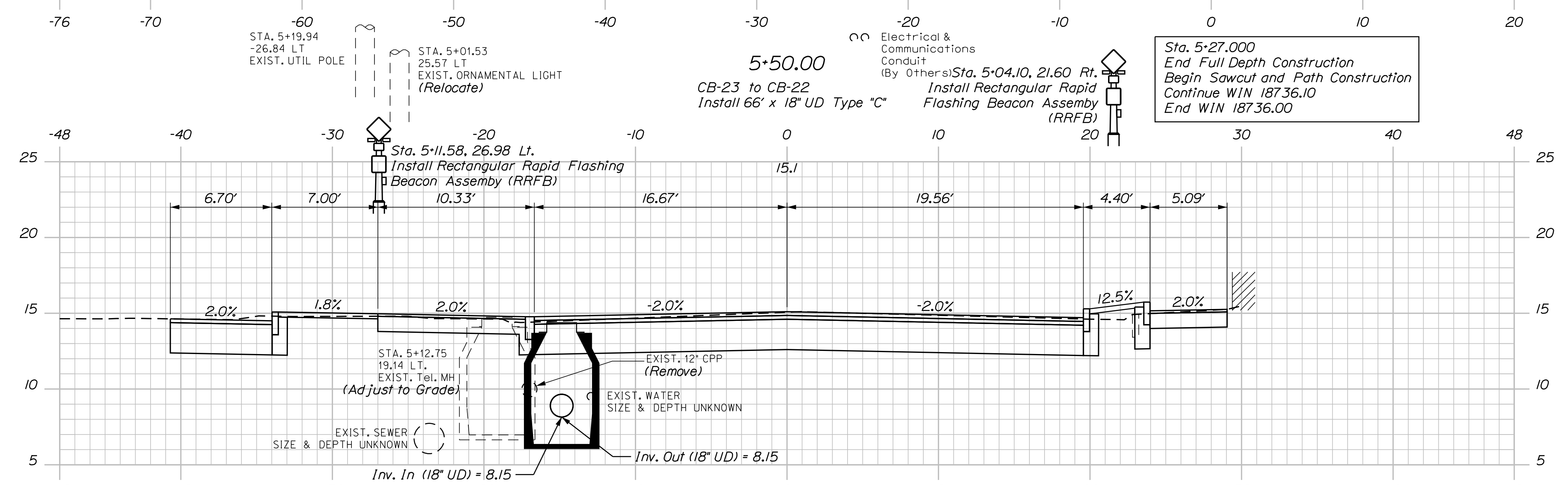
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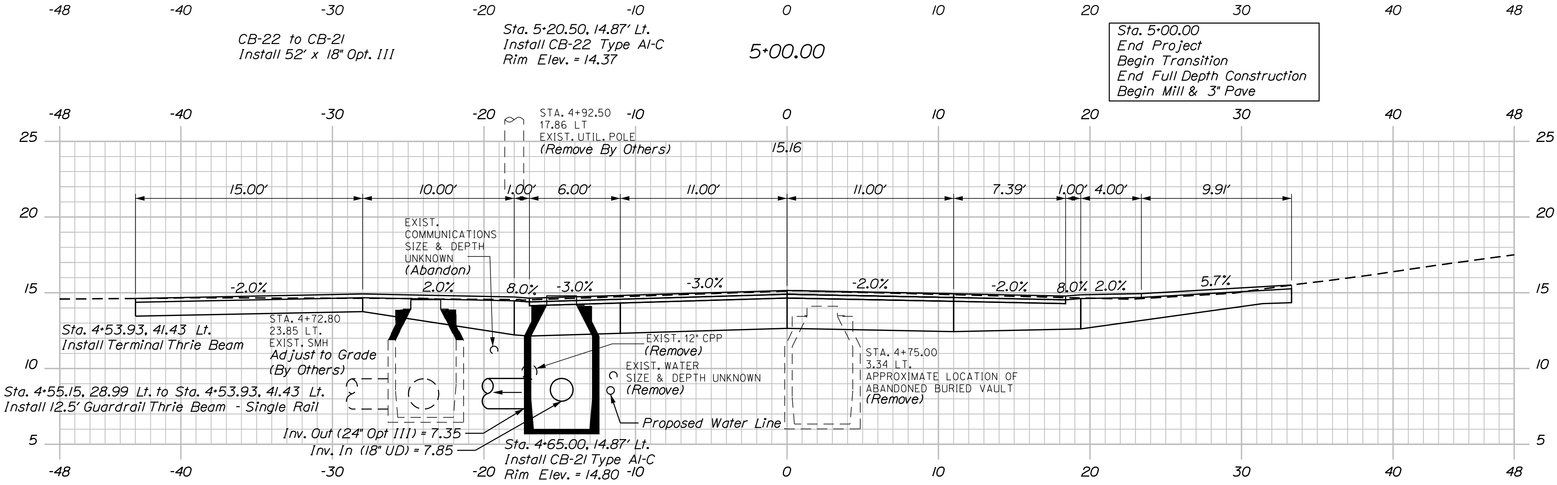
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

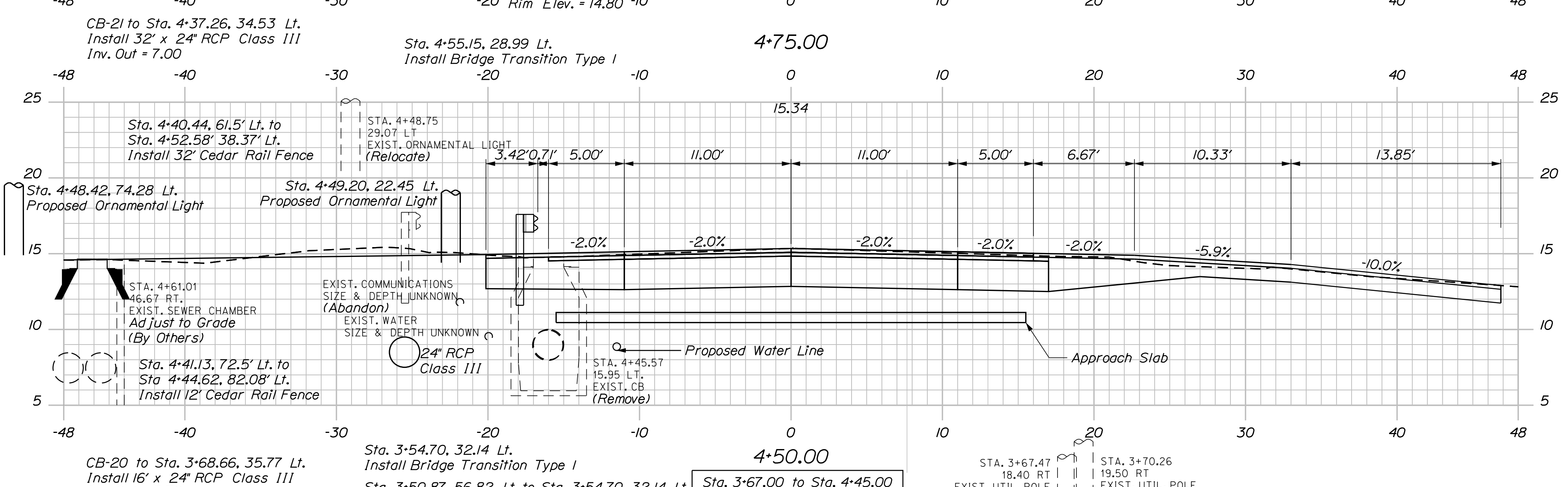
WIN
MULTI-WIN

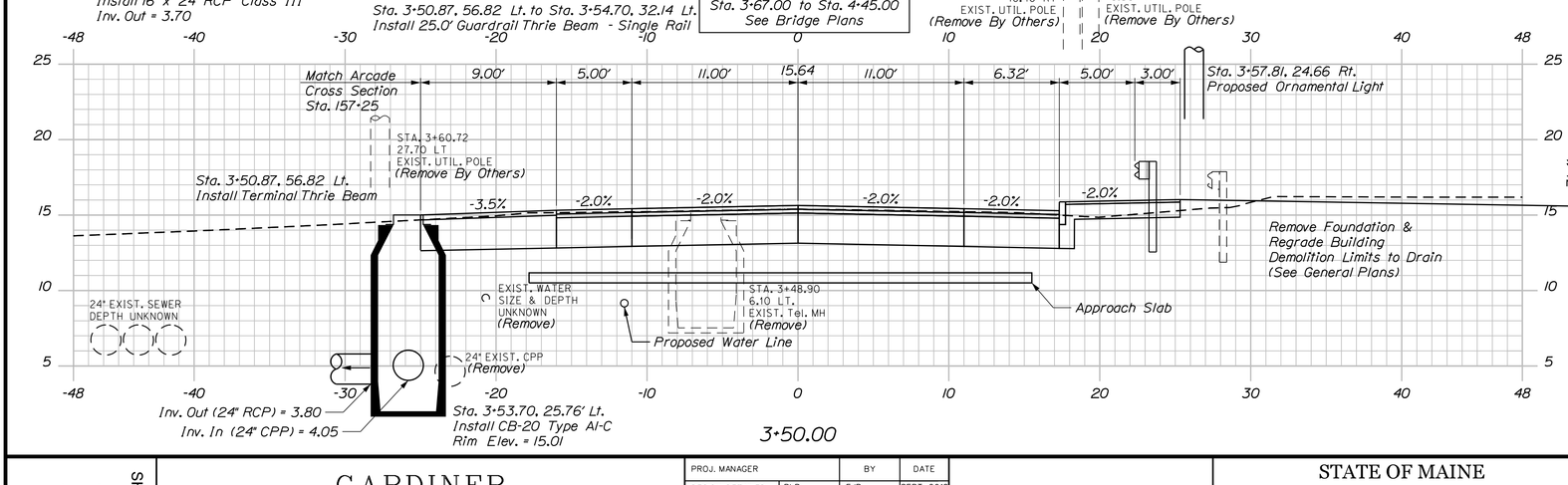
HIGHWAY PLANS











Maine Ave. Sta. 3+50.00 to Sta. 5+50.00

SHEET NUMBER E15 OF E26

GARDINER
ROUTE 24/9/126/US 201
CROSS SECTIONS

PROJ. MANAGER		BY	DATE
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

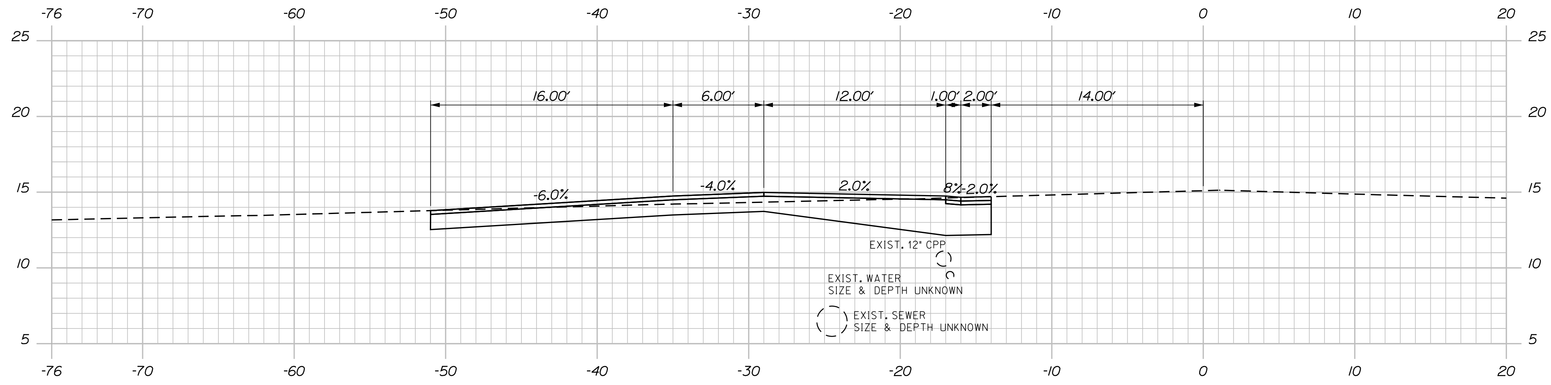
P.E. NUMBER

DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

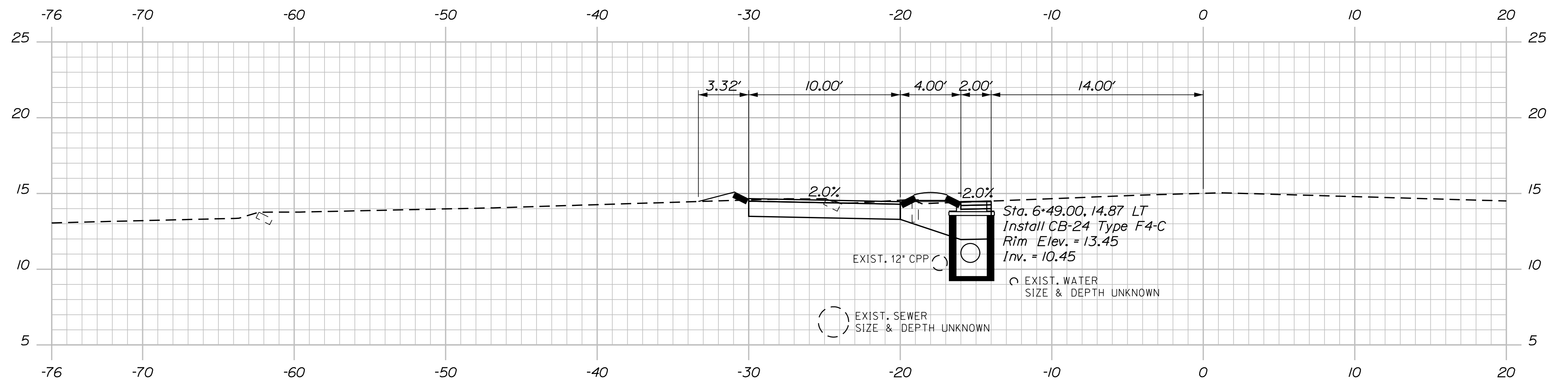
WIN
MULTI-WIN

HIGHWAY PLANS

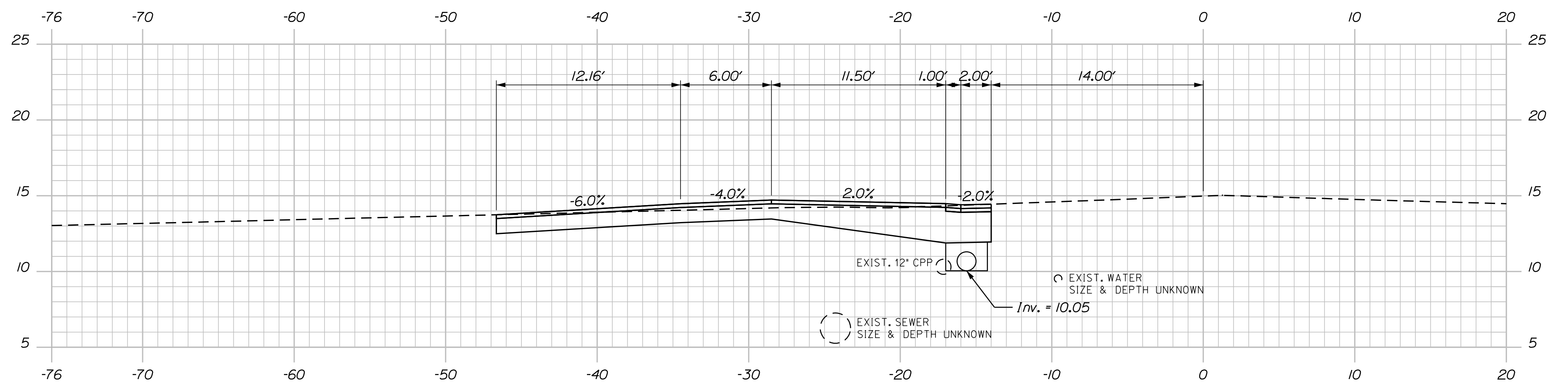


Sta. 6+70.00 Lt.
Construct Paved Commercial Drive

6+70.00

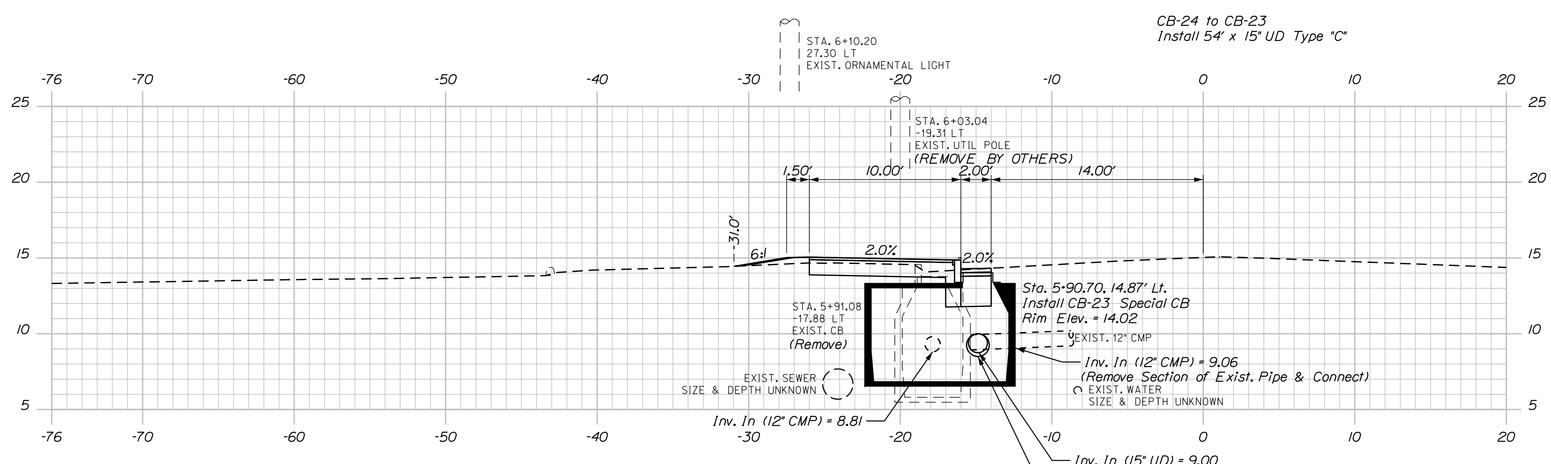


6+50.00



Sta. 6+30.00 Lt.
Construct Paved Commercial Drive

6+30.00



6+00.00

Maine Ave. Sta. 6+00.00 to Sta. 6+70.00

SHEET NUMBER E16 OF E26

GARDINER
ROUTE 24/9/126/US 201

CROSS SECTIONS

PROJ. MANAGER		BY	DATE
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

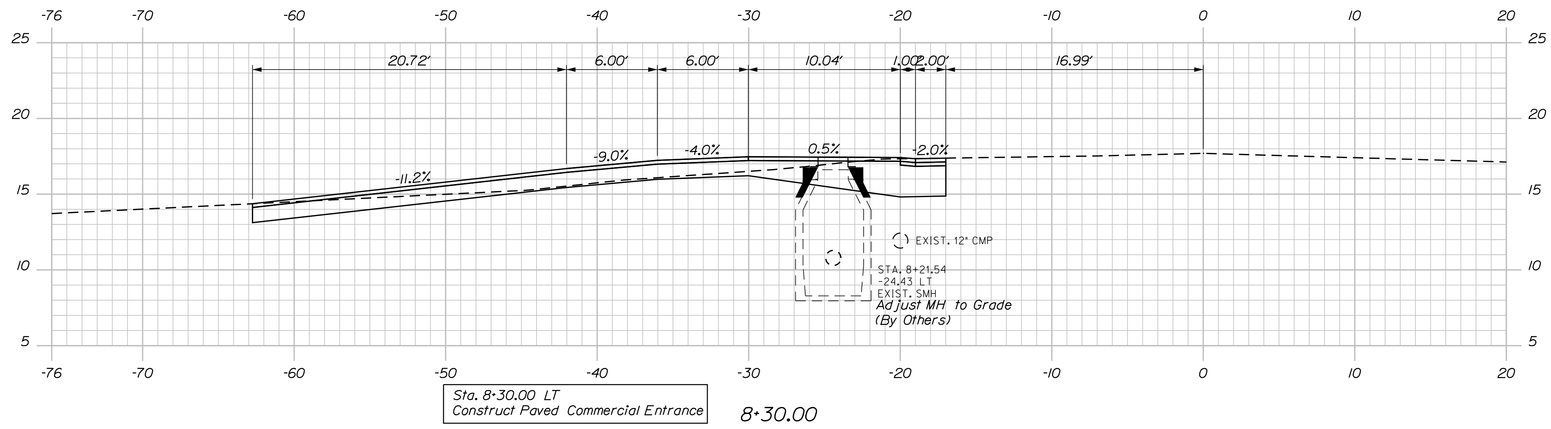
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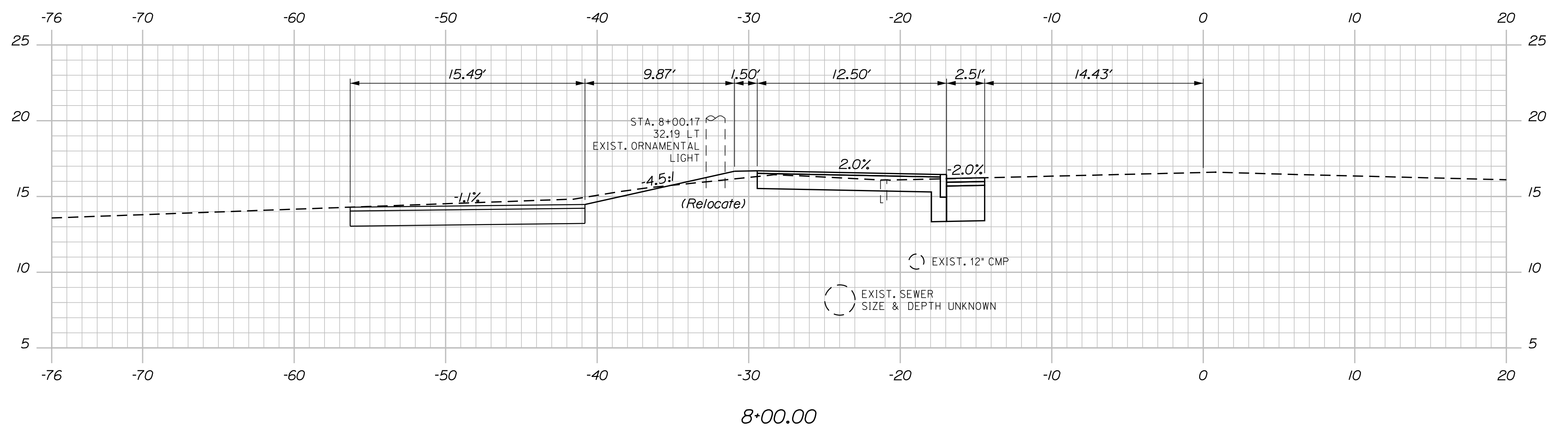
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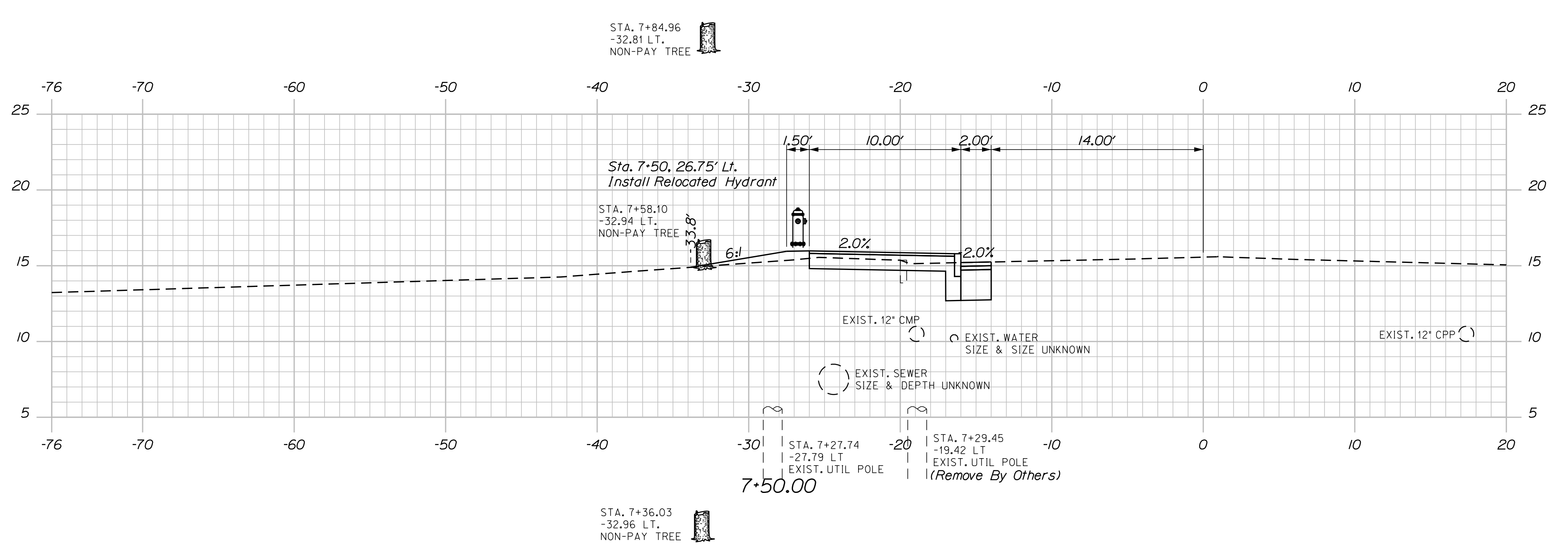
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

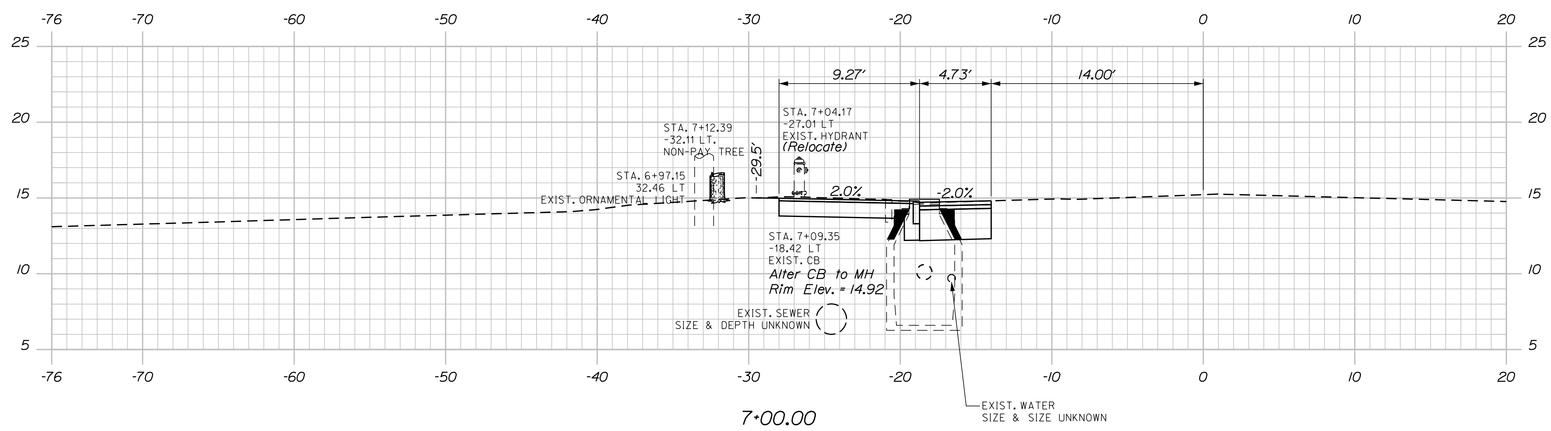
WIN
MULTI-WIN

HIGHWAY PLANS









Maine Ave. Sta. 7+00.00 to Sta. 8+30.00

SHEET NUMBER E17 OF E26

GARDINER
ROUTE 24/9/126/US 201

CROSS SECTIONS

PROJ. MANAGER		BY	DATE
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

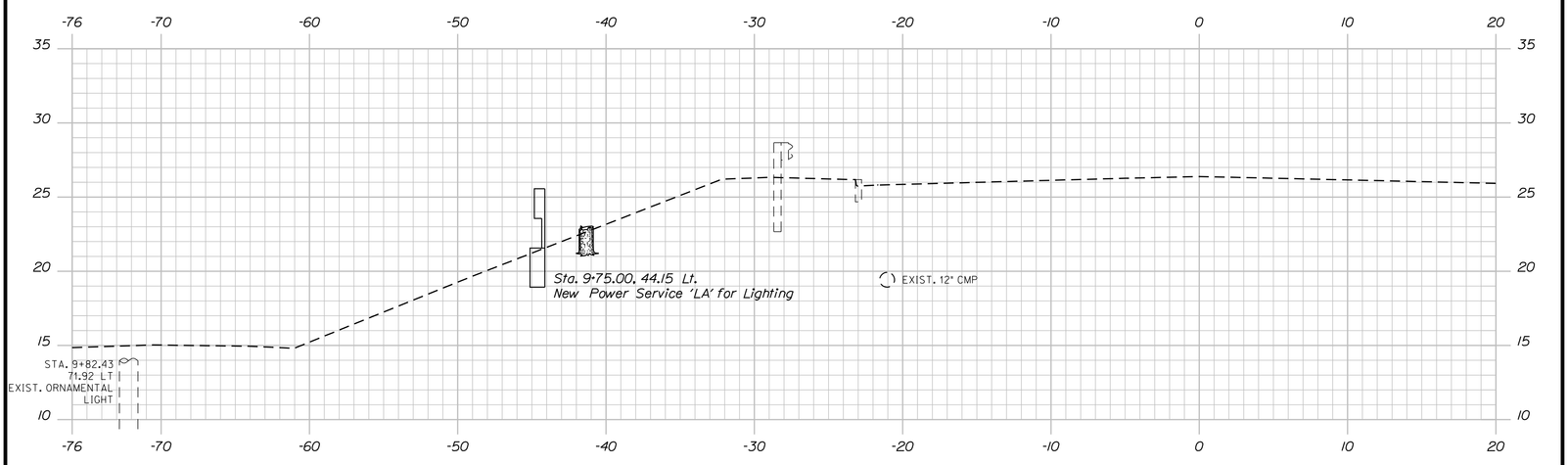
P.E. NUMBER

DATE

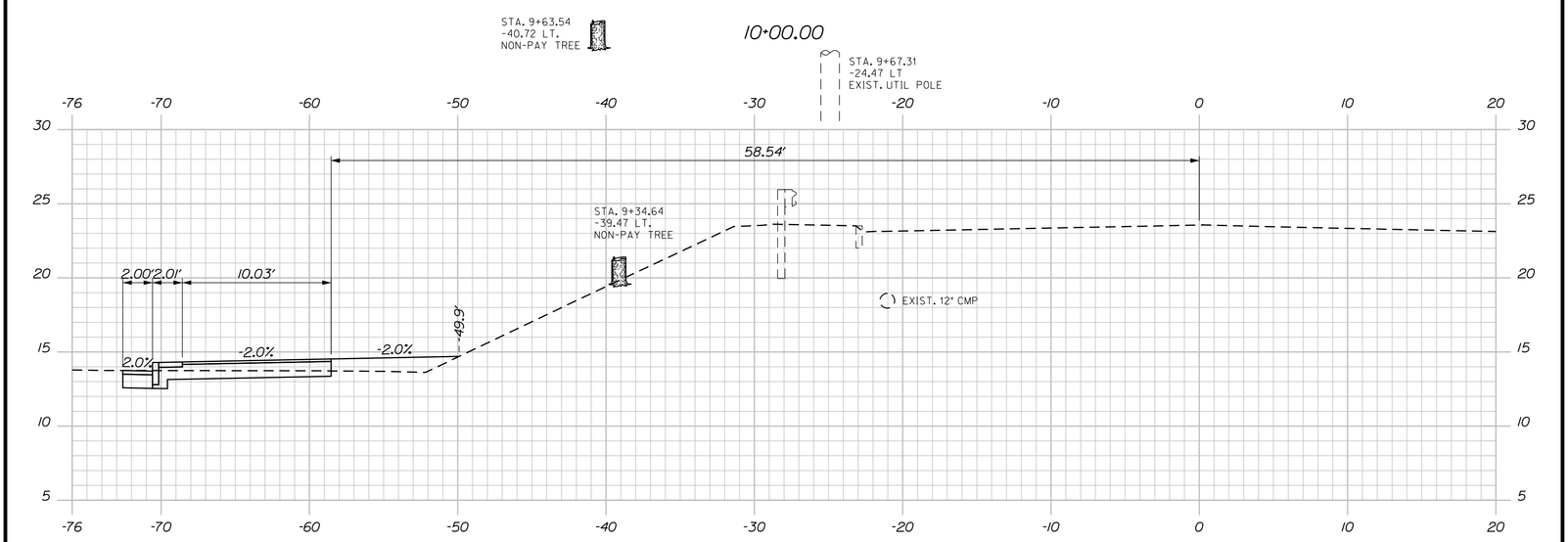
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
MULTI-WIN

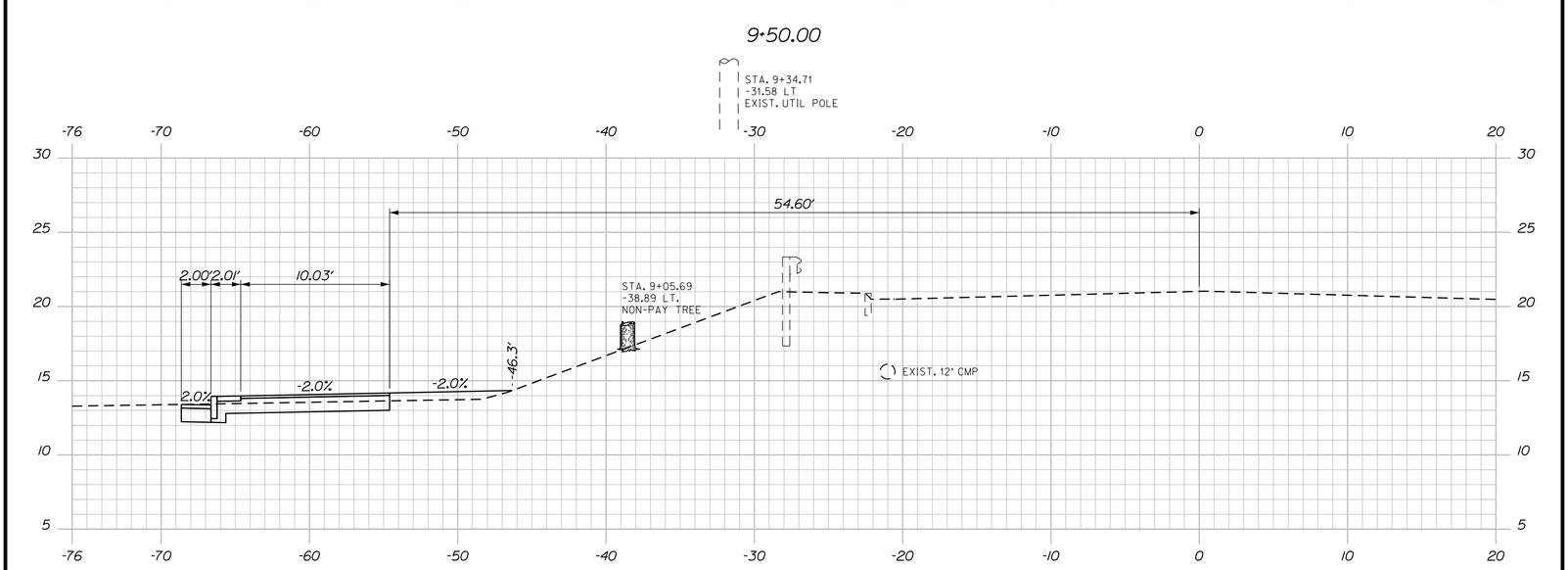
HIGHWAY PLANS



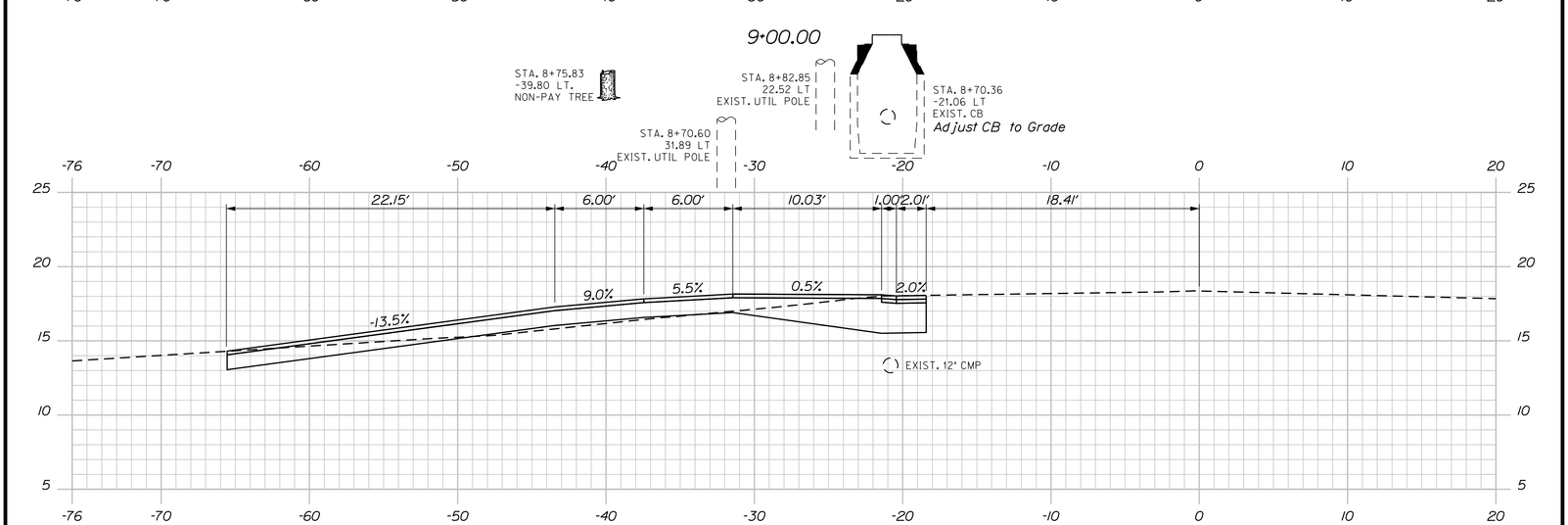
10+00.00



9+50.00



9+00.00



8+50.00

Maine Ave. Sta. 8+50.00 to Sta. 10+00.00

SHEET NUMBER E18 OF E26

GARDINER
ROUTE 24/9/126/US 201

CROSS SECTIONS

		BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

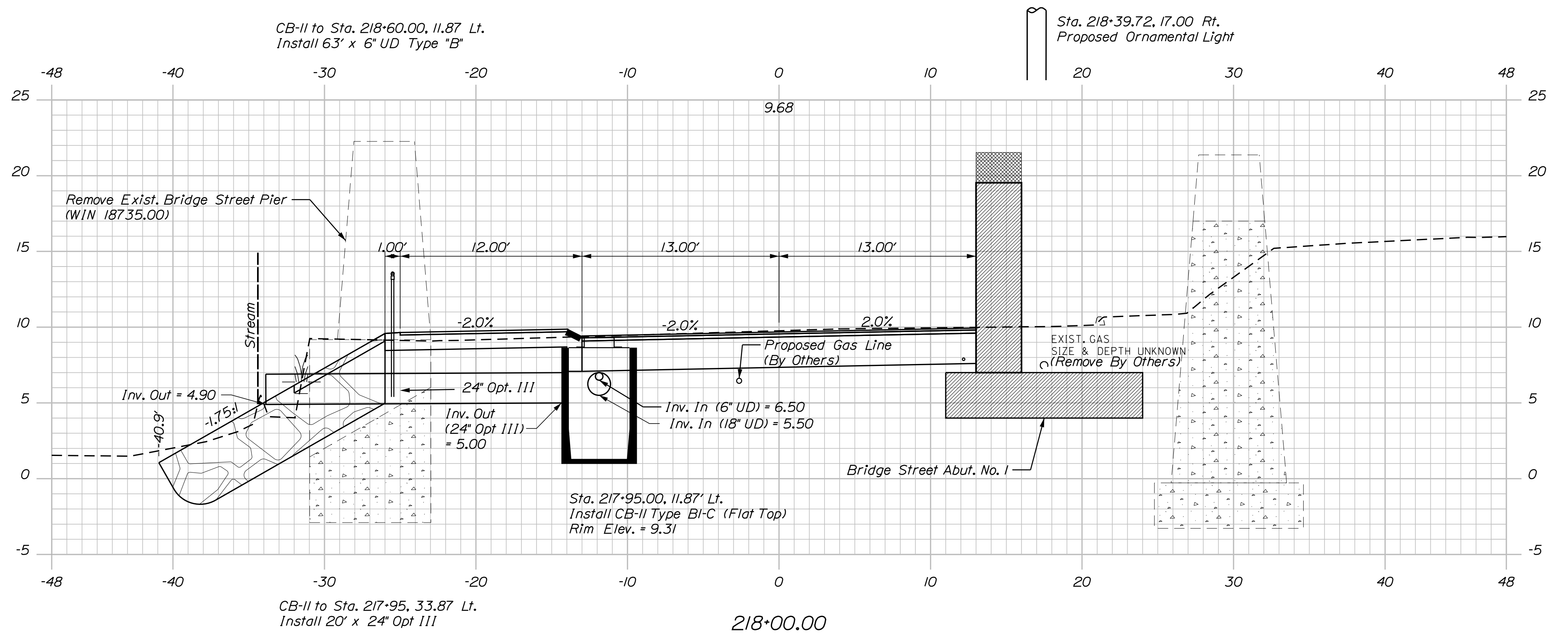
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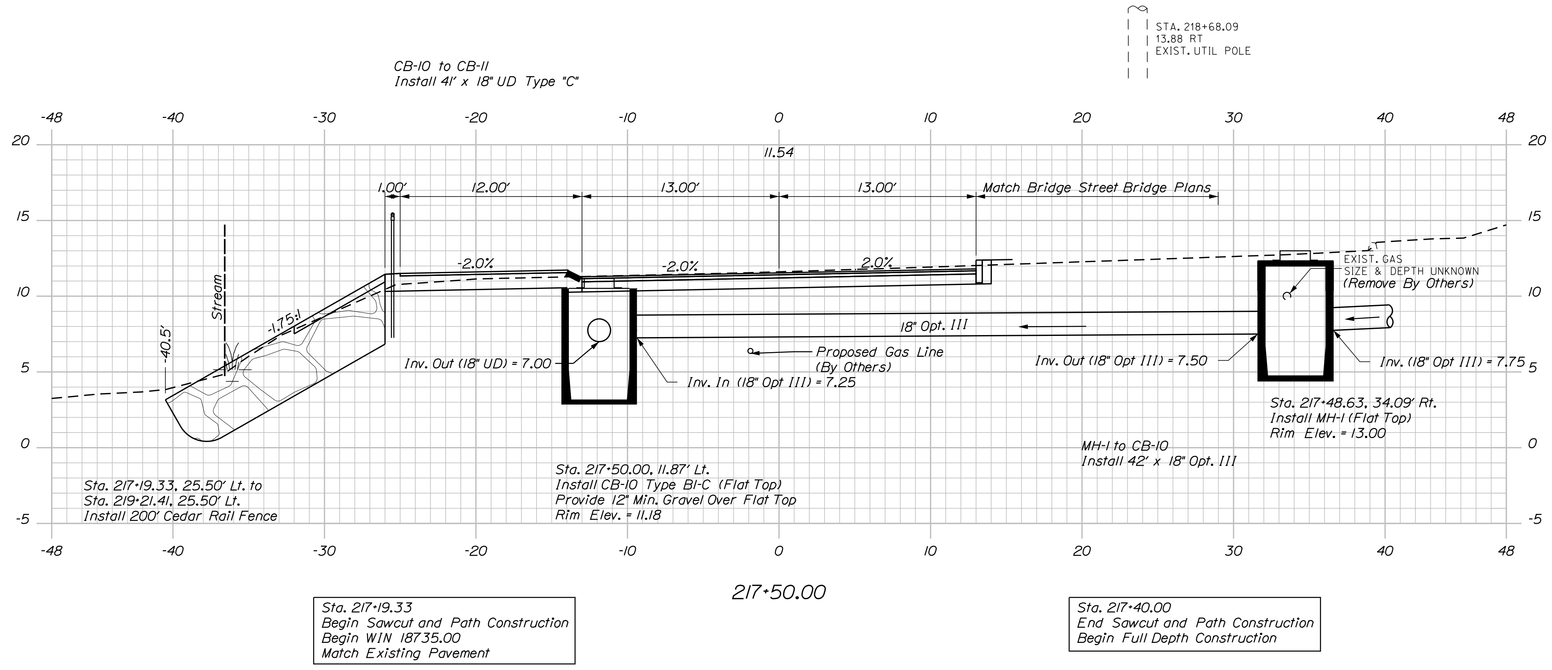
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
MULTI-WIN

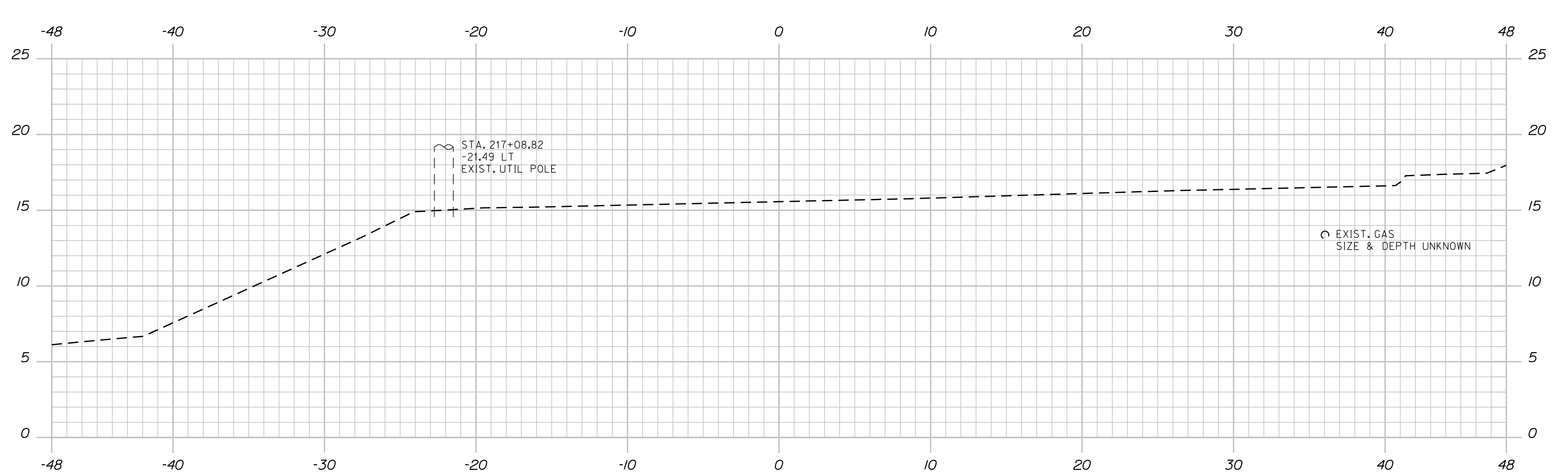
HIGHWAY PLANS





Sta. 217+19.33
Begin Sawcut and Path Construction
Begin WIN 18735.00
Match Existing Pavement

Sta. 217+40.00
End Sawcut and Path Construction
Begin Full Depth Construction



Arcade Sta. 217+00.00 to Sta. 218+00.00

SHEET NUMBER E19 OF E26

GARDINER
ROUTE 24/9/126/US 201

CROSS SECTIONS

PROJ. MANAGER		BY	DATE
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

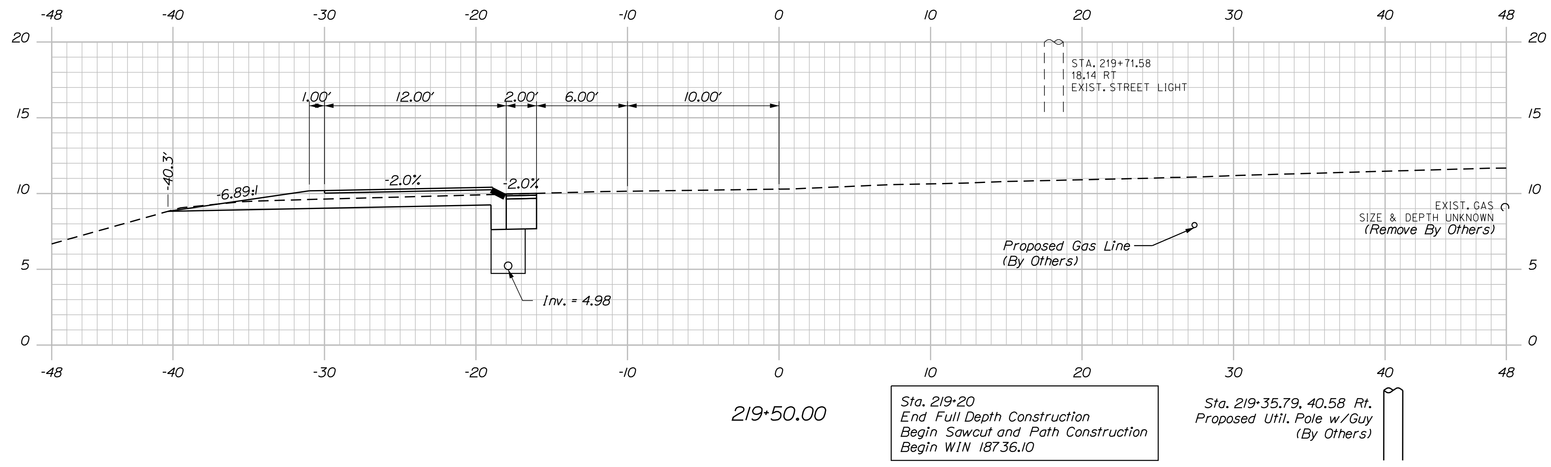
P.E. NUMBER

DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
MULTI-WIN

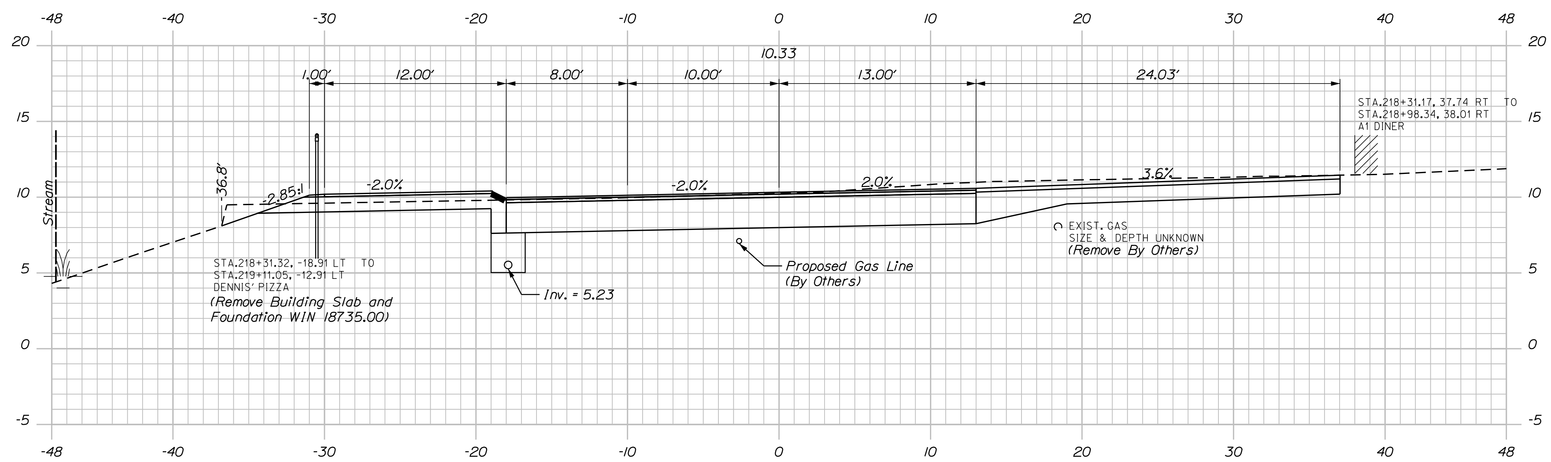
HIGHWAY PLANS



219+50.00

Sta. 219+20
End Full Depth Construction
Begin Sawcut and Path Construction
Begin WIN 18736.10

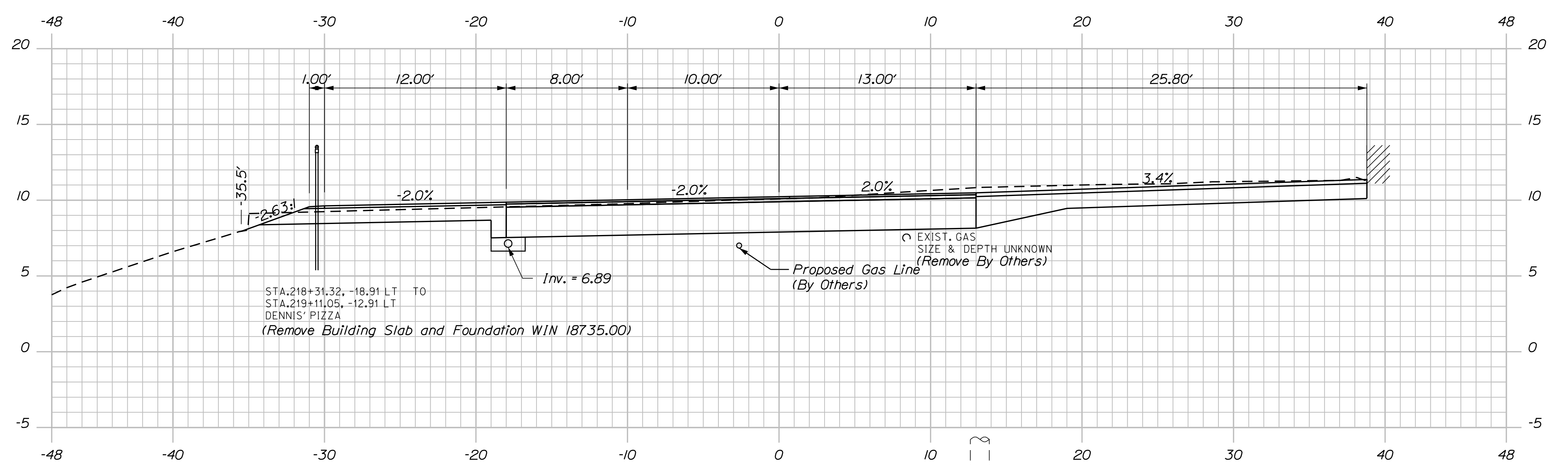
Sta. 219+35.79, 40.58 Rt.
Proposed Util. Pole w/Guy
(By Others)



219+00.00

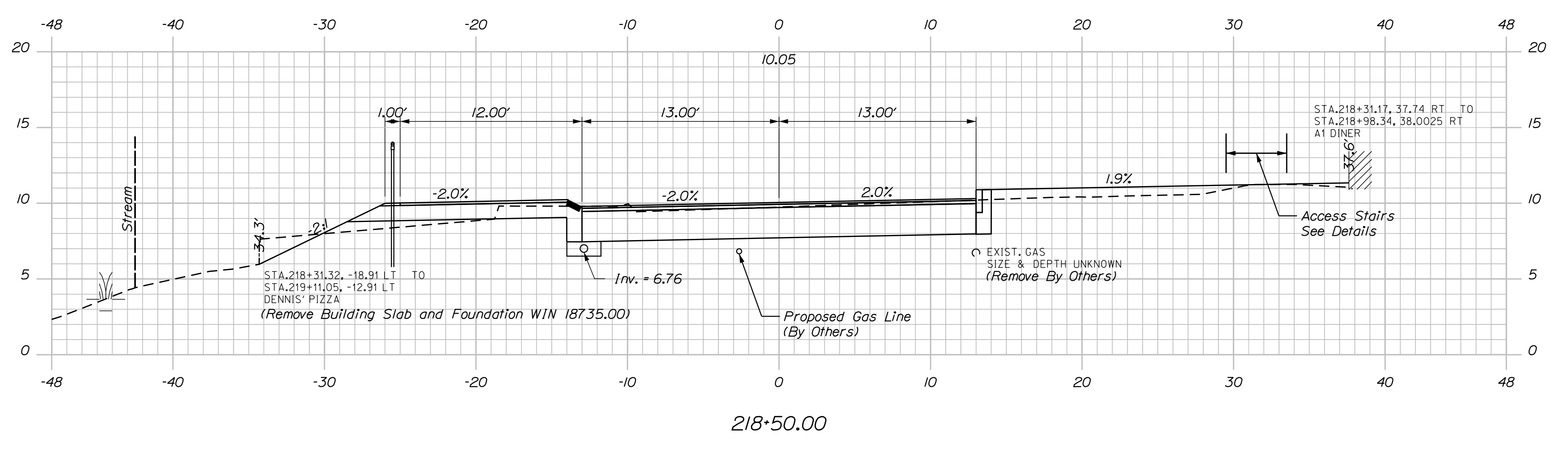
Sta. 218+57.27 to Sta. 219+20.00
Construct Paved Commercial Drive

Sta. 218+75.00, 16.87 Lt. to CB-12
Install 257' x 6" UD Type "B"



218+75.00

STA. 218+68.09
13.88 RT
EXIST. UTIL POLE
(Remove Pole and Guy By Others)
(Remove & Stockpile Flood Gauge By Others)



218+50.00

Arcade Sta. 218+50.00 to Sta. 219+50.00

SHEET NUMBER E20 OF E26

GARDINER
ROUTE 24/9/126/US 201

CROSS SECTIONS

		BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

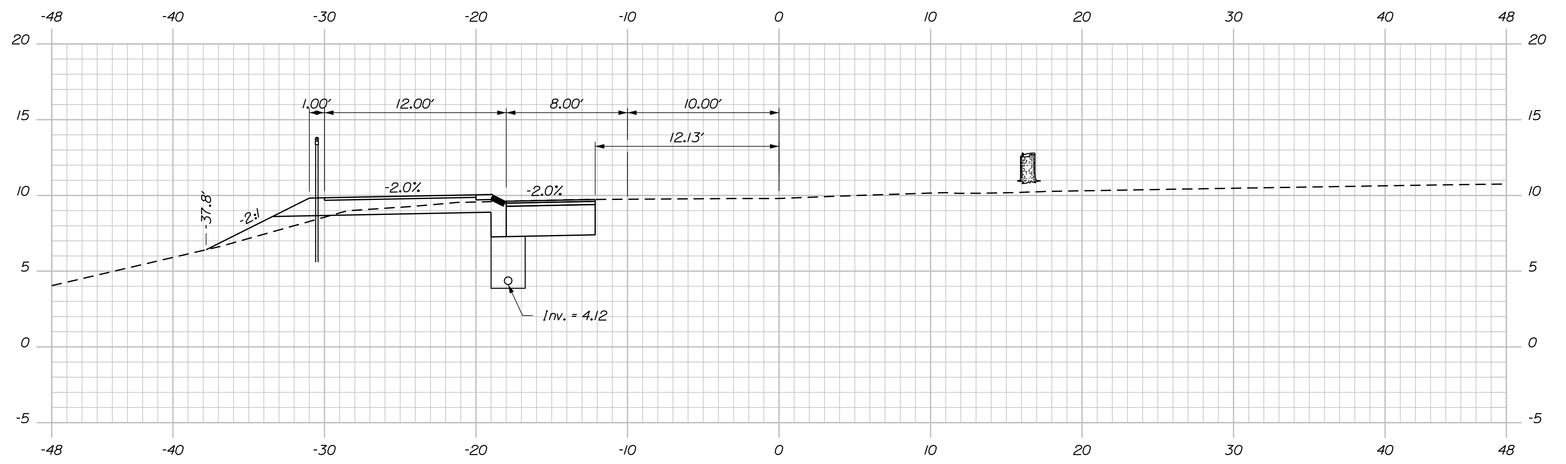
P.E. NUMBER

DATE

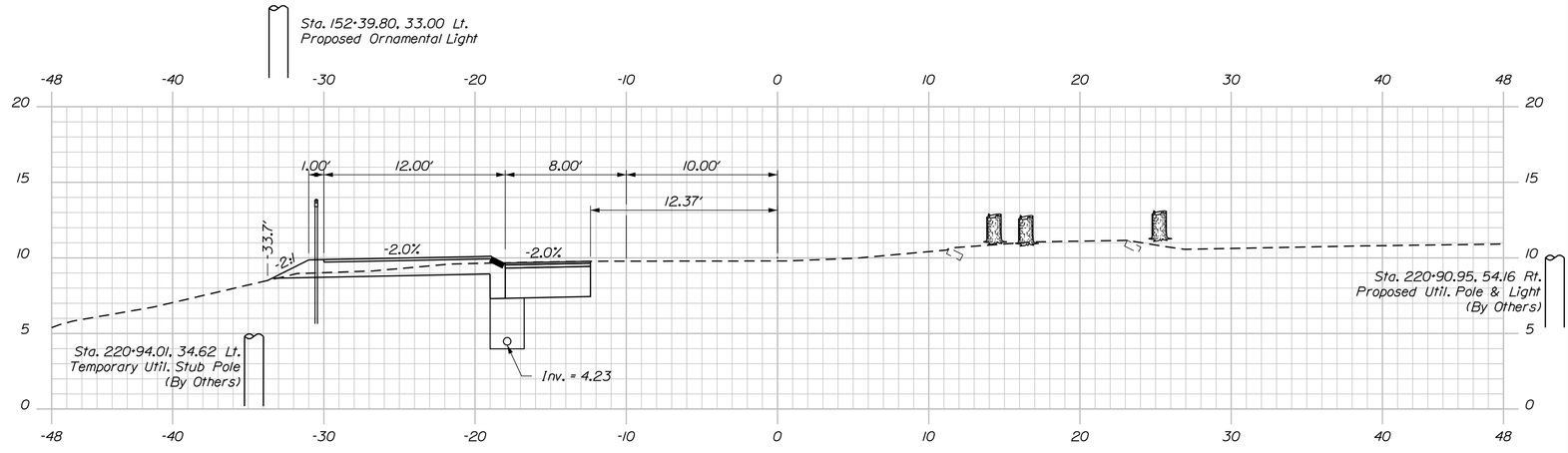
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
MULTI-WIN

HIGHWAY PLANS

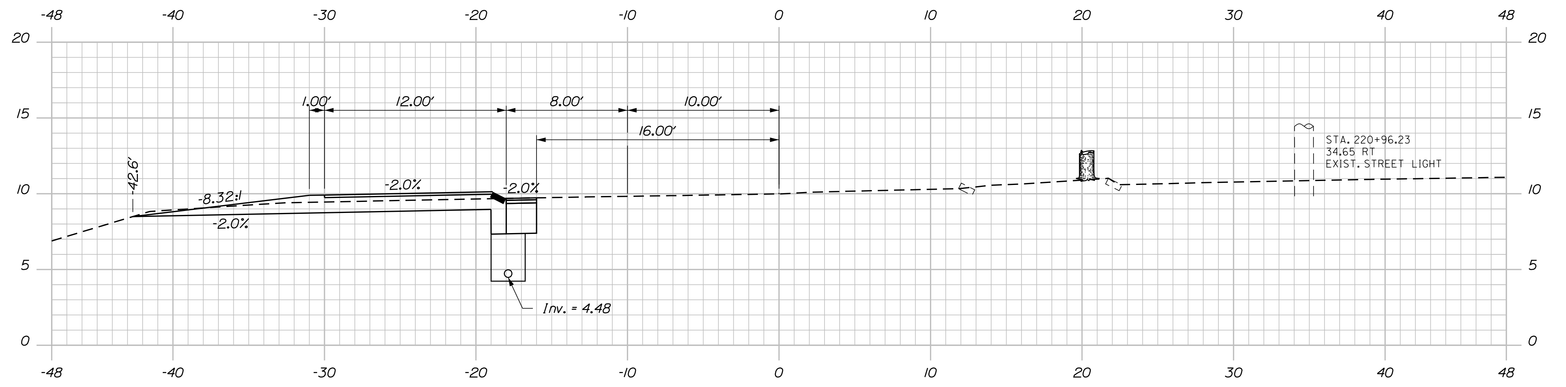


152+37.79 Ahead
221+20.59 Back

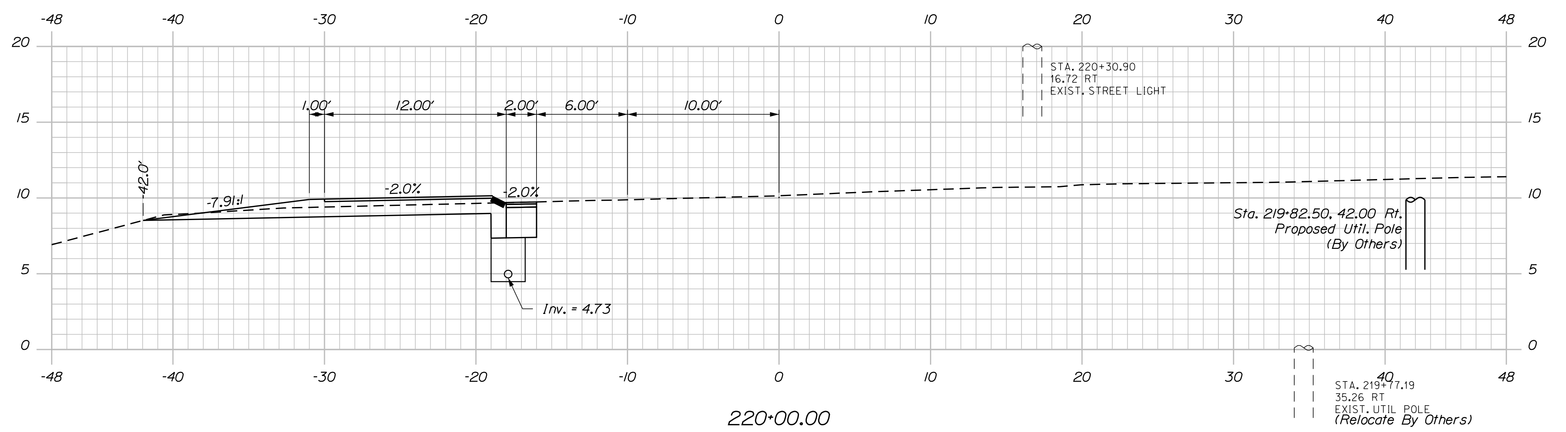


221+00.00

Sta. 220+87.62 30.50' Lt. to
Sta. 152+61.74, 29.46' Lt.
Install 56' Cedar Rail Fence



220+50.00



220+00.00

Arcade Sta. 220+00.00 to Sta. 221+20.59

SHEET NUMBER E21 OF E26

GARDINER
ROUTE 24/9/126/US 201

CROSS SECTIONS

PROJ. MANAGER		BY	DATE
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

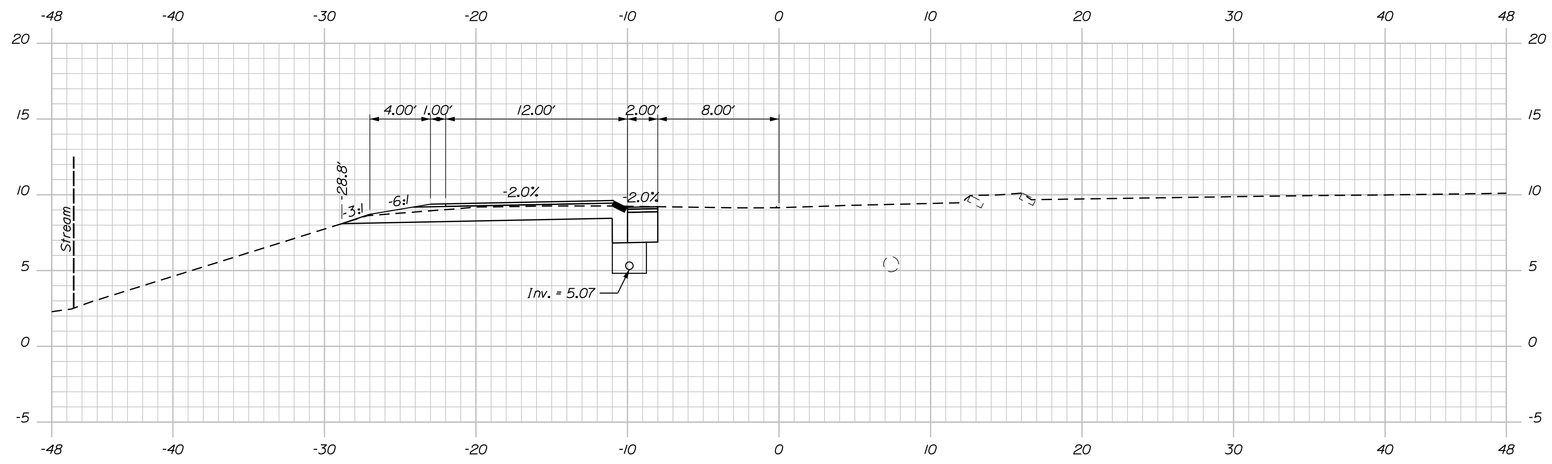
P.E. NUMBER

DATE

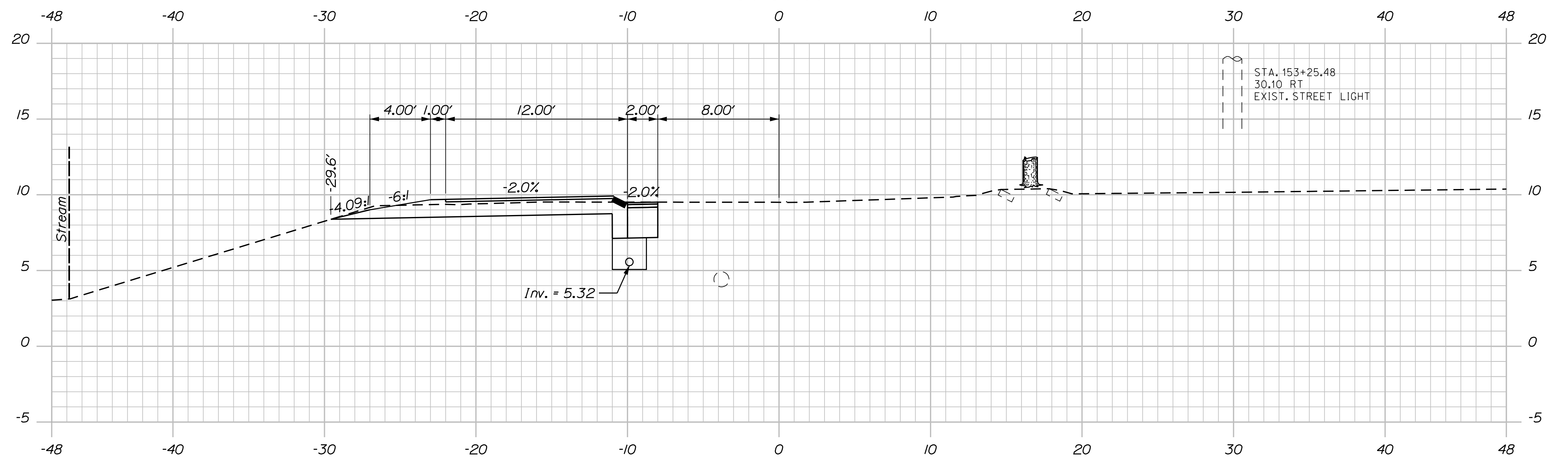
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
MULTI-WIN

HIGHWAY PLANS

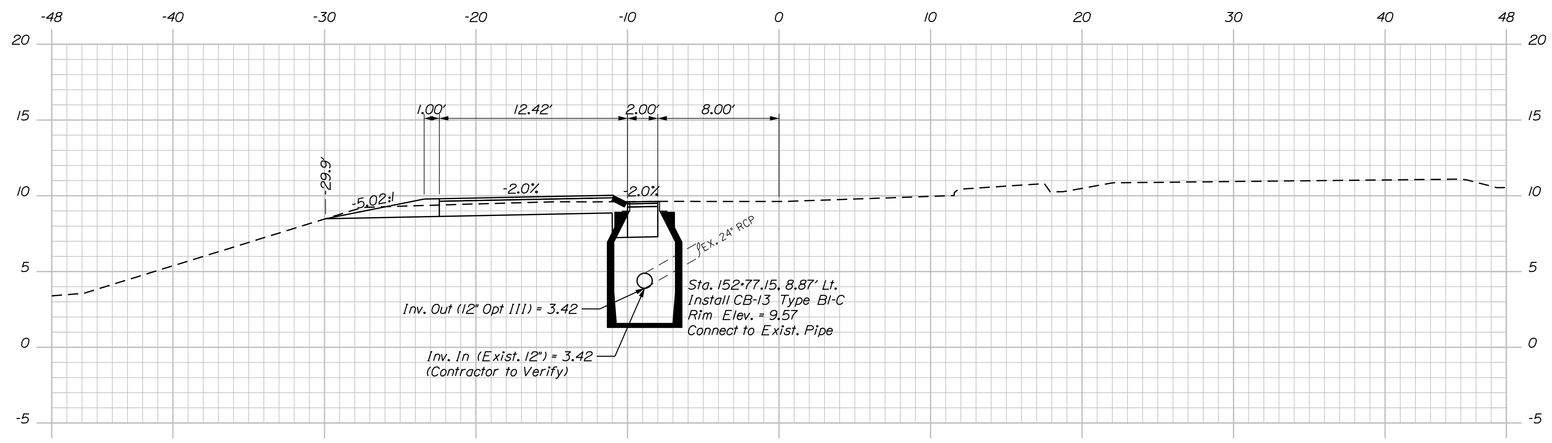


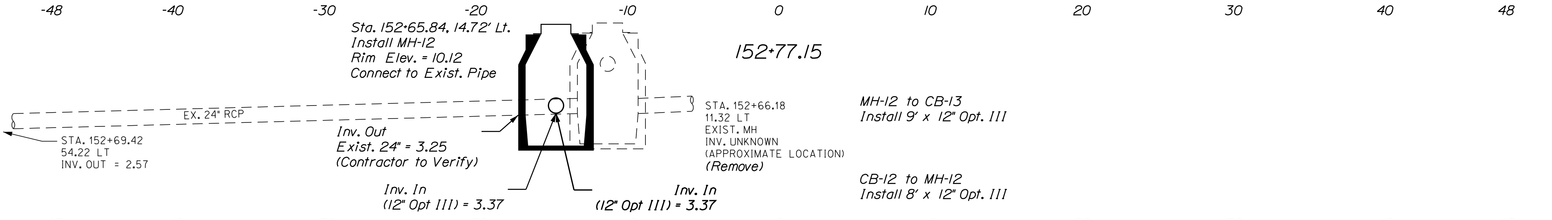
153+50.00



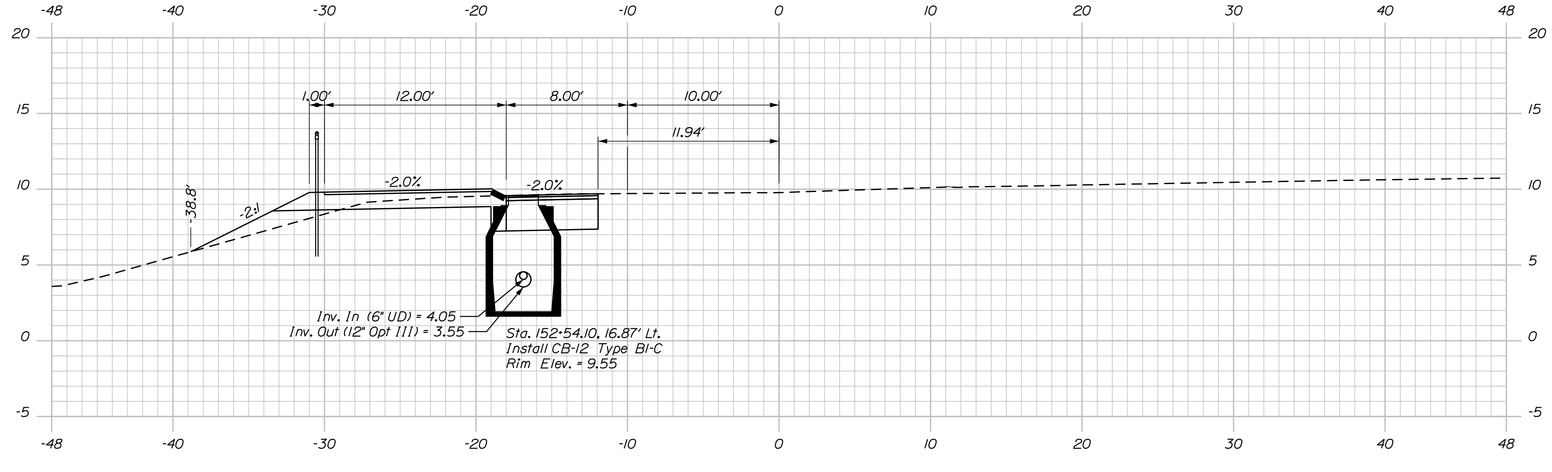
Sta. 153+00.00, 8.87' Lt. to CB-14
Install 8I' x 6" UD Type "B"

153+00.00





152+77.15



152+50.00

Arcade Sta. 152+50.00 to Sta. 153+50.00

SHEET NUMBER E22 OF E26

GARDINER
ROUTE 24/9/126/US 201

CROSS SECTIONS

		BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

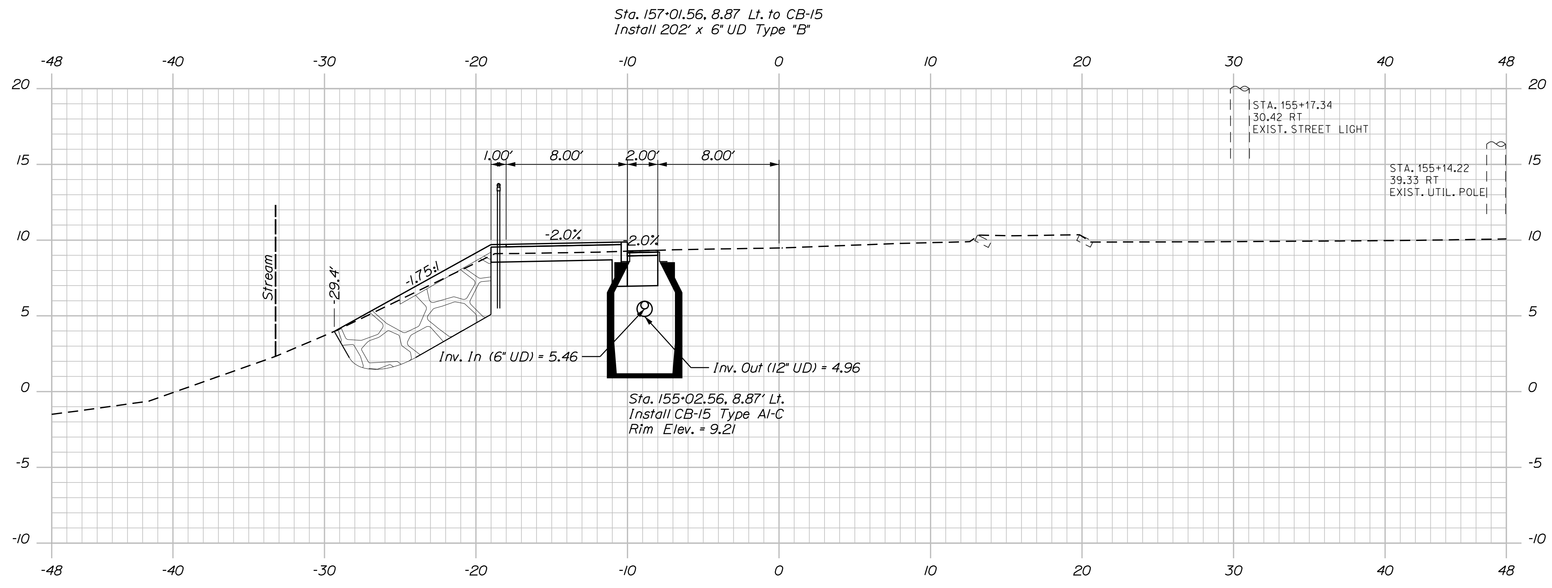
P.E. NUMBER

DATE

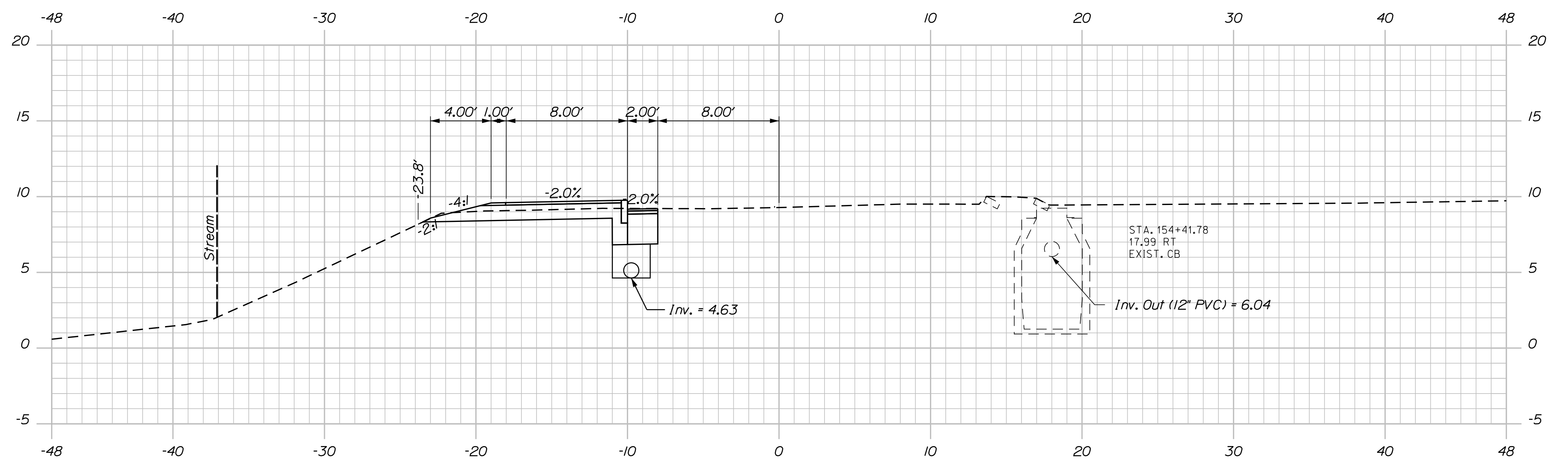
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
MULTI-WIN

HIGHWAY PLANS



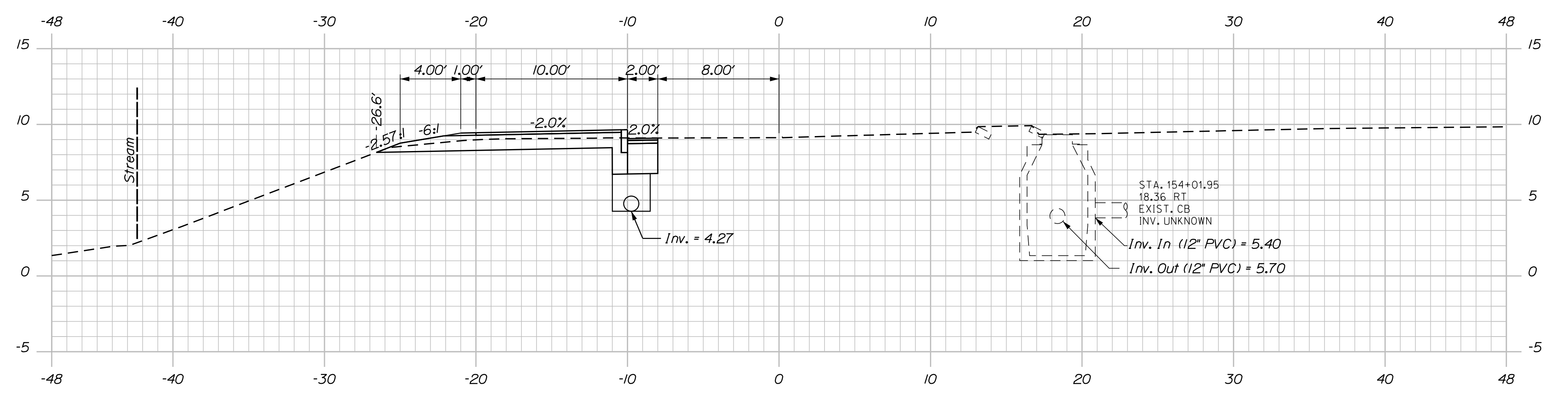
155+00.00



154+50.00

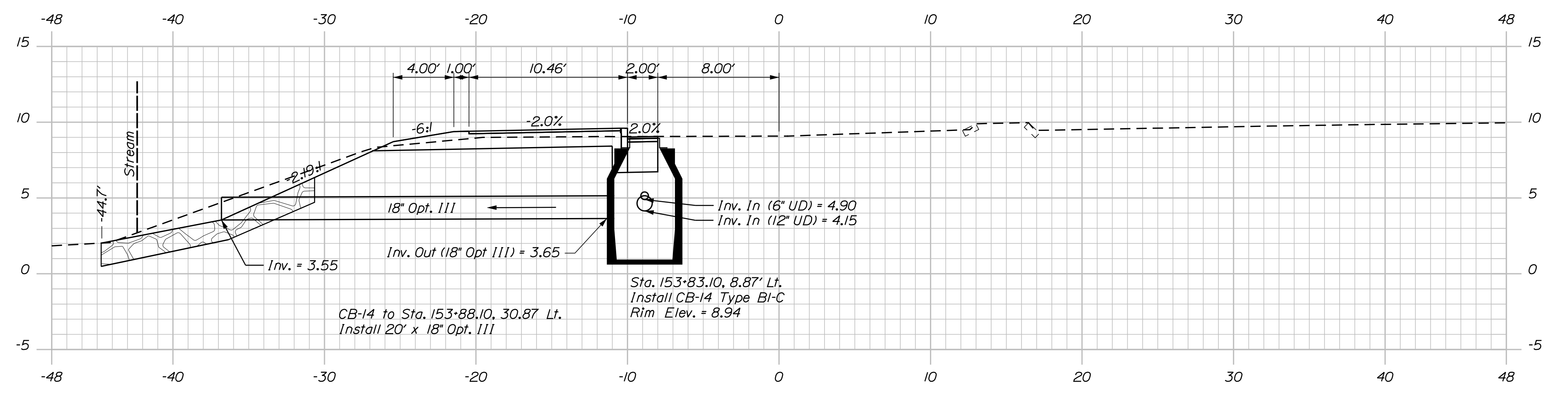
Sta. 154+40.58, 21.07' Lt.
Proposed Ornamental Light

Sta. 154+44.68, 18.50' Lt. to Sta. 156+77.24, 25.57' Lt.
Install 232' Cedar Rail Fence



154+00.00

CB-14 to CB-15
Install 114' x 12" UD Type "C"



153+83.10

Arcade Sta. 153+83.10 to Sta. 155+00.00

SHEET NUMBER E23 OF E26

GARDINER
ROUTE 24/9/126/US 201

CROSS SECTIONS

PROJ. MANAGER		BY	DATE
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

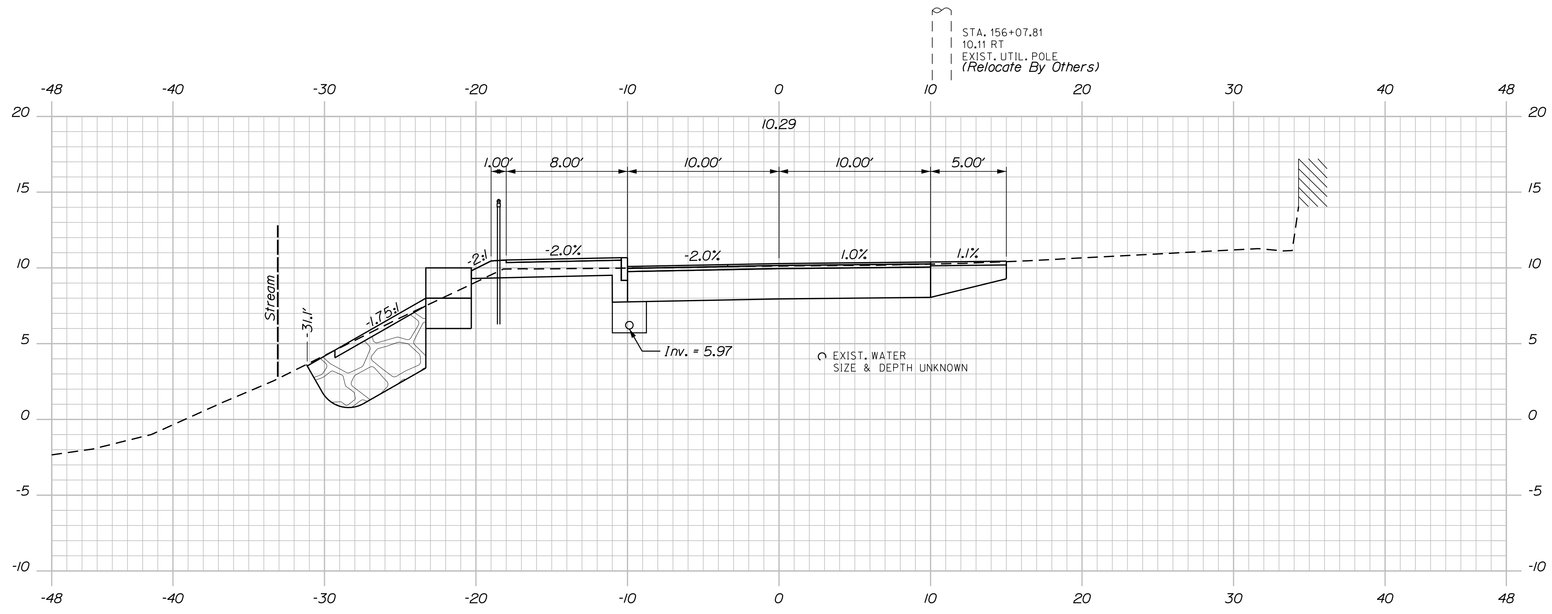
P.E. NUMBER

DATE

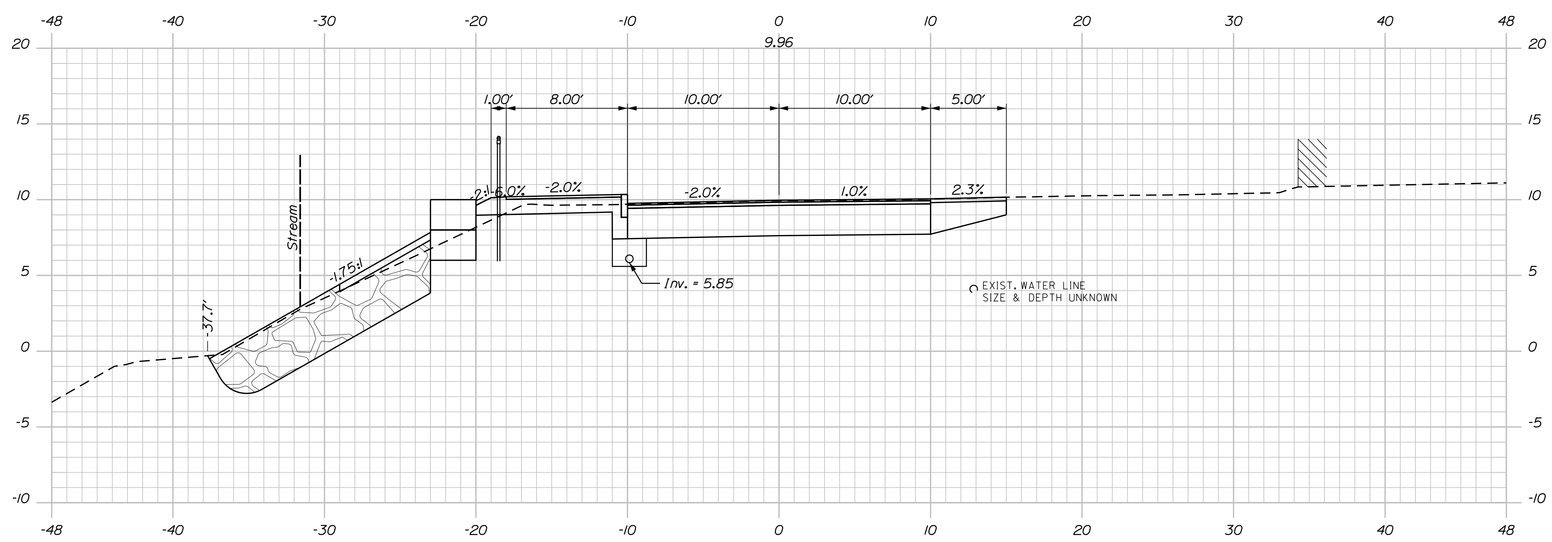
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
MULTI-WIN

HIGHWAY PLANS



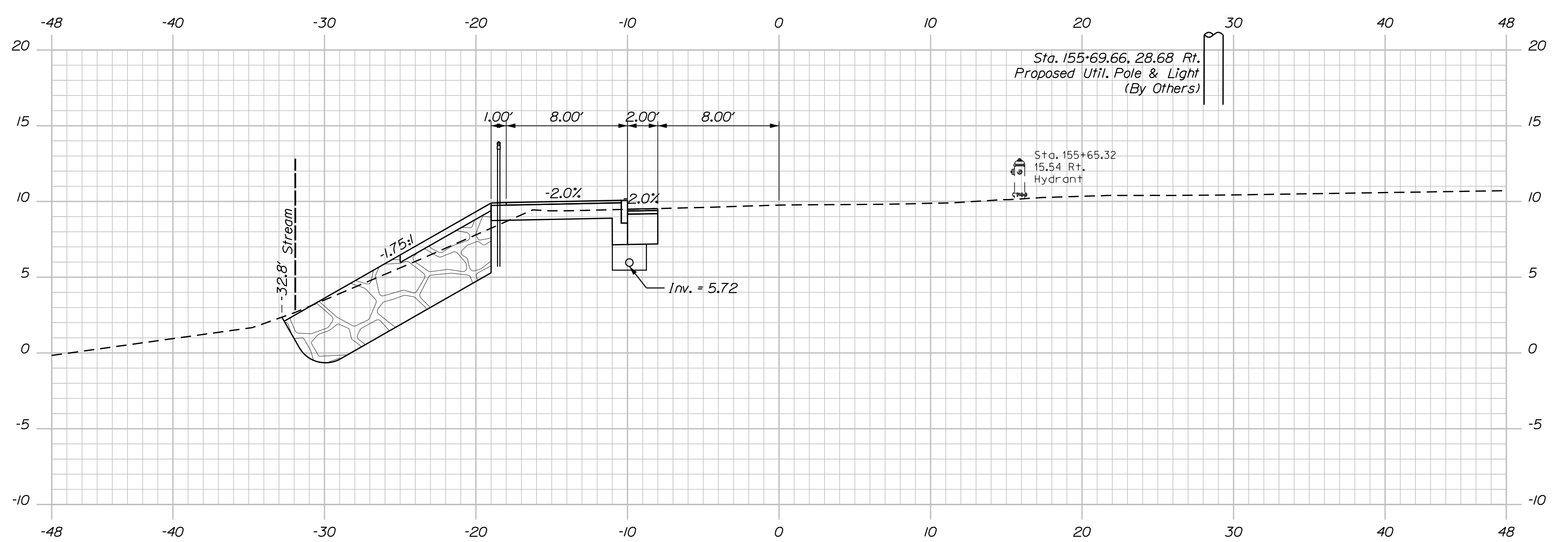
156+00.00



155+75.00

Sta. 155+57.26, 19.65 Lt.
Begin Granite Revetment
(WIN 18736.00)

Sta. 155+50
End Sawcut
Begin Full Depth Construction
Continue WIN 18736.10 Lt. of 10.00 Lt.
Begin WIN 18736.00 Rt. of 10.00 Lt.



155+50.00

Arcade Sta. 155+50.00 to Sta. 156+00.00

SHEET NUMBER E24 OF E26

GARDINER
ROUTE 24/9/126/US 201

CROSS SECTIONS

		BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

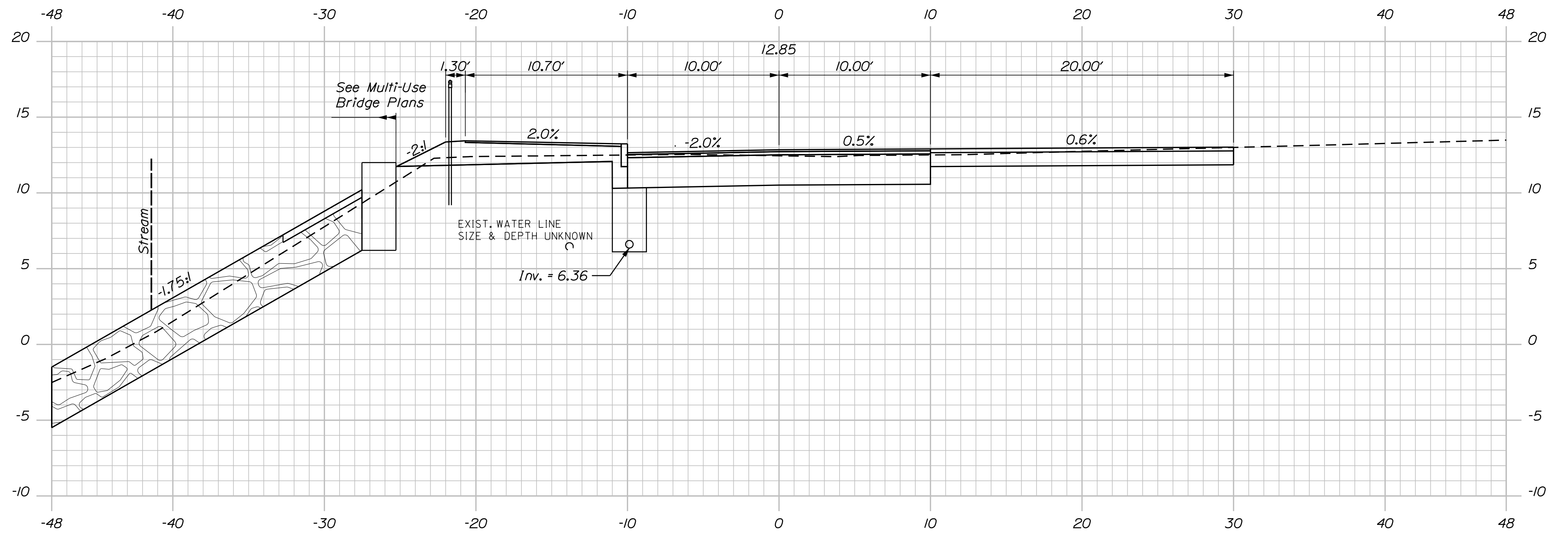
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
MULTI-WIN

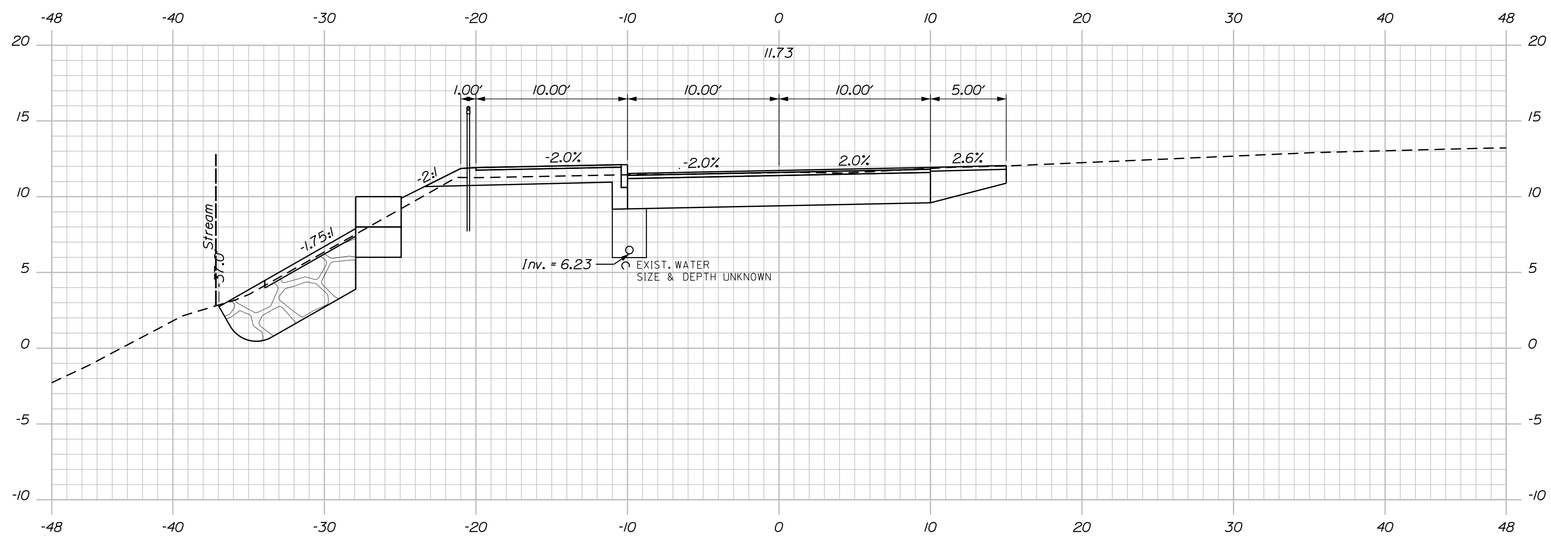
HIGHWAY PLANS

Sta. 156+80
End WIN 18736.10
Continue WIN 18736.00

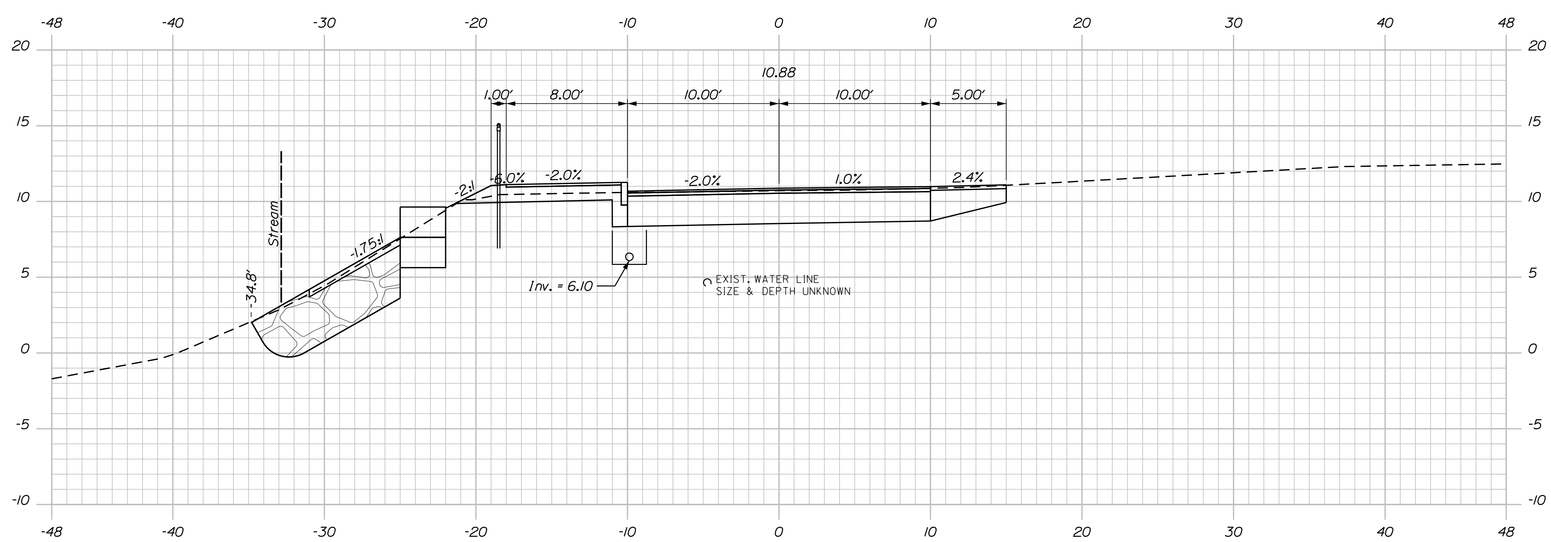
Sta. 156+88.01, 25.73 Lt. to Sta. 156+94.13, 16.38 Lt.
Install 12' Cedar Rail Fence



156+75.00



156+50.00



156+25.00

Arcade Sta. 156+25.00 to Sta. 156+75.00

SHEET NUMBER E25 OF E26

GARDINER
ROUTE 24/9/126/US 201

CROSS SECTIONS

PROJ. MANAGER		BY	DATE
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

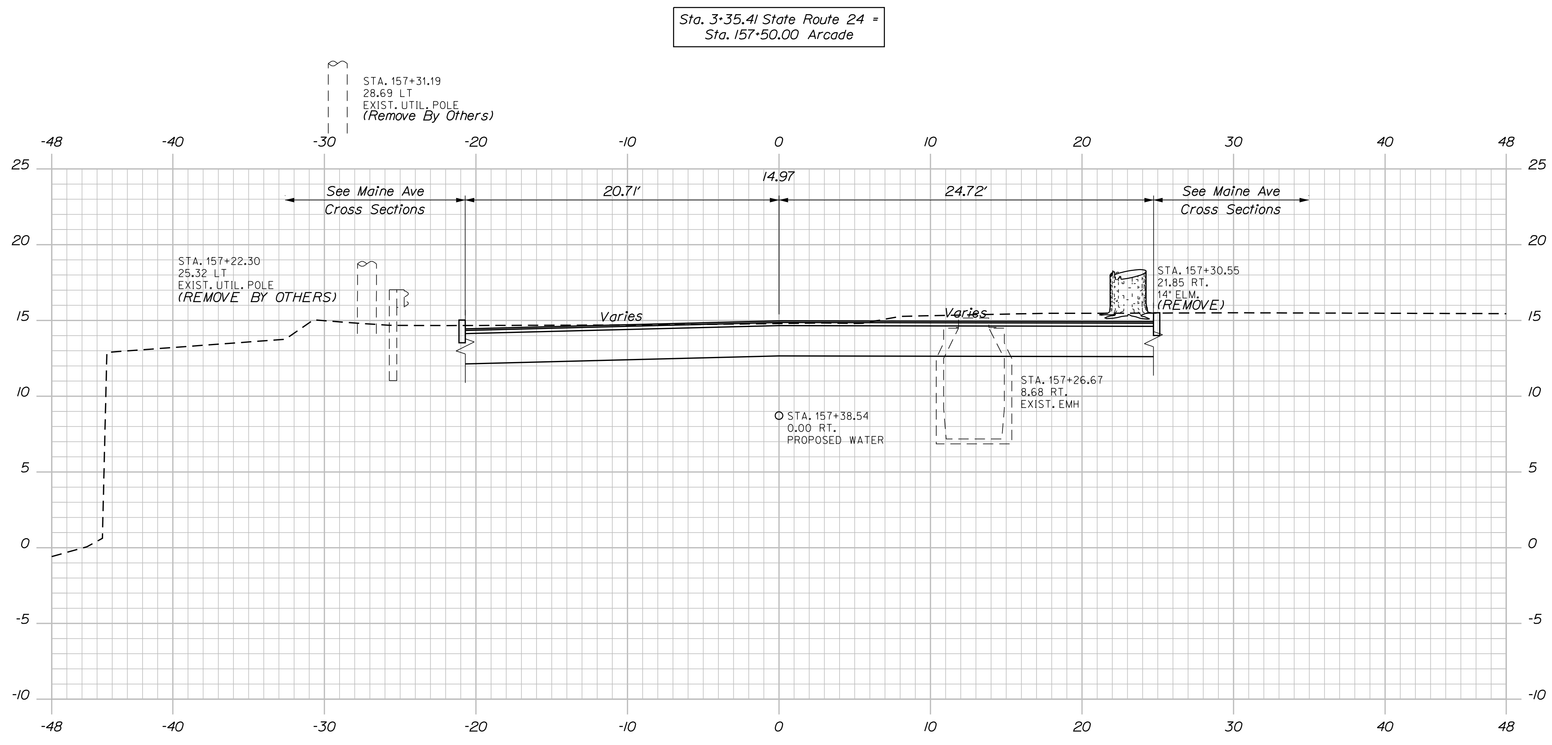
P.E. NUMBER

DATE

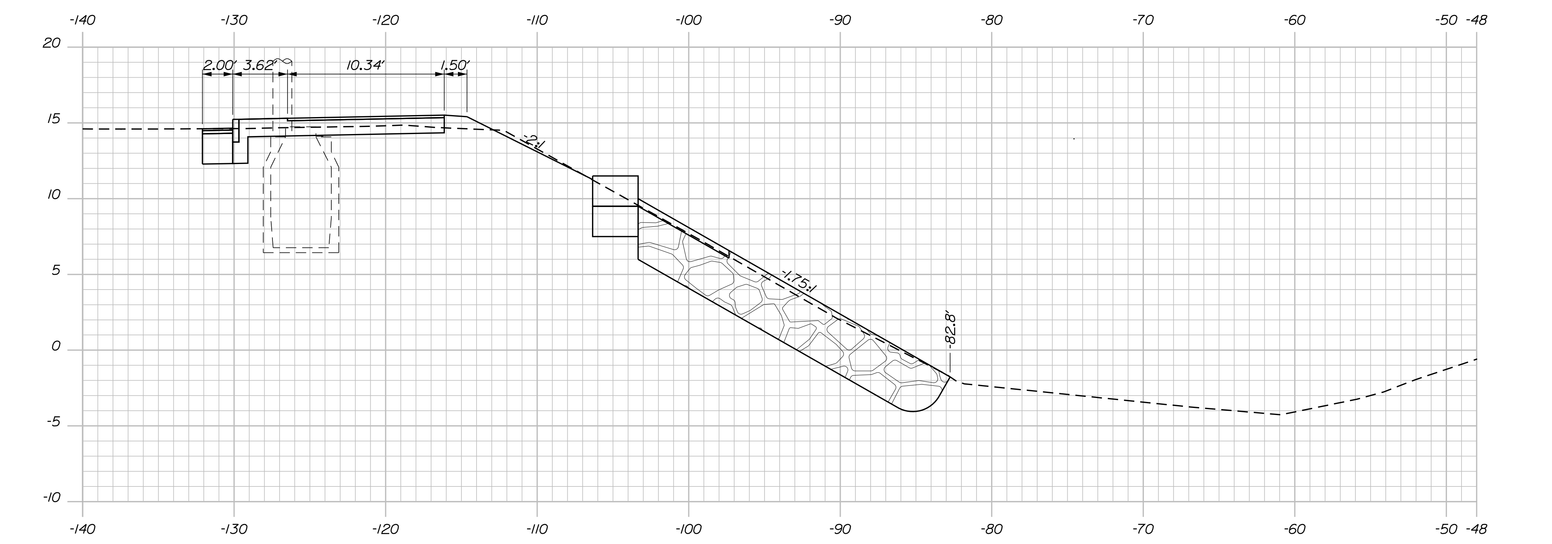
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
MULTI-WIN

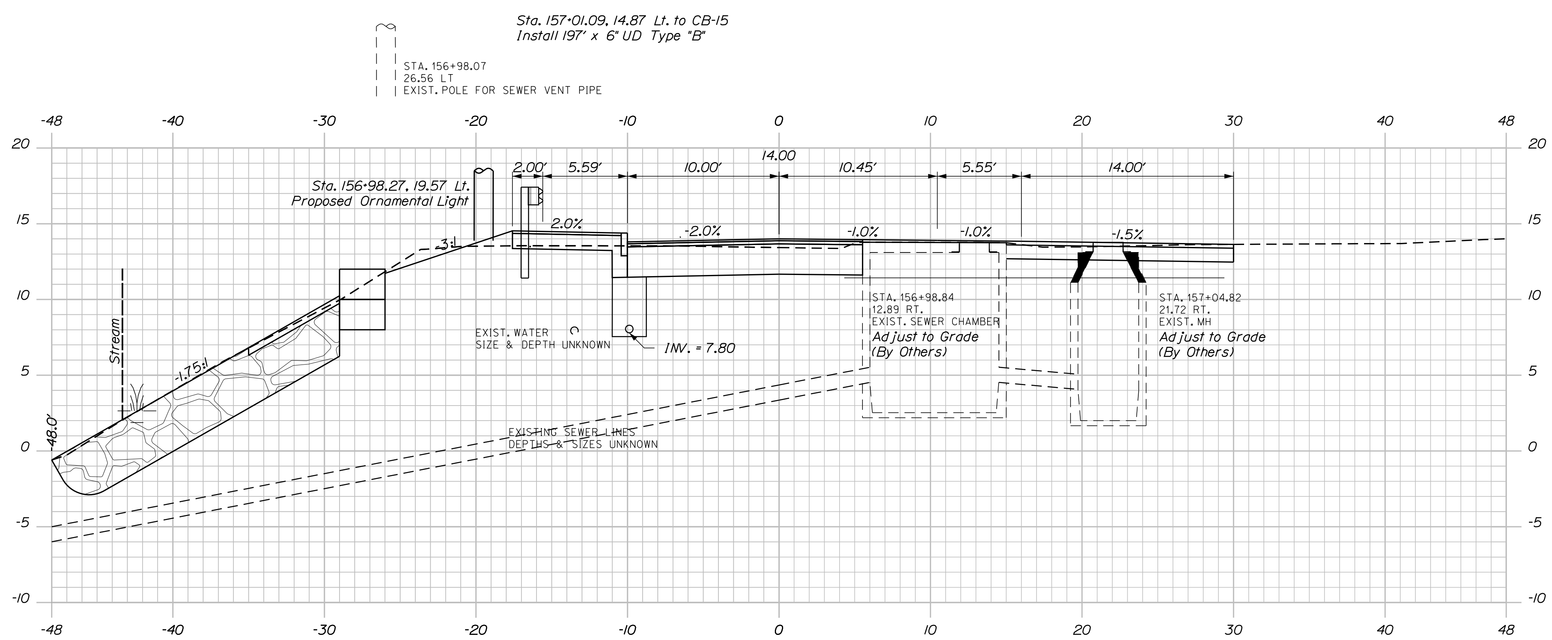
HIGHWAY PLANS



157+25.00



157+00.00 Left



157+00.00 Right

Arcade Sta. 157+00.00 to Sta. 157+25.00

SHEET NUMBER E26 OF E26

GARDINER
ROUTE 24/9/126/US 201

CROSS SECTIONS

PROJ. MANAGER		BY	DATE
DESIGN-DETAILED	PLP	EJB	SEPT 2018
CHECKED-REVIEWED	LEM	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

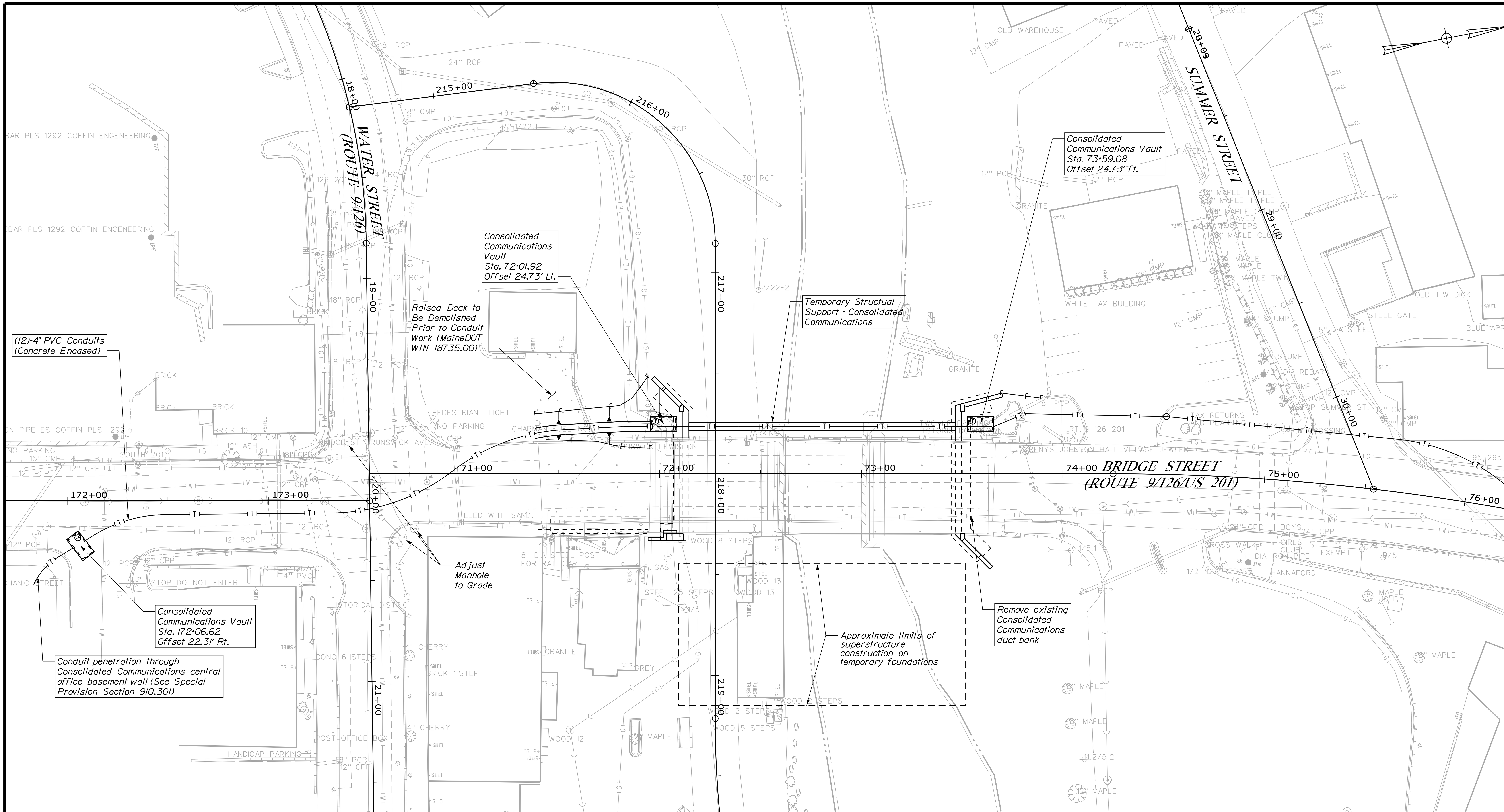
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN
MULTI-WIN

HIGHWAY PLANS

Date:9/27/2018
Username: dataylor
Division: BRIDGE
Filename: ...\MSTA\F01_fairpoint_plan1.dgn



NOTES

1. This Plan depicts the Consolidated Communications conduit work in the Pre-Closure period after the proposed bridge abutments are partially constructed, but prior to existing bridge demolition and proposed superstructure lateral slide-in. Refer to MaineDOT WIN 18735.00 Plans for Staged Construction Plans.

2. The total length of the approach conduit is approximately 644 feet.

3. See MaineDOT WIN 18735.00 Utility Plans for proposed utility plan and other utility details.

4. Stations and offsets are to center of structure. Accurate placement of vaults near bridge is critical, work with WIN 18735.00 Bridge Plans.

5. See Special Provision Sections 524, 604, 845, and 910 for further details.

Stantec

Stantec Consulting Services Inc.
482 Payne Road, Scarborough ME 04074
Tel. 207.883.3355 Fax 207.883.3376

CONSOLIDATED COMMUNICATIONS

PROJECT NUMBER
195311476

STATE OF MAINE · TIMOTHY W. MERRITT No. 9294 · LICENSED PROFESSIONAL ENGINEER

SIGNATURE
P.E. NUMBER 9294
DATE 9-26-18

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED	KLW\DDT	SEPT 2018
CHECKED-REVIEWED	TWM	SEPT 2018
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

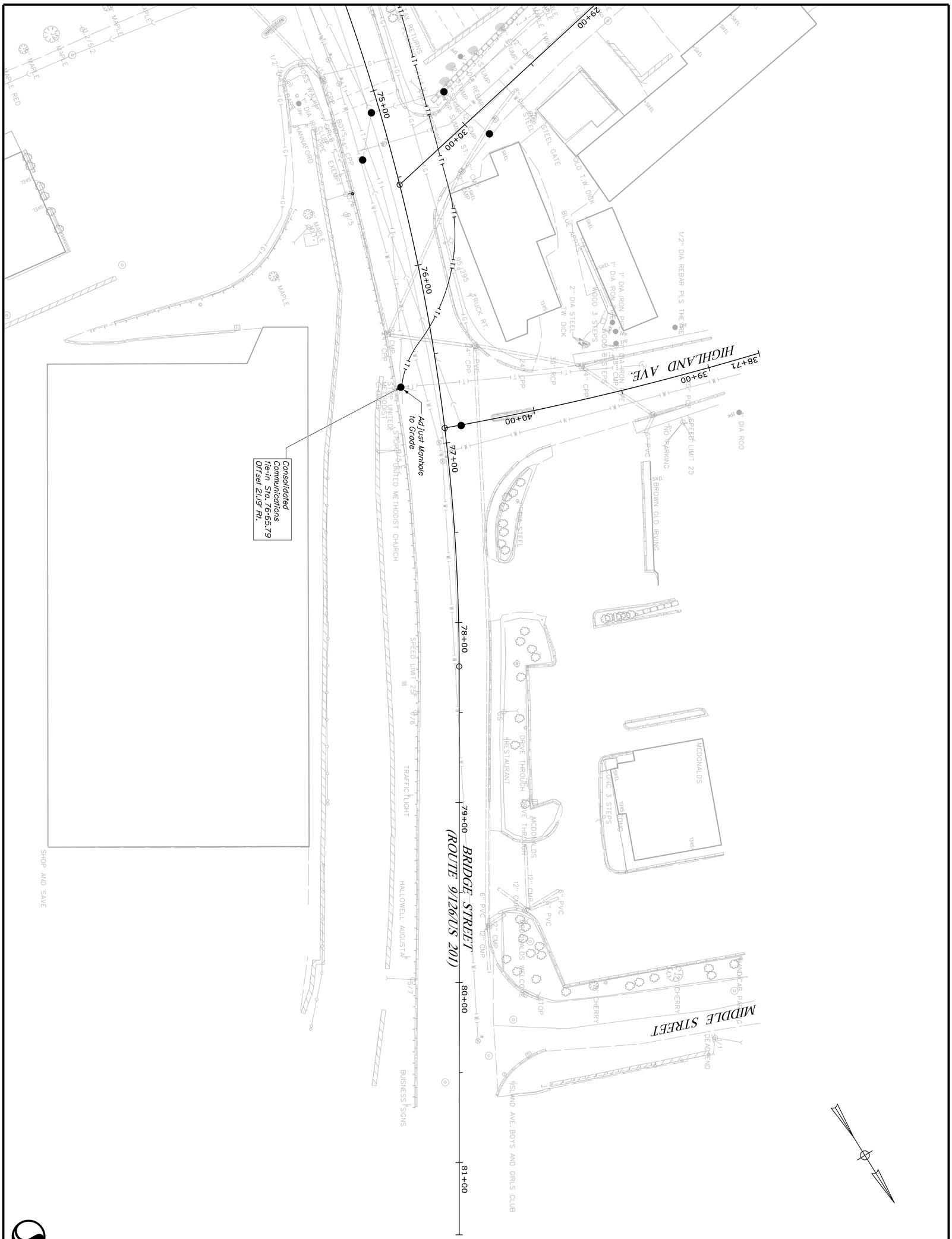
PROJ. MANAGER PLP, DESIGN-DETAILED DDT

BRIDGE STREET BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

PLAN 1

SHEET NUMBER
F01
OF F05

Filename: ...\MSTA\F02_fairpoint_plan2.dgn Division: BRIDGE Username: dataylor Date:9/27/2018



Stantec

BRIDGE STREET BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

PLAN 2

SHEET NUMBER F02 OF F05

PROJ. MANAGER		BY	DATE
DESIGN-DETAILED	PLP	KLW\DDT	SEPT 2018
CHECKED-REVIEWED	DDT	TWM	SEPT 2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE
9294
P.E. NUMBER
9-26-18
DATE

STATE OF MAINE
TIMOTHY W. MERRITT
No. 9294
LICENSED
PROFESSIONAL ENGINEER

Stantec Consulting Services Inc.
482 Payne Road, Scarborough ME 04074
Tel. 207.883.3355 Fax 207.883.3376

CONSOLIDATED COMMUNICATIONS

PROJECT NUMBER
195311476

Filename: ...\MSTA\F03_fairpoint_staging.dgn Division: BRIDGE Username: dataylor Date:9/27/2018

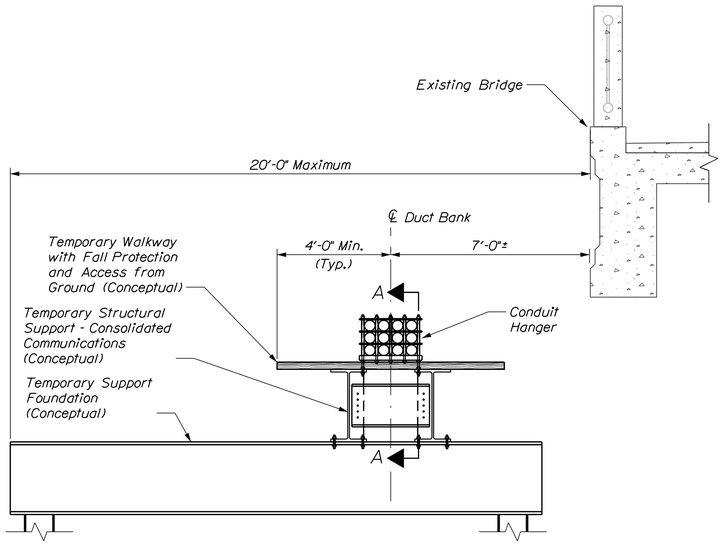
STAGED CONSTRUCTION NOTES

1. Build temporary utility support upstream of existing bridge and relocate existing conduit duct bank to temporary support. Cable pulling and splicing to be performed by others. Contractor shall brace conduit assemblies if needed during cable pulling, see Special Provision 524. Temporary Structural Support - Consolidated Communications.

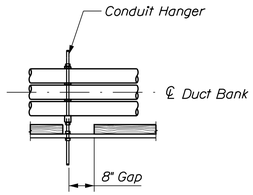
2. Slide in new bridge superstructure over temporary utility support and duct bank.

3. Chain hoist conduit to final height and attach hangers to support diaphragms (by others).

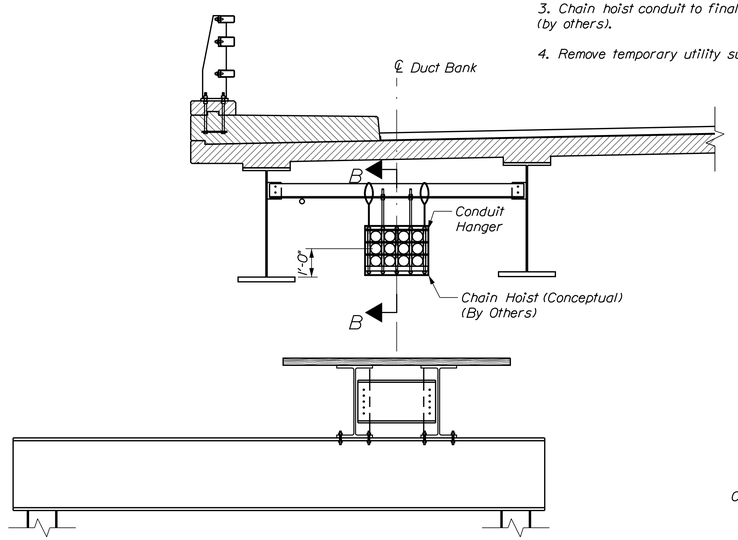
4. Remove temporary utility support.



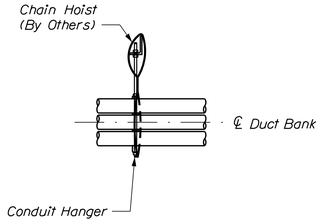
STAGE I



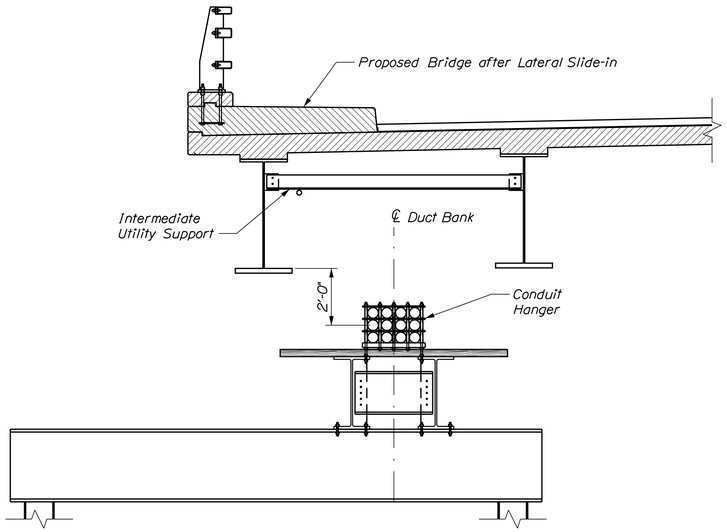
SECTION A-A



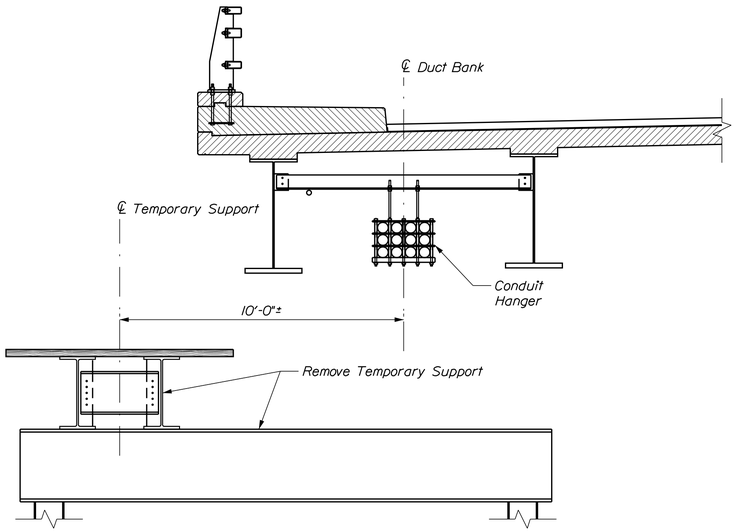
STAGE III



SECTION B-B



STAGE II



STAGE IV

Stantec Consulting Services Inc.
482 Payne Road, Scarborough ME 04074
Tel. 207.883.3355 Fax 207.883.3376

CONSOLIDATED COMMUNICATIONS

PROJECT NUMBER
195311476

STATE OF MAINE
TIMOTHY W. MERRITT
No. 9294
REGISTERED PROFESSIONAL ENGINEER

SIGNATURE
P.E. NUMBER
DATE

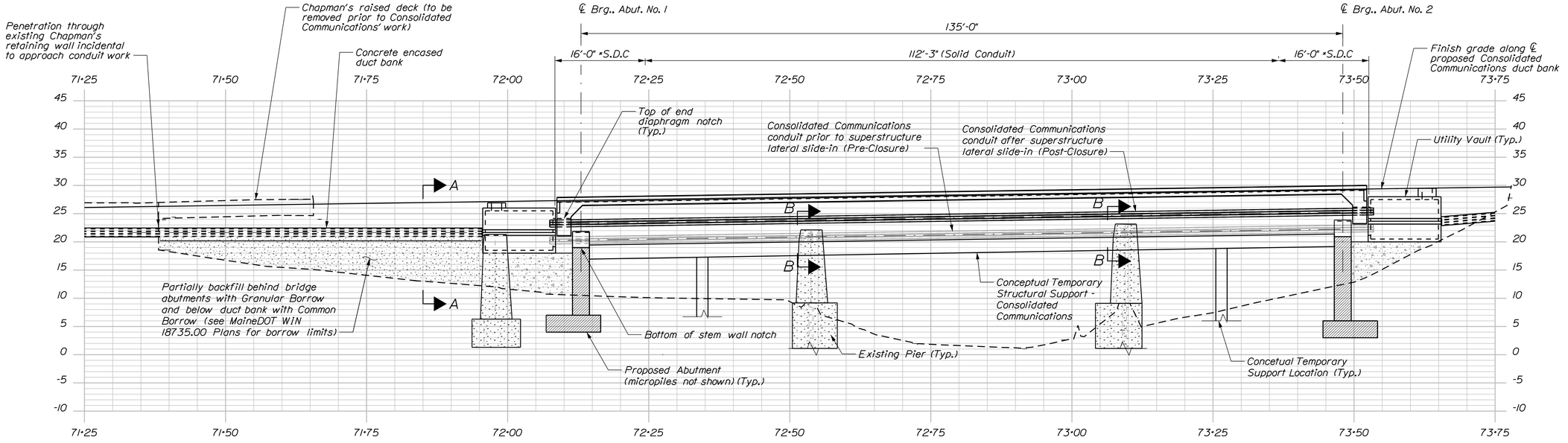
	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED	DDT	
CHECKED-REVIEWED	DDT	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1	KLW\DDT	SEPT 2018
REVISIONS 2	TWM	SEPT 2018
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

BRIDGE STREET BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

CONSTRUCTION STAGING

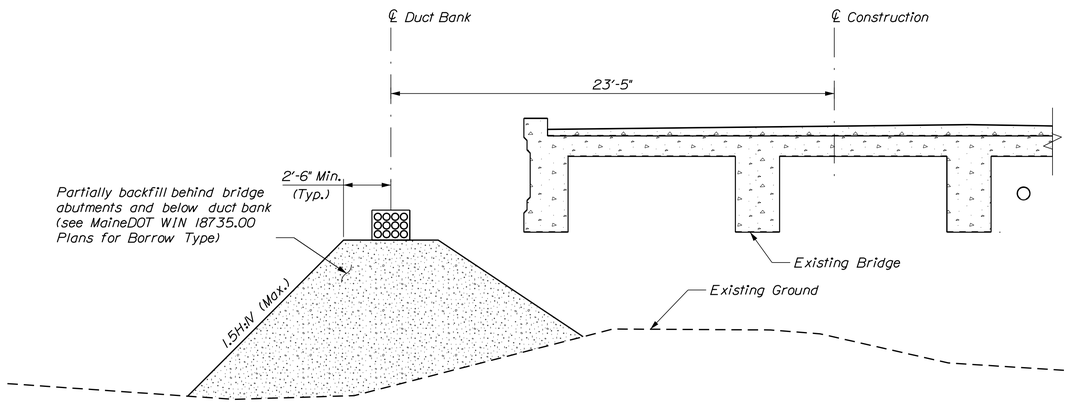
SHEET NUMBER
F03
OF F05

Stantec

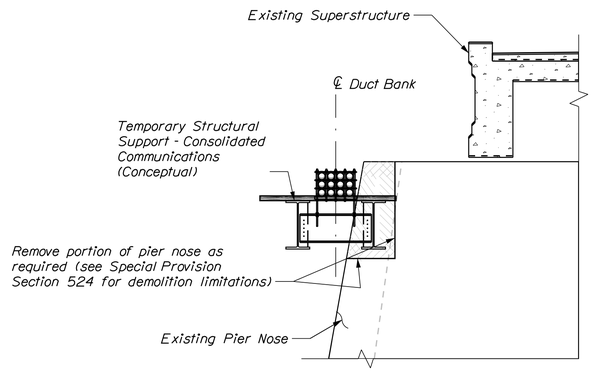


PROFILE ALONG ℄ CONSOLIDATED COMMUNICATIONS CONDUIT @ BRIDGE ST. BRIDGE

* Split-Duct Conduit



SECTION A-A



SECTION B-B

Stantec Consulting Services Inc.
482 Payne Road, Scarborough ME 04074
Tel. 207.883.3355 Fax 207.883.3376

CONSOLIDATED COMMUNICATIONS

PROJECT NUMBER
195311476

STATE OF MAINE
TIMOTHY W. MERRITT
No. 12294
REGISTERED PROFESSIONAL ENGINEER

Timothy W. Merritt
SIGNATURE
12294
P.E. NUMBER
9-26-18
DATE

	BY	DATE
DESIGN-DETAILED	KLW\DOT	SEPT 2018
CHECKED-REVIEWED	TWM	SEPT 2018
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

PROJ. MANAGER: DOT

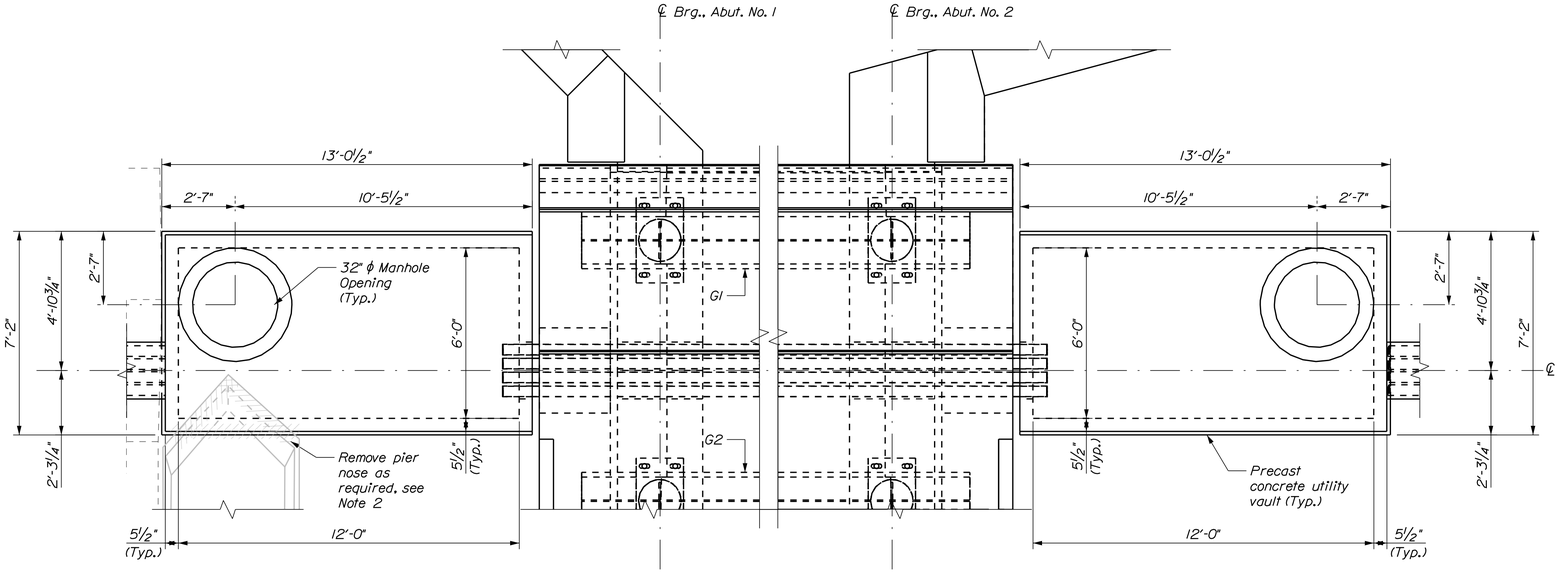
BRIDGE STREET BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

CONDUIT RELOCATION

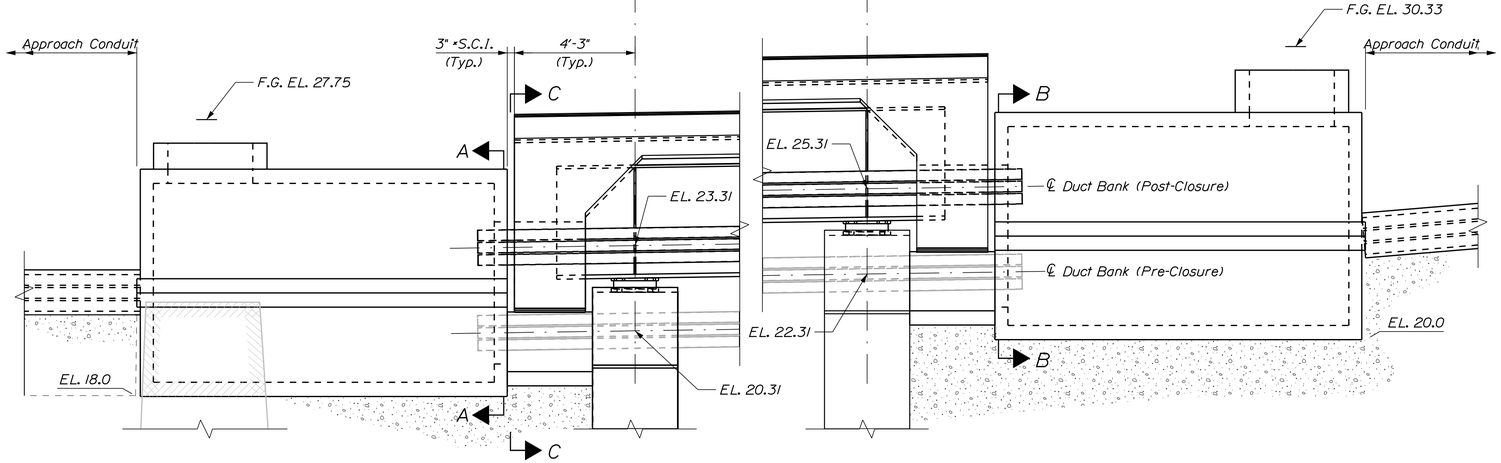
SHEET NUMBER
F04
OF F05

Stantec

Filename: ...\MSTA\F04_fairpoint_profile.dgn Division: BRIDGE Username: dataylor Date:9/27/2018

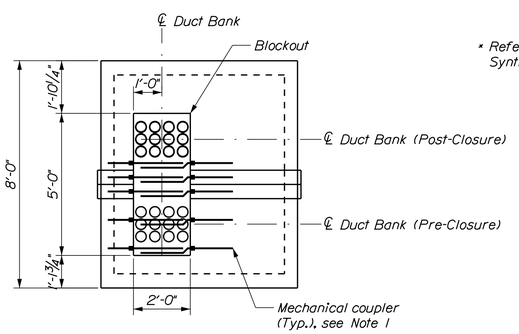


PLAN

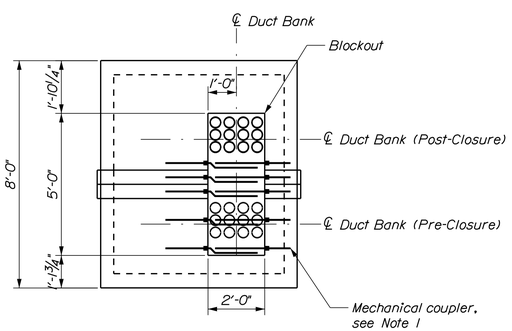


ELEVATION

* Refer to Special Provision Section 620, Synthetic Compressible Joint Inclusion



SECTION A-A



SECTION B-B

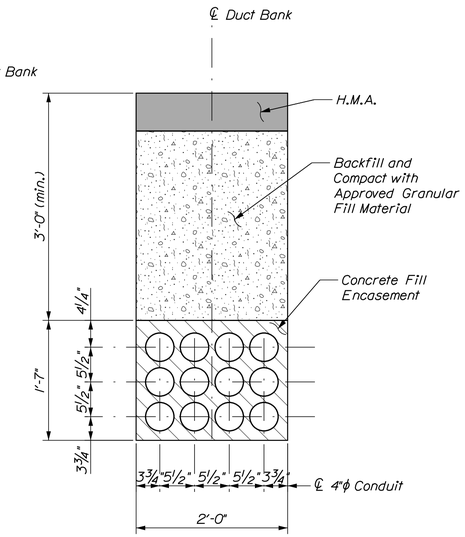
UTILITY VAULT NOTES

1. Fabricator to cast mechanical couplers along perimeter of blockout equal to design area of steel for the vault and supply male couplers to the Contractor to install after duct bank raise.

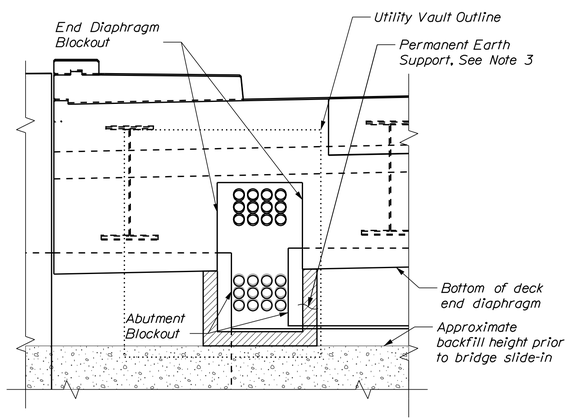
2. See Special Provision Section 524 for demolition limitations.

3. A permanent earth support shall be installed around the duct bank and blockouts between the backfill level prior to the lateral bridge slide-in and the bottom of the end diaphragm. The earth supports shall be designed to prevent earth from spilling into the duct back blockouts when the bridge abutments are backfilled to finished grade after the lateral slide-in.

4. The vault face against the bridge end shall be formed flush to allow installation of synthetic compressible joint inclusion after the bridge lateral slide.



SECTION - APPROACH CONDUIT TRENCH



SECTION C-C

(North Abutment Similar, Opposite Hand)

Stantec

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482 Payne Road, Scarborough ME 04074
Tel. 207.883.3355 Fax 207.883.3376

CONSOLIDATED COMMUNICATIONS

PROJECT NUMBER
195311476

STATE OF MAINE
TIMOTHY W. MERRITT
No. 12294
REGISTERED PROFESSIONAL ENGINEER

Timothy W. Merritt
SIGNATURE
12294
P.E. NUMBER
9-20-18
DATE

BY	DATE
KLW\ODT	SEPT 2018
TWM	SEPT 2018

PROJ. MANAGER	
DESIGN-DETAILED	ODT
CHECKED-REVIEWED	ODT
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

BRIDGE STREET BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

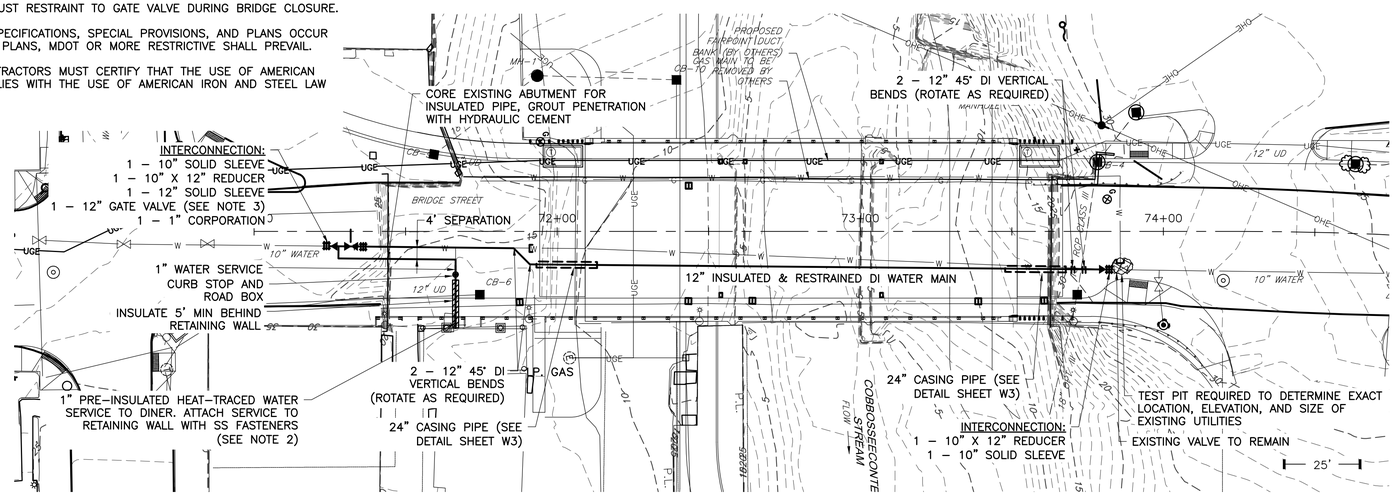
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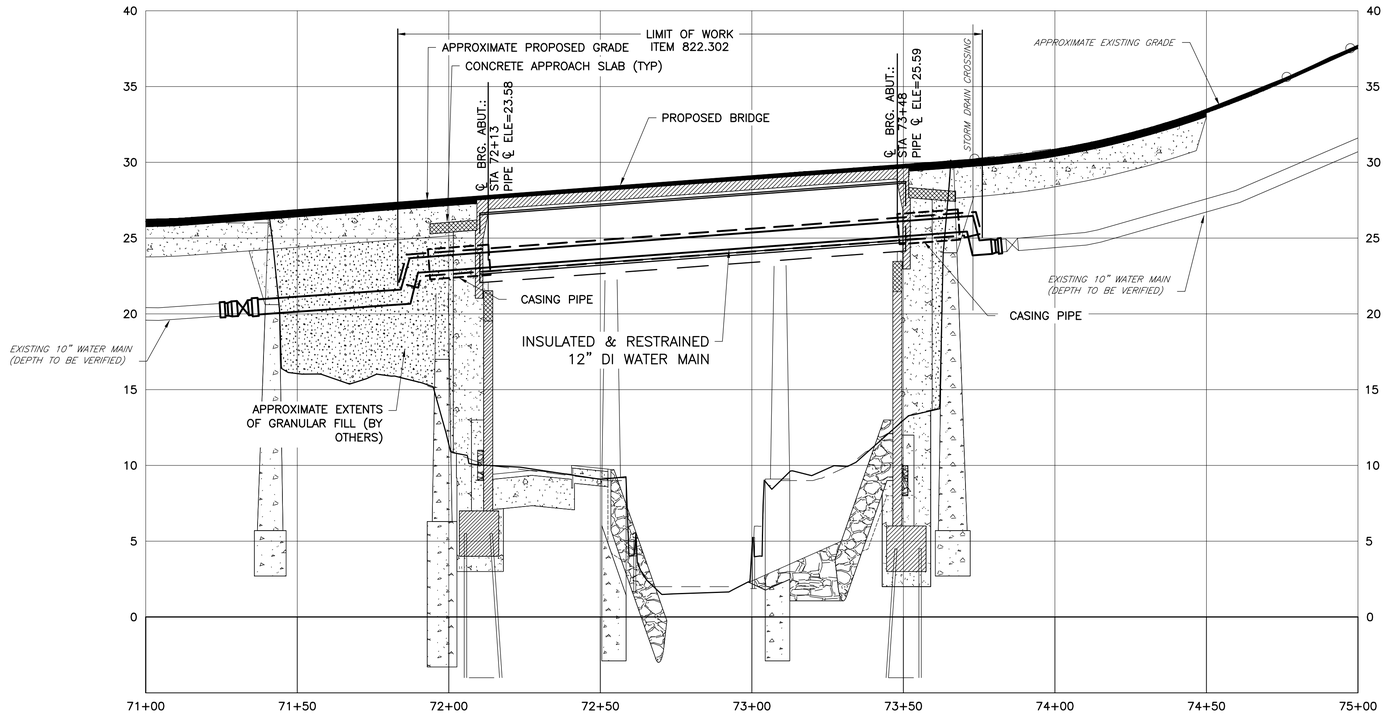
SHEET NUMBER
F05
OF F05

Filename: ...\MST\A\F05_fairpoint_details.dgn Username: dotaylor Division: BRIDGE Date:9/27/2018

NOTES:

1. EXISTING CONDITION INFORMATION AND PROPOSED BRIDGE DESIGN INFORMATION SHOWN ON THIS PLAN IS BASED ON INFORMATION FROM THE STATE OF MAINE DEPARTMENT OF TRANSPORTATION (MDOT) BRIDGE DESGIN PLAN SET TITLED, "BRIDGE STREET BRIDGE OVER COBBOSSEECONTEE STREAM–FEDERAL AID PROJECT NO. STP–1873(500)" DATED 6–12–2017, CREATED BY STANTEC.
2. COORDINATE WATER SERVICE LOCATION, BUILDING ENTRANCE, HEAT–TRACE POWER PANEL LOCATION, AND WIRE REQUIREMENTS WITH WATER DISTRICT AND BUILDING. SEE MDOT PLANS FOR ABUTMENT AND RETAINING WALL PENETRATION LOCATIONS.
3. PROVIDE TEMPORARY BRACING TO INTERCONNECTION TO PROVIDE THRUST RESTRAINT TO GATE VALVE DURING BRIDGE CLOSURE.
4. IN THE EVENT THAT DISCREPANCIES OR CONFLICTS BETWEEN MDOT SPECIFICATIONS, SPECIAL PROVISIONS, AND PLANS OCCUR WITH THE WATER UTILITIES SPECIFICATIONS, SPECIAL PROVISIONS AND PLANS, MDOT OR MORE RESTRICTIVE SHALL PREVAIL.
5. AS PER DWSRF REGULATIONS, THE PRIME CONTRACTOR AND SUBCONTRACTORS MUST CERTIFY THAT THE USE OF AMERICAN IRON AND STEEL IN THE CONSTRUCTION OF THE WATER MAINS COMPLIES WITH THE USE OF AMERICAN IRON AND STEEL LAW (SECTION 436 OF THE CONSOLIDATED APPROPRIATIONS ACT, 2014).





PROFILE

SCALE
VERT=1"–5'
HORIZ=1"–25'

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

PROJECT NO. STP–1873(500)

WIN 18735.00 BRIDGE PLANS

BRIDGE NO. 2101

BARRIN D. LANEY No. 10749 STATE OF MAINE REGISTERED PROFESSIONAL ENGINEER

SIGNATURE
No.
P.E. NUMBER
09–14–18
DATE

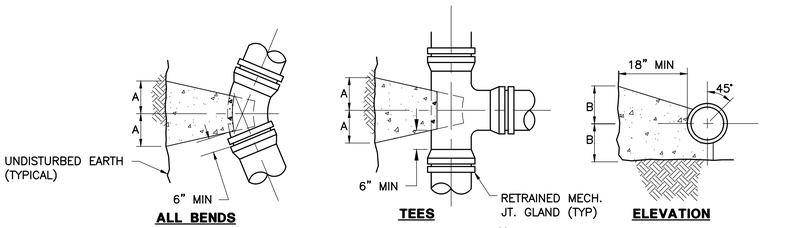
BY	DATE
-	-
-	-

PROJ. MANAGER XXXXXXXX
DESIGN–DETAILED
CHECKED–REVIEWED
DESIGNED–DETAILED
DESIGNED–DETAILED
REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

BRIDGE STREET BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

WATER MAIN BRIDGE CROSSING – BRIDGE STREET

SHEET NUMBER
W1
OF W6



NOTES

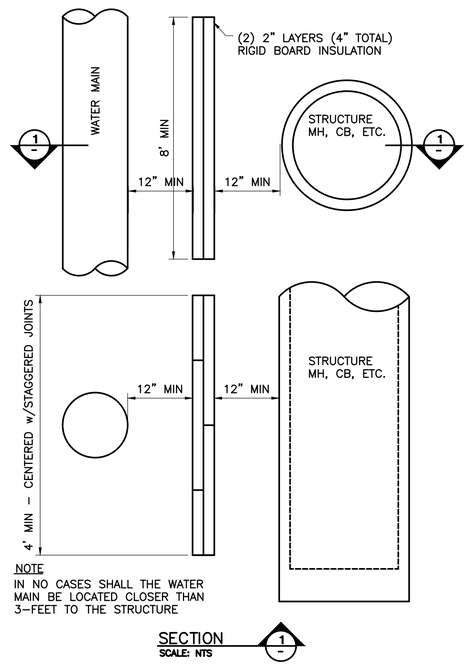
1. THRUST BLOCK SIZES SHOWN ARE BASED ON A SOIL BEARING CAPACITY OF 1000 PSF AND TEST PRESSURES OF 170 PSI.
2. POLYETHYLENE (6 MIL) SHALL BE PLACED AROUND FITTINGS PRIOR TO CONCRETE PLACEMENT.
3. PRECAST THRUST BLOCKS NOT ALLOWED FOR VERTICAL BENDS.

PIPE SIZE	90° BEND		45° BEND		22 1/2° BEND		11 1/4° BEND		TEE		VERTICAL BEND (DOWN)		DEAD END	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B
6"	15"	12"	12"	9"	9"	6"	6"	6"	12"	12"	24"	21"	–	–
8"	20"	15"	14"	12"	9"	9"	9"	6"	18"	12"	33"	24"	–	–
10"	21"	21"	18"	15"	15"	9"	9"	9"	20"	18"	40"	27"	–	–
12"	27"	24"	23"	15"	15"	12"	12"	9"	25"	18"	48"	30"	–	–
16"	37"	30"	30"	21"	21"	15"	13"	12"	32"	24"	57"	36"	–	–
20"/24"	36"	36"	30"	24"	24"	24"	24"	24"	32"	30"	32"	30"	32"	30"

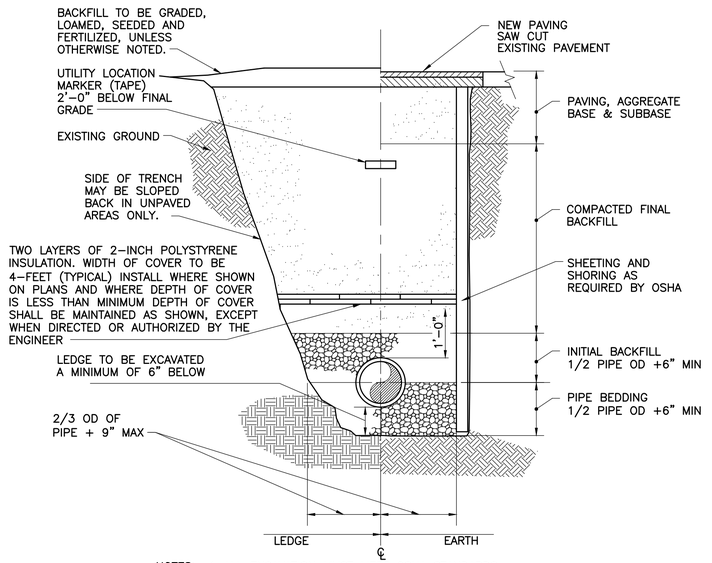
THRUST BLOCK DETAIL
NTS

NOTES:

1. WATER SERVICES SHALL BE 1" MINIMUM OR MATCH EXISTING UNLESS SHOWN OTHERWISE. ALL TAPS SHALL BE MADE "WET" AFTER THE NEW MAIN HAS BEEN TESTED AND PLACED IN SERVICE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF THE NEW WATER MAIN. LAYOUT SHALL BE REVIEWED AND ACCEPTED BY GARDINER WATER DISTRICT.
3. MINIMUM DEPTH OF COVER FOR WATER MAINS SHALL BE 5'–0" AND MAXIMUM DEPTH OF COVER SHALL BE 7'–0" UNLESS SHOWN OTHERWISE ON THE DRAWINGS. THE NEW WATER MAINS SHALL GENERALLY FOLLOW THE GROUND CONTOUR.
4. NEW MAINS SHALL BE DUCTILE IRON PIPE WITH PUSH–ON JOINTS UNLESS SHOWN OTHERWISE ON THE DRAWINGS. ALL FITTINGS SHALL BE DUCTILE IRON MECHANICAL JOINT, UNLESS OTHERWISE REQUIRED FOR JOINT RESTRAINT OR SHOWN ON THE DRAWINGS.
5. ALL BENDS, TEES, REDUCERS, HYDRANTS AND PLUGS SHALL BE RESTRAINED BY USING PRECAST CONCRETE THRUST BLOCKS AND MECHANICAL JOINT RESTRAINTS, OR OTHER METHODS AS SHOWN ON THE DRAWINGS. ANCHOR TEES SHALL BE USED FOR ALL HYDRANT BRANCHES EXCEPT IN LOCATIONS WHERE GATE VALVES CAN NOT BE CONNECTED DIRECTLY TO TEE, IN WHICH CASE RODS SHALL BE USED.
6. TEST PRESSURE FOR THE COMBINED PRESSURE AND LEAKAGE TEST SHALL BE AS NOTED IN SPECIFICATION SECTION 02675.
7. TRENCHES SHALL NOT BE LEFT OPEN DURING NON–WORKING HOURS. ALL OPEN PIPES SHALL BE SECURED WITH A WATER–TIGHT PLUG WHEN THE PIPE IS TEMPORARILY BACKFILLED AND WHEN PIPE LAYING IS NOT IN PROGRESS.
8. WHERE A NEW WATER MAIN PASSES BELOW OR ABOVE A SANITARY OR STORM SEWER, A FULL LENGTH OF WATER MAIN SHALL BE CENTERED ABOVE/BELOW THE SEWER. MAINTAIN A MINIMUM SEPARATION DISTANCE OF 12 INCHES.
9. CONNECTIONS TO EXISTING WATER MAIN SHALL BE COORDINATED WITH THE GARDINER WATER DISTRICT.
10. WHERE NEW PIPING IS TO BE CONNECTED TO EXISTING PIPING, THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ADAPTERS, FITTINGS, AND ADDITIONAL PIPE AS REQUIRED TO COMPLETE THE CONNECTION. CONTRACTOR SHALL VERIFY LOCATION, ELEVATION, ORIENTATION AND MATERIAL OF CONSTRUCTION. TEST PITS SHALL BE USED AS REQUIRED.
11. PROVIDE 4" RIGID INSULATION OVER WATER LINES WHEN COVER IS ALLOWED, BY THE ENGINEER, TO BE LESS THAN 5' OVER MAINS AND SERVICES. STAGGER ALL JOINTS ON RIGID INSULATION BOARD.
12. WATER SERVICE INTERRUPTIONS SHALL BE 4 HOURS OR LESS IN DURATION WITH NOTIFICATION TO ALL WATER CUSTOMERS AND THE GARDINER WATER DISTRICT A MINIMUM OF 72 HOURS PRIOR TO ANY INTERRUPTION IN SERVICE.
13. ALL WATER MAINS SHALL BE POLYETHYLENE ENCASED. POLYETHYLENE ENCASEMENT FOR DI PIPE (VALVES, AND FITTINGS) SHALL BE AS SPECIFIED BY ANSI/AWWA C105/A21.5–99 STANDARDS.
14. DO NOT SCALE DRAWINGS UNLESS OTHERWISE NOTED.
15. CONTRACTOR SHALL PROVIDE, FOR REVIEW AND APPROVAL BY THE ENGINEER AND THE GARDINER WATER DISTRICT, DETAILED CONSTRUCTION SCHEDULES OUTLINING PROJECT TIMING, EXPECTED SHUTDOWNS AND ANTICIPATED DURATION.
16. CONTRACTOR SHALL PROVIDE, FOR REVIEW AND APPROVAL BY THE ENGINEER AND THE GARDINER WATER DISTRICT, DETAILED TRAFFIC CONTROL PANEL OUTLINING EXPECTED TRAFFIC OFFICER REQUIREMENTS, ANTICIPATED LANE CLOSURES, SIGNAGE AND APPARATUSES.
17. INTERMEDIATE STRUCTURAL STEEL UTILITY SUPPORTS SHALL BE FURNISHED AND INSTALLED PER SPECIAL PROVISION 845. PAYMENT FOR SUPPORTS ARE INCLUDED IN LUMP SUM FOR PAY ITEM 822.302.

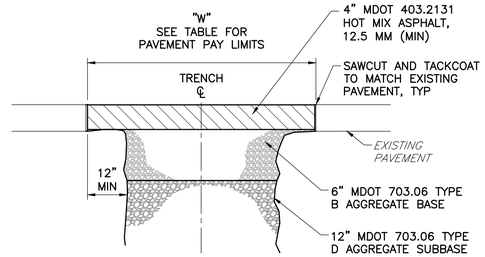


WATER MAIN-STRUCTURE INSULATION DETAIL
NTS



NOTES:
1. ALL EXCAVATION MUST MEET OSHA STANDARDS
2. INSTALL 3 FOOT LONG IMPERVIOUS MATERIAL DAM IN BEDDING/INITIAL BACKFILL MATERIAL EVERY 100 FEET TO PREVENT TRENCH GROUND WATER FROM BEING CHANNELED ALONG BEDDING/INITIAL BACKFILL.

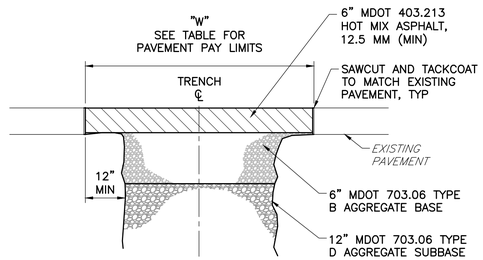
PIPE TRENCH DETAIL
NTS



PAVEMENT PAY LIMITS	
PIPE I.D.	"W" (FOR 0' – 10' DEEP)
6" – 15"	7'–0"
16" – 21"	8'–0"

"W" SHALL BE INCREASED BY 1'–0" FOR TRENCHES 10' – 15', AND BY 2'–0" FOR TRENCHES 15' – 20' DEEP.

WATER MAIN & SERVICE TEMPORARY TRENCH PAVING
ARCADE LOT
NTS



PAVEMENT PAY LIMITS	
PIPE I.D.	"W" (FOR 0' – 10' DEEP)
6" – 15"	7'–0"
16" – 21"	8'–0"

"W" SHALL BE INCREASED BY 1'–0" FOR TRENCHES 10' – 15', AND BY 2'–0" FOR TRENCHES 15' – 20' DEEP.

WATER MAIN & SERVICE TEMPORARY TRENCH PAVING
BRIDGE STREET & MAINE STREET
NTS

PAVEMENT NOTES:

1. WHEREVER PAVEMENT IS DISTURBED ALONG ANY STATE OR STATE AID ROADWAY, THE MINIMUM WIDTH OF PAVEMENT THAT SHALL BE REPLACED MUST BE AT LEAST 2' WIDE. ALL DISTURBED PAVEMENT AREAS SHALL BE REMOVED BY MACHINE CUTTING STRAIGHT EDGES THAT RUN PARALLEL TO THE ℄ OF THE ROADWAY.
2. WHEN OVERLAY ABUTS GRAVEL SHOULDER, THE SHOULDER SHALL BE BROUGHT TO THE AGGREGATE GRADE WITH BASE TYPE A.
3. WHEN PAVEMENT OVERLAY AND TRENCH PATCH ABUTS PAVEMENT, PAVED DRIVES, OR ENTRANCES, THE EXISTING PAVEMENT IS TO BE GROUND 1"± TO CREATE A SMOOTH TRANSITION BETWEEN THE EXISTING SURFACE AND THE NEW PAVEMENT.

NOTE: AS PER DWSRF REGULATIONS, THE PRIME CONTRACTOR AND SUBCONTRACTORS MUST CERTIFY THAT THE USE OF AMERICAN IRON AND STEEL IN THE CONSTRUCTION OF THE WATER MAINS COMPLIES WITH THE USE OF AMERICAN IRON AND STEEL LAW (SECTION 436 OF THE CONSOLIDATED APPROPRIATIONS ACT, 2014).

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
PROJECT NO. STP–1873(500)
BRIDGE NO. 2101
WIN 18735.00
BRIDGE PLANS

STATE OF MAINE · DEPARTMENT OF TRANSPORTATION · ENGINEERING BUREAU · BARRIN D. LAST · No. 10481 · REGISTERED PROFESSIONAL ENGINEER

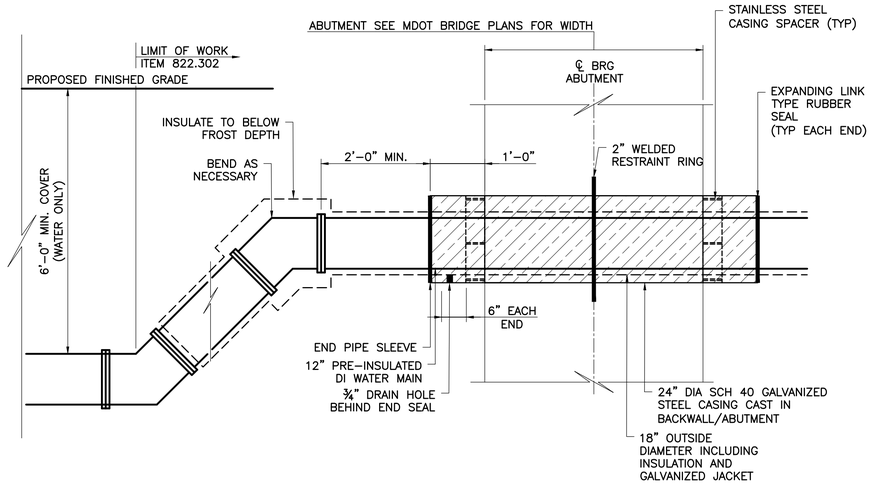
SIGNATURE
No.X
P.E. NUMBER
09–14–18
DATE

DATE	BY	
–	–	PROJ MANAGER XXXXXXXXX
–	–	DESIGN–DETAILED
–	–	CHECKED–DETAILED
–	–	DESIGN–DETAILED
–	–	DESIGN–DETAILED
–	–	REVISIONS 1
–	–	REVISIONS 2
–	–	REVISIONS 3
–	–	REVISIONS 4
–	–	FIELD CHANGES

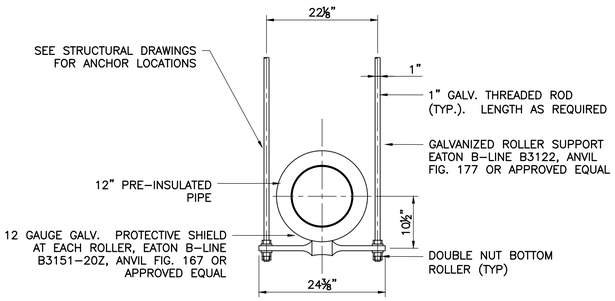
BRIDGE STREET BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

WATER MAIN DETAILS I

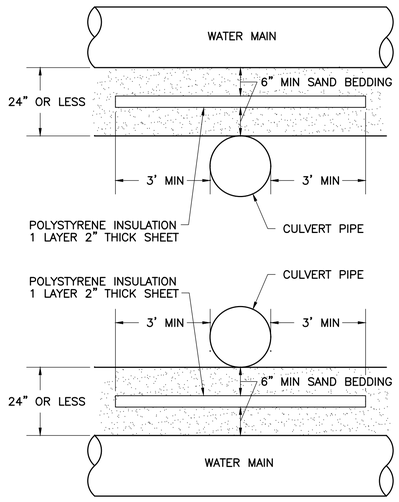
SHEET NUMBER
W2
OF W6



TYPICAL ABUTMENT SECTION - WATER MAIN
SCALE: NTS

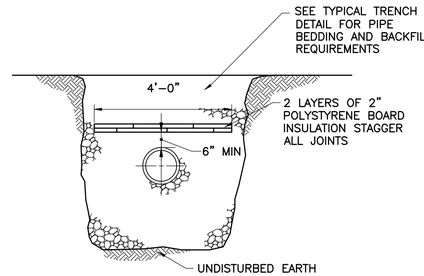


ADJUSTABLE ROLLER SUPPORT
SCALE: NTS



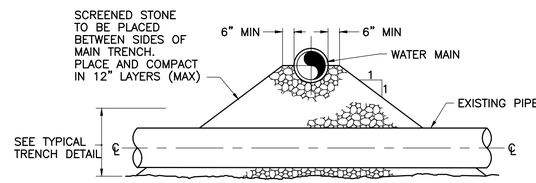
NOTE: INSULATION TO BE USED WHERE PIPE SEPARATION IS 24" OR LESS.

CULVERT CROSSING DETAIL
NTS



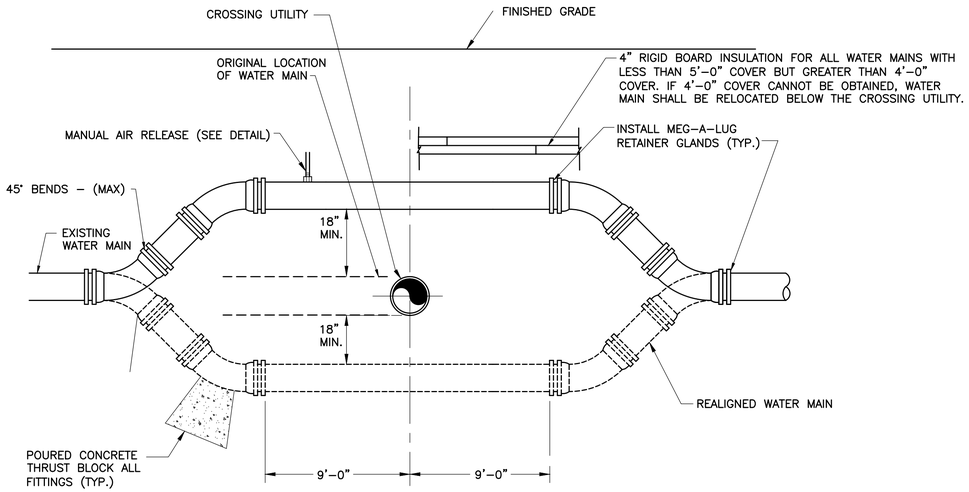
NOTE:
1. TRENCH PIPE INSULATION TO BE USED WHERE DEPTH OF COVER IS LESS THAN 5'–0" FEET OR AS DIRECTED BY THE ENGINEER.

TRENCH PIPE INSULATION DETAIL
NTS



NOTE:
JOINTS ON EACH PIPE TO BE AS FAR FROM INTERSECTION AS POSSIBLE

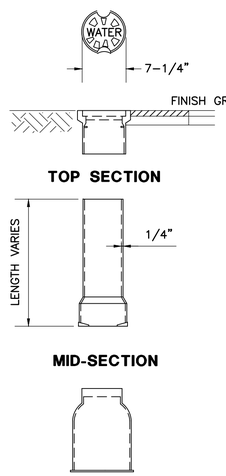
PIPE CROSSING DETAIL
NTS



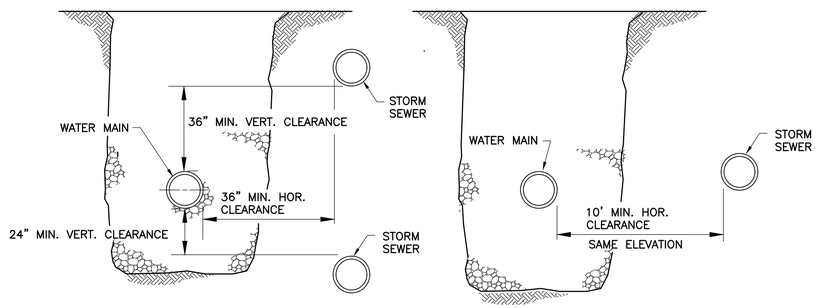
WATER MAIN RELOCATION
NTS

NOTES:

1. ALL FITTINGS AND JOINTS IN LOWERING AREA TO BE RESTRAINED.
2. WHEN IT IS IMPOSSIBLE TO OBTAIN HORIZONTAL OR VERTICAL SEPARATION AS INDICATED IN THE DETAIL ABOVE, BOTH THE WATER AND THE SEWER SHOULD BE ENCASED IN CONTROLED DENSITY FILL FOR A DISTANCE OF 10 FEET ON EITHER SIDE OF THE CROSSING.
3. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE WRAPPED WITH POLYETHYLENE ENCASEMENT WHEN CONTACTING POURED CONCRETE PRODUCTS.



VALVE BOX DETAIL
NTS



TRENCH PIPE CLEARANCE DETAIL
NTS

NOTE: AS PER DWSRF REGULATIONS, THE PRIME CONTRACTOR AND SUBCONTRACTORS MUST CERTIFY THAT THE USE OF AMERICAN IRON AND STEEL IN THE CONSTRUCTION OF THE WATER MAINS COMPLIES WITH THE USE OF AMERICAN IRON AND STEEL LAW (SECTION 436 OF THE CONSOLIDATED APPROPRIATIONS ACT, 2014).

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
PROJECT NO. STP–1873(500)
BRIDGE NO. 2101
WIN 18735.00
BRIDGE PLANS

STATE OF MAINE BARRIN D. LAMB No. 10748 REGISTERED PROFESSIONAL ENGINEER

SIGNATURE
P.E. NUMBER
09–14–18
DATE

BY	DATE
-	-
-	-

PROJ. MANAGER XXXXXXXXX
DESIGN–DETAILED
CHECKED–REVIEWED
DESIGN–ESTIMATED
DESIGN–24 HOUR
REVISIONS 1
REVISIONS 2
REVISIONS 3
FIELD CHANGES

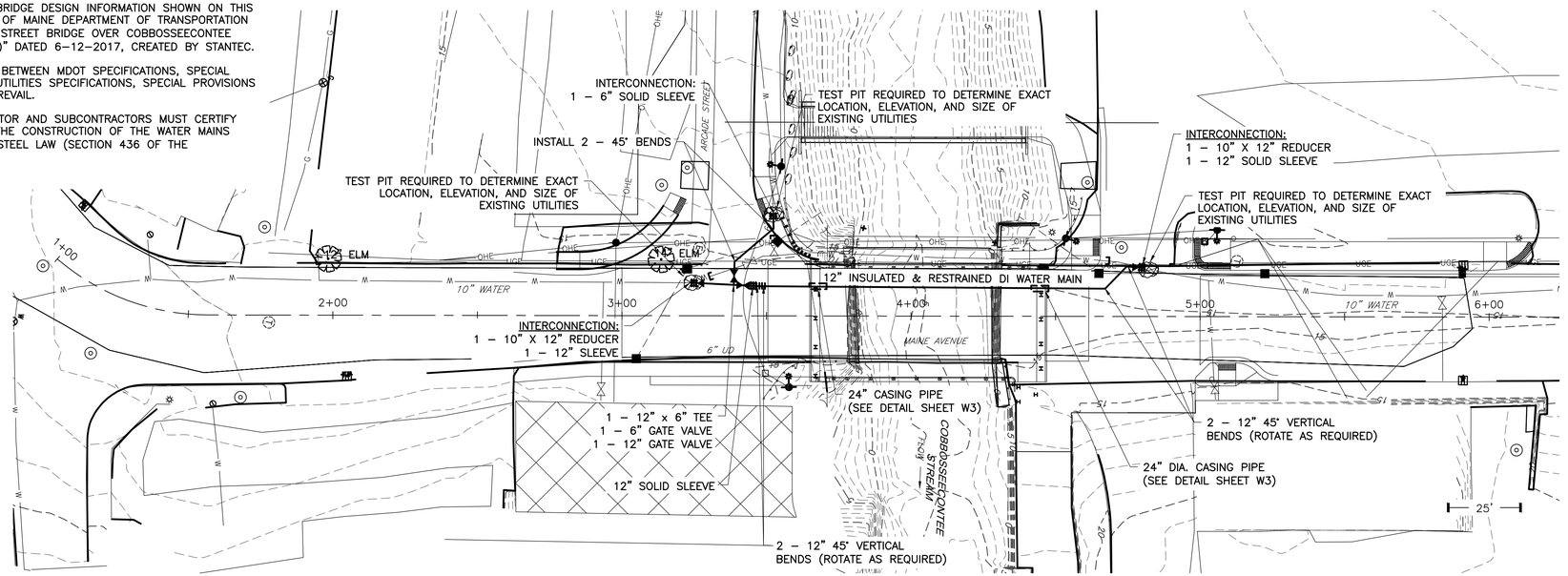
BRIDGE STREET BRIDGE
COBBOSSEECONTEE STREAM
KENNEBEC COUNTY
GARDINER

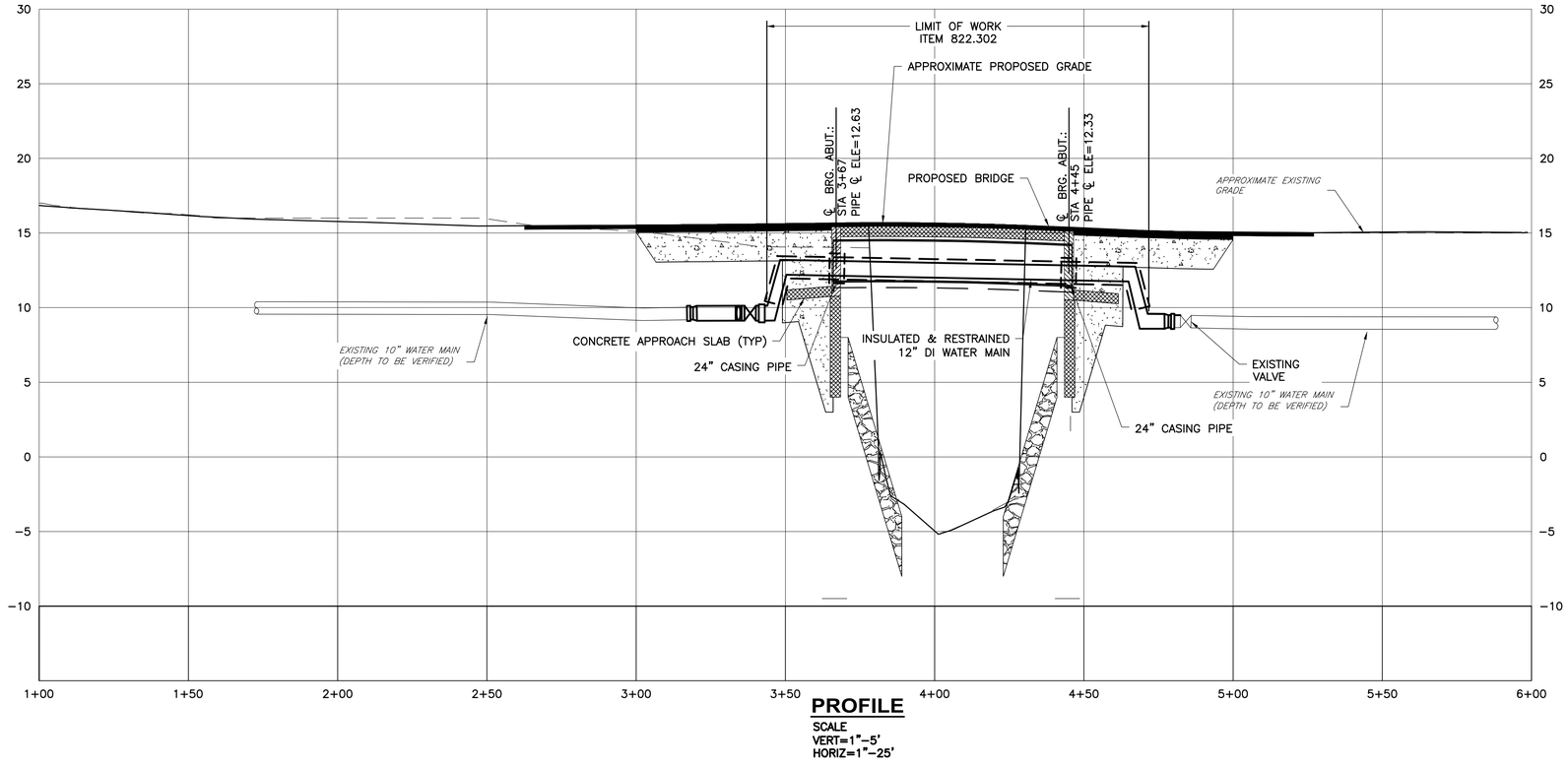
WATER MAIN DETAILS II

SHEET NUMBER
W3
OF W6

NOTES:

1. EXISTING CONDITION INFORMATION AND PROPOSED BRIDGE DESIGN INFORMATION SHOWN ON THIS PLAN IS BASED ON INFORMATION FROM THE STATE OF MAINE DEPARTMENT OF TRANSPORTATION (MDOT) BRIDGE DESGIN PLAN SET TITLED, "BRIDGE STREET BRIDGE OVER COBBOSSEECONTEE STREAM–FEDERAL AID PROJECT NO. STP–1873(500)" DATED 6–12–2017, CREATED BY STANTEC.
2. IN THE EVENT THAT DISCREPANCIES OR CONFLICTS BETWEEN MDOT SPECIFICATIONS, SPECIAL PROVISIONS, AND PLANS OCCUR WITH THE WATER UTILITIES SPECIFICATIONS, SPECIAL PROVISIONS AND PLANS, MDOT OR MORE RESTRICTIVE SHALL PREVAIL.
3. AS PER DWSRF REGULATIONS, THE PRIME CONTRACTOR AND SUBCONTRACTORS MUST CERTIFY THAT THE USE OF AMERICAN IRON AND STEEL IN THE CONSTRUCTION OF THE WATER MAINS COMPLIES WITH THE USE OF AMERICAN IRON AND STEEL LAW (SECTION 436 OF THE CONSOLIDATED APPROPRIATIONS ACT, 2014).





PROFILE
SCALE
VERT=1"–5'
HORIZ=1"–25'

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
PROJECT NO. STP–1873(600)
WIN 18736.00
BRIDGE NO. 3098
BRIDGE PLANS

BARRIN D. LACY
No. 10148
REGISTERED PROFESSIONAL ENGINEER
STATE OF MAINE

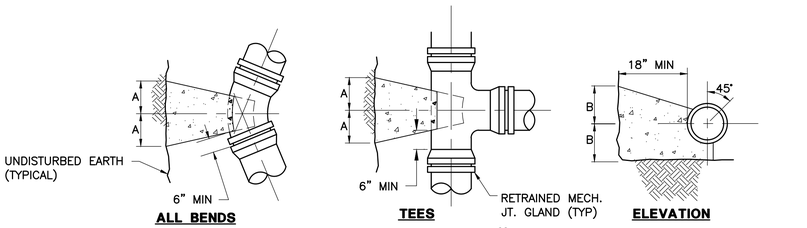
SIGNATURE
P.E. NUMBER
09–14–18
DATE

	BY	DATE
PROJ. MANAGER XXXXXXXX		
DESIGN–DETAILED		
CHECKED–REVISED		
DESIGNED–DETAILED		
DESIGNED–DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
KENNEBEC COUNTY
GARDINER

WATER MAIN BRIDGE CROSSING – MAINE AVENUE

SHEET NUMBER
W4
OF W6



NOTES

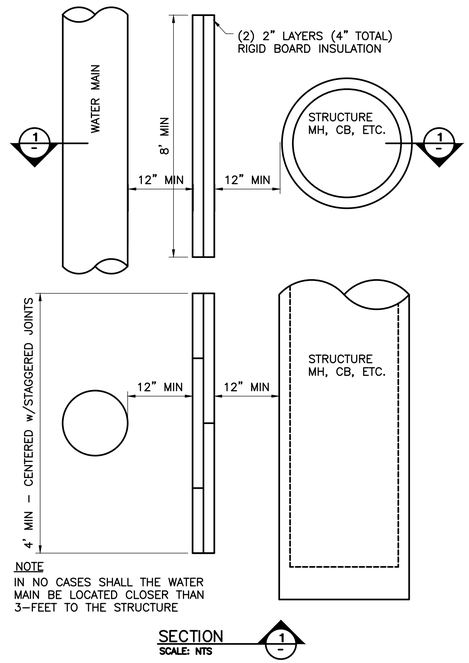
1. THRUST BLOCK SIZES SHOWN ARE BASED ON A SOIL BEARING CAPACITY OF 1000 PSF AND TEST PRESSURES OF 170 PSI.
2. POLYETHYLENE (6 MIL) SHALL BE PLACED AROUND FITTINGS PRIOR TO CONCRETE PLACEMENT.
3. PRECAST THRUST BLOCKS NOT ALLOWED FOR VERTICAL BENDS.

PIPE SIZE	90° BEND		45° BEND		22 1/2° BEND		11 1/4° BEND		TEE		VERTICAL BEND (DOWN)		DEAD END	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B
6"	15"	12"	12"	9"	9"	6"	6"	6"	12"	12"	24"	21"	–	–
8"	20"	15"	14"	12"	9"	9"	9"	6"	18"	12"	33"	24"	–	–
10"	21"	21"	18"	15"	15"	9"	9"	9"	20"	18"	40"	27"	–	–
12"	27"	24"	23"	15"	15"	12"	12"	9"	25"	18"	48"	30"	–	–
16"	37"	30"	30"	21"	21"	15"	13"	12"	32"	24"	57"	36"	–	–
20"/24"	36"	36"	30"	24"	24"	24"	24"	24"	32"	30"	32"	30"	32"	30"

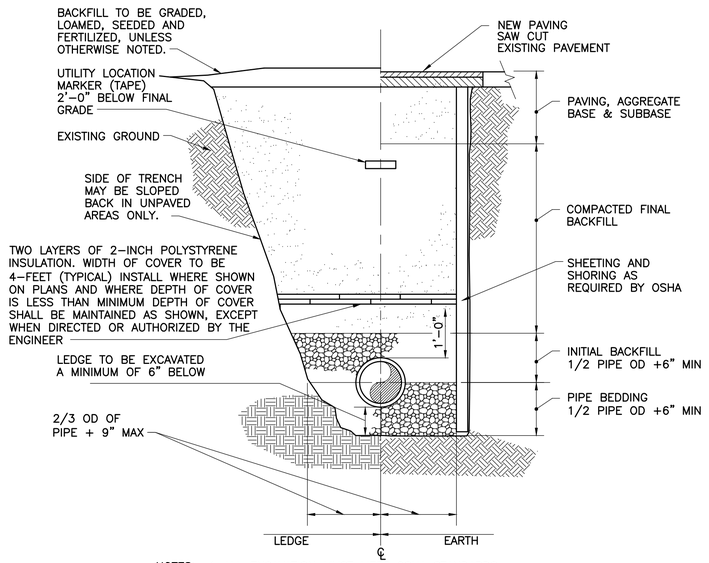
THRUST BLOCK DETAIL
NTS

NOTES:

1. WATER SERVICES SHALL BE 1" MINIMUM OR MATCH EXISTING UNLESS SHOWN OTHERWISE. ALL TAPS SHALL BE MADE "WET" AFTER THE NEW MAIN HAS BEEN TESTED AND PLACED IN SERVICE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF THE NEW WATER MAIN. LAYOUT SHALL BE REVIEWED AND ACCEPTED BY GARDINER WATER DISTRICT.
3. MINIMUM DEPTH OF COVER FOR WATER MAINS SHALL BE 5'–0" AND MAXIMUM DEPTH OF COVER SHALL BE 7'–0" UNLESS SHOWN OTHERWISE ON THE DRAWINGS. THE NEW WATER MAINS SHALL GENERALLY FOLLOW THE GROUND CONTOUR.
4. NEW MAINS SHALL BE DUCTILE IRON PIPE WITH PUSH–ON JOINTS UNLESS SHOWN OTHERWISE ON THE DRAWINGS. ALL FITTINGS SHALL BE DUCTILE IRON MECHANICAL JOINT, UNLESS OTHERWISE REQUIRED FOR JOINT RESTRAINT OR SHOWN ON THE DRAWINGS.
5. ALL BENDS, TEES, REDUCERS, HYDRANTS AND PLUGS SHALL BE RESTRAINED BY USING PRECAST CONCRETE THRUST BLOCKS AND MECHANICAL JOINT RESTRAINTS, OR OTHER METHODS AS SHOWN ON THE DRAWINGS. ANCHOR TEES SHALL BE USED FOR ALL HYDRANT BRANCHES EXCEPT IN LOCATIONS WHERE GATE VALVES CAN NOT BE CONNECTED DIRECTLY TO TEE, IN WHICH CASE RODS SHALL BE USED.
6. TEST PRESSURE FOR THE COMBINED PRESSURE AND LEAKAGE TEST SHALL BE AS NOTED IN SPECIFICATION SECTION 02675.
7. TRENCHES SHALL NOT BE LEFT OPEN DURING NON–WORKING HOURS. ALL OPEN PIPES SHALL BE SECURED WITH A WATER–TIGHT PLUG WHEN THE PIPE IS TEMPORARILY BACKFILLED AND WHEN PIPE LAYING IS NOT IN PROGRESS.
8. WHERE A NEW WATER MAIN PASSES BELOW OR ABOVE A SANITARY OR STORM SEWER, A FULL LENGTH OF WATER MAIN SHALL BE CENTERED ABOVE/BELOW THE SEWER. MAINTAIN A MINIMUM SEPARATION DISTANCE OF 12 INCHES.
9. CONNECTIONS TO EXISTING WATER MAIN SHALL BE COORDINATED WITH THE GARDINER WATER DISTRICT.
10. WHERE NEW PIPING IS TO BE CONNECTED TO EXISTING PIPING, THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ADAPTERS, FITTINGS, AND ADDITIONAL PIPE AS REQUIRED TO COMPLETE THE CONNECTION. CONTRACTOR SHALL VERIFY LOCATION, ELEVATION, ORIENTATION AND MATERIAL OF CONSTRUCTION. TEST PITS SHALL BE USED AS REQUIRED.
11. PROVIDE 4" RIGID INSULATION OVER WATER LINES WHEN COVER IS ALLOWED, BY THE ENGINEER, TO BE LESS THAN 5' OVER MAINS AND SERVICES. STAGGER ALL JOINTS ON RIGID INSULATION BOARD.
12. WATER SERVICE INTERRUPTIONS SHALL BE 4 HOURS OR LESS IN DURATION WITH NOTIFICATION TO ALL WATER CUSTOMERS AND THE GARDINER WATER DISTRICT A MINIMUM OF 72 HOURS PRIOR TO ANY INTERRUPTION IN SERVICE.
13. ALL WATER MAINS SHALL BE POLYETHYLENE ENCASED. POLYETHYLENE ENCASEMENT FOR DI PIPE (VALVES, AND FITTINGS) SHALL BE AS SPECIFIED BY ANSI/AWWA C105/A21.5–99 STANDARDS.
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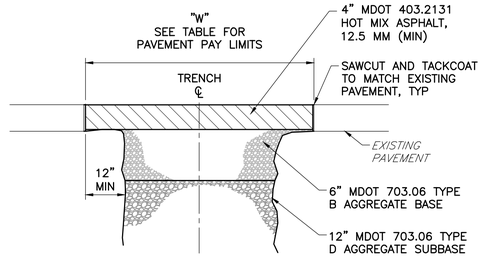
WATER MAIN-STRUCTURE INSULATION DETAIL
NTS



NOTES:
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PIPE TRENCH DETAIL
NTS

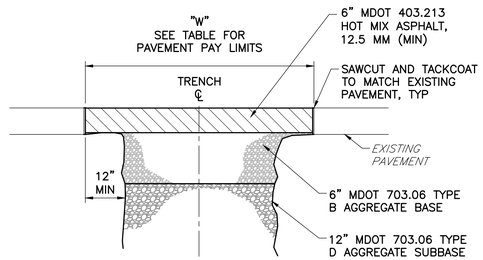
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PAVEMENT PAY LIMITS	
PIPE I.D.	"W" (FOR 0' – 10' DEEP)
6" – 15"	7'–0"
16" – 21"	8'–0"

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WATER MAIN & SERVICE TEMPORARY TRENCH PAVING
ARCADE LOT
NTS



PAVEMENT PAY LIMITS	
PIPE I.D.	"W" (FOR 0' – 10' DEEP)
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WATER MAIN & SERVICE TEMPORARY TRENCH PAVING
BRIDGE STREET & MAINE STREET
NTS

PAVEMENT NOTES:

1. WHEREVER PAVEMENT IS DISTURBED ALONG ANY STATE OR STATE AID ROADWAY, THE MINIMUM WIDTH OF PAVEMENT THAT SHALL BE REPLACED MUST BE AT LEAST 2' WIDE. ALL DISTURBED PAVEMENT AREAS SHALL BE REMOVED BY MACHINE CUTTING STRAIGHT EDGES THAT RUN PARALLEL TO THE ℄ OF THE ROADWAY.
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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
PROJECT NO. STP–1873(600)
BRIDGE NO. 3098
WIN 18736.00
BRIDGE PLANS

STATE OF MAINE BARRIN D. LADY No. 10181 REGISTERED PROFESSIONAL ENGINEER

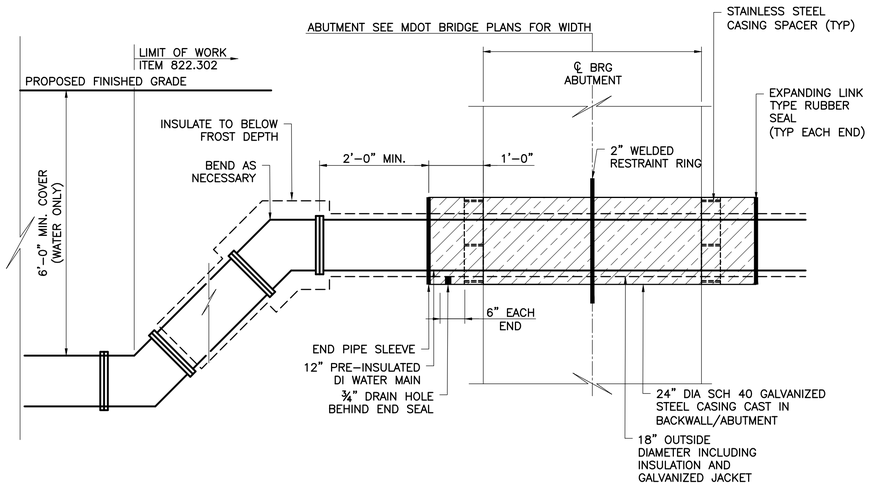
SIGNATURE
P.E. NUMBER
09–14–18
DATE

DATE	BY	
–	–	PROJ MANAGER XXXXXXXX
–	–	DESIGN–DETAILED
–	–	CHECKED–RECHECKED
–	–	DESIGN–DETAILED
–	–	DESIGN–DETAILED
–	–	REVISIONS 1
–	–	REVISIONS 2
–	–	REVISIONS 3
–	–	REVISIONS 4
–	–	FIELD CHANGES

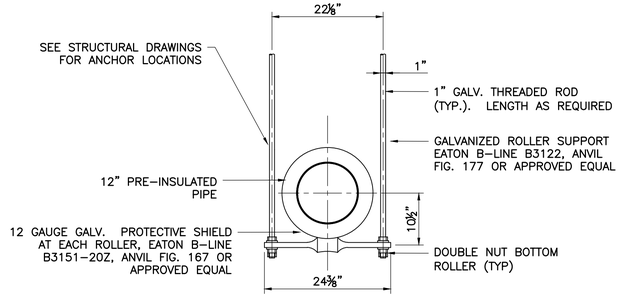
MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
GARDINER KENNEBEC COUNTY

WATER MAIN DETAILS I

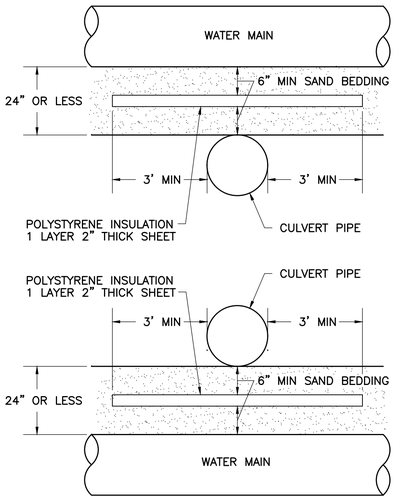
SHEET NUMBER
W5
OF W6



TYPICAL ABUTMENT SECTION - WATER MAIN
SCALE: NTS

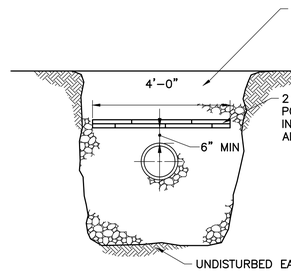


ADJUSTABLE ROLLER SUPPORT
SCALE: NTS



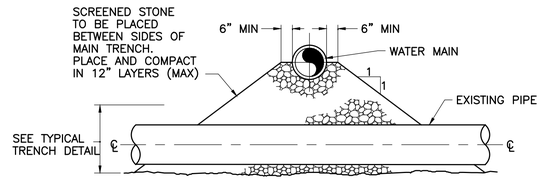
NOTE: INSULATION TO BE USED WHERE PIPE SEPARATION IS 24" OR LESS.

CULVERT CROSSING DETAIL
NTS



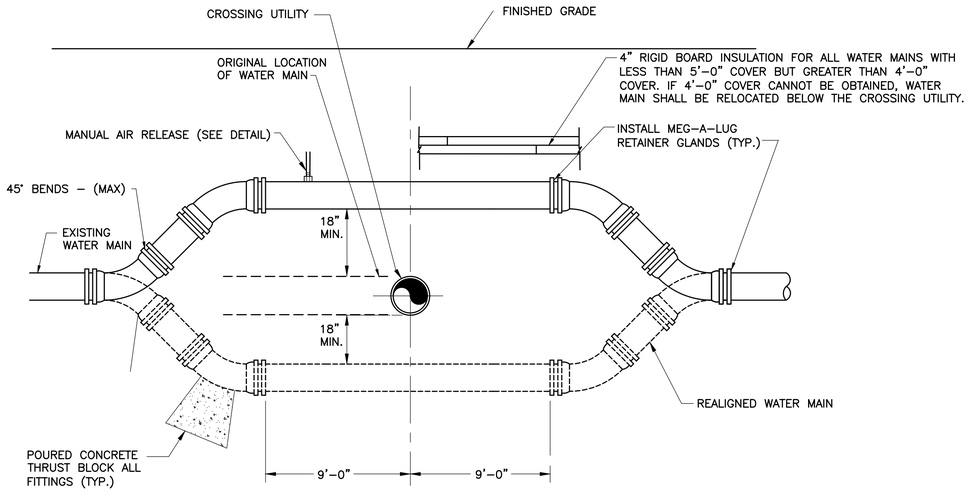
NOTE:
1. TRENCH PIPE INSULATION TO BE USED WHERE DEPTH OF COVER IS LESS THAN 5'–0" FEET OR AS DIRECTED BY THE ENGINEER.

TRENCH PIPE INSULATION DETAIL
NTS



NOTE:
JOINTS ON EACH PIPE TO BE AS FAR FROM INTERSECTION AS POSSIBLE

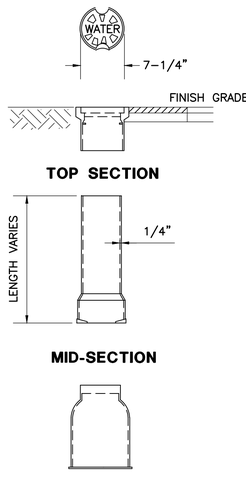
PIPE CROSSING DETAIL
NTS



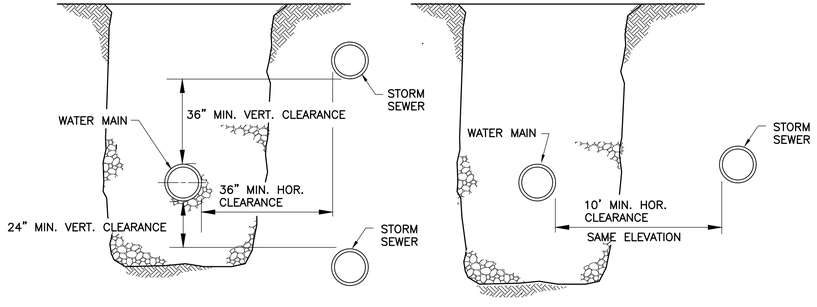
WATER MAIN RELOCATION
NTS

NOTES:

1. ALL FITTINGS AND JOINTS IN LOWERING AREA TO BE RESTRAINED.
2. WHEN IT IS IMPOSSIBLE TO OBTAIN HORIZONTAL OR VERTICAL SEPARATION AS INDICATED IN THE DETAIL ABOVE, BOTH THE WATER AND THE SEWER SHOULD BE ENCASED IN CONTROLED DENSITY FILL FOR A DISTANCE OF 10 FEET ON EITHER SIDE OF THE CROSSING.
3. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE WRAPPED WITH POLYETHYLENE ENCASEMENT WHEN CONTACTING POURED CONCRETE PRODUCTS.



VALVE BOX DETAIL
NTS



TRENCH PIPE CLEARANCE DETAIL
NTS

NOTE: AS PER DWSRF REGULATIONS, THE PRIME CONTRACTOR AND SUBCONTRACTORS MUST CERTIFY THAT THE USE OF AMERICAN IRON AND STEEL IN THE CONSTRUCTION OF THE WATER MAINS COMPLIES WITH THE USE OF AMERICAN IRON AND STEEL LAW (SECTION 436 OF THE CONSOLIDATED APPROPRIATIONS ACT, 2014).

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
PROJECT NO. STP–1873(600)
BRIDGE NO. 3098
WIN 18736.00
BRIDGE PLANS

STATE OF MAINE — DARRIN D. LAJOIE — No. 10148 — REGISTERED PROFESSIONAL ENGINEER

SIGNATURE
P.E. NUMBER
09–14–18
DATE

PROJ. MANAGER XXXXXXXX	BY	DATE
DESIGN–DETAILED	-	-
CHECKED–RECHKED	-	-
DESIGN–DETAILED		
DESIGN–DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
FIELD CHANGES		

MAINE AVENUE BRIDGE
COBBOSSEECONTEE STREAM
KENNEBEC COUNTY
GARDINER

WATER MAIN DETAILS II

SHEET NUMBER
W6
OF W6