

MAINE TURNPIKE AUTHORITY

ADDENDUM NO. 1

CONTRACT 2023.02

EXIT 102, NEW ON RAMP  
INTERCHANGE RAMP "A"  
MILE 102.0

**General**

The final addendum is scheduled to be issued on Monday, December 12, 2022. All questions regarding Contract 2023.02 shall be submitted by **5:00pm on Wednesday, December 7, 2022** to be answered in that addendum. Questions received after that time may not be answered.

**Make the following changes to the bid documents:**

In the Contract Plans, **REMOVE** sheets 2, 3, 8, 12, 14, 15, 17-19, and 21 and **REPLACE** with the attached revised sheets 2, 3, 8, 12, 14, 15, 17-19, and 21.

In the Contract Documents, Notice to Contractors, make the following 'Pen and Ink' change. On sheet N-1, paragraph 4, change the payment for half size plans from \$250.00 to \$125.00. "**The half size Plans** and Contract Documents may be obtained from the Authority upon payment of One Hundred Twenty-Five (\$125.00) Dollars for each set, which payment will not be returned."

In the Contract Documents, Proposal, **REMOVE** pages P-2 through P-9 and **REPLACE** with the attached revised pages P-2 through P-9.

In the Contract Documents, Part 2 – Special Provisions, **ADD** Special Provision Section 524 Temporary Supports (Protective Shielding – Steel Girders), (Protective Shielding – Prestressed Structural concrete I-Girders), (Protective Shielding – Prestressed Structural Concrete Slabs).

In the Contract Documents, Part 2 – Special Provisions, **REMOVE** Special Provision Section 526 – Concrete Barrier (Temporary Concrete Barrier Type I – Supplied by the Authority) and **REPLACE** with the attached revised Special Provision Section 526 – Concrete Barrier (Temporary Concrete Barrier Type I – Supplied by the Authority).

In the Contract Documents, Part 2 – Special Provisions, **REMOVE** Special Provision Section 634 – Highway Lighting (Highway Lighting Panel and Service Upgrades) and **REPLACE** with the attached revised Special Provision Section 634 – Highway Lighting (Highway Lighting Panel and Service Upgrades).

In the Contract Documents, Part 2 – Special Provisions, **REMOVE** Special Provision Section 634 – Highway Lighting (Conventional Light Standard with LED Fixture – Supplied by the Authority) and **REPLACE** with the attached Special Provision Section 634 – Highway Lighting (Conventional Light Standard with LED Fixture – Supplied by the Authority).

## Questions:

The following are questions asked at the pre-bid meeting held on November 29, 2022 or submitted to the Maine Turnpike Authority in writing. Answers to the questions are noted. Bidders shall utilize this information in preparing their bid.

Question 1: Where are concrete collars required?

Response: *A concrete collar is required at the pipe extension at 5209+39, 61.68' RT where a 12" x 8' OPT III pipe will be used to extend and existing RCP pipe under mainline.*

Question 2: Please Confirm that 900 LF of barrier will be sufficient for traffic control. Will Barrier be required at the beginning of the new on ramp prior to it being open to traffic?

Response: *The barrier quantity has be updated to 1,500 LF, please see the attached Special Provision Section 526 – Concrete Barrier – (Temporary Concrete Barrier Type 1 – Supplied by Authority). Item 652.312 - Type III Barricades shall be used at the beginning north end of the new on ramp prior to it being open to traffic.*

Question 3: Note 5 on sheet 25 of 79 mentions a Special Provision Section 524, Temporary Structural Supports (Protective Shield – Steel Girders). This Special Provision is not included in our bid book. Can this be provided?

Response: *See the attached Special Provision Section 524 - (Protective Shielding - Steel Girders), (Protective Shielding - Prestressed Structural Concrete I-Girders), (Protective Shielding - Prestressed Structural Concrete Slabs)*

Question 4: Is the milling of the Northbound off-ramp included in the quantity for Item 202.202? It is not listed in the quantity on Sheet 3 Construction notes/Earthwork summary.

Response: *Yes, the milling of the Northbound off-ramp included in the quantity for Item 202.202 – Remove Pavement Surface. Please see revised sheets attached.*

Question 5: On Sheet 4 (General Notes) of the plans there is Note 7 of "General" that states "Copies of the As-Built Plans are posted on the Maine Turnpike Authority website". I have not been able to find these plans. I would like to see the details of the existing bridge that needs to be removed.

Response: *The As-Builts have now been posted to the Authority's website under the Additional Info section.*

Question 6: What is the reason behind all the electrical conduit being run under the new drainage? This seems to be a slight issue that can be overcome, but would be much easier if run above with just a required cover needed.

Response: *The Contractor shall install electrical conduit below the drainage pipes as noted in the plans.*

**Attachments**

- Contract Plan Sheets 2, 3, 8, 12, 14, 15, 17-19, and 21 (10 pages)
- Proposal Pages P-2 through P-9 (8 pages)
- Special Provision Section 524 – Temporary Supports (Protective Shielding – Steel Girders), (Protective Shielding – Prestressed Structural concrete I-Girders), (Protective Shielding – Prestressed Structural Concrete Slabs) (3 pages)
- Special Provision Section 526 – Concrete Barrier – (Temporary Concrete Barrier Type 1 – Supplied by Authority) (4 pages)
- Special Provision Section 634 – Highway Lighting – (Highway Lighting Panel and Service Upgrades) (2 pages)
- Special Provision Section 634 – Highway Lighting – (Conventional Light Standard with LED Fixture – Supplied by the Authority) (3 pages)
- Pre-Bid Agenda (5 pages)
- Pre-Bid Sign-In Sheet (1 page)

Note: The above items shall be considered as part of the bid submittal.

The total number of pages included with this addendum is thirty-three (39).

All bidders are requested to acknowledge the receipt of the Addendum No. 1 by signing below and faxing this sheet to Nate Carll, Purchasing Department, (207) 871-7739. Bidders are also required to acknowledge receipt of this Addendum No. 1 on Page P-10 of the bid package.

\_\_\_\_\_  
Business Name

\_\_\_\_\_  
Print Name and Title

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

December 5, 2022

Very truly yours,

MAINE TURNPIKE AUTHORITY

\_\_\_\_\_  
Purchasing Manager  
Maine Turnpike Authority

**SCHEDULE OF BID PRICES  
CONTRACT NO. 2023.02**

**EXIT 102, NEW ON RAMP  
INTERCHANGE RAMP "A"  
MILE 102.0**

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
201.11	Clearing	Acres	2.90				
201.23	Removing Single Tree Top Only	Each	1				
201.24	Removing Stump	Each	1				
202.08	Removing Building No. 1: 7 Ronnie Street	Lump Sum	1				
202.12	Removing Existing Structural Concrete	Cubic Yard	16				
202.15	Removing Existing Manhole or Catch Basin	Each	1				
202.193	Removing Existing Bridge (Struct. Steel = 76 T, Conc. = 570 CY)	Lump Sum	1				
202.202	Removing Pavement Surface	Square Yard	17000				
202.203	Pavement Butt Joints	Square Yard	32				
203.2	Common Excavation	Cubic Yard	14300				
203.24	Common Borrow	Cubic Yard	2300				

**CARRIED FORWARD:**

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
<b>BROUGHT FORWARD:</b>							
203.25	Granular Borrow	Cubic Yard	970				
203.33	Special Fill	Cubic Yard	24				
211.3	Ditch Excavation	Linear Foot	1400				
304.1	Aggregate Subbase Course - Gravel	Cubic Yard	9600				
304.14	Aggregate Subbase Course - Type A	Cubic Yard	2400				
403.207	Hot Mix Asphalt 19.0 MM HMA	Tons	720				
403.208	Hot Mix Asphalt 12.5 MM HMA Surface	Tons	760				
403.209	Hot Mix Asphalt 9.5 MM HMA (Incid.)	Tons	63				
403.211	Hot Mix Asphalt (Shim)	Tons	130				
403.213	Hot Mix Asphalt 12.5 MM HMA Base	Tons	470				
404.2081	Hot Mix Asphalt 12.5 MM HMA Polymer Modified	Tons	430				
409.15	Bituminous Tack Coat Applied	Gallon	790				

**CARRIED FORWARD:**

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
<b>BROUGHT FORWARD:</b>							
419.3	Sawing Bituminous Pavement	Linear Foot	3400				
524.4	Protective Shielding	Square Yard	550				
526.306	Temporary Concrete Barrier, Type 1 - Supplied by the Authority	Lump Sum	1				
527.341	Work Zone Crash Cushions - TL-3	Unit	3				
603.15	12" Culvert Pipe Option I	Linear Foot	46				
603.159	12" Culvert Pipe Option III	Linear Foot	8				
603.16	15" Culvert Pipe Option I	Linear Foot	71				
603.175	18" Reinforced Concrete Pipe Class III	Linear Foot	116				
603.179	18" Culvert Pipe Option III	Linear Foot	34				
603.28	Concrete Collar for Reinforcing Concrete Pipe	Each	1				
603.47	60" Reinforced Concrete Pipe Class IV	Linear Foot	80				
604.246	Catch Basin Type F5	Each	1				

**CARRIED FORWARD:**

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
<b>BROUGHT FORWARD:</b>							
606.1301	31" W-Beam Guardrail, Mid-Way Splice-Single Faced	Linear Foot	680				
606.1302	31" W-Beam Guardrail, Mid-Way Splice-Dbl Faced	Linear Foot	370				
606.1306	31" W-Beam Guardrail, Mid-Way Splice Tangent Terminal	Each	1				
606.1307	31" W-Beam Guardrail, Mid-Way Splice Flared Terminal	Each	1				
606.352	Reflectorized Beam Guardrail Delineators	Each	27				
606.356	Underdrain Delineator Post	Each	14				
606.3561	Delineator Post - Remove And Reset	Each	5				
606.3631	Guardrail Remove and Dispose	Linear Foot	2300				
607.09	Woven Wire Fence - Metal Posts	Linear Foot	910				
607.17	Chain Link Fence - 6'	Linear Foot	120				
607.32	Bracing Assembly Type I Metal Post	Each	1				
607.33	Bracing Assembly Type II Metal Post	Each	3				

<b>TOTAL:</b>
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Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
<b>BROUGHT FORWARD:</b>							
609.34	Curb Type 5	Linear Foot	1200				
609.35	Curb Type 5 - Circular	Linear Foot	120				
610.08	Plain Riprap	Cubic Yard	75				
610.181	Temporary Stone Check Dam	Cubic Yard	30				
613.319	Erosion Control Blanket	Square Yard	5800				
615.07	Loam	Cubic Yard	3400				
618.13	Seeding Method Number 1	Unit	8				
618.14	Seeding Method Number 2	Unit	280				
619.1201	Mulch - Plan Quantity	Unit	280				
620.58	Erosion Control Geotextile	Square Yard	180				
626.122	Quazite Junction Box (18X11)	Each	10				
626.22	Non-Metallic Conduit	Linear Foot	2000				

<b>TOTAL:</b>
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Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
<b>BROUGHT FORWARD:</b>							
626.32	24" Diameter Foundation	Each	6				
626.33	30" Foundation, 8-Foot or less Foundation	Each	6				
626.38	Ground Mounted Cabinet Foundation	Each	1				
626.3412	Conventional Light Standard With LED Fixture - Supplied By The Authority	Each	6				
627.712	White or Yellow Pavement Marking Line	Linear Foot	12000				
627.75	White Or Yellow Pavement And Curb Marking	Square Foot	38				
627.77	Removing Existing Pavement Markings	Square Foot	320				
627.78	Temporary 4" Paint Pavement Marking Line White Or Yellow	Linear Foot	4900				
629.05	Hand Labor, Straight Time	Hour	40				
631.12	All-Purpose Exc (Inc Operator)	Hour	40				
631.172	Truck-Large (Inc Operator)	Hour	80				
631.22	Front End Loader (Inc Oper)	Hour	20				

**CARRIED FORWARD:**

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
<b>BROUGHT FORWARD:</b>							
631.36	Foreperson	Hour	20				
634.1612	Highway Lighting Panel and Service Upgrades	Lump Sum	1				
645.105	Remove and Stack Sign	Each	35				
645.109	Remove and Reset Sign	Each	9				
645.162	Breakaway Device Multi Pole	Each	4				
645.251	Roadside Guide Sign, Type 1	Square Foot	397				
645.2511	Sheet Aluminum Overlay, Type I	Square Foot	394				
645.271	Regulatory, Warning, Confirmation and Route Assembly, Type 1	Square Foot	251				
645.289	Steel H-Beam Poles	ERROR	1340				
645.511	LED Flashing Sign	Each	2				
652.3	Flashing Arrow	Each	2				
652.312	Type III Barricade	Each	6				

**CARRIED FORWARD:**

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
<b>BROUGHT FORWARD:</b>							
652.33	Drum	Each	125				
652.34	Cone	Each	50				
652.35	Construction Signs	Square Foot	1240				
652.361	Maintenance of Traffic Control Devices	Lump Sum	1				
652.38	Flaggers	Hour	480				
652.41	Portable Changeable Message Sign	Each	4				
652.45	Truck Mounted Attenuator	Calendar Days	100				
652.451	Automated Trailer Mounted Speed Limit Sign	Calendar Days	80				
656.5	Baled Hay, In Place	Each	50				
656.632	30" Temporary Silt Fence	Linear Foot	3600				
659.1	Mobilization	Lump Sum	1				
<b>TOTAL:</b>							

Date: 12/15/2022

Filename: ...002\_Estimated\_Quantities.dgn

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
201.11	Clearing	AC	2.9
201.23	Removing Single Tree Top Only	EA	1
201.24	Removing Stump	EA	1
202.08	Removing Building No. 1: 7 Ronnie Street	LS	1
202.12	Removing Existing Structural Concrete	CY	16
202.15	Removing Existing Manhole or Catch Basin	EA	1
202.193	Removing Existing Bridge (Struct. Steel = 76 T, Conc. = 570 CY)	LS	1
202.202	Removing Pavement Surface	SY	17000
202.203	Pavement Built Joints	SY	32
203.2	Common Excavation	CY	14300
203.24	Common Borrow	CY	2300
203.25	Granular Borrow	CY	970
203.33	Special Fill	CY	24
211.3	Ditch Excavation	LF	1400
304.1	Aggregate Subbase Course - Gravel	CY	9600
304.14	Aggregate Subbase Course - Type A	CY	2400
403.207	Hot Mix Asphalt 19.0 MM HMA	T	720
403.208	Hot Mix Asphalt 12.5 MM HMA Surface	T	760
403.209	Hot Mix Asphalt 9.5 MM HMA (Incid.)	T	63
403.211	Hot Mix Asphalt (Shim)	T	130
403.213	Hot Mix Asphalt 12.5 MM HMA Base	T	470
404.2081	Hot Mix Asphalt 12.5 MM HMA Polymer Modified	T	430
409.15	Bituminous Tack Coat Applied	GAL	790
419.3	Sawing Bituminous Pavement	LF	3400
524.4	Protective Shielding	SY	550
526.306	Temporary Concrete Barrier, Type I - Supplied by the Authority	LS	1
527.341	Work Zone Crash Cushions - TL-3	UNIT	3
603.15	12" Culvert Pipe Option I	LF	46
603.159	12" Culvert Pipe Option III	LF	8
603.16	15" Culvert Pipe Option I	LF	71
603.175	18" Reinforced Concrete Pipe Class III	LF	116
603.179	18" Culvert Pipe Option III	LF	34
603.28	Concrete Collar for Reinforcing Concrete Pipe	EA	1
603.47	60" Reinforced Concrete Pipe Class IV	LF	80
604.246	Catch Basin Type F5	EA	1
606.1301	3" W-Beam Guardrail, Mid-Way Splice-Single Faced	LF	680
606.1302	3" W-Beam Guardrail, Mid-Way Splice-Dbl Faced	LF	370
606.1306	3" W-Beam Guardrail, Mid-Way Splice Tangent Terminal	EA	1
606.1307	3" W-Beam Guardrail, Mid-Way Splice Flared Terminal	EA	1
606.352	Reflectorized Beam Guardrail Delineators	EA	27
606.356	Underdrain Delineator Post	EA	14
606.3561	Delineator Post - Remove And Reset	EA	5
606.3631	Guardrail Remove and Dispose	LF	2300
607.09	Woven Wire Fence - Metal Posts	LF	910
607.17	Chain Link Fence - 6'	LF	120

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
607.32	Bracing Assembly Type I Metal Post	EA	1
607.33	Bracing Assembly Type II Metal Post	EA	3
609.34	Curb Type 5	LF	1200
609.35	Curb Type 5 - Circular	LF	120
610.08	Plain Riprap	CY	75
610.181	Temporary Stone Check Dam	CY	30
613.319	Erosion Control Blanket	SY	5800
615.07	Loam	CY	3400
618.13	Seeding Method Number 1	UNIT	8
618.14	Seeding Method Number 2	UNIT	280
619.1201	Mulch - Plan Quantity	UNIT	280
620.58	Erosion Control Geotextile	SY	180
626.122	Quartzite Junction Box (18X11)	EA	10
626.22	Non-Metallic Conduit	LF	2000
626.32	24" Diameter Foundation	EA	6
626.33	30" Foundation, 8-Foot or less Foundation	EA	6
626.38	Ground Mounted Cabinet Foundation	EA	1
626.3412	Conventional Light Standard With LED Fixture - Supplied By The Authority	EA	6
627.712	White Or Yellow Pavement Marking Line	LF	12000
627.75	White Or Yellow Pavement And Curb Marking	SF	38
627.77	Removing Existing Pavement Markings	SF	320
627.78	Temporary 4" Paint Pavement Marking Line White Or Yellow	LF	4900
629.05	Hand Labor, Straight Time	HR	40
631.12	All-Purpose Exc (Inc Operator)	HR	40
631.172	Truck-Large (Inc Operator)	HR	80
631.22	Front End Loader (Inc Oper)	HR	20
631.36	Foreperson	HR	20
634.1612	Highway Lighting Panel and Service Upgrades	LS	1
645.105	Remove and Stack Sign	EA	35
645.109	Remove and Reset Sign	EA	9
645.162	Breakaway Device Multi Pole	EA	4
645.251	Roadside Guide Sign, Type I	SF	397
645.2511	Sheet Aluminum Overlay, Type I	SF	394
645.271	Regulatory, Warning, Confirmation and Route Assembly, Type I	SF	251
645.289	Steel H-Beam Poles	LBS	1340
645.511	LED Flashing Sign	EA	2
652.3	Flashing Arrow	EA	2
652.312	Type III Barricade	EA	6
652.33	Drum	EA	125
652.34	Cone	EA	50
652.35	Construction Signs	SF	1240
652.361	Maintenance of Traffic Control Devices	LS	1
652.38	Flaggers	HR	480
652.41	Portable Changeable Message Sign	EA	4
652.45	Truck Mounted Attenuator	CD	100
652.451	Automated Trailer Mounted Speed Limit Sign	CD	80
656.5	Baled Hay, In Place	EA	50
656.632	30' Temporary Silt Fence	LF	3600
659.1	Mobilization	LS	1

Scale: NOT TO SCALE

No.	Revision	By	Date
1.	Amendment No. 1	JBD	11/22

Designed by:



CONSULTANT PROJECT MANAGER: A. Grande			
	By	Date	
Designed	JBD	12/5/2022	Checked ECF 12/5/2022
Drawn	AGC	12/5/2022	In Charge of AG 12/5/2022

VANASSE HANGEN BRUSTLIN, INC.  
 500 Southborough Dr.  
 Suite 105B  
 South Portland, ME 04106  
 TEL (207) 889-3150  
 FAX (207) 253-5596



**THE GOLD STAR  
MEMORIAL HIGHWAY**

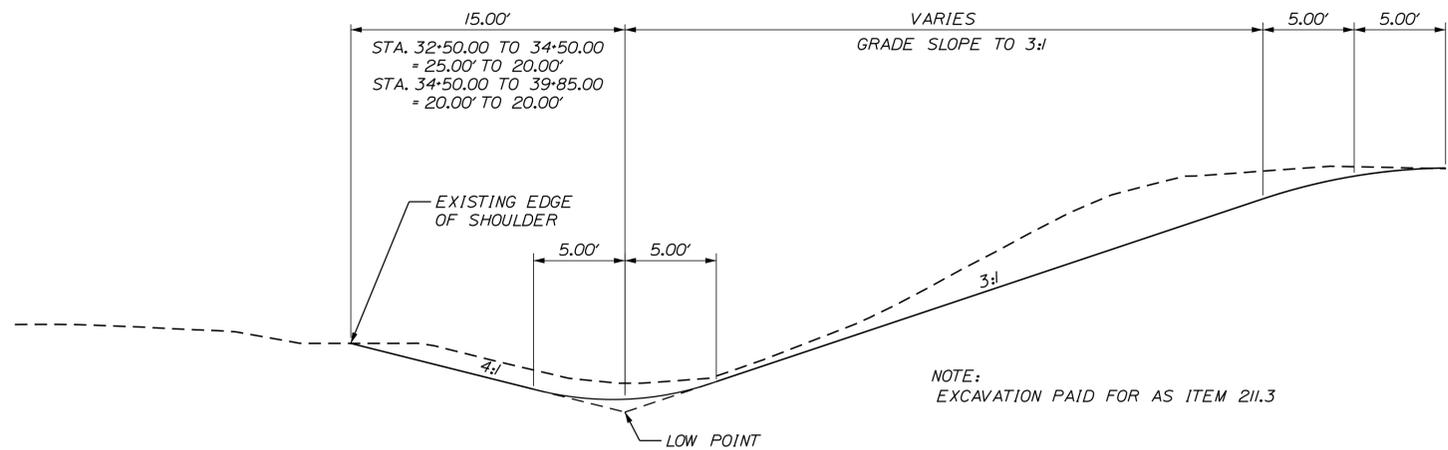
MTA PROJECT MANAGER: Ryan Barnes, PE, CPESC

WEST GARDINER  
EXIT 102  
ESTIMATED QUANTITIES

VHB: 55327.00 SHEET NUMBER: 2  
 CONTRACT: 2023.02 2 OF 92



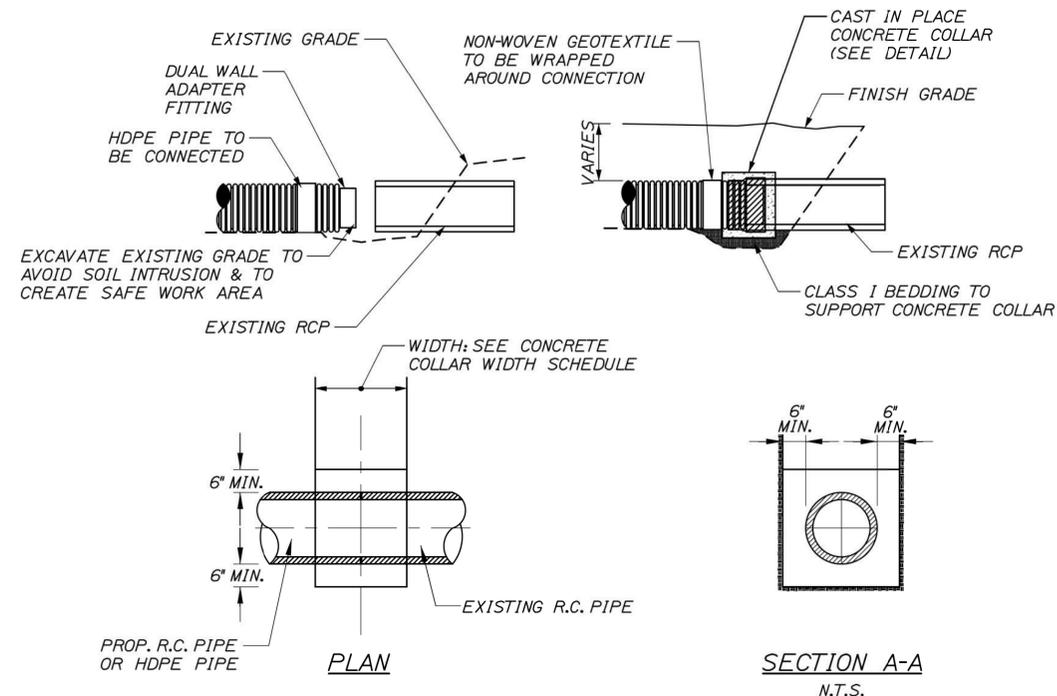
Date: 11/30/2022



**BRIDGE REMOVAL DITCH EXCAVATION**

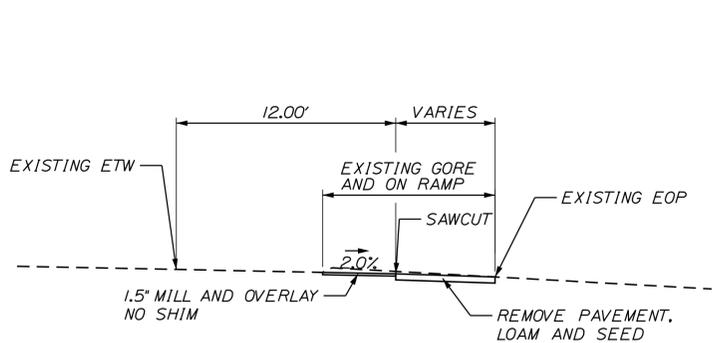
STA 5206+00.00 TO STA 5212+00.00 RT  
 STA 32+50.00 TO STA 39+85.00 RT  
 NOT TO SCALE

NOTE:  
 EXCAVATION PAID FOR AS ITEM 211.3



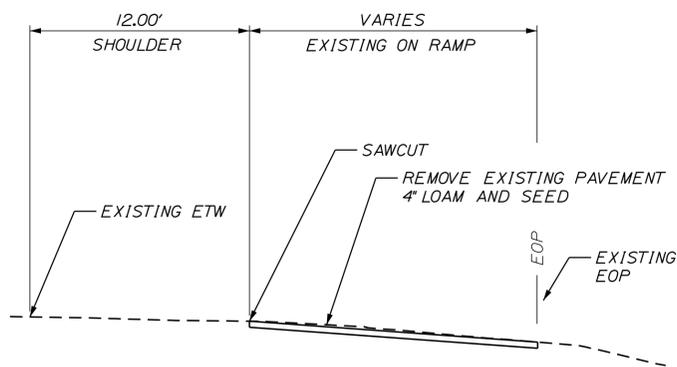
**NOTES:**

1. CONNECTION AND PIPE TO BE BACKFILL PER ASTM D2321 (CRUSHED STONE)
2. CONCRETE SHALL BE CLASS A FIBER REINFORCED.
3. SEE CONCRETE COLLAR WIDTH SCHEDULE FOR DIMENSIONS.
4. INSTALL AT STA. 5209+39, 61.68 RT. WITH 12" X 8' OPT-III



**MILL AND OVERLAY IN GORE**

STA 5207+33.68 TO STA 5208+58.68  
 NOT TO SCALE



**PAVEMENT REMOVAL ON EXISTING RAMP**

STA 5198+41.25 TO STA 5207+33.68  
 STA 5208+58.68 TO STA 5212+52.42  
 NOT TO SCALE

CONCRETE COLLAR WIDTH SCHEDULE	
PIPE DIA. (INCHES)	WIDTH OF CONC. (INCHES)
12	24
15	24
18	24
24	24
30	30
36	36
42	48
48	48
54	60

**CONCRETE COLLAR DETAIL**

Filename: ... \008...Typicals\_4.dgn

Scale:			
No.	Revision	By	Date
1.	Amendment No. 1	JBD	11/22

Designed by:



CONSULTANT PROJECT MANAGER: A. Grande

By	Date	By	Date
JBD	11/30/2022	ECF	11/30/2022
AGC	11/30/2022	AG	11/30/2022

VANASSE HANGEN BRUSTLIN, INC.  
 500 Southborough Dr.  
 Suite 105B  
 South Portland, ME 04106  
 TEL (207) 889-3150  
 FAX (207) 253-5596



**THE GOLD STAR MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ryan Barnes, PE, CPESC

WEST GARDINER  
 EXIT 102  
 TYPICAL SECTIONS

VHB: 55327.00  
 CONTRACT: 2023.02

SHEET NUMBER: 8  
 8 OF 92

Date: 11/30/2022

Filename: ... \012\_Details\_Lighting\_Notes\_Sched.dgn

**GENERAL NOTES: LIGHTING**

1. HIGHWAY LIGHTING FIXTURE VOLTAGE SHALL BE 240 VOLTS.
2. LIGHTING FIXTURES SHALL BE IES FULL CUTOFF, LIGHT EMITTING DIODE (LED) FIXTURES
3. ALL FIXTURES SHALL BE GASKETED AND HAVE SURGE PROTECTION AND A DOUBLE FUSE KIT. ALL FIXTURES SHALL BE GRAY. IF DIFFERENT FIXTURES ARE PROPOSED, THEY SHALL BE IES FULL CUTOFF, TYPE 3 IES DISTRIBUTION TYPE AS NOTED IN THE LUMINAIRE SCHEDULE. LED LUMINAIRES, B.U.G. RATINGS SHALL BE EQUAL TO OR BETTER THAN THE DESIGNED FIXTURES. THE CONTRACTOR MUST DEMONSTRATE THAT THE PROPOSED FIXTURES WILL REASONABLY EQUAL THE LIGHT LEVELS AND DISTRIBUTIONS SHOWN ON THE PLANS, IN THE OPINION OF MTA.
4. CONDUIT SHALL BE 3" MINIMUM, PVC SCHEDULE 80, MINIMUM BURIAL DEPTH FOR CONDUIT SHALL BE 30" TO THE TOP OF PIPE. ALL CONDUIT ENDS SHALL BE FITTED WITH PULLING BELL ENDS.
5. A JUNCTION BOX/HANDHOLE SHALL BE INSTALLED AT EACH POLE. THE WIRING IN CONDUITS SHALL BE CONTINUOUS BETWEEN JUNCTION BOXES/HANDHOLES WITHOUT RUNNING SPLICES IN CONDUITS.
6. UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL FURNISH TO MTA A SET OF AS-BUILT PLANS FOR FUTURE REFERENCE AND SYSTEM MAINTENANCE. PAYMENT FOR THE AS-BUILT PLANS SHALL BE INCIDENTAL TO THE LIGHTING
7. ALL LIGHT BASES SHALL HAVE A GROUND ROD LOCATED ADJACENT TO THE POLE THAT IS BONDED TO THE GROUNDING CONDUCTOR. PAYMENT FOR THE GROUND ROD SHALL BE INCLUDED IN LIGHT POLE ITEM.
8. LIGHT STANDARDS AND LUMINAIRES SHALL BE PROVIDED BY THE AUTHORITY AND PAID UNDER ITEM 634.2312 - CONVENTIONAL LIGHT STANDARD WITH LED FIXTURE - SUPPLIED BY THE AUTHORITY AS NOTED IN SP 634.
9. LIGHTING SERVICE PANEL SHALL BE MARKED WITH ARC FLASH HAZARD TYPE 1, 2, 3 OR 4 AND THE APPROPRIATE PPE REQUIRED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONDUCTING AN ARC FLASH STUDY.
10. BREAKAWAY DEVICES FOR LIGHT POLES SHALL CONFORM TO THE LATEST VERSION OF "AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS" AND NCHRP REPORT 350. THE BREAKAWAY DEVICE SHALL BE DESIGNED SO THAT THE ANCHOR BOLTS WILL NOT BEND WHEN A VEHICLE HITS THE POLE. A FRANGIBLE COUPLING SUCH AS TRANSCO POLE-SAFE 5000 SERIES (WITH A FEMALE ANCHOR), THE MANITOBA SAFETY BASE WITH REACTION PLATE, OR APPROVED EQUAL SHALL BE USED. BREAKAWAY DEVICES SHALL BE INSTALLED ON ALL POLES.
11. WIRE SHALL BE STRANDED COPPER XHHW-2, SIZE AS NOTED ON THE PLANS.
12. FOUNDATIONS SHALL BE 24 INCH DIAMETER BY 7' HEIGHT FOUNDATIONS. PRECAST FOUNDATIONS MAY BE USED, AND IF USED SHALL INCLUDE CAST CONDUIT INSERTS AT EACH POLE. CONTRACTOR SHALL PROVIDE 18" OF EXTRA WIRE SLACK.
13. AT EACH POLE, CONTRACTOR SHALL PROVIDE 18" OF EXTRA WIRE SLACK.
14. FOR ALL CONDUIT RUNS FROM HANDHOLE TO POLE, THE CONTRACTOR SHALL INSTALL 3" C WITH 2" ID AND 1" O.D.
15. EXCAVATION AND AGGREGATE SUBBASE COURSE - GRAVEL ARE INCIDENTAL TO ITEM 626.38 - GROUND MOUNTED CABINET FOUNDATION.
16. PREWIRED CONDUIT IS NOT ALLOWED.
17. ALL DRILLED CONDUIT SHALL INCLUDE A TRACER WIRE. TRACER WIRE SHALL BE INCIDENTAL TO THE CONDUIT.
18. PROVIDE 3" RIGID METAL CONDUIT AT RISER POLE UP TO 10 FT MIN. PAYMENT FOR RISER SHALL BE INCIDENTAL TO ITEM 634.1612 - HIGHWAY LIGHTING PANEL AND SERVICE UPGRADES.

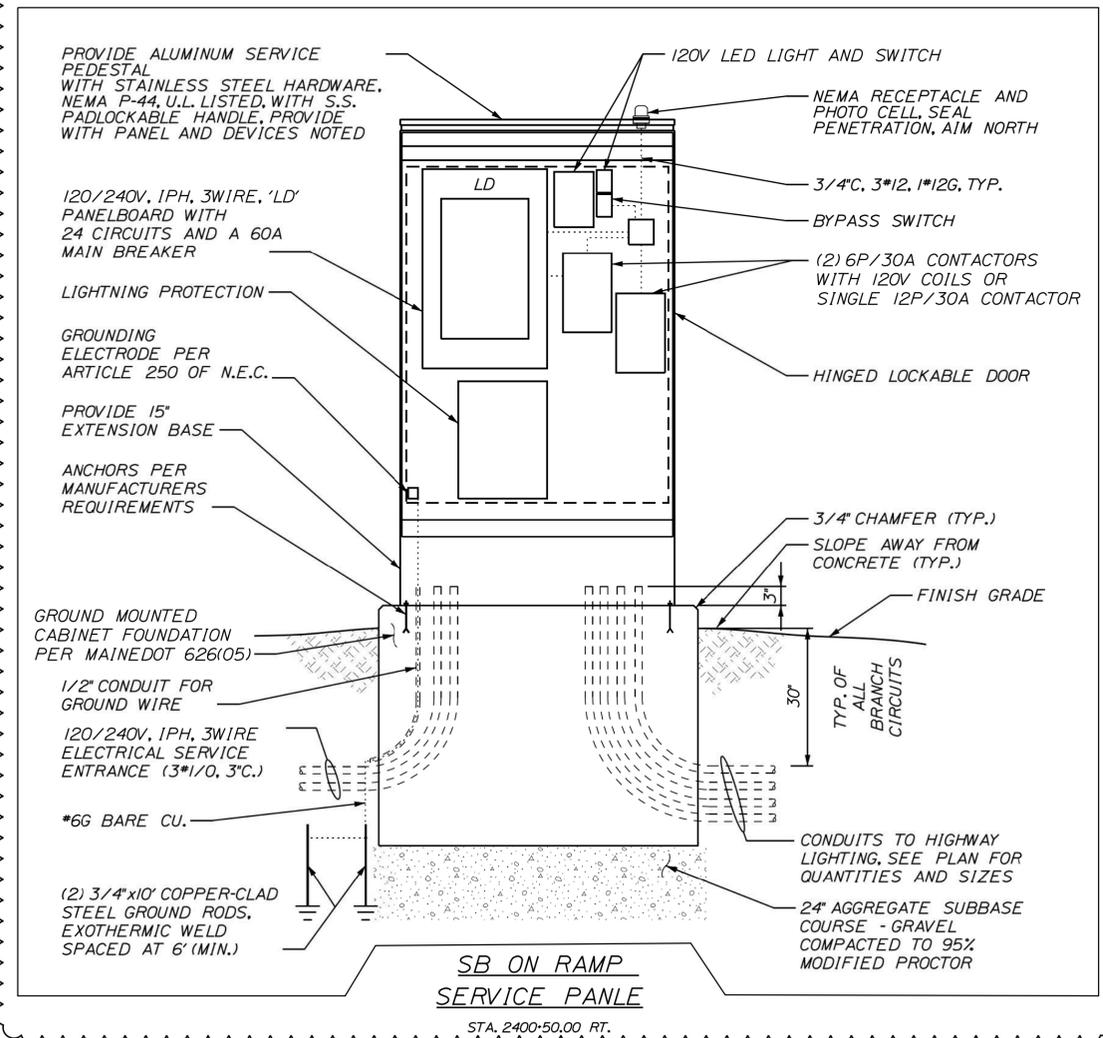
BUS		100A		<b>PANEL No. LD</b>				LOCATION		SOUTHBOUND ON RAMP	
PANEL RATING		22KAIC		PROPOSED PANEL				MOUNTING		MOUNT IN P44 ENCLOSURE	
SUPPLY VOLTAGE		120/240V						DRAWING No.			
SERVICE		1 PHASE, 3 WIRE									

WIRING	DESCRIPTION	VA OR W		BREAKER	CKT. NO	BUS CKT. NO	BREAKER	VA OR W		DESCRIPTION	WIRING	
		ØA	ØB					ØA	ØB		COND	WIRE
SEE SITE PLAN	LTS - HWY AT OFF RAMP	372		2	1	x	2	1	20			
	LTS - HWY AT OFF RAMP		372		3	x	4	1	20			
	SPARE			2	20	5	6	1	20			
	SPARE				7	x	8					
	SPARE			2	20	9	10	1	20			
	SPARE				11		12					
	SPARE			2	20	13	x	14	1	20		
	SPARE				15	x	16	1	20			
2#10, 1#10G	LIGHTNING PROTECTION SPD'S			2	30	17	18	1	20			
					19	x	20	1	20			
2#12, 1#12G	CONTROLS	100		1	20	21	x	22	1	20		
2#12, 1#12G	ENCLOSURE			1	15	23	24	1	20			
TOTAL 1		472	372	TOTAL 2								
TOTAL 2		0	0									
TOTAL 1 + 2		472	372									
CONN. LOAD TOTAL		844										
AMPERES		7.03										

MAIN BREAKER	60A	MAIN LUGS	N/A
FEEDER ENTRANCE	TOP/BOTTOM	ENCLOSURE TYPE	NEMA 4X
FEEDER SIZE	3", 3#1/0	ACCESSORIES	
SOURCE			
PANEL TYPE	DOOR-IN-DOOR		



ROADWAY LUMINAIRE SCHEDULE					
LABEL	CATALOG NUMBER	DESCRIPTION	MINIUM LUMENS	LIGHT LOSE FACTOR	MAXIMUM WATTS
A-LD	AMERICAN ELECTRIC ATB0 B304 MVOLT R3 3K NL	LED COBRAHEAD, 3000K, CCT, IES TYPE 3 DISTRIBUTION	17000	0.67	124

Scale:				Designed by:			
Not to Scale							
No.	Revision	By	Date	No.	Revision	By	Date
1.	Amendment No. 1	JBD	11/22				

CONSULTANT PROJECT MANAGER: A. Grande							
Designed	JBD	11/30/2022	Checked	ECF	11/30/2022	By	Date
Drawn	AGC	11/30/2022	In Charge of	AG	11/30/2022		

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**THE GOLD STAR MEMORIAL HIGHWAY**

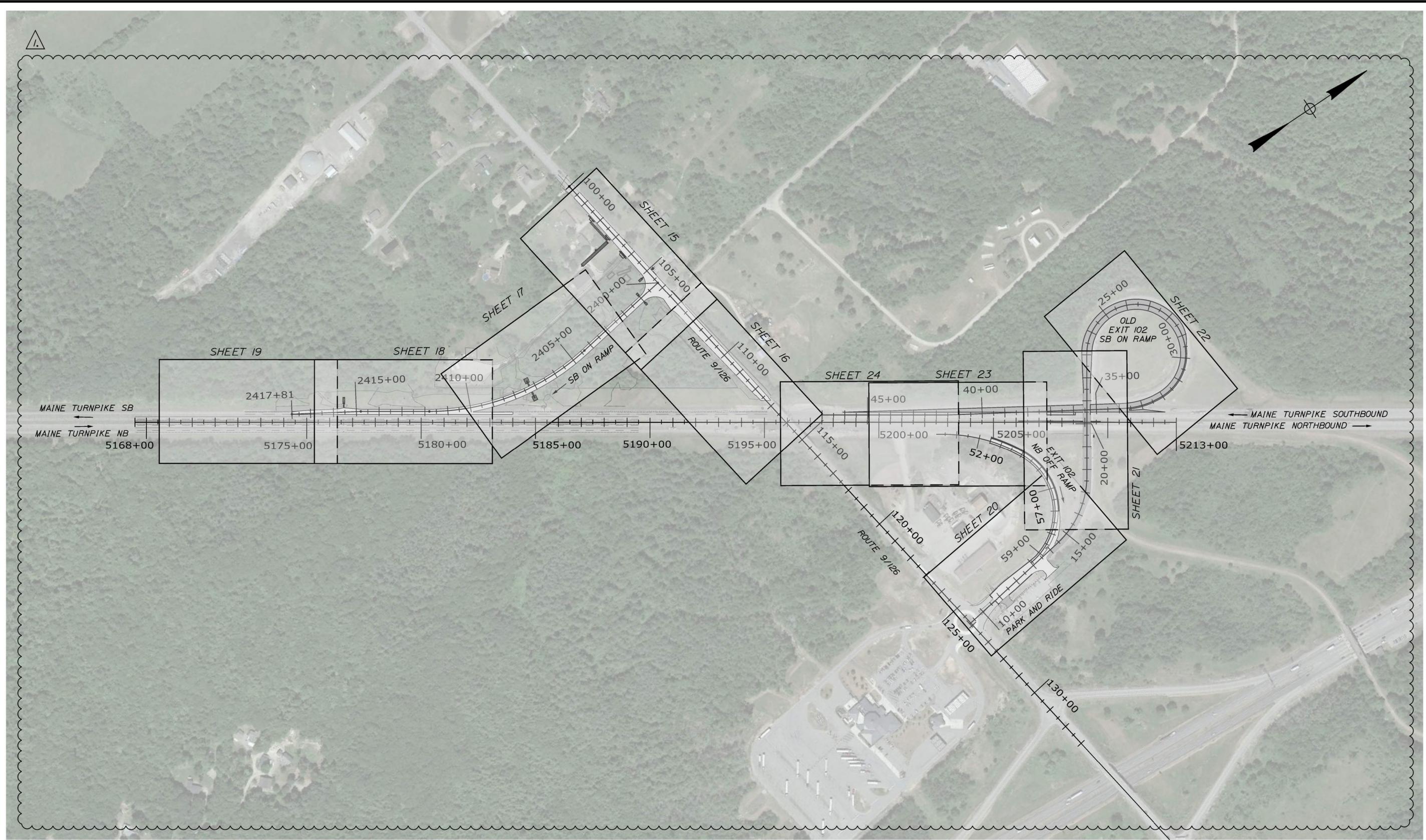
MTA PROJECT MANAGER: Ryan Barnes, PE, CPESC

WEST GARDINER  
 EXIT 102

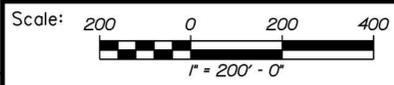
LIGHTING NOTES, SCHEDULES, AND DETAILS

VHB: 55327.00      SHEET NUMBER: 12  
 CONTRACT: 2023.02      12 OF 92

Date: 11/30/2022



Filename: ...014\_HwyPlan\_00.dwg



Designed by:



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THE GOLD STAR  
 MEMORIAL HIGHWAY

WEST GARDINER  
 EXIT 102  
 GENERAL PLANS LAYOUT

No.	Revision	By	Date
1.	Amendment No. 1	JBD	11/22

CONSULTANT PROJECT MANAGER: A. Grande					
	By	Date	Checked	By	Date
Designed	JBD	11/30/2022	ECF	ECF	11/30/2022
Drawn	AGC	11/30/2022	In Charge of	AG	11/30/2022

MTA PROJECT MANAGER: Ryan Barnes, PE, CPESC

VHB: 55327.00  
 CONTRACT: 2023.02

SHEET NUMBER: 14  
 14 OF 92

POINT	STATION	OFFSET
1	104+94.50	32.59' LT
2	104+94.83	41.79' LT
3	106+09.93	41.65' LT
4	106+10.00	32.45' LT

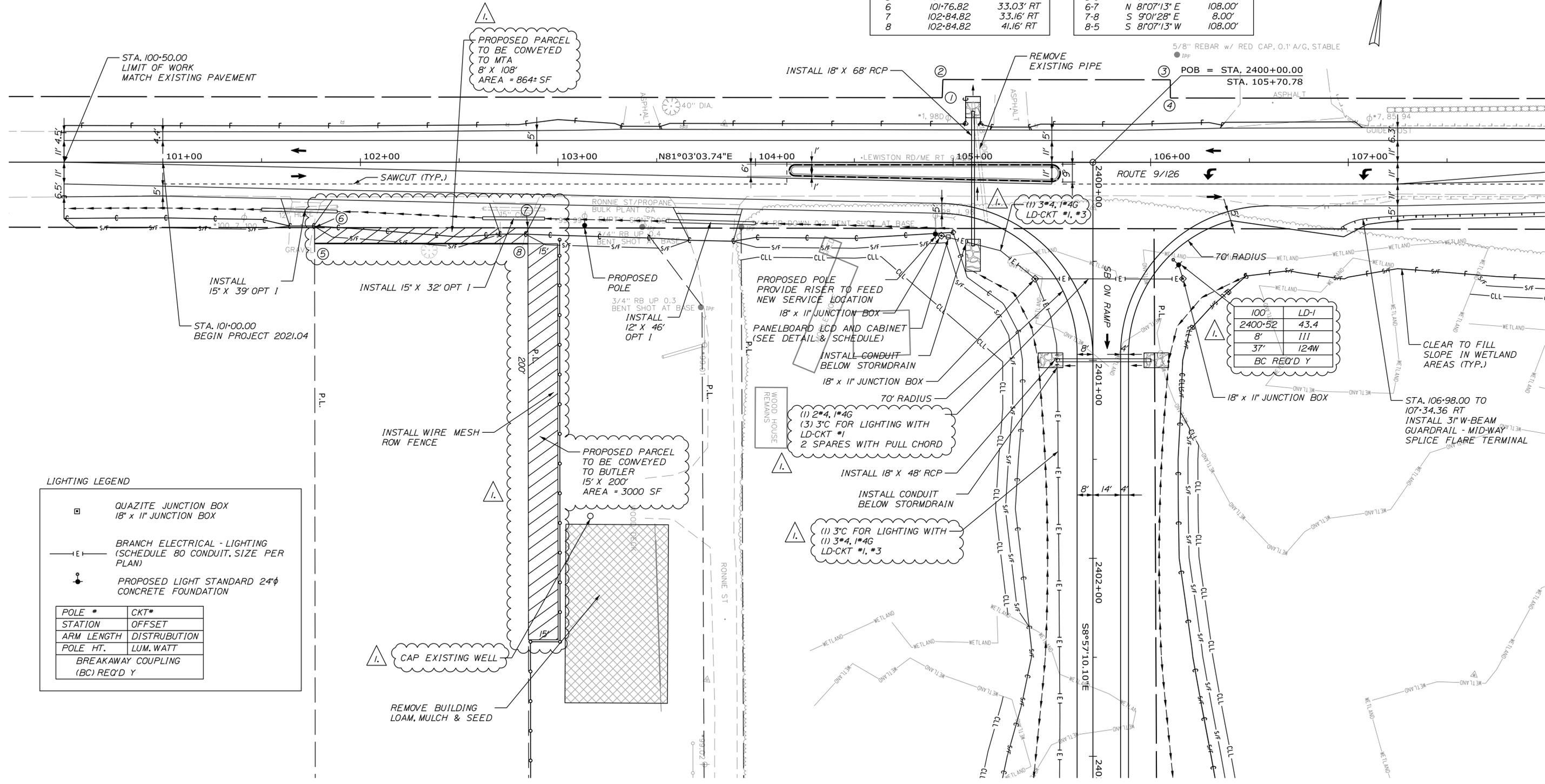
LINE	BEARING	DISTANCE
1-2	N 6°52'36" W	9.20'
2-3	N 81°07'13" E	115.10'
3-4	S 9°22'02" E	9.20'
4-1	S 81°07'13" W	115.50'

POINT	STATION	OFFSET
5	101+76.82	41.03' RT
6	101+76.82	33.03' RT
7	102+84.82	33.16' RT
8	102+84.82	41.16' RT

LINE	BEARING	DISTANCE
5-6	N 9°01'28" W	8.00'
6-7	N 81°07'13" E	108.00'
7-8	S 9°01'28" E	8.00'
8-5	S 81°07'13" W	108.00'



Date: 12/15/2022



**LIGHTING LEGEND**

- ☐ QUAZITE JUNCTION BOX  
18" x 11" JUNCTION BOX
- E— BRANCH ELECTRICAL - LIGHTING  
(SCHEDULE 80 CONDUIT, SIZE PER PLAN)
- ☛ PROPOSED LIGHT STANDARD 24"φ  
CONCRETE FOUNDATION

POLE #	CKT*
STATION	OFFSET
ARM LENGTH	DISTRIBUTION
POLE HT.	LUM. WATT
BREAKAWAY COUPLING (BC) REQ'D Y	

Scale: 1" = 25'-0"

No.	Revision	By	Date
1.	Amendment No. 1	JBD	11/22

Designed by:

CONSULTANT PROJECT MANAGER: A. Grande

	By	Date	By	Date	
Designed	JBD	12/5/2022	Checked	ECF	12/5/2022
Drawn	AGC	12/5/2022	In Charge of	AG	12/5/2022

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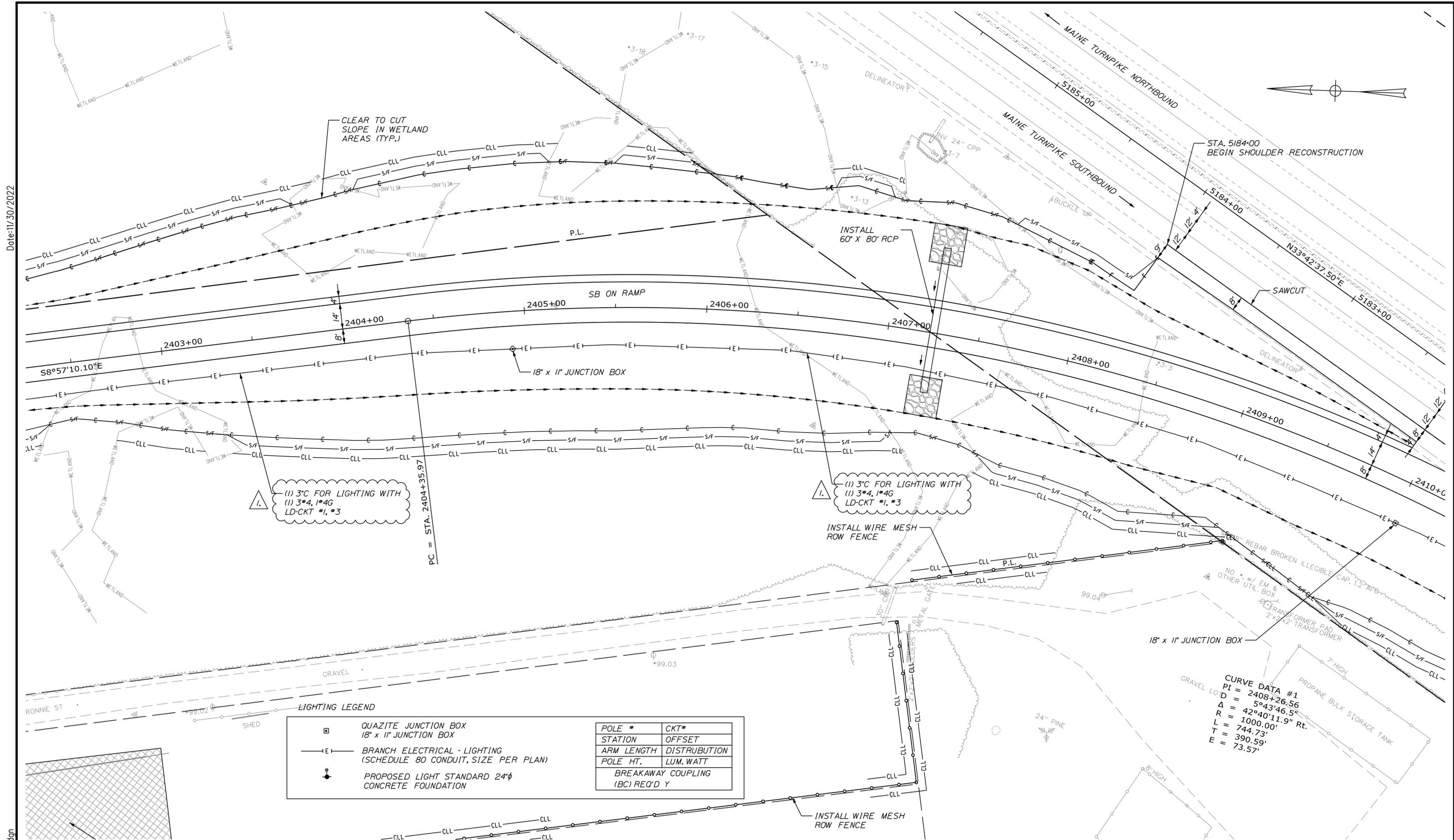
**THE GOLD STAR MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ryan Barnes, PE, CPESC

**WEST GARDINER EXIT 102**

**GENERAL PLAN (1 OF 6)**

VHB: 55327.00 SHEET NUMBER: 15  
CONTRACT: 2023.02 15 OF 92



Date: 11/30/2022

(1) 3" C FOR LIGHTING WITH  
(1) 3#4, 1#4G  
LD-CKT #1, #3

(1) 3" C FOR LIGHTING WITH  
(1) 3#4, 1#4G  
LD-CKT #1, #3

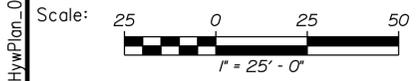
**LIGHTING LEGEND**

	QUAZITE JUNCTION BOX 18" x 11" JUNCTION BOX
	BRANCH ELECTRICAL - LIGHTING (SCHEDULE 80 CONDUIT, SIZE PER PLAN)
	PROPOSED LIGHT STANDARD 24"φ CONCRETE FOUNDATION

POLE #	CKT#
STATION	OFFSET
ARM LENGTH	DISTRIBUTION
POLE HT.	LUM. WATT

BREAKAWAY COUPLING  
(BC) REQ'D Y

**CURVE DATA #1**  
 PI = 2408+26.56  
 Δ = 5°43'46.5"  
 R = 42°40'11.9" Rt.  
 L = 1000.00'  
 T = 744.73'  
 E = 390.59'



Designed by:



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**THE GOLD STAR  
 MEMORIAL HIGHWAY**

**WEST GARDINER  
 EXIT 102  
 GENERAL PLAN (3 OF 6)**

Filename: ...017\_HwyPlan\_03.dgn

No.	Revision	By	Date
1.	Amendment No. 1	JBD	11/22

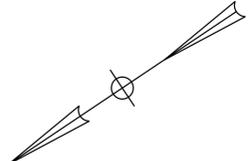
CONSULTANT PROJECT MANAGER: A. Grande			
	By	Date	
Designed	JBD	11/30/2022	Checked ECF 11/30/2022
Drawn	AGC	11/30/2022	In Charge of AG 11/30/2022

LIGHTING LEGEND

	QUAZITE JUNCTION BOX 18" x 11" JUNCTION BOX
	BRANCH ELECTRICAL - LIGHTING (SCHEDULE 80 CONDUIT, SIZE PER PLAN)
	PROPOSED LIGHT STANDARD 24"Ø CONCRETE FOUNDATION

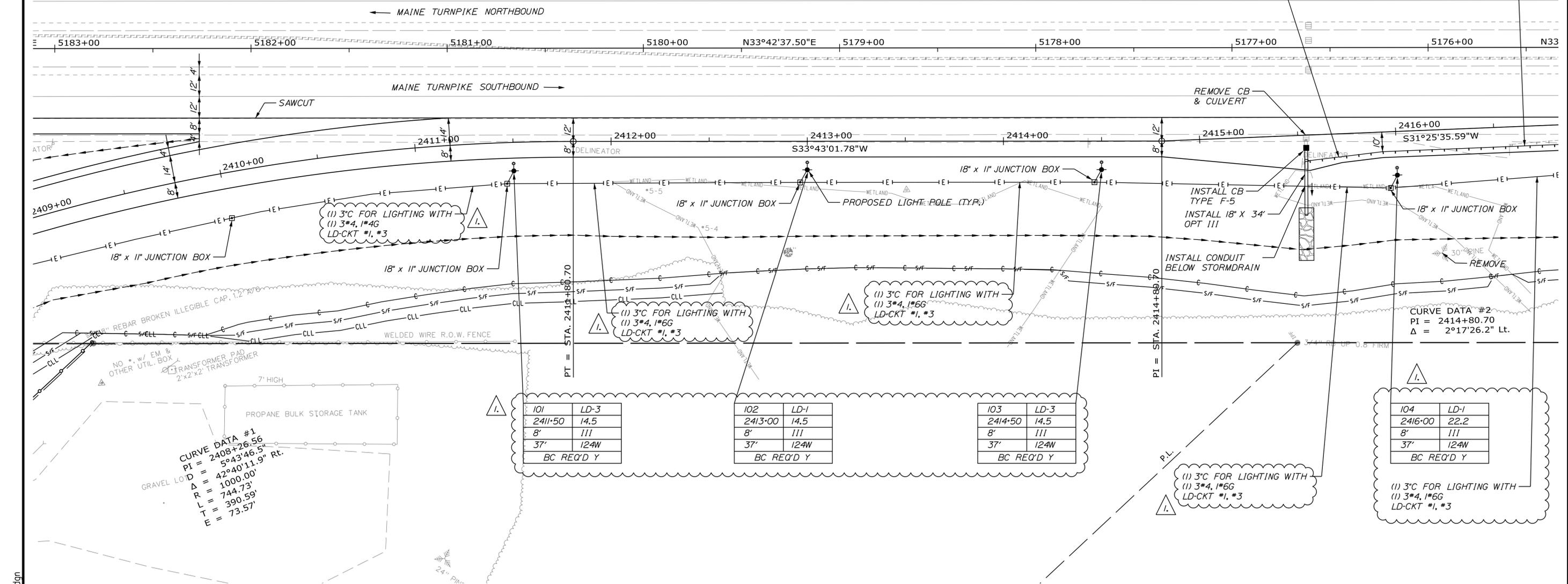
POLE #	CKT#
STATION	OFFSET
ARM LENGTH	DISTRUBUTION
POLE HT.	LUM. WATT
BREAKAWAY COUPLING (BC) REQ'D Y	



STA. 2415+55.69 TO 2416+05.69 RT  
INSTALL 3" W-BEAM GUARDRAIL - MID-WAY  
SPLICE (7' STEEL POSTS,  
8" OFFSET BLOCKS,  
SINGLE FACED)

STA. 2416+05.69 TO  
2417+80.69 RT  
INSTALL 3" W-BEAM  
GUARDRAIL - MID-WAY  
SPLICE (7' STEEL POSTS,  
8" OFFSET BLOCKS,  
SINGLE FACED)

Date: 11/30/2022



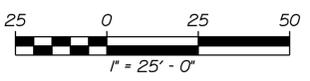
CURVE DATA #1  
PI = 2408+26.56  
5°43'46.5" RT.  
D = 42°40'11.9" RT.  
R = 1000.00'  
L = 744.73'  
T = 390.59'  
E = 73.57'

101	LD-3
2411+50	14.5
8'	III
37'	124W
BC REQ'D Y	

102	LD-1
2413+00	14.5
8'	III
37'	124W
BC REQ'D Y	

103	LD-3
2414+50	14.5
8'	III
37'	124W
BC REQ'D Y	

104	LD-1
2416+00	22.2
8'	III
37'	124W
BC REQ'D Y	



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THE GOLD STAR  
MEMORIAL HIGHWAY

WEST GARDINER  
EXIT 102  
GENERAL PLAN (4 OF 6)

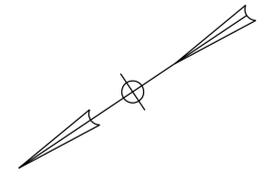
No.	Revision	By	Date
1.	Amendment No. 1	JBD	11/22

CONSULTANT PROJECT MANAGER: A. Grande					
Designed	JBD	11/30/2022	Checked	ECF	11/30/2022
Drawn	AGC	11/30/2022	In Charge of	AG	11/30/2022

MTA PROJECT MANAGER: Ryan Barnes, PE, CPESC

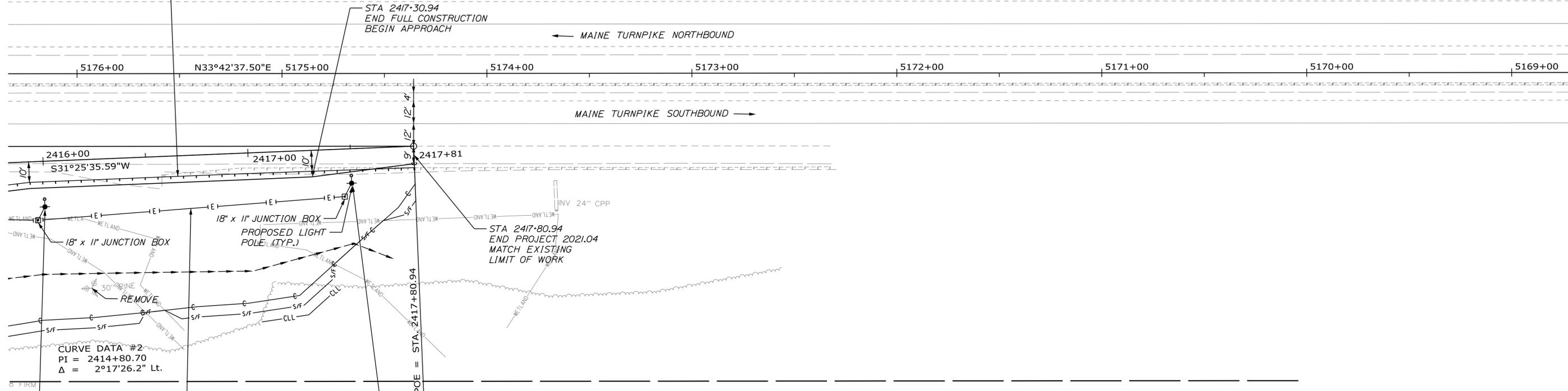
VHB: 55327.00 SHEET NUMBER: 18  
CONTRACT: 2023.02 18 OF 92

Filename: ...018\_HywayPlan\_04.dgn



Date: 11/30/2022

STA. 2416+05.69 TO  
2417+80.69 RT  
INSTALL 3" W-BEAM  
GUARDRAIL - MID-WAY  
SPLICE (7' STEEL POSTS,  
8" OFFSET BLOCKS,  
SINGLE FACED)



CURVE DATA #2  
PI = 2414+80.70  
Δ = 2°17'26.2" Lt.

POLE #	CKT #
104	LD-1
2416+00	22.2
8'	111
37'	124W
BC REQ'D Y	

(1) 3" C FOR LIGHTING WITH  
(1) 3" x 4, 1" #6G  
LD-CKT #1, #3

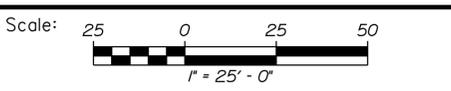
POLE #	CKT #
105	LD-3
2417+50	16.8
8'	111
37'	124W
BC REQ'D Y	

LIGHTING LEGEND

- QUAZITE JUNCTION BOX  
18' x 11' JUNCTION BOX
- E— BRANCH ELECTRICAL - LIGHTING  
(SCHEDULE 80 CONDUIT, SIZE PER PLAN)
- ⬇ PROPOSED LIGHT STANDARD 24"φ  
CONCRETE FOUNDATION

POLE #	CKT #
STATION	OFFSET
ARM LENGTH	DISTRUBUTION
POLE HT.	LUM. WATT
BREAKAWAY COUPLING (BC) REQ'D Y	

Filename: ...019\_HywwPlan\_05.dgn



Designed by:



No.	Revision	By	Date
1.	Amendment No. 1	JBD	11/22

CONSULTANT PROJECT MANAGER: A. Grande

By	Date	By	Date
Designed	JBD 11/30/2022	Checked	ECF 11/30/2022
Drawn	AGC 11/30/2022	In Charge of	AG 11/30/2022

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**THE GOLD STAR  
MEMORIAL HIGHWAY**

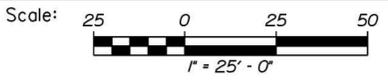
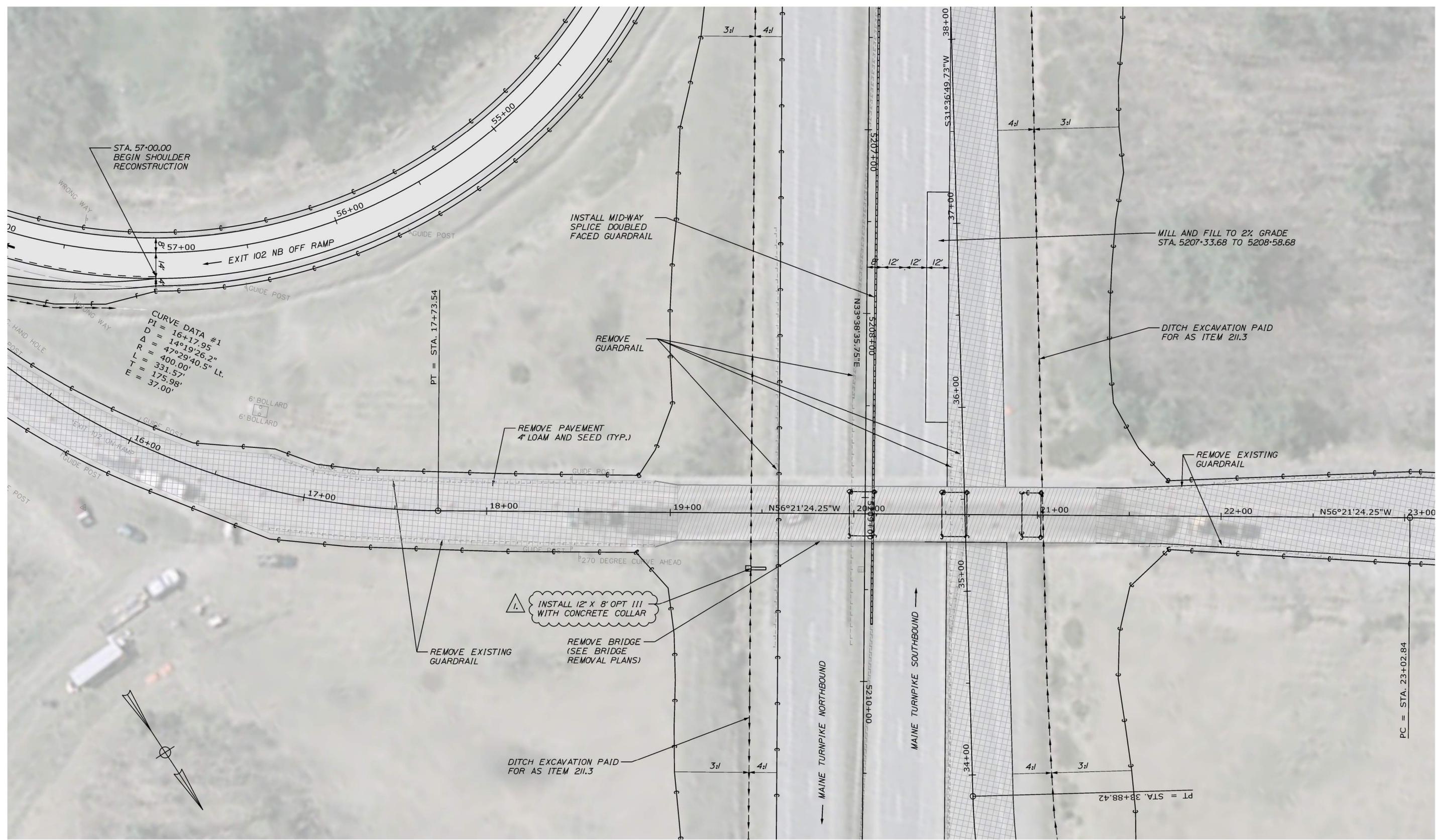
MTA PROJECT MANAGER: Ryan Barnes, PE, CPESC

WEST GARDINER  
EXIT 102  
GENERAL PLAN (5 OF 6)

VHB: 55327.00 SHEET NUMBER: 19  
CONTRACT: 2023.02 19 OF 92

Date: 11/30/2022

Filename: ...021\_HwyPlan\_07.dgn



Designed by:



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THE GOLD STAR  
 MEMORIAL HIGHWAY

WEST GARDINER  
 EXIT 102  
 GENERAL PLAN  
 REMOVAL OF EXISTING RAMP (1 OF 4)

No.	Revision	By	Date
1.	Amendment No. 1	JBD	11/22

CONSULTANT PROJECT MANAGER: A. Grande					
	By	Date	By	Date	
Designed	JBD	11/30/2022	Checked	ECF	11/30/2022
Drawn	AGC	11/30/2022	In Charge of	AG	11/30/2022

MTA PROJECT MANAGER: Ryan Barnes, PE, CPESC

VHB: 55327.00  
 CONTRACT: 2023.02  
 SHEET NUMBER: 21  
 21 OF 92

SPECIAL PROVISION

SECTION 524

TEMPORARY STRUCTURAL SUPPORTS

(Protective Shielding - Steel Girders)  
(Protective Shielding - Prestressed Structural Concrete I-Girders)  
(Protective Shielding - Prestressed Structural Concrete Slabs)

524.01 Description

The following paragraph is added:

This work shall also consist of furnishing all labor, equipment and materials required to provide protection for the public during demolition and construction. This protection shall include, but not necessarily be limited to, protective shielding of existing structures during demolition work, concrete removal, and installation of temporary deck support over roadway lanes and shoulders on all existing and new bridge structures.

The following Subsections are added:

524.031 Protective Shielding Design

Prior to the start of work, the Contractor shall submit working drawings for review and comment indicating the sizes and dimensions of protective shielding. If the shielding is to be attached to prestressed concrete components the submittal shall be coordinated with the respective precast concrete shop drawings. The proposed methods of protective shielding, including connections and fasteners, shall be in accordance with the following criteria:

The protective shielding shall be designed for safely supporting all construction and dead loads, but not less than 100 pounds per square foot with a load duration of seven (7) days. Protective shielding shall be stiff enough to limit deflection to 1/2 inch under maximum loads and to be tightly sealed at all joints. The protective shielding shall be placed on the tops of the bottom flanges of the steel girders, or between the web or bottom flanges of the concrete I-girders, with edges and laps made tight to protect the turnpike motorists from dust, debris and falling objects.

Special hangers may be required to support shielding on prestressed structural concrete I-girders or prestressed structural concrete slabs. The Contractor will not be permitted to install inserts, shoot fasteners, or drill holes in the concrete I-girders or concrete slabs to support the shielding. The Contractor may propose 3/4 inch or one inch diameter sleeves be installed in the webs of the girders during fabrication for temporary fasteners to pass through. The proposed and approved sleeves shall be coordinated with the girder manufacturer; and shall be filled, and stuck flush, with an epoxy grout after the protective shielding is removed.

524.041 Protective Shielding Erection and Removal

No portion of the protective shielding installed over a roadway shall project below a plane connecting the bottoms of the bottom flanges of the steel stringers or concrete I-girders. During demolition operations, the protective shielding shall be covered with sheet plastic made tight at edges and laps to prevent water used in the sawcutting operation from falling onto the facilities under the bridge.

The protective shielding on existing and new structures shall extend horizontally three feet beyond the fascia lines and vertically to a point one foot minimum above the top of parapet or railing. The shielding shall also extend 10 feet beyond the edge of pavement of the roadway below, unless otherwise noted on the Plans or as approved by the Resident.

Shielding shall be approved and installed prior to the start of any demolition work and shall remain in position during all demolition work. Shielding shall also be approved and installed prior to the start of any deck forming and shall remain in position during all deck work. The shielding shall be relocated or removed only as approved by the Resident.

Construction sequences may require protective shielding material to be removed, stored and then reinstalled by the Contractor. Any shielding which is damaged during this removal and reinstallation shall be replaced by the Contractor at no additional cost.

#### 524.28 Method of Measurement

The following paragraph is added:

Protective Shielding will be measured by the square yard for shielding designed, installed, removed and disposed or stacked. For purposes of computing the area, only the horizontal plan dimensions will be used.

#### 524.29 Basis of Payment

The following paragraphs are added:

Protective Shielding will be paid for at the Contract bid price per square yard and shall include all design, materials, transportation and stacking, labor (to install, remove and stack as needed), tools and equipment necessary to perform the work as described above or as approved by the Resident. The measurement shall include one sequence of placement, removal, and on-site storage (if applicable for intended reuse) of Protective Shielding. Where bridge and girder construction dictates that Protective Shielding is to be installed in the same location at a later date, then the quantity of Protective Shielding shall be increased accordingly to reflect the total work, and shall be tabulated on the drawings. Therefore, the calculated quantity of Protective Shielding will be the summation of each sequence noted above (placement, removal, and on-site storage). The Contractor shall note that additional timber material may be required to accommodate differing girder spacing or differing overhang dimensions.

Payment will be made under:

<u>Pay Item</u>		<u>Pay Unit</u>
524.40	Protective Shielding - Steel Girders	Square Yard
524.41	Protective Shielding - Prestressed Concrete I-Girders	Square Yard
524.42	Protective Shielding - Prestressed Structural Concrete Slabs	Square Yard

SPECIAL PROVISION

SECTION 526

CONCRETE BARRIER

(Temporary Concrete Barrier Type I - Supplied by Authority)

526.01 Description

The following paragraphs are added:

This work shall consist of loading, transporting, setting, resetting, removing, transporting and stacking Temporary Concrete Barrier Type I – Supplied by Authority. The barrier shall have attachments allowing individual sections to be connected into a continuous barrier.

The work also includes supplying connecting pins and furnishing and mounting retro-reflective delineators, per Subsection 526.02 and 526.03.

Concrete barriers supplied by Authority shall be available at the following location(s):

<u>Maintenance Area</u>	<u>Linear Feet of Barrier</u>
Former Rest Stop Mile 98.0 Northbound	600 LF
West Gardiner Maintenance Area Mile 100.3 Northbound	900 LF

Upon substantial completion of work, the Contractor shall remove and transport the barrier back to its maintenance area of origin. All barrier shall be returned, sorted and stacked according to type in locations directed by the project Resident or maintenance area foreman.

526.02 Materials

The following paragraphs are added:

- e. Delineators shall be bi-directional with a minimum effective reflective area of eight square inches as approved by the Resident. The reflectors shall be methyl methacrylate and the housing of acrylonitrile butadiene styrene. Color shall be in accordance with the MUTCD.

526.021 Acceptance

The Resident shall have the authority to accept or reject all Temporary Concrete Barrier Type I – Supplied by Authority used on the Project that does not meet the requirements of this specification

#### 526.03 Construction Requirements

The following paragraphs are added:

The Contractor shall notify the Resident prior to the scheduled pick-up and delivery of concrete barrier. No barrier shall be removed from or stacked at the Turnpike Maintenance Area without approval of the Resident.

The Contractor shall move and place barrier-utilizing methods that will not damage the barrier. Barrier that is damaged by the Contractor by failing to use proper methods shall be replaced by the Contractor at no additional cost to the Maine Turnpike Authority.

Concrete barrier supplied by the Authority consists of several different styles. Not all barriers may be compatible. The Contractor shall utilize caution when setting barrier to use identical barrier types as adjacent barrier. Non-compatible barrier that cannot be attached together shall be overlapped by a minimum of 10 feet with the blunt end on the non-traffic side of the barrier. This work will not be measured separately for payment, but shall be incidental to the concrete barrier.

Concrete barrier placed at roadway low points shall be shimmed on 1” by 2” by 2’ long wood planks to allow drainage to pass under the barrier. In addition, the Resident may direct the Contractor to shim the concrete barrier at other locations to provide for proper roadway drainage. All labor, material, and equipment necessary to shim the barrier will not be measured separately for payment, but shall be incidental to the Concrete Barrier.

The removal of concrete barrier from adjacent to the travel lane may be conducted without a lane closure if it is accomplished in accordance with the following requirements:

1. Barrier is removed from the trailing end and the workmen and equipment involved in the operation are always behind the barrier. No workmen or equipment shall enter the travel lane.
2. Barrier shall be dragged away from the travel lane to at least a 30-degree angle by the use of a cable.
3. Barrier shall be lifted no more than six inches while within 10 feet of the travel lane.

Retro-Reflective Delineators shall be mounted as follows:

4. One on top of each barrier.
5. One on the traffic side of every barrier used in a taper.
6. One on the traffic side of every other barrier at regularly spaced intervals and locations.
7. Delineators shall be installed on both sides of the barrier if barrier is used to separate opposing traffic.
8. Delineators shall be physically adhered so as to withstand the force of throw from a snow plow.
9. If more than 25% of delineators in any 50 foot section of barrier fall off for any reason, the Contractor will be responsible for reinstalling all the delineators in that run at that their own cost.
10. Contractor is required to submit the installation method for review and approval to the Resident.

#### 526.04 Method of Measurement

The following paragraphs are added:

Temporary Concrete Barrier Type I – Supplied by Authority shall be measured for payment by the lump sum.

The loading, transporting, setting, resetting, removing, transporting, sorting and stacking of the barrier, the furnishing, installation and maintenance of the barrier delineators, and furnishing and installing connector pins will not be measured separately for payment, but shall be incidental to the cost of the Barrier. Temporary storage of Concrete Barrier between construction phases, if required, will not be measured separately for payment, but shall be incidental to the cost of the Barrier. All equipment required to load, unload, transport and stack Concrete Barrier shall be supplied by the Contractor.

Any Barrier lost or damaged by the Contractor shall be replaced by the Contractor at no additional cost to the Authority.

#### 526.05 Basis of Payment

The fifth paragraph is deleted and not replaced.

The following paragraphs are added:

Temporary Concrete Barrier Type I – Supplied by Authority will be paid for at the Contract lump sum price, complete in place. Such payment shall be full compensation for loading, transporting, setting, resetting, temporary storage, removing, transporting and stacking at the area designated, furnishing all materials, and all other incidentals necessary to complete the work.

SPECIAL PROVISION

SECTION 634

HIGHWAY LIGHTING

(Conventional Light Standard with LED Fixture - Supplied by the Authority)

634.01 Description

The following paragraphs are added:

The work shall consist of verifying the voltage of existing luminaires and circuits.

The work shall consist of installing new conventional light standards with LED fixtures supplied by the Authority, including all appurtenances at locations shown.

Existing lighting shall remain operational at all. Any temporary lighting that may be needed during removing and resetting of existing light standards shall be incidental to the 634 items.

Conventional light standards with LED fixtures supplied by the Authority will be available at the MTA Sign Shop at MM 58 NB.

634.02 General

The following paragraphs are added:

All Contract work shall be overseen by a Maine licensed Master Electrician. The lead person for the field installations shall be either a Maine licensed Master Electrician, or a Maine licensed Journeyman Electrician. Apprentice Electricians, Helper Electricians, Journeyman-In-Training Electricians, and helpers may work under the Master or Journeyman Electrician as permitted under the law.

The Contractor shall comply with National Electrical Code (NFPA 70) as applicable to construction and installation of electrical cable, wire and connectors; provide electrical cable, wire and connectors, which have been listed and labeled by Underwriters Laboratories, and comply with National Electrical Manufacturers Association/Insulated Power Cable Authorities Association Standards publications pertaining to materials, construction and testing wire cable, where applicable.

At a minimum the Contractor shall provide the following field quality control:

- Prior to energizing, check wire for continuity of circuitry and for short circuits with ohmmeter type testing equipment. Correct malfunction when detected.
- Subsequent to wire hook-ups, energize circuitry and demonstrate functioning in accordance with requirements.

#### 634.02 Materials

The following paragraphs are added:

Splices in junction boxes shall be made with Burndy UGS350ULDB Direct Burial/Submersible Splice Wire Range #12 AWG – 350KCMIL connectors for the appropriate wire count only.

This item shall include the providing and installation of all AWG XHHW-2 grade wire for highway lighting, as described herein, including grounding wires (where applicable), for all locations called for in the plans/specifications. All wire installed in conduit must be copper and direct burial grade, suitable for wet locations. Payment for all wiring for highway lighting will be incidental to the 634 items.

#### 634.06 Luminaires

The second paragraph is revised to read:

The connections between the luminaires and connector kits shall be made with number 10 wires AWG copper stranded XHHW-2, minimum size. A 14-inch-long Teflon sleeve shall be placed over each end of each conductor in the luminaire.

#### 634.093 Basis of Payment

The following paragraphs are added:

Payment for Conventional Light Standard with LED Fixture – Supplied by The Authority will be made for the accepted quantity at the Contract unit price each. Payment shall be full compensation for loading, transporting light standards from the MTA Sign Shop at MM 58 to the project site, installing the light standard, breakaway device, bracket arm, new LED luminaire, driver, fixture mounted shorting cap at photocell receptacle, as supplied by the Authority and provide disconnect fuse kit, and all incidentals to complete the work.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
634.2312 Conventional Light Standard with LED Fixture - Supplied by the Authority	Each

Temporary Concrete Barrier Type I – Supplied by Authority and all connecting pins shall remain the property of the Authority, and shall be returned to the Turnpike Maintenance Area as designated in Subsection 526.01.

Payment of Concrete Barrier shall be based on a percentage of the work accomplished during that pay period.

Payment will be made under:

<u>Pay Item</u>		<u>Pay Unit</u>
526.306	Temporary Concrete Barrier, Type I – Supplied by Authority	Lump Sum

SPECIAL PROVISION

SECTION 634

HIGHWAY LIGHTING

(Highway Lighting Panel and Service Upgrades)

634.01 Description

The following paragraphs are added:

This work shall also consist of furnishing and installing highway lighting panel and service upgrades as shown in the plans, including removal of existing components.

634.028 Lighting Cabinet

The following paragraphs are added:

The lighting panelboard, circuitry, and all other components shall be enclosed within a weather tight 1/8 inch thick aluminum NEMA "P-44" type cabinet, with side and back mounting panels, a main door, and a switch compartment door on a 15" aluminum extension base. All exterior seams shall be continuously welded.

The cabinet door shall be a minimum of 80% of the front surface area and shall be hinged on the right side with a continuous hinge. The cabinet doorframe shall be flanged on all four sides with a light switch bracket located in the upper right hand corner. The latching mechanism shall be a 3-point draw roller type made of steel with a center catch. The operating handle shall have provisions for padlocking in the closed position. The main lock shall be a Corbin 1548-1 and furnished with two keys as specified by the Authority. The door shall have a gasket that forms a weather tight seal between the door and the cabinet. The lower portion of the door shall be vented with louvers on the exterior to provide 100 cfm of air flow. A filter held firmly in place by side and bottom brackets shall cover the louver vents on the door's interior. A door restraint shall be furnished to prevent door movement during windy conditions.

The exterior of the cabinet shall be natural aluminum. The interior surface of the cabinet and door, including shelves shall be painted with appliance white alkyd baked enamel paint.

The cabinet power panel shall be installed on the left side of the cabinet 8 inches up from the mounting flange. It shall have a 100-amp panel and a 60-amp main breaker and 24 circuit

breakers. A 15 amp breaker shall be used for a switched 120V LED Light Fixtures equal to Canlet LED Vaporproof, Gray, 12W, Wall Mount with Polycarbonate Globe, catalog number: 02-12W-LED-W-F-OG-18. Provide panelboard with breakers and contactors as noted in the contract plans. The switched light shall be mounted on the upper right side. Provide a 240/120V AC line filter and ISLATROL series line filter and lightning/surge suppressor shall be installed on the power panel.

The cabinet trouble light shall be a stainless steel, flex shaft type, 18 inch in length with on/off switch. Trouble light shall be mounted on the right-inside of the cabinet.

The cabinet shall be furnished with a resealable plastic print holder and a set prints showing all wiring and one copy of the highway lighting drawings. Print holder shall be mounted on the inside of the door.

634.092 Method of Measurement

The following paragraphs are added:

Highway Lighting Panel and Service Upgrades shall be measured by the lump sum, complete and in place.

634.093 Basis of Payment

The following paragraphs are added:

Lump Sum payment for Highway Lighting Panel and Service Upgrades shall be full compensation for furnishing and installing the enclosure cabinet, extension base, photocell, panelboard, anchorages, bonding, grounding and ground rods, and all other hardware or incidentals required to complete the work. Lump Sum payment for Highway Lighting Panel and Service Upgrades shall also include all costs for modifications and disconnections or connections to the power source and removal and disposing of the existing light panel.

Foundations shall be paid under Ground Mounted Cabinet Foundation

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
634.1612 Highway Lighting Panel and Service Upgrades	Lump Sum

# MAINE TURNPIKE AUTHORITY

## Pre-Bid Conference

### CONTRACT 2023.02

#### EXIT 102, NEW ON RAMP INTERCHANGE RAMP "A" MILE 102.0

November 29, 2022 10:00 AM

1) Location:

The general limits of work are as shown in the Contract Plans. The Exit 102 On-Ramp is located at Mile 102.0 of the Maine Turnpike.

2) General Description:

The work consists of highway construction in the Town of West Gardiner, Maine at the Exit 102 Interchange. The work includes a new southbound ramp and the removal of the existing southbound ramp, Route 9/126 mill and overlay with shoulder reconstruction, demolition bridge underpass, pavement, signing, guardrail, highway lighting, and maintenance of traffic and all other work incidental thereto in accordance with the Plans and Specifications.

3) Bid:

- a) Bid opening is December 13, 2022 at 11:00 A.M. at MTA headquarters 2360 Congress Street, Portland.
- b) All bid and contractual questions shall be directed to Purchasing Department, Phone No. (207) 482-8115.
- c) All questions on plans and specifications shall be in writing and shall be directed to Nate Carll, Purchasing Manager, at (207) 871-7739 (fax) or email [ncarll@maineturnpike.com](mailto:ncarll@maineturnpike.com).
- d) All questions must be submitted by 5:00pm on Wednesday December 7, 2022 to be considered.

4) Notification:

- a) Contractor shall notify and obtain approval from the Authority prior to visiting the Project site for field inspection. The contact person is Mr. Steve Tartre at (207) 482-8144 or [startre@maineturnpike.com](mailto:startre@maineturnpike.com).

5) Construction Schedule/Prosecution of Work:

- a) MTA Board is scheduled to consider the Contract Award on December 22, 2022.
- b) Construction Schedule:
  - All bridge demolition and ramp removal in this Contract shall be completed on or before June 21, 2024 and shall be substantially completed on or before June 7, 2024.

- Bridge removal to the limits shown on the plans and restoration of all disturbed ground resulting from the removal of the bridge
  - All disturbed slopes are seeded and mulched and temporary erosion control mix and/or blanket and riprap are installed where necessary
  - All other work shall be completed on or before November 10, 2023 and shall be substantially completed on or before October 12, 2023.
    - All paving, striping, guardrail, and drainage work is complete
    - All lighting is complete and operational
    - All disturbed slopes are seeded and mulched and temporary erosion control mix and/or blanket and riprap are installed where necessary
    - No lane or shoulder closures, except for demobilization (removal of construction signs, drum and general clean-up)
- c) Supplemental Liquidated damages on a calendar day basis in accordance with Subsection 107.8 shall be assessed for each calendar day that substantial completion is not achieved.
- 6) Maine Department of Labor – Fair Hourly Wages (Special Provision 104.3.8)
- a) Highway and Earthwork wages are included in the Contract Book.
  - b) Heavy and Bridge wages are included in the Contract Book.
- 7) Utility Coordination (Special Provision 104.4.6)
- a) The Contractor shall contact Dig Safe and any non-member utility operators through OK-TO-DIG prior to any work.
  - b) The following utilities are anticipated to be located within the Project limits:
    - i) Central Maine Power
    - ii) Charter Communications, Inc.
    - iii) Consolidated Communications
    - iv) Maine Turnpike Authority
  - c) Utility adjustments are anticipated as part of this project. The Contractor shall coordinate their work with the aerial utility's relocations, as necessary.
    - i) Consolidated Communications will install new poles along Route 9/126
    - ii) Consolidated Communications, Charter Communications and Central Maine Power will transfer their lines to the newly installed Consolidated Communications poles.
  - d) If any unexpected utility relocations become necessary, they will be scheduled in compliance with Section 104 of the Standard Specifications and will be done by the utilities in conjunction with the work by the Contractor.
- 8) Cooperation With Other Contractors (Special Provision 104.4.7)
- a) MTA Contract 2023.01 – Mainline Paving, MM 88.6 – 98.0
  - b) DOT WIN 26340.00 – Interstate 295 SB Ultra Thin Bonded Wearing Course
  - c) DOT WIN 26342.00 – Interstate 295 NB Ultra Thin Bonded Wearing Course
- 9) Lead Paint (Special Provision 105.2.4.2)
- a) The Contractor shall note that the existing bridge structure may contain lead based paint. The Contractor shall institute every precaution when working with materials coated with lead based paints.

10) Permit Requirements (Special Provisions 105.8.2 and 105.8.3)

- a) The Project is being constructed under the Maine Department of Environmental Protection (DEP) Natural Resources Protection Act Permit by Rule regulations Section 11 – State Transportation Facilities, as most recently amended June 8, 2012. A copy of the Section 11 – State Transportation Facilities Permit by Rule regulations are included in the Contract Book.
- b) The Project has been authorized under Section 404 of the Clean Water Act, through the US Army Corps of Engineers Programmatic General Permit, Category 2. The Project will be subject to the General Conditions of the Category 2 Authorization dated October 14, 2020 through October 14, 2025 and any additional conditions specified in the Maine General Permit Category 2 authorization anticipated to be issued by the U.S. Army Corps of Engineers. A signed copy of the Category 2 Start Work Notification Form must be sent to the Army Corps Maine Project Office at least two weeks before work commences. A copy of the Department of the Army General Permits for the State of Maine is included in the contract book.
- c) The Project is subject to the requirements of the Maine Pollutant Discharge Elimination System (MPDES) General Permit for Stormwater Discharge from Construction Activity.
- d) Compliance with the erosion and sedimentation control requirements outlined in this Contract is required by the Contractor.
- e) There are wetland impacts associated with the construction of the new On-Ramp. The Contractor shall not impact these wetlands beyond the limits shown in the Plans.
- f) No tree clearing may be done from the beginning of April to the end of July.

11) Prosecution of Work (107.4.6)

- a) No construction on the existing Exit 102 Ramp shall begin until the construction on Route 126 and the new Exit 102 SB on Ramp is substantially complete.

12) Price Adjustment for Diesel Fuel (108.4.2)

- a) A price adjustment for diesel fuel will be made based on the variance in costs for diesel fuel.

13) General Requirements

- a) U-Turns at toll plazas and median openings not allowed. (Supplemental Specification 105.5.1)
- b) Contractor access to and from the mainline shall not negatively impact mainline traffic flow. The Contractor may be required to establish lane closures to provide for safe access. Refer to Special Provision 652, Specific Project Maintenance of Traffic Requirements, for lane closure requirements and restrictions.
- c) All vehicles used on the Project, including concrete delivery trucks, shall be equipped with amber flashing beacons in accordance with Supplemental Specification 652.3.4.
- d) Class III safety vests must be worn at all times.

14) Specific Contract Items:

- a) Section 202 – Removing Buildings and Obstructions (Building Removal)
  - i) 7 Ronnie Street will be removed
  - ii) The Authority conducted an asbestos bulk testing performed by Lakeside Concrete Cutting, Inc in May 2021 found that the structure does not have regulated asbestos containing building materials. A copy of the Asbestos Demolition Impact Assessment is included in the contract.
- b) Section 203 – Excavation and Embankment (Special Fill)
  - i) Special Fill shall be carefully graded and placed as noted in Special Provision 203.
- c) Section 526 – Concrete Barrier (Temporary Concrete Barrier Type I - Supplied by Authority)
  - i) Concrete barriers supplied by Authority shall be available at the West Gardiner Maintenance Area Mile 100.3 Northbound (900 LF)
- d) Section 634 – Highway Lighting (Conventional Light Standard with LED Fixture - Supplied by the Authority)
  - i) Conventional light standards with LED fixtures supplied by the Authority will be available at the MTA Sign Shop at MM 58 NB.

15) Traffic Control (Special Provision Section 652):

- a) Special Provision Section 652 replaces the MaineDOT Standard Specification 2014 Edition and MTA 2016 Supplemental Specification Section 652.
- b) Substantive revisions have been bolded in the 652 SP.
- c) Contractor is responsible for supplying all traffic control devices.
- d) Contractor is responsible for placement, relocation, removal and maintenance of traffic control devices. Maintenance of traffic control devices is a 24-hour a day, seven days per week responsibility. Contractor shall inspect devices as required.
- e) Temporary detours, lane closures and construction phasing shall be established and maintained at all times in accordance with the details shown on the Plans and the requirements of the Special Provisions.
  - i) A truck mounted attenuator shall be utilized for all lane closures on the Turnpike mainline, shall be utilized for all temporary shoulder closures (i.e. closures that do not include temporary concrete barrier) on the Turnpike mainline, and other construction operations where workers are exposed to traffic and not protected by positive means.
  - ii) A truck mounted attenuator shall be utilized for all work completed behind guardrail if that work is being completed within the deflection zone of the guardrail (within four feet behind the guardrail post).
- f) Turnpike Lane closures
  - i) One lane of traffic flowing in each direction at all times. Minimum traveling width of 14' required unless otherwise shown in the Plans.
  - ii) All lane closures require the approval of the Resident. The Resident is required to submit a request to MTA for lane closures by noon on Thursday for lane closures needed for the following week. The Contractor shall plan the work and requests for lane closures accordingly. Requests are subject to approval by MTA.
  - iii) Supplemental liquidated damages shall be assessed at \$1,000 per minute for every minute that a temporary lane closure is in place outside of the allowable times.

- g) All signs, which do not apply to current construction activity, shall be 100% covered or removed in accordance with the plans. This includes any speed limit signs when work zone speed is in operation.
- h) Traffic control devices shall be NCHRP 350 compliant. All traffic control devices shall meet MASH guidelines if the date of manufacture was after December 31, 2019.

16) Questions:

