

MAINE TURNPIKE AUTHORITY ADDENDUM NO. 1

CONTRACT 2018.03

EXIT 44 SOUTHBOUND ON RAMP IMPROVEMENTS
MILE 44.3

The bid opening date is Thursday February 15, 2018 at 11:00 a.m.

The following changes are made to the Proposal, Specifications, and Plans.

GENERAL

All questions regarding Contract 2018.03 shall be submitted by February 9, 2018 at 12 pm. Questions received after that time may not be answered.

No site visits shall be done during inclement weather requiring snow plow operations.

PROPOSAL

- Proposal Sheets P-2 to P-9 are deleted and replaced with sheets P-2 to P-9 attached hereto. The revision to these sheet adds the item 403.211 Hot Mix Asphalt - Shim

SPECIAL PROVISIONS

- SP-6, Special Provision Section 107.4.6 Prosecution of Work, second line, the words “base coarse” are deleted and replaced with “base and intermediate courses (all but surface)”.
- SP-16, SECTION 401 HOT MIX ASPHALT, third paragraph, first sentence is deleted in its entirety and replaced with, “As part of the JMF submittal for the surface course, there are Hamburg Wheel Tracker requirements, the Contractor shall provide the Authority the test results in accordance with AASHTO T324.”
- SP-19, SECTION 403 HOT MIX ASPHALT PAVEMENT has been deleted in its entirety and replaced with SP-19. The special provision table was revised to add Shim Pavement and complementary notes listed.
- SP-21, Special Provision Section 409.02 Bituminous Material, the second sentence is deleted and replaced with, “Bituminous material shall conform to the Specifications for Emulsified Asphalt RS-1h or RS-1, of the AASHTO Designation M-140.”
- SP-67, SECTION 634 HIGHWAY LIGHTING, Section 634.01, fourth paragraph is deleted and replaced with, “All new light standards will be 35 feet tall with 2-foot riser and a 8-foot offset arm as detailed in the plans. All highway lights shall be installed so the LED fixture is centered over the shoulder for maintenance purposes.”

- SP-69, SECTION 634 HIGHWAY LIGHTING, Section 634.021, first bullet shall be revised to add “,or approved equal”
- SP-69, SECTION 634 HIGHWAY LIGHTING, Section 634.021, second and third bullets shall be deleted.

PLANS

- Plan Sheet 2 of 64, ESTIMATED QUANTITIES AND EARTHWORK SUMMARY, has been deleted in its entirety and replaced with Plan Sheet 2 of 64, included in this addendum.
- Plan Sheets 9 and 10 of 64, PHASE 2 MAINTENANCE OF TRAFFIC PLAN 1 OF 3 and PLAN 2 OF 3 have been deleted in their entirety and replaced with Plan Sheets 9 and 10 of 64, included in this addendum.
- Plan Sheet 19 of 64, LIGHTING AND COMMUNICATION DETAILS 1, has been deleted in its entirety and replaced with Plan Sheet 19 of 64, included in this addendum.

QUESTIONS

The following are questions asked at the Pre-Bid meeting held February 1, 2018 at 10:00 a.m. Answers to the questions are noted. Bidders shall utilize this information in preparing their bid.

1. *Question: Section 409 - Bituminous Tack Coat of the Special Provisions, page SP-29, in section 409.02 indicates Emulsified Asphalt RS-1h. Would the MTA accept Emulsified Asphalt RS-1?*

Answer: Yes. This addendum will revise the Special Provisions.

2. *Question: Section 202 Removing Pavement Surface, page SP-7, in section 202.01 Description indicates shimming may be required. How is shimming to be paid for?*

Answer: Shimming will be paid for under item 403.211 Hot Mix Asphalt - Shim. This addendum will add item 403.211.

3. *Question: Section 401.03 SP-14 indicates a maximum of 15% RAP may be used in any surface course and a maximum of 20% RAP for any base, intermediate, or shim course. Note C of Section 403 Hot Mix Asphalt Pavement indicates a maximum of 15% RAP may be used in all pavement layers. Can a maximum of 20% RAP be used in the base, intermediate or shim courses?*

Answer: Yes. This addendum will revise the Special Provisions.

4. *Question: Is the Hamburg Wheel Tracker allowed on all layers or just the surface?*

Answer: This addendum will revise SP-16, Section 401.03 Composition of Mixtures.

5. *Question: Will the MTA be sending somebody to test HMA for all pavement courses?*

Answer: This addendum will revise SP-19, Section 403.

6. *Question: Will work behind barrier be done day and night?*

Answer: Yes.

ATTACHMENTS

- Pre-Bid Agenda (3)
- Pre-Bid Sign-In Sheets (2)
- Proposal Sheets (8)
- Special Provisions (1)
- Plans (4)

The total number of pages included with this addendum is twenty-two (22).

All bidders are requested to acknowledge the receipt of the Addendum No. 1 by signing the next page 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.

Acknowledgment of the receipt of Addendum No. 1 (22 pages)

Business Name

Print Name and Title

Signature

Date
February 6, 2018

Very truly yours,

MAINE TURNPIKE AUTHORITY

Purchasing Manager
Maine Turnpike Authority

MAINE TURNPIKE AUTHORITY

Pre-Bid Conference

CONTRACT 2018.03

EXIT 44 SOUTHBOUND ON RAMP IMPROVEMENTS

MILE 44.3

February 1, 2018 10:00 a.m.

1) Location:

The general limits of work are at Mile 43.3 (Station 2139+00) to Mile 43.9 (Station 2168+00) in Scarborough, Maine.

2) General Description:

The roadway work consists of improving the southbound on ramp at Exit 44 in the Town of Scarborough, Maine. The existing one lane entrance ramp will be widened to accommodate a two-lane parallel entrance ramp merging with the two existing mainline travel lanes. The work includes reconstruction and grading on the mainline and ramp with earthwork, pavement, maintenance of traffic, signing, striping, guardrail, electrical work, all other work incidental thereto in accordance with the Plans and Specifications.

3) Bid:

- a) February 15, 2018 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 (faxed) to Purchasing Department, of the Maine Turnpike Authority. Fax No. (207) 871-7739 or ncarrll@maineturnpike.com.

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) 871-7771, ext. 144.

5) Maine Department of Labor – Fair Hourly Wages (Special Provision 104.3.8)

- a) Highway and Earthwork wages

6) General Requirements

- a) U-Turns at toll plazas and median openings not allowed, subject to fines. (Supplemental Specifications 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 the General Provision 652.61.
 - d) Class III safety vests must be worn at all times in accordance with Supplemental Specifications 652.3.2.
- 7) Permit Requirements (Special Provision 105.8.2)
- a) The Project is being constructed under the Maine DEP Natural Resources Protection Act Permit by Rule (PBR) for activities adjacent to protected natural resources. A copy of the PBR regulations and permit are in Appendix B.
 - b) The Project permitting also requires that Contractor shall not clear, disturb or otherwise impact other wetlands at the site during construction, beyond what impacts are shown on the project plans.
 - 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) A Notice of Intent (NOI), accompanied by a preliminary Limit of Disturbance (LOD) of 5.11 acres have been filed by MTA with Maine DEP. Contractor shall prepare and file a **final** LOD.
 - e) Compliance with the Maine Pollutant Discharge and Elimination System (MPDES) General Permit for the Discharge of Stormwater from MTA's Municipal Separate Storm Sewer Systems (MS4) requirements outlined in this Contract is required by the Contractor.
 - f) Compliance with the erosion and sedimentation control requirements outlined in this Contract is required by the Contractor.
 - g) MaineDOT Best Management Practices (latest issue), subject to fines in accordance with Supplemental Specifications 105.8.1.
- 8) Construction Schedule/Prosecution of Work:
- a) February 22, 2018 – Contract award considered at MTA Board Meeting
 - b) April 2018 – Anticipated Contract start
 - c) May 24, 2018 - Construction of the embankment widening shall be completed, up to and including the base course of pavement, guardrail and lighting with two lanes open to traffic on Exit 44 Southbound On Ramp
 - d) June 21, 2018 - Substantial Completion

- e) November 17, 2018 - Contract Completion date
- f) Substantial completion defined as
 - i) Two lanes of the Exit 44 On Ramp fully open to traffic including shoulders, guardrail, surface pavement, drainage, lighting, signage and striping.
 - ii) All disturbed slopes loamed, seeded and mulched, temporary erosion control mix and/or blanket installed where necessary.
 - iii) No lane closures, except for demobilization (removal of construction signs and drums, and general clean-up).
- g) Liquidated damages on a calendar day basis in accordance with Subsection 107.7.2 shall be assessed for each calendar day that project completion is not achieved.
- h) Supplemental liquated damages for:
 - i) for each calendar day that substantial completion is not achieved on a calendar day basis in accordance with Subsection 107.8.

9) Traffic Control (Special Provision Section 652):

- a) Phase 1 provides a long-term right shoulder closure with two 11' minimum travel lanes on mainline and one 11' minimum ramp travel lane adjacent to temporary concrete barrier.
- b) Phase 2 provides a long-term travelway closure between two 11' minimum travel lanes on mainline and one 11' minimum ramp travel lane.

10) Specific Contract Items

- a) Section 526 – Temporary Concrete Barrier Type I – Supplied by Authority
 - i) The concrete barrier sections are stored at the Kennebunk Motel Site Mile 25.5 and shall be returned there.
- b) Section 606 – Guardrail
 - i) The Guardrail run shall be the 31” W-Beam Guardrail – Mid-way Splice system.
 - ii) The FLEAT shall be for use with the 31” W-Beam Guardrail – Mid-way Splice system

11) Questions:

MAINE TURNPIKE AUTHORITY

Pre-Bid Conference

CONTRACT 2018.036

EXIT 44 SOUTHBOUND ON RAMP IMPROVEMENTS
MILE 44.3

February 1, 2018 10:00 a.m.

NAME (PRINT)	COMPANY	PHONE	EMAIL
Lauren Meek	Stantec	887 3440	lauren.meek@stantec.com
Paul Pottke	Stantec	887 3351	paul.pottkejr@stantec.com
Mitch Elliott	Shaw Brothers	839-2552	MelliotteShawbrothers.com
Alete Grill	MTA	482-8115	ncarille@maineturnpike.com
Lindsay Dearborn	Dearborn Bros. Const.	929-8812	LDearborn@DearbornConstruction.com
Sean O'Leary	RS Grandin	207-400-6517	estimator@rsgrandinconstruction.com
Loren Blaid	Pike	207 240 9247	Lblain@pikeindustries.com
Ricky Cloutier	Pike	207 212 1588	rcloutier@pikeindustries.com
Todd Griffith	Griffin	207 899 5241	toddg@griffinpaving.com
Peter Moulton	Pike Industries	207-212-6462	pmoulton@pikeindustries.com
ANDREW WARD	PRATT & SONS	207-345-3311	ANDREW@PRATTANDSONS.NET
Anthony Picinelli	Bentone and Greenman	207-577-7337	Tony.Picinelli@Bentone.com
Scott Warshol	MTA	207-482-8121	SWarshol@maineturnpike.com

NAME (PRINT)	COMPANY	PHONE	EMAIL
Steve Tardre	MTA	871-7771 - ext 144	stardre@mainefurniture.com

**SCHEDULE OF BID PRICES
CONTRACT NO. 2018.03
Exit 44 Southbound On Ramp Improvements
(MM 44.3)**

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
202.15	REMOVING MANHOLE OR CATCH BASIN	Each	2				
202.202	REMOVING PAVEMENT SURFACE	Square Yard	2,700				
202.206	REMOVING RUMBLE STRIPS	Linear Foot	3,800				
203.20	COMMON EXCAVATION	Cubic Yard	7,600				
203.24	COMMON BORROW	Cubic Yard	300				
203.25	GRANULAR BORROW	Cubic Yard	3,275				
304.10	AGGREGATE SUBBASE COURSE - GRAVEL	Cubic Yard	1,125				
304.14	AGGREGATE BASE COURSE - TYPE A	Cubic Yard	1,050				
403.207	HOT MIX ASPHALT, 19.0 MM NOMINAL MAXIMUM SIZE	Ton	2,225				
403.2081	HOT MIX ASPHALT, 12.5 MM (POLYMER MODIFIED)	Ton	950				
403.211	HOT MIX ASPHALT - SHIM	Ton	300				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
403.213	HOT MIX ASPHALT, 12.5 MM NOMINAL MAXIMUM SIZE, BASE	Ton	850				
409.15	BITUMINOUS TACK COAT, APPLIED	Gallon	740				
419.30	SAWING BITUMINOUS PAVEMENT	Linear Foot	3,200				
470.08	BERM DROPOFF CORRECTION - GRINDINGS	Ton	150				
526.306	TEMPORARY CONCRETE BARRIER TYPE I - SUPPLIED BY AUTHORITY (2,900 LF)	Lump Sum	1				
527.343	WORK ZONE CRASH CUSHIONS - TL-3	Unit	2				
603.175	18 INCH REINFORCED CONCRETE PIPE - CLASS III	Linear Foot	24				
604.09	CATCH BASIN TYPE B1	Each	2				
606.13	31" W-BEAM GUARDRAIL - MID-WAY SPLICE (7' STEEL POSTS, 8" OFFSET BLOCKS, SINGLE FACED)	Linear Foot	825				
606.131	31" W-BEAM GUARDRAIL - MID-WAY SPLICE (8' STEEL POSTS, 8" OFFSET BLOCKS, SINGLE FACED)	Linear Foot	200				
606.1351	TERMINAL END - ANCHORED END - 31" W-BEAM GUARDRAIL	Each	1				
606.2652	TERMINAL END - REMOVE AND STACK	Each	1				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
606.352	REFLECTORIZED BEAM GUARDRAIL DELINEATOR	Each	17				
606.353	REFLECTORIZED FLEXIBLE GUARDRAIL MARKER	Each	4				
606.356	UNDERDRAIN DELINEATOR POST	Each	25				
606.3561	DELINEATOR POST - REMOVE AND RESET	Each	10				
606.791	GUARDRAIL - 350 FLARED TERMINAL - 31" W-BEAM GUARDRAIL	Each	1				
606.82	GUARDRAIL - REMOVE AND STACK EXISTING CRASH END	Each	1				
610.08	PLAIN RIPRAP	Cubic Yard	5				
610.16	HEAVY RIP RAP	Cubic Yard	385				
610.18	STONE DITCH PROTECTION	Cubic Yard	10				
610.181	TEMPORARY STONE CHECK DAM	Cubic Yard	100				
613.319	EROSION CONTROL BLANKET	Square Yard	2,550				
615.07	LOAM	Cubic Yard	1,100				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
618.14	SEEDING METHOD NUMBER 2	Unit	54				
618.141	SEEDING METHOD NUMBER 3	Unit	30				
619.1201	MULCH - PLAN QUANTITY	Unit	84				
619.1202	TEMPORARY MULCH	Lump Sum	1				
620.58	EROSION CONTROL GEOTEXTILE	Square Yard	330				
626.122	QUAZITE JUNCTION BOX (18X11)	Each	14				
626.22	NON-METALLIC CONDUIT	Linear Foot	2,700				
626.31	18 INCH DIAMETER FOUNDATION	Each	6				
626.32	24 INCH DIAMETER FOUNDATION	Each	16				
626.33	30 INCH DIAMETER FOUNDATION	Each	2				
626.36	REMOVE OR MODIFY CONCRETE FOUNDATION	Each	11				
627.681	TEMPORARY 6 INCH PAINTED PAVEMENT MARKING LINE - YELLOW OR WHITE	Linear Foot	4,950				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
627.73	TEMPORARY 6 INCH PAVEMENT MARKING TAPE	Linear Foot	18,050				
627.731	TEMPORARY 6 INCH BLACK PAVEMENT MARKING TAPE	Linear Foot	14,100				
627.744	6" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	Linear Foot	14,900				
627.77	REMOVING EXISTING PAVEMENT MARKING	Square Foot	500				
627.812	TEMPORARY RAISED PAVEMENT MARKERS	Each	500				
627.94	PAVEMENT MARKING TAPE	Linear Foot	200				
627.941	PAVEMENT MARKING TAPE - DOTTED WHITE LANE LINE, 6-INCH WIDTH	Linear Foot	600				
627.944	PAVEMENT MARKINGS - RECESSED TAPE - WORDS, ARROWS AND STOP BARS	Square Foot	160				
629.05	HAND LABOR, STRAIGHT TIME	Hour	30				
631.10	AIR COMPRESSOR (INCLUDING OPERATOR)	Hour	20				
631.11	AIR TOOL (INCLUDING OPERATOR)	Hour	20				
631.12	ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	Hour	30				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
631.14	GRADER (INCLUDING OPERATOR)	Hour	30				
631.171	TRUCK - SMALL (INCLUDING OPERATOR)	Hour	30				
631.22	FRONT END LOADER (INCLUDING OPERATOR)	Hour	30				
631.36	FOREPERSON	Hour	30				
631.51	BUCKET TRUCK	Hour	20				
631.52	SCISSOR LIFT	Hour	20				
634.051	REMOVE AND STACK LIGHT STANDARD	Each	3				
634.160	HIGHWAY LIGHTING	Lump Sum	1				
634.175	REPLACEMENT LED FIXTURE, INSTALLED	Each	3				
634.208	REMOVE AND RESET LIGHT STANDARD	Each	4				
634.231	CONVENTIONAL LIGHT STANDARD WITH LED FIXTURE	Each	10				
645.105	REMOVE AND STACK SIGN	Each	4				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
645.161	BREAKAWAY DEVICE SINGLE POLE	Each	4				
645.271	REGULATORY, WARNING, CONFIRMATION AND ROUTE ASSEMBLY SIGNS, TYPE I	Square Foot	102				
645.289	STEEL H-BEAM POLES	Pound	792				
645.501	REMOVE AND RESET MAINLINE SIGN NO. 1	Each	1				
645.502	REMOVE AND RESET MAINLINE SIGN NO. 2	Each	1				
652.30	FLASHING ARROW	Each	2				
652.312	TYPE III BARRICADES	Each	5				
652.33	DRUM	Each	150				
652.34	CONE	Each	50				
652.35	CONSTRUCTION SIGNS	Square Foot	910				
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	Lump Sum	1				
652.39	PORTABLE LIGHT TOWER	Each	2				

CARRIED FORWARD:

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
652.41	PORTABLE-CHANGEABLE MESSAGE SIGN	Each	2				
652.45	TRUCK MOUNTED ATTENUATOR	Cal. Day	90	\$200	00	\$18,000	00
652.451	AUTOMATED TRAILER MOUNTED SPEED LIMIT SIGN	Cal. Day	90				
656.632	30" TEMPORARY SILT FENCE	Linear Foot	5,800				
656.60	TEMPORARY BERMS	Linear Foot	100				
656.62	TEMPORARY SLOPE DRAINS	Linear Foot	100				
659.10	MOBILIZATION	Lump Sum	1				
TOTAL:							

SPECIAL PROVISION

SECTION 403

HOT MIX ASPHALT PAVEMENT

Course	HMA Grading	Item Number	Total Thickness	No. of Layers	Complimentary Notes
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Mainline and Ramp Variable Depth Mill and Pave

Wearing	12.5mm	403.2081	1.5"	1	A,C,F,G,H,I,J,K,L,N
Intermediate	12.5mm	403.213	1.5"	1	B,E,J,L,N
Shim	4.75	403.211	1.5"	1	B,E,J,L,N

Mainline and Ramp Full Depth Construction and Full Depth Pavement Removal

Wearing	12.5mm	403.2081	1.5"	1	A,C,F,G,H,I,J,K,L,N
Intermediate	12.5mm	403.213	1.5"	1	B,E,J,L,N
Base	19.0mm	403.207	7"	3	B,E,J,L,N

COMPLEMENTARY NOTES

- A. The required PGAB for this mixture shall be **64E-28**.
- B. The required PGAB for this mixture shall be **64-28**.
- C. A maximum of 15 percent RAP may be used.
- D. RAP may not be used.
- E. The Maine DOT will conduct the job mix verification. The aggregate qualities shall meet the design traffic level of 3 to <10 million ESALS for mix placed under this contract. The design verification, Quality Control, and Acceptance tests for this mix will be performed at **75 gyrations**. (N design) Minimum and Maximum PGAB content shall not apply.
- F. The MTA will conduct the job mix verification. The aggregate qualities shall meet the design traffic level of 10 to <30 million ESALS for mix placed under this contract. The design verification, Quality Control, and Acceptance tests for this mix will be performed at **75 gyrations**. (N design)
- G. A material transfer vehicle (MTV) shall be used for the placement of Hot Mix Asphalt wearing surface on all roadways including acceleration and deceleration lanes and all ramps.
- H. Joints shall be constructed as the “notched wedge” type in accordance with Subsection 401.17.
- I. Joint density will be measured in accordance with Subsection 401.165.
- J. Tack coat shall be applied between all layers of pavement at a rate of 0.04 G/SY.
- K. PGAB shall conform to the provisions of 403.02 – Polymer Modified PGAB for HMA
- L. The contractor shall furnish a quality control technician equipped with an approved densometer to ensure density requirements are met.
- M. Hydrated Lime shall be incorporated into the mixture.
- N. No vehicular loads shall be permitted on newly completed pavement until adequate stability has been attained and the material has cooled sufficiently to prevent distortion or loss of fines. The newly paved area may be opened to traffic after the internal temperature

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
202.15	REMOVING MANHOLE OR CATCH BASIN	2	EA
202.202	REMOVING PAVEMENT SURFACE	2,700	SY
202.206	REMOVING RUMBLE STRIPS	3,800	LF
203.20	COMMON EXCAVATION	7,600	CY
203.24	COMMON BORROW	300	CY
203.25	GRANULAR BORROW	3,275	CY
304.10	AGGREGATE SUBBASE COURSE - GRAVEL	1,125	CY
304.14	AGGREGATE BASE COURSE - TYPE A	1,050	CY
403.207	HOT MIX ASPHALT 19.0 MM NOMINAL MAXIMUM SIZE	2,225	TON
403.208	HOT MIX ASPHALT 12.5 MM (POLYMER MODIFIED)	950	TON
403.211	HOT MIX ASPHALT - SHIM	300	TON
403.213	HOT MIX ASPHALT 12.5 MM NOMINAL MAXIMUM SIZE, BASE	850	TON
409.15	BITUMINOUS TACK COAT, APPLIED	740	GAL
419.30	SAWING BITUMINOUS PAVEMENT	3,200	LF
470.08	BERM DROPOFF CORRECTION - GRINDINGS	150	TON
526.306	TEMPORARY CONCRETE BARRIER TYPE I - SUPPLIED BY AUTHORITY (2,900 LF)	1	LS
527.343	WORK ZONE CRASH CUSHIONS - TL-3	2	UNIT
603.175	18 INCH REINFORCED CONCRETE PIPE - CLASS III	24	LF
604.09	CATCH BASIN TYPE BI	2	EA
606.13	3"W-BEAM GUARDRAIL - MID-WAY SPLICE (7' STEEL POSTS, 8" OFFSET BLOCKS, SINGLE FACED)	825	LF
606.131	3"W-BEAM GUARDRAIL - MID-WAY SPLICE (8' STEEL POSTS, 8" OFFSET BLOCKS, SINGLE FACED)	200	LF
606.1351	TERMINAL END - ANCHORED END - 3"W-BEAM GUARDRAIL	1	EA
606.352	REFLECTORIZED BEAM GUARDRAIL DELINEATOR	1	EA
606.352	REFLECTORIZED BEAM GUARDRAIL DELINEATOR	17	EA
606.353	REFLECTORIZED FLEXIBLE GUARDRAIL MARKER	4	EA
606.356	UNDERDRAIN DELINEATOR POST	25	EA
606.3561	DELINEATOR POST - REMOVE AND RESET	10	EA
606.791	GUARDRAIL - 350 FLARED TERMINAL - 3"W-BEAM GUARDRAIL	1	EA
606.82	GUARDRAIL - REMOVE AND STACK EXISTING CRASH END	1	EA
610.08	PLAIN RIPRAP	5	CY
610.16	HEAVY RIP RAP	385	CY
610.18	STONE DITCH PROTECTION	10	CY
610.181	TEMPORARY STONE CHECK DAM	100	CY
613.319	EROSION CONTROL BLANKET	2,550	SY
615.07	LOAM	1,100	CY
618.14	SEEDING METHOD NUMBER 2	54	UNIT
618.141	SEEDING METHOD NUMBER 3	30	UNIT
619.1201	MULCH - PLAW QUANTITY	84	UNIT
619.1202	TEMPORARY MULCH	1	LS
620.58	EROSION CONTROL GEOTEXTILE	330	SY
626.122	QUAZITE JUNCTION BOX (8X11)	14	EA
626.22	NON-METALLIC CONDUIT	2,700	LF
626.31	18 INCH DIAMETER FOUNDATION	6	EA
626.32	24 INCH DIAMETER FOUNDATION	16	EA
626.33	30 INCH DIAMETER FOUNDATION	2	EA
626.36	REMOVE OR MODIFY CONCRETE FOUNDATION	11	EA
627.681	TEMPORARY 6 INCH PAINTED PAVEMENT MARKING LINE - YELLOW OR WHITE	4,950	LF
627.73	TEMPORARY 6 INCH PAVEMENT MARKING TAPE	18,050	LF
627.731	TEMPORARY 6 INCH BLACK PAVEMENT MARKING TAPE	14,100	LF
627.744	6" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	14,900	LF
627.77	REMOVING EXISTING PAVEMENT MARKING	500	SF
627.812	TEMPORARY RAISED PAVEMENT MARKERS	500	EA
627.94	PAVEMENT MARKING TAPE	200	LF
627.941	PAVEMENT MARKING TAPE ^{1/2"} x ^{1/2"} DOTTED WHITE LANE LINE, 6-INCH WIDTH	600	LF
627.944	PAVEMENT MARKINGS - RECESSED TAPE - WORDS, ARROWS AND STOP BARS	160	SF
629.05	HAND LABOR, STRAIGHT TIME	30	HR
631.10	AIR COMPRESSOR (INCLUDING OPERATOR)	20	HR
631.11	AIR TOOL (INCLUDING OPERATOR)	20	HR
631.12	ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	30	HR
631.14	GRADER (INCLUDING OPERATOR)	30	HR
631.171	TRUCK - SMALL (INCLUDING OPERATOR)	30	HR
631.22	FRONT END LOADER (INCLUDING OPERATOR)	30	HR
631.36	FOREPERSON	30	HR
631.51	BUCKET TRUCK	20	HR
631.52	SCISSOR LIFT	20	HR
634.051	REMOVE AND STACK LIGHT STANDARD	3	EA
634.160	HIGHWAY LIGHTING	1	LS
634.175	REPLACEMENT LED FIXTURE, INSTALLED	3	EA
634.208	REMOVE AND RESET LIGHT STANDARD	4	EA
634.231	CONVENTIONAL LIGHT STANDARD WITH LED FIXTURE	10	EA
645.105	REMOVE AND STACK SIGN	4	EA
645.161	BREAKAWAY DEVICE SINGLE POLE	4	EA
645.271	REGULATORY WARNING, CONFIRMATION AND ROUTE ASSEMBLY SIGNS, TYPE I	102	SF
645.289	STEEL H-BEAM POLES	792	LB

Scale:

Designed by:



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**THE GOLD STAR
MEMORIAL HIGHWAY**



MTA PROJECT MANAGER: RALPH NORWOOD, IV, PE, PTOE
CONTRACT: 2018.03

SOUTHBOUND ON RAMP IMPROVEMENTS
ESTIMATED QUANTITIES
AND EARTHWORK SUMMARY

EXIT 44

SHEET NUMBER: 2 OF 64

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
645.501	REMOVE AND RESET MAINLINE SIGN NO. 1	1	EA
645.502	REMOVE AND RESET MAINLINE SIGN NO. 2	1	EA
652.30	FLASHING ARROW	2	EA
652.312	TYPE III BARRICADES	5	EA
652.33	DRUM	150	EA
652.34	CONE	50	EA
652.35	CONSTRUCTION SIGNS	910	SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	1	LS
652.39	PORTABLE LIGHT TOWER	1	EA
652.41	PORTABLE-CHANGEABLE MESSAGE SIGN	2	EA
652.45	TRUCK MOUNTED ATTENUATOR	90	CD
656.632	AUTOMATED TRAILER MOUNTED SPEED LIMIT SIGN	90	CD
656.632	30" TEMPORARY SILT FENCE	5,800	LF
656.60	TEMPORARY BERMS	100	LF
656.62	TEMPORARY SLOPE DRAINS	100	LF
659.10	MOBILIZATION	1	LS

COMMON EXCAVATION FOR ESTIMATE

COMMON EXCAVATION (FROM CROSS SECTIONS)
GRUBBING IN FILL
MUCK EXCAVATION (FROM CROSS SECTIONS)
PAVEMENT SALVAGE IN FILL
TOTAL COMMON EXCAVATION

5,866
760
889
0

7,515

EST

7,800

FILL FOR BORROW CALCULATIONS

COMMON FILL (FROM CROSS SECTIONS)
GRUBBING IN FILL
BACKFILL CATCH BASIN REMOVAL
MUCK EXCAVATION
TOTAL FILL

1,527
760
18
889

3,194

AVAILABLE COMMON EXCAVATION FOR BORROW CALCULATIONS

(1) TOTAL COMMON EXCAVATION DEDUCTIONS:
GRUBBING IN CUT
GRUBBING IN FILL
MUCK EXCAVATION
PAVEMENT REMOVAL
TOTAL DEDUCTIONS

1,350
760
889
1,296

7,515

TOTAL AVAILABLE COMMON EXCAVATION (1) MINUS (2)
TOTAL AVAILABLE NON-ROCK EXCAVATION

4,295
3,220
3,220

COMPUTATION OF GRANULAR BORROW FOR ESTIMATE

GRANULAR BORROW TO REPLACE MUCK
GRANULAR BORROW IN LOW WET AREAS
GRANULAR BORROW TO UPGRADE EXCAVATION
GRANULAR BORROW TO MAINTAIN TRAFFIC
GRANULAR BORROW FOR UNDERCUTTING
GRANULAR BORROW =

889
0
0
0
0

889

889 x 1.00 =

COMPUTATION FOR COMMON BORROW FOR ESTIMATE

(3) TOTAL FILL
TOTAL AVAIL. NON-ROCK EXCAV.
(4) TOTAL AVAILABLE EXCAVATION
BORROW NEEDED = TOTAL FILL MINUS TOTAL AVAILABLE EXCAVATION

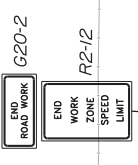
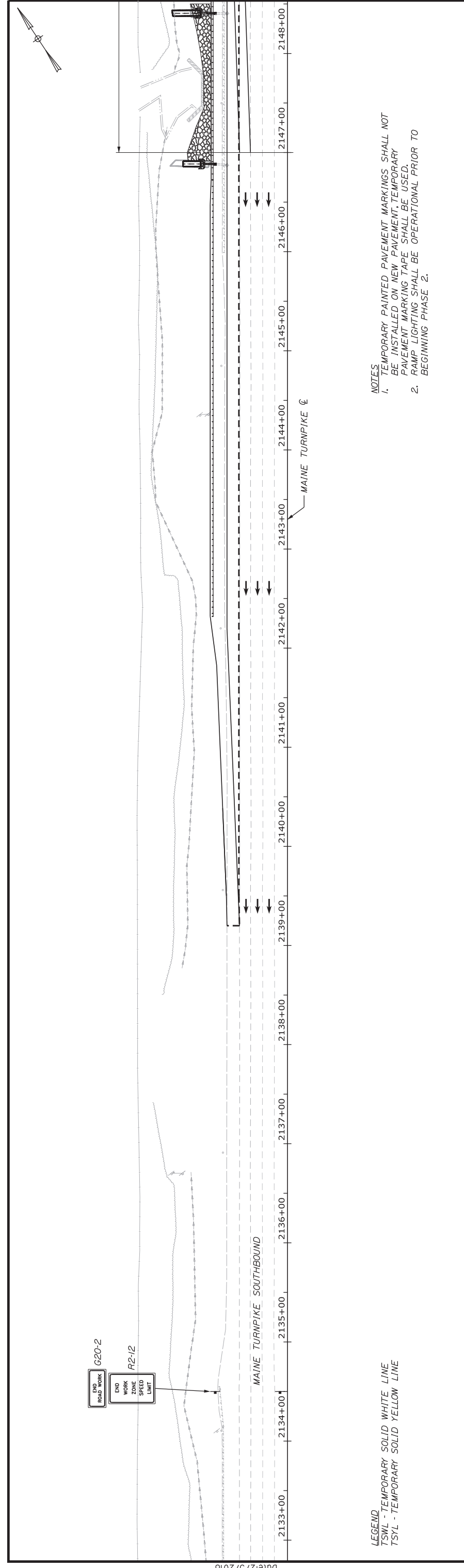
3,194
3,220 x 0.90 = 2,898
2,898

296

No.	Revision	By	Date
1		LEM	2/18

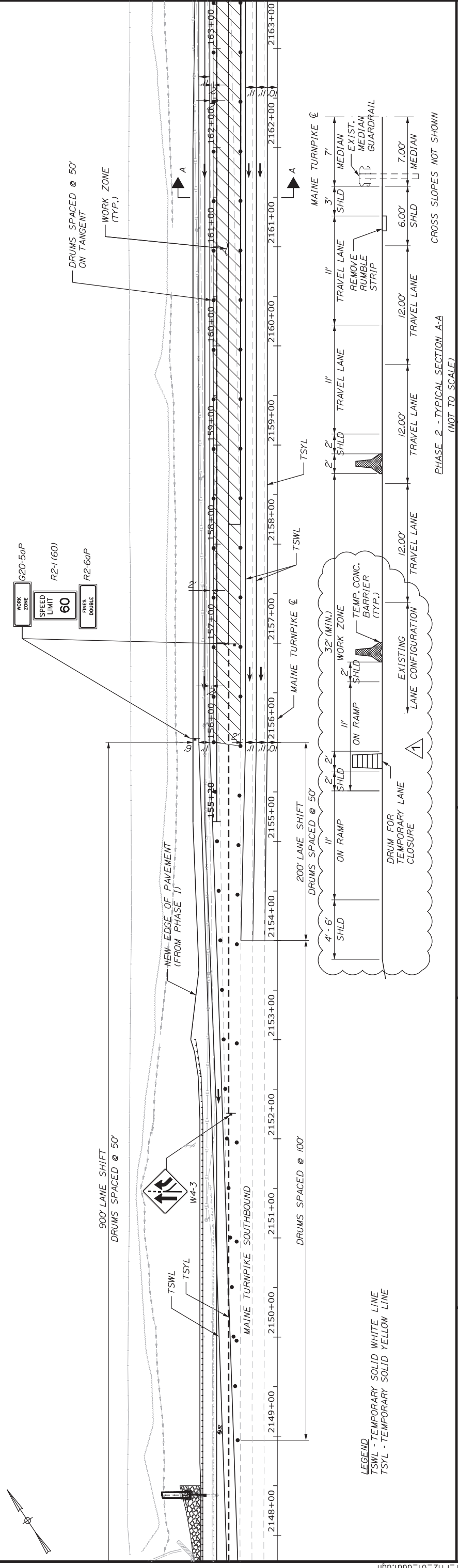
Designed	By	Date	By	Date
TFD	1/22/18	1/22/18	LEM	1/22/18
Drawn	PLP	1/22/18	In Charge of	GAE
				1/22/18

CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE



LEGEND
 TSWL - TEMPORARY SOLID WHITE LINE
 TSYL - TEMPORARY SOLID YELLOW LINE

NOTES
 1. TEMPORARY PAINTED PAVEMENT MARKINGS SHALL NOT BE INSTALLED ON NEW PAVEMENT, TEMPORARY PAVEMENT MARKING TAPE SHALL BE USED.
 2. RAMP LIGHTING SHALL BE OPERATIONAL PRIOR TO BEGINNING PHASE 2.



LEGEND
 TSWL - TEMPORARY SOLID WHITE LINE
 TSYL - TEMPORARY SOLID YELLOW LINE

Scale: 50 0 50 100
 Scale of Feet

No.	Revision	By	Date
1	1	LEM	2/18

Designed by:			
By	Date	By	Date
TFD	1/22/18	Checked	LEM
PLP	1/22/18	In Charge of	GAE



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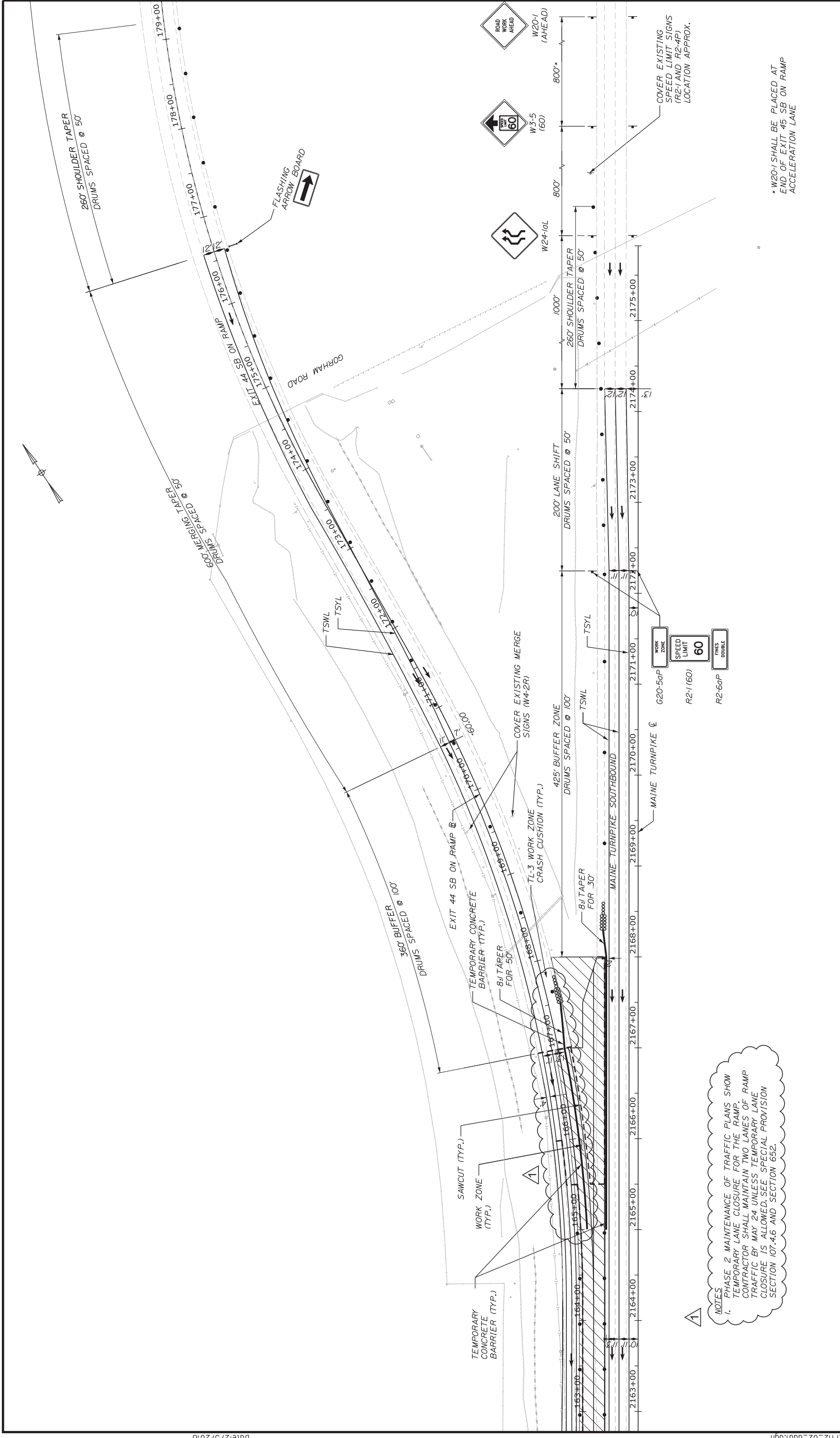


**THE GOLD STAR
 MEMORIAL HIGHWAY**

EXIT 44
 SOUTHBOUND ON RAMP IMPROVEMENTS
 PHASE 2
 MAINTENANCE OF TRAFFIC PLAN 1 OF 3

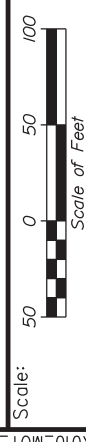
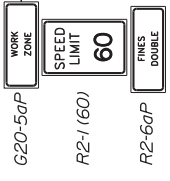
CONTRACT: 2018.03
 SHEET NUMBER: MOT-4
 9 OF 64

PHASE 2 - TYPICAL SECTION A-A
 (NOT TO SCALE)
 CROSS SLOPES NOT SHOWN



NOTES:
 1. PHASE 2 MAINTENANCE OF TRAFFIC PLANS SHOW TEMPORARY LANE CLOSURE FOR THE RAMP. CONTRACTOR SHALL MAINTAIN TWO LANES OF RAMP TRAFFIC BY MAY 24 UNLESS TEMPORARY LANE CLOSURE IS ALLOWED. SEE SPECIAL PROVISION SECTION 107.4.6 AND SECTION 652.

* W20-1 SHALL BE PLACED AT END OF EXIT 45 SB ON RAMP ACCELERATION LANE



No.	Revision	By	Date
1	Addendum No. 1	LEM	2/18

Designed	Checked	In Charge of
PLP	LEM	GAE

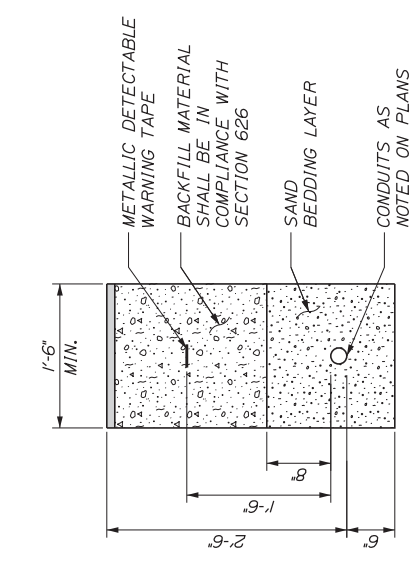
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 CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE

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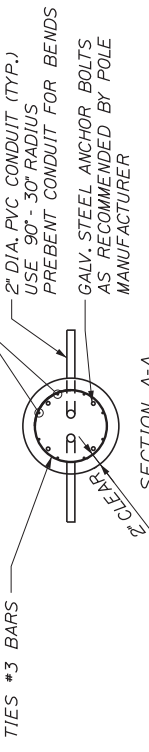
THE GOLD STAR MEMORIAL HIGHWAY

EXIT 44
 SOUTHBOUND ON RAMP IMPROVEMENTS
 PHASE 2
 MAINTENANCE OF TRAFFIC PLAN 2 OF 3
 CONTRACT: 2018.03
 SHEET NUMBER: MOT-5
 10 OF 64

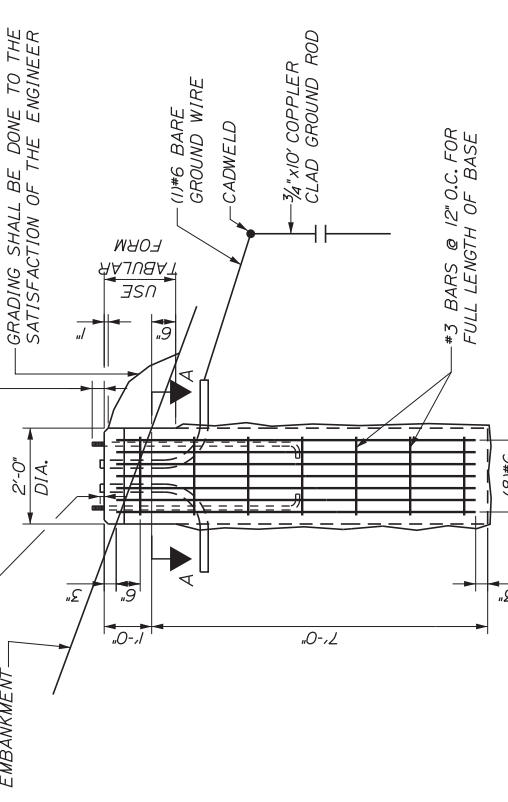


TRENCH CROSS SECTION
NOT TO SCALE

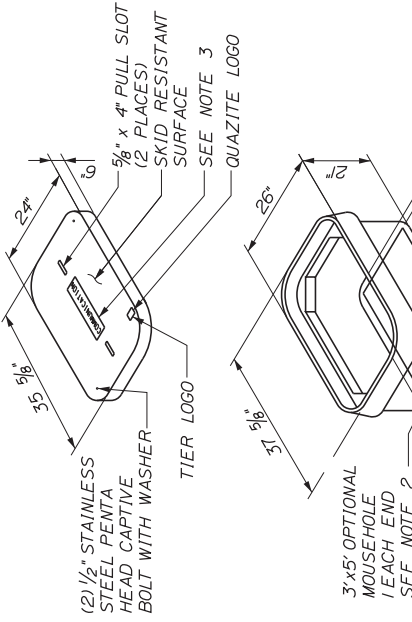
NOTE: WHERE SOLID ROCK IS ENCOUNTERED AT LESS THAN THE REQUIRED DISTANCE BELOW GROUND LEVEL, REINFORCING STEEL SHALL BE DOWELED INTO LEDGE AS SHOWN ON MAINE DOT STANDARD DETAIL 606106. PAYMENT SHALL BE INCIDENTAL TO THE FOUNDATION PAY ITEM.



2 3/4" FOR LIGHT STANDARDS WITH BREAKAWAY COUPLING
3/4" FOR LIGHT STANDARDS WITHOUT BREAKAWAY COUPLING

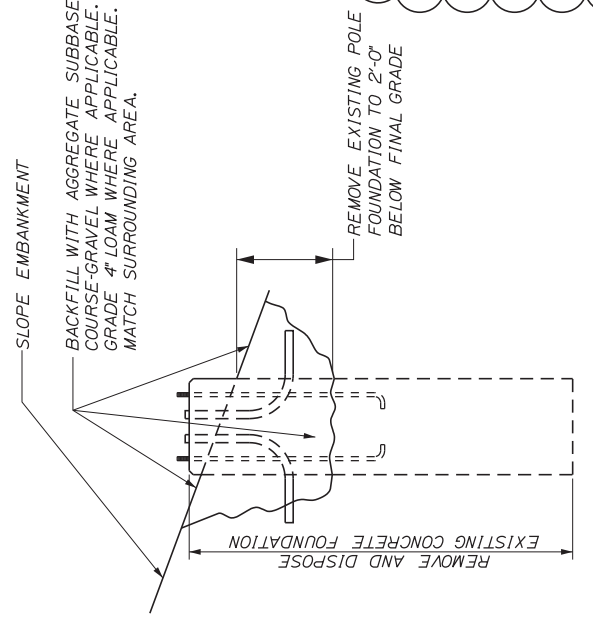


24 INCH FOUNDATION
NOT TO SCALE

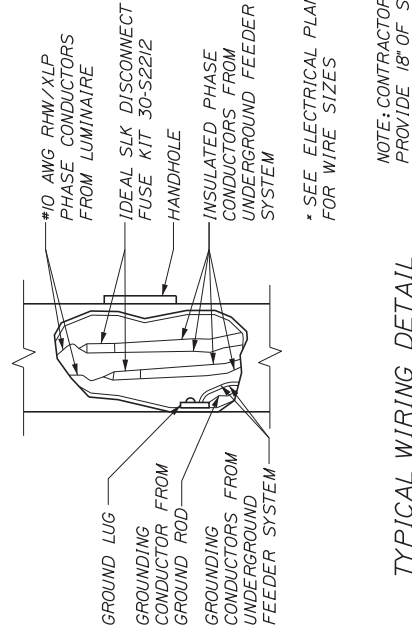


NOTES:
1. SPLICES IN BOX SHALL BE MADE WITH ILSCP USPA-350-SS-DB SAFETY SUB WATER TIGHT DIRECT BURY SPLICE WIRE RANGE 350CM-10-STR ONLY. PROVIDE ENOUGH SLACK IN THE WIRE TO ALLOW REMOVAL OF SPLICES AND NEATLY ARRANGE WIRE IN BOX.
2. PROVIDE 12" CRUSHED STONE OR GRAVEL UNDER BOX.
3. THE COVER SHALL BE LABELED WITH THE FUNCTION DESIGNATION IN 1" MIN TEXT AS FOLLOWS:
- "LIGHTING FOR LIGHTING CONDUIT"
- "COMMUNICATION FOR COMMUNICATIONS CONDUIT"
4. DIMENSIONS SHOWN FOR ITEM 626.12(1) QUAZITE JUNCTION BOX (36X24). SEE MANUFACTURER'S DETAILS FOR DIMENSIONS OF ITEM 626.122 (18X11).

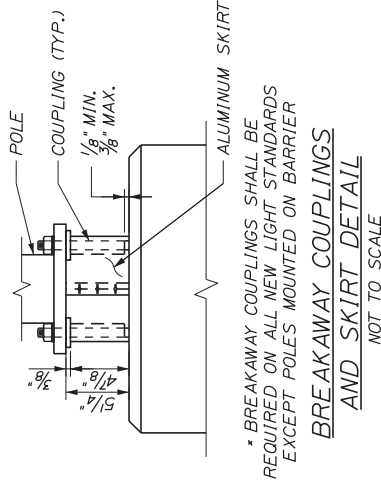
QUAZITE BOX DETAIL
NOT TO SCALE



REMOVAL OF CONCRETE FOUNDATION
NOT TO SCALE

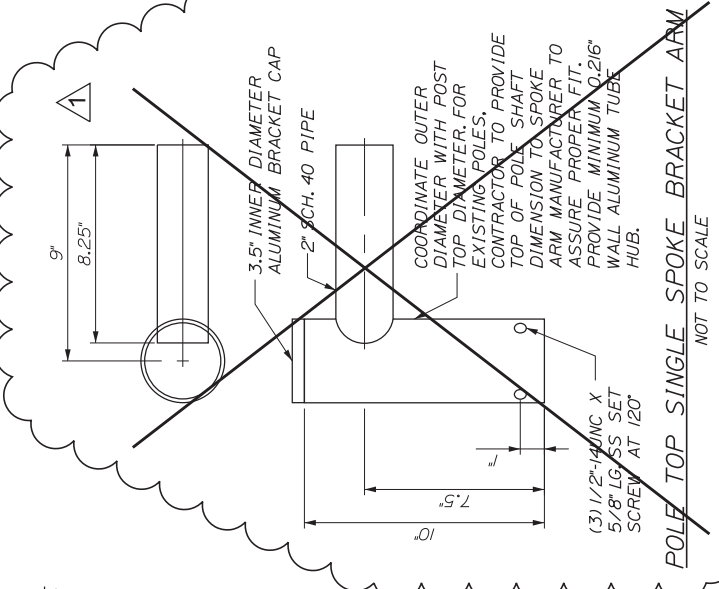


TYPICAL WIRING DETAIL
NOT TO SCALE

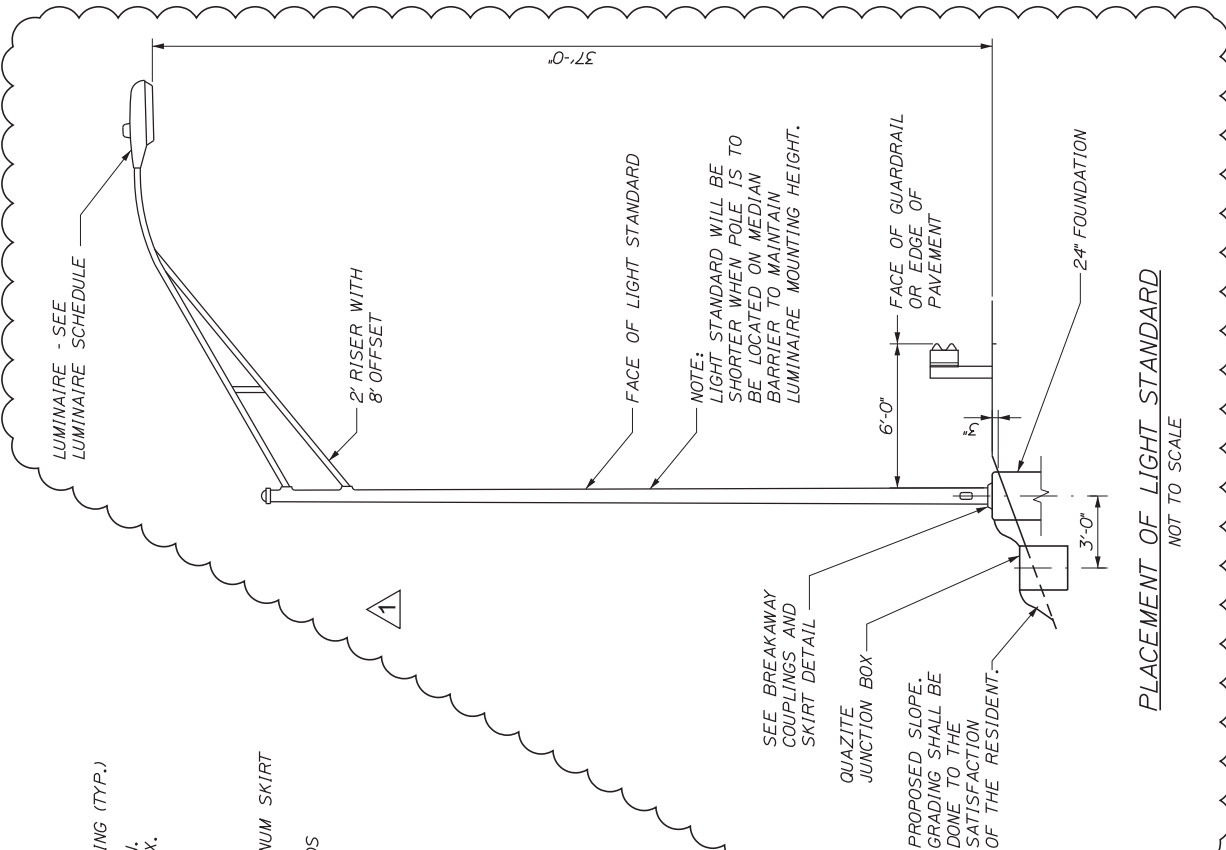


* BREAKAWAY COUPLINGS SHALL BE REQUIRED ON ALL NEW LIGHT STANDARDS EXCEPT POLES MOUNTED ON BARRIER

BREAKAWAY COUPLINGS AND SKIRT DETAIL
NOT TO SCALE



POLE TOP SINGLE SPOKE BRACKET ARM
NOT TO SCALE



PLACEMENT OF LIGHT STANDARD
NOT TO SCALE

No.	Revision	By	Date
1	Addendum No. 1	LEM	2/18

Designed	Checked	By	Date
PLP	LEM	LEM	1/22/18

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**THE GOLD STAR
MEMORIAL HIGHWAY**

EXIT 44
SOUTHBOUND ON RAMP IMPROVEMENTS
LIGHTING AND COMMUNICATION DETAILS 1
CONTRACT: 2018.03
SHEET NUMBER: DET-4
19 OF 64