#### **MAINE TURNPIKE AUTHORITY**

#### ADDENDUM NO. 2

#### **CONTRACT 2019.15**

# GRAY TRAVEL PLAZA FUEL SYSTEM REPLACEMENT MILE 58.8 NB

#### The bid opening date is July 18, 2019 at 11am.

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

#### **GENERAL**

All reference to a Fire Suppression System at the Diesel Dispensing Island and/or Canopy, within the Plans and Specifications, shall be deleted; a Fire Suppression System at the Diesel Island is not part of this Contract.

#### **PROPOSAL**

Proposal Sheet P-2 through P-7 shall be revised by the following:

- Changing Item 202.202 Quantity to 80.
- Changing Item 403.207 Quantity to 220.
- Changing Item 403.208 Quantity to 130.
- Adding Item 403.213 Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Base and Intermediate Base Course)
- Changing Item 409.15 Quantity to 130.
- Changing Item 603.165 Quantity to 60.
- Added Item 603.169 15 inch Culvert Pipe Option III
- Changing Item 604.09 Quantity to 1.
- Removed Item 604.15 Manhole
- Added Item 604.248 Catch Basin Type F6
- Removed Item 605.09 6 inch Underdrain Type B
- Added Item 627.73 Temporary 6 Inch Pavement Marking Tape
- Removed Item 627.78 Temporary Pavement Marking Line White or Yellow
- Changing Item 652.35 Quantity to 140.

#### **SPECIFICATIONS**

Special Provision Section 107.4.6 Prosecution of Work shall be revised. See attached revised page SP-9.

Special Provision Section 403 Hot Mix Asphalt Pavement shall be revised with an addition of item 403.213 Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Base and Intermediate Base Course) See attached revised page SP-30.

Special Provision Section 604 Manholes, Inlets, and Catch Basins (Oil-Water Separator System) shall be revised. See attached revised page SP-46.

All reference to a Fire Suppression System at the Diesel Dispensing Island and/or Canopy, within the Plans and Specifications, shall be deleted; a Fire Suppression System at the Diesel Island is not part of this Contract.

#### **PLANS**

Plan Sheets 2, 6, 8, 9-11,13,14-16, 20 and 24 out of 32 total sheets shall be revised.

All reference to a Fire Suppression System at the Diesel Dispensing Island and/or Canopy, within the Plans and Specifications, shall be deleted; a Fire Suppression System at the Diesel Island is not part of this Contract.

#### **QUESTIONS**

- Where and when are flaggers to be used?
   Response: Flaggers are not necessary for the MOT Phases shown therefore Flagger Hours have been removed from the Bid Items.
- 2) Typical buried fuel piping detail, what is the pay limit of special excavation, the dashed line ends at the top of the conduit fill section, I suspect the limits goes to the bottom of the trench?

**Response**: The detail shall be revised to clarify pay limits.

- 3) Can tape be used to delineate the no parking zone prior to the fuel station for diesel? **Response**: Yes, temporary striping shall be revised to tape.
- 4) Can you clarify the components of the oil water separator? **Response**: The Oil-Water Separator consists of the oil-water separator structure, two F-basins that collect oil and water from the diesel slab area, and connecting pipes, including the connection pipe from the oil-water separator to the first downstream catch basin, CB 1.

The plans have been modified with specific labeling of these components. This modification also changes the Bid Items.

5) Can you clarify the pavement layers and Bid Items?

#### **Response**:

- Pavement Bid Items and Quantities have been updated to include the 403.213 pay item.
- We could not find elevations of the dispenser pads or the tank pads on the plans. These elevations control the depth of the tank needed for the estimates.
   Response: Additional grading and spot elevation detail is provided for the diesel dispensing slab and the portion of the perimeter road that will be excavated for tank removal and replacement.
- 7) Sheet S-8, should this be Epoxy Rebar? **Response**: Yes, this shall be clarified to note epoxy rebar.
- 8) Where does the MTA require any unused granite curb be stockpiled?

  Response: Unused granite curb shall become the property of the contractor. Plan notes shall be revised.
- We're assuming there are only (2)-diesel dispensers under the diesel canopy and no gasoline dispensers like Kennebunk's and Gardiner. Is this correct?Response: The diesel island will have two diesel dispensers, operational from both sides; there will be no gasoline dispensers.
- Per HNTB drawing 26 of 32, there appears to be no diesel dispenser under the gasoline canopy unlike the Kennebunk's and Gardiner. Is this correct?
   Response: There will be no diesel dispenser at the gasoline dispensing islands; only gasoline dispensers.
- Diesel canopy fire system: The State Fire Marshall and NFPA do not require a fire system over diesel dispensers. Is it required by the MTA?
   Response: All reference to a Fire Suppression System at the Diesel Dispensing Island and/or Canopy, within the Plans and Specifications, shall be deleted; a Fire Suppression System at the Diesel Island is not part of this Contract.

## **ATTACHMENTS**

ATTACHMENTS		
<ul> <li>Proposal Sheets P-2 through P-7</li> <li>Special Provision 107.4.6 (Page Special Provision 403 (Page SP-Special Provision 604 (Page SP-Plan Sheet 2, 6, 8, 9-11,13,14,15)</li> </ul>	SP-9 Revised) -30 Revised) -46 Revised)	(6 pages) (1 pages) (1 pages) (1 page) (12 page)
Notes: The above items shall be considered.	dered as part of the bid sub	omittal.
The total number of pages included with	th this addendum is twenty	y-five (25).
faxing this sheet to Nathaniel Ca	arll, Purchasing Departm	ddendum No. 2 by signing below and nent, Maine Turnpike Authority at t of this Addendum No. 2 on Page P-8
Business Name	-	
Print Name and Title	-	
Signature	-	
Date	-	
	July 16, 2019	
	Very truly yours,	
	MAINE TURNPIKE	EAUTHORITY

Nathaniel Carll Purchasing Department Maine Turnpike Authority

### **SCHEDULE OF BID PRICES CONTRACT NO. 2019.15 Fuel System Replacement Gray Service Plaza** Mile 58.8

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
INO	item Description	Offics	Quantities	Dollars	Cents	Dollars	Cents
202.17	Removing Existing Structural Concrete	Lump Sum	1				     
202.202	Removing Pavement Surface	Square Yard	80		   		     
203.20	Common Excavation	Cubic Yard	340		   		     
203.2312	Health and Safety Plan	Lump Sum	1		   		     
203.2333	Disposal/Treatment of Special Excavation	Ton	535		   		     
203.2334	Disposal/Treatment of Contaminated Groundwater	Gallon	300,000		     		     
206.061	Structural Earth Excavation - Drainage Minor Structures Below Grade	Cubic Yard	25		     		     
304.10	Aggregate Subbase Course - Gravel	Cubic Yard	450				     
304.14	Aggregate Base Course - Type A	Cubic Yard	90		   		     
403.207	Hot Mix Asphalt, 19.0 mm Nominal Maximum Size	Ton	220		     		     
403.208	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size	Ton	130		     		     

						]
203.2312	Health and Safety Plan	Lump Sum	1			
203.2333	Disposal/Treatment of Special Excavation	Ton	535			
203.2334	Disposal/Treatment of Contaminated Groundwater	Gallon	300,000			   
206.061	Structural Earth Excavation - Drainage Minor Structures Below Grade	Cubic Yard	25			     
304.10	Aggregate Subbase Course - Gravel	Cubic Yard	450			   
304.14	Aggregate Base Course - Type A	Cubic Yard	90			   
403.207	Hot Mix Asphalt, 19.0 mm Nominal Maximum Size	Ton	220			
403.208	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size	Ton	130			     
				CARRIER FORM	ADD-	
				CARRIED FORW	AKD:	

CARRIED FORWARD:	

	1			COI	NTRACT NO: 2019.15
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 and Intermediate Base Course)	Ton	130	 	
409.15	Bituminous Tack Coat, Applied	Gallon	130		
419.30	Sawing Bituminous Pavement	Linear Foot	1,110		
502.701	Concrete Gas Island and Slab	Cubic Yard	74		
502.702	Concrete Diesel Island and Slab	Cubic Yard	37		
502.703	Concrete Fuel Tank Slab	Cubic Yard	39		
503.14	Epoxy-Coated Reinforcing Steel, Fabricated and Delivered	Pound	12,200		
503.15	Epoxy-Coated Reinforcing Steel, Placing	Pound	12,200		
524.30	Temporary Structural Support	Each	1		
526.306	Temporary Concrete Barrier, Type I - Supplied by Authority (500 LF)	Lump Sum	1		
603.165	15 Inch Reinforced Concrete Pipe - Class III	Linear Foot	60		
603.169	15 Inch Culvert Pipe Option III	Linear Foot	300	     	

15 Inch Reinforced Concrete Pipe - Class III	Linear Foot	60				     
15 Inch Culvert Pipe Option III	Linear Foot	300				     
			CARRIED FORW	ARD:		
		P-3	Revised 7/15/20	)19	Page 6	of 25

	1		1		I	ACT NO: 2019.1	<del>-</del>
Item No	Item Description	Units	Approx.  Quantities	Unit Prices Bid Al in Numbers in Num			
				Dollars Co	ents	Dollars	Cents
				BROUGHT FORWA	I		
604.09	Catch Basin Type B1	Each	1	 			     
604.248	Catch Basin Type F6	Each	1	1			<del> </del> 
604.30	Oil-water Separator	Each	1				     
606.265	Terminal End - single rail- Galvanized steel	Each	4				     
606.356	Underdrain Delineator Post	Each	3				     
606.3605	Guardrail Remove and Reset	Linear Foot	187.5				     
607.18	6 Foot Chain Link Safety Fence	Linear Foot	500				     
609.31	Curb Type 3	Linear Foot	120				     
610.08	Plain Riprap	Cubic Yard	9	 			     
613.319	Erosion Control Blanket	Square Yard	18	 			i i i
615.07	Loam	Cubic Yard	80	 			     
618.13	Seeding Method Number 1	Unit	5	] 			     

		Yard					
615.07	Loam	Cubic Yard	80				
618.13	Seeding Method Number 1	Unit	5				
				CARRIED FORW	ARD:		
			P-4	Revised 7/15/20	19	Page 7	of 25

			1		NTRACT NO: 2019.15	
Item No	Item Description	Description Units		Unit Prices in Numbers	Bid Amount in Numbers	
110	nom Boompaon	Ormo	Quantities	Dollars Cen	ts Dollars Co	ents
			<u> </u>	BROUGHT FORWARI	):	
619.1201	Mulch - Plan Quantity	Unit	5			
619.1202	Temporary Mulch	Lump Sum	1			
622.10	Transplanting Shrub	Each	13			
626.13	18" X 12" X 18" Quazite Junction Box	Each	1			
626.22	Non-Metallic Conduit	Linear Foot	70		1	
626.32	24 Inch Diameter Foundation	Each	2			
626.36	Remove or Modify Concrete Foundation	Each	2			
627.73	Temporary 6 Inch Pavement Marking Tape	Linear Foot	840			
627.731	Temporary 6 Inch Black Pavement Marking Tape	Linear Foot	100			
627.733	4" White or Yellow Painted Pavement Marking Line	Linear Foot	650			
629.05	Hand Labor, Straight Time	Man Hour	20			
631.12	All Purpose Excavator (including operator)	Hour	20			

631.12	All Purpose Excavator	Hour Hour	20			
	(including operator)					
				CARRIED FORW	ARD:	

	_				ONTRACT NO: 2019.1	<u> </u>
Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers	Bid Amount in Numbers	
	nom Bosonphon	Orinto	Quantities	Dollars Cen	ts Dollars	Cents
				BROUGHT FORWAR		
631.172	Truck Large (including operator)	Hour	40			     
631.221	Small Front End Loader (including operator)	Hour	20			     
631.32	Culvert Cleaner (including operator)	Hour	12			     
631.36	Foreman	Hour	20			     
634.208	Remove and Reset Light Standards	Each	2			     
634.23	Temporary Lighting	Lump Sum	1			     
639.19	Field Office, Type B	Each	1			     
645.109	Remove and Reset Sign	Each	1			     
652.33	Drum	Each	70			       
652.34	Cones	Each	25			     
652.35	Construction Signs	Square Foot	140			 
652.361	Maintenance of Traffic Control Devices	Lump Sum	1			     

							i l
652.35	Construction Signs	Square Foot	140				     
	Maintenance of Traffic Control Devices	Lump Sum	1				     
				CARRIED FORW	ARD:		
			P-6	Revised 7/15/20	19		•
						Page 9	of 25

	1				NTRACT NO: 2019.15	
Item No	Item Description	Units	Approx.	Unit Prices in Numbers	Bid Amount in Numbers	
INO	item Description	Units	Quantities	Dollars Cent		ents
	<u> </u>		<u> </u>	20114110	7 20	
				BROUGHT FORWARD	:	
652.41	Portable Changeable Message Sign	Each	1			
655.101	#6 AWG Wire	Linear Foot	180			
655.11	#10 AWG Wire	Linear Foot	90			
656.50	Baled Hay, in place	Each	12			
656.632	30 Inch Temporary Silt Fence	Linear Foot	280			
659.10	Mobilization	Lump Sum	1			
800.01	Removal of Underground Tanks (Gasoline and Diesel)	Lump Sum	1			
800.02	Underground Tank Installation (Gasoline and Diesel)	Lump Sum	1			
800.03	Aboveground Diesel Tank Installation	Lump Sum	1			
800.04	Aboveground Gasoline Tank Installation	Lump Sum	1			
800.50	New Canopy (Diesel)	Lump Sum	1			
				TOTAL		

#### 107.4.6 Prosecution of Work

The Authority's fuel operator is responsible for removing the existing gas and diesel dispensers. The Contractor shall provide a minimum of five days' notice to the Resident of when the dispensers need to be removed. The fuel operator shall have five working days to remove dispensers.

The Authority's fuel operator shall operate the aboveground storage tanks. Contractor shall provide Resident with five working days' notice of when the aboveground storage tanks will be operational.

The contractor shall plan for and provide access to the travel plaza and temporary fuel systems for delivery vehicles (food, supplies, gas, diesel, maintenance, etc.).

The following is a list of major milestone activities required:

- Pick up, delivery and install of owner purchased above ground gas and diesel storage tanks, protective barrier, point of sale, and temporary lighting
- Install temporary kiosk (supplied by the Authority's fuel operator) including providing power and communication protective barrier and temporary lighting
- Decommission (including but not limited to all systems disconnected, lines and tanks drained and purged and prepped for removal and disposal) and remove underground gas and diesel tanks
- Submit 90% and 100% complete Fuel System plans, including but not limited to fuel tanks, piping, electrical, communication, fire suppression, lighting, and all other components required for a fully function fuel system. These submittals are required. They will be reviewed by MTA. Construction shall not proceed without approval of the MTA.
- Take receipt of and install owner purchased underground gas and diesel tanks
- Take receipt of and install vendor supplied gas and diesel dispensers
- Design and install of diesel canopy

7/16/19 SP-9 Revised

#### **SPECIAL PROVISION**

#### **SECTION 403**

#### **HOT MIX ASPHALT PAVEMENT**

Course	HMA	Item	Total	No. of	Complimentary
	Grading	Number	Thickness	Layers	Notes

#### **Service Plaza- Full Depth Construction**

Intermediate	12.5mm	403.213	1.5"	1	B,E,J,L,N
Base	19.0mm	403.207	2.5"	1	B,E,J,L,N
Surface	12.5 mm	403.208	1.5	1	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 of the pavement has cooled to 120° F. The Resident will test the internal temperature of the pavement and shall be the sole judge as to the opening to traffic. The period of time before opening to traffic may be extended at the discretion of the Resident. The lane closure may not be removed until the internal temperature has cooled to 120° F.

#### **SPECIAL PROVISION**

#### SECTION 604

#### MANHOLES, INLETS, AND CATCH BASINS

(Oil-Water Separator System)

#### 604.01 Description

This work shall include furnishing and installing an oil-water separator system. The oil-water separator system shall consist of a precast oil-water separator structure, including a swirl chamber, baffles, manways and covers for access and maintenance, design and shop drawing submittal(s). The system shown on the plans is for informational purposes only. The limits of the oil-water separator system will be from the manhole connecting to the upstream drainage system to the catch basin connecting to the downstream drainage system.

The oil-water separator system shall tie into the existing upstream and downstream plaza drainage system as shown on the plans.

The work shall also include design of the proposed drainage system to include connections to the existing drainage system as required, all testing and all other work necessary to complete the construction, all in accordance with these Specifications and as shown on the Plans or as directed by the Resident.

#### 604.02 Materials

The following sentences are added:

Elastomeric sealer shall be Sikaflex 1a as manufactured by Sika or an approved equal.

Class AAA concrete shall conform to Subsection 502.05; except that the minimum cement factor shall be 750 pounds per cubic yard and the coarse aggregate size shall conform to ASTM C33 Grading 7.

The third paragraph should be deleted and replaced with:

Catch Basin Frames and Grates shall be as outlined below and be manufactured by EJ Company of Brockton, Massachusetts or an approved equal and shall meet or exceed the AASHTO M306 Loading Requirements.

Catch Basin Frames shall be manufactured by EJ Company of Brockton, Massachusetts (or an approved equal) with the following product numbers:

5521Z - 8 Inch Frame Product Number 00552111

5546Z – 6 Inch Frame Product Number 00554611

ITEM NO.	ITEM DES CRIPTION	UNIT	TOTAL QUANTITY	
202.17	Removing Existing Structural Concrete	LS	1	
202.202	Removing Pavement Surface	SY	80	$\triangle$
203.20	Common Excavation	CY	340	
203.2312	Health and Safety Plan	LS	1	
203.2333	Disposal/Treatment of Special Excavation	TON	535	
203.2334	Disposal/Treatment of Contaminated Groundwater	GAL	300,000	
206.061	Structural Earth Excavation - Drainage Minor Structures Below Grade	CY	25	
304.10	Aggregate Subbase Course - Gravel	CY	450	
304.14	Aggregate Base Course - Type A	CY	90	
403.207	Hot Mix Asphalt, 19.0 mm Nominal Maximum Size	Ton	220	
403.208	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size	Ton	130	1
	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Base and Intermediate			٦ _
403.213	Base Course)	Ton	130	
409.15	Bituminous Tack Coat, Applied	Gal	130	
419.30	Sawing Bituminous Pavement	LF	1,110	1 -
502.701	Concrete Gas Island and Slab	CY	74	
502.702	Concrete Diesel Island and Slab	CY	37	
502.703	Concrete Fuel Tank Slab	CY	39	
503.14	Epoxy-Coated Reinforcing Steel, Fabricated and Delivered	LB	12,200	
503.15	Epoxy-Coated Reinforcing Steel, Placing	LB	12,200	
524.30	Temporary Structural Support	EA	1	
526.306	Temporary Concrete Barrier, Type I - Supplied by Authority (500 LF)	LS	1	
603.165	15 Inch Reinforced Concrete Pipe - Class III	LF	60	1
603.169	15 Inch Culvert Pipe Option III	LF	300	
604.09	Catch Basin Type B1	EA	1	
604.248	Catch Basin Type F6	EA	1	
604.30	Oil-water Separator	EA	1	<del></del>
606.265	Terminal End - single rail- Galvanized steel	EA	4	
606.356	Underdrain Delineator Post	EA	3	
606.3605	Guardrail Remove and Reset	LF	187.5	
607.18	6 Foot Chain Link Safety Fence	LF	500	
609.31	Curb Type 3	LF	120	
610.08	Plain Riprap	CY	9	
613.319	Erosion Control Blanket	SY	18	
615.07	Loam	CY	80	
618.13	Seeding Method Number 1	Unit	5	
619.1201	Mulch - Plan Quantity	Unit	5	
619.1202	Temporary Mulch	LS	1	
622.10	Transplanting Shrub	EA	13	
626.13	18" X 12" X 18" Quazite Junction Box	EA	1	1
626.22	Non-Metallic Conduit	LF	70	1
626.32	24 Inch Diameter Foundation	EA	2	1
626.36	Remove or Modify Concrete Foundation	EA	2	1
627.73	Temporary 6 Inch Pavement Marking Tape	LF	840	1 1
627.731	Temporary 6 Inch Black Pavement Marking Tape	LF	100	<del>'</del>
627.733	4" White or Yellow Painted Pavement Marking Line	LF	650	1
629.05	Hand Labor, Straight Time	MH	20	1

ITEM NO.	TIEM DESCRIPTION	UNIT	TOTAL QUANTITY
631.12	All Purpose Excavator (including operator)	HR	20
631.172	Truck Large (including operator)	HR	40
631.221	Small Front End Loader (including operator)	HR	20
631.32	Culvert Cleaner (including operator)	HR	12
631.36	Foreman	HR	20
634.208	Remove and Reset Light Standards	EA	2
634.23	Temporary Lighting	LS	1
639.19	Field Office, Type B	EA	1
645.109	Remove and Reset Sign	EA	1
652.33	Drum	EA	70
652.34	Cones	EA	25
652.35	Construction Signs	SF	140
652.361	Maintenance of Traffic Control Devices	LS	1
652.41	Portable Changeable Message Sign	EA	1
655.101	#6 AWG Wire	LF	180
655.11	#10 AWG Wire	LF	90
656.50	Baled Hay, in place	EA	12
656.632	30 Inch Temporary Silt Fence	LF	280
659.10	Mobilization	LS	1
800.01	Removal of Underground Tanks (Gasoline and Diesel)	LS	1
800.02	Underground Tank Installation (Gasoline and Diesel)	LS	1
800.03	Aboveground Diesel Tank Installation	LS	1
800.04	Aboveground Gasoline Tank Installation	LS	1
800.50	New Canopy (Diesel)	LS	1

Scale:

| Designed by: | |

HNTB CORPORATION 340 County Road, Suite 6-C Westbrook, ME 04092 TEL (207) 774-5155 FAX (207) 228-0909



# THE GOLD STAR MEMORIAL HIGHWAY

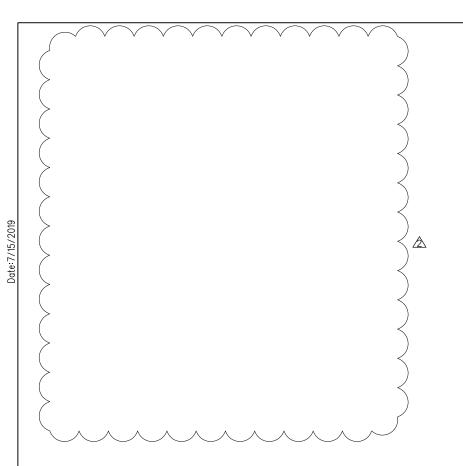
GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT

ESTIMATED QUANTITIES

SHEET NUMBER: EQ-01

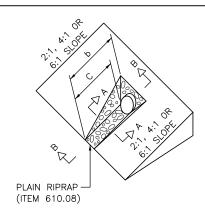
MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E.,P.T.O.E.

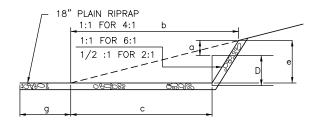
CONTRACT: 2019.15 2 01



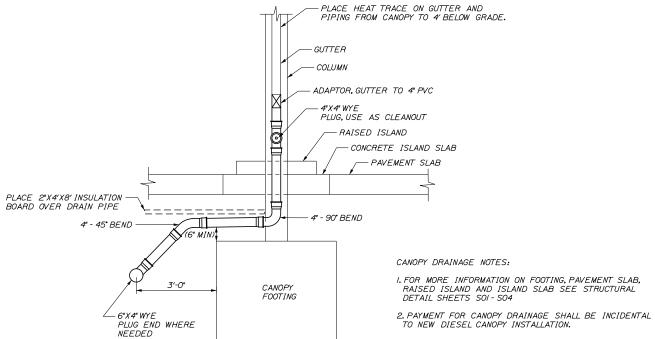
#### DIMENSIONS FOR SLOPE OF 2:1

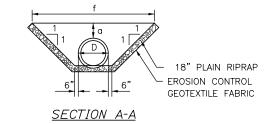
							STONE	STONE
D	a	b	С	e	f	g	DEPTH	(CY)
	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	
12"	1.00	4.00	3.00	2.00	6.00	1.00	1.50	1.30
15"	1.00	4.50	3.37	2.25	6.75	1.63	1.50	1.70
18"	1.00	5.00	3.75	2.50	7.50	2.25	1.50	2.09
21"	1.00	5.50	4.13	2.75	8.25	2.88	1.50	2.58
24"	1.00	6.00	4.50	3.00	9.00	3.50	1.50	3.12
30"	1.00	7.00	5.25	3.50	10.50	4.75	1.50	4.33
36"	1.00	8.00	6.00	4.00	12.00	6.00	1.50	5.75
42"	1.00	9.00	6.75	4.50	13.50	7.25	1.50	7.37
48"	1.00	10.00	7.50	5.00	15.00	8.50	1.50	9.18
54"	1.00	11.00	8.25	5.50	16.50	9.75	1.50	11.19
60"	1.00	12.00	9.00	6.00	18.00	11.00	1.50	13.40
66"	1.00	13.00	9.75	6.50	19.50	12.25	1.50	15.81
72"	1.00	14.00	10.50	7.00	21.00	13.50	1.50	18.41
84"	1.00	16.00	12.00	8.00	24.00	16.00	1.50	24.22





SECTION B-B





#### ROADWAY CULVERT END SLOPE TREATMENT

CULVERT NOTES:

I. THE DIMENSIONS SHOWN ARE APPROXIMATE AND MAY BE MODIFIED BY THE RESIDENT.

2. STONE QUANTITIES ARE FOR ONE END OF THE PIPE.

CANOPY DRAINAGE DETAIL N.T.S.

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900	2	REMOVED	DIVERSION	STRUCTURE	DAM	7/19						
							CONSULTANT F	PROJE	CT MANAGER:	Dale A. Mitchell	, P.E.	
ilename								Ву	Date		Ву	Date
띪							Designed	DSS			DAM	4\19\2019
:≝[			•	•			Drawn	WAD	4\19\2019	In Charge of	RAL	4\19\2019

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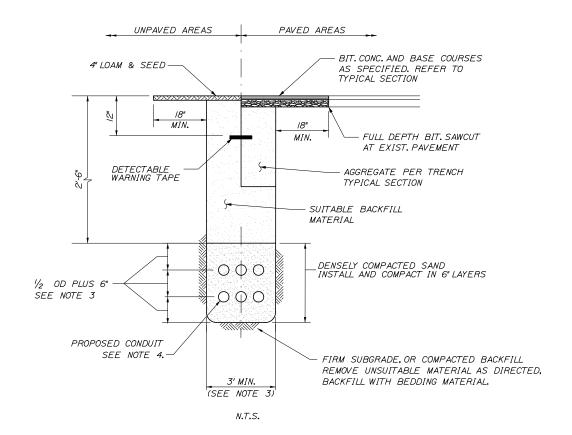
# THE GOLD STAR **MEMORIAL HIGHWAY**

GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT

DRAINAGE DETAILS

SHEET NUMBER: MD-01

MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E.,P.T.O.E.



#### STANDARD PIPE/CONDUIT TRENCH DETAIL

#### NOTES:

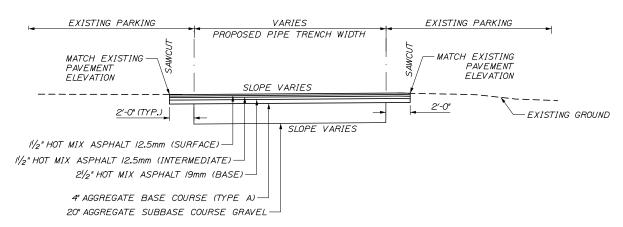
I. BEDDING SHALL BE COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY. USE HAND TAMPERS OR VIBRATORY COMPACTORS.

2. CONTRACTOR SHALL SHORE TRENCH SIDES WHEN REQUIRED OR AS DIRECTED BY THE RESIDENT.

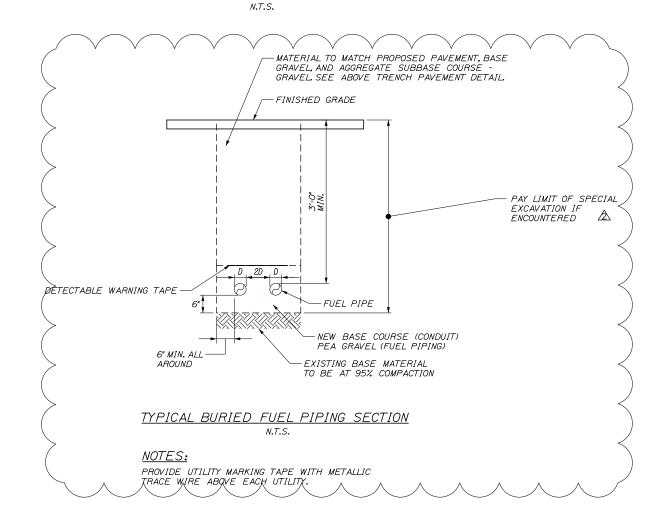
3. CONTRACTOR SHALL COMPLY WITH MINIMUM DISTANCES, BOTH HORIZONTALLY AND VERTICALLY, BETWEEN UTILITIES PER APPLICABLE CODE REQUIREMENTS. DIMENSIONS ABOVE ARE MINIMUMS.

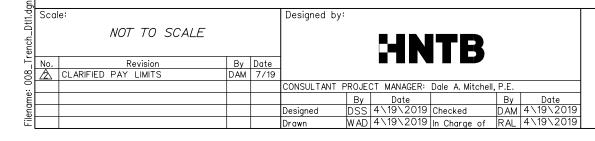
4. CONDUIT SHALL BE SCHEDULE 80 OR RMC UNDER PAVEMENT. IF CONTRACTOR USES OTHER CONDUIT TYPE, 4" CONCRETE COVER OVER TRENCH WIDTH IS REQUIRED.

5. MINIMUM OF 6" BETWEEN PIPES OR CONDUITS TO TRENCH WALLS IS REQUIRED.



## TRENCH PAVEMENT TYPICAL SECTION





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# THE GOLD STAR MEMORIAL HIGHWAY

GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT

STANDARD TRENCH DETAILS

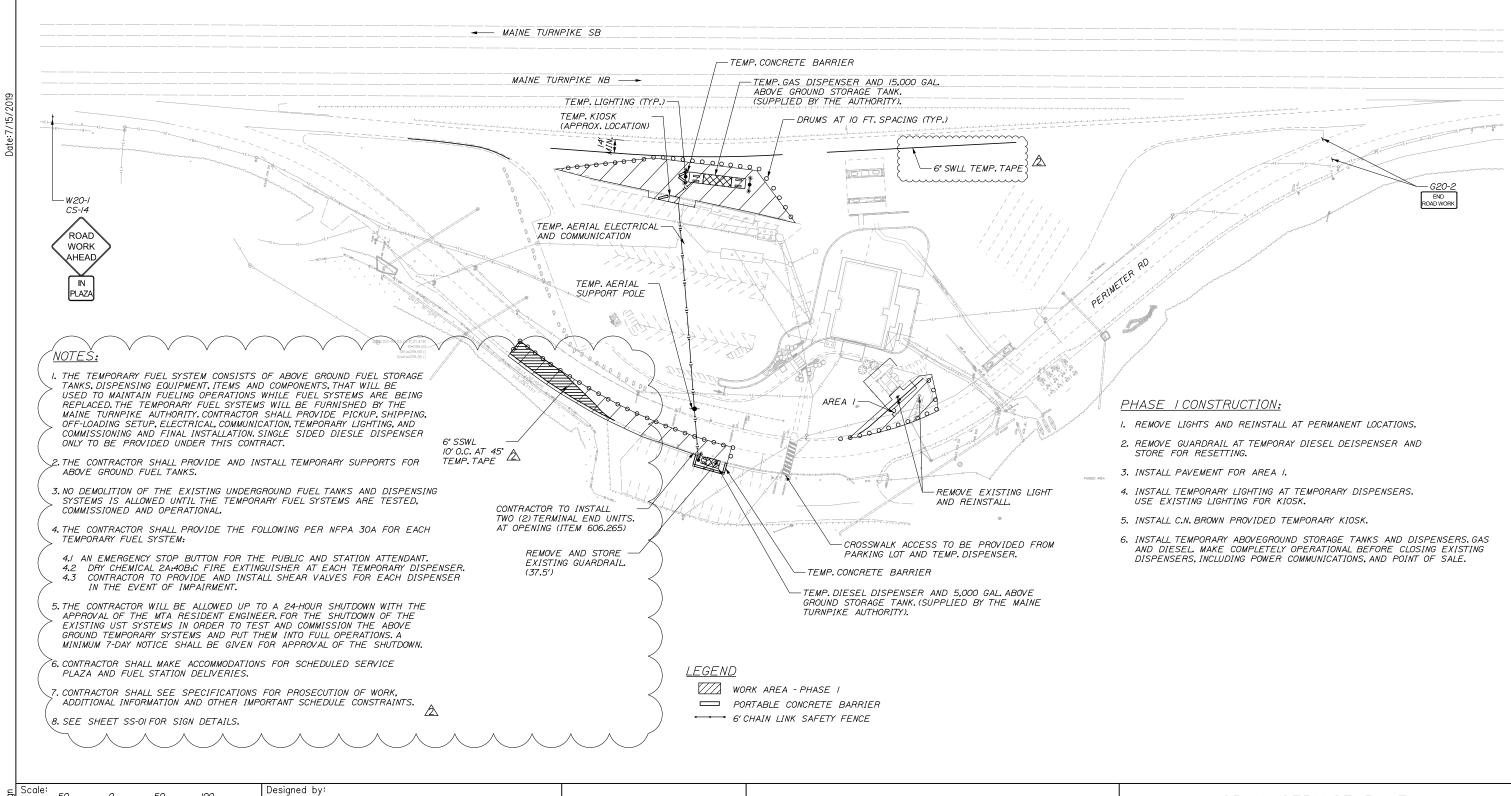
SHEET NUMBER: TD-01

MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E.,P.T.O.E.

CONTRACT:2019.15

8 OF 3





Revision REVISED NOTES & TEMP. PAINT DAM 7/19 CONSULTANT PROJECT MANAGER: Dale A. Mitchell, P.E 7/15/2019 Checked Designed WAD 7/15/2019 In Charge of RAL 7/15/2019

Scale of Feet

HNTB CORPORATION 340 County Road, Suite 6-C Westbrook, ME 04092 TEL (207) 774-5155 FAX (207) 228-0909

By Date DAM 7/15/2019



# THE GOLD STAR **MEMORIAL HIGHWAY**

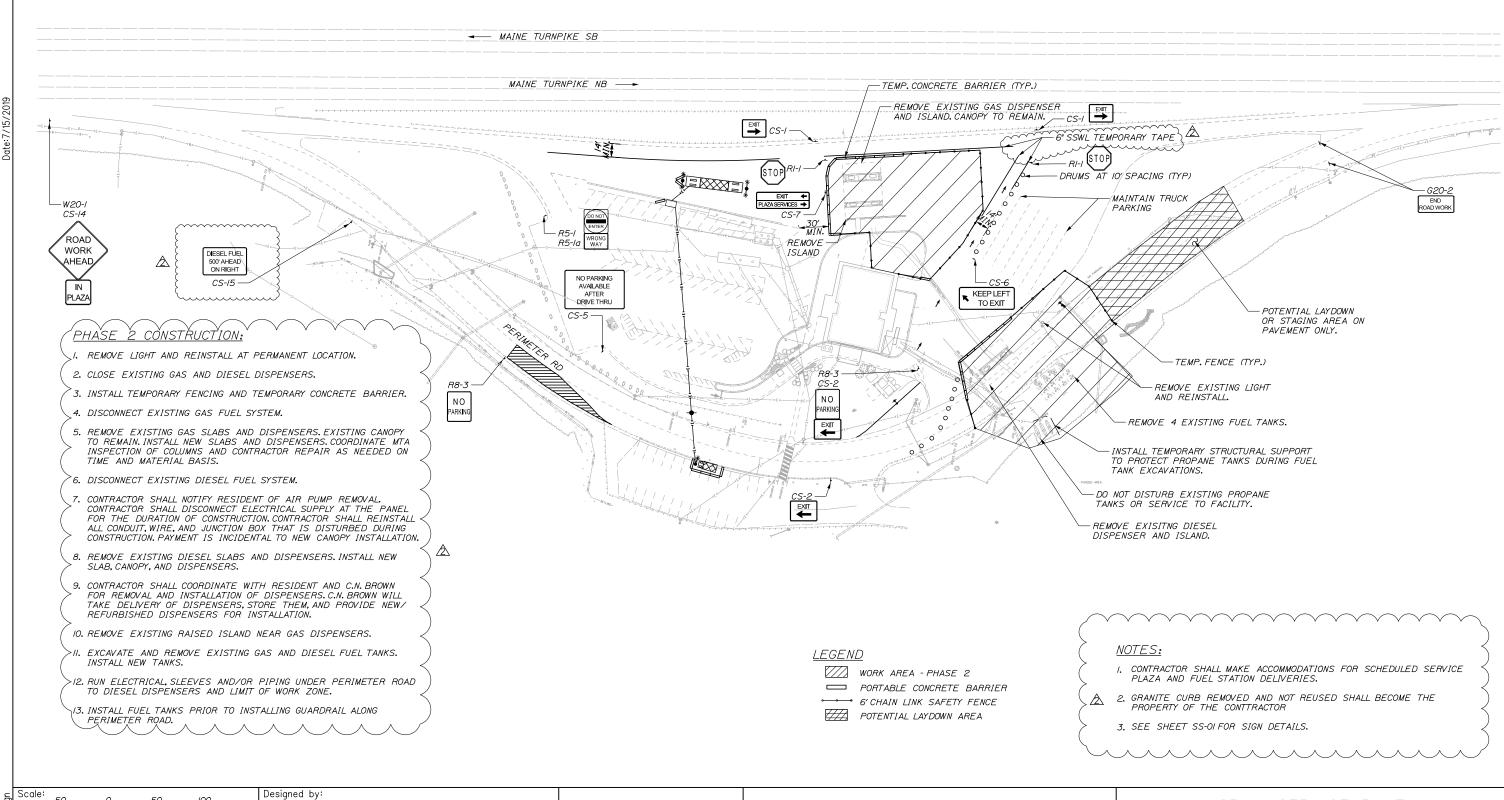
GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT MAINTENANCE OF TRAFFIC PHASE 1

CONTRACT:2019.15

SHEET NUMBER: MOT-01

MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E., P.T.O.E.





name: 010\_MOT-ph2.dgn

Scale: 50 0 50 100

Scale of Feet

No. Revision By Date

A REVISED NOTES & TEMP. PAINT DAM 7/19

Designed by

Designed

HNTB

Date 7/15/2019 Checked

WAD 7/15/2019 In Charge of RAL 7/15/2019

By Date DAM 7/15/2019

CONSULTANT PROJECT MANAGER: Dale A. Mitchell, P.E

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# THE GOLD STAR MEMORIAL HIGHWAY

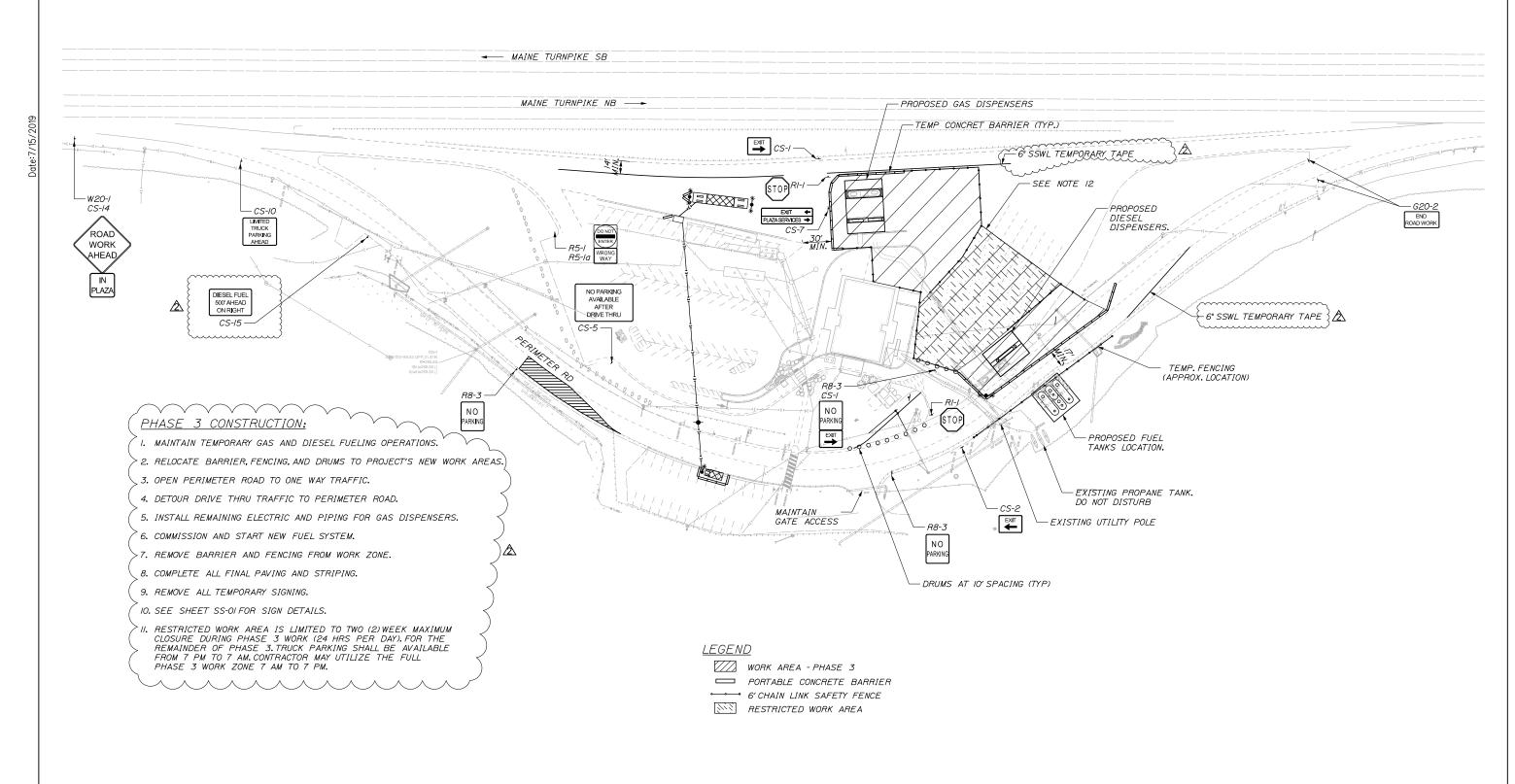
GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT MAINTENANCE OF TRAFFIC PHASE 2

SHEET NUMBER: MOT-02

MTA PROJECT MANAGER: Ralph C. Norwood, IV. P.E., P.T.O.E.

| Pagi |CONTRACT:2019.15





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Designed by:

HNTB CORPORATION 340 County Road, Suite 6-C Westbrook, ME 04092 TEL (207) 774-5155 FAX (207) 228-0909 CONSULTANT PROJECT MANAGER: Dale A. Mitchell, P.E 
 By
 Date
 By
 Date

 DSS
 7/15/2019
 Checked
 DAM
 7/15/2019

 WAD
 7/15/2019
 In Charge of
 RAL
 7/15/2019



# THE GOLD STAR **MEMORIAL HIGHWAY**

GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT MAINTENANCE OF TRAFFIC PHASE 3

SHEET NUMBER: MOT-03

MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E.,P.T.O.E.

#### CONSTRUCTION SIGN SUMMARY

IDENTIFI-		E OF 'GN		TEXT DI	MENSIONS	(INCHES)	NUMBER OF		COL	OR	AREA IN
CATION NUMBER	WIDTH	HEIGHT	TEXT	LETTER HEIGHT	VERTICAL SPACING	ARROW RTE.MKR.	SIGNS REQUIRED	BACK- GROUND		LEGENI BORDE	
CS-I	30"	24"	EXIT	4"C	3" 3" //" 3"	4.5"XI8"	2	ORA	NGE I	BLAC.	6.75 (/3.50)
CS-2	30"	24"	EXIT	4"C	3" 3" //" 3"	4.5"x/8"	2				6.75 (/3.50)
CS-5	48"	36"	NO PARKING AVAILABLE AFTER DRIVE THRU	4"C 4"C 4"C 4"C	6" 3" 3" 3" 5"	4"x6"	1				12.00 (12.00)
CS-6	42"	/8"	KEEP LEFT TO EXIT	4"C 4"C	3.5" 3" 3.5"	4"x6"	1				5.25 (5.25)
CS-7	54"	/8"	← EXIT PLAZA SERVICES →	4"C 4"C	3" 4" 3"	4"x6" 4"X6"	/				6.75 (6.75)
CS-10	36"	<i>30</i> "	LIMITED TRUCK PARKING AHEAD	4"C 4"C 4"C 4"C	2.5" 3" 3" 3" 2.5"		/				7.50 (7.50)
CS-14	18"	/8"	IN PLAZA	4"C 4"C	3.5" 3" 3.5"		/				2.25 (2.25)
CS-15	42"	30"	DIESEL FUEL 500' AHEAD ON RIGHT	4"C 4"C 4"C	5" 4" 4" 5"		/				8.75 (8.75)

	IDENTIFI-	IDENTIFI- SIGN SIGN			TEXT DIMENSIONS (INCHES)				(INCHES)	NUMBER OF	COL	AREA IN	
	NUMBER	WIDTH	HEIGHT	TEXT	LET HE I	TER GHT	VERT. SPAC	ICAL ING	ARROW RTE.MKR.	SIGNS REQUIRED	BACK- GROUND	LEGEND BORDER	SQUARE FEET
					STA	CON NDAF 1004 E	IFORM RD HI	TO TON TON TON TON TON TON TON TON TON T	Y SIGNS D 2012				
	RI-I	36"	36"	STOP						2	RED	WHITE	9.00 (18.00)
	R8-3	18"	24"	N O PARKING						3	WHITE	RED	3.00 (9.00)
	G20-2	36"	18"	END ROAD WORK						2	ORANGE	BLACK	4.50 (9.00)
) 	> W20-1	48"	48"	ROAD WORK AHEAD			_	^		,	ORANGE	BLACK	16.00 (16.00)
	R5-I	36"	36"	DO NOT ENTER						1	RED	WHITE	9.00 (9.00)
	R5-la	36"	24"	WRONG WAY						/	ORANGE	BLACK	6.00 (6.00)

Scale: Designed by: NOT TO SCALE No. Revised SIGNING By Date DAM 7/19 Revision CONSULTANT PROJECT MANAGER: Dale A. Mitchell, P.E. 
 By
 Date
 By
 Date

 DSS
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 In Charge of
 RAL
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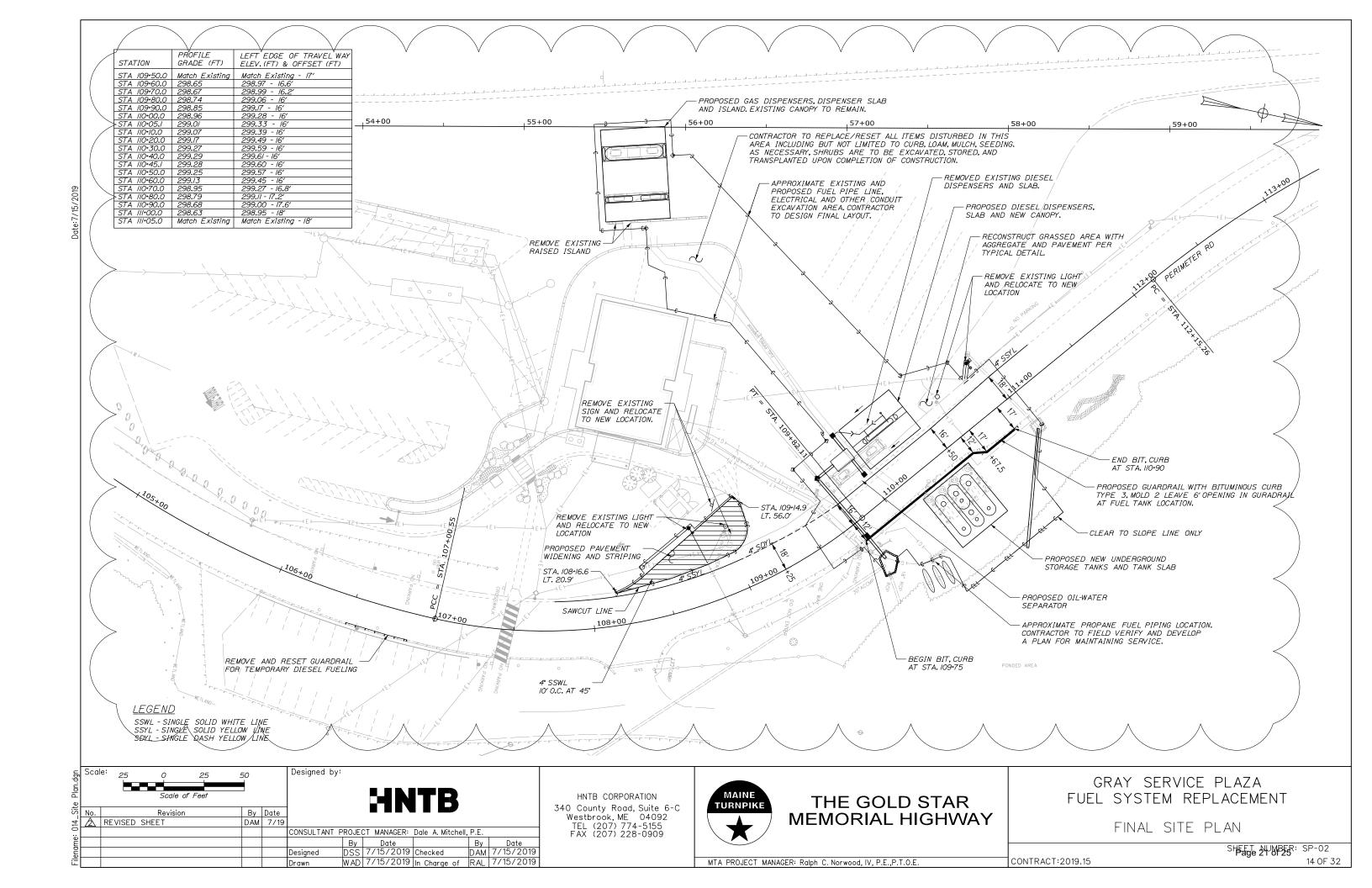


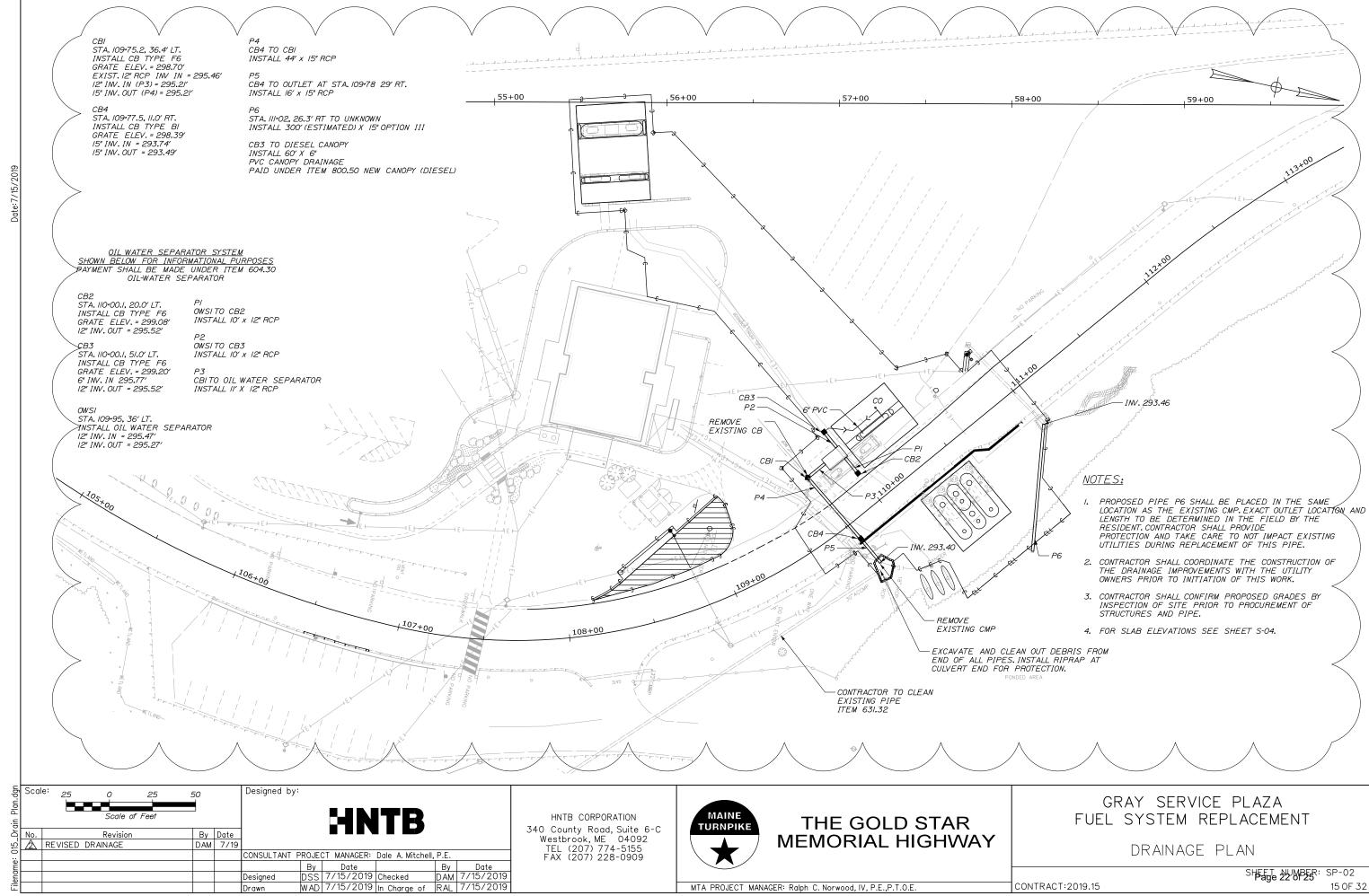
# THE GOLD STAR MEMORIAL HIGHWAY

GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT MAINTENANCE OF TRAFFIC SIGN SUMMARY

SHEET NUMBER: SS-01

MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E.,P.T.O.E.

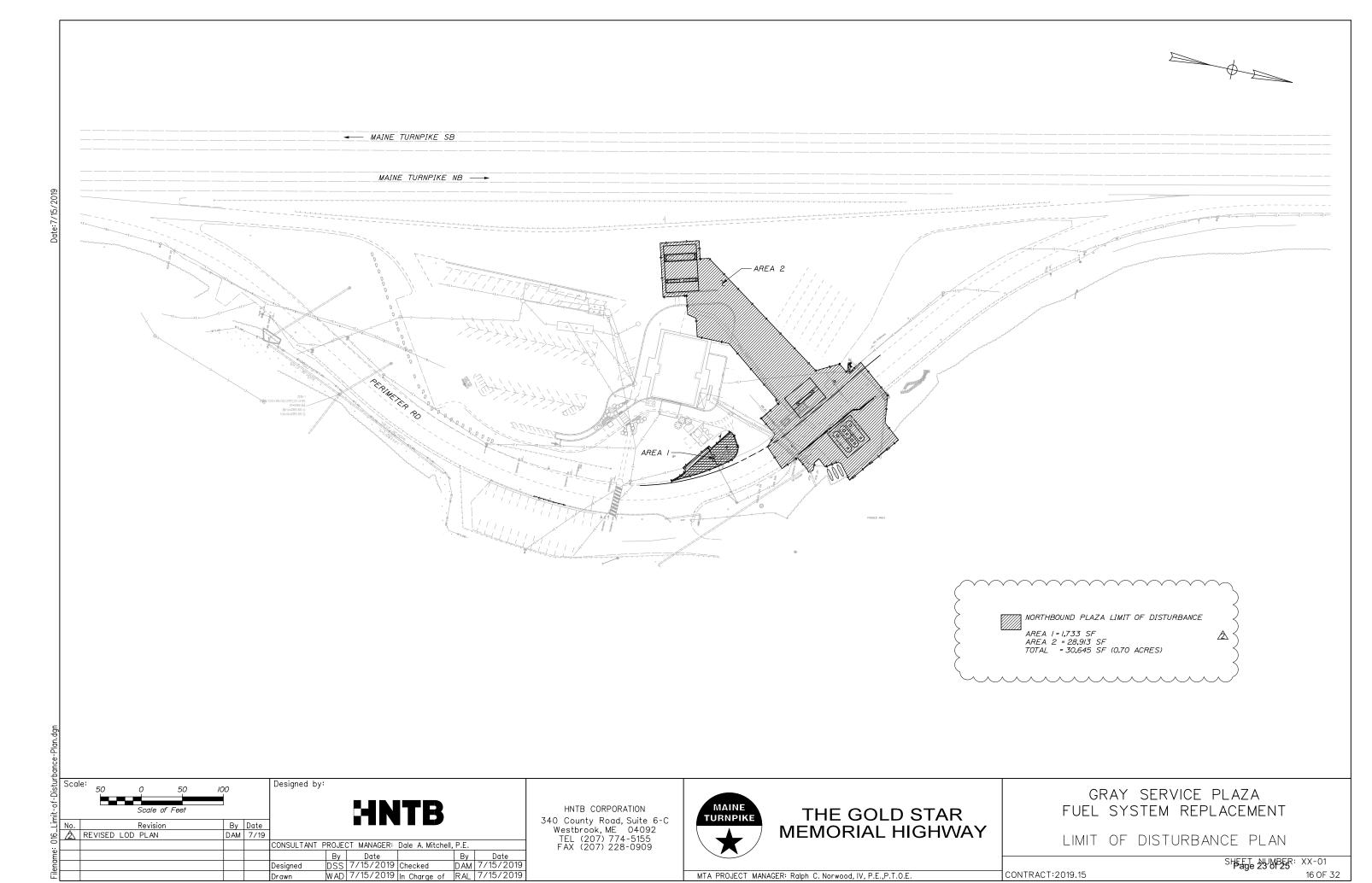




Designed

SHEET NUMBER: SP-02

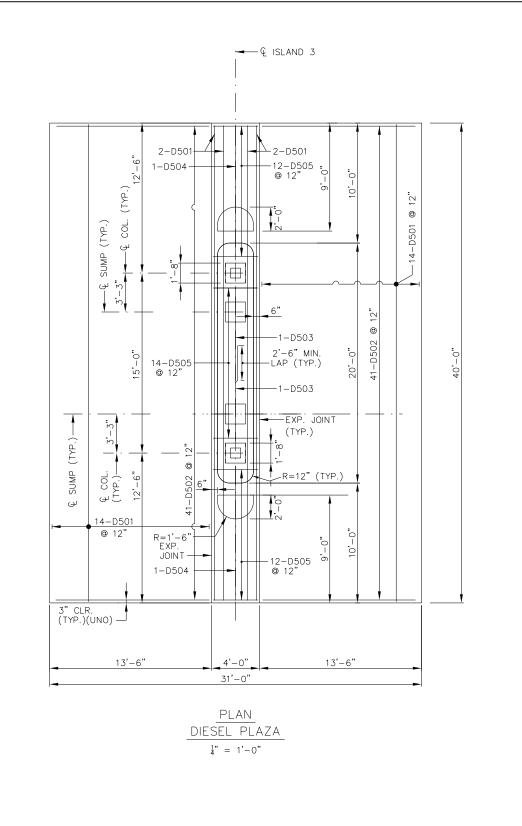
MTA PROJECT MANAGER: Ralph C. Norwood, IV. P.E., P.T.O.E.



MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E.,P.T.O.E.

CONTRACT:2019.15

SHEET MUMBER: XX-01



→ Q ISLAND 3 TYPICAL BUMPER (2 LOCATAIONS) SEE DETAIL SHEET S-03 1-D551 -1-D507 −1-D550 -1-D510 −1-D508 -1-D509 —1-D510 -1-D550 -1-D507 — 1-D551 -6-D554 -4-D552 -4-D553 4'-0"

PLAN ALISED ISLAND 3
DIESEL DISPENSER

4" = 1'-0"

#### NOTES

- 1. FOR NOTES SEE SHEET S-02.
- 2. FIELD CUT D503 BARS TO AVOID SUMP.

# Scale: AS NOTED No. Revision By Date REVISED SLAB GRADING DAM 7/19 CONSULTANT PROJECT MANAGER: Dale A. Mitchell, P.E. By Date Designed JDW 4\19\2019 Checked GLS 4\19\2019 Drawn WAD 4\19\2019 In Charge of RAL 4\19\2019

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# THE GOLD STAR MEMORIAL HIGHWAY

GRAY SERVICE PLAZA
FUEL SYSTEM REPLACEMENT
CONCRETE SLAB AND ISLANDS
AT DIESEL DISPENSERS

SHEET MUESEL DISPENSERS S-04

CONTRACT: 2019.15

20 OF

TRAVELWAY

2%|2%

4'-0"

2.8% 2%

-CB2 (SEE NOTE 2)

299.52

0.7%

ELEV. 299.22

GUTTER LINE -

- GUTTER LINE

MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E.,P.T.O.E.

CB3 (SEE NOTE 2)

DIESEL

AND

DIESEL SLAB, ELEVATION,
AND GRADING DETAIL

0.5% 1.3%

 $\frac{1}{4}$ " = 1'-0"

NOTES

ELEV.

MATCH EXISTING

ELEV. 299.90 MATCH EXISTING

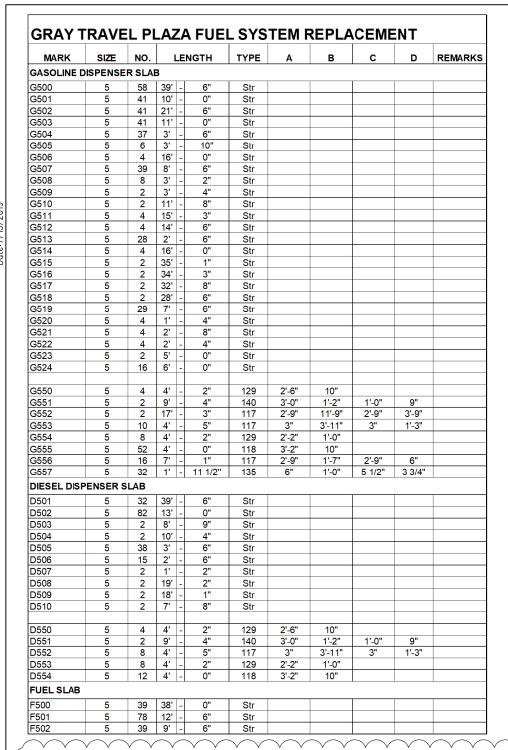
- GUTTER LINE

ELEV. / 300.05

 CONTRACTOR SHALL FIELD VERIFY PROPOSED ELEVATIONS SHOWN ABOVE PRIOR TO CONSTRUCTION OF SLAB.

ELEV. 299.45

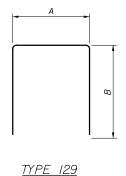
2. CONTRACTOR SHALL ENSURE THAT SLAB AND SURROUNDING AREA DRAINS TO CB2 AND CB3.



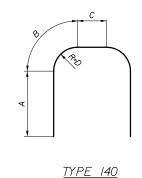
В

TYPE 117

TYPE 118



135° STND. HOOK TYPE 135



REINFORCED STEEL USED IN DISPENSER SLABS, ISLANDS, AND FUEL SLABS SHALL BE EPOXY COATED.

Scale: Designed by: NONE By Date DAM 7/19 No. ADDED NOTE Revision CONSULTANT PROJECT MANAGER: Dale A. Mitchell, P.E. | By | Date | By | Date | JDW | 4\19\2019 | Checked | DAM | 4\19\2019 | WAD | 4\19\2019 | In Charge of | RAL | 4\19\2019 | Designed

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# THE GOLD STAR **MEMORIAL HIGHWAY**

GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT

REINFORCING SCHEDULE

SHEET NUMBER: S-8

MTA PROJECT MANAGER: Ralph C. Norwood, IV. P.E.,P.T.O.E.