

# MAINE TURNPIKE AUTHORITY

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S. PETER MILLS, EXECUTIVE DIRECTOR

**CONTRACT 2024.15** VARIABLE MESSAGE SIGN AND WALKWAY REPLACEMENT NORTHBOUND MAINLINE MILE MARKER 30.35 &

WESTBROOK -AUBURN PORTLAND WESTBROOK KENNEBUNK WELLS OGUNQUIT SOUTH

 $\frac{04/23/24}{\text{DATE}}$ Tatte  $\frac{4/23/24}{\text{DATE}}$ 

PORTSMOUTH

WALKWAY INSTALLATION MILE MARKER 47.7

CONTRACT 2024 15

VMS AND WALKWAY INSTALLATION MILE MARKER 30.35

HNTB

**INDEX OF SHEETS** 

MAINTENANCE OF TRAFFIC DETAILS

MM 30.35 DEMOLITION PLAN AND ELEVATION

MM 30.35 REPLACEMENT PLAN AND ELEVATION MM 30.35 VMS AND WALKWAY DETAILS MM 30.35 VMS CABINET DETAIL MM 47.7 WALKWAY PLAN AND ELEVATION

MM 30.35 WIRING DIAGRAM

MM 47.7 WALKWAY DETAILS



**LOCATION MAP** MAINE TURNPIKE AUTHORITY

SHEET NO.

DESCRIPTION TITLE SHEET

**SOUTHBOUND MAINLINE MILE MARKER 47.7** 

### GENERAL NOTES:

- I. ALL DETAILS SHALL BE IN CONFORMANCE WITH MAINE DEPARTMENT OF TRANSPORTATION (MAINEDOT) 2014 STANDARD DETAILS FOR HIGHWAYS AND BRIDGES WITH ALL UPDATES AND MAINEDOT BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL, LATEST REVISION, UNLESS OTHERWISE NOTED IN THESE PLANS.
- 2. ALL WORK MUST BE COMPLETED WITHIN THE MAINE TURNPIKE AUTHORITY RIGHT OF WAY.
- 3. CONTRACTOR SHALL SUBMIT PROPOSED STAGING AREA(S) TO THE RESIDENT FOR APPROVAL PRIOR TO STARTING WORK.

### SIGN STRUCTURE GENERAL NOTES:

- I. ALL EXCAVATION, MULCH, LOAM, AND SEED IS INCIDENTAL TO RELATED SIGN STRUCTURE PAY ITEMS.
- 2. CONTRACTOR SHALL VERIFY ALL SITE INFORMATION PRIOR TO COMMENCING ANY WORK. COORDINATE WORK WITH RESIDENT.
- 3. ANY DAMAGE TO THE EXISTING INFRASTRUCTURE AND SLOPES CAUSED BY THE CONTRACTOR'S EQUIPMENT, PERSONNEL OR OPERATION SHALL BE REPAIRED TO THE SATISFACTION OF THE RESIDENT AT THE CONTRACTOR'S EXPENSE.
- 4. ALL UTILITY SPLICES WILL BE MADE IN THE CABINETS OR JUNCTION BOXES.
- 5. SEE SPECIAL PROVISIONS FOR POWER LINE INSTALLATION REQUIREMENTS.
- 6. JUNCTION BOXES SHALL BE INSTALLED PER THE PLANS AND SPECIFICATIONS AND AS DIRECTED BY THE RESIDENT ENGINEER.
- 7. ALL EXISTING SIGN TRUSS DIMENSIONS SHALL BE VERIFIED IN FIELD BY THE CONTRACTOR, FABRICATION SHALL NOT OCCUR UNTIL ALL DIMENSIONS ARE FIELD VERIFIED.
- 8. CONTRACTOR SHALL SUBMIT SIGN BRACKET AND WALKWAY FABRICATION DETAILS TO MTA FOR REVIEW AND ACCEPTANCE PRIOR TO FABRICATION.
- 9. WALKWAY GRATING SHALL HAVE A SERRATED SURFACE.

### SIGN STRUCTURE STRUCTURAL GENERAL NOTES:

### **SPECIFICATIONS**

### <u>DESIGN</u>

AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9th EDITION (2020)

AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS, 1st EDITION (2015)

AISC STEEL CONSTRUCTION MANUAL, 16th EDITION (2023)

ASCE 7-22 MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES (2022)

### CONSTRUCTION

STATE OF MAINE, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, HIGHWAYS AND BRIDGES NOVEMBER 2014 EDITION

STATE OF MAINE, DEPARTMENT OF TRANSPORTATION STANDARD DETAILS FOR HIGHWAYS AND BRIDGES, DECEMBER 2014 EDITION WITH UPDATES

MTA SUPPLEMENTAL SPECIFICATIONS, 2016 EDITION

### MATERIALS

### STRUCTURAL STEEL

STRUCTURAL STEEL W-SHAPES SHALL CONFORM TO ASTM A992

ALL OTHER STEEL SHALL CONFORM TO ASTM A36

SUPPORT STRUCTURE COMPONENTS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION IN CONFORMANCE WITH ASTM A123

U-BOLTS FOR STEEL SUPPORT STRUCTURES SHALL CONFORM TO ASTM A449

ALL BOLTS SHALL CONFORM TO ASTM A325, TYPE I

ALL HARDWARE SHALL BE HOT-DIP GALVANIZED IN CONFORMANCE WITH AASHTO M232 PER MAINEDOT STD. SPECS 719.072

### BASIC DESIGN STRESSES

### STRUCTURAL STEEL

 $ASTM A992 - f_V = 50,000 PSI$ 

ASTM A36 - fy = 36,000 PSI

ASTM A325, TYPE I - f = 120,000 PSI

### UTILITY NOTES:

- I. THE CONTRACTOR SHALL COORDINATE WITH MTA, THROUGH THE RESIDENT, FOR ELECTRICAL SERVICE AND COMMUNICATIONS FOR VMS.
- 2. ABOVE GROUND CONDUIT SHALL BE GALVANIZED RIGID METAL AND UNDERGROUND CONDUIT SHALL BE SCHEDULE 80 PVC.
- 3. EXISTING UTILITIES WERE NOT LOCATED FOR THESE PLANS. IMPACTS TO UTILITIES ARE NOT ANTICIPATED TO PERFORM THIS WORK. NO WORK SHALL BE STARTED UNTIL THE OWNERS OF THE VARIOUS UTILITIES ARE NOTIFIED BY THE CONTRACTOR OF THE PROPOSED CONSTRUCTION. THE CONTRACTOR IS ALSO REQUIRED TO CALL DIG SAFE AT 1-888-344-7233 AT LEAST 72 HOURS PRIOR TO THE START OF WORK.
- 4.THE CONTRACTOR SHALL ALSO NOTIFY ALL NON-MEMBERS THROUGH WWW.OKTODIG.COM OR AS OTHERWISE REQUIRED BY THE MAINE PUBLIC UTILITIES COMISSION. ALL PROPOSED SIGN LOCATIONS AND EXCAVATION LOCATIONS SHALL BE MARKED AT THE NOTIFICATION TIME. NO EXCAVATION SHALL BE PERMITTED UNTIL THE AUTHORITY HAS LOCATED AND MARKED ITS ELECTRONIC COPY OF ALL DIG SAFE TICKETS WITHIN 24 HOURS OF THEIR RELEASE FOR PROJECT NOTIFICATIONS AND 3RD PARTY UTILITY LOCATER COORDINATION.
- 5. THE CONTRACTOR SHALL NOTIFY THE RESIDENT 10 CALENDAR DAYS PRIOR TO SUBMITTING A UTILITY LOCATE REQUEST THROUGH DIG SAFE SO THAT THE RESIDENT CAN ARRANGE FOR MAINE TURNPIKE UNDERGROUND UTILITY LOCATION. ALL PROPOSED SIGN LOCATIONS AND EXCAVATION LOCATIONS SHALL BE MARKED AT THE NOTIFICATION TIME.

### SIGN STRUCTURE CONSTRUCTION NOTES:

I. FOR ADDITIONAL DETAILS REFERENCED OR NOT SHOWN IN THESE DRAWINGS, SEE THE STATE OF MAINE, DEPARTMENT OF TRANSPORTATION STANDARD DETAILS, NOVEMBER 2014 EDITION.

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THE GOLD STAR MEMORIAL HIGHWAY VMS AND WALKWAY REPLACEMENT MM 30.35 & 47.7

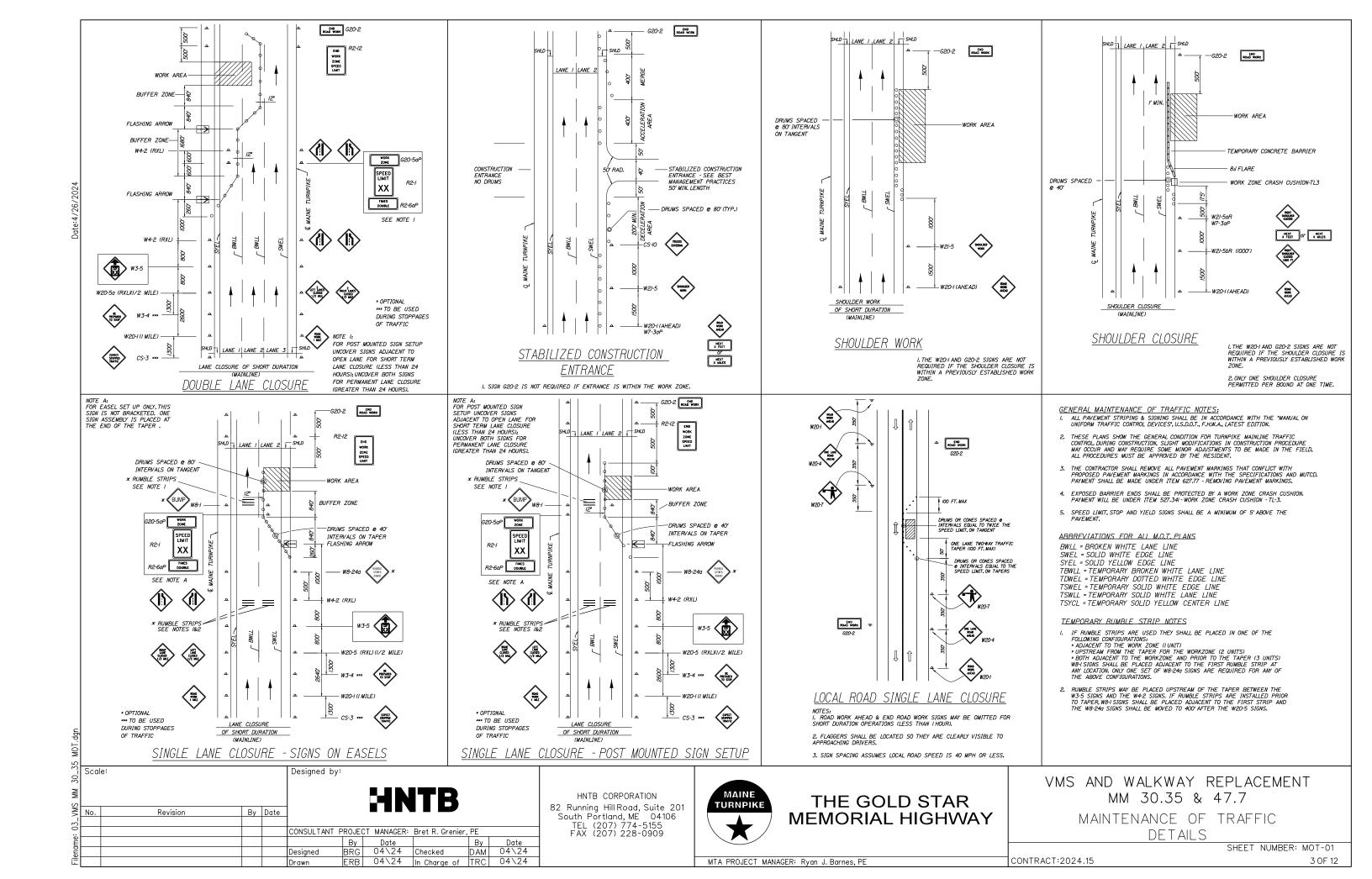
GENERAL NOTES

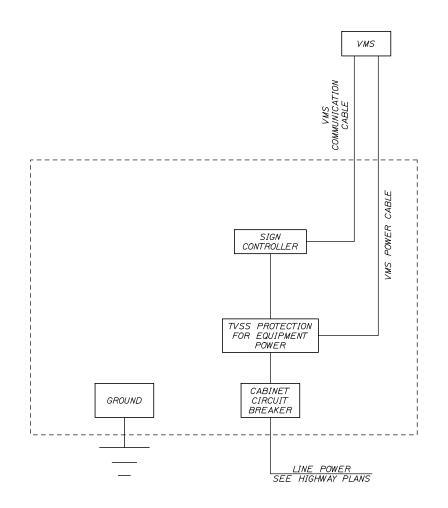
SHEET NUMBER: GN-01

CONTRACT:2024.15

2 OF 10

MTA PROJECT MANAGER: Ryan J. Barnes, PE





VMS CABINET - MM 30.35 NOT TO SCALE

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THE GOLD STAR
MEMORIAL HIGHWAY

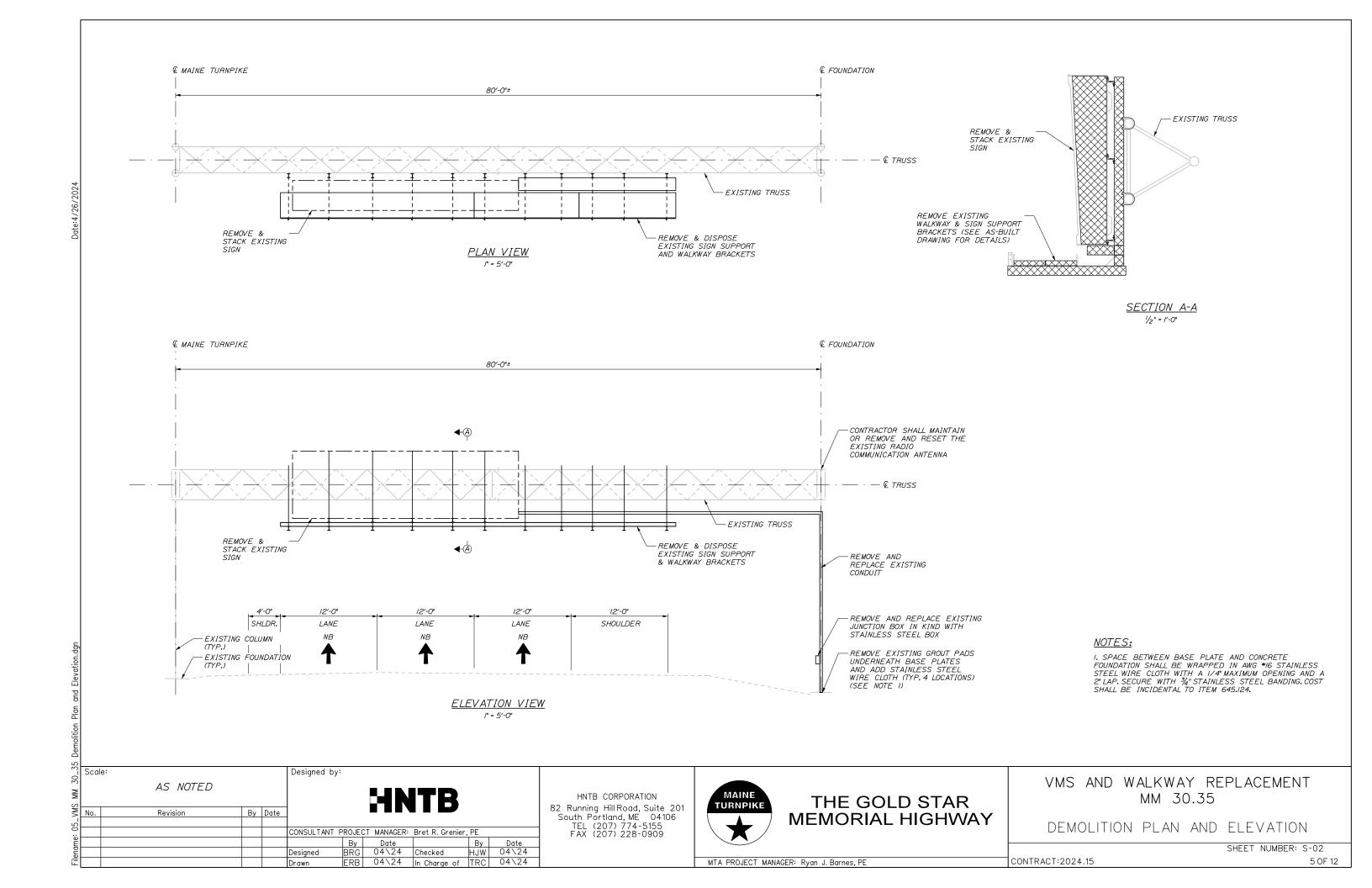
VMS AND WALKWAY REPLACEMENT MM 30.35

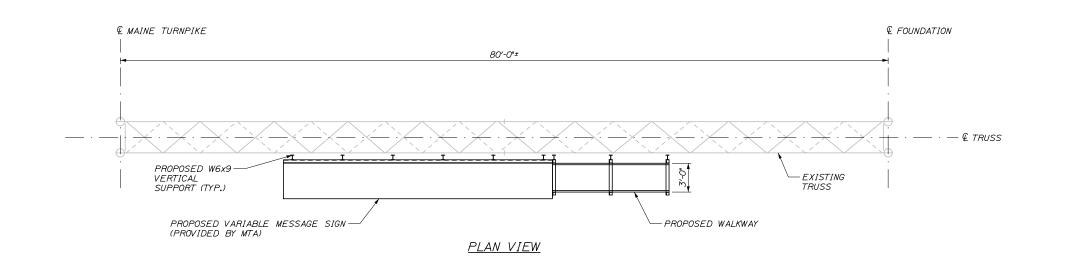
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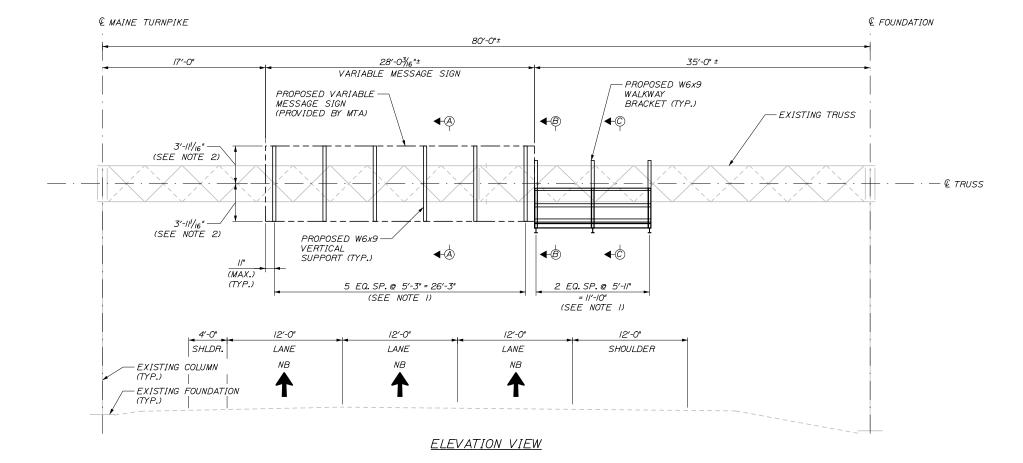
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## THE GOLD STAR MEMORIAL HIGHWAY

VMS AND WALKWAY REPLACEMENT MM 30.35

NOTES:

RESIDENT FOR REVIEW.

I. W6x9 SIGN AND WALKWAY SUPPORT HORIZONTAL SPACING MAY BE ADJUSTED ±6"TO AVOID TRUSS LATTICE BRACING.

2. CONTRACTOR SHALL VERIFY DISTANCE FROM TOP OF ROADWAY TO BOTTOM CHORD AND ADJUST DISTANCES AS REQUIRED TO MEET A MINIMUM CLEARANCE OF 17'-6". CONTRACTOR SHALL SUBMIT FIELD MEASUREMENTS TO THE

REPLACEMENT PLAN AND ELEVATION

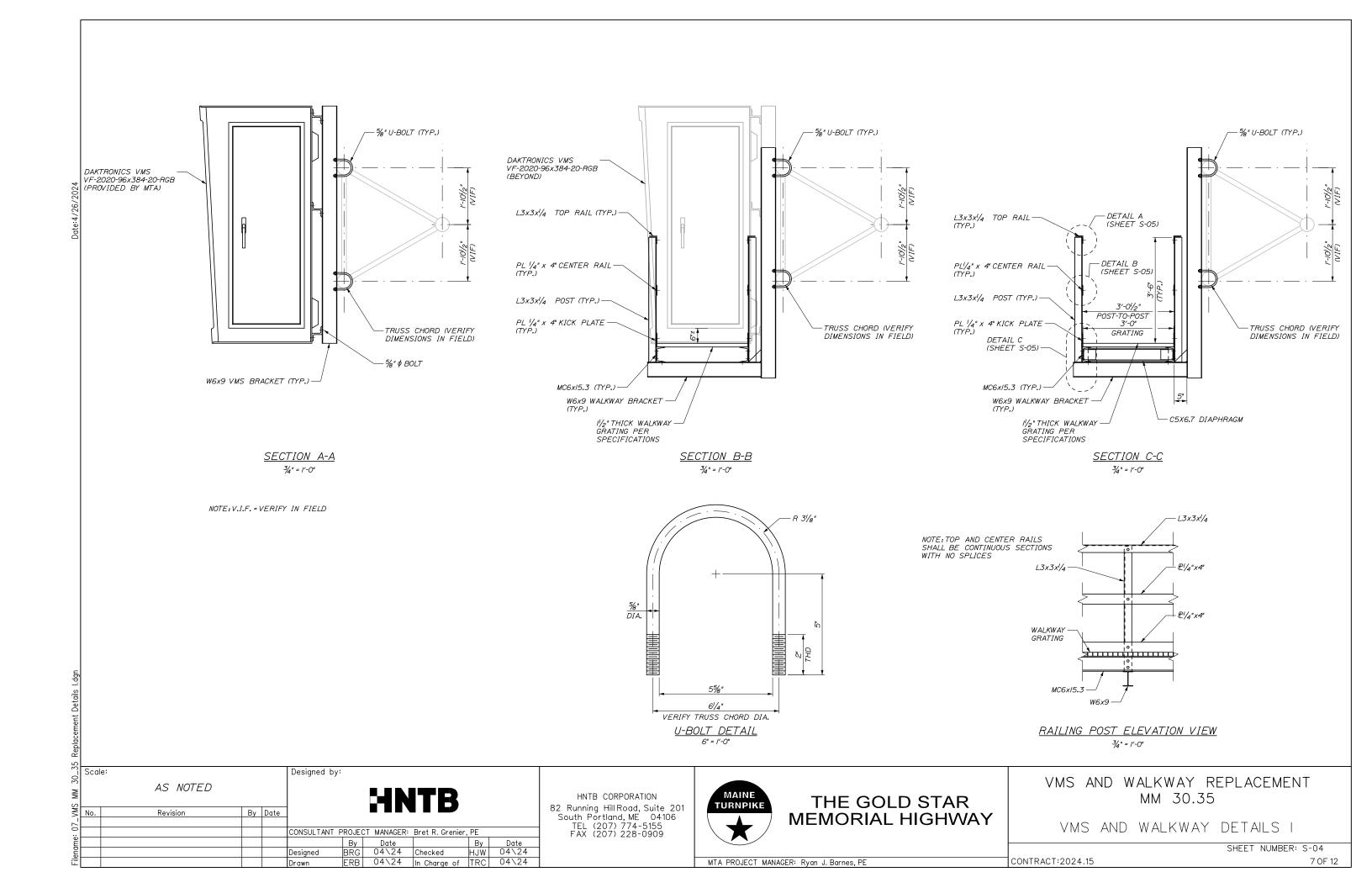
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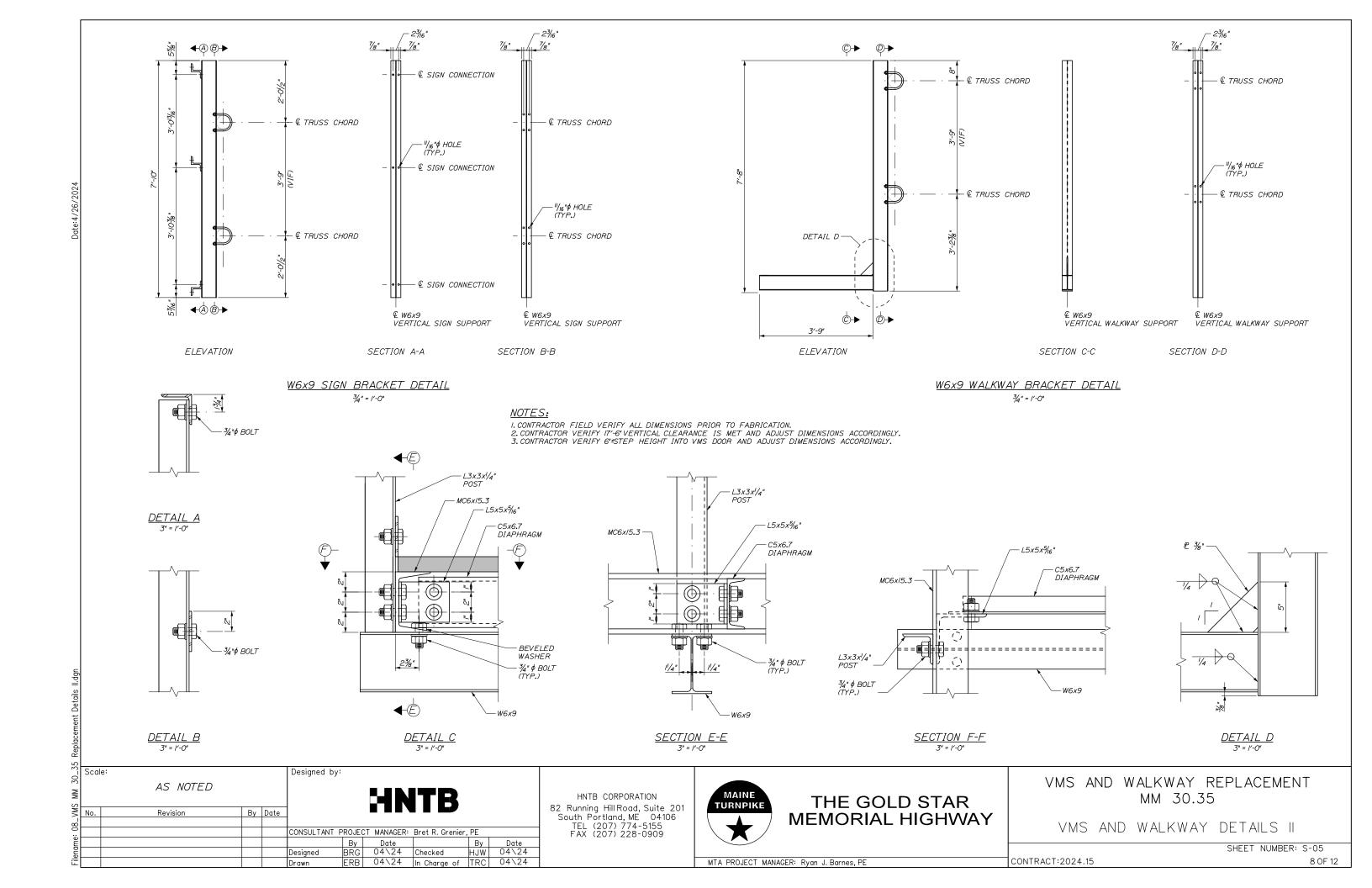
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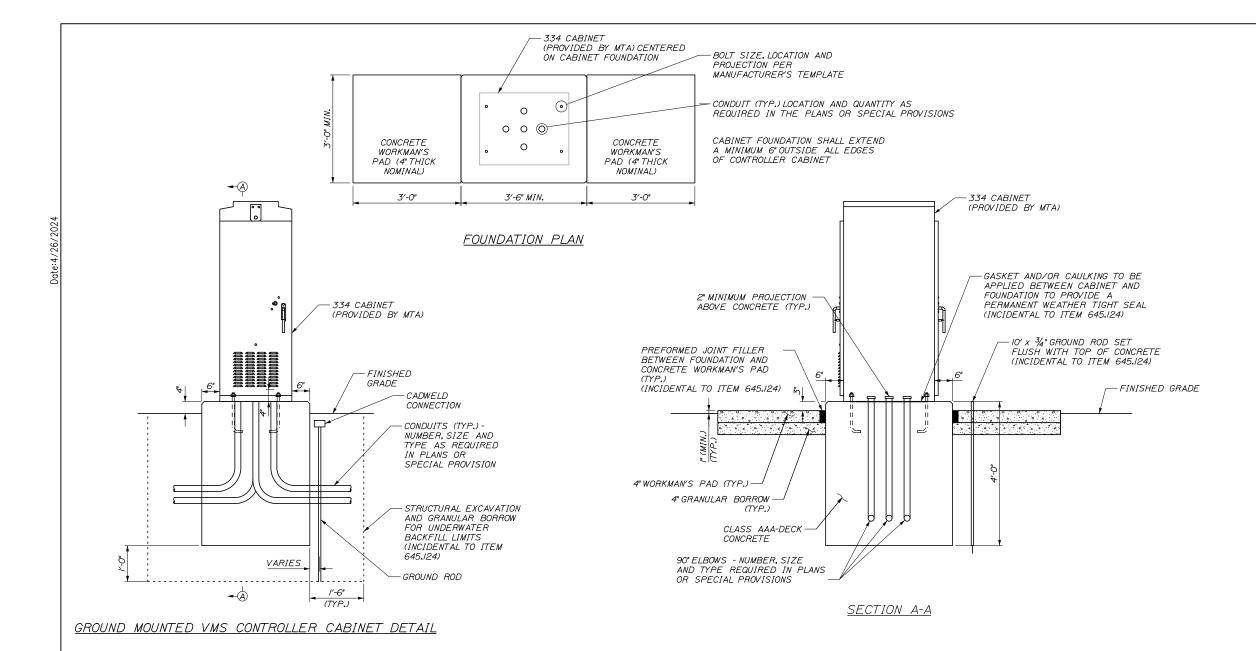
MTA PROJECT MANAGER: Ryan J. Barnes, PE

SHEET NUMBER: 3-03

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NOTES:

- I. PAYMENT FOR INSTALLATION OF CONTROLLER CABINET, SHALL BE UNDER ITEMS 645.124, SEE SPECIAL PROVISION.
- 2. PAYMENT FOR CONTROLLER CABINET FOUNDATION AND WORKMAN'S PADS SHALL BE UNDER ITEM 645.124.
- 3. WORKMAN'S PADS (AND CABINET DOORS) SHOULD BE ORIENTED AS SHOWN IN THE PLANS AND AS DIRECTED BY THE RESIDENT.
- 4. CONTRACTOR SHALL INSTALL A SPARE 3" PVC CONDUIT RUNNING TO JUNCTION BOX ADJACENT TO CABINET.
- 5. CONCRETE WORKMAN'S PAD SHALL HAVE #4 REINFORCING BARS AT 12" O.C. AT MID DEPTH IN BOTH DIRECTIONS, INCIDENTAL TO ITEM 645.124.
- 6. REINFORCING STEEL SCHEDULE SHALL BE SUBMITTED FOR APPROVAL FOR CONTRACTOR'S SELECTED FOUNDATION OPTION. ALL REINFORCING STEEL SHALL BE INCIDENTAL TO ITEM 645.124.
- 7. ALL EXCAVATION, INCLUDING ROCK EXCAVATION AND STRUCTURAL EXCAVATION AND BACKFILL SHALL BE INCIDENTAL TO ITEM 645.124.

Sca	e: /6" O	16"	32"		Designed by	:				
3/4" = 1'-0"						HN	ITB			
No.	Revis	ion	Ву	Date	]					
					CONSULTANT	PROJEC	T MANAGER:	Bret R. Grenier	, PE	
						By	Date		Ву	Date
					Designed	BRG	04\24	Checked	HJW	04\24
					Drawn	ERB	04\24	In Charge of	TRC	04\24

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THE GOLD STAR **MEMORIAL HIGHWAY**  VMS AND WALKWAY REPLACEMENT MM 30.35

VMS CABINET DETAIL

SHEET NUMBER: S-06

MTA PROJECT MANAGER: Ryan J. Barnes, PE

CONTRACT:2024.15

