

Date: 2/12/2015



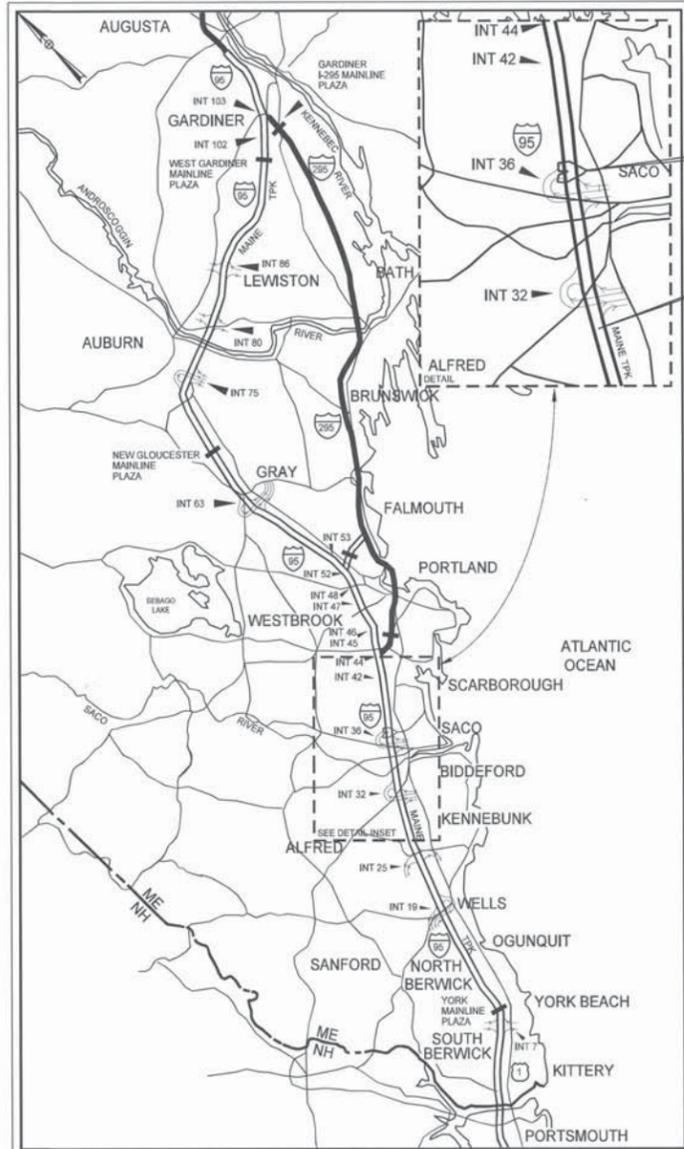
THE GOLD STAR
MEMORIAL HIGHWAY

MAINE TURNPIKE AUTHORITY

DANIEL E. WATHEN, CHAIR
 JAMES F. CLOUTIER, VICE CHAIR
 GERARD P. CONLEY, SR., MEMBER
 JOHN E. DORITY, MEMBER
 FREEMAN R. GOODRICH, MEMBER
 ROBERT D. STONE, MEMBER
 KAREN S. DOYLE, MEMBER EX-OFFICIO

S. PETER MILLS, EXECUTIVE DIRECTOR

CONTRACT 2015.06 INTERCHANGE 36 SACO TOLL PLAZA LANE ADDITION (MM 36.0) & VARIABLE MESSAGE SIGN RELOCATION (MM 28.3)



LOCATION MAP

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CONTRACT 2015.06

APPROVED: MAINE TURNPIKE AUTHORITY

Stephen R. Tartre
 STEPHEN R. TARTRE, P.E. - DIRECTOR OF ENGINEERING AND BUILDING MAINTENANCE
 DATE: 2/13/15

William Yates III
 WILLIAM YATES III - DIRECTOR OF INFORMATION TECHNOLOGY
 DATE: 13 FEB 15



HNTB
 SHEETS: 4 TO 52
 DATE: 2/12/15
 ROLAND A. LAVALLEE, P.E., PLS. - VICE PRESIDENT
 DIRECTOR OF OPERATIONS



Gregory Edwards
 GREGORY EDWARDS, P.E. - SENIOR PRINCIPAL
 DATE: 2-17-15



Don G. Ettinger
 DON G. ETTINGER, P.E. - PRINCIPAL
 DATE: 2/13/15

Filename: ... \HIGHWAY\MSTA\001_MTA_TITLE.dgn

Date: 2/18/2015

Filename: ...MSTA002_Quantities.dgn

| ITEM NO. | DESCRIPTION | UNIT | VMS QUANTITY | SACO MEDIAN QUANTITY | TOLL PLAZA QUANTITY | TOTAL QUANTITY |
|----------|--|------|--------------|----------------------|---------------------|----------------|
| 202.1271 | REMOVING EXISTING BITUMINOUS PAVEMENT | CY | | | 200 | 200 |
| 202.203 | PAVEMENT BUTT JOINTS | SY | | | 350 | 350 |
| 203.20 | COMMON EXCAVATION | CY | 5 | | 4900 | 4905 |
| 203.24 | COMMON BORROW | CY | 90 | | | 90 |
| 203.25 | GRANULAR BORROW | CY | | | 15 | 15 |
| 203.43 | GEOFOAM LIGHTWEIGHT FILL | CY | | | 2550 | 2550 |
| 203.45 | LEVELING SAND | CY | | | 500 | 500 |
| 206.082 | STRUCTURAL EARTH EXCAVATION - MAJOR STRUCTURES | CY | | | 30 | 30 |
| 304.09 | AGGREGATE BASE COURSE - CRUSHED | CY | | | 450 | 450 |
| 304.10 | AGGREGATE SUBBASE COURSE - GRAVEL | CY | | | 1800 | 1800 |
| 403.207 | HOT MIX ASPHALT, 19.0 mm NOMINAL MAXIMUM SIZE | T | | | 450 | 450 |
| 403.208 | HOT MIX ASPHALT, 12.5 mm NOMINAL MAXIMUM SIZE, SURFACE | T | | | 300 | 300 |
| 403.209 | HOT MIX ASPHALT, 9.5 mm NOMINAL MAXIMUM SIZE (ISLAND & INCIDENTALS) | T | | | 70 | 70 |
| 403.21 | HOT MIX ASPHALT, 9.5 mm | T | | | 100 | 100 |
| 403.213 | HOT MIX ASPHALT, 12.5 mm NOMINAL MAXIMUM SIZE, BASE | T | | | 400 | 400 |
| 409.15 | BITUMINOUS TACK COAT, APPLIED | G | | | 200 | 200 |
| 419.30 | SAWING BITUMINOUS PAVEMENT | LF | | | 1300 | 1300 |
| 502.111 | STRUCTURAL CONCRETE FOOTING | CY | | | 10 | 10 |
| 502.266 | STRUCTURAL CONCRETE PLAZA SLAB ON GRADE | CY | | | 25 | 25 |
| 502.56 | CONCRETE FILL | CY | | | 10 | 10 |
| 503.14 | EPOXY - COATED REINFORCING STEEL, FABRICATED AND DELIVERED | LB | | | 1350 | 1350 |
| 503.15 | EPOXY - COATED REINFORCING STEEL, PLACING | LB | | | 1350 | 1350 |
| 503.18 | GLASS FIBER REINFORCED POLYMER (GFRP) REINFORCING BARS, FABRICATED AND DELIVERED | LB | | | 1810 | 1810 |
| 503.19 | GLASS FIBER REINFORCED POLYMER (GFRP) REINFORCING BARS, PLACING | LB | | | 1810 | 1810 |
| 503.90 | SYNTHETIC FIBER REINFORCEMENT | LB | | | 175 | 175 |
| 506.30 | SHOP COATING OF STRUCTURAL STEEL | LS | | | 1 | 1 |
| 515.202 | CLEAR PROTECTIVE COATING FOR CONCRETE SURFACES | SY | | | 210 | 210 |
| 515.23 | EPOXY OVERLAY | SY | | | 12 | 12 |
| 518.51 | REPAIR OF UPWARD FACING SURFACES - BELOW REINFORCING STEEL, <209 mm | SF | | | 22 | 22 |
| 526.306 | TEMPORARY CONCRETE BARRIER, TYPE I - SUPPLIED BY AUTHORITY (1,810 LF) | LS | 0.2 | | 0.8 | 1 |
| 526.311 | PERMANENT CONCRETE BARRIER TYPE I | LF | | 70 | | 70 |
| 526.342 | PERMANENT CONCRETE BARRIER TYPE I TRANSITION | EA | | 2 | | 2 |
| 527.342 | WORK ZONE CRASH CUSHIONS TL-2 | EA | | | 1 | 1 |
| 602.30 | FLCWABLE CONCRETE FILL | CY | | | 15 | 15 |
| 603.152 | 16 INCH HDPE PIPE | LF | | | 38 | 38 |
| 603.175 | 18 INCH REINFORCED CONCRETE PIPE - CLASS III | LF | 23 | | | 23 |
| 604.248 | CATCH BASIN TYPE F6 | EA | | | 1 | 1 |
| 606.1724 | BRIDGE TRANSITION - TYPE III (MODIFIED) | EA | | 2 | | 2 |
| 606.24 | GUARDRAIL TYPE 3D - SINGLE RAIL | LF | 325 | 325 | 1200 | 1850 |
| 606.2401 | GUARDRAIL TYPE 3D - DOUBLE RAIL | LF | | 1225 | | 1225 |
| 606.2652 | TERMINAL END - REMOVE AND STACK | EA | | 3 | | 3 |
| 606.278 | TERMINAL END - ANCHORED END | EA | 1 | | | 2 |
| 606.279 | TERMINAL END - ANCHORED END, THRIE BEAM | EA | 1 | | | 1 |
| 606.352 | REFLECTORIZED BEAM GUARDRAIL DELINEATOR | EA | | 18 | | 18 |
| 606.353 | DELINEATOR POST | EA | 5 | 1 | 3 | 9 |
| 606.354 | DELINEATOR POST - REMOVE AND RESET | EA | 2 | 2 | 2 | 6 |
| 606.3605 | GUARDRAIL - REMOVE, MODIFY AND RESET, SINGLE RAIL | LF | | 112.5 | | 112.5 |
| 606.3631 | GUARDRAIL - REMOVE AND DISPOSE | LF | 62.5 | 375 | 1175 | 1612.5 |
| 606.48 | SINGLE GALVANIZED STEEL POST | EA | | 16 | | 16 |
| 606.65 | GUARDRAIL THRIE BEAM - SINGLE RAIL | LF | 150 | | | 150 |
| 606.701 | ASYMMETRICAL THRIE BEAM TRANSITION | EA | 3 | | | 3 |
| 606.80 | GUARDRAIL 350 FLEAT TERMINAL | EA | 1 | | | 1 |
| 609.11 | VERTICAL CURB TYPE 1 | LF | | | 430 | 430 |
| 609.12 | VERTICAL CURB TYPE 1 - CIRCULAR | LF | | | 20 | 20 |
| 609.234 | TERMINAL CURB TYPE 1 - 4 FT | EA | | | 2 | 2 |
| 609.441 | CURBING REMOVE AND STACK | LF | | 100 | | 100 |
| 610.08 | PLAIN RIPRAP | CY | 10 | | | 10 |
| 610.18 | STONE DITCH PROTECTION | CY | | | 10 | 10 |
| 613.319 | EROSION CONTROL BLANKET | SY | 600 | | 3750 | 4350 |
| 615.07 | LOAM | CY | 60 | | 450 | 510 |
| 618.1401 | SEEDING METHOD NUMBER 2, PLAN QUANTITY | UN | 10 | | | 10 |
| 618.1411 | SEEDING METHOD NUMBER 3, PLAN QUANTITY | UN | | | 34 | 34 |
| 619.1201 | MULCH, PLAN QUANTITY | UN | 10 | | 34 | 44 |
| 619.1202 | TEMPORARY MULCH | UN | | | 34 | 34 |
| 620.58 | EROSION CONTROL GEOTEXTILE | SY | 20 | | 20 | 40 |
| 620.625 | CELLULAR CONFINEMENT SYSTEM | SY | | | 300 | 300 |
| 620.70 | HDPE GEOMEMBRANE | SY | | | 2900 | 2900 |

| ITEM NO. | DESCRIPTION | UNIT | VMS QUANTITY | SACO MEDIAN QUANTITY | TOLL PLAZA QUANTITY | TOTAL QUANTITY |
|----------|--|------|--------------|----------------------|---------------------|----------------|
| 626.11 | PRECAST CONCRETE JUNCTION BOX | EA | 1 | | | 1 |
| 626.31 | 18 in FOUNDATION | EA | | | 8 | 8 |
| 626.32 | 24 in FOUNDATION | EA | | | 1 | 1 |
| 626.331 | 30-INCH DIA., GREATER THAN 8-FEET LONG, AND ALL 36-INCH AND 42-INCH DIA. FOUNDATIONS | CY | 13 | | | 13 |
| 626.36 | REMOVE OR MODIFY CONCRETE FOUNDATION | EA | | | 8 | 8 |
| 626.38 | GROUND MOUNTED CABINET FOUNDATION | EA | 1 | | | 1 |
| 627.73 | TEMPORARY 6 INCH PAVEMENT MARKING TAPE | LF | | | 4900 | 4900 |
| 627.731 | TEMPORARY 6 INCH BLACK PAVEMENT MARKING TAPE | LF | | | 2900 | 2900 |
| 629.05 | HAND LABOR, STRAIGHT TIME | HR | | | 28 | 28 |
| 631.10 | AIR COMPRESSOR (INCLUDING OPERATOR) | HR | | | 8 | 8 |
| 631.12 | ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR) | HR | | | 20 | 20 |
| 631.13 | BULLDOZER (INCLUDING OPERATOR) | HR | | | 20 | 20 |
| 631.172 | TRUCK - LARGE (INCLUDING OPERATOR) | HR | | | 40 | 40 |
| 631.22 | FRONT END LOADER (INCLUDING OPERATOR) | HR | | | 20 | 20 |
| 631.32 | CULVERT CLEANER (INCLUDING OPERATOR) | HR | | | 20 | 20 |
| 631.36 | FOREMAN | HR | | | 8 | 8 |
| 631.50 | JACKHAMMER (AIR TOOL INCLUDING OPERATOR) | HR | | | 8 | 8 |
| 631.51 | BUCKET TRUCK | HR | | | 8 | 8 |
| 631.52 | SCISSOR LIFT | HR | | | 8 | 8 |
| 631.53 | ELECTRICIAN | HR | | | 8 | 8 |
| 631.54 | ELECTRICIAN'S APPRENTICE | HR | | | 8 | 8 |
| 634.25 | SERVICE POLE COMPLETE WITH CABINET AND CONTROLS | EA | 1 | | | 1 |
| 642.712 | LANE USE SIGNAL | EA | | | 1 | 1 |
| 645.105 | REMOVE AND STACK SIGN | EA | | | 6 | 6 |
| 645.109 | REMOVE AND RESET SIGN | EA | | | 18 | 18 |
| 645.123 | REMOVAL, DISASSEMBLY AND RELOCATION OF VMS AND SUPPORTING STRUCTURE | LS | 1 | | | 1 |
| 645.161 | BREAKAWAY DEVICE SINGLE POLE | EA | | | 1 | 1 |
| 645.289 | STEEL H-BEAM POLES | LB | | | 1150 | 1150 |
| 645.303 | REMOVE AND RESET DELINEATOR | EA | | | 6 | 6 |
| 645.403 | INSTALLATION OF TYPE 1 SIGNS | EA | | | 13 | 13 |
| 652.30 | FLASHING ARROW | EA | 2 | | | 3 |
| 652.312 | TYPE III BARRICADES | EA | | | 3 | 3 |
| 652.33 | DRUM | EA | 85 | | 65 | 150 |
| 652.35 | CONSTRUCTION SIGNS | SF | 790 | 120 | 619.5 | 1529.5 |
| 652.361 | MAINTENANCE OF TRAFFIC CONTROL DEVICES | LS | 0.3 | | 0.7 | 1 |
| 652.41 | PORTABLE - CHANGEABLE MESSAGE SIGN | EA | 2 | | | 2 |
| 652.45 | TRUCK MOUNTED ATTENUATOR | CD | 10 | | | 10 |
| 655.012 | INSTALLATION OF CASH LANE CONTROLLER CABINET | EA | | | 1 | 1 |
| 655.02 | DVAS MOUNT INSTALLATION | EA | | | 1 | 1 |
| 655.04 | INSTALLATION OF SENSOR LOOPS | LS | | | 1 | 1 |
| 655.05 | INSTALLATION OF AVI ANTENNAS | EA | | | 1 | 1 |
| 655.07 | TRAFFIC CONTROL PEDESTAL PREPARATION WORK | EA | | | 1 | 1 |
| 655.11 | #10 AWG WIRE | LF | | | 450 | 450 |
| 655.12 | #12 AWG WIRE | LF | | | 600 | 600 |
| 655.13 | #14 AWG WIRE | LF | | | 50 | 50 |
| 655.14 | 4pr/24 (CATEGORY 5e) CABLE | LF | | | 1700 | 1700 |
| 655.16 | FIBER OPTIC CABLE - 6 FIBER | LF | | | 600 | 600 |
| 655.17 | IVIS HOMERUN LOOP CABLE (MSA 50-2 #16) | LF | | | 400 | 400 |
| 655.203 | 1 1/2" SCHEDULE 80 PVC CONDUIT | LF | | | 50 | 50 |
| 655.2031 | 2" SCHEDULE 80 PVC CONDUIT | LF | | | 175 | 175 |
| 655.204 | 3" SCHEDULE 80 PVC CONDUIT | LF | | | 10 | 10 |
| 655.2071 | 2" GALVANIZED RIGID METAL CONDUIT | LF | | | 190 | 190 |
| 655.2102 | 2" LIQUID TIGHT METALLIC FLEX CONDUIT | LF | | | 20 | 20 |
| 655.223 | TYPE D PULL BOX OUTDOOR CANOPY | EA | | | 4 | 4 |
| 655.81 | KEY SWITCH | EA | | | 2 | 2 |
| 656.50 | BALED HAY, IN PLACE | EA | 10 | | 50 | 60 |
| 656.60 | TEMPORARY BERMS | LF | | | 600 | 600 |
| 656.62 | TEMPORARY SLOPE DRAINS | LF | | | 30 | 30 |
| 656.632 | 30 INCH TEMPORARY SILT FENCE | LF | 250 | | 1500 | 1750 |
| 659.10 | MOBILIZATION | LS | | | 1 | 1 |
| 669.01 | BOLLARD | EA | | | 4 | 4 |
| 800.501 | TOLL GANTRY INSTALLATION | LS | | | 1 | 1 |

NOTE: AN ESTIMATED QUANTITY OF ITEM 202.203 PAVEMENT BUTT JOINT - 350 SY AND ITEM 403.21 HOT MIX ASPHALT, 9.5 mm - 100 TONS, HAVE BEEN INCLUDED TO ADDRESS THE PAVEMENT SHIM NEEDED ON THE SOUTHBOUND OFF RAMP AT INTERCHANGE 36.

| TOLL PLAZA EARTHWORK SUMMARY | | | |
|---|--------------|----------|-------|
| COMMON EXCAVATION | | | |
| COMMON EXCAVATION (FROM CROSS SECTIONS) | 1,094 | | |
| GRUBBING IN FILL | 675 | | |
| UNDERCUT (LEDGE UNDERCUT AND FROST TRANSITION) | 0 | | |
| EXCAVATION FOR GEOFOAM BLOCK AND LEVELING SAND | 3,262 | | |
| EXISTING PAVEMENT REMOVAL (DEDUCT) | 184 | | |
| TOTAL COMMON EXCAVATION | | 4,847 | |
| | | Rounding | 53 |
| | | Total | 4,900 |
| FILL FOR BORROW CALCULATIONS | | | |
| TOTAL COMMON FILL (FROM CROSS SECTIONS) | 6,239 | | |
| GRUBBING IN FILL (ADD) | 675 | | |
| GEOFOAM BLOCK (DEDUCT) | 2,518 | | |
| LEVELING SAND (DEDUCT) | 409 | | |
| TOTAL FILL | | 3,987 | |
| ROCK EXCAVATION FOR ESTIMATE | | | |
| ROCK EXCAVATION (FROM CROSS SECTIONS) | 0 | | |
| TOTAL ROCK EXCAVATION | | 0 | |
| AVAILABLE COMMON EXCAVATION BORROW CALCULATIONS | | | |
| (1) TOTAL COMMON EXCAVATION | | 4,847 | |
| DEDUCTIONS: | | | |
| GRUBBING IN CUT | | | |
| GRUBBING IN FILL | 675 | | |
| MUCK EXCAVATION | 3,262 | | |
| PAVEMENT SALVAGE (CUT & FILL) | | | |
| (2) TOTAL DEDUCTIONS | | 3,937 | |
| TOTAL AVAILABLE COMMON EXCAVATION | | 910 | |
| TOTAL AVAILABLE STRUCT. EXCAVATIONS (UNDERDRAIN ONLY) | | | |
| TOTAL AVAILABLE NON-ROCK EXCAVATION | | 910 | |
| COMPUTATION OF WASTE STORAGE & WASTE MATERIAL | | | |
| TOTAL AVAIL. WASTE STORAGE AREA (FROM CROSS SECTIONS) | | 3,987 | |
| GRUBBING IN CUT | 0 | | |
| GRUBBING IN FILL | 675 | | |
| UNDERCUT | 0 | | |
| EXISTING PAVEMENT REMOVAL | 184 | | |
| STONE DITCH PROTECTION AND RPRAP AREAS | 20 | | |
| TOTAL WASTE MATERIAL TO BE UTILIZED | | 0 | |
| TOTAL WASTE MATERIAL TO BE WASTED | | 879 | |
| COMPUTATION OF GRANULAR BORROW FOR ESTIMATE | | | |
| GRANULAR BORROW FOR UNDERCUTTING AND BOX CULVERT | 0 | | |
| GRANULAR BORROW | 0 x 1.15 | 0 | |
| COMPUTATION FOR COMMON BORROW FOR ESTIMATE | | | |
| (3) TOTAL FILL (TOTAL FILL - GRANULAR BORROW) | | 3,987 | |
| TOTAL AVAIL. NON-ROCK EXCAV. | 910 x 0.85 = | 774 | |
| TOTAL AVAIL. ROCK EXCAV. | 0 x 1.33 = | 0 | |
| TOTAL AVAIL. STR. ROCK EXCAV. | 0 x 1.33 = | 0 | |
| (4) TOTAL AVAILABLE EXCAVATION | | = 774 | |
| EXCESS EXCAVATION = TOTAL AVAILABLE EXCAVATION MINUS TCTAL FILL | | -2,335 | |
| PLUS TOTAL WASTE MATERIAL TO BE WASTED | | | |

| | | | |
|--------|----------|----|------|
| Scale: | | | |
| No. | Revision | By | Date |
| | | | |

| | | | |
|--|-----------|--------------|-----------|
| Designed by: | | | |
| | | | |
| CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE | | | |
| By | Date | By | Date |
| Designed | TFD 02/15 | Checked | GAE 02/15 |
| Drawn | PZA 02/15 | In Charge of | GAE 02/15 |

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THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

INTERCHANGE 36

SACO TOLL PLAZA LANE ADDITION

ESTIMATED QUANTITIES & EARTHWORKS SUMMARY

SHEET NUMBER: _____

CONTRACT: 2015.06 2 OF 54

Date: 2/18/2015

Filename: ...MSTA003_General Notes.dgn

GENERAL

- ALL DETAILS SHALL BE IN CONFORMANCE WITH MAINE DEPARTMENT OF TRANSPORTATION (MAINE DOT) STANDARD DETAILS HIGHWAYS AND BRIDGES DECEMBER 2002, AND MAINE DOT BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL LATEST REVISION UNLESS OTHERWISE INCLUDED IN THESE PLANS OR PROJECT SPECIFICATIONS.
- ALL EXISTING DELINEATOR AND MILE MARKER POSTS SHALL BE REMOVED AND RESET UPON COMPLETION OF THE CONTRACT. DELINEATOR POSTS SUPPLIED BY THE CONTRACTOR SHALL BE PAID FOR UNDER 606.35.
- THE CONTRACTOR SHALL SUBMIT HIS PROPOSED STAGING AREA(S) AND FIELD TRAILER LOCATION TO THE RESIDENT FOR APPROVAL PRIOR TO STARTING WORK.
- THE STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION PERMIT FOR THE PROJECT IS INCLUDED AS PART OF THIS CONTRACT (SEE SPECIFICATIONS). THE CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS OF THESE PERMITS.
- RIGHT OF WAY AND PROPERTY LINES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. ADDITIONAL INFORMATION IS AVAILABLE FROM THE MAINE TURNPIKE AUTHORITY UPON REQUEST.
- CONTRACTOR IS REQUIRED TO MAINTAIN ACCESS TO THE PARKING LOT OF THE PLAZA AT ALL TIMES DURING CONSTRUCTION.
- ALL ISLAND BOLLARDS WILL BE COVERED WITH A HIGH STRENGTH PLASTIC BOLLARD SLEEVE/COVER, SEE SPECIFICATION 669. THE PAYMENT FOR THE BOLLARD COVERS WILL BE INCLUDED IN THE COST FOR ITEM 841.48.
- NO SMOKING WITHIN 25' OF TOLL BUILDINGS OR MANNED TOLL BOOTHS.
- A COPY OF THE "LOGS OF SUBSURFACE EXPLORATIONS" DATED AUGUST, 2014 AND OCTOBER, 2014 ARE PROVIDED IN AN APPENDIX TO THE SPECIFICATIONS. THIS GEOTECHNICAL INFORMATION IS FURNISHED FOR THE BIDDER'S AND CONTRACTORS USE. NO ASSURANCE IS GIVEN THAT THE INFORMATION OR INTERPRETATIONS WILL BE REPRESENTATIVE OF ACTUAL SUBSURFACE CONDITIONS AT THE TIME OF CONSTRUCTION. THE AUTHORITY SHALL NOT BE RESPONSIBLE FOR THE BIDDER'S AND CONTRACTOR'S INTERPRETATIONS OF OR CONCLUSIONS DRAWN FROM THE GEOTECHNICAL INFORMATION. THE BORING LOGS CONTAINED IN THE SPECIFICATIONS PRESENT FACTUAL AND INTERPRETIVE SUBSURFACE INFORMATION COLLECTED AT DISCRETE LOCATIONS. DATA PROVIDED MAY NOT BE REPRESENTATIVE OF THE SUB SURFACE CONDITIONS BETWEEN BORING LOCATIONS.

EARTHWORK AND PAVEMENT

- THE CLEARING SHOWN ON THE PLANS HAS BEEN COMPLETED BY THE MTA. ANY ADDITIONAL CLEARING SHALL BE ESTABLISHED IN THE FIELD BY THE CONTRACTOR AND SHALL BE APPROVED BY THE RESIDENT PRIOR TO ANY CLEARING TAKING PLACE. NO CLEARING SHALL BE ALLOWED WITHIN THE IDENTIFIED WETLANDS.
- WASTE MATERIALS SHALL BE DISPOSED OF OFF THE PROJECT SITE, IN ACCORDANCE WITH ALL ENVIRONMENTAL REGULATIONS.
- THE NORMAL GRUBBING WIDTH IN THE FILLS SHALL BE VARIABLE WHEN SUBGRADE IS LESS THAN 5' ABOVE OLD GROUND. THE GRUBBING DEPTH HAS BEEN ESTIMATED AS 6" IN FIELD AREAS AND 12" IN WOODED AREAS.
- SUMMARY OF SUBSURFACE EXPLORATIONS IS SHOWN ON THE SUBSURFACE EXPLORATION SUMMARY SHEET. ADDITIONAL INFORMATION IS AVAILABLE FROM THE MAINE TURNPIKE AUTHORITY UPON REQUEST.
- THE CONTRACTOR SHALL COMPLETE ALL EARTHWORK, BASE, AND BINDER PAVING BEFORE PLACING THE SURFACE PAVING COURSE TO MINIMIZE THE NUMBER OF LONGITUDINAL AND TRANSVERSE CONSTRUCTION JOINTS. NIGHT TIME CLOSURES WILL BE ALLOWED UPON REQUEST TO AND APPROVAL OF THE RESIDENT.
- ITEM 403.209 - HOT MIX ASPHALT, 9.5 MM NOMINAL MAXIMUM SIZE, HAND PLACED INCIDENTALS SHALL BE USED AT LOCATIONS TO BE DETERMINED BY THE RESIDENT.
- EXCAVATED GRAVEL SHALL NOT BE STOCK PILED ON SITE.

EROSION CONTROL

- THE ANTICIPATED EROSION CONTROL DEVICES ARE SHOWN ON THE PLANS FOR REFERENCE. THE CONTRACTOR SHALL PROPOSE ACTUAL TYPE AND LOCATION OF DEVICES FOR APPROVAL BY THE RESIDENT. ADDITIONAL MEASURES MAY BE PROPOSED BY THE CONTRACTOR DUE TO SITE OR WEATHER CONDITIONS. THE RESIDENT MAY DIRECT THE CONTRACTOR TO IMPLEMENT ADDITIONAL MEASURES. ANY ADDITIONAL MEASURES APPROVED BY THE RESIDENT WILL BE MEASURED FOR PAYMENT UNDER THE APPROPRIATE BID ITEMS.
- 4" LOAM HAS BEEN ESTIMATED FOR 100% OF THE DISTURBED SLOPE AREA UNLESS OTHERWISE SPECIFIED ON THE PLANS. ACTUAL PLACEMENT OF THE LOAM SHALL BE AS DESIGNATED BY THE RESIDENT.
- NEWLY DISTURBED EARTH SHALL BE MULCHED BY THE END OF EACH WORK DAY. MULCH SHALL BE MAINTAINED ON A DAILY BASIS. THIS WORK SHALL BE PAID FOR UNDER ITEM 619.1202 TEMPORARY MULCH.
- ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE MAINE DEPARTMENT OF TRANSPORTATION BEST MANAGEMENT PRACTICES.
- TEMPORARY SEED SHALL BE APPLIED TO ALL DISTURBED AREAS THAT WILL NOT BE COMPLETED WITHIN 30 DAYS.
- TEMPORARY BERMS AND TEMPORARY SLOPE DRAINS ARE ANTICIPATED AT ALL STONE DOWNSPOUT LOCATIONS WHILE GROWTH IS BEING ESTABLISHED ON SIDE SLOPES. THESE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS.
- TEMPORARY EROSION CONTROL BLANKET, ITEM 613.319 SHALL BE INSTALLED IN ALL DITCHES AND 2:1 SLOPES FROM TOP TO TOE OF SLOPE. LOAM AND SEED SHALL BE PLACED PRIOR TO THE INSTALLATION OF THE EROSION CONTROL BLANKET. LIMITS OF THE EROSION CONTROL BLANKET IN DITCHES SHALL BE 6' WIDE OR AS DESIGNATED BY THE RESIDENT.
- ALL SLOPES SHALL BE SEEDED WITH SEEDING METHOD NO. 2.
- A DOUBLE ROW OF SILT FENCE PROTECTION SHALL BE INSTALLED AT ALL STREAM LOCATIONS AND OPEN WATER WETLANDS AS SHOWN ON THE PLANS. PLAN NOTES INDICATE STATION TO STATION LIMITS OF INSTALLATION AND NOT NECESSARILY A QUANTITY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PLACEMENT AND MAINTENANCE OF EROSION CONTROL ITEMS AROUND STOCKPILES, IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES" (BMP). PAYMENT FOR THESE ITEMS SHALL BE INCIDENTAL TO THE MATERIAL STOCKPILED.

SITE ACCESS NOTES

- ACCESS THROUGH AREAS BEYOND THE LIMITS OF DISTURBANCE ARE TO BE APPROVED BY THE RESIDENT.

UTILITY

- EXISTING UTILITIES ON THESE PLANS WERE COMPILED FROM FIELD SURVEY AND VARIOUS OTHER SOURCES. LOCATIONS ARE NOT GUARANTEED TO BE ACCURATE NOR IS IT GUARANTEED THAT ALL UTILITIES ARE SHOWN. NO SEPARATE OR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR DUE TO ANY VARIANCE BETWEEN THE DATA SHOWN ON THE PLANS AND THE ACTUAL FIELD CONDITIONS ENCOUNTERED. NO WORK SHALL BE STARTED UNTIL THE OWNERS OF THE VARIOUS UTILITIES ARE NOTIFIED BY THE CONTRACTOR OF THE PROPOSED CONSTRUCTION. THE CONTRACTOR IS REQUIRED TO CALL DIG SAFE AT 1-888-344-7233 PRIOR TO THE START OF THE WORK.
- THE UTILITIES INVOLVED IN THIS CONTRACT ARE:
 MAINE TURNPIKE AUTHORITY
 CENTRAL MAINE POWER
 FAIRPOINT
 TIME WARNER CABLE

 THE AUTHORITY IS RESPONSIBLE FOR MARKING MTA UTILITIES PRIOR TO CONSTRUCTION. THE MTA MAY USE DIG SMART OF MAINE FOR UTILITY LOCATION. THE CONTRACTOR SHALL COORDINATE WITH THE RESIDENT IN ORDER TO CONTACT DIG SMART OR MTA PERSONNEL.
- SEE SPECIFICATIONS FOR REQUIRED UTILITY COORDINATION.

GUARDRAIL

- AT THE END OF THE WORK DAY, EVERYDAY, THE CONTRACTOR IS REQUIRED TO HAVE AN APPROVED CRASHWORTHY END TREATMENT ON ALL GUARDRAIL WITHIN ALL WORK AREAS THAT ARE ACCESSIBLE TO TRAFFIC.
- CONNECTIONS FOR PROPOSED GUARDRAIL TO EXISTING GUARDRAIL SHALL BE INCIDENTAL TO THE PROPOSED GUARDRAIL ITEMS.
- CONTRACTOR SHALL STOCKPILE ALL GUARDRAIL TO BE REMOVED AND RESET, REMOVED AND DISPOSED AND REMOVED, MODIFIED AND RESET UNTIL GUARDRAIL INSTALLATION HAS BEEN COMPLETE. STOCKPILING THE GUARDRAIL SHALL BE INCIDENTAL TO ITEM 606.3631 GUARDRAIL REMOVE AND DISPOSE. ALL USABLE EXISTING GUARDRAIL SHALL BE MODIFIED AND RESET PRIOR TO BEING PAID TO INSTALL NEW GUARDRAIL. THE RESIDENT WILL DETERMINE THE AMOUNT OF GUARDRAIL THAT CAN BE RESET.
- FOR ALL NEW GUARDRAIL TYPE 3D W-BEAM, OFFSET BLOCKS SHALL BE NON-WOOD CONFORMING TO NCHRP 350 TEST LEVEL 3.
- ALL PROPOSED GUARDRAIL AND RESET GUARDRAIL SHALL BE INSTALLED IN A MANNER TO AVOID DRAINAGE STRUCTURES AND UTILITIES.

DRAINAGE

- NO EXISTING DRAINAGE SHALL BE ABANDONED, REMOVED OR PLUGGED WITHOUT PRIOR APPROVAL TO THE RESIDENT.
- INLETS AND OUTLETS OF ALL CULVERTS SHALL BE RIPRAPPED UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE RESIDENT.
- EXISTING CULVERTS TO REMAIN SHALL BE CLEANED AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE MADE UNDER ITEM 631.32 CULVERT CLEANER (INCLUDING OPERATORS).
- ALL NEW CATCH BASIN GRATES SHALL BE MANUFACTURED BY EJ COMPANY OF BROCKTON, MA.
- IF FOUNDATION MATERIAL IS REQUIRED UNDER CULVERTS, IT SHALL MEET THE REQUIREMENTS FOR GRANULAR BORROW UNDERWATER BACKFILL AND SHALL BE PAID FOR AS GRANULAR BORROW.
- EXISTING CULVERTS TO REMAIN SHALL BE INSPECTED FOR SEPARATION OF THE LAST SECTION OF PIPE. IF RECONNECTION IS DIRECTED BY THE RESIDENT, IT SHALL NOT BE PAID FOR SEPARATELY BUT WILL BE INCIDENTAL TO ITEM 203.20 COMMON EXCAVATION.

STRUCTURAL

- WHERE DRILLING AND ANCHORING OF REINFORCING STEEL IS SPECIFIED THE CONTRACTOR SHALL USE A MATERIAL LISTED ON THE MAINE DEPARTMENT OF TRANSPORTATION (MDOT) APPROVED PRODUCTS LIST OF CHEMICAL ANCHORAGE MATERIAL. THE DEPTH OF THE EMBEDMENT SHALL BE SUFFICIENT TO DEVELOP 125% OF THE YIELD STRENGTH OF THE BAR, BUT NOT LESS THAN THE MINIMUM DEPTH OF EMBEDMENT WHEN SPECIFIED. WHERE MINIMUM EMBEDMENT DEPTH HAVE NOT BEEN SPECIFIED BAR LENGTHS HAVE BEEN DEVELOPED BASED ON AN ASSUMED EMBEDMENT DEPTH OF 9" FOR A #5 BAR. THE CONTRACTOR SHALL VERIFY THE REQUIRED DEPTH OF EMBEDMENT AND ADJUST BAR LENGTHS AS REQUIRED.
- WHERE DRILLING AND GROUTING OF GFRP REINFORCEMENT IS SPECIFIED THE CONTRACTOR SHALL USE A MATERIAL APPROVED BY THE GFRP REINFORCEMENT MANUFACTURER. THE DEPTH OF EMBEDMENT SHALL BE SUFFICIENT TO DEVELOP THE FRACTURE STRENGTH OF THE BAR, BUT SHALL BE NO LESS THAN THE MINIMUM LENGTH OF EMBEDMENT WHEN SPECIFIED OR THE MANUFACTURER'S RECOMMENDATIONS, WHICHEVER IS GREATER. WHERE MINIMUM EMBEDMENT LENGTHS HAVE NOT BEEN SPECIFIED, BAR LENGTHS HAVE BEEN DEVELOPED BASED ON AN ASSUMED DEPTH OF EMBEDMENT OF 12" FOR #6 BARS. THE CONTRACTOR SHALL VERIFY THE REQUIRED EMBEDMENT LENGTHS AS REQUIRED.
- THE CONTRACTOR SHALL PROVIDE SOFT CUT JOINTS AS NOTED ON PLANS OR AS DIRECTED BY THE RESIDENT. THIS WORK SHALL BE INCIDENTAL TO ITEM 502.262 STRUCTURAL CONCRETE ROADWAY SLAB ON GRADE.
- ALL STRUCTURAL CONCRETE FOR ROADWAY SLAB ON GRADE (ITEM 502.262) SHALL BE CLASS AAA DECK CONCRETE AND CONTAIN 5 LBS. PER CY OF SYNTHETIC FIBER REINFORCEMENT.
- PROTECTIVE COATING FOR CONCRETE SURFACES (BOTH OLD AND NEW) SHALL BE APPLIED TO ALL EXPOSED SURFACES OF CONCRETE CURBS, CONCRETE WEARING SURFACES AND CONCRETE ISLANDS.
- ANY DAMAGE TO EXISTING CONCRETE OR REINFORCING RESULTING FROM THE WORK PERFORMED SHALL BE REPAIRED OR REPLACED BY A METHOD APPROVED BY THE RESIDENT AT NO COST TO THE AUTHORITY.
- ALL EXISTING MATERIALS WHICH ARE REMOVED FROM THE WORK AREA SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF BY THE CONTRACTOR IN A MANNER IN ACCORDANCE WITH THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION SOLID WASTE REGULATIONS. THESE EXISTING MATERIALS INCLUDE, BUT ARE NOT LIMITED TO, CONCRETE, METAL CASING, REINFORCING STEEL, SILT AND DEBRIS ON OR ATTACHED TO THE STRUCTURE WITHIN THE WORK AREAS. THE COST OF REMOVAL AND DISPOSAL SHALL BE INCIDENTAL TO THE COST OF TH WORK ITEMS FOR WHICH THESE REMOVALS ARE REQUIRED.
- REINFORCING STEEL AND GFRP SHALL HAVE A 3" MINIMUM COVER UNLESS OTHERWISE NOTED.
- COPIES OF THE AS BUILT PLANS ARE ON FILE AT THE MAINE TURNPIKE AUTHORITY. THE COMPLETENESS AND ACCURACY OF THESE PLANS IS NOT GUARANTEED.
- ALL EXPOSED THREADED ROD SHALL BE CUT FLUSH WITH THE CONCRETE. ANY DISTURBED CONCRETE SHALL BE PATCHED TO THE SATISFACTION OF THE RESIDENT.

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Designed by:



CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE

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| By | Date | By | Date |
| Designed | TFD 02/15 | Checked | GAE 02/15 |
| Drawn | PZA 02/15 | In Charge of | GAE 02/15 |

STANTEC CONSULTING SERVICES INC.
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THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

INTERCHANGE 36
 SACO TOLL PLAZA LANE ADDITION
 GENERAL NOTES

SHEET NUMBER:
 CONTRACT: 2015.06 3 OF 54

Date: 2/17/2015

Filename: 004_Exit36_AddedLane-General Notes.dgn

TOLLING

1. TRANSSCORE SHALL PROVIDE THE FOLLOWING ITEMS TO BE INSTALLED BY THE CONTRACTOR:
 - A. PELCO MOUNTING HOOK FOR THE DVAS CAMERA
 - B. IVIS LOOP SENSORS, TEMPLATES FOR LOOP LAYOUT, LOCTITE EPOXY FOR LOOP INSTALLATION, AND ANY LAYOUT FOR CUTTING CONCRETE. THE CONTRACTOR SHALL SUPPLY THE EQUIPMENT AND LABOR FOR CUTTING CONCRETE FOR INSTALLATION OF THE LOOPS.
 - C. TRAFFIC CONTROL PEDESTAL
 - D. LANE CONTROLLER, CABINET, AND METAL CLEATS.
 - E. CANOPY OVERRIDE SWITCH
2. THE CONTRACTOR SHALL PROVIDE AND INSTALL THE FOLLOWING ITEMS:
 - A. ALL REQUIRED JUNCTION BOXES/PULL BOXES (INCLUDING ALL MOUNTING SUPPORTS), CONDUIT, FITTINGS, AND ASSOCIATED COMMUNICATION AND ELECTRICAL WIRING.
 - B. TRAFFIC CONTROL PEDESTAL (INSTALL ONLY)
3. ALL TOLL ITEMS ASSOCIATED WITH EXISTING CASH/ETC LANES SHALL REMAIN.
4. TRANSSCORE SHALL PROVIDE AND TERMINATE THE FOLLOWING ITEMS:
 - A. DVAS CAMERA AND COSTAR ENCLOSURE
 - B. NEW LANE AND ASSOCIATED CONTROLLERS AND NETWORK SWITCH
 - C. TRAFFIC CONTROL PEDESTAL (PROVIDE AND TERMINATE ONLY)
 - D. LANE CONTROLLER ENCLOSURE AND METAL CLEATS
 - E. MANUAL LANE TERMINAL
5. THE PELCO MOUNTING HOOKS WILL BE MOUNTED TO SUPPORT COLUMN OF THE PROPOSED GANTRY. THE FINAL LOCATION OF THE MOUNTING HOOKS SHALL BE REVIEWED AND APPROVED BY TRANSSCORE AND THE MAINE TURNPIKE AUTHORITY PRIOR TO INSTALLATION.
6. THE CASH LANE IVIS LOOPS WILL HAVE A 1/4" DEEP EPOXY OVERLAY, 8" WIDE, AS DETAILED ON PLAN SHEETS. SEE ITEM 515.23.

ELECTRICAL

1. LOOP GRADIENT SENSORS CONDUIT STUB-UPS WILL BE CONNECTED TO A HOME RUN CONDUIT VIA A 3" SANITARY TEE OR 90 PVC DWV.
2. ALL CONDUIT LOCATED IN THE TOLL LANES SHALL BE INSTALLED IN THE ROADWAY SUBBASE, BELOW THE CONCRETE SLAB. THE ONLY CONDUIT LOCATED WITHIN THE CONCRETE SLAB IS FOR STUB-UPS.
3. *KEY SWITCHES* WILL BE INSTALLED FOR THE INLINE CLEAN POWER OF EACH DVAS AND VES. CLEAN POWER SWITCHES SHALL BE REUSED FOR ALL LANES WITH EXISTING SWITCHES. POWER AND DATA CABLES FROM THE LANE CONTROLLERS TO THE DVAS SHALL BE ROUTED UP THROUGH CANOPY SUPPORT COLUMNS AND ATTACHED TO CANOPY BOTTOM IN CONDUIT. ANY CABLES AND/OR WIRES RUN TO DEVICES ON CANOPIES WITH OUT DROP CEILINGS SHALL BE RUN IN CONDUIT.
4. ALL EXISTING CONDUIT RUNS SHALL BE REUSED WHEN POSSIBLE. EXISTING CONDUIT RUNS SHALL NOT BE ABANDONED UNLESS REVIEWED AND APPROVED OR AS DIRECTED BY TRANSSCORE AND THE MAINE TURNPIKE AUTHORITY
5. THE CONTRACTOR WILL PROTECT AND MAINTAIN THE CURRENT LOCATION OF THE OUTBOARD LANE 5 LIGHT BAR.

TOLL SYSTEM INTEGRATOR

1. THE CONTRACTOR'S SCHEDULE OF WORK SHALL ACCOUNT FOR THE INSTALLATION OF THE NEW TOLLING EQUIPMENT IN EACH LANE (10 WORKING DAYS PER LANE TO COMMISSION THE LANES). ALL CIVIL WORK IN A LANE SHALL BE COMPLETED BY THE CONTRACTOR PRIOR TO THE INSTALLATION OF THE NEW TOLLING EQUIPMENT IN THE RESPECTIVE LANE. NEW TOLLING EQUIPMENT IS TO BE INSTALLED, TERMINATED, AND TESTED BY THE TOLL SYSTEM INTEGRATOR.
2. A LANE SHALL NOT BE OPENED TO TRAFFIC UNTIL ALL NEW TOLLING EQUIPMENT HAS BEEN INSTALLED IN THE RESPECTIVE LANE, HAS BEEN TESTED, AND COMMISSIONING HAS BEEN ACCEPTED BY THE MTA.
3. THE TOLL SYSTEM INTEGRATOR WILL HAVE 10 BUSINESS DAYS. THE CONTRACTOR WILL NEED TO ACCOUNT FOR THE TOLL SYSTEM INTEGRATOR WITHIN THEIR SCHEDULE OF WORK.

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| Designed by: | | | | | |
| HNTB | | | | | |
| CONSULTANT PROJECT MANAGER: R. Bruce Munger, P.E. | | | | | |
| | By | Date | | By | Date |
| | RB | 01/15 | Checked | ERB | 01/15 |
| | Drawn | MPC | 01/15 | In Charge of | RAL |
| | | | | | |

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**THE GOLD STAR
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

INTERCHANGES 36
SACO TOLL PLAZA LANE ADDITION

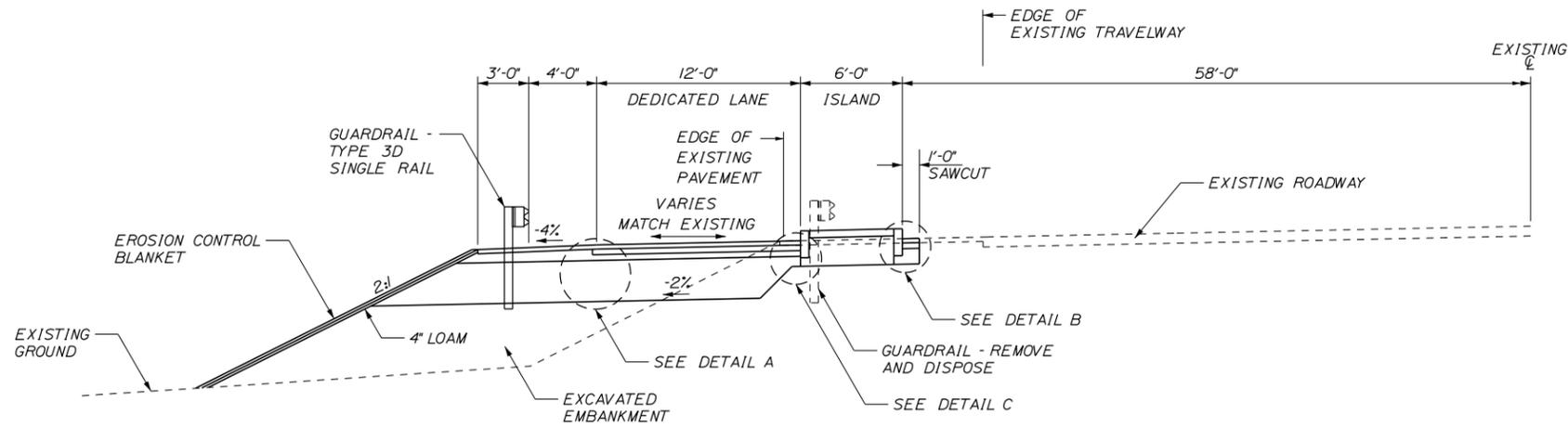
GENERAL NOTES

CONTRACT: 2015.06

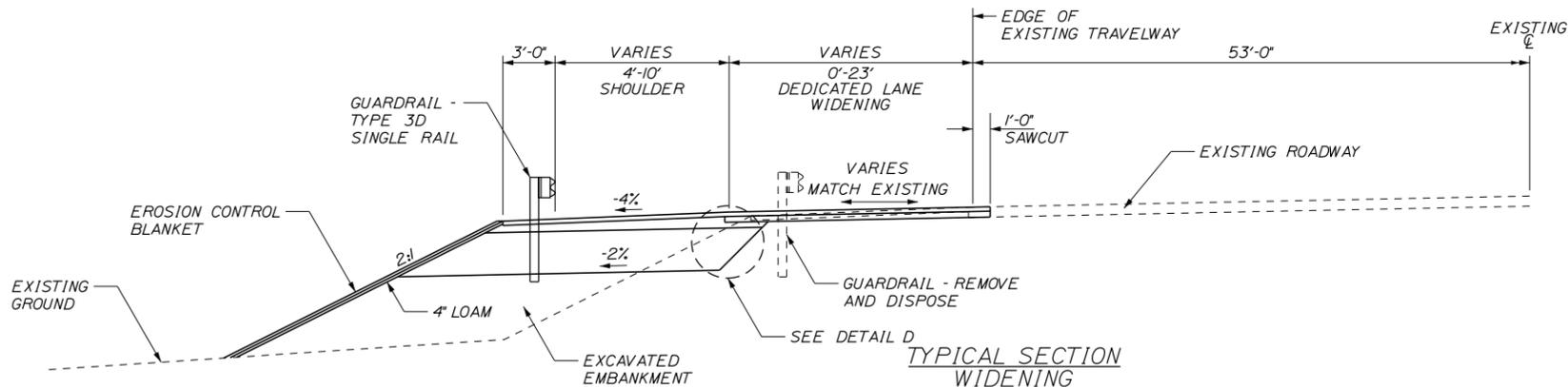
SHEET NUMBER: GN-02

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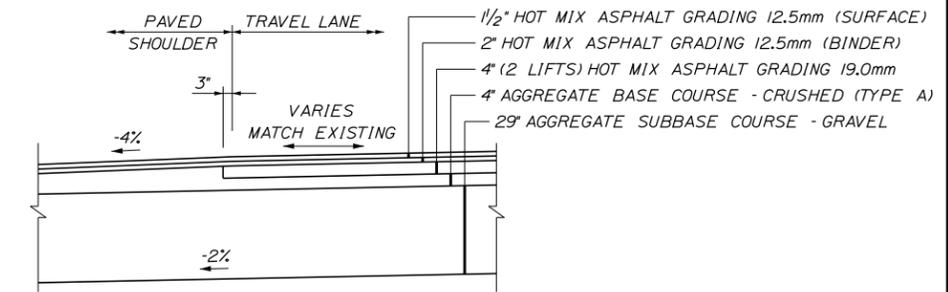
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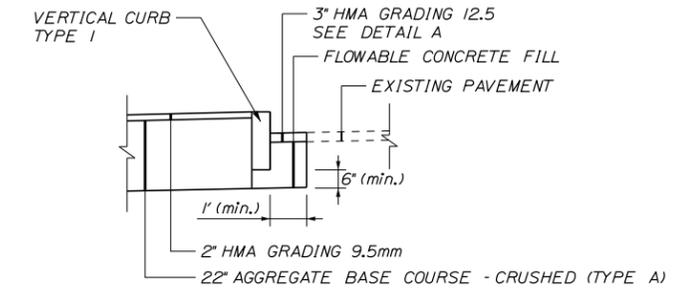
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PLAZA**
STA. 118+45 TO STA. 119+01
STA. 119+47 TO STA. 120+55
NOT TO SCALE



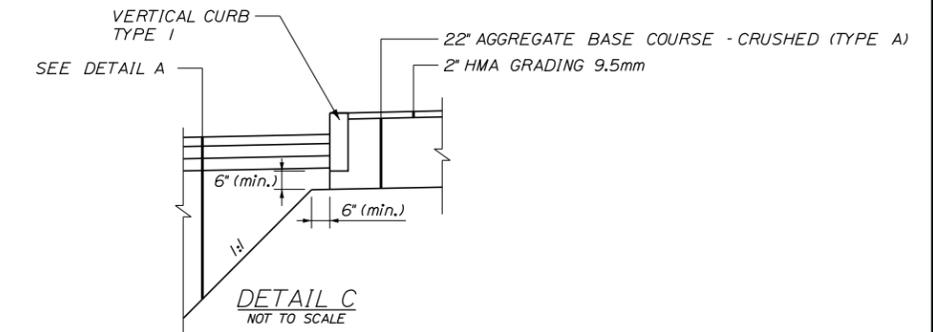
**TYPICAL SECTION
WIDENING**
STA. 112+70 TO STA. 118+45
STA. 120+55 TO STA. 124+30
NOT TO SCALE



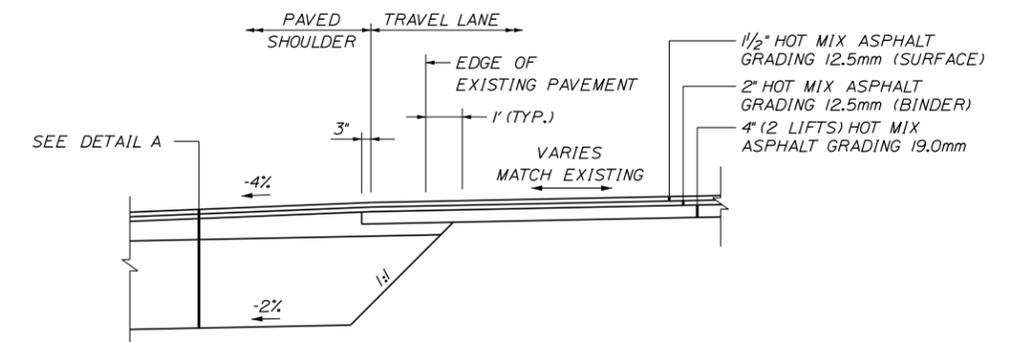
DETAIL A
NOT TO SCALE



DETAIL B
NOT TO SCALE



DETAIL C
NOT TO SCALE



DETAIL D
NOT TO SCALE

NOTES:

1. THE PAVEMENT, BASE DEPTHS AND CROSS SLOPES AS SHOWN ON THE PLANS ARE INTENDED TO BE NOMINAL.
2. "ROLLOVER" ALGEBRAIC DIFFERENCE IN RATES OF CROSS SLOPE SHALL NOT EXCEED 8%.
3. CROWNS FOR BOTH SUPER ELEVATED AND NORMAL SECTIONS FOR ALL COURSES OF SUBBASE AND PAVEMENT SHALL BE STRAIGHT.
4. A COATING OF HOT RUBBERIZED ASPHALT SHALL BE APPLIED TO SURFACE LAYER OF ALL SAW CUT AND PAVEMENT JOINTS PRIOR TO PAVING. REMAINDER OF SAW CUT TO BE BITUMINOUS TACK COAT. PAYMENT SHALL BE INCIDENTAL TO THE PAVEMENT ITEMS.
5. BITUMINOUS TACK COAT IS REQUIRED BETWEEN ALL LIFTS OF PAVEMENT, OR AS DIRECTED BY THE RESIDENT. BITUMINOUS TACK COAT IS REQUIRED ON ALL EXISTING PAVED OR MILLED SURFACES PRIOR TO PLACING PROPOSED PAVEMENT.

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| Designed by: | | | | | |
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| CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE | | | | | |
| | By | Date | | By | Date |
| Designed | TFD | 02/15 | Checked | GAE | 02/15 |
| Drawn | PZA | 02/15 | In Charge of | GAE | 02/15 |

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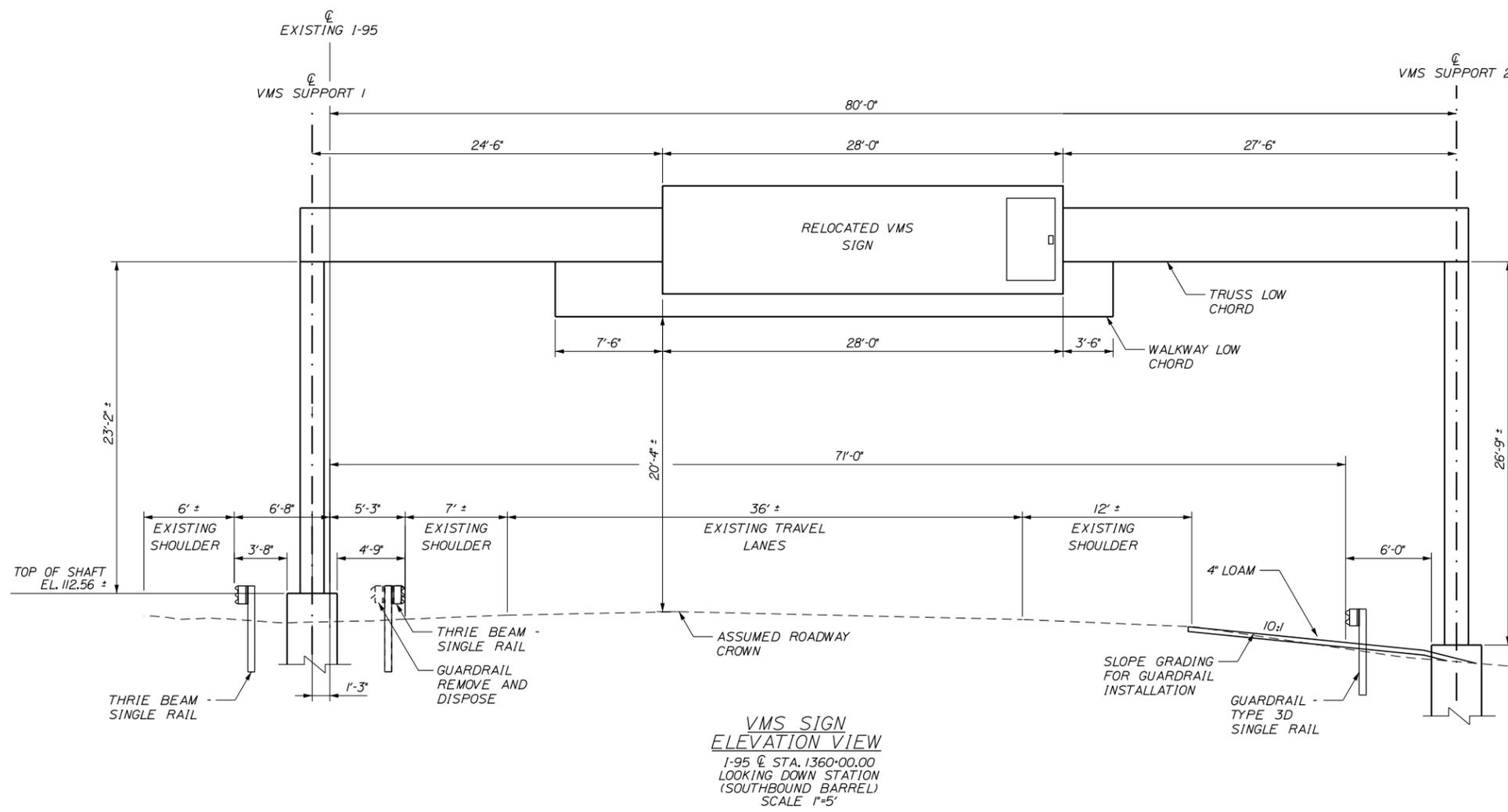
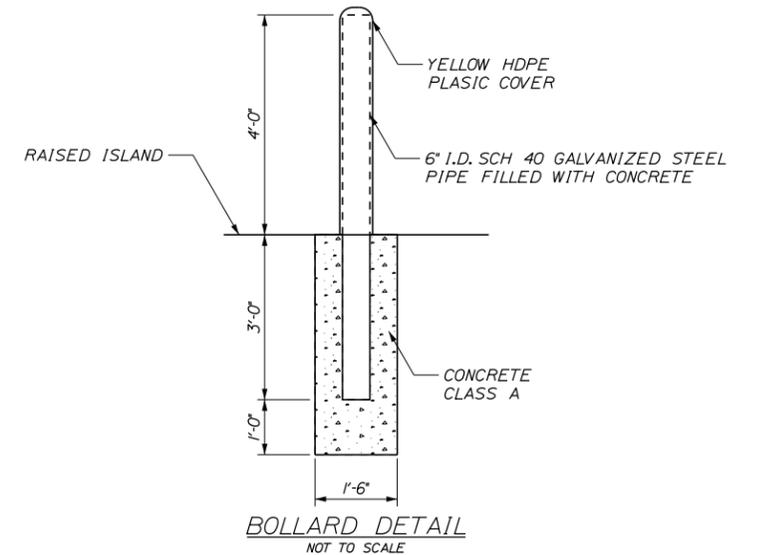
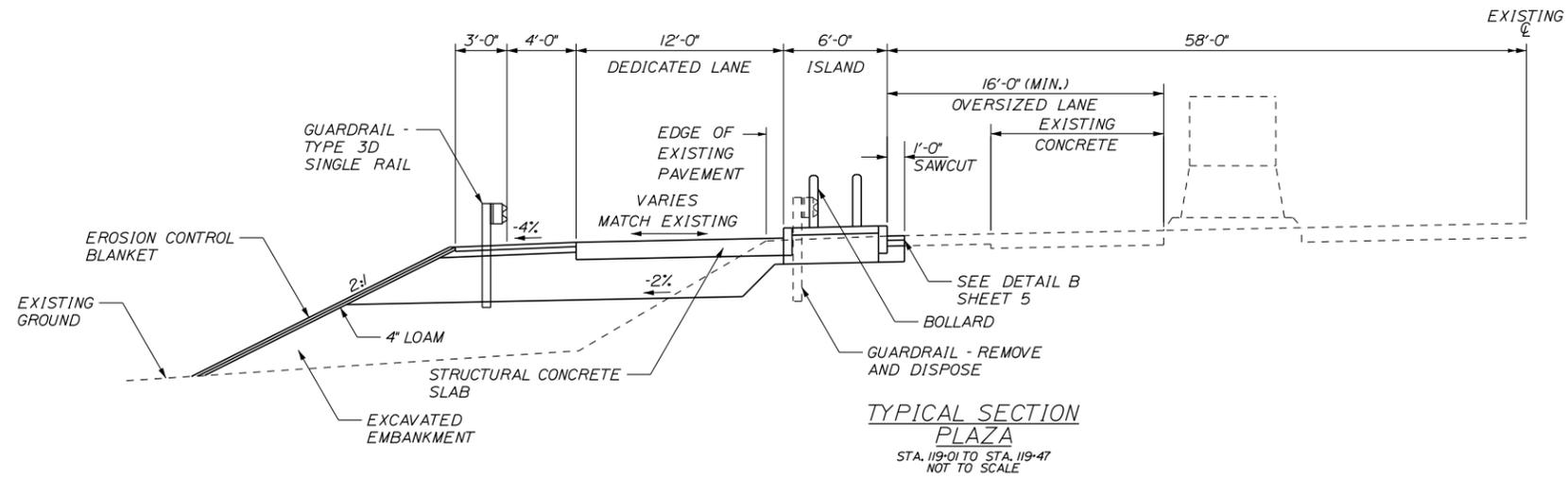
**THE GOLD STAR
MEMORIAL HIGHWAY**

INTERCHANGE 36
SACO TOLL PLAZA LANE ADDITION
TYPICAL SECTIONS
(1 OF 2)

SHEET NUMBER:
CONTRACT: 2015.06 5 OF 54

Date: 2/18/2015

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- NOTES:**
1. CONTRACTOR SHALL VERIFY THE FOUNDATION LOCATIONS AND ELEVATIONS WILL ACCOMMODATE THE EXISTING SIGN STRUCTURE AND WILL MAINTAIN A MINIMUM VERTICAL CLEARANCE BETWEEN HIGHEST POINT OF THE ROADWAY AND LOWEST POINT OF THE VMS SIGN ASSEMBLY OF 17'-2\"/>
 - 2. THE INTERIOR FACE OF THE EXISTING DOUBLE FACED GUARDRAIL SHALL BE REMOVED AS SHOWN ON THE VMS SIGN RELOCATION PLAN.
 - 3. ALL DISTURBED AREAS SHALL RECEIVE 4\"/>
 - 4. COMPACT EARTH AROUND GUARDRAIL POSTS.

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Designed by:

CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE

| | By | Date | | By | Date |
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| Designed | TFD | 02/15 | Checked | GAE | 02/15 |
| Drawn | PZA | 02/15 | In Charge of | GAE | 02/15 |

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THE GOLD STAR MEMORIAL HIGHWAY

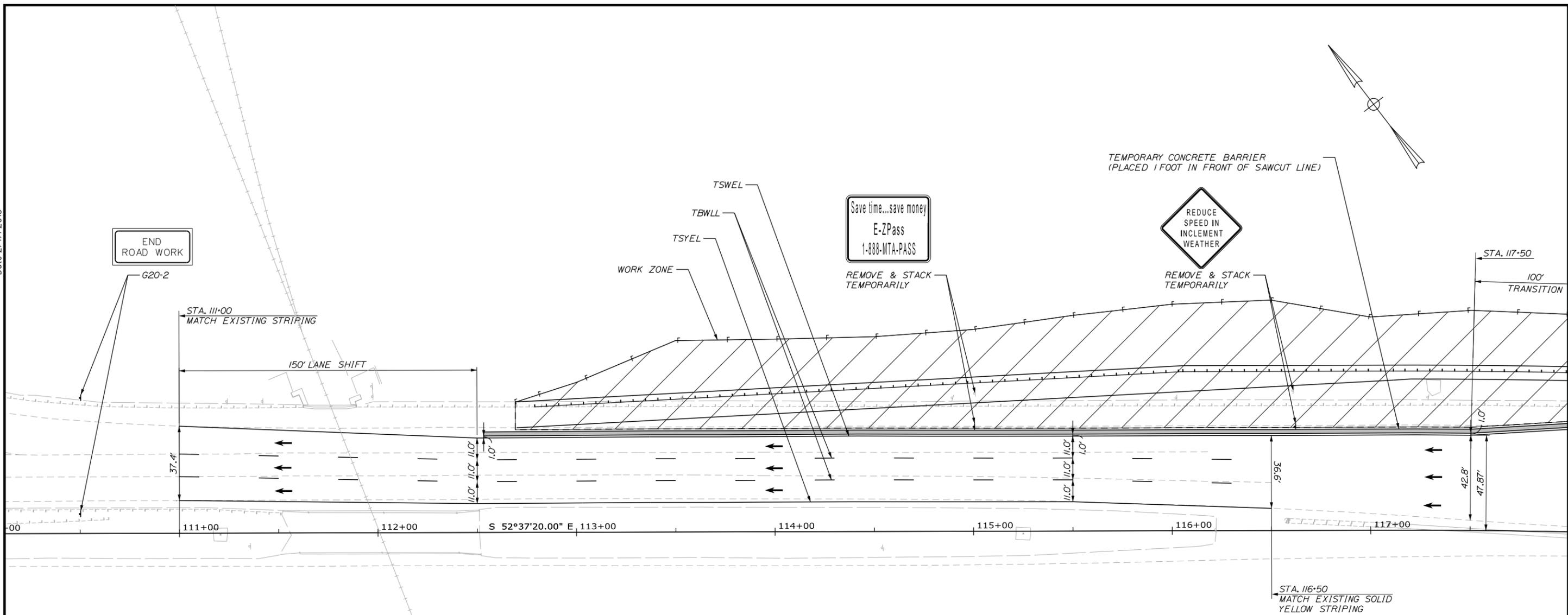
MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

INTERCHANGE 36
 SACO TOLL PLAZA LANE ADDITION
 TYPICAL SECTIONS
 (2 OF 2)

SHEET NUMBER:
 CONTRACT: 2015.06
 6 OF 54

Date: 2/17/2015

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NOTES:

1. TEMPORARY STRIPING SHALL BE TEMPORARY 6 INCH PAVEMENT MARKING TAPE.
2. CONTRACTOR SHALL REMOVE ALL EXISTING MARKINGS THAT CONFLICT WITH THE TEMPORARY MARKINGS.
3. CONTRACTOR SHALL COVER ALL CONFLICTING EXISTING SIGNS. WORK SHALL BE INCIDENTAL TO ITEM 652.35 CONSTRUCTION SIGNS.
4. WHERE NOTED ON PLANS CONTRACTOR SHALL REMOVE AND RESET EXISTING SIGNS TO BEHIND BARRIER FOR TEMPORARY LOCATION. SIGNS SHALL BE VISIBLE TO TRAFFIC. BOTTOM OF SIGN MUST BE ABOVE BOTTOM OF BARRIER. CONTRACTOR SHALL RESET SIGNS TO PERMANENT LOCATION. REFER TO SIGNING AND STRIPING PLANS.
5. WHERE NOTED, CONTRACTOR SHALL REMOVE AND STACK SIGNS TEMPORARILY. SIGNS SHALL BE STORED SAFELY AND NOT DAMAGED. WORK SHALL BE INCIDENTAL TO THE 645 ITEMS.

ITEM 526.306 TEMPORARY CONCRETE BARRIER, TYPE 1 - SUPPLIED BY AUTHORITY

| STATION | TO | STATION | LENGTH |
|----------------|----|----------------|--------|
| 112+53.49' LT. | | 119+27.57' LT. | 680 LF |

LEGEND

- TSWEL TEMPORARY SOLID WHITE EDGE LINE (6 INCH)
- TSWLL TEMPORARY SOLID WHITE LANE LINE (6 INCH)
- TSYEL TEMPORARY SOLID YELLOW EDGE LINE (6 INCH)
- TBWLL TEMPORARY BROKEN WHITE LANE LINE (6 INCH - 10' STRIPE & 30' GAP)



Designed by:



GORRILL PALMER
PO Box 1237
15 Shaker Road
Gray, Maine 04039
207.657.6910



**THE GOLD STAR
MEMORIAL HIGHWAY**

**INTERCHANGE 36
SACO TOLL PLAZA LANE ADDITION
MAINTENANCE OF TRAFFIC
PHASE 1**

| No. | Revision | By | Date |
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| CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE | | | | | |
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| | By | Date | | By | Date |
| Designed | LEM | 01/15 | Checked | DGE | 01/15 |
| Drawn | LAN | 01/15 | In Charge of | GAE | 01/15 |

MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

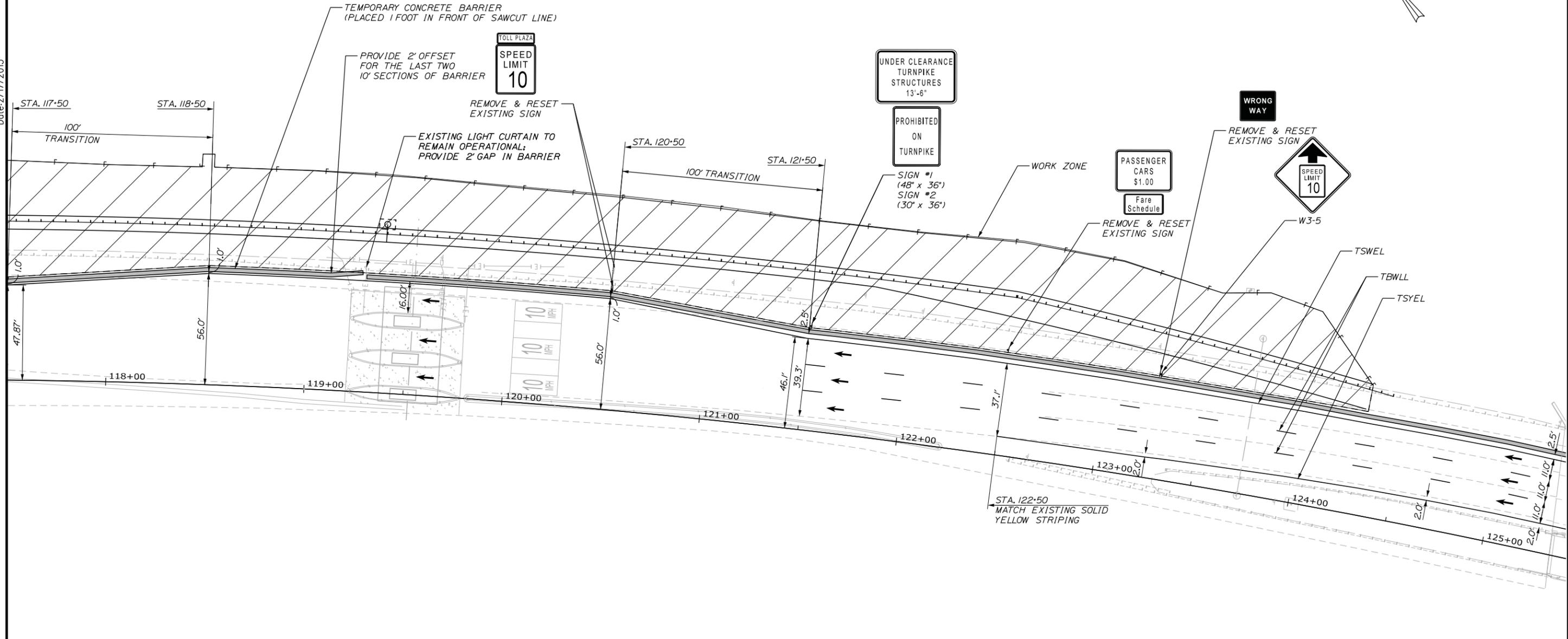
CONTRACT: 2015.06

SHEET NUMBER:

7 OF 54

Date: 2/17/2015

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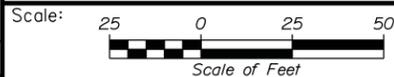


LEGEND

| | |
|-------|--|
| TSWEL | TEMPORARY SOLID WHITE EDGE LINE (6 INCH) |
| TSWLL | TEMPORARY SOLID WHITE LANE LINE (6 INCH) |
| TSYEL | TEMPORARY SOLID YELLOW EDGE LINE (6 INCH) |
| TBWLL | TEMPORARY BROKEN WHITE LANE LINE (6 INCH - 10' STRIPE & 30' GAP) |

ITEM 526.306 TEMPORARY CONCRETE BARRIER, TYPE I - SUPPLIED BY AUTHORITY

| STATION | TO | STATION | LENGTH |
|---------|---------|---------|----------------|
| 119+29 | 57' LT. | 127+48 | 50' LT. 830 LF |



Designed by:



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THE GOLD STAR
MEMORIAL HIGHWAY

INTERCHANGE 36
SACO TOLL PLAZA LANE ADDITION
MAINTENANCE OF TRAFFIC
PHASE 1

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| CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE | | | | | |
| Designed | By | Date | Checked | By | Date |
| | LEM | 01/15 | | DGE | 01/15 |
| Drawn | By | Date | In Charge of | By | Date |
| | LAN | 01/15 | | GAE | 01/15 |

MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

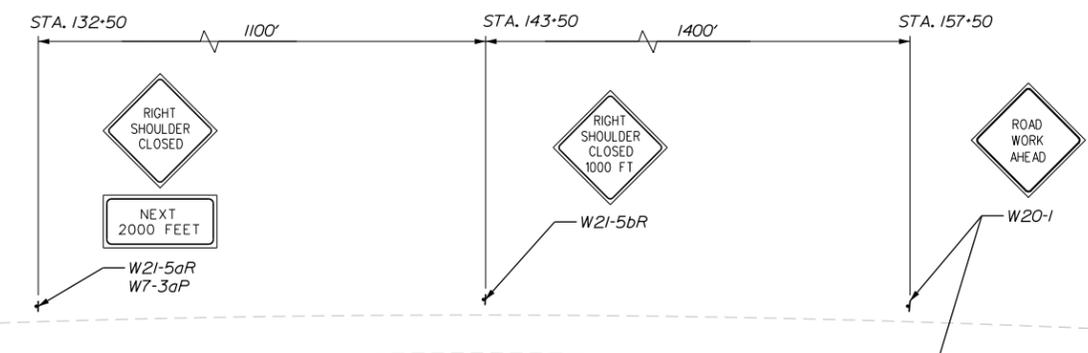
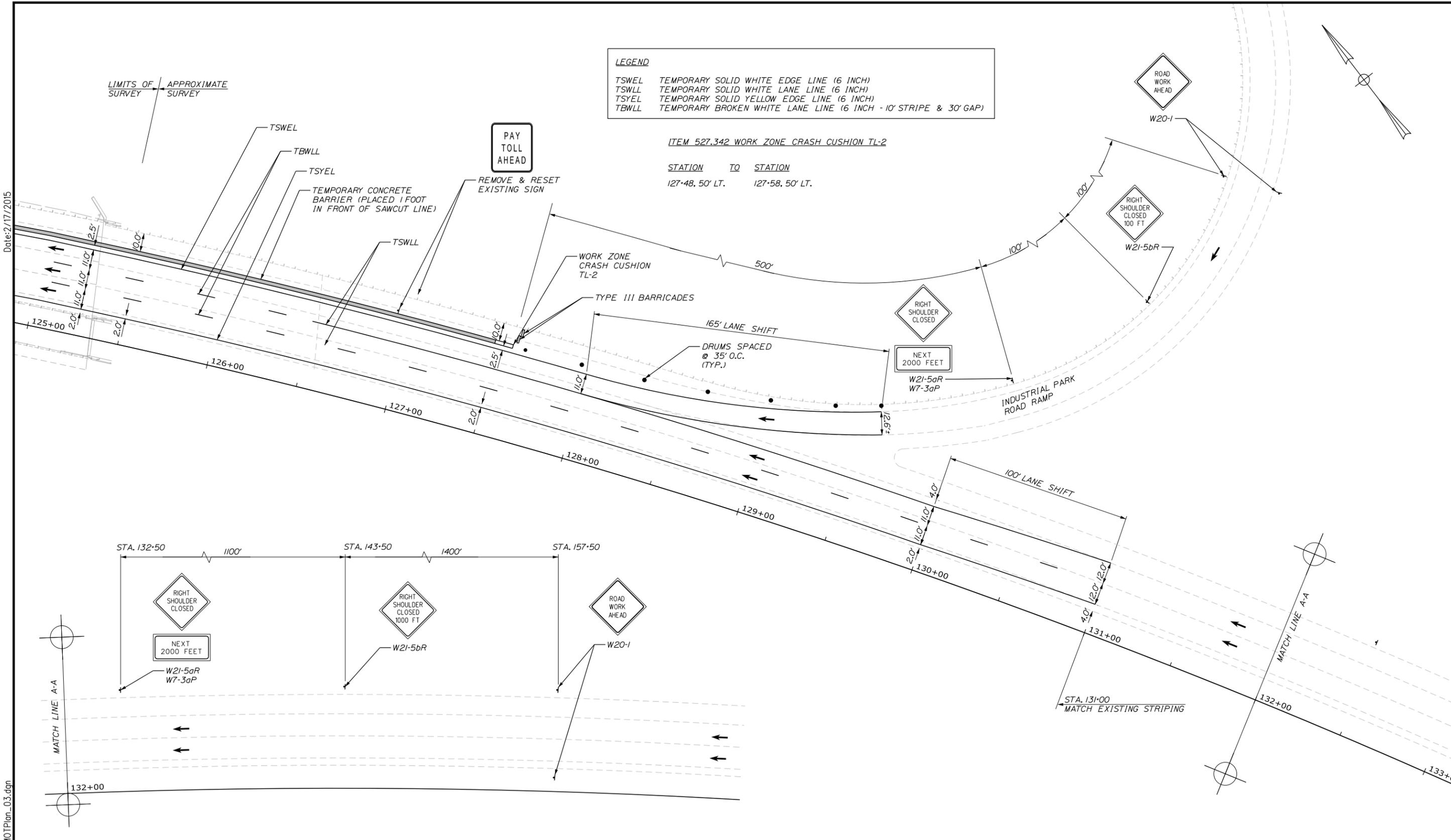
CONTRACT: 2015.06

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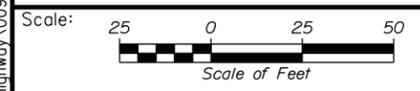
LEGEND
 TSWEL TEMPORARY SOLID WHITE EDGE LINE (6 INCH)
 TSWLL TEMPORARY SOLID WHITE LANE LINE (6 INCH)
 TSYEL TEMPORARY SOLID YELLOW EDGE LINE (6 INCH)
 TBWLL TEMPORARY BROKEN WHITE LANE LINE (6 INCH - 10' STRIPE & 30' GAP)

ITEM 527.342 WORK ZONE CRASH CUSHION TL-2
 STATION TO STATION
 127+48, 50' LT. 127+58, 50' LT.



Date: 2/17/2015

Filename: ...:\00_Highway\009_M01Plan_03.dgn



Designed by: **GORRILL PALMER**

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| CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE | | | | | |
| | By | Date | By | Date | |
| Designed | LEM | 01/15 | Checked | DGE | 01/15 |
| Drawn | LAN | 01/15 | In Charge of | GAE | 01/15 |

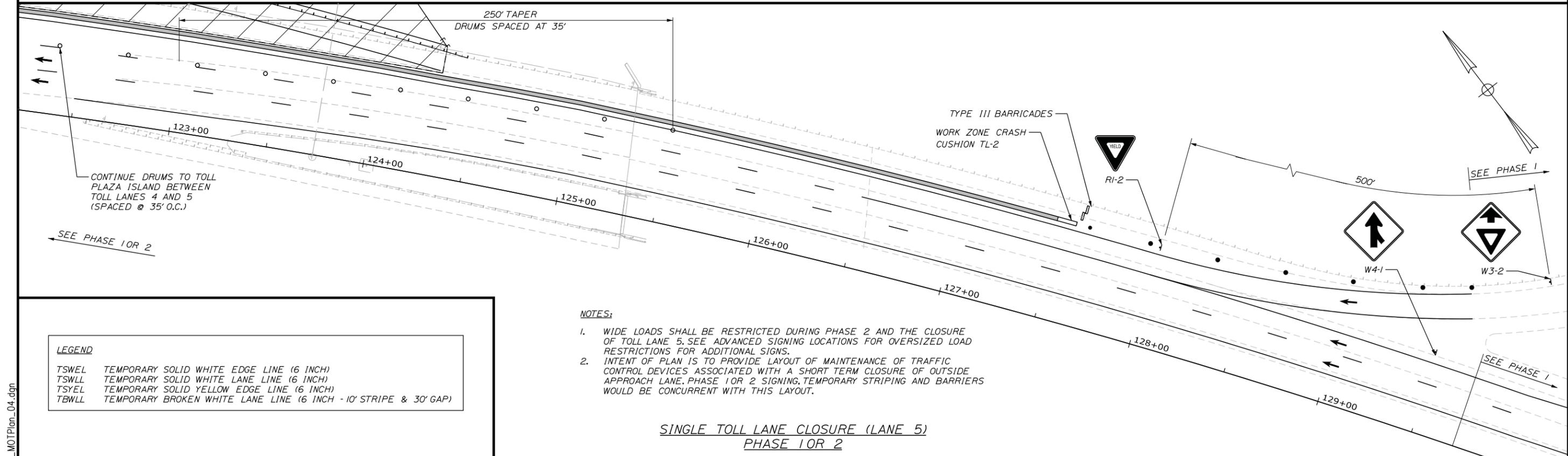
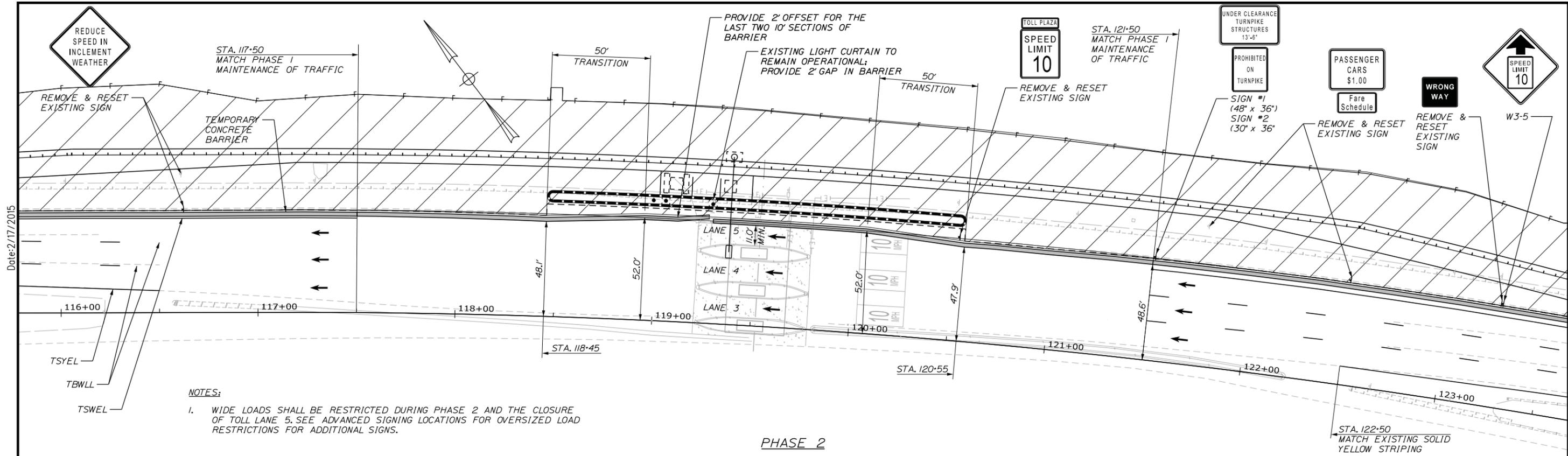
THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

INTERCHANGE 36
 SACO TOLL PLAZA LANE ADDITION
 MAINTENANCE OF TRAFFIC
 PHASE 1

CONTRACT: 2015.06

SHEET NUMBER: 9 OF 54



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Scale of Feet

| No. | Revision | By | Date |
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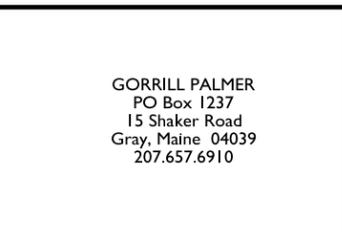
Designed by:

GP GORRILL PALMER

GORRILL PALMER
PO Box 1237
15 Shaker Road
Gray, Maine 04039
207.657.6910

CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE

| | By | Date | | By | Date |
|----------|-----|-------|--------------|-----|-------|
| Designed | LEM | 01/15 | Checked | DGE | 01/15 |
| Drawn | LAN | 01/15 | In Charge of | GAE | 01/15 |



THE GOLD STAR MEMORIAL HIGHWAY

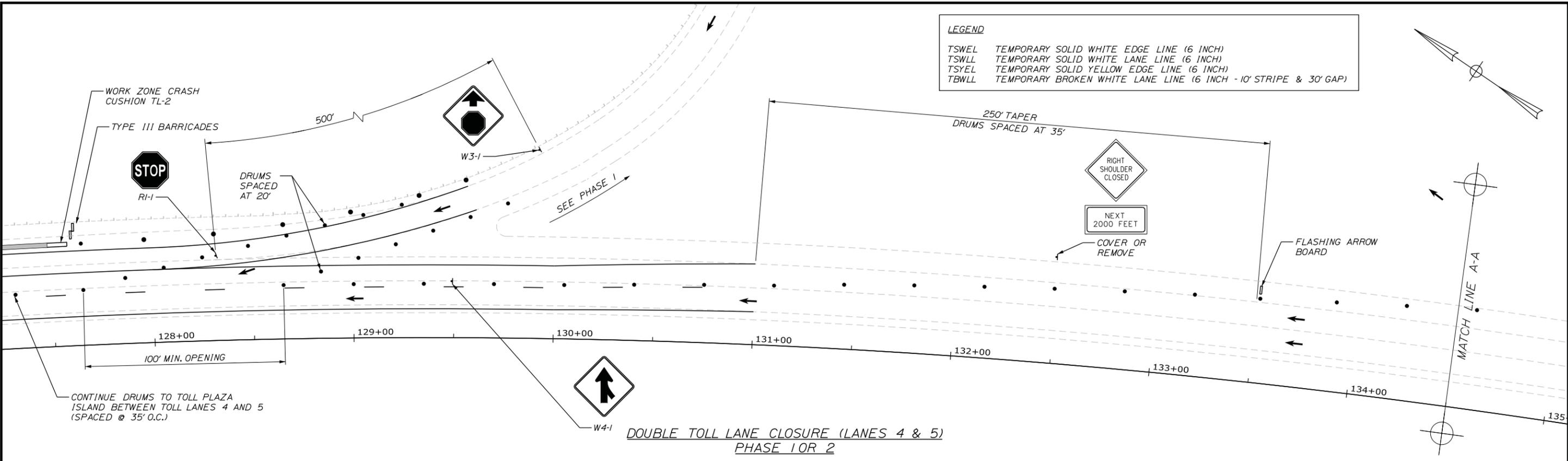
MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

INTERCHANGE 36
SACO TOLL PLAZA LANE ADDITION
MAINTENANCE OF TRAFFIC
PHASE 2 & TOLL LANE CLOSURE

SHEET NUMBER:
CONTRACT: 2015.06

10 OF 54

Date: 2/18/2015

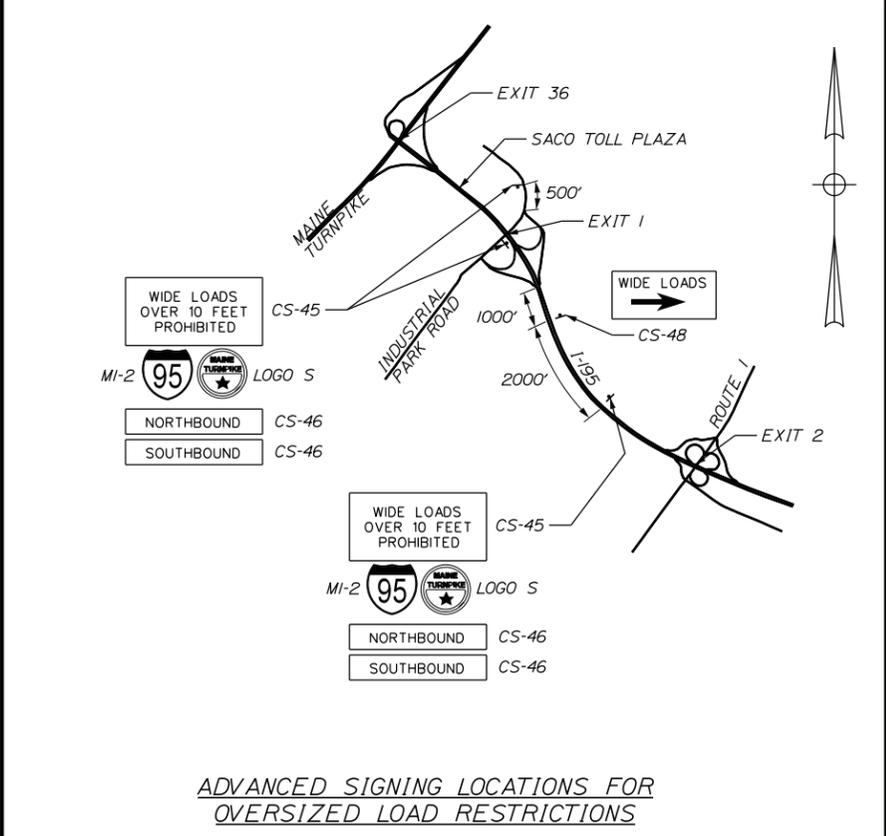
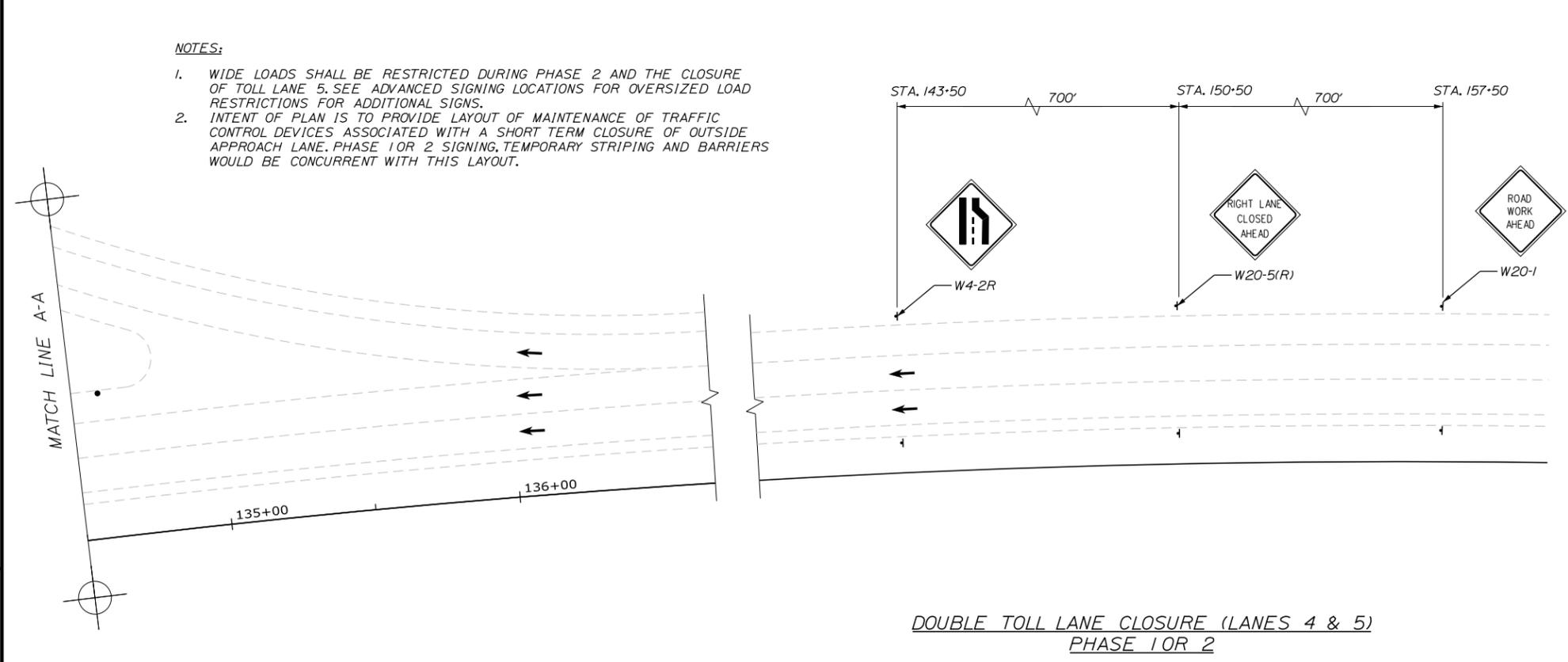


LEGEND

| | |
|-------|--|
| TSWEL | TEMPORARY SOLID WHITE EDGE LINE (6 INCH) |
| TSWLL | TEMPORARY SOLID WHITE LANE LINE (6 INCH) |
| TSYEL | TEMPORARY SOLID YELLOW EDGE LINE (6 INCH) |
| TBWLL | TEMPORARY BROKEN WHITE LANE LINE (6 INCH - 10' STRIPE & 30' GAP) |

NOTES:

1. WIDE LOADS SHALL BE RESTRICTED DURING PHASE 2 AND THE CLOSURE OF TOLL LANE 5. SEE ADVANCED SIGNING LOCATIONS FOR OVERSIZED LOAD RESTRICTIONS FOR ADDITIONAL SIGNS.
2. INTENT OF PLAN IS TO PROVIDE LAYOUT OF MAINTENANCE OF TRAFFIC CONTROL DEVICES ASSOCIATED WITH A SHORT TERM CLOSURE OF OUTSIDE APPROACH LANE. PHASE 1 OR 2 SIGNING, TEMPORARY STRIPING AND BARRIERS WOULD BE CONCURRENT WITH THIS LAYOUT.



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| No. | Revision | By | Date |
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Designed by:

GORRILL PALMER

CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE

| | By | Date | | By | Date |
|----------|-----|-------|--------------|-----|-------|
| Designed | LEM | 02/15 | Checked | DGE | 02/15 |
| Drawn | LAN | 02/15 | In Charge of | GAE | 02/15 |

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THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

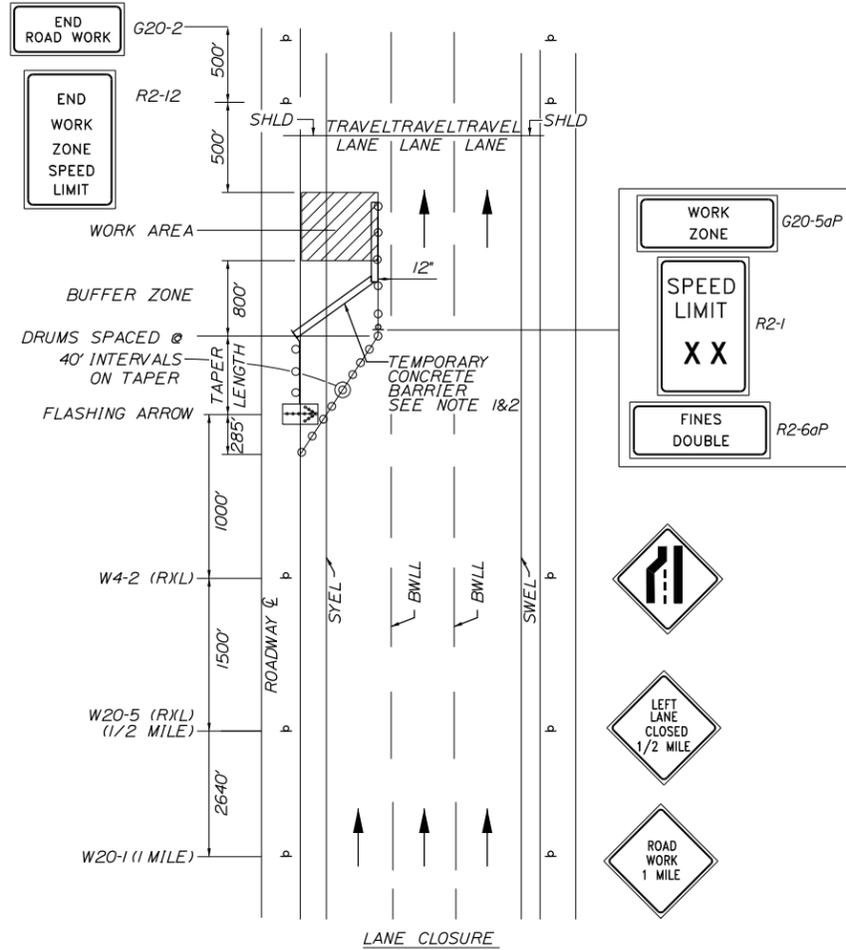
INTERCHANGE 36
SACO TOLL PLAZA LANE ADDITION
MAINTENANCE OF TRAFFIC
TOLL LANE CLOSURE

SHEET NUMBER: 11 OF 54

CONTRACT: 2015.06

Date: 2/18/2015

Filename: ...000\HIGHWAY\MSTA\006_MOT_01.dgn



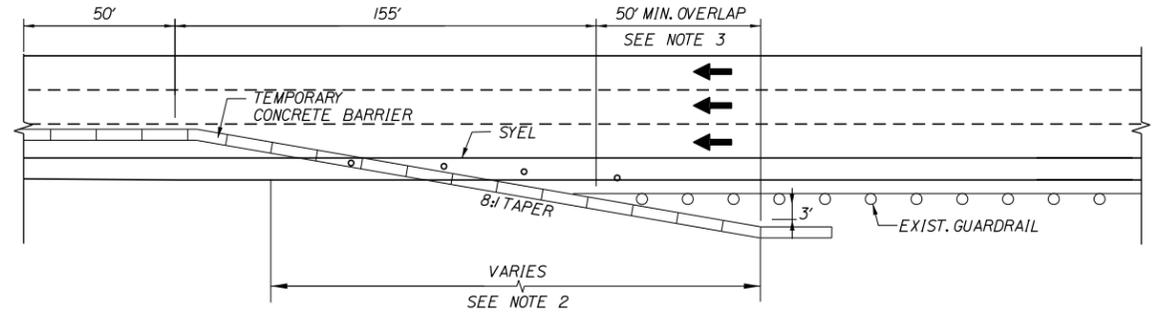
SINGLE LANE CLOSURE

NOT TO SCALE

1. THE INSTALLATION OF TEMPORARY CONCRETE BARRIER, AND/OR BARRELS, SHALL BE IN ACCORDANCE WITH SECTION 652 OF THE CONTRACT SPECIFICATIONS.
2. TEMPORARY CONCRETE BARRIER IS REQUIRED WHEN THE LANE CLOSURE DURATION EXCEEDS ONE DAYLIGHT PERIOD.

| LOCATION | WORK ZONE SPEED | TAPER LENGTH |
|--------------|-----------------|--------------|
| I-95 ARUNDEL | 50 MPH | 840' |
| I-95 SACO | 35 MPH | 450' |

LEGEND:
 SWEL = SINGLE WHITE EDGE LINE
 BWLL = BROKEN WHITE LANE LINE
 SYEL = SINGLE YELLOW EDGE LINE

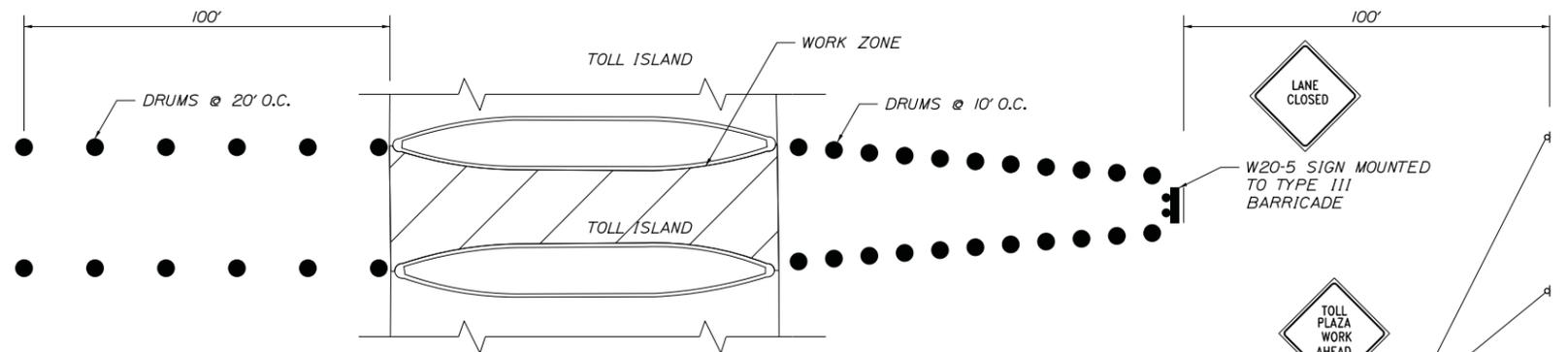


CONCRETE BARRIER / GUARDRAIL OVERLAP DETAIL

NOT TO SCALE

NOTES:

1. BARRIER ENDS SHALL BE LAPPED BEHIND GUARDRAIL.
2. 8:1 TAPERED BARRIER LENGTH IS DEPENDANT ON THE LOCATION OF THE BARRIER RELATIVE TO SHOULDERS OR LANES.
3. IF THE 50' MIN. LENGTH OF OVERLAP CAN NOT BE MET THEN THE EXISTING GUARDRAIL END MUST BE ANCHORED IN ACCORDANCE WITH DRAWING SEW02a IN THE AASHTO-AGC-ARBTA JOINT COMMITTEE TASK FORCE 13 REPORT, DRAFTED MAY 1995.



TOLL LANE CLOSURE

NOT TO SCALE

NOTES:

1. CONTRACTOR SHALL MAINTAIN ACCESS AT ALL ACTIVE TOLL BOOTHS FOR MTA EMPLOYEES AND PLACE DRUMS TO BLOCK MTA EMPLOYEES FROM ACCESSING THE WORK ZONE.
2. CANOPY LIGHT ABOVE CLOSED LANE SHALL BE RED.

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| Scale: AS NOTED | | | |
| No. | Revision | By | Date |
| | | | |

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| Designed by: | | | | | |
| CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE | | | | | |
| | By | Date | | By | Date |
| Designed | TFD | 02/15 | Checked | GAE | 02/15 |
| Drawn | PZA | 02/15 | In Charge of | GAE | 02/15 |

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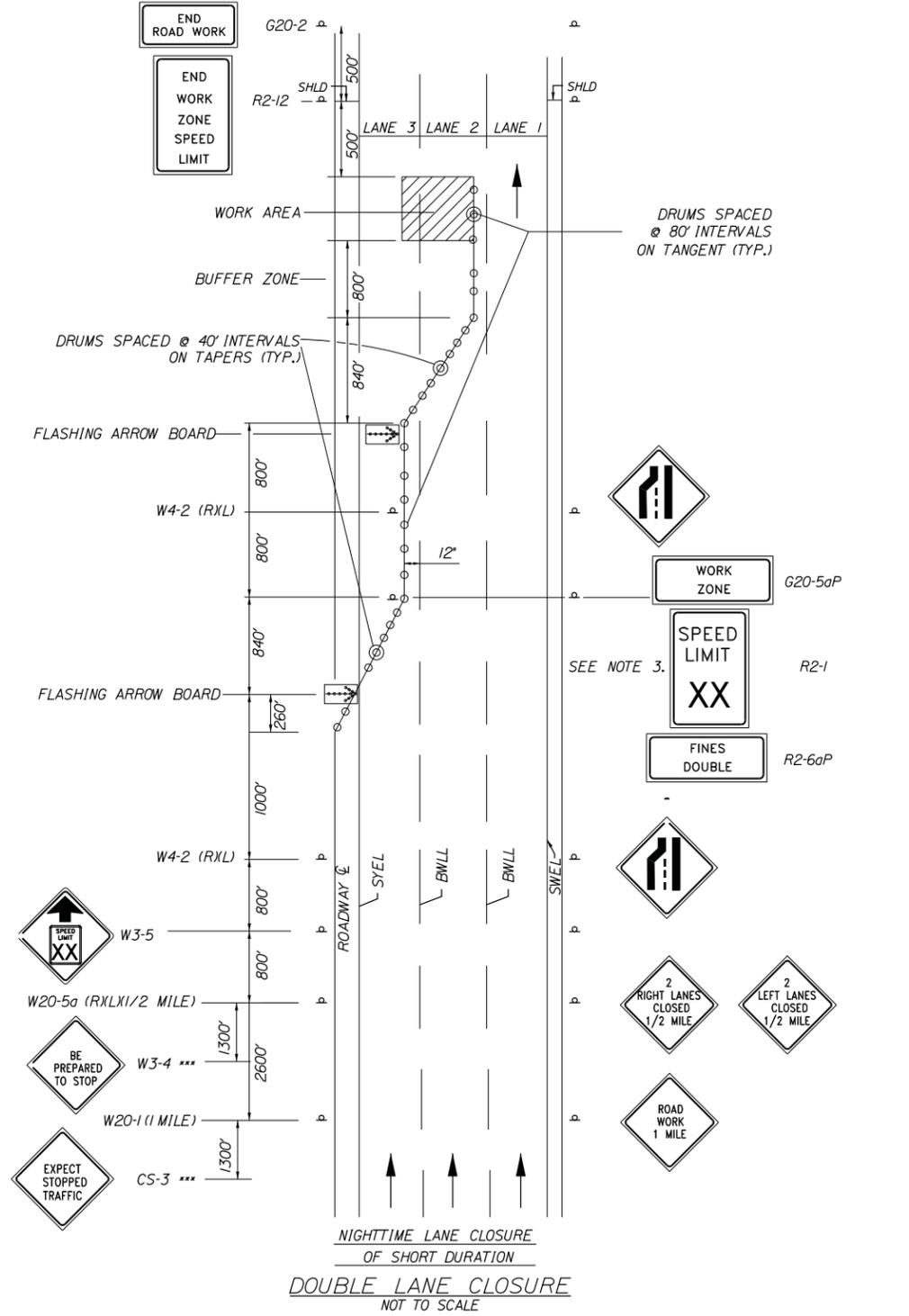
THE GOLD STAR MEMORIAL HIGHWAY

INTERCHANGE 36
 SACO TOLL PLAZA LANE ADDITION
 MAINTENANCE OF TRAFFIC
 (1 OF 4)

SHEET NUMBER:
 CONTRACT: 2015.06
 12 OF 54

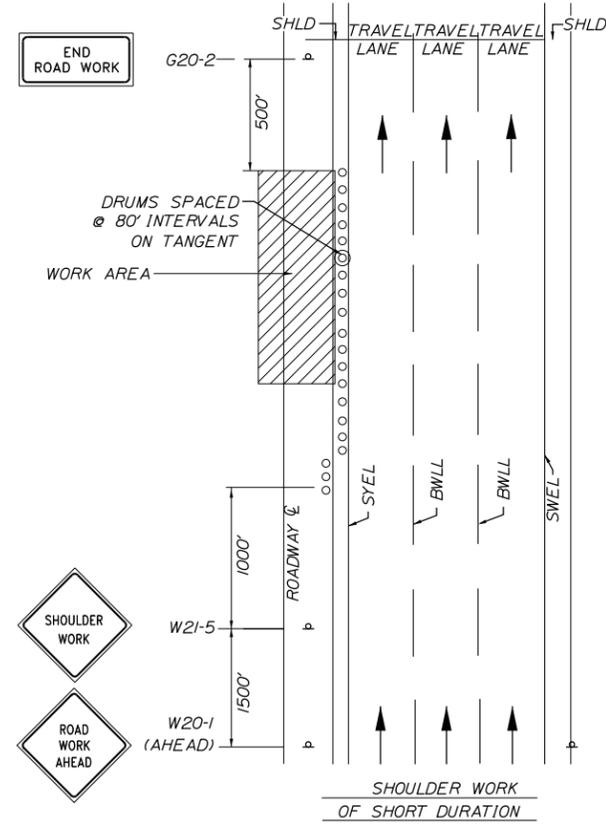
Date: 2/18/2015

Filename: ...00\HIGHWAY\MSTA\007_MOT_02.dgn



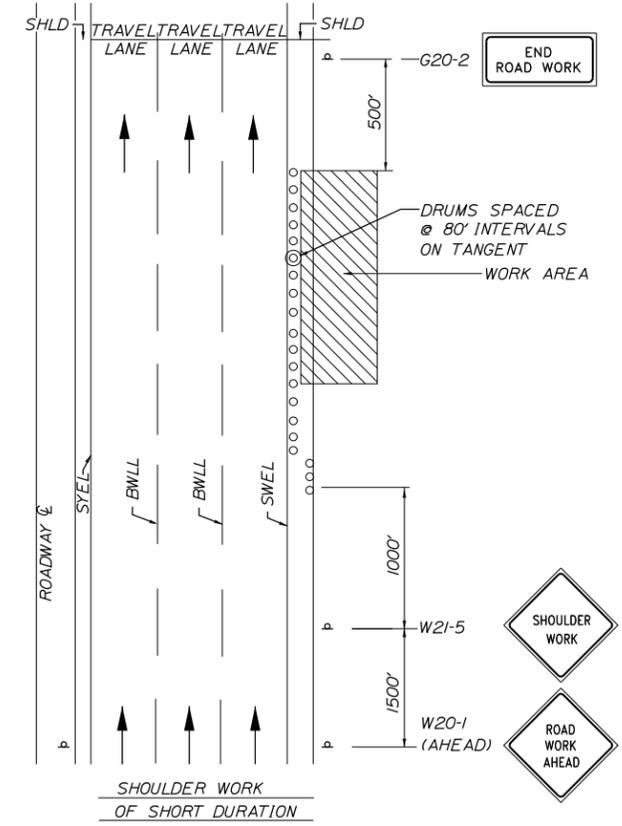
DOUBLE LANE CLOSURE
NOT TO SCALE

1. DETAIL SHALL APPLY FOR I-95 CONSTRUCTION (NORTHBOUND AND SOUTHBOUND).
2. NIGHTTIME CLOSURE TIMES SHALL BE IN ACCORDANCE WITH SECTION 652 OF THE CONTRACT SPECIFICATIONS.
3. SEE SINGLE LANE CLOSURE NOTES FOR REDUCED SPEED SIGNS, TRAFFIC STOPPAGE SIGNS, SIGN SPACING AND OTHER PERTINENT INFORMATION.
4. FOR EASEL SET UP ONLY, THIS SIGN IS NOT BRACKETED. ONE SIGN ASSEMBLY IS PLACED AT THE END OF THE TAPER.



MEDIAN SHOULDER WORK
NOT TO SCALE

1. DETAIL SHALL APPLY FOR I-95 SHOULDER WORK CONSTRUCTION.
2. THE W20-1 AND G20-2 SIGNS ARE NOT REQUIRED IF THE SHOULDER CLOSURE IS WITHIN A PREVIOUSLY ESTABLISHED WORK ZONE.



SHOULDER WORK
NOT TO SCALE

1. DETAIL SHALL APPLY FOR I-95 SHOULDER WORK CONSTRUCTION.
2. THE W20-1 AND G20-2 SIGNS ARE NOT REQUIRED IF THE SHOULDER CLOSURE IS WITHIN A PREVIOUSLY ESTABLISHED WORK ZONE.

| Scale: AS NOTED | | | |
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| No. | Revision | By | Date |
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Designed by:

CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE

| | | | | | |
|----------|-----|-------|--------------|-----|-------|
| Designed | TFD | 02/15 | Checked | GAE | 02/15 |
| Drawn | PZA | 02/15 | In Charge of | GAE | 02/15 |

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THE GOLD STAR MEMORIAL HIGHWAY

INTERCHANGE 36
SACO TOLL PLAZA LANE ADDITION
MAINTENANCE OF TRAFFIC
(2 OF 4)

SHEET NUMBER:
CONTRACT: 2015.06

13 OF 54

Date: 2/18/2015

Filename: ...00\HIGHWAY\MSTA\008_MOT_03.dgn

| ID NUMBER | SIZE OF SIGN | | TEXT | TEXT DIMENSIONS (INCHES) | | | NUMBER OF SIGNS REQUIRED | COLOR | | BORDER RADIUS | AREA IN SQUARE FEET | NOTES |
|-----------|--------------|--------|------------------------------------|--|------------------|-----------------|--------------------------|---|---------------|---------------|---------------------|-------|
| | WIDTH | HEIGHT | | LETTER HEIGHT | VERTICAL SPACING | ARROW RTE. MKR. | | BACK-GROUND | LEGEND BORDER | | | |
| CS-3 | 48" | 48" | | 6" 6" 6" | 4" 4" | | 4 | ORANGE | BLACK | | 16.00 (64.00) | |
| CS-45 | | | WIDE LOADS OVER 10 FEET PROHIBITED | 8" C 8" C 8" C | 6" 6" 6" | | 3 | ORANGE | BLACK | | 32.00 (96.00) | |
| CS-46 | | | NORTHBOUND SOUTHBOUND | 8" C | 5" 5" | | 6 | ORANGE | BLACK | | 12.00 (72.00) | |
| CS-48 | | | WIDE LOADS | 8" D | | 9"x36" ø 0" | 1 | ORANGE | BLACK | | 15.00 (15.00) | |
| CS-52 | 48" | 48" | | 6" 6" 6" | 4" 4" 4" | | 2 | ORANGE | BLACK | | 16.00 (32.00) | |
| LOGO S | 24" | 24" | | SEE MAINE TURNPIKE SHIELD DETAIL | | | 3 | SEE MAINE TURNPIKE SHIELD DETAIL | | | 4.00 (12.00) | |
| MI-2 | 24" | 24" | | TEXT DIMENSIONS SHALL CONFORM TO 2004 EDITION - STANDARD HIGHWAY SIGNS - 2012 SUPPLEMENT | | | 3 | COLORS SHALL CONFORM TO 2004 EDITION - STANDARD HIGHWAY SIGNS - 2012 SUPPLEMENT | | | 4.00 (12.00) | |
| G20-2 | 48" | 24" | END ROAD WORK | | | | 7 | | | | 8.00 (56.00) | |
| G20-5aP | 48" | 24" | WORK ZONE | | | | 4 | | | | 8.00 (32.00) | |
| RI-1 | 48" | 48" | | | | | 1 | | | | 9.00 (9.00) | |

| ID NUMBER | SIZE OF SIGN | | TEXT | TEXT DIMENSIONS (INCHES) | | | NUMBER OF SIGNS REQUIRED | COLOR | | BORDER RADIUS | AREA IN SQUARE FEET | NOTES |
|-----------|--------------|--------|---------------------------|--|------------------|-----------------|--------------------------|---|---------------|---------------|---------------------|-------|
| | WIDTH | HEIGHT | | LETTER HEIGHT | VERTICAL SPACING | ARROW RTE. MKR. | | BACK-GROUND | LEGEND BORDER | | | |
| RI-2 | 60" | 60" | | TEXT DIMENSIONS SHALL CONFORM TO 2004 EDITION - STANDARD HIGHWAY SIGNS - 2012 SUPPLEMENT | | | 1 | COLORS SHALL CONFORM TO 2004 EDITION - STANDARD HIGHWAY SIGNS - 2012 SUPPLEMENT | | | 4.50 (4.50) | |
| R2-1 (50) | 48" | 60" | SPEED LIMIT XX | | | | 4 | | | | 20.00 (80.00) | |
| R2-6aP | 48" | 24" | FINES DOUBLE | | | | 4 | | | | 8.00 (32.00) | |
| R2-12 | 36" | 54" | END WORK ZONE SPEED LIMIT | | | | 4 | | | | 13.50 (54.00) | |
| W3-1 | 48" | 48" | | | | | 1 | | | | 16.00 (16.00) | |
| W3-2 | 48" | 48" | | | | | 1 | | | | 16.00 (16.00) | |
| W3-4 | 48" | 48" | BE PREPARED TO STOP | | | | 4 | | | | 16.00 (64.00) | |
| W3-5 (50) | 48" | 48" | | | | | 4 | | | | 16.00 (64.00) | |
| W4-1 | 48" | 48" | | | | | 1 | | | | 16.00 (16.00) | |
| W4-2 (L) | 48" | 48" | | | | | 12 | | | | 16.00 (192.00) | |

Scale: AS NOTED

| No. | Revision | By | Date |
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| | | | |

Designed by:

CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE

| | By | Date | | By | Date |
|----------|-----|-------|--------------|-----|-------|
| Designed | TFD | 02/15 | Checked | GAE | 02/15 |
| Drawn | PZA | 02/15 | In Charge of | GAE | 02/15 |

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THE GOLD STAR MEMORIAL HIGHWAY

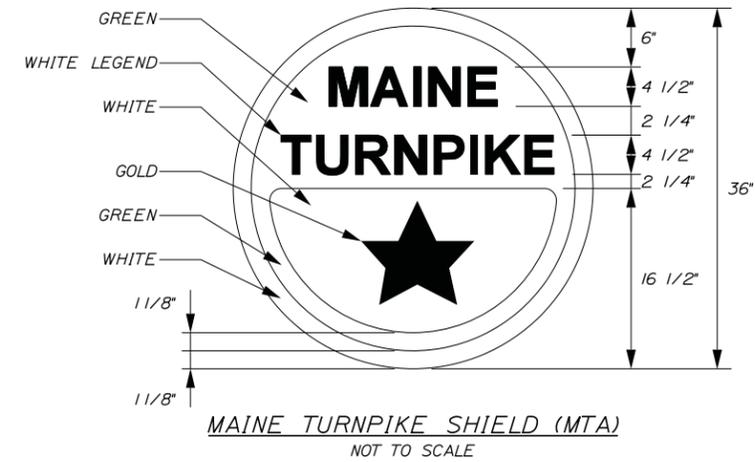
INTERCHANGE 36
 SACO TOLL PLAZA LANE ADDITION
 MAINTENANCE OF TRAFFIC
 (3 OF 4)

SHEET NUMBER:
 CONTRACT: 2015.06
 14 OF 54

Date: 2/18/2015

Filename: ... \HIGHWAY\MSTA\008a_MOT_04.dgn

| ID NUMBER | SIZE OF SIGN | | TEXT | TEXT DIMENSIONS (INCHES) | | | NUMBER OF SIGNS REQUIRED | COLOR | | BORDER RADIUS | AREA IN SQUARE FEET | NOTES |
|----------------------------|--------------|--------|---|--|------------------|-----------------|--------------------------|---|---------------|---------------|---------------------------------------|-------|
| | WIDTH | HEIGHT | | LETTER HEIGHT | VERTICAL SPACING | ARROW RTE. MKR. | | BACK-GROUND | LEGEND BORDER | | | |
| W4-2 (R) | 48" | 48" |  | TEXT DIMENSIONS SHALL CONFORM TO 2004 EDITION - STANDARD HIGHWAY SIGNS - 2012 SUPPLEMENT | | | 2 | COLORS SHALL CONFORM TO 2004 EDITION - STANDARD HIGHWAY SIGNS 2012 SUPPLEMENT | | | 16.00 (32.00) | |
| W7-3aP | 36" | 30" |  | | | | 2 | | | | 7.50 (15.00) | |
| W20-1 (AHEAD) (1 MILE) | 48" | 48" |  | | | | 8 6 | | | | 16.00 (128.00) 16.00 (96.00) | |
| W20-5 | 48" | 48" |  | | | | 1 | | | | 16.00 (16.00) | |
| W20-5 (R) | 48" | 48" |  | | | | 1 | | | | 16.00 (16.00) | |
| W20-5 (L) (1/2 MILE) | 48" | 48" |  | | | | 8 | | | | 16.00 (128.00) | |
| W20-5a (L) | 48" | 48" |  | | | | 4 | | | | 16.00 (64.00) | |
| W21-5 | 48" | 48" |  | | | | 2 | | | | 16.00 (32.00) | |
| W21-5aR | 48" | 48" |  | | | | 2 | | | | 16.00 (32.00) | |
| W21-5bR (100 FT) (1000 FT) | 48" | 48" |  | | | | 1 1 | | | | 16.00 (16.00) 16.00 (16.00) | |



Scale: AS NOTED

| No. | Revision | By | Date |
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Designed by:



CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE

| | By | Date | | By | Date |
|----------|-----|-------|--------------|-----|-------|
| Designed | TFD | 02/15 | Checked | GAE | 02/15 |
| Drawn | PZA | 02/15 | In Charge of | GAE | 02/15 |

STANTEC CONSULTING SERVICES INC.
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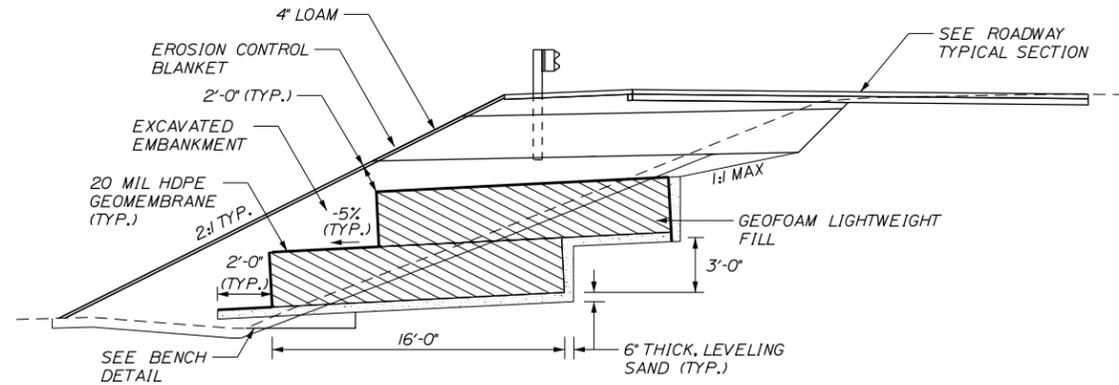
**THE GOLD STAR
MEMORIAL HIGHWAY**

INTERCHANGE 36
SACO TOLL PLAZA LANE ADDITION
MAINTENANCE OF TRAFFIC
(4 OF 4)

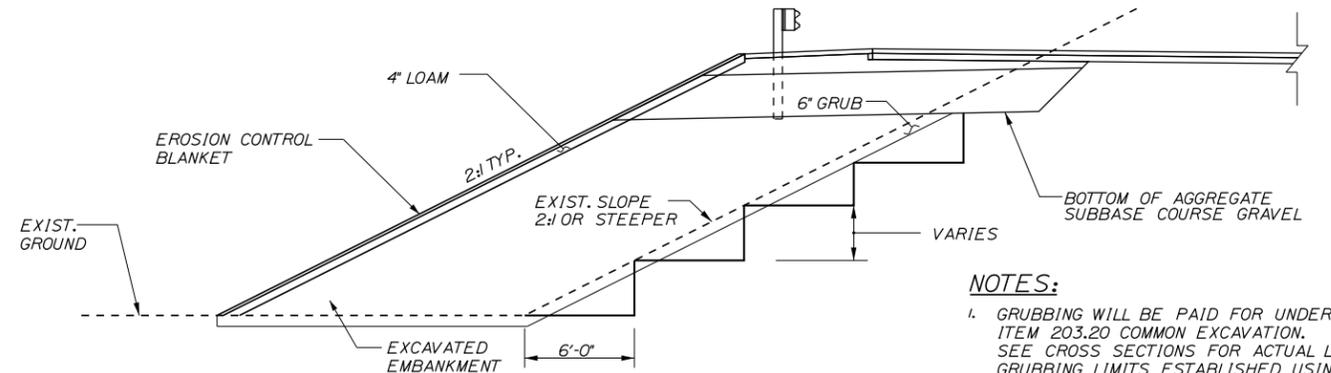
SHEET NUMBER:
CONTRACT: 2015.06
15 OF 54

Date: 2/18/2015

Filename: ...000.HIGHWAY\MSTA\009_Det_01.dgn



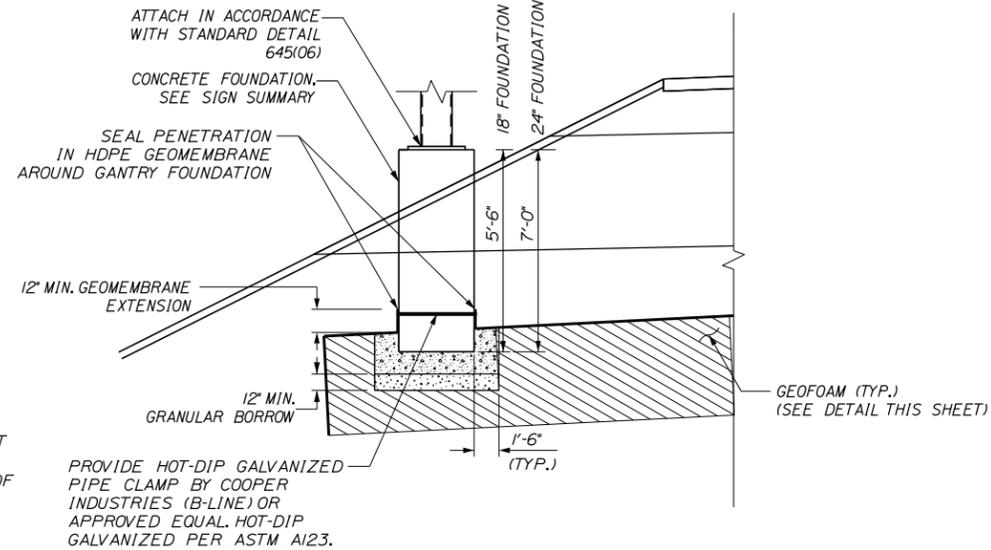
GEOFOAM FILL SECTION
NTS



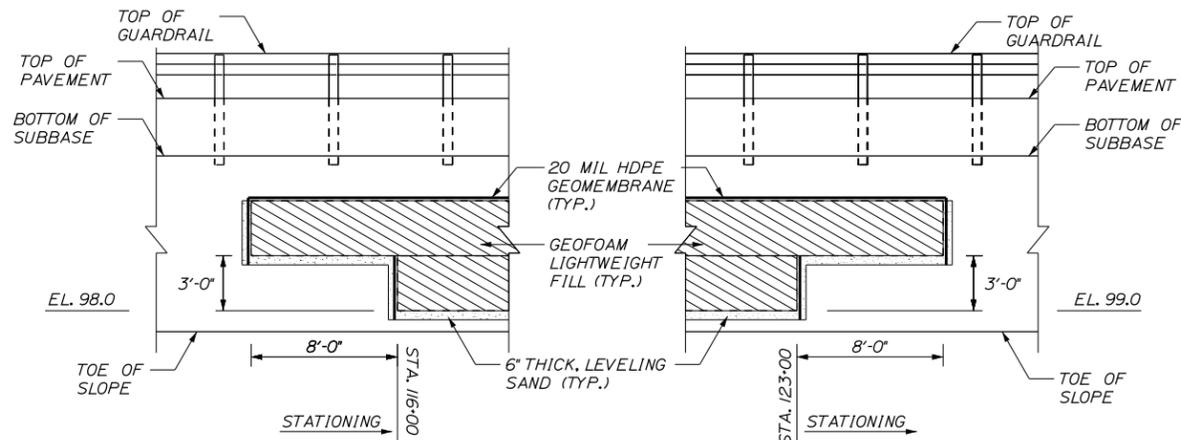
BENCH DETAIL
NTS

NOTES:

- GRUBBING WILL BE PAID FOR UNDER ITEM 203.20 COMMON EXCAVATION. SEE CROSS SECTIONS FOR ACTUAL LIMITS. GRUBBING LIMITS ESTABLISHED USING MAINE DOT HIGHWAY DESIGN GUIDE, DECEMBER 2004, CHAPTER 14 PROCEDURES.
- EXCAVATION FOR BENCHING TO RECEIVE EMBANKMENTS SHALL BE PAID INCIDENTAL TO ITEM 203.20 COMMON EXCAVATION.
- BENCHING IS REQUIRED WHERE FILL IS TO BE PLACED ON EXISTING EMBANKMENTS WITH SLOPES 2:1 OR STEEPER.
- PLACEMENT OF EMBANKMENT WILL REQUIRE SPECIAL PROCEDURES TO PREVENT DAMAGE TO HDPE GEOMEMBRANE. THE EMBANKMENT WITHIN 6 INCHES OF THE HDPE SHALL HAVE NO CRUSHED OR SHATTERED ROCK AND ANY STONES SHALL BE LESS THAN 1"



PERMANENT SIGN FOUNDATION DETAIL
NTS

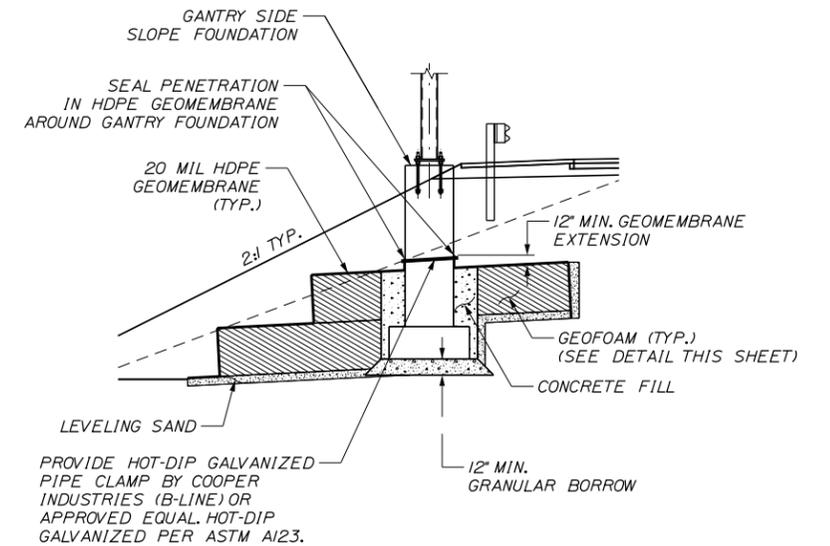


BEGIN TRANSITION - GEOFOAM FILL
NTS

END TRANSITION - GEOFOAM FILL
NTS

NOTES:

- THE TOP OF THE GEOFOAM SHALL BE NO CLOSER THAN 6" BELOW THE ROADWAY SURFACE.
- BETWEEN STA 116+00 AND STA. 120+50 THE BOTTOM OF GEOFOAM SHALL BE SET AT ELEVATION 98.0. BETWEEN STA 120+50 AND STA. 123+00 THE BOTTOM OF GEOFOAM SHALL BE SET AT ELEVATION 99.0. SEE CROSS SECTIONS FOR MORE INFORMATION.
- A TRANSITION ZONE SHALL BE PROVIDED 8' BEFORE AND AFTER THE BEGINNING AND END OF THE GEOFOAM CONSTRUCTION TO PREVENT ABRUPT SETTLING. THIS TRANSITION ZONE SHALL BE ONE COURSE OF BLOCK SET AT THE UPPER BLOCK ELEVATION.
- PLACEMENT OF EMBANKMENT WILL REQUIRE SPECIAL PROCEDURES TO PREVENT DAMAGE TO HDPE GEOMEMBRANE. THE EMBANKMENT WITHIN 6 INCHES OF THE HDPE SHALL HAVE NO CRUSHED OR SHATTERED ROCK AND ANY STONES SHALL BE LESS THAN 1"



GANTRY FOUNDATION DETAIL
NTS

Scale: AS NOTED

Designed by:



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**THE GOLD STAR
MEMORIAL HIGHWAY**

**INTERCHANGE 36
SACO TOLL PLAZA LANE ADDITION
ROADWAY DETAILS**

| No. | Revision | By | Date |
|-----|----------|----|------|
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| CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE | | | | | |
|--|-----|-------|--------------|-----|-------|
| | By | Date | | By | Date |
| Designed | TFD | 02/15 | Checked | GAE | 02/15 |
| Drawn | PZA | 02/15 | In Charge of | GAE | 02/15 |

MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

CONTRACT: 2015.06

SHEET NUMBER:

16 OF 54

Date: 2/18/2015

Filename: ...000\HIGHWAY\MSTAD\010_Boring.dgn

| Test Boring Designation | Exploration Location | | | | Ground Surface Elevation | Approximate Encountered Thickness (ft) | | | | | Exploration Depth (ft) | Top of Rock/Refusal | | Depth to Water (ft) | Remarks | |
|-------------------------|----------------------|-------------|----|------------|--------------------------|--|------------------|------|-------------|-------------|------------------------|---------------------|-------|---------------------|---------|--|
| | Station | Offset (ft) | | Northing | | Easting | Pavement/Topsoil | Fill | Marine Sand | Marine Clay | | Glacial Till | Depth | | | Elevation |
| B-1A | 116+00 | 48 | LT | 252,244.78 | 2,872,147.70 | 110.7 | 0.6 | 5.3 | -- | -- | -- | 5.3 | NE | NE | NE | Test boring drilled to determine thickness of the pavement and base course section in travel lane. |
| B-1B | 118+08 | 58 | LT | 252,124.60 | 2,878,319.46 | 109.9 | 0.3 | 20.7 | 6.0 | 138.7 | 9.8 | 175.5 | NE | NE | 22.5 | |
| B-2 | 118+00 | 100 | LT | 252,162.46 | 2,878,339.39 | 97.4 | 0.5 | 5.5 | 7.0 | 19.0 | -- | 32.0 | NE | NE | 7.0 | |
| B-3 | 121+50 | 57 | LT | 251,894.40 | 2,878,579.16 | 110.8 | 0.5 | 12.5 | -- | 56.0 | -- | 72.6 | 69.1 | 41.4 | 23.0 | |

Notes:

1. Coordinated (northing and easting) are in feet and reference the NAD 83 (96) ME2000 West Zone coordinate system. Elevations are in feet and reference the North American Vertical Datum 1988.
2. Ground survey and surface elevations provided by Titcomb Associates.
3. The test borings were drilled by New England Boring during the period from August 18 through August 19, 2014 under the supervision of Stanlec personnel.
4. "NE" indicated strata/refusal/groundwater not encountered.
5. Top of rock/refusal depths/elevations correspond to confirmed, probable or possible top of bedrock. See Boring and Test Pit Logs for additional information on the nature of refusal surfaces.

| | | | |
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| Scale: | | | |
| AS NOTED | | | |
| No. | Revision | By | Date |
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| Designed by: | | | | | |
|  | | | | | |
| CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE | | | | | |
| | By | Date | | By | Date |
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**THE GOLD STAR
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

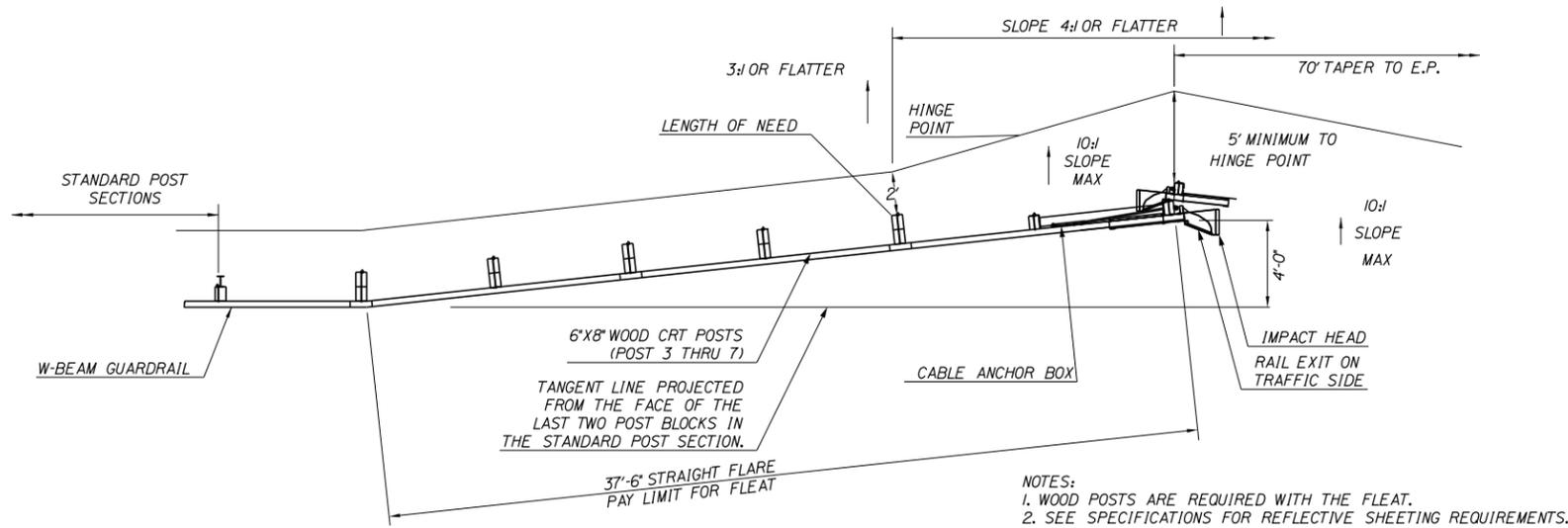
INTERCHANGE 36
 SACO TOLL PLAZA LANE ADDITION
 SUBSURFACE EXPLORATION
 SUMMARY

SHEET NUMBER:
 17 OF 54

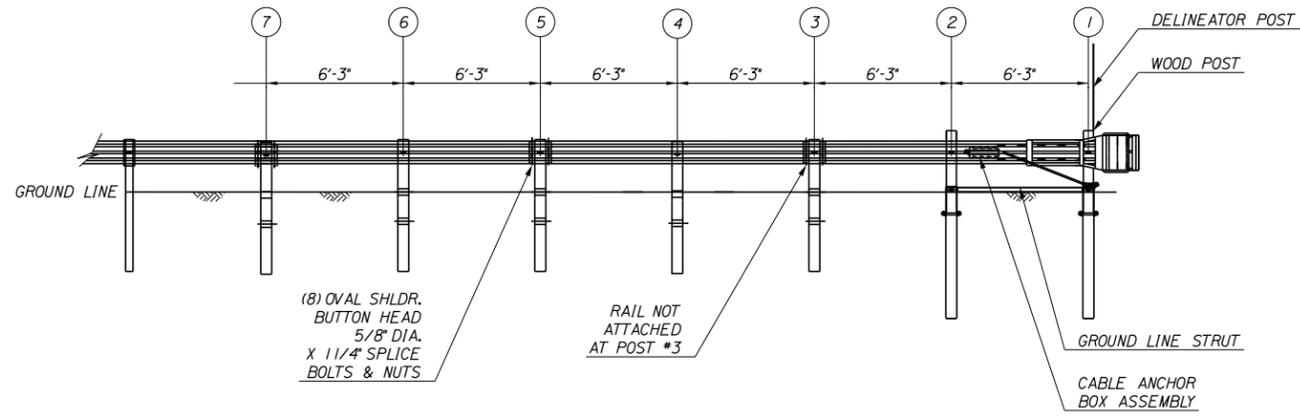
CONTRACT: 2015.06

Date: 2/18/2015

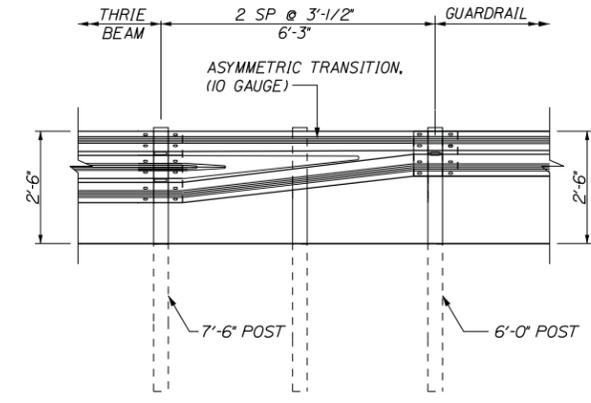
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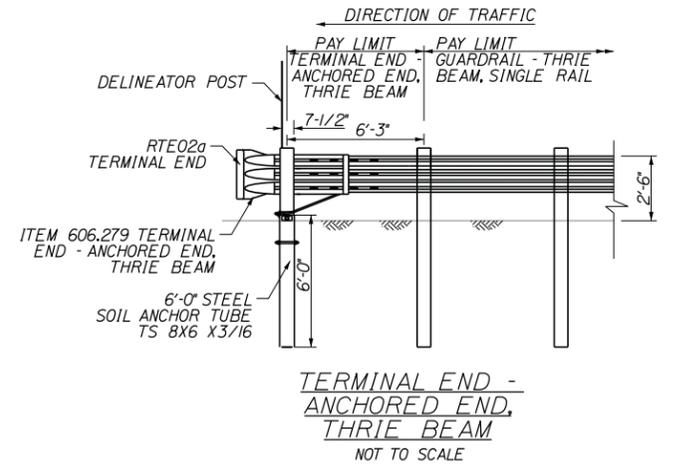
PLAN
NOT TO SCALE



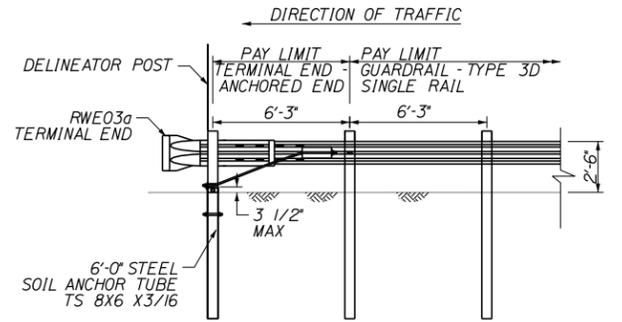
ELEVATION
GUARDRAIL 350 FLEAT TERMINAL
NOT TO SCALE



W-BEAM TO THRIE BEAM TRANSITION SECTION
NOT TO SCALE



TERMINAL END - ANCHORED END, THRIE BEAM
NOT TO SCALE



TERMINAL END - ANCHORED END
NOT TO SCALE

- GENERAL GUARDRAIL INSTALLATION NOTE:
1. THE CONTRACTOR SHALL FOLLOW ALL MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR THE INSTALLATION OF ALL GUARDRAIL COMPONENTS TO BE INSTALLED. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER OF ANY CONFLICTS OR IRREGULARITIES BETWEEN THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND THE CONTRACT DOCUMENTS.
 2. THE CONTRACTOR IS REQUIRED TO HAVE AN APPROVED CRASH END TREATMENT ON ALL GUARDRAIL ENDS PRIOR TO THE REMOVAL OF ANY MOT FEATURES.
 3. GUARDRAIL HEIGHT SHALL BE 30'-0" ± 1/2". GUARDRAIL HEIGHT SHALL BE MEASURED FROM AT GROUND ELEVATION ADJACENT TO EACH POST.
 4. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL CUT BOLTS, DISCARD PARTS, TRASH, PAVEMENT DEBRIS, ETC., AFTER COMPLETING THE GUARDRAIL INSTALLATION.
 5. CONNECTION FOR PROPOSED RAIL TO EXISTING RAIL SHALL BE INCIDENTAL TO THE PROPOSED GUARDRAIL ITEMS.
 6. THE FLEAT 350 TERMINAL SHALL BE INSTALLED AT A HEIGHT OF 27'-6" AT THE TERMINAL HEAD AND TRANSITIONED TO 30'-0" ± 1/2" OVER 25 FEET. HEIGHT OF FLEAT 350 RAIL SHALL BE MEASURED FROM THE GROUND ELEVATION DIRECTLY ADJACENT TO THE FLEAT RAIL.
 7. SOIL ANCHOR TUBES INSTALLED AS PART OF FLEAT OR TRAILING TERMINAL ENDS SHALL NOT PROTRUDE FROM THE GROUND MORE THAN 3/2". ADDITIONAL SITE GRADING MAY BE REQUIRED TO ADJUST SOIL TUBE REVEAL AND IF REQUIRED SHALL NOT DIRECT STORM WATER SURFACE DRAINAGE TOWARDS THE SHOULDER OR TRAVEL WAY. ADDITIONAL SITE GRADING SHALL BE INCIDENTAL TO THE END TERMINAL INSTALLATION.

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| No. | Revision | By | Date |
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Designed by:

Stantec

CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE

| By | Date | By | Date |
|--------------|-------|------------------|-------|
| Designed TFD | 02/15 | Checked GAE | 02/15 |
| Drawn PZA | 02/15 | In Charge of GAE | 02/15 |

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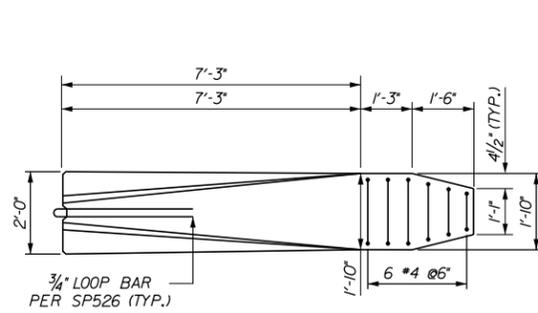
THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

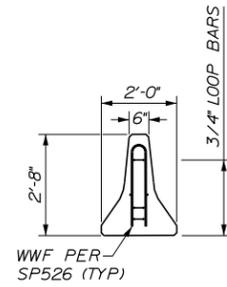
INTERCHANGE 36
SACO TOLL PLAZA LANE ADDITION
GUARDRAIL DETAILS
(1 OF 2)

SHEET NUMBER:
CONTRACT: 2015.06
18 OF 54

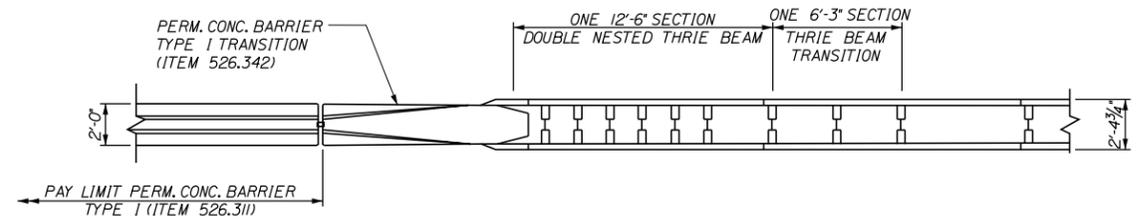
Date: 2/18/2015



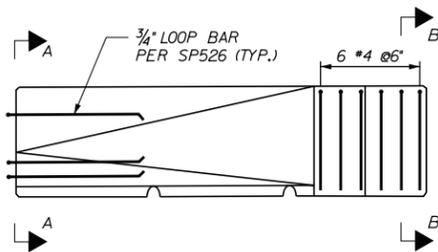
PLAN - MEDIAN BARRIER TRANSITION
NTS



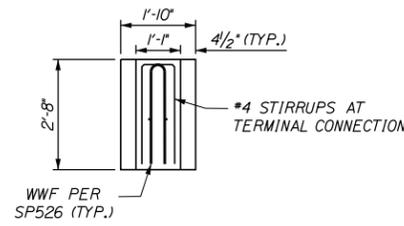
SECTION A-A
NTS



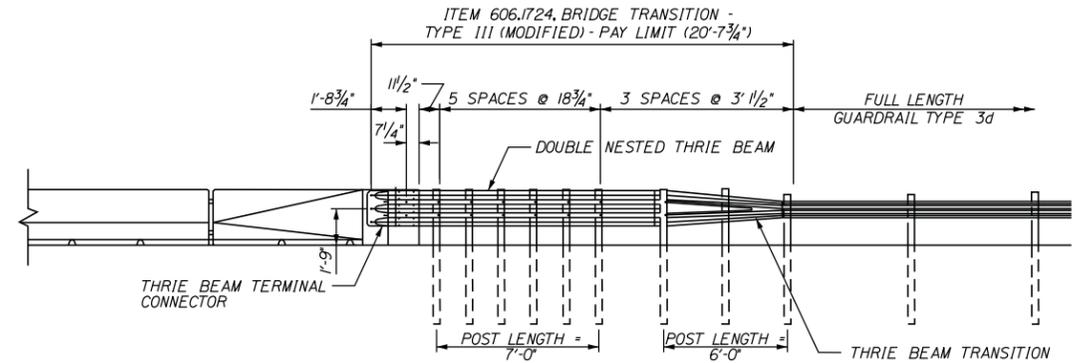
PLAN - MEDIAN BARRIER
NTS



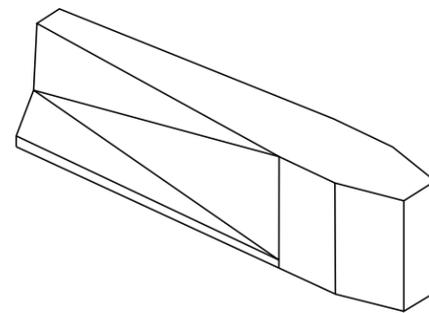
ELEVATION - MEDIAN BARRIER TRANSITION
NTS



SECTION B-B
NTS



BRIDGE TRANSITION TYPE III (MODIFIED)
NTS



MEDIAN BARRIER TRANSITION ISOMETRIC
NTS

MEDIAN TRANSITION NOTES

1. FOR ADDITIONAL BRIDGE TRANSITION DETAILS, SEE MAINE DOT STANDARD DETAIL 606(21-27).
2. THE THRIE BEAM ANCHORAGE SHALL BE 7/8" AASHTO M314 (GALVANIZED) BOLTS, NUTS AND WASHERS WITH A MAXIMUM 1 1/2" PROJECTION WHEN INSTALLED AND SHALL BE THRU BOLTED IN A SLEEVE WITHIN THE MEDIAN BARRIER TRANSITION.
3. FOR PERMANENT CONCRETE MEDIAN BARRIER, SEE SPECIAL PROVISION 526.
4. REINFORCEMENT IN THE CONCRETE BARRIER TRANSITION SHALL BE INCIDENTAL.

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| CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE | | | | | |
| | By | Date | | By | Date |
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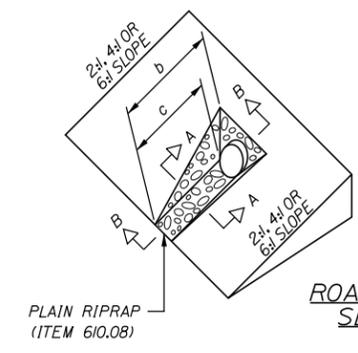
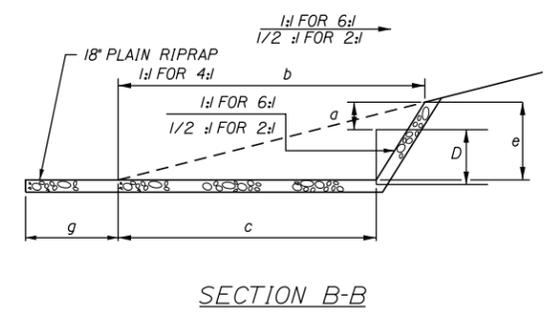
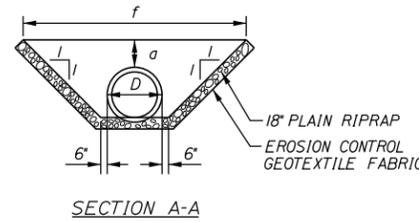
**THE GOLD STAR
MEMORIAL HIGHWAY**

INTERCHANGE 36
SACO TOLL PLAZA LANE ADDITION
GUARDRAIL DETAILS
(2 OF 2)

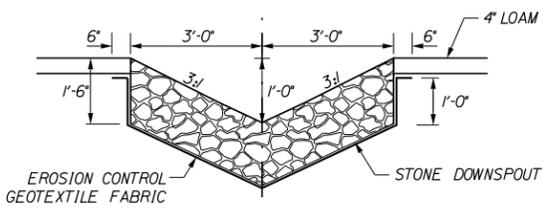
SHEET NUMBER:
CONTRACT: 2015.06
19 OF 54

DIMENSIONS FOR SLOPE OF 2:1

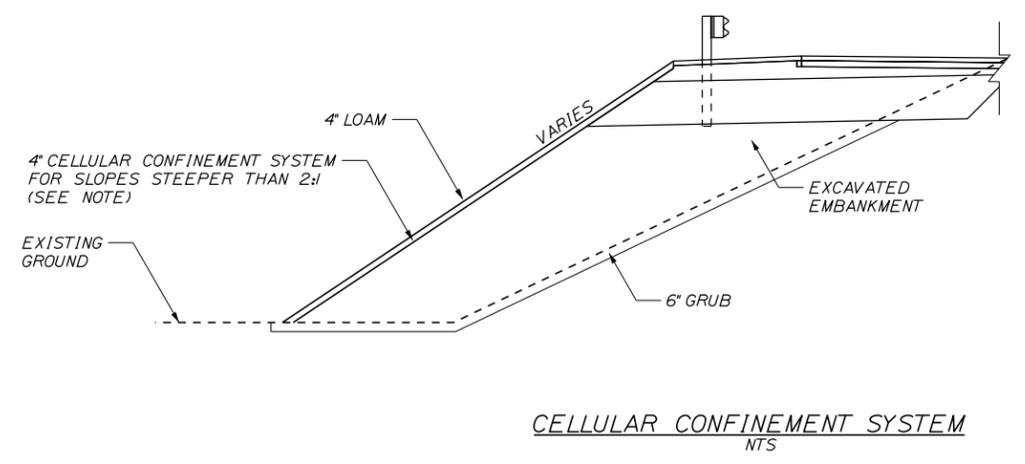
| D | a (FT) | b (FT) | c (FT) | e (FT) | f (FT) | g (FT) | STONE DEPTH (FT) | STONE (CY) |
|-----|--------|--------|--------|--------|--------|--------|------------------|------------|
| 12" | 1.00 | 4.00 | 3.00 | 2.00 | 6.00 | 1.00 | 1.50 | 1.30 |
| 15" | 1.00 | 4.50 | 3.37 | 2.25 | 6.75 | 1.63 | 1.50 | 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 |



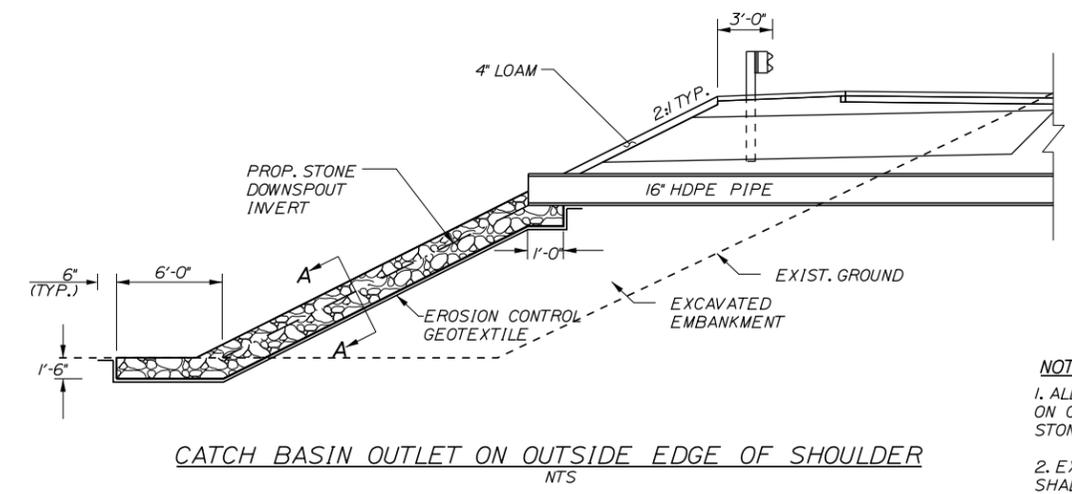
NOTES:
 1. THE DIMENSIONS SHOWN ARE APPROXIMATE AND MAY BE MODIFIED BY THE RESIDENT.
 2. STONE QUANTITIES ARE FOR ONE END OF THE PIPE.



1 LF OF DOWNSPOUT = 0.33 CY OF STONE DITCH PROTECTION
 1 LF OF DOWNSPOUT = 1.04 SY OF EROSION CONTROL GEOTEXTILE FABRIC



NOTE:
 CELLULAR CONFINEMENT SYSTEM SHALL BE INSTALLED ON ALL SLOPES STEEPER THAN 2:1. SLOPES SHALL BE GRUBBED, BACKFILLED AND COMPACTED PRIOR TO CELLULAR CONFINEMENT SYSTEM INSTALLATION. SEE SPECIAL PROVISION SECTION 620 FOR ADDITIONAL INFORMATION.



NOTES:
 1. ALL SIDE SLOPES AT CATCH BASIN OUTLETS ON OUTSIDE EDGE OF SHOULDER SHALL HAVE STONE DOWNSPOUTS.
 2. EXCAVATION TO REMOVE EXISTING PIPE SHALL BE INCIDENTAL TO THE PROPOSED PIPE ITEMS.
 3. STONE FOR STONE DOWNSPOUT SHALL MEET THE REQUIREMENTS OF MDOT SPECIFICATION 703.29, AND WILL BE PAID FOR UNDER ITEM 610.18, STONE DITCH PROTECTION.

Date: 2/18/2015

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Designed by:

CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE

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THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

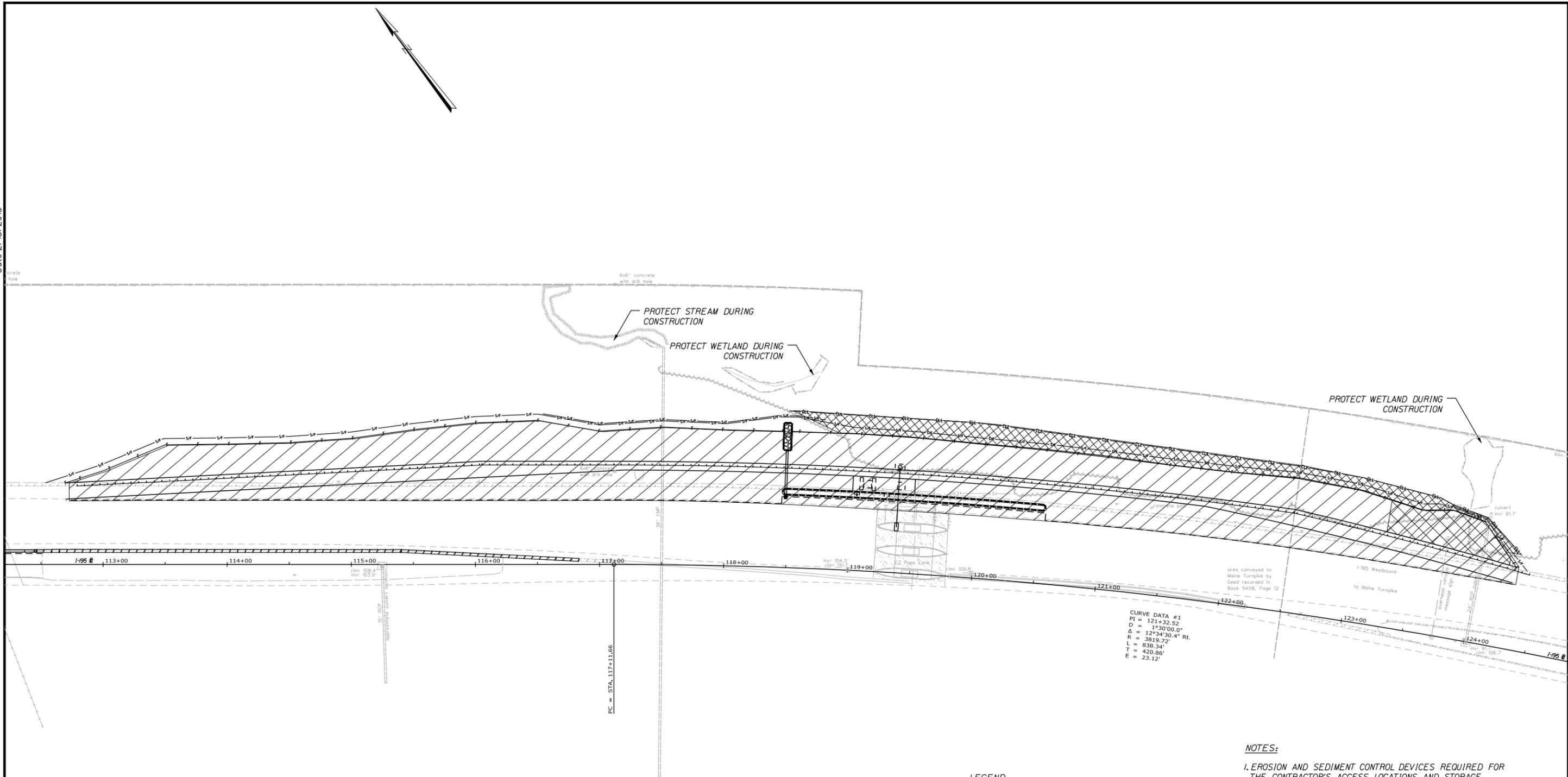
INTERCHANGE 36
 SACO TOLL PLAZA LANE ADDITION
 EROSION CONTROL DETAILS

SHEET NUMBER: 20 OF 54

CONTRACT: 2015.06

Date: 2/18/2015

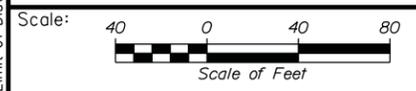
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LEGEND

-  CONTRACT LIMIT OF DISTURBANCE
61,810 SF (1.42 ACRES)
-  CONTRACT ADDITIONAL CLEARING LIMIT OF DISTURBANCE
7,198 SF (0.17 ACRES)

- NOTES:
1. EROSION AND SEDIMENT CONTROL DEVICES REQUIRED FOR THE CONTRACTOR'S ACCESS LOCATIONS AND STORAGE AREAS WILL NOT BE MEASURED FOR PAYMENT.
 2. SEE SPECIFICATIONS FOR CONTRACTOR'S SUBMITTAL REQUIREMENTS IF ADDING ADDITIONAL LIMITS OF DISTURBANCE TO THE PROJECT ESTIMATED QUANTITIES.
 3. AN ADDITIONAL ONE ACRE HAS BEEN ESTIMATED FOR CONTRACTOR ACCESS LOCATIONS AND STORAGE AREAS.
 4. TOTAL LIMIT OF DISTURBANCE FOR THIS PROJECT HAS BEEN ESTIMATED TO BE 2.59 ACRES, INCLUDING CONTRACTOR ACCESS AND STORAGE AREAS.



Designed by:



| No. | Revision | By | Date |
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CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE

| | By | Date | | By | Date |
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THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

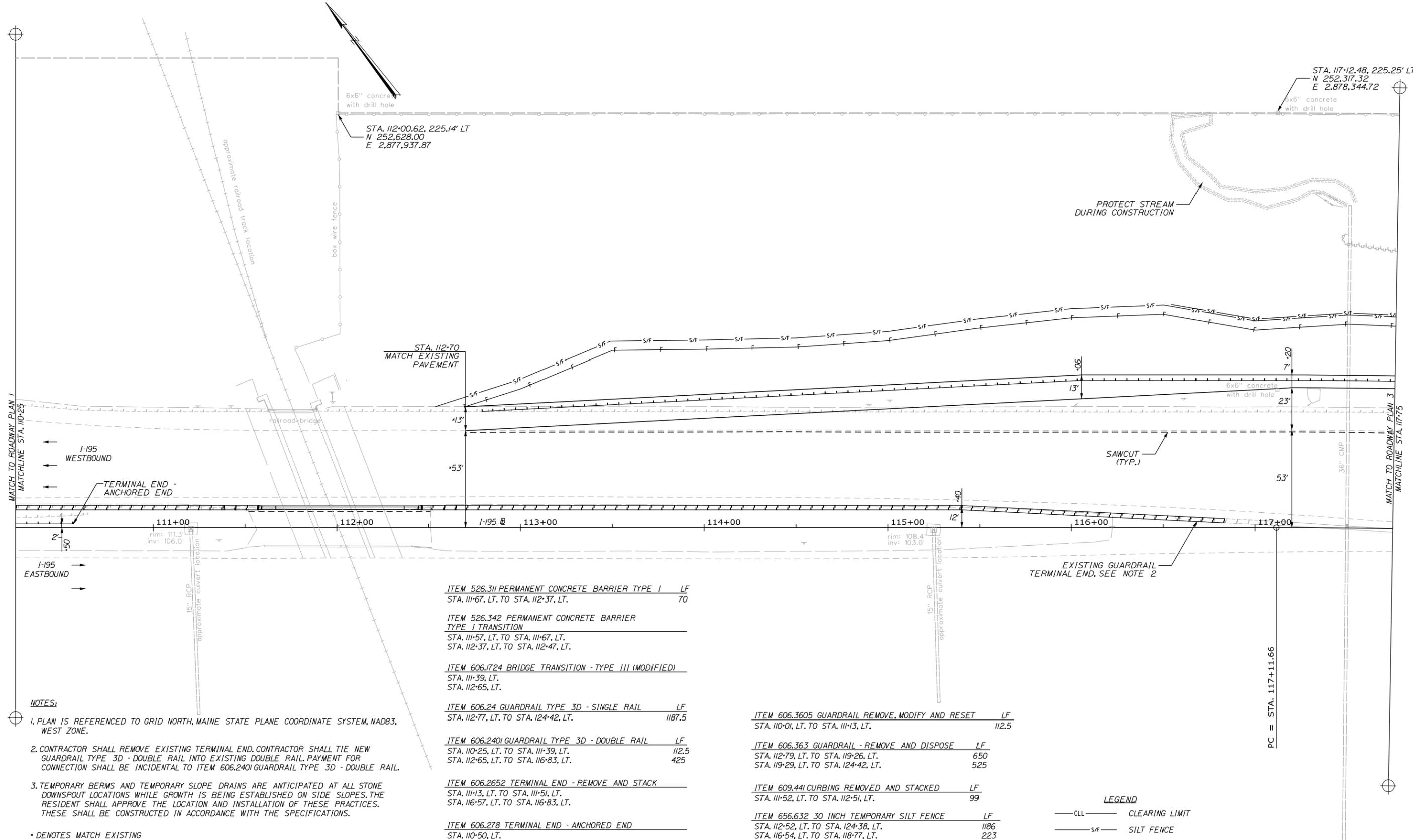
INTERCHANGE 36
 SACO TOLL PLAZA LANE ADDITION
 LIMIT OF DISTURBANCE PLAN

SHEET NUMBER: 21 OF 54

CONTRACT: 2015.06

Date: 2/18/2015

Filename: ...HIGHWAY\MSTA\015_Plan_02.dgn



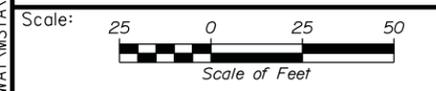
NOTES:

1. PLAN IS REFERENCED TO GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, NAD83, WEST ZONE.
 2. CONTRACTOR SHALL REMOVE EXISTING TERMINAL END. CONTRACTOR SHALL TIE NEW GUARDRAIL TYPE 3D - DOUBLE RAIL INTO EXISTING DOUBLE RAIL. PAYMENT FOR CONNECTION SHALL BE INCIDENTAL TO ITEM 606.2401 GUARDRAIL TYPE 3D - DOUBLE RAIL.
 3. TEMPORARY BERMS AND TEMPORARY SLOPE DRAINS ARE ANTICIPATED AT ALL STONE DOWNSPOUT LOCATIONS WHILE GROWTH IS BEING ESTABLISHED ON SIDE SLOPES. THE RESIDENT SHALL APPROVE THE LOCATION AND INSTALLATION OF THESE PRACTICES. THESE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS.
- DENOTES MATCH EXISTING

| | | |
|---|----|--------|
| ITEM 526.311 PERMANENT CONCRETE BARRIER TYPE I | LF | 70 |
| STA. 111+67, LT. TO STA. 112+37, LT. | | |
| ITEM 526.342 PERMANENT CONCRETE BARRIER TYPE I TRANSITION | | |
| STA. 111+57, LT. TO STA. 111+67, LT. | | |
| STA. 112+37, LT. TO STA. 112+47, LT. | | |
| ITEM 606.1724 BRIDGE TRANSITION - TYPE III (MODIFIED) | | |
| STA. 111+39, LT. | | |
| STA. 112+65, LT. | | |
| ITEM 606.24 GUARDRAIL TYPE 3D - SINGLE RAIL | LF | 1187.5 |
| STA. 112+77, LT. TO STA. 124+42, LT. | | |
| ITEM 606.2401 GUARDRAIL TYPE 3D - DOUBLE RAIL | LF | 112.5 |
| STA. 110+25, LT. TO STA. 111+39, LT. | | |
| STA. 112+65, LT. TO STA. 116+83, LT. | | |
| ITEM 606.2652 TERMINAL END - REMOVE AND STACK | | |
| STA. 111+13, LT. TO STA. 111+51, LT. | | |
| STA. 116+57, LT. TO STA. 116+83, LT. | | |
| ITEM 606.278 TERMINAL END - ANCHORED END | | |
| STA. 110+50, LT. | | |
| ITEM 606.3605 GUARDRAIL REMOVE, MODIFY AND RESET | LF | 112.5 |
| STA. 110+01, LT. TO STA. 111+13, LT. | | |
| ITEM 606.363 GUARDRAIL - REMOVE AND DISPOSE | LF | 650 |
| STA. 112+79, LT. TO STA. 119+26, LT. | | |
| STA. 119+29, LT. TO STA. 124+42, LT. | | |
| ITEM 609.441 CURBING REMOVED AND STACKED | LF | 99 |
| STA. 111+52, LT. TO STA. 112+51, LT. | | |
| ITEM 656.632 30 INCH TEMPORARY SILT FENCE | LF | 1186 |
| STA. 112+52, LT. TO STA. 124+38, LT. | | |
| STA. 116+54, LT. TO STA. 118+77, LT. | | |

LEGEND

| | |
|---------|----------------|
| — cll — | CLEARING LIMIT |
| — s/f — | SILT FENCE |



Designed by:

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| CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE | | | | | |
| | By | Date | By | Date | |
| Designed | TFD | 02/15 | Checked | GAE | 02/15 |
| Drawn | PZA | 02/15 | In Charge of | GAE | 02/15 |

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THE GOLD STAR MEMORIAL HIGHWAY

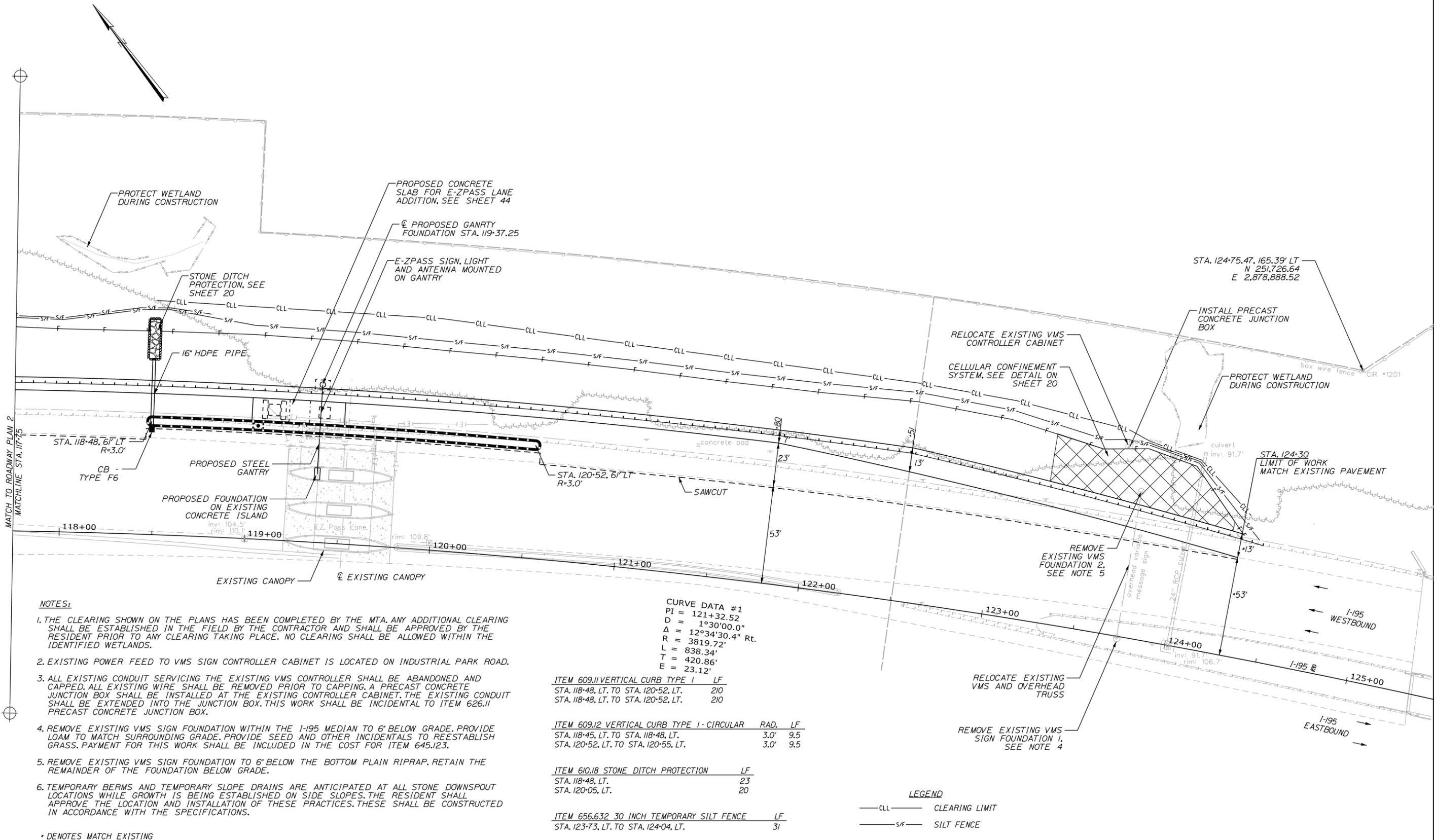
MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

INTERCHANGE 36
SACO TOLL PLAZA LANE ADDITION
ROADWAY PLANS
(2 OF 4)

SHEET NUMBER:
CONTRACT: 2015.06
23 OF 54

Date: 2/18/2015

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NOTES:

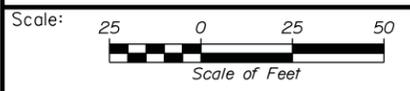
1. THE CLEARING SHOWN ON THE PLANS HAS BEEN COMPLETED BY THE MTA. ANY ADDITIONAL CLEARING SHALL BE ESTABLISHED IN THE FIELD BY THE CONTRACTOR AND SHALL BE APPROVED BY THE RESIDENT PRIOR TO ANY CLEARING TAKING PLACE. NO CLEARING SHALL BE ALLOWED WITHIN THE IDENTIFIED WETLANDS.
2. EXISTING POWER FEED TO VMS SIGN CONTROLLER CABINET IS LOCATED ON INDUSTRIAL PARK ROAD.
3. ALL EXISTING CONDUIT SERVICING THE EXISTING VMS CONTROLLER SHALL BE ABANDONED AND CAPPED. ALL EXISTING WIRE SHALL BE REMOVED PRIOR TO CAPPING. A PRECAST CONCRETE JUNCTION BOX SHALL BE INSTALLED AT THE EXISTING CONTROLLER CABINET. THE EXISTING CONDUIT SHALL BE EXTENDED INTO THE JUNCTION BOX. THIS WORK SHALL BE INCIDENTAL TO ITEM 626.11 PRECAST CONCRETE JUNCTION BOX.
4. REMOVE EXISTING VMS SIGN FOUNDATION WITHIN THE I-195 MEDIAN TO 6" BELOW GRADE. PROVIDE LOAM TO MATCH SURROUNDING GRADE. PROVIDE SEED AND OTHER INCIDENTALS TO REESTABLISH GRASS. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE COST FOR ITEM 645.123.
5. REMOVE EXISTING VMS SIGN FOUNDATION TO 6" BELOW THE BOTTOM PLAIN RIPRAP. RETAIN THE REMAINDER OF THE FOUNDATION BELOW GRADE.
6. TEMPORARY BERMS AND TEMPORARY SLOPE DRAINS ARE ANTICIPATED AT ALL STONE DOWNSPOUT LOCATIONS WHILE GROWTH IS BEING ESTABLISHED ON SIDE SLOPES. THE RESIDENT SHALL APPROVE THE LOCATION AND INSTALLATION OF THESE PRACTICES. THESE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS.

* DENOTES MATCH EXISTING

CURVE DATA #1

PI = 121+32.52
 D = 1°30'00.0"
 Δ = 12°34'30.4" Rt.
 R = 3819.72'
 L = 838.34'
 T = 420.86'
 E = 23.12'

| ITEM | DESCRIPTION | LF |
|--------------|--------------------------------------|----------|
| ITEM 609.11 | VERTICAL CURB TYPE 1 | LF |
| | STA. 118+48, LT. TO STA. 120+52, LT. | 210 |
| | STA. 118+48, LT. TO STA. 120+52, LT. | 210 |
| ITEM 609.12 | VERTICAL CURB TYPE 1 - CIRCULAR | RAD. LF |
| | STA. 118+45, LT. TO STA. 118+48, LT. | 3.0' 9.5 |
| | STA. 120+52, LT. TO STA. 120+55, LT. | 3.0' 9.5 |
| ITEM 610.18 | STONE DITCH PROTECTION | LF |
| | STA. 118+48, LT. | 23 |
| | STA. 120+05, LT. | 20 |
| ITEM 656.632 | 30 INCH TEMPORARY SILT FENCE | LF |
| | STA. 123+73, LT. TO STA. 124+04, LT. | 31 |



Designed by:

Stantec

CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE

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| By | Date | By | Date |
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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

INTERCHANGE 36
 SACO TOLL PLAZA LANE ADDITION
 ROADWAY PLANS
 (3 OF 4)

SHEET NUMBER:
 24 OF 54

CONTRACT: 2015.06

ITEM 606.24 GUARDRAIL TYPE 3D - SINGLE RAIL LF
 STA. 1358+00, RT. TO STA. 1359+69, RT. 175+
 STA. 1359+42, LT. TO STA. 1360+67, LT. 125

ITEM 606.278 TERMINAL END - ANCHORED END
 STA. 1359+42, LT.

ITEM 606.279 TERMINAL END - ANCHORED END, THRIE BEAM
 STA. 1360+50, LT.

ITEM 606.363 GUARDRAIL REMOVE AND DISPOSE LF
 STA. 1359+69, LT. TO STA. 1360+31, LT. 62.5

ITEM 606.65 GUARDRAIL THRIE BEAM LF
 STA. 1359+75, LT. TO STA. 1360+25, LT. 50
 STA. 159+75, RT. TO STA. 1360+50, RT. 75

ITEM 606.701 ASYMMETRICAL THRIE BEAM TRANSITION
 STA. 1359+69, RT. TO STA. 1359+75, RT.
 STA. 1359+69, LT. TO STA. 1359+75, LT.
 STA. 1360+25, LT. TO STA. 1360+31, LT.

ITEM 606.80 GUARDRAIL 350 FLEAT TERMINAL
 STA. 1360+67.5, LT. TO STA. 1361+05, LT.

ITEM 656.632 30 INCH TEMPORARY SILT FENCE LF
 STA. 1358+84, LT. TO STA. 1361+04, LT. 232

GENERAL NOTES:

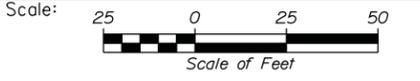
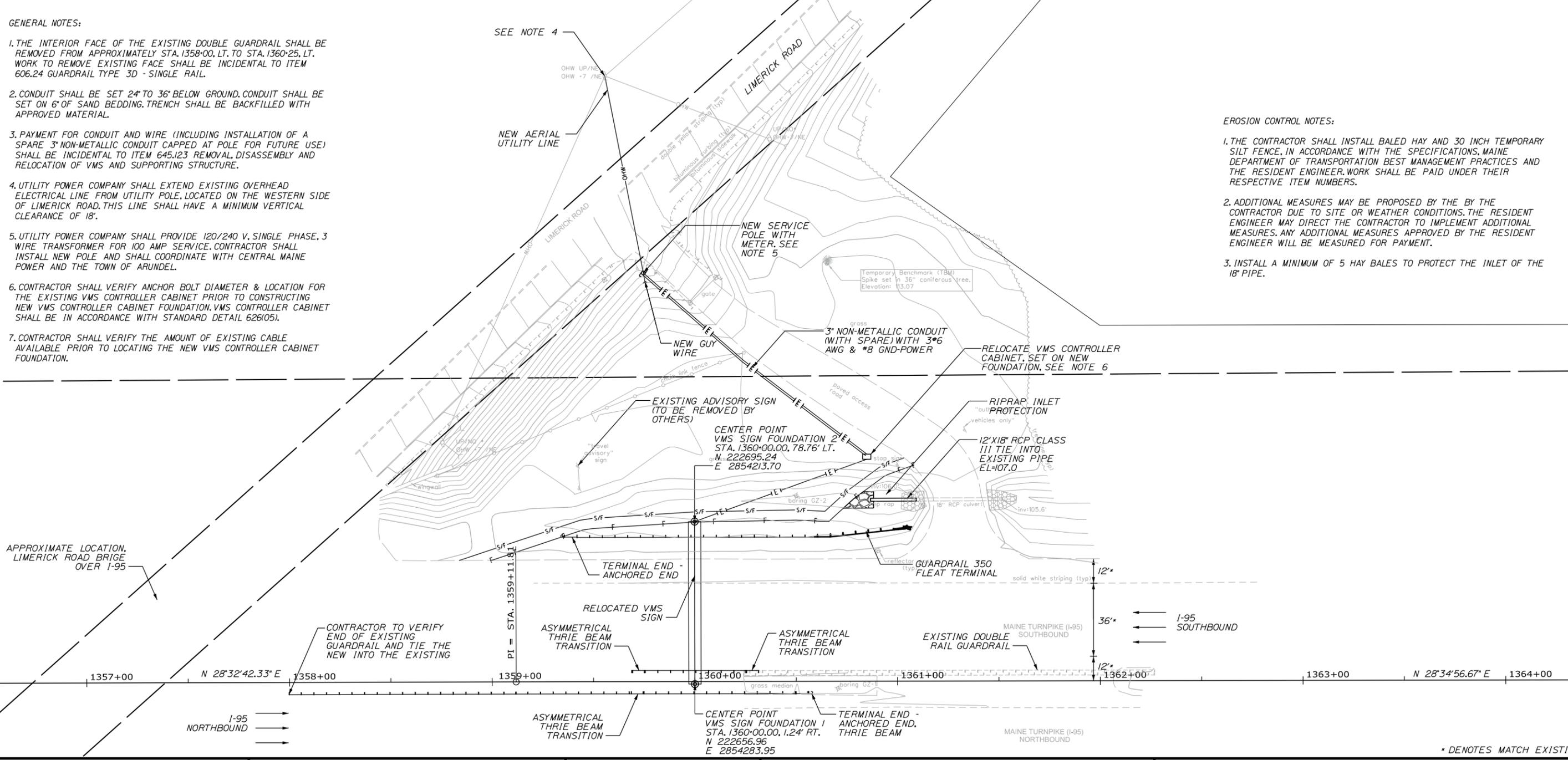
1. THE INTERIOR FACE OF THE EXISTING DOUBLE GUARDRAIL SHALL BE REMOVED FROM APPROXIMATELY STA. 1358+00, LT. TO STA. 1360+25, LT. WORK TO REMOVE EXISTING FACE SHALL BE INCIDENTAL TO ITEM 606.24 GUARDRAIL TYPE 3D - SINGLE RAIL.
2. CONDUIT SHALL BE SET 24" TO 36" BELOW GROUND. CONDUIT SHALL BE SET ON 6" OF SAND BEDDING. TRENCH SHALL BE BACKFILLED WITH APPROVED MATERIAL.
3. PAYMENT FOR CONDUIT AND WIRE (INCLUDING INSTALLATION OF A SPARE 3" NON-METALLIC CONDUIT CAPPED AT POLE FOR FUTURE USE) SHALL BE INCIDENTAL TO ITEM 645.123 REMOVAL, DISASSEMBLY AND RELOCATION OF VMS AND SUPPORTING STRUCTURE.
4. UTILITY POWER COMPANY SHALL EXTEND EXISTING OVERHEAD ELECTRICAL LINE FROM UTILITY POLE, LOCATED ON THE WESTERN SIDE OF LIMERICK ROAD. THIS LINE SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 18'.
5. UTILITY POWER COMPANY SHALL PROVIDE 120/240 V. SINGLE PHASE, 3 WIRE TRANSFORMER FOR 100 AMP SERVICE. CONTRACTOR SHALL INSTALL NEW POLE AND SHALL COORDINATE WITH CENTRAL MAINE POWER AND THE TOWN OF ARUNDEL.
6. CONTRACTOR SHALL VERIFY ANCHOR BOLT DIAMETER & LOCATION FOR THE EXISTING VMS CONTROLLER CABINET PRIOR TO CONSTRUCTING NEW VMS CONTROLLER CABINET FOUNDATION. VMS CONTROLLER CABINET SHALL BE IN ACCORDANCE WITH STANDARD DETAIL 6261051.
7. CONTRACTOR SHALL VERIFY THE AMOUNT OF EXISTING CABLE AVAILABLE PRIOR TO LOCATING THE NEW VMS CONTROLLER CABINET FOUNDATION.

EROSION CONTROL NOTES:

1. THE CONTRACTOR SHALL INSTALL BALED HAY AND 30 INCH TEMPORARY SILT FENCE, IN ACCORDANCE WITH THE SPECIFICATIONS, MAINE DEPARTMENT OF TRANSPORTATION BEST MANAGEMENT PRACTICES AND THE RESIDENT ENGINEER. WORK SHALL BE PAID UNDER THEIR RESPECTIVE ITEM NUMBERS.
2. ADDITIONAL MEASURES MAY BE PROPOSED BY THE BY THE CONTRACTOR DUE TO SITE OR WEATHER CONDITIONS. THE RESIDENT ENGINEER MAY DIRECT THE CONTRACTOR TO IMPLEMENT ADDITIONAL MEASURES. ANY ADDITIONAL MEASURES APPROVED BY THE RESIDENT ENGINEER WILL BE MEASURED FOR PAYMENT.
3. INSTALL A MINIMUM OF 5 HAY BALES TO PROTECT THE INLET OF THE 18" PIPE.

Date: 2/18/2015

Filename: ...MSTA\VMS.007_Plan_02.dgn



Designed by:

Stantec

CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE

| No. | Revision | By | Date |
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| | By | Date | | By | Date |
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| Designed | TFD | 02/15 | Checked | GAE | 02/15 |
| Drawn | PZA | 02/15 | In Charge of | GAE | 02/15 |

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MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

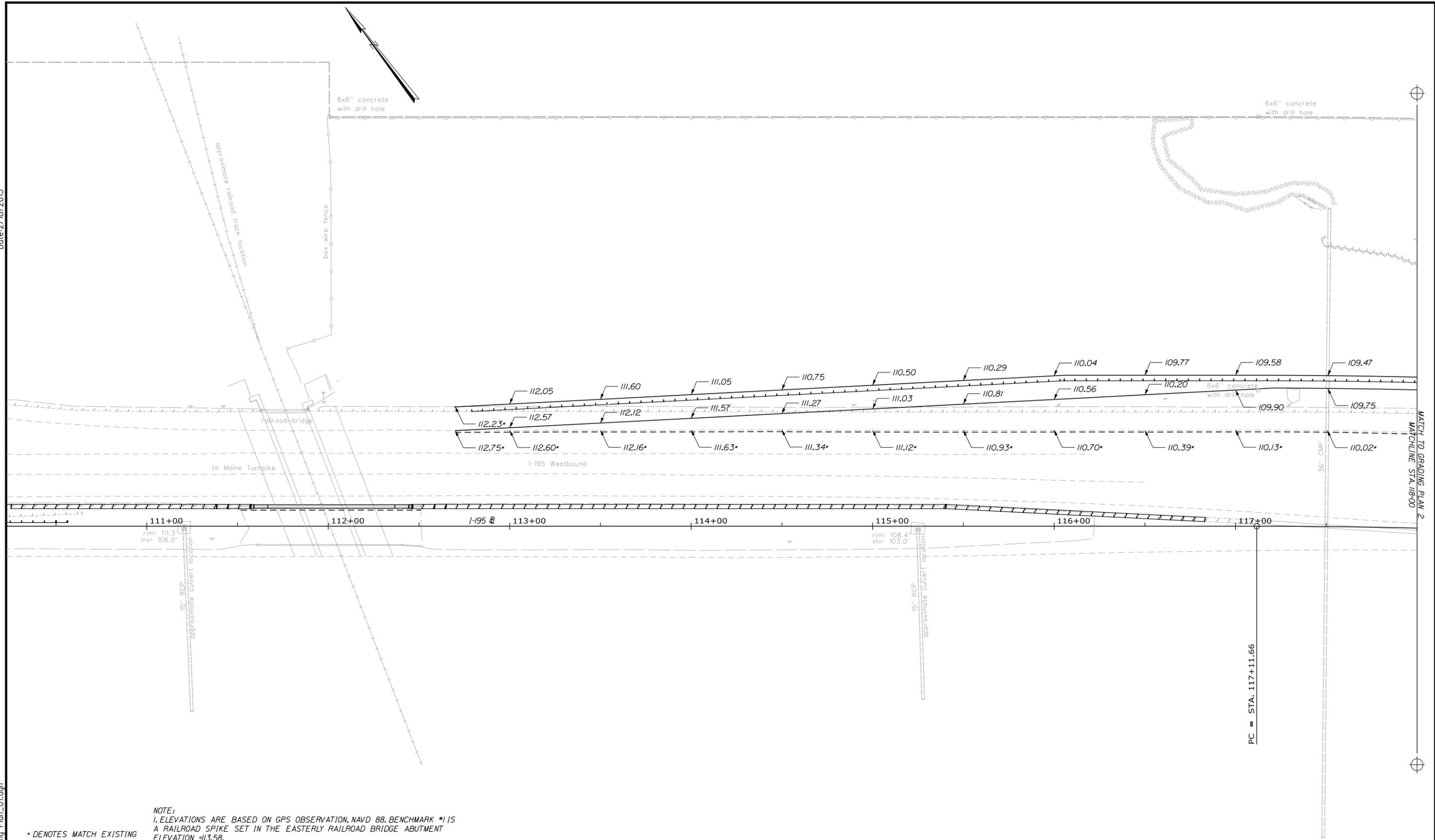
MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

INTERCHANGE 36 SACO
 VARIABLE MESSAGE SIGN RELOCATION
 VMS SIGN -
 RELOCATION PLAN

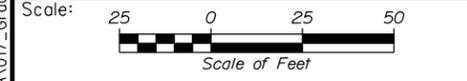
SHEET NUMBER: QT-1
 CONTRACT: S2014.56
 25 OF 54

Date: 2/18/2015

Filename: ...MSTA\017_Grading_Plan_01.dgn



NOTE:
 1. ELEVATIONS ARE BASED ON GPS OBSERVATION, NAVD 88, BENCHMARK #1 IS A RAILROAD SPIKE SET IN THE EASTERLY RAILROAD BRIDGE ABUTMENT ELEVATION = 113.58.
 * DENOTES MATCH EXISTING



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| | By | Date | By | Date | |
| Designed | TFD | 02/15 | Checked | GAE | 02/15 |
| Drawn | PZA | 02/15 | In Charge of | GAE | 02/15 |

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THE GOLD STAR MEMORIAL HIGHWAY

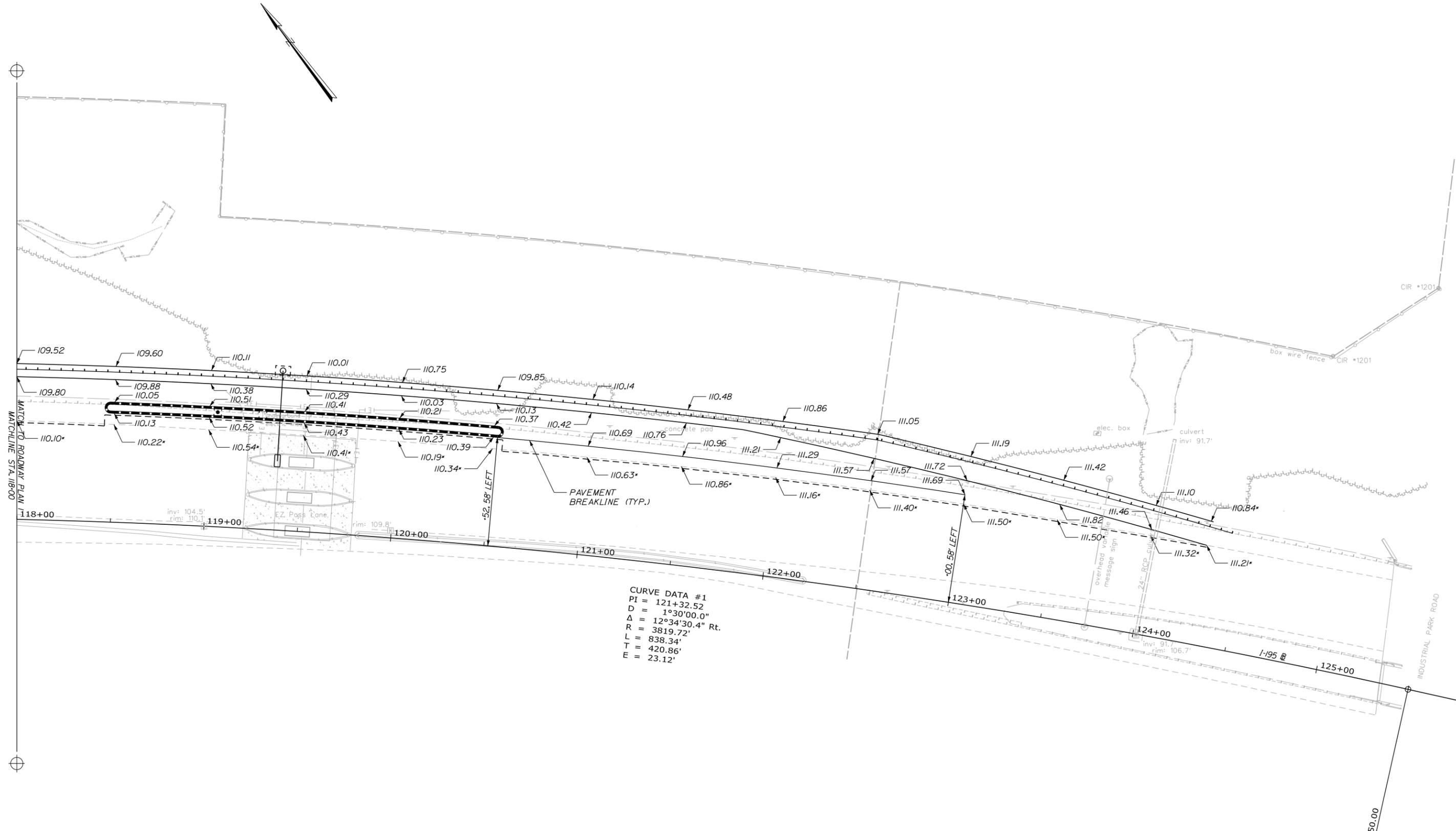
MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

INTERCHANGE 36
 SACO TOLL PLAZA LANE ADDITION
 GRADING PLANS
 (1 OF 2)

SHEET NUMBER:
 CONTRACT: 2015.06
 26 OF 54

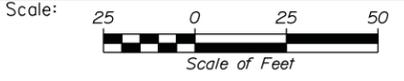
Date: 2/18/2015

Filename: ...MSTA\018_Grading_Plan_02.dgn



CURVE DATA #1
 PI = 121+32.52
 D = 1°30'00.0"
 Δ = 12°34'30.4" Rt.
 R = 3819.72'
 L = 838.34'
 T = 420.86'
 E = 23.12'

* DENOTES MATCH EXISTING



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THE GOLD STAR
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INTERCHANGE 36
 SACO TOLL PLAZA LANE ADDITION
 GRADING PLANS
 (2 OF 2)

| No. | Revision | By | Date |
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| CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE | | | | | |
| Designed | TFD | 02/15 | Checked | GAE | 02/15 |
| Drawn | PZA | 02/15 | In Charge of | GAE | 02/15 |

MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

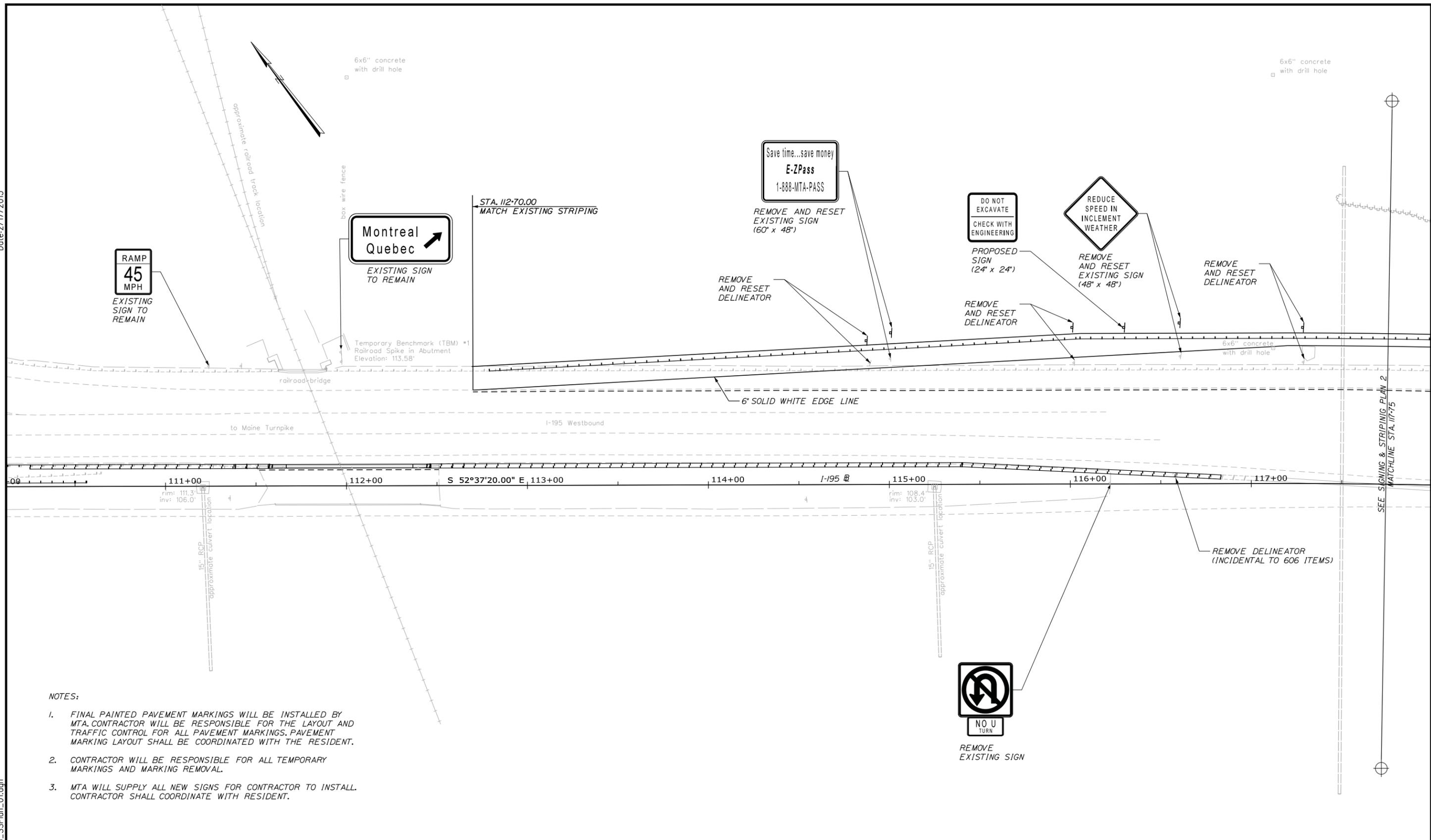
CONTRACT: 2015.06

SHEET NUMBER:

27 OF 54

Date: 2/17/2015

Filename: ...\\00.Hwy\028_SSPlan_01.dgn



NOTES:

1. FINAL PAINTED PAVEMENT MARKINGS WILL BE INSTALLED BY MTA. CONTRACTOR WILL BE RESPONSIBLE FOR THE LAYOUT AND TRAFFIC CONTROL FOR ALL PAVEMENT MARKINGS. PAVEMENT MARKING LAYOUT SHALL BE COORDINATED WITH THE RESIDENT.
2. CONTRACTOR WILL BE RESPONSIBLE FOR ALL TEMPORARY MARKINGS AND MARKING REMOVAL.
3. MTA WILL SUPPLY ALL NEW SIGNS FOR CONTRACTOR TO INSTALL. CONTRACTOR SHALL COORDINATE WITH RESIDENT.

Scale: 25 0 25 50
Scale of Feet

| No. | Revision | By | Date |
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Designed by:



GORRILL PALMER

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|--|-----|-------|--------------|-----|-------|
| CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE | | | | | |
| | By | Date | | By | Date |
| Designed | LEM | 01/15 | Checked | DGE | 01/15 |
| Drawn | LAN | 01/15 | In Charge of | GAE | 01/15 |

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207.657.6910



THE GOLD STAR
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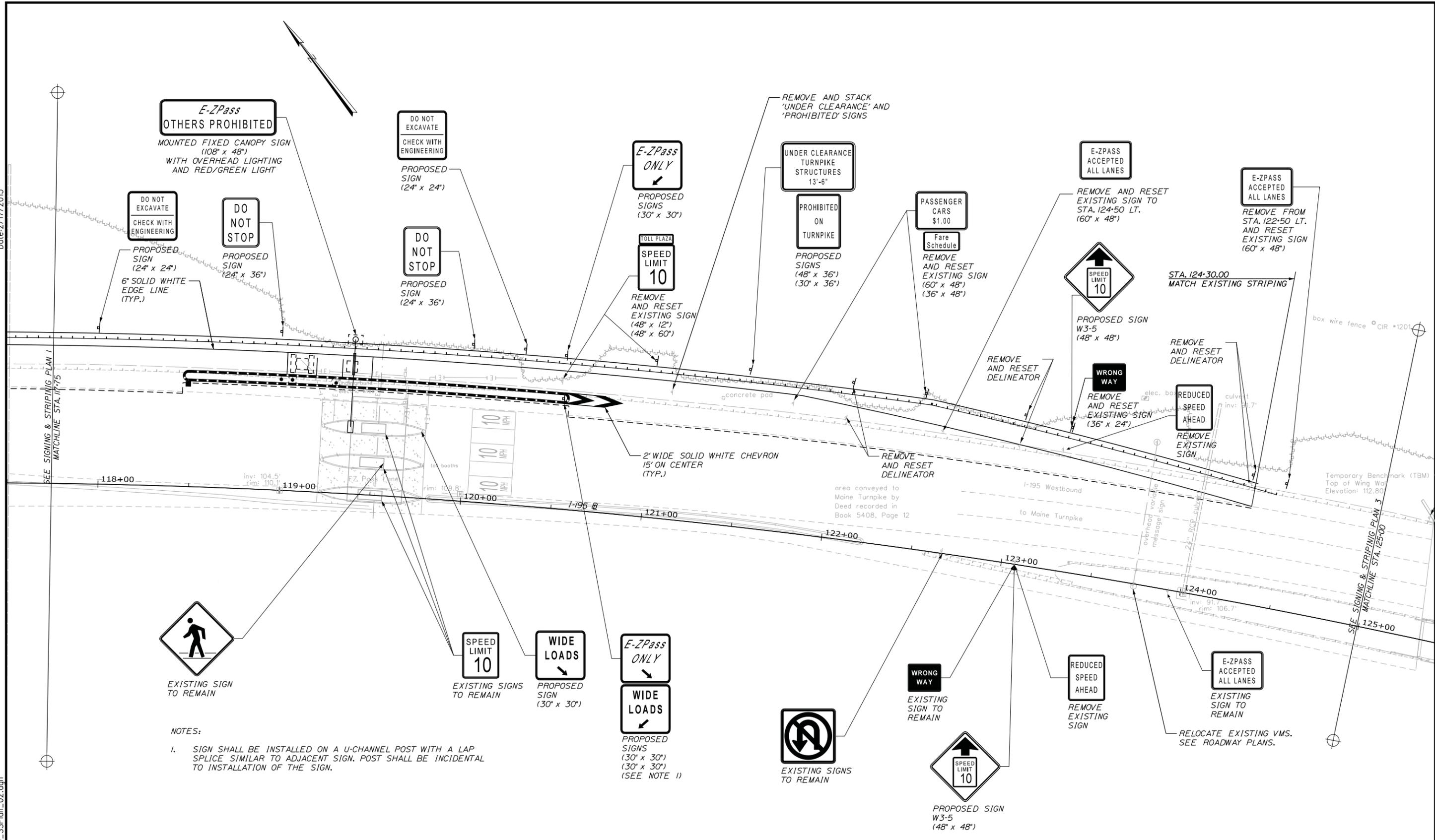
MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

INTERCHANGE 36
SACO TOLL PLAZA LANE ADDITION
SIGNING & STRIPING PLANS
(1 OF 3)

SHEET NUMBER:
CONTRACT: 2015.06
28 OF 54

Date: 2/17/2015

Filename: ...000\Highway\029_SSPlan_02.dgn



NOTES:
 1. SIGN SHALL BE INSTALLED ON A U-CHANNEL POST WITH A LAP SPLICE SIMILAR TO ADJACENT SIGN. POST SHALL BE INCIDENTAL TO INSTALLATION OF THE SIGN.

Scale: 25 0 25 50
Scale of Feet

| No. | Revision | By | Date |
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Designed by:

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| CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE | | | | | |
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| | By | Date | By | Date | |
| Designed | LEM | 01/15 | Checked | DGE | 01/15 |
| Drawn | LAN | 01/15 | In Charge of | GAE | 01/15 |

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THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

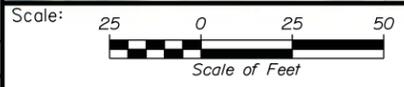
INTERCHANGE 36
 SACO TOLL PLAZA LANE ADDITION
 SIGNING & STRIPING PLANS
 (2 OF 3)

SHEET NUMBER:
 CONTRACT: 2015.06
 29 OF 54



Date: 2/17/2015

Filename: ... \00\Highway\030_SSPlan_03.dgn



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THE GOLD STAR
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INTERCHANGE 36
SACO TOLL PLAZA LANE ADDITION
SIGNING & STRIPING PLANS
(3 OF 3)

| No. | Revision | By | Date |
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| CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE | |
| By | Date |
| Designed LEM | 01/15 |
| Checked DGE | 01/15 |
| By | Date |
| Drawn LAN | 01/15 |
| In Charge of GAE | 01/15 |

MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

CONTRACT: 2015.06

SHEET NUMBER:

30 OF 54

Date: 2/17/2015

| IDENTIFICATION NUMBER | SIZE OF SIGN | | TEXT | TEXT DIMENSIONS (INCHES) | | | NUMBER OF SIGNS REQUIRED | COLOR | | BORDER RADIUS | AREA IN SQUARE FEET | POST AND FOUNDATION |
|-----------------------|--------------|--------|---|--------------------------|------------------|-----------------|--------------------------|--------------|---------------|---------------|---------------------|---------------------------|
| | WIDTH | HEIGHT | | LETTER HEIGHT | VERTICAL SPACING | ARROW RTE. MKR. | | BACK-GROUND | LEGEND BORDER | | | |
| | 24" | 36" |  | | | | 2 | WHITE | BLACK | | 6.0 (12.0) | WOOD POST |
| | 30" | 30" |  | | | | 1 | PANTONE 259C | WHITE | | 6.25 | W6x9 18" φ FOUNDATION |
| | 30" | 30" |  | | | | 1 | PANTONE 259C | WHITE | | 6.25 | W6x9 18" φ FOUNDATION |
| | 30" | 30" |  | | | | 1 | WHITE | BLACK | | 6.25 | W6x9 18" φ FOUNDATION |
| | 30" | 30" |  | | | | 1 | WHITE | BLACK | | 6.25 | W6x9 18" φ FOUNDATION |
| | 144" | 48" |  | | | | 1 | PANTONE 259C | WHITE | | 48.00 | GANTRY |
| | 24" | 24" |  | | | | 3 | YELLOW | BLACK | | 4.00 (12.00) | U-CHANNEL |
| W3-5 | 48" | 48" |  | | | | 2 | YELLOW | BLACK | | 16.00 (32.0) | W6x9 18" φ FOUNDATION |
| SIGN #1 | 48" | 36" |  | | | | 1 | YELLOW | BLACK | | 11.00 | W6x15 18" φ FOUNDATION |
| SIGN #2 | 30" | 36" |  | | | | 1 | WHITE | BLACK | | 7.50 | W6x15 18" φ FOUNDATION |

NOTE:

1. PROPOSED SIGNS WILL BE PROVIDED BY THE MTA AND THE CONTRACTOR SHALL INSTALL THEM.

Filename: ...:\00\Highway\031_SignSummary.dgn

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| Scale: AS NOTED | | | |
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| CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE | | | | | |
| | By | Date | | By | Date |
| Designed | LEM | 12/14 | Checked | DGE | 12/14 |
| Drawn | LAN | 12/14 | In Charge of | GAE | 12/14 |

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**THE GOLD STAR
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

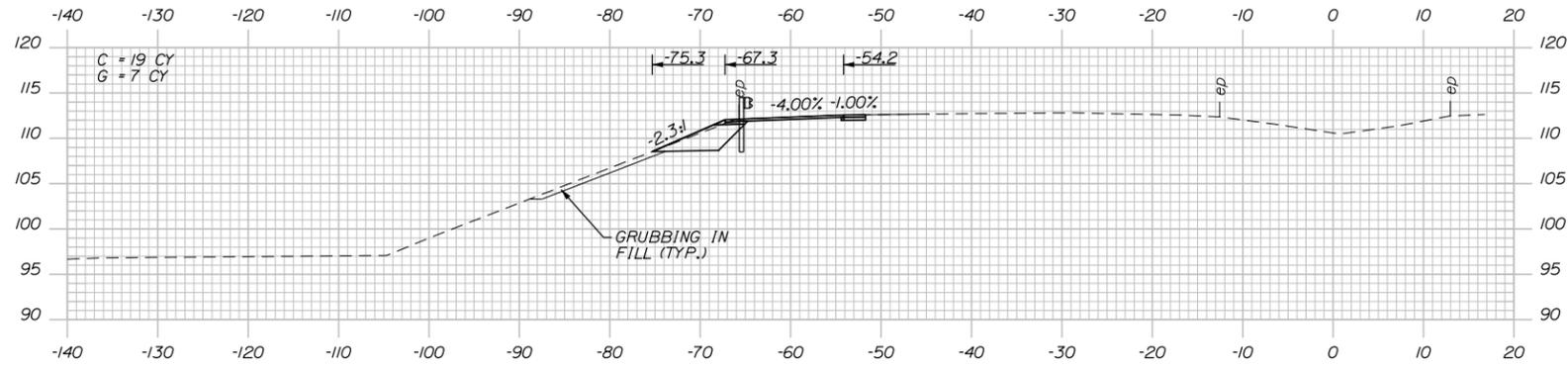
INTERCHANGE 36
SACO TOLL PLAZA LANE ADDITION
PROPOSED SIGN SUMMARY

SHEET NUMBER:
CONTRACT: 2015.06

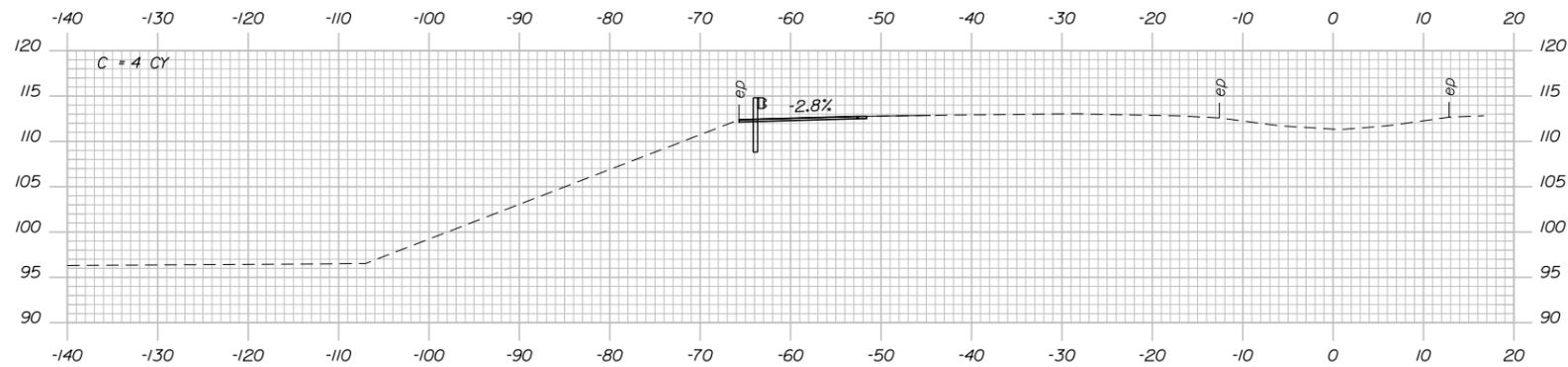
31 OF 54

Date: 2/18/2015

Filename: ...MSTA\019_Cross Sections.dgn

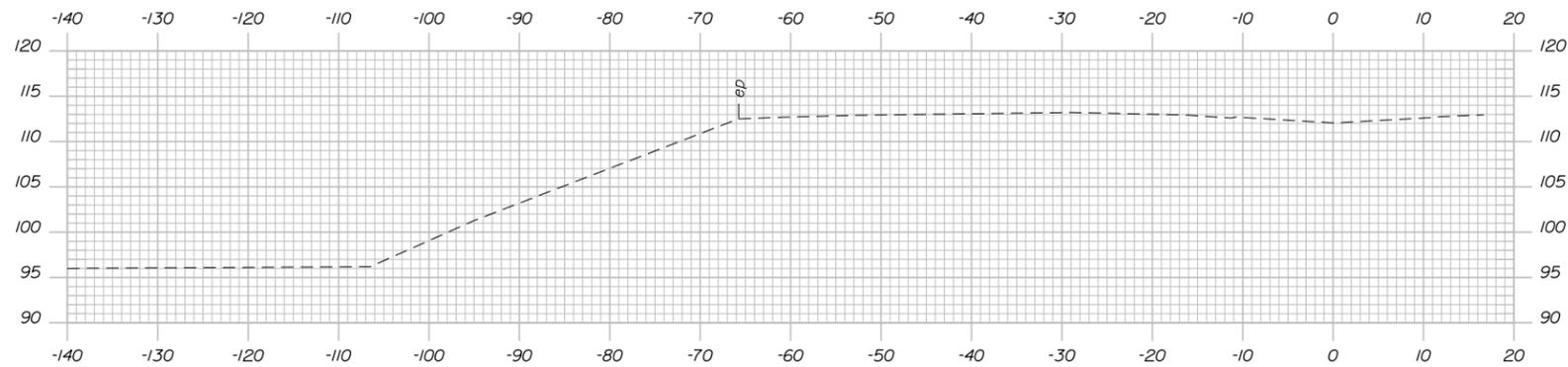


113+00.00



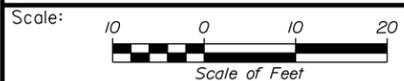
112+70.00

STA. 112+70
LIMIT OF WORK
MATCH EXISTING PAVEMENT



112+50.00

Sta. 112+50.00 to Sta. 113+00.00



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THE GOLD STAR
MEMORIAL HIGHWAY

INTERCHANGE 36
SACO TOLL PLAZA LANE ADDITION
CROSS SECTION PLANS
(1 OF 10)

| No. | Revision | By | Date |
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| CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE | | | | | |
| Designed | TFD | 02/15 | Checked | GAE | 02/15 |
| Drawn | PZA | 02/15 | In Charge of | GAE | 02/15 |

MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

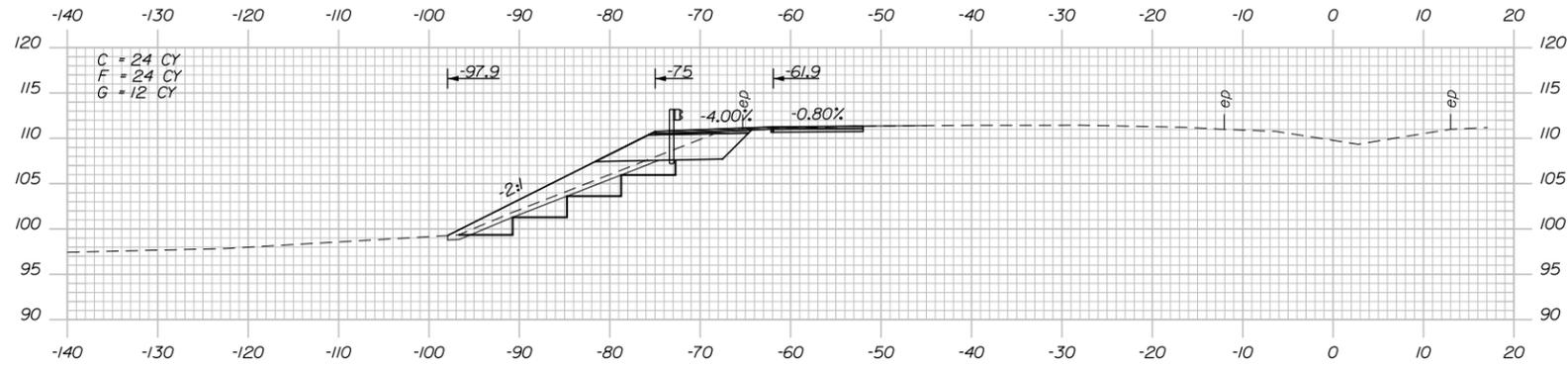
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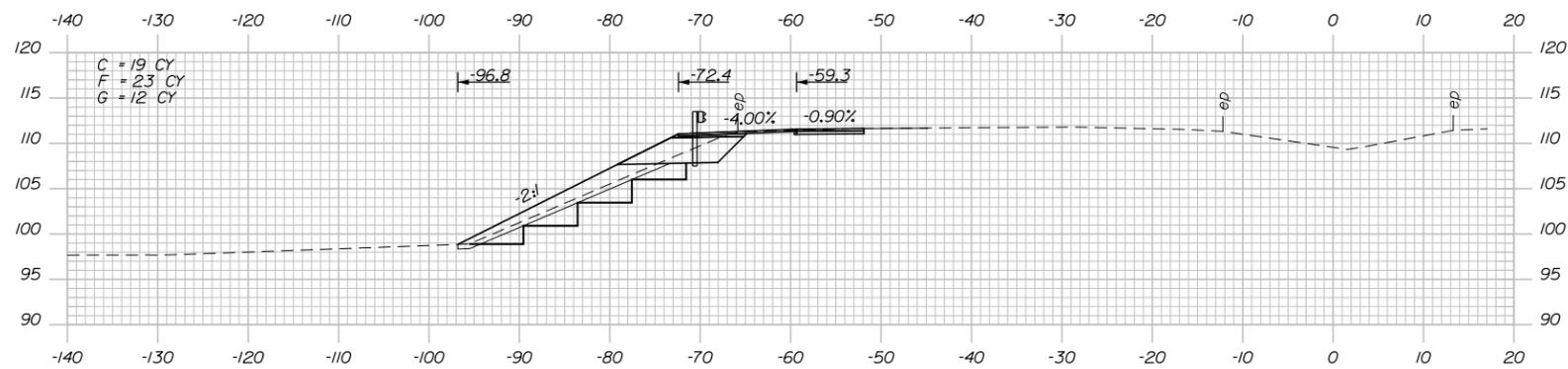
32 OF 54

Date: 2/18/2015

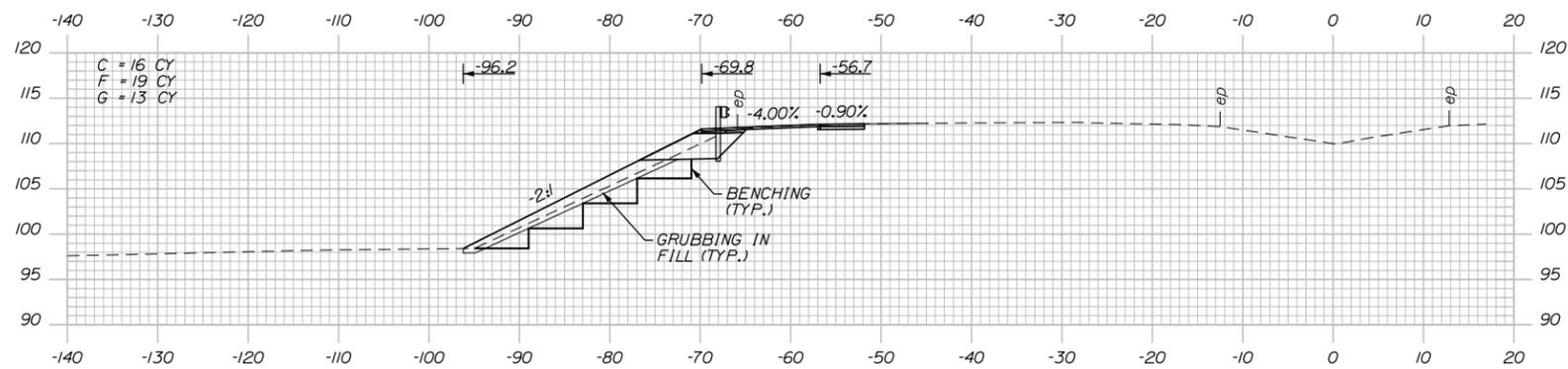
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114+50.00

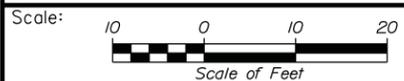


114+00.00



113+50.00

Sta. 113+50.00 to Sta. 114+50.00



| No. | Revision | By | Date |
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| | By | Date | | By | Date |
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**THE GOLD STAR
 MEMORIAL HIGHWAY**

INTERCHANGE 36
 SACO TOLL PLAZA LANE ADDITION
 CROSS SECTION PLANS
 (2 OF 10)

SHEET NUMBER:

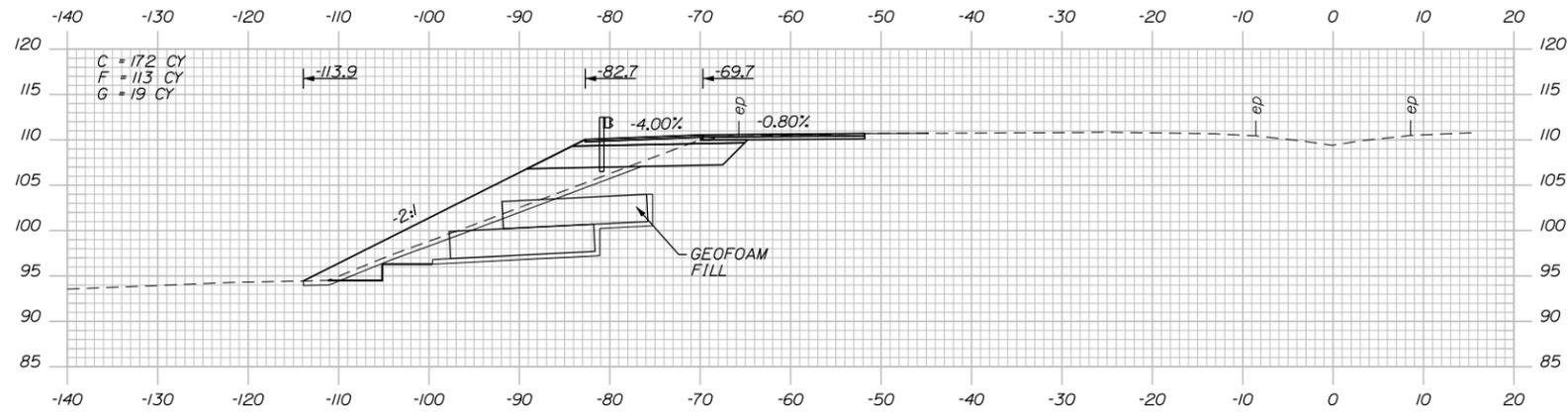
CONTRACT: 2015.06

33 OF 54

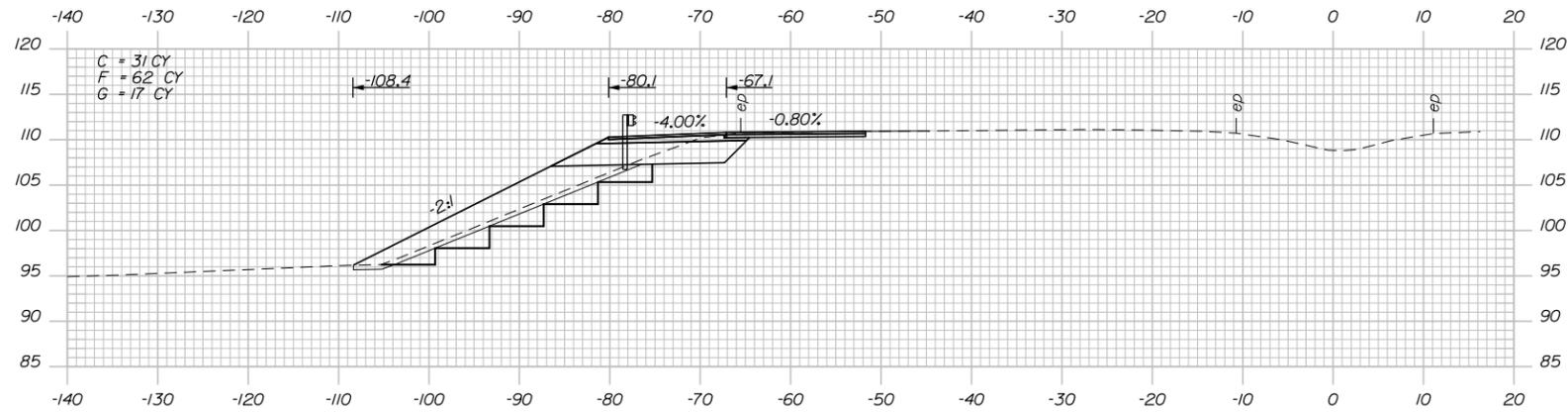
MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

Date: 2/18/2015

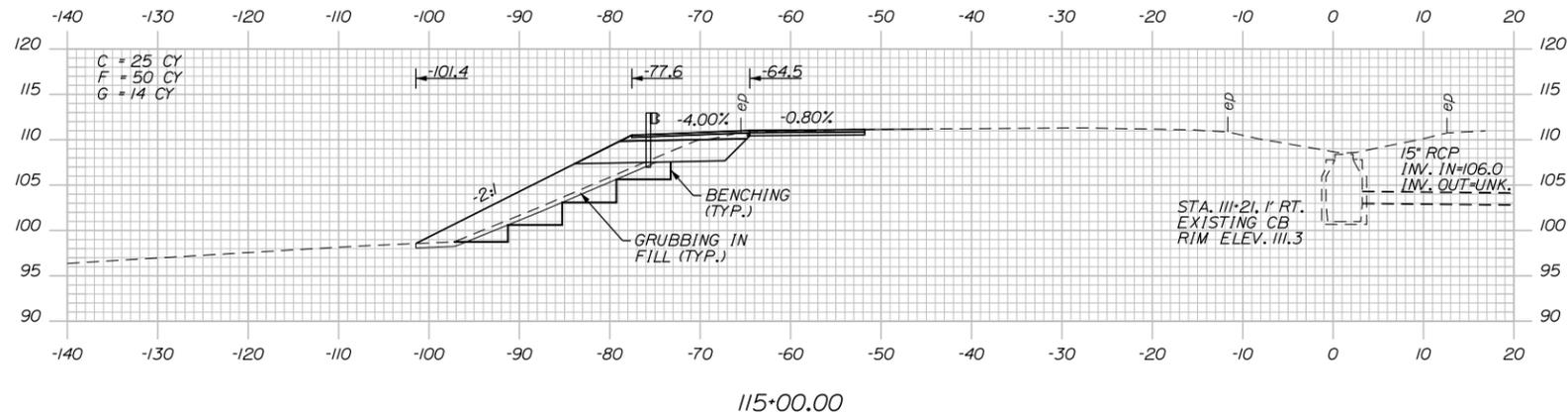
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116+00.00

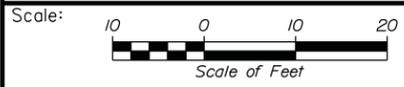


115+50.00



115+00.00

Sta. 115+00.00 to Sta. 116+00.00



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THE GOLD STAR
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INTERCHANGE 36
SACO TOLL PLAZA LANE ADDITION
CROSS SECTION PLANS
(3 OF 10)

| No. | Revision | By | Date |
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| Drawn | PZA | 02/15 | In Charge of | GAE | 02/15 |

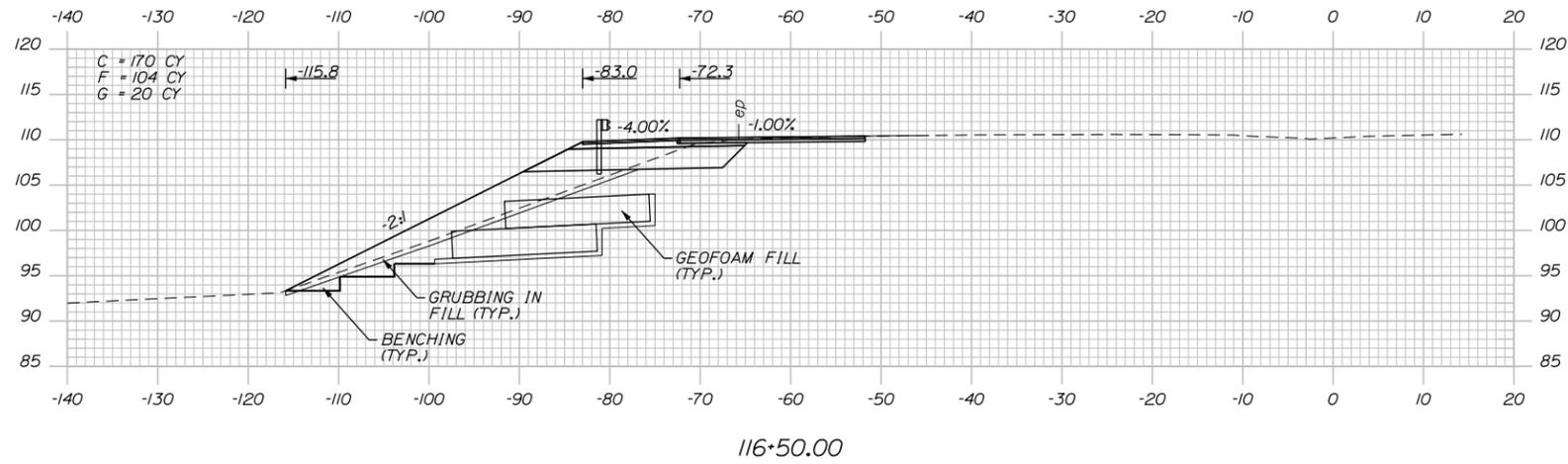
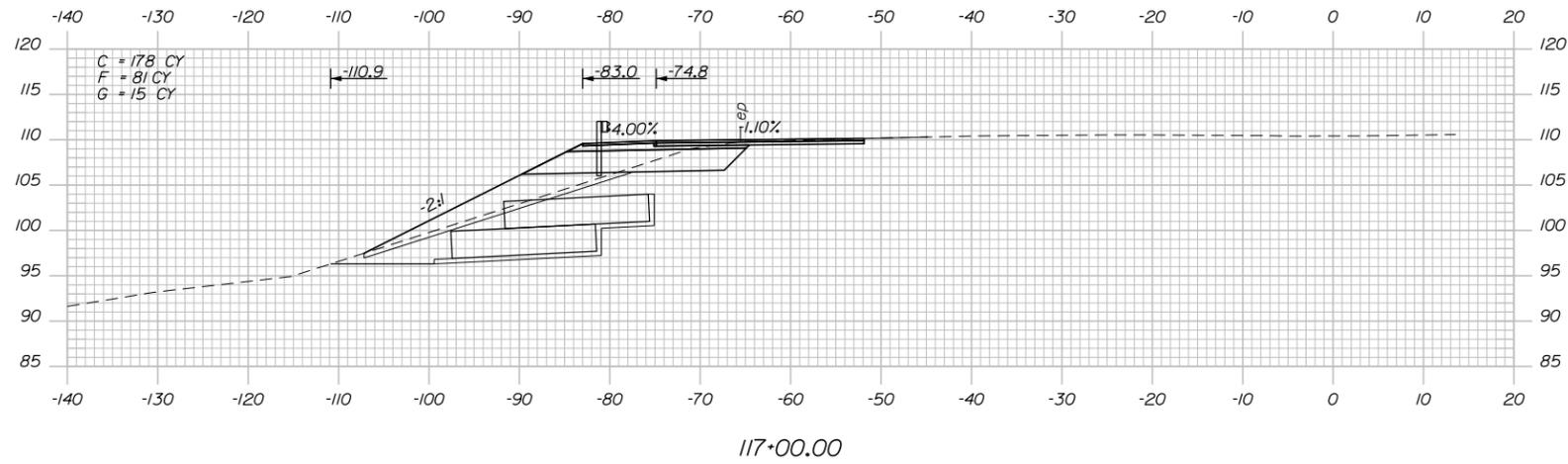
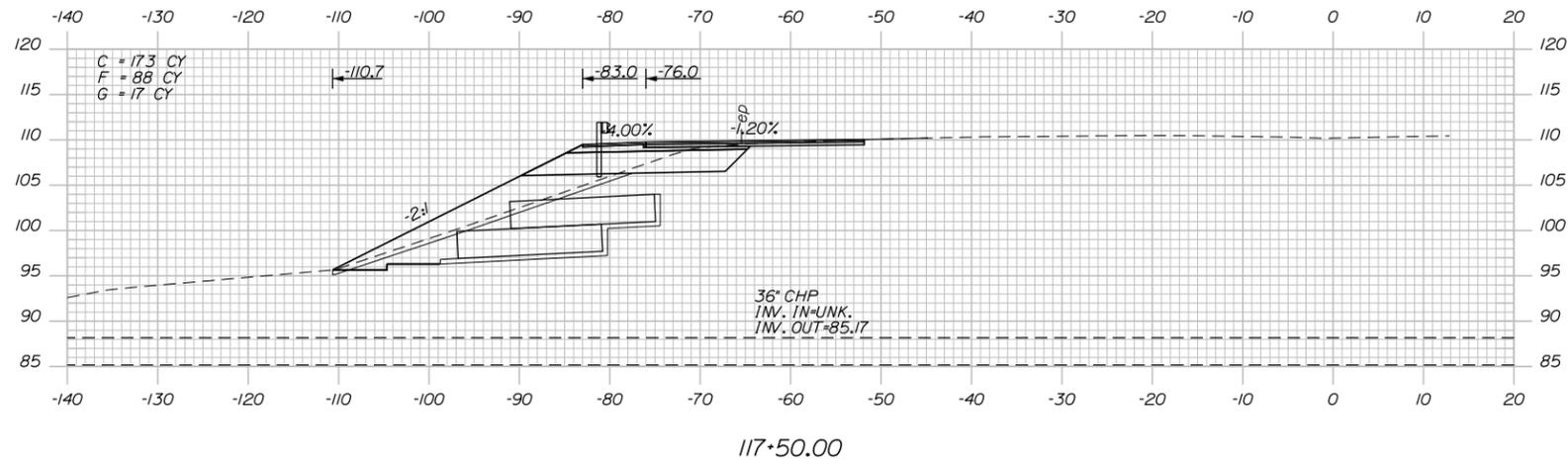
MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

CONTRACT: 2015.06

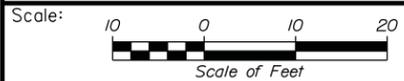
34 OF 54

Date: 2/18/2015

Filename: ...MSTA\019_Cross Sections.dgn



Sta. 116+50.00 to Sta. 117+50.00



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THE GOLD STAR
MEMORIAL HIGHWAY

INTERCHANGE 36
SACO TOLL PLAZA LANE ADDITION
CROSS SECTION PLANS
(4 OF 10)

| No. | Revision | By | Date |
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| CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE | | | | | |
| Designed | TFD | 02/15 | Checked | GAE | 02/15 |
| Drawn | PZA | 02/15 | In Charge of | GAE | 02/15 |

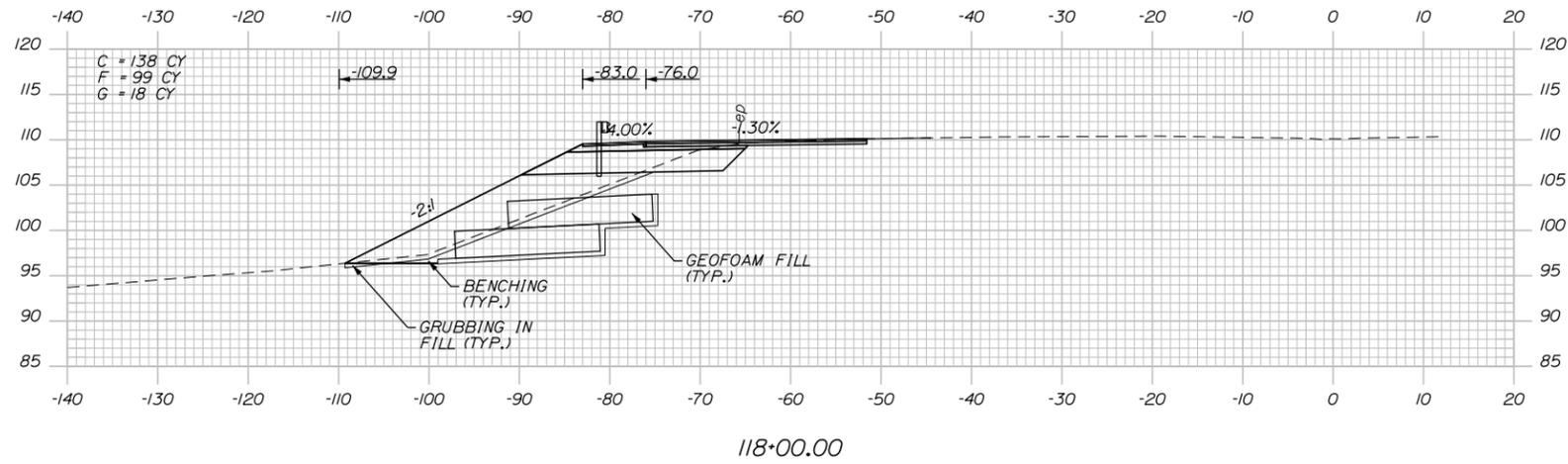
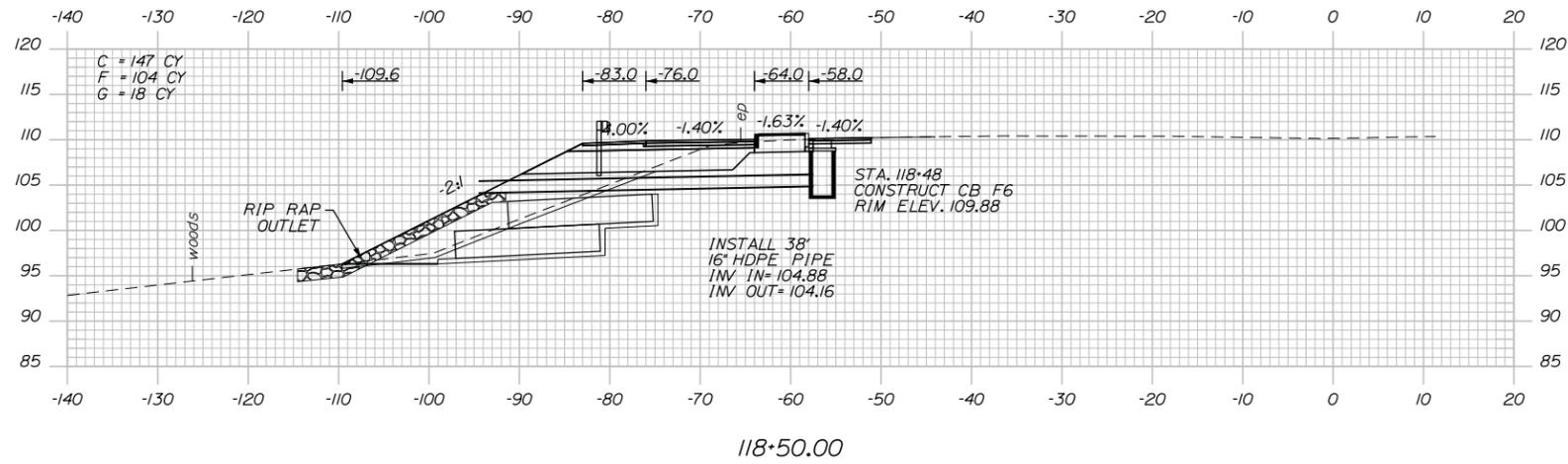
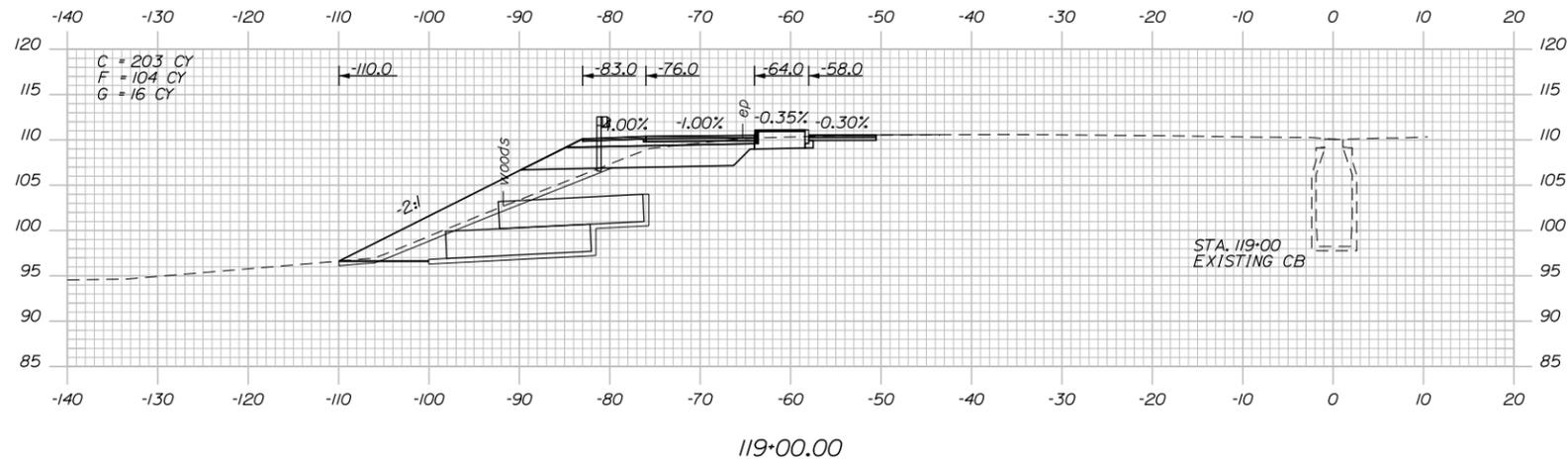
MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

CONTRACT: 2015.06

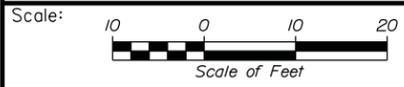
35 OF 54

Date: 2/18/2015

Filename: ...MSTA\019_Cross Sections.dgn



Sta. 118+00.00 to Sta. 119+00.00



| No. | Revision | By | Date |
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Designed by:

Stantec

CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE

| | By | Date | | By | Date |
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THE GOLD STAR MEMORIAL HIGHWAY

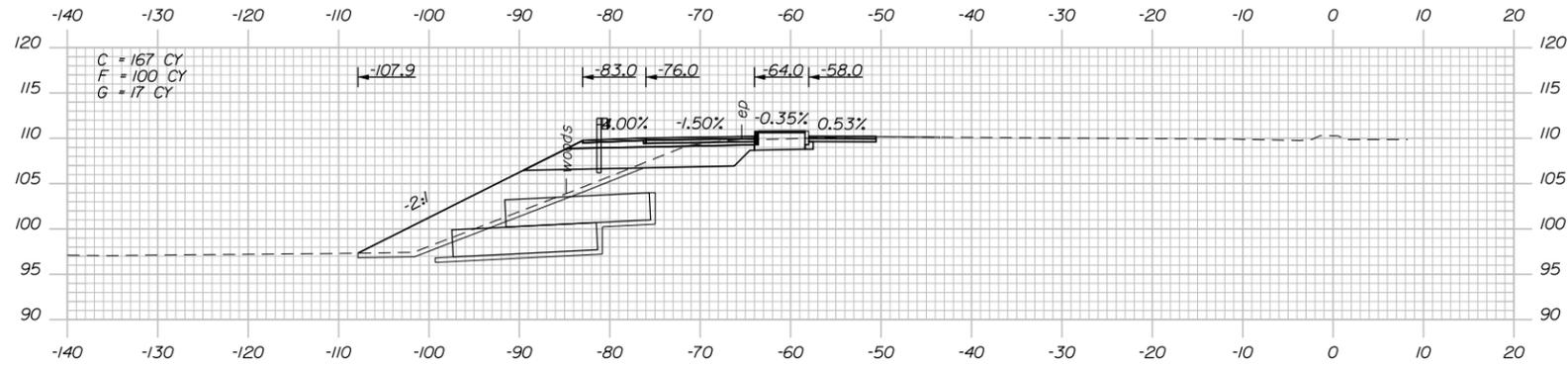
MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

INTERCHANGE 36
 SACO TOLL PLAZA LANE ADDITION
 CROSS SECTION PLANS
 (5 OF 10)

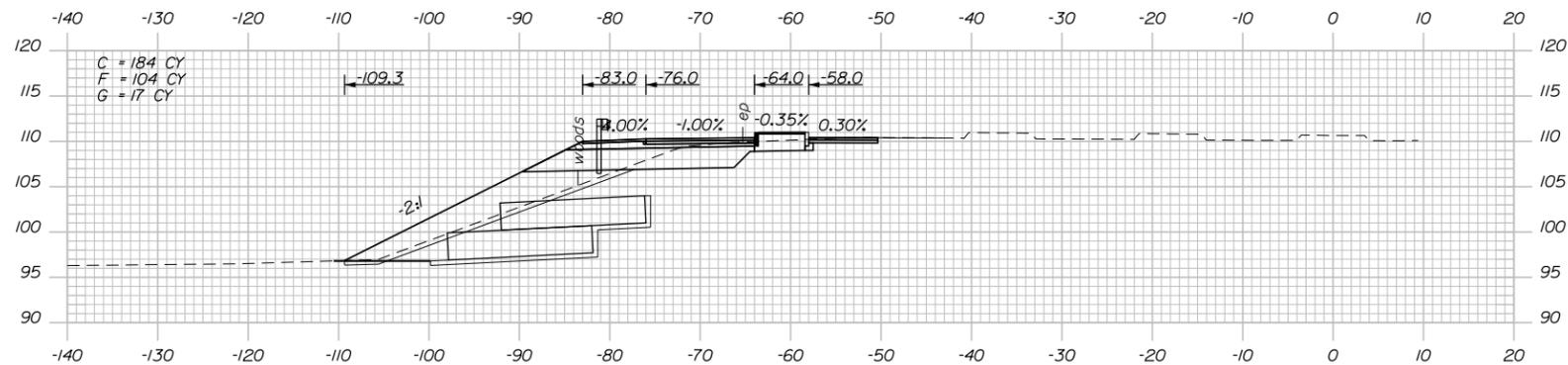
SHEET NUMBER:
 CONTRACT: 2015.06
 36 OF 54

Date: 2/18/2015

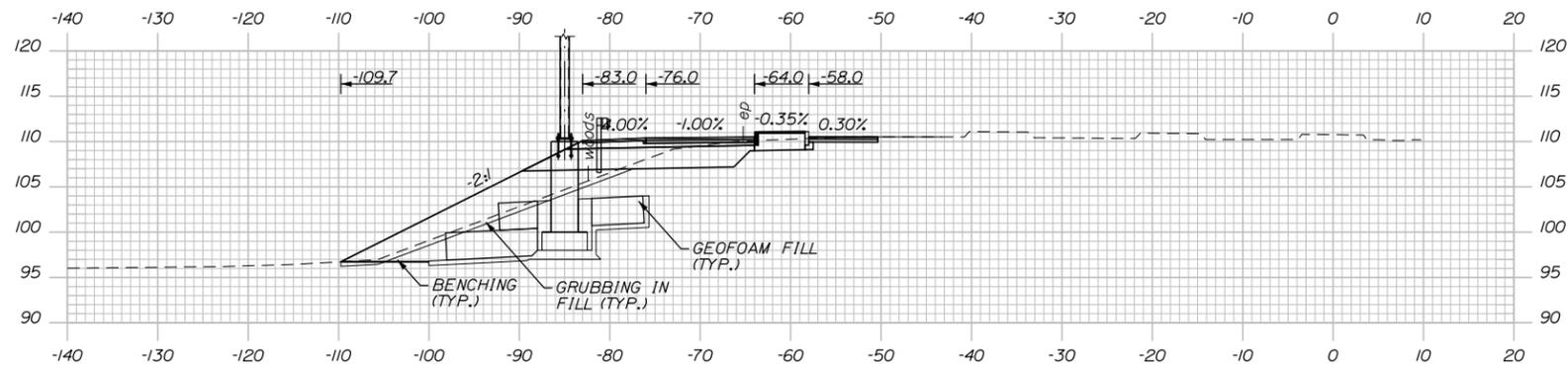
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120+00.00

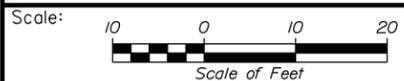


119+50.00



119+37.25

Sta. 119+37.25 to Sta. 120+00.00



| No. | Revision | By | Date |
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Stantec

CONSULTANT PROJECT MANAGER: GREG EDWARDS, PE

| | By | Date | | By | Date |
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THE GOLD STAR MEMORIAL HIGHWAY

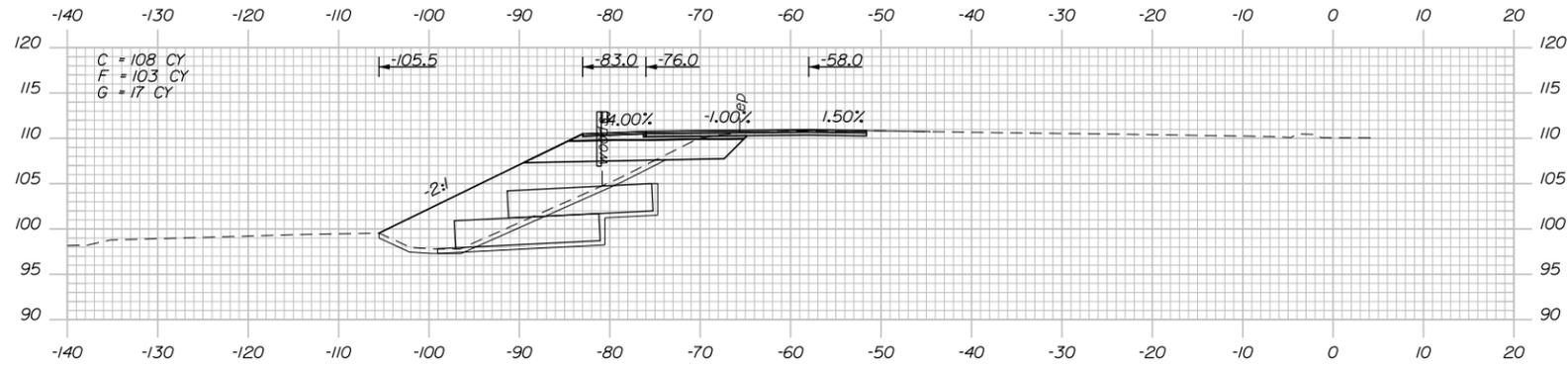
MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

INTERCHANGE 36
 SACO TOLL PLAZA LANE ADDITION
 CROSS SECTION PLANS
 (6 OF 10)

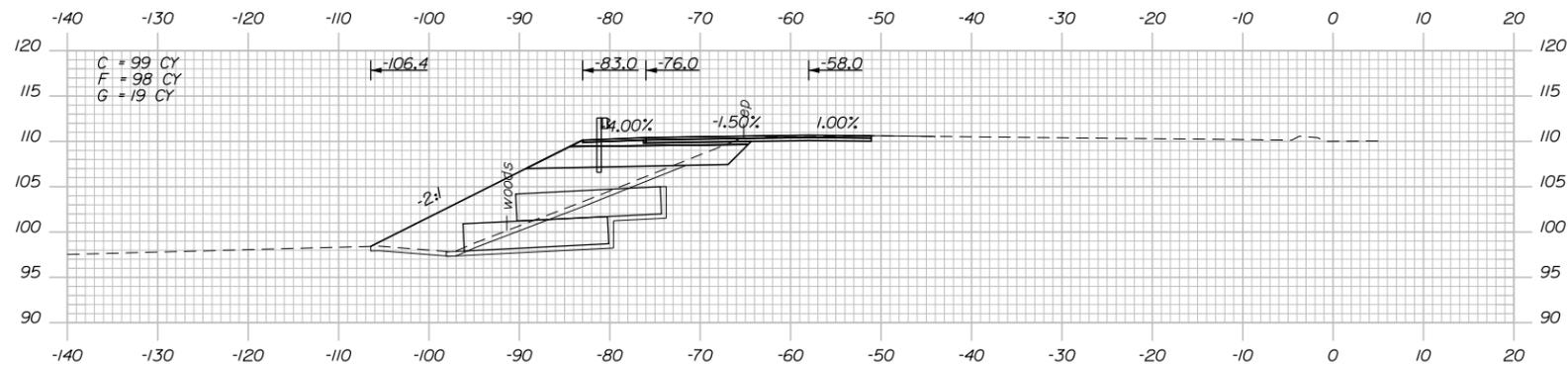
SHEET NUMBER:
 CONTRACT: 2015.06
 37 OF 54

Date: 2/18/2015

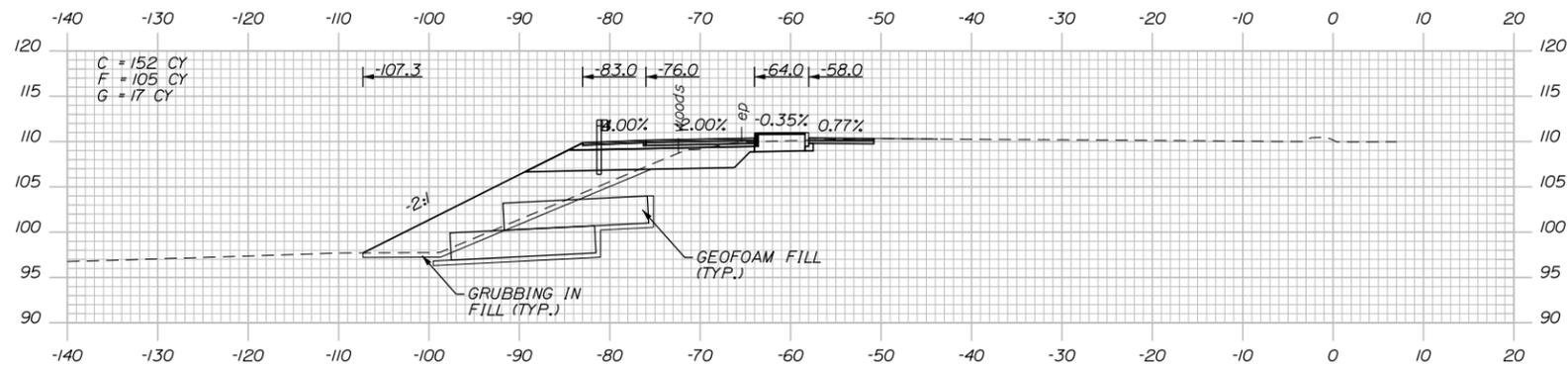
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121+50.00

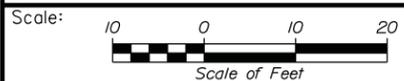


121+00.00



120+50.00

Sta. 120+50.00 to Sta. 121+50.00



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INTERCHANGE 36
SACO TOLL PLAZA LANE ADDITION
CROSS SECTION PLANS
(7 OF 10)

| No. | Revision | By | Date |
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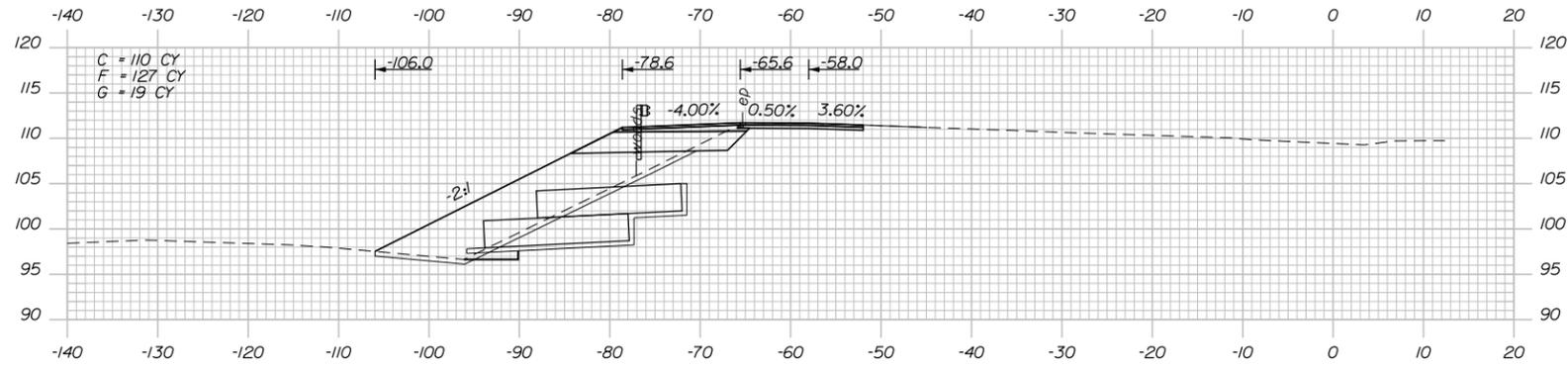
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CONTRACT: 2015.06

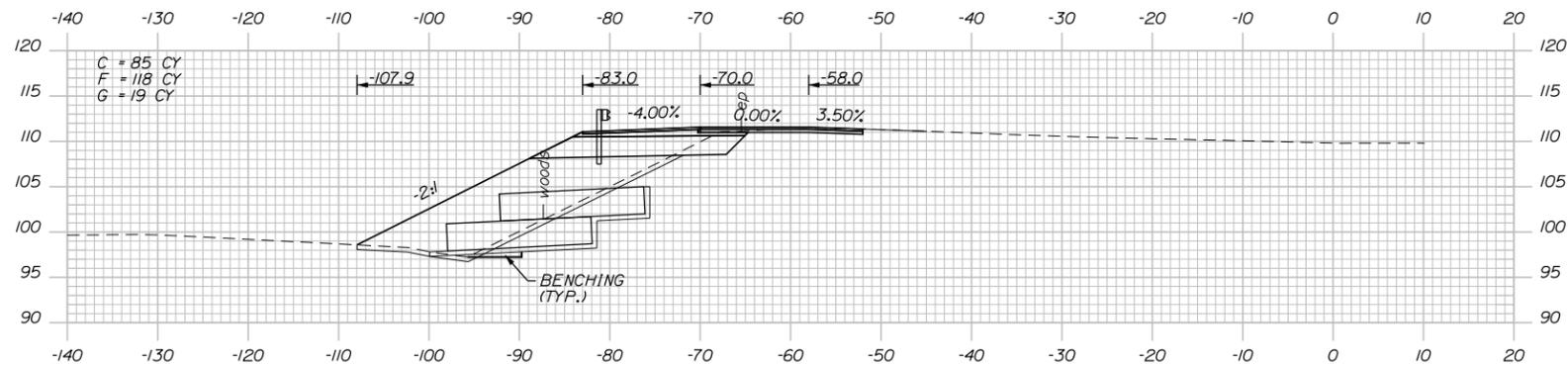
SHEET NUMBER:
38 OF 54

Date: 2/18/2015

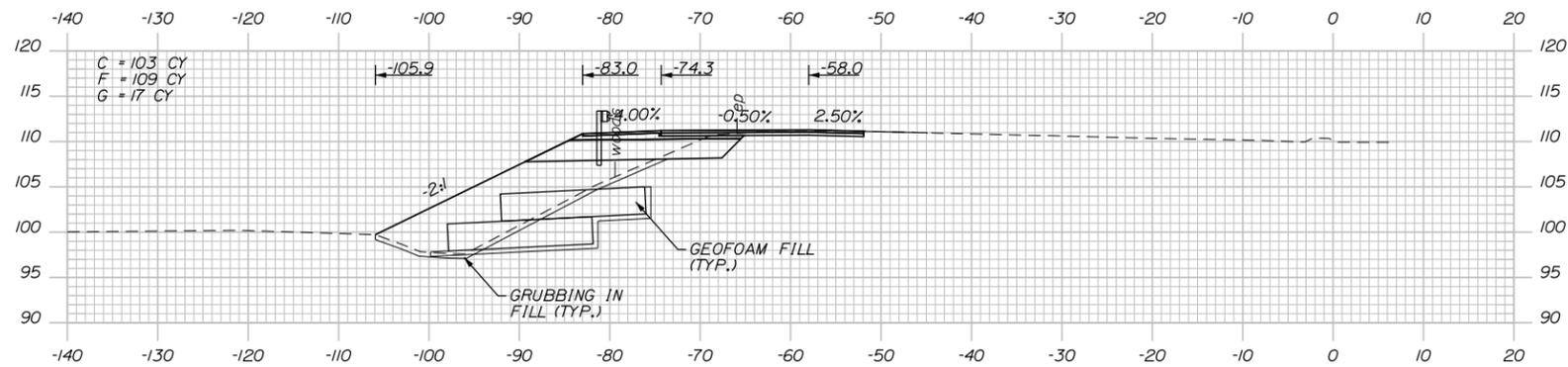
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123+00.00

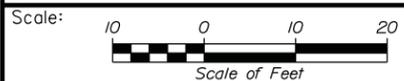


122+50.00



122+00.00

Sta. 122+00.00 to Sta. 123+00.00



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| | By | Date | By | Date | |
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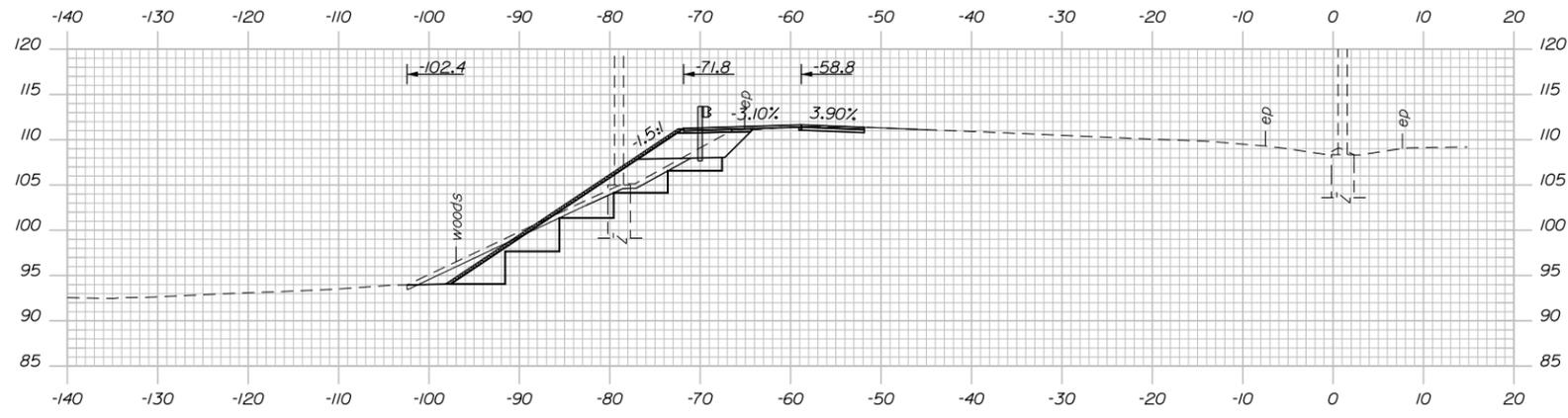
MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

INTERCHANGE 36
 SACO TOLL PLAZA LANE ADDITION
 CROSS SECTION PLANS
 (8 OF 10)

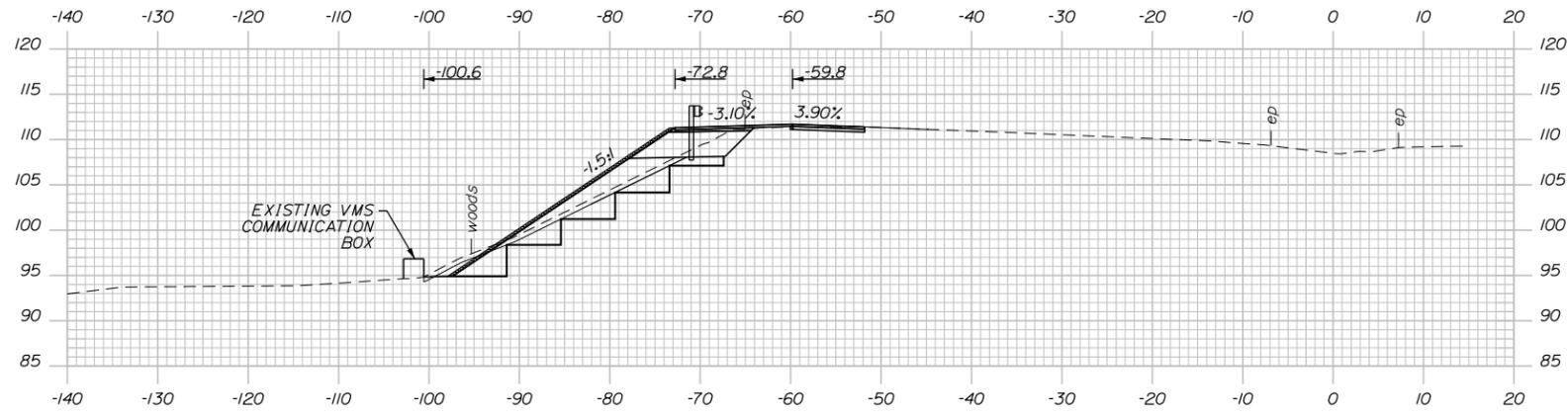
SHEET NUMBER:
 CONTRACT: 2015.06
 39 OF 54

Date: 2/18/2015

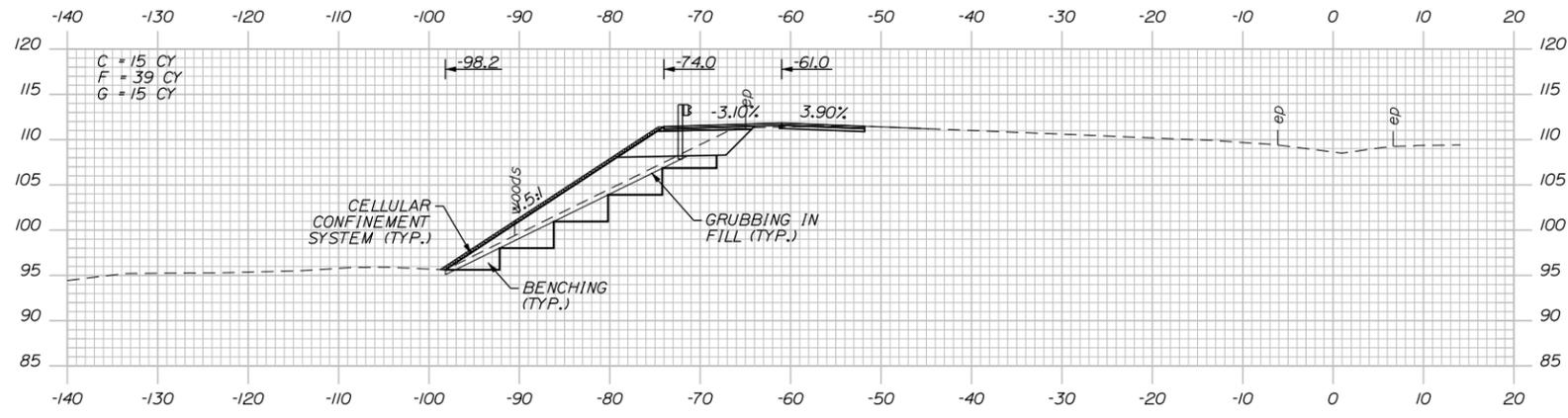
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123+73.42

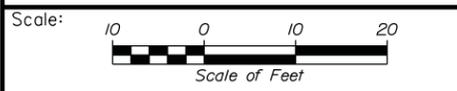


123+63.17



123+50.00

Sta. 123+50.00 To Sta. 123+73.42



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| By | Date | By | Date |
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MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

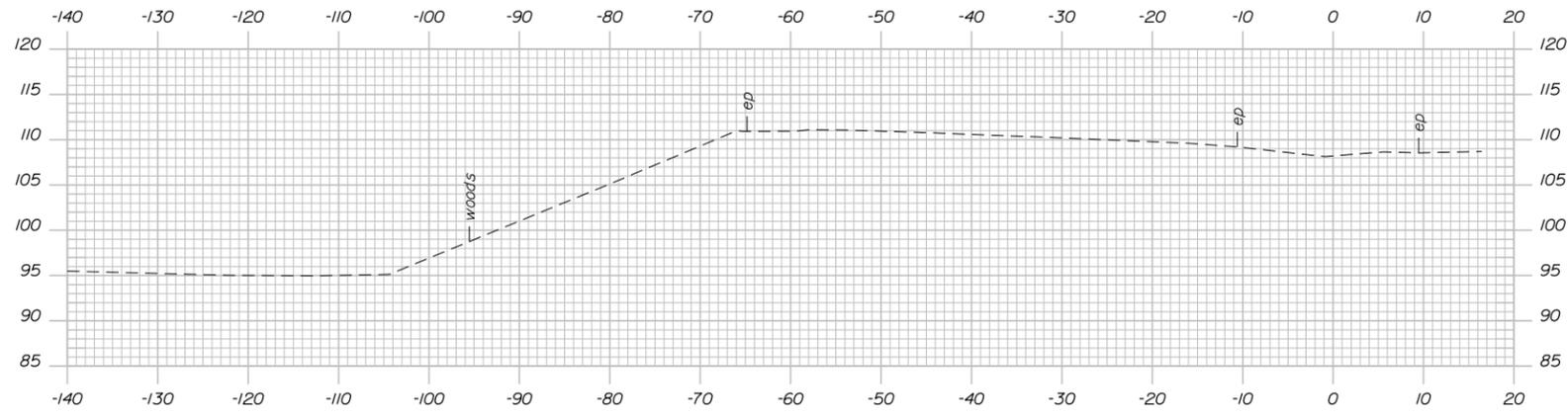
INTERCHANGE 36
 SACO TOLL PLAZA LANE ADDITION
 CROSS SECTION PLANS
 (9 OF 10)

SHEET NUMBER:
 40 OF 54

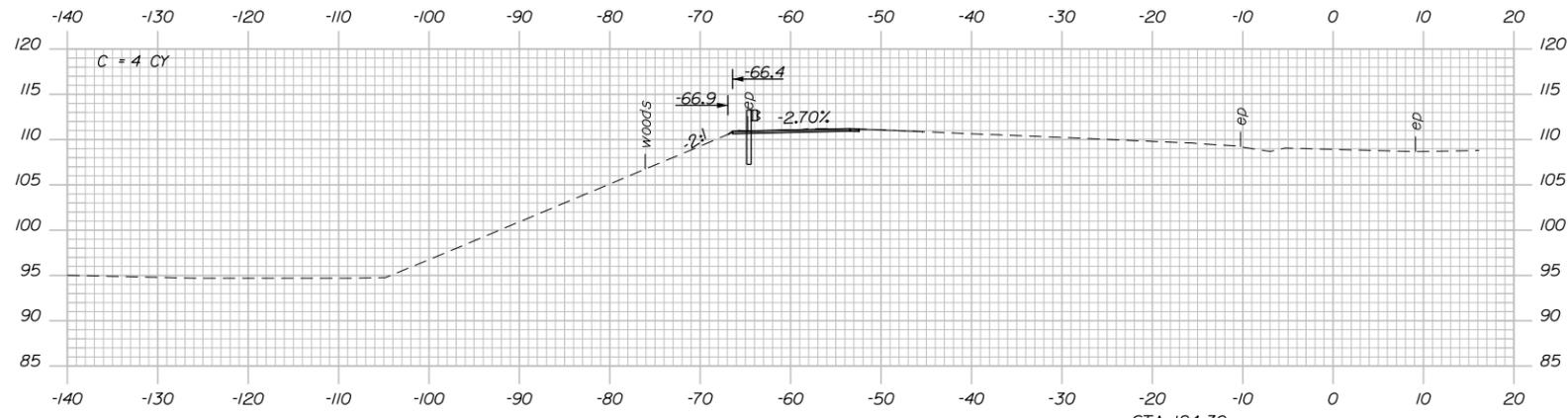
CONTRACT: 2015.06

Date: 2/18/2015

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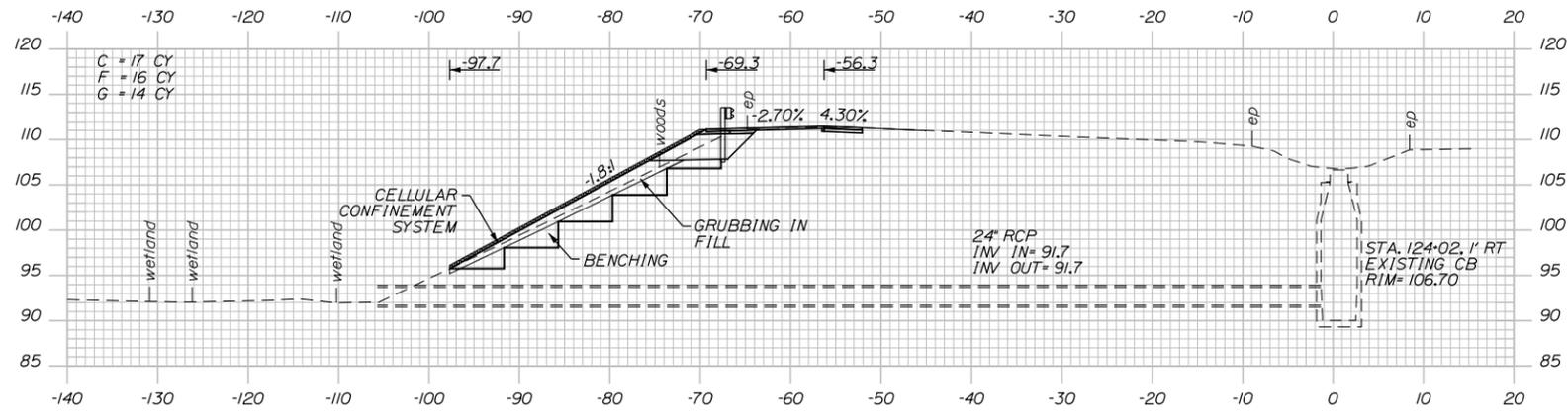


124+50.00



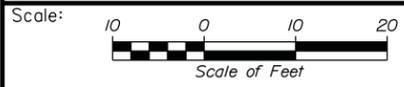
124+30.00

STA. 124+30
LIMIT OF WORK
MATCH EXISTING PAVEMENT



124+00.00

Sta. 124+00.00 to Sta. 124+50.00



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INTERCHANGE 36
SACO TOLL PLAZA LANE ADDITION
CROSS SECTION PLANS
(10 OF 10)

| No. | Revision | By | Date |
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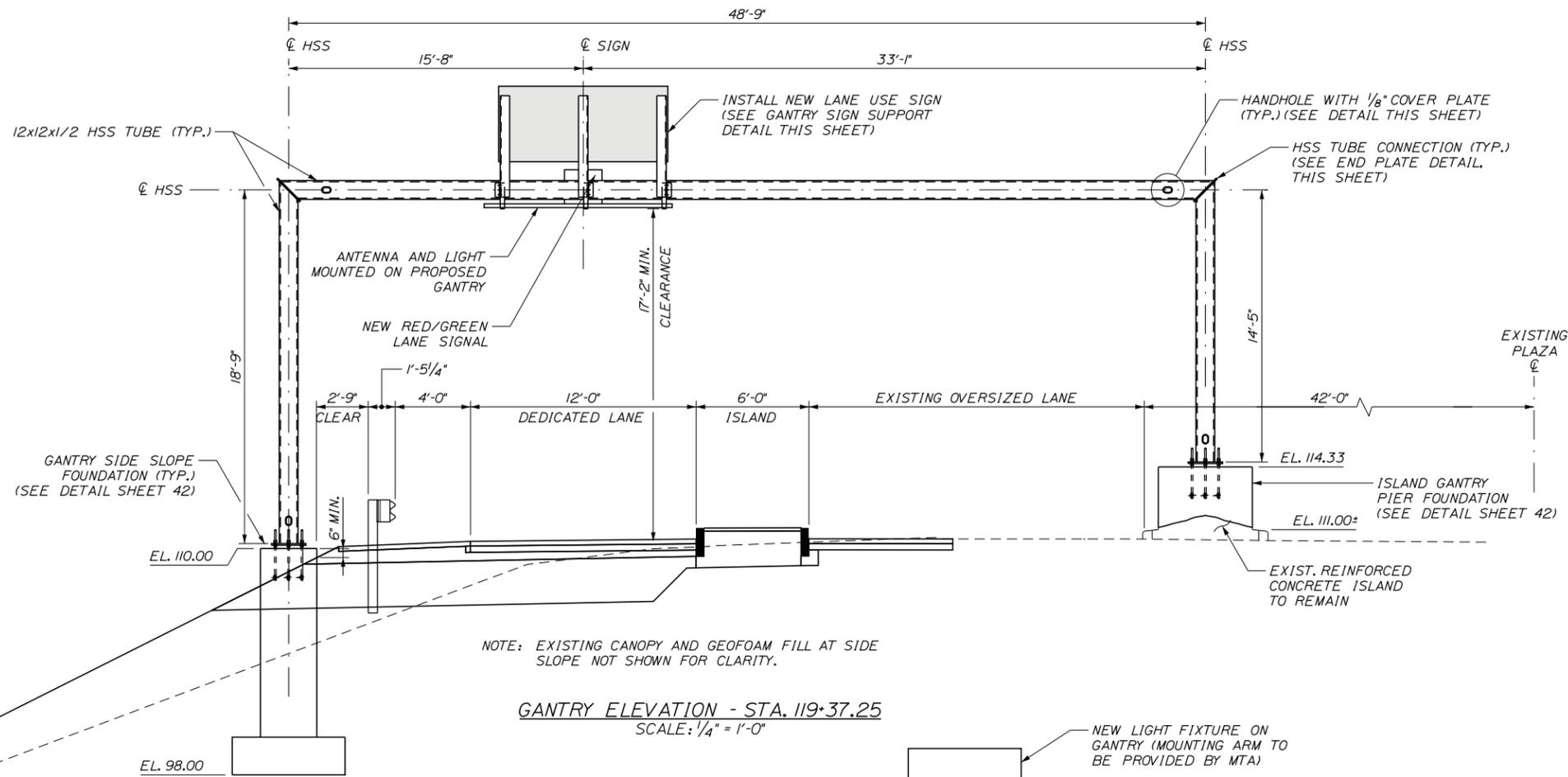
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CONTRACT: 2015.06

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Date: 2/18/2015

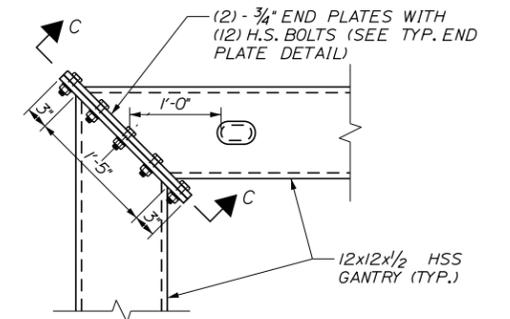


NOTE: EXISTING CANOPY AND GEOFOAM FILL AT SIDE SLOPE NOT SHOWN FOR CLARITY.

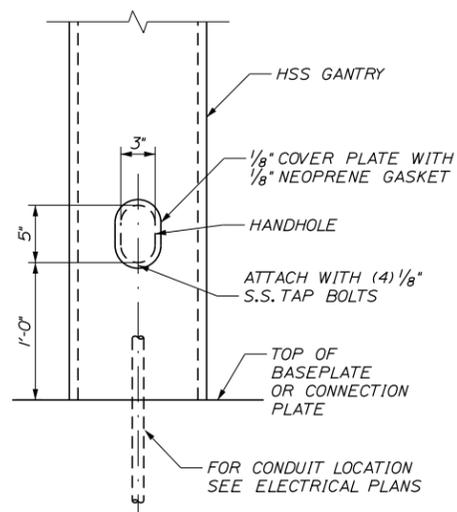
GANTRY ELEVATION - STA. 119+37.25
 SCALE: 1/4" = 1'-0"

GANTRY NOTES

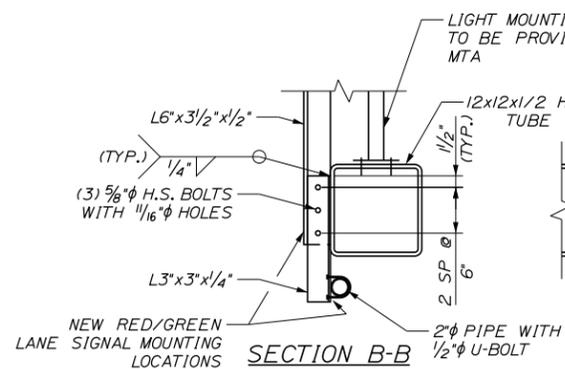
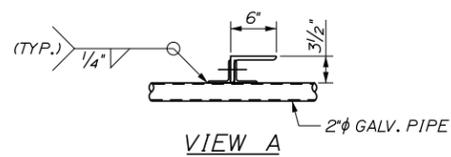
- ALL STRUCTURAL STEEL SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH AASHTO M 111 (ASTM A123).
- STRUCTURAL STEEL TUBING SHALL BE ASTM A500, FY=46,000 psi. ALL OTHER STRUCTURAL STEEL TO BE AASHTO M20 (ASTM A709) GRADE 36.
- ALL HIGH STRENGTH BOLTS SHALL BE ASTM A325.
- DESIGN SPECIFICATIONS:
 - A) 2013 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS (WITH INTERIMS).
 - B) 2002 (7TH EDITION) STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.
- THREADED RODS SHALL BE ASTM F1554, GRADE 105, HOT-DIP GALVANIZED AS PER ASTM A153. NUTS SHALL CONFORM TO ASTM A563 AND PLATE WASHERS SHALL CONFORM TO ASTM F436. ALL NUTS AND WASHERS SHALL ALSO BE HOT-DIP GALVANIZED AS PER ASTM A153.
- THE GANTRY SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT EDITION OF THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY TRAFFIC SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS, INCLUDING ALL INTERIMS.
- THE GANTRY SHALL BE CAMBERED UPWARD 1" AT MID-SPAN.



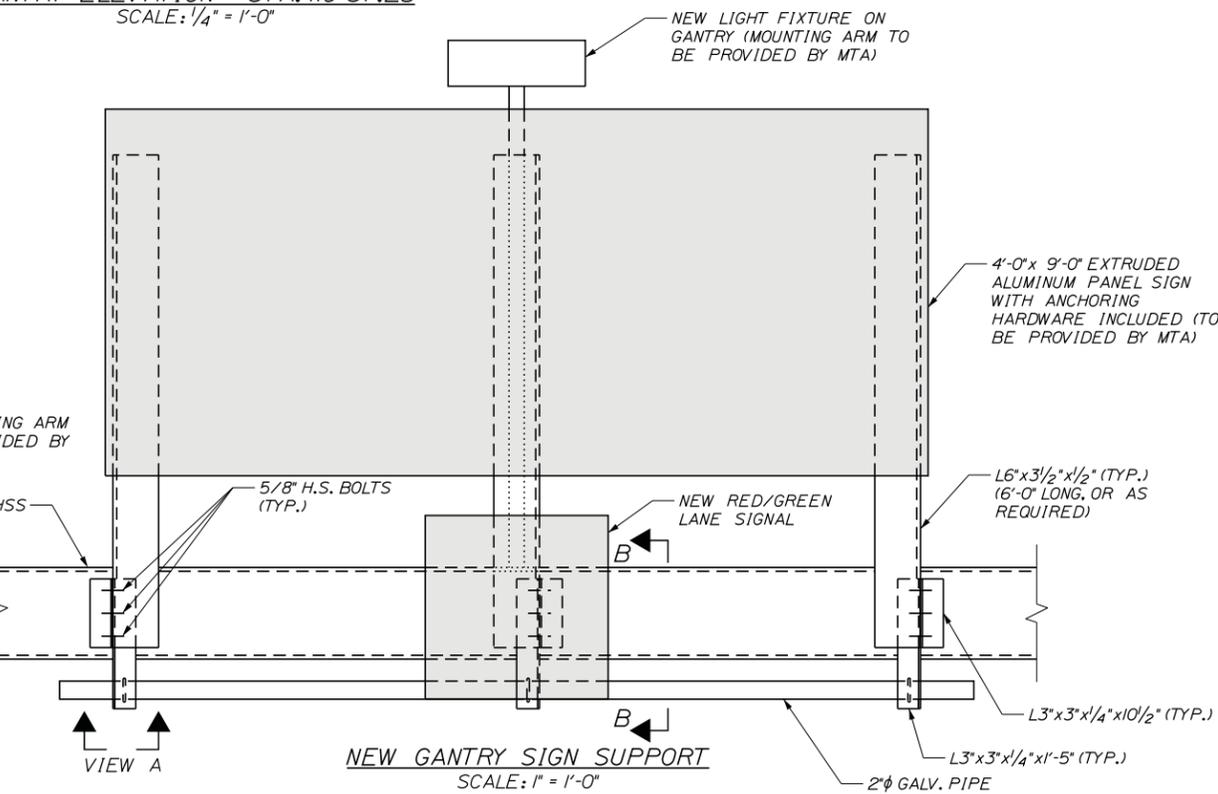
GANTRY END PLATE ELEVATION
 SCALE: 1" = 1'-0"



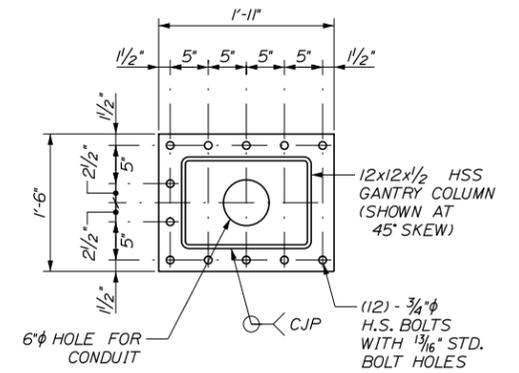
HANDHOLE DETAIL
 SCALE: 1/2" = 1'-0"



SECTION B-B
 SCALE: 1" = 1'-0"



NEW GANTRY SIGN SUPPORT
 SCALE: 1" = 1'-0"



SECTION C-C - GANTRY END PLATE CONNECTION DETAIL
 SCALE: 1" = 1'-0"

Scale: AS NOTED

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CONSULTANT PROJECT MANAGER: GREG EDWARDS

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THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: RALPH C. NORWOOD, IV

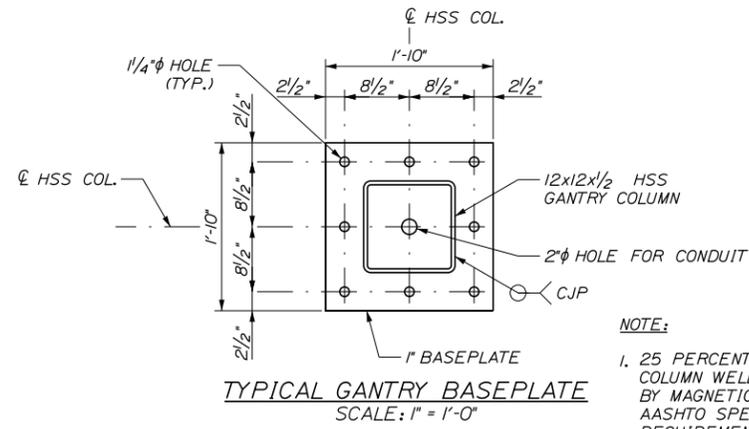
INTERCHANGE 36
 SACO TOLL PLAZA LANE ADDITION
 STRUCTURAL DETAILS
 (1 OF 4)

SHEET NUMBER: 42 OF 54

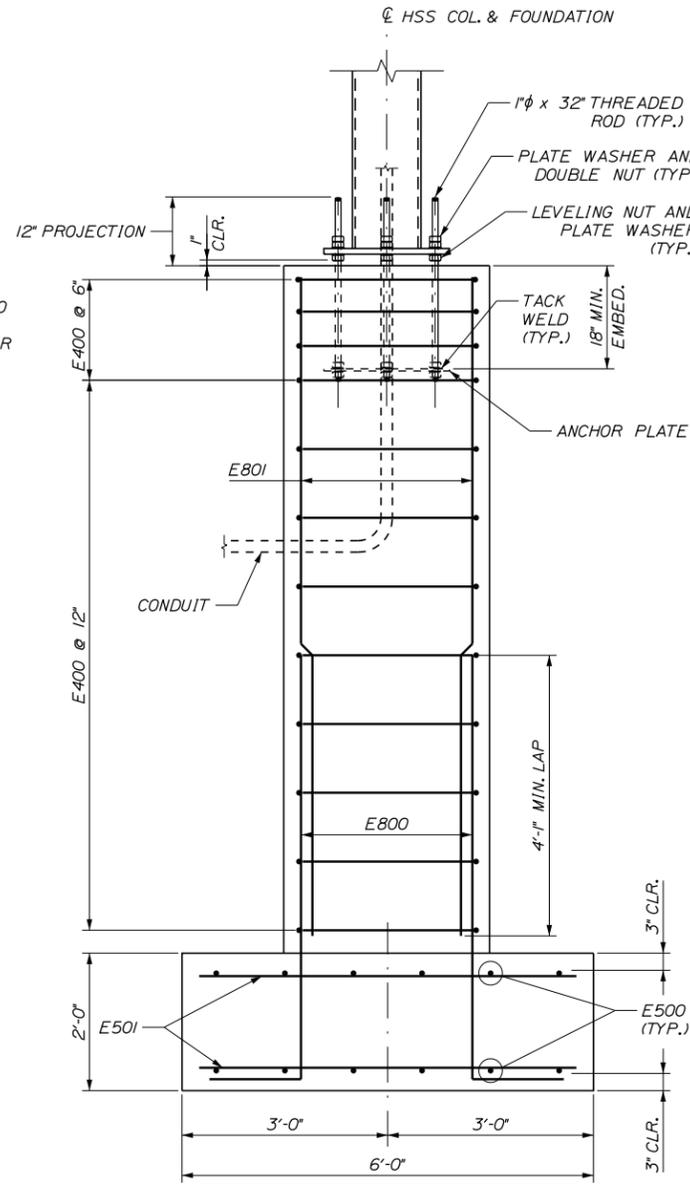
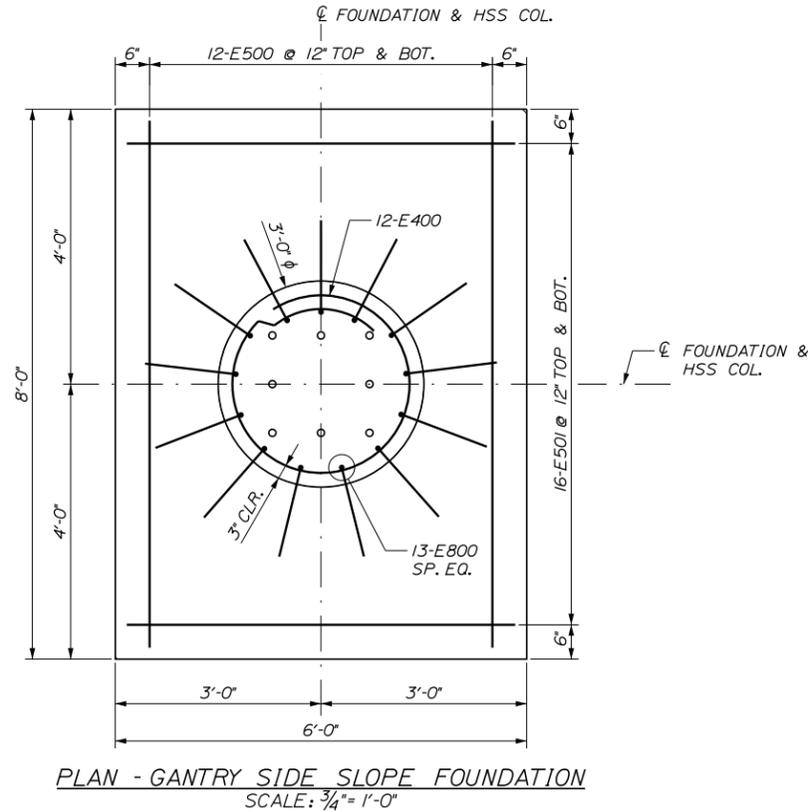
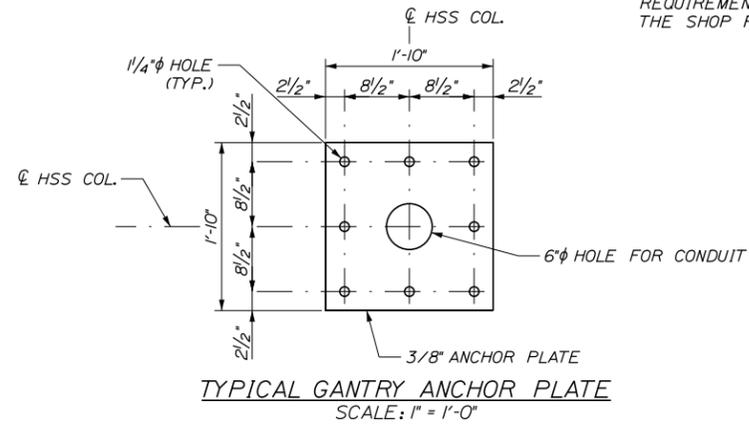
CONTRACT: 2015.06

Date: 2/18/2015

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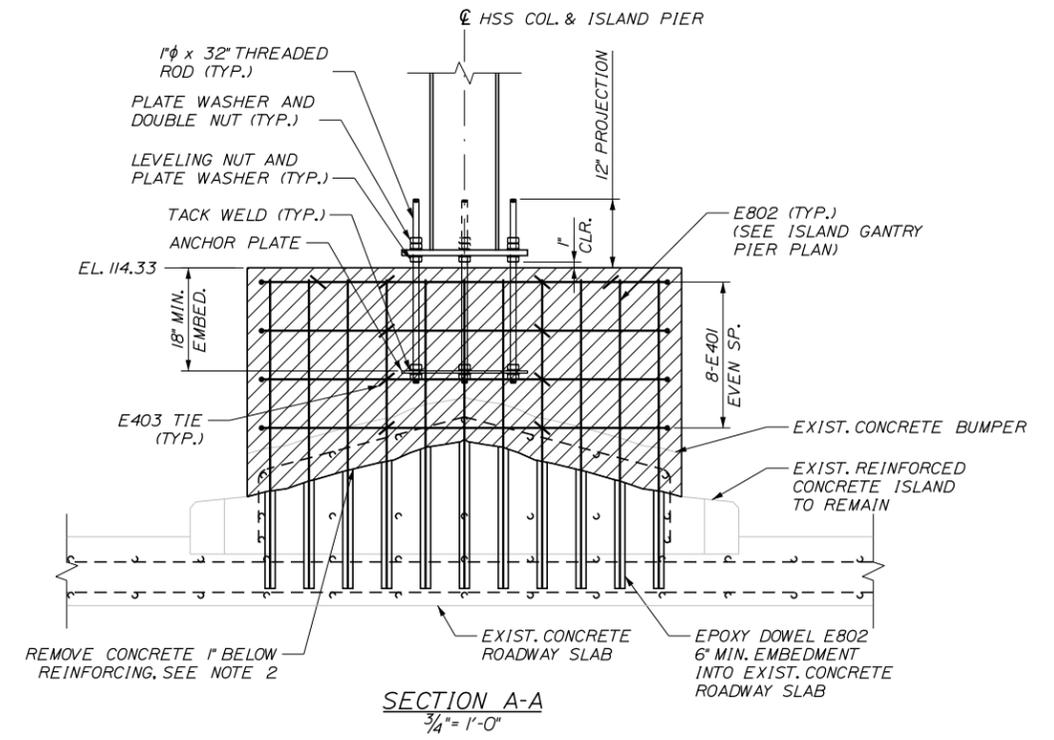
NOTE:
1. 25 PERCENT OF THE BASEPLATE TO COLUMN WELD SHALL BE INSPECTED BY MAGNETIC PARTICLE TESTING PER AASHTO SPECIFICATIONS. THIS REQUIREMENT SHALL BE NOTED ON THE SHOP PLANS.



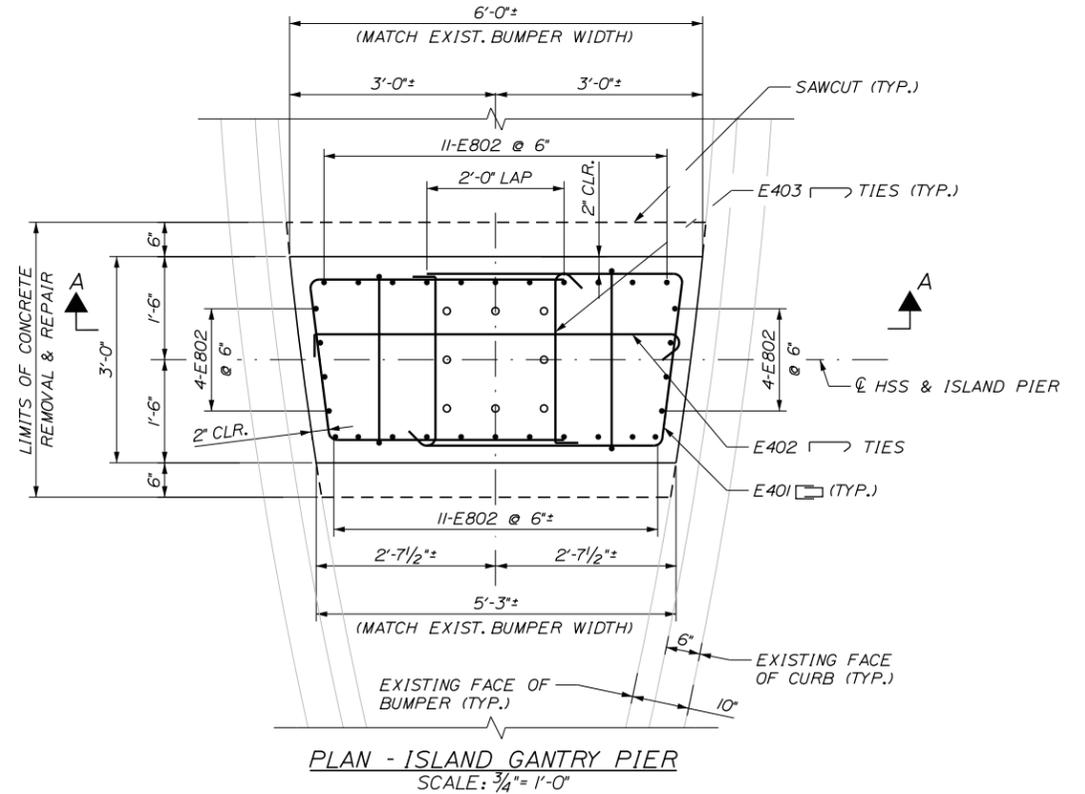
ELEVATION - GANTRY SIDE SLOPE FOUNDATION
SCALE: 3/4" = 1'-0"

FOUNDATION NOTES

1. THE SIDE SLOPE FOUNDATION SHALL BE BACKFILLED TO FINAL GROUND BEFORE THE GANTRY IS INSTALLED.
2. CONCRETE REMOVAL AND REPAIR LIMITS AS APPROVED BY THE RESIDENT IN ACCORDANCE WITH SPECIFICATION SECTION 518.
3. ALL REINFORCING STEEL SHALL HAVE 3" MINIMUM CLEAR COVER UNLESS NOTED OTHERWISE.
4. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 5/8" x 1/8".
5. ALL CONCRETE SHALL BE CLASS A WITH DESIGN COMPRESSIVE STRENGTH $f_c = 4000$ PSI.



SECTION A-A
3/4" = 1'-0"



PLAN - ISLAND GANTRY PIER
SCALE: 3/4" = 1'-0"

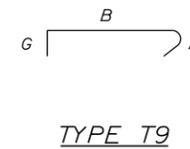
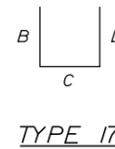
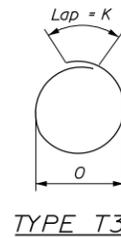
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| Scale: | | | | Designed by: | | | |
| AS NOTED | | | | | | | |
| No. | Revision | By | Date | | | | |
| | | | | CONSULTANT PROJECT MANAGER: GREG EDWARDS | | | |
| | | | | By | Date | By | Date |
| | | | | Designed | SJP 02/15 | Checked | TWM 02/15 |
| | | | | Drawn | JTS 02/15 | In Charge of | GAE 02/15 |

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| MTA PROJECT MANAGER: RALPH C. NORWOOD, IV | | | | CONTRACT: 2015.06 | | | |

INTERCHANGE 36
SACO TOLL PLAZA LANE ADDITION
STRUCTURAL DETAILS
(2 OF 4)

REINFORCING STEEL SCHEDULE

| MARK | SIZE | NO. | LENGTH | TYPE | A | B | C | D | E | F | G | H | K | O | REMARKS |
|---------------------------------------|------|-----|--------|------|-------|--------|-------|--------|---|---|-------|---|-------|-------|------------------------------|
| GANTRY - SIDE SLOPE FOUNDATION | | | | | | | | | | | | | | | |
| E400 | 4 | 12 | 9'-7" | T3 | | | | | | | | | 1'-0" | 2'-9" | HORIZ. |
| E500 | 5 | 12 | 7'-6" | STR. | | | | | | | | | | | TRANSVERSE |
| E501 | 5 | 16 | 5'-6" | STR. | | | | | | | | | | | LONGITUDINAL |
| E800 | 8 | 13 | 7'-8" | 17 | | 6'-4" | 1'-4" | -- | | | | | | | VERTICAL |
| E801 | 8 | 13 | 9'-6" | STR. | | | | | | | | | | | VERTICAL |
| GANTRY - ISLAND PIER | | | | | | | | | | | | | | | |
| E401 | 4 | 8 | 10'-4" | 17 | | 3'-10" | 2'-8" | 3'-10" | | | | | | | HORIZ. |
| E402 | 4 | 4 | 6'-1" | T9 | 0'-5" | 5'-3" | | | | | 0'-5" | | | | HORIZ. |
| E403 | 4 | 10 | 3'-6" | T9 | 0'-5" | 2'-8" | | | | | 0'-5" | | | | HORIZ. |
| E802 | 8 | 30 | 4'-9" | STR. | | | | | | | | | | | VERTICAL |
| PAVEMENT SLAB | | | | | | | | | | | | | | | |
| S601 | 6 | 48 | 50'-0" | STR. | | | | | | | | | | | GFRP LONGITUDINAL TOP & BOT. |
| S602 | 6 | 200 | 11'-6" | STR. | | | | | | | | | | | GFRP TRANSVERSE TOP & BOT. |



Date: 2/18/2015

Filename: ...MSTA\struct_details_3 of 4.dgn

| Scale: AS NOTED | | | |
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| Designed by: | | | | | |
| CONSULTANT PROJECT MANAGER: GREG EDWARDS | | | | | |
| | By | Date | | By | Date |
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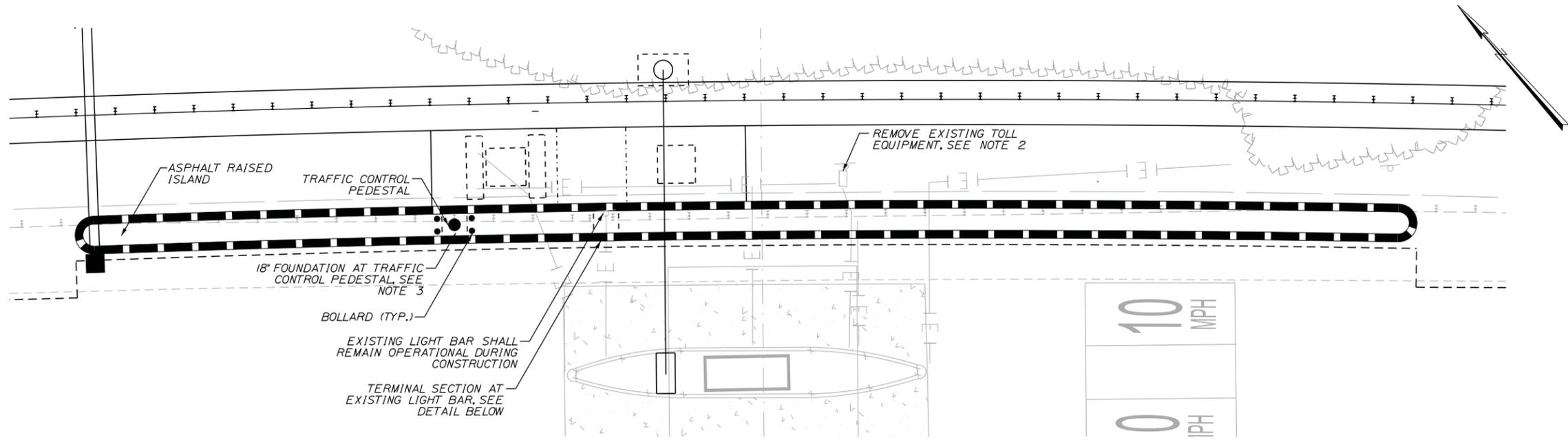
**THE GOLD STAR
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: RALPH C. NORWOOD, IV

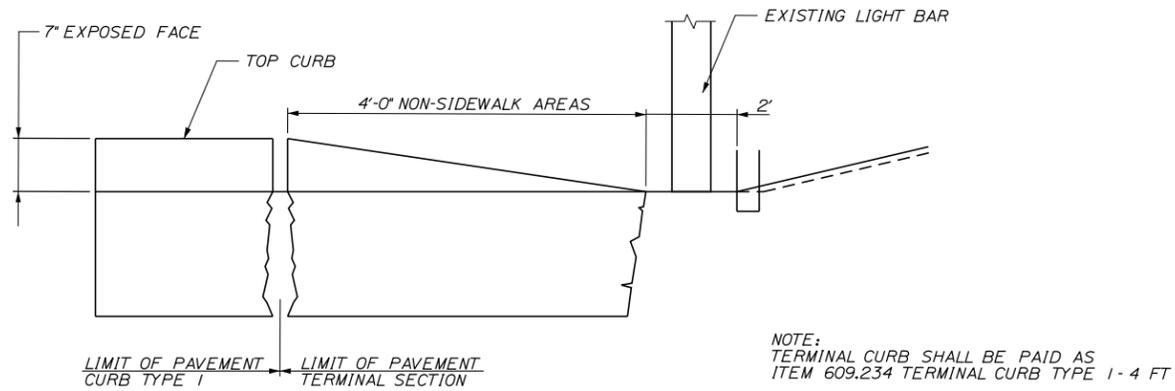
INTERCHANGE 36
 SACO TOLL PLAZA LANE ADDITION
 STRUCTURAL DETAILS
 (3 OF 4)

SHEET NUMBER:
 CONTRACT: 2015.06
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Date: 2/18/2015



ISLAND TOLL EQUIPMENT FOUNDATION PLAN
1" = 10'-0"

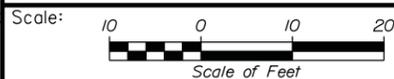


TERMINAL SECTION TYPE 1
NTS

NOTES:

1. REFER TO SHEETS 43 THROUGH 45 FOR MORE INFORMATION ON TOLL SENSORS, PEDESTALS AND OTHER PROPOSED/RELOCATED TOLL EQUIPMENT.
2. PAYMENT FOR THE REMOVAL OF EXISTING ABANDONED TOLL EQUIPMENT SHALL BE MADE UNDER 655.71 REMOVAL OF EXISTING SELECT TOLL EQUIPMENT. ABANDONED CONCRETE SHALL BE CAPPED WATER TIGHT AT LIMIT OF WORK.
3. ALL CONCRETE SHALL BE CLASS A WITH DESIGN COMPRESSIVE STRENGTH OF $f'_c = 4000$ PSI.

Filename: ...MSTA\020_Typ_Sensor.dgn



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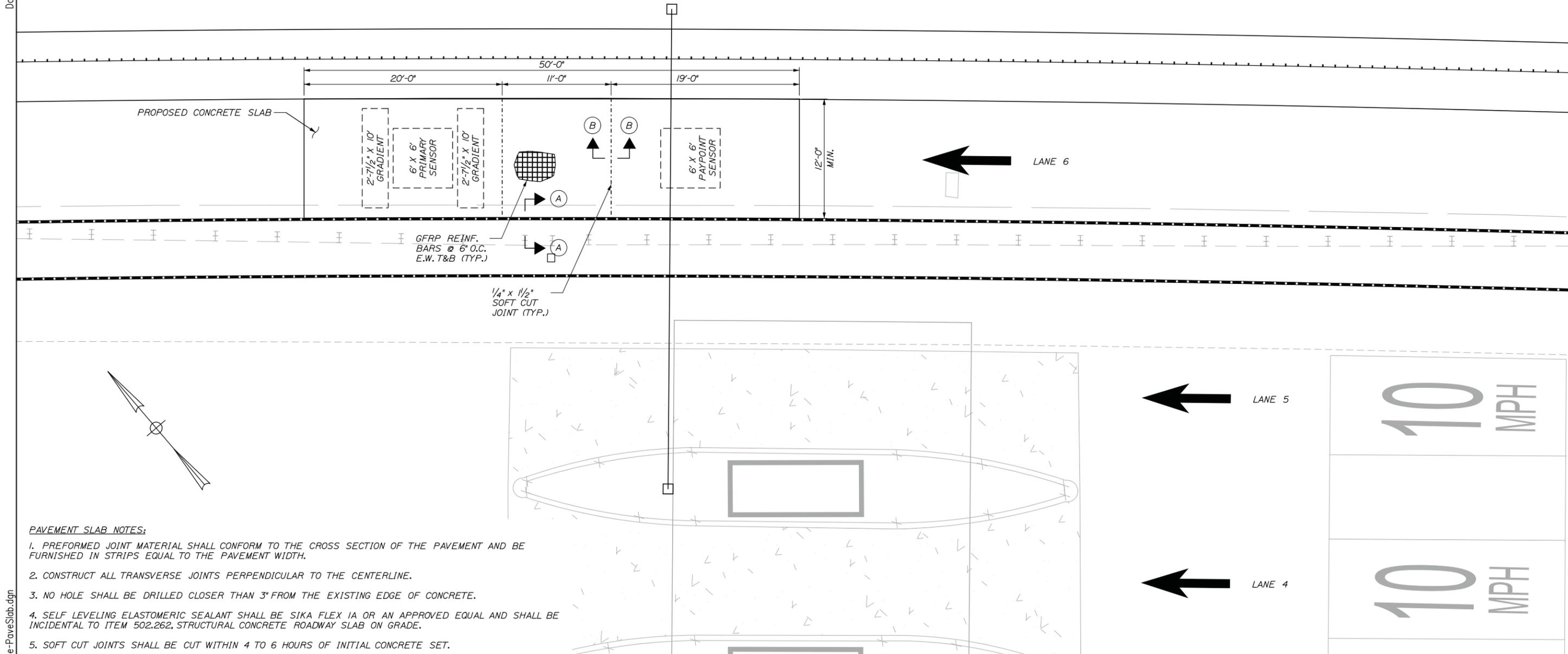
**THE GOLD STAR
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MTA PROJECT MANAGER: RALPH C. NORWOOD, IV, PE

INTERCHANGE 36
SACO TOLL PLAZA LANE ADDITION
STRUCTURAL DETAILS
(4 OF 4)

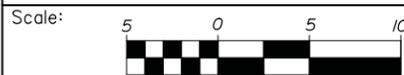
SHEET NUMBER:
CONTRACT: 2015.06
45 OF 54

Date: 2/17/2015



PAVEMENT SLAB NOTES:

1. PREFORMED JOINT MATERIAL SHALL CONFORM TO THE CROSS SECTION OF THE PAVEMENT AND BE FURNISHED IN STRIPS EQUAL TO THE PAVEMENT WIDTH.
2. CONSTRUCT ALL TRANSVERSE JOINTS PERPENDICULAR TO THE CENTERLINE.
3. NO HOLE SHALL BE DRILLED CLOSER THAN 3" FROM THE EXISTING EDGE OF CONCRETE.
4. SELF LEVELING ELASTOMERIC SEALANT SHALL BE SIKA FLEX IA OR AN APPROVED EQUAL AND SHALL BE INCIDENTAL TO ITEM 502.262, STRUCTURAL CONCRETE ROADWAY SLAB ON GRADE.
5. SOFT CUT JOINTS SHALL BE CUT WITHIN 4 TO 6 HOURS OF INITIAL CONCRETE SET.



Designed by:



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**THE GOLD STAR
 MEMORIAL HIGHWAY**

**INTERCHANGES 36
 SACO TOLL PLAZA LANE ADDITION**

PAVEMENT SLAB DETAILS

| No. | Revision | By | Date |
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| CONSULTANT PROJECT MANAGER: R. Bruce Munger, P.E. | | | |
| By | Date | By | Date |
| Designed RBM | 02/15 | Checked ERB | 02/15 |
| Drawn MPC | 02/15 | In Charge of RAL | 02/15 |

MTA PROJECT MANAGER: Ralph C. Norwood, IV

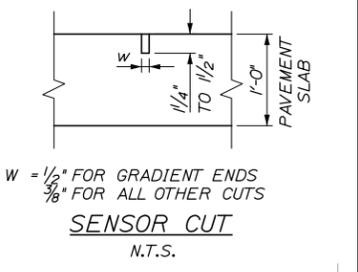
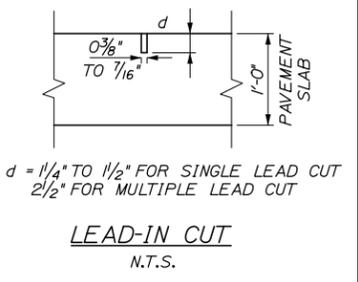
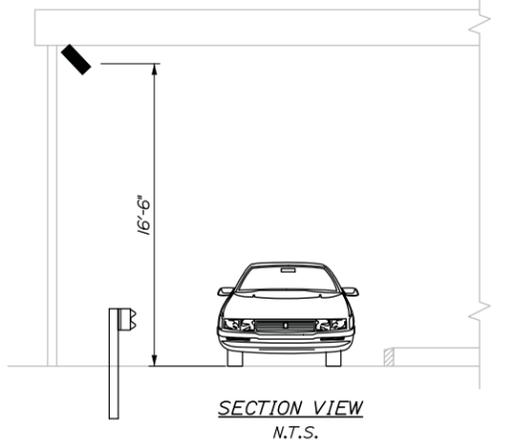
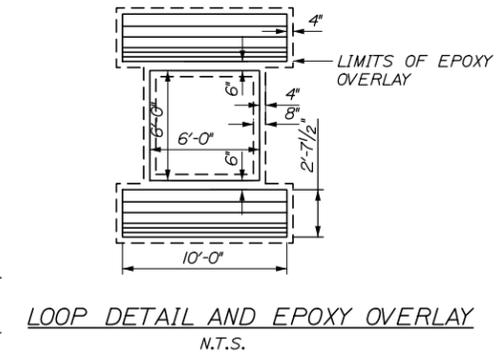
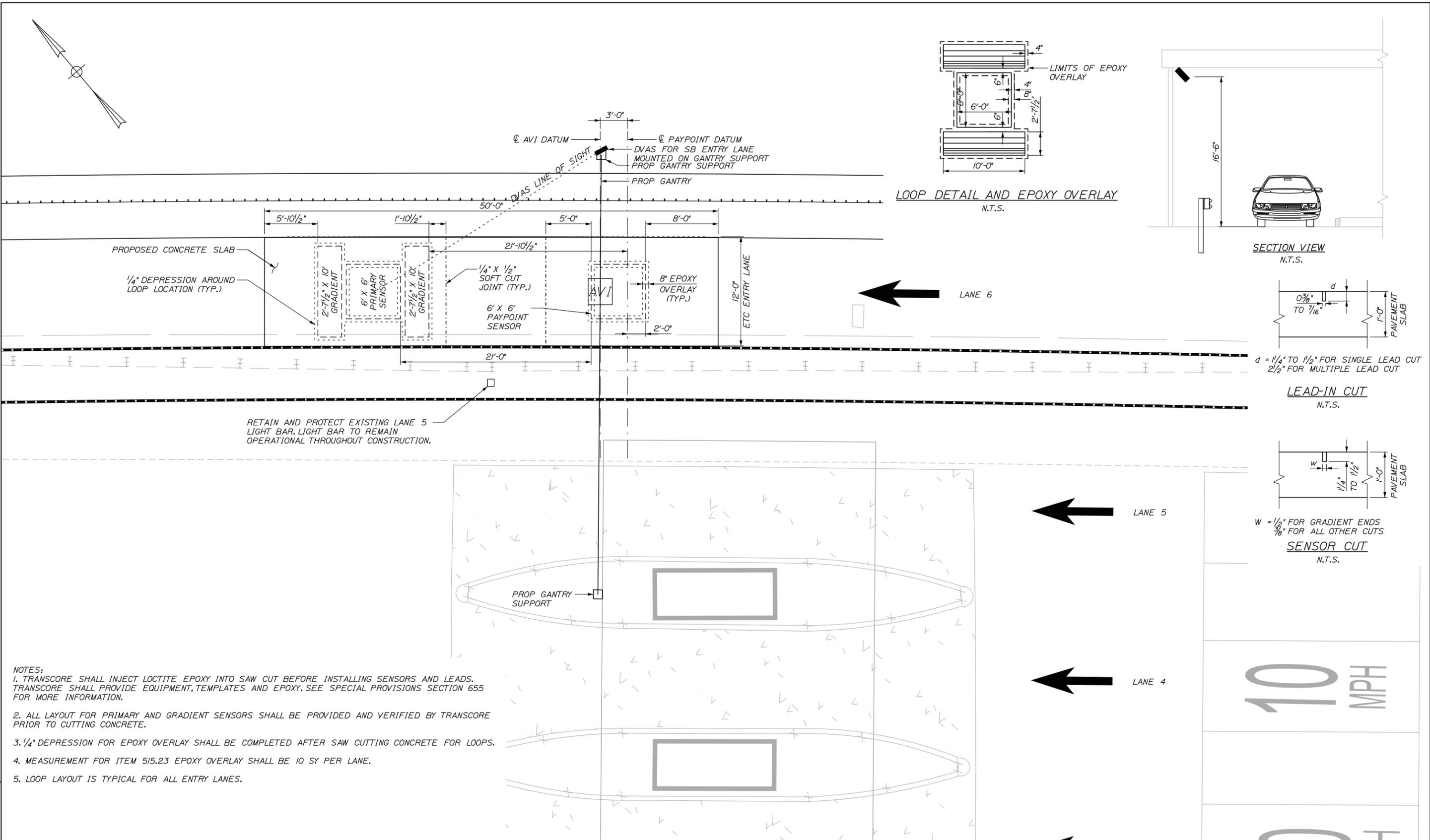
CONTRACT: 2015.06

SHEET NUMBER: PS-01

46 OF 54

Filename: 046_Exit36_AddLane-PaveSlab.dgn

Date: 2/17/2015



- NOTES:
1. TRANSCORE SHALL INJECT LOCTITE EPOXY INTO SAW CUT BEFORE INSTALLING SENSORS AND LEADS. TRANSCORE SHALL PROVIDE EQUIPMENT, TEMPLATES AND EPOXY. SEE SPECIAL PROVISIONS SECTION 655 FOR MORE INFORMATION.
 2. ALL LAYOUT FOR PRIMARY AND GRADIENT SENSORS SHALL BE PROVIDED AND VERIFIED BY TRANSCORE PRIOR TO CUTTING CONCRETE.
 3. 1/4" DEPRESSION FOR EPOXY OVERLAY SHALL BE COMPLETED AFTER SAW CUTTING CONCRETE FOR LOOPS.
 4. MEASUREMENT FOR ITEM 515.23 EPOXY OVERLAY SHALL BE 10 SY PER LANE.
 5. LOOP LAYOUT IS TYPICAL FOR ALL ENTRY LANES.

RETAIN AND PROTECT EXISTING LANE 5 LIGHT BAR. LIGHT BAR TO REMAIN OPERATIONAL THROUGHOUT CONSTRUCTION.

Scale: 5 0 5 10

| No. | Revision | By | Date |
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Designed by:

HNTB

CONSULTANT PROJECT MANAGER: R. Bruce Munger, P.E.

| | By | Date | | By | Date |
|----------|-----|-------|--------------|-----|-------|
| Designed | RBM | 01/15 | Checked | ERB | 01/15 |
| Drawn | MPC | 01/15 | In Charge of | RAL | 01/15 |

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MAINE TURNPIKE

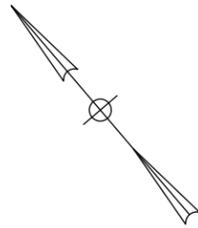
THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ralph C. Norwood, IV

INTERCHANGES 36
SACO TOLL PLAZA LANE ADDITION
TYPICAL SENSOR LAYOUT

SHEET NUMBER: SL-01
CONTRACT: 2015.06
47 OF 54

Filename: 047_Exit36_AddedLane-Sensors.dgn

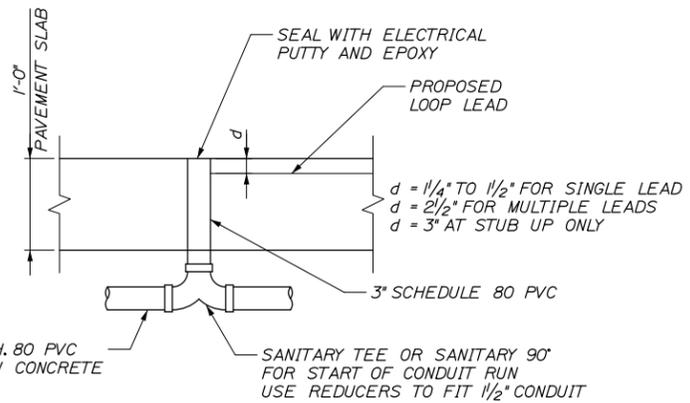
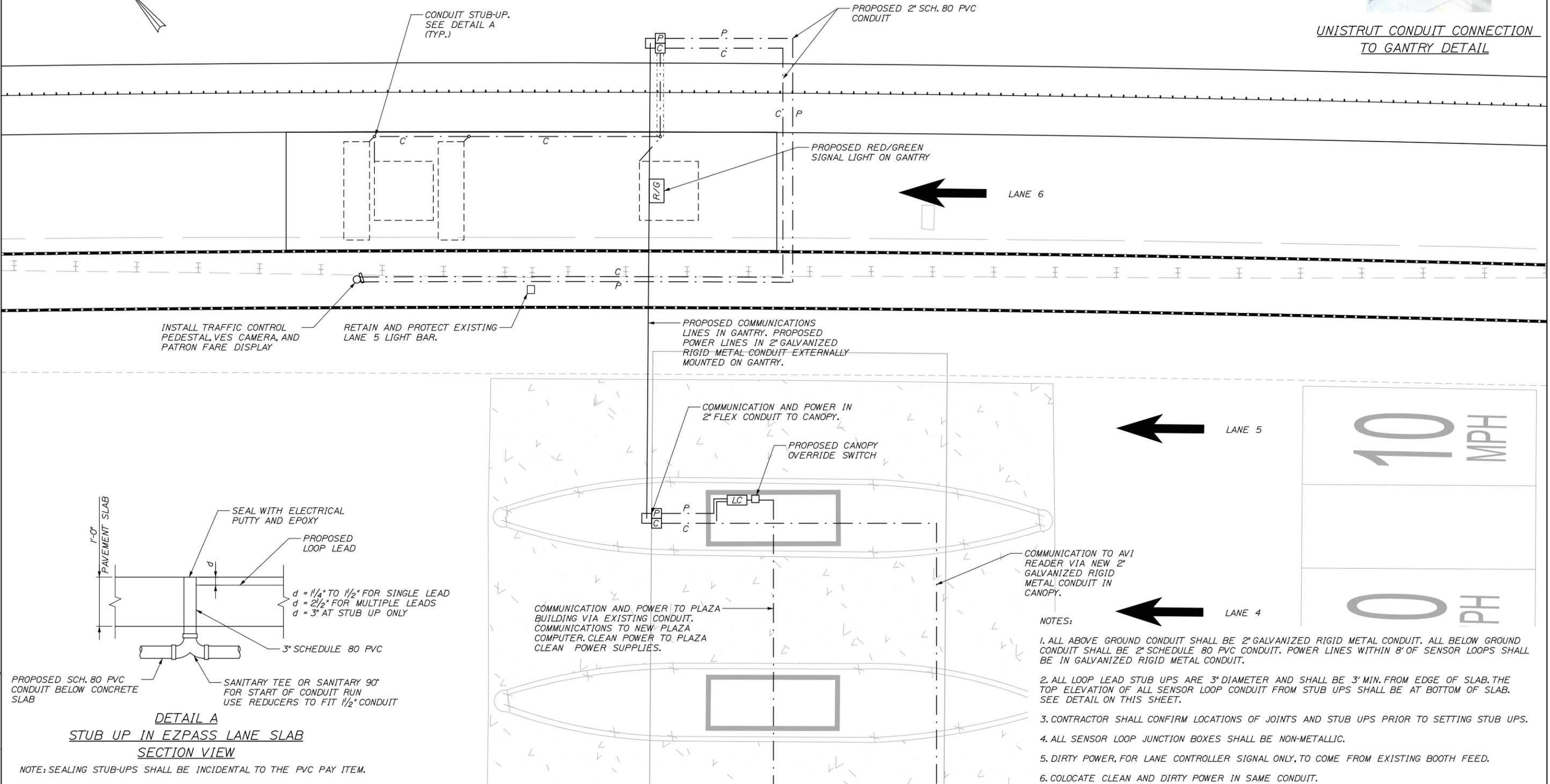


UNISTRUT P1117 PIPE CLAMP FOR RIGID METAL CONDUIT OR APPROVED EQUAL



UNISTRUT CONDUIT CONNECTION TO GANTRY DETAIL

Date: 2/17/2015

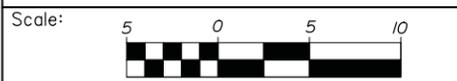


DETAIL A
STUB UP IN EZPASS LANE SLAB
SECTION VIEW

NOTE: SEALING STUB-UPS SHALL BE INCIDENTAL TO THE PVC PAY ITEM.

- NOTES:
1. ALL ABOVE GROUND CONDUIT SHALL BE 2" GALVANIZED RIGID METAL CONDUIT. ALL BELOW GROUND CONDUIT SHALL BE 2" SCHEDULE 80 PVC CONDUIT. POWER LINES WITHIN 8' OF SENSOR LOOPS SHALL BE IN GALVANIZED RIGID METAL CONDUIT.
 2. ALL LOOP LEAD STUB UPS ARE 3" DIAMETER AND SHALL BE 3' MIN. FROM EDGE OF SLAB. THE TOP ELEVATION OF ALL SENSOR LOOP CONDUIT FROM STUB UPS SHALL BE AT BOTTOM OF SLAB. SEE DETAIL ON THIS SHEET.
 3. CONTRACTOR SHALL CONFIRM LOCATIONS OF JOINTS AND STUB UPS PRIOR TO SETTING STUB UPS.
 4. ALL SENSOR LOOP JUNCTION BOXES SHALL BE NON-METALLIC.
 5. DIRTY POWER, FOR LANE CONTROLLER SIGNAL ONLY, TO COME FROM EXISTING BOOTH FEED.
 6. COLOCATE CLEAN AND DIRTY POWER IN SAME CONDUIT.

Filename: 048_Exit36_AddedLane-Proposed Electrical.dgn



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CONSULTANT PROJECT MANAGER: R. Bruce Munger, P.E.

| | By | Date | | By | Date |
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| Designed | RBM | 01/15 | Checked | ERB | 01/15 |
| Drawn | MPC | 01/15 | In Charge of | RAL | 01/15 |

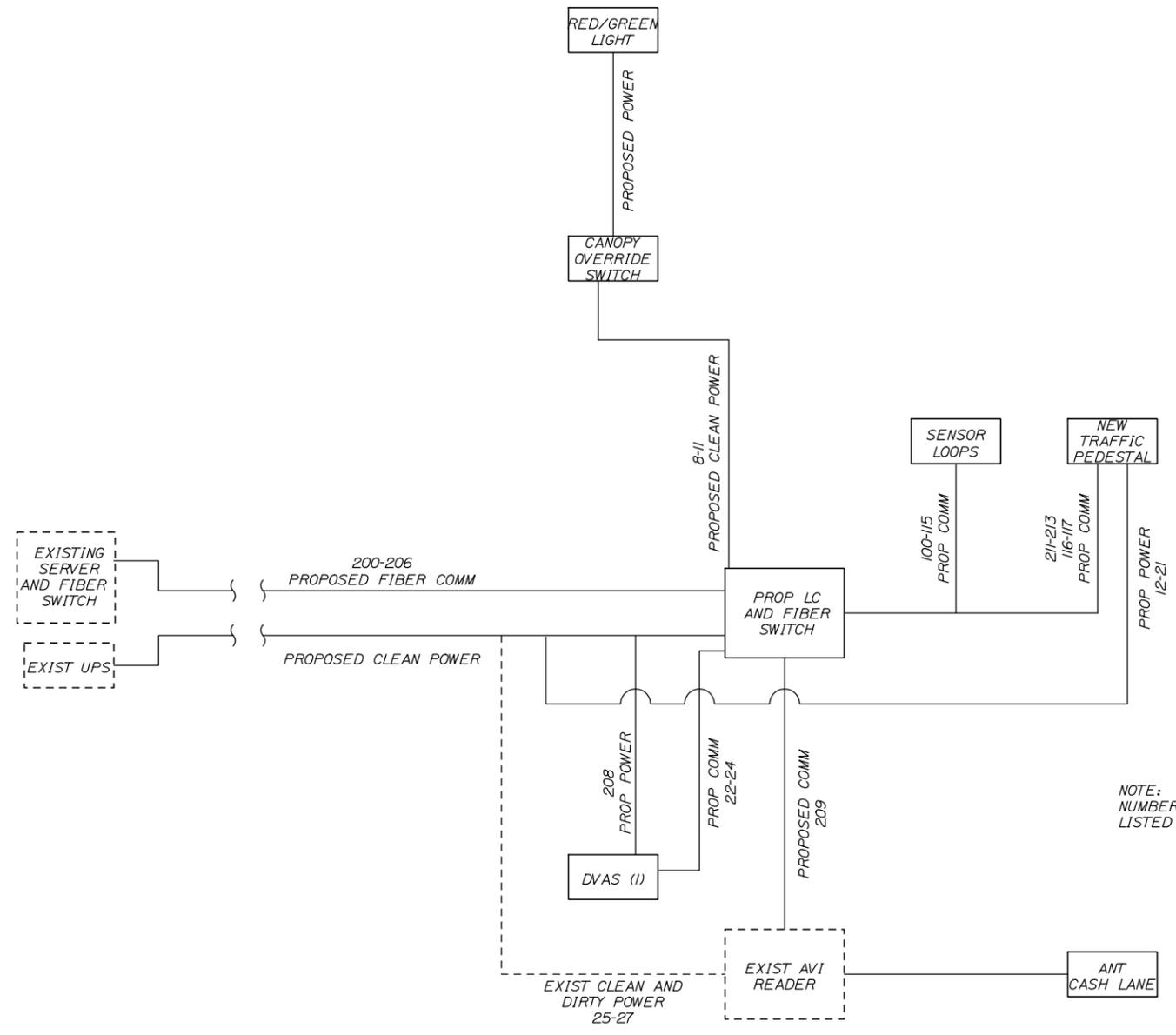
THE GOLD STAR
MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ralph C. Norwood, IV

INTERCHANGES 36
SACO TOLL PLAZA LANE ADDITION
PROPOSED ELECTRICAL PLAN

SHEET NUMBER: PE-01
CONTRACT: 2015.06
48 OF 54

Date: 2/17/2015



NOTE:
NUMBERS CORRESPOND TO NUMBERS
LISTED ON WIRING SCHEDULES.

LEGEND

| | | |
|-----------------|-----------------|-----------|
| <u>PROPOSED</u> | <u>EXISTING</u> | |
| | | EQUIPMENT |
| | | WIRING |

TOLLING EQUIPMENT SYSTEMS DIAGRAM
SCALE: NTS

Filename: 049_Exit36_AddelLane-WiringDiagram.dgn

| Scale: | Designed by: | <div style="text-align: center;"> <p>HNTB CORPORATION 340 County Road, Suite 6-C Westbrook, ME 04092 TEL (207) 774-5155 FAX (207) 228-0909</p> </div> | <div style="text-align: center;"> <p>THE GOLD STAR MEMORIAL HIGHWAY</p> </div> | <p>INTERCHANGE 36 SACO TOLL PLAZA LANE ADDITION POWER & COMMUNICATIONS LINE DIAGRAM</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--------------|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|----|------|--|----------|-----|-------|-------------------|-------|-----|-------|------------------------|---|---|
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>No.</th> <th>Revision</th> <th>By</th> <th>Date</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table> | No. | Revision | By | Date | | | | | | | | | | | | | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="4">CONSULTANT PROJECT MANAGER: R. Bruce Munger, P.E.</td> </tr> <tr> <td> </td> <td>By</td> <td>Date</td> <td> </td> </tr> <tr> <td>Designed</td> <td>RBM</td> <td>01/15</td> <td>Checked ERB 01/15</td> </tr> <tr> <td>Drawn</td> <td>MPC</td> <td>01/15</td> <td>In Charge of RAL 01/15</td> </tr> </table> | CONSULTANT PROJECT MANAGER: R. Bruce Munger, P.E. | | | | | By | Date | | Designed | RBM | 01/15 | Checked ERB 01/15 | Drawn | MPC | 01/15 | In Charge of RAL 01/15 | <div style="text-align: center;"> <p>MTA PROJECT MANAGER: Ralph C. Norwood, IV</p> </div> | <p>SHEET NUMBER: PC-01 CONTRACT: 2015.06 49 OF 54</p> |
| No. | Revision | By | Date | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| CONSULTANT PROJECT MANAGER: R. Bruce Munger, P.E. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | By | Date | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Designed | RBM | 01/15 | Checked ERB 01/15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Drawn | MPC | 01/15 | In Charge of RAL 01/15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

POWER SCHEDULE

WIRING SHOWN IS FOR TYPICAL CASH LANE. REPLICATE FOR SIMILAR LANES.
ATT/ETC LANE TYPE POWER WIRING SCHEDULE

| WIRE LABEL | DESCRIPTION | AWG | COLOR | CORE | JACKET | VOLTAGE | CIRCUIT BREAKER | FROM | TO | LANE SERVER TERMINAL # | TERMINATION REQUIREMENTS | TERMINATIONS | STATUS |
|---|--|---|-------------------------|----------|--------|---------|-----------------|--|---|------------------------|--|--------------------|--------|
| BOOTH QUAD OUTLET | | | | | | | | | | | | | |
| 1 (LANE CONTROLLER) .L.BQUAD | PERIPHERAL POWER (HOT, NON-SWITCHED) | 12 | BLACK OR PER LOCAL CODE | STRANDED | THHW | 120 VAC | 20 | EXISTING UPS | BOOTH QUAD OUTLET LOCATE WITHIN 3 FT OF ATTENDANT WORK AREA | N/A | INSTALL QUAD OUTLET | TUNNEL/POWER PANEL | NEW |
| 2 (LANE CONTROLLER) .N.BQUAD | PERIPHERAL POWER (NEUTRAL) | | WHITE | | | | | | | | | TUNNEL/POWER PANEL | NEW |
| 3 (LANE CONTROLLER) .G.BQUAD | PERIPHERAL POWER (GROUND) | | GREEN | | | | | | | | | TUNNEL/POWER PANEL | NEW |
| LANE SERVER | | | | | | | | | | | | | |
| 4 (LANE CONTROLLER) .LS.T1-1 | LANE SERVER POWER (HOT, NON-SWITCHED) | 12 | BLACK OR PER LOCAL CODE | STRANDED | THHW | 120 VAC | 20 | BOOTH or MAIN POWER DISTRIBUTION PANEL and ISOLATED GROUND BAR | LANE SERVER FIELD WIRING (T1) TERMINAL BLOCK | T1-1 | BAREWIRE (Capped and Taped for termination by UTS) | TUNNEL/POWER PANEL | NEW |
| 5 (LANE CONTROLLER) .N.LS.T1-2 | LANE SERVER POWER (NEUTRAL) | | WHITE | | | | | | | T1-2 | | TUNNEL/POWER PANEL | NEW |
| 6 (LANE CONTROLLER) .LS.T1-3 | LANE SERVER POWER (GROUND) | | GREEN | | | | | | | T1-4 | | TUNNEL/POWER PANEL | NEW |
| 7 (LANE CONTROLLER) .G.LS.T1-4 | LANE SERVER POWER (ISOLATED GROUND) | | GREEN W/ WHITE STRIPE | | | | | | | T1-3 | | TUNNEL/POWER PANEL | NEW |
| CANOPY TRAFFIC SIGNAL | | | | | | | | | | | | | |
| 8 COS.CTS-R.SIG | RED CANOPY TRAFFIC SIGNAL POWER (HOT, SWITCHED) | 12 | RED | STRANDED | THHW | 120 VAC | N/A | PROPOSED LANE CONTROLLER (T1) TERMINAL BLOCK | CANOPY OVERRIDE SWITCH (See Note #4) | T1-9 | BAREWIRE | TUNNEL/POWER PANEL | NEW |
| 9 COS.CTS-G.SIG | GREEN CANOPY TRAFFIC SIGNAL POWER (HOT, SWITCHED) | | BLUE | | | | | | | T1-10 | | TUNNEL/POWER PANEL | NEW |
| 10 COS.CTS-N.SIG | CANOPY TRAFFIC SIGNAL POWER (NEUTRAL) | | WHITE | | | | | | | T1-11 | | TUNNEL/POWER PANEL | NEW |
| 11 COS.CTS-CG.SIG | CANOPY TRAFFIC SIGNAL POWER (COMMON GROUND) | | GREEN | | | | | | | T1-8 | | TUNNEL/POWER PANEL | NEW |
| TRAFFIC CONTROL PEDESTAL (TCP) | | | | | | | | | | | | | |
| 12 ITS.LS.T1-12 | VIOLATION BEACON (HOT) | 12 | BLACK | STRANDED | THHW | 120 VAC | - | PROPOSED LANE CONTROLLER (T1) TERMINAL BLOCK | TRAFFIC CONTROL PEDESTAL FIELD WIRING TERMINAL BLOCK TA' | T1-12 | TA - TH BLACK | TUNNEL/POWER PANEL | NEW |
| 13 ITS.LS.T1-13 | LANE 1 ISLAND TRAFFIC SIGNAL RED LIGHT POWER (HOT, SWITCHED) | | RED | | | | | | | T1-13 | TA - TH RED | TUNNEL/POWER PANEL | NEW |
| 14 ITS.LS.T1-14 | LANE 1 ISLAND TRAFFIC SIGNAL AMBER LIGHT POWER (HOT, SWITCHED) | | YELLOW | | | | | | | T1-14 | TA - TH AMBER | TUNNEL/POWER PANEL | NEW |
| 15 ITS.LS.T1-15 | LANE 1 ISLAND TRAFFIC SIGNAL GREEN LIGHT POWER (HOT, SWITCHED) | | BLUE | | | | | | | T1-15 | TA - TH BLUE | TUNNEL/POWER PANEL | NEW |
| 16 ITS.LS.T1-16 | LANE 1 ISLAND TRAFFIC SIGNAL POWER (NEUTRAL) | | WHITE | | | | | | | T1-16 | TA - TH (N) | TUNNEL/POWER PANEL | NEW |
| 17 PTD.LS.T1-6 | LANE 1 PATRON TOLL DISPLAY POWER (HOT, NON-SWITCHED) | 12 | BLACK | STRANDED | THHW | 120 VAC | - | PROPOSED LANE CONTROLLER (T1) TERMINAL BLOCK | TRAFFIC CONTROL PEDESTAL FIELD WIRING TERMINAL BLOCK TA' | T1-6 | TA - PTD (H) | TUNNEL/POWER PANEL | NEW |
| 18 PTD.LS.T1-7 | LANE 1 PATRON TOLL DISPLAY POWER (NEUTRAL) | | WHITE | | | | | | | T1-7 | TA - PTD (N) | TUNNEL/POWER PANEL | NEW |
| 19 PTD.LS.T1-8 | LANE 1 PATRON TOLL DISPLAY POWER (GROUND) | | GREEN | | | | | | | T1-8 | TA - PTD / VIOL (G) | TUNNEL/POWER PANEL | NEW |
| 20 (Primary Power Panel).TCP | VES/TCP POWER (HOT, NON-SWITCHED) | 12 | BLACK | STRANDED | THHW | 120 VAC | - | EXISTING CLEAN POWER FEED | TRAFFIC CONTROL PEDESTAL FIELD WIRING TERMINAL BLOCK TB' | N/A | TB - 120V (H) | TUNNEL/POWER PANEL | NEW |
| 21 (Primary Power Panel).N.TCP | VES/TCP POWER (NEUTRAL) | | WHITE | | | | | | | N/A | TB - 120V (N) | TUNNEL/POWER PANEL | NEW |
| 22 (Primary Power Panel).G.TCP | VES/TCP POWER (GROUND) | | GREEN | | | | | | | N/A | TB - 120V (G) | TUNNEL/POWER PANEL | NEW |
| LANE DIGITAL VIDEO AND AUDIT CAMERA (DVAS) | | | | | | | | | | | | | |
| 23 (Primary Power Panel).PP | LANE DVAS PAYPOINT CAMERA ENCLOSURE POWER (HOT - NON-SWITCHED) | 12 | BLACK OR PER LOCAL CODE | STRANDED | THHW | 120 VAC | N/A | EXISTING CLEAN POWER FEED | DVAS CAMERA ENCLOSURE FIELD WIRING POWER STRIP (UP TO 6 CAMERAS ON 1 CIRCUIT) | N/A | | TUNNEL/POWER PANEL | NEW |
| 24 (Primary Power Panel).N.PP | LANE DVAS PAYPOINT CAMERA ENCLOSURE POWER (NEUTRAL) | | WHITE | | | | | | | | | TUNNEL/POWER PANEL | NEW |
| 25 (Primary Power Panel).G.PP | LANE DVAS PAYPOINT CAMERA ENCLOSURE POWER (GROUND) | | GREEN | | | | | | | | | TUNNEL/POWER PANEL | NEW |
| AUTOMATIC VEHICLE IDENTIFICATION (AVI) | | | | | | | | | | | | | |
| 26 (Primary Power Panel).L.AVI | LANE AVI READER QUAD POWER (AC HOT) | 12 | BLACK OR PER LOCAL CODE | STRANDED | THHW | 120 VAC | 20 | EXISTING CLEAN POWER FEED | EXISTING AVI READER (LANES 6-10) | N/A | QUAD OUTLET | TUNNEL/POWER PANEL | NEW |
| 27 (Primary Power Panel).N.AVI | LANE AVI READER QUAD POWER (AC NEUTRAL) | | WHITE | | | | | | | | | TUNNEL/POWER PANEL | NEW |
| 28 (Primary Power Panel).G.AVI | LANE AVI QUAD READER (GROUND) | | GREEN | | | | | | | | | TUNNEL/POWER PANEL | NEW |
| GENERAL NOTES: | | 1) RF MODULE POWER CONNECTOR IS DEPENDENT ON EQUIPMENT TYPE. SEE SPECIFIC USER INSTALLATION MANUAL OR UTS CONSTRUCTION AND INSTALLATION GUIDE FOR TYPE 2) (In#) will have to be replaced with the lane number assigned according to construction plans. 3) (Booth Panel#) (Ckt #) will have to be replaced with the Panel ID and circuit/breaker number that this wire is connected to. 4) Canopy Override Switch - These are switched hot leads from the Lane Server clean power source fed through lane server switched terminals. When manually switching with dirty power, Line and Neutral leads must both be switched. | | | | | | | | | | | |

Date: 2/17/2015

Filename: 050_Exit36_AddedLane_Schedule1.dgn

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| Designed by: | | | | | | |
| HNTB | | | | | | |
| CONSULTANT PROJECT MANAGER: R. Bruce Munger, P.E. | | | | | | |
| | By | Date | | By | Date | |
| | RBM | 02/15 | Checked | ERB | 02/15 | |
| | Drawn | MPC | 02/15 | In Charge of | RAL | 02/15 |

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**THE GOLD STAR
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph C. Norwood, IV

INTERCHANGE 36
SACO TOLL PLAZA LANE ADDITION
POWER SCHEDULE

SHEET NUMBER: PS-01
CONTRACT: 2015.06
50 OF 54

DATA SCHEDULE

WIRING SHOWN IS FOR CASH LANE. REPLICATE FOR SIMILAR LANES.

ATT/ETC DESCRETE WIRING SCHEDULE - DATA: DOOR WIRING LOGIC, SERIAL, VIDEO, AUDIO (Primary Server)

Intelligent Vehicle Identification System (IVIS) (For Wiring Only. Home Run Lead supplied as part of Sensor)

| WIRE LABEL | DESCRIPTION | AWG | COLOR | CORE | STANDARD | FROM | TO | LANE SERVER TERMINAL # | STATUS |
|------------|-------------|-----|-------|----------|----------|--|--|------------------------|--------|
| 100 | T4-49.G1 | | | | | | SENSORS COME WITH 80' RGTA IL. IF ADDITIONAL WIRE NEEDED SPLICE TO IMSA-50=2 TYPE CABLE. INSTALL THE HOME RUN CABLE FROM THE LANE GROUND BOX TO THE LANE SERVER CONNECTION SPECIFIED IN THE ADJ COLUMN. ALL SPLICES MUST BE SOLDERED, TIGHTLY TWISTED, AND INSULATED TO BE WATER RESISTANT. FOR LANES NOT HAVING PRE_CLASSIFICATION, DELETE REQUIREMENTS FOR PRE_CLASSIFICATION SENSORS AND INTELLIGENT QUEUING SENSOR | T4-49 | |
| 101 | T4-50.G1 | | | | | T4-50 | | | |
| 102 | T4-51.P1 | | | | | T4-51 | | | |
| 103 | T4-52.P1 | | | | | T4-52 | | | |
| 104 | T4-53.G2 | | | | | T4-53 | | | |
| 105 | T4-54.G2 | | | | | T4-54 | | | |
| 106 | T4-55.IQ | | | | | T4-55 | | | |
| 107 | T4-56.IQ | | | | | T4-56 | | | |
| 108 | T4-57.PP | 16 | BLACK | STRANDED | IMSA50-2 | PAYPOINT PRIMARY SENSOR | | T4-57 | NEW |
| 109 | T4-58.PP | | | | | PAYPOINT PRIMARY SENSOR | | T4-58 | NEW |
| 110 | T4-59.G3 | 16 | BLACK | STRANDED | IMSA50-2 | POST-CLASSIFICATION GRADIENT SENSOR #1 | | T4-59 | NEW |
| 111 | T4-60.G3 | | | | | POST-CLASSIFICATION GRADIENT SENSOR #1 | | T4-60 | NEW |
| 112 | T4-61.P4 | 16 | BLACK | STRANDED | IMSA50-2 | POST-CLASSIFICATION PRIMARY SENSOR | | T4-61 | NEW |
| 113 | T4-62.P4 | | | | | POST-CLASSIFICATION PRIMARY SENSOR | | T4-62 | NEW |
| 114 | T4-63.G4 | 16 | BLACK | STRANDED | IMSA50-2 | POST-CLASSIFICATION GRADIENT SENSOR #2 | | T4-63 | NEW |
| 115 | T4-64.G4 | | | | | POST-CLASSIFICATION GRADIENT SENSOR #2 | T4-64 | NEW | |

Toll Booth Peripheral Cables (MLT, Printer, PC Prox, PTD Display)

| | | | | | | | | | |
|-----|-----------|---|--------------------|-----------------------|--|-------------------------|--|---------|-----|
| 116 | S3.1.PTD | LANE (8) PATRON TOLL DISPLAY COMMUNICATIONS | RJ-45 | BARE WIRE AT PEDESTAL | FIELD WIRED - ONLY FOUR PINS USED: PIN 3 - DEVICE RECEIVE, PIN 5 - GROUND, PINS 7 AND 8 JUMPED | RS232 | PEDESTAL WIRE CENTER TA - PTD DATA | TBD | NEW |
| | | | | | | | PEDESTAL WIRE CENTER TA - PTD DATA | | NEW |
| 117 | Lane(#)TR | LANE (#) TRIGGER | RJ-45 | BARE WIRE | Pin to Pin | TTL(optically isolated) | (See Note 1 below) Wire to Designated Trigger Terminals for Front and Rear Trigger (+/-) in Pedestal Wire Center | TBD | NEW |
| 118 | S8.PROX | LANE (8) MANUAL LANE TERMINAL PCPROX CARD READER | RJ-45 | DB9 (MALE) | SERIAL | RS232 | (See Note 1 below) | S-8 | NEW |
| 119 | PROXPWR | LANE (8) MANUAL LANE TERMINAL PCPROX CARD READER POWER | PS2 (MALE) | PS2 (FEMALE) | SERIAL | RS232 | (See Note 1 below) | PS/2 | NEW |
| 120 | S9.MLT | LANE (8) TOLL BOOTH MANUAL LANE TERMINAL (MLT) COMMUNICATIONS | RJ-45 | RJ-45 | SERIAL | RS232 | (See Note 1 below) | TBD | NEW |
| 121 | S10.RP | LANE (8) TOLL BOOTH RECEIPT PRINTER COMMUNICATIONS | RJ-45 | DB25 (MALE) | NULL MODEM | RS232 | PREFAB NULL MODEM CABLE - NOT TO EXCEED 50 FT | TBD | NEW |
| 122 | MLTVGA | LANE (8) TOLL BOOTH MANUAL LANE TERMINAL VIDEO | DB15(VGA) (FEMALE) | DB15(VGA) (MALE) | VGA/SVGA/XGA analog | VIDEO | PREFAB VIDEO CABLE - NOT TO EXCEED 50 FT | MONITOR | NEW |
| 123 | MLTAUDIO | LANE (8) TOLL BOOTH MANUAL LANE TERMINAL SPEAKER | 3.5mm Plug (MALE) | 3.5mm Plug (MALE) | AUDIO | AUDIO | PREFAB AUDIO CABLE | AUDIO | NEW |

Notes:

- 1.) Lane Server to peripheral cable pin connections - refer to peripheral Installation Guide. RJ-45 at Lane Server: 1=CTS, 2=CD, 3=RxD, 4=Gnd, 5=Gnd, 6=TxD, 7=DTR, 8=RTS. (No handshaking is used)
- 2.) Schedule does not include booth access control requirements, booth DVAS or wiring.

Date: 2/17/2015

Filename: 051_Exit36_AddedLane_Schedule2.dgn

| | | | | | | | | | | | | | | | | |
|--------|--|-----|-------|----|------|----|-------|-----|-------|-----|-------|-----|-------|---|--|--|
| Scale: | Designed by: <div style="text-align: center; font-size: 24pt; font-weight: bold; margin: 10px 0;">HNTB</div> CONSULTANT PROJECT MANAGER: R. Bruce Munger, P.E. <table border="0" style="width: 100%; font-size: 10pt;"> <tr> <td>By</td><td>Date</td><td>By</td><td>Date</td></tr> <tr> <td>RB</td><td>02/15</td><td>ERB</td><td>02/15</td></tr> <tr> <td>MPC</td><td>02/15</td><td>RAL</td><td>02/15</td></tr> </table> | By | Date | By | Date | RB | 02/15 | ERB | 02/15 | MPC | 02/15 | RAL | 02/15 | HNTB CORPORATION 340 County Road, Suite 6-C Westbrook, ME 04092 TEL (207) 774-5155 FAX (207) 228-0909 | <div style="font-weight: bold; font-size: 14pt; margin: 5px 0;">THE GOLD STAR MEMORIAL HIGHWAY</div> MTA PROJECT MANAGER: Ralph C. Norwood, IV | INTERCHANGE 36 SACO TOLL PLAZA LANE ADDITION DATA SCHEDULE SHEET NUMBER: DS-01 CONTRACT: 2015.06 51 OF 54 |
| By | Date | By | Date | | | | | | | | | | | | | |
| RB | 02/15 | ERB | 02/15 | | | | | | | | | | | | | |
| MPC | 02/15 | RAL | 02/15 | | | | | | | | | | | | | |

NETWORK WIRING DIAGRAM

WIRING SHOWN IS FOR CASH LANE. REPLICATE FOR SIMILAR LANES.

ATT-ETC LANE NETWORK WIRING SCHEDULE

LANE SERVER MULTIMODE FIBER (FOR REMOTE SWITCH ACCESS)

| WIRE LABEL | DESCRIPTION | COLOR | CONNECTOR AT FX PATCH PANEL (COMPUTER ROOM) | COMMUNICATIONS SWITCH IN THE LANE SERVER | WIRING CONVENTION | PROTOCOL | FIELD WIRING INSTRUCTIONS | STATUS |
|------------|---|--------|---|--|--|--|--|--------|
| 200 | LANE SERVER NETWORK CONNECTION - SEND | BLUE | ST (MALE) | ST (MALE) | 6-FIBER (TYP) (4 Min Fiber) MULTI-MODE 100mbs | 62.5/125 MICRONS INDOOR/ OUTDOOR RISER RATED | FROM PLAZA COMMUNICATIONS RACK FIBER (FX) PATCH PANEL TO THE BOOTH LANE SERVER FIBER LINE INTERFACE UNIT (LIU) IN THE CABINET OR GUTTER. PROVIDE 1 EA 3M DUPLEX FX PATCH CABLE (STM to STM) FROM THE LIU TO THE LANE 1 LANE SERVER NETWORK SWITCH. | NEW |
| 201 | LANE SERVER NETWORK CONNECTION - RECEIVE | ORANGE | | | | | | NEW |
| 202 | LANE SERVER NETWORK CONNECTION - SPARE SEND | GREEN | | | | | | NEW |
| 203 | LANE SERVER NETWORK CONNECTION - SPARE RECEIVE | BROWN | | | | | | NEW |
| 204 | LANE SERVER NETWORK CONNECTION - SPARE SEND (optional) | SLATE | | | | | | NEW |
| 205 | LANE SERVER NETWORK CONNECTION - SPARE RECEIVE (optional) | WHITE | | | | | | NEW |

LANE SERVER ETHERNET CONNECTION (FOR LOCAL SWITCH -SAME ROOM- ACCESS)

| | | | | | | | | |
|-----|---|----------------------------|--------------|--------------|--------------------------|-----|--|-----|
| 206 | LANE SERVER NETWORK CONNECTION (CAT5E/6) CABLE ALTERNATIVE TO FIBER ABOVE IF LOCAL SWITCH PROVIDED AND CONNECTION IS LESS THAN 300 FEET) | CAT5E COLOR STANDARD | RJ-45 (MALE) | RJ-45 (MALE) | CAT5E/6 DIRECT BURIAL | UTP | CAT5E BULK CABLE FROM THE SERVER ROOM TO THE LANE CABINET FIBER SWITCH LANE SERVER SWITCH. TERMINATE AND TEST CABLE RUN. | NEW |
|-----|---|----------------------------|--------------|--------------|--------------------------|-----|--|-----|

DIGITAL VIDEO AUDIT SYSTEM (DVAS)

| | | | | | | | | |
|-----|--|----------------------------|--------------|--------------|--------------------------|-----|--|-----|
| 208 | DVAS.(Ln#).PP LANE DVAS PAYPOINT CAMERA NETWORK CONNECTIONS | CAT5E COLOR STANDARD | RJ-45 (MALE) | RJ-45 (MALE) | CAT5E/6 DIRECT BURIAL | UTP | CAT5E BULK CABLE FROM THE LANE CONTROLLER AND FIBER SWITCH TO THE LANE DVAS PAYPOINT CAMERA. TERMINATE AND TEST CABLE RUN. ALLOW 10' OF CABLE TO REACH FROM THE DVAS DATA JUNCTION BOX TO THE LANE 1 CAMERA ENCLOSURE. | NEW |
|-----|--|----------------------------|--------------|--------------|--------------------------|-----|--|-----|

AUTOMATIC VEHICLE IDENTIFICATION (AVI)

| | | | | | | | | |
|-----|--|----------------------------|--------------|--------------|--------------------------|------------|---|-----|
| 209 | (Ln#).AVIE LANE AVI READER ETHERNET DATA CONNECTION | CAT5E COLOR STANDARD | RJ-45 (MALE) | RJ-45 (MALE) | CAT5E/6 DIRECT BURIAL | 10/100 UTP | CAT5E BULK CABLE FROM THE LANE CONTROLLER CONNECTION PANEL AVI 110 JACK TO THE LANE AVI READER SERIAL TO ETHERNET CONVERTER | NEW |
| 210 | (Ln#).AVIS LANE AVI READER DATA CONNECTION | CAT5E COLOR STANDARD | RJ-45 (MALE) | RJ-45 (MALE) | CAT5E/6 DIRECT BURIAL | 10/100 UTP | CAT5E BULK CABLE FROM THE LANE CONTROLLER CONNECTION PANEL AVI 110 JACK TO THE LANE AVI READER SERIAL TO ETHERNET CONVERTER | NEW |

TRAFFIC CONTROL PEDESTAL (TCP) MAINTENANCE PORT

| | | | | | | | | |
|-----|--|----------------------------|--------------|--------------|--------------------------|-------------|--|-----|
| 211 | (Ln#).TCPFVES LANE TRAFFIC CONTROL PEDESTAL VES CAMERA CONNECTION | CAT5E COLOR STANDARD | RJ-45 (MALE) | RJ-45 (MALE) | CAT5E/6 DIRECT BURIAL | GIGABIT UTP | CAT5E BULK CABLE FROM THE LANE CONTROLLER CONNECTION PANEL VES 110 JACK TO THE LANE ISLAND TRAFFIC CONTROL PEDESTAL FRONT CAMERA PORT. | NEW |
| 212 | (Ln#).TCPRVES LANE TRAFFIC CONTROL PEDESTAL VES CAMERA CONNECTION | CAT5E COLOR STANDARD | RJ-45 (MALE) | RJ-45 (MALE) | CAT5E/6 DIRECT BURIAL | GIGABIT UTP | CAT5E BULK CABLE FROM THE LANE CONTROLLER CONNECTION PANEL VES 110 JACK TO THE LANE ISLAND TRAFFIC CONTROL PEDESTAL REAR CAMERA PORT. | NEW |
| 213 | (Ln#).TCPM LANE TRAFFIC CONTROL PEDESTAL MAINTENANCE NETWORK CONNECTION | CAT5E COLOR STANDARD | RJ-45 (MALE) | RJ-45 (MALE) | CAT5E/6 DIRECT BURIAL | GIGABIT UTP | CAT5E BULK CABLE FROM THE LANE CONTROLLER AND FIBER SWITCH TO THE LANE ISLAND TRAFFIC CONTROL PEDESTAL MAINTENANCE PORT. | NEW |

NOTES:

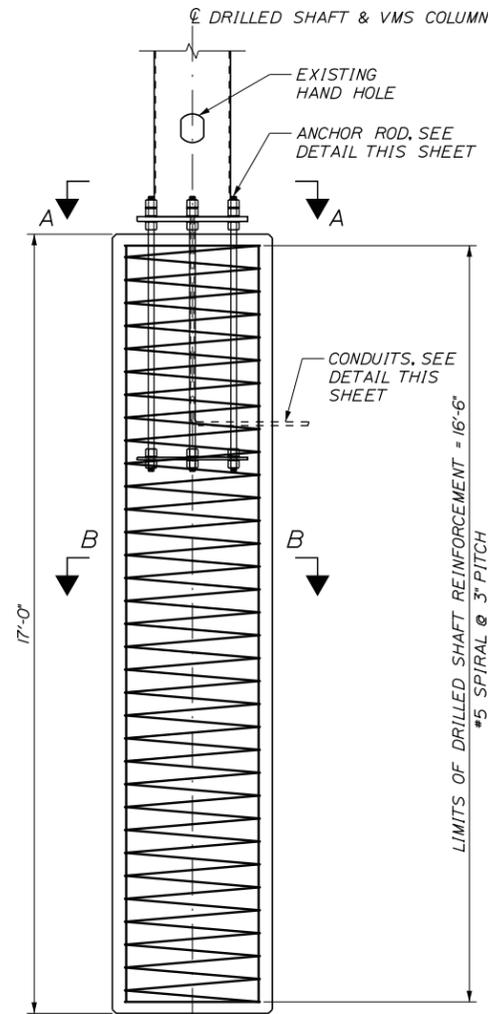
- 1). ALL NETWORK CABLES ARE GIGABIT COMPLIANT, SUITABLE FOR OUTDOOR/WET ENVIRONMENT, OSP GRADE FOR DIRECT BURIAL
- 2). STRADDLE ANTENNAS/READERS ARE LOCATED BETWEEN LANES ABOVE THE STRIPE. IF STRADDLE ANTENNAS/READERS ARE OMITTED BY PLANS, WIRING MAY BE OMITTED

Date: 2/17/2015

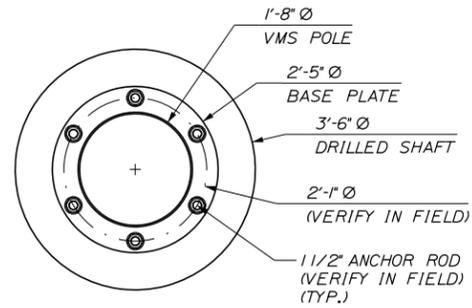
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| Scale: | Designed by: | | HNTB CORPORATION 340 County Road, Suite 6-C Westbrook, ME 04092 TEL (207) 774-5155 FAX (207) 228-0909 | | THE GOLD STAR MEMORIAL HIGHWAY | INTERCHANGE 36 SACO TOLL PLAZA LANE ADDITION NETWORK WIRING SCHEDULE | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--------------|--------------|---|------|---|--|--|--|--|--|--|--|--|--|--|--|---|--|----|------|----|------|----------|-----------|---------|-----------|-------|-----------|--------------|-----------|--|---|-------------------|---------------------------------|
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>No.</th> <th>Revision</th> <th>By</th> <th>Date</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table> | No. | Revision | By | Date | | | | | | | | | | | | | CONSULTANT PROJECT MANAGER: R. Bruce Munger, P.E. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>By</th> <th>Date</th> <th>By</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>Designed</td> <td>RBM 02/15</td> <td>Checked</td> <td>ERB 02/15</td> </tr> <tr> <td>Drawn</td> <td>MPC 02/15</td> <td>In Charge of</td> <td>RAL 02/15</td> </tr> </tbody> </table> | | By | Date | By | Date | Designed | RBM 02/15 | Checked | ERB 02/15 | Drawn | MPC 02/15 | In Charge of | RAL 02/15 | | MTA PROJECT MANAGER: Ralph C. Norwood, IV | CONTRACT: 2015.06 | SHEET NUMBER: NS-01 52 OF 54 |
| No. | Revision | By | Date | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| By | Date | By | Date | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Designed | RBM 02/15 | Checked | ERB 02/15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Drawn | MPC 02/15 | In Charge of | RAL 02/15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

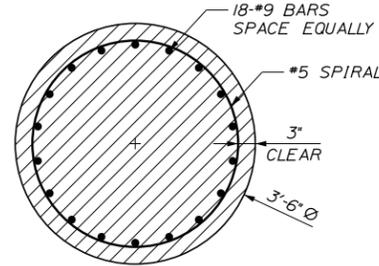
Date: 2/18/2015



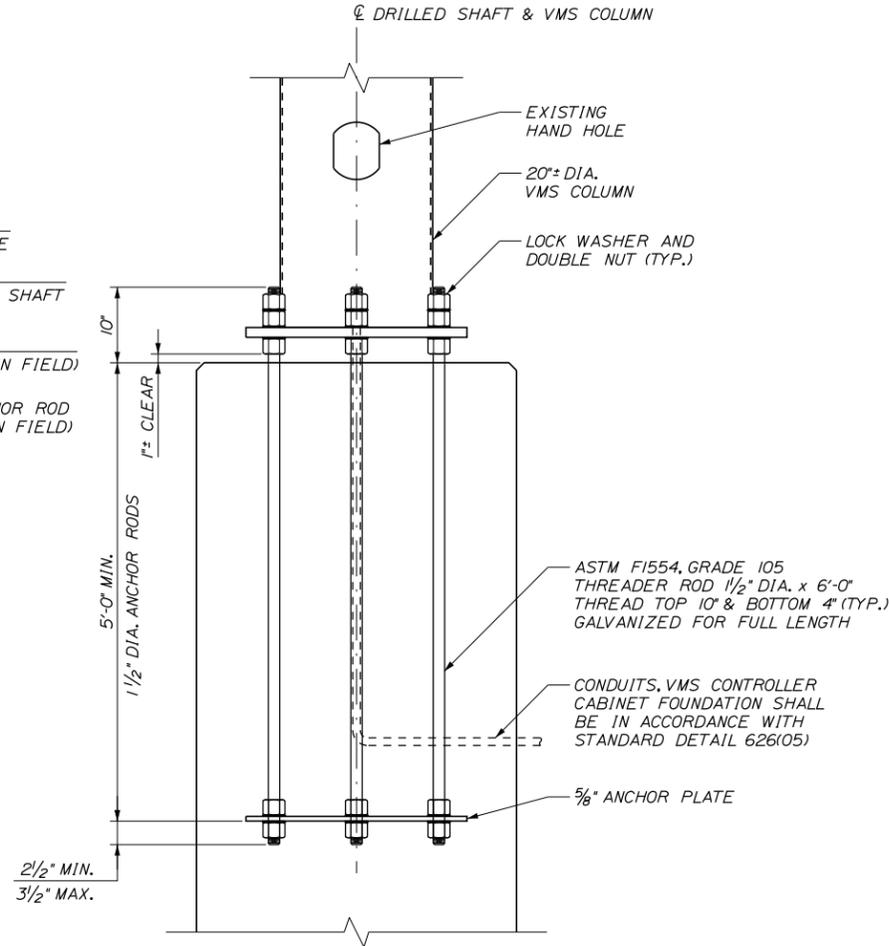
DRILLED SHAFT ELEVATION
1/2" = 1'-0"



PLAN A-A
3/4" = 1'-0"



SECTION B-B
3/4" = 1'-0"



ANCHOR ROD DETAIL
1" = 1'-0"

NOTE: REINFORCEMENT NOT SHOWN FOR CLARITY.

FOUNDATION NOTES:

1. DRILLED SHAFTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SPECIAL PROVISION SECTION 626 30-INCH DIAMETER, GREATER THAN 8-FT LONG, AND ALL 36-INCH AND 42-INCH DIAMETER FOUNDATIONS.
2. SEE SPECIAL PROVISION SECTION 626 FOR CONCRETE COVER REQUIREMENTS.
3. DESIGN SPECIFICATIONS:
 - A) 2013 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS (WITH INTERIMS).
 - B) 2002 (17TH EDITION) STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.
4. DESIGN CRITERIA:
 - DESIGN WIND SPEED: 100MPH
 - DESIGN ICE LOAD: 3 PSF
5. THREADED RODS SHALL BE ASTM F1554, GRADE 105, HOT-DIP GALVANIZED AS PER ASTM A153. NUTS SHALL CONFORM TO ASTM A563 AND PLATE WASHERS SHALL CONFORM TO ASTM F436. ALL NUTS AND WASHERS SHALL ALSO BE HOT-DIP GALVANIZED AS PER ASTM A153.
6. ALL CONCRETE SHALL BE CLASS A WITH DESIGN COMPRESSIVE STRENGTH $f'_c = 4000\text{PSI}$.
7. STEEL REINFORCEMENT SHALL BE ASTM A615 (GRADE 60) $F_y = 60,000\text{PSI}$.
8. CLIP ANCHOR PLATE IN FIELD AS REQUIRED TO CLEAR VERTICAL REINFORCEMENT.

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| Scale: | | | |
| AS NOTED | | | |
| No. | Revision | By | Date |
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| Designed by: | | | | | |
| | | | | | |
| CONSULTANT PROJECT MANAGER: GREG EDWARDS | | | | | |
| | By | Date | | By | Date |
| Designed | SJP | 02/15 | Checked | TWM | 02/15 |
| Drawn | JTS | 02/15 | In Charge of | GAE | 02/15 |

STANTEC CONSULTING SERVICES INC.
482 PAYNE ROAD
SCARBOROUGH, ME 04074
TEL (207) 887-3448
FAX (207) 883-3376

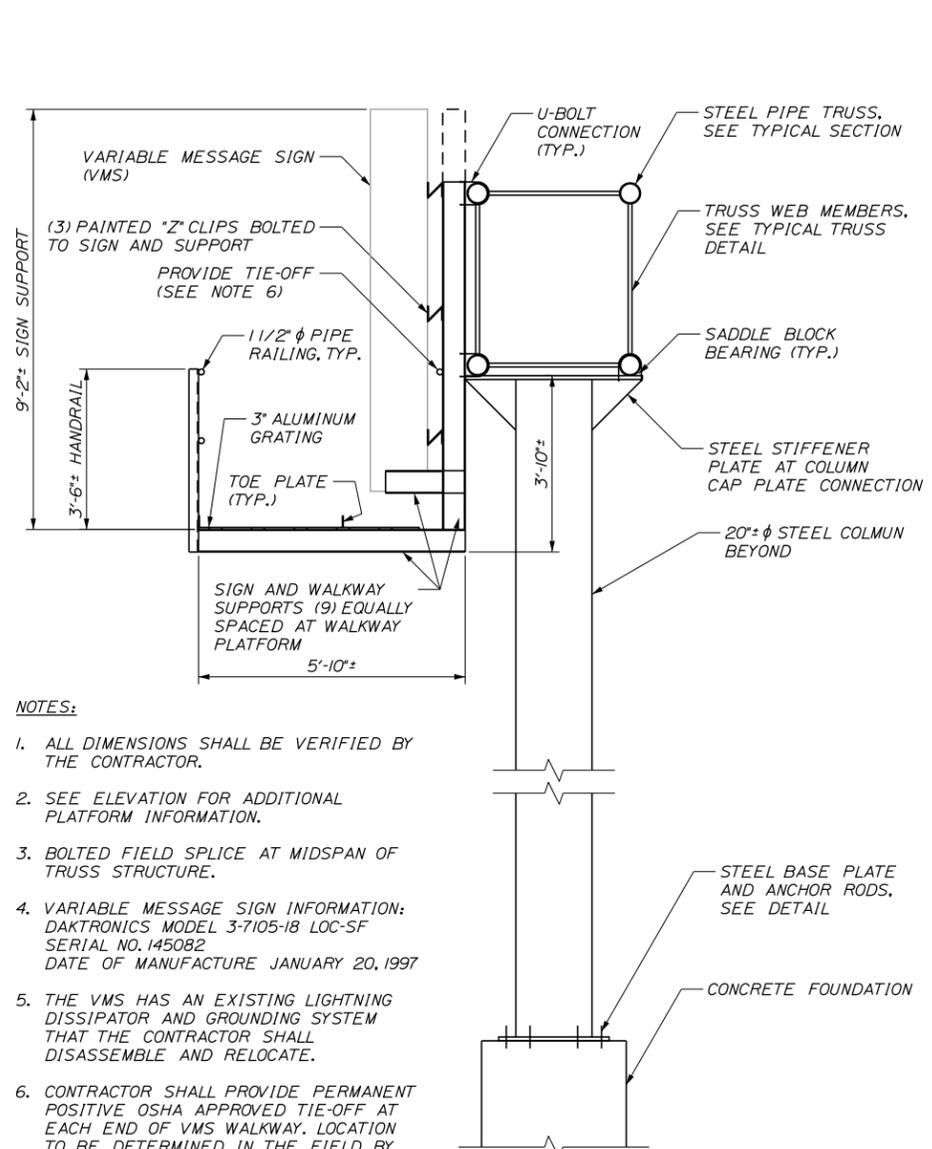
THE GOLD STAR
MEMORIAL HIGHWAY

INTERCHANGE 36 SACO
VARIABLE MESSAGE SIGN INSTALLATION
FOUNDATION DETAILS

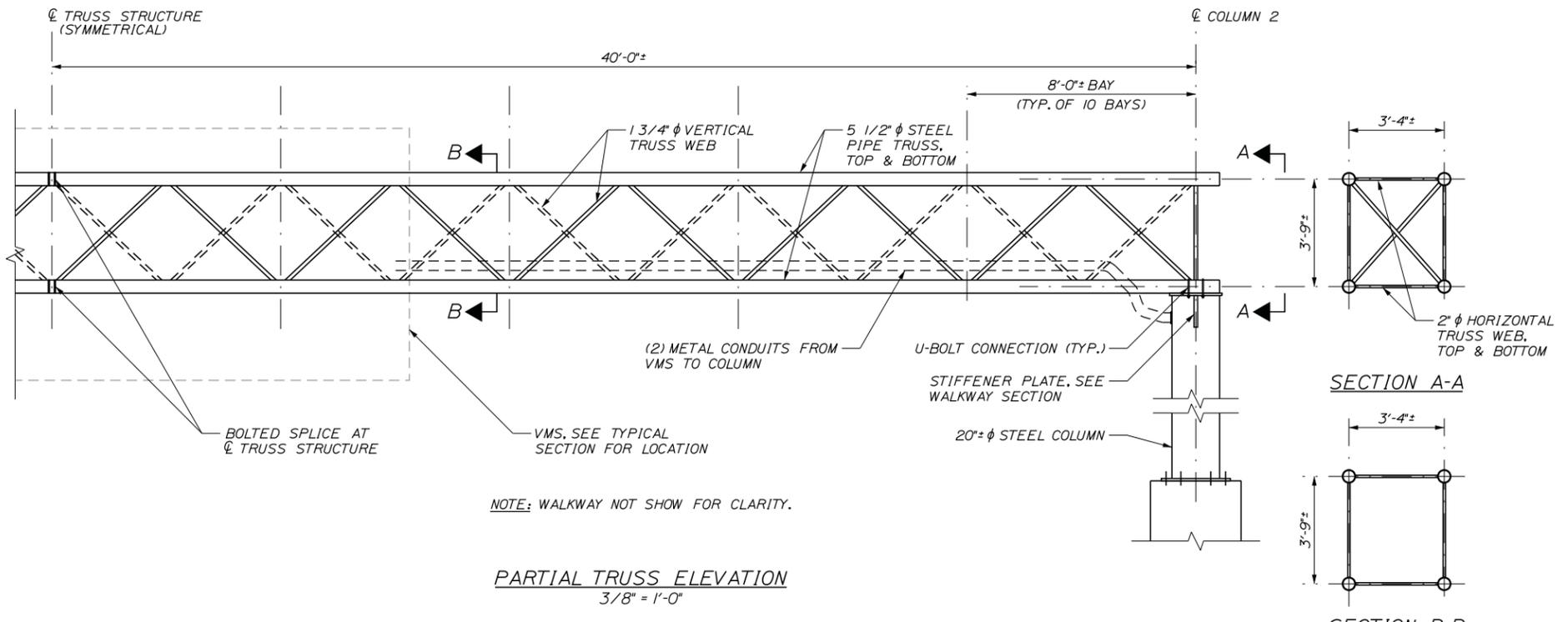
SHEET NUMBER:
CONTRACT: 2015.06 53 OF 54

Date: 2/18/2015

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- NOTES:**
1. ALL DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR.
 2. SEE ELEVATION FOR ADDITIONAL PLATFORM INFORMATION.
 3. BOLTED FIELD SPLICE AT MIDSPAN OF TRUSS STRUCTURE.
 4. VARIABLE MESSAGE SIGN INFORMATION: DAKTRONICS MODEL 3-7105-18 LOC-SF SERIAL NO. 145082 DATE OF MANUFACTURE JANUARY 20, 1997
 5. THE VMS HAS AN EXISTING LIGHTNING DISSIPATOR AND GROUNDING SYSTEM THAT THE CONTRACTOR SHALL DISASSEMBLE AND RELOCATE.
 6. CONTRACTOR SHALL PROVIDE PERMANENT POSITIVE OSHA APPROVED TIE-OFF AT EACH END OF VMS WALKWAY. LOCATION TO BE DETERMINED IN THE FIELD BY THE RESIDENT. PAYMENT FOR MATERIAL AND INSTALLATION SHALL BE INCIDENTAL TO ITEM 645.123 - REMOVAL, DISASSEMBLY AND RELOCATION OF VMS AND SUPPORTING STRUCTURE.



NOTE: WALKWAY NOT SHOW FOR CLARITY.

PARTIAL TRUSS ELEVATION
3/8" = 1'-0"

Scale: AS NOTED

| No. | Revision | By | Date |
|-----|----------|----|------|
| | | | |
| | | | |
| | | | |

Designed by:

Stantec

CONSULTANT PROJECT MANAGER: GREG EDWARDS

| | By | Date | | By | Date |
|----------|-----|-------|--------------|-----|-------|
| Designed | SJP | 02/15 | Checked | TWM | 02/15 |
| Drawn | JTS | 02/15 | In Charge of | GAE | 02/15 |

STANTEC CONSULTING SERVICES INC.
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TEL (207) 887-3448
FAX (207) 883-3376

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: RALPH C. NORWOOD, IV

INTERCHANGE 36 SACO
VARIABLE MESSAGE SIGN INSTALLATION
VMS SIGN STRUCTURE DETAILS

SHEET NUMBER:
CONTRACT: 2015.06
54 OF 54