

Date: 5/19/2020



THE GOLD STAR
MEMORIAL HIGHWAY

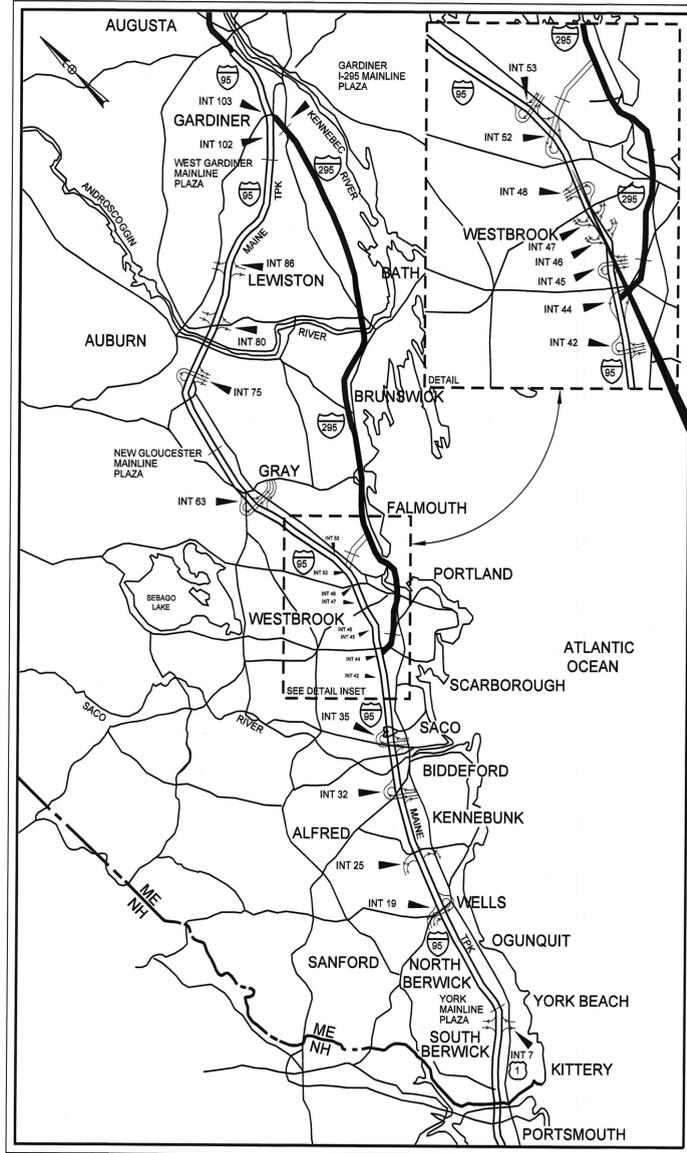
MAINE TURNPIKE AUTHORITY

DANIEL E. WATHEN, CHAIR
ROBERT D. STONE, VICE CHAIR
MICHAEL J. CIANCHETTE, MEMBER
JANE L. LINCOLN, MEMBER
ANN R. ROBINSON, MEMBER
THOMAS J. ZUKE, MEMBER
BRUCE A. VAN NOTE, EX-OFFICIO MEMBER

S. PETER MILLS, EXECUTIVE DIRECTOR

CONTRACT 2020.09

EMERGENCY VEHICLE RAMPS FOREST AVENUE / RIVERSIDE INDUSTRIAL PARKWAY MILE 50.0



CONTRACT 2019.08
EMERGENCY VEHICLE RAMPS
FOREST AVENUE OVERPASS
IN PORTLAND

LOCATION MAP

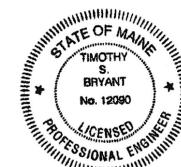
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16 - 28	CROSS SECTIONS

APPROVED:

MAINE TURNPIKE AUTHORITY


 PETER S. MERFELD, P.E. - CHIEF OPERATIONS OFFICER 5/19/20
 DATE


 STEPHEN R. MARTRE, P.E., - DIRECTOR OF ENGINEERING &
 BUILDING MAINTENANCE 5/19/20
 DATE





Timothy S. Bryant, P.E.
Consultant Project Manager

5/19/2020
DATE

Filename: ... \001_title_01.dgn

Contract 2020.09

ESTIMATED QUANTITIES

ITEM	DESCRIPTION	UNIT	PROJECT ITEMS	SOUTHBOUND EVR QUANTITY	NORTHBOUND EVR QUANTITY	MM 54 CULVERT WORK	TOTAL QUANTITY
201.11	Clearing	AC		0.40	0.35		0.75
203.20	Common Excavation	CY		750	1250		2000
203.24	Common Borrow	CY		12300	1900		14200
203.25	Granular Borrow	CY		570	1020		1590
304.10	Aggregate Subbase Course - Gravel	CY		740	670		1410
304.14	Aggregate Base Course - Type A	CY		190	170		360
403.207	Hot Mix Asphalt - 19.0 MM Nom. Max. Size (Base)	Ton		210	180		390
403.208	Hot Mix Asphalt - 12.5 MM Nom. Max. Size (Surface)	Ton		130	110		240
409.15	Bituminous Tack Coat RS-1 or RS-1h - Applied	Gallon		60	55		115
419.30	Saw Cutting Bituminous Pavement	LF		600	590		1190
603.155	12" RCP Class III	LF			40		40
603.159	12" Culvert Pipe Opt III	LF				20	20
603.179	18" Culvert Pipe Opt III	LF		88			88
603.199	24" Culvert Pipe Opt III	LF		80	48	40	168
603.280	Concrete Collar	EA				3	3
606.1301	31" W-Beam Guardrail, Mid-Way Splice	LF		988	600		1588
606.1304	31" W-Beam Guardrail, Mid-Way Splice - Over 15' Radius	LF		263	200		463
606.1351	Terminal End - Anchored End	EA		6	6		12
606.353	Reflectorized Flexible Guardrail Marker	EA		7	4		11
606.3561	Delineator Post - Remove and Stack	EA		2	3		5
606.369	Guardrail Remove and Stack	LF		525	500		1025
606.611	Remove and Reset Timber Guardrail	LF		80			80
607.17	Chain Link Fence - 6 ft	LF		80	80		160
607.2325	Pipe Entry Gate	EA		1	1		2
607.32	Bracing Assembly Type I - Metal Posts	EA		4	4		8
607.33	Bracing Assembly Type II - Metal Posts	EA			4		4
610.08	Plain Riprap	CY		8	154	15	177
610.18	Stone Ditch Protection	CY		40		60	100
610.181	Temporary Stone Check Dam	CY		8			8
613.319	Erosion Control Blanket	SY		3800	860	250	4910
615.07	Loam	CY		430	190	40	660
618.14	Seeding Method Number 2	Unit		35	15	1	51
619.1201	Mulch - Plan Quantity	Unit		35	15	1	51
620.58	Erosion Control Geotextile	SY		31	400	250	681
629.05	Hand Labor Straight Time	HR	30				30
631.12	All Purpose Excavator (including operator)	HR	30				30
631.171	Truck - Small (including operator)	HR	30				30
631.32	Culvert Cleaner (including operator)	HR			5	5	10
631.36	Foreman	HR	15				15
645.271	Regulatory, Warning, Confirmation and Route Marker Assembly Sign, Type 1	SF	67				67
652.39	Work Zone Traffic Control	LUMP	1				1
652.45	Truck Mounted Attenuator	CD	10				10
656.50	Baled Hay, in Place	EA	35				35
656.632	30" Temporary Silt Fence	LF		1100	920	150	2170
659.10	Mobilization	LUMP	1				1

COMMON EXCAVATION FOR ESTIMATE

COMMON EXCAVATION (FROM CROSS SECTIONS)	85
GRUBBING IN FILL	94
MUCK EXCAVATION	1,016
CULVERT INLET AND OUTLET DITCHES	17
TOTAL COMMON EXCAVATION (for estimate)	1,212

FILL FOR BORROW CALCULATIONS

COMMON FILL (FROM CROSS SECTIONS)	1,816
GRUBBING IN FILL	94
MUCK EXCAVATION	1,016
TOTAL FILL	2,926

AVAILABLE COMMON EXCAVATION FOR BORROW CALCULATIONS

(1) TOTAL COMMON EXCAVATION	1,212
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DEDUCTIONS:

GRUBBING IN CUT	77
GRUBBING IN FILL	94
MUCK EXCAVATION	1,016

(2) TOTAL DEDUCTIONS	1,187
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TOTAL AVAILABLE COMMON EXCAVATION (1) MINUS (2)

TOTAL AVAILABLE COMMON EXCAVATION (1) MINUS (2)	25
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COMPUTATION OF GRANULAR BORROW FOR ESTIMATE

GRANULAR BORROW TO REPLACE MUCK	1,016
GRANULAR BORROW =	1,016 x 1.00 = 1,016

COMPUTATION FOR COMMON BORROW FOR ESTIMATE

(3) TOTAL FILL	2,926
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TOTAL AVAIL. NON-ROCK EXCAV. $25 \times 0.90 =$	23
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(4) TOTAL AVAILABLE EXCAVATION	23
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BORROW NEEDED = TOTAL FILL MINUS TOTAL AVAILABLE EXCAVATION	2,904
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GRANULAR BORROW TO REPLACE MUCK	1,016
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COMMON BORROW	1,888
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SOUTHBOUND EVR EARTHWORK SUMMARY

COMMON EXCAVATION FOR ESTIMATE

COMMON EXCAVATION (FROM CROSS SECTIONS)	68
GRUBBING IN FILL	150
MUCK EXCAVATION	566
TOTAL COMMON EXCAVATION (for estimate)	784

FILL FOR BORROW CALCULATIONS

COMMON FILL (FROM CROSS SECTIONS)	12,076
GRUBBING IN FILL	150
MUCK EXCAVATION	566
TOTAL FILL	12,792

AVAILABLE COMMON EXCAVATION FOR BORROW CALCULATIONS

(1) TOTAL COMMON EXCAVATION	784
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DEDUCTIONS:

GRUBBING IN CUT	60
GRUBBING IN FILL	150
MUCK EXCAVATION	566

(2) TOTAL DEDUCTIONS	776
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TOTAL AVAILABLE COMMON EXCAVATION (1) MINUS (2)

TOTAL AVAILABLE COMMON EXCAVATION (1) MINUS (2)	8
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COMPUTATION OF GRANULAR BORROW FOR ESTIMATE

GRANULAR BORROW TO REPLACE MUCK	566
GRANULAR BORROW =	566 x 1.00 = 566

COMPUTATION FOR COMMON BORROW FOR ESTIMATE

(3) TOTAL FILL	12,792
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TOTAL AVAIL. NON-ROCK EXCAV. $8 \times 0.90 =$	7
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(4) TOTAL AVAILABLE EXCAVATION	7
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BORROW NEEDED = TOTAL FILL MINUS TOTAL AVAILABLE EXCAVATION	12,785
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GRANULAR BORROW TO REPLACE MUCK	566
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COMMON BORROW	12,219
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Date: 5/20/2020

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Scale:			
No.	Revision	By	Date

Designed by:					
					
CONSULTANT PROJECT MANAGER: T. Bryant					
	By	Date		By	Date
Designed	AGC	5/2020	Checked	ECF	5/2020
Drawn	AGC	5/2020	In Charge of	AG	5/2020

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**THE GOLD STAR
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph Norwood, IV

FOREST AVE./RIVERSIDE IND. PKWY.
 EMERGENCY VEHICLE RAMPS
 ESTIMATED QUANTITIES &
 EARTHWORK SUMMARY

VHB: 55281.00 SHEET NUMBER: 2
 CONTRACT: 2020.09 2 OF 28

Date: 5/20/2020

Filename: ... \003_gen_notes_01.dgn

GENERAL CONSTRUCTION

1. ALL DETAILS SHALL BE IN CONFORMANCE WITH MAINE DEPARTMENT OF TRANSPORTATION (MAINEDOT) 2014 STANDARD DETAILS FOR HIGHWAYS AND BRIDGES WITH ALL UPDATES, AND MAINEDOT BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL LATEST REVISION UNLESS OTHERWISE NOTED IN THESE PLANS.
2. DURING CONSTRUCTION, TRAFFIC WILL BE MAINTAINED AS SHOWN IN THE PLANS AND AS REQUIRED IN THE SPECIAL PROVISIONS.
3. ALL EXISTING DELINEATOR AND MILE MARKER POSTS WITHIN LIMITS OF DISTURBANCE SHALL BE REMOVED AND RESET UPON COMPLETION OF THE CONTRACT. PAYMENT WILL BE MADE UNDER ITEM 606.3561.
4. EXISTING ROW FENCE WITHIN THE LIMITS OF WORK, AS SHOWN ON THE PLANS OR AS DIRECTED BY THE RESIDENT, SHALL BE REMOVED AND DISPOSED. THIS WORK SHALL BE INCIDENTAL TO THE PROPOSED FENCE ITEMS. PROPOSED CHAIN LINK FENCE AND PIPE ENTRY GATE SHALL BE INSTALLED CONTINUOUSLY WITH NO GAPS. IF REQUIRED, CONNECTION FOR PROPOSED FENCE TO EXISTING FENCE SHALL BE INCIDENTAL TO THE CONTRACT.
5. THE PROPOSED ELEVATIONS ARE BASED ON THE NAVD 88 DATUM.
6. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID IMPACTS BEYOND WHAT IS SHOWN IN THESE PLANS TO DELINEATED WETLAND AREAS.

EARTHWORK

1. THE CLEARING LIMITS SHALL BE 10' BEYOND AND PARALLEL TO CONSTRUCTION SLOPE LINES OR AS SHOWN ON THE PLANS. THE ACTUAL CLEARING LINES SHALL BE ESTABLISHED IN THE FIELD BY THE CONTRACTOR AND SHALL BE APPROVED BY THE RESIDENT PRIOR TO ANY CLEARING TAKING PLACE. ALL CLEARING SHALL BE WITHIN THE ROW. NO CLEARING SHALL TAKE PLACE IN JUNE OR JULY.
2. THE NORMAL GRUBBING WIDTH IN THE FILLS SHALL BE VARIABLE LEFT OR RIGHT, WHEN SUBGRADE IS LESS THAN 5' ABOVE OLD GROUND. THE GRUBBING DEPTH HAS BEEN ESTIMATED AS 12".
3. MUCK EXCAVATION HAS BEEN ESTIMATED IN ALL WETLAND AREAS AT A 2' DEPTH. THE CONTRACTOR SHALL CONFIRM WITH THE RESIDENT THE ACTUAL LIMITS AND DEPTH BEFORE PLACING ANY AGGREGATE.
4. WASTE MATERIALS SHALL BE DISPOSED OFF THE PROJECT SITE, IN ACCORDANCE WITH CHAPTER 404, DEPARTMENT OF ENVIRONMENTAL PROTECTION SOLID WASTE MANAGEMENT RULES.
5. EXCAVATIONS ACCOMPLISHED AS PART OF THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH OSHA SUBPART P OF 29 CFR PART 1926.650-652 (CONSTRUCTION STANDARDS FOR EXCAVATION).
6. THE CONTRACTOR SHALL MINIMIZE SLOPE DISTURBANCES WHERE POSSIBLE, AS DIRECTED BY THE RESIDENT.
8. GRANULAR BORROW USED TO BACKFILL MUCK EXCAVATION, IN LOW WET AREAS 1' ABOVE WATER LEVEL, OR OLD GROUND SHALL MEET REQUIREMENTS FOR GRANULAR BORROW MATERIAL FOR UNDERWATER BACKFILL AS SPECIFIED IN STANDARD SPECIFICATION 703.19. GRANULAR BORROW - UNDERWATER BACKFILL SHALL BE PAID FOR UNDER ITEM 203.25 GRANULAR BORROW.

GUARDRAIL

1. COMPOSITE OFFSET BLOCKS SHALL BE USED WITH GUARDRAIL.
2. AT THE END OF EACH WORK DAY, ALL GUARDRAIL WITHIN WORK AREAS ACCESSIBLE TO TRAFFIC SHALL HAVE AN APPROVED CRASHWORTHY END TREATMENT.
3. CONNECTIONS FOR PROPOSED GUARDRAIL TO EXISTING GUARDRAIL SHALL BE INCIDENTAL TO THE PROPOSED GUARDRAIL ITEMS.
4. CONTRACTOR SHALL STOCKPILE ALL GUARDRAIL TO BE REMOVED AND RESET, AND REMOVED AND DISPOSED UNTIL GUARDRAIL INSTALLATION HAS BEEN COMPLETED.
5. POST HOLES FROM GUARDRAIL REMOVED OR RESET SHALL BE FILLED AND COMPACTED WITH GRANULAR BORROW AND PAVEMENT TO MATCH SURROUNDING PAVEMENT THICKNESS.

DRAINAGE

1. NO EXISTING DRAINAGE SHALL BE ABANDONED, REMOVED OR PLUGGED WITHOUT PRIOR APPROVAL OF THE RESIDENT.
2. INLETS AND OUTLETS OF ALL CULVERTS SHALL BE RIPRAPPED UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE RESIDENT.
3. ALL DITCH ELEVATIONS AND OFFSETS SHOWN ON THE CROSS SECTIONS ARE FOR THE FINISHED DITCH FLOW LINE.
4. IF FOUNDATION MATERIAL IS REQUIRED UNDER CULVERTS, IT SHALL MEET THE REQUIREMENTS FOR GRANULAR BORROW - UNDERWATER BACKFILL AS SPECIFIED IN STANDARD SPECIFICATION 703.19 AND BE PAID FOR AS 203.25 GRANULAR BORROW.
5. FOR CULVERT AND DRAINAGE REPAIRS AT MM 53.7 SEE APPENDIX C IN THE SPECIAL PROVISIONS.

EROSION CONTROL

1. THE ANTICIPATED EROSION CONTROL DEVICES ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL PROPOSE ACTUAL TYPE AND LOCATION OF DEVICES FOR APPROVAL BY THE RESIDENT. ADDITIONAL MEASURES MAY BE PROPOSED BY THE CONTRACTOR TO IMPLEMENT ADDITIONAL MEASURES. ANY ADDITIONAL MEASURES APPROVED BY THE RESIDENT WILL BE MEASURED FOR PAYMENT.
2. 4" LOAM HAS BEEN ESTIMATED FOR 100% OF THE DISTURBED AREA UNLESS OTHERWISE SPECIFIED ON THE PLANS. ACTUAL PLACEMENT OF THE LOAM SHALL BE AS DESIGNATED BY THE RESIDENT.
3. ALL SLOPES SHALL BE SEEDED WITH SEEDING METHOD #2.
4. TEMPORARY SEED SHALL BE APPLIED TO ALL DISTURBED AREAS THAT WILL NOT BE COMPLETED WITHIN 30 DAYS.
5. ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE MAINE DEPARTMENT OF TRANSPORTATION BEST MANAGEMENT PRACTICES.
6. TEMPORARY STONE CHECK DAMS SHALL BE INSTALLED IN ACCORDANCE WITH THE MAINE DEPARTMENT OF TRANSPORTATION BEST MANAGEMENT PRACTICES. STONE CHECK DAMS SHALL BE SPACED APPROXIMATELY 100 FEET FOR DITCH GRADES LESS THAN 3% AND SPACED APPROXIMATELY 50 FEET FOR DITCH GRADES STEEPER THAN 5%. SEE MAINEDOT BEST MANAGEMENT PRACTICES FOR FURTHER DETAILS.
7. EROSION CONTROL BLANKET, ITEM 613.319 SHALL BE INSTALLED ON 2:1 SLOPES FROM THE 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.

UTILITY

1. 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 SHALL CONTACT DIG SAFE (1-888-DIG-SAFE OR 811) PRIOR TO STARTING WORK. IN ADDITION, DIG SMART OF MAINE SHALL BE CONTACTED PRIOR TO STARTING ANY WORK WITHIN MTA RIGHT-OF-WAY. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COSTS. PROOF OF UTILITY LOCATION FROM BOTH DIG SAFE AND DIG SMART (WHEN APPLICABLE) SHALL BE SUBMITTED PRIOR TO THE COMMENCEMENT OF ANY WORK.
2. ALL UTILITY FACILITIES SHALL BE ADJUSTED BY THE RESPECTIVE UTILITIES UNLESS NOTED.
3. THE UTILITIES INVOLVED IN THIS CONTRACT ARE:
CENTRAL MAINE POWER (CMP)
CROWN CASTLE FIBER
CONSOLIDATED COMMUNICATIONS
CHARTER COMMUNICATIONS OF MAINE
LIGHTOWER FIBER NETWORKS
4. GRADING AROUND UTILITY POLES AND GUY WIRES, EXISTING OR PROPOSED, SHALL BE DONE BY HAND.

Scale:			
No.	Revision	By	Date

Designed by:					
					
CONSULTANT PROJECT MANAGER: T. Bryant					
	By	Date		By	Date
Designed	AGC	5/2020	Checked	ECF	5/2020
Drawn	AGC	5/2020	In Charge of	AG	5/2020

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Suite 105B
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THE GOLD STAR MEMORIAL HIGHWAY

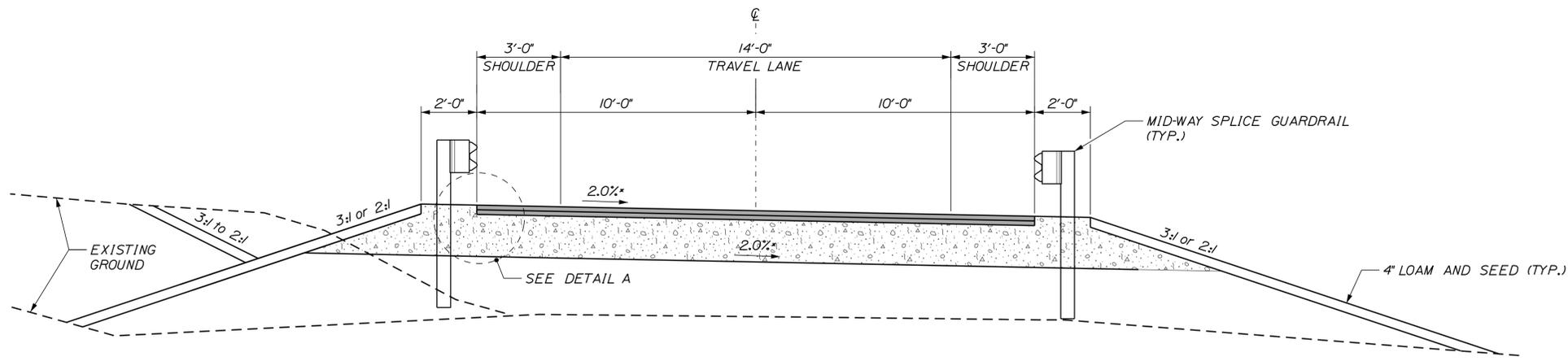
MTA PROJECT MANAGER: Ralph Norwood, IV

FOREST AVE./RIVERSIDE IND. PKWY.
EMERGENCY VEHICLE RAMPS

GENERAL NOTES

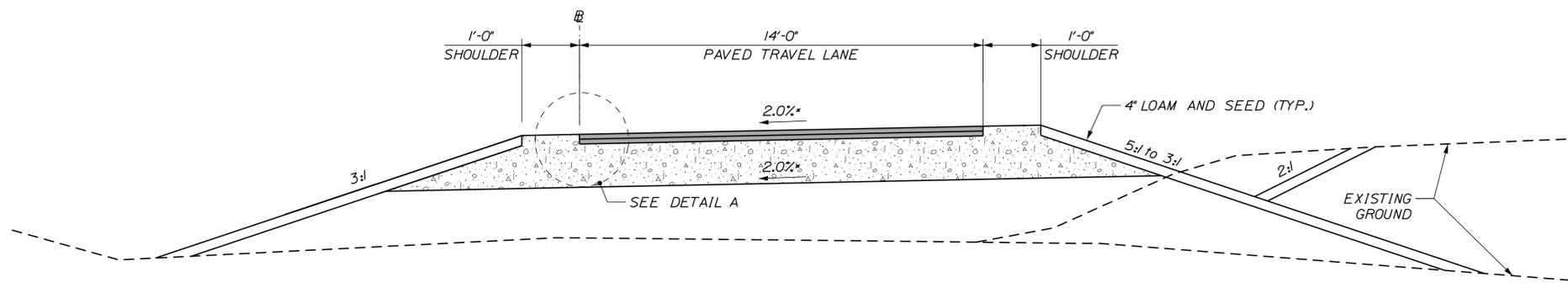
VHB: 55281.00	SHEET NUMBER: 3
CONTRACT: 2020.09	3 OF 28

Date: 5/20/2020



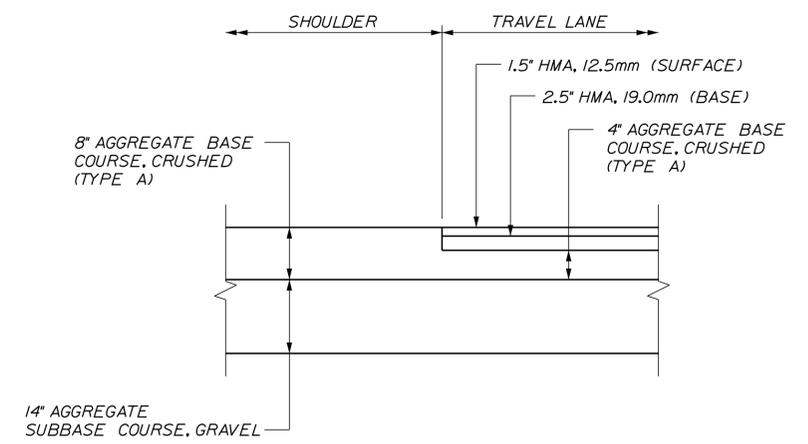
SB EMERGENCY VEHICLE RAMP SECTION

*NOTE: CROSS SLOPE VARIES AT INTERSECTIONS, SEE CROSS SECTIONS



NB EMERGENCY VEHICLE RAMP SECTION

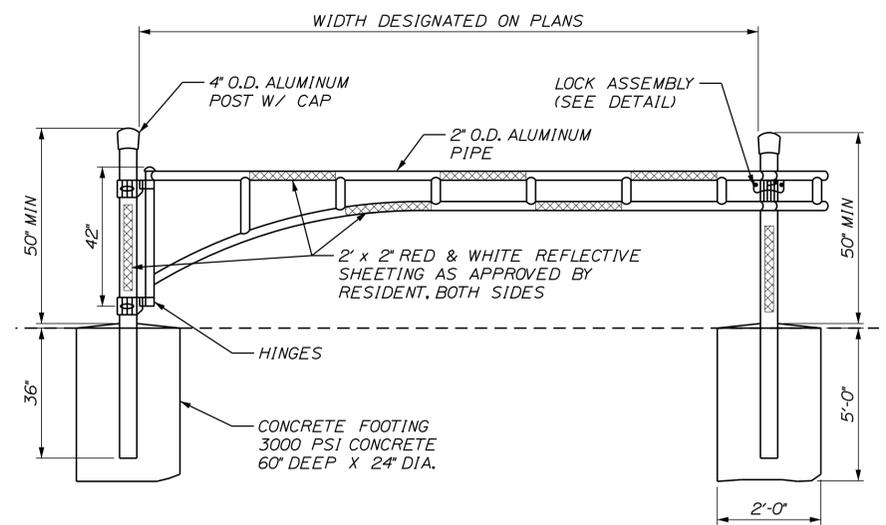
*NOTE: CROSS SLOPE VARIES AT INTERSECTIONS, SEE CROSS SECTIONS



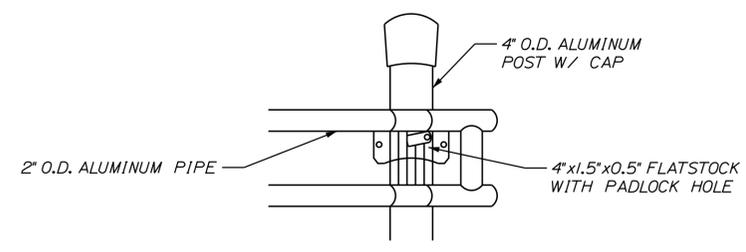
DETAIL A
NOT TO SCALE

TYPICAL EMERGENCY VEHICLE RAMP SECTION NOTES

1. THE PAVEMENT, BASE, AND SUBBASE DEPTHS AS SHOWN ON PLANS ARE INTENDED TO BE NOMINAL.
2. ALL NECESSARY PAVEMENT CUTTING SHALL BE SAWCUT AND DONE IN SUCH A MANNER AS TO LEAVE A CLEAN VERTICAL FACE.
3. 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.
4. A COATING OF HOT RUBBERIZED ASPHALT SHALL BE APPLIED TO THE SURFACE LAYER OF ALL SAWCUT AND PAVEMENT JOINTS PRIOR TO PAVING.



PIPE ENTRY GATE
NOT TO SCALE



LOCK ASSEMBLY
NOT TO SCALE

SIGN SUMMARY				
Sign	Text Dimensions (Inches)		Size	Quantity and Color
	Letter Height	Vertical Spacing		
R1-1		Text Dimensions Shall Conform to "Standard Highway Signs" - 2012	36"x36"	4 - WHITE ON RED
R5-11			30"x24"	5 - BLACK ON WHITE
R6-1R			36"x12"	2 - BLACK ON WHITE

Filename: ...004_Road_Typ_01.dgn

Scale: NOT TO SCALE

No.	Revision	By	Date

Designed by:

CONSULTANT PROJECT MANAGER: T. Bryant

	By	Date	By	Date	
Designed	AGC	5/2020	Checked	ECF	5/2020
Drawn	AGC	5/2020	In Charge of	AG	5/2020

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THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ralph Norwood, IV

FOREST AVE./RIVERSIDE IND. PKWY.
EMERGENCY VEHICLE RAMP
TYPICAL ROADWAY SECTIONS
DETAILS & SIGN SUMMARY

VHB: 55281.00
CONTRACT: 2020.09

SHEET NUMBER: 4
4 OF 28

Date: 5/20/2020

DIMENSIONS FOR SLOPE OF 2:1

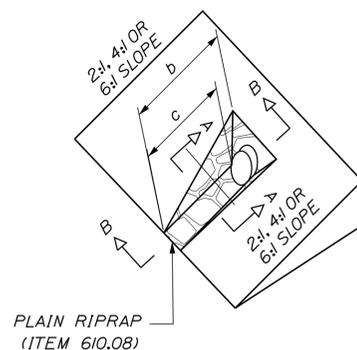
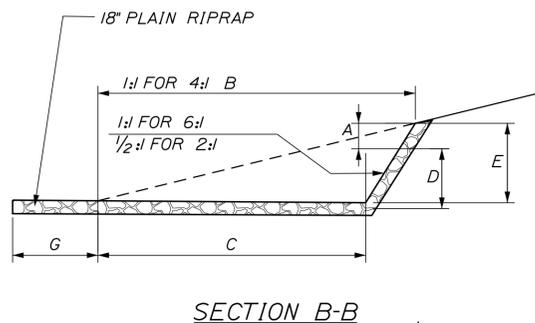
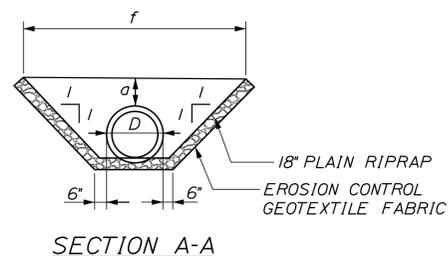
D	A (FT)	B (FT)	C (FT)	E (FT)	F (FT)	G (FT)	STONE DEPTH (FT)	STONE (CY)
12"	1.00	4.00	3.00	2.00	6.00	1.00	1.50	1.30
15"	1.00	4.50	3.37	2.25	6.75	1.63	1.50	1.70
18"	1.00	5.00	3.75	2.50	7.50	2.25	1.50	2.09
24"	1.00	6.00	4.50	3.00	9.00	3.50	1.50	3.12
30"	1.00	7.00	5.25	3.50	10.50	4.75	1.50	4.33

DIMENSIONS FOR SLOPE OF 6:1

D	A (FT)	B (FT)	C (FT)	E (FT)	F (FT)	G (FT)	STONE DEPTH (FT)	STONE (CY)
12"	0.50	9.00	7.50	1.50	4.50	0.00	1.50	2.30
15"	0.50	10.50	8.75	1.75	5.50	0.00	1.50	2.93
18"	0.50	12.00	10.00	2.00	6.50	0.00	1.50	3.57
24"	0.50	15.00	12.50	2.50	8.00	0.00	1.50	5.44
30"	0.50	18.00	15.00	3.00	9.50	0.00	1.50	7.71

DIMENSIONS FOR SLOPE OF 4:1

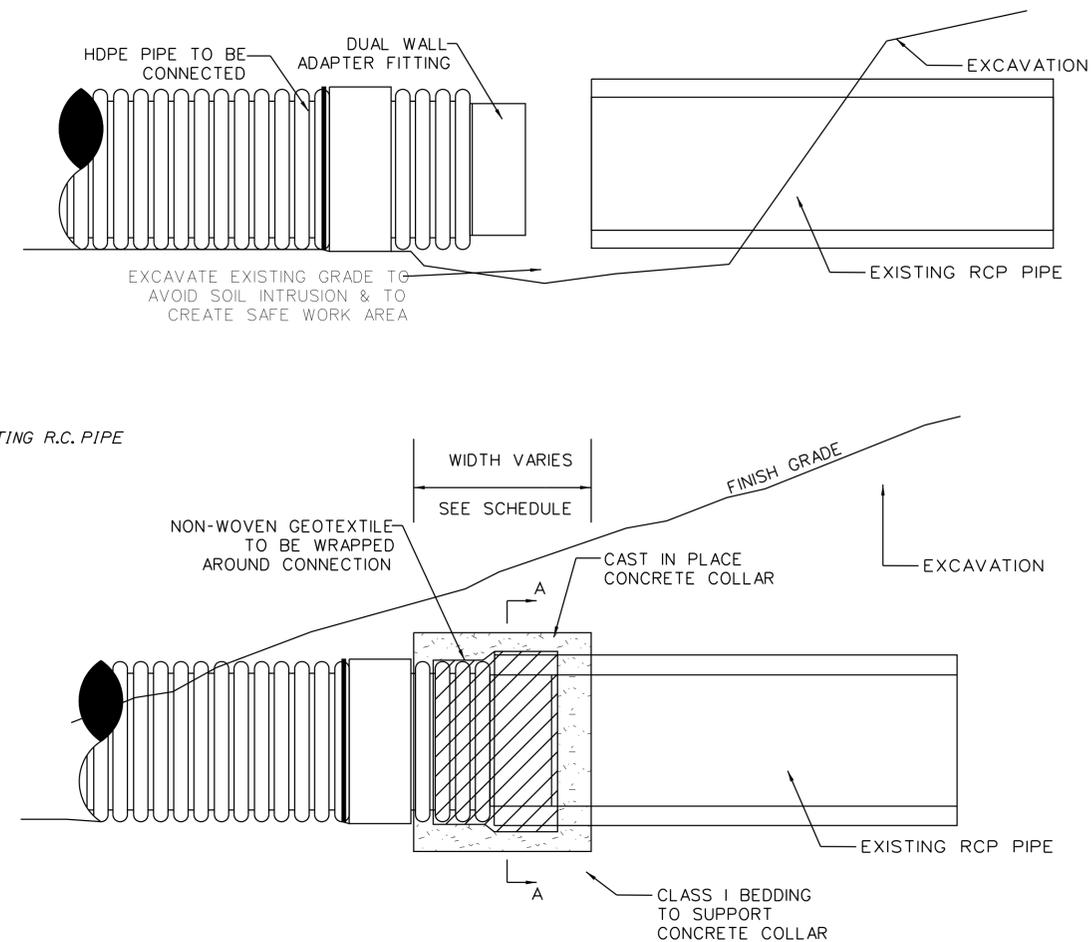
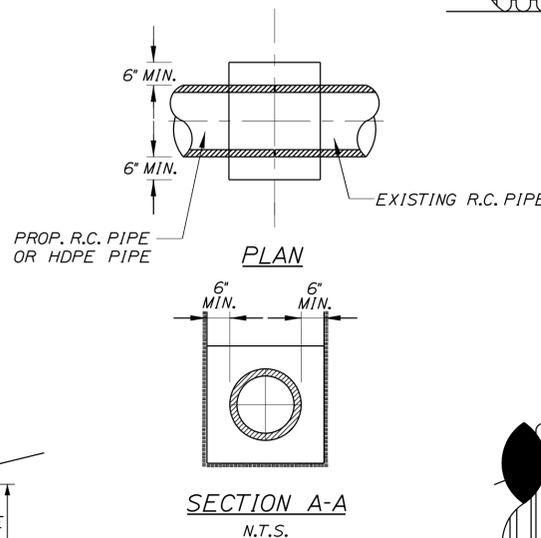
D	A (FT)	B (FT)	C (FT)	E (FT)	F (FT)	G (FT)	STONE DEPTH (FT)	STONE (CY)
12"	1.00	8.00	6.00	2.00	6.00	0.00	1.50	2.20
15"	1.00	9.00	6.75	2.25	6.75	0.00	1.50	2.80
18"	1.00	10.00	7.50	2.50	7.50	0.00	1.50	3.40
24"	1.00	12.00	9.00	3.00	9.00	0.00	1.50	4.86
30"	1.00	14.00	10.50	3.50	10.50	0.00	1.50	6.58



NOTES:

- THE DIMENSIONS SHOWN ARE APPROXIMATE AND MAY BE MODIFIED BY THE RESIDENT.
- STONE QUANTITIES ARE FOR ONE END OF THE PIPE.

ROADWAY CULVERT END SLOPE TREATMENT
N.T.S



PIPE DIA. (INCHES)	WIDTH OF CONC. (INCHES)
12	24
15	24
18	24
24	24
30	30
36	36
42	48
48	48

NOTES:

- CONNECTION AND PIPE TO BE BACKFILLED PER ASTM D2321 (CRUSHED STONE).
- CONCRETE SHALL BE CLASS A FIBER REINFORCED.
- SEE CONCRETE COLLAR WIDTH SCHEDULE FOR DIMENSIONS.

Filename: ...005_Drainage_Details.dgn

No.	Revision	By	Date

Designed by:					
CONSULTANT PROJECT MANAGER: T. Bryant					
	By	Date		By	Date
Designed	AGC	5/2020	Checked	ECF	5/2020
Drawn	AGC	5/2020	In Charge of	AG	5/2020

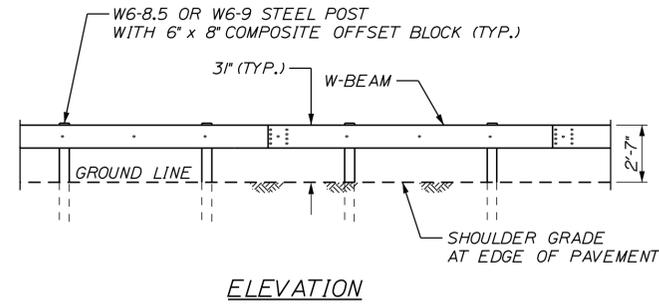
VANASSE HANGEN BRUSTLIN, INC.
500 Southborough Dr.
Suite 105B
South Portland, ME 04106
TEL (207) 889-3150
FAX (207) 253-5596

THE GOLD STAR MEMORIAL HIGHWAY

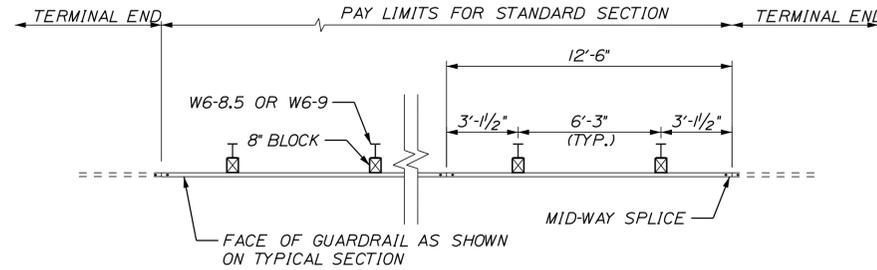
FOREST AVE./RIVERSIDE IND. PKWY.
EMERGENCY VEHICLE RAMPS
DRAINAGE DETAILS

VHB: 55281.00 SHEET NUMBER: 5
CONTRACT: 2020.09 5 OF 28

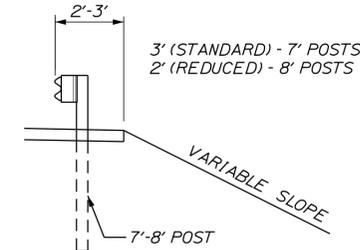
Date: 5/20/2020



ELEVATION

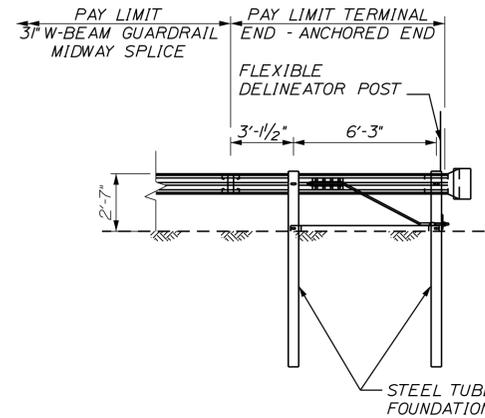


PLAN - SINGLE FACED



CROSS SECTION

3" W-BEAM GUARDRAIL - MID-WAY SPLICE
(8' STEEL POST, 8" OFFSET BLOCKS, SINGLE FACED)
(ITEM 606.130I)
 NOT TO SCALE

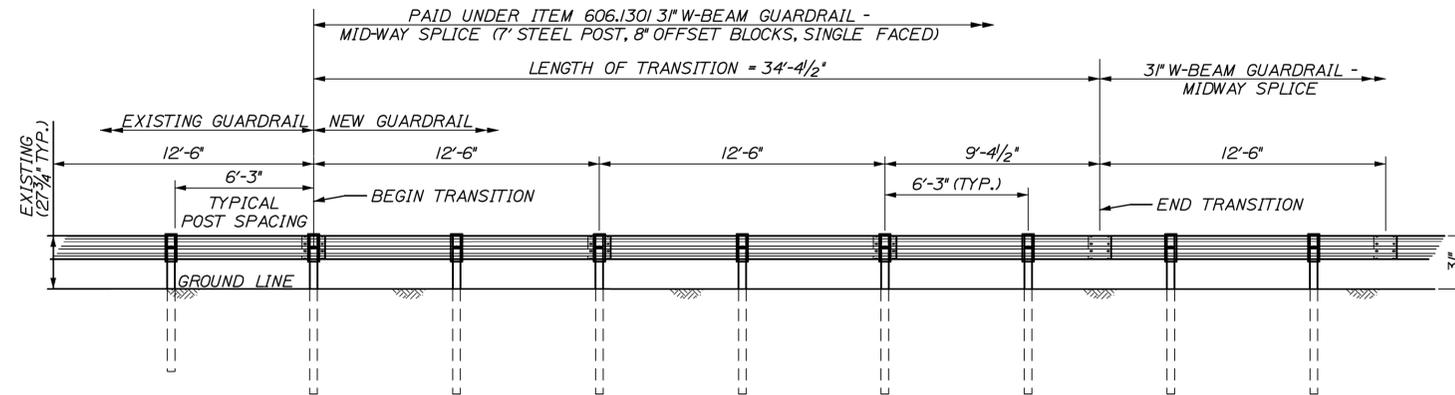


TERMINAL END - ANCHORED END - 3" W-BEAM GUARDRAIL
(ITEM 606.135I)
 NOT TO SCALE

NOTES:
 1. THIS DETAIL MODIFIES THE SEW31 DRAWING SUCH THAT W-BEAM DOES NOT EXTEND BEYOND THE LAST GUARDRAIL POST. THE RWMI40 W-BEAM PANEL SHALL HAVE A LENGTH OF 9'-4 1/2" MEASURED FROM THE CENTER OF THE MIDWAY SPLICE TO THE CENTER OF THE LAST GUARDRAIL POST.

GENERAL GUARDRAIL INSTALLATION NOTES:

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 MID-WAY SPLICE HEIGHT SHALL BE 3". GUARDRAIL HEIGHT SHALL BE MEASURED FROM 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.



TRANSITION FROM EXISTING GUARDRAIL TO 3" MID-WAY SPLICED GUARDRAIL
 NOT TO SCALE

TRANSITION FROM EXISTING GUARDRAIL NOTES:

1. MAINTAIN STANDARD 1" CLEARANCE OF POST ABOVE PANEL THROUGHOUT THE ENTIRE LENGTH OF TRANSITION.
2. A MINIMUM OF ONE (1) 12'-6" PANEL SHALL BE PLACED BETWEEN THIS TRANSITION AND THE START OF ANY END TREATMENT OR ANCHORAGE.
3. ALL NEW POSTS SHALL BE 8' IN LENGTH UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.

Filename: ...006_Details_Guardrail.dgn

Scale: NOT TO SCALE			
No.	Revision	By	Date

Designed by:					
CONSULTANT PROJECT MANAGER: T. Bryant					
	By	Date		By	Date
Designed	AGC	5/2020	Checked	ECF	5/2020
Drawn	AGC	5/2020	In Charge of	AG	5/2020

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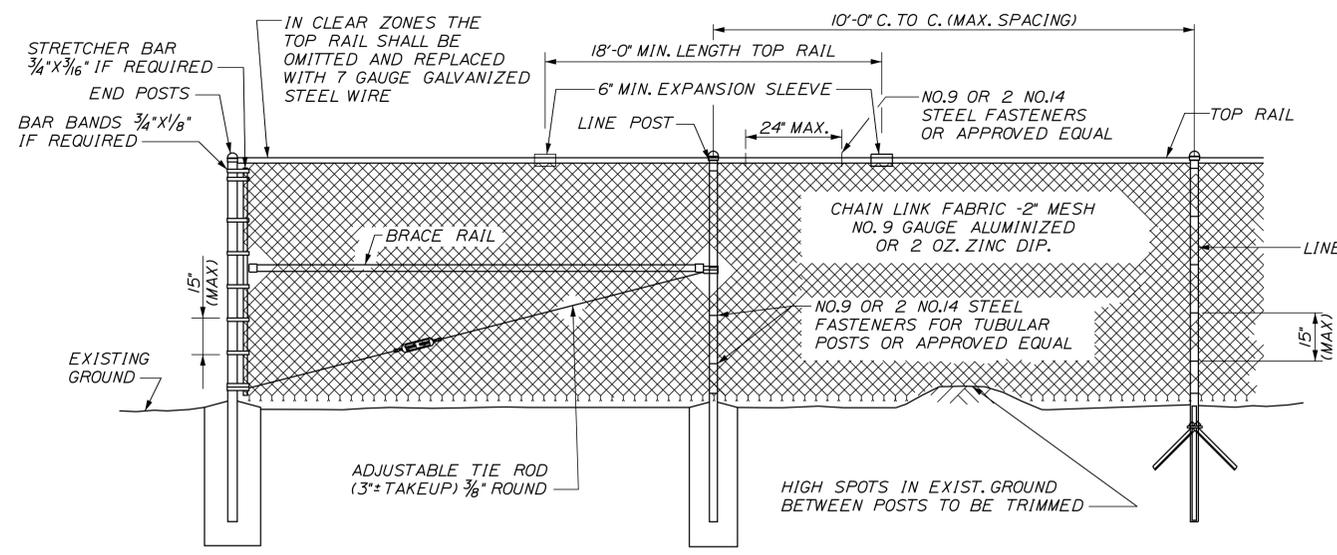
THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ralph Norwood, IV

FOREST AVE./RIVERSIDE IND. PKWY.
 EMERGENCY VEHICLE RAMPS
 GUARDRAIL DETAILS

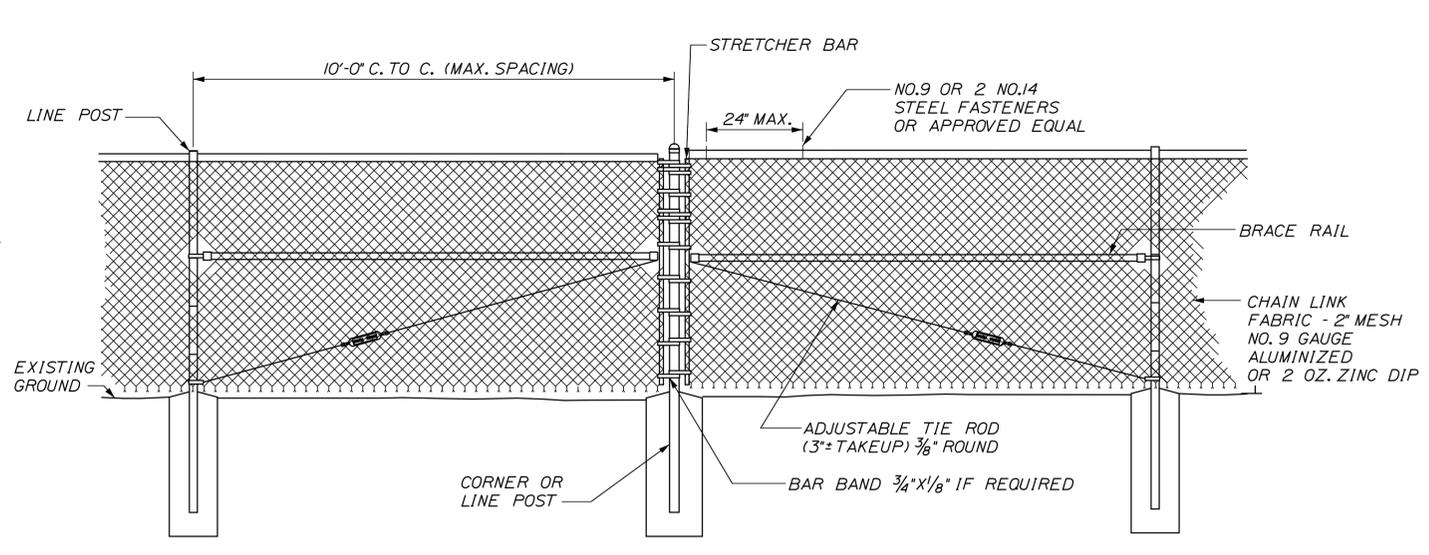
VHB: 55281.00 SHEET NUMBER: 6
 CONTRACT: 2020.09 6 OF 28

Date: 5/20/2020

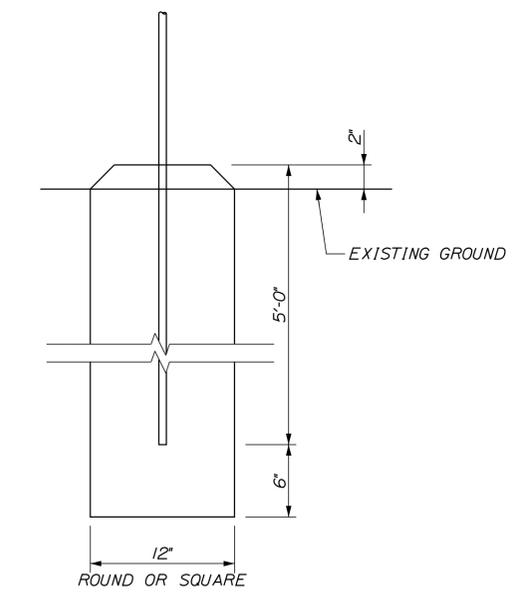


TYPICAL TYPE I END PANEL
N.T.S.

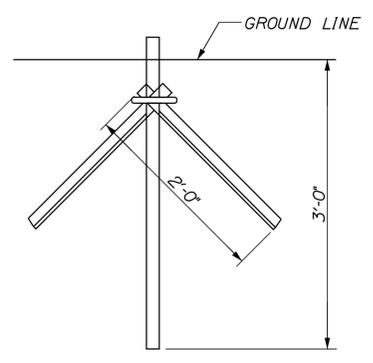
TYPICAL INTERMEDIATE PANEL
N.T.S.



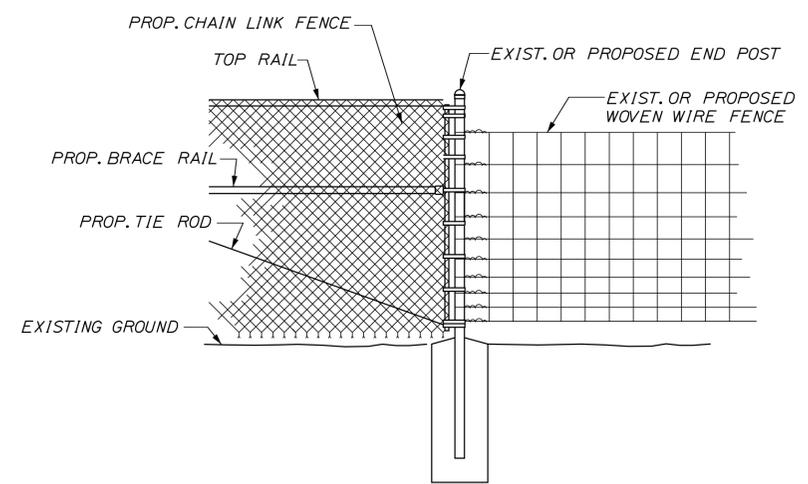
TYPICAL TYPE II BRACE PANEL
N.T.S.



BRACE, GATE AND END POST BASE DETAIL
N.T.S.



LINE POST DRIVE ANCHOR DETAIL
N.T.S.



METHOD OF ATTACHING CHAIN LINK FENCE TO WOVEN WIRE FENCE
N.T.S.

BENDING MOMENTS BASED ON GRADE 1 (SCHEDULE 40 STEEL)

CHAIN LINK FENCE	SHAPE	NOMINAL SIZE (INCHES)	BENDING MOMENT* (LBS.-IN.)
END & CORNER POSTS	φ	2 I.D.	14,025
LINE POSTS	φ	1-1/2 I.D.	8,150
TOP & BRACE RAILS	φ	1-1/4 I.D.	5,875

* MATERIAL FOR GRADE 2 END, CORNER & LINE POSTS AND TOP & BRACE RAILS MUST MEET OR EXCEED BENDING MOMENTS FOR GRADE 1 STEEL AS NOTED ABOVE.

NOTES

- BRACE PANELS SHALL BE INSTALLED WHERE THE CHANGE IN GRADE BETWEEN ANY THREE POSTS EXCEEDS 15 PERCENT.
- NO ADDITIONAL PAYMENT WILL BE MADE FOR LONGER POSTS NECESSITATED BY LARGE GRADE DIFFERENTIAL.
- TYPE I BRACING WILL BE USED AT FENCE ENDS. TYPE II BRACING WILL BE USED AT CORNER POSTS.
- WHEN LEDGE IS ENCOUNTERED, STEEL POSTS SHALL BE SET AND GROUTED 12" DEEP UNLESS THE POSTS PENETRATE THE GROUND TO THE DEPTH INDICATED ON THE DRAWINGS.
- CONCRETE FOR POST FOUNDATION SHALL BE CLASS B.
- BRACE, GATE AND END POSTS SHALL BE SET IN CONCRETE.
- CHAIN LINK FENCE SHALL BE INSTALLED WITH BARBS DOWN.
- ALL COMPONENTS OF CHAIN LINK FENCE SHALL BE IN ACCORDANCE WITH AASHTO M181.

Filename: ...007_Fence_Dt_01.dgn

Scale: NOT TO SCALE

No.	Revision	By	Date

Designed by:

CONSULTANT PROJECT MANAGER: T. Bryant

	By	Date	By	Date
Designed	AGC	5/2020	Checked	ECF 5/2020
Drawn	AGC	5/2020	In Charge of	AG 5/2020

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THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ralph Norwood, IV

FOREST AVE./RIVERSIDE IND. PKWY.
EMERGENCY VEHICLE RAMPS
FENCING DETAILS

VHB: 55281.00
CONTRACT: 2020.09

SHEET NUMBER: 7
7 OF 28

MAINTENANCE OF TRAFFIC GENERAL NOTES

- All traffic control equipment and devices shall conform to the latest edition of the Maine Department of Transportation (MaineDOT) Standard Specifications, Maine Turnpike Authority (MTA) Supplemental Specifications, contract specifications and applicable traffic control standards and practices.
- All traffic control equipment and layouts shall conform to the 2009 edition of the Federal Highway Administration (FHWA) Manual on Uniform Traffic Control Devices (MUTCD), chapter 6.
- All temporary traffic control signs shall have ASTM D4956 Type VII, Type VIII, or Type IX super high intensity or prismatic fluorescent retroreflective sheeting and shall be maintained in like-new condition. All orange construction signs shall be fluorescent orange with Type IX sheeting. Placement of construction signs shall be adjusted to avoid obstructing existing signs and to ensure proper sight lines to the construction signs as determined by the Resident
- Any signs, equipment, or devices found to be damaged or unserviceable shall be replaced at the Contractor's expense.
- During night operations, temporary work lighting shall be directed away from approaching lanes of traffic.
- Temporary lane closures will be required, with advanced approval, whenever work will occur within four feet of the I-95 traveled way. Temporary lane closures shall be removed if no work is occurring. See Special Provisions for more information.
- All lane closures shall require approval of the Resident a minimum of two working days in advance of the lane closure.
- The quantities for construction signs indicated are typical for one ramp location. The Contractor has the authority to work both ramp locations concurrently, in accordance with Section 652.

Date: 5/20/2020

TURNPIKE SHOULDER CLOSURES

CONSTRUCTION SIGN SUMMARY				
Sign	Text Dimensions (Inches)		Size	Quantity and Color
	Letter Height	Vertical Spacing		
G20-2		Text Dimensions Shall Conform to "Standard Highway Signs" - 2012	48"x24"	1 - Black on Orange
W7-3aP			36"x30"	1 - Black on Orange
W20-1 (AHEAD)			48"x48"	2 - Black on Orange
W21-5aR			48"x48"	1 - Black on Orange
W21-5bR			48"x48"	1 - Black on Orange

TURNPIKE SINGLE LANE CLOSURES

CONSTRUCTION SIGN SUMMARY					
Sign	Text Dimensions (Inches)		Size	Quantity and Color	
	Letter Height	Vertical Spacing			
CS-3		7" / 7" / 7"	4" / 4"	48"x48"	2 - Black on Orange
G20-2		Text Dimensions Shall Conform to "Standard Highway Signs" - 2012		48"x24"	2 - Black on Orange
G20-5aP				36"x24"	1 - Black on Orange
R2-1(50)				48"x60"	1 - Black on White
R2-6aP				36"x24"	1 - Black on White
R2-12				36"x54"	2 - Black on White
W3-4				48"x48"	2 - Black on Orange
W3-5(50)			48"x48"	2 - Black on Orange	
W4-2(R)			48"x48"	2 - Black on Orange	
W20-1 (1 MILE)			48"x48"	2 - Black on Orange	
W20-5R			48"x48"	2 - Black on Orange	

LOCAL ROAD SINGLE LANE CLOSURE / SHOULDER CLOSURE

CONSTRUCTION SIGN SUMMARY				
Sign	Text Dimensions (Inches)		Size	Quantity and Color
	Letter Height	Vertical Spacing		
G20-2		Text Dimensions Shall Conform to "Standard Highway Signs" - 2012	36"x18"	2 - Black on Orange
W20-1			36"x36"	2 - Black on Orange
W20-4			36"x36"	2 - Black on Orange
W20-7			36"x36"	2 - Black on Orange

STABILIZED CONSTRUCTION ENTRANCE

CONSTRUCTION SIGN SUMMARY				
Sign	Text Dimensions (Inches)		Size	Quantity and Color
	Letter Height	Vertical Spacing		
G20-2		Text Dimensions Shall Conform to "Standard Highway Signs" - 2012	48"x24"	1 - Black on Orange
W7-3aP			36"x30"	1 - Black on Orange
W20-1 (AHEAD)			48"x48"	2 - Black on Orange
W21-5			48"x48"	1 - Black on Orange
CS-10			48"x48"	1 - Black on Orange

Filename: ... \008_workzone_01.dgn

Scale:	Designed by: <div style="text-align: center;"> </div>	VANASSE HANGEN BRUSTLIN, INC. 500 Southborough Dr. Suite 105B South Portland, ME 04106 TEL (207) 889-3150 FAX (207) 253-5596		<h2 style="margin: 0;">THE GOLD STAR MEMORIAL HIGHWAY</h2>	FOREST AVE./RIVERSIDE IND. PKWY. EMERGENCY VEHICLE RAMPS MAINTENANCE OF TRAFFIC DETAILS (1 OF 2)												
<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> </tbody> </table>	No.	Revision	By	Date					CONSULTANT PROJECT MANAGER: T. Bryant		MTA PROJECT MANAGER: Ralph Norwood, IV		VHB: 55281.00 CONTRACT: 2020.09				
No.	Revision	By	Date														
<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 MLG</td> <td>5/2020</td> <td>Checked MDS</td> <td>5/2020</td> </tr> <tr> <td>Drawn JAR</td> <td>5/2020</td> <td>In Charge of AG</td> <td>5/2020</td> </tr> </tbody> </table>	By	Date	By	Date	Designed MLG	5/2020	Checked MDS	5/2020	Drawn JAR	5/2020	In Charge of AG	5/2020					SHEET NUMBER: 8 OF 28
By	Date	By	Date														
Designed MLG	5/2020	Checked MDS	5/2020														
Drawn JAR	5/2020	In Charge of AG	5/2020														

Date: 5/20/2020

Filename: ...010_Highway_Forest_Ave_NB.dgn

ITEM 603.155 - 12" RCP OPTION III

LOCATION	QUANTITY (LF)
110+33.65 LT/RT	40

**ITEM 603.199 - 24" CULVERT PIPE OPTION III
HDPE ONLY**

LOCATION	QUANTITY (LF)
113+50 LT/RT	48

ITEM 606.1301 - 31" W-BEAM GUARDRAIL MID-WAY SPLICE

STATION TO STATION	OFFSET	QUANTITY (LF)
112+37.48 TO 113+37.48	LT	100.0
112+37.49 TO 113+37.49	RT	100.0
113+60.23 TO 113+85.23	LT	25.0
113+20.24 TO 113+85.24	RT	25.0
114+41.43	LT	175.0
114+41.43	RT	175.0

ITEM 606.1304 - 31" W-BEAM GUARDRAIL MID-WAY SPLICE OVER 15' RADIUS

STATION TO STATION	OFFSET	RADIUS	QUANTITY (LF)
113+85.23 TO 114+41.43	LT	60'	100.0
113+85.24 TO 114+41.43	RT	60'	100.0

ITEM 606.1351 - TERMINAL END - ANCHORED END

STATION	OFFSET	QUANTITY (EA)
112+28.10 TO 112+37.48	LT	1
112+28.12 TO 112+37.49	RT	1
113+37.48 TO 113+46.85	LT	1
113+37.49 TO 113+46.87	RT	1
113+50.85 TO 113+60.23	LT	1
113+50.87 TO 113+60.24	RT	1

ITEM 606.353 - REFLECTORIZED FLEXIBLE GUARDRAIL MARKER

STATION	OFFSET	QUANTITY (EA)
112+21.85	LT	2
112+21.87	RT	2

ITEM 606.3561 - DELINEATOR POST - REMOVE AND STACK

LOCATION	QUANTITY (EA)
NB EVR ALL LOCATIONS	3

ITEM 606.369 - GUARDRAIL REMOVE AND STACK

STATION	QUANTITY (LF)
114+45	500

ITEM 607.17 - CHAIN LINK FENCE - 6 FOOT

STATION	OFFSET	QUANTITY (LF)
113+40	LT	40
113+40	RT	40

ITEM 607.2325 - PIPE ENTRY GATE

STATION	QUANTITY (EA)
113+40	1

ITEM 610.08 - PLAIN RIPRAP

STATION	OFFSET	QUANTITY (CY)
110+33.65	LT	73.9
110+33.65	RT	77.5
113+50	LT	1.3
113+50	RT	1.3

ITEM 613.319 - EROSION CONTROL BLANKET

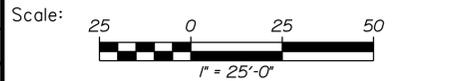
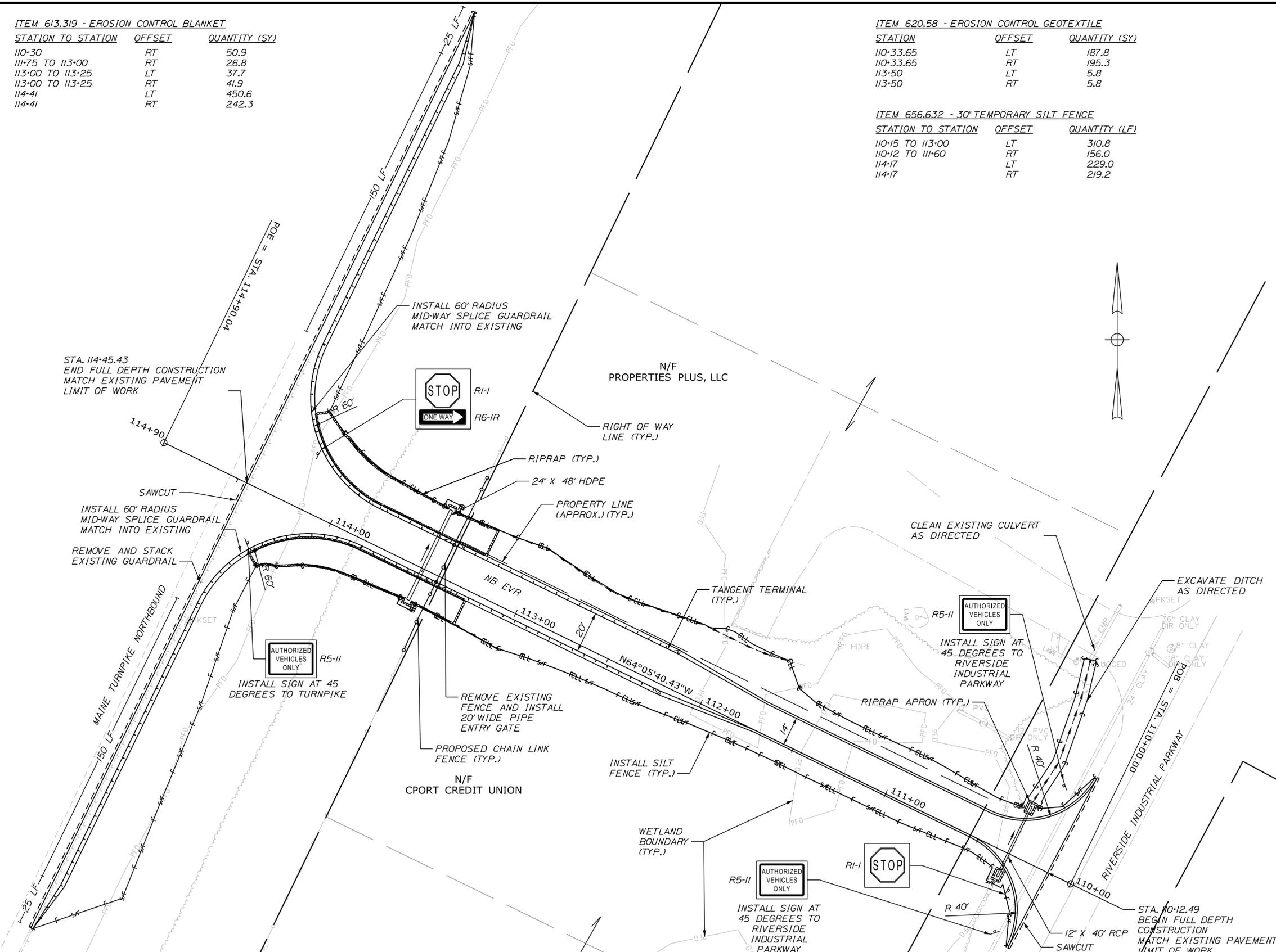
STATION TO STATION	OFFSET	QUANTITY (SY)
110+30	RT	50.9
111+75 TO 113+00	RT	26.8
113+00 TO 113+25	LT	37.7
113+00 TO 113+25	RT	41.9
114+41	LT	450.6
114+41	RT	242.3

ITEM 620.58 - EROSION CONTROL GEOTEXTILE

STATION	OFFSET	QUANTITY (SY)
110+33.65	LT	187.8
110+33.65	RT	195.3
113+50	LT	5.8
113+50	RT	5.8

ITEM 656.632 - 30" TEMPORARY SILT FENCE

STATION TO STATION	OFFSET	QUANTITY (LF)
110+15 TO 113+00	LT	310.8
110+12 TO 111+60	RT	156.0
114+17	LT	229.0
114+17	RT	219.2



Designed by:



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**THE GOLD STAR
MEMORIAL HIGHWAY**

**FOREST AVE./RIVERSIDE IND. PKWY.
EMERGENCY VEHICLE RAMPS
GENERAL PLANS (1 OF 2)
NORTHBOUND**

No.	Revision	By	Date

CONSULTANT PROJECT MANAGER: T. Bryant					
	By	Date		By	Date
Designed	AGC	5/2020	Checked	ECF	5/2020
Drawn	AGC	5/2020	In Charge of	AG	5/2020

MTA PROJECT MANAGER: Ralph Norwood, IV

ITEM 603.179 - 18" CULVERT PIPE OPTION III
HDPE ONLY

LOCATION	QUANTITY (LF)
100+50 LT TO 101+00 RT	88

ITEM 603.199 - 24" CULVERT PIPE OPTION III
RCP ONLY

LOCATION	QUANTITY (LF)
103+99.17 LT/RT	80

ITEM 606.1301 - 3" W-BEAM GUARDRAIL MID-WAY SPLICE

STATION TO STATION	OFFSET	QUANTITY (LF)
100+41.08 TO 103+58.24	LT	325.0
100+62.82 TO 103+58.16	RT	287.5
103+80.91 TO 103+93.41	RT	12.5
103+80.99 TO 103+93.49	LT	12.5
104+65.15	RT	175.0
104+65.15	LT	175.0

ITEM 606.1304 - 3" W-BEAM GUARDRAIL MID-WAY SPLICE OVER 15' RADIUS

STATION TO STATION	OFFSET	RADIUS	QUANTITY (LF)
100+29.23 TO 100+41.08	LT	50'	12.5
100+38.51 TO 100+62.82	RT	40'	25.0
103+93.41 TO 104+65.15	RT	70'	112.5
103+93.49 TO 104+65.15	LT	70'	112.5

ITEM 606.1351 - TERMINAL END - ANCHORED END

STATION	OFFSET	QUANTITY (EA)
100+21.81 TO 100+29.23	LT	1
100+30.72 TO 100+38.51	RT	1
103+58.16 TO 103+67.53	RT	1
103+58.24 TO 103+67.62	LT	1
103+71.53 TO 103+81.91	RT	1
103+71.62 TO 103+80.99	LT	1

ITEM 606.353 - REFLECTORIZED FLEXIBLE GUARDRAIL MARKER

STATION	OFFSET	QUANTITY (EA)
100+20	RT	2
100+26	LT	2
104+69	RT	1
104+69	LT	2

ITEM 606.3561 - DELINEATOR POST - REMOVE AND STACK

LOCATION	QUANTITY (EA)
SB EVR ALL LOCATIONS	2

ITEM 606.369 - GUARDRAIL REMOVE AND STACK

STATION	QUANTITY (LF)
104+65	525.0

ITEM 606.611 - REMOVE AND RESET TIMBER GUARDRAIL

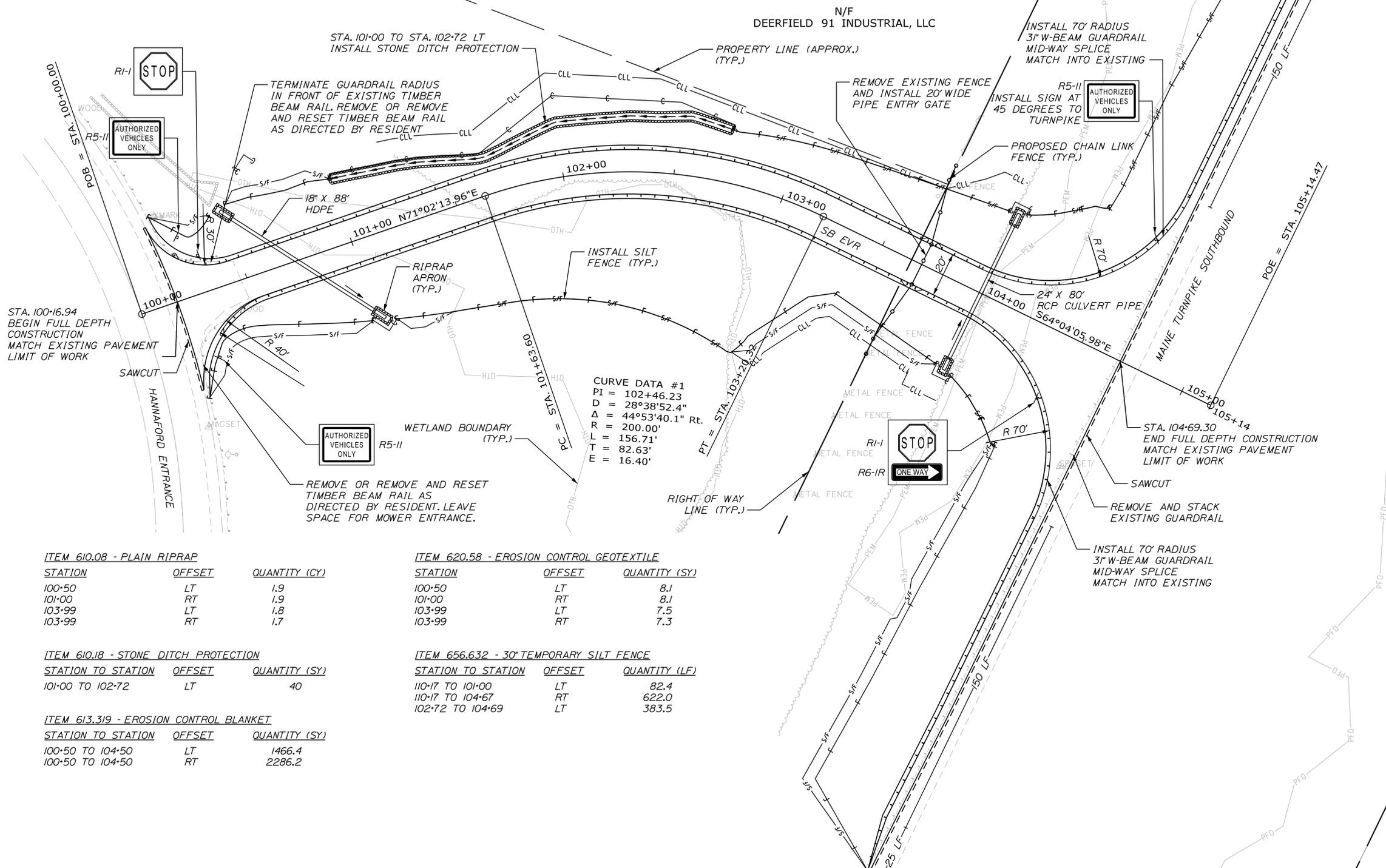
STATION TO STATION	OFFSET	QUANTITY (LF)
100+19 TO 100+40	LT	30.0
100+19 TO 100+42	RT	50.0

ITEM 607.17 - CHAIN LINK FENCE - 6 FOOT

STATION	OFFSET	QUANTITY (LF)
103+70	LT	40.0
103+70	RT	40.0

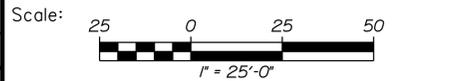
ITEM 607.2325 - PIPE ENTRY GATE

STATION	QUANTITY (EA)
103+70	1



Date: 5/20/2020

Filename: ...011_Highway_Forest_Ave_SB.dgn



No.	Revision	By	Date

Designed by:



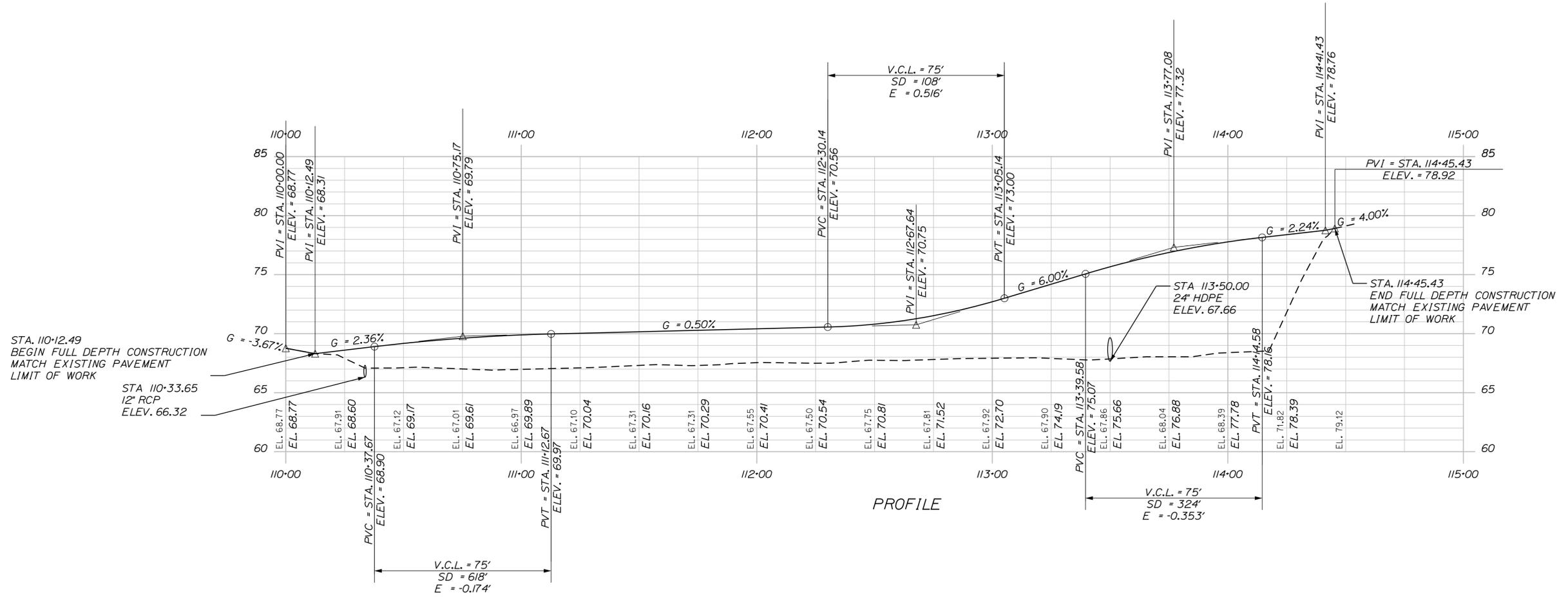
CONSULTANT PROJECT MANAGER: T. Bryant					
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**THE GOLD STAR
MEMORIAL HIGHWAY**

**FOREST AVE./RIVERSIDE IND. PKWY.
EMERGENCY VEHICLE RAMPS
GENERAL PLANS (2 OF 2)
SOUTHBOUND**



Scale: HORIZ. 25 0 25 50
VERT. 5 0 5 10

No.	Revision	By	Date

Designed by:



CONSULTANT PROJECT MANAGER: T. Bryant

	By	Date		By	Date
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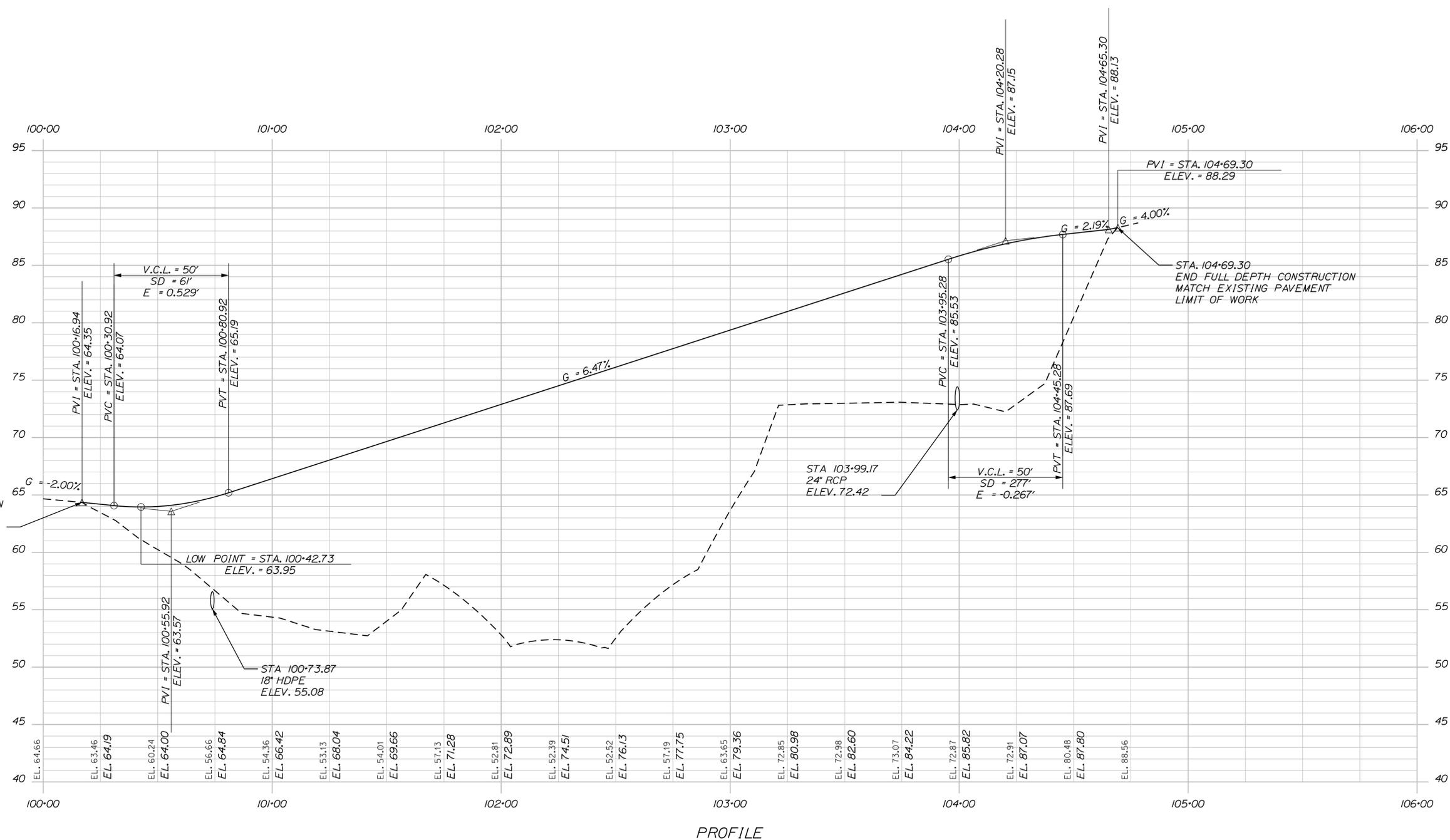
MTA PROJECT MANAGER: Ralph Norwood, IV

FOREST AVE./RIVERSIDE IND. PKWY.
EMERGENCY VEHICLE RAMPS
PROFILES (1 OF 2)
NORTHBOUND

VHB: 55281.00 SHEET NUMBER: 12
CONTRACT: 2020.09 12 OF 28

Date: 5/20/2020

Filename: ...013_Profile_Forest_Ave_SB.dgn



Scale: HORIZ. 1" = 25', 0, 25, 50
VERT. 1" = 5', 0, 5, 10

No.	Revision	By	Date

Designed by: 

CONSULTANT PROJECT MANAGER: T. Bryant

	By	Date		By	Date
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**THE GOLD STAR
MEMORIAL HIGHWAY**

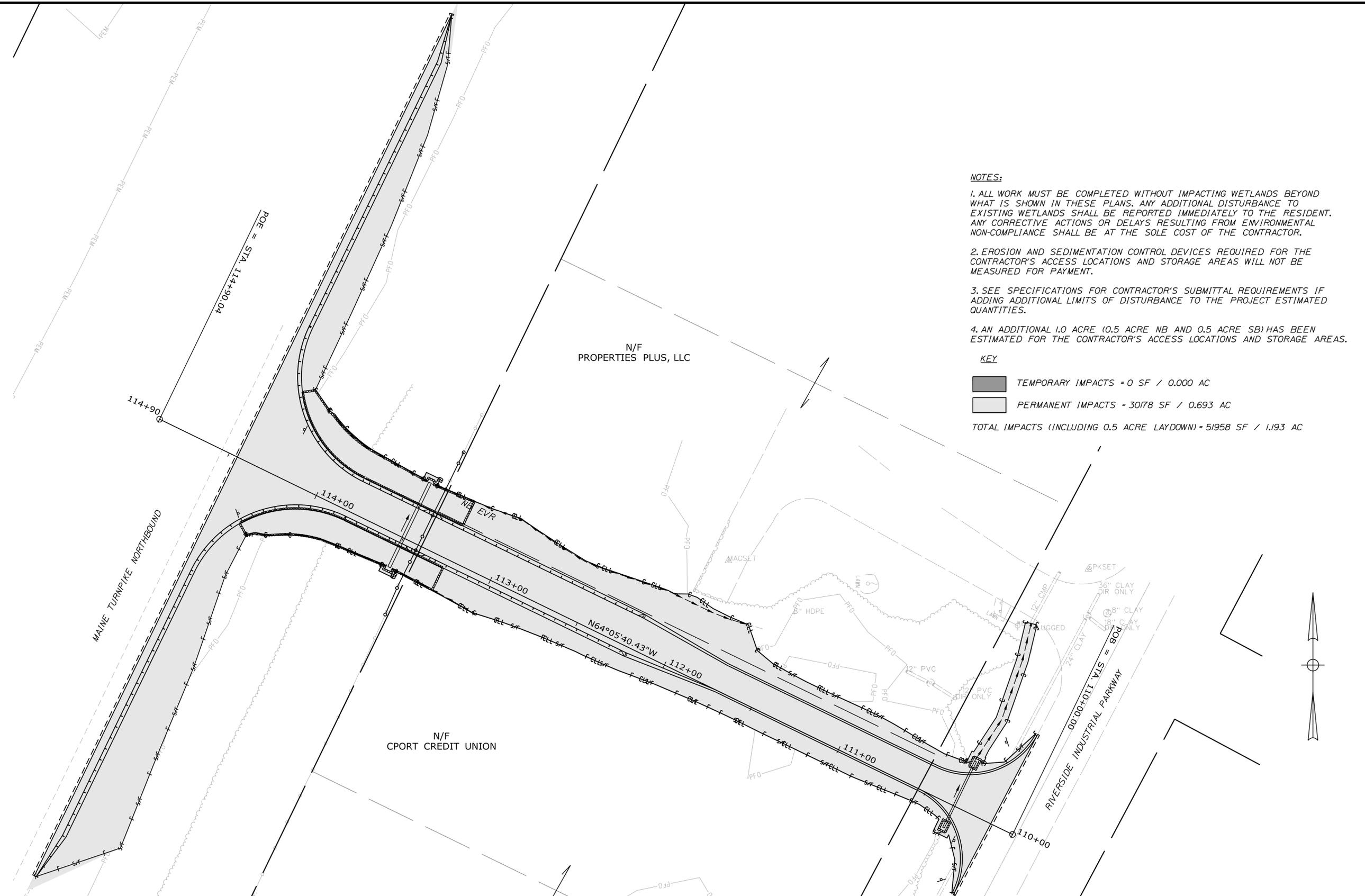
MTA PROJECT MANAGER: Ralph Norwood, IV

FOREST AVE./RIVERSIDE IND. PKWY.
EMERGENCY VEHICLE RAMPS
PROFILES (2 OF 2)
SOUTHBOUND

VHB: 55281.00 SHEET NUMBER: 13
CONTRACT: 2020.09 13 OF 28

Date: 5/20/2020

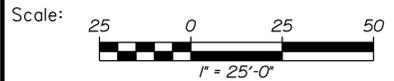
Filename: ...014_DisturbancePlan_Forest_Ave_NB.dgn



- NOTES:**
1. ALL WORK MUST BE COMPLETED WITHOUT IMPACTING WETLANDS BEYOND WHAT IS SHOWN IN THESE PLANS. ANY ADDITIONAL DISTURBANCE TO EXISTING WETLANDS SHALL BE REPORTED IMMEDIATELY TO THE RESIDENT. ANY CORRECTIVE ACTIONS OR DELAYS RESULTING FROM ENVIRONMENTAL NON-COMPLIANCE SHALL BE AT THE SOLE COST OF THE CONTRACTOR.
 2. EROSION AND SEDIMENTATION CONTROL DEVICES REQUIRED FOR THE CONTRACTOR'S ACCESS LOCATIONS AND STORAGE AREAS WILL NOT BE MEASURED FOR PAYMENT.
 3. SEE SPECIFICATIONS FOR CONTRACTOR'S SUBMITTAL REQUIREMENTS IF ADDING ADDITIONAL LIMITS OF DISTURBANCE TO THE PROJECT ESTIMATED QUANTITIES.
 4. AN ADDITIONAL 1.0 ACRE (0.5 ACRE NB AND 0.5 ACRE SB) HAS BEEN ESTIMATED FOR THE CONTRACTOR'S ACCESS LOCATIONS AND STORAGE AREAS.

KEY

TEMPORARY IMPACTS = 0 SF / 0.000 AC
 PERMANENT IMPACTS = 30178 SF / 0.693 AC
TOTAL IMPACTS (INCLUDING 0.5 ACRE LAYDOWN) = 51958 SF / 1.193 AC



Designed by:



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



**THE GOLD STAR
 MEMORIAL HIGHWAY**

**FOREST AVE./RIVERSIDE IND. PKWY.
 EMERGENCY VEHICLE RAMPS
 DISTURBANCE IMPACT PLAN (1 OF 2)
 NORTHBOUND**

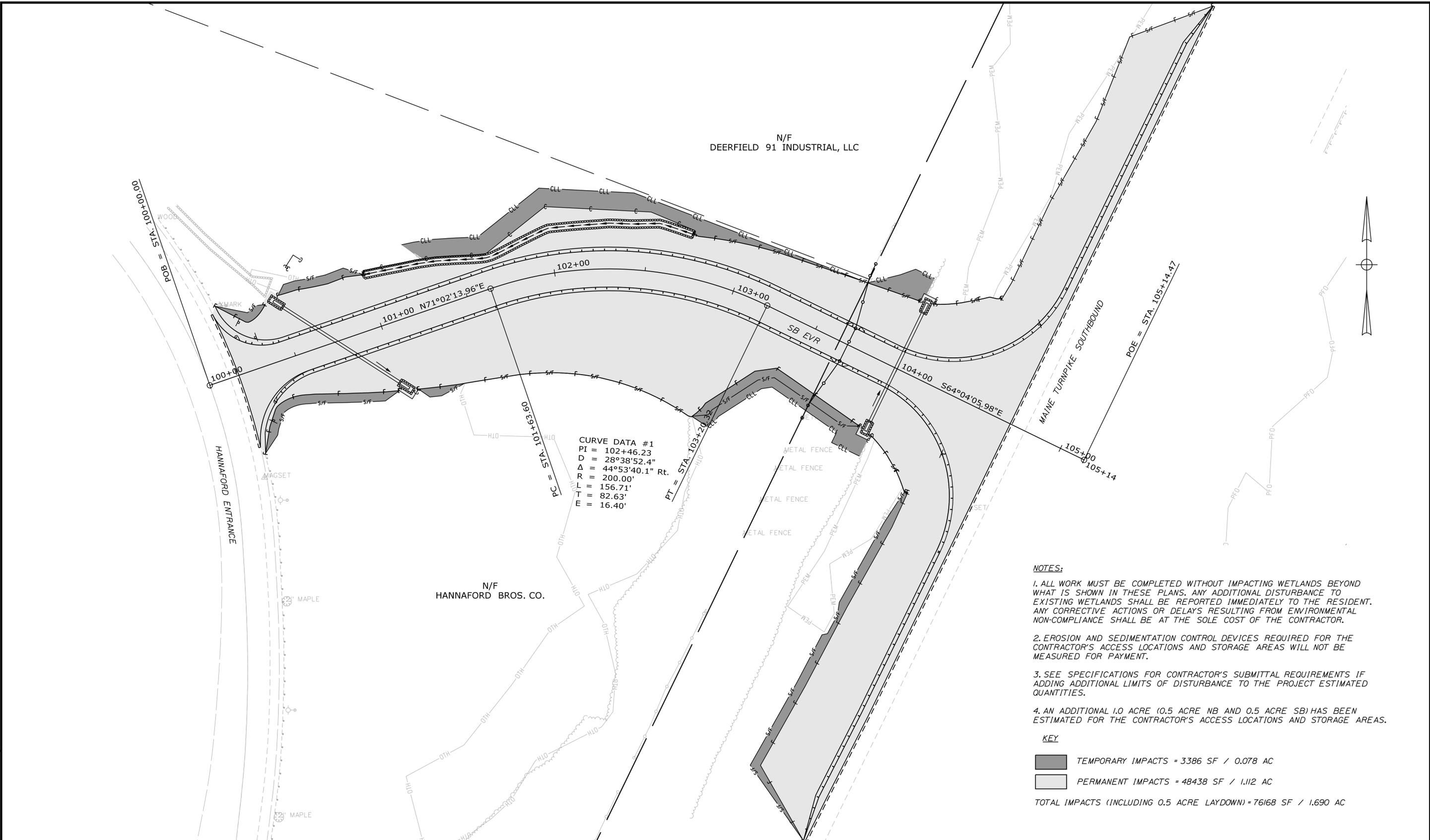
No.	Revision	By	Date

CONSULTANT PROJECT MANAGER: T. Bryant					
	By	Date	Checked	By	Date
Designed	AGC	5/2020	Checked	ECF	5/2020
Drawn	AGC	5/2020	In Charge of	AG	5/2020

MTA PROJECT MANAGER: Ralph Norwood, IV

Date: 5/22/2020

Filename: ...015_DisturbancePlan_Forest_Ave_SB.dgn



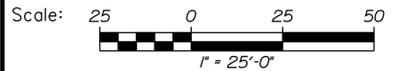
- NOTES:**
1. ALL WORK MUST BE COMPLETED WITHOUT IMPACTING WETLANDS BEYOND WHAT IS SHOWN IN THESE PLANS. ANY ADDITIONAL DISTURBANCE TO EXISTING WETLANDS SHALL BE REPORTED IMMEDIATELY TO THE RESIDENT. ANY CORRECTIVE ACTIONS OR DELAYS RESULTING FROM ENVIRONMENTAL NON-COMPLIANCE SHALL BE AT THE SOLE COST OF THE CONTRACTOR.
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 3. SEE SPECIFICATIONS FOR CONTRACTOR'S SUBMITTAL REQUIREMENTS IF ADDING ADDITIONAL LIMITS OF DISTURBANCE TO THE PROJECT ESTIMATED QUANTITIES.
 4. AN ADDITIONAL 1.0 ACRE (0.5 ACRE NB AND 0.5 ACRE SB) HAS BEEN ESTIMATED FOR THE CONTRACTOR'S ACCESS LOCATIONS AND STORAGE AREAS.

KEY

TEMPORARY IMPACTS = 3386 SF / 0.078 AC

PERMANENT IMPACTS = 48438 SF / 1.112 AC

TOTAL IMPACTS (INCLUDING 0.5 ACRE LAYDOWN) = 76168 SF / 1.690 AC



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**FOREST AVE./RIVERSIDE IND. PKWY.
 EMERGENCY VEHICLE RAMPS
 DISTURBANCE IMPACT PLAN (2 OF 2)
 SOUTHBOUND**

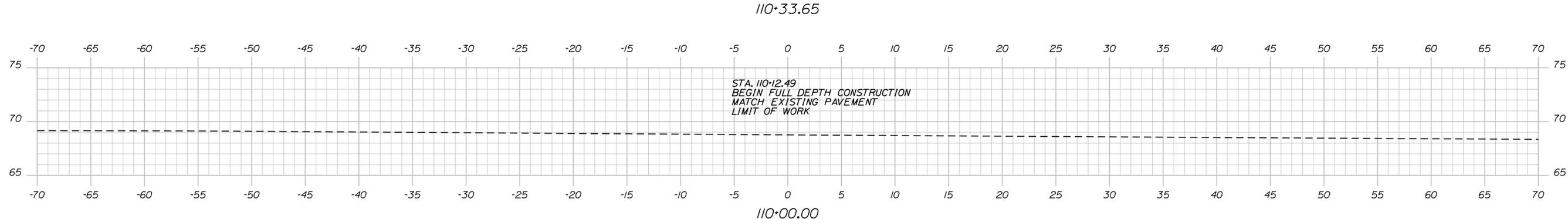
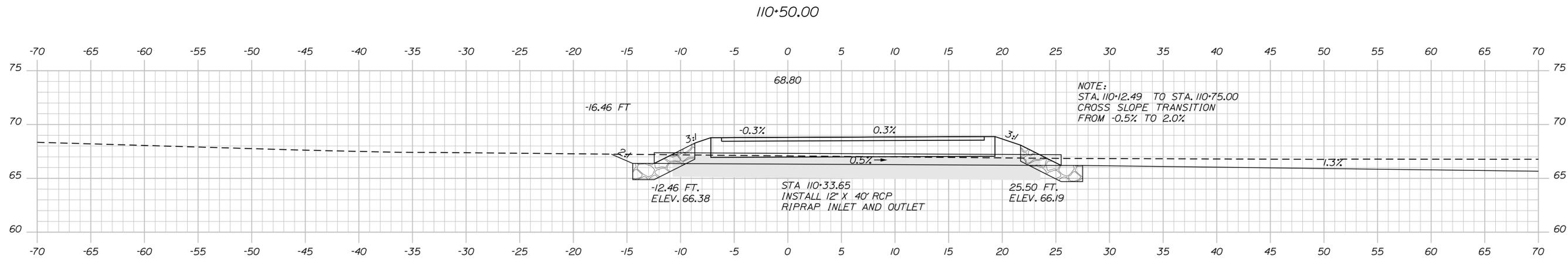
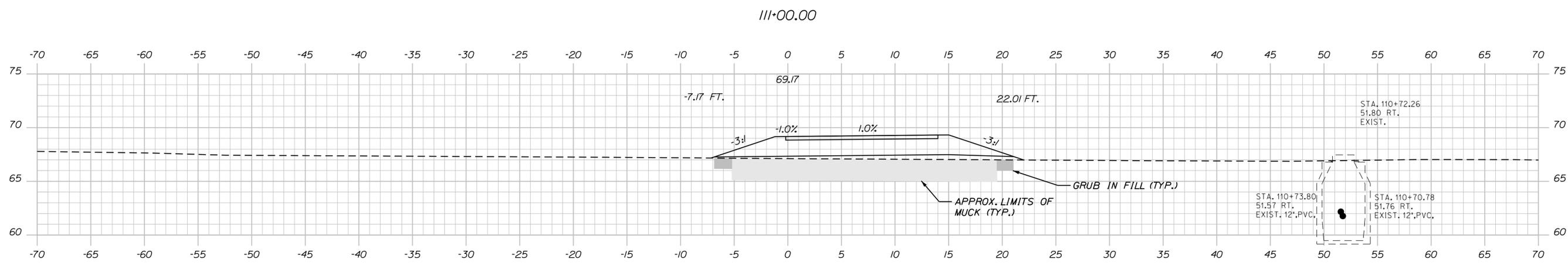
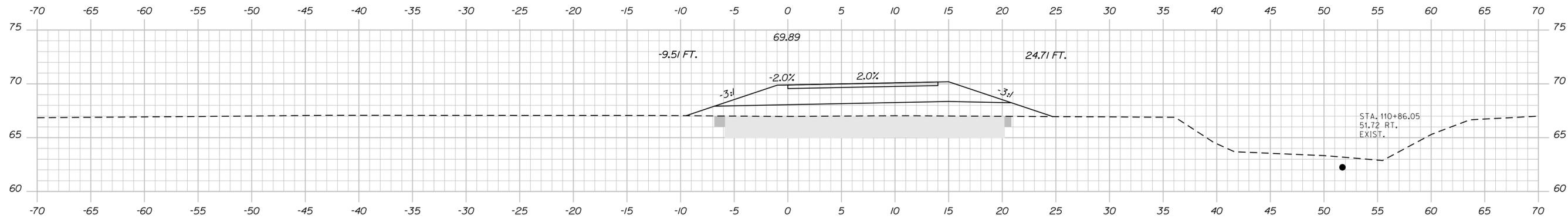
No.	Revision	By	Date

CONSULTANT PROJECT MANAGER: T. Bryant					
	By	Date		By	Date
Designed	AGC	5/2020	Checked	ECF	5/2020
Drawn	AGC	5/2020	In Charge of	AG	5/2020

MTA PROJECT MANAGER: Ralph Norwood, IV

Date: 5/20/2020

Filename: ...016_XSect-Forest_Ave_NB_01.dgn



Scale: 1" = 5' - 0"

No.	Revision	By	Date

Designed by:



CONSULTANT PROJECT MANAGER: T. Bryant

	By	Date	Checked	By	Date
Designed	AGC	5/2020	ECF	ECF	5/2020
Drawn	AGC	5/2020	In Charge of	AG	5/2020

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MTA PROJECT MANAGER: Ralph Norwood, IV

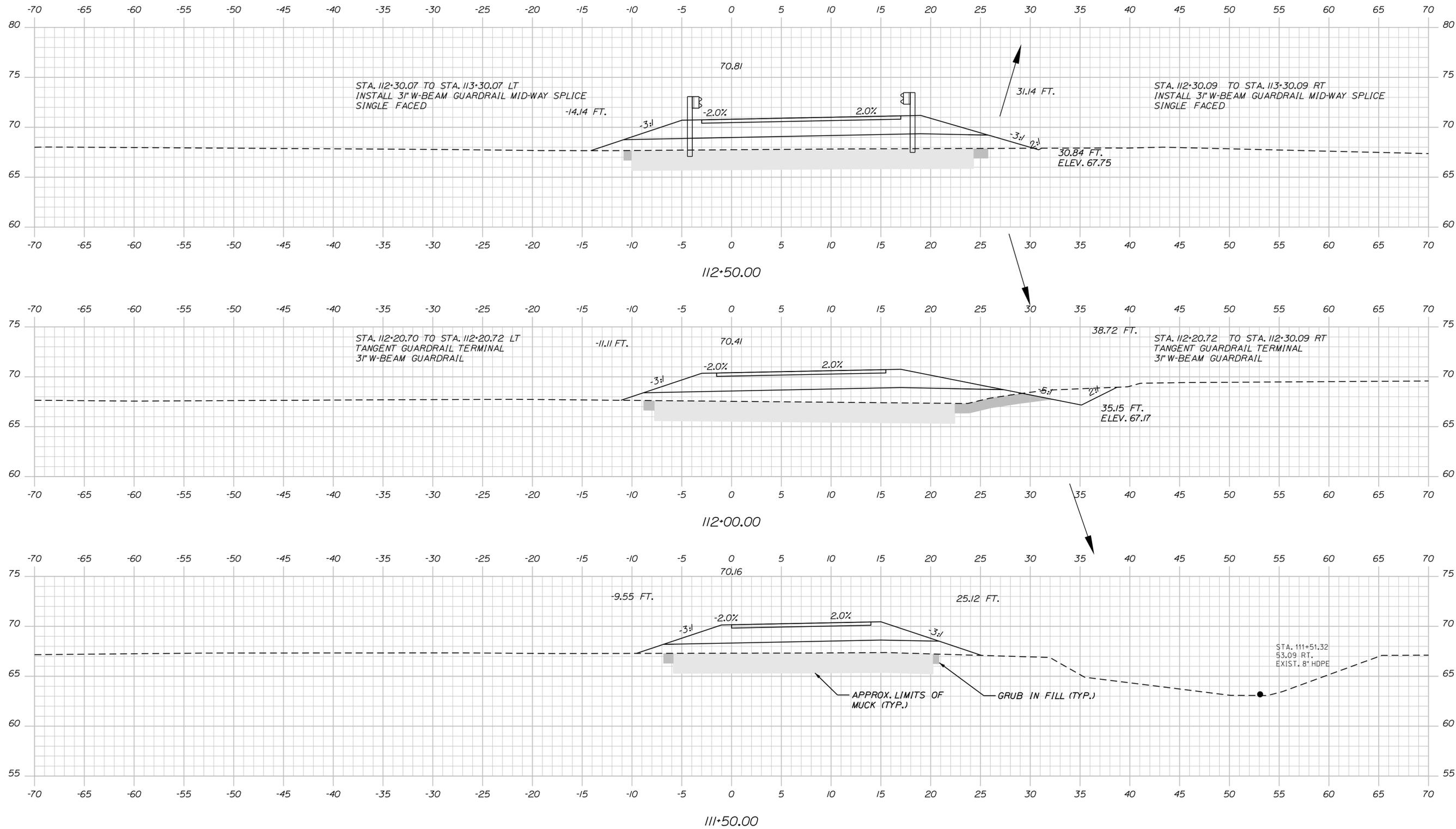
FOREST AVE./RIVERSIDE IND. PKWY.
 EMERGENCY VEHICLE RAMPS
 NORTHBOUND CROSS SECTIONS
 Sta. 110+00.00 to Sta. 111+00.00

VHB: 55281.00
 CONTRACT: 2020.09

SHEET NUMBER: 16
 16 OF 28

Date: 5/20/2020

Filename: ...017_XSect-Forest_Ave_NB_02.dgn



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FOREST AVE./RIVERSIDE IND. PKWY.
 EMERGENCY VEHICLE RAMPS
 NORTHBOUND CROSS SECTIONS
 Sta. 111+50.00 to Sta. 112+50.00

No.	Revision	By	Date

CONSULTANT PROJECT MANAGER: T. Bryant					
	By	Date		By	Date
Designed	AGC	5/2020	Checked	ECF	5/2020
Drawn	AGC	5/2020	In Charge of	AG	5/2020

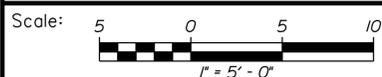
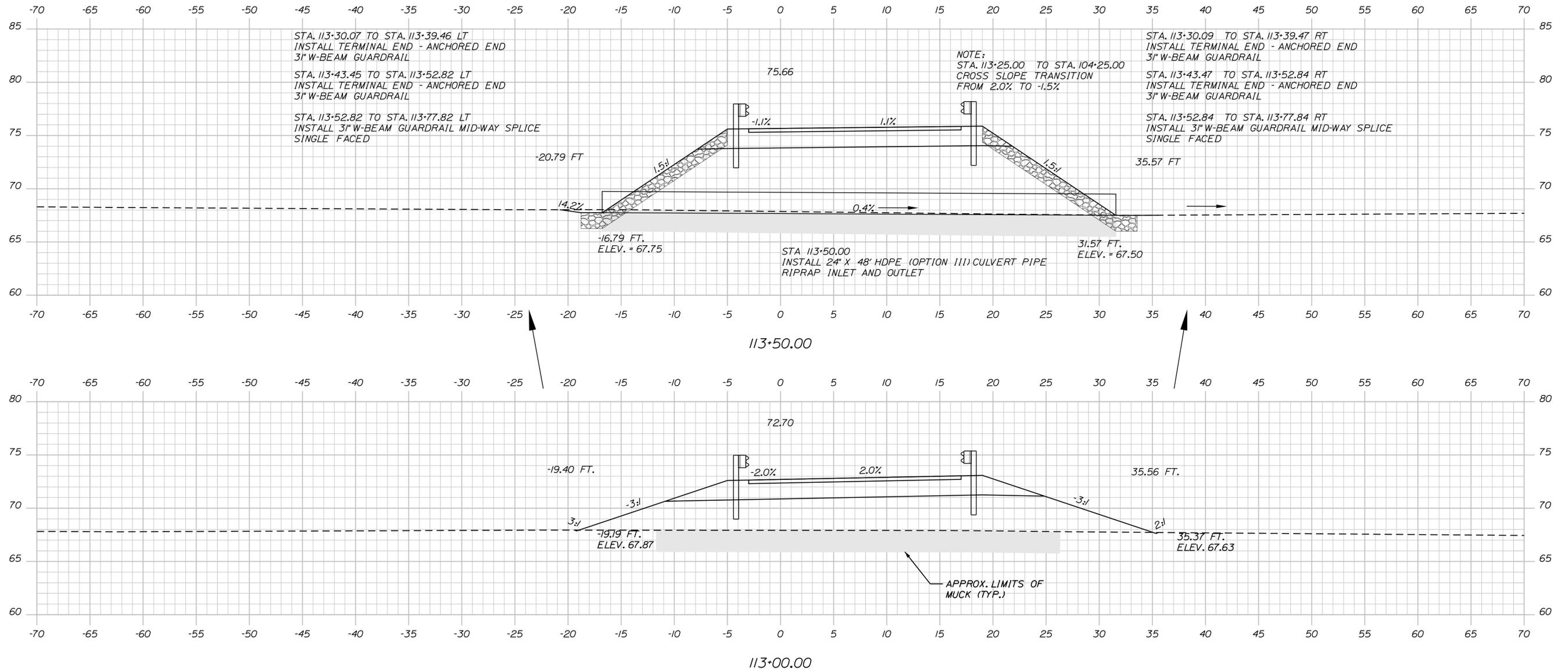
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VHB: 55281.00
 CONTRACT: 2020.09

SHEET NUMBER: 17
 17 OF 28

Date: 5/20/2020

Filename: ...018_XSect-Forest_Ave_NB_03.dgn



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FOREST AVE./RIVERSIDE IND. PKWY.
EMERGENCY VEHICLE RAMPS
NORTHBOUND CROSS SECTIONS
Sta. 113+00.00 to Sta. 113+50.00

No.	Revision	By	Date

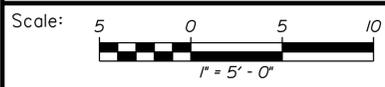
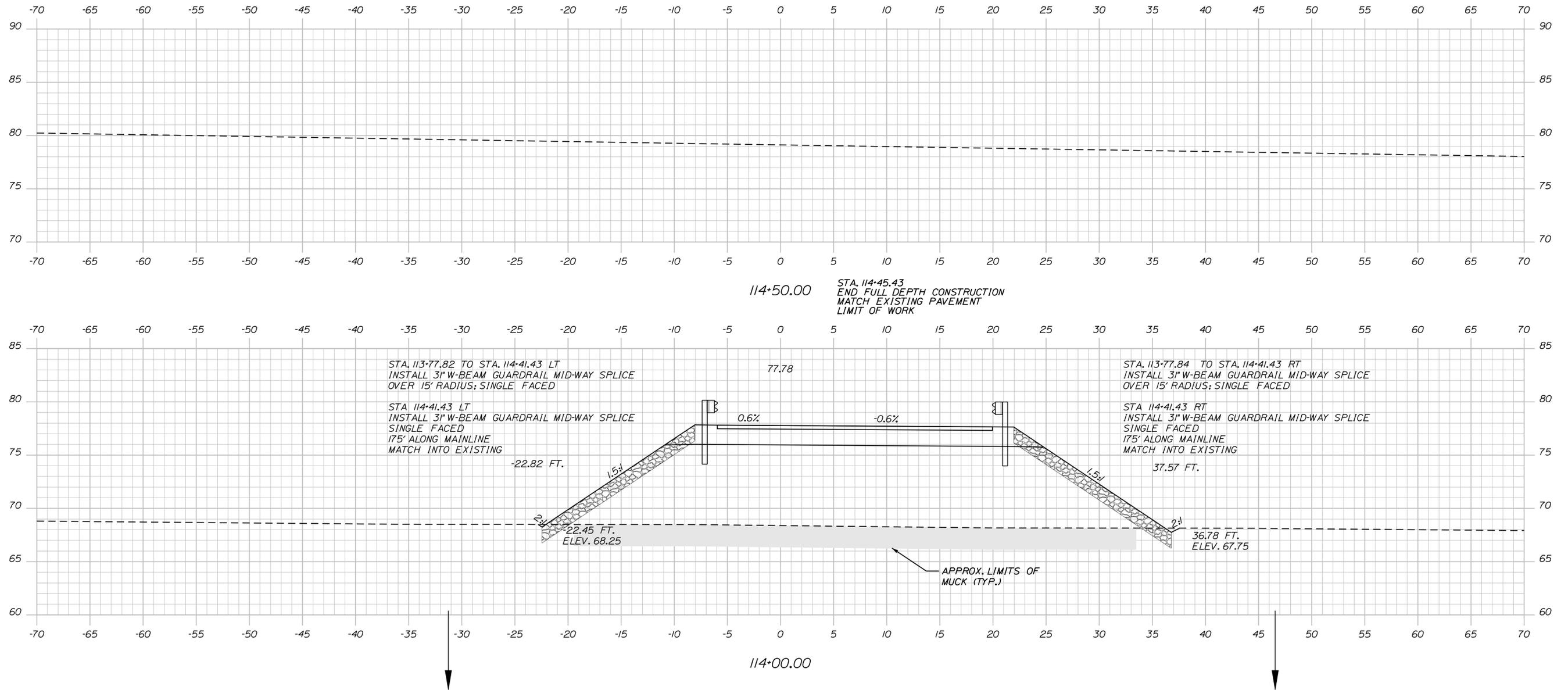
CONSULTANT PROJECT MANAGER: T. Bryant					
	By	Date		By	Date
Designed	AGC	5/2020	Checked	ECF	5/2020
Drawn	AGC	5/2020	In Charge of	AG	5/2020

MTA PROJECT MANAGER: Ralph Norwood, IV

VHB: 55281.00
CONTRACT: 2020.09
SHEET NUMBER: 18
18 OF 28

Date: 5/20/2020

Filename: ...019_xSect-Forest_Ave_NB_04.dgn



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 MEMORIAL HIGHWAY**

**FOREST AVE./RIVERSIDE IND. PKWY.
 EMERGENCY VEHICLE RAMPS
 NORTHBOUND CROSS SECTIONS
 Sta. 114+00.00 to Sta. 114+50.00**

No.	Revision	By	Date

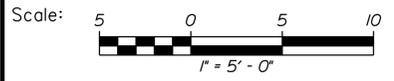
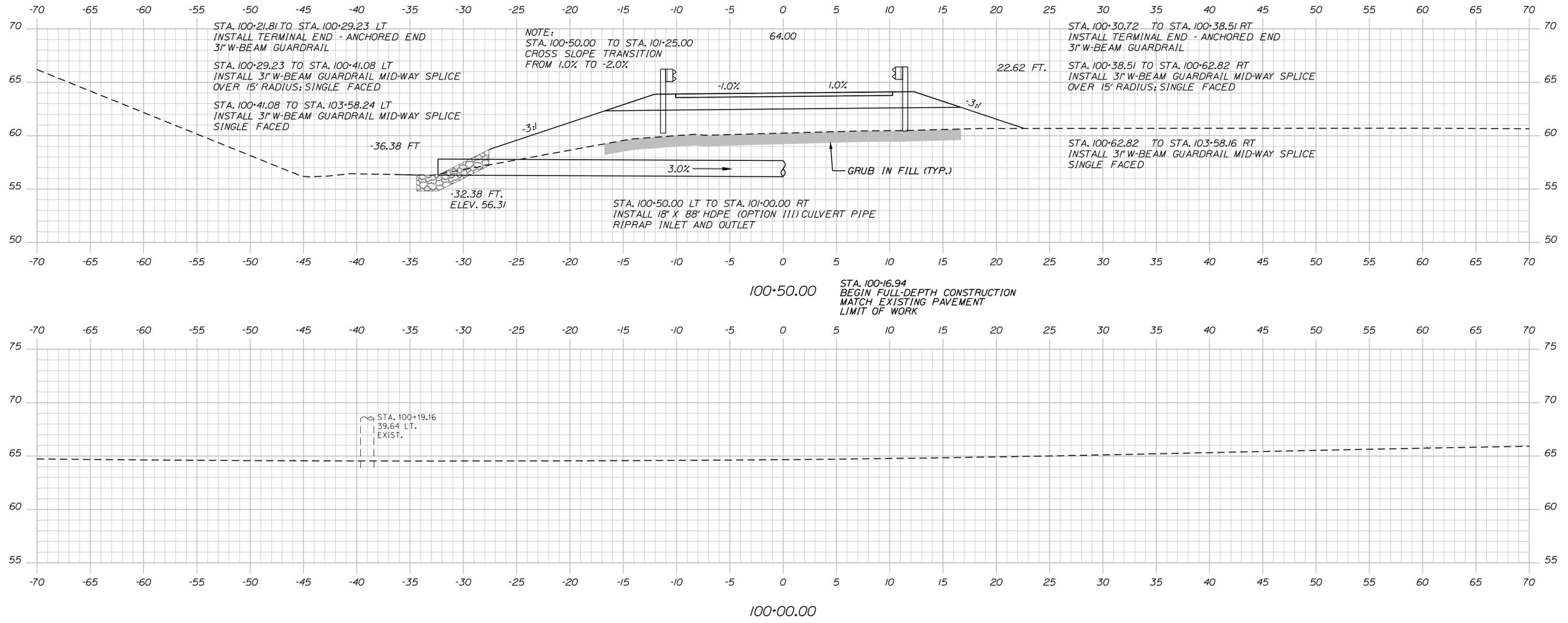
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	By	Date		By	Date
Designed	AGC	5/2020	Checked	ECF	5/2020
Drawn	AGC	5/2020	In Charge of	AG	5/2020

MTA PROJECT MANAGER: Ralph Norwood, IV

VHB: 55281.00
 CONTRACT: 2020.09
 SHEET NUMBER: 19
 19 OF 28

Date: 5/20/2020

Filename: ... \020_XSect-Forest_Ave_SB_01.dgn



Designed by:



CONSULTANT PROJECT MANAGER: T. Bryant

No.	Revision	By	Date

	By	Date		By	Date
Designed	AGC	5/2020	Checked	ECF	5/2020
Drawn	AGC	5/2020	In Charge of	AG	5/2020

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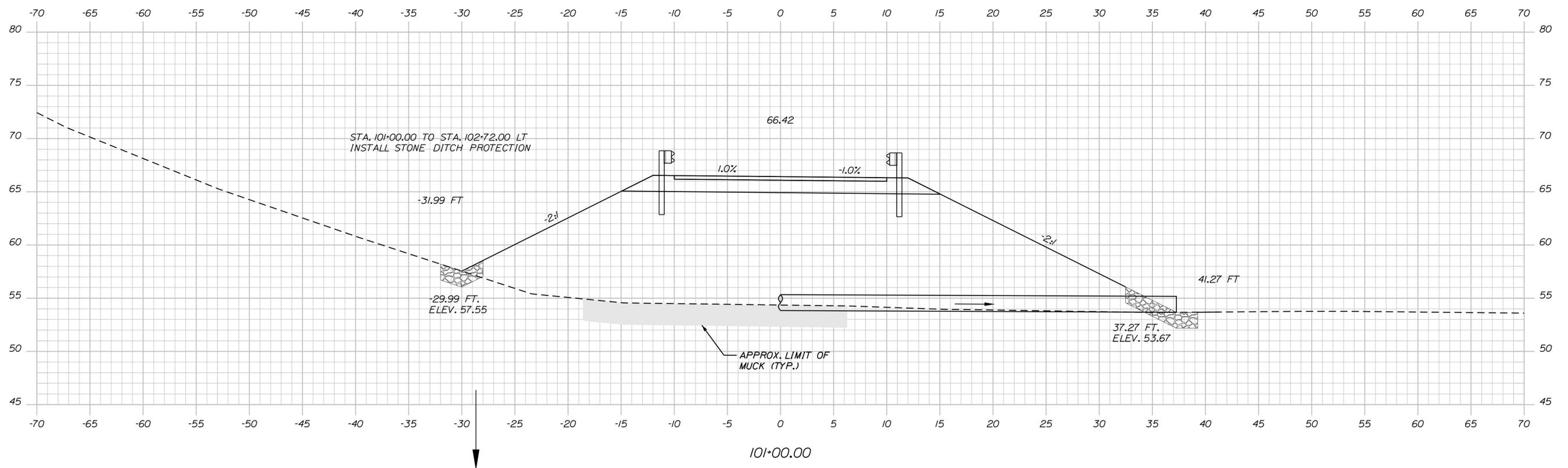
MTA PROJECT MANAGER: Ralph Norwood, IV

FOREST AVE./RIVERSIDE IND. PKWY.
 EMERGENCY VEHICLE RAMPS
 SOUTHBOUND CROSS SECTIONS
 Sta. 100+00.00 to Sta. 100+50.00

VHB: 55281.00 SHEET NUMBER: 20
 CONTRACT: 2020.09 20 OF 28

Date: 5/20/2020

Filename: ...021_xSect-Forest_Ave_SB_02.dgn



Scale: 1" = 5'-0"			
No.	Revision	By	Date

Designed by:



CONSULTANT PROJECT MANAGER: T. Bryant					
	By	Date		By	Date
Designed	AGC	5/2020	Checked	ECF	5/2020
Drawn	AGC	5/2020	In Charge of	AG	5/2020

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MTA PROJECT MANAGER: Ralph Norwood, IV

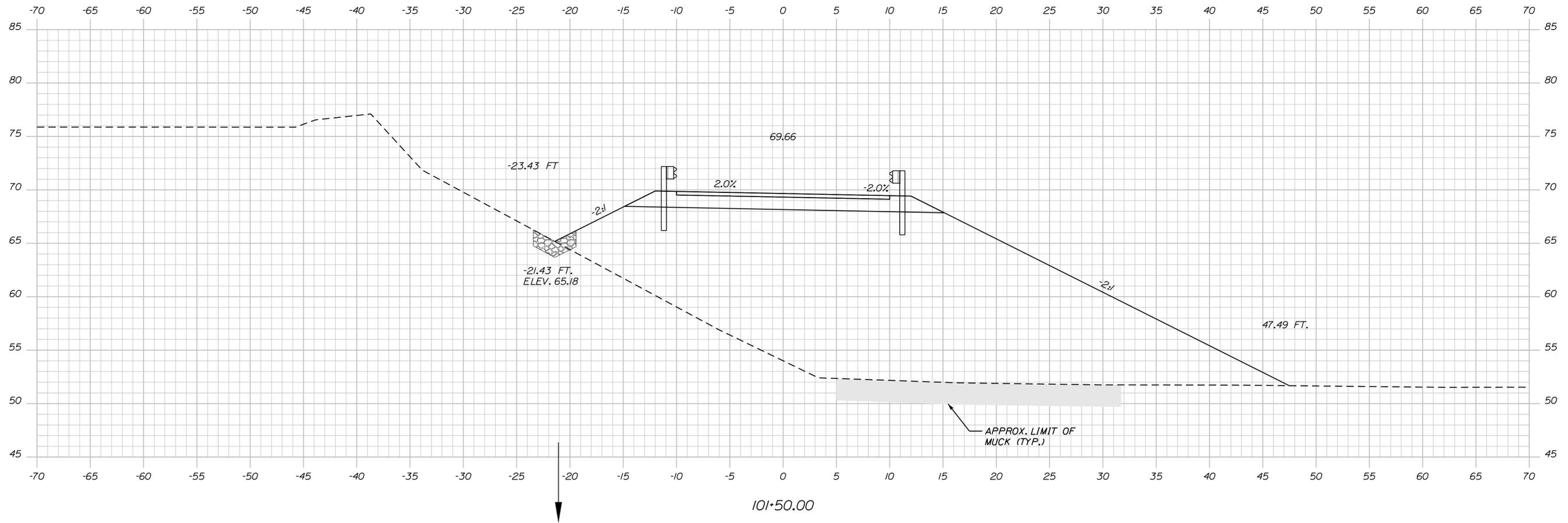
FOREST AVE./RIVERSIDE IND. PKWY.
 EMERGENCY VEHICLE RAMPS
 SOUTHBOUND CROSS SECTIONS
 Sta. 101+00.00

VHB: 55281.00
 CONTRACT: 2020.09

SHEET NUMBER: 21
 21 OF 28

Date: 5/20/2020

Filename: ... \022_XSect-Forest_Ave_SB_03.dgn



Scale: 5 0 5 10
1" = 5' - 0"

No.	Revision	By	Date

Designed by:



CONSULTANT PROJECT MANAGER: T. Bryant

	By	Date	Checked	By	Date
Designed	AGC	5/2020	ECF	ECF	5/2020
Drawn	AGC	5/2020	In Charge of	AG	5/2020

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**THE GOLD STAR
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph Norwood, IV

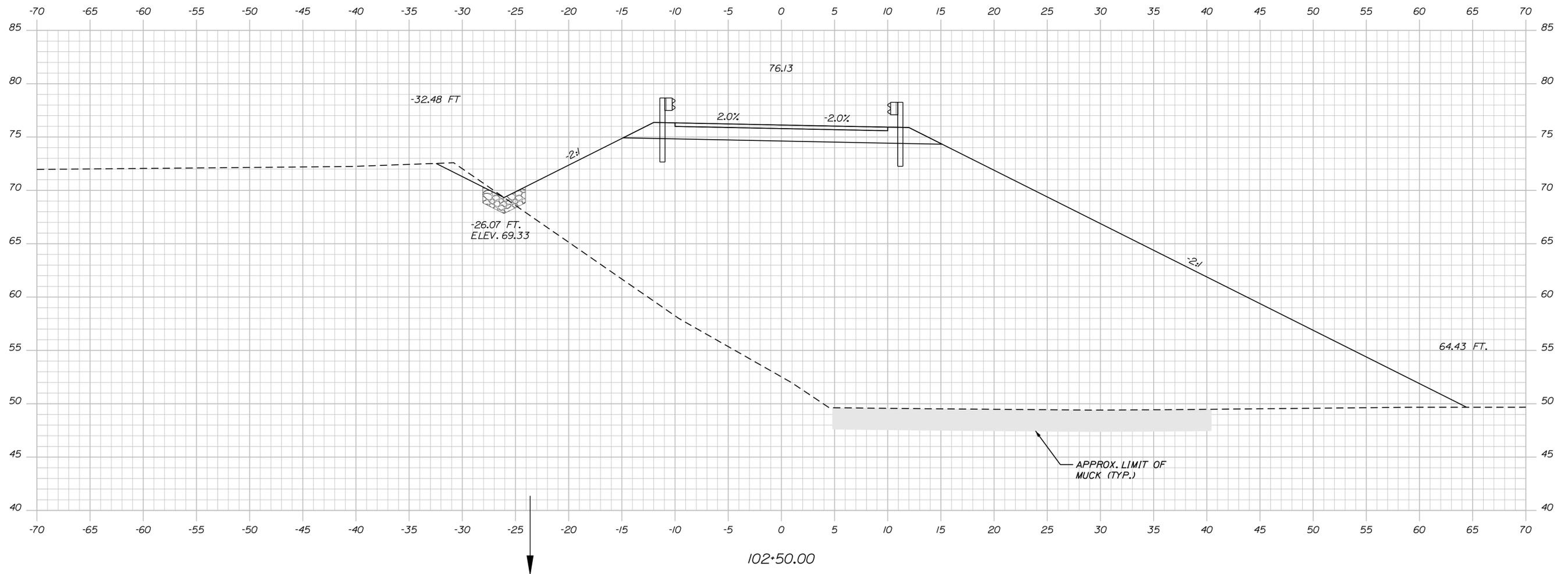
FOREST AVE./RIVERSIDE IND. PKWY.
EMERGENCY VEHICLE RAMPS
SOUTHBOUND CROSS SECTIONS
Sta. 101+50.00

VHB: 55281.00
CONTRACT: 2020.09

SHEET NUMBER: 22
22 OF 28

Date: 5/20/2020

Filename: ...024_XSect-Forest_Ave_SB_05.dgn



Scale: 5 0 5 10
1" = 5' - 0"

No.	Revision	By	Date

Designed by:



CONSULTANT PROJECT MANAGER: T. Bryant

	By	Date	Checked	By	Date
Designed	AGC	5/2020	ECF	ECF	5/2020
Drawn	AGC	5/2020	In Charge of	AG	5/2020

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TEL (207) 889-3150
FAX (207) 253-5596



**THE GOLD STAR
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph Norwood, IV

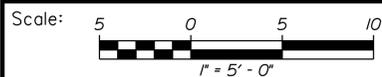
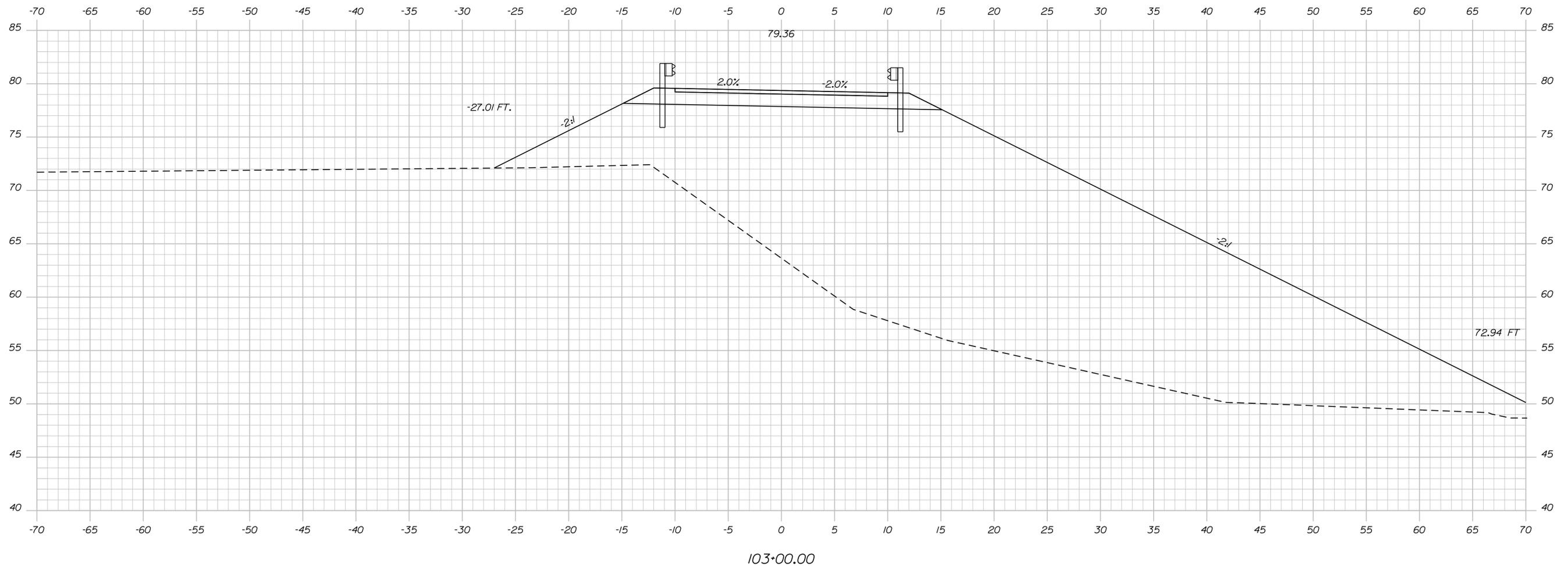
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EMERGENCY VEHICLE RAMP
SOUTHBOUND CROSS SECTIONS
Sta. 102+50.00

VHB: 55281.00
CONTRACT: 2020.09

SHEET NUMBER: 24
24 OF 28

Date: 5/20/2020

Filename: ... \025_XSect-Forest_Ave_SB_06.dgn



Designed by:



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500 Southborough Dr.
Suite 105B
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FAX (207) 253-5596



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FOREST AVE./RIVERSIDE IND. PKWY.
EMERGENCY VEHICLE RAMPS
SOUTHBOUND CROSS SECTIONS
Sta. 103+00.00

No.	Revision	By	Date

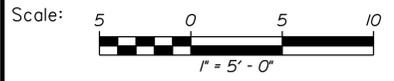
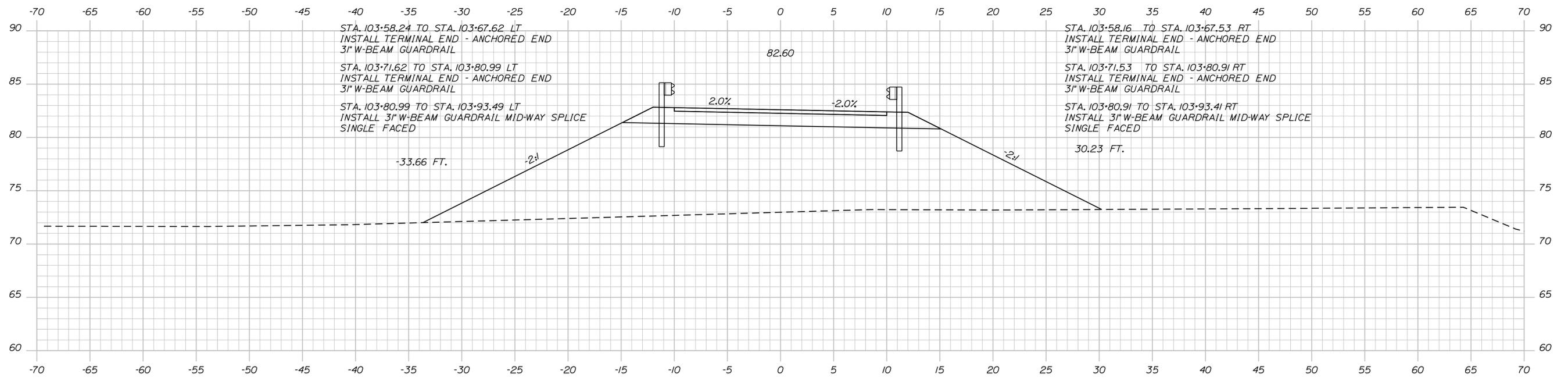
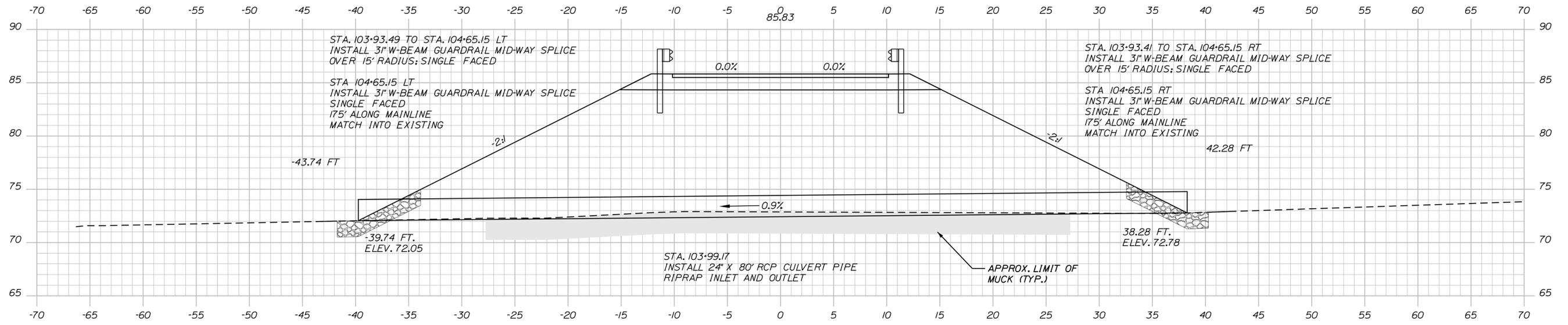
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	By	Date		By	Date
Designed	AGC	5/2020	Checked	ECF	5/2020
Drawn	AGC	5/2020	In Charge of	AG	5/2020

VHB: 55281.00 SHEET NUMBER: 25
CONTRACT: 2020.09 25 OF 28

MTA PROJECT MANAGER: Ralph Norwood, IV

Date: 5/20/2020

Filename: ... \026_XSect-Forest_Ave_SB_07.dgn



Designed by:



No.	Revision	By	Date

CONSULTANT PROJECT MANAGER: T. Bryant

	By	Date		By	Date
Designed	AGC	5/2020	Checked	ECF	5/2020
Drawn	AGC	5/2020	In Charge of	AG	5/2020

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South Portland, ME 04106
TEL (207) 889-3150
FAX (207) 253-5596



**THE GOLD STAR
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph Norwood, IV

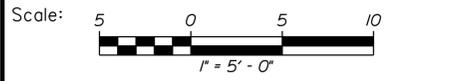
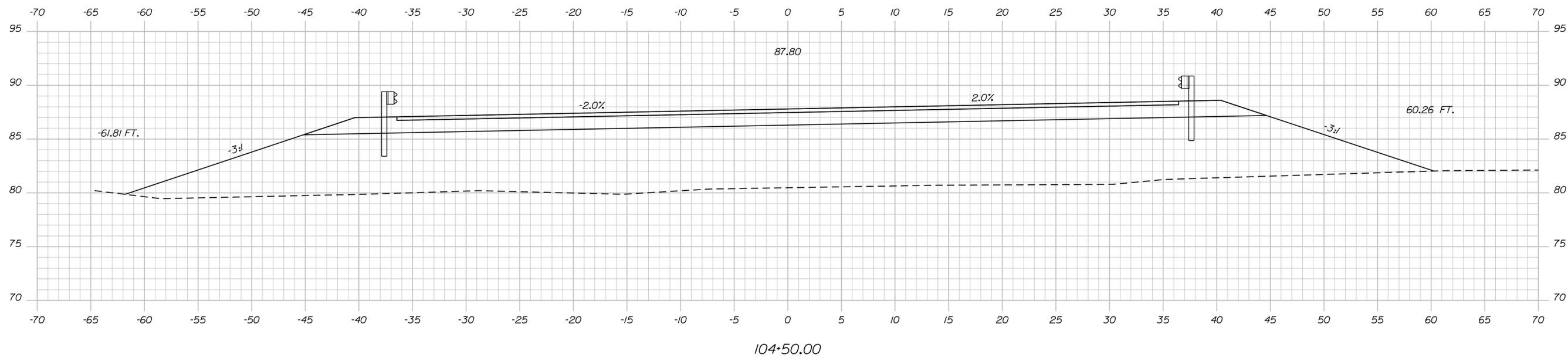
FOREST AVE./RIVERSIDE IND. PKWY.
EMERGENCY VEHICLE RAMPS
SOUTHBOUND CROSS SECTIONS
Sta. 103+50.00 to Sta. 104+00.00

VHB: 55281.00
CONTRACT: 2020.09

SHEET NUMBER: 26
26 OF 28

Date: 5/20/2020

Filename: ... \027_XSect-Forest_Ave_SB_08.dgn



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 Suite 105B
 South Portland, ME 04106
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**THE GOLD STAR
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FOREST AVE./RIVERSIDE IND. PKWY.
 EMERGENCY VEHICLE RAMPS
 SOUTHBOUND CROSS SECTIONS

No.	Revision	By	Date

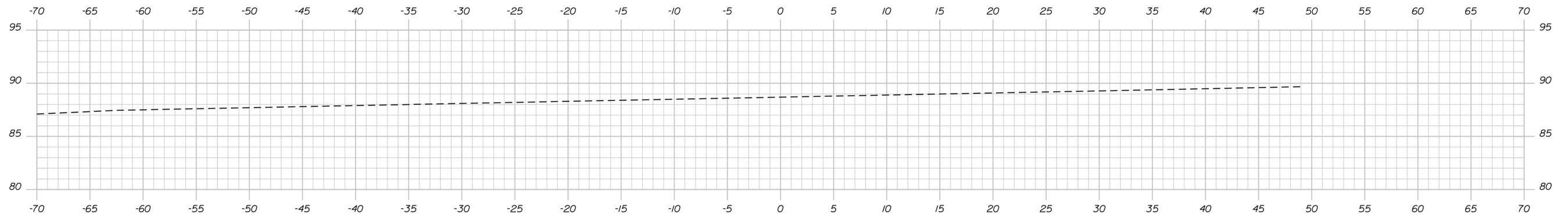
CONSULTANT PROJECT MANAGER: T. Bryant					
	By	Date	Checked	By	Date
Designed	AGC	5/2020	Checked	ECF	5/2020
Drawn	AGC	5/2020	In Charge of	AG	5/2020

VHB: 55281.00 SHEET NUMBER: 27
 CONTRACT: 2020.09 27 OF 28

MTA PROJECT MANAGER: Ralph Norwood, IV

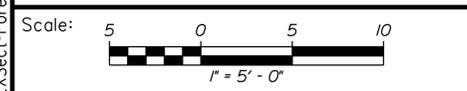
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Filename: ... \028_XSect-Forest_Ave_SB_09.dgn



104+78.00

STA. 104+69.30
 END FULL-DEPTH CONSTRUCTION
 MATCH EXISTING PAVEMENT
 LIMIT OF WORK



Designed by:



No.	Revision	By	Date

CONSULTANT PROJECT MANAGER: T. Bryant

	By	Date		By	Date
Designed	AGC	5/2020	Checked	ECF	5/2020
Drawn	AGC	5/2020	In Charge of	AG	5/2020

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**THE GOLD STAR
 MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph Norwood, IV

FOREST AVE./RIVERSIDE IND. PKWY.
 EMERGENCY VEHICLE RAMPS
 SOUTHBOUND CROSS SECTIONS
 Sta. 104+78.00

VHB: 55281.00 SHEET NUMBER: 28
 CONTRACT: 2020.09 28 OF 28