

SITE OF WORK

JOYCE ROAD OVER TRIBUTARY TO ROE POND CULVERT REPLACEMENT

TOWN OF MORIAH ESSEX COUNTY, NEW YORK

**THIS IS A FEMA FUNDED PROJECT
DR4814 - PROJECT NUMBER: 760224**

TOWN OF MORIAH HIGHWAY DEPARTMENT
30 JOYCE ROAD
MINEVILLE, NY 12956

THE LATEST REVISIONS OF THE NYSOT STANDARD SHEETS MAINTAINED BY THE DEPARTMENT, WHICH ARE CURRENT ON THE DATE OF ADVERTISEMENT FOR BIDS, SHALL BE CONSIDERED TO BE IN EFFECT. ALL PAY ITEMS AND WORK CONTAINED IN THE CONTRACT AND ANY ADDITIONAL PAY ITEMS AND WORK ENCOUNTERED DURING THE COURSE OF THE CONTRACT SHALL BE SUBJECT TO THE APPLICABLE STANDARD SHEET(S) UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS.

ALL WORK CONTEMPLATED UNDER THIS CONTRACT IS TO BE COVERED BY AND IN CONFORMITY WITH THE NYSOT STANDARD SPECIFICATIONS (US CUSTOMARY) MAINTAINED BY THE DEPARTMENT WHICH ARE CURRENT ON THE DATE OF ADVERTISEMENT FOR BIDS EXCEPT AS MODIFIED BY THESE PLANS OR BY CHANGES SET FORTH IN THE CONTRACT DOCUMENTS.

CONTRACT PLANS HAVE BEEN DESIGNED IN ACCORDANCE WITH NYSOT POLICIES AND GUIDELINES AND THE SCOPE SUMMARY MEMORANDUM APPROVED ON DECEMBER 4, 2025.

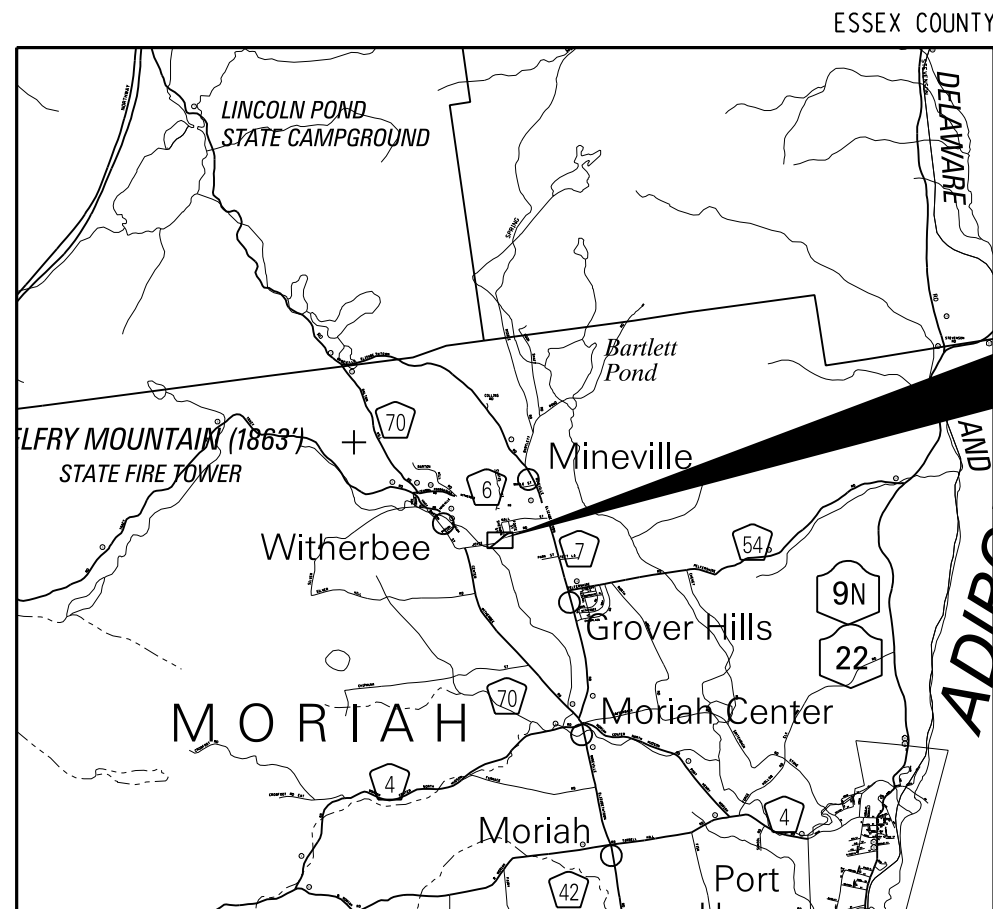
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

PROJECT DESCRIPTION

REPLACEMENT OF THE JOYCE ROAD OVER THE TRIBUTARY TO ROE POND AND ASSOCIATED HIGHWAY APPROACH RECONSTRUCTION AND ROADSIDE APPURTENANCES.

CONTRACT LIMITS

APPROXIMATELY 100 FT TO THE EAST & WEST OF THE CULVERT.

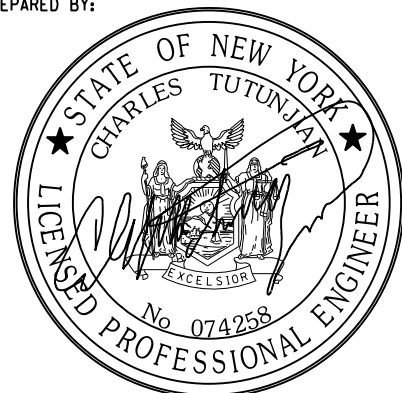


PROJECT LOCATION

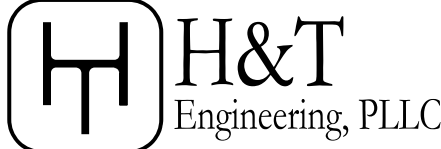
PROJECT LOCATION

DESIGNED BY C. VICKERY
CHECKED BY I. PENGU
DRAFTED BY C. VICKERY
CHECKED BY I. PENGU
PROJECT MANAGER C. TUTUNJIAN

PREPARED BY:



CHARLES TUTUNJIAN
LIC. NO. 074258



14 Corporate Dr, Clifton Park, NY 12065
888-379-1527

**JOYCE ROAD OVER
TRIBUTARY TO ROE POND
CULVERT REPLACEMENT**

SHEET NO.	TOTAL SHEETS	H&T*	24-130
1	22		DATE: 03/2026

PROJECT MANAGER: C. TUTUNJIAN

CHECKED BY: I. PENGU

DRAFTED BY: C. VICKERY

CHECKED BY: I. PENGU

DESIGNED BY: C. VICKERY

JOYCE ROAD PLAN ESTIMATE OF QUANTITIES

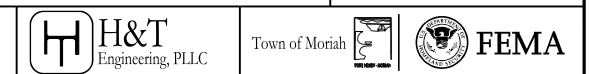
ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	FINAL QUANTITY
201.06	CLEARING AND GRUBBING	LS	1	
202.19	REMOVAL OF SUBSTRUCTURES	CY	118	
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY	205	
203.03	EMBANKMENT IN PLACE	CY	520	
203.07	SELECT GRANULAR FILL	CY	105	
203.21	SELECT STRUCTURE FILL	CY	242	
203.24010017	SHOULDER BACKUP MATERIAL	TON	19	
206.01	STRUCTURE EXCAVATION	CY	1117	
206.0201	TRENCH AND CULVERT EXCAVATION	CY	96	
207.20	GEOTEXTILE BEDDING	SY	261	
207.26	PREFABRICATED COMPOSITE STRUCTURAL DRAIN	SY	35	
209.13	SILT FENCE-TEMPORARY	LF	425	
209.1501	TURBIDITY CURTAIN - TEMPORARY	LF	32	
304.11	SUBBASE COURSE, TYPE 1	CY	28	
304.12	SUBBASE COURSE, TYPE 2	CY	258	
404.0983	9.5 F3 TOP COURSE ASPHALT, 80 SERIES COMPACTION	TON	57	
404.1989	19 F9 BINDER COURSE ASPHALT, 80 SERIES COMPACTION	TON	96	
404.3789	37.5 F9 BASE COURSE ASPHALT, 80 SERIES COMPACTION	TON	114	
407.0102	DILUTED TACK COAT	GAL	84	
552.17	SHIELDS AND SHORING	SF	2046	
553.030001	TEMPORARY WATERWAY DIVERSION STRUCTURE	EACH	1	
555.0021	CONCRETE FOR STRUCTURES, PERFORMANCE	CY	16	
555.10000006	ABANDON EXISTING CULVERT	CY	4	
556.0202	EPOXY-COATED BAR REINFORCEMENT FOR STRUCTURES	LB	113	
568.51	STEEL BRIDGE RAILING (FOUR RAIL)	LF	45	
568.70	TRANSITION BRIDGE RAILING	LF	128	
595.50000018	SHEET-APPLIED WATERPROOFING MEMBRANE	SF	722	
603.63180815	PRECAST CONCRETE BOX CULVERT (FILL HEIGHT LESS THAN 24 IN) 18 FT SPAN, 8 FT RISE	LF	36	
603.67000001	PRECAST CONCRETE WINGWALL UNITS FOR BOX CULVERTS	SY	54	
606.120201	BOX BEAM GUIDE RAILING END ASSEMBLY, TYPE IIA	EACH	4	
610.1605	TURF ESTABLISHMENT PERFORMANCE	SY	198	
613.04000001	STOCKPILING AND PLACING EXISTING STREAM BED MATERIALS	CY	45	
619.01	BASIC WORK ZONE TRAFFIC CONTROL	LS	1	
619.04	TYPE III CONSTRUCTION BARRICADE	EACH	6	
620.03	STONE FILLING (LIGHT)	CY	2	
620.04	STONE FILLING (MEDIUM)	CY	5	
620.0801	BEDDING MATERIAL, TYPE 1	CY	8	
623.12	CRUSHED STONE (IN-PLACE MEASURE)	CY	89	
625.01	SURVEY OPERATIONS	LS	1	
627.50140008	CUTTING PAVEMENT	LF	47	
646.22	DELINEATOR, SNOWPLOWING MARKER, SUPPLEMENTARY SNOWPLOWING MARKER PANELS	EACH	6	
646.32	STEEL POST, 2.0 LB/FT	EACH	4	
663.0208	STEEL WATER PIPE, 8"	LF	166	
663.1301	HYDRANT	EACH	1	
663.33	ADJUST EXISTING VALVE BOX ELEVATION	EACH	1	
663.43	REMOVE AND DISPOSE OF EXISTING HYDRANT	EACH	1	
685.1102	WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MIL	LF	380	
685.1202	YELLOW EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MIL	LF	190	
697.03	FIELD CHANGE PAYMENT	DC	40220	
699.040001	MOBILIZATION	LS	1	

JOYCE ROAD PLAN INDEX

SHEET NO.	DESCRIPTION	DRAWING NO.
1	COVER	COV
2	INDEX & ESTIMATE	IA-1
3	LEGEND POINT SYMBOLOGY	LE-1
4	LEGEND LINE SYMBOLOGY	LE-2
5	GENERAL NOTES, BASELINE TIES, & ALIGNMENT	GN-1
6	WORK ZONE TRAFFIC CONTROL - 1	WZTC-1
7	WORK ZONE TRAFFIC CONTROL - 2	WZTC-2
8	GENERAL PLAN & ELEVATION	GP-1
9	TYPICAL SECTIONS	ST-1
10	PROFILE	ST-2
11	EARTHWORK & EROSION CONTROL PLAN	ST-3
12	EARTHWORK SECTIONS	ST-4
13	PRECAST BOX CULVERT DETAILS - 1	ST-5
14	PRECAST BOX CULVERT DETAILS - 2	ST-6
15	WATER MAIN RELOCATION PLAN	ST-7
16	WATER MAIN DETAILS - 1	ST-8
17	WATER MAIN DETAILS - 2	ST-9
18	WATER MAIN DETAILS - 3	ST-10
19	RAILING PLAN	ST-11
20	CULVERT RAIL DETAILS	ST-12
21	TRANSITION RAIL PLAN, ELEVATION & DETAILS	ST-13
22	TRANSITION RAIL DETAILS	ST-14

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	JOYCE ROAD OVER TRIBUTARY TO ROE POND	BRIDGES BIN TBD	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER DR 4814 PROJECT NUMBER: 760224
	CULVERT REPLACEMENT PROJECT				
	TOWN OF MORIAH				
	COUNTY: ESSEX	REGION: 1		INDEX & ESTIMATE	DRAWING NO. IA-1 SHEET NO. 2

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PROJECT MANAGER: C. TUTUNJIAN

CHECKED BY: I. PENGU

DRAFTED BY: C. VICKERY

CHECKED BY: I. PENGU

DESIGNED BY: C. VICKERY

ALIGNMENT			DRAINAGE			ITS			ROW MAPPING			SIGNS			UTILITIES		
CELL	NAME	DESCRIPTION	CELL	NAME	DESCRIPTION	CELL	NAME	DESCRIPTION	CELL	NAME	DESCRIPTION	CELL	NAME	DESCRIPTION	CELL	NAME	DESCRIPTION
⊗	ACC	CENTER OF CURVATURE	+	DINV	INVERT	⊕	IANT_P	ANTENNAS	⊕	MDL1P	DEED LINE, TYPE 1	⊕	S	SINGLE POST	⊕	UEB	ELECTRIC, BOX
+	ACOGO	COGO	▨	DS	STRUCTURE, RECTANGULAR	⊕	IASCTS	ACCOU. SPEED/COUNT SNSR.S	⊕	MDL2P	DEED LINE, TYPE 2	⊕	S.P	SINGLE POST, PROPOSED	⊕	UEM	ELECTRIC, METER
⊙	ACS	CURVE TO SPIRAL	+	DSI	STRUCTURE, INVERT	⊕	ICABPAD	CABINET & PAD	⊕	MDL3P	DEED LINE, TYPE 3	⊕	SB.P	BACK TO BACK, PROPOSED	⊕	UEMH	ELECTRIC, MANHOLE
△	ADPL_P	DETOUR, POINT OF INTERSECT.	⊕	DSM	STRUCTURE, MANHOLE	⊕	ICCTV	CCTV SITE	⊕	MDL4P	DEED LINE, TYPE 4	⊕	SDEL	DELINEATORS	⊕	UEPT	ELECTRIC, POLE, TRANS.
○	ADPL_P	DETOUR, POINT ON LINE	⊕	DSMTXX_P	STRUCTURE, MANHOLE, TYPE "XX" "XX" = 48, 60, 72, 96	⊕	ICDPD	CDPD TRANSCEIVER	⊕	MDL5P	DEED LINE, TYPE 5	⊕	SPM	PARKING METER	⊕	UGM	GAS, METER
○	AEQN	EQUATION	⊕	DSR	STRUCTURE, ROUND	⊕	ICELLT	CELL PHONE TOWER	⊕	MEEP	EASEMENT, EXISTING	⊕	SRM	REFERENCE MARKERS	⊕	UGMH	GAS, MANHOLE
⊕	AEQNAHD	EQUATION AHEAD	⊕	DST"x"CB_P	STRUCTURE, RECT., WITH CURB TYPE "X" "X" = F, G, N, O, P, R	⊕	ICJB	CONDUIT JACK OR BORING	⊕	MEPAP_P	EASEMENT, PERM., APPROX.	⊕	SRSC3	SHLD, CTY, 123 DIG.	⊕	UGLM	GAS, LINE MARKER
⊕	AEQNBK	EQUATION BACK	⊕	DST"x"CB_P	STRUCTURE, RECT., WITH CURB TYPE "X" "X" = F, G, N, O, P, R	⊕	ICNTLCAB	CONTROLLER CABINET	⊕	MEPP_P	EASEMENT, PERM., BACK LINE	⊕	SRSC4	SHLD, CTY, 4 DIG.	⊕	UGP	GAS/FUEL PUMP
○	AEVT	EVENT STATION	⊕	DST"x"CB_P	STRUCTURE, RECT., WITH CURB TYPE "X" "X" = F, G, N, O, P, R	⊕	ICPB	COMMUNICATION PULL BOX	⊕	MEPSP_P	EASEMENT, PERM., SHAPE	⊕	SRSC2	SHLD, CTY TOUR, 1-2 DIG.	⊕	UGV	GAS, VALVE
⊕	APC	POINT OF CURVATURE	⊕	DST"x"CB_P	STRUCTURE, RECT., WITH CURB TYPE "X" "X" = F, G, N, O, P, R	⊕	ICTD	CONDUIT TURNING DOWN	⊕	MFAP_P	FEE ACQUISITION, APPROX.	⊕	SRSC4	SHLD, CTY TOUR, 3-4 DIG.	⊕	UGVT	GAS, VENT
○	APCC	POINT OF COMPOUND CURVATURE	⊕	DST"x"CB_P	STRUCTURE, RECT., WITH CURB TYPE "X" "X" = F, G, N, O, P, R	⊕	ICTU	CONDUIT TURNING UP	⊕	MFP_P	FEE ACQUISITION, BACK LINE	⊕	SRS1	SHLD, INTERSTATE	⊕	ULP	LIGHTING, POLE
△	API	POINT OF INTERSECTION	ENVIRONMENTAL			⊕	ICVTRT	COMM. VEH. ROAD TRANSCEIVER	⊕	MFSP_P	FEE ACQUISITION, SHAPE	⊕	SRSN2	SHLD, NATIONAL, 2 DIG.	⊕	ULPM	LIGHTING, POLE, MEDIAN
△	APOB	POINT OF BEGINNING	ENVIRONMENTAL			+	IDEFAULT	DEFAULT	⊕	MHBAP	HIGHWAY BNDRY., APPROX.	⊕	SRSN3	SHLD, NATIONAL, 3 DIG.	⊕	ULPP	LIGHTING, POLE, PED.
○	APOC	POINT OF CURVATURE	CULV	EIOP_P	STR., INLET, OUTLET PROT.	⊕	IEZR	E-ZPASS READER	⊕	MHBCP	HISTORICAL, BLDG. CORNERS	⊕	SRSS2	SHLD, STATE, 2 DIG.	⊕	UMFC	MISC. FILLER CAP
△	APOE	POINT OF END	GB	EIPGB_P	STR., INLET PROT., GRAVEL BAG	⊕	IEZTR	TRANSMITTAL READER	⊕	MHBP	HIGHWAY BNDRY, PT.	⊕	SRSS3	SHLD, STATE, 3 DIG.	⊕	UOLM	OIL, LINE MARKER
○	APOL	POINT ON LINE	H/S	EIPHS_P	STR., INLET PROT., HAY/STRAW	⊕	IFXCAB	FIBER OPTIC X-CONNECT CABINET	⊕	MJCP	PT., JURIS. CITY	⊕	SRSS4	SHLD, STATE, 4 DIG.	⊕	UP	POLE, WITH UTILITY
○	APOS	POINT ON SPIRAL	H/S	EIPHS_P	STR., INLET PROT., HAY/STRAW	⊕	IFUSSPL	FUSION SPLICE	⊕	MPBC	PT., BUILDING CORNER	TRAFFIC CONTROL			○	UPD	POLE, DEAD (NO UTILITY)
○	APOT	POINT ON TANGENT	PRFB	EIPP_P	STR., INLET PROT., PREFAB.	⊕	IHARADV	HAR ADVISORY SIGN	⊕	MPCC	PT., CROSS CUT	⊕	TCBJ	BOX, JUNCTION	⊕	UPL	POLE, WITH LIGHT
△	APOVC	POINT ON VERTICAL CURVE	PRFB	EIPP_P	STR., INLET PROT., PREFAB.	⊕	IHARST	HAR SITE	⊕	MPDH	PT., DRILL HOLE	⊕	TCBP	BOX, PULL BOX	⊕	USMH	SANITARY SEWER MANHOLE
△	APOVT	POINT ON VERTICAL TANGENT	SF	EIPSF_P	STR., INLET PROT., SILT FENCE	⊕	ILC	LOAD CENTER	⊕	MPF	PT., FENCE LOCATION	⊕	TCBS	BOX, SPLICE	⊕	UTB	TELEPHONE, BOOTH
Y	APORC	POINT ON REVERSE CURVE	+	ERCB	RISER, CONCRETE BOX	⊕	IMECSPL	MECHANICAL SPLICE	⊕	MPIP	PT., IRON PIPE	⊕	TCMC	MICROCOMPUTER CABINET	⊕	UTLM	TELEPHONE, LINE MARKER
⊕	APT	POINT OF TANGENCY	+	ETRS_P	TRAP, SEDIMENT	⊕	IMSCS	PORT. SPEED & COUNT SENSOR	⊕	MPIR	PT., IRON ROD	⊕	TCPP	PED POLE	⊕	UTMH	TELEPHONE, MANHOLE
⊕	APVC	POINT OF VERTICAL CURVATURE	+	EWFG	WETLAND FLAG	⊕	IMSCTS	MICRO SPEED & COUNT SENSOR	⊕	MPM	PT., MONUMENT	⊕	TCSH	SIGNAL HEADS	⊕	UTVLM	CABLE TV, LINE MARKER
△	APVCC	POINT OF VERT. CMPND CURVE	GEOTECHNICAL			⊕	IMT	MICROWAVE TRANSCEIVER	⊕	MPMM	PT., MONUMENT, MISC.	⊕	TCSH	SIGNAL HEADS	⊕	UTVPB	CABLE TV, PULL BOX
⊕	APVI	POINT OF VERT. INTERSECTION	⊕	GDH	DRILL HOLE	⊕	IOVHMS	PERM. OVERHEAD VMS	⊕	MPN	PT., NAIL	⊕	TOSP	SIGNAL POLE	⊕	UUB	UNKNOWN, BOX
△	APVRC	POINT OF VERT. REVERSE CURVE	LANDSCAPE			⊕	IPASCS	PORT. ACCOU. SPD & CNT. SENSOR	⊕	MPRS	PT., RAILROAD SPIKE	TRAFFIC WORK ZONE			⊕	UUB	UNKNOWN, BOX
⊕	APVT	POINT OF VERTICAL TANGENCY	LANDSCAPE			⊕	IPEDS	PEDESTRIAN SIGNAL HEAD	⊕	MPSP	PT., SPIKE	⊕	TWZAP_P	ARROW PANEL	⊕	UUB	UNKNOWN, BOX
⊕	ASC	SPIRAL TO CURVE	+	LELS	ELEVATION, SPOT	⊕	IPSS	PAVEMENT SURFACE SENSOR	⊕	MPST	PT., STAKE	⊕	TWZAP_C_P	ARROW PANEL, CAUTION MODE	⊕	UUB	UNKNOWN, BOX
△	ASPI	SPIRAL POINT OF INTERSECTION	⊕	LFP	FLAG POLE	⊕	IPVMS	PERM. VMS	⊕	MPTW	PT., TREE W/ WIRE	⊕	TWZAPT_P	ARROW PANEL, TRAILER OR SUPPORT	⊕	UUB	UNKNOWN, BOX
○	ASTS	SPIRAL TO SPIRAL	⊕	LMB	MAILBOX	⊕	IRM	RAMP METER	⊕	MPWL	PT., WALL LOCATION	⊕	TWZBCD_P	BARRICADE (TYPE III)	⊕	UUB	UNKNOWN, BOX
⊕	AST	SPIRAL TO TANGENT	⊕	LPB	PAPER BOX	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	ROW ACQUISITION			⊕	TWZBDC_P	BARRICADE (TYPE III)	⊕	UUB	UNKNOWN, BOX
⊕	ATS	TANGENT TO SPIRAL	⊕	LPST	POST, SINGLE	⊕	ISP	SOLAR PANEL	⊕	MFS_P.T	FEE ACQUISITION	⊕	TWZCMS_P	CHANGEABLE MESSAGE SIGN (PVMS)	⊕	UUB	UNKNOWN, BOX
△	AVEVT	VERTICAL EVENT POINT	⊕	LRB	ROCK, BOULDER	⊕	ISST	SPREAD SPECT. TRANSCEIVER	⊕	MEPS_P.T	EASEMENT, PERMANENT	⊕	TWZFLG_P	FLAGGER	⊕	UUB	UNKNOWN, BOX
○	AVHIGH	VERTICAL HIGH POINT	⊕	LSHC	SHRUB, CONIFEROUS	⊕	ITDB	TELEPHONE DEMARCATION BLK	⊕	METS_P.T	EASEMENT, TEMPORARY	⊕	TWZFT_P	FLAG TREE	⊕	UUB	UNKNOWN, BOX
○	AVLOW	VERTICAL LOW POINT	⊕	LSHD	SHRUB, DECIDUOUS	⊕	ITP	SUBSURFACE TEMP. PROBE	⊕	METS_P.T	EASEMENT, TEMPORARY	⊕	TWZIA_P	IMPACT ATTENUATOR / CRASH CUSHION (TEMPORARY)	⊕	UUB	UNKNOWN, BOX
BRIDGE			⊕	LTC	TREE, CONIFEROUS	⊕	IVTRT	VEHICLE TO RDWY TRANSCEIVER	⊕	METS_P.T	EASEMENT, TEMPORARY	⊕	TWZLUM_P	LUMINAIRE (TEMPORARY)	⊕	UUB	UNKNOWN, BOX
⊕	BSC	BRIDGE, SCUPPER	⊕	LTD	TREE, DECIDUOUS	⊕	IWIMD	WEIGHT IN MOTION DETECTOR	⊕	METS_P.T	OCCUPANCY, TEMPORARY	⊕	TWZSDT_P	SYMBOL, DIRECTION OF TRAFFIC	⊕	UUB	UNKNOWN, BOX
CONTROL			⊕	LTS	TREE, STUMP	⊕	IWVR	WIRELESS VIDEO REPEATER	⊕	METS_P.T	OCCUPANCY, TEMPORARY	⊕	TWZSDT_P	SYMBOL, DIRECTION OF TEMPORARY TRAFFIC DETOUR	⊕	UUB	UNKNOWN, BOX
△	CBP	BASELINE, POINT	⊕	LTW_P	TREE, WELL OR WALL	⊕	IWVRC	WIRELESS VIDEO RECEIVER	⊕	MFS_P.T	FEE ACQUISITION W/O ACCESS	⊕	TWZSGN_P	SIGN (TEMPORARY)	⊕	UUB	UNKNOWN, BOX
○	CBPOL	BASELINE, POINT ON LINE	+	LUKP	UNKNOWN POINT	⊕	IWVTT	WIRELESS VIDEO TRANSMITTER	ROADWAY			⊕	TWZSIG_P	SIGNAL, TRAFFIC OR PEDESTRIAN (TEMPORARY)	⊕	UUB	UNKNOWN, BOX
⊕	CBSP	BASELINE, SPUR POINT				⊕	RES_P	ELEVATION, SPOT	⊕	RGA	GUIDE RAIL, ANCHOR	⊕	TWZWL_P	WARNING LIGHT	⊕	UUB	UNKNOWN, BOX
⊕	CBTP	BASELINE, TIE POINT				⊕	RGP	GUIDE POST, SINGLE	⊕	TWZWV_P	WORK VEHICLE	⊕	TWZWVA_P	WORK VEHICLE WITH TRUCK MOUNTED ATTENUATOR	⊕	UUB	UNKNOWN, BOX
⊕	CPBM	BENCHMARK										⊕	TWZWVA_P	WORK VEHICLE WITH TRUCK MOUNTED ATTENUATOR	⊕	UUB	UNKNOWN, BOX
⊕	CPH	POINT, HORIZ. PHOTOGRAMMETRY													⊕	UUB	UNKNOWN, BOX
⊕	CPSM	POINT, SURVEY MARKER, PERM.													⊕	UUB	UNKNOWN, BOX
⊕	CPSV	POINT, VERT., PHOTOGRAMMETRY													⊕	UUB	UNKNOWN, BOX

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	JOYCE ROAD OVER TRIBUTARY TO ROE POND	BRIDGES BIN TBD	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER DR 4814 PROJECT NUMBER: 760224
	CULVERT REPLACEMENT PROJECT				
	TOWN OF MORIAH				
	COUNTY: ESSEX REGION: 1				
LEGEND POINT SYMBOLOLOGY					
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.					

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PROJECT MANAGER C. TUTUNJIAN

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DRAFTED BY C. VICKERY

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ALIGNMENT			LANDSCAPE			ROADWAY			TRAFFIC WORK ZONE		
STYLE	NAME	DESCRIPTION	STYLE	NAME	DESCRIPTION	STYLE	NAME	DESCRIPTION	STYLE	NAME	DESCRIPTION
	AC	CONTROL (CENTERLINE)		LABL	AREA, BRUSH LINE		RCZ.P	CLEAR ZONE		TWZBT.P	BARRIER, TEMPORARY
	AD.P	DETOUR		LAHR	AREA, HEDGE ROW		RG	GUIDE RAIL, MISCELLANEOUS		TWZBTWL.P	BARRIER, TEMPORARY, W/ WARNING LIGHTS
	AT.P	TRANSITION CONTROL		LAPB	AREA, PLANTING BED		RGB	GUIDE RAIL, BOX BEAM		TWZCD.P	CHANNELIZING DEVICE
BRIDGE				LAWA	AREA, WOODED AREA OUTLINE		RGBM	GUIDE RAIL, BOX BEAM, MEDIAN		TWZPMRC.P	PAVEMENT MARKING REMOVAL OR COVERING
	BR	RAIL		LAW	AREA, WATERS EDGE		RGC	GUIDE RAIL, CABLE	UTILITIES		
	BSHT	SHEET PILING		LCUT.P	CUT LIMIT		RGCB	GUIDE RAIL, CONCRETE BARRIER		UC	CONDUIT, UNDERGROUND
CONTROL				LFILL.P	FILL LIMIT		RGP.P	GUIDE POST		UCH	CONDUIT, HANGING
	CB	BASELINE		LFNC	FENCE		RGW	GUIDE RAIL, W BEAM		UCO	CONDUIT, OVERHEAD
	CBPR	BASELINE, PROJECTION		LTRC	TREE ROW, CONIFEROUS		RGWM	GUIDE RAIL, W BEAM, MEDIAN		UE	ELECTRIC LINE, UNDERGROUND
DRAINAGE				LTRD	TREE ROW, DECIDUOUS		RPB	PARKING BUMPER		UEH	ELECTRIC LINE, HANGING
	DCP	CULVERT PIPE		LWH	WALL, H PILE		RRC	RAIL ROAD, CATENARY		UEO	ELECTRIC LINE, OVERHEAD
	DCP.P	CULVERT PIPE (DIR)		LWR	WALL, RETAINING		RRER	RAIL ROAD, 3RD RAIL		UETO	ELECTRIC TRANSMISSION, OVERHEAD
	DDG.P	DITCH, GRASS LINED		LWS	WALL, STONE		RRPLS.P	RAIL, PHOTO, LARGE SCALE		UESS	ELECTRIC, SUBSTATIONS
	DDP.P	DITCH, PAVED INVERT	ROW MAPPING				RRPSS	RAIL, PHOTO, SMALL SCALE		UFO	FIBER OPTIC, UNDERGROUND
	DDS.P	DITCH, STONE LINED		MDL	DEED LINE		RRS	RUMBLE STRIP		UFOH	FIBER OPTIC, HANGING
	DFL.P	FLOW LINE		MEE	EASEMENT, EXISTING		RRSLS.P	RAIL, SURVEY, LARGE SCALE		UFOO	FIBER OPTIC, OVERHEAD
	DSSD	SLOTTED DRAIN		MEP.P	EASEMENT, PERMANENT		RRSSS	RAIL, SURVEY, SMALL SCALE		UG	GAS, UNDERGROUND
	DUD.P	UNDERDRAIN		MEPA.P	EASEMENT, PERMANENT, APPROX.	SIGNS				UGH	GAS, HANGING
ENVIRONMENTAL				MET.P	EASEMENT, TEMPORARY		SBLB	BILLBOARDS		UGO	GAS, OVERHEAD
	EBLHS	BALE, STRAW		META.P	EASEMENT, TEMPORARY, APPROX.		SM	MULTIPLE POST		UIC	INFORM CABLE, UNDERGROUND
	ECT	CURTAIN, TURBIDITY		MF.P	FEE ACQUISITION, W/ ACCESS		SSO	STRUCTURE, OVERHEAD		UICH	INFORM CABLE, HANGING
	EDMC	DAM, COFFER		MFA.P	FEE ACQUISITION, APPROXIMATE		SSOC	STRUCTURE, OVHD, CANTILEVER		UO	OIL LINE, UNDERGROUND
	EDMEC.P	DAM, EARTHEN CHECK		MFS.P	FEE ACQUISITION, SHAPE	STRIPING				UOH	OIL LINE, HANGING
	EDMGSC.P	DAM, GRAVEL BAG/SAND BAG CHECK		MFWOA.P	FEE ACQUISITION, W/O ACCESS		STB•	BROKEN LINE		UPBP	POLE, BRACE, PUSH BRACE
	EDMPC.P	DAM, PREFABRICATED CHECK		MHA	HISTORICAL, ACQUISITION		STDB•	DOUBLE BROKEN LINE		UPCW	POLE, GUY WIRE
	EDMSC.P	DAM, STONE CHECK		MHB	HIGHWAY BOUNDARY		STDL•	DOTTED LINE LONG		USA	SANITARY SEWER, UNDERGROUND
	EFNS	FENCE, SILT		MHB	HIGHWAY BOUNDARY, APPROX.		STDS•	DOTTED LINE SHORT		USAH	SANITARY SEWER, HANGING
	EFNSV	FENCE, SILT & VEGETATION		MHBW	HWY BOUNDARY, FACE OF WALL		STFB•	FULL BARRIER LINE		USAF	SANITARY SEWER, FORCE MAIN, UGND
	EFNV	FENCE, VEGETATION		MHBWOA	HIGHWAY BOUNDARY, W/O ACCESS		STH•	HATCH LINE		USAFH	SANITARY SEWER, FORCE MAIN, HANG
	EWAA.P	WETLAND, ADJACENT AREA		MJC	JURISDICTION, CITY		STPB•	PARTIAL BARRIER LINE		UT	TELEPHONE, UNDERGROUND
	EWf	WETLAND, FEDERAL		MJCY	JURISDICTION, COUNTY		STRCT	ROUNDABOUT, CAT TRACKS		UTH	TELEPHONE, HANGING
	EWFS	WETLAND, FEDERAL AND STATE		MJHD	JURISDICTION, HISTORIC DISTRICT		STRYL	ROUNDABOUT, YIELD LINE		UTO	TELEPHONE, OVERHEAD
	EWm	WETLAND, MITIGATION AREA		MJLL	JURISDICTION, (GREAT, MILITARY) LOT LINE		STSB	STOP BAR		UTV	CABLE TV, UNDERGROUND
	EWs	WETLAND, STATE		MJN	JURISDICTION, NATION		STSE•	SOLID, EDGE		UTVH	CABLE TV, HANGING
				MJPB	JURISDICTION, PUBLIC LANDS		STXL	X WALK, LADDER LINE		UTVO	CABLE TV, OVERHEAD
				MJS	JURISDICTION, STATE		STXLB	X WALK, LADDER BAR LINE		UUU	UNKNOWN, UNDERGROUND
				MJT	JURISDICTION, TOWN	TRAFFIC CONTROL				UUH	UNKNOWN, HANGING
				MJV	JURISDICTION, VILLAGE		TCSW	SIGNAL, SPAN WIRE		UUO	UNKNOWN, OVERHEAD
				MPL	PROPERTY LOT LINE					UW	WATER LINE, UNDERGROUND
				MPLA	PROPERTY LOT LINE, APPROXIMATE					UWH	WATER LINE, HANGING
				MSL	SUB LOT LINE					UWO	WATER LINE, OVERHEAD

- NOTES:**
- THE LEGEND ILLUSTRATES MAPPING FEATURES (EXISTING AND PROPOSED).
 - FEATURES ARE SHOWN AS EITHER LINEAR (ROADWAY GUIDERAIL, ROADWAY SIDEWALK, UTILITY LINES, ETC.) OR POINT (SIGN, UTILITY POLE, ETC.).
 - FEATURES SHOWN ON THE LEGEND AS EXISTING FEATURES ALSO HAVE CORRESPONDING PROPOSED FEATURES.
 - PROPOSED FEATURE SYMBOLOGY IS IDENTICAL TO EXISTING FEATURE SYMBOLOGY EXCLUDING LINE WEIGHT. LINE WEIGHT FOR PROPOSED FEATURES IS THICKER (0.015 in ON B SIZE DRAWINGS).
 - MAPPING FEATURES NOT INCLUDED ON THE LEGEND SHEET DO NOT HAVE A UNIQUE SYMBOLOGY (SUCH AS THE PAVEMENT EDGE, PAVEMENT EDGE OF TRAVEL WAY) AND SHOULD BE LABELED ON THE PLANS.
 - FEATURES SHOWN AT THE HEAVIER WEIGHT ARE PROPOSED ONLY AND DO NOT HAVE CORRESPONDING EXISTING FEATURES.

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	JOYCE ROAD OVER TRIBUTARY TO ROE POND	BRIDGES BIN TBD	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER DR 4814
	CULVERT REPLACEMENT PROJECT				
	TOWN OF MORIAH			LEGEND LINE SYMBOLOGY	DRAWING NO. LE-2
	COUNTY: ESSEX REGION: 1				SHEET NO. 4
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.					

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GENERAL NOTES:

DESIGN SPECIFICATIONS: NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES WITH ALL PROVISIONS IN EFFECT AS OF FEBRUARY 2026. (FOR DESIGN PURPOSES, COMPRESSIVE STRENGTH OF CONCRETE FOR SUBSTRUCTURES AND DECK SLABS AT 28 DAYS: f'c=3000 PSI.)

DESIGN SPECIFICATIONS: NYS DOT LRFD BRIDGE DESIGN SPECIFICATIONS WITH ALL PROVISIONS IN EFFECT AS OF FEBRUARY 2026 (FOR DESIGN PURPOSES, COMPRESSIVE STRENGTH OF CONCRETE FOR SUBSTRUCTURES AND DECK SLABS AT 28 DAYS: f'c=3000 PSI.)

LIVE LOAD: AASHTO HL-93

CONSTRUCTION AND MATERIALS SPECIFICATIONS: STANDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, OFFICE OF ENGINEERING, DATED MAY 1, 2024, WITH CURRENT ADDITIONS AND MODIFICATIONS.

DETAILS ON THE DRAWINGS LABELED AS "NOT TO SCALE" ARE INTENTIONALLY DRAWN NOT TO SCALE FOR VISUAL CLARITY. ALL OTHER DETAILS FOR WHICH NO SCALE IS SHOWN ARE DRAWN PROPORTIONAL AND ARE FULLY DIMENSIONED.

ALL SHOP DRAWINGS SUBMITTED FOR THIS PROJECT SHALL BE IN US CUSTOMARY UNITS.

THE COST OF WATER USED FOR COMPACTION OF SELECT FILL ITEMS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 203.21 - SELECT STRUCTURE FILL.

THE COST OF WATER USED FOR COMPACTION OF SELECT FILL ITEMS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 203.21 - SELECT STRUCTURE FILL.

THE COST OF ALL JOINT MATERIAL SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE VARIOUS ITEMS OF THE CONTRACT, UNLESS OTHERWISE SPECIFIED ON THE PLANS.

HIGH VOLTAGE ELECTRICAL LINES ARE IN PROXIMITY TO THIS BRIDGE. REFER TO SUBSECTION 107-05 OF THE STANDARD SPECIFICATIONS FOR CONTRACTOR SAFETY REQUIREMENTS.

SUBSTRUCTURE NOTES:

ALL PLACEMENTS OF SELECT STRUCTURE FILL, ITEM 203.21, SHALL BE COMPACTED TO 95 PERCENT OF STANDARD PROCTOR MAXIMUM DENSITY.

HIGHWAY EMBANKMENT MATERIAL (FROM HIGHWAY ESTIMATE OR FROM STRUCTURE EXCAVATION BACKFILL) AND SELECT STRUCTURE FILL, ITEM 203.21, SHALL BE PLACED SIMULTANEOUSLY, IN CONTACT, ON BOTH SIDES OF THE VERTICAL PAYMENT LINE. THE COST OF ALL MATERIAL AT EACH CONSTRUCTION JOINT, CONTRACTION JOINT AND CONCRETE EXPANSION JOINT SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE VARIOUS ITEMS OF THE CONTRACT, UNLESS OTHERWISE SPECIFIED ON THE PLANS.

SUPERSTRUCTURE NOTES:

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE REQUIREMENTS OF SUBSECTION 202-3.01 GENERAL AND SAFETY REQUIREMENTS. A LIFTING PLAN SHALL BE SUBMITTED TO THE ENGINEER FIFTEEN (15) DAYS PRIOR TO BEGINNING THE ERECTION.

REMOVAL NOTES:

EXISTING PIPE CULVERTS SHALL BE REMOVED UNDER ITEM 202.19.

THERE ARE NO AREAS WITHIN THE CONTRACT LIMITS AVAILABLE FOR DISPOSAL OF DEBRIS. REFER TO SUBSECTION 107-05 OF THE STANDARD SPECIFICATIONS FOR CONTRACTOR SAFETY REQUIREMENTS.

CONTROL OF INVASIVE SPECIES NOTES:

ALL CONSTRUCTION EQUIPMENT WILL BE PRESSURE WASHED TO REMOVE SOIL CLUMPS AND DEBRIS PRIOR TO SHIPPING TO THE PROJECT SITE.

ALL SEED SPECIES (EXCEPT ANNUAL RYE AND PERENNIAL RYE GRASSES) SHALL BE NATIVE TO NEW YORK STATE. SEED SHALL MEET THE REQUIREMENTS OF NYS DOT MATERIAL SPECIFICATION 713-04 SEEDS.

CONTRACTOR SHALL MAINTAIN ALL SEEDED AREAS AGAINST INVASION AND GROWTH OF INVASIVE, NON-NATIVE SPECIES. PURPLE LOOSE STRIFE (LYTHRUM SALICARIA), COMMON REED (PHRAGMITES AUSTRALIS), AND REED CANARY-GRASS (PHALARIS ARUNDINACEA) SHALL BE DUG OR CAREFULLY PULLED IN ORDER TO GET ALL ROOTS WHEN OBSERVED INVADING THE SITE.

NO HAY BALES SHALL BE PERMITTED ON PROJECT SITE. STRAW BALES, WHICH MEET THE REQUIREMENTS OF NYS DOT MATERIAL SPECIFICATION 713-19- STRAW SHALL BE PERMITTED ON PROJECT SITE.

MULCH SHALL MEET THE REQUIREMENTS OF NYS DOT MATERIAL SPECIFICATION 713-11- WOOD FIBER MULCH.

EROSION, SEDIMENTATION AND TURBIDITY CONTROLS:

ALL WORK IN A FLOWING STREAM MUST BE KEPT TO A MINIMUM AND THE STREAM WATERS MUST BE PUMPED, PIPED OR OTHERWISE DIVERTED AROUND, OR SEPARATED FROM, THE WORK AREA. STRAW BALES OR OTHER DEVICES PLACED ACROSS THE STREAM DOWNSTREAM OF THE WORK SITE ARE NOT ACCEPTABLE POLLUTION CONTROLS. ALL WATER PUMPED FROM COFFERDAMS, SETTLING BASINS, OR OTHER WORK AREAS MUST NOT BE ALLOWED TO FLOW BACK INTO A STREAM UNLESS IT IS FIRST FILTERED UNTIL IT IS AS CLEAR (NON-TURBID) AS THE STREAM WATERS FLOWING UPSTREAM OF THE WORK SITE.

UNDER NO CIRCUMSTANCES ARE WET CONCRETE, CEMENT, WASHINGS FROM CEMENT TRUCKS, OILS, FUELS OR OTHER POLLUTANTS ALLOWED TO ENTER THE STREAM. ACCIDENTAL SPILLS ARE TO BE IMMEDIATELY CLEANED UP. ALL PETROLEUM SPILLS SHALL BE REPORTED AS REQUIRED BY REGULATION. THE STREAM BELOW THE WORK SITE SHALL BE AS CLEAR AS THE STREAM ABOVE THE WORK SITE.

WORK SHALL BE PERFORMED FROM THE STREAM BANKS TO THE EXTENT POSSIBLE TO MINIMIZE THE USE OF EQUIPMENT IN THE STREAM. UNDER NO CIRCUMSTANCES IS EQUIPMENT TO OPERATE IN FLOWING WATER UNLESS AUTHORIZED IN WRITING OR BY ON-SITE DEC REPRESENTATIVE. GRAVEL REMOVED FROM A STREAM BED MUST BE PLACED BEYOND THE REACH OF NORMAL HIGH WATER. GRAVEL WILL NOT BE PUSHED UP ON STREAM BANKS OR SLOPES UNLESS SPECIFICALLY AUTHORIZED IN WRITING, NOR SHALL ANY BE USED TO CONSTRUCT ANY DIKE, LEVEE, BERM OR OTHER OBSTRUCTION TO HIGH FLOWS. ALL WASTE MATERIAL (RUBBLE, SAND BLASTING AND CHIPPING WASTES AND RESIDUES, ETC.) RESULTING FROM CONSTRUCTION MUST BE COLLECTED AND MOVED TO AN APPROVED DISPOSAL AREA. NO MATERIAL SHALL BE ALLOWED TO ENTER, EITHER DIRECTLY OR INDIRECTLY, INTO ANY STREAM OR ANY FRESHWATER WETLAND.

ALL DISTURBED PORTIONS OF THE WORK AREA AND STREAM BANKS MUST BE GRADED TO A STABLE SLOPE, AND EITHER RIP-RAPPED OR PLANTED WITH SUITABLE GRASSES, SHRUBS OR LEGUMES, AND/OR SEEDED WITH A CONSERVATION TYPE GRASS MIXTURE AND MULCHES. MULCH SHALL BE MAINTAINED UNTIL A SUITABLE VEGETATIVE COVER HAS BEEN ESTABLISHED. LIME AND FERTILIZER SHALL BE USED AS REQUIRED.

STREAM PROTECTION NOTES:

TRIBUTARY TO ROE POND IS CLASSIFIED AS CLASS (C1S) BODY OF WATER

DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL CONDUCT OPERATIONS IN SUCH A MANNER AS TO PREVENT OR REDUCE TO A MINIMUM ANY DAMAGE TO ANY STREAM FROM POLLUTION BY DEBRIS, SEDIMENT, OR OTHER FOREIGN MATERIAL, OR FROM MANIPULATION OF EQUIPMENT AND/OR MATERIALS IN OR NEAR SUCH STREAMS. THE CONTRACTOR SHALL NOT RETURN DIRECTLY TO A STREAM ANY WATER WHICH HAS BEEN USED FOR WASH PURPOSES OR OTHER SIMILAR OPERATIONS WHICH CAUSE THIS WATER TO BECOME POLLUTED WITH SAND, SILT, CEMENT, OIL, OR OTHER IMPURITIES. IF THE CONTRACTOR USES WATER FROM A STREAM, THE CONTRACTOR SHALL CONSTRUCT AN INTAKE OR TEMPORARY DAM REQUIRED TO PROTECT AND MAINTAIN WATER RIGHTS AND TO SUSTAIN FISH LIFE DOWNSTREAM.

ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE ACOE NATIONWIDE PERMIT NO. 3 & 33, NYSDEC ARTICLE 15 STREAM DISTURBANCE PERMITS, ACOE AND APA PERMITS ARE PENDING.

IT IS ANTICIPATED THE CONTRACTOR SHALL HAVE IN-STREAM WORK COMPLETED IN THE PERIOD BETWEEN MAY 15TH AND OCTOBER 1ST. IT IS ANTICIPATED COFFERDAMS IN THE STREAM CHANNEL AND/OR STREAM DIVERSIONS OF THE CHANNEL SHALL NOT BE ALLOWED PRIOR TO MAY 15TH AND AFTER OCTOBER 1ST WITHOUT PRIOR WRITTEN APPROVAL FROM THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION. IF USED, COFFERDAMS AND STREAM DIVERSIONS SHALL BE SIZED WITH REGARD TO THE SEASONAL FLOW OF THE STREAM EXPECTED FOR THE TIME THEY ARE TO BE IN USE.

IF PUMPS ARE USED AT THE END OF THE WORK DAY OR BEFORE HEAVY ANTICIPATED FLOWS, THE CONTRACTOR SHALL ESTABLISH AN UNOBSTRUCTED CHANNEL AREA SUFFICIENT TO ACCOMMODATE THE FLOW. THE CONTRACTOR SHALL SUBMIT A PROCEDURE FOR APPROVAL TO THE ENGINEER-IN-CHARGE.

IF PROPOSING TO USE COFFERDAMS IN LIEU OF A TEMPORARY STREAM DIVERSION STRUCTURE, THE CONTRACTOR SHALL SUBMIT A COFFERDAM PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION. PAYMENT WILL BE MADE UNDER THE TEMPORARY STREAM DIVERSION STRUCTURE ITEM.

STONE APRONS AND SCOUR PROTECTION PLACED IN STREAMS OR RIVERS SHALL BE INSTALLED FLUSH WITH THE INVERT ELEVATION AND FILLED WITH NATIVE BED MATERIAL AND SUPPLEMENTED WITH SIMILARLY SIZED MATERIAL, IF NEEDED TO FILL INTERSTITIAL SPACES.

COFFERDAM NOTES:

WHEN A COFFERDAM IS USED, THE COST OF DEWATERING THE ENTIRE EXCAVATION, REGARDLESS OF THE SOURCE OF WATER, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WATERWAY DIVERSION STRUCTURE ITEM.

DEWATERING OF EXCAVATION SHALL BE ACCOMPLISHED BY PUMPING THE WATER TO AN APPROVED UPLAND VEGETATED AREA OUTSIDE OF THE STREAMBED AS SHOWN ON THE PLANS AND/OR APPROVED BY THE E.I.C. TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL, SUCH AS STRAW BALES OR APPROVED EQUAL, MAY BE REQUIRED AS DETERMINED BY THE ENGINEER-IN-CHARGE. NO SETTLEMENT BASIN SHALL BE CONSTRUCTED.

ORDINARY WATER IS ESTIMATED TO BE AT ELEVATION 1102.5. THIS IS DEFINED AS THE HIGHEST SURFACE WATER ELEVATION LIKELY TO BE ENCOUNTERED DURING ON CONSTRUCTION SEASON (OTHER THAN MAJOR FLOODS). IT IS ALWAYS LESS THAN THE ORDINARY HIGH WATER ELEVATION AND IT IS USUALLY AN OBSERVED ELEVATION RATHER THAN A COMPUTED ONE.

TREE REMOVALS:

THE CONTRACTOR SHALL USE CARE SO AS NOT TO REMOVE OR DAMAGE EXISTING TREES THAT ARE NOTED "TO REMAIN" OR ANY ADDITIONAL TREES BEYOND THE LIMITS OF WORK. SHOULD REMOVAL OR DAMAGE OCCUR TO ANY TREES THAT ARE BEYOND THE LIMITS OF WORK OR ANY TREES NOTED "TO REMAIN", THEY SHALL BE REPLACED IN-KIND BY THE CONTRACTOR, AT NO ADDITIONAL COST TO THE COUNTY.

UTILITY NOTES:

LOCATION OF UTILITIES, PUBLIC AND/OR PRIVATE, INDICATED ON THE PLANS AS EXISTING AND/OR TO BE CONSTRUCTED ARE APPROXIMATE ONLY. THEIR EXACT LOCATION SHALL BE DETERMINED IN THE FIELD. ADDITIONAL UTILITY LINES, WHETHER ABANDONED OR IN SERVICE, MAY EXIST AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT HIS OPERATIONS, AND TAKE NECESSARY PRECAUTIONS SUCH THAT INTERFERENCE WITH OR DAMAGE TO THESE OR OTHER FACILITIES DURING THE COURSE OF CONSTRUCTION IS PREVENTED.

THE FOLLOWING UTILITIES WILL BE ENCOUNTERED IN THE FIELD: NATIONAL GRID OVERHEAD ELECTRIC LINES, VERIZON COMMUNICATION LINES, AND TOWN OF MORIAH WATER MAIN.

THE OVERHEAD ELECTRIC LINES SHALL BE DE-ENERGIZED DURING CULVERT ERECTION OPERATIONS. CONTRACTOR TO COORDINATE WITH NATIONAL GRID AT LEAST 2 WEEKS PRIOR TO THE ANTICIPATED ERECTION DATE. TELECOMMUNICATION LINES SHALL REMAIN AND BE PROTECTED DURING ERECTION.

NATIONAL GRID CONTACTS:
ROBERT PALANGE, REGIONAL ACCOUNT SERVICES EAST
OFFICE: 518-761-5816
EMAIL: ROBERT.PALANGE@NATIONALGRID.COM

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CALL "DIG SAFELY" (1-800-962-7962) TO HAVE UNDERGROUND UTILITIES LOCATED.

HIGHWAY MAINTENANCE:

UPON COMPLETION AND ACCEPTANCE OF THIS CONTRACT, THE HIGHWAY AND BRIDGE WILL CONTINUE TO BE MAINTAINED BY THOSE AGENCIES WHICH HAD JURISDICTION PRIOR TO THIS CONTRACT.

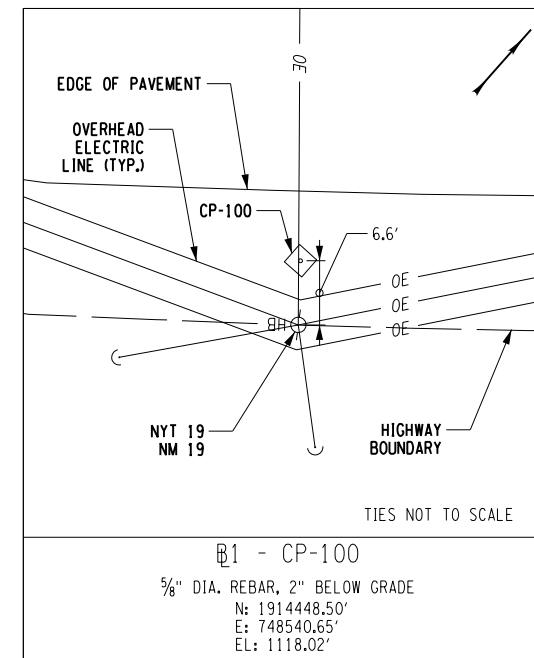
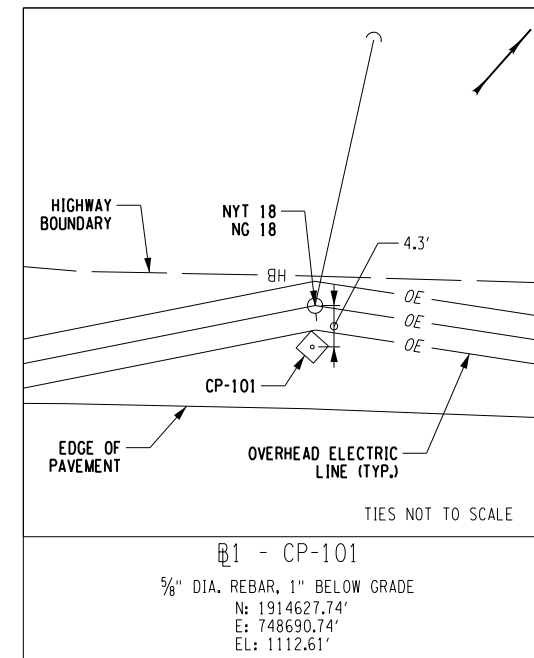


TABLE OF HORIZONTAL ALIGNMENT				
POINT	STATION	CURVE DATA	COORDINATE	
			NORTH	EAST
JOYCE ROAD				
POB	J 2+00.00	AZ 48°34'18.7" LENGTH = 193.31 FT	1914429.44	748483.95
POE	J 3+93.31		1914619.08	748707.50



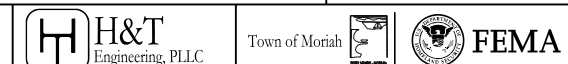
PREPARED BY: CHARLES TUTUNJIAN, P.E.
ON: 03/05/2026

ALTERED BY:
ON:



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	JOYCE ROAD OVER TRIBUTARY TO ROE POND	BRIDGES BIN TBD	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER DR 4814 PROJECT NUMBER: 760224
	CULVERT REPLACEMENT PROJECT				
	TOWN OF MORIAH			GENERAL NOTES, BASELINE TIES, & ALIGNMENT	DRAWING NO. GN-1
	COUNTY: ESSEX REGION: 1				SHEET NO. 5

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PROJECT MANAGER: C. TUTUNJIAN

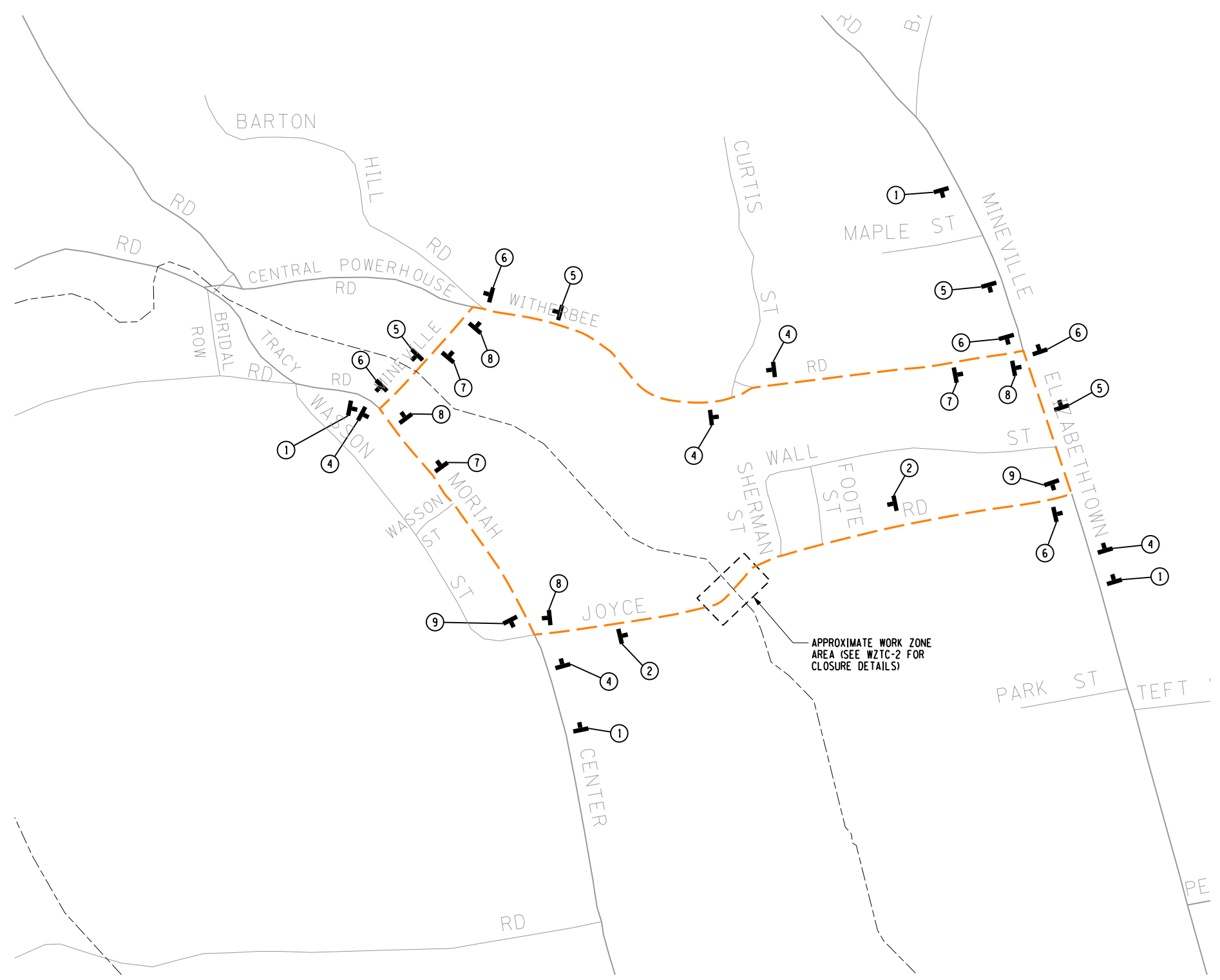
CHECKED BY: I. PENGU

DRAFTED BY: C. VICKERY

CHECKED BY: I. PENGU

DESIGNED BY: C. VICKERY

PROJECT MANAGER: C. TUTUNJIAN
 CHECKED BY: I. PENGU
 DRAFTED BY: C. VICKERY
 CHECKED BY: I. PENGU
 DESIGNED BY: C. VICKERY



LEGEND	
	- DETOUR SIGN LOCATION
	- DETOUR ROUTE

 W20-2A ①	GRID NORTH ①
 R11-3A ②	 ⑥
 R11-3A ③	 ⑦
 ④	 ⑧
 ⑤	 ⑨

PREPARED BY: CHARLES TUTUNJIAN, P.E.
 ON: 03/05/2026
 ALTERED BY:
 ON:



WORK ZONE TRAFFIC CONTROL - 1

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	JOYCE ROAD OVER TRIBUTARY TO ROE POND CULVERT REPLACEMENT PROJECT	BRIDGES BIN TBD	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED WORK ZONE TRAFFIC CONTROL - 1	CONTRACT NUMBER DR 4814 PROJECT NUMBER: 760224
	TOWN OF MORIAH COUNTY: ESSEX REGION: 1				DRAWING NO. WZTC-1 SHEET NO. 6

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NOTES:





- TYPE III BARRICADES USED TO CLOSE A TRAVEL LANE(S) OR ROADWAY SHALL BE SPACED UNIFORMLY ACROSS THE TRAVEL LANE(S) OR ROADWAY. THE NUMBER OF TYPE III BARRICADES REQUIRED SHALL BE THE NUMBER OF WHOLE UNITS DETERMINED BY DIVIDING THE WIDTH OF THE TRAVEL LANE(S) OR ROADWAY CLOSED (FT) BY 4 (FT). (FOR EXAMPLE, 15 FT. TRAVEL LANE / 4 FT = 3.75. THEREFORE 3 TYPE III BARRICADES REQUIRED.)

WORK ZONE TRAFFIC CONTROL NOTES:

- GENERAL NOTES:
 - WORK ZONE TRAFFIC CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 619 - WORK ZONE TRAFFIC CONTROL - OF THE NYSOT STANDARD SPECIFICATIONS, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES WITH REVISIONS 1 & 2, NYSOT STANDARD SHEETS 619 SERIES, AND ANY PROVISIONS CONTAINED IN THESE PLANS.
 - THE TYPICAL DETAILS DEPICTED ON THE STANDARD SHEETS, THE TRAFFIC CONTROL PLANS, AND IN THE MUTCD REFLECT THE MINIMUM REQUIREMENTS. ADDITIONAL SIGNS AND/OR TRAFFIC CONTROL DEVICES MAY BE REQUIRED AS DETERMINED BY THE ENGINEER, COST TO BE INCLUDED IN THE PRICE BID FOR THE APPROPRIATE ITEMS. IF AT ANY TIME THE ENGINEER DETERMINES THAT TRAFFIC IS NOT BEING PROPERLY MAINTAINED WITHIN A WORK ZONE, THE CONTRACTOR SHALL IMMEDIATELY CORRECT THE INDICATED DEFICIENCY, AOB.
- THE CONTRACTOR MUST SUBMIT TO THE ENGINEER, IN WRITING, PROPOSED REVISIONS TO THE TRAFFIC CONTROL PLAN FOR REVIEW AND APPROVAL BY THE COUNTY FIVE (5) WORKING DAYS PRIOR TO THE PLANNED IMPLEMENTATION OF SUCH PROPOSED REVISIONS, EXCEPT FOR CHANGES THAT ALTER THE BASIC CONCEPT OF THE TRAFFIC CONTROL PLAN. SUCH CONCEPTUAL CHANGES MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL BY THE COUNTY THIRTY (30) WORKING DAYS PRIOR TO IMPLEMENTATION OF SUCH REVISIONS.
- THE CONTRACTOR SHALL PROVIDE THE ENGINEER, IN WRITING, WITH THE NAMES, ADDRESSES, AND TELEPHONE NUMBERS OF STAFF WHO ARE AUTHORIZED TO SECURE LABOR, MATERIALS, AND EQUIPMENT FOR EMERGENCY REPAIRS OUTSIDE NORMAL WORKING HOURS. THE ENGINEER WILL PROVIDE THE SUBMITTED INFORMATION TO NYSOT, REGIONAL MANAGEMENT, THE NEW YORK STATE POLICE, THE RESIDENT ENGINEER, THE TOWN, THE COUNTY, AND THE LOCAL POLICE.
- PRIOR TO THE START OF ANY WORK OPERATIONS, ALL RELATED WORK FOR PROPOSED WORK ZONE TRAFFIC CONTROL, AOB, SHALL BE COMPLETE. THIS INCLUDES BUT IS NOT LIMITED TO, ALL SIGNS, SIGNALS, PAVEMENT MARKINGS, BARRIERS, DELINEATION (CONES, DRUMS, ETC.) FLAGGERS, PAVEMENT MODIFICATIONS, AND ANY OTHER RELATED WORK.

- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SAFE AND ADEQUATE INGRESS AND EGRESS TO AND FROM INTERSECTION HIGHWAYS, HOMES AND COMMERCIAL ESTABLISHMENTS AT ALL TIMES TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH ITEM 619.01 SECTION 619-3.02(C).
- STANDARD SHEETS 619-10, 11, AND 12 CRITERIA:
 - PRECONSTRUCTION POSTED SPEED LIMIT: UNPOSTED
 - TYPE OF ROADWAY: LOCAL ROAD
 - SETTING: RURAL

LEGEND:

-  SIGNS, PAYMENT UNDER ITEM 619.01
-  TEMPORARY CONCRETE BARRIER (UNPINNED) COST TO BE INCLUDED IN ITEM 619.01
-  TYPE III BARRICADE, ITEM 619.04
-  LIMITS OF EXCAVATION

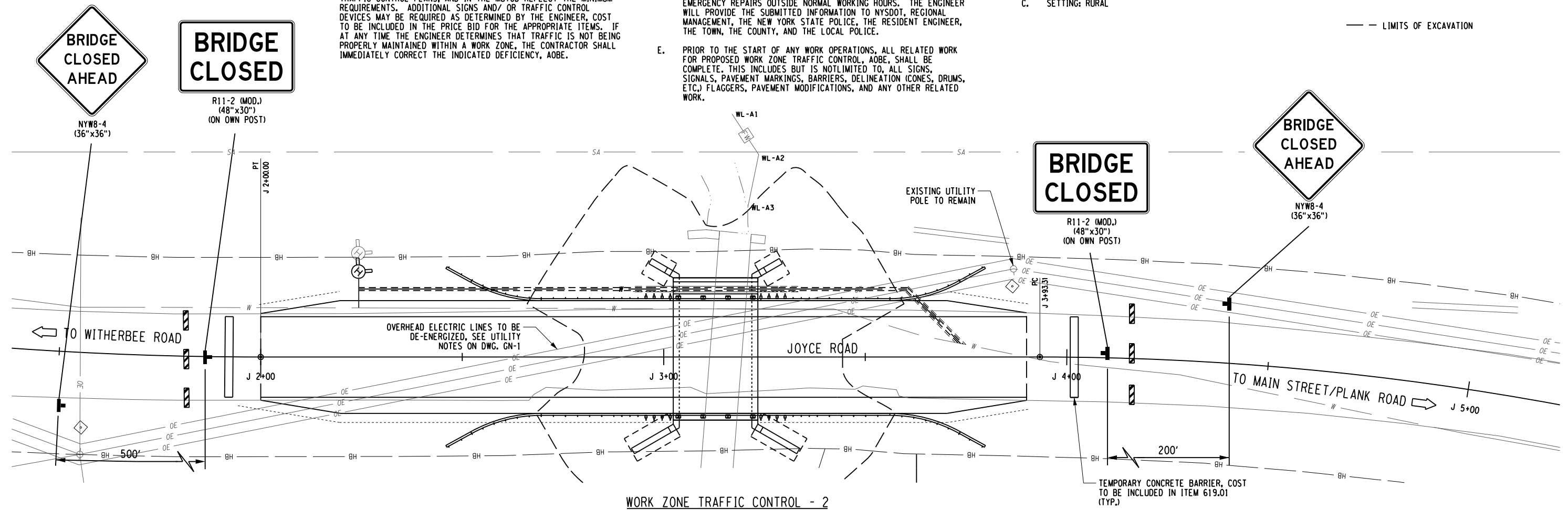
PROJECT MANAGER: C. TUTUNJIAN

CHECKED BY: I. PENGU

DRAFTED BY: C. VICKERY

CHECKED BY: I. PENGU

DESIGNED BY: C. VICKERY



WORK ZONE TRAFFIC CONTROL - 2
SCALE: 1" = 25'-0"

3. TIME/DATE RESTRICTIONS:

- THE CONTRACTOR SHALL NOT BEGIN WARMING UP EQUIPMENT BEFORE THE SCHEDULED START TIMES, NOR KEEP THE EQUIPMENT RUNNING AFTER THE SCHEDULED QUIT TIMES. MAINTENANCE OF EQUIPMENT ON SITE WHICH REQUIRES THE EQUIPMENT TO BE RUNNING SHALL BE APPROVED BY THE ENGINEER IF THE MAINTENANCE IS PERFORMED OUTSIDE THE WORK HOUR RESTRICTIONS.
- THERE SHALL BE NO WORK OPERATIONS ALLOWED BEFORE SUNRISE OR AFTER SUNSET WITHOUT APPROVAL OF THE COUNTY/ENGINEER AND AN APPROVED LIGHTING PLAN. THE LIGHTING PLAN SHALL BE APPROVED PRIOR TO THE START OF WORK BY THE ENGINEER.

4. CONSTRUCTION VEHICLES, EQUIPMENT, AND MATERIALS:

- THE CLEAR ROADSIDE AREA IS DEFINED AS THE AREA WITHIN 10 FEET OF THE EDGE OF THE TRAVEL WAY.
- CONTRACTOR VEHICLES NOT IN USE AND PRIVATE VEHICLES OWNED BY CONTRACTOR'S EMPLOYEES SHALL NOT BE PARKED IN THE CLEAR ROADSIDE AREA, OR ANY OTHER LOCATION CONSIDERED BY THE ENGINEER TO BE A HAZARD. THIS REQUIREMENT IS NOT LIMITED TO THE CONTRACT LIMITS.
- NO MATERIAL IS TO BE STORED WITHIN THE CLEAR ROADSIDE AREA WITHOUT THE APPROVAL OF THE ENGINEER.
- VEHICLES BELONGING TO THE CONTRACTOR OR THE CONTRACTOR'S EMPLOYEES SHALL NOT BE PARKED IN A MANNER WHICH OBSTRUCTS SIGNS, BARRIERS, BARRICADES, OR OTHER TRAFFIC CONTROL DEVICES.
- VEHICLES BELONGING TO THE CONTRACTOR OR THE CONTRACTOR'S EMPLOYEES SHALL NOT BE PARKED IN A MANNER WHICH INTERFERES WITH ACCESS TO ADJUTING PROPERTIES.
- THE CONTRACTOR SHALL PLAN AND INCORPORATE ACCESS POINTS INTO THE WORK ZONE SUCH THAT, TO THE EXTENT PRACTICAL, THE CONTRACTOR'S VEHICLES ENTERING AND LEAVING THE WORK ZONE SHALL NOT IMPEDE THE MOVEMENT OF THROUGH TRAFFIC IN THE ADJACENT OPEN LANES.

5. CHANNELIZING DEVICES:

- WHERE POSSIBLE ALL CHANNELIZING AND GUIDING DEVICES ARE TO BE PLACED SO AS TO PROVIDE A MINIMUM 1 FOOT LATERAL CLEARANCE TO THE TRAVELED WAY.
 - THE CONTRACTOR SHALL NOT MIX CHANNELIZATION DEVICES IN A LINEAR CLOSURE OR TAPER I.E. CONES, VERTICAL PANELS AND DRUMS SHALL NOT BE USED IN THE SAME TAPER OR CLOSURE. HOWEVER, DIFFERENT CHANNELIZATION DEVICES MAY BE USED IN DIFFERENT AREAS OF A PROJECT.
 - REFLECTORIZED PLASTIC DRUM DELINEATORS SHALL BE USED AT HAZARDOUS LOCATIONS DETERMINED BY THE ENGINEER. DELINEATORS SHALL REMAIN IN PLACE UNTIL SATISFACTORY PROTECTION IS PROVIDED. DELINEATORS SHALL BE SPACED AT A DISTANCE NOT TO EXCEED 25 FEET, OR AS DIRECTED BY THE ENGINEER.
- 6. FLAGGING AND TRAFFIC CONTROL:**
- FLAGGER SIGNS SHALL NOT BE USED FOR BRIEF PERIODS OF INCIDENTAL FLAGGING, AOB. FLAGGER SIGNS SHALL NOT BE VISIBLE WHEN FLAGGERS ARE NOT BEING USED.

7. SIGNS AND DEVICES:

- WHEN A SIDE ROAD OR DRIVEWAY INTERSECTS THE ROADWAY WITHIN A WORK ZONE TRAFFIC CONTROL AREA, ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES AND/OR FLAGGERS SHALL BE PLACED AS NEEDED. ADDITIONAL FLAGGERS SHALL BE LOCATED AS NEEDED AT ALL INTERSECTIONS AND COMMERCIAL DRIVEWAYS LOCATED WITHIN OR NEAR THE ACTIVE WORK SPACE.
- DIAMOND-SHAPED ADVANCE WARNING SIGNS SHALL BE USED FOR ALL ADVANCE WARNING SIGNS SHOWN IN PART 6 OF THE MUTCD. COLOR REQUIREMENTS SHALL BE BLACK TEXT ON ORANGE BACKGROUND.
- THE CORRECT SPACING OF SIGNS, EITHER PERMANENT OR TEMPORARY MUST BE MAINTAINED AT ALL TIMES IN ACCORDANCE WITH THE MUTCD UNLESS SHOWN OTHERWISE ON THE PLANS. ALL SIGNS INCLUDING GUIDE SIGNS SHALL INDICATE ACTUAL CONDITIONS AT ALL TIMES AND SHALL BE COVERED, MOVED, REMOVED, OR CHANGED IMMEDIATELY AS ORDERED BY THE ENGINEER.
- THE LOCATION OF THE SIGNS SHOWN ON THE WORK ZONE TRAFFIC CONTROL PLANS AND DETAILS MAY BE ADJUSTED BASED ON SIGHT DISTANCE AND OTHER CONSIDERATIONS. THE FINAL LOCATIONS OF SIGNS ARE SUBJECT TO APPROVAL OF THE ENGINEER.
- ANY EXISTING SIGNS, INCLUDING OVERHEAD SIGNS, WHICH CONFLICT WITH THE TEMPORARY TRAFFIC CONTROL SIGNS LAYOUT SHALL BE COVERED, REMOVED, STORED OR RESET, AS APPROVED BY THE ENGINEER. ALL APPROPRIATE EXISTING SIGNS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AND/OR LOCATION UNLESS OTHERWISE REPLACED IN THIS CONTRACT.
- SIGNS AT OR NEAR INTERSECTIONS SHALL BE PLACED SO THAT THEY DO NOT OBSTRUCT A MOTORIST'S LINE OF SIGHT.
- ALL WARNING AND REGULATORY SIGNS SHALL BE POSTED ON BOTH SIDES OF ONE-WAY STREETS. IN CASES WHERE LANE RESTRICTIONS REDUCE THE TRAVEL LANE TO ONE LANE, SIGNS SHALL BE POSTED ON THE RIGHT SIDE OF THE ACTIVE TRAVEL LANE, UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.
- THE DIMENSIONS OF WORK ZONE TRAFFIC CONTROL SIGNS TO BE USED FOR THIS PROJECT ARE DESCRIBED IN THE MUTCD AND THE NYSOT STANDARD SHEET SERIES 619.

PREPARED BY: CHARLES TUTUNJIAN, P.E.
ON: 03/05/2026

ALTERED BY:
ON:



AS-BUILT REVISIONS	JOYCE ROAD OVER TRIBUTARY TO ROE POND
DESCRIPTION OF ALTERATIONS:	CULVERT REPLACEMENT PROJECT
	TOWN OF MORIAH
	COUNTY: ESSEX REGION: 1

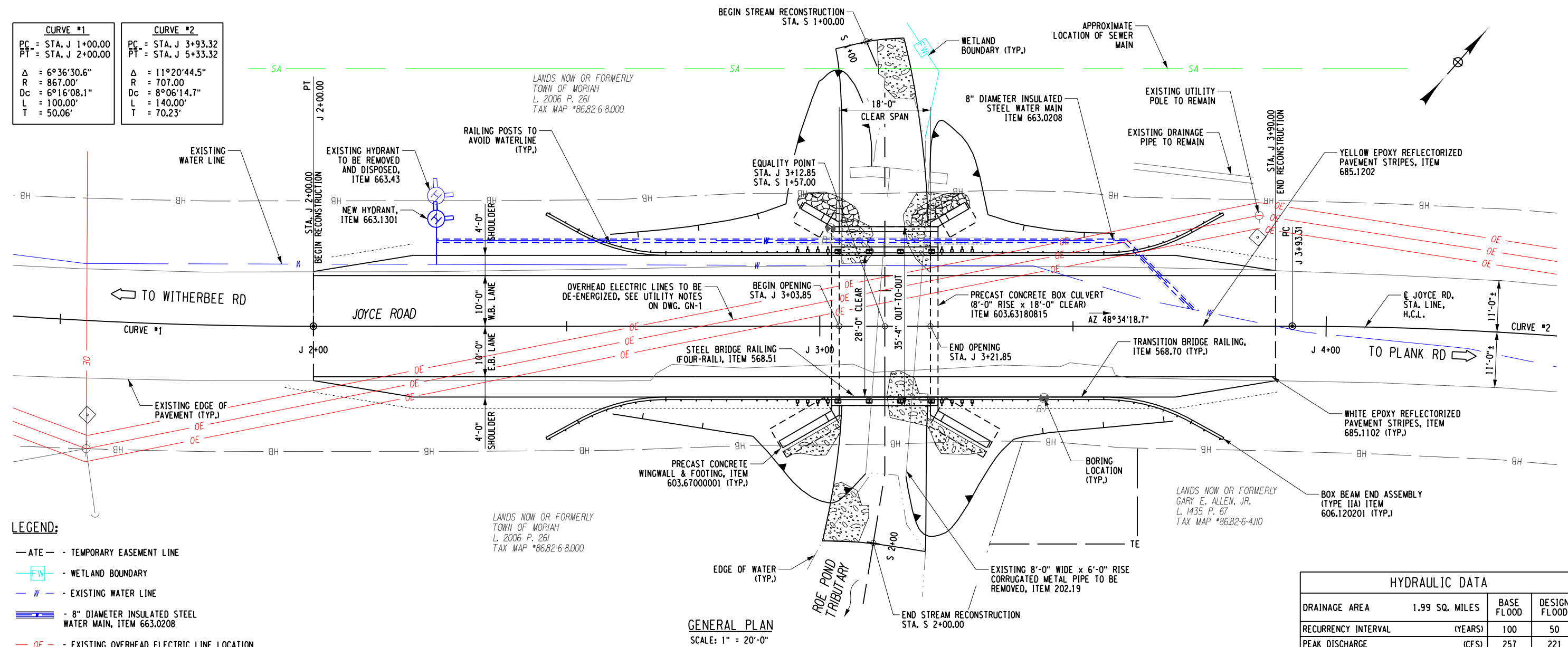
BRIDGES	BIN TBD	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER DR 4814
			WORK ZONE TRAFFIC CONTROL - 2	PROJECT NUMBER: 760224
				DRAWING NO. WZTC-2
				SHEET NO. 7

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

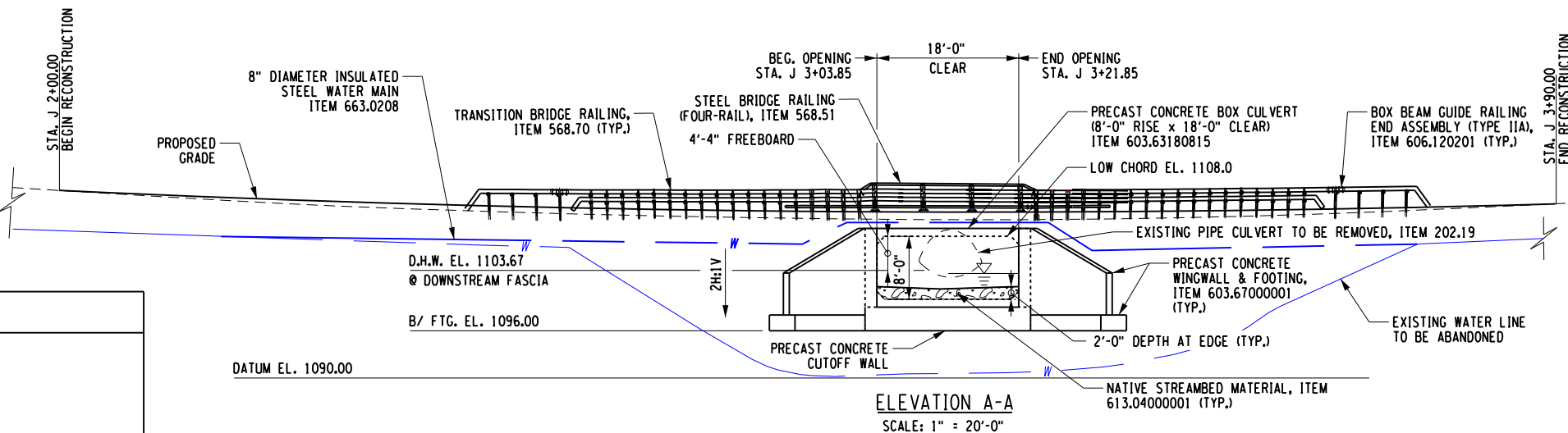


PROJECT MANAGER: C. TUTUNJIAN
 CHECKED BY: I. PENGU
 DRAFTED BY: C. VICKERY
 CHECKED BY: I. PENGU
 DESIGNED BY: C. VICKERY

CURVE #1	CURVE #2
PC = STA. J 1+00.00	PC = STA. J 3+93.32
PT = STA. J 2+00.00	PT = STA. J 5+33.32
$\Delta = 6^\circ 36' 30.6''$	$\Delta = 11^\circ 20' 44.5''$
R = 867.00'	R = 707.00'
Dc = 6°16'08.1"	Dc = 8°06'14.7"
L = 100.00'	L = 140.00'
T = 50.06'	T = 70.23'



- LEGEND:**
- ATE - TEMPORARY EASEMENT LINE
 - FW - WETLAND BOUNDARY
 - W - EXISTING WATER LINE
 - 8" DIAMETER INSULATED STEEL WATER MAIN, ITEM 663.0208
 - OE - EXISTING OVERHEAD ELECTRIC LINE LOCATION
 - OE - RELOCATED OVERHEAD ELECTRIC LINE LOCATION
 - SA - EXISTING BURIED SEWER MAIN
 - FILL LINE
 - CUT LINE
 - NATIVE STREAMBED MATERIAL, ITEM 613.04000001
 - STONE FILLING (MEDIUM), ITEM 620.04
 - INDICATES BORING LOCATION & DESIGNATION



HYDRAULIC DATA			
DRAINAGE AREA	1.99 SQ. MILES	BASE FLOOD	DESIGN FLOOD
RECURRENCE INTERVAL	(YEARS)	100	50
PEAK DISCHARGE	(CFS)	257	221
HIGH WATER ELEVATION AT POINT OF MAX. BACKWATER	EXISTING	1107.22	1107.08
	PROPOSED	1103.85	1103.67
FREEBOARD PROVIDED (FT)	EXISTING	2.9	3.0
	PROPOSED	4.2	4.3
AVG. VELOCITY THRU STRUCT. @ DESIGN FLOOD	8.8 FT./SEC.		

PREPARED BY: CHARLES TUTUNJIAN, P.E.
 ON: 03/05/2026
 ALTERED BY: ON:

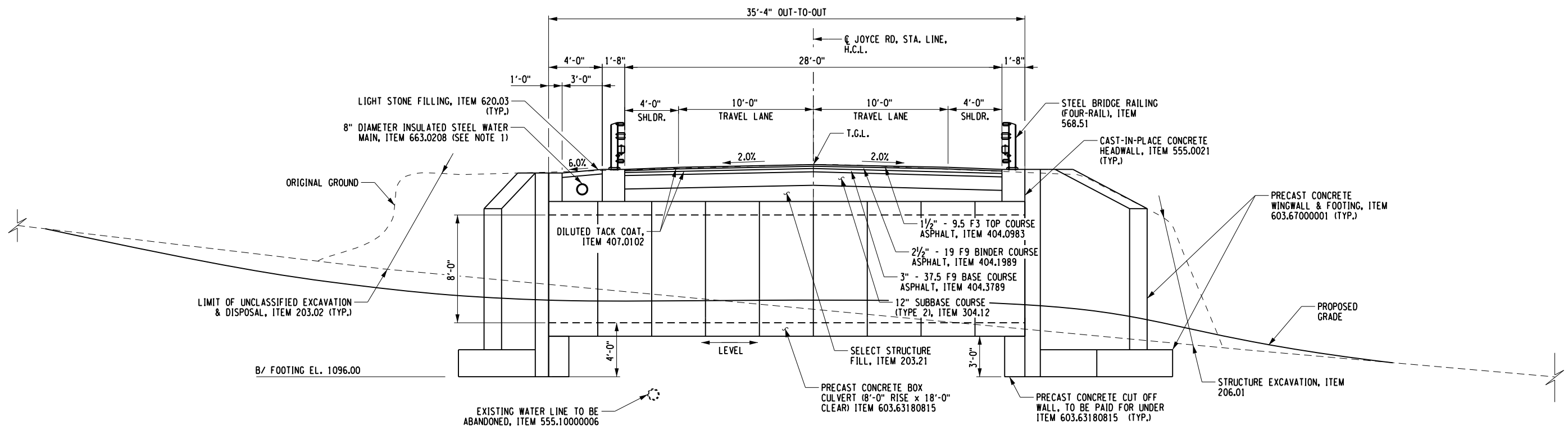


AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	JOYCE ROAD OVER TRIBUTARY TO ROE POND	BRIDGES BIN TBD	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER DR 4814
	CULVERT REPLACEMENT PROJECT				PROJECT NUMBER: 760224
	TOWN OF MORIAH				DRAWING NO. GP-1
COUNTY: ESSEX	REGION: 1				SHEET NO. 8

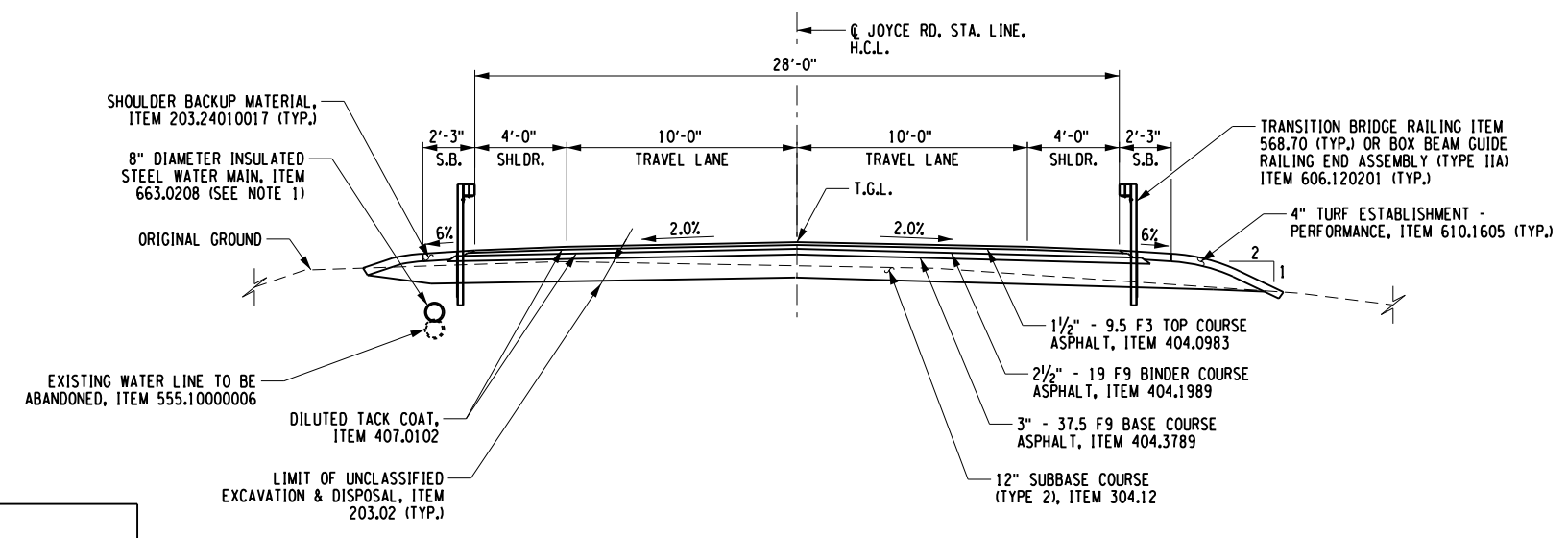
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PROJECT MANAGER: C. TUTUNJIAN
 CHECKED BY: I. PENGU
 DRAFTED BY: C. VICKERY
 CHECKED BY: I. PENGU
 DESIGNED BY: C. VICKERY



TYPICAL BRIDGE SECTION
SCALE: 1/8" = 1'-0"



TYPICAL ROADWAY APPROACH SECTION
SCALE: 1/8" = 1'-0"

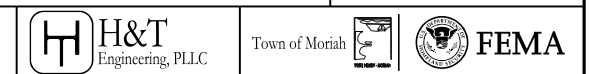
NOTES:
1. SEE DWGS. ST-7 TO ST-10 FOR WATER MAIN DETAILS.

PREPARED BY: CHARLES TUTUNJIAN, P.E.
ON: 03/05/2026
ALTERED BY: ON:



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	JOYCE ROAD OVER TRIBUTARY TO ROE POND	BRIDGES BIN TBD	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER DR 4814
	CULVERT REPLACEMENT PROJECT				PROJECT NUMBER: 760224
	TOWN OF MORIAH			TYPICAL SECTIONS	DRAWING NO. ST-1
	COUNTY: ESSEX REGION: 1				SHEET NO. 9

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



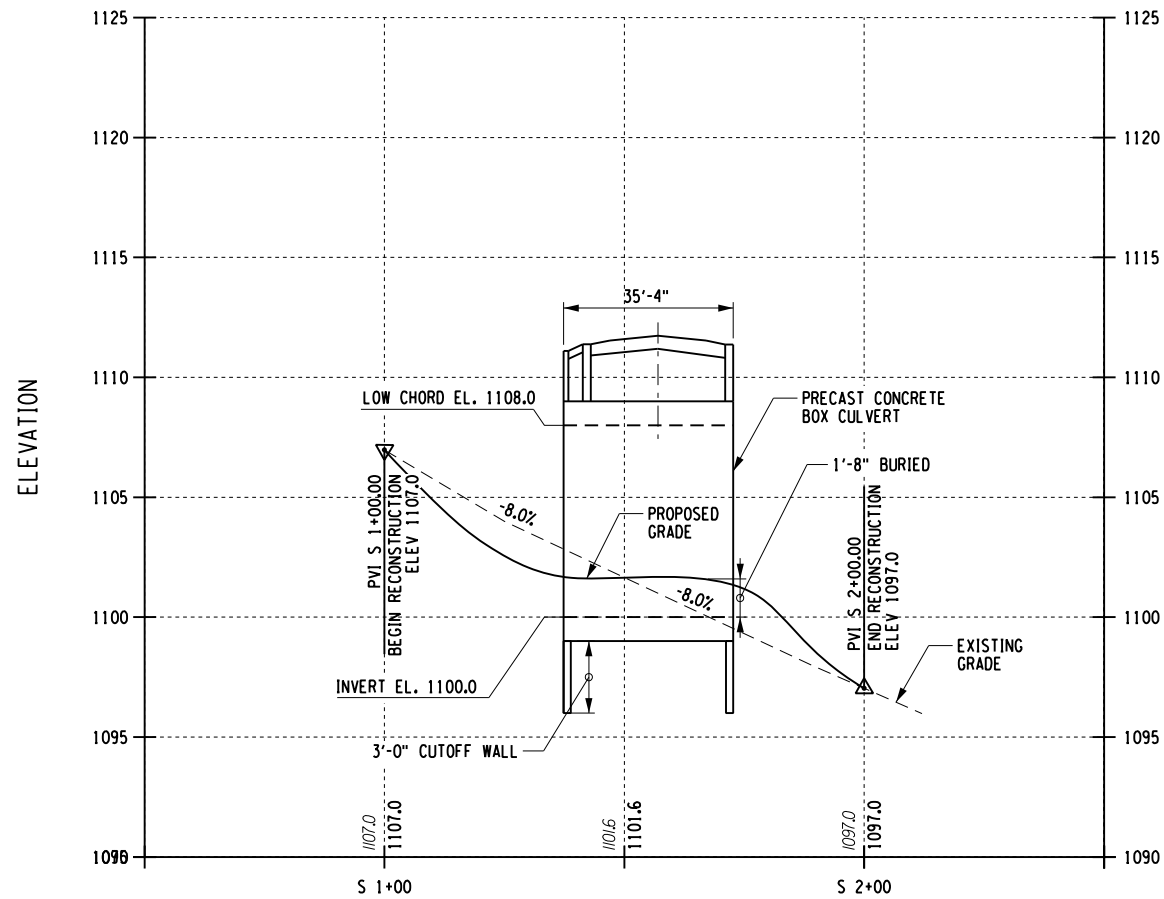
PROJECT MANAGER: C. TUTUNJIAN

CHECKED BY: I. PENGU

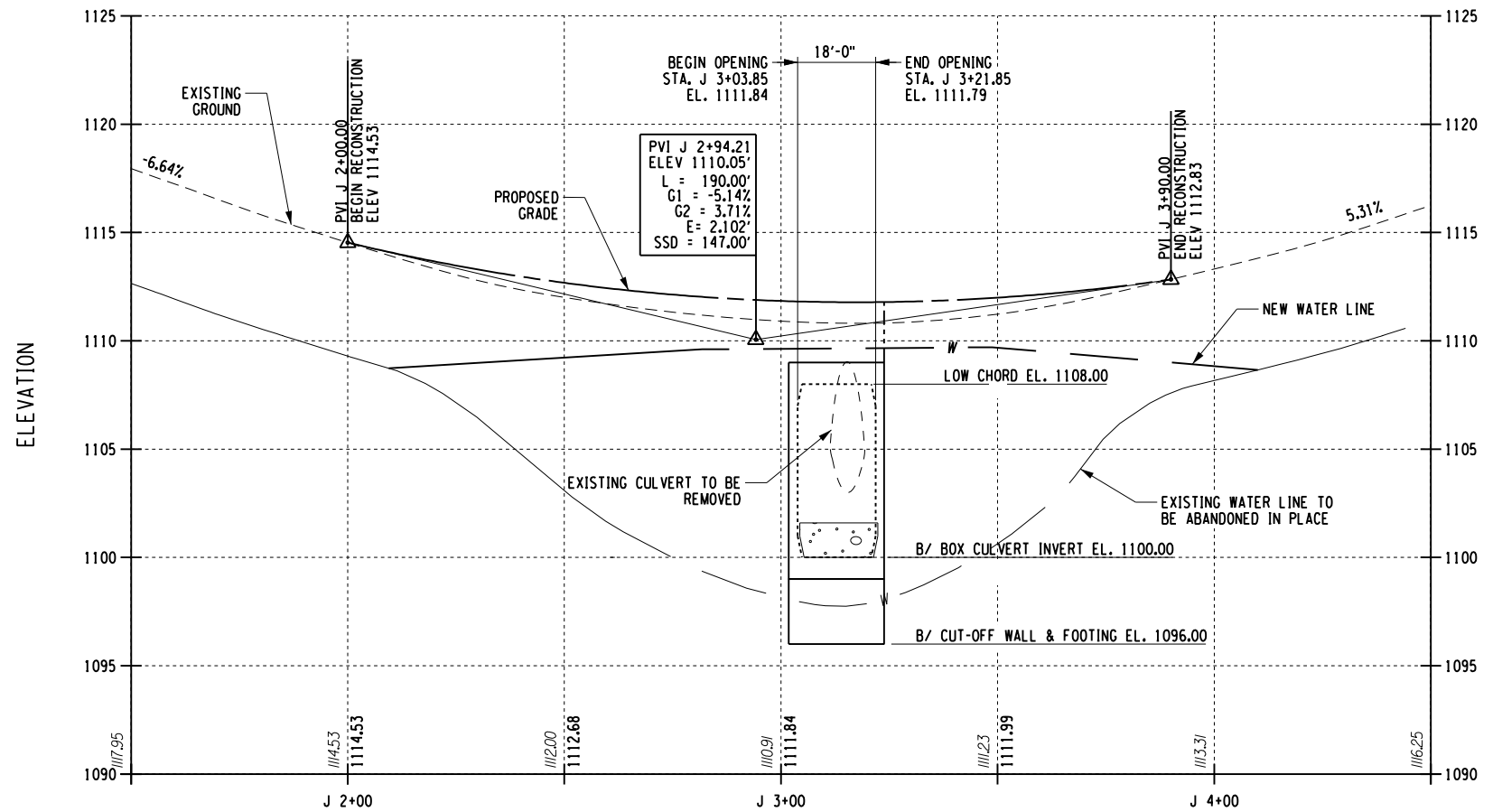
DRAFTED BY: C. VICKERY

CHECKED BY: I. PENGU

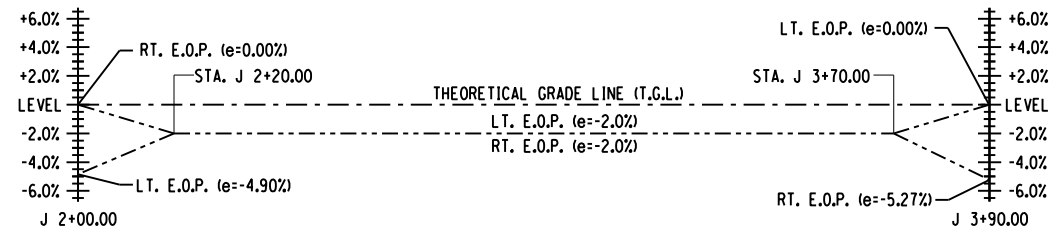
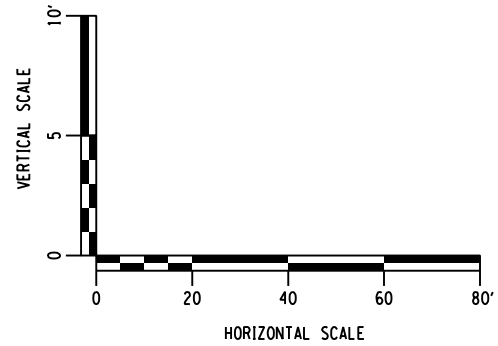
DESIGNED BY: C. VICKERY



STREAM PROFILE



ROADWAY PROFILE



BANKING DIAGRAM

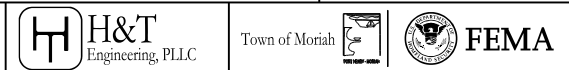
PREPARED BY: CHARLES TUTUNJIAN, P.E.
ON: 03/05/2026

ALTERED BY:
ON:

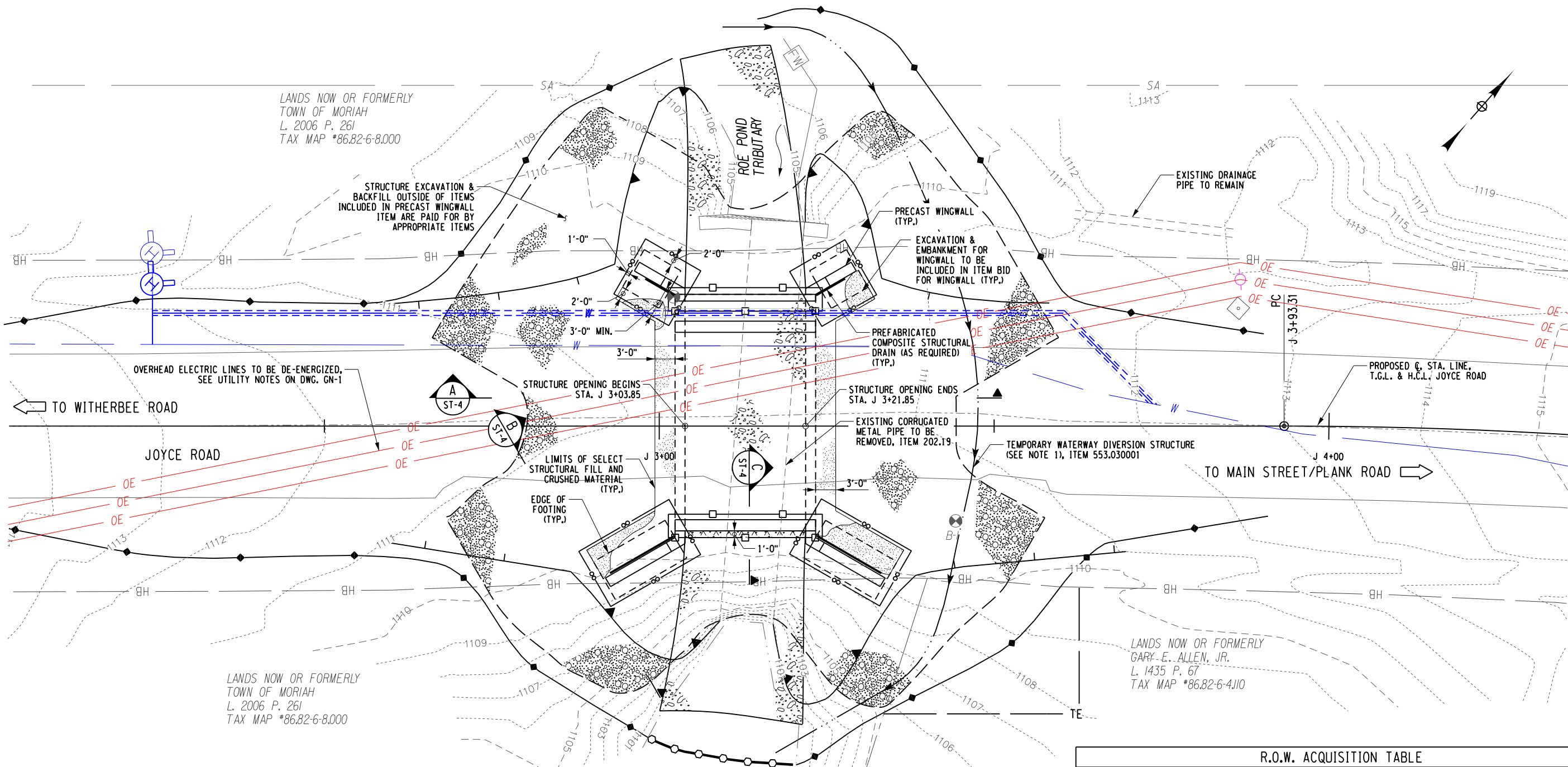


AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	JOYCE ROAD OVER TRIBUTARY TO ROE POND	BRIDGES BIN TBD	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER DR 4814
	CULVERT REPLACEMENT PROJECT				PROJECT NUMBER: 760224
	TOWN OF MORIAH			PROFILE	DRAWING NO. ST-2
	COUNTY: ESSEX REGION: 1				SHEET NO. 10

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



PROJECT MANAGER: C. TUTUNJIAN
 CHECKED BY: I. PENGU
 DRAFTED BY: C. VICKERY
 CHECKED BY: I. PENGU
 DESIGNED BY: C. VICKERY



EARTHWORK AND EROSION CONTROL PLAN
SCALE: 1/16" = 1'-0"

NOTES:
 1. CONTRACTOR TO TAKE MEASURES TO NOT DAMAGE EXISTING WATER LINE DURING EXCAVATION AND PROTECT THE WATER LINE FROM DAMAGE IN THE AREA OF THE PROPOSED STREAM DIVERSION.

LEGEND:

- NATIVE STREAMBED MATERIAL, ITEM 613.04000001
- EMBANKMENT IN PLACE, ITEM 203.03
- SELECT STRUCTURE FILL, ITEM 203.21
- SUBBASE COURSE, TYPE 1, ITEM 304.11
- PREFABRICATED COMPOSITE STRUCTURAL DRAIN, ITEM 207.26
- SILT FENCE, ITEM 209.13
- TURBIDITY CURTAIN, ITEM 209.1501
- CUT LINE (FINAL CONDITION)
- FILL LINE (FINAL CONDITION)
- TEMPORARY WATERWAY DIVERSION STRUCTURE, ITEM 553.030001
- LIMITS OF STRUCTURE EXCAVATION, ITEM 206.01
- TRENCH AND CULVERT EXCAVATION, ITEM 206.0201
- WITHIN THESE LINES, EXCAVATE AND BACKFILL IN ACCORDANCE WITH THE ITEMS INDICATED, PAYMENT FOR ALL ITEMS WITHIN THESE LINES SHALL BE INCLUDED IN THE PRICE BID FOR THE PRECAST WINGWALL ITEM
- 8" DIAMETER INSULATED STEEL WATER MAIN, ITEM 663.0208

R.O.W. ACQUISITION TABLE					
PARCEL NO.	OWNER	ACQUISITION TYPE	ACQUISITION TYPE (SF)	PARCEL SIZE (SF)	PERCENTAGE OF ACQUISITION
86.82-6-4.110	GARY E. ALLEN JR.	TEMPORARY EASEMENT (TE)	515	1159132	0.5%

PREPARED BY: CHARLES TUTUNJIAN, P.E.
ON: 03/05/2026

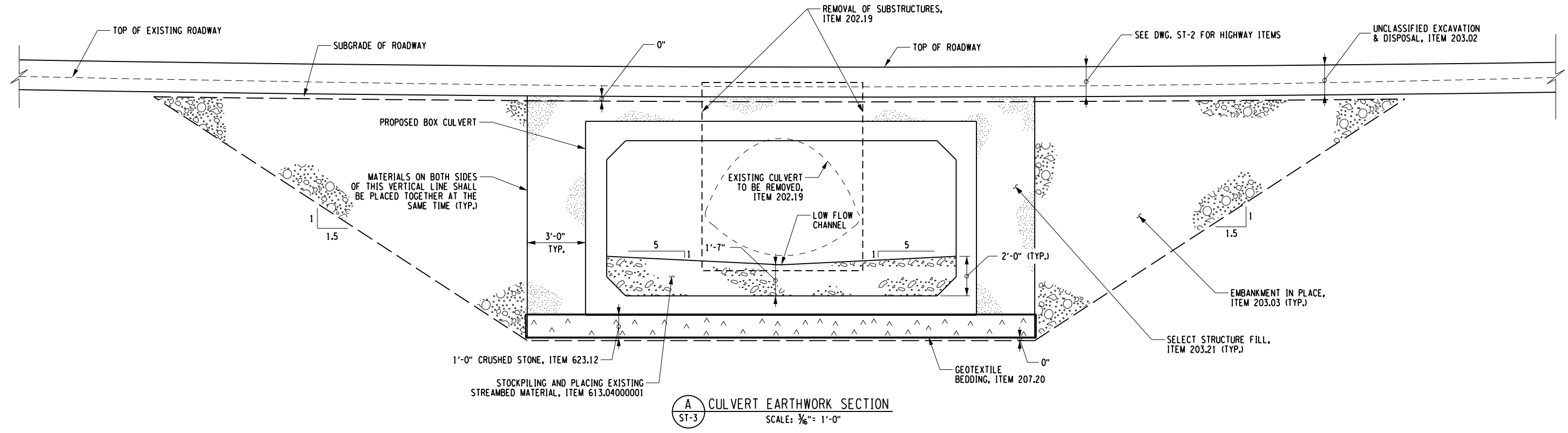
ALTERED BY:
ON:



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	JOYCE ROAD OVER TRIBUTARY TO ROE POND	BRIDGES BIN TBD	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER DR 4814
	CULVERT REPLACEMENT PROJECT				PROJECT NUMBER: 760224
TOWN OF MORIAH	REGION: 1	EARTHWORK AND EROSION CONTROL PLAN			DRAWING NO. ST-3
COUNTY: ESSEX					SHEET NO. 11

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

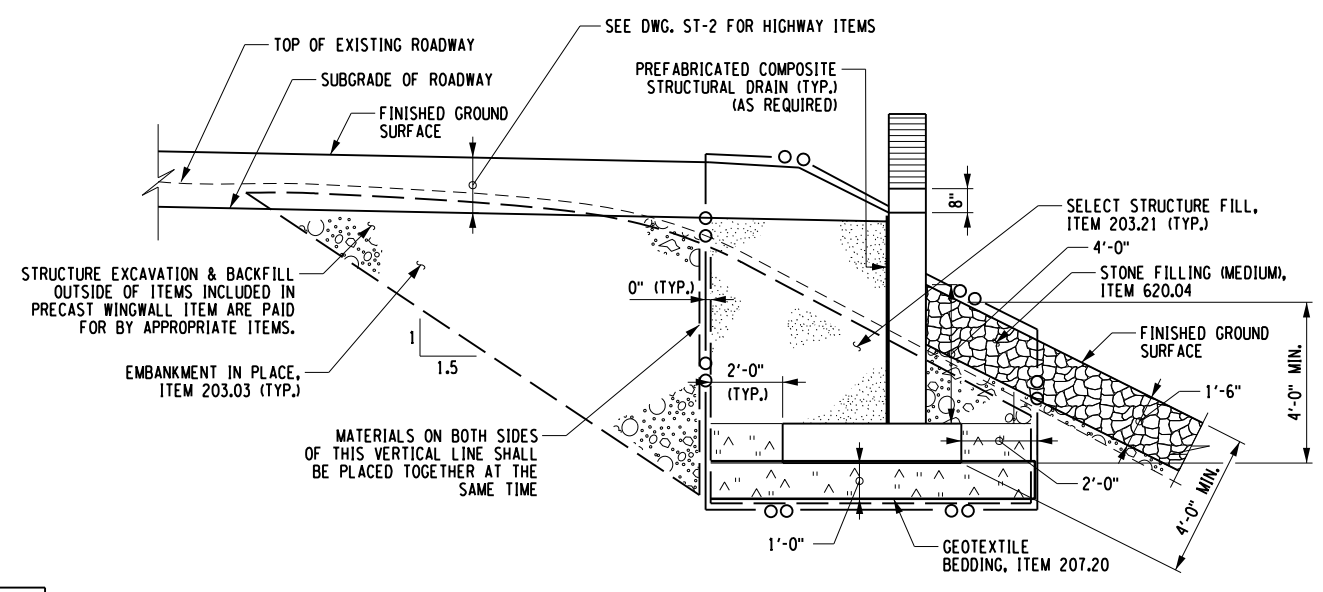
PROJECT MANAGER: C. TUTUNJIAN
 CHECKED BY: I. PENGU
 DRAFTED BY: C. VICKERY
 CHECKED BY: I. PENGU
 DESIGNED BY: C. VICKERY



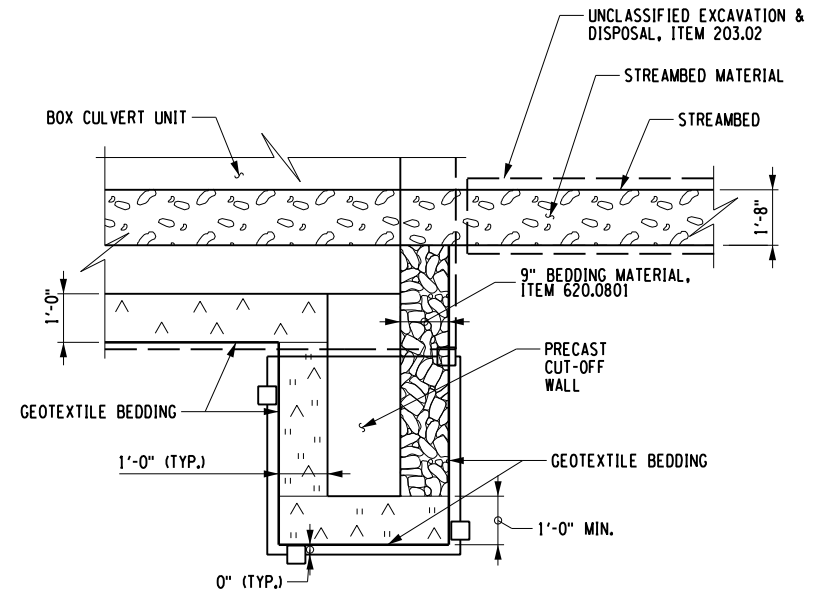
A CULVERT EARTHWORK SECTION
 ST-3 SCALE: 3/16" = 1'-0"

LEGEND:

- STOCKPILING AND PLACING EXISTING STREAM BED MATERIALS, ITEM 613.04000001
- EMBANKMENT IN PLACE, ITEM 203.03
- SELECT STRUCTURE FILL, ITEM 203.21
- SUBBASE COURSE, TYPE 1, ITEM 304.11
- CRUSHED STONE, ITEM 623.12
- STONE FILLING (MEDIUM), ITEM 620.04
- BEDDING MATERIAL, ITEM 620.0801
- LIMITS OF STRUCTURE EXCAVATION, ITEM 206.01
- TRENCH AND CULVERT EXCAVATION, ITEM 206.0201
- WITHIN THESE LINES, EXCAVATE AND BACKFILL IN ACCORDANCE WITH THE ITEMS INDICATED, PAYMENT FOR ALL ITEMS WITHIN THESE LINES SHALL BE INCLUDED IN THE PRICE BID FOR THE PRECAST WINGWALL ITEM



B WINGWALL EARTHWORK SECTION
 ST-3 SCALE: 3/16" = 1'-0"



C PRECAST CUT-OFF WALL SECTION
 ST-3 NOT TO SCALE

PREPARED BY: CHARLES TUTUNJIAN, P.E.
 ON: 03/05/2026
 ALTERED BY:
 ON:

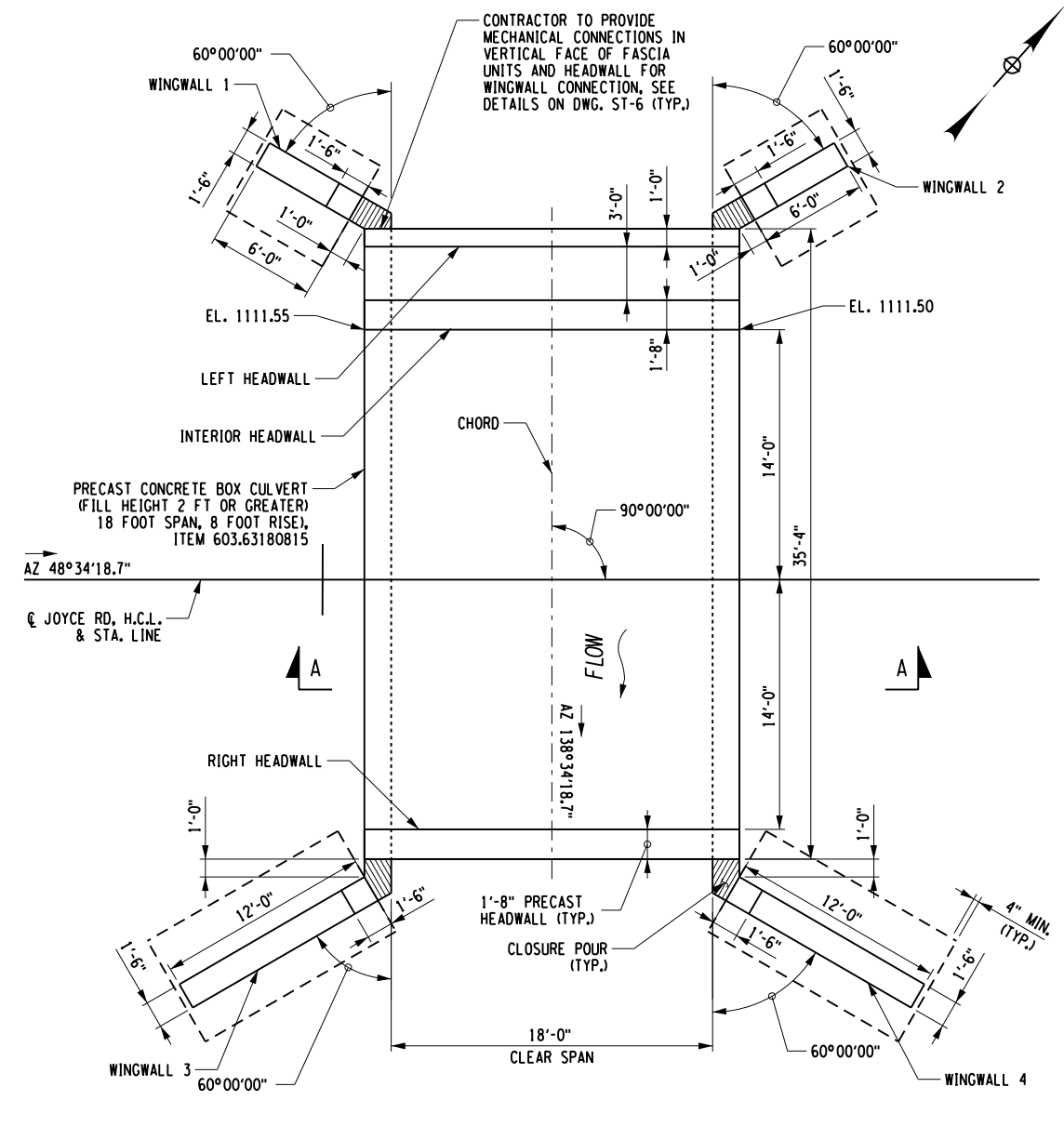


AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	JOYCE ROAD OVER TRIBUTARY TO ROE POND CULVERT REPLACEMENT PROJECT	BRIDGES BIN TBD	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER DR 4814 PROJECT NUMBER: 760224
	TOWN OF MORIAH COUNTY: ESSEX REGION: 1	EARTHWORK SECTIONS		DRAWING NO. ST-4 SHEET NO. 12	

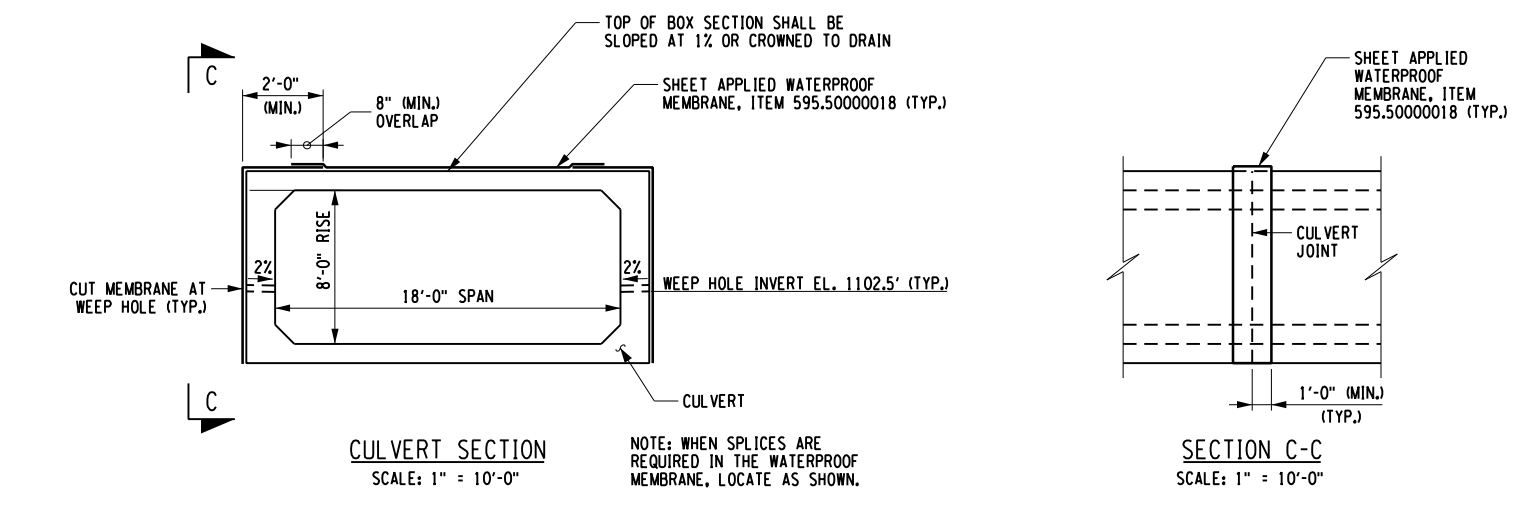
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PROJECT MANAGER: C. TUTUNJIAN
 CHECKED BY: I. PENGU
 DRAFTED BY: C. VICKERY
 CHECKED BY: I. PENGU
 DESIGNED BY: C. VICKERY



CULVERT PLAN
SCALE: 1" = 10'-0"

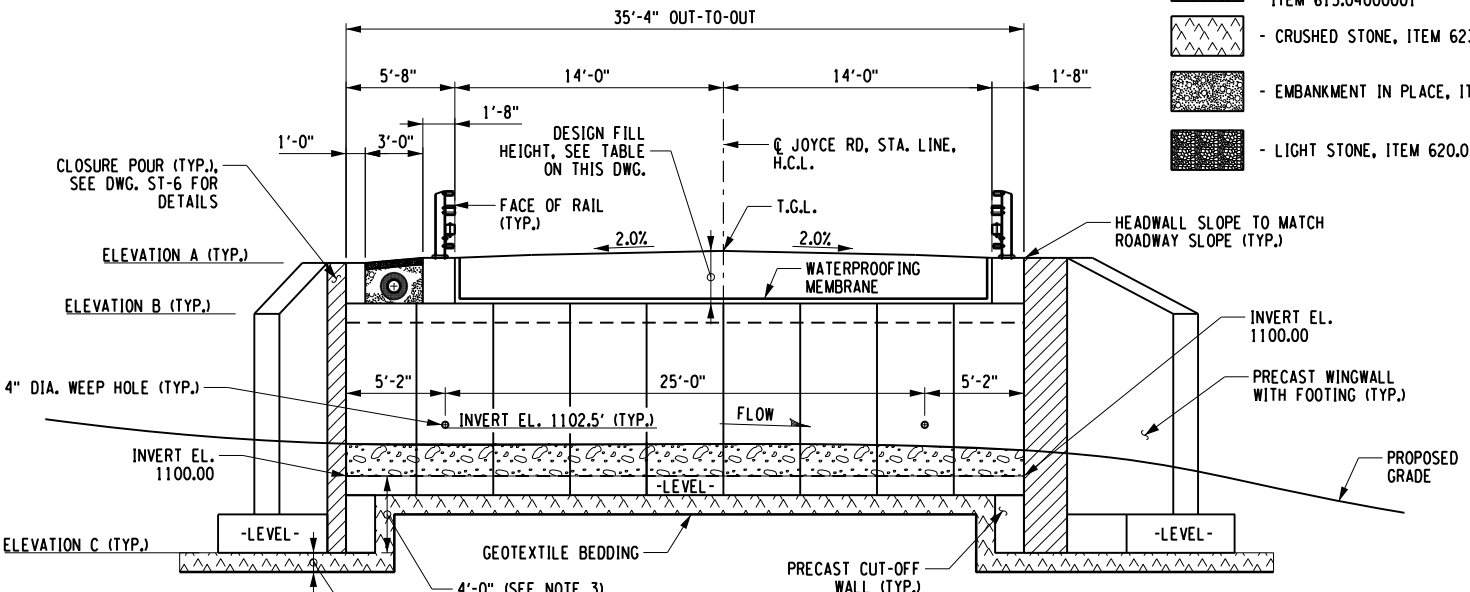


CULVERT SECTION
SCALE: 1" = 10'-0"

SECTION C-C
SCALE: 1" = 10'-0"

LEGEND:

- NATIVE STREAMBED MATERIAL, ITEM 613.04000001
- CRUSHED STONE, ITEM 623.12
- EMBANKMENT IN PLACE, ITEM 203.03
- LIGHT STONE, ITEM 620.03



CULVERT ELEVATION B-B
SCALE: 1" = 10'-0"

- NOTES:**
- THE LENGTH OF EACH CULVERT SEGMENT SHALL BE DETERMINED BY THE CONTRACTOR. IF STAGED CONSTRUCTION IS EMPLOYED, THE PRECAST BOX CULVERT SEGMENT MUST BE COMPATIBLE WITH STAGING REQUIREMENTS.
 - ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1".
 - BASED ON ASSUMED BOTTOM SLAB THICKNESS OF 12". FABRICATOR SHALL ADJUST CUTOFF WALL HEIGHT BASED ON ACTUAL SLAB THICKNESS.

LOAD RATING (LOAD FACTOR) *		
INVENTORY	HL-93	RF =
OPERATING	HL-93	RF =

* TO BE FILLED IN BY CONTRACTOR

CULVERT DESIGN DATA TABLE	
CLEAR SPAN, FT	18'-0"
CLEAR RISE, FT.	8'-0"
*MIN. FILL HEIGHT, FT.	1'-10"
*MAX. FILL HEIGHT, FT.	2'-10"
SKEW ANGLE \perp TO ϕ OF ROADWAY, DEG.	0°00'0"
LIVE LOAD	HL-93

* BASED ON ASSUMED TOP SLAB THICKNESS OF 12". FABRICATOR SHALL ADJUST BASED ON ACTUAL TOP SLAB THICKNESS.

WINGWALL DATA			
LOCATION	ELEVATION A	ELEVATION B	ELEVATION C
WINGWALL 1	1111.34'	1109.5'	1096.0'
WINGWALL 2	1111.30'	1109.5'	1096.0'
WINGWALL 3	1111.52'	1109.0'	1096.0'
WINGWALL 4	1111.48'	1109.0'	1096.0'

GEOTECHNICAL DESIGN DATA						
FRICITION ANGLE OF SOIL RETAINED BY THE WALL (DEGREES)	FRICITION ANGLE OF FOUNDATION SOIL (DEGREES)	TOTAL SOIL UNIT WEIGHT (LB/FT ³)	MAXIMUM SERVICE LIMIT STATE BEARING RESISTANCE (LB/FT ²)	NOMINAL COEFFICIENT OF FRICTION FOR SLIDING	STRENGTH LIMIT STATE RESISTANCE FACTOR FOR SLIDING	STRENGTH LIMIT STATE RESISTANCE FACTOR FOR BEARING
32°	30°	130	5000	0.45	0.8	0.45

- FOR THE SLIDING AND ECCENTRICITY ANALYSES, ASSUME A GROUND WATER ELEVATION OF 1105.0 FEET.
- FOR THE BEARING ANALYSES, ASSUME A GROUND WATER ELEVATION OF 1105.0 FEET.
- USE SUBMERGED UNIT WEIGHTS BELOW THE GROUND WATER ELEVATIONS PROVIDED.

PREPARED BY: CHARLES TUTUNJIAN, P.E.
ON: 03/05/2026

ALTERED BY:
ON:



AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

JOYCE ROAD OVER TRIBUTARY TO ROE POND
CULVERT REPLACEMENT PROJECT

TOWN OF MORIAH
COUNTY: ESSEX REGION: 1

BRIDGES
BIN TBD

CULVERTS

ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED

PRECAST BOX CULVERT DETAILS - 1

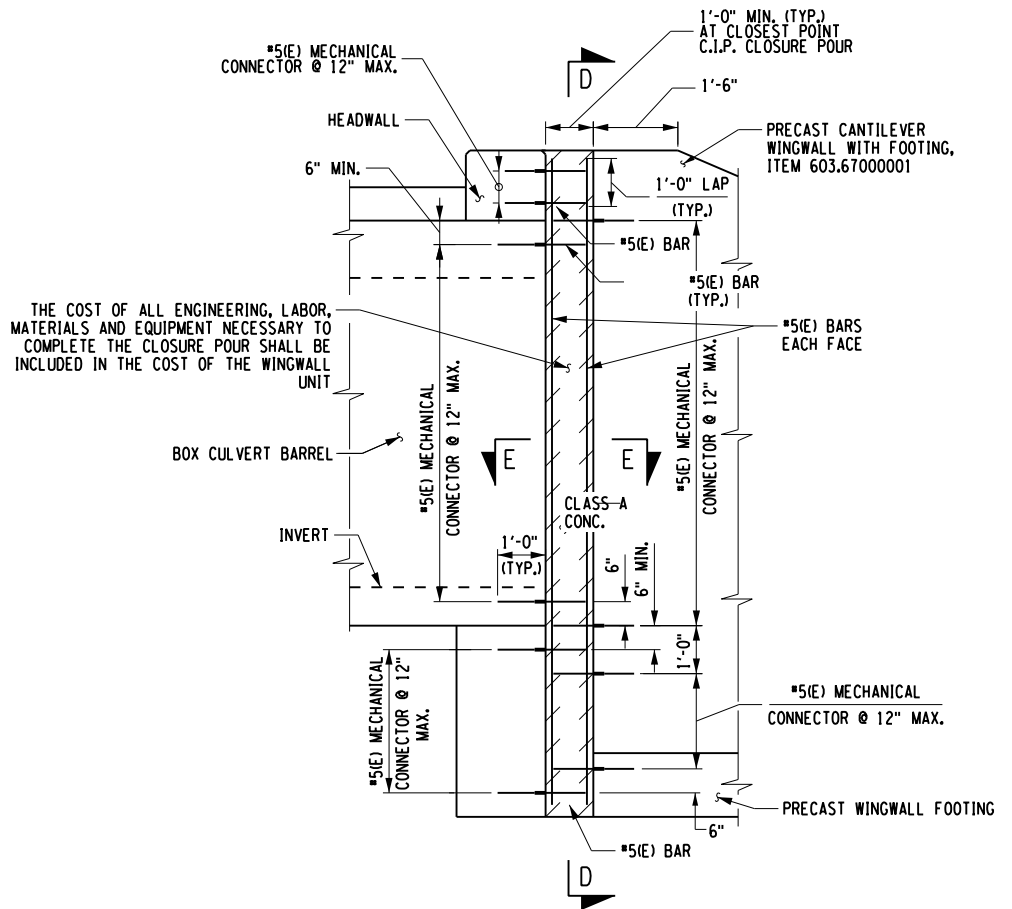
CONTRACT NUMBER
DR 4814
PROJECT NUMBER: 760224

DRAWING NO. ST-5
SHEET NO. 13

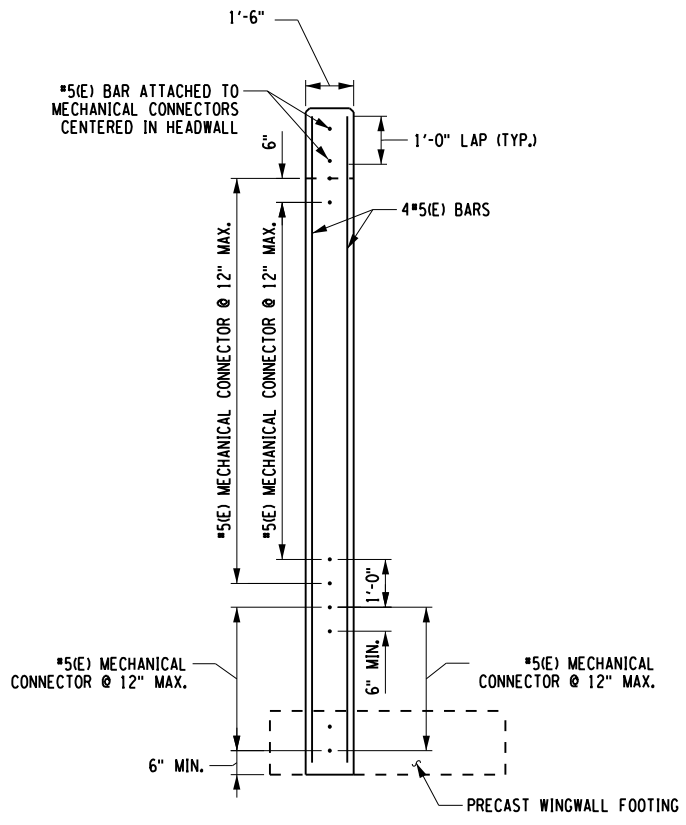
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



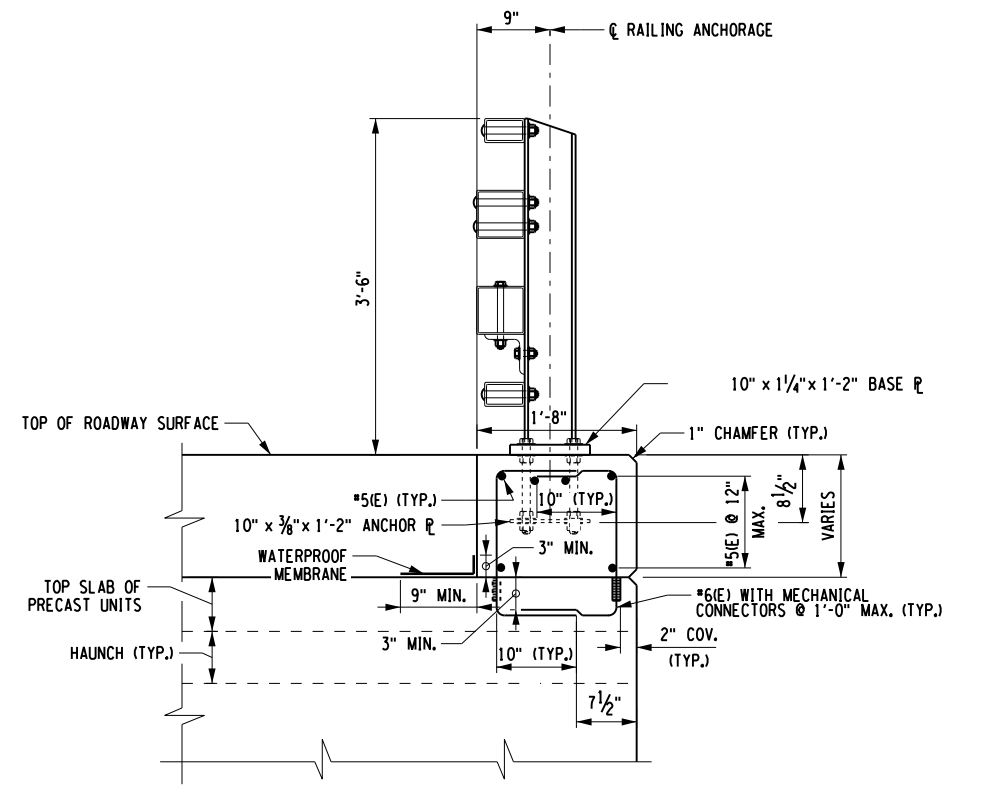
PROJECT MANAGER: C. TUTUNJIAN
 CHECKED BY: I. PENGU
 DRAFTED BY: C. VICKERY
 CHECKED BY: I. PENGU
 DESIGNED BY: C. VICKERY



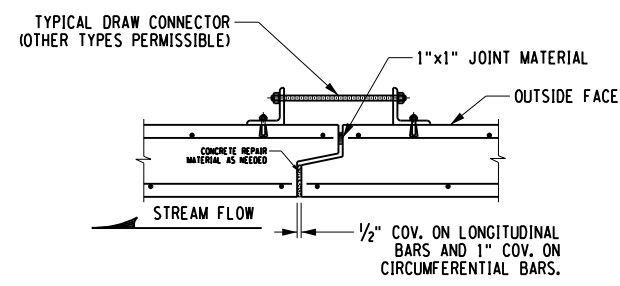
CLOSURE POUR DETAIL
NOT TO SCALE



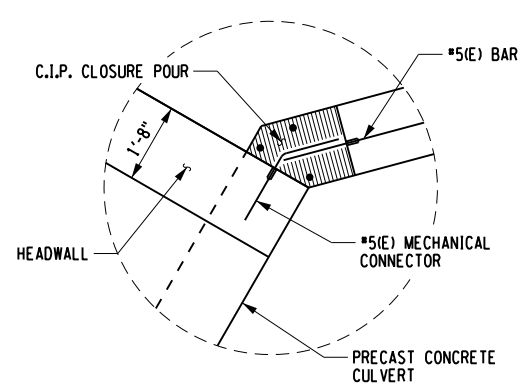
**SECTION D-D
CLOSURE POUR REINFORCEMENT SECTION**
NOT TO SCALE



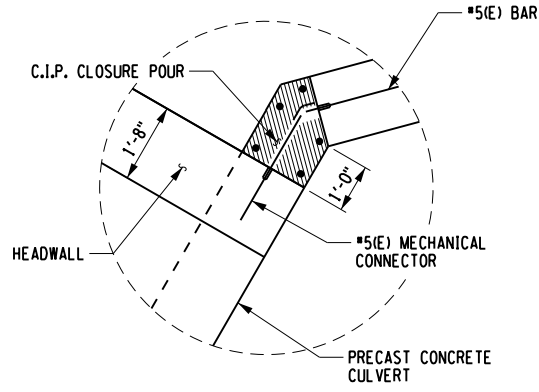
BRIDGE RAILING ANCHORAGE DETAIL (SOUTH SIDE SHOWN)
SCALE: 1" = 2'-0"



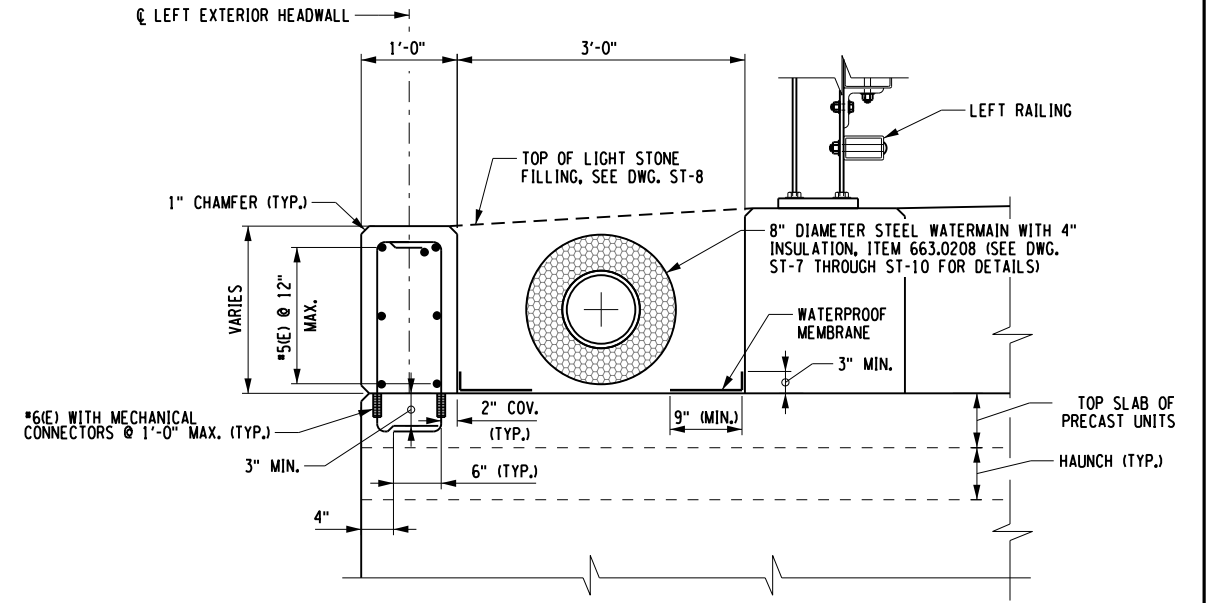
BOX CULVERT JOINT DETAIL
NOT TO SCALE



**NORTH WINGWALL &
HEADWALL CLOSURE POUR DETAIL**
NOT TO SCALE



**SOUTH WINGWALL &
HEADWALL CLOSURE POUR DETAIL**
NOT TO SCALE



LEFT EXTERIOR HEADWALL DETAIL
SCALE: 1" = 2'-0"

PREPARED BY: CHARLES TUTUNJIAN, P.E.
ON: 03/05/2026

ALTERED BY:
ON:



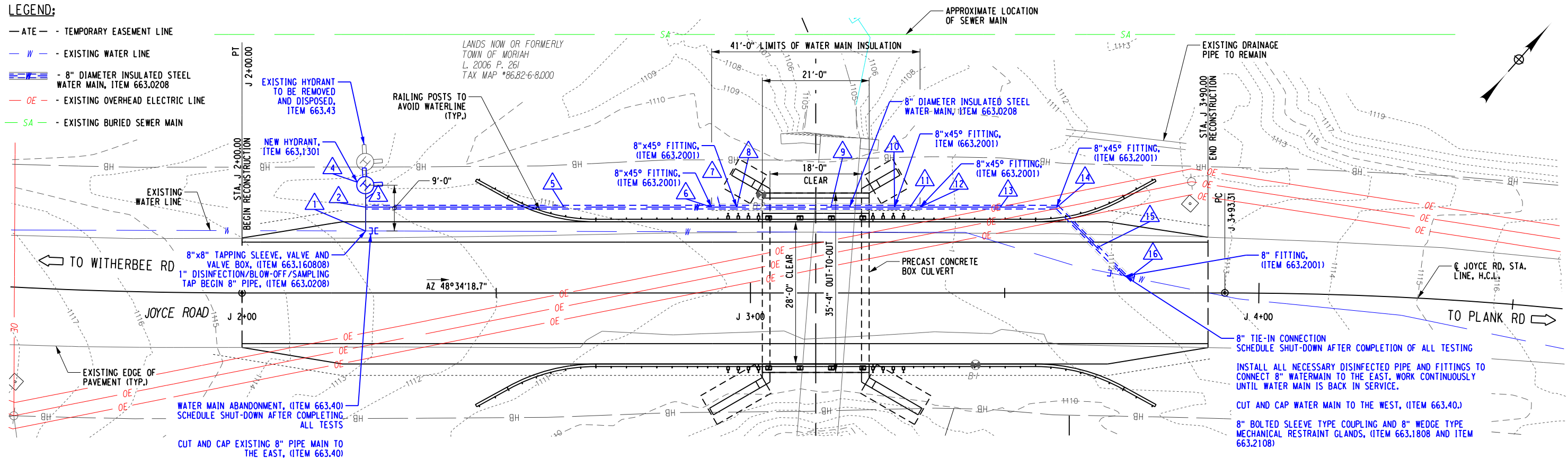
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	JOYCE ROAD OVER TRIBUTARY TO ROE POND	BRIDGES BIN TBD	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER DR 4814
	CULVERT REPLACEMENT PROJECT				PROJECT NUMBER: 760224
	TOWN OF MORIAH				DRAWING NO. ST-6
	COUNTY: ESSEX REGION: 1				SHEET NO. 14

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



LEGEND:

- ATE - - TEMPORARY EASEMENT LINE
- W - - EXISTING WATER LINE
- 8" DIAMETER INSULATED STEEL WATER MAIN, ITEM 663.0208
- OE - - EXISTING OVERHEAD ELECTRIC LINE
- SA - - EXISTING BURIED SEWER MAIN



WATER MAIN RELOCATION PLAN

SCALE: 1" = 20'-0"

WATER MAIN NOTES:

1. INSTALL NEW WATER MAIN WITH A MINIMUM OF 5'-6" OF COVER FROM FINAL PROJECT GRADES (FOR NON-INSULATED PIPE).
2. WATER PRESSURE TEST IS REQUIRED UPON COMPLETION OF THE INSTALLATION AND BACKFILL OF THE WATER MAIN. UNLESS OTHERWISE NOTED, A MINIMUM HYDROSTATIC PRESSURE OF 150 PSI IS REQUIRED. NO PRESSURE DROP IS ALLOWED. THE PRESSURE TEST MUST BE MAINTAINED FOR A PERIOD OF ONE HOUR WITHOUT ADDITIONAL PUMPING OR ADDITION OF WATER.
3. FLUSHING, DISINFECTING AND HEALTH SAMPLING ARE REQUIRED FOR ALL WATER MAIN WORK.
4. THE WATER MAIN SHALL NOT BE PLACED INTO SERVICE UNTIL AUTHORIZED IN WRITING BY THE COUNTY HEALTH DEPARTMENT AND TOWN OF MORIAH.
5. WATER MAINS AND APPURTENANCES TO BE CONSTRUCTED IN ACCORDANCE WITH THE REGULATIONS AND SPECIFICATIONS OF THE TOWN OF MORIAH.
6. WATER MAIN(S) SHALL BE 8 INCH DUCTILE IRON, CEMENT-LINED, CLASS 52 WITH ZINC COATING.
7. WATER SERVICE(S) SHALL BE MINIMUM 1 INCH TYPE K COPPER FROM THE WATER MAIN TO THE CURB BOX. COST TO BE INCLUDED IN THE PRICE BID FOR VARIOUS WATER MAIN ITEMS.
8. ALL GATE VALVES SHALL BE EPOXY-COATED AND HAVE STAINLESS STEEL BODY AND BONNET BOLTS.
9. THE CONTRACTOR IS RESPONSIBLE TO SCHEDULE ALL WATER MAIN TAPS WITH THE TOWN OF MORIAH, IN WRITING, A MINIMUM OF THREE WORK DAYS IN ADVANCE. THE CONTRACTOR IS REQUIRED TO PROVIDE SAFE EXCAVATION (INCLUDING ACCESS) AND SUPPLY AND INSTALL THE TAPPING SLEEVE AND VALVE SUCH THAT IT WILL PASS AN AIR TEST ADMINISTERED BY THE TOWN OF MORIAH PRIOR TO MAKING THE TAP.
10. MINIMUM HORIZONTAL SEPARATION BETWEEN WATER MAINS AND SEWER MAINS SHALL BE 10 FEET. MINIMUM VERTICAL SEPARATION BETWEEN WATER MAINS AND SEWER MAINS SHALL BE 18 INCHES MEASURED FROM THE OUTSIDE OF THE PIPES AT THE POINT OF CROSSING. ONE FULL LENGTH OF WATER MAIN SHALL BE CENTERED UNDER OR OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT (COMPACTED SELECT GRANULAR FILL) SHALL BE PROVIDED FOR THE SEWER TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING OF THE SEWER ON THE WATER MAIN.
11. DUCTILE IRON FITTINGS SHALL MEET AWWA C-111 SPECIFICATIONS, MINIMUM CLASS 250, WITH MECHANICAL OR PUSH-ON JOINT, EXCEPT FOR HYDRANT BRANCHES, WHICH SHALL BE MECHANICAL JOINT. FITTINGS SHALL BE CEMENT LINED IN ACCORDANCE WITH AWWA C-104. BOLTS AND NUTS SHALL BE HIGH-STRENGTH, LOW ALLOY, COATED STEEL. PVC FITTINGS SHALL MEET SPECIFICATIONS OF AWWA C-905 MADE FROM PVC COMPOUND 12454-B (ASTM D1784) WITH GASKET JOINTS MEETING ASTM D3139. ALL FITTINGS SHALL BE BACKED WITH ADEQUATELY-SIZED 2500 PSI MINIMUM STRENGTH CONCRETE THRUST BLOCKS CONTAINING NO FLY ASH OR POZZOLANS. CONCRETE FOR THRUST BLOCKS MUST BE TRANSIT MIX.
12. THE CONTRACTOR SHALL NOTIFY THE TOWN OF MORIAH SUPERVISOR, MATTHEW BRASSARD 518-546-8631 AND THE HIGHWAY SUPERINTENDENT JAMIE WILSON 518-942-7155, A MINIMUM OF THREE WORK DAYS PRIOR TO STARTING ANY WATER MAIN WORK.
13. CONTRACTOR IS RESPONSIBLE FOR VERIFYING SIZE OF EXISTING WATER MAIN(S) PRIOR TO SCHEDULING ANY WET TAPS OR SHUTDOWNS FOR TIE-IN CONNECTIONS. CONTRACTOR MUST HAVE ALL NECESSARY MATERIALS ONSITE PRIOR TO ANY WATER SYSTEM SHUTDOWNS FOR TIE-IN CONNECTIONS.
14. IF ANY CONTACT IS MADE WITH TOWN OF MORIAH FACILITIES OR IF ANY PROBLEMS WITH EXISTING WATER MAINS OR APPURTENANCES OCCUR DURING CONSTRUCTION, NOTIFY THE TOWN OF MORIAH HIGHWAY DEPARTMENT AT 518-942-7155.
15. ALL WATER SYSTEM HYDRANTS, VALVES AND CURB BOXES SHALL BE ADJUSTED TO GRADE AND MAINTAINED ACCESSIBLE THROUGHOUT THE PROJECT.
16. THE CONTRACTOR IS RESPONSIBLE TO SCHEDULE AND COORDINATE ALL REQUIRED WATER SYSTEM SHUT-OFFS, INCLUDING A MINIMUM 24 HOUR ADVANCE WRITTEN NOTICE TO ALL AFFECTED CUSTOMERS AND A MINIMUM OF 3 WORK DAYS ADVANCE WRITTEN NOTICE TO THE TOWN OF MORIAH. WATER SYSTEM SHUT-OFF NOTIFICATIONS SHALL INCLUDE THE FOLLOWING INFORMATION (LOCATION, DATE, TIME OF SHUT-OFF, DURATION, ANTICIPATED TIME OF TURN ON AND NUMBER OF AFFECTED CUSTOMERS). ALL EXISTING WATER SYSTEM VALVES AND APPURTENANCES ARE TO BE OPERATED BY TOWN PERSONNEL ONLY. NO WATER SYSTEM SHUT-OFFS WILL BE ALLOWED ON TOWN HOLIDAYS.
17. THE CONTRACTOR SHALL USE CAUTION WHEN WORKING IN THE VICINITY OF EXISTING WATER MAINS (INCLUDING THE USE OF COMPACTION EQUIPMENT). ANY DAMAGE TO TOWN OF MORIAH FACILITIES THAT IS DUE TO THE CONTRACTOR'S OPERATIONS WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
18. MAXIMUM TIME ALLOWED FOR ANY WATER MAIN SHUT DOWN SHALL BE FOUR (4) HOURS.
19. THE CONTRACTOR IS RESPONSIBLE TO SCHEDULE ALL REQUIRED WATERING UP, FLUSHING AND TESTING OF THE NEW WATER MAIN VIA WRITTEN NOTICE TO THE TOWN OF MORIAH A MINIMUM OF 3 WORK DAYS IN ADVANCE. ALL EXISTING WATER SYSTEM VALVES AND APPURTENANCES ARE TO BE OPERATED BY TOWN PERSONNEL ONLY.
20. ALL OPEN PIPE ENDS ON WATER MAIN AND APPURTENANCES SHALL BE COVERED IN A WATER-TIGHT MANNER USING TEMPORARY CAPS, PLUGS OR DOUBLE-LAYERED PLASTIC SHEETING. THIS REQUIREMENT APPLIES TO PIPE THAT IS BEING SHIPPED, STOCKPILED, STAGED, STRUNG ALONG THE JOBSITE OR WITHIN EXCAVATIONS DURING INSTALLATION. ALL DIRT, DEBRIS AND FOREIGN MATERIALS MUST BE REMOVED FROM THE INSIDE OF NEW WATER MAIN AND APPURTENANCES PRIOR TO INSTALLATION.
21. THE EXCAVATION WATER LEVEL SHALL BE KEPT A MINIMUM OF 12 INCHES BELOW THE WATER MAIN INVERT DURING INSTALLATION.
22. ALL VALVES ON ABANDONED SECTIONS OF WATER MAIN SHALL BE LEFT IN THE CLOSED POSITION AND THE VALVE BOX SHALL BE REMOVED.
23. THE USE OF RECYCLED CONCRETE AS BACKFILL MATERIAL IS NOT ALLOWED UNLESS IT HAS BEEN CONFIRMED THAT THE RECYCLED CONCRETE CONTAINS NO FLY-ASH OR POZZOLANS. SUFFICIENT TESTS SHALL BE PERFORMED BY A CERTIFIED TESTING LABORATORY (AT THE CONTRACTOR'S EXPENSE) TO DETERMINE THAT EACH SOURCE OF RECYCLED CONCRETE CONTAINS NO FLY-ASH OR POZZOLANS.
24. CONTRACTOR MUST SUBMIT A WRITTEN REQUEST FOR THE TOWN OF MORIAH TO CHECK ALL VALVES AND HYDRANTS A MINIMUM OF 3-4 WEEKS PRIOR TO START OF PROJECT, AND AT END OF PROJECT. AS PART OF THE PRE-PROJECT VALVE CHECKS, THE TOWN WILL CORRECT ANY DEFICIENCIES FOUND BEFORE THE PROJECT BEGINS. AT END OF PROJECT, THE TOWN WILL CHECK ALL VALVES AND HYDRANTS AND PROVIDE CONTRACTOR WITH A WRITTEN PUNCHLIST OF ITEMS TO BE CORRECTED.
25. IF ANY OUT-OF-SERVICE WATER LINES ARE EXPOSED DURING STRUCTURAL EXCAVATION, REMOVAL TO BE INCLUDED UNDER ITEM 206.01, STRUCTURE EXCAVATION.

- LEGEND:**
- △ - WW NUMBER, SEE WATERWORKS TABLE, DWG. ST-8

PAYMENT NOTE:

1. ALL ITEM NUMBERS SHOWN IN (PARENTHESIS) HAVE BEEN SHOWN FOR SPECIFICATION PURPOSES. ALL WORK FOR THE WATER LINE INSTALLATION SHALL BE PAID FOR UNDER "8" DIAMETER STEEL WATER MAIN", ITEM 663.0208.

PROJECT MANAGER: C. TUTUNJIAN
CHECKED BY: I. PENGU
DRAFTED BY: C. VICKERY
CHECKED BY: I. PENGU
DESIGNED BY: C. VICKERY

PREPARED BY: CHARLES TUTUNJIAN, P.E.
ON: 03/05/2026
ALTERED BY:
ON:

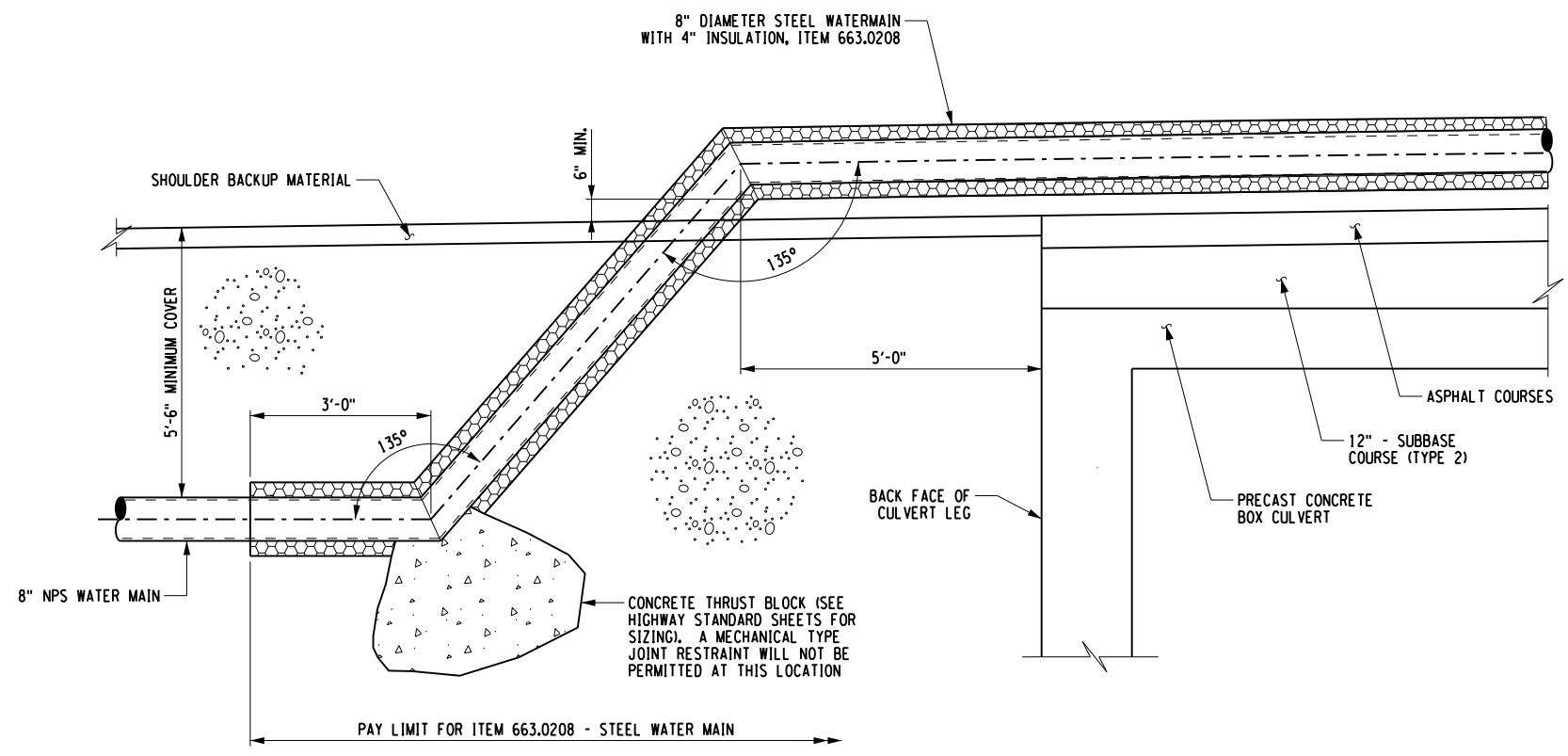


AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	JOYCE ROAD OVER TRIBUTARY TO ROE POND	BRIDGES BIN TBD	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER DR 4814
	CULVERT REPLACEMENT PROJECT				PROJECT NUMBER: 760224
	TOWN OF MORIAH				DRAWING NO. ST-7
	COUNTY: ESSEX	REGION: 1			SHEET NO. 15

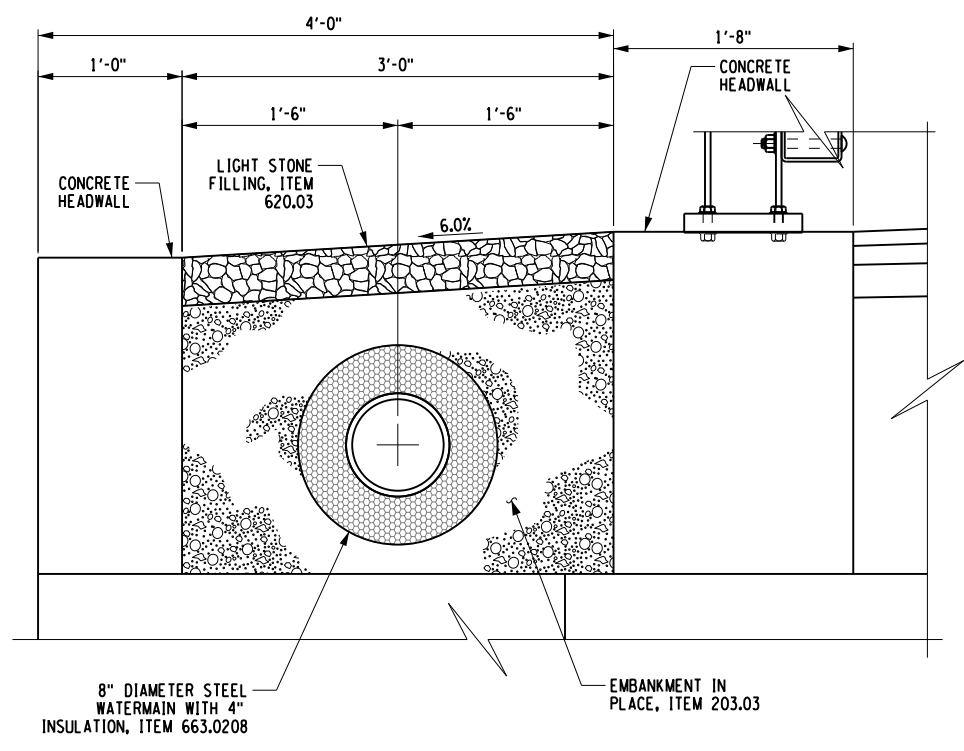
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PROJECT MANAGER: C. TUTUNJIAN
 CHECKED BY: I. PENGU
 DRAFTED BY: C. VICKERY
 CHECKED BY: I. PENGU
 DESIGNED BY: C. VICKERY



WATER MAIN TERMINATION DETAIL
 (BEGIN FRAME LEG SHOWN - END FRAME LEG SIMILAR)
 NOT TO SCALE



UTILITY ON BRIDGE TYPICAL SECTION
 SCALE: 3/4" = 1'-0"

WATERWORKS TABLE									
WW NUMBER	LOCATION	STATION	OFFSET (FT)	SIDE	TO	STATION	OFFSET (FT)	SIDE	DESCRIPTION
1	JOYCE ROAD	J 2+24.30	12.2	LEFT	-	-	-	-	8"x8" TAPPING SLEEVE, VALVE AND VALVE BOX, 1" DISINFECTION/BLOW-OFF/SAMPLING TAP. BEGIN 8" PIPE
2	JOYCE ROAD	J 2+24.30	12.2	LEFT	-	J 2+24.30	16.9	LEFT	LAY 4.7' OF 8 NPS AND INSTALL 8 x 6 HYDRANT TEE & VALVE FOR FIRE HYDRANT (ADD ADDITIONAL BENDS FOR ELEVATION CHANGE)
3	JOYCE ROAD	J 2+24.30	16.9	LEFT	-	J 2+24.30	19.6	LEFT	INSTALL 6 NPS VALVE AND LAY 2.7' OF 6 NPS
4	JOYCE ROAD	J 2+24.30	19.6	LEFT	-	-	-	-	INSTALL FIRE HYDRANT
5	JOYCE ROAD	J 2+24.30	12.2	LEFT	-	J 2+92.40	12.2	LEFT	LAY 68' OF 8 NPS
6	JOYCE ROAD	J 2+92.40	12.2	LEFT	-	-	-	-	INSTALL 45 DEGREE BEND FOR ELEVATION CHANGE
7	JOYCE ROAD	J 2+92.40	12.2	LEFT	-	J 2+97.40	12.2	LEFT	LAY 5' OF 8 NPS
8	JOYCE ROAD	J 2+97.40	12.2	LEFT	-	-	-	-	INSTALL 45 DEGREE BEND FOR ELEVATION CHANGE
9	JOYCE ROAD	J 2+97.40	12.2	LEFT	-	J 3+28.40	12.2	LEFT	LAY 31.0' OF 8 NPS OVER BRIDGE
10	JOYCE ROAD	J 3+28.40	12.2	LEFT	-	-	-	-	INSTALL 45 DEGREE BEND FOR ELEVATION CHANGE
11	JOYCE ROAD	J 3+28.40	12.2	LEFT	-	J 3+33.40	12.2	LEFT	LAY 5' OF 8 NPS
12	JOYCE ROAD	J 3+33.40	12.2	LEFT	-	-	-	-	INSTALL 45 DEGREE BEND FOR ELEVATION CHANGE
13	JOYCE ROAD	J 3+33.40	12.2	LEFT	-	J 3+60.40	12.2	LEFT	LAY 27' OF 8 NPS
14	JOYCE ROAD	J 3+60.40	12.2	LEFT	-	-	-	-	INSTALL 45 DEGREE BEND FOR DIRECTION CHANGE
15	JOYCE ROAD	J 3+60.40	12.2	LEFT	-	J 3+73.7	3.3	LEFT	LAY 19' OF 8 NPS
16	JOYCE ROAD	J 3+73.7	3.3	LEFT	-	-	-	-	8" TIE-IN CONNECTION, SCHEDULE SHUT-DOWN AFTER COMPLETION OF ALL TESTING INSTALL ALL NECESSARY DISINFECTED PIPE AND FITTINGS TO CONNECT 8" WATER MAIN TO THE EAST. WORK CONTINUOUSLY UNTIL WATER MAIN IS BACK IN SERVICE CUT AND CAP WATER MAIN TO THE WEST 8" DIAMETER BOLTED SLEEVE TYPE COUPLING AND 8" WEDGE TYPE MECHANICAL RESTRAINT GLANDS

PREPARED BY: CHARLES TUTUNJIAN, P.E.
 ON: 03/05/2026
 ALTERED BY:
 ON:

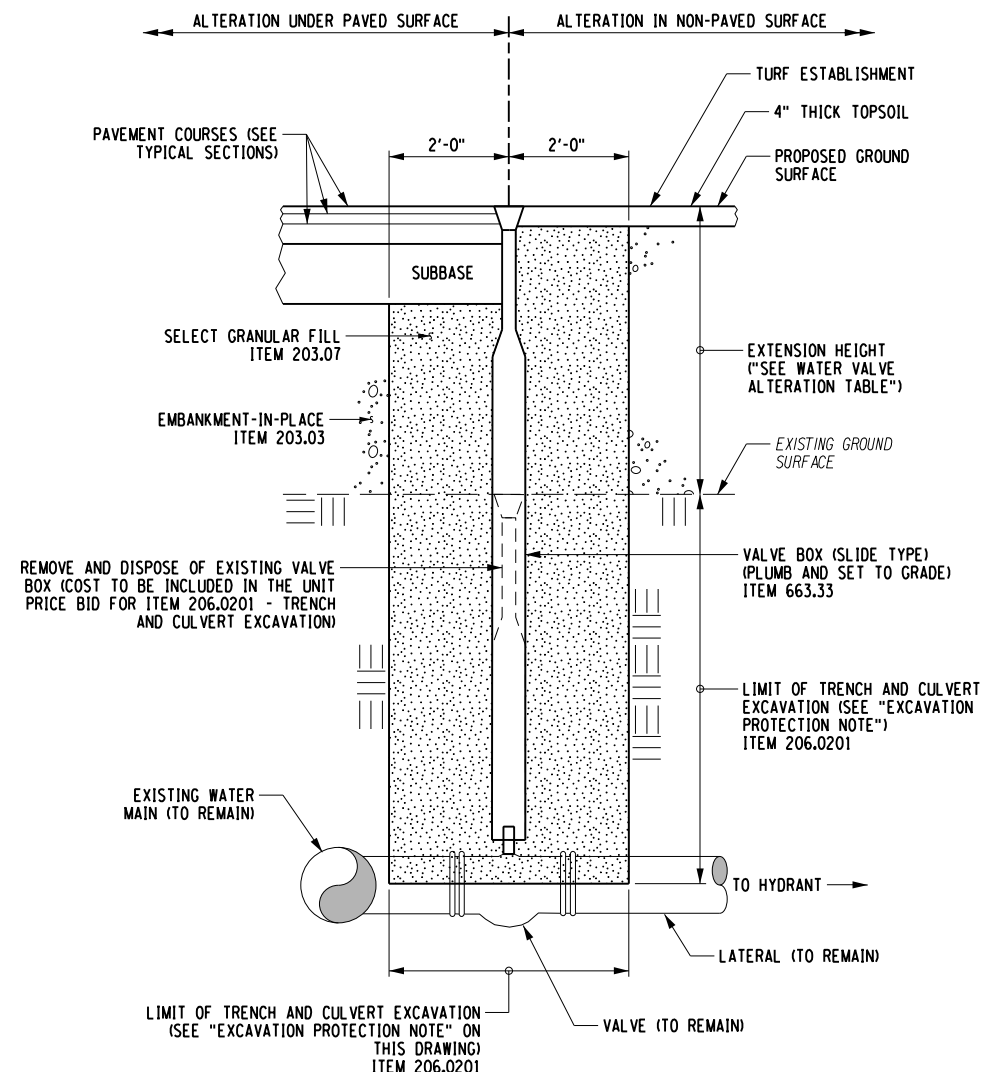


AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	JOYCE ROAD OVER TRIBUTARY TO ROE POND	BRIDGES BIN TBD	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER DR 4814
	CULVERT REPLACEMENT PROJECT				PROJECT NUMBER: 760224
	TOWN OF MORIAH			WATER MAIN DETAILS - 1	DRAWING NO. ST-8
	COUNTY: ESSEX	REGION: 1			SHEET NO. 16

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



PROJECT MANAGER: C. TUTUNJIAN
 CHECKED BY: I. PENGU
 DRAFTED BY: C. VICKERY
 CHECKED BY: I. PENGU
 DESIGNED BY: C. VICKERY



WATER MAIN VALVE BOX ALTERATION NOTES:

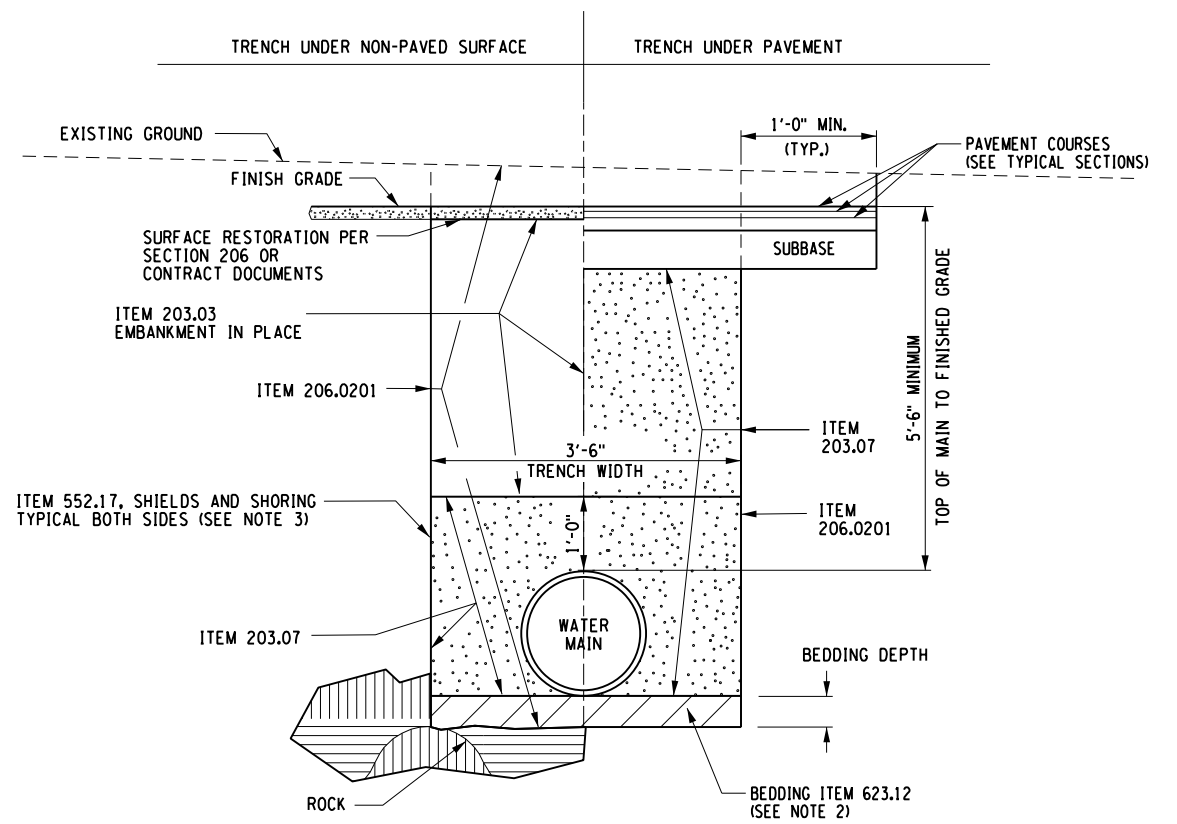
SEE STANDARD SHEET 663-05 FOR ADDITIONAL DETAILS AND NOTES.
 ALL PIPE, FITTINGS AND FIXTURES SHALL COMPLY WITH THE "REDUCTION OF LEAD IN DRINKING WATER ACT" OF JANUARY 4, 2011.

WATER MAIN VALVE BOX ALTERATION DETAIL
 NOT TO SCALE

WATER MAIN VALVE BOX ALTERATION NOTES:

1. WATER MAIN VALVE BOX ALTERATION LOCATIONS HAVE NOT BEEN IDENTIFIED IN THE PLANS; HOWEVER, THE DETAIL HAS BEEN INCLUDED IN THE EVENT IT IS REQUIRED.
2. COST FOR VALVE BOX ALTERATION HAS BEEN INCLUDED IN ITEM 663.33.

WATER MAIN VALVE BOX ALTERATION TABLE								
WW NUMBER	REFERENCE ALIGNMENT	STATION	OFFSET (FT)	SIDE	EXISTING VALVE ELEVATION (FT)	PROPOSED VALVE ELEVATION (FT)	EXTENSION HEIGHT (FT)	QUANTITY ITEM 663.33 (EACH)
1	JOYCE ROAD	J X+XX.XX	XX.XX	RIGHT	XX.XX	XX.XX	XX.XX	X
NOTES: A POSITIVE VALUE FOR EXTENSION HEIGHT INDICATES WATER VALVE NEEDS TO BE RAISED. A NEGATIVE VALUE INDICATES LOWERING OF WATER VALVE. ITEM 663.33 - ADJUST EXISTING VALVE BOX ELEVATION.								



WATER MAIN TRENCH DETAIL
 NOT TO SCALE

WATER MAIN NOTES:

1. SEE SECTION 663 STANDARD SHEETS FOR ADDITIONAL NOTES & DETAILS.
2. BEDDING IN NORMAL SOIL CONDITIONS, OR ROCK SHALL BE 6" OF ITEM 623.12. BEDDING IN UNSTABLE OR UNSUITABLE SOIL CONDITIONS SHALL BE 1' MIN. AND 2' MAX. OF ITEM 623.12 OR A.O.B.E. ADDITIONAL PAYMENT WILL BE MADE FOR MATERIAL PLACED TO TREAT UNSTABLE OR UNSUITABLE CONDITIONS. ITEM 623.12 SHALL BE A BLENDED PRODUCT OF 50% #1 AND 50% #2 STONE OR A.O.B.E.
3. ITEM 552.17 IS REQUIRED FOR EXCAVATIONS 5' OR GREATER IN DEPTH. SEE SECTION 552 OF THE STANDARD SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
4. WHEN CONTAMINATED SOILS ARE ENCOUNTERED UNEXPECTEDLY IN THE FIELD, THE CONTRACTOR SHALL NOTIFY THE E.I.C. IMMEDIATELY, FOR WATER MAIN FACILITIES LOCATED WITHIN PETROLEUM HYDROCARBON AND/OR CHLORINATED SOLVENT CONTAMINATED SOILS, GASKETS SHALL BE MADE OF OIL RESISTANT BUNA-N (NITRILE) RUBBER. ALL JOINTS SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF ANSI/AWWA C111/A21.11.
5. THE EXISTING WATER MAIN SHALL BE PLUGGED A.O.B.E. AT LOCATIONS IT NEEDS TO BE CUT AND ABANDONED IN PLACE. COST INCLUDED IN THE WATER MAIN ITEMS.
6. ALL PIPE, FITTINGS, AND FIXTURES SHALL COMPLY WITH THE "REDUCTION OF LEAD IN DRINKING WATER ACT" OF JANUARY 4, 2011.
7. IF THE EXISTING PIPE IS OUTSIDE OF THE LIMITS OF ITEM 206.0201 FOR THE NEW PIPE, THE REMOVAL WILL INCLUDE ITEMS 203.02 & 203.03 IN ADDITION TO THE WATER MAIN REMOVAL ITEM. THE EXCAVATION WIDTH IS LIMITED TO THE INSIDE DIAMETER OF THE EXISTING PIPE.
8. NO ADDITIONAL PAYMENT WILL BE MADE IF THE CONTRACTOR ELECTS TO SAWCUT THE EXISTING PAVEMENT.

EXCAVATION PROTECTION NOTE:

ANY EXCAVATION DEPTH GREATER THAN 5'-0" AND LESS THAN 20'-0" SHALL REQUIRE THE USE OF EXCAVATION PROTECTION FOR WORKER SAFETY. EXCAVATION PROTECTION SHALL CONSIST OF A LAYBACK SLOPE OF VERTICAL TO 1 1/2 HORIZONTAL FROM THE BOTTOM OF EXCAVATION IN AREAS WHERE A LAYBACK SLOPE IS POSSIBLE. PAYMENT FOR EXCAVATION PROTECTION IN AREAS WHERE A LAYBACK SLOPE IS UTILIZED SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 206.0201 - TRENCH AND CULVERT EXCAVATION AND SHALL BE PAID NEARLINE TO THE LIMITS SHOWN. EXCAVATION PROTECTION SHALL BE PAID FOR UNDER THE UNIT PRICE BID FOR ITEM 552.17 - SHIELDS AND SHORING IN AREAS WHERE A LAYBACK SLOPE IS NOT POSSIBLE.

PREPARED BY: CHARLES TUTUNJIAN, P.E.
 ON: 03/05/2026
 ALTERED BY:
 ON:



AS-BUILT REVISIONS
 DESCRIPTION OF ALTERATIONS:

JOYCE ROAD OVER TRIBUTARY TO ROE POND
 CULVERT REPLACEMENT PROJECT
 TOWN OF MORIAH
 COUNTY: ESSEX REGION: 1

BRIDGES
 BIN TBD
 CULVERTS

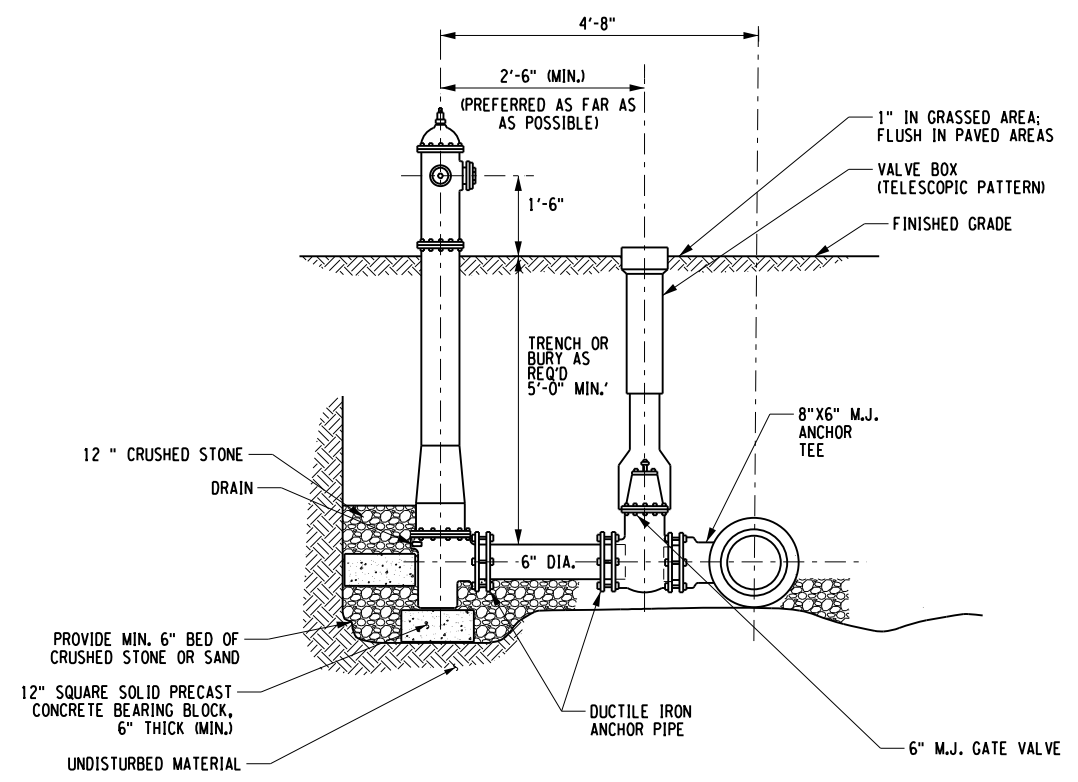
ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED
 WATER MAIN DETAILS - 2

CONTRACT NUMBER
 DR 4814
 PROJECT NUMBER: 760224
 DRAWING NO. ST-9
 SHEET NO. 17

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

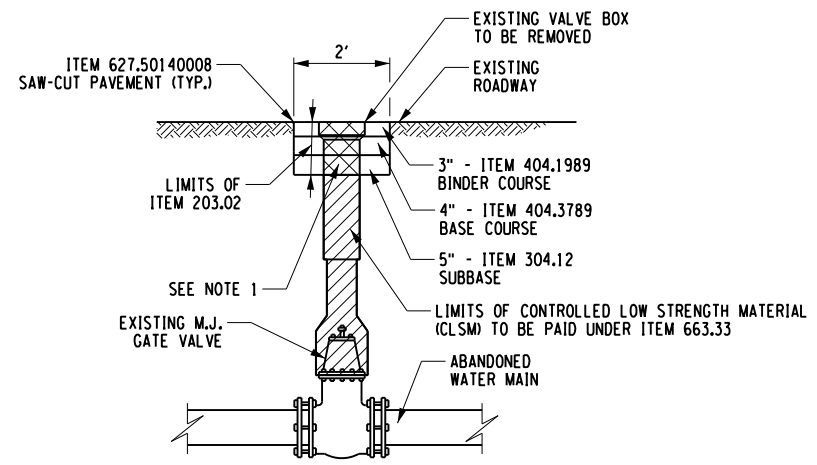


PROJECT MANAGER: C. TUTUNJIAN
 CHECKED BY: I. PENGU
 DRAFTED BY: C. VICKERY
 CHECKED BY: I. PENGU
 DESIGNED BY: C. VICKERY



- NOTES:
1. HYDRANT TYPE: MUELLER CENTURIAN 4.5" WVO OR 5.25" WVO
 2. ENTIRE ASSEMBLY SHALL BE WRAPPED WITH POLYETHYLENE ENCASMENT AND TAPED, ITEM 663.2306.
 3. PER SPEC, 6.5 LF OF 6" DUCTILE IRON PIPE IS INCLUDED IN ITEM 663.1301.
 4. CONTRACTOR SHALL COORDINATE THE PAINT SCHEME OF THE NEW FIRE HYDRANT WITH THE TOWN OF MORIAH. COST TO BE INCLUDED IN THE HYDRANT ITEM.

TYPICAL HYDRANT INSTALLATION
(NOT TO SCALE)



- NOTE:
1. CONTRACTOR SHALL REMOVE ALL EXISTING VALVE BOXES TO MIN. 1' BELOW EXISTING GROUND ON ABANDONED WATER MAINS AFTER NEW MAIN IS IN OPERATION. PAYMENT FOR EXCAVATION REQUIRED FOR VALVE BOX REMOVALS SHALL BE MADE UNDER ITEM 203.02.

WATER VALVE BOX REMOVAL
(NOT TO SCALE)

PREPARED BY: CHARLES TUTUNJIAN, P.E.
ON: 03/05/2026

ALTERED BY:
ON:



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	JOYCE ROAD OVER TRIBUTARY TO ROE POND	BRIDGES BIN TBD	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER DR 4814
	CULVERT REPLACEMENT PROJECT				PROJECT NUMBER: 760224
	TOWN OF MORIAH			WATER LINE DETAILS - 3	DRAWING NO. ST-10
	COUNTY: ESSEX REGION: 1				SHEET NO. 18

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



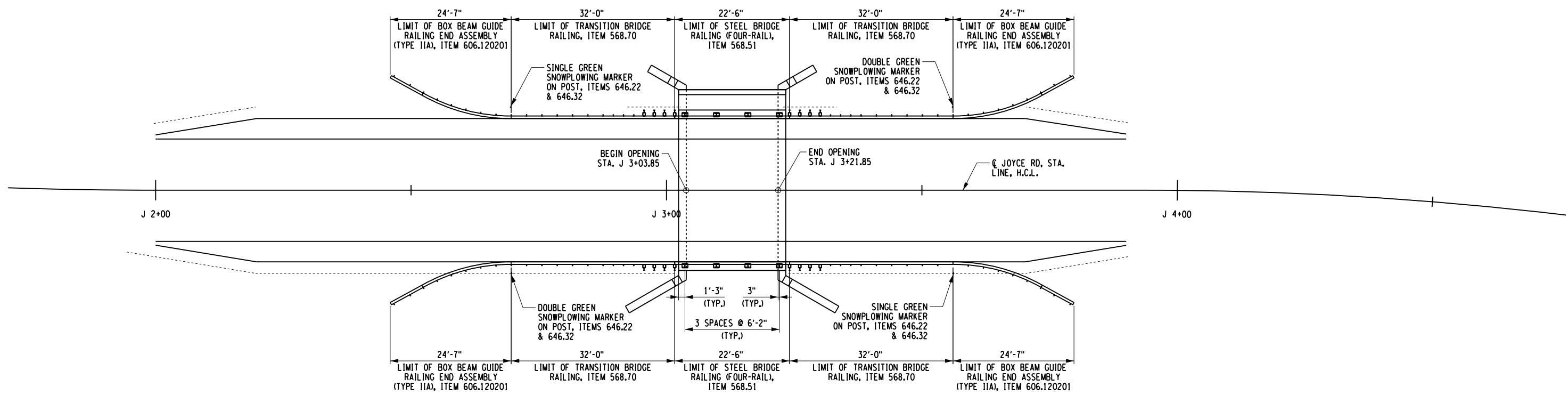
PROJECT MANAGER C. TUTUNJIAN

CHECKED BY I. PENGU

DRAFTED BY C. VICKERY

CHECKED BY I. PENGU

DESIGNED BY C. VICKERY



RAILING PLAN

TABLE OF SNOW PLOW MARKERS			
STATION	SIDE	ITEM 646.22	ITEM 646.32
J 2+69.60	RT	2	1
J 2+69.60	LT	1	1
J 3+56.10	RT	1	1
J 3+56.10	LT	2	1
TOTALS		6 EA	4 EA

ITEM NO.	DESCRIPTION
646.22	DELINEATOR, SNOW PLOWING MARKER, SUPPLEMENTARY SNOW PLOWING MARKER PANELS (GREEN)
646.32	STEEL POST, 2.0 LB/FT (7'-0" LONG)

TABLE OF GUIDERAIL					
STATION		SIDE	ITEM 568.51 (LF)	ITEM 568.70 (LF) <RADIUS>	ITEM 606.120201 (EACH)
FROM	TO				
J 2+45.92	J 2+69.60	LT			1
J 2+45.92	J 2+69.60	RT			1
J 2+69.60	J 3+01.60	LT		(32.0)	
J 2+69.60	J 3+01.60	RT		(32.0)	
J 3+01.60	J 3+24.10	LT	(22.5)		
J 3+01.60	J 3+24.10	RT	(22.5)		
J 3+24.10	J 3+56.10	LT		(32.0)	
J 3+24.10	J 3+56.10	RT		(32.0)	
J 3+56.10	J 3+79.78	LT			1
J 3+56.10	J 3+79.78	RT			1
TOTAL			45.0	128.0	4

TABLE OF GUIDERAIL ITEMS AND DESCRIPTIONS		
ITEM	DESCRIPTION	UNITS
568.51	STEEL BRIDGE RAIL (FOUR-RAIL)	LF
568.70	TRANSITION BRIDGE RAILING	LF
606.120201	BOX BEAM GUIDE RAILING END ASSEMBLY (TYPE IIA)	EACH

PREPARED BY: CHARLES TUTUNJIAN, P.E.
ON: 03/05/2026

ALTERED BY:
ON:

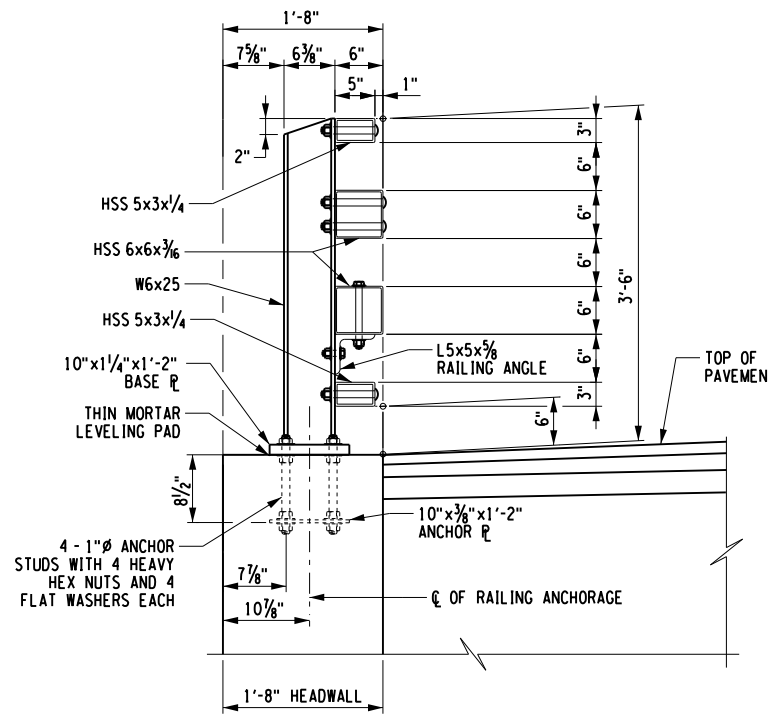


AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	JOYCE ROAD OVER TRIBUTARY TO ROE POND	BRIDGES BIN TBD	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER DR 4814
	CULVERT REPLACEMENT PROJECT				PROJECT NUMBER: 760224
	TOWN OF MORIAH	RAILING PLAN & DETAILS			DRAWING NO. ST-11
	COUNTY: ESSEX REGION: 1				SHEET NO. 19

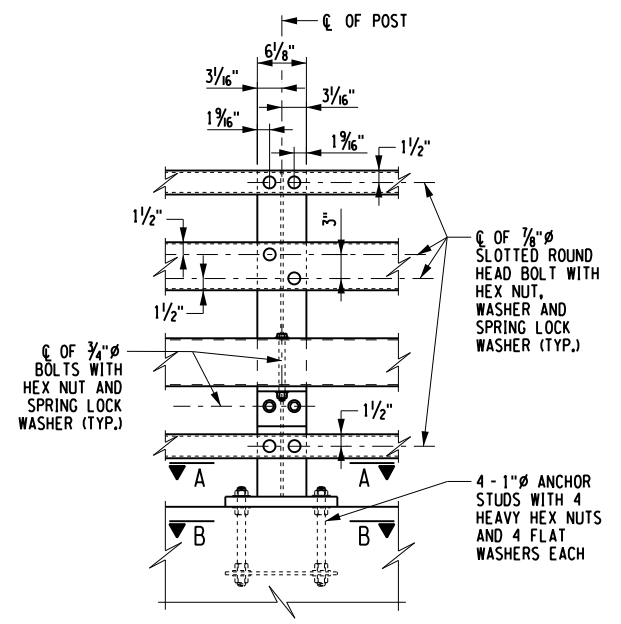
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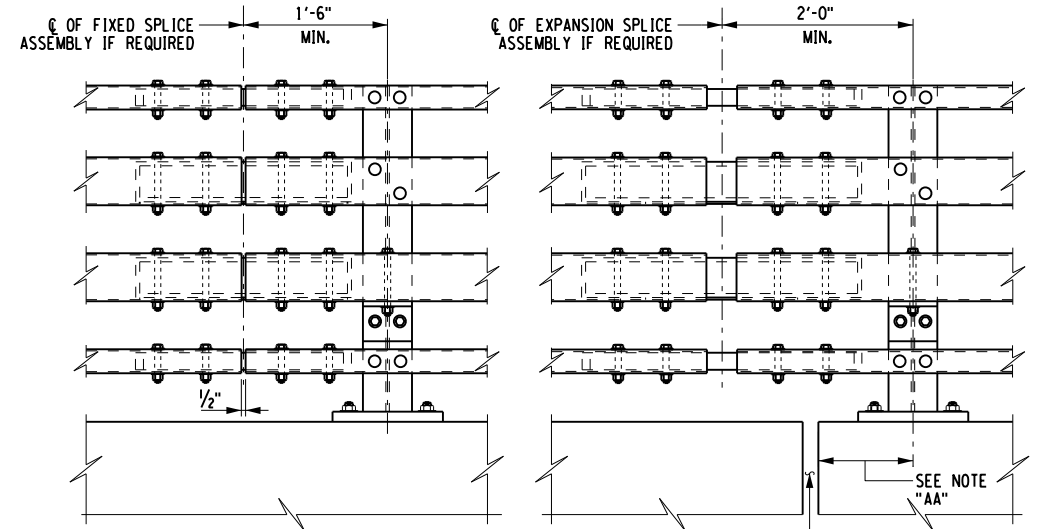
PROJECT MANAGER: C. TUTUNJIAN
 CHECKED BY: I. PENGU
 DRAFTED BY: C. VICKERY
 CHECKED BY: I. PENGU
 DESIGNED BY: C. VICKERY



SECTION

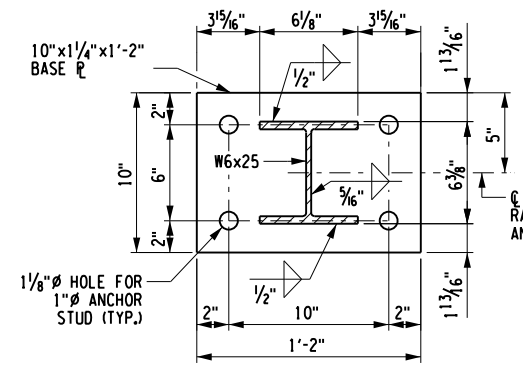


ELEVATION

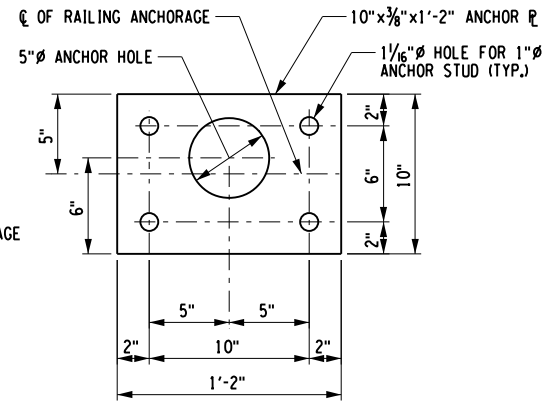


STEEL CULVERT RAILING (FOUR-RAIL) - CURBLESS SPLICE DETAIL ELEVATION
(NOT TO SCALE)

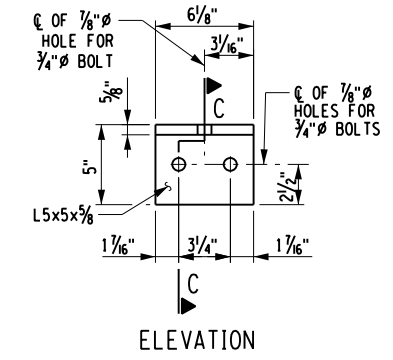
STEEL CULVERT RAILING (FOUR-RAIL) - CURBLESS
(NOT TO SCALE)



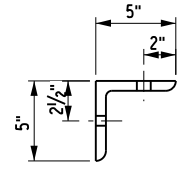
SECTION A-A



SECTION B-B

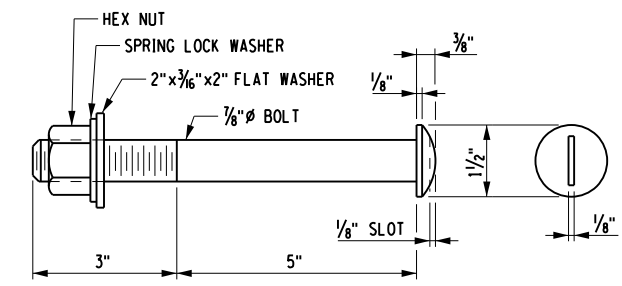


ELEVATION



SECTION C-C

RAILING ANGLE DETAILS
(NOT TO SCALE)



SLOTTED ROUND HEAD BOLT
(NOT TO SCALE)

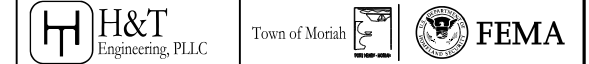
PREPARED BY: CHARLES TUTUNJIAN, P.E.
ON: 03/05/2026

ALTERED BY:
ON:

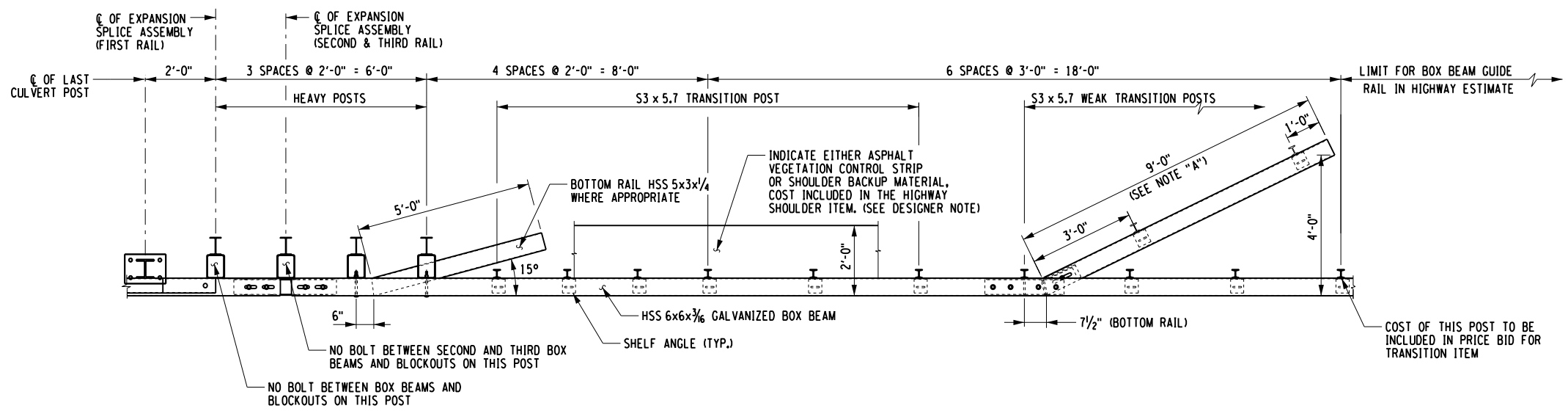


AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	JOYCE ROAD OVER TRIBUTARY TO ROE POND CULVERT REPLACEMENT PROJECT	BRIDGES BIN TBD	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER DR 4814
	TOWN OF MORIAH			CULVERT RAIL DETAILS	PROJECT NUMBER: 760224
	COUNTY: ESSEX	REGION: 1			DRAWING NO. ST-12

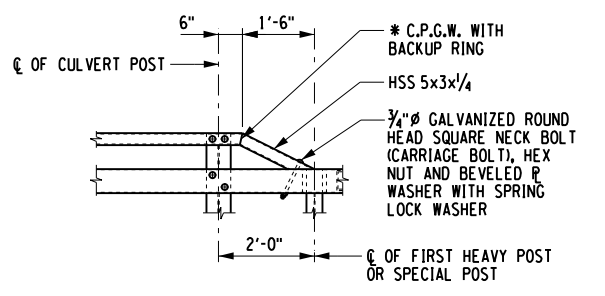
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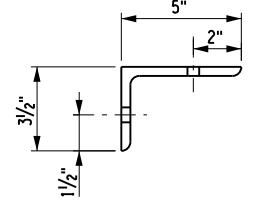
PROJECT MANAGER: C. TUTUNJIAN
 CHECKED BY: I. PENGU
 DRAFTED BY: C. VICKERY
 CHECKED BY: I. PENGU
 DESIGNED BY: C. VICKERY



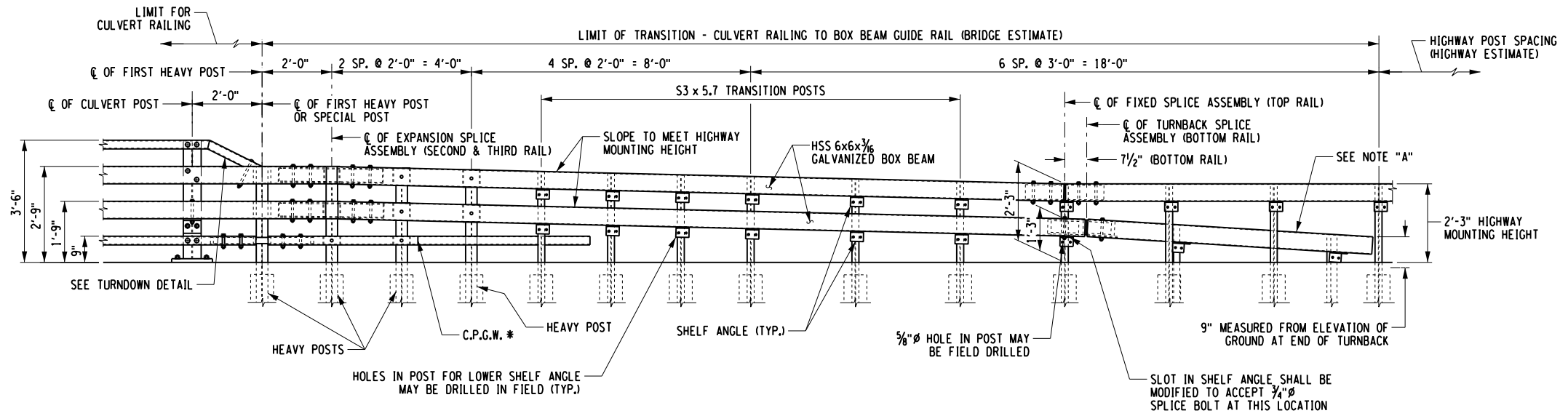
TRANSITION RAIL PLAN
(NOT TO SCALE)



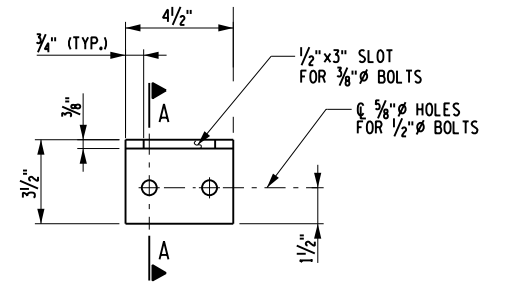
TURNDOWN DETAIL
(NOT TO SCALE)



SECTION A-A



TRANSITION RAIL ELEVATION
(NOT TO SCALE)



ELEVATION SHELF ANGLE DETAILS
(NOT TO SCALE)

PREPARED BY: CHARLES TUTUNJIAN, P.E.
ON: 03/05/2026

ALTERED BY:
ON:

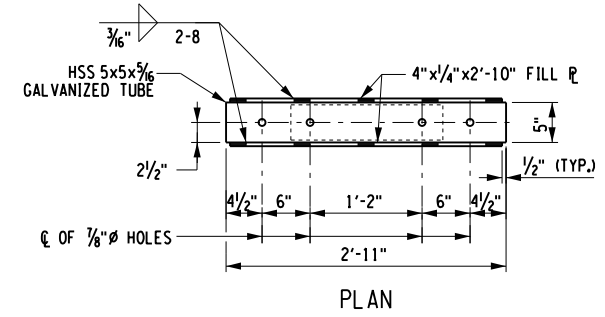


AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS: NO AS-BUILT REVISIONS.	JOYCE ROAD OVER TRIBUTARY TO ROE POND CULVERT REPLACEMENT PROJECT	BRIDGES BIN TBD	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER DR 4814 PROJECT NUMBER: 760224
	TOWN OF MORIAH			TRANSITION RAIL PLAN, ELEVATION AND DETAILS	DRAWING NO. ST-13
	COUNTY: ESSEX	REGION: 1			SHEET NO. 21

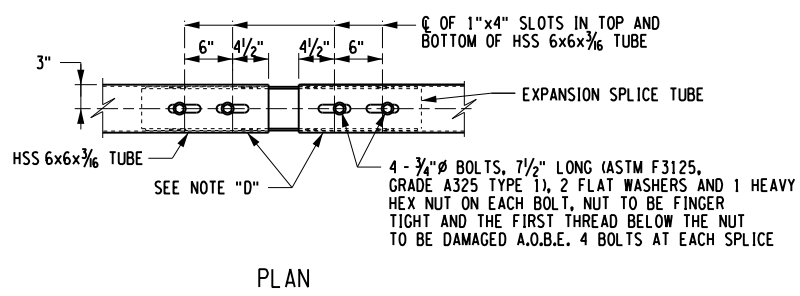
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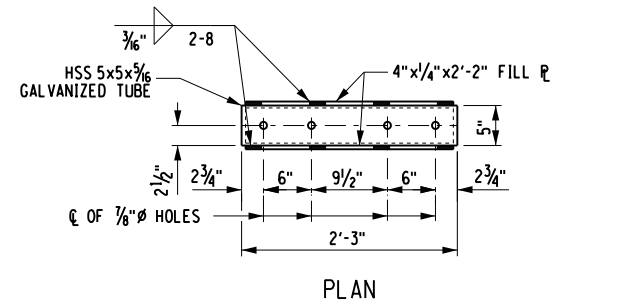
PROJECT MANAGER: C. TUTUNJIAN
 CHECKED BY: I. PENGU
 DRAFTED BY: C. VICKERY
 CHECKED BY: I. PENGU
 DESIGNED BY: C. VICKERY



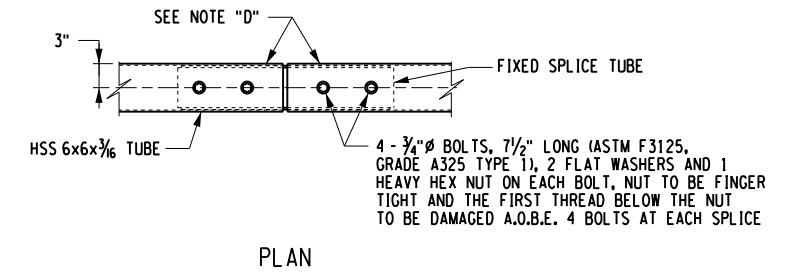
PLAN



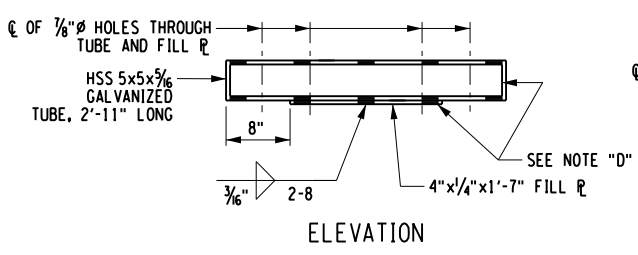
PLAN



PLAN

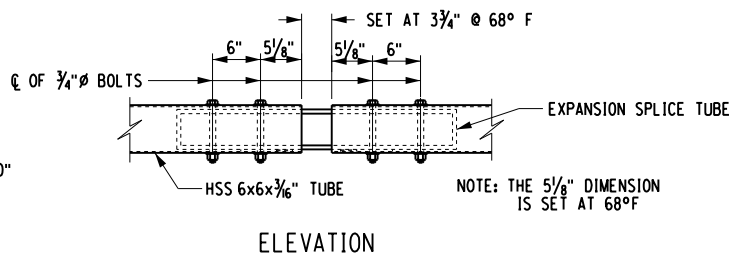


PLAN



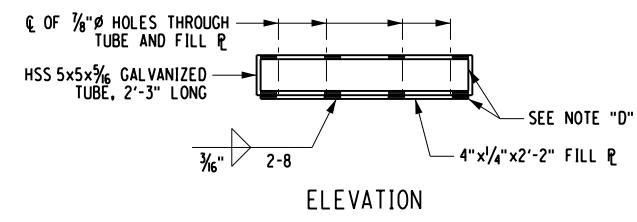
ELEVATION

EXPANSION SPLICE TUBE
(NOT TO SCALE)



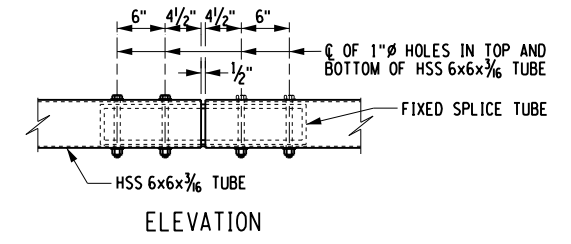
ELEVATION

EXPANSION SPLICE ASSEMBLY
(NOT TO SCALE)



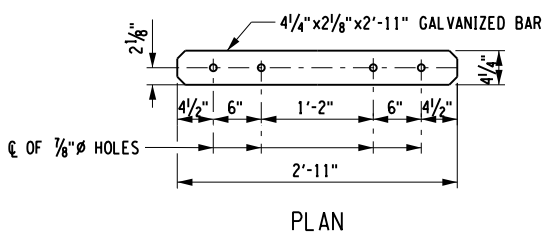
ELEVATION

FIXED SPLICE TUBE
(NOT TO SCALE)

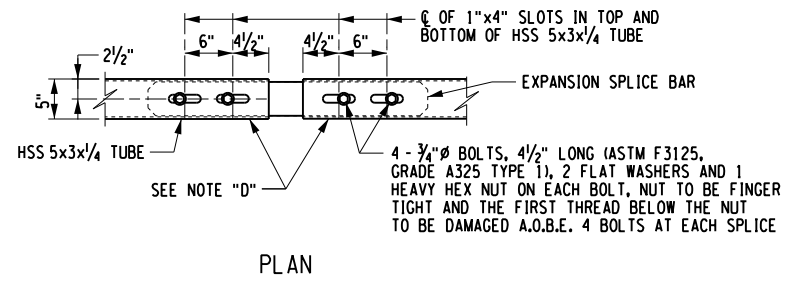


ELEVATION

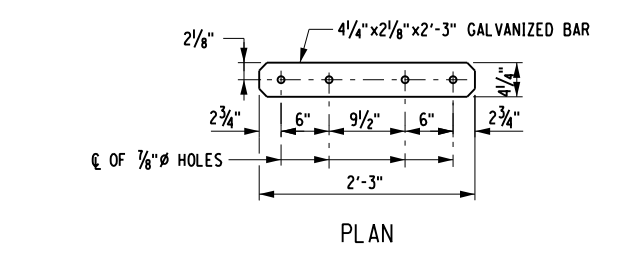
FIXED SPLICE ASSEMBLY
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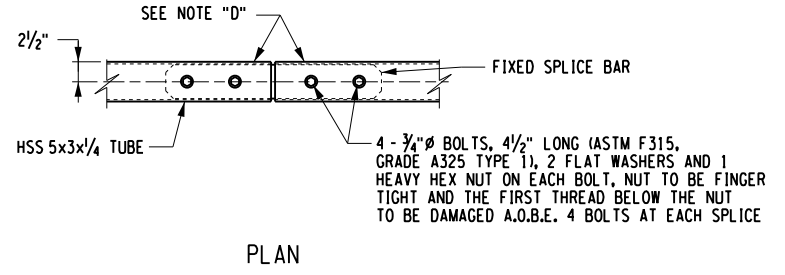
PLAN



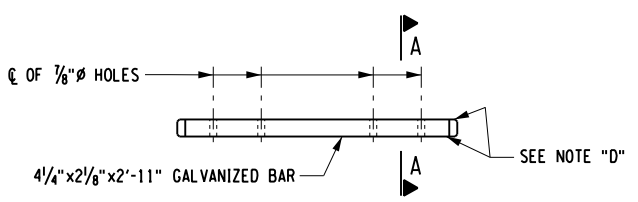
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PLAN

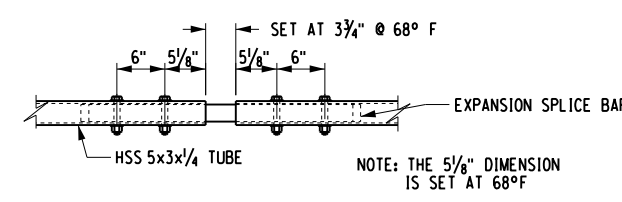


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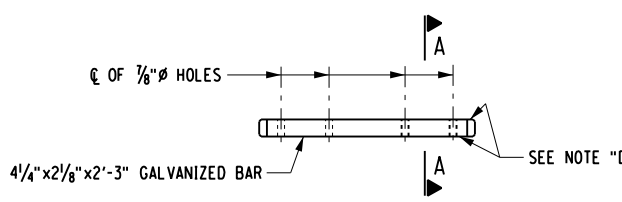
ELEVATION

EXPANSION SPLICE BAR
(NOT TO SCALE)



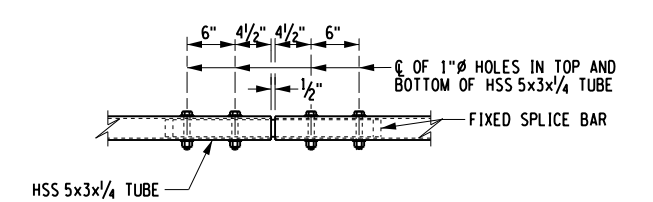
ELEVATION

EXPANSION SPLICE ASSEMBLY
(NOT TO SCALE)



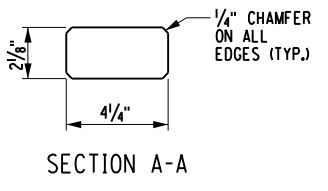
ELEVATION

FIXED SPLICE BAR
(NOT TO SCALE)



ELEVATION

FIXED SPLICE ASSEMBLY
(NOT TO SCALE)



SECTION A-A

PREPARED BY: CHARLES TUTUNJIAN, P.E.
ON: 03/05/2026

ALTERED BY:
ON:



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	JOYCE ROAD OVER TRIBUTARY TO ROE POND	BRIDGES BIN TBD	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER DR 4814
	CULVERT REPLACEMENT PROJECT				PROJECT NUMBER: 760224
	TOWN OF MORIAH			TRANSITION RAIL DETAILS	DRAWING NO. ST-14
	COUNTY: ESSEX REGION: 1				SHEET NO. 22

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