

PROJECT LOCATION

CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS
 FROM NY 9/74 TO NY 9N/22
 TOWN OF TICONDEROGA, ESSEX COUNTY
 MARCH 4, 2019

THE LATEST REVISIONS OF THE 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 SHEETS UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS.

ALL WORK CONTEMPLATED UNDER THIS CONTRACT IS TO BE COVERED BY AND IN CONFORMITY WITH THE STANDARD SPECIFICATIONS (AS CUSTOMARY) REFERENCED IN THE CONTRACT PROJECT "PROPOSAL" EXCEPT AS MODIFIED BY THESE PLANS OR BY CHANGES SET FORTH IN THE CONTRACT PROJECT "PROPOSAL."

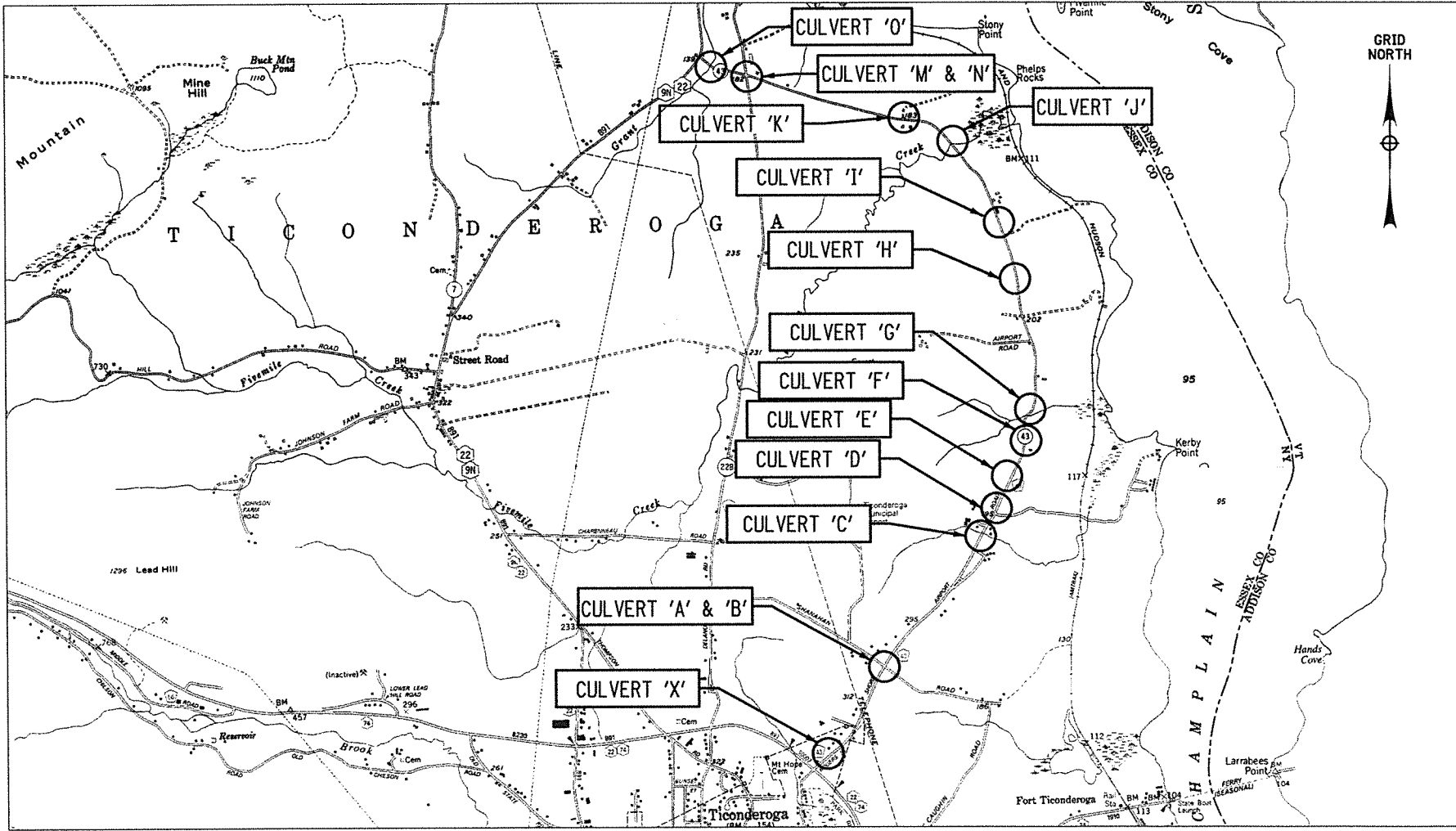
CONTRACT PLANS HAVE BEEN DESIGNED IN ACCORDANCE WITH NYS DOT POLICIES AND GUIDELINES AND THE FINAL DESIGN REPORT APPROVED ON 2/1/2018.

28 SHEETS

PIN 1760.63 / D036169

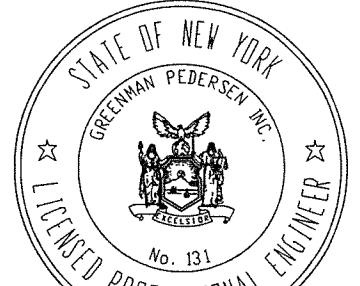
ESSEX COUNTY

CONTRACTOR'S NAME _____
 AWARD DATE _____
 COMPLETION DATE _____
 FINAL ACCEPTANCE DATE _____
 REGIONAL DIRECTOR _____
 ENGINEER IN CHARGE _____
 FINAL COST TOTAL _____
 FISCAL SHARE _____ COST(S) _____



PROJECT LOCATION
 NOT TO SCALE

PREPARED AND RECOMMENDED BY:



Christopher C. Cornwell
 CHRISTOPHER C. CORNWELL, P.E., HIGHWAY DESIGN
 VICE PRESIDENT

Fred C. Mastroianni
 FRED MASTROIANNI, P.E., QA/QC
 VICE PRESIDENT

GPI
 GREENMAN-PEDERSEN, INC.
 CONSULTING ENGINEERS
 80 WOLF ROAD, SUITE 300
 ALBANY, NY 12205

CR 43 SHORE AIRPORT ROAD		
DRAINAGE IMPROVEMENTS		
TOWN OF TICONDEROGA		
ESSEX COUNTY		
FED. ROAD REG. NO.	STATE	SHEET NO.
1	N.Y.	1
CAPITAL PROJECT IDENTIFICATION NO. 1760.63		
INDEX ON SHEET NO. 2		

APPROVED BY
Chris Garrow 3-4-19
 DATE
 CHRIS GARROW, SUPERINTENDENT OF PUBLIC WORKS
 ESSEX COUNTY

FILE NAME = #FILEABBREV#
 DATE/TIME USER = #DATE# #TIME# #USER#
 DESIGN SUPERVISOR = FRED MASTROIANNI
 JOB MANAGER = CHRIS CORNWELL
 DESIGN = JEFF GENTZLER
 CHECKED BY = JEFF GENTZLER
 DRAFTING = JEFF GENTZLER
 CHECKED BY DRAFTING PROJECT MANAGER = CHRIS CORNWELL

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	STYLE	NAME	DESCRIPTION	
CONTROL				LFILL_P	FILL LIMIT		RGP_P	GUIDE POST		UC	CONDUIT, UNDERGROUND	
	CB	BASELINE		LFNC	FENCE		RGW	GUIDE RAIL, W BEAM		UCH	CONDUIT, HANGING	
	CBPR	BASELINE, PROJECTION		LTRC	TREE ROW, CONIFEROUS		RGWM	GUIDE RAIL, W BEAM, MEDIAN		UCO	CONDUIT, OVERHEAD	
DRAINAGE				LTRD	TREE ROW, DECIDUOUS		RPB	PARKING BUMPER		UE	ELECTRIC LINE, UNDERGROUND	
	DCP	CULVERT PIPE		LWH	WALL, H PILE		RRC	RAIL ROAD, CATENARY		UEH	ELECTRIC LINE, HANGING	
	DCP_P	CULVERT PIPE (DIR)		LWR	WALL, RETAINING		RRER	RAIL ROAD, 3RD RAIL		UEO	ELECTRIC LINE, OVERHEAD	
	DDG_P	DITCH, GRASS LINED		LWS	WALL, STONE		RRPLS_P	RAIL, PHOTO, LARGE SCALE		UETO	ELECTRIC TRANSMISSION, OVERHEAD	
	DDP_P	DITCH, PAVED INVERT	ROW MAPPING				RRPSS	RAIL, PHOTO, SMALL SCALE		UESS	ELECTRIC, SUBSTATIONS	
	DDS_P	DITCH, STONE LINED		MDL	DEED LINE		RRS	RUMBLE STRIP		UFO	FIBER OPTIC, UNDERGROUND	
	DFL_P	FLOW LINE		MEE	EASEMENT, EXISTING		RRSLS_P	RAIL, SURVEY, LARGE SCALE		UFOH	FIBER OPTIC, HANGING	
	DSSD	SLOTTED DRAIN		MEP_P	EASEMENT, PERMANENT		RRSSS	RAIL, SURVEY, SMALL SCALE		UFOO	FIBER OPTIC, OVERHEAD	
	DUD_P	UNDERDRAIN		MEPA_P	EASEMENT, PERMANENT, APPROX.		SIGNS				UG	GAS, UNDERGROUND
ENVIRONMENTAL				MET_P	EASEMENT, TEMPORARY		SBLB	BILLBOARDS		UGH	GAS, HANGING	
	EBLHS	BALE, STRAW		META_P	EASEMENT, TEMPORARY, APPROX.		SM	MULTIPLE POST		UGO	GAS, OVERHEAD	
	ECT	CURTAIN, TURBIDITY		MF_P	FEE ACQUISITION, W/ ACCESS		SSO	STRUCTURE, OVERHEAD		UIC	INFORM CABLE, UNDERGROUND	
	EDMC	DAM, COFFER		MFA_P	FEE ACQUISITION, APPROXIMATE		SSOC	STRUCTURE, OVHD. CANTILEVER		UICH	INFORM CABLE, HANGING	
	EDMEC_P	DAM, EARTHEN CHECK		MFS_P	FEE ACQUISITION, SHAPE		STRIPING				UO	OIL LINE, UNDERGROUND
	EDMGS_C_P	DAM, GRAVEL BAG/SAND BAG CHECK		MFWOA_P	FEE ACQUISITION, W/O ACCESS		STB*	BROKEN LINE		UOH	OIL LINE, HANGING	
	EDMPC_P	DAM, PREFABRICATED CHECK		MHA	HISTORICAL, ACQUISITION		STDB*	DOUBLE BROKEN LINE		UPBP	POLE, BRACE, PUSH BRACE	
	EDMSC_P	DAM, STONE CHECK		MHB	HIGHWAY BOUNDARY		STDL*	DOTTED LINE LONG		UPGW	POLE, GUY WIRE	
	EFNS	FENCE, SILT		MHBA	HIGHWAY BOUNDARY, APPROX.		STDS*	DOTTED LINE SHORT		USA	SANITARY SEWER, UNDERGROUND	
	EFNSV	FENCE, SILT & VEGETATION		MHBW	HWY BOUNDARY, FACE OF WALL		STFB*	FULL BARRIER LINE		USAH	SANITARY SEWER, HANGING	
	EFNV	FENCE, VEGETATION		MHBWOA	HIGHWAY BOUNDARY, W/O ACCESS		STH*	HATCH LINE		USAF	SANITARY SEWER, FORCE MAIN, UGND	
	EWAA_P	WETLAND, ADJACENT AREA		MJC	JURISDICTION, CITY		STPB*	PARTIAL BARRIER LINE		USAFH	SANITARY SEWER, FORCE MAIN, HANG	
	EW	WETLAND, FEDERAL		MJCY	JURISDICTION, COUNTY		STRCT	ROUNDABOUT, CAT TRACKS		UT	TELEPHONE, UNDERGROUND	
	EWFS	WETLAND, FEDERAL AND STATE		MJHD	JURISDICTION, HISTORIC DISTRICT		STRYL	ROUNDABOUT, YIELD LINE		UTH	TELEPHONE, HANGING	
	EWM	WETLAND, MITIGATION AREA		MJLL	JURIS., (GREAT, MILITARY) LOT LINE		STSB	STOP BAR		UTO	TELEPHONE, OVERHEAD	
	EWS	WETLAND, STATE		MJN	JURISDICTION, NATION		STSE*	SOLID, EDGE		UTV	CABLE TV, UNDERGROUND	
				MJPB	JURISDICTION, PUBLIC LANDS		STXL	X WALK, LADDER LINE		UTVH	CABLE TV, HANGING	
				MJS	JURISDICTION, STATE		STXLB	X WALK, LADDER BAR LINE		UTVO	CABLE TV, OVERHEAD	
				MJT	JURISDICTION, TOWN		TRAFFIC CONTROL				UUU	UNKNOWN, UNDERGROUND
				MJV	JURISDICTION, VILLAGE		TCSW	SIGNAL, SPAN WIRE		UUH	UNKNOWN, HANGING	
				MPL	PROPERTY LOT LINE		TRAFFIC CONTROL				UUO	UNKNOWN, OVERHEAD
				MPLA	PROPERTY LOT LINE, APPROXIMATE		TRAFFIC CONTROL				UW	WATER LINE, UNDERGROUND
				MSL	SUB LOT LINE		TRAFFIC CONTROL				UWH	WATER LINE, HANGING
							TRAFFIC CONTROL				UWO	WATER LINE, OVERHEAD

NOTES

1. THE LEGEND ILLUSTRATES MAPPING FEATURES (EXISTING AND PROPOSED).
2. FEATURES ARE SHOWN AS EITHER LINEAR (ROADWAY GUIDERAIL, ROADWAY SIDEWALK, UTILITY LINES, ETC.) OR POINT (SIGN, UTILITY POLE, ETC.).
3. FEATURES SHOWN ON THE LEGEND AS EXISTING FEATURES ALSO HAVE CORRESPONDING PROPOSED FEATURES.
4. 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).
5. 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.
6. FEATURES SHOWN AT THE HEAVIER WEIGHT ARE PROPOSED ONLY AND DO NOT HAVE CORRESPONDING EXISTING FEATURES.

CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS	PIN: 1768.68	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER D036169
TOWN OF TICONDEROGA	UTIL QLVL = D			LEGEND, LINE, & POINT SYMBOLOGY	DRAWING NO. LEG-1 SHEET NO. 3
COUNTY: ESSEX	REGION: 1				
GPI GREENMAN-PEDERSEN, INC. CONSULTING ENGINEERS				ESSEX COUNTY	

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	⊕	SRSI	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				+	IDEFAULT	DEFAULT	⊕	MHBAP	HIGHWAY BNDRY., APPROX.	⊕	SRSN3	SHLD, NATIONAL, 3 DIG.	⊕	ULPP	LIGHTING, POLE, PED.
⊙	APOC	POINT OF CURVATURE	⊕	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	⊕	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	⊕	EIPHS_P	STR., INLET PROT., HAY/STRAW	⊕	IFOXCAB	FIBER OPTIC X-CONNECT CABINET	⊕	MJCP	PT., JURIS. CITY	⊕	SRSS4	SHLD, STATE, 4 DIG.	⊕	UP	POLE, WITH UTILITY
⊙	APOS	POINT ON SPIRAL	⊕	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	⊕	EIPP_P	STR., INLET PROT., PREFAB.	⊕	IHARADV	HAR ADVISORY SIGN	⊕	MPCC	PT., CROSS CUT				⊕	UPL	POLE, WITH LIGHT
△	APOVC	POINT ON VERTICAL CURVE	⊕	EIPSF_P	STR., INLET PROT., SILT FENCE	⊕	IHARST	HAR SITE	⊕	MPDH	PT., DRILL HOLE	⊕	TCBJ	BOX, JUNCTION	⊕	USMH	SANITARY SEWER MANHOLE
△	APOVT	POINT ON VERTICAL TANGENT	⊕	EIPSF_P	STR., INLET PROT., SILT FENCE	⊕	ILC	LOAD CENTER	⊕	MPF	PT., FENCE LOCATION	⊕	TCBP	BOX, PULL BOX	⊕	UTB	TELEPHONE, BOOTH
Y	APORC	POINT ON REVERSE CURVE	⊕	ERCB	RISER, CONCRETE BOX	⊕	IMECSPL	MECHANICAL SPLICE	⊕	MPIP	PT., IRON PIPE	⊕	TCBS	BOX, SPLICE	⊕	UTLM	TELEPHONE, LINE MARKER
⊕	APT	POINT OF TANGENCY	⊕	ETRS_P	TRAP, SEDIMENT	⊕	IMSCS	PORT. SPEED & COUNT SENSOR	⊕	MPIR	PT., IRON ROD	⊕	TCMC	MICROCOMPUTER CABINET	⊕	UTMH	TELEPHONE, MANHOLE
⊕	APVC	POINT OF VERTICAL CURVATURE	+	EWFG	WETLAND FLAG	⊕	IMSCS	PORT. SPEED & COUNT SENSOR	⊕	MPM	PT., MONUMENT	⊕	TCPP	PED POLE	⊕	UTVLM	CABLE TV, LINE MARKER
△	APVCC	POINT OF VERT. CMPND CURVE	GEOTECHNICAL			⊕	IMSCS	PORT. SPEED & COUNT SENSOR	⊕	MPMM	PT., MONUMENT, MISC.	⊕	TCSH	SIGNAL HEADS	⊕	UTVPB	CABLE TV, PULL BOX
△	APVI	POINT OF VERT. INTERSECTION				⊕	GDH	DRILL HOLE	⊕	IMT	MICROWAVE TRANSCEIVER	⊕	MPN	PT., NAIL	⊕	TCSP	SIGNAL POLE
△	APVRC	POINT OF VERT. REVERSE CURVE	LANDSCAPE			⊕	IPASCS	PORT. ACCOU. SPD & CNT. SENSOR	⊕	MPRS	PT., RAILROAD SPIKE	TRAFFIC WORK ZONE			⊕	UUJB	UNKNOWN, JUNCTION BOX
⊕	APVT	POINT OF VERTICAL TANGENCY				+	LELS	ELEVATION, SPOT	⊕	IPEDS	PEDESTRIAN SIGNAL HEAD				⊕	MPSP	PT., SPIKE
⊕	ASC	SPIRAL TO CURVE	⊕	LFP	FLAG POLE	⊕	IPSS	PAVEMENT SURFACE SENSOR	⊕	MPST	PT., STAKE	⊕	TWZAPC_P	ARROW PANEL, CAUTION MODE	⊕	UUPB	UNKNOWN, PULL BOX
△	ASPI	SPIRAL POINT OF INTERSECTION	⊕	LMB	MAILBOX	⊕	IPVMS	PERM. VMS	⊕	MPTW	PT., TREE W/ WIRE	⊕	TWZAPT_P	ARROW PANEL, TRAILER OR SUPPORT	⊕	UUVL	UNKNOWN, VALVE
⊙	ASTS	SPIRAL TO SPIRAL	⊕	LPB	PAPER BOX	⊕	IRM	RAMP METER	⊕	MPWL	PT., WALL LOCATION	⊕	TWZBCD_P	BARRICADE (TYPE III)	⊕	UUVT	UNKNOWN, VENT
⊕	AST	SPIRAL TO TANGENT	⊕	LPB	PAPER BOX	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	ROW ACQUISITION			⊕	TWZCMS_P	CHANGEABLE MESSAGE SIGN (PVMS)	⊕	UUVW	UNKNOWN, WELL
⊕	ATS	TANGENT TO SPIRAL	⊕	LPST	POST, SINGLE	⊕	ISP	SOLAR PANEL				⊕	MFS_P.T	FEE ACQUISITION	⊕	TWZFLG_P	FLAGGER
△	AVEVT	VERTICAL EVENT POINT	⊕	LRB	ROCK, BOULDER	⊕	ISST	SPREAD SPECT. TRANSCEIVER	⊕	MEPS_P.T	EASEMENT, PERMANENT	⊕	TWZFT_P	FLAG TREE	⊕	UWM	WATER, METER
⊙	AVHIGH	VERTICAL HIGH POINT	⊕	LSHC	SHRUB, CONIFEROUS	⊕	ITDB	TELEPHONE DEMARCATION BLK	⊕	METS_P.T	EASEMENT, TEMPORARY	⊕	TWZIA_P	IMPACT ATTENUATOR / CRASH CUSHION (TEMPORARY)	⊕	UWMH	WATER, MANHOLE
⊙	AVLOW	VERTICAL LOW POINT	⊕	LSHD	SHRUB, DECIDUOUS	⊕	ITP	SUBSURFACE TEMP. PROBE	⊕	METS_P.T	EASEMENT, TEMPORARY	⊕	TWZLUM_P	LUMINAIRE (TEMPORARY)	⊕	UWV	WATER, VALVE
BRIDGE			⊕	LTC	TREE, CONIFEROUS	⊕	IVTRT	VEHICLE TO RDWY TRANSCEIVER	⊕	METS_P.T	OCCUPANCY, TEMPORARY	⊕	TWZSDT_P	SYMBOL, DIRECTION OF TRAFFIC	⊕	UWW	WATER, WELL
			⊕	LTD	TREE, DECIDUOUS	⊕	IWIMD	WEIGHT IN MOTION DETECTOR	⊕	METS_P.T	OCCUPANCY, TEMPORARY	⊕	TWZSDTD_P	SYMBOL, DIRECTION OF TEMPORARY TRAFFIC DETOUR	⊕		
CONTROL			⊕	LTS	TREE, STUMP	⊕	IWVR	WIRELESS VIDEO REPEATER	⊕	MFS_P.T	FEE ACQUISITION W/O ACCESS	⊕	TWZSGN_P	SIGN (TEMPORARY)	⊕		
			+	LTK_P	TREE, WELL OR WALL	⊕	IWVRC	WIRELESS VIDEO RECEIVER	⊕	RES_P	ELEVATION, SPOT	⊕	TWZSIG_P	SIGNAL, TRAFFIC OR PEDESTRIAN (TEMPORARY)	⊕		
⊕	CBP	BASELINE, POINT	+	LUKP	UNKNOWN POINT	⊕	IWVTT	WIRELESS VIDEO TRANSMITTER	⊕	RGA	GUIDE RAIL, ANCHOR	⊕	TWZWV_P	WORK VEHICLE	⊕		
⊕	CBPOL	BASELINE, POINT ON LINE	NOTE: 1. SEE LEG-1 FOR NOTES.			⊕			⊕	RGP	GUIDE POST, SINGLE	⊕	TWZWVA_P	WORK VEHICLE WITH TRUCK MOUNTED ATTENUATOR	⊕		
⊕	CBSP	BASELINE, SPUR POINT				⊕			⊕								
⊕	CBTP	BASELINE, TIE POINT															
⊕	CPBM	BENCHMARK															
⊕	CPH	POINT, HORIZ. PHOTOGRAMMETRY															
⊕	CPSM	POINT, SURVEY MARKER, PERM.															
⊕	CPSV	POINT, VERT., PHOTOGRAMMETRY															

CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS	PIN: 1766.66	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D036169
TOWN OF TICONDEROGA	UTIL QL.VL = D				
COUNTY: ESSEX	REGION: 1			LEGEND, LINE, & POINT SYMBOLOGY	DRAWING NO. LEG-2 SHEET NO. 4
GPI GREENMAN-PEDERSEN, INC. CONSULTING ENGINEERS				ESSEX COUNTY	

GENERAL NOTES

- MATERIAL AND CONSTRUCTION SPECIFICATIONS: "STANDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS", NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYS DOT) OFFICE OF ENGINEERING, DATED JANUARY 1, 2019 WITH CURRENT ADDITIONS AND MODIFICATIONS, SHALL BE IN EFFECT FOR THIS PROJECT.
- CURRENT NATIONAL "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) WITH NEW YORK STATE SUPPLEMENT SHALL BE IN EFFECT FOR THIS PROJECT.
- ADDITIONAL NOTES MAY BE FOUND ON SUBSEQUENT DRAWINGS. SUCH NOTES, WHILE PERTAINING TO THE SPECIFIC DRAWING THEY ARE PLACED ON, ALSO SUPPLEMENT THE GENERAL NOTES LISTED HEREIN.
- THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT DUE TO THE NATURE OF RECONSTRUCTION PROJECTS, THE EXACT EXTENT OF THE WORK CANNOT ALWAYS BE ACCURATELY DETERMINED PRIOR TO THE COMMENCEMENT. THESE CONTRACT DOCUMENTS HAVE BEEN PREPARED BASED ON FIELD INSPECTION AND OTHER INFORMATION AVAILABLE AT THE TIME. ACTUAL FIELD CONDITIONS MAY REQUIRE MODIFICATIONS TO CONSTRUCTION DETAILS AND WORK QUANTITIES. THE CONTRACTOR SHALL PERFORM THE WORK IN ACCORDANCE WITH THE CONDITIONS AND A.O.B.E.
- THE CONTRACTOR SHALL EXAMINE AND VERIFY IN THE FIELD ALL EXISTING CONDITIONS AND DIMENSIONS WITH THOSE SHOWN ON THE PLANS. THE CONTRACTOR SHALL USE THE FIELD CONDITIONS AND DIMENSIONS, AND MAKE THE APPROPRIATE CHANGES TO THOSE SHOWN ON THE PLANS AS APPROVED BY THE ENGINEER. THE RESULTS OF THIS CHECK OF CONDITIONS AND DIMENSIONS SHALL BE SO NOTED ON THE DRAWINGS SUBMITTED FOR APPROVAL.
- THERE SHALL BE NO CLAIM AGAINST THE COUNTY OR STATE BY THE CONTRACTOR FOR WORK PERTAINING TO MODIFICATIONS AS MAY BE REQUIRED DUE TO ANY DIFFERENCE BETWEEN ACTUAL FIELD CONDITIONS AND THOSE SHOWN BY THE DETAILS AND DIMENSIONS ON THE CONTRACT PLANS. THE CONTRACTOR WILL BE PAID AT THE UNIT BID PRICE FOR THE ACTUAL QUANTITIES OF MATERIALS USED OR FOR THE WORK PERFORMED, AS INDICATED BY THE VARIOUS ITEMS IN THE CONTRACT AND PER SECTION 104-04 OF THE STANDARD SPECIFICATIONS.
- AT ALL TIMES, THE CONTRACTOR SHALL TAKE MEASURES TO PROVIDE POSITIVE DRAINAGE OF SURFACE RUNOFF FROM THE TRAVEL LANES AND CONTROL OF THE RUNOFF TO PREVENT EROSION, POLLUTION, SEDIMENTATION OR OTHER DISCHARGES WHICH WOULD AFFECT PROPERTIES ADJACENT TO THE WORK SITE. ALL MEASURES TAKEN TO PROVIDE POSITIVE DRAINAGE SHALL BE APPROVED BY THE ENGINEER PRIOR TO IMPLEMENTATION. THE COST FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS ITEMS IN THE CONTRACT.
- THE CONTRACTOR SHOULD NOTE THAT ADDITIONAL WORK MAY BE REQUIRED AS THE CONTRACT PROGRESSES WHICH IS NOT SHOWN OR NOTED ON THE PLANS. THIS WORK SHALL BE PERFORMED BY THE CONTRACTOR AS ORDERED BY THE ENGINEER AND PAYMENT SHALL BE MADE AT THE BID PRICE FOR THE APPROPRIATE ITEMS AND PER SECTION 104-04 OF THE STANDARD SPECIFICATIONS.
- THE CLEARING AND GRUBBING ITEM SHALL CONSIST OF THE REMOVAL OF THE BRUSH AND TREE STUMPS WITHIN THE PROJECT LIMITS WHERE INDICATED ON THE PLANS AND A.O.B.E. THE COST OF THIS WORK SHALL BE INCLUDED UNDER ITEM 201.06-CLEARING & GRUBBING.
- NO PAYMENT SHALL BE MADE FOR WORK CALLED FOR BY NOTES ON THE PLANS, IN THE SPECIFICATIONS, OR UNDER THE HEADING GENERAL NOTES UNLESS PAYMENT IS SPECIFICALLY INDICATED BY ITEM NUMBER. THE COST OF WORK FOR WHICH NO SEPARATE PAYMENT IS INDICATED SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE VARIOUS ITEMS IN THE CONTRACT.
- WHENEVER ITEMS IN THE CONTRACT REQUIRE MATERIALS TO BE REMOVED AND DISPOSED, THE COST OF SUPPLYING A DISPOSAL AREA AND TRANSPORTATION TO THAT AREA SHALL BE INCLUDED IN THE PRICE BID FOR THOSE ITEMS.
- THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY SUPPORTS, BRACING OR OTHER DEVICES THAT MAY BE REQUIRED OR THAT MAY BE DIRECTED BY THE ENGINEER TO PROTECT THE SAFETY OF ADJACENT STRUCTURES, ROADWAYS OR THE VARIOUS ITEMS IN THE CONTRACT. NO SEPARATE PAYMENT SHALL BE MADE.
- PAVED AREAS DISTURBED BY THE CONTRACTOR WHICH ARE NOT PART OF THE WORK TO BE PERFORMED UNDER THIS CONTRACT, SHALL BE RESTORED TO AN ACCEPTABLE CONDITION AS SPECIFIED BY AND TO THE SATISFACTION OF THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR GUARDING AND PROTECTING ALL OPEN EXCAVATIONS IN ACCORDANCE WITH THE PROVISIONS OF SECTION 107.05 "SAFETY & HEALTH REQUIREMENTS" OF THE NYS DOT STANDARD SPECIFICATIONS.
- PROVISIONS TO DE-WATER EXCAVATIONS, DUE TO CONSTRUCTION OPERATIONS ALONG THE PROJECT ARE REQUIRED. THERE SHALL BE NO SEPARATE PAYMENT FOR ANY DE-WATERING SYSTEMS. COST SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS ITEMS IN THE CONTRACT.
- THE CONTRACTOR SHALL KEEP ALL DRAINAGE FACILITIES, WITHIN THE CONTRACT LIMITS, CLEAN AND FULLY OPERATIONAL AT ALL TIMES (A.O.B.E.). THIS WORK SHALL BE INCLUDED UNDER VARIOUS ITEMS IN THE CONTRACT.
- THE CONTRACTOR SHALL PROVIDE SURVEY AND STAKEOUT AS REQUIRED AND IN ACCORDANCE WITH SECTION 625 OF THE STANDARD SPECIFICATIONS. COST FOR THIS WORK SHALL BE INCLUDED UNDER ITEM 625.01-SURVEY OPERATIONS.
- THE CONTRACTOR IS TO VISIT THE SITE BEFORE BIDDING TO BECOME FAMILIAR WITH THE PRESENT CONDITIONS AND TO JUDGE THE EXTENT AND NATURE OF THE WORK TO BE DONE UNDER THIS CONTRACT. NO EXTRA COMPENSATION WILL BE ALLOWED BECAUSE OF FAILURE TO INCLUDE IN THE BID ALL ITEMS AND MATERIALS WHICH ARE REQUIRED TO BE FURNISHED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND PER SECTION 104-04 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL BE REQUIRED TO PROTECT HIS WORKERS AT ALL TIMES IN CONFORMANCE WITH APPLICABLE OSHA REGULATIONS.
- COST OF WATERING NEEDED FOR VEGETATION AND OTHER LANDSCAPING ITEMS SHALL BE INCLUDED UNDER EACH RESPECTIVE ITEM IN THE CONTRACT. THERE WILL NOT BE A SEPARATE PAYMENT.
- 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 PROPORTIONALLY AND ARE FULLY DIMENSIONED.

- TWO WEEKS PRIOR TO THE COMMENCEMENT OF ANY WORK, THE CONTRACTOR SHALL SUBMIT A PROPOSED CONSTRUCTION SEQUENCE TO THE ENGINEER FOR APPROVAL.
- BASEMAPPING WAS DEVELOPED FROM A LIMITED GPS SURVEY CONDUCTED BY GREENMAN-PEDERSEN, INC. IN MAY, 2017. THE HORIZONTAL DATUM SHOWN HEREON IS REFERENCED TO THE NEW YORK STATE PLANE COORDINATE SYSTEM, TRANSVERSE MERCATOR PROJECTION, EASTERN ZONE, NAD 1983 IN US SURVEY FEET. THE VERTICAL DATUM SHOWN HEREON IS REFERENCED TO THE NATIONAL VERTICAL DATUM OF 1988 IN SURVEY FEET.
- SUBMITTALS, CATALOG CUTS, SAMPLES, AND SHOP DRAWINGS MUST BE RECEIVED, REVIEWED, AND APPROVED BY THE ENGINEER PRIOR TO ORDERING, FABRICATING, OR INSTALLING MATERIALS. FAILURE TO DO SO MAY CAUSE TIME DELAYS FOR THE CONTRACTOR. THE CONTRACTOR WILL NOT BE ENTITLED TO COMPENSATION FOR SAID TIME DELAYS, REMOVALS, OR REPLACEMENTS.
- DURING CONSTRUCTION, FLOWABLE FILL SHALL NOT BE ALLOWED TO ESCAPE INTO WETLANDS, DRAINAGE SYSTEMS OR WATERS OF NEW YORK STATE. DESIGNATED WASH OUT AREAS ARE TO BE APPROVED BY THE ENGINEER IN CHARGE.
- THE CONTRACTOR IS REQUIRED TO OBTAIN A RIGHT-OF-WAY PERMIT FROM THE ESSEX COUNTY AND RIGHT-OF-WAY PERMIT (PERM 33) FROM NYS DOT.
- THE CONTRACTOR WILL NOTIFY THE COUNTY 72 HOURS PRIOR TO ANY LANE CLOSURES.

RIGHT-OF-WAY NOTES

- ALL WORK TO BE PERFORMED WITHIN SHEETS GNP-1 THROUGH GNP-12 UNDER THIS CONTRACT WILL BE WITHIN THE PUBLIC RIGHT-OF-WAY (ROW) IN ACCORDANCE WITH SECTION 105-15 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR IS TO ASSURE HIMSELF THAT ALL WORK IS BEING PERFORMED WITHIN THE ROW, INCLUDING BUT NOT LIMITED TO VEHICLE ACCESS; STORAGE OF EQUIPMENT, MATERIALS, DEBRIS AND WASTE; LANDSCAPING; VEGETATION REMOVAL AND MANAGEMENT; GRADING, SEEDING AND THE INSTALLATION OF TURF; AND THE INSTALLATION OF ANY FENCES OR PROTECTIVE BARRIER. IF CONTRACTOR IS UNABLE TO IDENTIFY THE LIMITS OF THE RIGHTS-OF-WAY WHEN THE CONTRACT CALLS FOR WORK IN THOSE VICINITIES, THE CONTRACTOR MUST CONTACT THE PROJECT ENGINEER FOR DEFINITIVE BOUNDARY DETERMINATION BEFORE AND WORK MAY BE INITIATED AT THOSE LOCATION (STANDARD SPECIFICATION SECTIONS 105-10 AND 625).
- IN ACCORDANCE WITH SECTION 105-15 OF THE STANDARD SPECIFICATIONS, RELEASES FOR ANY NON-ESSENTIAL CONTRACT WORK OUTSIDE OF THE EXISTING RIGHTS-OF-WAY, INCLUDING PLANTINGS, LANDSCAPING OR DRIVEWAY ENHANCEMENT, WILL BE PROVIDED BY THE PROJECT ENGINEER AND IN NO INSTANCE ARE TO BE SECURED BY THE CONTRACTOR. THE CONTRACTOR SHALL NOT INVADE UPON PRIVATE PROPERTIES, LANDS OR BUILDINGS OUTSIDE OF THE RIGHTS-OF-WAY FOR ANY REASON WITHOUT FIRST SECURING WRITTEN PERMISSION FROM THE PROPERTY OWNER (STANDARD SPECIFICATIONS SECTION 105-15).
- THE CONTRACTOR WILL BE HELD LIABLE FOR ANY DAMAGES DONE. ANY SUCH INJURIES OR DAMAGES SHALL BE SATISFACTORILY REPAIRED OR ITEMS REPLACED AT THE CONTRACTOR'S EXPENSE (STANDARD SPECIFICATIONS SECTION 107-08).
- THE HIGHWAY BOUNDARY SHOWN ON GNP-1, GNP-3, GNP-4, GNP-5 (INLET), GNP-6 (INLET), GNP-7 (OUTLET), GNP-10, GNP-11, AND GNP-13 IN THE GENERAL PLANS ARE BASED ON GIS TAX MAP PARCELS AND WAS PROVIDED BY ESSEX COUNTY REAL PROPERTY. THE HIGHWAY BOUNDARY SHOWN ON GNP-2, GNP-5 (OUTLET), GNP-6 (OUTLET), GNP-7 (INLET), GNP-8, GNP-9, AND GNP-12 WAS ESTABLISHED IN FEBRUARY 2018 BY S.Y. KIM LAND SURVEYOR, P.C. USING RECORD PLANS AND FIELD MONUMENTATION.

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 LOCATIONS 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. PRIOR TO ANY EXCAVATION, THE CONTRACTOR IS TO CALL DIG SAFELY N.Y. TO HAVE UNDERGROUND UTILITIES LOCATED.
- IN THE EVENT THE CONTRACTOR DAMAGES AN EXISTING UTILITY SERVICE, CAUSING THE INTERRUPTION IN SAID SERVICE, THE CONTRACTOR SHALL IMMEDIATELY COMMENCE WORK TO RESTORE SERVICE AND MAY NOT CEASE WORK UNTIL SERVICE IS RESTORED. ALL COSTS TO REPAIR OR REPLACE DAMAGE UTILITIES SHALL BE AT THE EXPENSE OF THE CONTRACTOR. IF THE CONTRACTOR DOES NOT MAKE IMMEDIATE NECESSARY REPAIRS, THE RESPECTIVE OWNING COMPANIES OR MUNICIPAL FORCES MAY DO THE WORK, AND THE COST THEREOF CHARGED AGAINST THE CONTRACTOR.
- THE UNDERGROUND UTILITY INFORMATION SHOWN IS BASED ON QUALITY LEVEL "D". FOUR SEPARATE QUALITY LEVELS OF SUBSURFACE UTILITY FACILITY INFORMATION ARE GENERALLY RECOGNIZED AND ARE AS FOLLOWS:
 QUALITY LEVEL A IS THE HIGHEST DEGREE OF ACCURACY. THE INFORMATION SHOWN ON THE PLANS HAS BEEN OBTAINED BY THE ACTUAL EXPOSURE (OR VERIFICATION OF PREVIOUSLY EXPOSED AND SURVEYED UTILITY FACILITIES) OF THE SUBSURFACE UTILITIES, USING (TYPICALLY) MINIMALLY INTRUSIVE EXCAVATION EQUIPMENT TO DETERMINE THEIR PRECISE HORIZONTAL AND VERTICAL POSITIONS, AS WELL AS THEIR OTHER OWN FACILITY ATTRIBUTES. (SHOWN AS QA)
 QUALITY LEVEL B IS THE SECOND HIGHEST DEGREE OF ACCURACY. THE INFORMATION SHOWN ON THE PLANS HAS BEEN OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS (I.E., UNDERGROUND CAMERAS, RADAR, SONAR, TONE OUTS, ETC.) TO IDENTIFY THE EXISTENCE AND APPROPRIATE HORIZONTAL POSITION OF SUBSURFACE UTILITY FACILITIES. QUALITY LEVEL B DATA ARE REPRODUCIBLE BY SURFACE GEOPHYSICS AT ANY POINT OF THEIR DEPICTION. THE INFORMATION WAS SURVEYED TO APPLICABLE TOLERANCES AND REDUCED ONTO THE PLANS. NO EXCAVATIONS WERE PERFORMED. (SHOWN AS QB)

UTILITY NOTES CONT'D

- QUALITY LEVEL C IS THE THIRD HIGHEST DEGREE OF ACCURACY. THE INFORMATION SHOWN ON THE PLANS HAS BEEN OBTAINED BY SURVEYING AND PLOTTING VISIBLE ABOVE-GROUND UTILITY FEATURES AND BY USING PROFESSIONAL JUDGEMENT IN CORRELATING THIS INFORMATION TO QUALITY LEVEL D INFORMATION. (SHOWN AS QC)
- QUALITY LEVEL D IS THE LOWEST DEGREE OF ACCURACY. THE INFORMATION SHOWN ON THE PLANS WAS DERIVED SOLELY FROM EXISTING NYS DOT AND/OR UTILITY COMPANY RECORDS OR RECOLLECTIONS. (SHOWN AS QD)
- THE CONTRACTOR SHALL PROTECT ALL UNDERGROUND UTILITIES TO REMAIN IN PLACE FROM DAMAGE DURING THE CONSTRUCTION. METHODS OF PROTECTION MAY INCLUDE STEEL PLATES OVER THE UTILITY SO THAT WHEEL LOADINGS FROM CONSTRUCTION VEHICLES DO NOT DAMAGE THE UTILITY. THE COST OF PROVIDING PROTECTION OF UNDERGROUND UTILITIES SHALL BE INCLUDED UNDER VARIOUS ITEMS IN THE CONTRACT.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING NATIONAL GRID FOR PROVIDING RESTRAINTS TO THE EXISTING UTILITY POLES IF REQUIRED WITHIN THE PROJECT LIMITS, WHILE CONSTRUCTION IS TAKING PLACE. THE CONTRACTOR SHALL COORDINATE WITH NATIONAL GRID TO PERFORM THE WORK. THE COST FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS ITEMS.
 - ALL UTILITY POLES TO BE RELOCATED BY OTHERS SHALL BE APPROVED BY THE ENGINEER OF THEIR NEW LOCATION SO THAT THEY DO NOT CONFLICT WITH CONSTRUCTION.
 - PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CALL "DIG SAFELY" (1-800-962-7962) TO HAVE UNDERGROUND UTILITIES LOCATED.

ELECTRICAL SAFETY NOTE

- HIGH VOLTAGE LINES MAY BE PRESENT WITHIN THE PROJECT LIMITS. REFER TO ELECTRICAL SAFETY NOTE CONTAINED IN THE CONTRACT PROPOSAL FOR SPECIAL CONTRACTOR'S SAFETY REQUIREMENTS.

ENVIRONMENTAL REQUIREMENTS


- THE CONTRACTOR SHALL COMPLY WITH ALL ENVIRONMENTAL PERMIT REQUIREMENTS PROVIDED IN THE CONSTRUCTION DOCUMENTS. WITHIN THE DOCUMENTS ARE PERMITS FROM THE ADIRONDACK PARK AGENCY, ARMY CORPS OF ENGINEERS, AND NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION (TWO PERMITS). COST TO BE INCLUDED UNDER VARIOUS ITEMS IN THE CONTRACT. NO SEPARATE PAYMENT WILL BE MADE FOR PERMIT COMPLIANCE.
- THE CONTRACTOR IS ALLOWED TO WORK ON CULVERT 'O' FROM MAY 1 TO SEPTEMBER 30.

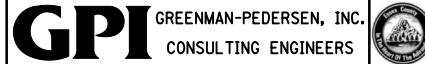
CLEARING AND GRUBBING:

- THE CONTRACTOR MAY REMOVE VEGETATION AS REQUIRED WITHIN THE RIGHT-OF-WAY AND PERMANENT EASEMENTS TO ACCESS AND PERFORM THE WORK. ROOTS OF VEGETATION SHALL PREFERABLY REMAIN AND ENTIRE TREES ARE NOT TO BE REMOVED. THE WORK IS TO BE PAID FOR UNDER ITEM 201.06 - CLEARING AND GRUBBING

CULVERTS

- DUE TO THE EXISTING CONDITIONS PRESENT IN A MAY 2017 FIELD SURVEY THE CONDITION OF THE INVERT AT CULVERTS 'J' AND 'O' ARE UNKNOWN. IF THE CONTRACTOR DISCOVERS AREAS OF DETEIORATION 1 SF OR GREATER, THE CONTRACTOR IS TO FILL THE DETEIORATED AREA WITH GROUT - ITEM 204.01 AS DIRECTED BY THE ENGINEER PRIOR TO LINING THE CULVERT WITH SHOTCRETE. SEE DETAIL ON DWG. MTD-3.
- ALL SEDIMENT, DEBRIS, AND EXCAVATED MATERIAL FROM THE CULVERTS ARE TO BE DISPOSED OF IN A SUITABLE LOCATION ESTABLISHED BY THE CONTRACTOR AND APPROVED BY THE E.I.C. NO SEPARATE PAYMENT IS PROVIDED.
- THE TYPE OF DEWATERING METHOD AND EQUIPMENT USED IS TO BE DETERMINED BY THE CONTRACTOR. REGARDLESS OF THE METHOD, THE CONTRACTOR WILL BE RESPONSIBLE FOR ESTABLISHING EROSION CONTROL MEASURES FOR EMBANKMENT STABILIZATION AND FOR RESTORATION OF IMPACTS CAUSED BY ANY COFFERDAM OR SEDIMENT REMOVAL AREA. PER GENERAL NOTE 15, NO SEPARATE PAYMENT FOR DEWATERING IS PROVIDED.

AFFIX SEAL: GREENMAN - PEDERSEN, INC ON: MARCH 4, 2019	ALTERED BY: On:
	

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS	PIN: 1760.63	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D036169
	TOWN OF TICONDEROGA	UTIL QLVL = D				DRAWING NO. GNN-1
	COUNTY: ESSEX	REGION: 1				SHEET NO. 5
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.						 GREENMAN-PEDERSEN, INC. CONSULTING ENGINEERS ESSEX COUNTY

WORK ZONE TRAFFIC CONTROL NOTES:

- THE FOLLOWING NOTES ARE INTENDED TO SUPPLEMENT AND CLARIFY REQUIREMENTS SET FORTH IN SECTION 619 OF THE CURRENT NYS STANDARD SPECIFICATIONS AND SECTION 619 OF THE NYS STANDARD SHEETS.
- ALL WORK ZONE TRAFFIC CONTROL ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT NYS DOT STANDARD SPECIFICATIONS, THE CURRENT NATIONAL MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND NYS SUPPLEMENT.
- TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH ALL PROVISIONS OF ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL, OR AS AMENDED ON THESE PLANS, FOR THE DURATION OF THE PROJECT.
- THE CONTRACTOR MAY SUBMIT REVISIONS TO THESE PLANS, IN WRITING, TO THE ENGINEER FOR APPROVAL, HOWEVER ANY COSTS RESULTING FROM THESE CHANGES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL VEHICLES AND EQUIPMENT THAT SHALL BE MOVING IN AND OUT OF TRAFFIC AT WORK AREAS SHALL BE EQUIPPED WITH AN APPROVED AMBER ROTATING SAFETY LIGHT. THIS LIGHT SHALL BE MOUNTED SO AS TO BE EASILY SEEN BY APPROACHING TRAFFIC.
- VEHICLES BELONGING TO THE CONTRACTOR, OR THE CONTRACTOR'S EMPLOYEES, SHALL NOT BE PARKED ON THE PAVEMENT OR SHOULDERS, OR WITHIN 30 FEET OF THE EDGE OF PAVEMENT ALONG OR ADJACENT TO OPEN TRAVEL LANES.
- THE CLEAR ROADSIDE AREA IS DEFINED AS THE AREA WITHIN 30 FEET OF THE EDGE OF THE TRAVELWAY. NO MATERIAL SHALL BE STORED OR VEHICLES PARKED WITHIN THE CLEAR ROADSIDE AREA UNLESS WITHIN AN ACTIVE WORK ZONE OR WITH THE APPROVAL OF THE ENGINEER.
- DRIVING AGAINST TRAFFIC AT ANY TIME, REGARDLESS OF WHETHER OR NOT THE AREA HAS BEEN CLOSED TO TRAFFIC, SHALL NOT BE PERMITTED, EXCEPT FOR TRAFFIC CONE PICK-UP OR AS SPECIFICALLY PERMITTED BY THE ENGINEER.
- ESCORT VEHICLES EQUIPPED WITH AN AMBER LIGHT OR AN OPERATING ARROW PANEL WILL BE REQUIRED WHEN TRANSPORTING SLOW MOVING CONSTRUCTION EQUIPMENT ALONG ANY PORTION OF THE ROADWAY OPEN TO TRAFFIC.
- WHEN REOPENING DRIVING LANES TO TRAFFIC, THE CONTRACTOR SHALL START BY MOVING THE DEVICES AT THE FAR END OF THE LANE CLOSURE AND WORKING TOWARDS THE SIGNS AT THE BEGINNING OF THE LANE CLOSURE. THE SIGNS ARE NOT TO BE TAKEN DOWN UNTIL ALL TRAFFIC CONTROL DEVICES HAVE BEEN REMOVED.
- THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO AVOID DAMAGING EXISTING PAVEMENT, CURBS, AND SIDEWALKS WHEN IT IS NECESSARY TO MOVE EQUIPMENT THROUGH LOCAL STREETS. HE/SHE SHALL OBSERVE ALL OF THE RULES, REGULATIONS, AND DIRECTIONS OF LOCAL MUNICIPALITIES RELATIVE TO SUCH HANDLING OF EQUIPMENT, AND TAKE SUCH PROTECTIVE MEASURES AS HE/SHE DEEMS NECESSARY OR AS DIRECTED BY THE ENGINEER. LOCAL STREET PAVEMENT, CURBS, VEGETATION, SIDEWALKS, AND OTHER APPURTENANCES LOCATED WITHIN THE CONTRACT LIMITS THAT ARE NOT SCHEDULED TO BE REPLACED, AND ARE DAMAGED BY THE CONTRACTOR, SHALL BE REPLACED OR REPAIRED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S SOLE COST AND EXPENSE.
- THE WORK ZONE TRAFFIC CONTROL PLANS PROVIDED HEREIN AND AS PER STANDARD SHEETS ARE NOT INTENDED TO BE ALL INCLUSIVE, BUT RATHER SERVE AS A GUIDE FOR THE SAFE AND EFFICIENT SEQUENCE OF TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION OPERATIONS. ANY ADDITIONS OR DELETIONS TO THE TRAFFIC CONTROL PLANS MAY BE ORDERED BY THE ENGINEER. COST TO BE INCLUDED UNDER ITEM 619.01.
- COSTS FOR ALL TEMPORARY SIGNS FOR WORK ZONE TRAFFIC CONTROL SHALL BE INCLUDED UNDER ITEM 619.01.
- THE COST OF PROVIDING AND MAINTAINING SAFE AND ADEQUATE INGRESS AND EGRESS TO AND FROM INTERSECTING HIGHWAYS, HOMES AND COMMERCIAL ESTABLISHMENTS AT ALL TIMES, TO THE SATISFACTION OF THE ENGINEER, SHALL BE BORNE BY THE CONTRACTOR, INCLUDING PROVIDING TEMPORARY ASPHALT PAVEMENT TO MAINTAIN THIS ACCESS.
- IF THE ENGINEER NOTIFIES THE CONTRACTOR OR HIS SUPERINTENDENT OF ANY HAZARDOUS CONSTRUCTION PRACTICES, ALL OPERATIONS IN THAT AREA SHALL BE DISCONTINUED AND IMMEDIATE REMEDIAL ACTION SHALL BE TAKEN TO THE SATISFACTION OF THE ENGINEER BEFORE WORK IS RESUMED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING SURE THAT ALL SIGNS, CONES, FLASHERS, BARRIERS, ETC. ARE IN PLACE AND IN GOOD CONDITION. THE SOLE JUDGE OF THE EFFECTIVENESS OF THE CONTRACTOR'S EFFORTS TOWARDS THE PROTECTION OF TRAFFIC AND PERSONNEL SHALL BE THE ENGINEER.

WORK ZONE TRAFFIC CONTROL NOTES (CON'T):

- FLAGGERS SHALL BE LOCATED AT ALL ACTIVE WORK AREAS AND AT OTHER LOCATIONS WITHIN A WORK AREA WHERE RESTRICTED SIGHT DISTANCE IMPEDES THE FLOW OF TRAFFIC OR A.O.B.E.
- EXISTING TRAFFIC SIGNS SHALL BE COVERED AND UNCOVERED AS NECESSARY DURING CONSTRUCTION. COST TO BE INCLUDED UNDER ITEM 619.01.
- IF IN THE ENGINEER'S JUDGMENT, FLAGS ON SIGNS ARE NECESSARY DUE TO LIMITED SIGHT DISTANCE. THEY SHALL BE PROVIDED BY THE CONTRACTOR. COST SHALL BE INCLUDED IN ITEM 619.01.
- PEDESTRIAN AND BICYCLIST TRAFFIC SHALL BE MAINTAINED AND PROTECTED AT ALL TIMES IN ACCORDANCE WITH SECTION 619 OF THE NYS DOT STANDARD SPECIFICATIONS.
- THE CONTRACTOR IS ADVISED THAT THROUGHOUT THE DURATION OF THE PROJECT, NIGHTTIME CONSTRUCTION WILL NOT BE ALLOWED UNLESS APPROVED BY ENGINEER. NIGHTTIME CONSTRUCTION IS DEFINED AS THE PERIOD BETWEEN 7 PM AND 6 AM.
- THE CONTRACTOR SHALL MAINTAIN STABLE EXCAVATED SIDE SLOPES AT ALL TIMES.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH ALL PUBLIC AND PRIVATE UTILITIES FOR MAINTENANCE OR RELOCATION WORK WITH RESPECT TO SITE ACCESS, TRAFFIC CONTROL AND SCHEDULING TO AVOID CONFLICTS FOR TIMELY COMPLETION OF THE WORK.
- THE CONTRACTOR SHALL PROVIDE SAFE AND CONVENIENT EMERGENCY ACCESS FOR LOCAL FIRE, POLICE AUTHORITIES, AND AMBULANCE SERVICES THROUGHOUT THE PROJECT AREA AT ALL TIMES.
- RESPONSIBILITY FOR EMERGENCY REPAIRS: THE CONTRACTOR SHALL, IN WRITING, SUBMIT TO THE APPROPRIATE LAW ENFORCEMENT AND GOVERNMENT AGENCIES THE NAME, ADDRESS AND TELEPHONE NUMBER(S) OF THE PERSON OR PERSONS AUTHORIZED TO SECURE LABOR, MATERIALS AND EQUIPMENT FOR EMERGENCY REPAIRS OUTSIDE OF NORMAL WORKING HOURS. DUPLICATE COPIES OF THE ABOVE SHALL BE FILED WITH THE ENGINEER.
- WHERE DRUMS, CONES, VERTICAL PANELS OR TUBULAR MARKERS ARE USED IN CONTROLLING THE MOVEMENT OF TRAFFIC, THE CONTRACTOR SHALL TAKE WHATEVER STEPS ARE NECESSARY TO PREVENT ALL TRAFFIC CONTROL DEVICES FROM BEING BLOWN OVER OR DISPLACED BY PASSING VEHICLES. THE CONTRACTOR SHALL ACCOMPLISH THIS BY DOUBLING CONES, THE USE OF SAND BAGS, RINGS OR BY OTHER MEANS, AS APPROVED BY THE ENGINEER, WHICH SHALL NOT PRESENT A HAZARD TO MOTORISTS OR WORKERS IF THE CONES, DRUMS, VERTICAL PANELS OR TUBULAR MARKERS ARE STRUCK.
- THE CONTRACTOR SHALL BACKFILL ALL OPEN EXCAVATIONS OR PROVIDE ANCHORED STEEL PLATES TO COVER ALL TRENCH EXCAVATIONS DURING NON-WORKING HOURS. ANCHORED STEEL PLATES SHALL ALSO BE PLACED ON SUBGRADE, SUBBASE COURSES OR BASE COURSES TO PROTECT SHALLOW UTILITY FACILITIES FROM WHEEL LOADINGS DUE TO CONSTRUCTION VEHICLES AND EQUIPMENT. STEEL PLATES SHALL BE RAMPED WITH ASPHALT IN THE ROADWAY AREA TO PROVIDE A SMOOTH TRANSITION. THE COST FOR ANCHORED PLATES AND PAVEMENT SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 619.01.
- THE MINIMUM WIDTH OF TRAVEL LANES SHALL BE 11 FEET UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- THE CONTRACTOR WILL NOT BE ALLOWED TO IMPLEMENT ANY TEMPORARY LANE OR SHOULDER CLOSURES OR OTHERWISE DISRUPT TRAFFIC IN ANY WAY DURING THE FOLLOWING STATE RECOGNIZED HOLIDAYS:
 - NEW YEAR'S DAY
 - MEMORIAL DAY
 - INDEPENDENCE DAY
 - LABOR DAY
 - COLUMBUS DAY
 - THANKSGIVING DAY
 - CHRISTMAS DAY
- IF AN ABOVE RECOGNIZED HOLIDAY IS ON A MONDAY, NO TEMPORARY LANE OR SHOULDER CLOSURES OR OTHER TRAFFIC DISRUPTIONS WILL BE PERMITTED FROM 12 NOON FRIDAY BEFORE THE HOLIDAY TO 10 A.M. TUESDAY AFTER THE HOLIDAY.
- IF AN ABOVE RECOGNIZED HOLIDAY IS ON A TUESDAY, NO TEMPORARY LANE OR SHOULDER CLOSURES OR OTHER TRAFFIC DISRUPTIONS WILL BE PERMITTED FROM 12 NOON FRIDAY BEFORE THE HOLIDAY TO 10 A.M. WEDNESDAY AFTER THE HOLIDAY.
- IF AN ABOVE RECOGNIZED HOLIDAY IS ON A WEDNESDAY, NO TEMPORARY LANE OR SHOULDER CLOSURES OR OTHER TRAFFIC DISRUPTIONS WILL BE PERMITTED FROM 12 NOON TUESDAY BEFORE THE HOLIDAY TO 10 A.M. THURSDAY AFTER THE HOLIDAY.
- IF AN ABOVE RECOGNIZED HOLIDAY IS ON A THURSDAY OR FRIDAY, NO TEMPORARY LANE OR SHOULDER CLOSURES OR OTHER TRAFFIC DISRUPTIONS WILL BE PERMITTED FROM 12 NOON THE DAY BEFORE THE HOLIDAY TO 10 A.M. MONDAY AFTER THE HOLIDAY.
- IF AN ABOVE RECOGNIZED HOLIDAY IS ON A WEEKEND DAY, NO TEMPORARY LANE OR SHOULDER CLOSURES OR OTHER TRAFFIC DISRUPTIONS WILL BE PERMITTED FROM 12 NOON FRIDAY BEFORE THE HOLIDAY TO 10 A.M. TUESDAY AFTER THE HOLIDAY.
- THE CONTRACTOR SHALL NOT BEGIN WARMING UP EQUIPMENT BEFORE THE SCHEDULED START TIMES, NOR KEEP EQUIPMENT RUNNING AFTER THE SCHEDULED QUIT TIMES.

WORK AREA COORDINATION:

- IT IS THE RESPONSIBILITY OF THE CONTRACTOR, BEFORE COMMENCING WORK, TO SUBMIT TO THE ENGINEER FOR APPROVAL AN OUTLINE OF HIS PROPOSED METHODS AND MANNER OF EXECUTING THE WORK, INCLUDING SEQUENCES OF OPERATION AND A TIME SCHEDULE.
- THE CONTRACTOR SHALL COORDINATE ALL CONTRACT WORK WITH ANY UTILITY WORK, SUBCONTRACTORS WORK, PUBLIC MAINTENANCE OPERATIONS, OR OTHER CONSTRUCTION ACTIVITIES IN THE AREA TO ENSURE THERE ARE NO CONFLICTS.
- ESSEX COUNTY, THE TOWN OF TICONDEROGA DEPARTMENT OF PUBLIC WORKS, AND INTERNATIONAL PAPER SHALL BE NOTIFIED 2 WEEKS IN ADVANCE OF ANY SCHEDULED WORK.
- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SAFE ACCESS TO ALL BUSINESSES THROUGHOUT THE PROJECT DURATION DURING ALL HOURS.

PEDESTRIAN AND BICYCLE ACCOMMODATION

- THE CONTRACTORS ATTENTION IS CALLED TO THE FACT THAT PEDESTRIAN AND BICYCLE TRAFFIC IS TO BE MAINTAINED THROUGHOUT OR AROUND THE PROJECT FOR THE DURATION OF CONSTRUCTION. MATERIAL, EQUIPMENT OR OTHER SUCH BARRIERS SHALL NOT BE PLACED OR PARKED SO AS TO OBSTRUCT PEDESTRIAN/BICYCLE TRAFFIC OR PRESENT A SAFETY HAZARD TO THE NON-MOTORIZED PUBLIC. ALL NECESSARY LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO MAINTAIN PEDESTRIAN AND BICYCLE TRAFFIC SHALL BE INCLUDED IN THE BID PRICE FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL.

DELINEATION


- CONFLICTING PAVEMENT MARKINGS SHALL BE REMOVED AS SPECIFIED IN THE PLANS AND/OR AOB.E.
- TEMPORARY OR INTERIM PAVEMENT MARKINGS SHALL BE INSTALLED PRIOR TO OPENING THE PAVEMENT TO TRAFFIC DURING CONSTRUCTION IN ACCORDANCE WITH THE NYS DOT STANDARD SPECIFICATIONS.
- EXISTING PAVEMENT MARKINGS OUTSIDE OF THE CONSTRUCTION ZONES SHALL BE MAINTAINED AND RE-STRIPED AOB.E. THIS MAY INCLUDE, BUT IS NOT LIMITED TO RE-STRIPING THE EXISTING ROADWAY PRIOR TO, OR DIRECTLY AFTER, THE WINTER SHUTDOWN, AND/OR RE-STRIPING AREAS THAT ARE NOT SCHEDULED FOR WORK UNTIL LATER STAGES OF CONSTRUCTION. EXISTING PAVEMENT MARKINGS, LETTERS, AND SYMBOLS SHALL BE REAPPLIED AOB.E.
- ALL CHANNELIZING AND GUIDING DEVICES ARE TO BE PLACED AS TO PROVIDE A 2 FOOT LATERAL CLEARANCE TO THE TRAVELWAY.
- THE CONTRACTOR SHALL NOT MIX CHANNELIZATION DEVICES (CONES, BARRELS, VERTICAL PANELS) IN A LINEAR CLOSURE OR TAPER. DIFFERENT CHANNELIZATION DEVICES MAY BE USED ON DIFFERENT AREAS OF THE PROJECT.

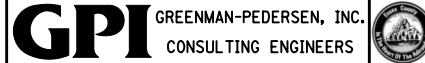
COORDINATION

- THE CONTRACTOR SHALL BE AWARE THAT THERE MAY BE OTHER CONTRACTS, MUNICIPALITIES, MAINTENANCE OPERATIONS, OR BRIDGE INSPECTIONS IN PROGRESS IN OR ADJACENT TO THE WORK AREA. THE ENGINEER AND THE CONTRACTOR SHALL COMMUNICATE AND COORDINATE OPERATIONS WITH OTHER OPERATIONS SO THAT NO CONFLICT IN WORK SCHEDULING OR LOCATION OCCUR.

STANDARD SHEETS 619-10, 11, 12 CRITERIA

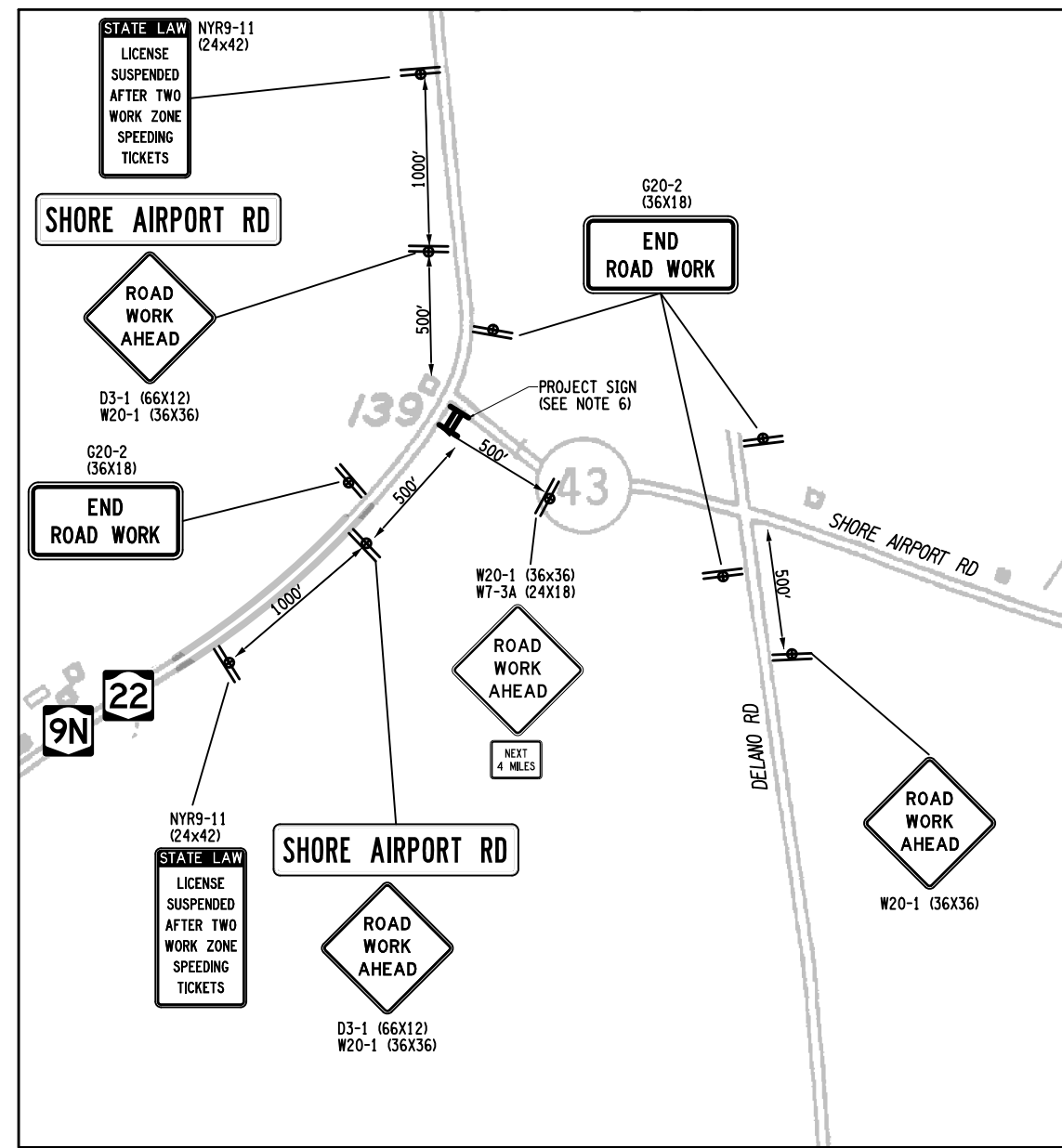
- PRECONSTRUCTION POSTED SPEED LIMIT: 55 MPH
- TYPE OF ROADWAY: MAJOR COLLECTOR
- SETTING: RURAL

AFFIX SEAL: GREENMAN - PEDERSEN, INC ON: MARCH 4, 2019	ALTERED BY: ON:
	

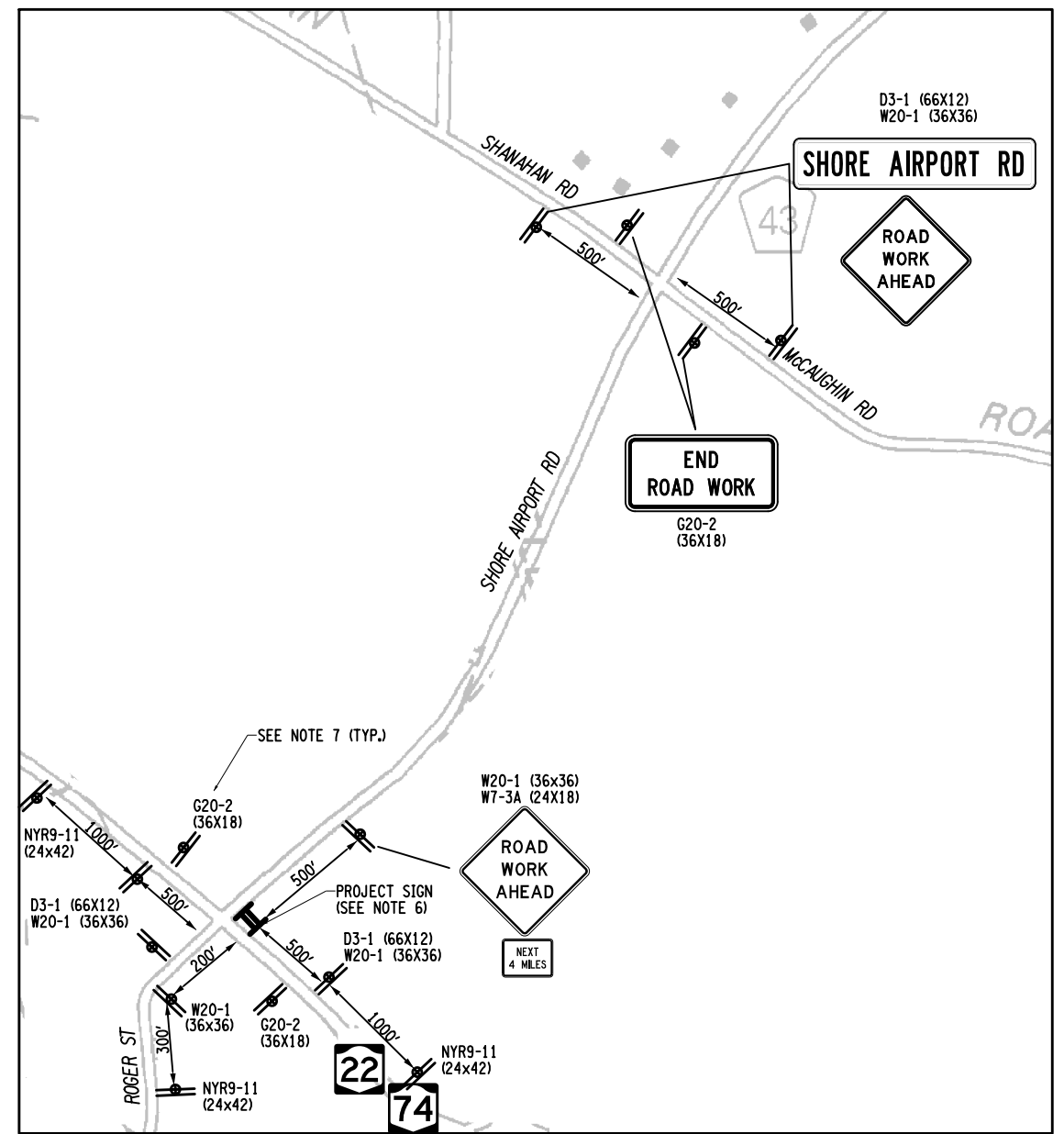
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS	PIN: 1760.63	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D036169
	TOWN OF TICONDEROGA	UTIL QL.VL = D				DRAWING NO. WZTC-1 SHEET NO. 6
IT IS A VIOLATION OF LAW FOR ANY PERSON, 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.		COUNTY: ESSEX	REGION: 1			ESSEX COUNTY

FILE NAME = ...\\176063.CPH.WZTC_02.dgn
 DATE/TIME = 3/4/2019
 USER = jgentzler

DESIGN SUPERVISOR F. MASTROIANNI
 JOB MANAGER C. CORNWELL
 DESIGN J. GENTZLER
 CHECK C. CORNWELL
 DRAFTING J. GENTZLER
 CHECK A. HAWKINS
 PROJECT MANAGER C. CORNWELL



NORTHERN PROJECT LIMITS



SOUTHERN PROJECT LIMITS

NOTES:

1. THE CONTRACTOR SHALL COVER ALL EXISTING SIGNS CONFLICTING WITH PROPOSED WORK ZONE SIGNING.
2. CONSTRUCTION SIGNING SHALL BE COVERED OR TURNED OVER WHEN NOT IN USE.
3. WHILE WORKING IN THE VARIOUS SECTIONS OF THE ROADWAY AND DEPENDING UPON THE TYPE OF WORK, THE CONTRACTOR SHALL USE APPROPRIATE 619 STANDARD SHEETS FOR BOTH SHOULDER CLOSURES AND LANE CLOSURES.
4. THE COST OF ALL WORK ZONE SIGNAGE SHALL BE PROVIDED UNDER ITEM 619.01. SEE DWG. WZTC-1 FOR ADDITIONAL NOTES.
5. SIGN POSTS SHALL BE LOCATED BASED ON VALUES IN THE NYS DOT STANDARD SHEETS AND THE NYS MUTCD SUPPLEMENT.
6. THE PROJECT SIGNS SHALL BE CONSTRUCTED TO INDICATE THE ANTICIPATED DURATION OF THE PROJECT AND INSTALLED TWO WEEKS PRIOR TO CONSTRUCTION. THE SIGNS SHALL BE PAID FOR UNDER ITEM 619.01.
7. SEE NORTHERN PROJECT LIMITS MAP FOR SIGN FACES.

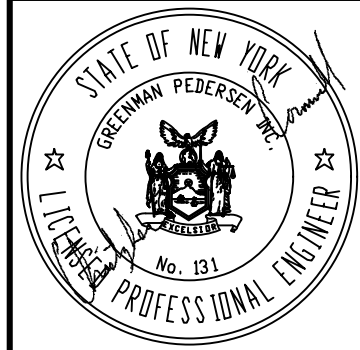
LEGEND:

	PROPOSED PROJECT SIGN
	PORTABLE VARIABLE MESSAGE SIGN LOCATION

PROJECT SIGN



AFFIX SEAL: GREENMAN - PEDERSEN, INC
 ON: MARCH 4, 2019
 ALTERED BY:
 ON:



AS-BUILT REVISIONS
 DESCRIPTION OF ALTERATIONS:

CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS
TOWN OF TICONDEROGA
COUNTY: ESSEX
REGION: 1

PIN: 1760.63	BRIDGES	CULVERTS
UTIL QL.VL = D		

ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D036169
WORK ZONE TRAFFIC CONTROL	DRAWING NO. WZTC-2 SHEET NO. 7

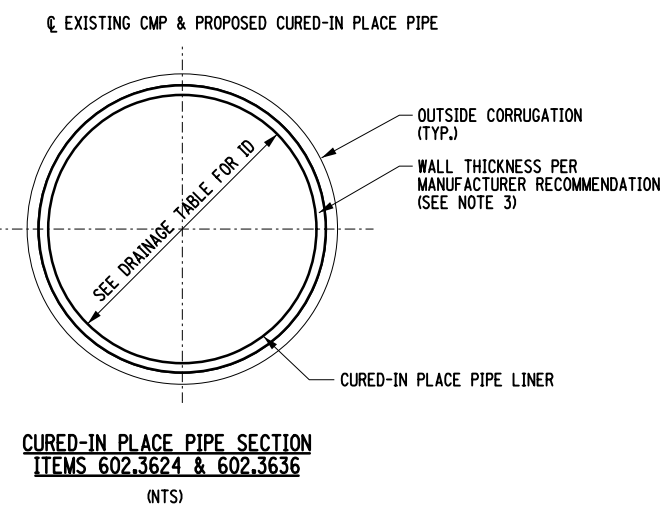
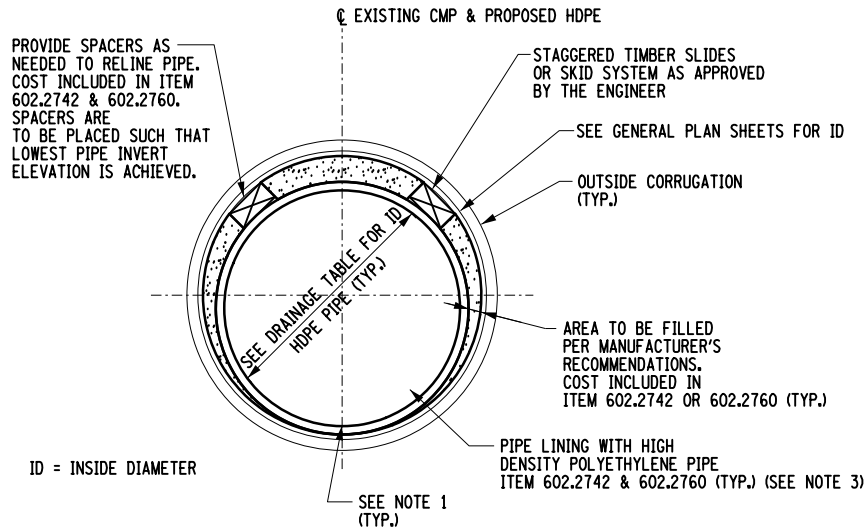
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GPI GREENMAN-PEDERSEN, INC.
 CONSULTING ENGINEERS
 ESSEX COUNTY

PROJECT MANAGER C. CORNWELL
 CHECK A. HAWKINS
 DRAFTING J. GENTZLER
 CHECK C. CORNWELL
 DESIGN J. GENTZLER
 JOB MANAGER C. CORNWELL
 DESIGN SUPERVISOR F. MASTROIANNI

FILE NAME = ...176063.CPH_MTD-1.dgn
 DATE/TIME = 3/4/2019
 USER = jgentzler

TABLE OF DRAINAGE ITEMS													DRAINAGE ITEMS - SEE DESCRIPTIONS BELOW																						
CULVERT/ARCH	GENERAL PLAN	DESCRIPTION	EXISTING DIAMETER/SPAN	EXISTING INVERT 1	EXISTING INVERT 2	EXISTING PIPE LENGTH	SLOPE	PROPOSED DIAMETER/SPAN	PROPOSED INVERT 1	PROPOSED INVERT 2	PROPOSED STONE APRON (W/P X T ₁) (SEE MTD-2)	PROPOSED DRAINAGE DITCH	TOTAL AREA	203.07	204.01	206.0201	209.18030124	209.2301	555.0105	555.10000006	602.2101	602.2742	602.2760	602.3624	602.3636	603.171416	603.171814	603.172012	603.172212	620.03	620.08	620.29010009	621.01	656.01	
														CY	CY	CY	SY	LF	CY	CY	SF	LF	LF	LF	LF	EA	EA	EA	EA	CY	CY	CY	LF	LB	
X	GNP-1	INSTALL CIPP, CULVERT END SECTIONS, AND STONE APRONS	24"	NOT EVALUATED	58.0	N/E	21"	N/E	6'-0"x10'-5"	6'-0"x10'-5"			125.0	0.5	8.8	58.0	1.3							73		2				4.6	2.3				
A	GNP-2	INSTALL CIPP, CULVERT END SECTIONS, AND STONE APRONS	36"	262.65	255.69	10.1	6.96%	33"	262.9	255.9	9'-0"x15'-0"	9'-0"x15'-0"	270.0	1.7	19.2	89.0	2.5								141		2			10.0	5.0				
B	GNP-2	INSTALL CIPP, CULVERT END SECTIONS, AND STONE APRONS	24"	275.68	263.90	95.0	11.78%	21"	275.9	264.1	6'-0"x10'-5"		62.5	0.5	5.3	54.0	1.3							95					2.3	1.2					
C	GNP-3	INSTALL 60" HDPE PIPE AND STONE APRONS	72"	183.97	181.97	134.0	2.00%	60"	184.2	182.2	18'-0"x29'-6"	18'-0"x29'-6"	1062.0	5.4	69.0	121.0	4.6					138					2		39.3	19.7	39.3				
D	GNP-4	INSTALL CIPP, CULVERT END SECTIONS, AND STONE APRONS	36"	193.25	187.86	104.0	5.39%	33"	193.4	188.0	9'-0"x15'-0"	9'-0"x15'-0"	270.0	0.5	18.0	73.0	2.5								104		2		10.0	5.0					
E	GNP-4	FILL EXISTING CULVERT WITH FLOWABLE FILL	24"	193.52	192.56	81.0	0.96%	N/A												0.0	11.0														
F	GNP-5	INSTALL CIPP, CULVERT END SECTIONS, STONE APRONS, AND DRAINAGE DITCH	36"	130.92	126.63	141.0	4.29%	36"	131.0	126.8	9'-0"x15'-0"	9'-0"x15'-0"	500'	270.0	1.7	37.9	72.2	267.0	2.5						141		2		10.0	5.0					
G	GNP-6	INSTALL 60" HDPE PIPE AND STONE APRONS	72"	110.79	108.91	171.0	1.88%	60"	111.0	109.1	14'-0"x20'-0"	18'-0"x29'-6"	811.0	5.4	55.0	108.0	4.6					175					2	30.0	15.0	30.0					
H	GNP-7	INSTALL CIPP, CULVERT END SECTIONS, AND STONE APRONS	36"	190.18	188.19	130.0	1.99%	33"	190.3	188.3	9'-0"x15'-0"	9'-0"x15'-0"	270.0	1.7	19.2	102.0	2.5								130		2		10.0	5.0					
I	GNP-8	INSTALL 36" HDPE PIPE AND STONE APRONS	48"	152.28	149.81	118.0	2.47%	42"	152.5	150.0	12'-0"x20'-6"	12'-0"x20'-6"	492.0	3.6	33.5	145.0	2.5										2		18.2	9.1					
J	GNP-9	LINE INVERT AND 50% OF ARCH HEIGHT WITH SHOTCRETE	16'-7" x 10'-1"	96.64	96.36	182.0	0.28%	16'1" x 9'-7"	97.3	97.0	NONE				5.0		132.0	0.0			4750.2														
K	GNP-10	CLEAN EXISTING PIPE AND INSTALL END SECTION/STONE APRONS	24"	172.53	170.40	75.0	2.13%	N/A	N/A	N/A	6'-0"x10'-5"	6'-0"x10'-5"	125.0	0.5	8.8	76.0	1.3									2			4.6	2.3		75			
M	GNP-11	CLEAN EXISTING PIPE AND INSTALL END SECTION/STONE APRONS	24"	177.13	175.63	88.0	1.50%	N/A	N/A	N/A	6'-0"x10'-5"	6'-0"x10'-5"	125.0	0.5	8.8	70.0	1.3									2			4.6	2.3		88			
N	GNP-11	CLEAN EXISTING PIPE AND INSTALL END SECTION/STONE APRONS	24"	177.87	176.12	93.0	1.75%	N/A	N/A	N/A	6'-0"x10'-5"	6'-0"x10'-5"	125.0	0.5	8.8	71.0	1.3									2			4.6	2.3		93			
O	GNP-12	LINE INVERT AND 50% OF ARCH HEIGHT WITH SHOTCRETE	11'-5" x 7'-3"	120.29	112.50	176.0	7.79%	10'-9" x 6'-9"	121.0	113.2	20'-0"x20'-0"	17'-0"x17'-0"	689.0		5.0	38.3	107.0	0.0			3168.0								25.5	12.8	25.5		2000.0		
TOTALS:													22.4	10.0	330.6	72.2	1473.0	28.6	11.0	7918.2	118.0	313.0	168.0	516.0	10	8	2	4	173.9	87.0	94.9	256.0	2000.0		



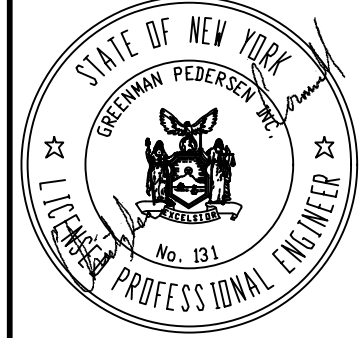
NOTES:

1. PROPOSED HDPE LINER INVERT TO BE MAINTAINED AS LOW AS POSSIBLE.
2. PROVIDE SMOOTH CROSS SECTION & INVERT ELEVATION SECTION SHOWN AT THE CULVERT INLET/OUTLET TO EXISTING GROUND AT LIMIT OF APRON. CONSTRUCTION SHALL BE PERFORMED BY EITHER HAND OR MECHANICALLY (A.O.B.E.) AS REQUIRED TO MEET THE PROPOSED PROFILE AND CROSS SECTION WITHOUT RESULTING IN IMPEDIMENTS TO FISH OR ANIMAL PASSAGE.
3. THE CONTRACTOR WILL BE RESPONSIBLE FOR SUBMITTING MANUFACTURER CALCULATIONS INDICATING THAT THE INSTALLED CURED-IN-PLACE LINER OR HDPE PIPE MEETS THE NECESSARY LOADING REQUIRED FOR EACH INDIVIDUAL CULVERT. THE DESIGN LOAD FOR ALL CULVERTS SHALL MEET THE NYSDOT LOAD AND RESISTANCE FACTOR DESIGN (LRFD) REQUIREMENT OF A HL-93 TRUCK LOAD PER NYSDOT EB 11-015. FOR DEPTHS OF COVER SEE PROFILES ON DWGS. PRO-1 (CULVERT A/B), PRO-2 (CULVERT C/D), PRO-3 (CULVERT F/G), AND PRO-4 (CULVERT H/I). CULVERT X IS NOT SHOWN IN THE PROFILES, BUT THE CONTRACTOR WILL BE REQUIRED FOR SUBMITTING APPROPRIATE LOADING CALCULATIONS. A SUMMARY OF SOIL SAMPLES TAKEN DURING PAVEMENT CORING PROVIDES A SUMMARY OF BLOW COUNTS THAT CAN BE USED TO APPROXIMATE SOIL MODULUS. THE FINAL PAVEMENT REPORT IS INCLUDED AS SUPPLEMENTAL INFORMATION IN THE PROJECT MANUAL.

HIGH DENSITY POLYETHYLENE PIPE SECTION
 ITEMS 602.2742 & 602.2760
 (NTS)

ITEM	DESCRIPTION	UNIT
203.07	SELECT GRANULAR FILL	CY
204.01	CONTROLLED LOW STRENGTH MATERIAL (CLSM)	CY
206.0201	TRENCH AND CULVERT EXCAVATION	CY
209.18030124	VEGETATED MAT	SY
209.2301	SEDIMENT FILTER LOG-TEMPORARY, 12"	LF
555.0105	CLASS A CONCRETE	CY
555.10000006	ABANDON EXISTING CULVERT	CY
602.2101	LINING CULVERT WITH SHOTCRETE	SF
602.2742	LINING WITH PROFILE WALL HIGH DENSITY POLYETHYLENE PIPE 42 INCH DIAMETER	LF
602.2760	LINING WITH PROFILE WALL HIGH DENSITY POLYETHYLENE PIPE 60 INCH DIAMETER	LF
602.3624	LINING WITH CURED IN PLACE PIPE (CIPP) 24 INCH DIAMETER	LF
602.3636	LINING WITH CURED IN PLACE PIPE (CIPP) 36 INCH DIAMETER	LF
603.171416	GALVANIZED STEEL END SECTIONS-PIPE (2-2/3" X 1/2" CORRUGATIONS) 24 INCH DIAMETER, 16 GAUGE	EA
603.171814	GALVANIZED STEEL END SECTIONS-PIPE (2-2/3" X 1/2" CORRUGATIONS) 36 INCH DIAMETER, 14 GAUGE	EA
603.172012	GALVANIZED STEEL END SECTIONS-PIPE (2-2/3" X 1/2" CORRUGATIONS) 48 INCH DIAMETER, 12 GAUGE	EA
603.172212	GALVANIZED STEEL END SECTIONS-PIPE (2-2/3" X 1/2" CORRUGATIONS) 60 INCH DIAMETER, 12 GAUGE	EA
620.03	STONE FILLING (LIGHT)	CY
620.08	BEDDING MATERIAL	CY
620.29010009	NATIVE STREAM BED MATERIAL (A)	CY
621.01	CLEANING CULVERTS WITH SPAN OF 50 IN. OR LESS	LF
656.01	MISCELLANEOUS METALS	LB

AFFIX SEAL: GREENMAN - PEDERSEN, INC
 ON: MARCH 4, 2019
 ALTERED BY:
 ON:



AS-BUILT REVISIONS
 DESCRIPTION OF ALTERATIONS:
 CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS
 TOWN OF TICONDEROGA
 COUNTY: ESSEX REGION: 1

PIN: 1760.63
 UTIL QL.VL = D

BRIDGES
 CULVERTS

ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED
 MISCELLANEOUS TABLES AND DETAILS

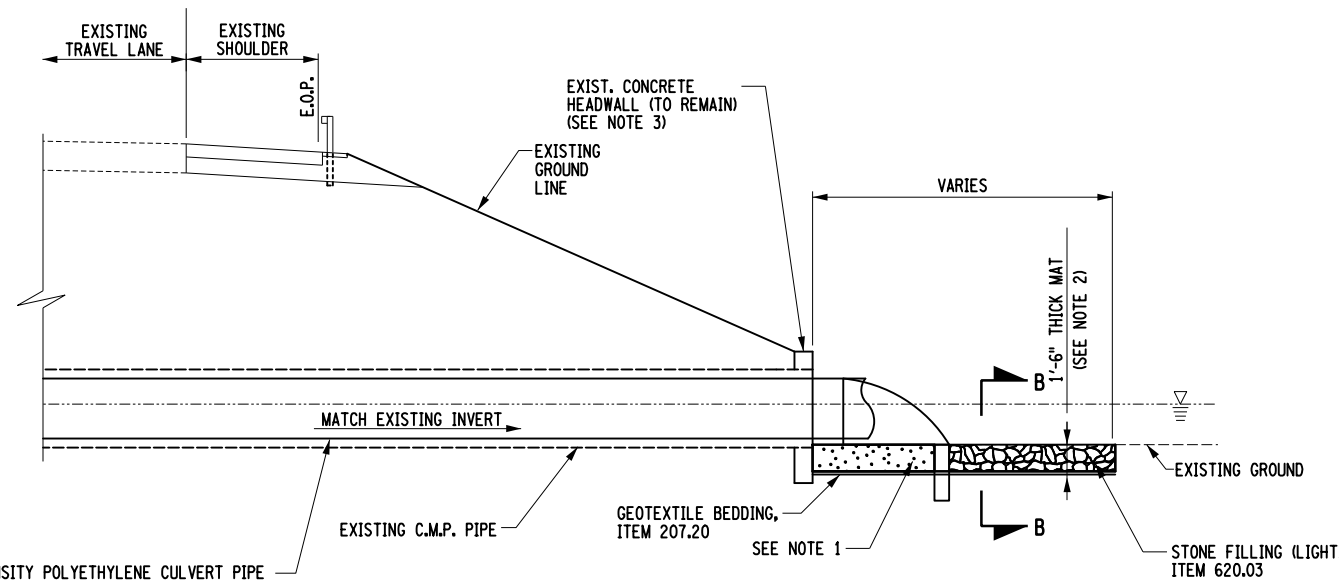
CONTRACT NUMBER
 D036169
 DRAWING NO. MTD-1
 SHEET NO. 8

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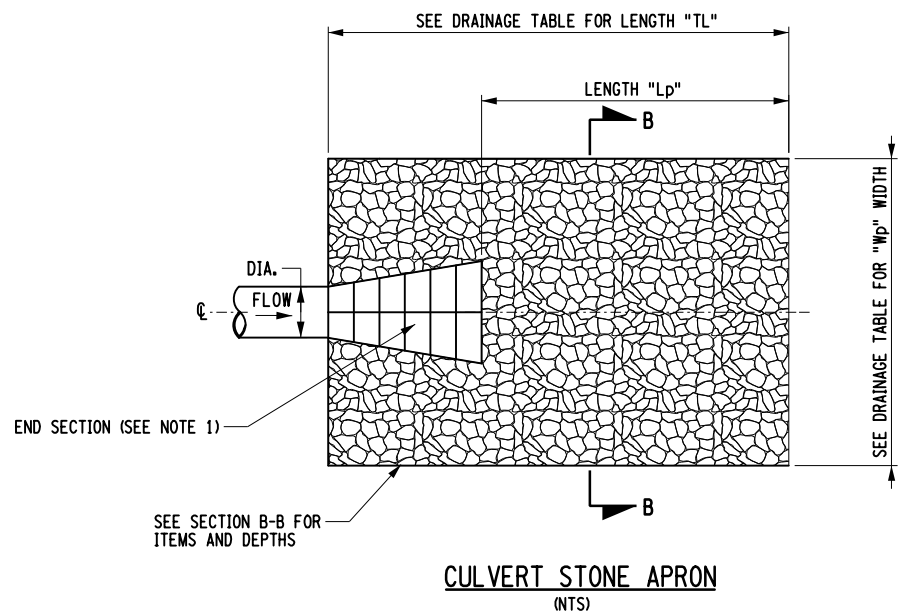


PROJECT MANAGER C. CORNWELL
 CHECK A. HAWKINS
 DRAFTING J. GENTZLER
 CHECK C. CORNWELL
 DESIGN J. GENTZLER
 JOB MANAGER C. CORNWELL
 DESIGN SUPERVISOR F. MASTROIANNI

FILE NAME = ...176063.CPH_MTD-2.dgn
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 USER = jgentzler



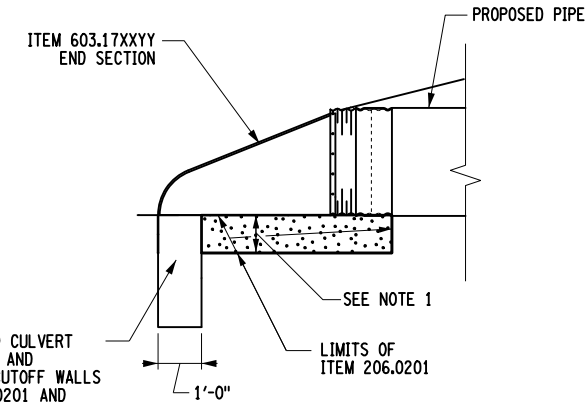
TYPICAL RELINING PROFILE VIEW
(NTS)



LONGITUDINAL STONE APRON DIMENSION TABLE			
EXISTING PIPE DIA	LENGTH "Lp"	LENGTH "TL"	WIDTH "Wp"
24"	6'-0"	10'-5"	6'-0"
36"	9'-0"	15'-0"	9'-0"
48"	12'-0"	20'-6"	12'-0"
72"	18'-0"	29'-6"	18'-0"

NOTE:
 1. STONE APRONS ON CULVERT G AND O VARY FROM THE DIMENSIONS SHOWN IN THE TABLE TO MINIMIZE WETLAND IMPACTS.

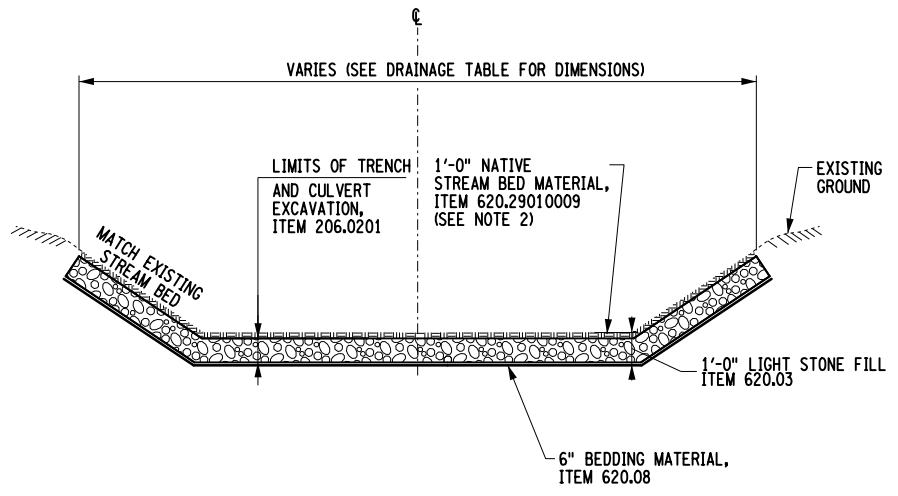
HIGH DENSITY POLYETHYLENE CULVERT PIPE LINING, ITEM 602.2742 OR 602.2760 OR LINING WITH CURED IN PLACE PIPE (CIPP) ITEM 602.3624 OR 602.3636.



CULVERT END SECTION DETAIL
(NTS)

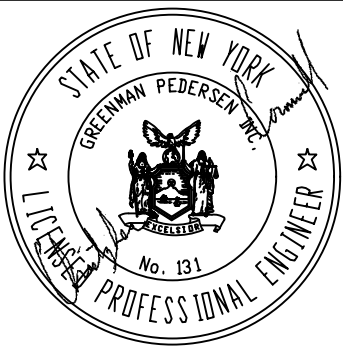
NOTES:

- BENEATH THE CULVERT END SECTIONS, THE CONTRACTOR SHALL EXCAVATE MATERIAL DEEMED UNSUITABLE BY ENGINEER TO BE PAID FOR UNDER ITEM 206.0201-TRENCH AND CULVERT EXCAVATION AND BACKFILL WITH ITEM 203.07-SELECT GRANULAR FILL. SEE SS 603-02 FOR END SECTION DIMENSIONS FOR PAYMENT AREA.
- FOR STONE APRONS ON CULVERTS C, G, AND O, THE CONTRACTOR SHALL PLACE 1'-0" OF ITEM 620.03 - LIGHT STONE FILL ON TOP OF 6" OF BEDDING MATERIAL. FOLLOWING THE LIGHT STONE FILL, ITEM 620.29010009 - NATIVE STREAM BED MATERIAL SHALL BE USED TO FILL IN THE VOIDS SO AS TO CREATE A SMOOTH SURFACE THAT DOES NOT IMPEDE THE FLOW OF WATER. FOR THE REMAINING STONE APRONS ON CULVERTS X, A, B, D, F, H, I, K, M, AND N THE CONTRACTOR DOES NOT NEED TO PLACE NATIVE STREAM BED MATERIAL.
- NOT ALL CULVERTS HAVE EXISTING HEADWALLS.
- CUTOFF WALL PAYMENT QUANTITIES FOR TRENCH AND CULVERT EXCAVATION AND CONCRETE FOR STRUCTURES - CLASS A ARE LISTED ON SS 603-04.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR SUBMITTING MANUFACTURER CALCULATIONS INDICATING THAT THE INSTALLED HDPE OR CURED-IN PLACE LINER MEET THE NECESSARY LOADING REQUIRED FOR EACH INDIVIDUAL CULVERT. THE DESIGN LOAD FOR ALL CULVERTS SHALL MEET THE NYS DOT LOAD AND RESISTANCE FACTOR DESIGN (LRFD) REQUIREMENT OF A HL-93 TRUCK LOAD PER NYS DOT EB 11-015. FOR DEPTHS OF COVER SEE PROFILES ON DWGS. PRO-1 (CULVERT A/B), PRO-2 (CULVERT D), PRO-3 (CULVERT F/G), AND PRO-4 (CULVERT H/I). A SUMMARY OF SOIL SAMPLES TAKEN DURING PAVEMENT CORING PROVIDES A SUMMARY OF BLOW COUNTS THAT CAN BE USED TO APPROXIMATE SOIL MODULUS. THE FINAL PAVEMENT REPORT IS INCLUDED AS SUPPLEMENTAL INFORMATION IN THE PROJECT MANUAL.



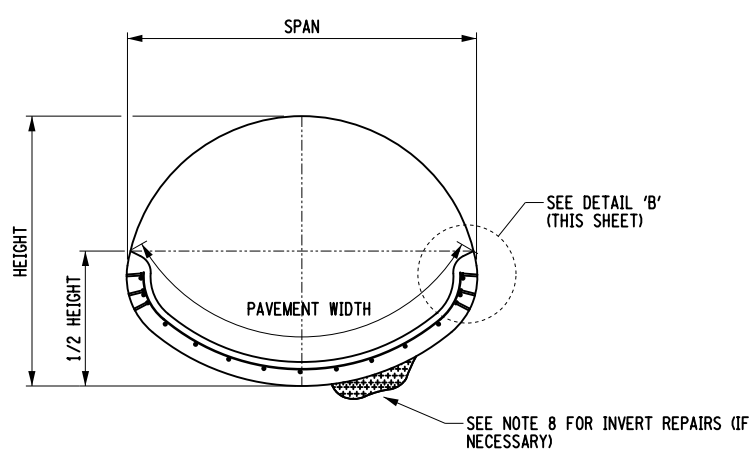
SECTION B-B STONE APRON TYPICAL SECTION
(NTS)

AFFIX SEAL: GREENMAN - PEDERSEN, INC
 ON: MARCH 4, 2019
 ALTERED BY:
 ON:

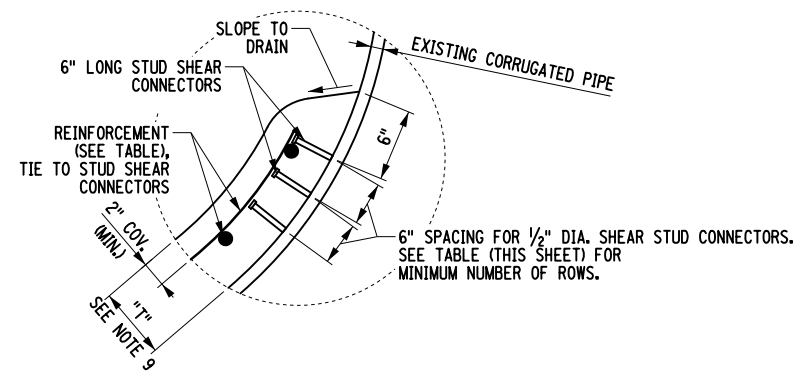


AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS	PIN: 1760.63	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D036169	
	TOWN OF TICONDEROGA	UTIL QLVL = D				MISCELLANEOUS TABLES AND DETAILS	DRAWING NO. MTD-2 SHEET NO. 9
	COUNTY: ESSEX	REGION: 1					
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.						GPI GREENMAN-PEDERSEN, INC. CONSULTING ENGINEERS	ESSEX COUNTY

PROJECT MANAGER C. CORNWELL
 CHECK A. HAWKINS
 DRAFTING J. GENTZLER
 CHECK C. CORNWELL
 DESIGN J. GENTZLER
 JOB MANAGER C. CORNWELL
 DESIGN SUPERVISOR F. MASTROIANNI

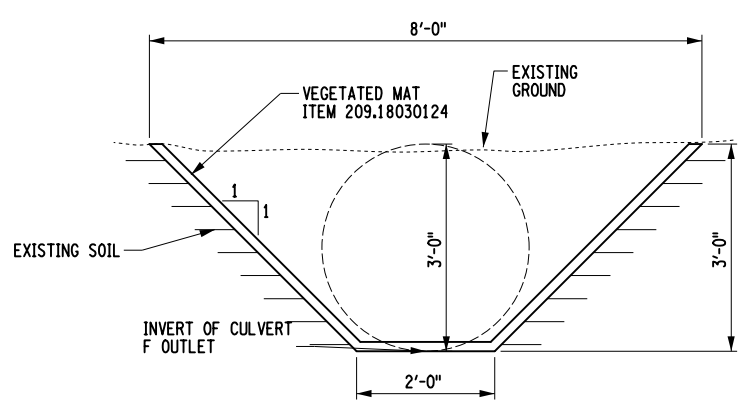


REBAR PAVED INVERT ARCH DETAIL (RPI)
(NTS)

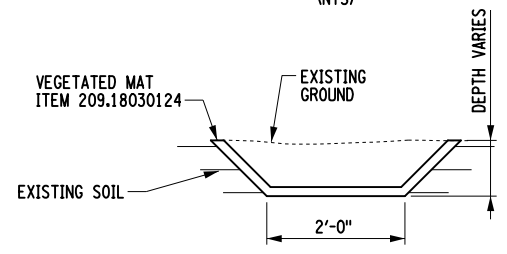


DETAIL 'B'
(NTS)

REINFORCEMENT TABLE				
SPAN	TRANSVERSE	LONGITUDINAL	"T"	STUD SHEAR CONNECTOR SPACING
>10'	#5 @ 6"	#5 @ 12"	8"	2 ROWS (SEE NOTE 6)



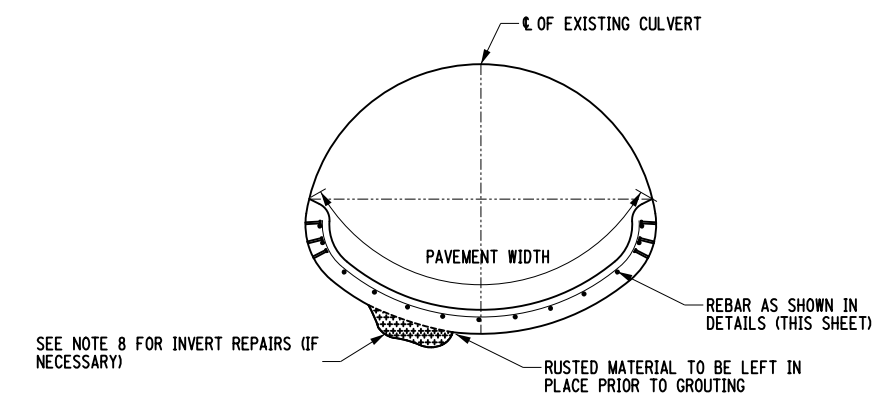
CULVERT 'F' DRAINAGE DITCH PROFILE A-A
(NTS)



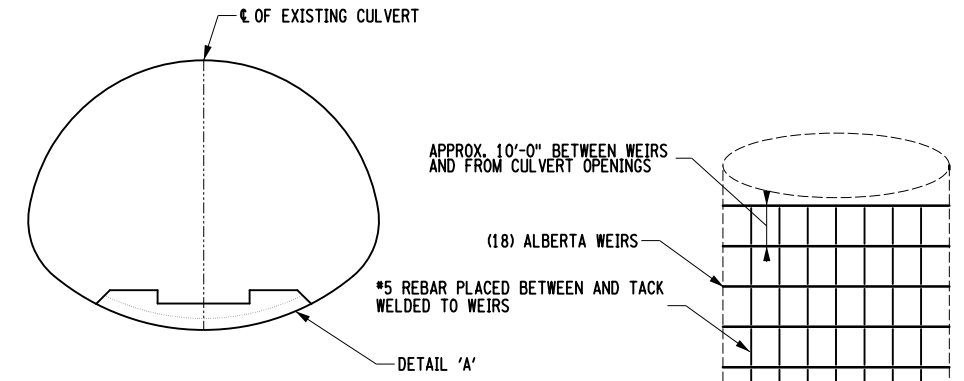
CULVERT 'F' DRAINAGE DITCH PROFILE B-B
(NTS)

NOTES:

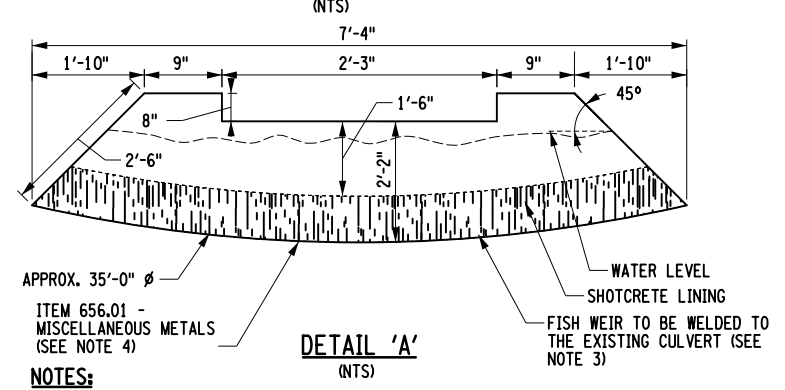
- ITEM 602.2101 SHALL COMPLETELY COVER THE DETERIORATED SURFACE OF THE PIPE INVERT AND HALF ITS HEIGHT. STUD SHEAR CONNECTORS SHALL BE INSTALLED BY A CERTIFIED AMERICAN WELDING SOCIETY WELDER ACCORDING TO THE STEEL CONSTRUCTION MANUAL (SCM) AND ATTACHED TO THE PIPE ABOVE THE AREA OF SECTION LOSS, A.O.B.E. THIS ITEM SHALL INCLUDE ALL MATERIALS AND WORK SHOWN TO REPAIR THE CULVERT. PER ITEM 602.2101, ALL WORK NECESSARY TO COMPLETE THE SHOTCRETE IS INCLUDED IN THE ITEM INCLUSIVE OF BUT NOT LIMITED TO DEWATERING, CLEANING, REINFORCEMENT, SHEAR STUDS, WELDING, ETC.
- ALL PROVISIONS OF SECTION 602 OF THE NYS DOT STANDARD SPECIFICATIONS APPLY TO THE WORK DETAILED AND ARE BASED ON DWGS. NYS DOT'S CULVERT REPAIR TABLES CD-1 THROUGH CD-3.
- CONCRETE FOR CUT-OFF WALLS SHALL MEET REQUIREMENTS OF SECTION 555, CLASS A. SHOTCRETE SHALL MEET SECTION 583 AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF F_c = 3000 PSI AT 28 DAYS.
- DEFECTIVELY ATTACHED STUD SHEAR CONNECTORS SHALL BE LEFT IN PLACE AND REPLACED WITH AN ADDITIONAL STUD SHEAR CONNECTOR A.O.B.E.
- ANY ASPHALT COATING AND GALVANIZING ARE TO BE REMOVED TO BARE METAL BEFORE WELDING. REPAIR GALVANIZING IN THE WELD AREAS ACCORDING TO SECTION 719-01 OF THE STANDARD SPECIFICATIONS. COST TO BE INCLUDED IN THE BID PRICE FOR ITEM 602.2101.
- THE STUD SHEAR CONNECTORS ARE TO BE WELDED TO THE CREST OF EVERY OTHER CORRUGATION.
- CONCRETE SHALL CURE FOR A MINIMUM OF 48 HOURS BEFORE WATER IS PERMITTED TO FLOW ON THE INVERT.
- VOIDS (1 SQUARE FOOT OR LARGER) IN THE EXISTING INVERT SHALL BE COMPLETELY FILLED WITH GROUT AND PAID FOR UNDER ITEM 204.01. GROUT USED TO FILL CULVERT INVERT HOLES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF F_c = 3000 PSI AT 28 DAYS. FOR VOID SMALLER THAN 1 SQUARE FOOT, SHOTCRETE MAY BE USED TO FILL THE INVERT HOLES.
- THE SHOTCRETE THICKNESS "T" IS TO BE MEASURED FROM THE CREST OF ALL CORRUGATIONS.
- ALL REINFORCEMENT SHALL BE GALVANIZED IN ACCORDANCE WITH NYS DOT MATERIAL SPEC 709-11.
- ALL SHEAR STUD CONNECTIONS SHALL MEET NYS DOT MATERIAL SPEC 709.05 AND BE GALVANIZED IN ACCORDANCE WITH NYS DOT MATERIAL SPEC 719-01.



CULVERT 'J' AND 'O' INVERT REPAIR
(NTS)



CULVERT 'O' "ALBERTA" FISH WEIR CROSS SECTION
(NTS)



DETAIL 'A'
(NTS)

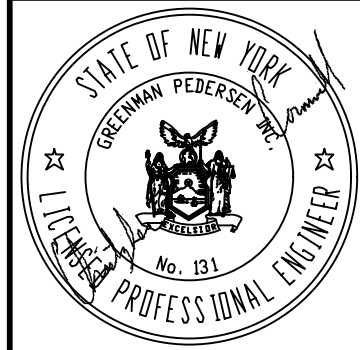
NOTES:

- THE PROPOSED "ALBERTA" FISH WEIR IS TO BE CONSTRUCTED FROM 1/4" STEEL (A36) AND ITS EDGES CHAMFERED OR ROUNDED TO REMOVE ALL SHARP AREAS.
- FOLLOWING FABRICATION THE METAL PLATE IS TO BE GALVANIZED PRIOR TO INSTALLATION OF THE SHOTCRETE LINING AND IN ACCORDANCE WITH NYS DOT MATERIAL SPEC 719-01. ANY BARE METALS SURFACES CREATED AS A RESULT OF WELDING IS TO BE COLD GALVANIZED.
- THE WEIR IS TO BE WELDED TO THE HOST CULVERT ON ONE SIDE WITH A 1/4 THROAT FILLET WELD. THE WELD IS TO BE SHIELDED METAL ARC AND PERFORMED BY AN AMERICAN WELDING SOCIETY (AWS) CERTIFIED WELDER.
- PAID FOR UNDER ITEM 656.01 - MISCELLANEOUS METALS, IS THE FABRICATION, GALVANIZING, WELDING AND FIELD COATING REPAIRS OF THE WEIR.

CULVERT 'O' "ALBERTA" FISH WEIRS
(NTS)

AFFIX SEAL: GREENMAN - PEDERSEN, INC
ON: MARCH 4, 2019

ALTERED BY:
ON:



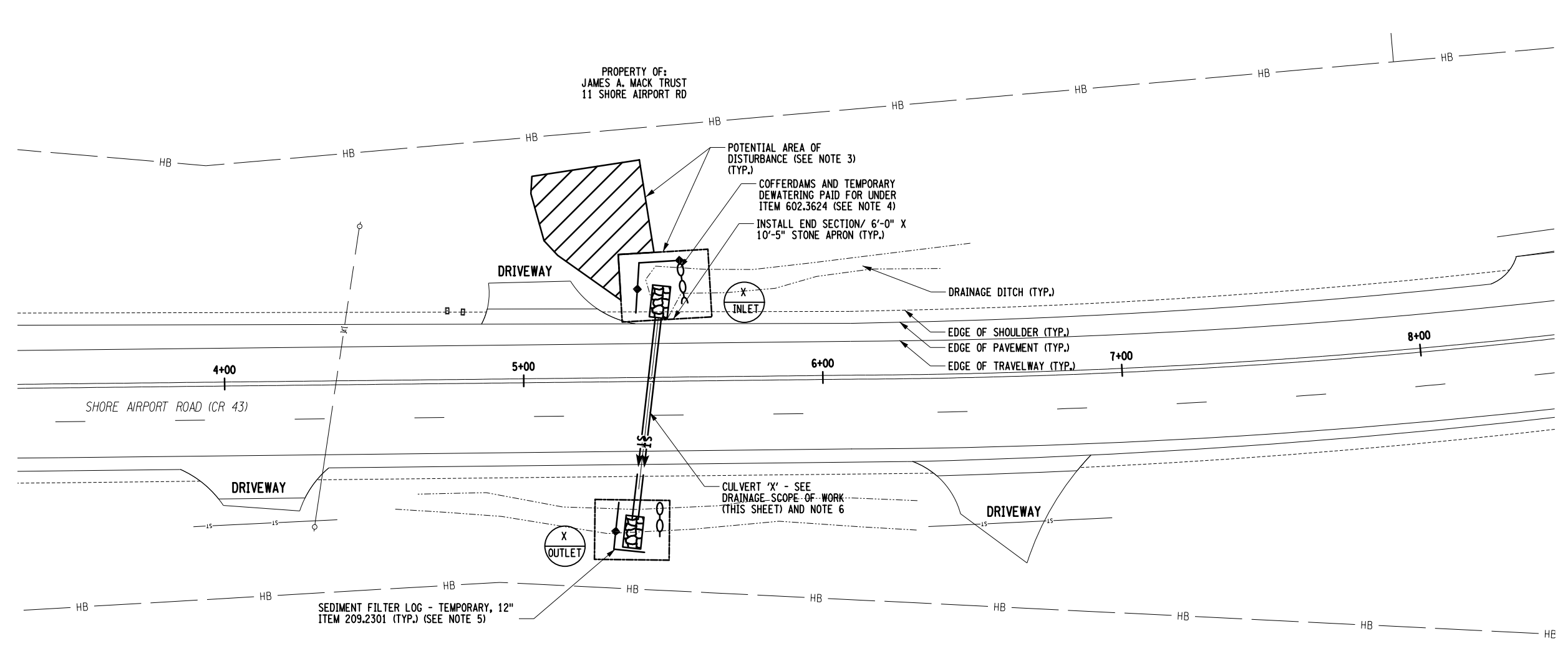
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS	PIN: 1760.63	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D036169
	TOWN OF TICONDEROGA	UTIL QL.VL = D			MISCELLANEOUS TABLES AND DETAILS	DRAWING NO. MTD-3 SHEET NO. 10
	COUNTY: ESSEX	REGION: 1				

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.

FILE NAME = ...176063.CPH.MTD-3.dgn
 DATE/TIME = 3/4/2019
 USER = jgentzler

FILE NAME = ...\\176063.CPH-gnp-1.dgn
 DATE/TIME = 3/4/2019
 USER = jgentzler

DESIGN SUPERVISOR: F. MASTROIANNI
 JOB MANAGER: C. CORNWELL
 DESIGN: J. GENTZLER
 CHECK: C. CORNWELL
 DRAFTING: J. GENTZLER
 CHECK: A. HAWKINS
 PROJECT MANAGER: C. CORNWELL



PROPERTY OF:
 FORT TICONDEROGA VFW 146
 12 SHORE AIRPORT RD

NOTES:

1. THE LINERS PROVIDED FOR CURED-IN PLACE PIPE UNDER ITEM 602.3624 SHALL BE ONE CONTINUOUS LINER.
2. THE STATIONING SHOWN ON THE PLANS IS NOT INTENDED TO BE USED AS A SURVEY CONTROL FEATURE, BUT RATHER A REFERENCE FOR WORK PERFORMED. NO SURVEY BASELINE TIES ARE PROVIDED AS PART OF THIS PROJECT.
3. ALL AREAS DISTURBED DURING CONSTRUCTION ADJACENT TO THE ANIMAL HOSPITAL IN THE HATCHED AREA ARE TO BE RESTORED WITH 4" OF ITEM 610.1403, TOPSOIL - LAWNS AND ITEM 610.1602, TURF ESTABLISHMENT - LAWNS. ALL OTHER AREAS ARE TO BE RESTORED WITH SEED AND MULCH - TEMPORARY AND INCLUDED IN THE BID PRICE FOR 602.3624.
4. ALL WORK INCLUDING LINING, CLEANING AND DEWATERING OF THE EXISTING CULVERTS, REMOVAL OF AN OBSTRUCTIONS, AND REMOVAL OF ANY DAMAGED PIPE IS TO BE INCLUDED IN THE BID PRICE FOR ITEM 602.3624. SEE SECTION 602 IN THE NYS DOT STANDARD SPECIFICATIONS FOR ADDITIONAL DETAILS.
5. THE TEMPORARY SEDIMENT FILTER LOG IS TO BE EXTENDED ABOVE TO ACCOMMODATE DISTURBANCE DUE TO SITE ACCESS AND WORK ACTIVITIES. IT SHOULD BE INSTALLED AS CLOSE TO THE WORK AREA AS REASONABLY POSSIBLE FOR THE CONTRACTOR TO COMPLETE THEIR WORK. IF COFFERDAMS ARE NOT REQUIRED TO COMPLETE THE RELINING, THE FILTER LOG SHOULD BE PLACED WHERE COFFERDAMS ARE SHOWN ON THE PLANS.
6. CULVERT 'X' CARRIES STORM RUNOFF AND DOES NOT HAVE CONTINUOUS WATER FLOW.



LEGEND	
	STONE APRON
	PROPOSED CULVERT RELINING
	CULVERT/DRAINAGE STRUCTURE
	12" FILTER LOG - TEMPORARY
	CULVERT DEWATERING

DRAINAGE SCOPE OF WORK:

EXISTING CULVERTS:
 CULVERT 'X' = 24" CMP CULVERT (73 LF)

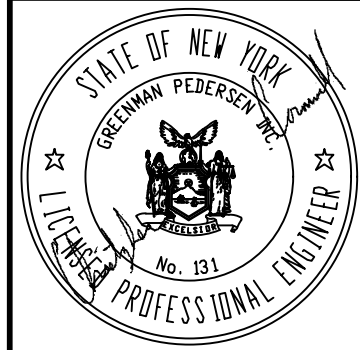
PROPOSED WORK:
 CULVERT 'X' = RELINE WITH 24" CURED-IN-PLACE PIPE, REPLACE END SECTIONS, INSTALL STONE APRONS

SEE DRAINAGE TABLE ON DWG. MTD-1 FOR QUANTITIES

UTILITY NOTE:
 CONTRACTOR SHALL NOTE NO UNDERGROUND UTILITIES ARE SHOWN, HOWEVER BOTH OVERHEAD AND UNDERGROUND ARE PRESENT WITHIN THE PROJECT LIMITS.

AFFIX SEAL: GREENMAN - PEDERSEN, INC
 ON: MARCH 4, 2019

ALTERED BY:
 ON:



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS	PIN: 1760.63	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D036169
	TOWN OF TICONDEROGA	UTIL QLVL = D			GENERAL PLAN - CULVERT X	DRAWING NO. GNP-1 SHEET NO. 11
	COUNTY: ESSEX	REGION: 1				ESSEX COUNTY

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.

GPI GREENMAN-PEDERSEN, INC. CONSULTING ENGINEERS

FILE NAME = ...\\176063.CPH_gnp-2.dgn
 DATE/TIME = 3/4/2019
 USER = jgentzler

PROJECT MANAGER: C. CORNWELL
 CHECK: A. HAWKINS
 DRAFTING: J. GENTZLER
 DESIGN: J. GENTZLER
 JOB MANAGER: C. CORNWELL
 DESIGN SUPERVISOR: F. MASTROIANNI

HYDRAULIC DATA - CULVERT A	
DRAINAGE AREA = 23.47 SQ. ACRES	DESIGN FLOOD
REQUENCY INTERVAL (YEARS)	50
PEAK DISCHARGE (FT ³ /SEC)	16.0
PROPOSED INLET DEPTH (FT)	1.3
PROPOSED OUTLET VELOCITY (FT/SEC)	17.4

HYDRAULIC DATA - CULVERT B	
DRAINAGE AREA = 5.8 SQ. ACRES	DESIGN FLOOD
REQUENCY INTERVAL (YEARS)	50
PEAK DISCHARGE (FT ³ /SEC)	9.2
PROPOSED INLET DEPTH (FT)	1.2
PROPOSED OUTLET VELOCITY (FT/SEC)	19.3

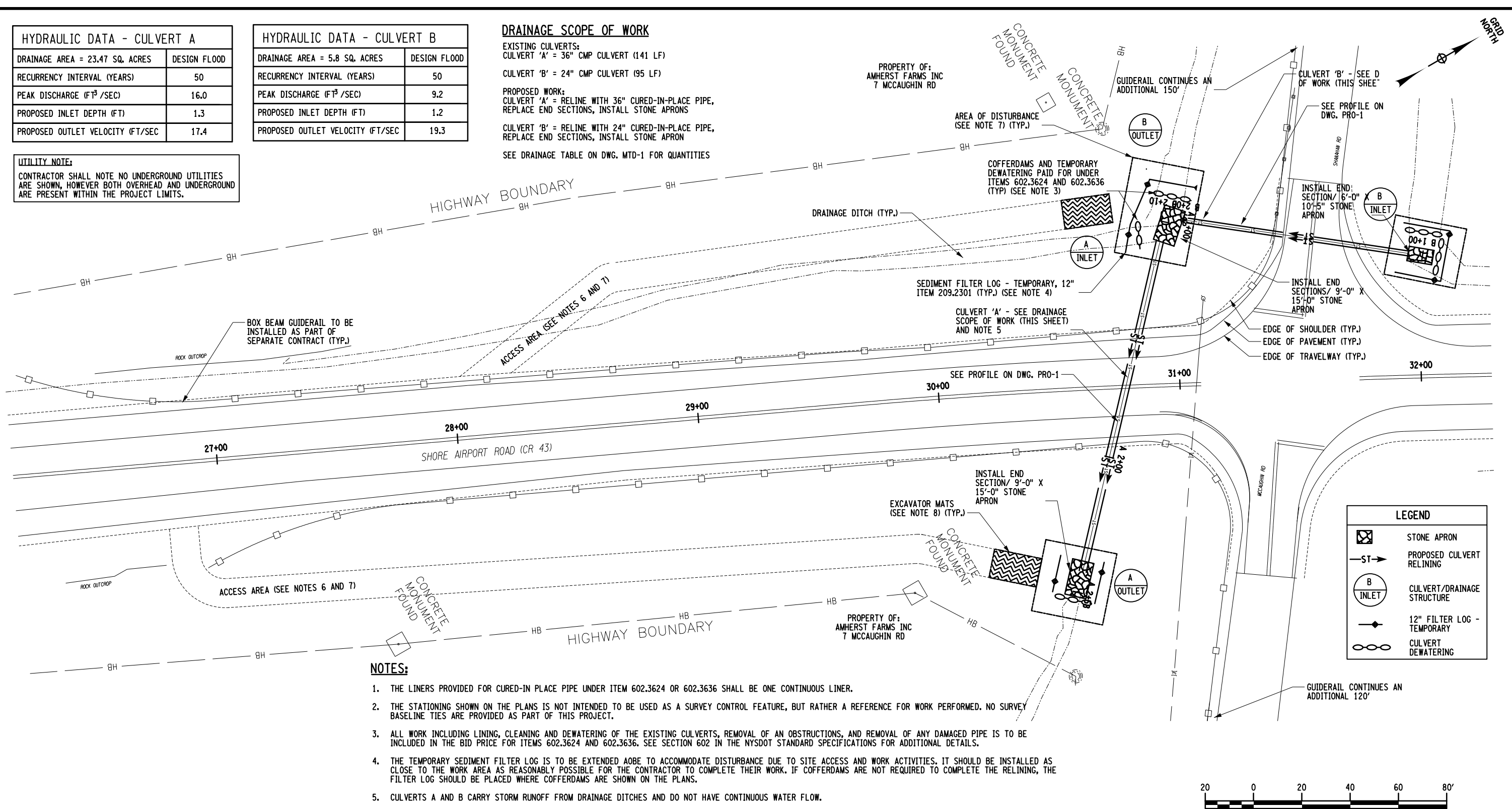
UTILITY NOTE:
 CONTRACTOR SHALL NOTE NO UNDERGROUND UTILITIES ARE SHOWN, HOWEVER BOTH OVERHEAD AND UNDERGROUND ARE PRESENT WITHIN THE PROJECT LIMITS.

DRAINAGE SCOPE OF WORK

EXISTING CULVERTS:
 CULVERT 'A' = 36" CMP CULVERT (141 LF)
 CULVERT 'B' = 24" CMP CULVERT (95 LF)

PROPOSED WORK:
 CULVERT 'A' = RELINE WITH 36" CURED-IN-PLACE PIPE, REPLACE END SECTIONS, INSTALL STONE APRONS
 CULVERT 'B' = RELINE WITH 24" CURED-IN-PLACE PIPE, REPLACE END SECTIONS, INSTALL STONE APRON

SEE DRAINAGE TABLE ON DWG. MTD-1 FOR QUANTITIES



NOTES:

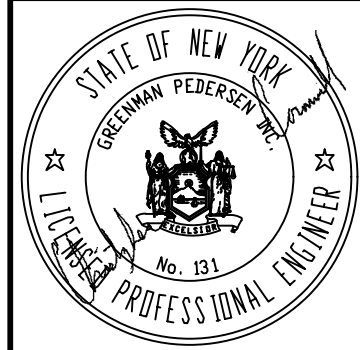
1. THE LINERS PROVIDED FOR CURED-IN PLACE PIPE UNDER ITEM 602.3624 OR 602.3636 SHALL BE ONE CONTINUOUS LINER.
2. THE STATIONING SHOWN ON THE PLANS IS NOT INTENDED TO BE USED AS A SURVEY CONTROL FEATURE, BUT RATHER A REFERENCE FOR WORK PERFORMED. NO SURVEY BASELINE TIES ARE PROVIDED AS PART OF THIS PROJECT.
3. ALL WORK INCLUDING LINING, CLEANING AND DEWATERING OF THE EXISTING CULVERTS, REMOVAL OF AN OBSTRUCTIONS, AND REMOVAL OF ANY DAMAGED PIPE IS TO BE INCLUDED IN THE BID PRICE FOR ITEMS 602.3624 AND 602.3636. SEE SECTION 602 IN THE NYS DOT STANDARD SPECIFICATIONS FOR ADDITIONAL DETAILS.
4. THE TEMPORARY SEDIMENT FILTER LOG IS TO BE EXTENDED ABOVE TO ACCOMMODATE DISTURBANCE DUE TO SITE ACCESS AND WORK ACTIVITIES. IT SHOULD BE INSTALLED AS CLOSE TO THE WORK AREA AS REASONABLY POSSIBLE FOR THE CONTRACTOR TO COMPLETE THEIR WORK. IF COFFERDAMS ARE NOT REQUIRED TO COMPLETE THE RELINING, THE FILTER LOG SHOULD BE PLACED WHERE COFFERDAMS ARE SHOWN ON THE PLANS.
5. CULVERTS A AND B CARRY STORM RUNOFF FROM DRAINAGE DITCHES AND DO NOT HAVE CONTINUOUS WATER FLOW.
6. THE ACCESS AREAS SHOWN ON THE PLANS ARE EXAMPLES AND NOT MEANT TO RESTRICT THE ACCESS POINTS. THE CONTRACTOR MAY CHOOSE WHERE TO ACCESS THE CULVERT INLET/OUTLETS. IF THE CONTRACTOR DECIDES TO REMOVE GUIDERAIL, THE GUIDERAIL MUST BE RESET AT THE END OF EACH WORK DAY. WHILE REMOVED, THE OPENING SHALL BE LINED WITH TRAFFIC DELINEATORS PER STANDARD SPECIFICATION 619-3.02J.6 AND PAID UNDER ITEM 619.01. AT EACH ACCESS POINT, A 50 FOOT LONG BY 12 FOOT WIDE TEMPORARY CONSTRUCTION ENTRANCE WILL BE PAID FOR UNDER ITEM 209.22, RESTORED WITH ITEM 207.1003, AND CONSTRUCTED IN ACCORDANCE WITH NYS DOT SS 609-05. BEYOND 50 FEET, THE COST OF ANY ACCESS ROAD IS TO BE INCLUDED IN THE BID PRICE FOR ITEMS 602.3624 AND 602.3636.
7. ALL AREAS DISTURBED DURING CONSTRUCTION ARE TO BE RESTORED WITH SEED AND MULCH - TEMPORARY. THE COST OF THE RESTORATION IS BE INCLUDED IN THE BID PRICE FOR ITEMS 602.3624 AND 602.3636.
8. THE COST OF THE EXCAVATOR MATS (IF NECESSARY) THAT ARE SHOWN ON THE PLANS ARE TO BE INCLUDED IN THE BID PRICE FOR ITEMS 602.3624 AND 602.3636.

LEGEND	
	STONE APRON
	PROPOSED CULVERT RELINING
	CULVERT/DRAINAGE STRUCTURE
	12" FILTER LOG - TEMPORARY
	CULVERT DEWATERING



AFFIX SEAL: GREENMAN - PEDERSEN, INC
 ON: MARCH 4, 2019

ALTERED BY:
 ON:

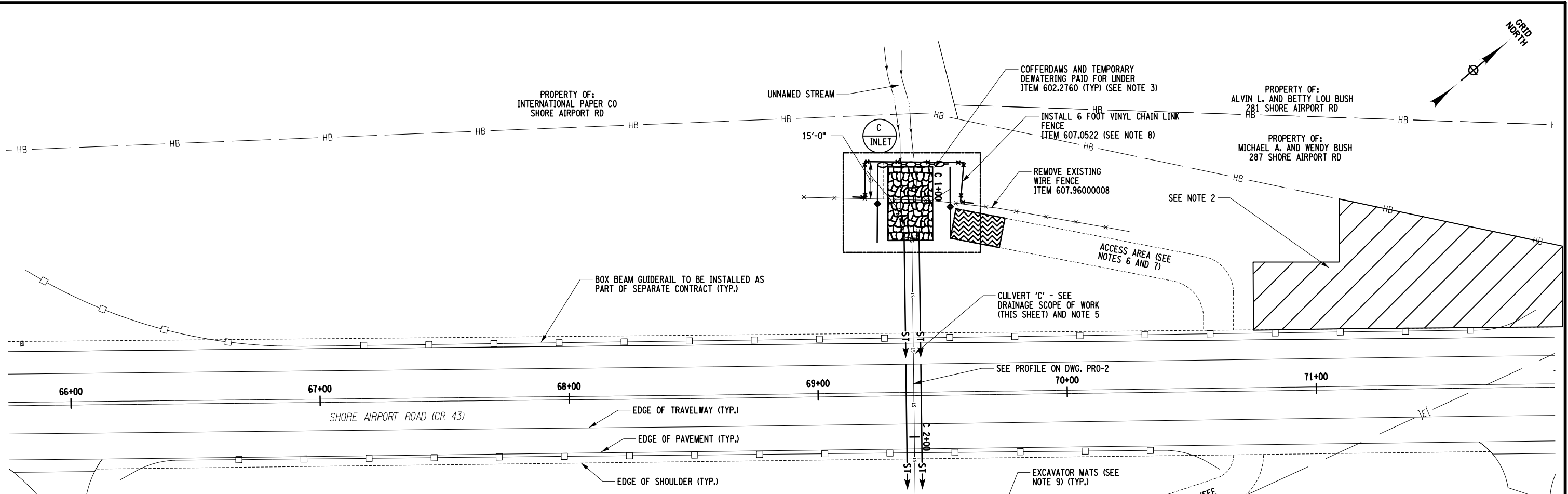


AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS	PIN: 1760.63	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D036169
	TOWN OF TICONDEROGA	UTIL QL.VL = D			GENERAL PLAN - CULVERTS A & B	DRAWING NO. GNP-2 SHEET NO. 12
	COUNTY: ESSEX	REGION: 1			GPI GREENMAN-PEDERSEN, INC. CONSULTING ENGINEERS	ESSEX COUNTY

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. CORNWELL
 CHECK: A. HAWKINS
 DRAFTING: J. GENTZLER
 CHECK: C. CORNWELL
 DESIGN: J. GENTZLER
 JOB MANAGER: C. CORNWELL
 DESIGN SUPERVISOR: F. MASTROIANNI

FILE NAME: \\176063.CPH_gnp-3.dgn
 DATE/TIME: 3/4/2019
 USER: jgentzler



- NOTES:**
1. THE STATIONING SHOWN ON THE PLANS IS NOT INTENDED TO BE USED AS A SURVEY CONTROL FEATURE, BUT RATHER A REFERENCE FOR WORK PERFORMED.
 2. ANY RESTORATION PERFORMED IN THE HATCHED AREA SHALL BE RESTORED WITH 4" OF ITEM 610.1403 - TOPSOIL - LAWNS AND 610.1602 - TURF ESTABLISHMENT - LAWNS.
 3. ALL WORK INCLUDING LINING, CLEANING AND DEWATERING OF THE EXISTING CULVERTS, REMOVAL OF AN OBSTRUCTIONS, AND REMOVAL OF ANY DAMAGED PIPE IS TO BE INCLUDED IN THE BID PRICE FOR ITEM 602.2760. SEE SECTION 602 IN THE NYS DOT STANDARD SPECIFICATIONS FOR ADDITIONAL DETAILS.
 4. THE SEDIMENT FILTER LOG IS TO BE EXTENDED ABOVE TO ACCOMMODATE DISTURBANCE DUE TO SITE ACCESS AND WORK ACTIVITIES. IT SHOULD BE INSTALLED AS CLOSE TO THE WORK AREA AS REASONABLY POSSIBLE FOR THE CONTRACTOR TO COMPLETE THEIR WORK.
 5. CULVERT C CARRIES AN UNNAMED STREAM AND HAS CONTINUOUS WATER FLOW.
 6. THE ACCESS AREAS SHOWN ON THE PLANS ARE EXAMPLES AND NOT MEANT TO RESTRICT THE ACCESS POINTS. THE CONTRACTOR MAY CHOOSE WHERE TO ACCESS THE CULVERT INLET/OUTLETS. IF THE CONTRACTOR DECIDES TO REMOVE GUIDERAIL, THE GUIDERAIL MUST BE RESET AT THE END OF EACH WORK DAY. WHILE REMOVED, THE OPENING SHALL BE LINED WITH TRAFFIC DELINEATORS PER STANDARD SPECIFICATION 619-3.02J.6 AND PAID UNDER ITEM 619.01. AT EACH ACCESS POINT, A 50 FOOT LONG BY 12 FOOT WIDE TEMPORARY CONSTRUCTION ENTRANCE WILL BE PAID FOR UNDER ITEM 209.22, RESTORED WITH ITEM 207.1003, AND CONSTRUCTED IN ACCORDANCE WITH NYS DOT SS 609-05. BEYOND 50 FEET, THE COST OF ANY ADDITIONAL ACCESS ROAD IS TO BE INCLUDED IN THE BID PRICE FOR ITEM 602.2760.
 7. ALL AREAS DISTURBED DURING CONSTRUCTION ARE TO BE RESTORED WITH SEED AND MULCH - TEMPORARY. THE COST OF THE RESTORATION IS BE INCLUDED IN THE BID PRICE FOR ITEM 602.2760.
 8. THE PROPOSED CHAINLINK FENCING MUST BE INSTALLED BEFORE THE EXISTING FENCING IS REMOVED (CATTLE PASTURE). TO STABILIZE THE EXISTING FENCE THE CHAINLINK FENCING SHOULD OVERLAP THE EXISTING FENCE BY FIVE FEET ON EACH SIDE AND JOINED WITH WIRE TIES.
 9. THE COST OF THE EXCAVATOR MATS (IF NECESSARY) THAT ARE SHOWN ON THE PLANS ARE TO BE INCLUDED IN THE BID PRICE FOR ITEM 602.2760.

LEGEND

	STONE APRON
	PROPOSED CULVERT RELINING
	CULVERT/DRAINAGE STRUCTURE
	12" FILTER LOG - TEMPORARY
	CULVERT DEWATERING

DRAINAGE SCOPE OF WORK:

EXISTING CULVERT:
 CULVERT 'C' = 72" CMP CULVERT (138 LF)

PROPOSED WORK:
 CULVERT 'C' = RELINE WITH 60" HDPE PROFILE WALL PIPE (EXTEND PIPE 2' BEYOND EXISTING PIPE), INSTALL END SECTIONS, INSTALL STONE APRONS

SEE DRAINAGE TABLE ON DWG. MTD-1 FOR QUANTITIES

NOTE: THE INSIDE DIAMETER OF THE EXISTING PIPE IS APPROXIMATELY 68"

UTILITY NOTE:
 CONTRACTOR SHALL NOTE NO UNDERGROUND UTILITIES ARE SHOWN, HOWEVER BOTH OVERHEAD AND UNDERGROUND ARE PRESENT WITHIN THE PROJECT LIMITS.

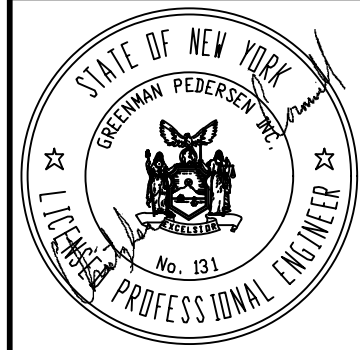
HYDRAULIC DATA - CULVERT C

	CHECK FLOOD	DESIGN FLOOD
DRAINAGE AREA = 198.4 SQ. ACRES		
REQUENCY INTERVAL (YEARS)	100	50
PEAK DISCHARGE FT ³ /SEC	64.8	55.2
HIGH WATER ELEVATION @ PT OF MAX. BACKWATER	EXIST. 187.32 PROP. 189.18	185.98 186.53
AVG. VELOCITY THRU STRUCTURE @ DESIGN FLOOD	12.84 FT/S	
ORDINARY HIGH WATER	ELEVATION = 185.37', 19 CFS	



AFFIX SEAL: GREENMAN - PEDERSEN, INC
 ON: MARCH 4, 2019

ALTERED BY:
 ON:



AS-BUILT REVISIONS
 DESCRIPTION OF ALTERATIONS:

CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS
TOWN OF TICONDEROGA
COUNTY: ESSEX
REGION: 1

PIN: 1760.63	BRIDGES	CULVERTS
UTIL QLVL = D		

ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D036169
GENERAL PLAN - CULVERT C	DRAWING NO. GNP-3 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.

GPI GREENMAN-PEDERSEN, INC. CONSULTING ENGINEERS

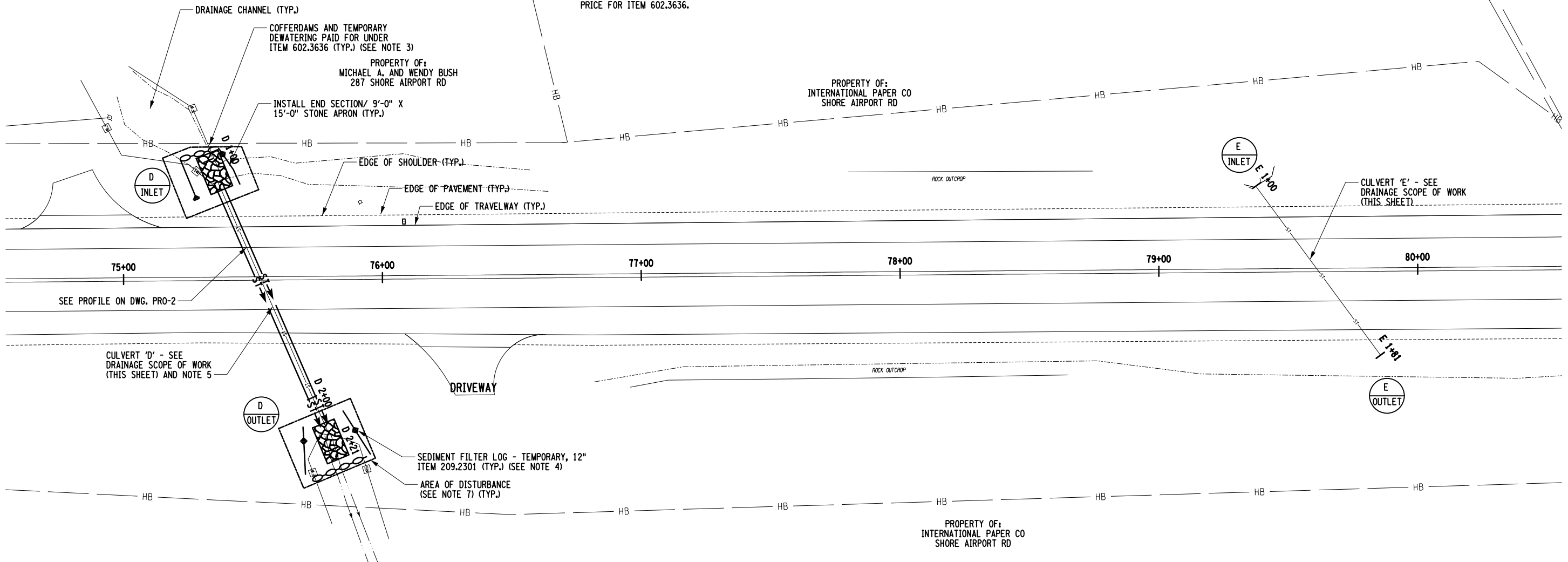
ESSEX COUNTY

PROJECT MANAGER: C. CORNWELL
 CHECK: A. HAWKINS
 DRAFTING: J. GENTZLER
 CHECK: C. CORNWELL
 DESIGN: J. GENTZLER
 JOB MANAGER: C. CORNWELL
 DESIGN SUPERVISOR: F. MASTROIANNI

HYDRAULIC DATA - CULVERT D	
DRAINAGE AREA = 8.40 SQ. ACRES	DESIGN FLOOD
REQUENCY INTERVAL (YEARS)	50
PEAK DISCHARGE (FT ³ /SEC)	13.7
PROPOSED INLET DEPTH (FT)	1.2
PROPOSED OUTLET VELOCITY (FT/SEC)	13.6

NOTES:

1. THE LINER PROVIDED FOR CURED-IN PLACE PIPE UNDER ITEM 602.3636 SHALL BE ONE CONTINUOUS LINER.
2. THE STATIONING SHOWN ON THE PLANS IS NOT INTENDED TO BE USED AS A SURVEY CONTROL FEATURE, BUT RATHER A REFERENCE FOR WORK PERFORMED. NO SURVEY BASELINE TIES ARE PROVIDED AS PART OF THIS PROJECT.
3. ALL WORK INCLUDING LINING, CLEANING AND DEWATERING OF THE EXISTING CULVERTS, REMOVAL OF AN OBSTRUCTIONS, AND REMOVAL OF ANY DAMAGED PIPE IS TO BE INCLUDED IN THE BID PRICE FOR ITEM 602.3636. SEE SECTION 602 IN THE NYS DOT STANDARD SPECIFICATIONS FOR ADDITIONAL DETAILS.
4. TEMPORARY SEDIMENT FILTER LOG IS TO BE EXTENDED ABOVE TO ACCOMMODATE DISTURBANCE DUE TO SITE ACCESS AND WORK ACTIVITIES. IT SHOULD BE INSTALLED AS CLOSE TO THE WORK AREA AS REASONABLY POSSIBLE FOR THE CONTRACTOR TO COMPLETE THEIR WORK. IF COFFERDAMS ARE NOT REQUIRED TO COMPLETE THE RELINING, THE FILTER LOG SHOULD BE PLACED WHERE COFFERDAMS ARE SHOWN ON THE PLANS.
5. CULVERT D CARRIES STORM RUNOFF AND DOES NOT HAVE CONTINUOUS WATER FLOW.
6. THE CONTRACTOR MAY CHOOSE WHERE TO ACCESS THE CULVERT INLET/OUTLETS. AT EACH ACCESS POINT, A 50 FOOT LONG BY 12 FOOT WIDE TEMPORARY CONSTRUCTION ENTRANCE WILL BE PAID FOR UNDER ITEM 209.22, RESTORED WITH ITEM 207.1003, AND CONSTRUCTED IN ACCORDANCE WITH NYS DOT SS 609-05. BEYOND 50 FEET, THE COST OF ANY ACCESS ROAD IS TO BE INCLUDED IN THE BID PRICE FOR ITEM 602.3636.
7. ALL AREAS DISTURBED DURING CONSTRUCTION ARE TO BE RESTORED WITH SEED AND MULCH - TEMPORARY. THE COST OF THE RESTORATION IS BE INCLUDED IN THE BID PRICE FOR ITEM 602.3636.



DRAINAGE SCOPE OF WORK:

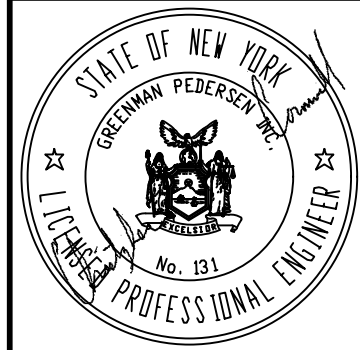
- EXISTING CULVERTS:
 CULVERT 'D' = 36" CMP CULVERT (104 LF)
 CULVERT 'E' = 24" CMP CULVERT (81 LF)
- PROPOSED WORK:
 CULVERT 'D' = RELINE WITH 36" CURED-IN-PLACE PIPE, REPLACE END SECTIONS, INSTALL STONE APRONS
 CULVERT 'E' = FILL EXISTING CULVERT WITH FLOWABLE FILL AND REMOVE INLET END SECTION
- SEE DRAINAGE TABLE ON DWG. MTD-1 FOR QUANTITIES

LEGEND	
	STONE APRON
	PROPOSED CULVERT RELINING
	CULVERT/DRAINAGE STRUCTURE
	12" FILTER LOG - TEMPORARY
	CULVERT DEWATERING



UTILITY NOTE:
 CONTRACTOR SHALL NOTE NO UNDERGROUND UTILITIES ARE SHOWN, HOWEVER BOTH OVERHEAD AND UNDERGROUND ARE PRESENT WITHIN THE PROJECT LIMITS.

AFFIX SEAL: GREENMAN - PEDERSEN, INC
 ON: MARCH 4, 2019
 ALTERED BY:
 ON:



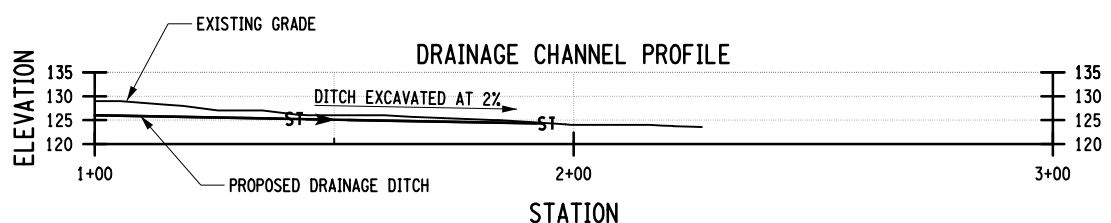
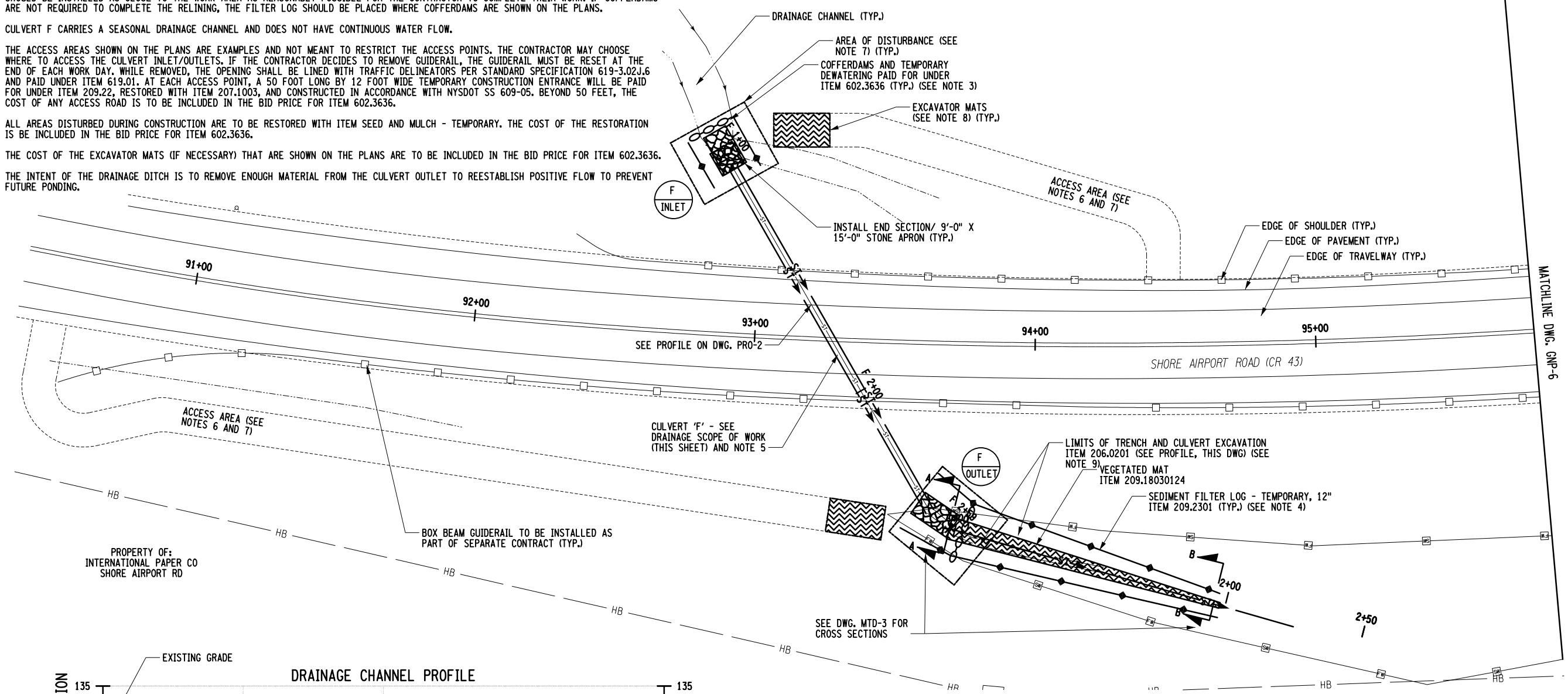
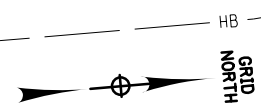
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS	PIN: 1760.63	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D036169	
	TOWN OF TICONDEROGA	UTIL QL.VL = D					
	COUNTY: ESSEX	REGION: 1			GENERAL PLAN - CULVERTS D & E	DRAWING NO. GNP-4 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.						GPI GREENMAN-PEDERSEN, INC. CONSULTING ENGINEERS	ESSEX COUNTY

FILE NAME = ...\\176063.CPH-gnp-4.dgn
 DATE/TIME = 3/4/2019
 USER = jgentzler

NOTES:

1. THE LINER PROVIDED FOR CURED-IN PLACE PIPE UNDER ITEM 602.3636 SHALL BE ONE CONTINUOUS LINER.
2. THE STATIONING SHOWN ON THE PLANS IS NOT INTENDED TO BE USED AS A SURVEY CONTROL FEATURE, BUT RATHER A REFERENCE FOR WORK PERFORMED. NO SURVEY BASELINE TIES ARE PROVIDED AS PART OF THIS PROJECT.
3. ALL WORK INCLUDING LINING, CLEANING AND DEWATERING OF THE EXISTING CULVERTS, REMOVAL OF AN OBSTRUCTIONS, AND REMOVAL OF ANY DAMAGED PIPE IS TO BE INCLUDED IN THE BID PRICE FOR ITEM 602.3636. SEE SECTION 602 IN THE NYSOT STANDARD SPECIFICATIONS FOR ADDITIONAL DETAILS.
4. TEMPORARY SEDIMENT FILTER LOG IS TO BE EXTENDED ABOVE TO ACCOMMODATE DISTURBANCE DUE TO SITE ACCESS AND WORK ACTIVITIES. IT SHOULD BE INSTALLED AS CLOSE TO THE WORK AREA AS REASONABLY POSSIBLE FOR THE CONTRACTOR TO COMPLETE THEIR WORK. IF COFFERDAMS ARE NOT REQUIRED TO COMPLETE THE RELINING, THE FILTER LOG SHOULD BE PLACED WHERE COFFERDAMS ARE SHOWN ON THE PLANS.
5. CULVERT F CARRIES A SEASONAL DRAINAGE CHANNEL AND DOES NOT HAVE CONTINUOUS WATER FLOW.
6. THE ACCESS AREAS SHOWN ON THE PLANS ARE EXAMPLES AND NOT MEANT TO RESTRICT THE ACCESS POINTS. THE CONTRACTOR MAY CHOOSE WHERE TO ACCESS THE CULVERT INLET/OUTLETS. IF THE CONTRACTOR DECIDES TO REMOVE GUIDERAIL, THE GUIDERAIL MUST BE RESET AT THE END OF EACH WORK DAY. WHILE REMOVED, THE OPENING SHALL BE LINED WITH TRAFFIC DELINEATORS PER STANDARD SPECIFICATION 619-3.02J.6 AND PAID UNDER ITEM 619.01. AT EACH ACCESS POINT, A 50 FOOT LONG BY 12 FOOT WIDE TEMPORARY CONSTRUCTION ENTRANCE WILL BE PAID FOR UNDER ITEM 209.22, RESTORED WITH ITEM 207.1003, AND CONSTRUCTED IN ACCORDANCE WITH NYSOT SS 609-05. BEYOND 50 FEET, THE COST OF ANY ACCESS ROAD IS TO BE INCLUDED IN THE BID PRICE FOR ITEM 602.3636.
7. ALL AREAS DISTURBED DURING CONSTRUCTION ARE TO BE RESTORED WITH ITEM SEED AND MULCH - TEMPORARY. THE COST OF THE RESTORATION IS BE INCLUDED IN THE BID PRICE FOR ITEM 602.3636.
8. THE COST OF THE EXCAVATOR MATS (IF NECESSARY) THAT ARE SHOWN ON THE PLANS ARE TO BE INCLUDED IN THE BID PRICE FOR ITEM 602.3636.
9. THE INTENT OF THE DRAINAGE DITCH IS TO REMOVE ENOUGH MATERIAL FROM THE CULVERT OUTLET TO REESTABLISH POSITIVE FLOW TO PREVENT FUTURE PONDING.

PROPERTY OF:
INTERNATIONAL PAPER CO
SHORE AIRPORT RD



HYDRAULIC DATA - CULVERT F	
DRAINAGE AREA = 27.49 SQ. ACRES	DESIGN FLOOD
RECCURENCY INTERVAL (YEARS)	50
PEAK DISCHARGE (FT ³ /SEC)	27.94
PROPOSED INLET DEPTH (FT)	1.9
PROPOSED OUTLET VELOCITY (FT/SEC)	18.9

LEGEND	
	STONE APRON
	PROPOSED CULVERT RELINING
	CULVERT/DRAINAGE STRUCTURE
	12" FILTER LOG - TEMPORARY
	CULVERT DEWATERING

UTILITY NOTE:
CONTRACTOR SHALL NOTE NO UNDERGROUND UTILITIES ARE SHOWN, HOWEVER BOTH OVERHEAD AND UNDERGROUND ARE PRESENT WITHIN THE PROJECT LIMITS.



DRAINAGE SCOPE OF WORK:

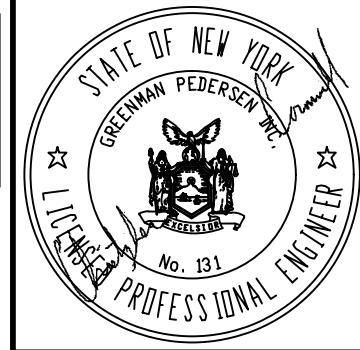
EXISTING CULVERT:
CULVERT 'F' = 36" CMP CULVERT (141 LF)

PROPOSED WORK:
CULVERT 'F' = RELINE WITH 36" CURED-IN-PLACE PIPE, REPLACE END SECTIONS, INSTALL STONE APRONS, REGRADE DRAINAGE CHANNEL

SEE DRAINAGE TABLE ON DWG. MTD-1 FOR QUANTITIES

AFFIX SEAL: GREENMAN - PEDERSEN, INC
ON: MARCH 4, 2019

ALTERED BY:
ON:



AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS

TOWN OF TICONDEROGA

COUNTY: ESSEX REGION: 1

PIN: 1760.63
UTIL QLVL = D

BRIDGES
CULVERTS

ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED

GENERAL PLAN - CULVERT F

CONTRACT NUMBER
D036169

DRAWING NO. GNP-5
SHEET NO. 15

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.

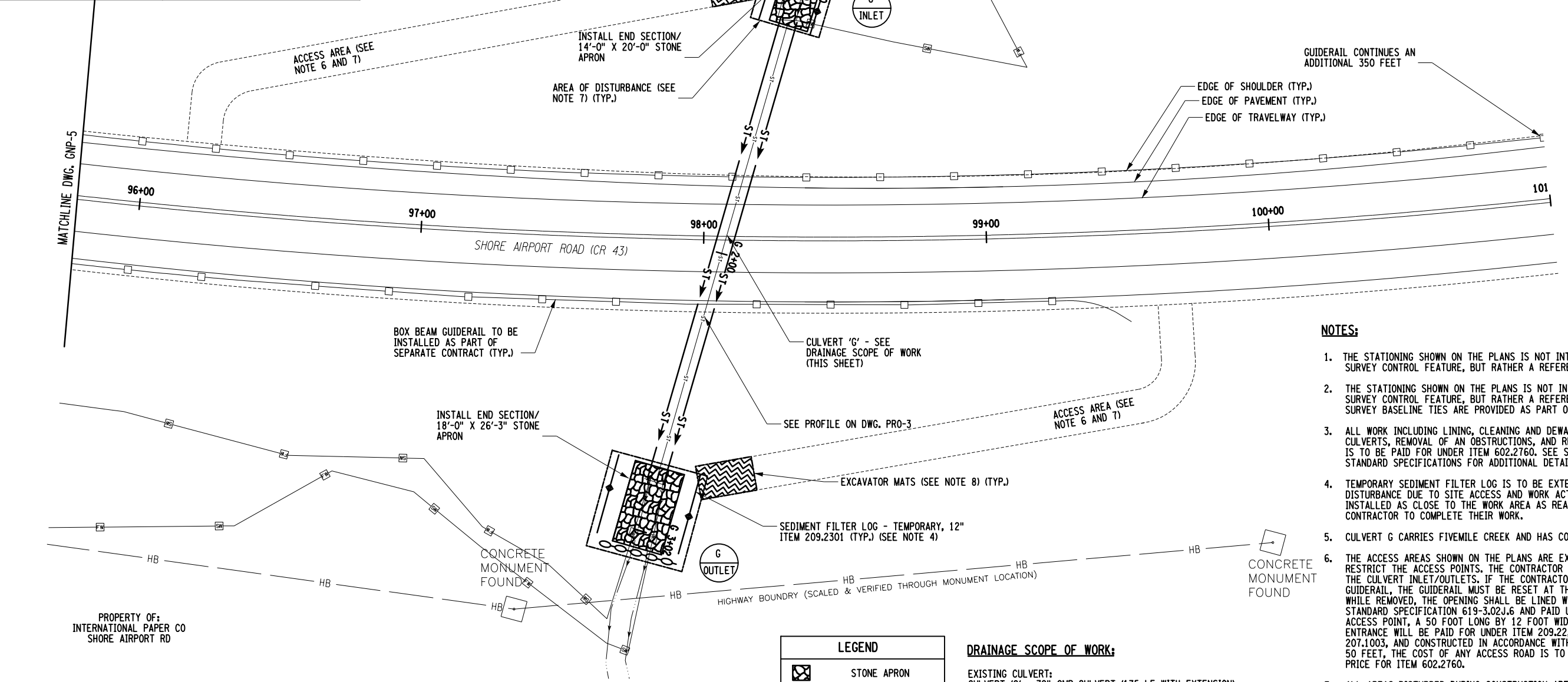
GPI GREENMAN-PEDERSEN, INC. CONSULTING ENGINEERS

ESSEX COUNTY

FILE NAME = ...176063.CPH_gnp-5.dgn
DATE/TIME = 3/4/2019
USER = jgentzler

PROJECT MANAGER C. CORNWELL
CHECK A. HAWKINS
DRAFTING J. GENTZLER
CHECK C. CORNWELL
DESIGN J. GENTZLER
JOB MANAGER C. CORNWELL
DESIGN SUPERVISOR F. MASTROIANNI

HYDRAULIC DATA - CULVERT G			
DRAINAGE AREA = 384 SQ. ACRES		CHECK FLOOD	DESIGN FLOOD
RECURRENCE INTERVAL (YEARS)		100	50
PEAK DISCHARGE FT ³ /SEC		122.0	104.0
HIGH WATER ELEVATION @ PT OF MAX. BACKWATER	EXIST.	113.54	113.25
	PROP.	117.45	117.07
AVG. VELOCITY THRU STRUCTURE @ DESIGN FLOOD	14.02 FT/S		
ORDINARY HIGH WATER	ELEVATION = 115.45', 36.0 CFS		



- NOTES:**
1. THE STATIONING SHOWN ON THE PLANS IS NOT INTENDED TO BE USED AS A SURVEY CONTROL FEATURE, BUT RATHER A REFERENCE FOR WORK PERFORMED.
 2. THE STATIONING SHOWN ON THE PLANS IS NOT INTENDED TO BE USED AS A SURVEY CONTROL FEATURE, BUT RATHER A REFERENCE FOR WORK PERFORMED. NO SURVEY BASELINE TIES ARE PROVIDED AS PART OF THIS PROJECT.
 3. ALL WORK INCLUDING LINING, CLEANING AND DEWATERING OF THE EXISTING CULVERTS, REMOVAL OF AN OBSTRUCTIONS, AND REMOVAL OF ANY DAMAGED PIPE IS TO BE PAID FOR UNDER ITEM 602.2760. SEE SECTION 602 IN THE NYS DOT STANDARD SPECIFICATIONS FOR ADDITIONAL DETAILS.
 4. TEMPORARY SEDIMENT FILTER LOG IS TO BE EXTENDED ABOVE TO ACCOMMODATE DISTURBANCE DUE TO SITE ACCESS AND WORK ACTIVITIES. IT SHOULD BE INSTALLED AS CLOSE TO THE WORK AREA AS REASONABLY POSSIBLE FOR THE CONTRACTOR TO COMPLETE THEIR WORK.
 5. CULVERT G CARRIES FIVEMILE CREEK AND HAS CONTINUOUS WATER FLOW.
 6. THE ACCESS AREAS SHOWN ON THE PLANS ARE EXAMPLES AND NOT MEANT TO RESTRICT THE ACCESS POINTS. THE CONTRACTOR MAY CHOOSE WHERE TO ACCESS THE CULVERT INLET/OUTLETS. IF THE CONTRACTOR DECIDES TO REMOVE GUIDERAIL, THE GUIDERAIL MUST BE RESET AT THE END OF EACH WORK DAY. WHILE REMOVED, THE OPENING SHALL BE LINED WITH TRAFFIC DELINEATORS PER STANDARD SPECIFICATION 619-3.02J.6 AND PAID UNDER ITEM 619.01. AT EACH ACCESS POINT, A 50 FOOT LONG BY 12 FOOT WIDE TEMPORARY CONSTRUCTION ENTRANCE WILL BE PAID FOR UNDER ITEM 209.22, RESTORED WITH ITEM 207.1003, AND CONSTRUCTED IN ACCORDANCE WITH NYS DOT SS 609-05. BEYOND 50 FEET, THE COST OF ANY ACCESS ROAD IS TO BE INCLUDED IN THE BID PRICE FOR ITEM 602.2760.
 7. ALL AREAS DISTURBED DURING CONSTRUCTION ARE TO BE RESTORED WITH ITEM SEED AND MULCH - TEMPORARY. THE COST OF THE RESTORATION IS BE INCLUDED IN THE BID PRICE FOR ITEM 602.2760.
 8. THE COST OF THE EXCAVATOR MATS (IF NECESSARY) THAT ARE SHOWN ON THE PLANS ARE TO BE INCLUDED IN THE BID PRICE FOR ITEM 602.2760.

DRAINAGE SCOPE OF WORK:

EXISTING CULVERT:
CULVERT 'G' = 72" CMP CULVERT (175 LF WITH EXTENSION)

PROPOSED WORK:
CULVERT 'G' = RELINE WITH 60" HDPE PROFILE WALL PIPE (EXTEND PIPE 2' BEYOND EXISTING PIPE), INSTALL END SECTIONS, INSTALL STONE APRONS

SEE DRAINAGE TABLE ON DWG. MTD-1 FOR QUANTITIES

NOTE: THE INSIDE DIAMETER OF THE EXISTING PIPE IS APPROXIMATELY 67"

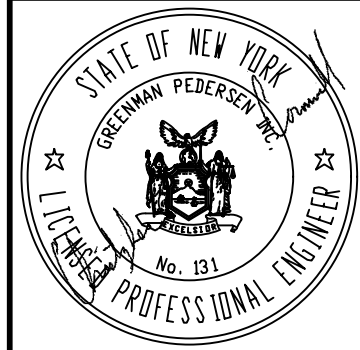
LEGEND	
	STONE APRON
	PROPOSED CULVERT RELINING
	CULVERT/DRAINAGE STRUCTURE
	12" FILTER LOG - TEMPORARY
	CULVERT DEWATERING

UTILITY NOTE:
CONTRACTOR SHALL NOTE NO UNDERGROUND UTILITIES ARE SHOWN, HOWEVER BOTH OVERHEAD AND UNDERGROUND ARE PRESENT WITHIN THE PROJECT LIMITS.



AFFIX SEAL: GREENMAN - PEDERSEN, INC
ON: MARCH 4, 2019

ALTERED BY:
ON:



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS	PIN: 1760.63	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D036169
	TOWN OF TICONDEROGA	UTIL QLVL = D			GENERAL PLAN - CULVERT G	DRAWING NO. GNP-6 SHEET NO. 16
	COUNTY: ESSEX	REGION: 1				

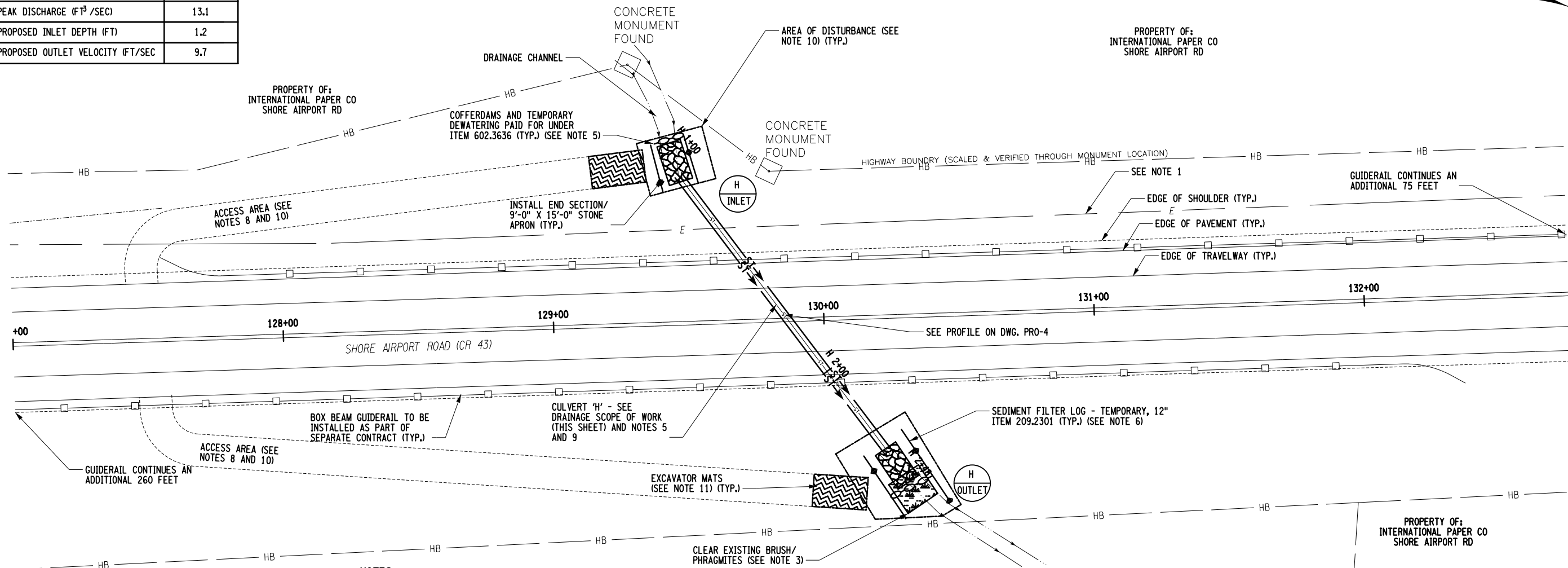
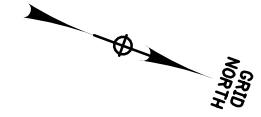
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, 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.

GPI GREENMAN-PEDERSEN, INC. CONSULTING ENGINEERS

ESSEX COUNTY

PROJECT MANAGER: C. CORNWELL
 CHECK: A. HAWKINS
 DRAFTING: J. GENTZLER
 CHECK: C. CORNWELL
 DESIGN: J. GENTZLER
 JOB MANAGER: C. CORNWELL
 DESIGN SUPERVISOR: F. MASTROIANNI
 FILE NAME: ...176063.CPL-gnp-6.dgn
 DATE/TIME: 3/4/2019
 USER: jgentzler

HYDRAULIC DATA - CULVERT H	
DRAINAGE AREA = 15.85 SQ. ACRES	DESIGN FLOOD
RECURRENCE INTERVAL (YEARS)	50
PEAK DISCHARGE (FT ³ /SEC)	13.1
PROPOSED INLET DEPTH (FT)	1.2
PROPOSED OUTLET VELOCITY (FT/SEC)	9.7



PROPERTY OF:
INTERNATIONAL PAPER CO
SHORE AIRPORT RD

LEGEND	
	STONE APRON
	PROPOSED CULVERT RELINING
	CULVERT/DRAINAGE STRUCTURE
	12" FILTER LOG - TEMPORARY
	CULVERT DEWATERING

NOTES:

- PER RECORDS PLANS RECEIVED BY NATIONAL GRID ON JUNE 6, 2017, THERE IS A 25KV BURIED ELECTRICAL LINE IN THE VICINITY OF SOUTHBOUND SHOULDER. THE LOCATION SHOWN ON THE PLANS IS FOR REFERENCE ONLY. THE CONTRACTOR SHALL CONTACT DIGSAFE TO VERIFY THE EXACT LOCATION AND DEPTH PRIOR TO EXCAVATING IN THE AREA.
- THE LINER PROVIDED FOR CURED-IN PLACE PIPE UNDER ITEM 602.3636 SHALL BE ONE CONTINUOUS LINER
- THE GENERAL CLEARING OF THE CULVERT OUTLET IS INTENDED TO CREATE POSITIVE DRAINAGE AND REMOVE THE CURRENT PONDING AT THE OUTLET. ALL WORK SHALL BE PAID UNDER ITEM 206.0201.
- THE STATIONING SHOWN ON THE PLANS IS NOT INTENDED TO BE USED AS A SURVEY CONTROL FEATURE, BUT RATHER A REFERENCE FOR WORK PERFORMED. NO SURVEY BASELINE TIES ARE PROVIDED AS PART OF THIS PROJECT.
- ALL WORK INCLUDING LINING, CLEANING AND DEWATERING OF THE EXISTING CULVERTS, REMOVAL OF AN OBSTRUCTIONS, AND REMOVAL OF ANY DAMAGED PIPE IS TO BE PAID FOR UNDER ITEM 602.3636. SEE SECTION 602 IN THE NYS DOT STANDARD SPECIFICATIONS FOR ADDITIONAL DETAILS.
- TEMPORARY SEDIMENT FILTER LOG IS TO BE EXTENDED ABOVE TO ACCOMMODATE DISTURBANCE DUE TO SITE ACCESS AND WORK ACTIVITIES. IT SHOULD BE INSTALLED AS CLOSE TO THE WORK AREA AS REASONABLY POSSIBLE FOR THE CONTRACTOR TO COMPLETE THEIR WORK. IF COFFERDAMS ARE NOT REQUIRED TO COMPLETE THE RELINING THE FILTER LOG SHOULD BE PLACED WHERE COFFERDAMS ARE SHOWN ON THE PLANS.
- CULVERT H CARRIES A DRAINAGE CHANNEL AND DOES NOT HAVE CONTINUOUS WATER FLOW.
- THE ACCESS AREAS SHOWN ON THE PLANS ARE EXAMPLES AND NOT MEANT TO RESTRICT THE ACCESS POINTS. THE CONTRACTOR MAY CHOOSE WHERE TO ACCESS THE CULVERT INLET/OUTLETS. IF THE CONTRACTOR DECIDES TO REMOVE GUIDERAIL, THE GUIDERAIL MUST BE RESET AT THE END OF EACH WORK DAY. WHILE REMOVED, THE OPENING SHALL BE LINED WITH TRAFFIC DELINEATORS PER STANDARD SPECIFICATION 619-3.02J.6 AND PAID UNDER ITEM 619.01. AT EACH ACCESS POINT, A 50 FOOT LONG BY 12 FOOT WIDE TEMPORARY CONSTRUCTION ENTRANCE WILL BE PAID FOR UNDER ITEM 209.22, RESTORED WITH ITEM 207.1003, AND CONSTRUCTED IN ACCORDANCE WITH NYS DOT SS 609-05. BEYOND 50 FEET, THE COST OF ANY ACCESS ROAD IS TO BE INCLUDED IN THE BID PRICE FOR ITEM 602.3636.
- THIS NOTE IS INTENDED TO INFORM THE CONTRACTOR THAT THERE IS WELDED RIGHT-ANGLE BRACING WITHIN THE EXISTING CULVERT THAT WAS PREVIOUSLY USED TO SUPPORT UTILITY PIPING THAT HAS SINCE BEEN REMOVED. THIS BRACING WILL NEED TO BE REMOVED BEFORE RELINING CAN BE PERFORMED AND SHOULD BE INCLUDED IN THE BID PRICE FOR ITEM 602.3636.
- ALL AREAS DISTURBED DURING CONSTRUCTION ARE TO BE RESTORED WITH ITEM SEED AND MULCH - TEMPORARY. THE COST OF THE RESTORATION IS BE INCLUDED IN THE BID PRICE FOR ITEM 602.3636.
- THE COST OF THE EXCAVATOR MATS (IF NECESSARY) THAT ARE SHOWN ON THE PLANS ARE TO BE INCLUDED IN THE BID PRICE FOR ITEM 602.3636.

PROPERTY OF:
INTERNATIONAL PAPER CO
SHORE AIRPORT RD

DRAINAGE SCOPE OF WORK:

EXISTING CULVERT:
CULVERT 'H' = 36" CMP CULVERT (130 LF WITH EXTENSION)

PROPOSED WORK:
CULVERT 'H' = RELINE WITH 36" CURED-IN-PLACE PIPE, REMOVE PIPE SUPPORTS MOUNTED INSIDE EXISTING PIPE, INSTALL END SECTIONS, AND STONE APRONS

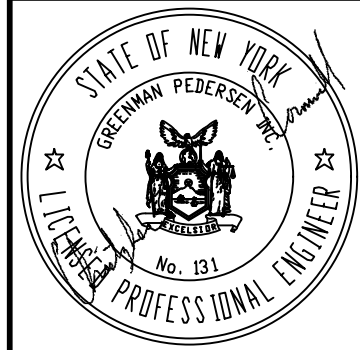
SEE DRAINAGE TABLE ON DWG. MTD-1 FOR QUANTITIES

UTILITY NOTE:
CONTRACTOR SHALL NOTE NO UNDERGROUND UTILITIES ARE SHOWN, HOWEVER BOTH OVERHEAD AND UNDERGROUND ARE PRESENT WITHIN THE PROJECT LIMITS.



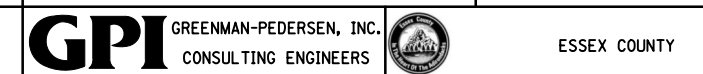
AFFIX SEAL: GREENMAN - PEDERSEN, INC
ON: MARCH 4, 2019

ALTERED BY:
ON:



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS	PIN: 1760.63	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D036169
	TOWN OF TICONDEROGA	UTIL QL.VL = D				GENERAL PLAN - CULVERT H
	COUNTY: ESSEX	REGION: 1				

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FILE NAME = ...\\176063.CPH_gnp-7.dgn
DATE/TIME = 3/4/2019
USER = jgentzler

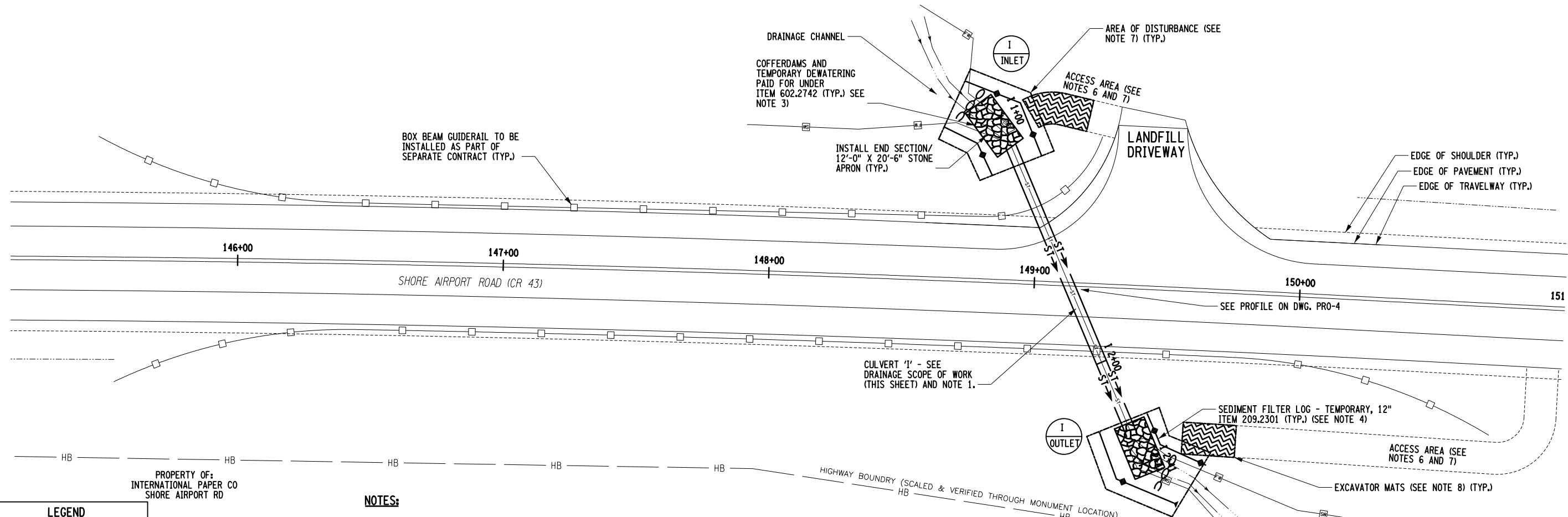
PROJECT MANAGER: C. CORNWELL
CHECK: A. HAWKINS
DRAFTING: J. GENTZLER
CHECK: C. CORNWELL
DESIGN: J. GENTZLER
JOB MANAGER: C. CORNWELL
DESIGN SUPERVISOR: F. MASTROIANNI

HYDRAULIC DATA - CULVERT I	
DRAINAGE AREA = 53.18 SQ. ACRES	DESIGN FLOOD
REQUENCY INTERVAL (YEARS)	50
PEAK DISCHARGE (FT ³ /SEC)	28.4
PROPOSED INLET DEPTH (FT)	1.8
PROPOSED OUTLET VELOCITY (FT/SEC)	12.6

HIGHWAY BOUNDARY LOCATED WEST OF THIS PLAN SHEET



PROJECT MANAGER: C. CORNWELL
 CHECK: A. HAWKINS
 DRAFTING: J. GENTZLER
 CHECK: C. CORNWELL
 DESIGN: J. GENTZLER
 JOB MANAGER: C. CORNWELL
 DESIGN SUPERVISOR: F. MASTROIANNI



LEGEND	
	STONE APRON
	PROPOSED CULVERT RELINING
	CULVERT/DRAINAGE STRUCTURE
	12" FILTER LOG - TEMPORARY
	CULVERT DEWATERING

NOTES:

- THIS NOTE IS INTENDED TO INFORM THE CONTRACTOR THAT THERE IS WELDED RIGHT-ANGLE BRACING WITHIN THE EXISTING CULVERT THAT WAS PREVIOUSLY USED TO SUPPORT UTILITY PIPING THAT HAS SINCE BEEN REMOVED. THIS BRACING WILL NEED TO BE REMOVED BEFORE RELINING CAN BE PERFORMED.
- THE STATIONING SHOWN ON THE PLANS IS NOT INTENDED TO BE USED AS A SURVEY CONTROL FEATURE, BUT RATHER A REFERENCE FOR WORK PERFORMED. NO SURVEY BASELINE TIES ARE PROVIDED AS PART OF THIS PROJECT.
- ALL WORK INCLUDING LINING, CLEANING AND DEWATERING OF THE EXISTING CULVERTS, REMOVAL OF AN OBSTRUCTIONS, AND REMOVAL OF ANY DAMAGED PIPE IS TO BE INCLUDED IN THE BID PRICE FOR ITEM 602.2742. SEE SECTION 602 IN THE NYS DOT STANDARD SPECIFICATIONS FOR ADDITIONAL DETAILS.
- TEMPORARY SEDIMENT FILTER LOG IS TO BE EXTENDED ABOVE TO ACCOMMODATE DISTURBANCE DUE TO SITE ACCESS AND WORK ACTIVITIES. IT SHOULD BE INSTALLED AS CLOSE TO THE WORK AREA AS REASONABLY POSSIBLE FOR THE CONTRACTOR TO COMPLETE THEIR WORK.
- CULVERT I CARRIES A DRAINAGE CHANNEL AND WILL HAVE STANDING WATER AT ITS OUTLET.
- THE ACCESS AREAS SHOWN ON THE PLANS ARE EXAMPLES AND NOT MEANT TO RESTRICT THE ACCESS POINTS. THE CONTRACTOR MAY CHOOSE WHERE TO ACCESS THE CULVERT INLET/OUTLETS. IF THE CONTRACTOR DECIDES TO REMOVE GUIDERAIL, THE GUIDERAIL MUST BE RESET AT THE END OF EACH WORK DAY. WHILE REMOVED, THE OPENING SHALL BE LINED WITH TRAFFIC DELINEATORS PER STANDARD SPECIFICATION 619-3.02J.6 AND PAID UNDER ITEM 619.01. AT EACH ACCESS POINT, A 50 FOOT LONG BY 12 FOOT WIDE TEMPORARY CONSTRUCTION ENTRANCE WILL BE PAID FOR UNDER ITEM 209.22, RESTORED WITH ITEM 207.1003, AND CONSTRUCTED IN ACCORDANCE WITH NYS DOT SS 609-05. BEYOND 50 FEET, THE COST OF ANY ACCESS ROAD IS TO BE INCLUDED IN THE BID PRICE FOR ITEM 602.2742.
- ALL AREAS DISTURBED DURING CONSTRUCTION ARE TO BE RESTORED WITH ITEM SEED AND MULCH - TEMPORARY. THE COST OF THE RESTORATION IS BE INCLUDED IN THE BID PRICE FOR ITEM 602.2742.
- THE COST OF THE EXCAVATOR MATS (IF NECESSARY) THAT ARE SHOWN ON THE PLANS ARE TO BE INCLUDED IN THE BID PRICE FOR ITEM 602.2742.

DRAINAGE SCOPE OF WORK:

EXISTING CULVERT:
 CULVERT 'I' = 48" CMP CULVERT (118 LF)

PROPOSED WORK:
 CULVERT 'I' = RELINE WITH 42" HDPE PIPE, REPLACE END SECTIONS, INSTALL STONE APRONS

SEE DRAINAGE TABLE ON DWG. MTD-1 FOR QUANTITIES

NOTE: THE INSIDE DIAMETER OF THE EXISTING PIPE IS APPROXIMATELY 47"



UTILITY NOTE:
 CONTRACTOR SHALL NOTE NO UNDERGROUND UTILITIES ARE SHOWN, HOWEVER BOTH OVERHEAD AND UNDERGROUND ARE PRESENT WITHIN THE PROJECT LIMITS.

AFFIX SEAL: GREENMAN - PEDERSEN, INC
 ON: MARCH 4, 2019

ALTERED BY:
 ON:



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS	PIN: 1760.63	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D036169
	TOWN OF TICONDEROGA	UTIL QLVL = D				GENERAL PLAN - CULVERT I
	COUNTY: ESSEX	REGION: 1				

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.

GPI GREENMAN-PEDERSEN, INC. CONSULTING ENGINEERS

NOTES:

1. THIS NOTE IS INTENDED TO INFORM THE CONTRACTOR THAT THERE IS 12-18 INCHES OF SEDIMENT AT THE BOTTOM OF THE ARCH. IN ADDITION TO ANY DEWATERING AND REMOVAL OF DAMAGED PIPE SECTIONS, THE CONTRACTOR IS TO REMOVE THE EXISTING SEDIMENT AND AT THE COMPLETION OF THE SHOTCRETE PLACEMENT REPLACE THE SEDIMENT OVER THE SHOTCRETE. THIS WORK, IN ITS ENTIRETY, IS TO BE PAID FOR UNDER ITEM 602.2101. SEE SECTION 602 IN THE NYSOT STANDARD SPECIFICATIONS FOR ADDITIONAL DETAILS.
2. THE STATIONING SHOWN ON THE PLANS IS NOT INTENDED TO BE USED AS A SURVEY CONTROL FEATURE, BUT RATHER A REFERENCE FOR WORK PERFORMED. NO SURVEY BASELINE TIES ARE PROVIDED AS PART OF THIS PROJECT.
3. TEMPORARY SEDIMENT FILTER LOG IS TO BE EXTENDED ABOVE TO ACCOMMODATE DISTURBANCE DUE TO SITE ACCESS AND WORK ACTIVITIES. IT SHOULD BE INSTALLED AS CLOSE TO THE WORK AREA AS REASONABLY POSSIBLE FOR THE CONTRACTOR TO COMPLETE THEIR WORK.
4. CULVERT J CARRIES AN UNNAMED STREAM AND WILL HAVE 2-3 FEET OF STANDING WATER OVER ITS ENTIRE LENGTH. THE CONDITION OF THE CULVERT ALONG ITS INVERT IS UNKNOWN. IF THE INVERT OF THE CULVERT IS DETERIORATED SEE RESTORATION NOTES ON DWG. GNN-1.
5. THE ACCESS AREAS SHOWN ON THE PLANS ARE EXAMPLES AND NOT MEANT TO RESTRICT THE ACCESS POINTS. THE CONTRACTOR MAY CHOOSE WHERE TO ACCESS THE CULVERT INLET/OUTLETS. IF THE CONTRACTOR DECIDES TO REMOVE GUIDERAIL, THE GUIDERAIL MUST BE RESET AT THE END OF EACH WORK DAY. WHILE REMOVED, THE OPENING SHALL BE LINED WITH TRAFFIC DELINEATORS PER STANDARD SPECIFICATION 619-3.02J.6 AND PAID UNDER ITEM 619.01. AT EACH ACCESS POINT, A 50 FOOT LONG BY 12 FOOT WIDE TEMPORARY CONSTRUCTION ENTRANCE WILL BE PAID FOR UNDER ITEM 209.22, RESTORED WITH ITEM 207.1003, AND CONSTRUCTED IN ACCORDANCE WITH NYSOT SS 609-05. BEYOND 50 FEET, THE COST OF ANY ACCESS ROAD IS TO BE INCLUDED IN THE BID PRICE FOR ITEM 602.2101.
6. ALL AREAS DISTURBED DURING CONSTRUCTION ARE TO BE RESTORED WITH ITEM SEED AND MULCH - TEMPORARY. THE COST OF THE RESTORATION IS BE INCLUDED IN THE BID PRICE FOR ITEM 602.2101.
7. THE COST OF THE EXCAVATOR MATS (IF NECESSARY) THAT ARE SHOWN ON THE PLANS ARE TO BE INCLUDED IN THE BID PRICE FOR ITEM 602.2101.

LEGEND

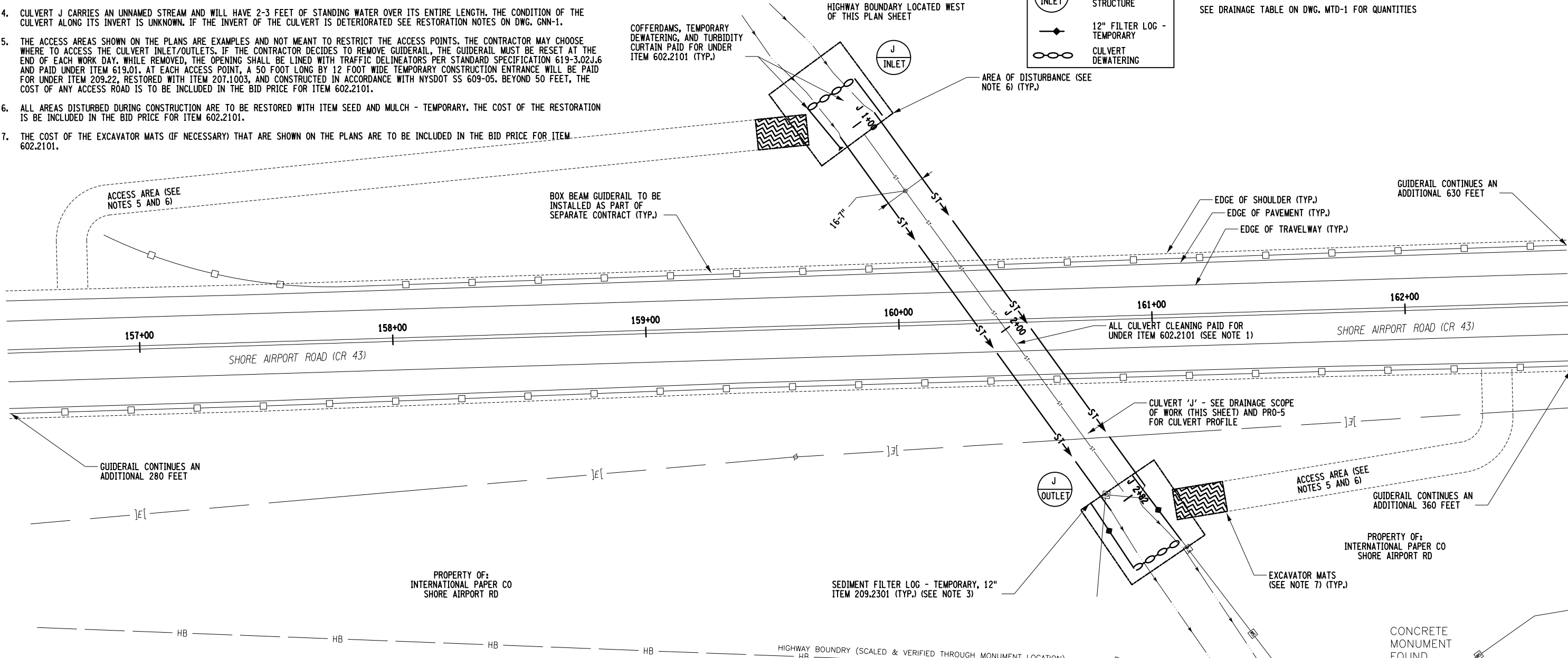
	STONE APRON
	PROPOSED CULVERT RELINING
	CULVERT/DRAINAGE STRUCTURE
	12" FILTER LOG - TEMPORARY
	CULVERT DEWATERING

DRAINAGE SCOPE OF WORK:

EXISTING CULVERT:
CULVERT 'J' = 16'-7" X 10'-1" MULTI-PLATE ARCH (175 LF)

PROPOSED WORK:
CULVERT 'J' = RELINE INVERT AND HALF ITS WALL HEIGHT WITH SHOTCRETE

SEE DRAINAGE TABLE ON DWG. MTD-1 FOR QUANTITIES



UTILITY NOTE:
CONTRACTOR SHALL NOTE NO UNDERGROUND UTILITIES ARE SHOWN, HOWEVER BOTH OVERHEAD AND UNDERGROUND ARE PRESENT WITHIN THE PROJECT LIMITS.

HYDRAULIC DATA - CULVERT J

	CHECK FLOOD	DESIGN FLOOD
DRAINAGE AREA = 8.45 SQ. MILES		
RECURRENCE INTERVAL (YEARS)	100	50
PEAK DISCHARGE FT ³ /SEC	999.00	905.70
HIGH WATER ELEVATION @ PT OF MAX. BACKWATER	EXIST. 107.80 PROP. 108.19	106.96 107.37
AVG. VELOCITY THRU STRUCTURE @ DESIGN FLOOD	7.78 FT/S	
ORDINARY HIGH WATER	ELEVATION = 102.24', 324.0 CFS	

AFFIX SEAL: GREENMAN - PEDERSEN, INC
ON: MARCH 4, 2019

ALTERED BY:
ON:



AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS
TOWN OF TICONDEROGA
COUNTY: ESSEX
REGION: 1

PIN: 1760.63	BRIDGES	CULVERTS
UTIL QLVL = D		

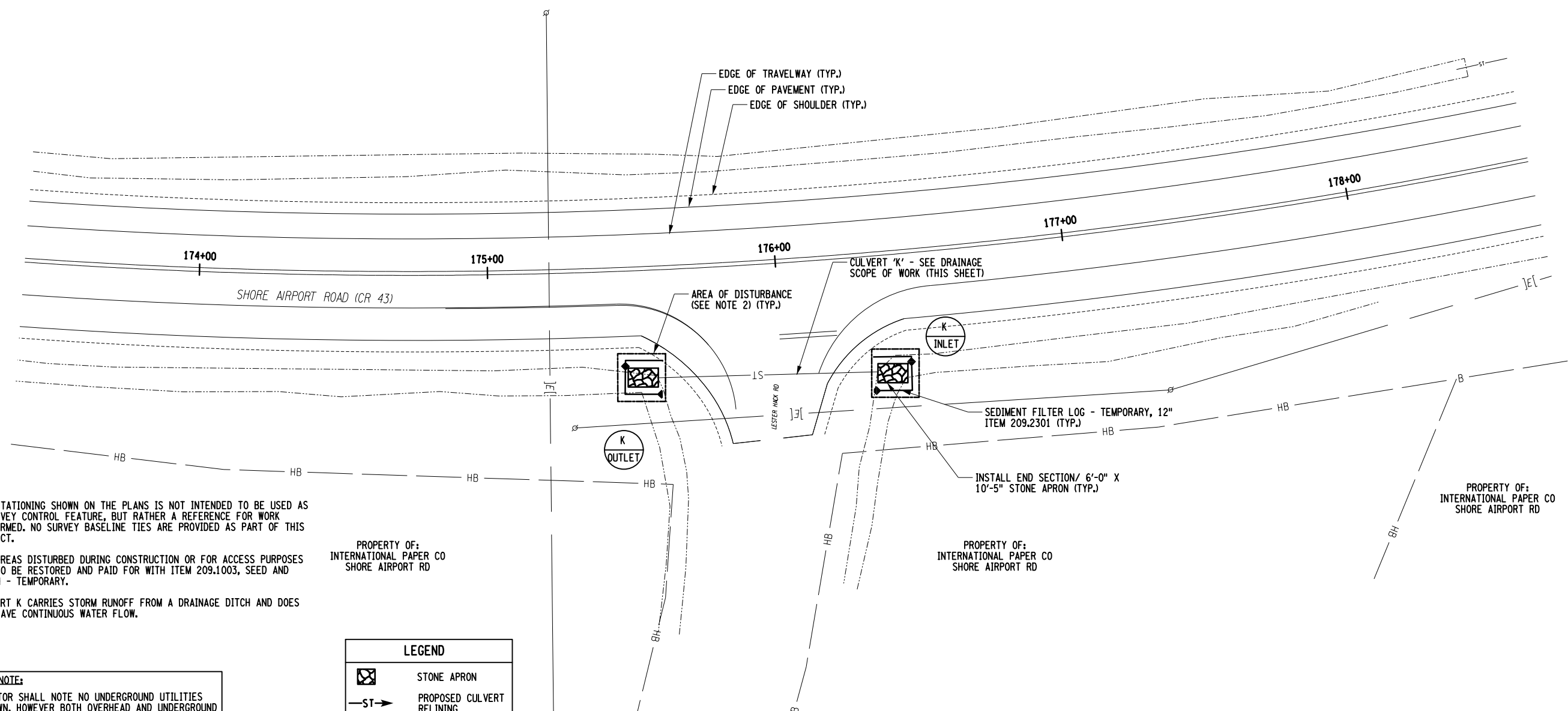
ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D036169
GENERAL PLAN - CULVERT J	DRAWING NO. GNP-9 SHEET NO. 19

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.



ESSEX COUNTY

PROJECT MANAGER: C. CORNWELL
 CHECK: A. HAWKINS
 DRAFTING: J. GENTZLER
 CHECK: C. CORNWELL
 DESIGN: J. GENTZLER
 JOB MANAGER: C. CORNWELL
 DESIGN SUPERVISOR: F. MASTROIANNI



- NOTES:**
1. THE STATIONING SHOWN ON THE PLANS IS NOT INTENDED TO BE USED AS A SURVEY CONTROL FEATURE, BUT RATHER A REFERENCE FOR WORK PERFORMED. NO SURVEY BASELINE TIES ARE PROVIDED AS PART OF THIS PROJECT.
 2. ALL AREAS DISTURBED DURING CONSTRUCTION OR FOR ACCESS PURPOSES ARE TO BE RESTORED AND PAID FOR WITH ITEM 209.1003, SEED AND MULCH - TEMPORARY.
 3. CULVERT K CARRIES STORM RUNOFF FROM A DRAINAGE DITCH AND DOES NOT HAVE CONTINUOUS WATER FLOW.

UTILITY NOTE:
 CONTRACTOR SHALL NOTE NO UNDERGROUND UTILITIES ARE SHOWN, HOWEVER BOTH OVERHEAD AND UNDERGROUND ARE PRESENT WITHIN THE PROJECT LIMITS.

LEGEND	
	STONE APRON
	PROPOSED CULVERT RELINING
	CULVERT/DRAINAGE STRUCTURE
	12" FILTER LOG - TEMPORARY
	CULVERT DEWATERING

DRAINAGE SCOPE OF WORK:

EXISTING CULVERT:
 CULVERT 'K' = 24" CMP CULVERT (75 LF)

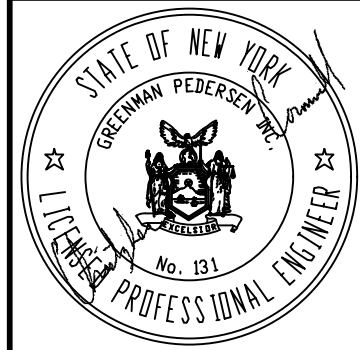
PROPOSED WORK:
 CULVERT 'K' = CLEAN EXISTING PIPE, REPLACE END SECTIONS, INSTALL STONE APRONS

SEE DRAINAGE TABLE ON DWG. MTD-1 FOR QUANTITIES



AFFIX SEAL: GREENMAN - PEDERSEN, INC
 ON: MARCH 4, 2019

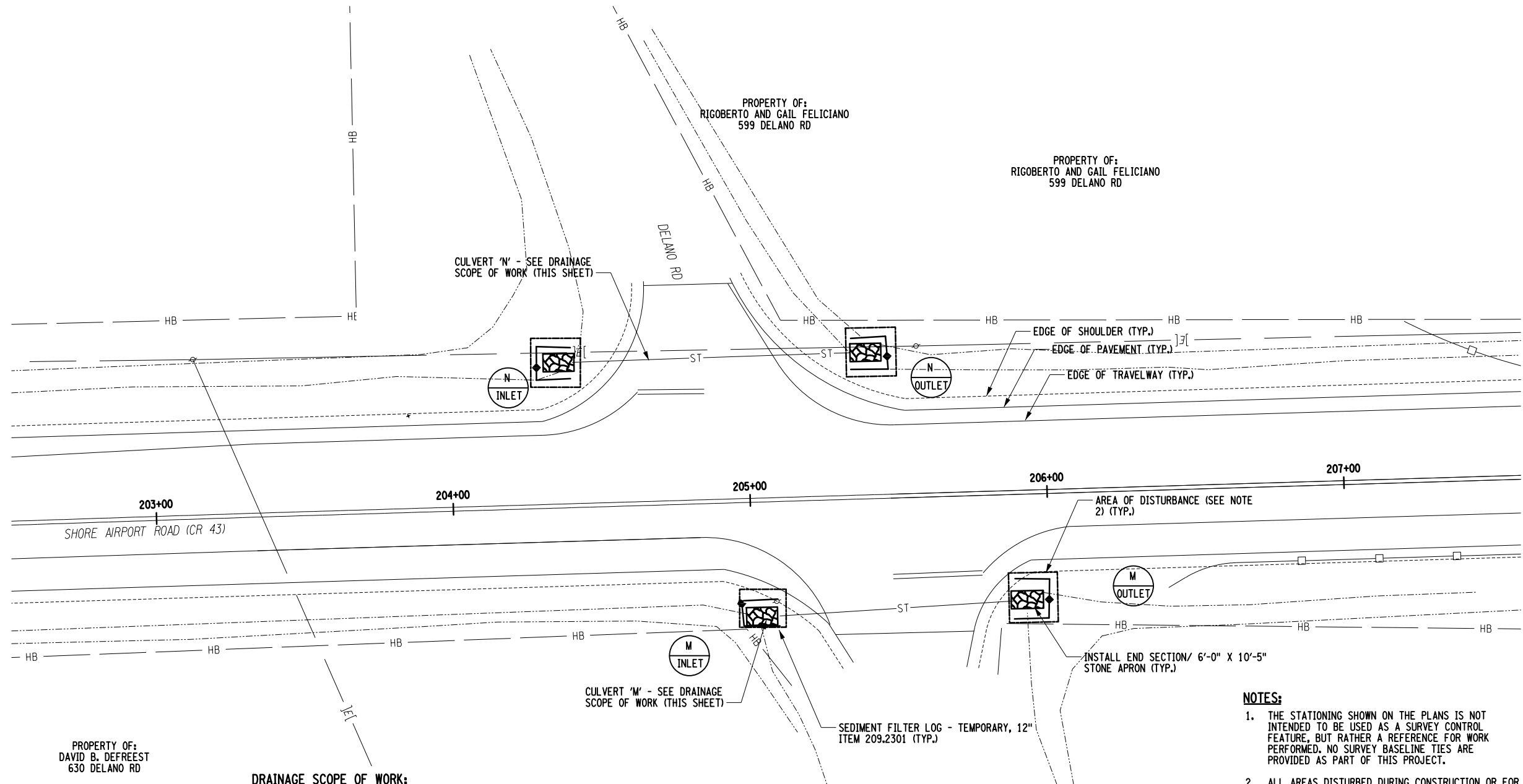
ALTERED BY:
 ON:



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS	PIN: 1760.63	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D036169
	TOWN OF TICONDEROGA	UTIL QLVL = D			GENERAL PLAN - CULVERT K	DRAWING NO. GNP-10 SHEET NO. 20
	COUNTY: ESSEX	REGION: 1				ESSEX COUNTY

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.

GPI GREENMAN-PEDERSEN, INC. CONSULTING ENGINEERS



LEGEND	
	STONE APRON
	PROPOSED CULVERT RELINING
	CULVERT/DRAINAGE STRUCTURE
	12" FILTER LOG - TEMPORARY
	CULVERT DEWATERING

DRAINAGE SCOPE OF WORK:

EXISTING CULVERTS:
 CULVERT 'M' = 24" CMP CULVERT (88 LF)
 CULVERT 'N' = 24" CMP CULVERT (93 LF)

PROPOSED WORK:
 CULVERT 'M' = CLEAN EXISTING PIPE, REPLACE END SECTIONS, INSTALL STONE APRONS
 CULVERT 'N' = CLEAN EXISTING PIPE, REPLACE END SECTIONS, INSTALL STONE APRONS

SEE DRAINAGE TABLE ON DWG. MTD-1 FOR QUANTITIES

UTILITY NOTE:
 CONTRACTOR SHALL NOTE NO UNDERGROUND UTILITIES ARE SHOWN, HOWEVER BOTH OVERHEAD AND UNDERGROUND ARE PRESENT WITHIN THE PROJECT LIMITS.

- NOTES:**
1. THE STATIONING SHOWN ON THE PLANS IS NOT INTENDED TO BE USED AS A SURVEY CONTROL FEATURE, BUT RATHER A REFERENCE FOR WORK PERFORMED. NO SURVEY BASELINE TIES ARE PROVIDED AS PART OF THIS PROJECT.
 2. ALL AREAS DISTURBED DURING CONSTRUCTION OR FOR ACCESS PURPOSES ARE TO BE RESTORED AND PAID FOR WITH ITEM 209.1003, SEED AND MULCH - TEMPORARY.
 3. CULVERTS M AND N CARRY STORM RUNOFF FROM A DRAINAGE DITCH AND DO NOT HAVE CONTINUOUS WATER FLOW.



AFFIX SEAL: GREENMAN - PEDERSEN, INC
 ON: MARCH 4, 2019

ALTERED BY:
 ON:

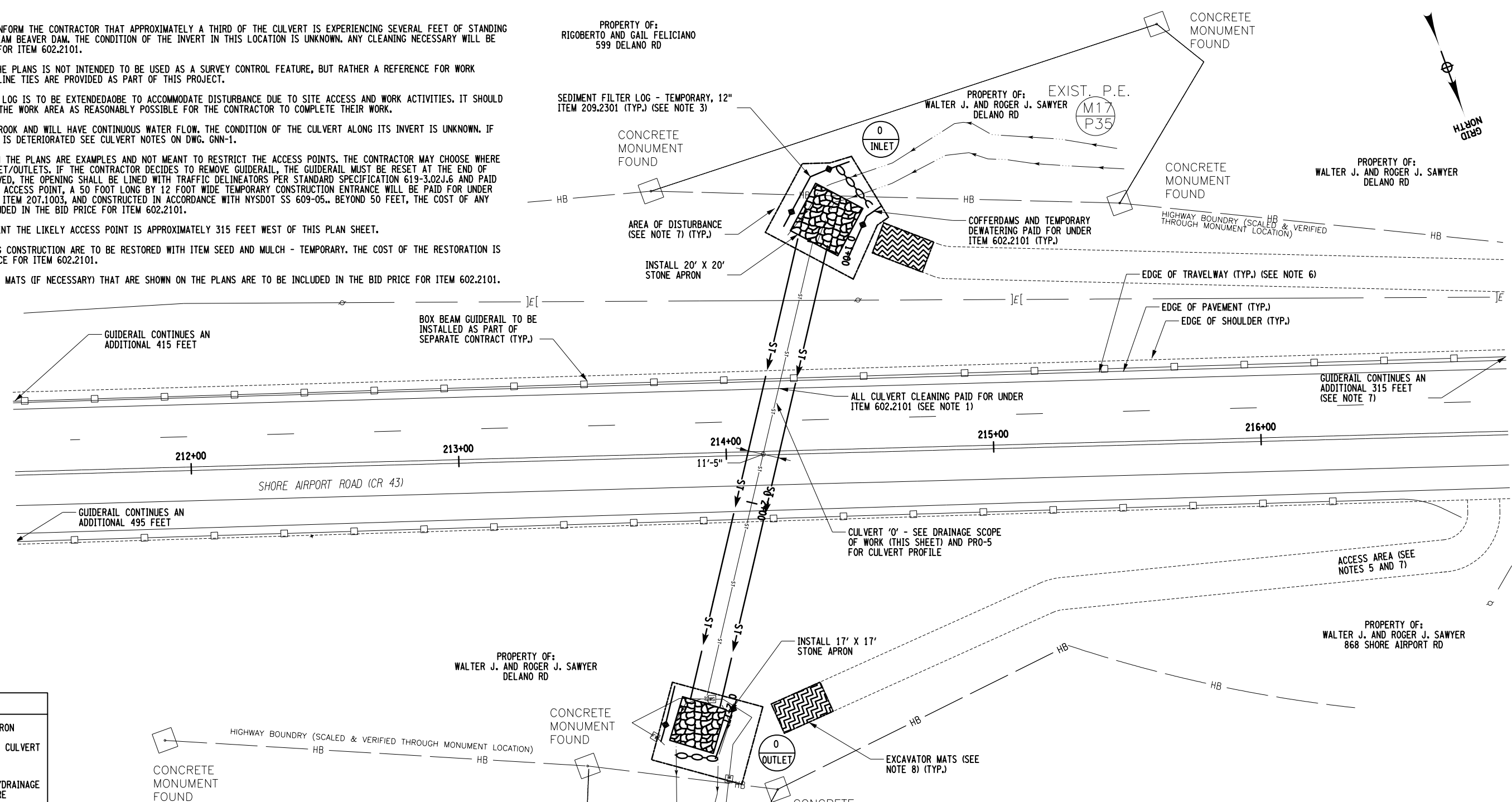
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS	PIN: 1760.63	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D036169
	TOWN OF TICONDEROGA	UTIL QLVL = D				GENERAL PLAN
	COUNTY: ESSEX	REGION: 1				

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.

GPI GREENMAN-PEDERSEN, INC.
 CONSULTING ENGINEERS

PROJECT MANAGER: C. CORNWELL
 CHECK: A. HAWKINS
 DRAFTING: J. GENTZLER
 CHECK: C. CORNWELL
 DESIGN: J. GENTZLER
 JOB MANAGER: C. CORNWELL
 DESIGN SUPERVISOR: F. MASTROIANNI

- NOTES:**
- THIS NOTE IS INTENDED TO INFORM THE CONTRACTOR THAT APPROXIMATELY A THIRD OF THE CULVERT IS EXPERIENCING SEVERAL FEET OF STANDING WATER DUE TO THE DOWNSTREAM BEAVER DAM. THE CONDITION OF THE INVERT IN THIS LOCATION IS UNKNOWN. ANY CLEANING NECESSARY WILL BE INCLUDED IN THE BID PRICE FOR ITEM 602.2101.
 - THE STATIONING SHOWN ON THE PLANS IS NOT INTENDED TO BE USED AS A SURVEY CONTROL FEATURE, BUT RATHER A REFERENCE FOR WORK PERFORMED. NO SURVEY BASELINE TIES ARE PROVIDED AS PART OF THIS PROJECT.
 - TEMPORARY SEDIMENT FILTER LOG IS TO BE EXTENDED ABOVE TO ACCOMMODATE DISTURBANCE DUE TO SITE ACCESS AND WORK ACTIVITIES. IT SHOULD BE INSTALLED AS CLOSE TO THE WORK AREA AS REASONABLY POSSIBLE FOR THE CONTRACTOR TO COMPLETE THEIR WORK.
 - CULVERT 0 CARRIES GRANT BROOK AND WILL HAVE CONTINUOUS WATER FLOW. THE CONDITION OF THE CULVERT ALONG ITS INVERT IS UNKNOWN. IF THE INVERT OF THE CULVERT IS DETERIORATED SEE CULVERT NOTES ON DWG. GNN-1.
 - THE ACCESS AREAS SHOWN ON THE PLANS ARE EXAMPLES AND NOT MEANT TO RESTRICT THE ACCESS POINTS. THE CONTRACTOR MAY CHOOSE WHERE TO ACCESS THE CULVERT INLET/OUTLETS. IF THE CONTRACTOR DECIDES TO REMOVE GUIDERAIL, THE GUIDERAIL MUST BE RESET AT THE END OF EACH WORK DAY. WHILE REMOVED, THE OPENING SHALL BE LINED WITH TRAFFIC DELINEATORS PER STANDARD SPECIFICATION 619-3.02J.6 AND PAID UNDER ITEM 619.01. AT EACH ACCESS POINT, A 50 FOOT LONG BY 12 FOOT WIDE TEMPORARY CONSTRUCTION ENTRANCE WILL BE PAID FOR UNDER ITEM 209.22, RESTORED WITH ITEM 207.1003, AND CONSTRUCTED IN ACCORDANCE WITH NYS DOT SS 609-05.. BEYOND 50 FEET, THE COST OF ANY ACCESS ROAD IS TO BE INCLUDED IN THE BID PRICE FOR ITEM 602.2101.
 - DUE TO THE STEEP EMBANKMENT THE LIKELY ACCESS POINT IS APPROXIMATELY 315 FEET WEST OF THIS PLAN SHEET.
 - ALL AREAS DISTURBED DURING CONSTRUCTION ARE TO BE RESTORED WITH ITEM SEED AND MULCH - TEMPORARY. THE COST OF THE RESTORATION IS BE INCLUDED IN THE BID PRICE FOR ITEM 602.2101.
 - THE COST OF THE EXCAVATOR MATS (IF NECESSARY) THAT ARE SHOWN ON THE PLANS ARE TO BE INCLUDED IN THE BID PRICE FOR ITEM 602.2101.



LEGEND

	STONE APRON
	PROPOSED CULVERT RELINING
	CULVERT/DRAINAGE STRUCTURE
	12" FILTER LOG - TEMPORARY
	CULVERT DEWATERING

DRAINAGE SCOPE OF WORK:

EXISTING CULVERT:
 CULVERT '0' = 11'-5" X 7'-3" MULTI-PLATE ARCH (176 LF)

PROPOSED WORK:
 CULVERT '0' = RELINE INVERT WITH SHOTCRETE

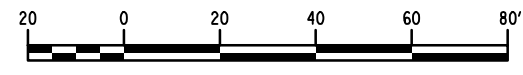
SEE DRAINAGE TABLE ON DWG. MTD-1 FOR QUANTITIES

UTILITY NOTE:

CONTRACTOR SHALL NOTE NO UNDERGROUND UTILITIES ARE SHOWN, HOWEVER BOTH OVERHEAD AND UNDERGROUND ARE PRESENT WITHIN THE PROJECT LIMITS.

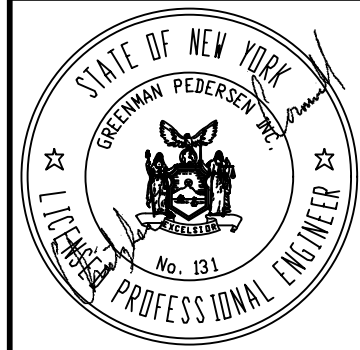
HYDRAULIC DATA - CULVERT 0

	BASIC FLOOD	DESIGN FLOOD
DRAINAGE AREA = 1.87 SQ. MILES		
RECURRENCY INTERVAL (YEARS)	100	50
PEAK DISCHARGE FT ³ /SEC	361	309
HIGH WATER ELEVATION @ PT OF MAX. BACKWATER	EXIST. 125.60 PROP. 126.27	125.03 125.73
AVG. VELOCITY THRU STRUCTURE @ DESIGN FLOOD	17.74 FT/S	
ORDINARY HIGH WATER	ELEVATION = 123.34', 108 CFS	



AFFIX SEAL: GREENMAN - PEDERSEN, INC
 ON: MARCH 4, 2019

ALTERED BY:
 ON:



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS	PIN: 1760.63	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D036169
	TOWN OF TICONDEROGA	UTIL QLVL = D				GENERAL PLAN - CULVERT 0
	COUNTY: ESSEX	REGION: 1				

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.

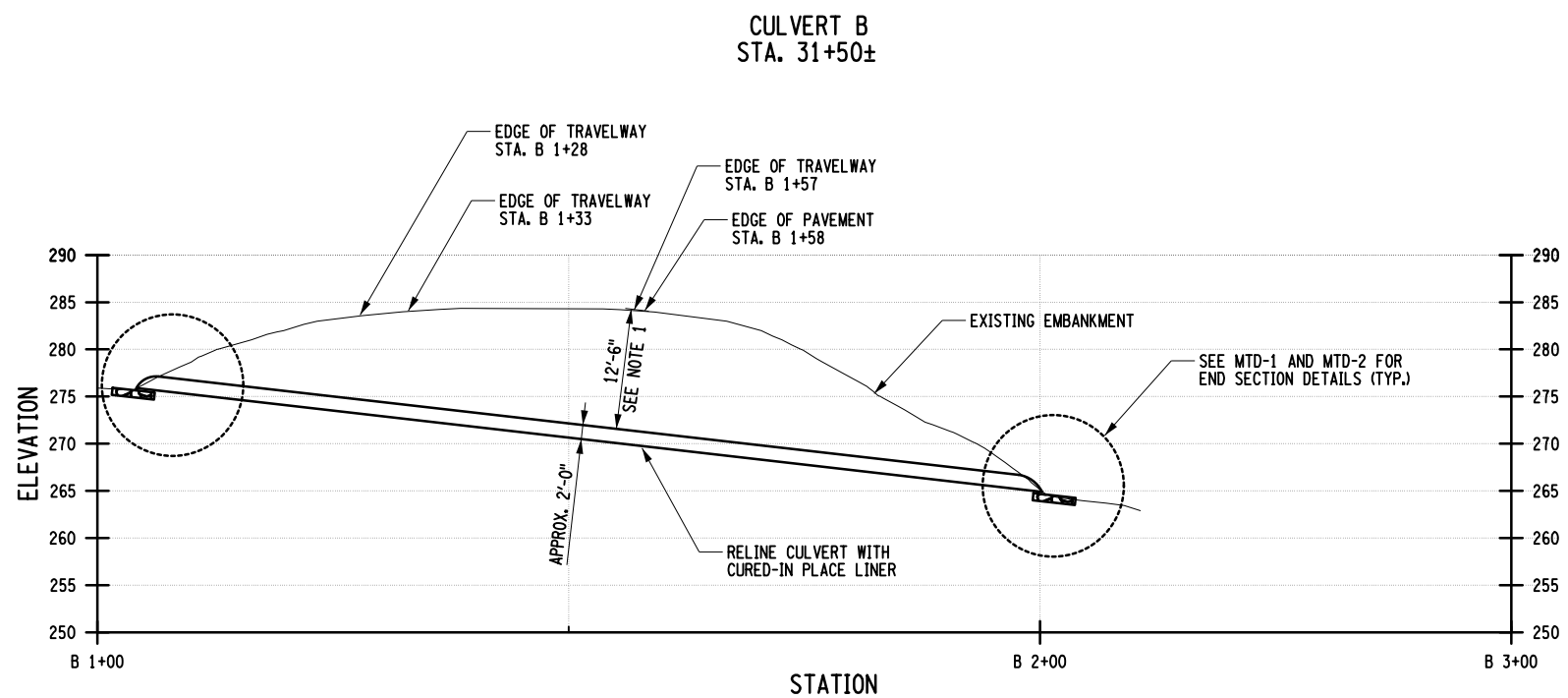
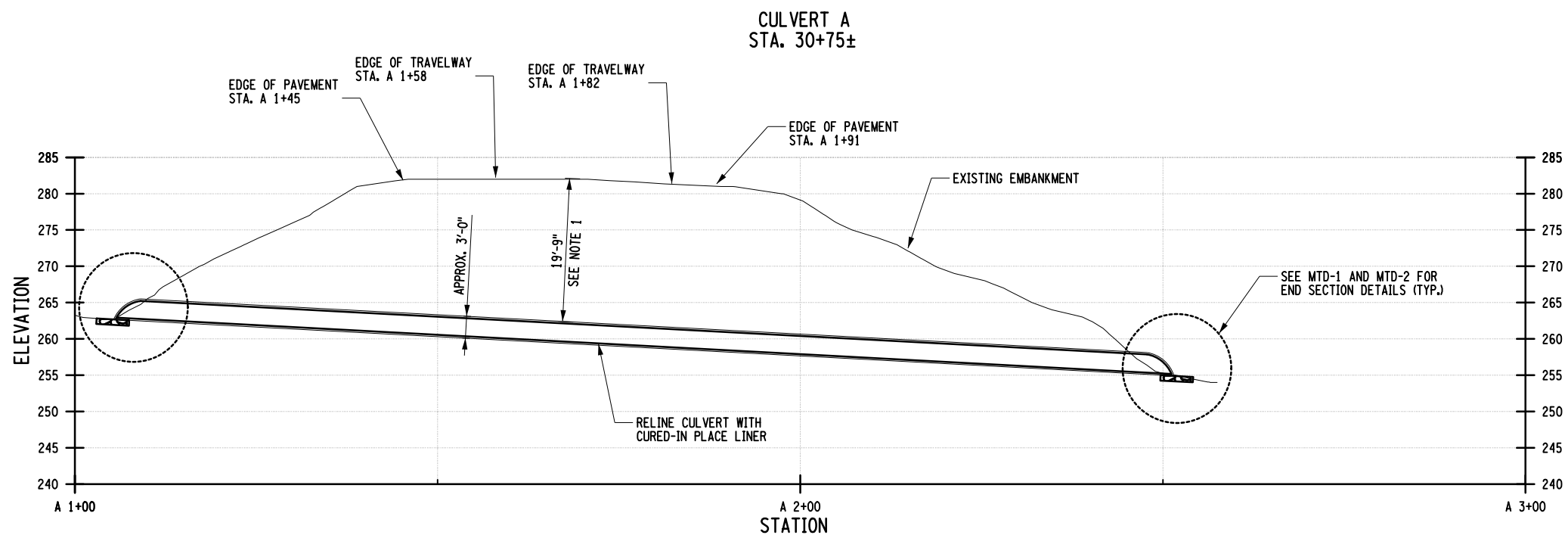
GPI GREENMAN-PEDERSEN, INC. CONSULTING ENGINEERS

ESSEX COUNTY

FILE NAME = ...176063_CPH_gnp-12.dgn
 DATE/TIME = 3/4/2019
 USER = jgentzler

PROJECT MANAGER: C. CORNWELL
 CHECK: A. HAWKINS
 DRAFTING: J. GENTZLER
 CHECK: C. CORNWELL
 DESIGN: J. GENTZLER
 JOB MANAGER: C. CORNWELL
 DESIGN SUPERVISOR: F. MASTROIANNI

FILE NAME = ...\\176063.CPH_pro-1.dgn
 DATE/TIME = 3/4/2019
 USER = jgentzler



NOTE:
1. SEE NOTE #3 ON DEPTH OF COVER ON DWG. MTD-1.

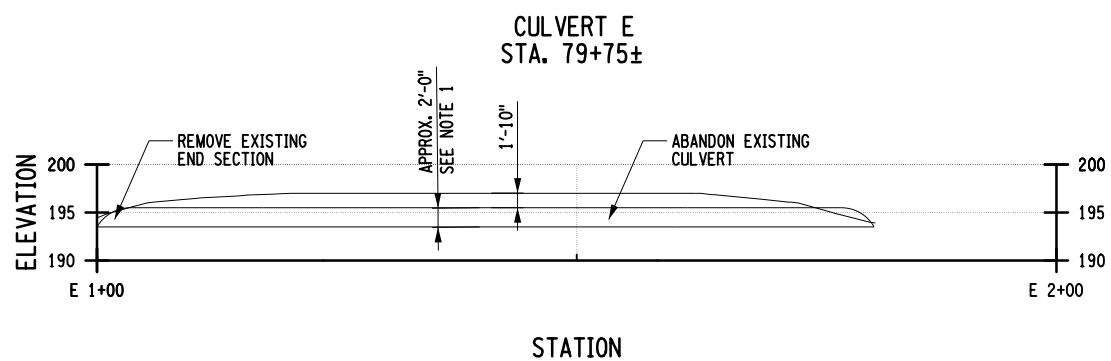
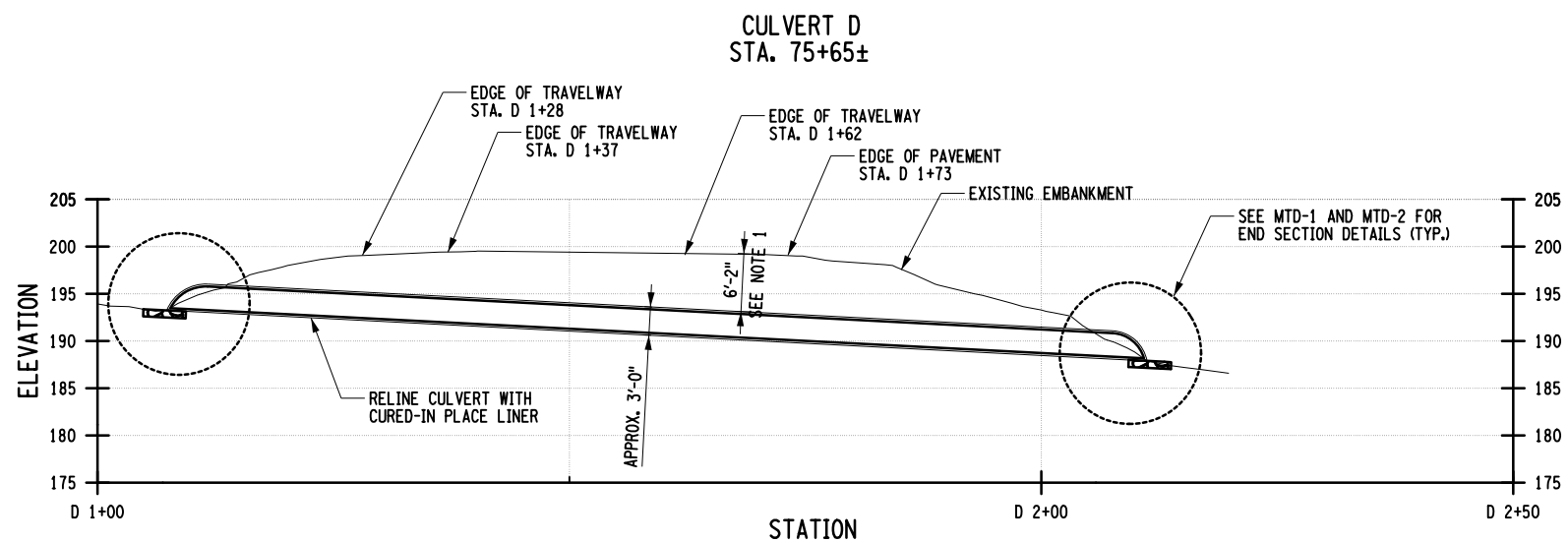
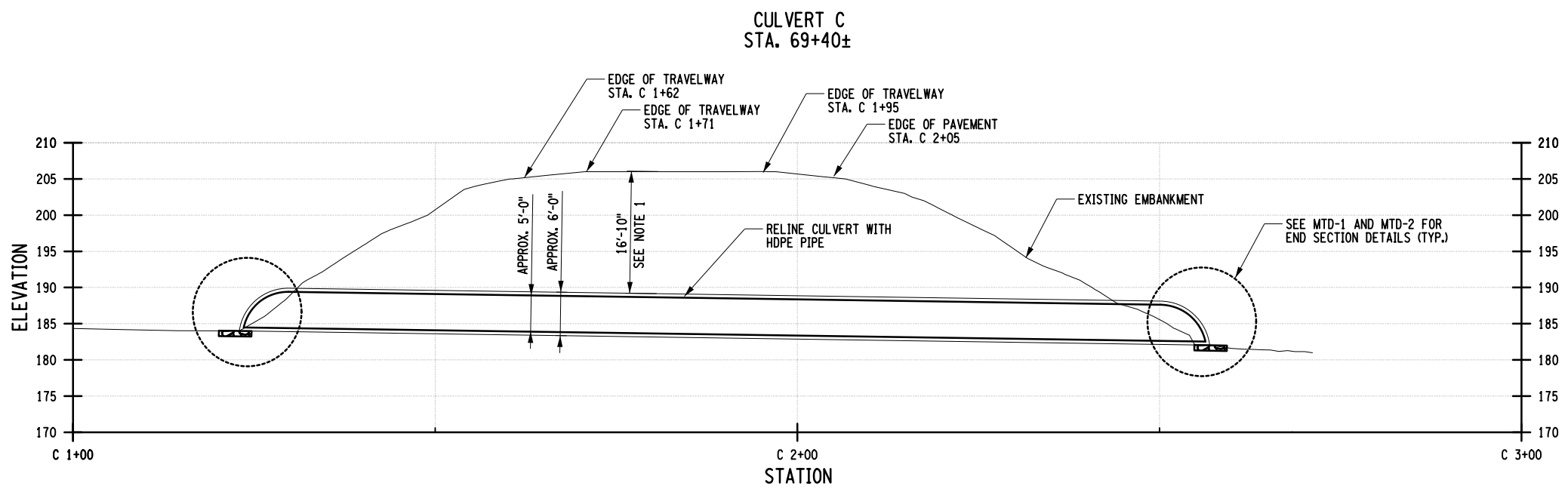


AFFIX SEAL: GREENMAN - PEDERSEN, INC ON: MARCH 4, 2019	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS TOWN OF TICONDEROGA COUNTY: ESSEX REGION: 1	PIN: 1760.63 UTIL QL.VL = D	BRIDGES CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED PROFILES	CONTRACT NUMBER D036169 DRAWING NO. PR0-1 SHEET NO. 24
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.					ESSEX COUNTY

FILE NAME = ...\\176063.CPH_pro-2.dgn
 DATE/TIME = 3/4/2019
 USER = jgentzler

DESIGN SUPERVISOR F. MASTROIANNI
 JOB MANAGER C. CORNWELL
 DESIGN J. GENTZLER
 CHECK C. CORNWELL
 DRAFTING J. GENTZLER
 CHECK A. HAWKINS
 PROJECT MANAGER C. CORNWELL



NOTE:
 1. SEE NOTE #3 ON DEPTH OF COVER ON DWG. MTD-1.



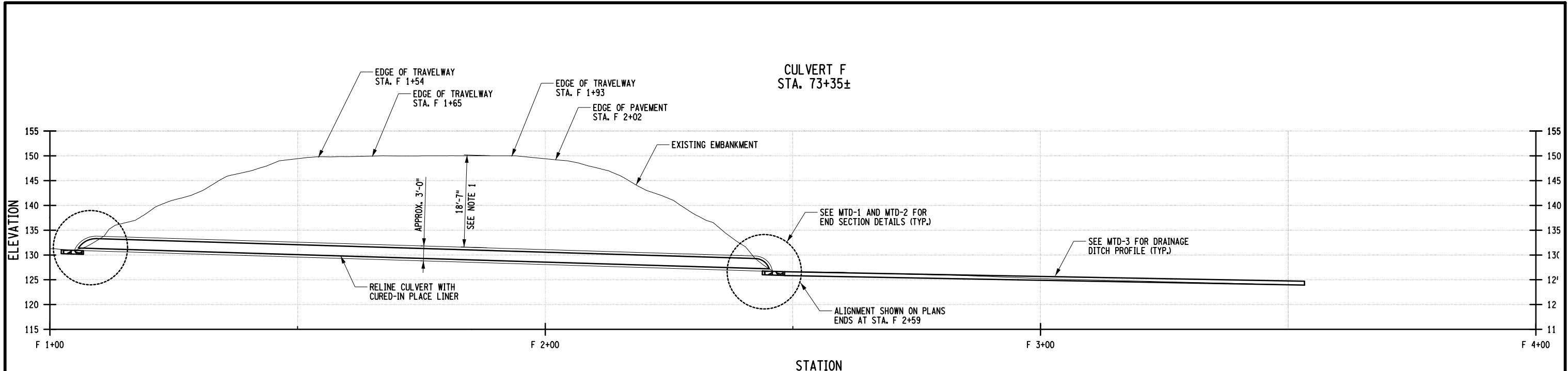
AFFIX SEAL: GREENMAN - PEDERSEN, INC
 ON: MARCH 4, 2019
 ALTERED BY:
 ON:



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS	PIN: 1760.63	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D036169
	TOWN OF TICONDEROGA	UTIL QL.VL = D				DRAWING NO. PRO-2 SHEET NO. 25
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.					PROFILES	ESSEX COUNTY
					GPI GREENMAN-PEDERSEN, INC. CONSULTING ENGINEERS	

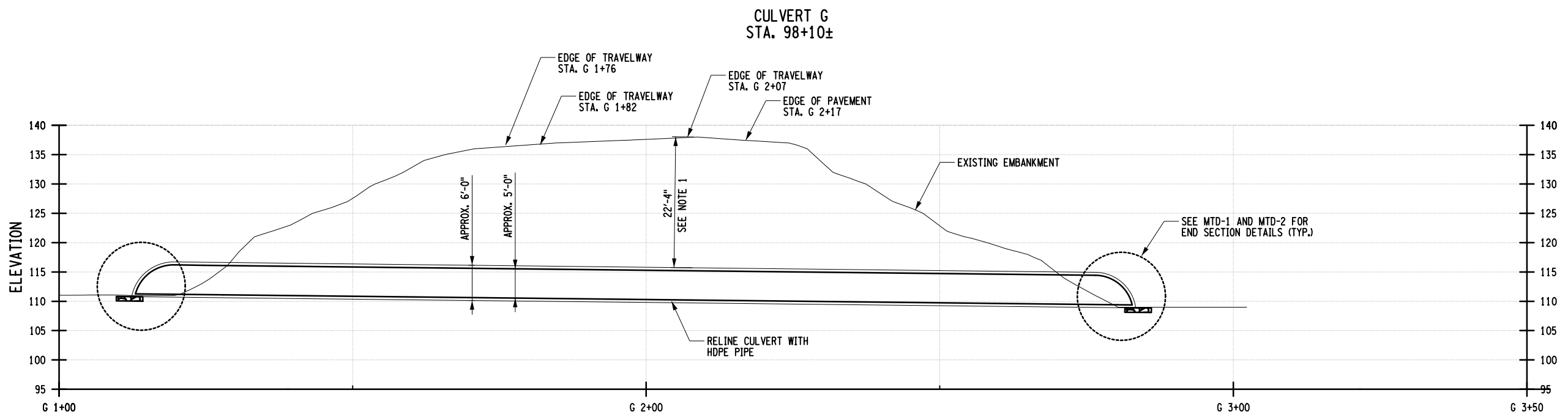
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 DATE/TIME = 3/4/2019
 USER = jgentzler

PROJECT MANAGER C. CORNWELL
 CHECK A. HAWKINS
 DRAFTING J. GENTZLER
 CHECK C. CORNWELL
 DESIGN J. GENTZLER
 JOB MANAGER C. CORNWELL
 DESIGN SUPERVISOR F. MASTROIANNI



CULVERT F
 STA. 73+35±

ELEVATION
 STATION



CULVERT G
 STA. 98+10±

ELEVATION
 STATION



AFFIX SEAL: GREENMAN - PEDERSEN, INC
 ON: MARCH 4, 2019

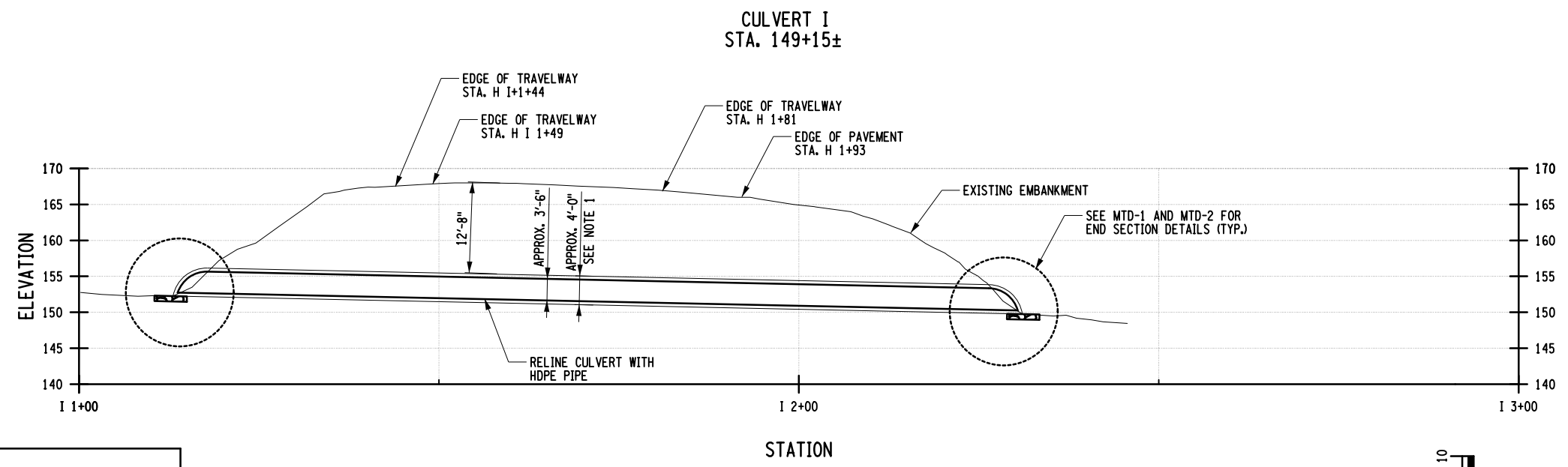
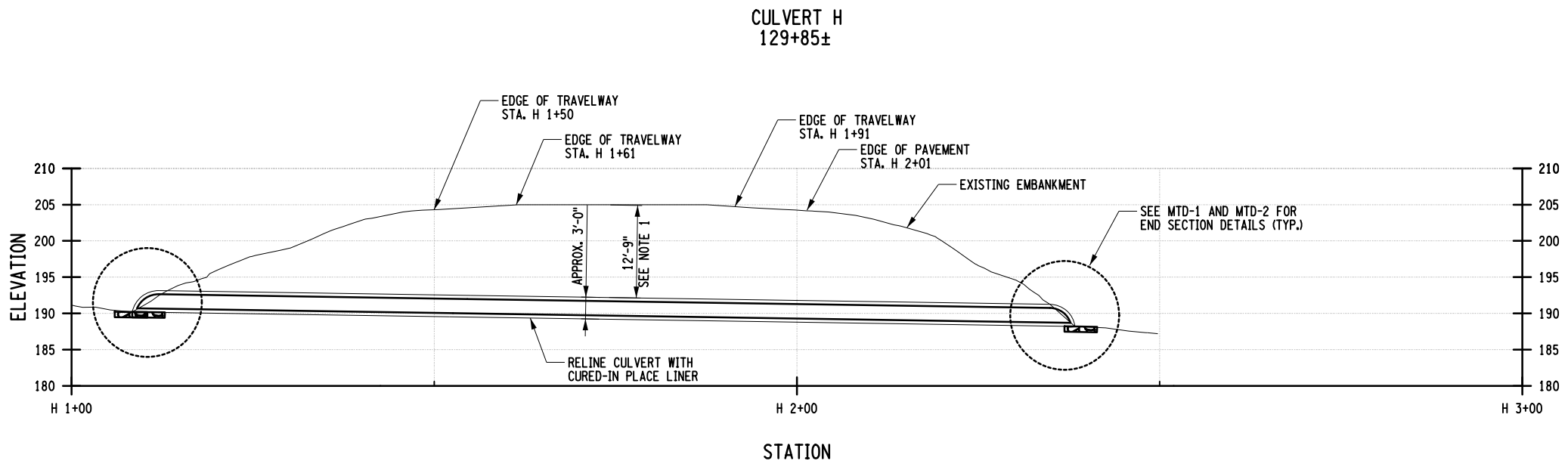
ALTERED BY:
 ON:

NOTE:
 1. SEE NOTE #3 ON DEPTH OF COVER ON DWG. MTD-1.

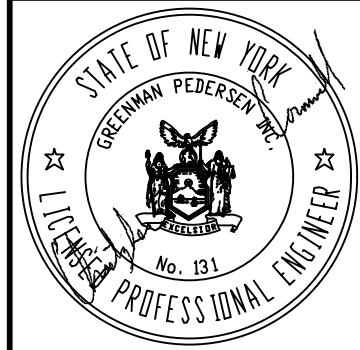
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS	PIN: 1760.63	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D036169	
	TOWN OF TICONDEROGA	UTIL QLVL = D				DRAWING NO. PRO-3 SHEET NO. 26	
	COUNTY: ESSEX	REGION: 1			PROFILES		
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.						GPI GREENMAN-PEDERSEN, INC. CONSULTING ENGINEERS	ESSEX COUNTY

FILE NAME = ...\\176063.CPH.pro-4.dgn
 DATE/TIME = 3/4/2019
 USER = jgentzler

DESIGN SUPERVISOR F. MASTROIANNI
 JOB MANAGER C. CORNWELL
 DESIGN J. GENTZLER
 DRAFTING J. GENTZLER
 CHECK C. CORNWELL
 CHECK A. HAWKINS
 PROJECT MANAGER C. CORNWELL



AFFIX SEAL: GREENMAN - PEDERSEN, INC
 ON: MARCH 4, 2019
 ALTERED BY:
 ON:

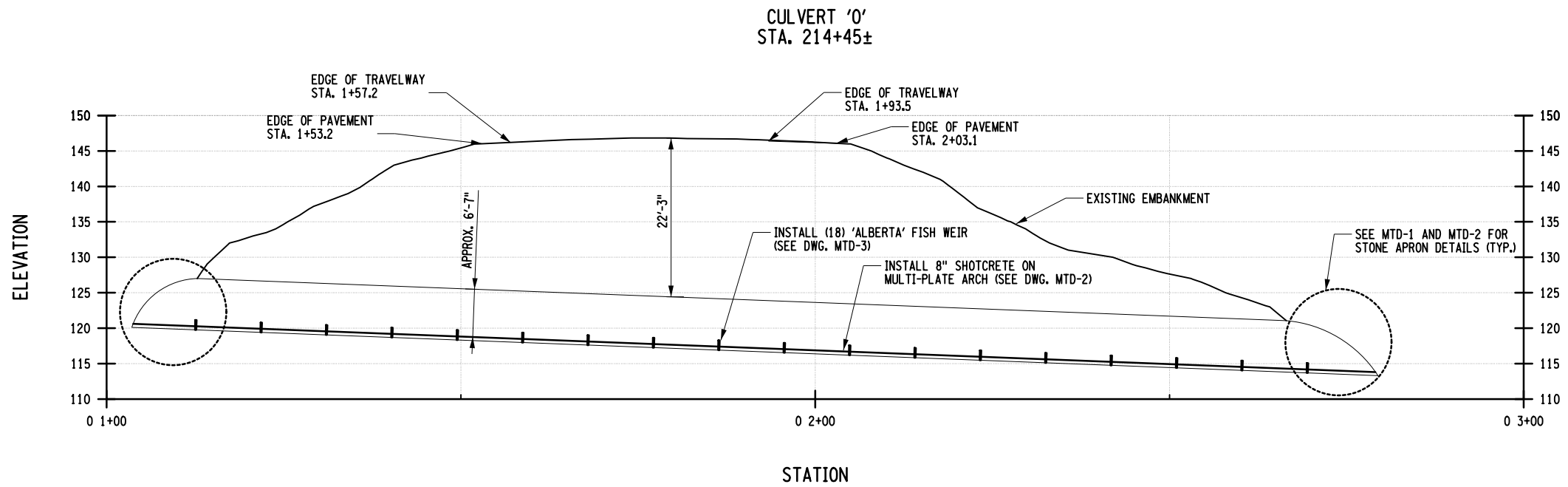
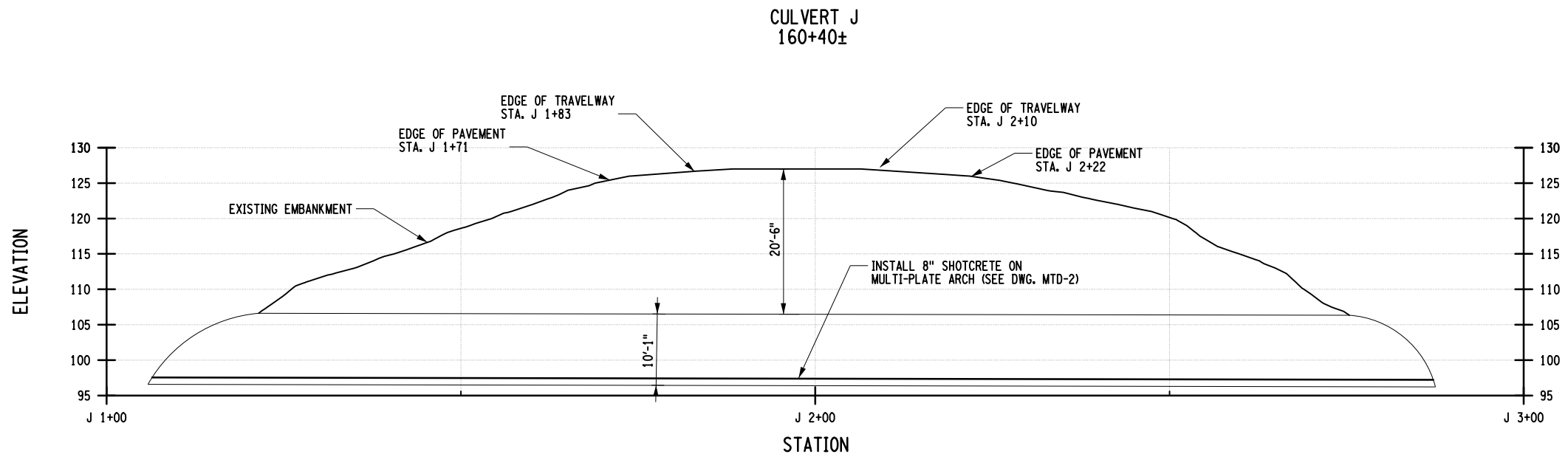


NOTE:
 1. SEE NOTE #3 ON DEPTH OF COVER ON DWG. MTD-1.

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS TOWN OF TICONDEROGA COUNTY: ESSEX REGION: 1	PIN: 1760.63 UTIL QL.VL = D	BRIDGES CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED PROFILES	CONTRACT NUMBER D036169 DRAWING NO. PRO-4 SHEET NO. 27
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.				GPI GREENMAN-PEDERSEN, INC. CONSULTING ENGINEERS	ESSEX COUNTY

FILE NAME = ...\\176063.CPH_pro-5.dgn
 DATE/TIME = 3/4/2019
 USER = jgentzler

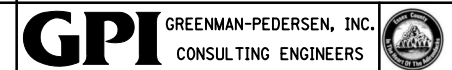
DESIGN SUPERVISOR F. MASTROIANNI
 JOB MANAGER C. CORNWELL
 DESIGN J. GENTZLER
 CHECK C. CORNWELL
 DRAFTING J. GENTZLER
 CHECK A. HAWKINS
 PROJECT MANAGER C. CORNWELL




AFFIX SEAL: GREENMAN - PEDERSEN, INC
 ON: MARCH 4, 2019

ALTERED BY:
 ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS	PIN: 1760.63	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D036169
	TOWN OF TICONDEROGA	UTIL QLVL = D				DRAWING NO. PR0-5 SHEET NO. 28
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.					PROFILES	ESSEX COUNTY



Item No.	Description	Unit	Quantity
201.06	CLEARING AND GRUBBING	LS	1
203.07	SELECT GRANULAR FILL	CY	25
204.01	CONTROLLED LOW STRENGTH MATERIAL (CLSM)	CY	10
206.0201	TRENCH AND CULVERT EXCAVATION	CY	550
209.1003	SEED AND MULCH - TEMPORARY	SY	2000
209.18030124	VEGETATED MAT	SY	90
209.2301	SEDIMENT FILTER LOG - TEMPORARY, 12"	LF	1700
209.22	CONSTRUCTION ENTRANCE	SY	1500
555.0105	CONCRETE FOR STRUCTURES, CLASS A	CY	30
555.10000006	ABANDON EXISTING CULVERT	CY	11
602.2101	LINING CULVERT WITH SHOTCRETE	SF	9000
602.2742	LINING WITH PROFILE WALL HIGH DENSITY POLYETHYLENE PIPE, 42 INCH DIAMETER	LF	125
602.2760	LINING WITH PROFILE WALL HIGH DENSITY POLYETHYLENE PIPE, 60 INCH DIAMETER	LF	330
602.3624	LINING WITH CURED IN PLACE PIPE (CIPP), 24 INCH DIAMETER	LF	180
602.3636	LINING WITH CURED IN PLACE PIPE (CIPP), 36 INCH DIAMETER	LF	550
603.171416	GALVANIZED STEEL END SECTIONS - PIPE (2-2/3" X 1/2" CORRUGATIONS) 24 INCH DIAMETER, 16 GAUGE	EA	10
603.171814	GALVANIZED STEEL END SECTIONS - PIPE (2-2/3" X 1/2" CORRUGATIONS) 36 INCH DIAMETER, 14 GAUGE	EA	8
603.172012	GALVANIZED STEEL END SECTIONS - PIPE (2-2/3" X 1/2" CORRUGATIONS) 48 INCH DIAMETER, 12 GAUGE	EA	2
603.172212	GALVANIZED STEEL END SECTIONS - PIPE (2-2/3" X 1/2" CORRUGATIONS) 72 INCH DIAMETER, 12 GAUGE	EA	4
607.0522	VINYL COATED STEEL CHAIN-LINK FENCE ON PLASTIC COATED FRAME WITH TOP TENSION WIRE 1830 MILLIMETER HIGH	LF	90
607.96000008	REMOVE AND DISPOSE OF EXISTING FENCE	LF	45
610.1403	TOPSOIL - LAWNS	CY	25
610.1602	TURF ESTABLISHMENT - LAWNS	SY	200
619.01	BASIC WORK ZONE TRAFFIC CONTROL	LS	1
620.03	STONE FILLING - (LIGHT)	CY	200
620.08	BEDDING MATERIAL	CY	100
620.29010009	NATIVE STREAM BED MATERIAL (A)	CY	100
621.01	CLEANING CULVERTS WITH SPAN OF 50 IN. OR LESS	LF	270
625.01	SURVEY OPERATIONS	LS	1
637.11	ENGINEER'S FIELD OFFICE - TYPE 1	MNTH	4
637.34	OFFICE TECHNOLOGY AND SUPPLIES	DC	3,000
656.01	MISCELLANEOUS METALS	LB	2,000
697.03	FIELD CHANGE PAYMENT (FCP)	DC	78,000
698.05	FUEL PRICE ADJUSTMENT	DC	100
698.06	STEEL/IRON PRICE ADJUSTMENT	DC	100
699.040001	MOBILIZATION	LS	NEC

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	CR 43 SHORE AIRPORT ROAD DRAINAGE IMPROVEMENTS	PIN: 1760.63 UTIL QL.VL = D	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER D036169
	TOWN OF TICONDEROGA					DRAWING NO. EOQ-1
	COUNTY: ESSEX					SHEET NO. 28
	REGION: 1					
ESTIMATE OF QUANTITIES						 GREENMAN-PEDERSEN, INC. CONSULTING ENGINEERS
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.						
						ESSEX COUNTY