



TOMPKINS COUNTY
PUBLIC WORKS
HIGHWAY DIVISION

BRIDGE REPLACEMENT FOR THE
WATERBURG ROAD BRIDGE (BIN 3314400)
OVER TAUGHANNOCK CREEK
IN THE TOWN OF ULYSSES
TOMPKINS COUNTY PROJECT NO. HW-12-15

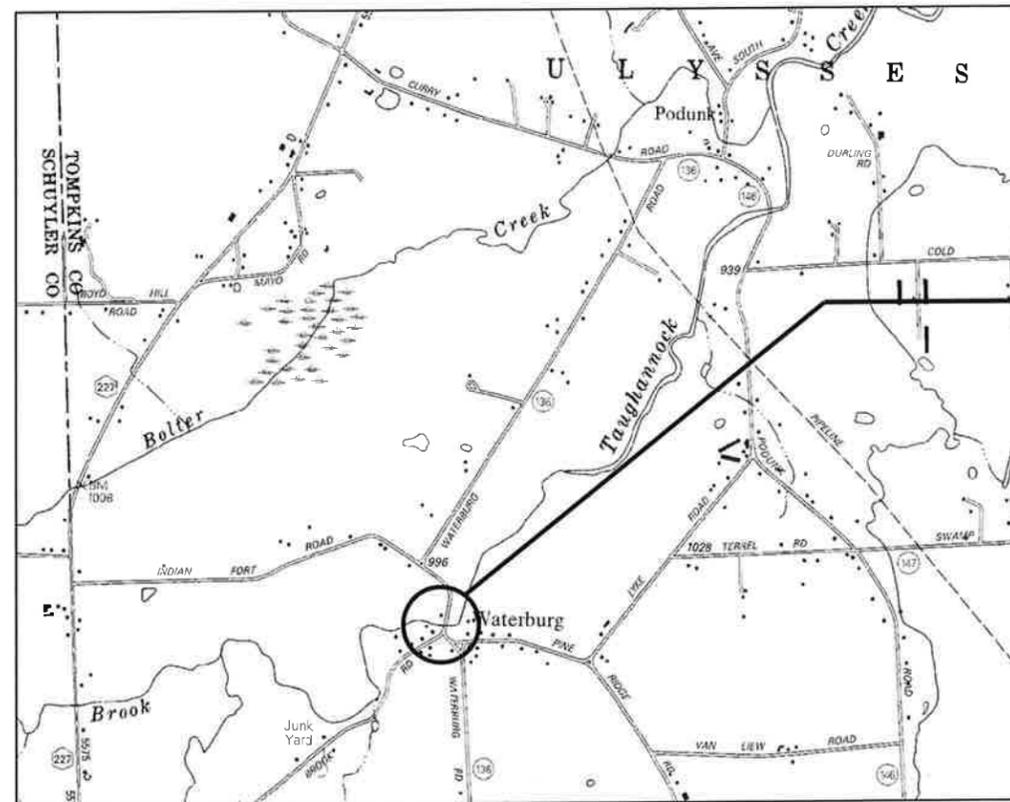
THE LATEST REVISIONS OF THE STANDARD SHEETS MAINTAINED BY THE NYSOT, WHICH ARE CURRENT ON THE DATE OF ADVERTISEMENT FOR BIDS, SHALL BE CONSIDERED TO BE IN EFFECT. ALL PAY ITEMS AND WORK CONTAINED IN THE CONTRACT AND ANY ADDITIONAL PAY ITEMS AND WORK ENCOUNTERED DURING THE COURSE OF THE CONTRACT SHALL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

ALL WORK CONTEMPLATED UNDER THIS CONTRACT IS TO BE COVERED BY AND IN CONFORMITY WITH THE NYSOT STANDARD SPECIFICATIONS (ENGLISH UNITS) OF MAY 1, 2008, WITH CURRENT ADDITIONS AND MODIFICATIONS, EXCEPT AS MODIFIED ON THESE PLANS AND IN THE PROPOSAL.

CHANGES MADE TO THESE PLANS AND RELATED CONTRACT DOCUMENTS SINCE COMPLETION BY THE CONSULTING ENGINEER MAY BE DETERMINED BY COMPARISON WITH SUCH CONTRACT PLANS AND RELATED DOCUMENTS FILED AT THE BROOME COUNTY DEPARTMENT OF PUBLIC WORKS OR THOSE FILED AT THE OFFICE OF THE CONSULTING ENGINEER.

FOR DRAWING INDEX, SEE DWG SHT. NO. 2

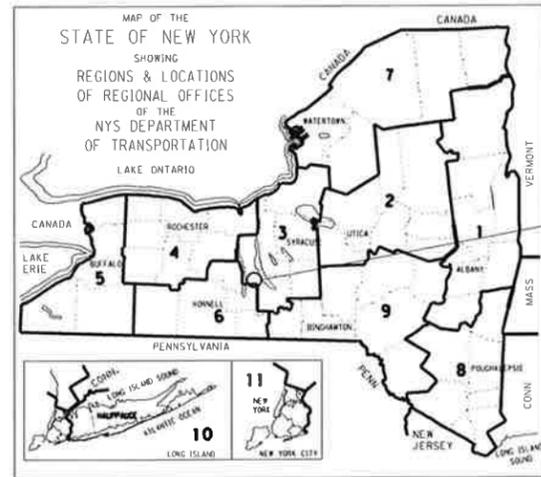
22 SHEETS



LOCATION MAP

NOT TO SCALE

THIS PROJECT INCLUDES THE REPLACEMENT OF THE WATERBURG ROAD BRIDGE, BIN 3314400, OVER TAUGHANNOCK CREEK IN THE TOWN OF ULYSSES, TOMPKINS COUNTY, NEW YORK.



SITE OF WORK

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



PREPARED AND RECOMMENDED BY

Joseph J. Mieczkowski 4-13-15

JOSEPH J. MIECZKOWSKI
DELTA ENGINEERS, ARCHITECTS, & LAND SURVEYORS
ENDWELL, NY
N.Y.S.P.E. NO. 082669

APPROVED BY

TOMPKINS COUNTY HIGHWAY DIRECTOR

DATE

PROJECT LOCATION

BIN:3314400

WATERBURG ROAD
OVER TAUGHANNOCK CREEK
TOMPKINS COUNTY, NY

TITLE SHEET



SCALE
NONE
DATE
APRIL 2015

DRAWING NO.
COV-1
SHEET
1 OF 22

FILE NAME = T:\2012\2012.001 Waterburg Rd Br. Repl\Drawings\Structure\2012.001.001_cpb_cov.dgn
DATE = 4/13/2015
USER = njogvis
IN CHARGE OF : JJM
DESIGNED BY : NKL
CHECKED BY : RJT
DETAILED BY : NKL
IF 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 ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL BE FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

DESIGNED BY: JJM
 CHECKED BY: RJT
 IN CHARGE OF: JJM
 DETAILED BY: INJL
 CHECKED BY: INJL
 IF 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 ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL BE FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

ALIGNMENT		TOPOGRAPHY (MISCELLANEOUS)		UTILITIES	
ABBR.	DESCRIPTION	ABBR.	DESCRIPTION	ABBR.	DESCRIPTION
AH	AHEAD	ABUT	ABUTMENT	E	ELECTRIC
AZ	AZIMUTH	AOBE	AS ORDERED BY ENGINEER	EMH	ELECTRIC MANHOLE
BK	BACK	ASPH	ASPHALT	G	GAS
B	BASELINE	BDY	BOUNDARY	GP	GUY POLE
BRC	BEARING	BLDG	BUILDING	GSB	GAS SERVICE BOX (HOUSE LINE)
C	CENTERLINE	BM	BENCH MARK	GV	GAS VALVE (MAIN LINE)
CS	CURVE TO SPIRAL	CC	CENTER TO CENTER	HYD	HYDRANT
e	SUPERELEVATION RATE (CROSS SLOPE)	CONC	CONCRETE	LP	LIGHT POLE
EQ	EQUALITY	CONST	CONSTRUCTION	LPG	LOW PRESSURE GAS
EXT	EXTERNAL	CR	COUNTY ROAD	PP	POWER POLE
HCL	HORIZONTAL CONTROL LINE	D	DEED DISTANCE	SA	SANITARY SEWER
HSD	HEADLIGHT SIGHT DISTANCE	DM	DIRECT MEASUREMENT	SMH	SANITARY MANHOLE
L	LENGTH OF CIRCULAR CURVE	DWY	DRIVEWAY	ST	STORM SEWER
LS	LENGTH OF SPIRAL	EP	EDGE OF PAVEMENT	T	TELEPHONE
LVC	LENGTH OF VERTICAL CURVE	ES	EDGE OF SHOULDER	TCB	TRAFFIC CONTROL BOX
E	CENTER CORRECTION OF VERTICAL CURVE	FEE	FEE ACQUISITION	TELBOX	TELEPHONE BOX
M	MAIN LINE	FEE WO/A	FEE ACQUISITION WITHOUT ACCESS	TEL P	TELEPHONE POLE
PC	POINT OF CURVATURE	FP	FENCE POST	TMH	TELEPHONE MANHOLE
PI	POINT OF INTERSECTION	FD	FOUNDATION	CTV	CABLE TELEVISION
POL	POINT ON LINE	FL	FENCE LINE	W	WATER
PSD	PASSING SIGHT DISTANCE	GAR	GARAGE	WSB	WATER SERVICE BOX (HOUSE LINE)
PT	POINT OF TANGENT	GR	GRAVEL	WV	WATER VALVE (MAIN LINE)
PVC	POINT OF VERTICAL CURVE	HO	HOUSE	SUBSURFACE EXPLORATION	
PVI	POINT OF VERTICAL INTERSECTION	HWY	HIGHWAY		
PVT	POINT OF VERTICAL TANGENT	IP	IRON PIN OR IRON PIPE	ABBR.	DESCRIPTION
R	RADIUS	MB	MAILBOX	REPLACE ABBREVIATION "AB" WITH:	
SC	SPIRAL TO CURVE	MON	MONUMENT	AH	HAND AUGER
SSD	STOPPING SIGHT DISTANCE	N&W	NAIL AND WASHER	CP	CONE PENETROMETER
ST	SPIRAL TO TANGENT	OG	ORIGINAL GROUND	DA	2 1/4 INCHES CASED DRILL HOLE
STA	STATION	O/H	OVERHEAD	DM	DRILLING MUD
T	TANGENT LENGTH	P	PARCEL	DN	4 INCHES CASED DRILL HOLE
TGL	THEORETICAL GRADE LINE	PAV'T	PAVEMENT	FH	HOLLOW FLIGHT AUGER
TS	TANGENT TO SPIRAL	PE	PERMANENT EASEMENT	PA	POWER AUGER
VC	VERTICAL CURVE	PED POLE	PEDESTRIAN POLE	PH	PROBE
TOPOGRAPHY (DRAINAGE)		R	PROPERTY LINE	PT	PERCOLATION TEST HOLE
		POR	PORCH	RP	1 INCH SAMPLER (RETRACTABLE PLUG)
ABBR.	DESCRIPTION	RR	RAILROAD	ABBREVIATION "C" IN CATEGORIES: DA, DM, DN, AND FH WITH:	
BB	BOTTOM OF BANK (STREAM)	RTE	ROUTE		
BC	BOTTOM OF CURB	ROW	RIGHT OF WAY	C	CUT
BO	BOTTOM OF OPENING	RW	RETAINING WALL	D	DAM
CAP	CORRUGATED ALUMINUM PIPE	SH	STATE HIGHWAY	F	FILL
CB	CATCH BASIN	SHLDR	SHOULDER	K	CULVERT
CIP	CAST IRON PIPE	SPK	SPIKE	W	WALL
C STRM	CENTERLINE OF STREAM	ST	STREET	X	TO BE USED IF ONE OF THE ABOVE CANNOT BE DEFINED AT THE TIME THE EXPLORATION IS MADE
CMP	CORRUGATED METAL PIPE	STK	STAKE		
CP	CONCRETE PIPE	STY	STORY		
CSP	CORRUGATED STEEL PIPE	SW	SIDEWALK		
CULV	CULVERT	TE	TEMPORARY EASEMENT		
DIA	DIAMETER	TO	TEMPORARY OCCUPANCY		
DMH	DRAINAGE MANHOLE	U/G	UNDERGROUND		
DS	DRAINAGE STRUCTURE PIPE	WW	WING WALL		
D'XING	DITCH CROSSING				
EHW	EXTREME HIGH WATER				
EL	ELEVATION				
ELEV	ELEVATION				
ELW	EXTREME LOW WATER				
ES	END SECTION				
HW	HEADWALL				
INV	INVERT				
MH	MANHOLE				
MHW	MEAN HIGH WATER				
OHW	ORDINARY HIGH WATER				
OLW	ORDINARY LOW WATER				
RCP	REINFORCED CONCRETE PIPE				
SICPP	SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE				
TB	TOP OF BANK (STREAM)				
TC	TOP OF CURB				
TG	TOP OF GRATE				
VCP	VITRIFIED CLAY PIPE				

STANDARD SYMBOL (PLANS)	ITEM PAYMENT UNIT: ESTIMATE OF QUANTITIES SHEET	EQUIVALENT NOMENCLATURE: (SPECS/PROPOSAL)
.	ft	LINEAR FEET
ft ²	SF	SQUARE FEET
YD ²	SY	SQUARE YARD
YD ³	CY	CUBIC YARD
mi	MI	MILES
AC	AC	ACRES
lb	LB	POUND
TON	TON	TON
GAL	GAL	GALLON

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BIN:3314400

**WATERBURG ROAD
OVER TAUGHANNOCK CREEK
TOMPKINS COUNTY, NY**

INDEX AND ABBREVIATIONS

 ENGINEERS, ARCHITECTS, & LAND SURVEYORS	SCALE NONE	DRAWING NO. INDEX
	DATE APRIL 2015	SHEET 2 OF 22

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 CHECKED BY: RJT
 IN CHARGE OF: JJM
 DETAILED BY: INK
 CHECKED BY: RJT
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ALIGNMENT			LANDSCAPE			ROADWAY			UTILITIES		
STYLE	NAME	DESCRIPTION	STYLE	NAME	DESCRIPTION	STYLE	NAME	DESCRIPTION	STYLE	NAME	DESCRIPTION
	AC	CONTROL (CENTERLINE)		LABL	AREA, BRUSH LINE		RCZ.P	CLEAR ZONE		UC	CONDUIT, UNDERGROUND
	AD_P	DETOUR		LAHR	AREA, HEDGE ROW		RG	GUIDE RAIL, MISCELLANEOUS		UCH	CONDUIT, HANGING
	AT_P	TRANSITION CONTROL		LAPB	AREA, PLANTING BED		RGB	GUIDE RAIL, BOX BEAM		UCO	CONDUIT, OVERHEAD
BRIDGE				LAWA	AREA, WOODED AREA OUTLINE		RGBM	GUIDE RAIL, BOX BEAM, MEDIAN		UE	ELECTRIC LINE, UNDERGROUND
	BR	RAIL		LAWE	AREA, WATERS EDGE		RGC	GUIDE RAIL, CABLE		UEH	ELECTRIC LINE, HANGING
	BSHT	SHEET PILING		LCUT.P	CUT LIMIT		RCCB	GUIDE RAIL, CONCRETE BARRIER		UEO	ELECTRIC LINE, OVERHEAD
CONTROL				LFILL.P	FILL LIMIT		RGP.P	GUIDE POST		UETO	ELECTRIC TRANSMISSION, OVERHEAD
	CB	BASELINE		LFNC	FENCE		RCW	GUIDE RAIL, W BEAM		UESS	ELECTRIC, SUBSTATIONS
	CBPR	BASELINE, PROJECTION		LTRC	TREE ROW, CONIFEROUS		RCWM	GUIDE RAIL, W BEAM, MEDIAN		UF0	FIBER OPTIC, UNDERGROUND
DRAINAGE				LTRD	TREE ROW, DECIDUOUS		RPB	PARKING BUMPER		UFOH	FIBER OPTIC, HANGING
	DCP	CULVERT PIPE		LWH	WALL, H PILE		RRER	RAIL ROAD, CATENARY		UG	GAS, UNDERGROUND
	DCP.P	CULVERT PIPE (DIR)		LWR	WALL, RETAINING		RRPL.S.P	RAIL, PHOTO, LARGE SCALE		UGH	GAS, HANGING
	DDG.P	DITCH, GRASS LINED		LWS	WALL, STONE		RRPSS	RAIL, PHOTO, SMALL SCALE		UGO	GAS, OVERHEAD
	DDP.P	DITCH, PAVED INVERT	ROW MAPPING				RRSS	RUMBLE STRIP		UIC	INFORM CABLE, UNDERGROUND
	DDS.P	DITCH, STONE LINED		MDL	DEED LINE		RRSLS.P	RAIL, SURVEY, LARGE SCALE		UICH	INFORM CABLE, HANGING
	DFL.P	FLOW LINE		PE	EASEMENT, EXISTING		RRSSS	RAIL, SURVEY, SMALL SCALE		UO	OIL LINE, UNDERGROUND
	DSSD	SLOTTED DRAIN		PE	EASEMENT, PERMANENT					UOH	OIL LINE, HANGING
ENVIRONMENTAL				APE	EASEMENT, PERMANENT, APPROX.	STRIPING				UPBP	POLE, BRACE, PUSH BRACE
	EBLHS	BALE, STRAW		TE	EASEMENT, TEMPORARY		STB*	BROKEN LINE		UPGW	POLE, GUY WIRE
	ECT	CURTAIN, TURBIDITY		ATE	EASEMENT, TEMPORARY, APPROX.		STDB*	DOUBLE BROKEN LINE		USA	SANITARY SEWER, UNDERGROUND
	EDMC	DAM, COFFER TYPE		FEE	FEE ACQUISITION, W/ ACCESS		STDL*	DOTTED LINE LONG		USAH	SANITARY SEWER, HANGING
	EDMEC.P	DAM, EARTHEN, CHECK		AFEE	FEE ACQUISITION, APPROXIMATE		STDS*	DOTTED LINE SHORT		USAF	SANITARY SEWER, FORCE MAIN, UGND
	EDMPC.P	DAM, PREFAB, CHECK		FEE W/OA	FEE ACQUISITION, W/O ACCESS		STFB*	FULL BARRIER LINE		USAFH	SANITARY SEWER, FORCE MAIN, HANG
	EDMSC.P	DAM, STONE, CHECK		HB	HIGHWAY BOUNDARY		STH*	HATCH LINE		UT	TELEPHONE, UNDERGROUND
	EFNS	FENCE, SILT		AHB	HIGHWAY BOUNDARY, APPROX.		STPB*	PARTIAL BARRIER LINE		UTH	TELEPHONE, HANGING
	EFNSV	FENCE, SILT & VEGETATION		MHB	HIGHWAY BOUNDARY, FACE OF WALL		STRCT	ROUNDAABOUT, CAT TRACKS		UTO	TELEPHONE, OVERHEAD
	EFNV	FENCE, VEGETATION		MHBW	HIGHWAY BOUNDARY, W/O ACCESS		STRYL	ROUNDAABOUT, YIELD LINE		UTV	CABLE TV, UNDERGROUND
	EWAA.P	WETLAND, ADJACENT AREA		MJC	JURISDICTION, CITY		STSB	STOP BAR		UTVH	CABLE TV, HANGING
	EWF	WETLAND, FEDERAL		MJCY	JURISDICTION, COUNTY		STSE*	SOLID, EDGE		UTVO	CABLE TV, OVERHEAD
	EWFS	WETLAND, FEDERAL AND STATE		MJHD	JURISDICTION, HISTORIC DISTRICT		STXL*	X WALK, LADDER LINE		UUU	UNKNOWN, UNDERGROUND
	EWM	WETLAND, MITIGATION AREA		MJLL	JURIS., (GREAT, MILITARY) LOT LINE					UUH	UNKNOWN, HANGING
	EWS	WETLAND, STATE		MJN	JURISDICTION, NATION					UUO	UNKNOWN, OVERHEAD
SIGNS				MJPB	JURISDICTION, PUBLIC LANDS	TRAFFIC CONTROL				UW	WATER LINE, UNDERGROUND
	SBLB	BILLBOARDS		MJS	JURISDICTION, STATE		TCSW	SIGNAL, SPAN WIRE		UWH	WATER LINE, HANGING
	SM	MULTIPLE POST		MJT	JURISDICTION, TOWN	TRAFFIC MAINTENANCE				UWO	WATER LINE, OVERHEAD
	SSO	STRUCTURE, OVERHEAD		MJV	JURISDICTION, VILLAGE		TMBCD.P	BARRICADES			
	SSOC	STRUCTURE, OVHD, CANTILEVER		MPL	PROPERTY LOT LINE		TMBCL.P	BARRICADES, LIGHTED			
				MPLA	PROPERTY LOT LINE, APPROXIMATE		TMBT.P	BARRIER, TEMPORARY			
				MSL	SUB LOT LINE		TMBTL.P	BARRIER, TEMPORARY, LIGHTED			
							TMOB.P	DEVICE, BARRELS			
							TMOBL.P	DEVICE, BARRELS, LIGHTED			
							TMDC.P	DEVICE, CONES			

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.

BIN:3314400

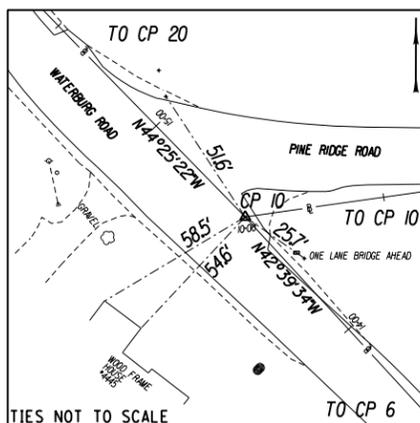
**WATERBURG ROAD
OVER TAUGHANNOCK CREEK
TOMPKINS COUNTY, NY**

LEGEND AND LINE SYMBOLOGY

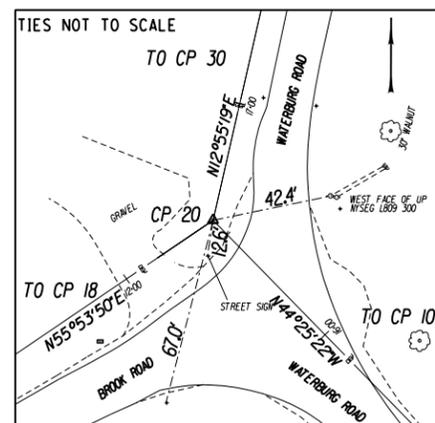
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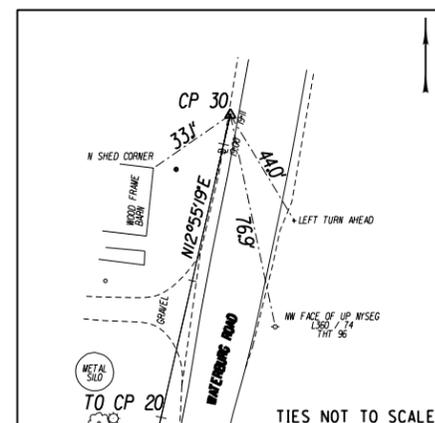
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 DESIGNED BY : INKL
 CHECKED BY : JJM
 DETAILED BY : INKL
 CHECKED BY : JJM



TIES NOT TO SCALE
 TO CP 6
 CP 10 STA. 14+54.493(A)
 CP 10 STA. 10+00.000(B)
 CP 10 IS A SET RAILROAD SPIKE ON THE EAST SIDE OF WATERBURG ROAD AT THE INTERSECTION WITH PINE RIDGE ROAD.
 NYSPCS NAD 83 (96) ZONE CENTRAL
 N 912,759.218
 E 795,397.791
 ELEV 986.137'



TIES NOT TO SCALE
 TO CP 18
 CP 20 STA. 16+57.223(A)
 CP 20 STA. 12+37.314(C)
 CP 20 IS A SET REBAR WITH CAP ON THE WEST SIDE OF WATERBURG ROAD, LOCATED APPROXIMATELY 34' NORTHERLY OF THE INTERSECTION OF THE CENTERLINE OF WATERBURG ROAD AND BROOK ROAD.
 NYSPCS NAD 83 (96) ZONE CENTRAL
 N 912,904.006
 E 795,255.891
 ELEV 972.949'



TIES NOT TO SCALE
 TO CP 20
 CP 30 STA. 19+10.753(A)
 CP 30 IS A SET REBAR WITH CAP ON THE WEST SIDE OF WATERBURG ROAD, LOCATED APPROXIMATELY 288' NORTHERLY OF THE INTERSECTION OF THE CENTERLINE OF WATERBURG ROAD AND BROOK ROAD.
 NYSPCS NAD 83 (96) ZONE CENTRAL
 N 913,151.116
 E 795,312.586
 ELEV 980.42'

BENCHMARK TABLE		
NAME	DESCRIPTION	NAVD 88 ELEVATION
BM # 3	BENCHMARK IS A SET CHISELED SQUARE ON THE SOUTHEAST CORNER OF A HEADWALL. LOCATED APPROXIMATELY 174+/-' SOUTH OF THE CENTER OF THE BRIDGE OVER TAUGHANNOCK CREEK.	972.78'
BM # 4	BENCHMARK IS A SET RAILROAD SPIKE IN THE WEST FACE OF A UTILITY POLE (NYSEG L360 / 74). LOCATED ON THE EAST SIDE OF WATERBURG ROAD, APPROXIMATELY 94+/-' NORTH OF THE CENTERLINE OF THE BRIDGE OVER TAUGHANNOCK CREEK.	979.06'

HORIZONTAL CONTROL
 THE HORIZONTAL DATUM SHOWN HEREON IS REFERENCED TO THE NEW YORK STATE PLANE COORDINATE SYSTEM, NAD83(CORS96) TRANSVERSE MERCATOR PROJECTION, CENTRAL ZONE. THE COORDINATES WERE ESTABLISHED ON THE PRIMARY CONTROL POINTS BY RTK GPS METHODS USING A LEICA VIVA NETWORK ROVER TIED TO THE NYSNET SYSTEM, AS WELL AS CONVENTIONAL SURVEY METHODS USING A FOCUS 10 TOTAL STATION TO CHECK THE PRIMARY CONTROL POINTS AND ESTABLISH SECONDARY CONTROL POINTS.

CORS.ID.NYWG
 N = 856,714.0645 USFT
 E = 741,121.9185 USFT

VERTICAL CONTROL
 THE VERTICAL DATUM SHOWN HEREON IS REFERENCED TO THE NYSNET SYSTEM, BEING RELATIVE TO THE BROADCAST POSITION OF CORS.ID.NYWG. THE ELEVATIONS WERE ESTABLISHED ON THE PRIMARY CONTROL POINTS BY RTK GPS METHODS USING A LEICA VIVA NETWORK ROVER. THE PRIMARY CONTROL AND PROJECT BENCHMARKS WERE THEN DIFFERENTIALLY LEVELED THROUGH, USING A TOPCON DL-101C DIGITAL LEVEL, AND HOLDING THE ELEVATION, ESTABLISHED BY THE LEICA VIVA NETWORK ROVER, ON PRIMARY CONTROL POINT 20 AND ADJUSTING ACCORDINGLY. THE SECONDARY CONTROL WAS ESTABLISHED USING CONVENTIONAL SURVEY METHODS WITH A FOCUS 10 TOTAL STATION.

CORS.ID.NYWG
 N = 856,714.0645 USFT
 E = 741,121.9185 USFT
 ELLIPSOID HT = 930.343 USFT
 GEIOD HEIGHT = -108.372 USFT(GE10D09)
 BROADCAST ELEVATION = 1038.715 USFT

...NOTE...
 1) THE BROADCAST ELEVATION IS THE RESULT OF THE GEIOD HEIGHT BEING SUBTRACTED FROM THE ELLIPSOID HEIGHT

BIN:3314400

**WATERBURG ROAD
 OVER TAUGHANNOCK CREEK
 TOMPKINS COUNTY, NY**

HORIZONTAL AND VERTICAL CONTROLS

	SCALE NONE	DRAWING NO. BLT-1
	DATE APRIL 2015	SHEET 5 OF 22

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 DETAILED BY : INKL
 CHECKED BY : JJM
 IF THERE IS 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 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.

GENERAL NOTES

DESIGN SPECIFICATIONS: NYS DOT LRFD BRIDGE DESIGN SPECIFICATIONS WITH ALL PROVISIONS IN EFFECT AS OF SEPTEMBER 2014 (FOR DESIGN PURPOSES, COMPRESSIVE STRENGTH OF CONCRETE FOR SUBSTRUCTURES AND DECK SLABS AT 28 DAYS: $f'_c = 3000$ psi.)

LIVE LOAD: AASHTO HL - 93.

CONSTRUCTION AND MATERIALS SPECIFICATIONS: STANDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, OFFICE OF ENGINEERING, DATED MAY 1, 2008, WITH CURRENT ADDITIONS AND MODIFICATIONS.

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

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

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

DIMENSIONS FOR THICKNESSES OF STEEL ROLLED ANGLE SHAPES AND STRUCTURAL TUBING ARE SHOWN ACCORDING TO THE AISC MANUAL.

THIS BRIDGE SHALL BE MAINTAINED IN ACCORDANCE WITH THE GUIDELINES CONTAINED IN THE CURRENT EDITION OF THE AASHTO MAINTENANCE MANUAL: THE MAINTENANCE AND MANAGEMENT OF ROADWAYS AND BRIDGES.

UNLESS OTHERWISE INDICATED ON THE PLANS, WORK TO BE PERFORMED UNDER THIS CONTRACT DOES NOT REQUIRE THE DISTURBING, DESTRUCTION OR REMOVAL OF ANY KNOWN MATERIALS CONTAINING ASBESTOS, UNLESS OTHERWISE INDICATED ON THE PLANS. IT IS THE EXPRESS INTENT OF THIS CONTRACT THAT THESE MATERIALS NOT BE DISTURBED IN ANY WAY. SHOULD THE CONTRACTOR BE FORCED TO DISTURB IN ANY WAY ANY SUCH MATERIALS, THE CONTRACTOR SHALL FIRST BE FAMILIAR WITH INDUSTRIAL CODE RULE 56 OF THE N.Y.S. DEPARTMENT OF LABOR. THE CONTRACTOR SHALL ALSO OBTAIN WRITTEN PERMISSION OF THE REGIONAL DIRECTOR OF TRANSPORTATION BEFORE PROCEEDING.

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

SUBSTRUCTURE NOTES

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

HIGHWAY EMBANKMENT MATERIAL (FROM HIGHWAY ESTIMATE OR FROM STRUCTURE EXCAVATION BACKFILL) AND SELECT STRUCTURE FILL, ITEM 203.21, SHALL BE PLACED SIMULTANEOUSLY, IN CONTACT, ON BOTH SIDES OF THE VERTICAL PAYMENT LINE.

ORDINARY WATER IS ESTIMATED TO BE 958.5. THIS IS DEFINED AS THE HIGHEST SURFACE WATER ELEVATION LIKELY TO BE ENCOUNTERED DURING ONE CONSTRUCTION SEASON (OTHER THAN MAJOR FLOODS). IT IS ALWAYS LESS THAN THE ORDINARY HIGH WATER ELEVATION AND IT IS USUALLY AN OBSERVED ELEVATION RATHER THAN A COMPUTED ONE.

ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A709 GRADE 50.

PRECAST NOTES

THE PRECAST STRUCTURE TYPE SHOWN IS A GENERIC IN NATURE. ANY PRECAST STRUCTURE MEETING THE SPAN AND RISE MEASUREMENTS SHOWN MAY BE USED.

THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR THE PRECAST ARCH STRUCTURE MEETING THE REQUIREMENTS OF 706-17 OF THE SPECIFICATIONS. THE COST OF THE REINFORCEMENT AND DESIGN SHALL BE INCLUDED WITHIN THE PRECAST UNITS.

THREADED INSERT AND EMBEDMENT LENGTH DETAILS AND/OR KEYWAYS FOR CONNECTING WINGWALLS TO THE ARCH STRUCTURE SHALL BE PROVIDED BY THE CONTRACTOR WITH THE SHOP DRAWINGS. INSERTS SHALL BE NON-CORROSIVE.

PRECAST DETAILS ARE INTENDED TO BE NON-PROPRIETARY IN NATURE.

REMOVAL NOTES

EXISTING SUBSTRUCTURE SHALL BE REMOVED WITHIN THE LIMITS SHOWN ON THE PLANS ACCORDING TO ITEM 202.19.

EXISTING SUPERSTRUCTURE SHALL BE REMOVED ACCORDING TO ITEM 202.120001.

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE REQUIREMENTS OF SUBSECTION 202-3.01 GENERAL AND SAFETY REQUIREMENTS. A REMOVAL PLAN, SIGNED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW YORK, SHALL BE SUBMITTED TO THE ENGINEER THIRTY (30) DAYS PRIOR TO BEGINNING THE DEMOLITION.

RECORD PLANS FOR THIS STRUCTURE ARE NOT AVAILABLE.

REFER TO SUBSECTION 107-05 OF THE STANDARD SPECIFICATIONS FOR SAFETY AND HEALTH REQUIREMENTS.

RECONSTRUCTION NOTES

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT, DUE TO THE NATURE OF RECONSTRUCTION PROJECTS, THE EXACT EXTENT OF RECONSTRUCTION WORK CANNOT ALWAYS BE ACCURATELY DETERMINED PRIOR TO THE COMMENCEMENT OF WORK. 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 FIELD CONDITIONS.

THE CONTRACTOR SHALL PERFORM ALL WORK WITH CARE SO THAT ANY MATERIALS WHICH ARE TO REMAIN IN PLACE, OR WHICH ARE TO REMAIN THE PROPERTY OF THE COUNTY, WILL NOT BE DAMAGED. IF THE CONTRACTOR DAMAGES ANY MATERIALS WHICH ARE TO REMAIN IN PLACE OR WHICH ARE TO REMAIN THE PROPERTY OF THE COUNTY, THE DAMAGED MATERIALS SHALL BE REPAIRED OR REPLACED IN A MANNER SATISFACTORY TO THE ENGINEER AT THE EXPENSE OF THE CONTRACTOR.

WHENEVER ITEMS IN THE CONTRACT REQUIRE MATERIALS TO BE REMOVED AND DISPOSED OF, THE COST OF SUPPLYING A DISPOSAL AREA AND TRANSPORTATION TO THAT AREA SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THOSE ITEMS.

DURING REMOVAL OPERATIONS, THE CONTRACTOR SHALL NOT BE ALLOWED TO DROP WASTE CONCRETE, DEBRIS AND OTHER MATERIAL TO THE AREA BELOW THE BRIDGE EXCEPT WHERE THE PLANS SPECIFICALLY PERMIT THE DROPPING OF MATERIAL. PLATFORMS, NETS, SCREENS OR OTHER PROTECTIVE DEVICES SHALL BE USED TO CATCH THE MATERIAL. IF THE ENGINEER DETERMINES THAT ADEQUATE PROTECTIVE DEVICES ARE NOT BEING EMPLOYED, THE WORK SHALL BE SUSPENDED UNTIL ADEQUATE PROTECTION IS PROVIDED.

ALL MATERIAL FALLING ON THE AREA BELOW AND ADJACENT TO THE BRIDGE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AT NO COST TO THE COUNTY.

THE COST OF FURNISHING, INSTALLING, MAINTAINING, REMOVING AND DISPOSING OF ALL PLATFORMS, NETS, SCREENS OR OTHER PROTECTIVE DEVICES SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE APPROPRIATE ITEMS OF THE CONTRACT.

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

FOUNDATION NOTES

SEE PROPOSAL SPECIAL NOTES

* GUIDERAIL TO BE REMOVED - ACCORDING TO ITEM 606.63		
LOCATION	LENGTH (FT)	COMMENTS
SW QUADRANT	41	RAILING FROM THE BRIDGE SHALL ALSO BE REMOVED WITH CARE AND STORED FOR COUNTY PICK-UP.
SE QUADRANT	64	
NW QUADRANT	41	
NE QUADRANT	94	
TOTAL	240	

606.63 - REMOVING AND STORING BOX BEAM GUIDE RAILING
 * AFTER CAREFUL DISMANTLING OF THE RAIL THE CONTRACTOR SHALL STORE THE RAIL IN A SAFE LOCATION. THE CONTRACTOR SHALL ARRANGE FOR A TIME WHEN THE COUNTY CAN PICK UP THE RAIL FROM ITS STORAGE LOCATION.

EROSION AND SEDIMENT CONTROL MEASURES	
STATION TO STATION (+/-)	QUANTITY (FT)
ACCORDING TO ITEM 209.13 - SILT FENCE (FT)	
SW QUADRANT	30
SE QUADRANT	70
NW QUADRANT	45
NE QUADRANT	65
TOTAL=	210

TABLE OF SNOWPLOWING MARKERS				
STATION	OFFSET	ITEM 646.22 QTY. (EA)	ITEM 646.32 QTY. (EA)	DETAILS
W 12+55	RT	2	1	DOUBLE GREEN SNOWPLOWING MARKER
W 15+02	RT	1	1	SINGLE GREEN SNOWPLOWING MARKER
W 14+26	LT	2	1	DOUBLE GREEN SNOWPLOWING MARKER
W 12+84	LT	1	1	SINGLE GREEN SNOWPLOWING MARKER
TOTAL		6	4	

ITEM 646.22 DELINEATOR, SNOWPLOWING MARKER, SUPPLEMENTARY SNOWPLOWING MARKER PANELS
 ITEM 646.32 STEEL POST 2.0 LB/FT

DRIVEWAY TABLE											
LOCATION STA.	SIDE	EXISTING MATERIAL	PROPOSED MATERIAL	ITEM NO.	CLASS	W	CORNER ANGLE	PL	TL	ENTRANCE TYPE	COMMENTS
W 12+70	LT	GRAVEL	ASPHALT	608.020102	R	*	*	0	25'	1	* REPLACE TO EXISTING WIDTH & ANGLE
W 14+50	LT	GRAVEL	SUBBASE	304.15	R	*	*	0	14'	1	* REPLACE TO EXISTING WIDTH & ANGLE

NOTES: 1. REFER TO STANDARD SHEETS 608-03 AND 608-04 FOR LEGEND AND DETAILS.
 2. DRIVEWAY WORK SHALL BE CORRELATED WITH INSTALLATION & GRADING FOR DS-1. SEE DRAINAGE STRUCTURE TABLE FOR DETAILS.

CULVERT TABLE								
CULVERT NUMBER	LOCATION (UPSTREAM TO DOWNSTREAM)	LENGTH (FT)	PIPE ITEM NO.	PIPE DESCRIPTION	INLET DRAINAGE STRUCTURE	OUTLET DRAINAGE STRUCTURE	INVERTS	REMARKS
C-1	W 12+79.3, 30.2' RT	48.0	603.9818	18" SICPP	DS-1	OUT FALL	UPSTREAM INVERT = 966.50'	USE GALVANIZED STEEL END SECTION @ OUTFALL ACCORDING TO ITEM 603.171116
	DOWNSTREAM INVERT = 965.00'							
C-2	BROOK RD. INLET	82.0	603.9818	18" SICPP	BROOK RD. INLET	DS-1	UPSTREAM INVERT = 970.21'	ALTERATIONS AT BROOK ROAD INLET SHALL BE REQUIRED TO ACCOMMODATE LARGER PROPOSED PIPE A.O.B.E. (SEE NOTE 3)
	W 12+79.3, 30.2' RT						DOWNSTREAM INVERT = 966.50'	
C-3	W 14+08.6, 26.5' RT	93.0	603.9818	18" SICPP	EX-1	OUT FALL	UPSTREAM INVERT = 977.51'	USE GALVANIZED STEEL END SECTION @ OUTFALL ACCORDING TO ITEM 603.171116
	W 14+99.9, 19.2' RT						DOWNSTREAM INVERT = 972.00'	

NOTES:
 1. PAVEMENT AT C-2 INSTALLATION LOCATION SHALL BE SAWCUT PRIOR EXCAVATION. PAVEMENT SECTION AT C-2 INSTALLATION LOCATION SHALL BE RECONSTRUCTED IN LIFTS AS PER THE TYPICAL SECTION ON DWG. TYP-1.
 2. TEMPORARY DIVERSION OF FLOW IN THE PIPE DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND COST FOR TEMPORARY DIVERSION TO BE INCLUDED IN PROPOSED PIPE ITEM (ITEM 603.9815).
 3. ALTERATIONS SHALL BE DONE PER ITEM 604.070901.
 4. PIPES SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD SHEET 203-04.

DRAINAGE STRUCTURE TABLE							
STRUCTURE NUMBER	LOCATION (TO CENTER OF GRATE)	STRUCTURE TYPE	STRUCTURE ITEM NO.	TOP GRATE ELEVATION	INVERT IN AND OUT ELEVATION	GRATE OR COVER ITEM NO.	REMARKS
DS-1	W 12+48.32, 35.0' RT	F	604.300606	970.50	966.25	655.1006	AREA AROUND STRUCTURE SHALL BE GRADED IN A WAY TO ELIMINATE PONDING ON DRIVEWAY. WORK SHALL BE CORRELATED WITH DRIVEWAY WORK TO ENSURE PROPER DRAINAGE.

REFLECTORIZED PAVEMENT STRIPES - 15 MILS				
STATION	OFFSET	ITEM 640.10 QTY. (FT)	ITEM 640.11 QTY. (FT)	REMARKS
W 12+60 TO 14+80	RT	240	0	ADD 10' @ EACH END
W 12+60 TO 14+80	RT	240	0	ADD 10' @ EACH END
W 12+60 TO 14+80	CL	0	480	ADD 10' @ EACH END
TOTAL		480	480	

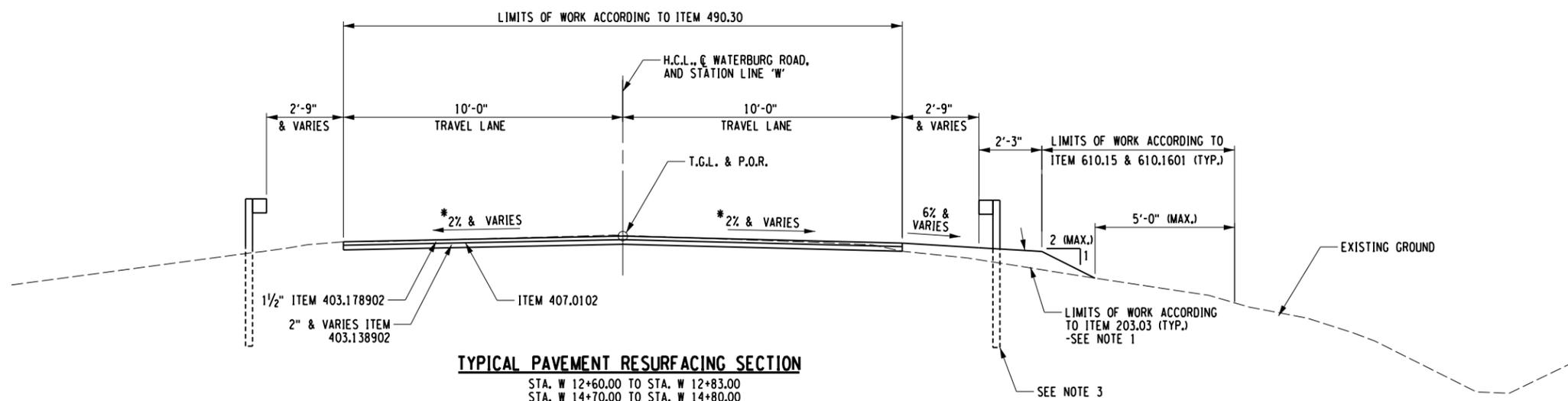
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**WATERBURG ROAD
 OVER TAUGHANNOCK CREEK
 TOMPKINS COUNTY, NY**

GENERAL NOTES AND MISCELLANEOUS TABLES

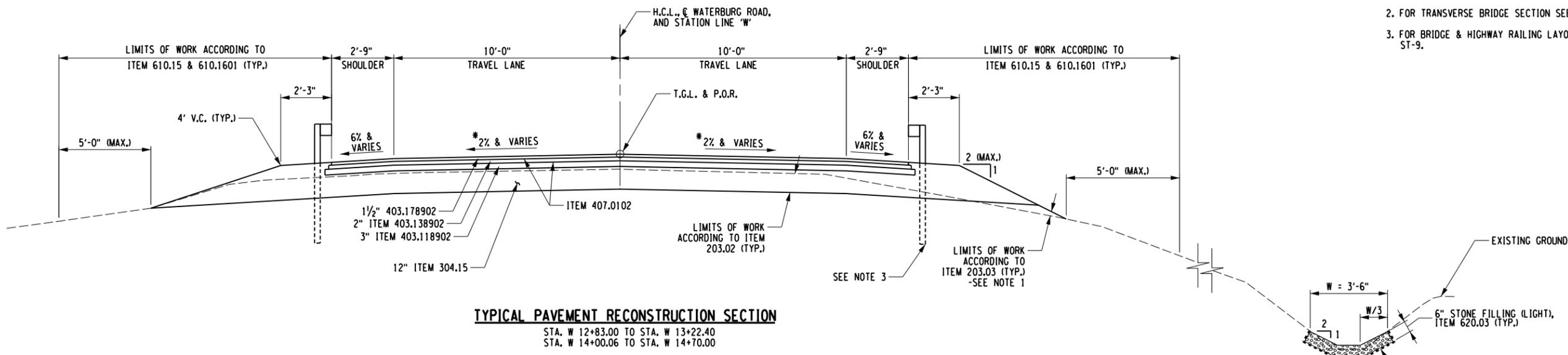
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	DATE APRIL 2015	SHEET 6 OF 22

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 CHECKED BY : NJL
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 IF 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.
 CHECKED BY : JJM

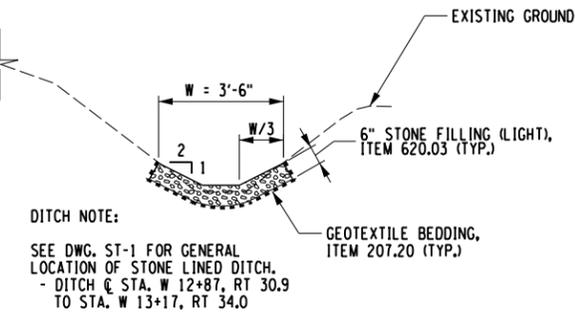


*SEE SUPERELEVATION DIAGRAM ON PROFILE, DWG. NO. ST-2

- NOTES:
1. REMOVE TOPSOIL IN EMBANKMENT AREAS - ACCORDING TO ITEM 203.02.
 2. FOR TRANSVERSE BRIDGE SECTION SEE DWG. NO. ST-3.
 3. FOR BRIDGE & HIGHWAY RAILING LAYOUT SEE DWG. ST-9.



*SEE SUPERELEVATION DIAGRAM ON PROFILE, DWG. NO. ST-2



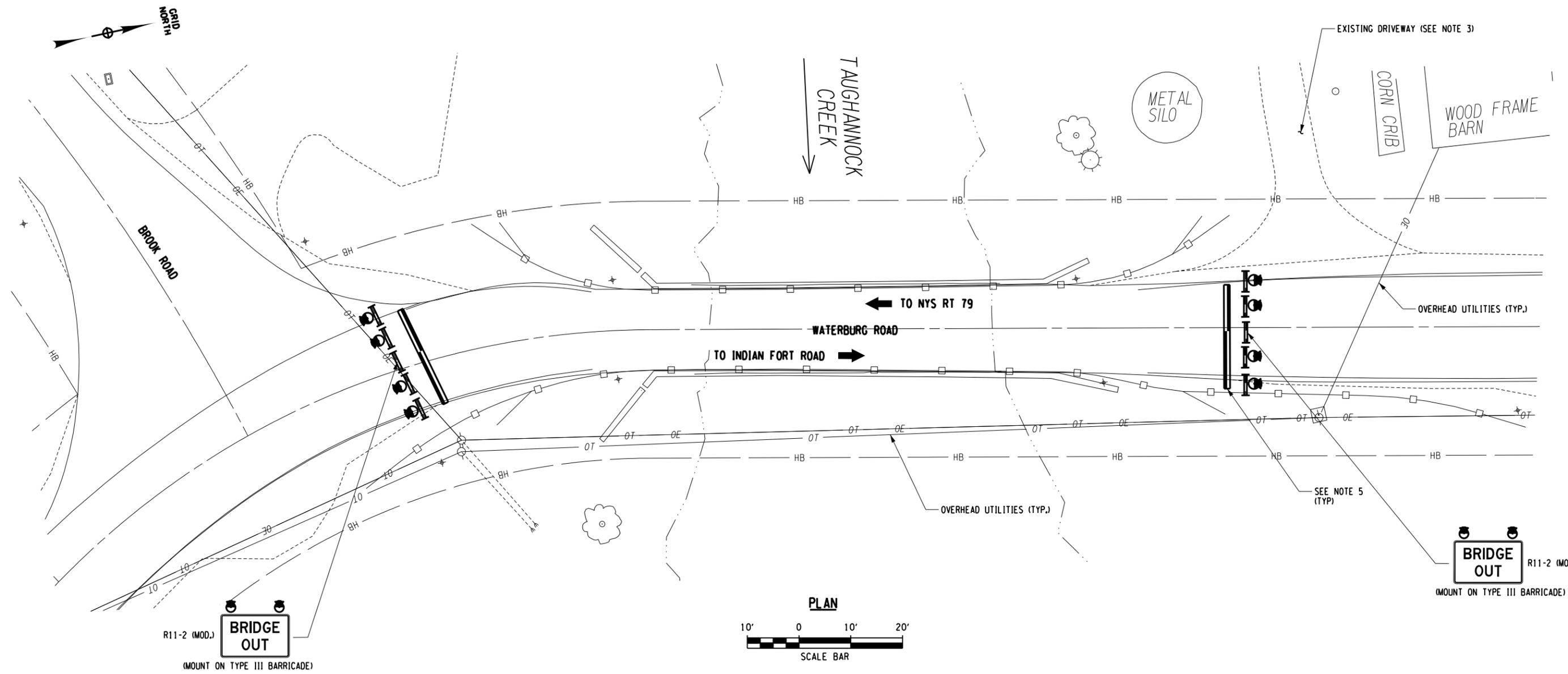
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**WATERBURG ROAD
 OVER TAUGHANNOCK CREEK
 TOMPKINS COUNTY, NY**

TYPICAL ROADWAY SECTIONS

DELTA ENGINEERS, ARCHITECTS, & LAND SURVEYORS	SCALE NONE	DRAWING NO. TYP - 1
	DATE APRIL 2015	SHEET 7 OF 22

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 DESIGNED BY: JJM
 CHECKED BY: JJM
 IN CHARGE OF: JJM
 DETAILED BY: INKL
 CHECKED BY: INKL



- NOTES:**
1. FOR DETOUR PLAN SEE DWG. WZTC-2.
 2. CONTRACTOR SHALL PROVIDE TYPE III BARRICADES AT EACH END OF BRIDGE. (MIN. = 5 EACH)
 3. DRIVEWAY ACCESS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION PROJECT. IN THE EVENT THAT ACCESS HAS TO BE RESTRICTED FOR SHORT DURATIONS, THE OWNER SHALL BE NOTIFIED IN ADVANCE.
 4. THE BRIDGE CLOSURE SIGNAGE SHALL BE ACCORDING TO ITEM 619.01.
 5. CONTRACTOR SHALL PROVIDE TEMPORARY CONCRETE BARRIER BETWEEN TYPE III BARRICADES AND BRIDGE WHEN DROP OFF HAZARDS EXIST OR AS DIRECTED BY THE ENGINEER.

- LEGEND**
- TYPE III CONSTRUCTION BARRICADE, ACCORDING TO ITEM 619.04. PROVIDE TYPE 'A' FLASHING LOW INTENSITY LIGHTING (SEE NOTE 2)
 - TYPE 'A' FLASHING LOW INTENSITY WARNING LIGHT FOR LIGHTING TYPE III CONSTRUCTION BARRICADES.
 - TEMPORARY CONCRETE BARRIER (UNPINNED) , ACCORDING TO ITEM 619.1701

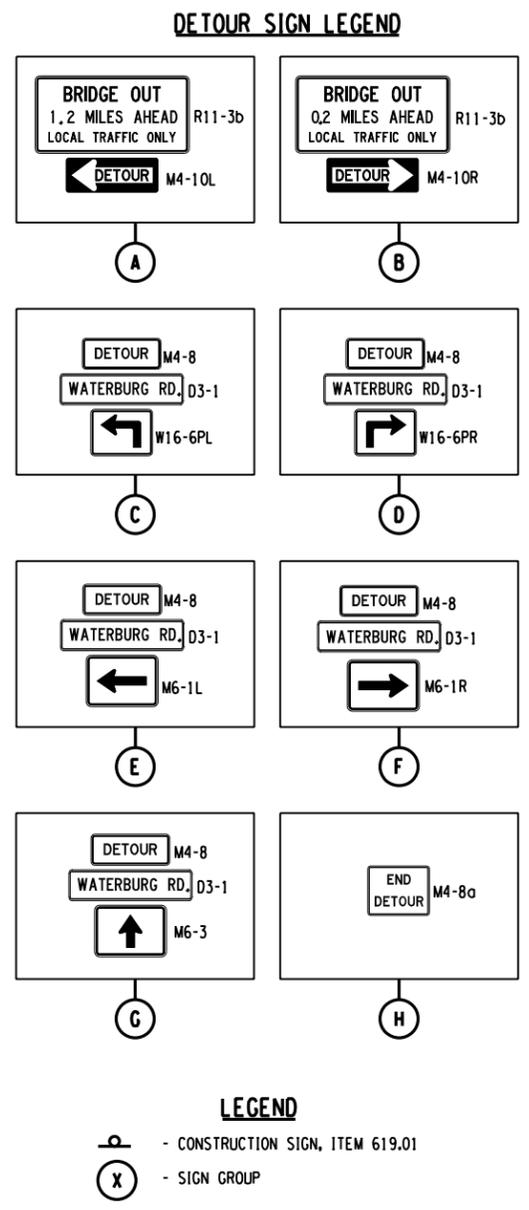
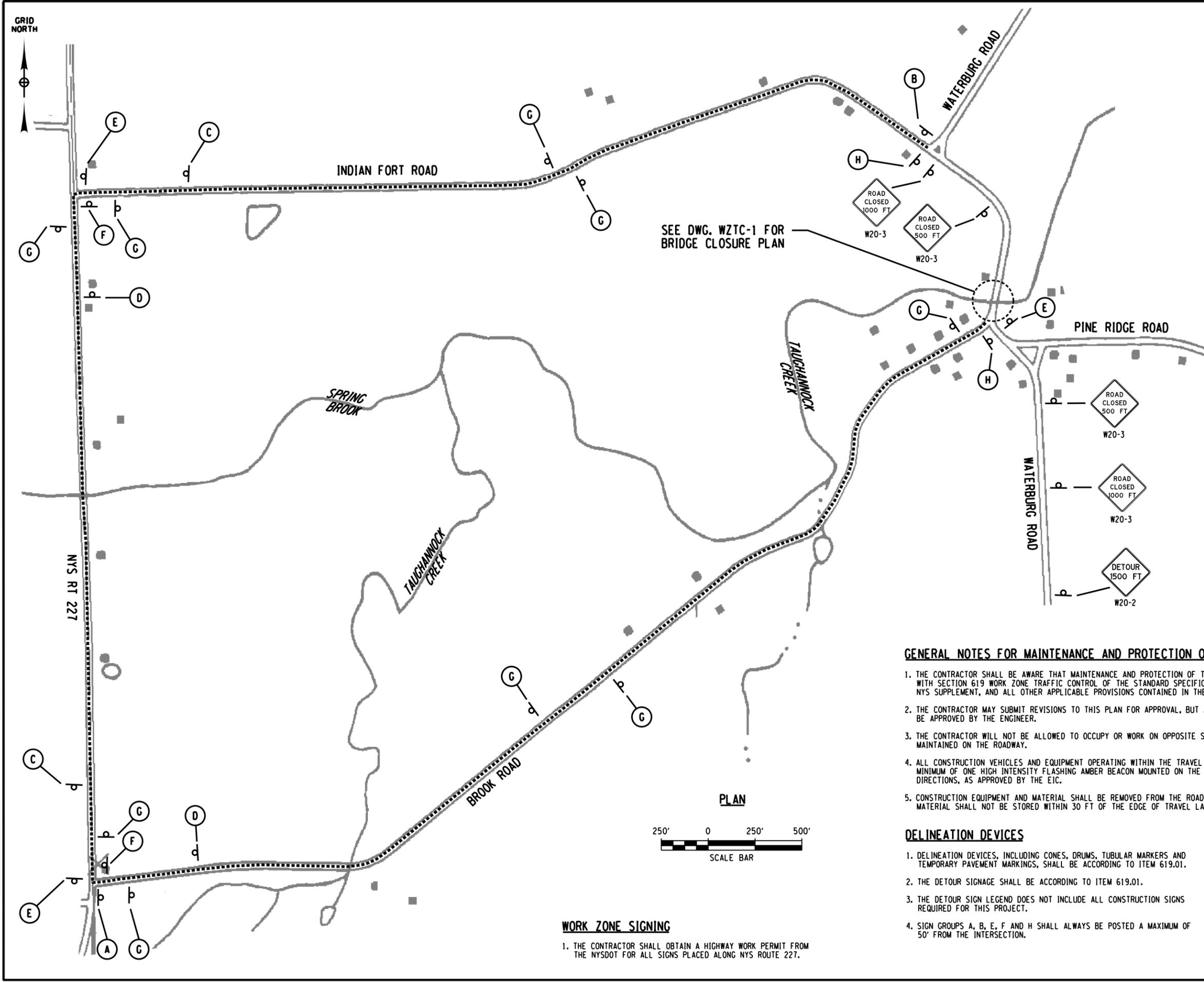
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**WATERBURG ROAD
OVER TAUGHANNOCK CREEK
TOMPKINS COUNTY, NY**

**WORK ZONE TRAFFIC CONTROL PLAN
BRIDGE CLOSURE POUR**

DELTA <small>ENGINEERS, ARCHITECTS, & LAND SURVEYORS</small>	SCALE AS SHOWN	DRAWING NO. WZTC-1
	DATE APRIL 2015	SHEET 8 OF 22

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 IN CHARGE OF : JJM
 DESIGNED BY : JJM
 CHECKED BY : INKL
 DETAILED BY : JJM
 CHECKED BY : INKL



GENERAL NOTES FOR MAINTENANCE AND PROTECTION OF TRAFFIC

1. THE CONTRACTOR SHALL BE AWARE THAT MAINTENANCE AND PROTECTION OF TRAFFIC IS VERY CRITICAL AND SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 619 WORK ZONE TRAFFIC CONTROL OF THE STANDARD SPECIFICATIONS, THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES WITH NYS SUPPLEMENT, AND ALL OTHER APPLICABLE PROVISIONS CONTAINED IN THE CONTRACT.
2. THE CONTRACTOR MAY SUBMIT REVISIONS TO THIS PLAN FOR APPROVAL, BUT ANY CHANGE THAT ALTERS THE BASIC CONCEPTS OF THE PLAN MUST BE APPROVED BY THE ENGINEER.
3. THE CONTRACTOR WILL NOT BE ALLOWED TO OCCUPY OR WORK ON OPPOSITE SIDES OF THE ROADWAY IN ONE LOCATION WHILE TRAFFIC IS MAINTAINED ON THE ROADWAY.
4. ALL CONSTRUCTION VEHICLES AND EQUIPMENT OPERATING WITHIN THE TRAVEL LANES, SHOULDER, AND CLEAR ZONE AREA SHALL BE EQUIPPED WITH A MINIMUM OF ONE HIGH INTENSITY FLASHING AMBER BEACON MOUNTED ON THE VEHICLE SO THAT IT IS VISIBLE TO APPROACHING TRAFFIC FROM ALL DIRECTIONS, AS APPROVED BY THE EIC.
5. CONSTRUCTION EQUIPMENT AND MATERIAL SHALL BE REMOVED FROM THE ROADSIDE AREA DURING NON-WORKING HOURS. THIS EQUIPMENT AND MATERIAL SHALL NOT BE STORED WITHIN 30 FT OF THE EDGE OF TRAVEL LANE, OR A DISTANCE AS ORDERED BY THE ENGINEER.

DELINEATION DEVICES

1. DELINEATION DEVICES, INCLUDING CONES, DRUMS, TUBULAR MARKERS AND TEMPORARY PAVEMENT MARKINGS, SHALL BE ACCORDING TO ITEM 619.01.
2. THE DETOUR SIGNAGE SHALL BE ACCORDING TO ITEM 619.01.
3. THE DETOUR SIGN LEGEND DOES NOT INCLUDE ALL CONSTRUCTION SIGNS REQUIRED FOR THIS PROJECT.
4. SIGN GROUPS A, B, E, F AND H SHALL ALWAYS BE POSTED A MAXIMUM OF 50' FROM THE INTERSECTION.

WORK ZONE SIGNING

1. THE CONTRACTOR SHALL OBTAIN A HIGHWAY WORK PERMIT FROM THE NYSOT FOR ALL SIGNS PLACED ALONG NYS ROUTE 227.

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**WATERBURG ROAD
OVER TAUGHANNOCK CREEK
TOMPKINS COUNTY, NY**

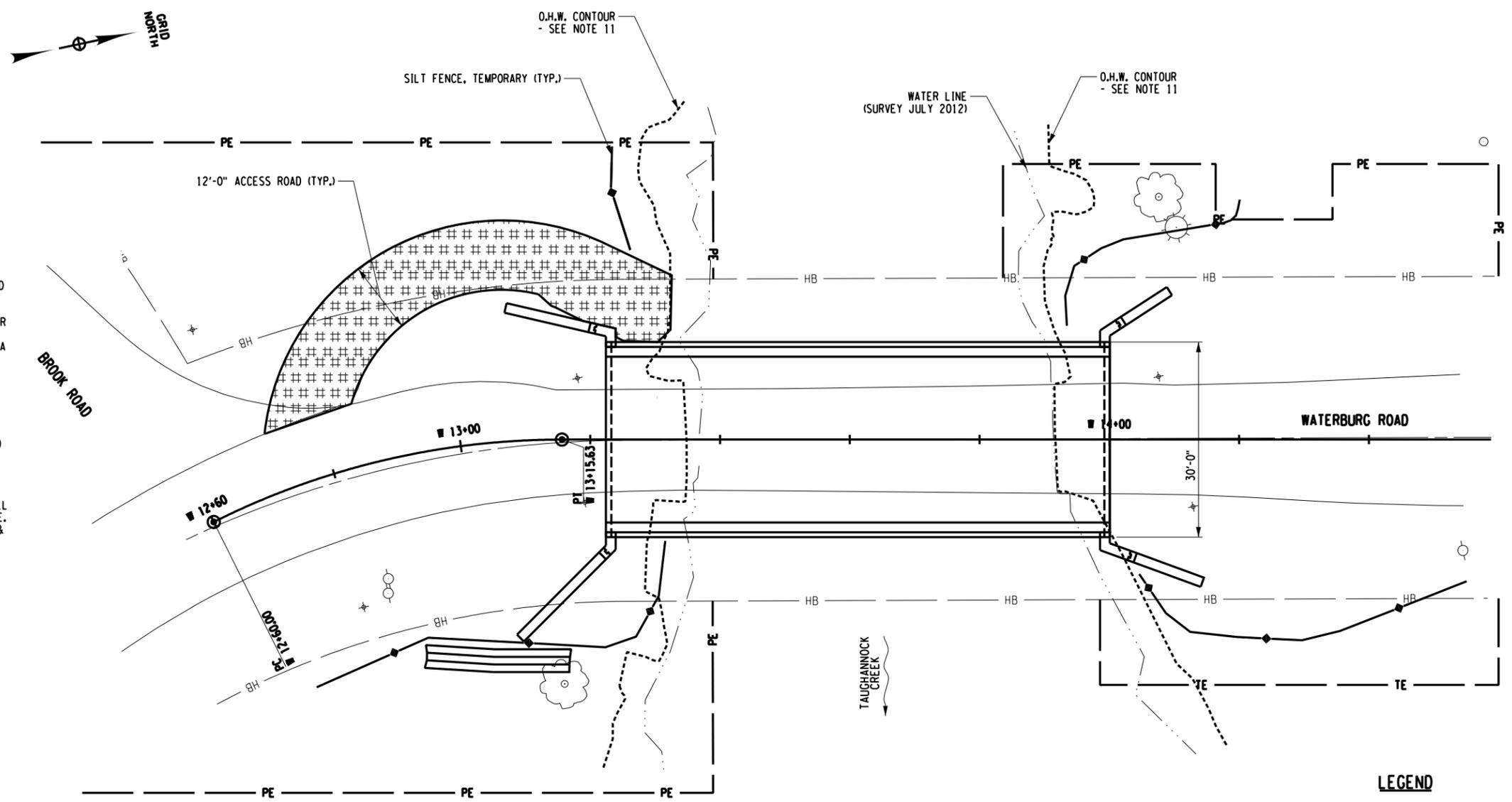
**WORK ZONE TRAFFIC CONTROL PLAN
DETOUR PLAN**

DELTA ENGINEERS, ARCHITECTS, & LAND SURVEYORS	SCALE AS SHOWN	DRAWING NO. WZTC-2
	DATE APRIL 2015	SHEET 9 OF 22

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 IN CHARGE OF : JJM
 DESIGNED BY : RJT
 CHECKED BY : INKL
 DETAILED BY : INKL
 CHECKED BY : RJT

NOTES:

1. THE EXISTING ARCH DEMOLITION SHALL BE PERFORMED IN ONE CONTINUOUS OPERATION WITHOUT DELAY.
2. THE CONTRACTOR SHALL PROVIDE A DEMOLITION PLAN AND CALCULATIONS STAMPED BY A PE REGISTERED IN NEW YORK AS REQUIRED BY THE SPECIFICATIONS.
3. THE DEMOLITION PLAN SHALL PROVIDE FOR REMOVAL OF THE EXISTING ARCH FILL AND CONCRETE SPANDEL WALLS PRIOR TO REMOVING THE ARCH.
4. THE ARCH WILL BE ALLOWED TO BE LOWERED INTO THE STREAMBED AND THEN PROMPTLY REMOVED.
5. AT NO TIME SHALL THE STREAM FLOW BE COMPLETELY BLOCKED OR DAMMED. THE DEMOLITION PLAN SHALL PROVIDE FOR SUFFICIENT EQUIPMENT AND LABOR TO ENSURE THAT THE WATERWAY FLOW AREA IS EQUAL TO OR GREATER THAN ONE HALF OF THE EXISTING WATERWAY AREA PRIOR TO THE END OF THE FIRST DAY OF ARCH REMOVAL EFFORTS.
6. THE ARCH DEBRIS REMOVAL SHALL BE PROGRESSED AS QUICKLY AS POSSIBLE UNTIL COMPLETE.
7. ACCESS ROAD SHALL BE CONSTRUCTED AT THE LOCATION DEPICTED ON THESE PLANS. ANY CHANGES TO THIS PLAN WILL REQUIRE THE CONTRACTOR TO OBTAIN NEW PERMITS FROM THE ARMY CORPS OF ENGINEERS AND THE CONCURRENCE OF THE ENGINEER-IN-CHARGE. THIS PROCESS MAY BE TIME-CONSUMING, AND WILL NOT BE A REASON FOR ANY DELAY IN THE CONTRACT. NO STREAM WORK SHALL BE INITIATED WITHOUT THE APPROVAL OF THE ENGINEER-IN-CHARGE. THE MATERIALS, LABOR AND EQUIPMENT REQUIRED TO CONSTRUCT & REMOVE THE ACCESS ROAD SHALL BE DONE ACCORDING TO ITEM 209.22.
8. TEMPORARY SOIL EROSION AND POLLUTION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY WORK IN THE STREAM. TEMPORARY SOIL EROSION AND POLLUTION CONTROLS SHALL MEET THE REQUIREMENTS OF THE VARIOUS SPECIFICATIONS DEPICTED THROUGHOUT THE PLANS.
9. SEE NYSOT 209 SERIES STANDARD SHEETS FOR ADDITIONAL EROSION AND SEDIMENT CONTROL DETAILS.
10. INSTREAM CONSTRUCTION ACTIVITIES SHALL ONLY BE PERFORMED DURING LOW-FLOW STREAM CONDITIONS, AND BETWEEN THE DATES PROVIDED IN THE PERMIT ISSUED FOR THIS PROJECT.
11. O.H.W. = ORDINARY HIGH WATER ELEV. 958.5±
 O.W. = ORDINARY WATER 957.0±
 L.W. = LOW WATER 956.0±

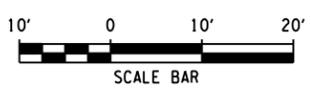


PLAN

LEGEND

ACCESS ROAD LIMITS, ACCORDING TO ITEM 209.22

SILT FENCE TEMPORARY, ACCORDING TO ITEM 209.13



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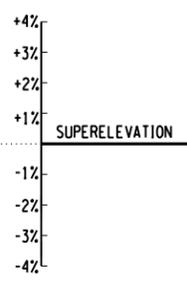
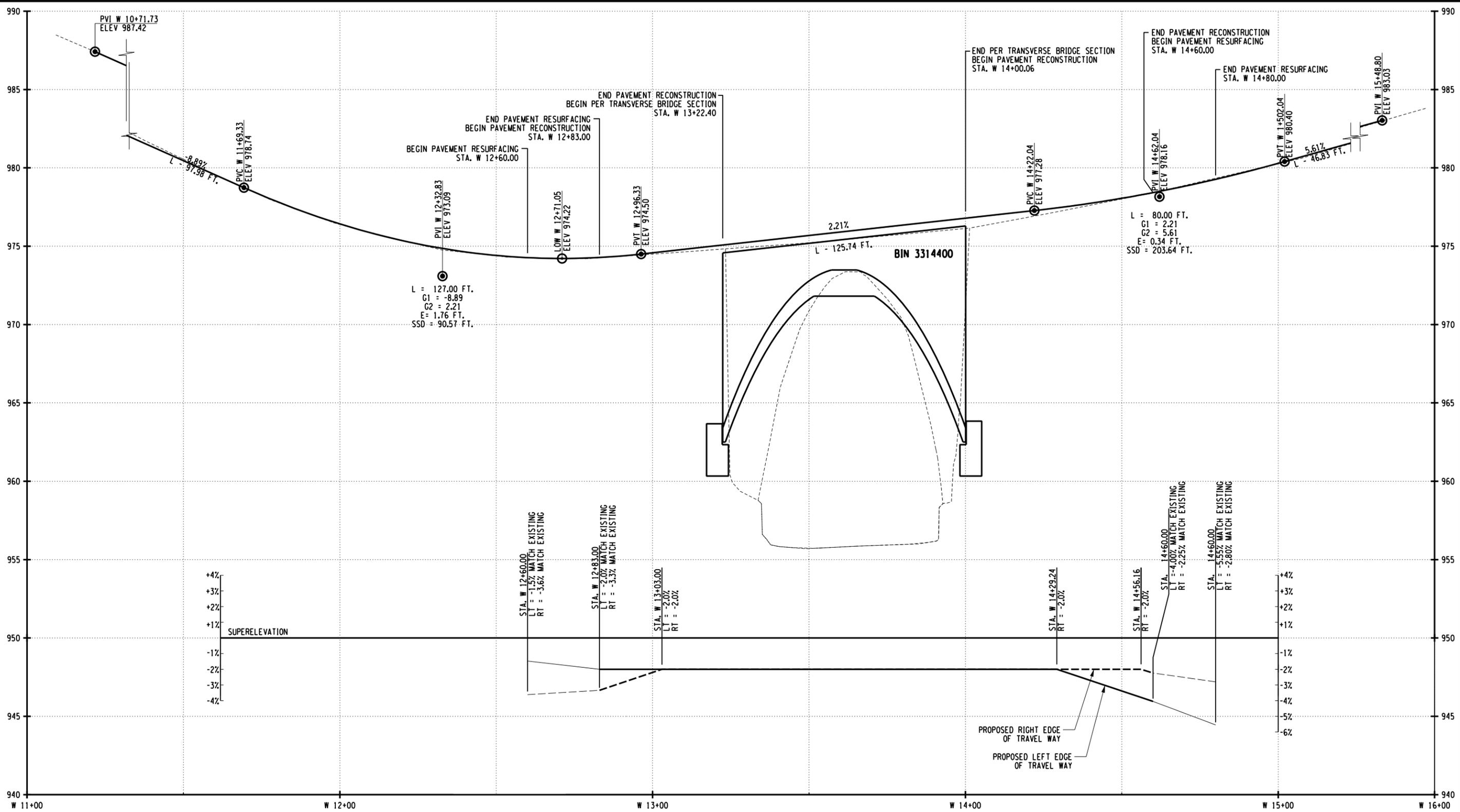
**WATERBURG ROAD
OVER TAUGHANNOCK CREEK
TOMPKINS COUNTY, NY**

EROSION & SEDIMENT CONTROL PLAN

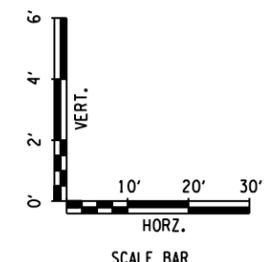
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	DATE APRIL 2015	SHEET 10 OF 22

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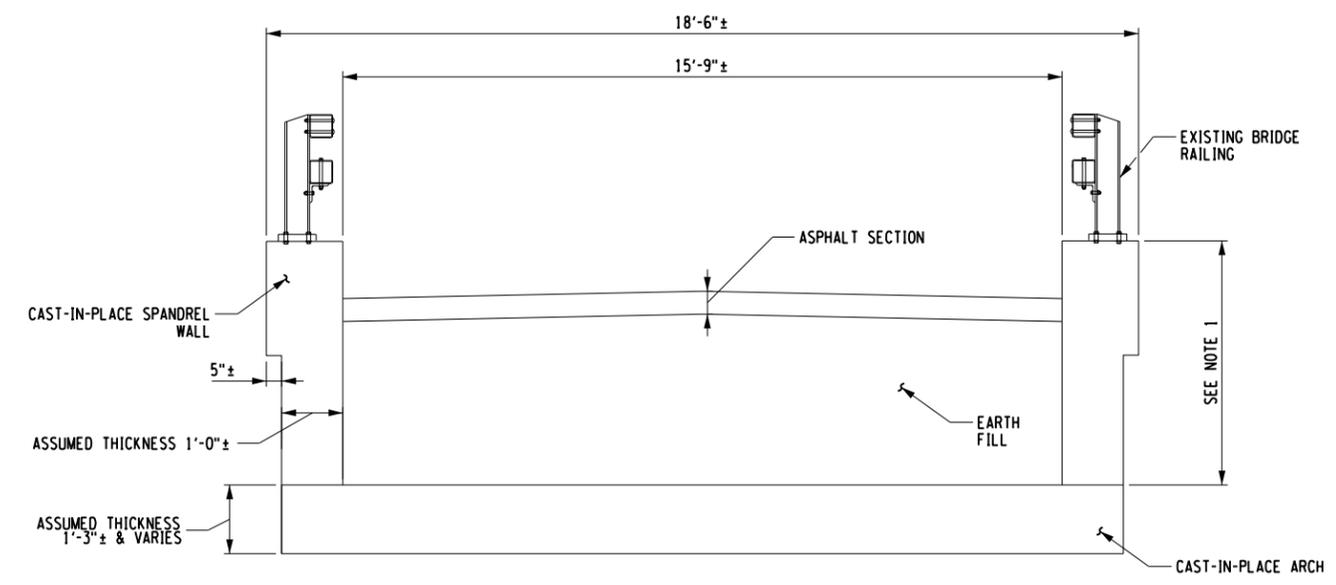


PROFILE - WATERBURG ROAD



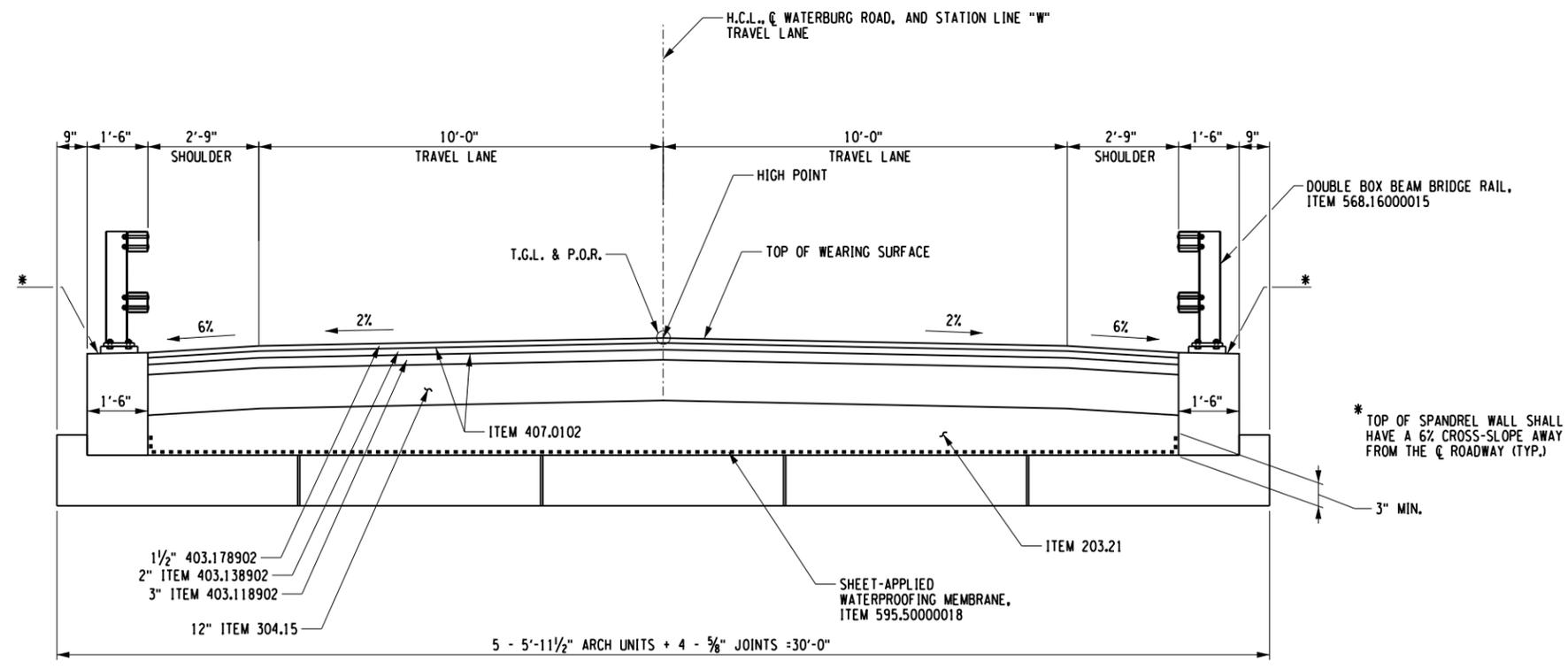
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WATERBURG ROAD OVER TAUGHANNOCK CREEK TOMPKINS COUNTY, NY		
PROFILE		
DELTA ENGINEERS, ARCHITECTS, & LAND SURVEYORS	SCALE AS SHOWN	DRAWING NO. ST-2
	DATE APRIL 2015	SHEET 12 OF 22

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 IN CHARGE OF : JJM
 DESIGNED BY : INKL
 CHECKED BY : RPJ
 DETAILED BY : INKL
 CHECKED BY : RPJ

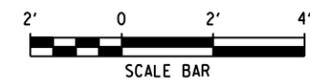


EXISTING BRIDGE SECTION
(LOOKING UPSTATION)

NOTES
 1. SEE PARTIAL ELEVATION ON ST-4 FOR MORE INFORMATION.



PROPOSED BRIDGE SECTION
(LOOKING UPSTATION)



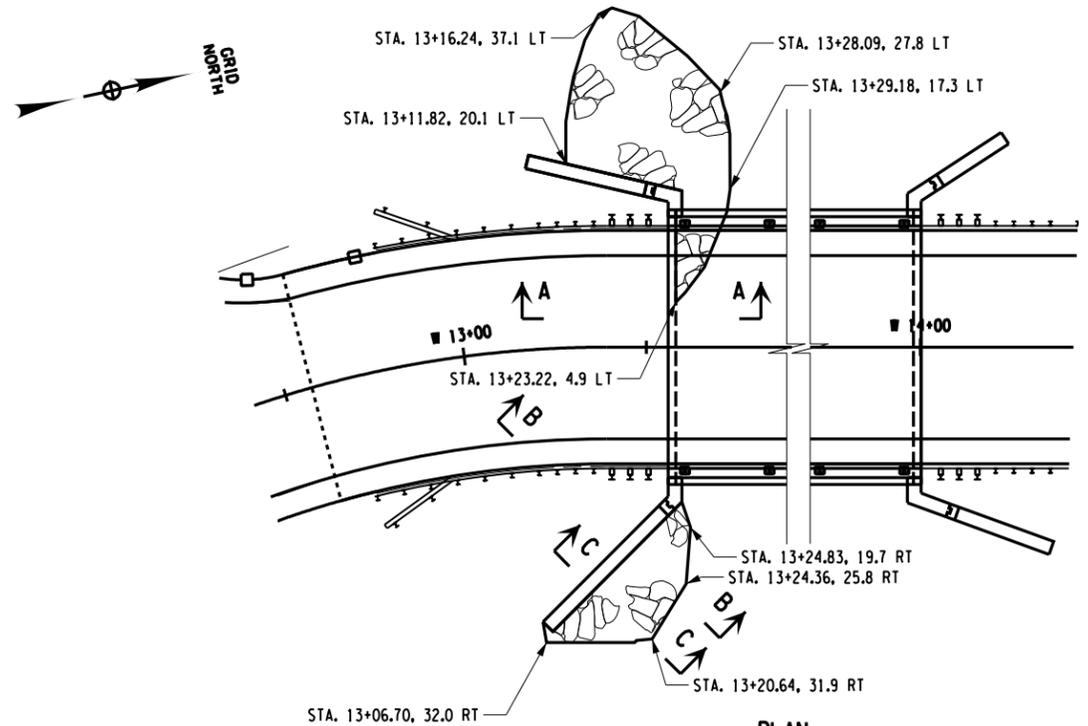
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**WATERBURG ROAD
OVER TAUGHANNOCK CREEK
TOMPKINS COUNTY, NY**

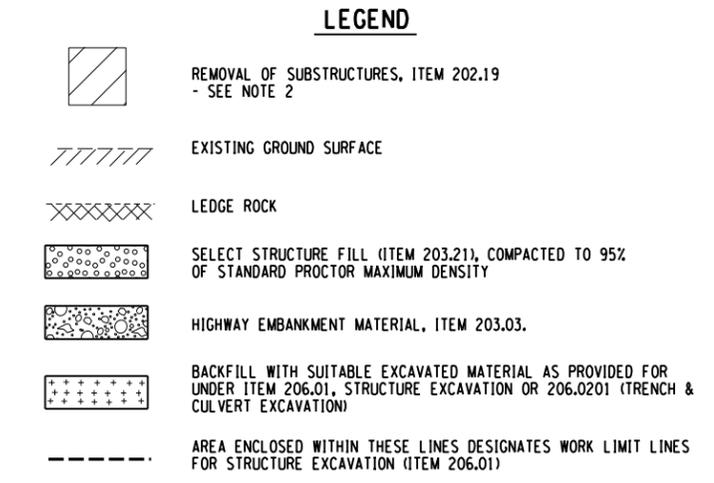
TRANSVERSE BRIDGE SECTIONS

DELTA <small>ENGINEERS, ARCHITECTS, & LAND SURVEYORS</small>	SCALE NONE	DRAWING NO. ST-3
	DATE APRIL 2015	SHEET 13 OF 22

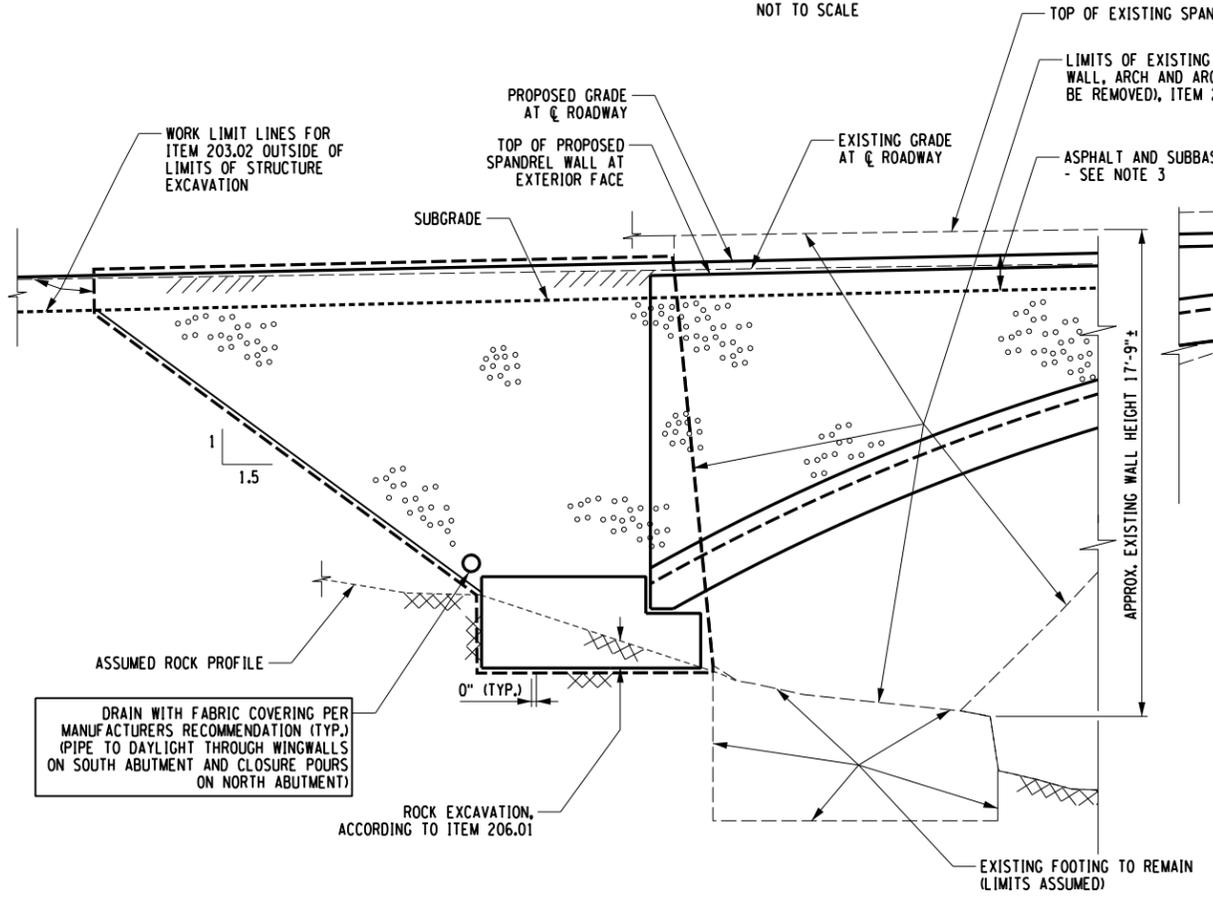
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 IN CHARGE OF : JJM
 DESIGNED BY : INKL
 CHECKED BY : JJM
 DETAILED BY : INKL
 CHECKED BY : JJM
 IF A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL BE FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



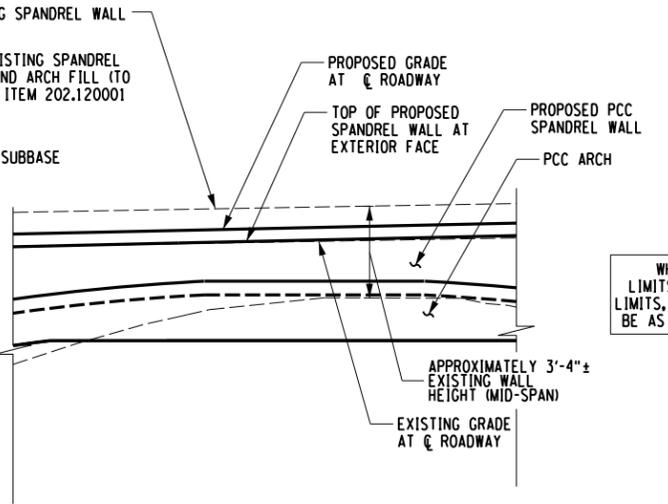
PLAN
NOT TO SCALE



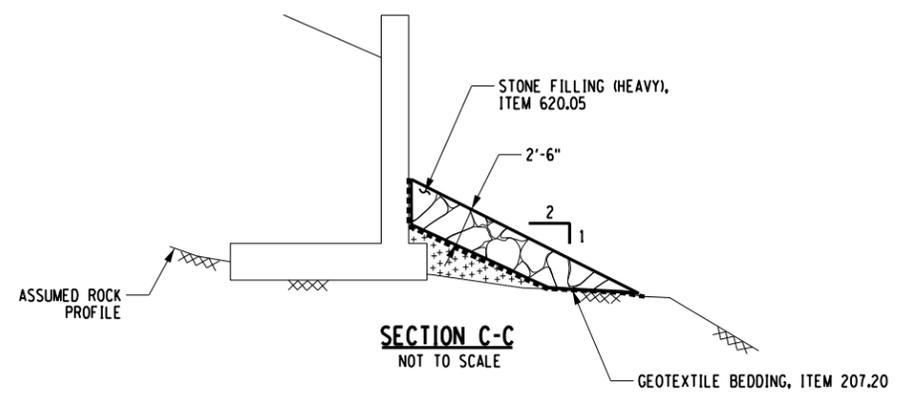
- NOTES:**
1. FOR STRUCTURE EXCAVATION OVER 5'-0" DEEP USE A LAYBACK SLOPE OF 1 VERTICAL TO 1.5 HORIZONTAL FROM THE BOTTOM OF EXCAVATION.
 2. EXCAVATION OF ROCK SHALL BE DONE ACCORDING TO ITEM 206.01.
 3. FOR BRIDGE PAVEMENT SECTION SEE DWG. ST-3.



SECTION A-A
NOT TO SCALE



SECTION B-B
NOT TO SCALE



SECTION C-C
NOT TO SCALE

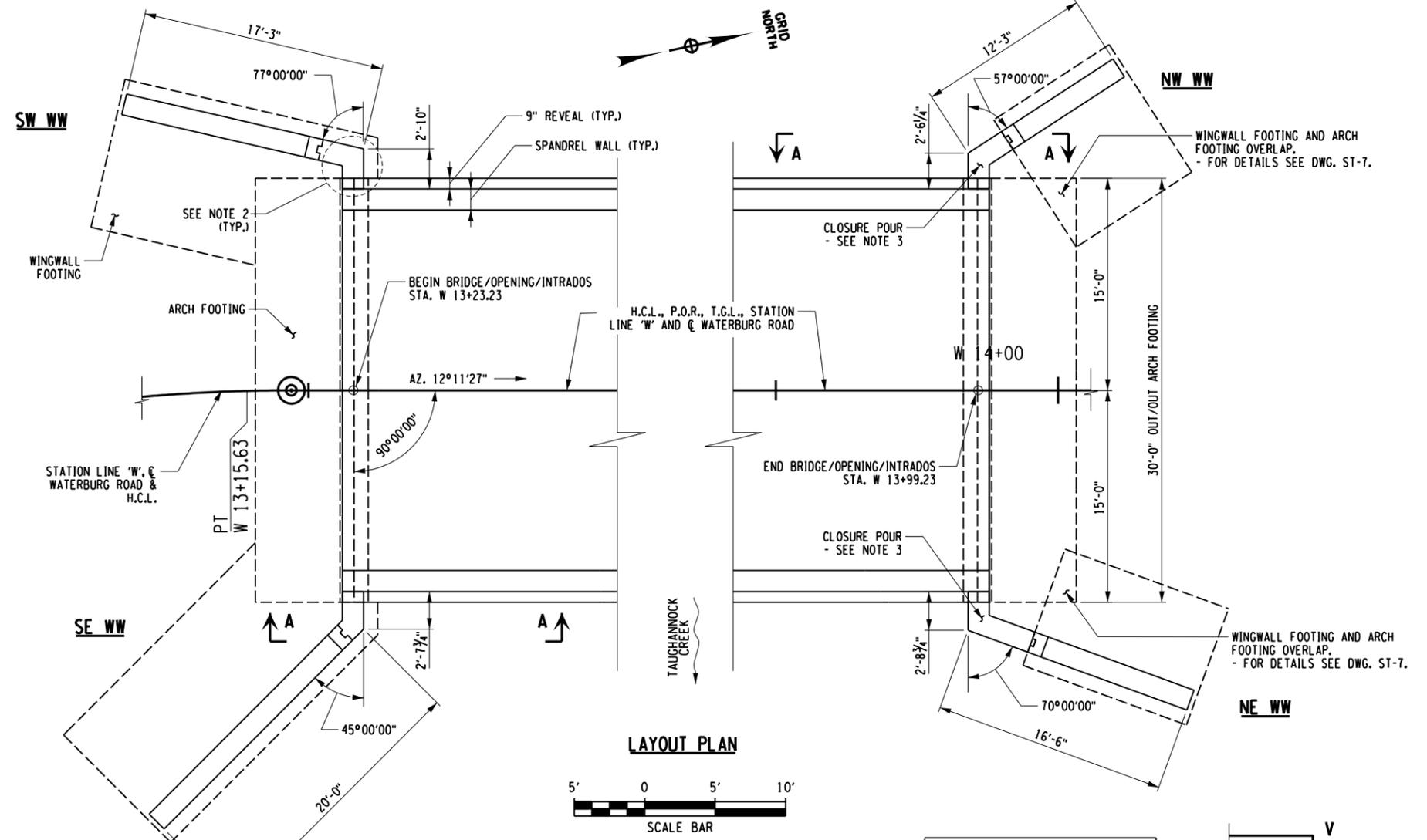
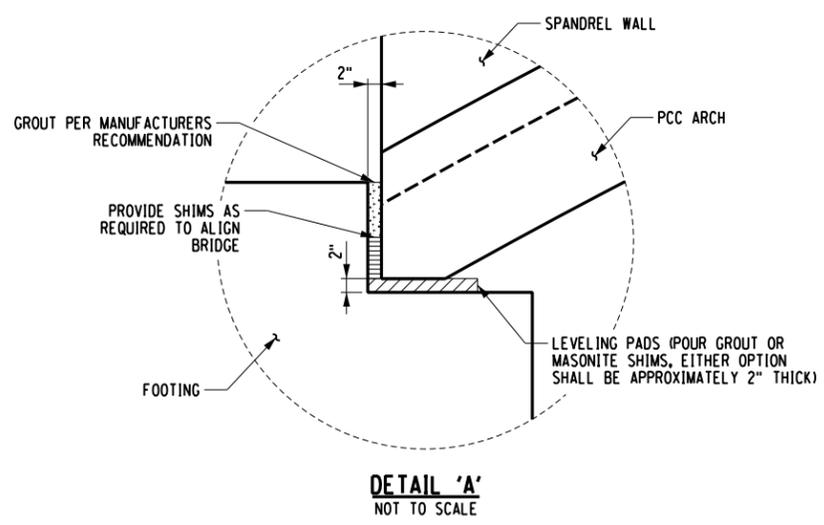
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**WATERBURG ROAD
OVER TAUGHANNOCK CREEK
TOMPKINS COUNTY, NY**

**EXCAVATION AND EMBANKMENT
PLAN AND SECTIONS**

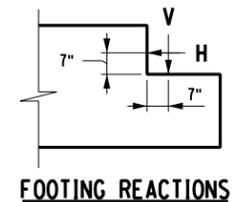
 DELTA <small>ENGINEERS, ARCHITECTS, & LAND SURVEYORS</small>	SCALE AS SHOWN	DRAWING NO. ST-4
	DATE APRIL 2015	SHEET 14 OF 22

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 IN CHARGE OF : JJM
 DESIGNED BY : RPJ
 CHECKED BY : JJM
 TO :
 FROM :
 DETAILED BY : NKL
 CHECKED BY : JJM



ASSUMED FOOTING LOADS

HORIZ. REACTION (UNFACTORED)	DL	61.1 KIPS
	LL	12.4 KIPS
VERT. REACTION (UNFACTORED)	DL	40.0 KIPS
	LL	6.1 KIPS



THE ARCH FOOTING IS DESIGNED FOR THE ASSUMED FOOTING LOADS SHOWN IN THE TABLE. THE CONTRACTOR'S LICENSED PROFESSIONAL ENGINEER SHALL VERIFY THAT THE FOOTING DESIGN SHOWN IS ACCEPTABLE FOR THE ACTUAL STRUCTURE PROVIDED.

PRECAST ARCH DESIGN DATA

CLEAR SPAN, ft.	76'-0"
ARCH (INTRADOS) RISE, ft.	9'-4"
MIN. FILL HEIGHT, ft.	*
MAX. FILL HEIGHT, ft.	*
(CSKEW) SKEW ANGLE ⊥ TO @ OF ROADWAY, DEG.	00°00'00"
LIVE LOAD	HL-93
RAILING/ BARRIER TEST LOAD	TL-2

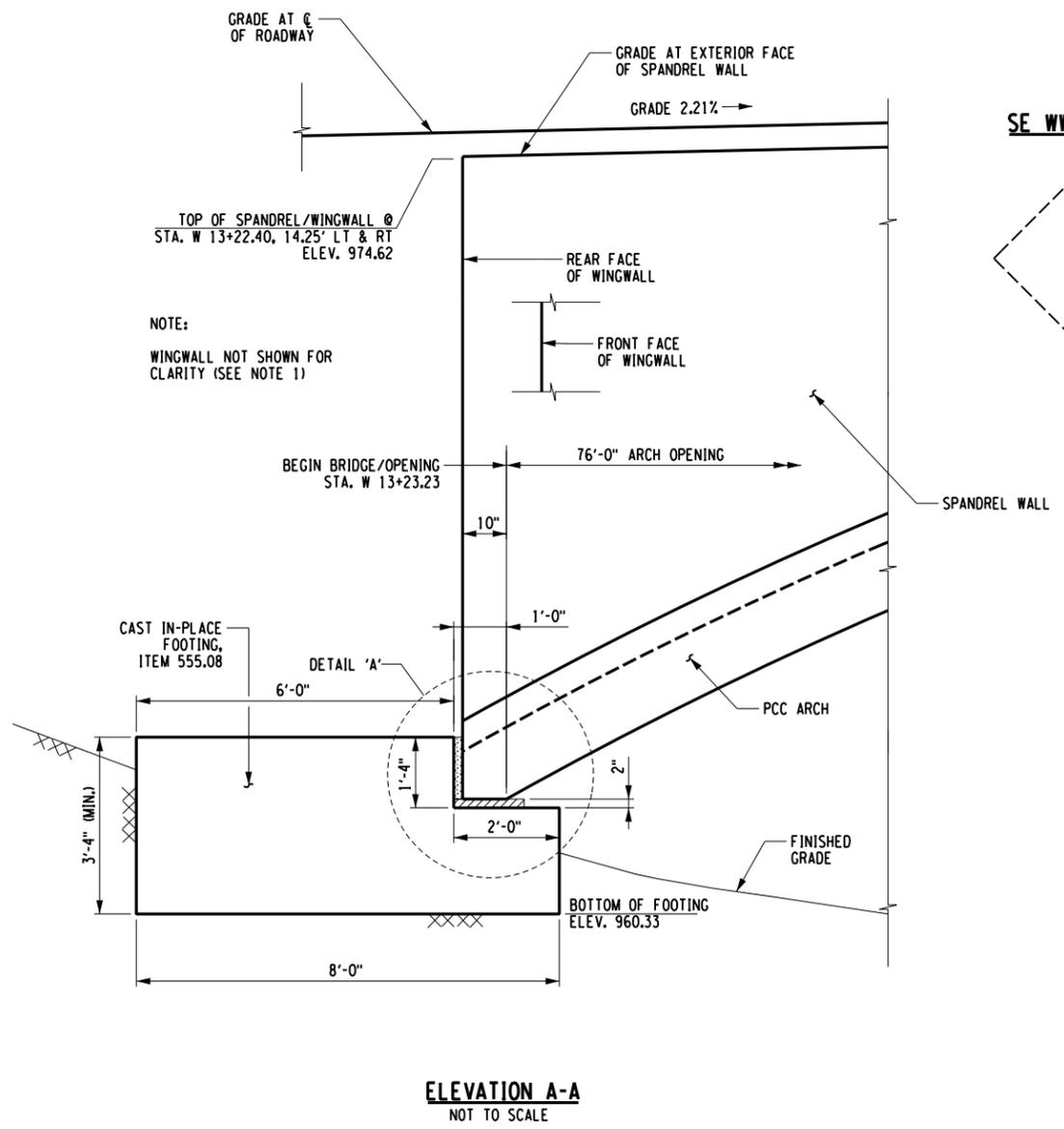
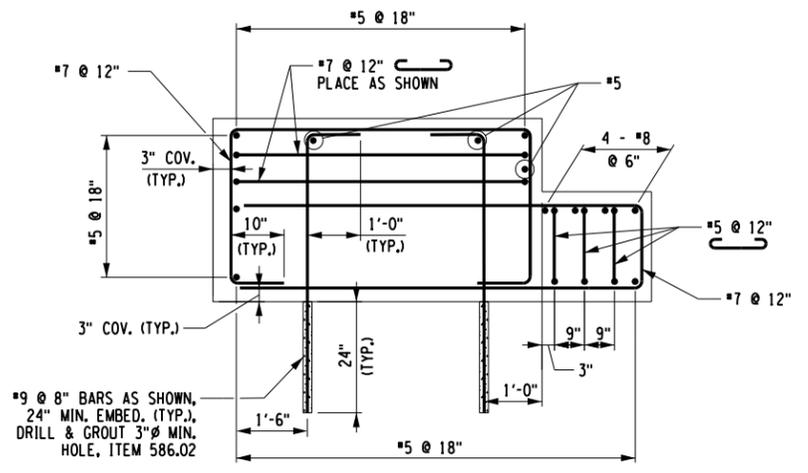
- NOTES:
- FOR WINGWALL ELEVATIONS SEE DWG. ST-6 & ST-7.
 - FOR WINGWALL TO SPANDREL WALL TIE-IN DETAILS AT SOUTH END, SEE DWG. ST-8.
 - FOR WINGWALL TO SPANDREL WALL CLOSURE POUR DETAILS AT NORTH END, SEE DWG. ST-8.

BIN:3314400

**WATERBURG ROAD
OVER TAUGHANNOCK CREEK
TOMPKINS COUNTY, NY**

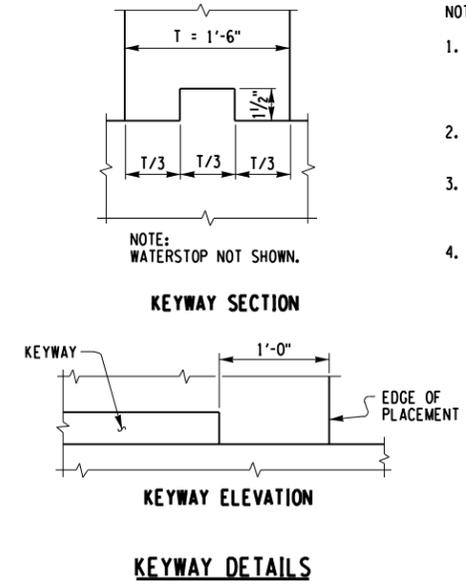
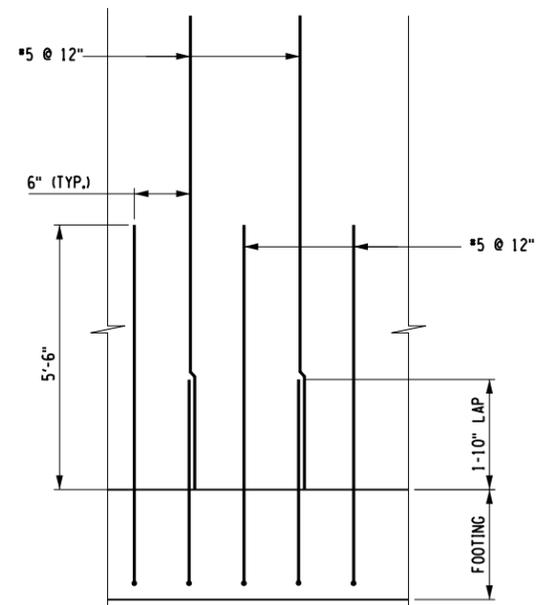
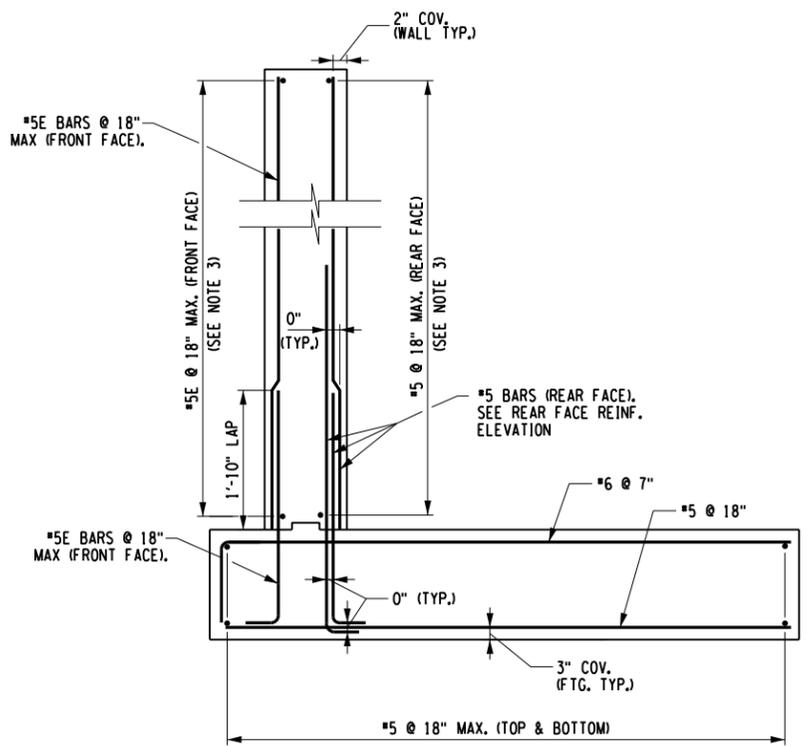
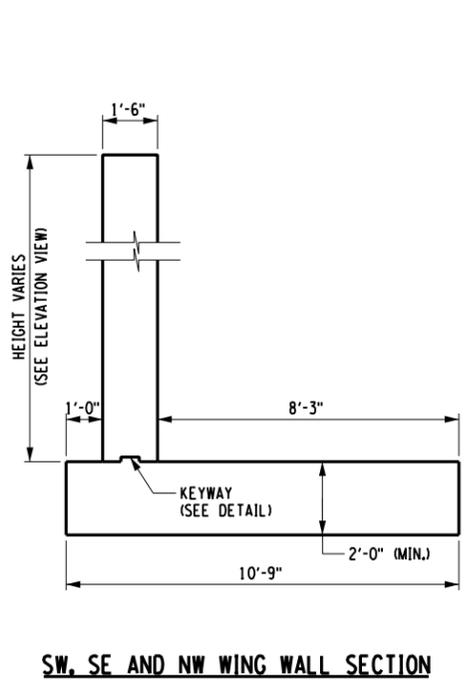
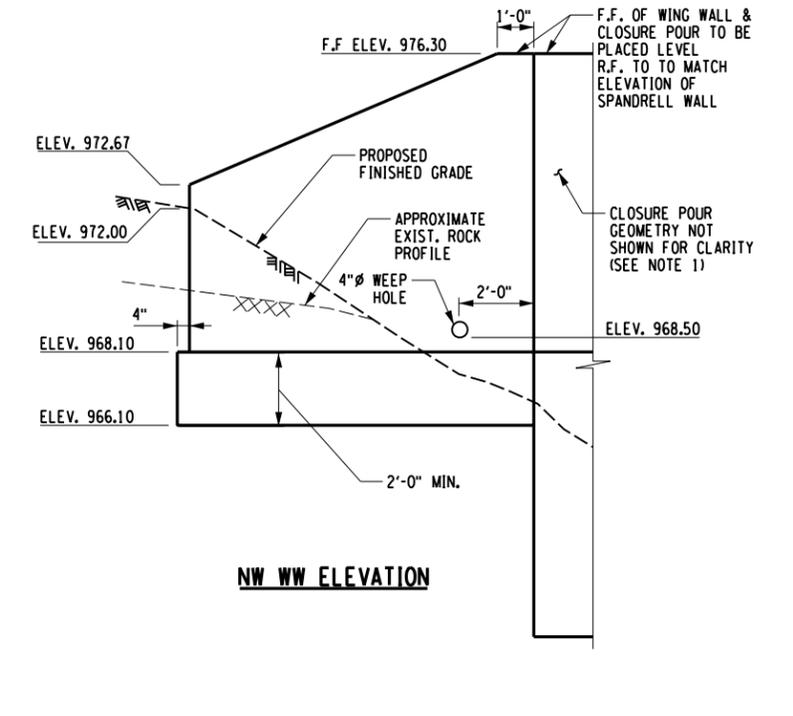
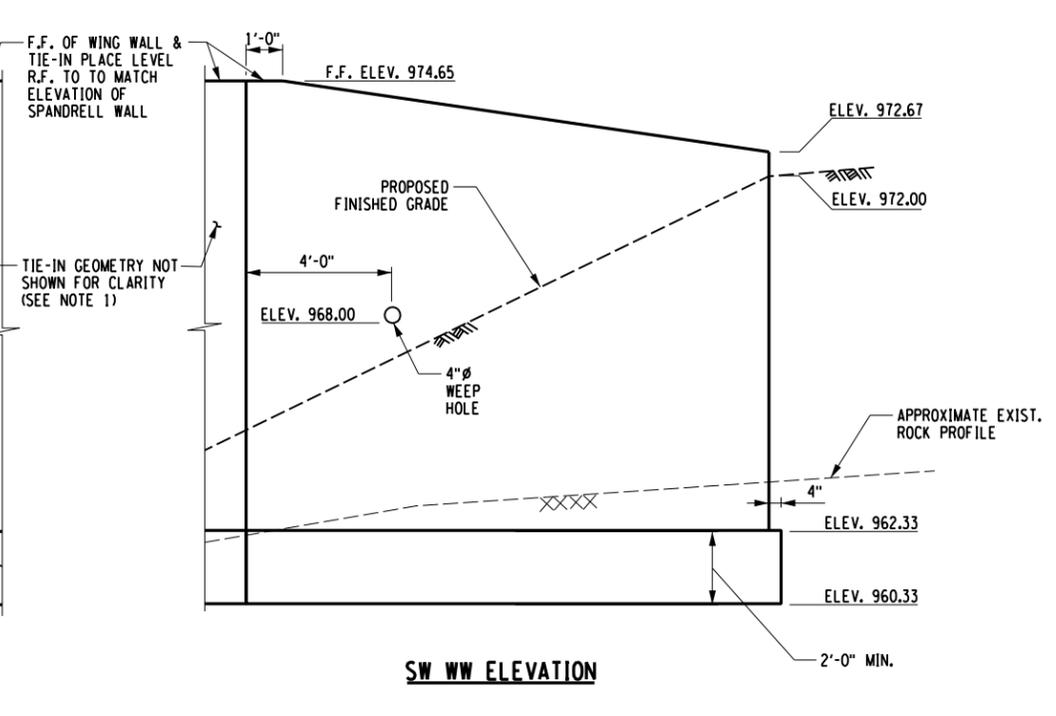
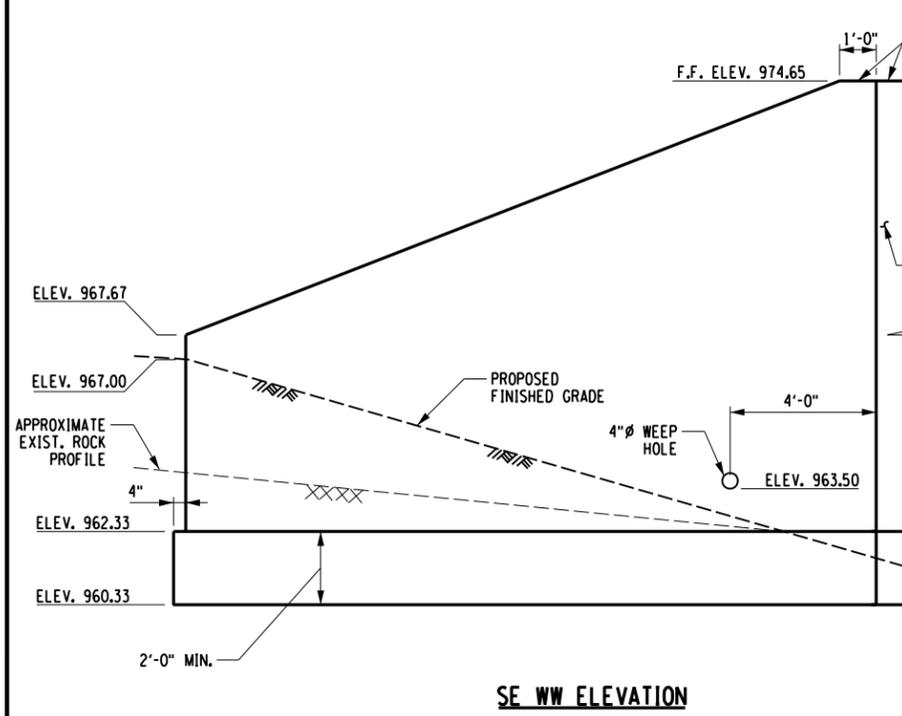
PRECAST ARCH PLAN AND FOOTING SECTION

DELTA ENGINEERS, ARCHITECTS, & LAND SURVEYORS	SCALE AS SHOWN	DRAWING NO. ST-5
	DATE APRIL 2015	SHEET 15 OF 22



* LAYOUT BASED ON ARCH THICKNESS AT PEAK OF 1'-8". FABRICATOR SHALL CONFIRM FILL HEIGHT AND RISE COMPATIBILITY TO ACCOMMODATE ROADWAY PROFILE.

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 IN CHARGE OF : JJM
 DESIGNED BY : RPU
 CHECKED BY : JJM
 DETAILED BY : NKJ
 CHECKED BY : JJM



- NOTES**
1. FOR GENERAL WINGWALL LAYOUT SEE DWG. ST-5. FOR DETAILS OF TIE-IN GEOMETRY AT BEGIN AND CLOSURE POURS AT END ABUTMENT SEE DWG. ST-8.
 2. FOR END RIGHT WINGWALL ELEVATION AND SECTION SEE DWG. ST-7.
 3. AT END ABUTMENT WINGWALLS EXTEND THESE BARS INTO THE CLOSURE POUR. FOR DETAILS SEE DWG. ST-8.
 4. 'E' DENOTES EPOXY COATED BAR.

REAR FACE REINFORCEMENT PATTERN
 ALL WING WALL REINFORCEMENT ACCORDING TO ITEM 556.0202 OR 556.0201

SW, SE AND NW WING WALL REINFORCEMENT SECTION
 ALL WING WALL REINFORCEMENT ACCORDING TO ITEM 556.0202 OR 556.0201

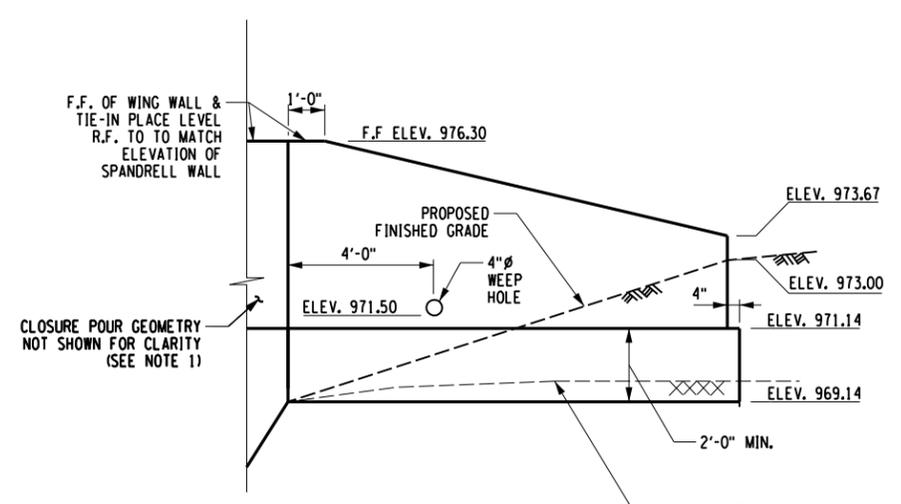
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**WATERBURG ROAD
 OVER TAUGHANNOCK CREEK
 TOMPKINS COUNTY, NY**

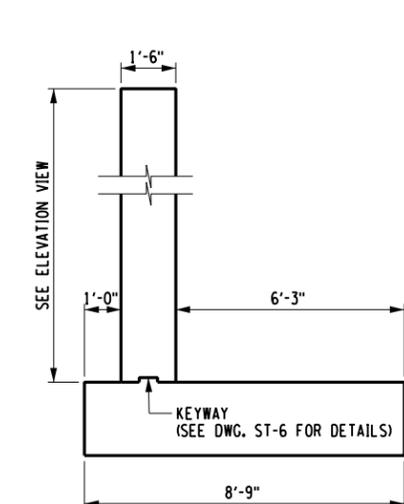
WINGWALL ELEVATIONS AND SECTIONS I

DELTA ENGINEERS, ARCHITECTS, & LAND SURVEYORS	SCALE NONE	DRAWING NO. ST-6
	DATE APRIL 2015	SHEET 16 OF 22

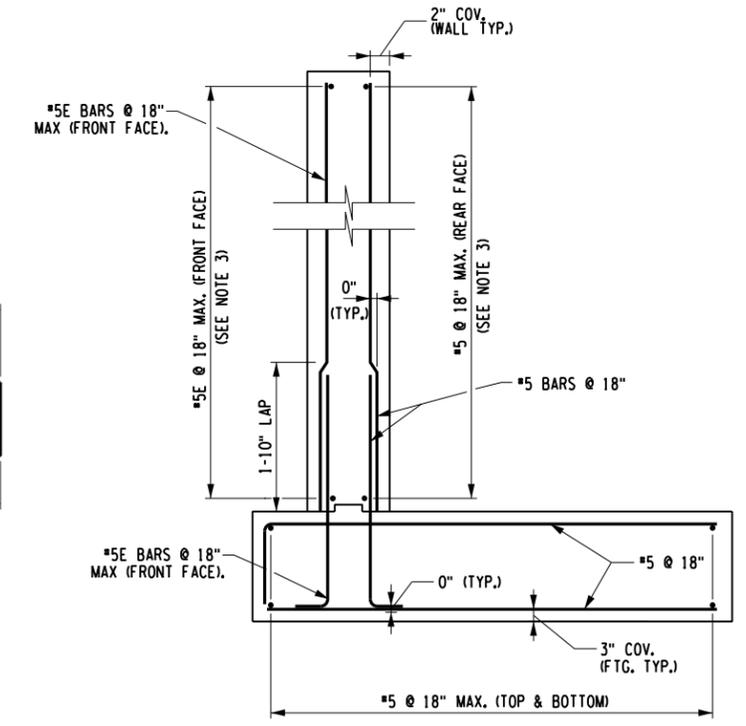
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 IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL 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.
 DESIGNED BY: RPJ
 CHECKED BY: JJM
 IN CHARGE OF: JJM
 DETAILED BY: NKL
 CHECKED BY: NKL



NE WW ELEVATION
NOT TO SCALE

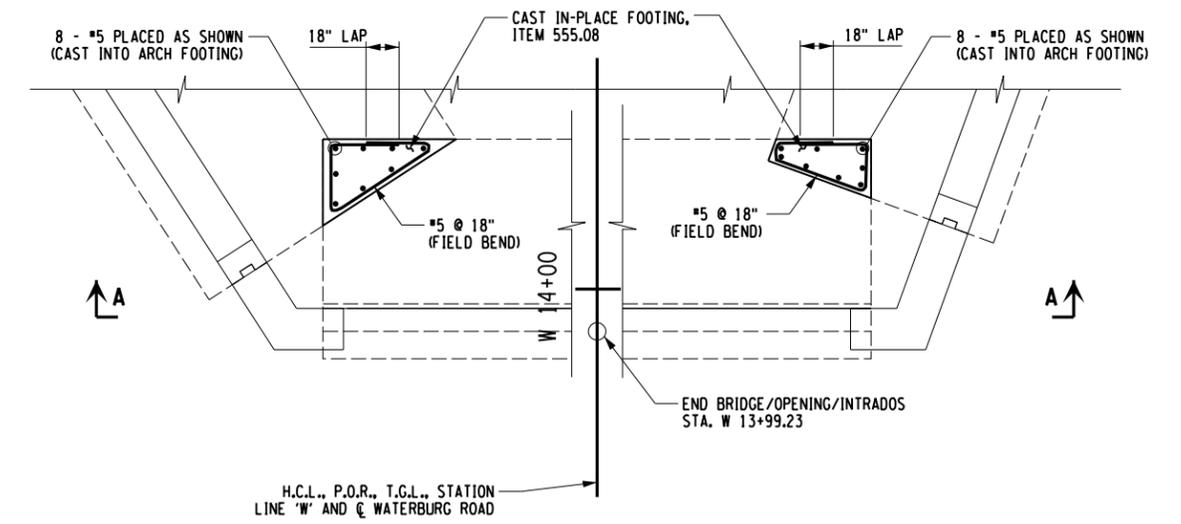


NE WING WALL SECTION

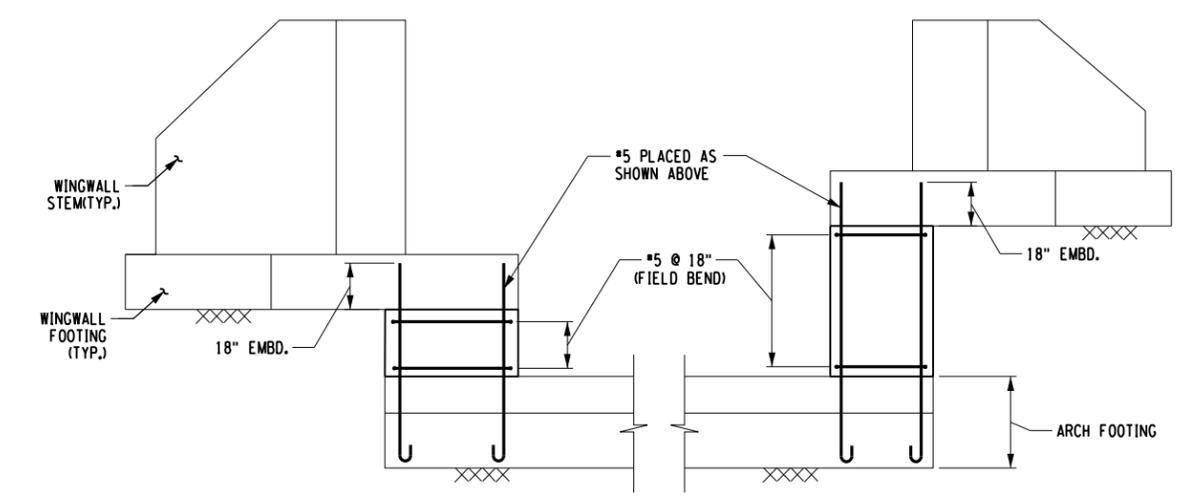


NE WING WALL REINFORCEMENT SECTION

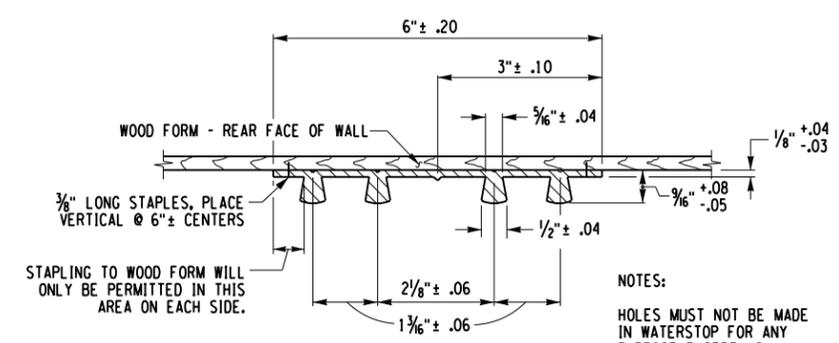
ALL WING WALL REINFORCEMENT ACCORDING TO ITEM 556.0202 OR 556.0201



PARTIAL PLAN (NORTH ABUTMENT)
NOT TO SCALE



ELEVATION A-A
NOT TO SCALE



TYPE D WATERSTOP
NOT TO SCALE

NOTES:
 HOLES MUST NOT BE MADE IN WATERSTOP FOR ANY PURPOSE EXCEPT AS REQUIRED FOR STAPLING TO FORMS.
 TYPE D WATERSTOP SHALL BE LIGHT GRAY IN COLOR.

- NOTES
- FOR GENERAL WINGWALL LAYOUT SEE DWG. ST-5. FOR DETAILS OF TIE-IN GEOMETRY AT BEGIN AND CLOSURE POURS AT END ABUTMENT SEE DWG. ST-8.
 - FOR OTHER WINGWALL ELEVATIONS AND SECTIONS SEE DWG. ST-6.
 - AT END ABUTMENT WINGWALLS EXTEND THESE BARS INTO THE CLOSURE POUR. FOR DETAILS SEE DWG. ST-8.
 - 'E' DENOTES EPOXY COATED REINFORCEMENT.

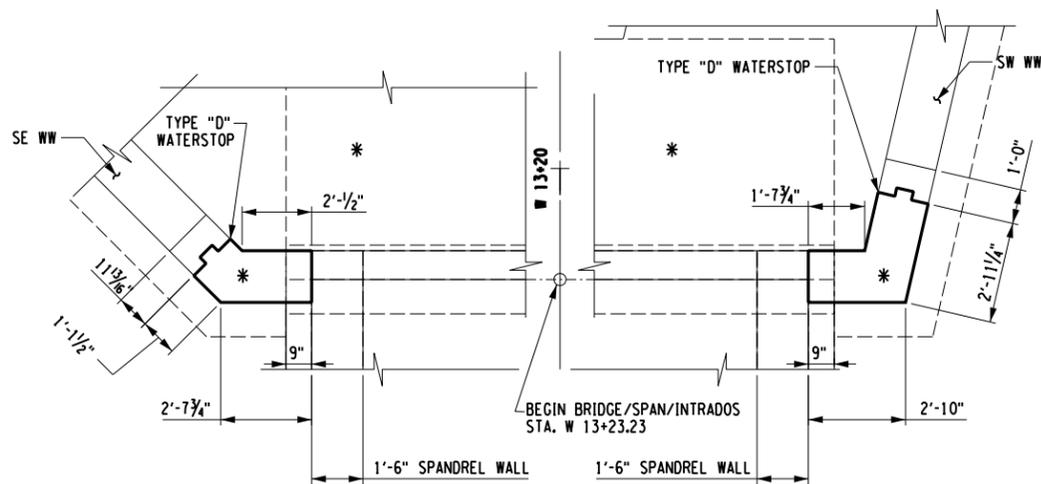
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**WATERBURG ROAD
OVER TAUGHANNOCK CREEK
TOMPKINS COUNTY, NY**

WINGWALL ELEVATION & SECTION II

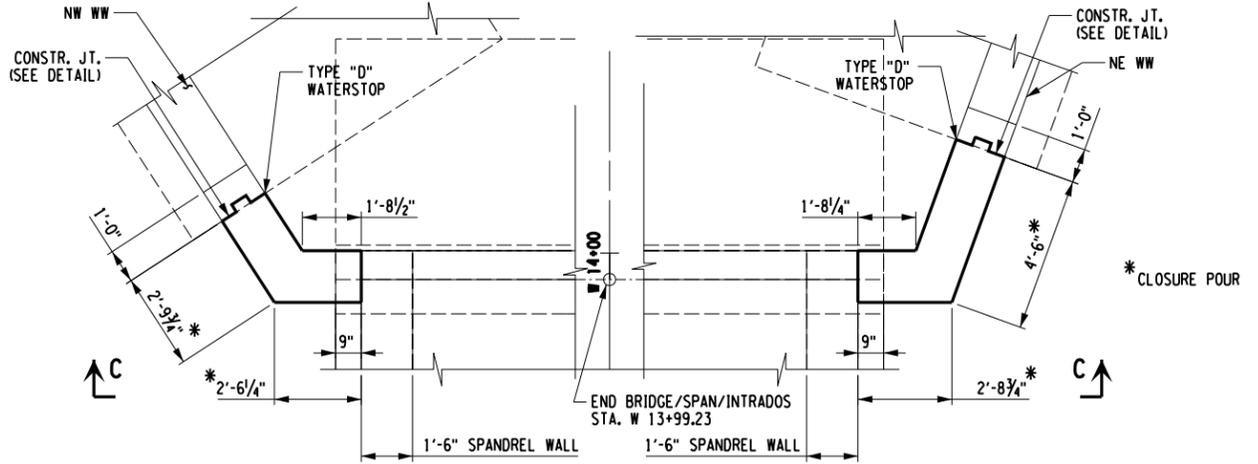
DELTA ENGINEERS, ARCHITECTS, & LAND SURVEYORS	SCALE AS SHOWN	DRAWING NO. ST-7
	DATE APRIL 2015	SHEET 17 OF 22

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 CHECKED BY: JUM
 IN CHARGE OF: JUM
 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.
 CHECKED BY: JUM
 DETAILED BY: NKL
 CHECKED BY: NKL

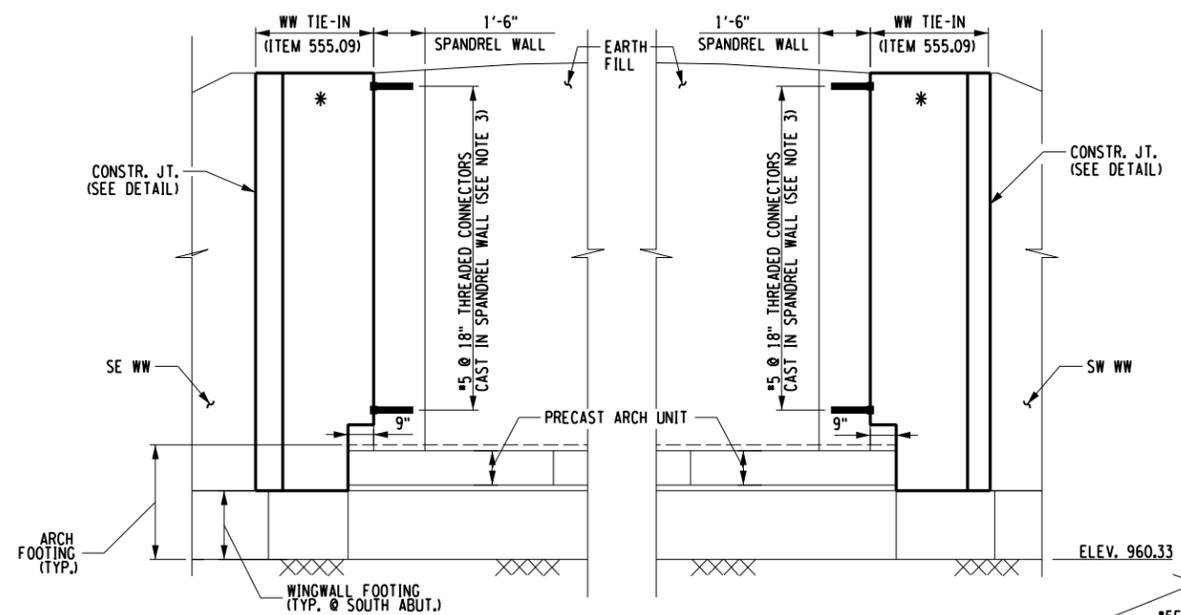


SOUTH ABUTMENT PLAN
(NOT TO SCALE)

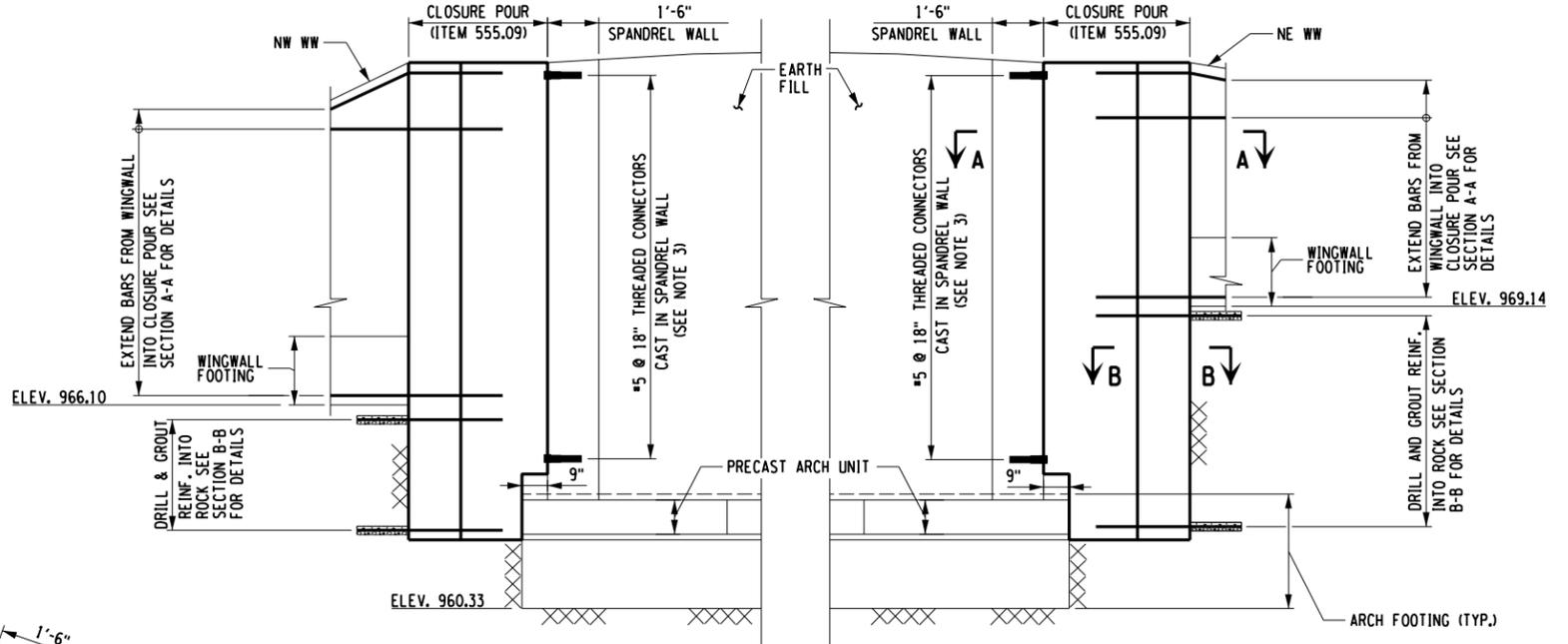
* SEE NOTE 2



NORTH ABUTMENT PLAN
(NOT TO SCALE)

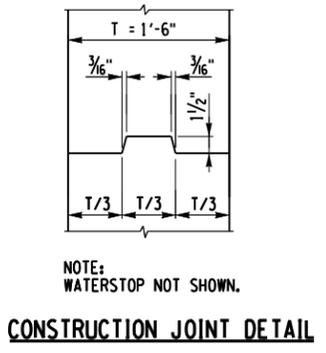


SOUTH ABUTMENT ELEVATION
(NOT TO SCALE)
SEE NOTE 4

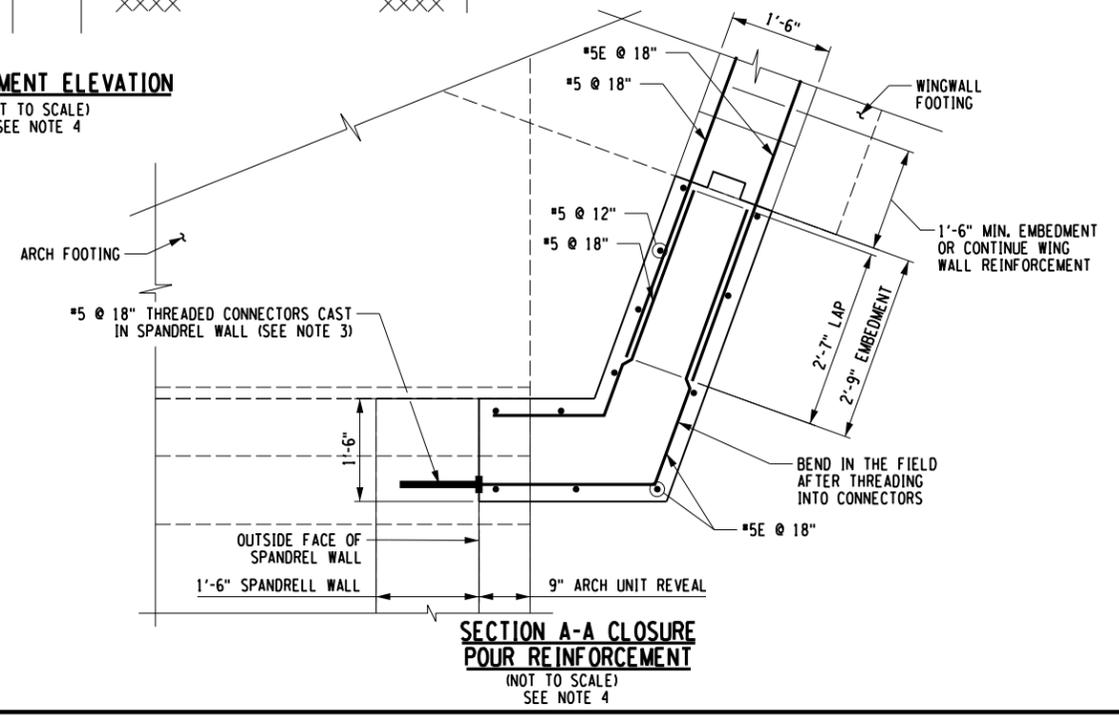


NORTH ABUTMENT ELEVATION - VIEW C-C
(NOT TO SCALE)
SEE NOTE 4

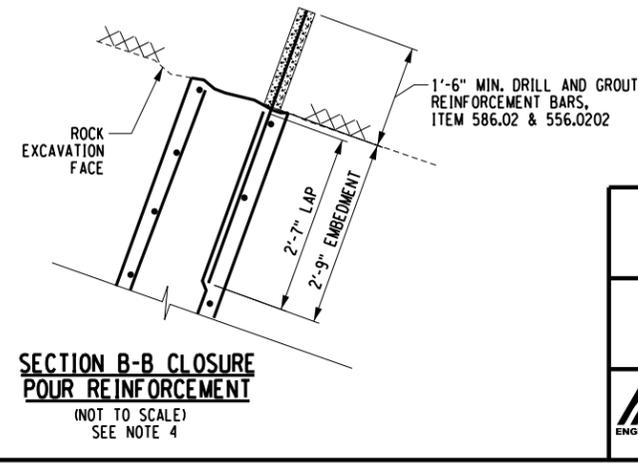
- NOTES:
1. FOR WINGWALL LAYOUT SEE DWG. ST-5.
 2. WINGWALL FOOTING AND ARCH FOOTING REINFORCEMENT SHALL PROJECT AND OVERLAP INTO EACH OTHER WHILE MAINTAINING PATTERN AS SHOWN IN THE APPROPRIATE REINFORCEMENT CROSS SECTIONS. WINGWALL TIE-IN REINFORCEMENT SHALL BE MAINTAINED AS DEPICTED IN THE WING WALL CROSS-SECTIONS WITH THE ADDITION OF THE #5 @ 18" THREADED CONNECTORS AS DEPICTED ON SECTION A-A (THIS SHEET).
 3. THREADED CONNECTORS TO BE DESIGNED AND PROVIDED BY MANUFACTURER.
 4. ALL TIE-IN AND CLOSURE POUR REINFORCEMENT ACCORDING TO ITEM 556.0201 OR 556.0202 AS INDICATED.
 5. FOR WATERSTOP DETAILS SEE DWG. ST-7.
 6. E = INDICATES EPOXY COATED.



NOTE:
WATERSTOP NOT SHOWN.
CONSTRUCTION JOINT DETAIL



SECTION A-A CLOSURE POUR REINFORCEMENT
(NOT TO SCALE)
SEE NOTE 4



SECTION B-B CLOSURE POUR REINFORCEMENT
(NOT TO SCALE)
SEE NOTE 4

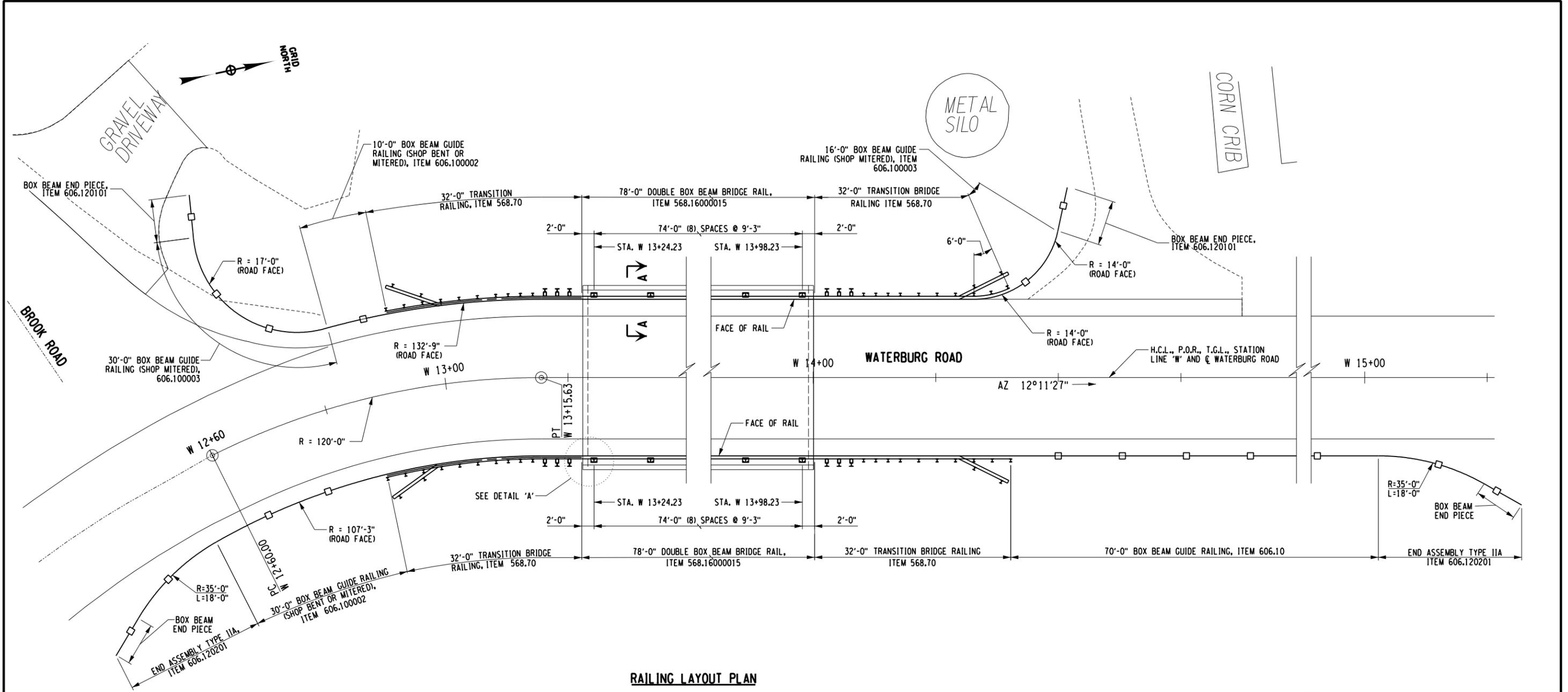
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**WATERBURG ROAD
OVER TAUGHANNOCK CREEK
TOMPKINS COUNTY, NY**

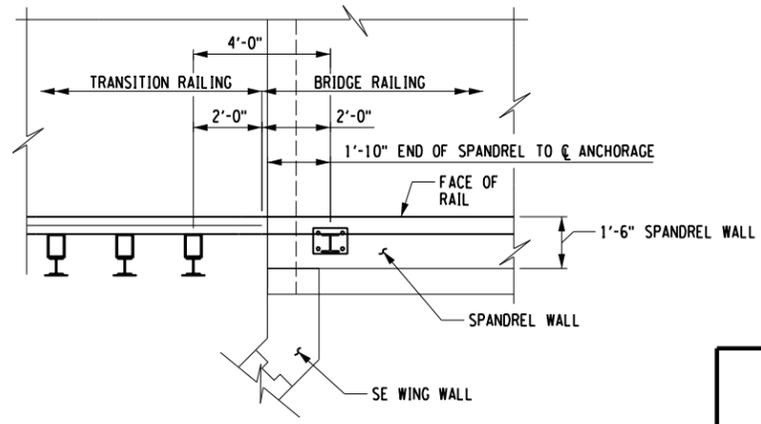
**CLOSURE POUR AND WINGWALL
TIE-IN DETAILS**

 DELTA ENGINEERS, ARCHITECTS, & LAND SURVEYORS	SCALE NONE	DRAWING NO. ST-8
	DATE APRIL 2015	SHEET 18 OF 22

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 IN CHARGE OF : JJM
 DESIGNED BY : INKL
 CHECKED BY : JJM
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 CHECKED BY : JJM
 IF THERE IS 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.



RAILING LAYOUT PLAN



DETAIL 'A'
NOT TO SCALE

NOTE:
DETAIL SHOWN AT SE WING WALL, OTHERS SIMILAR

- NOTES**
- 1) SEE DWG. ST-10 FOR SECTION A-A.
 - 2) BRIDGE RAILS SHALL SPAN A MINIMUM OF THREE POSTS.

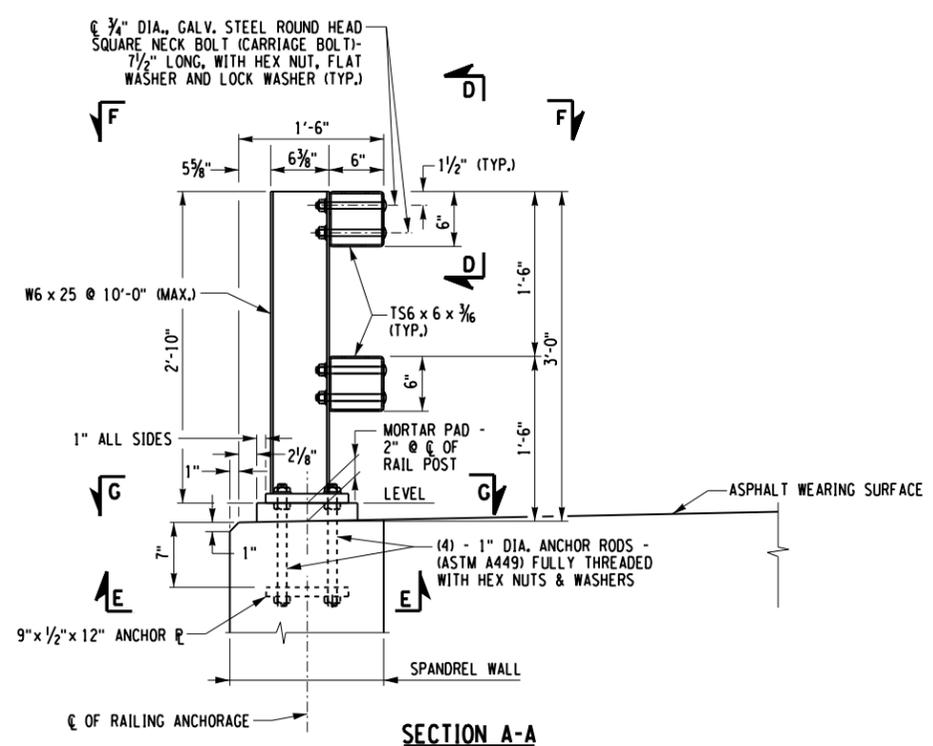
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**WATERBURG ROAD
OVER TAUGHANNOCK CREEK
TOMPKINS COUNTY, NY**

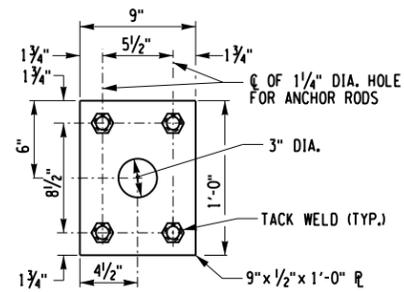
RAILING LAYOUT PLAN

DELTA <small>ENGINEERS, ARCHITECTS, & LAND SURVEYORS</small>	SCALE AS SHOWN	DRAWING NO. ST-9
	DATE APRIL 2015	SHEET 19 OF 22

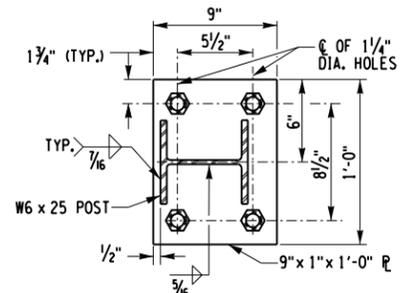
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 IN CHARGE OF : JJM
 DESIGNED BY : INKL
 CHECKED BY : JJM
 DETAILED BY : INKL
 I AM A VIOLATION OF LAW FOR ANY PERSON UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR. TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL 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.



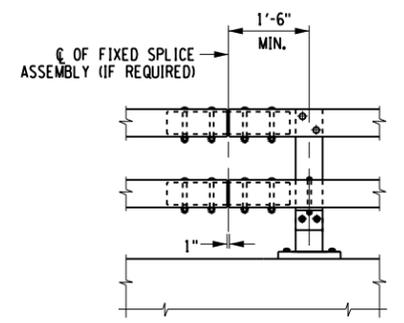
SECTION A-A



VIEW E-E (ANCHOR PLATE)

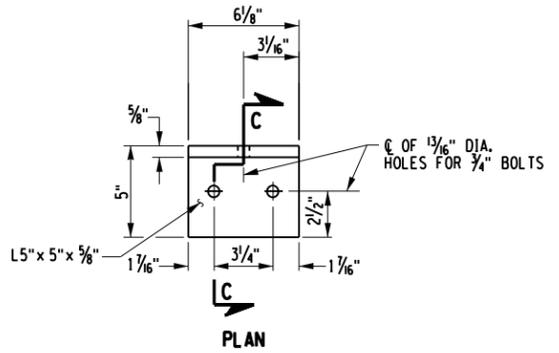


SECTION G-G (BASE PLATE)

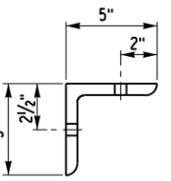


ELEVATION

STEEL BRIDGE RAILING SPLICE DETAILS

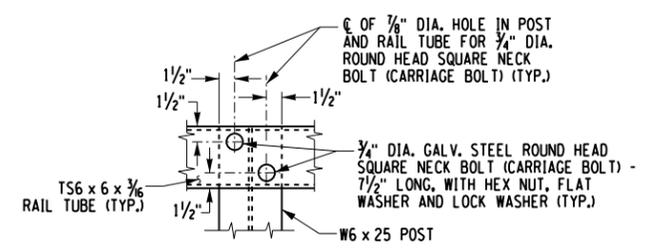


PLAN

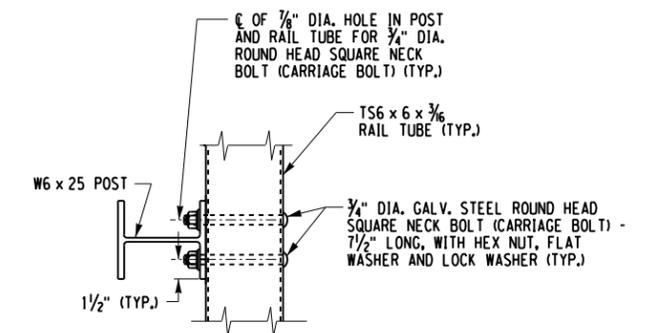


SECTION C-C

RAILING ANGLE DETAILS



SECTION D-D



SECTION F-F

- NOTES:
1. ALL RAILING IS TO BE FABRICATED AND ERECTED ACCORDING TO SECTION 568 OF THE STANDARD SPECIFICATIONS.
 2. PRIOR TO GALVANIZING THE ASSEMBLED POST, GRIND ALL EDGES TO A MINIMUM RADIUS OF 1/16".
 3. BOLTS SHALL BE TORQUED SNUG TIGHT (APPROXIMATELY 100 FT-LB.).
 4. FOR SPLICE DETAILS SEE DWG. NO. ST-12.
 5. ALL STEEL SHALL BE GALVANIZED AFTER WELDING IN ACCORDANCE WITH THE N.Y.S. STANDARD SPECIFICATION SUBSECTION 719-01.
 6. HOLES IN THE POST FOR THE LOWER RAIL MAY BE LOCATED AND DRILLED IN THE FIELD. IF SO, THE GALVANIZING SHALL BE REPAIRED IN ACCORDANCE WITH SUBSECTION 719-01 OF THE N.Y.S. STANDARD SPECIFICATIONS.

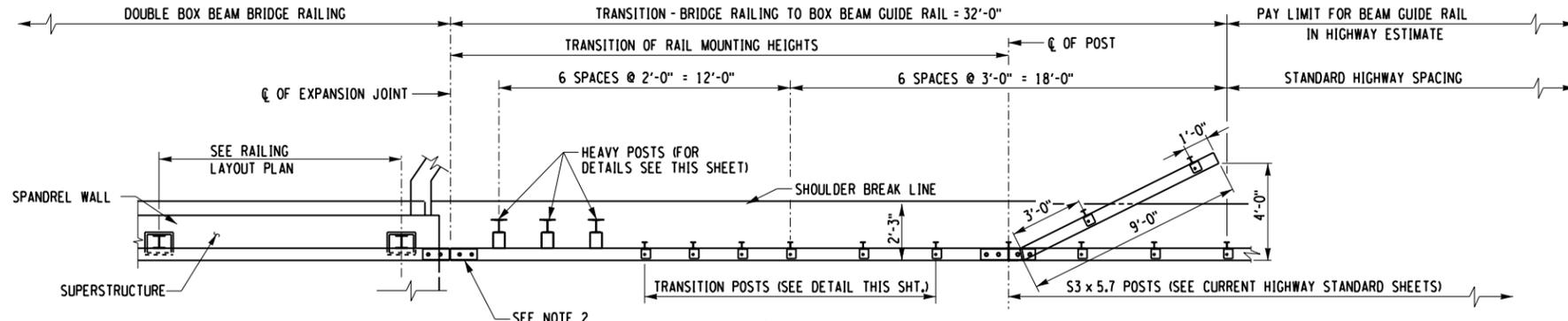
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**WATERBURG ROAD
OVER TAUGHANNOCK CREEK
TOMPKINS COUNTY, NY**

**DOUBLE BOX BEAM BRIDGE RAIL
(LOW VOLUME BRIDGE)**

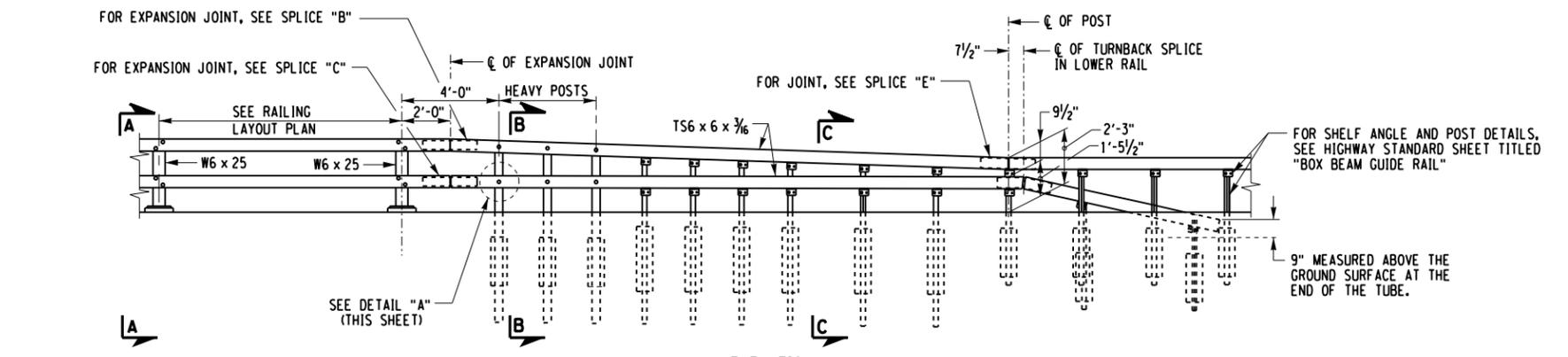
DELTA <small>ENGINEERS, ARCHITECTS, & LAND SURVEYORS</small>	SCALE NONE	DRAWING NO. ST-10
	DATE APRIL 2015	SHEET 20 OF 22

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 DESIGNED BY : INKL
 CHECKED BY : JJM
 DETAILED BY : INKL
 CHECKED BY : JJM
 I AM 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.

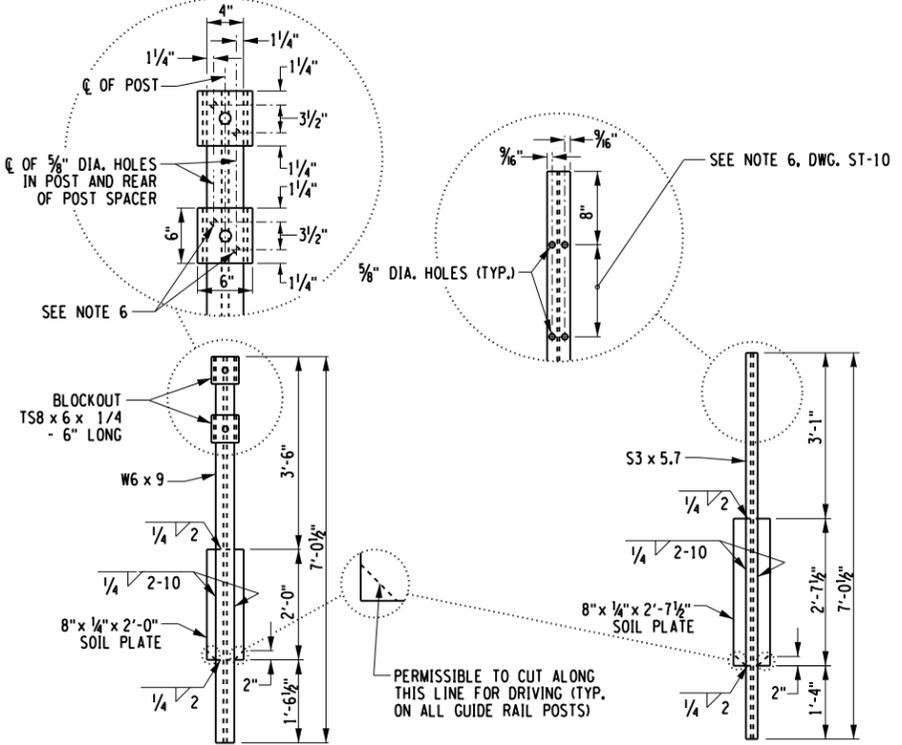
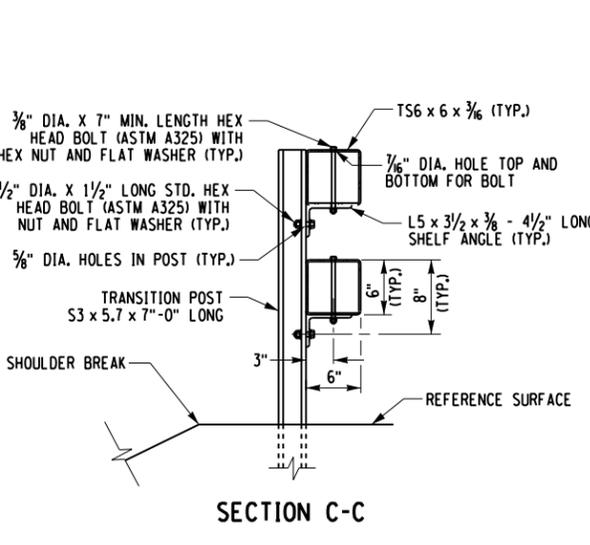
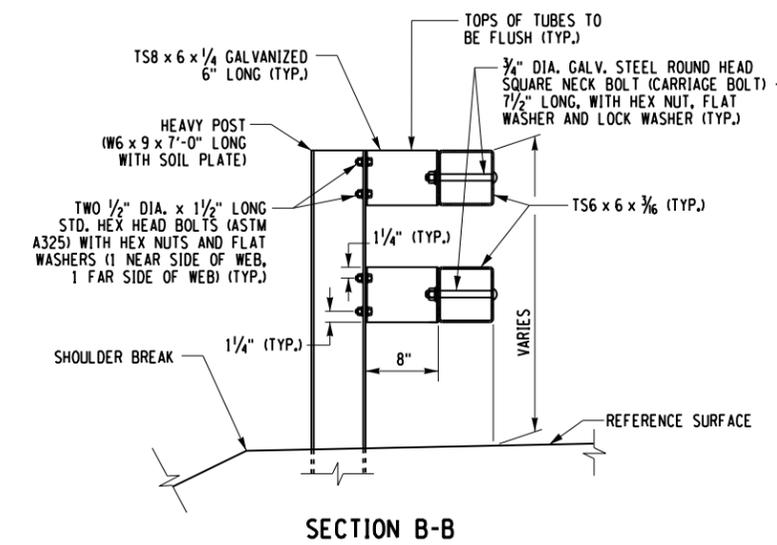


* PLAN

* SEE RAILING LAYOUT PLAN FOR RAIL CURVATURE DETAILS

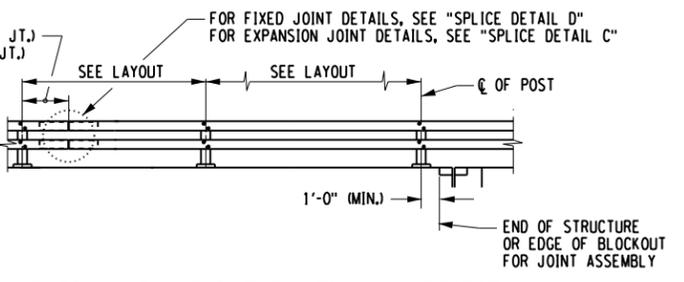


RAILING TRANSITION TO HIGHWAY BOX BEAM GUIDE RAIL

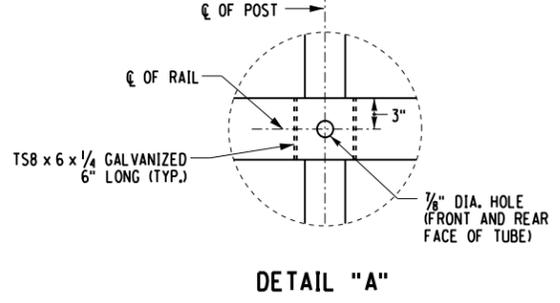


HEAVY POST NOT TO SCALE

TRANSITION POST NOT TO SCALE



- NOTES:
- FOR SECTION A-A SEE DWG. ST-10.
 - FOR SPLICE DETAILS SEE DWG. ST-12.



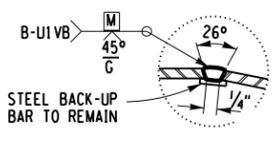
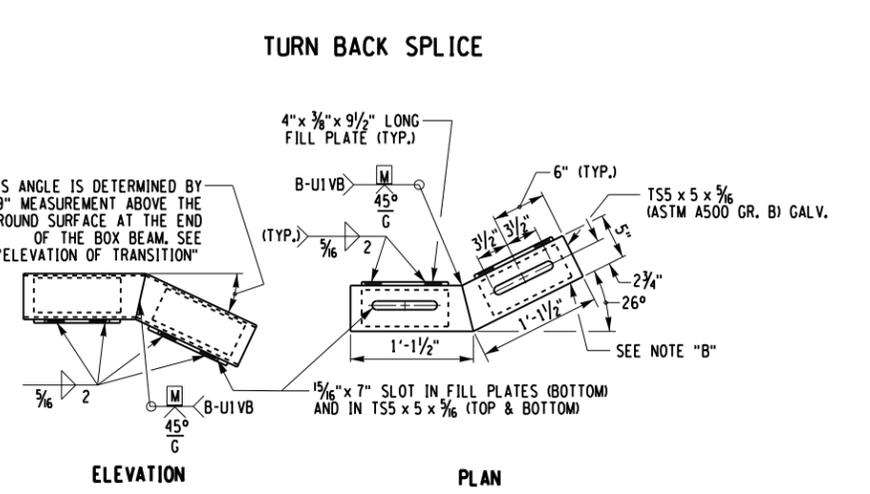
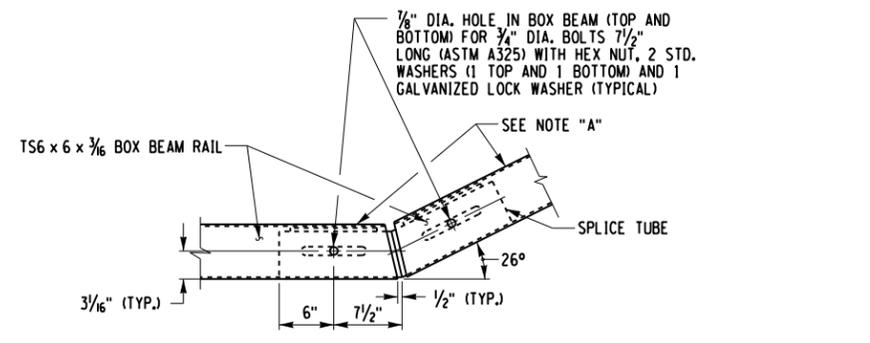
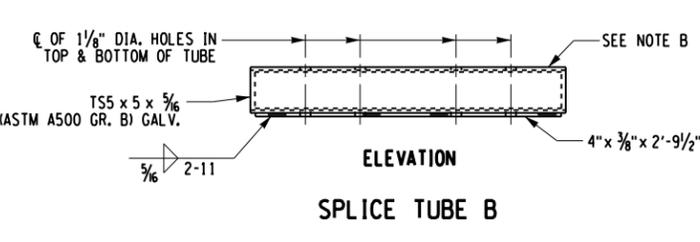
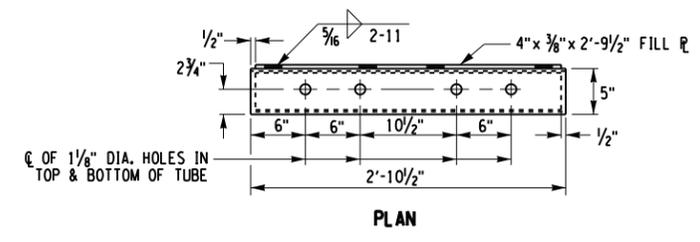
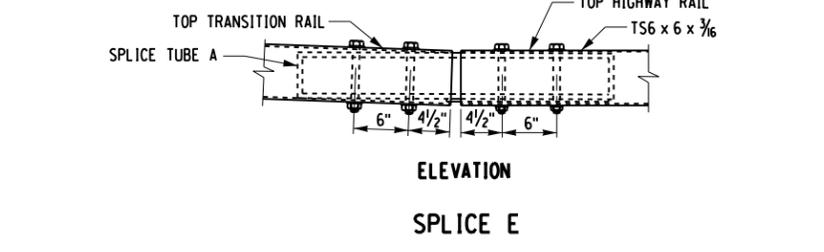
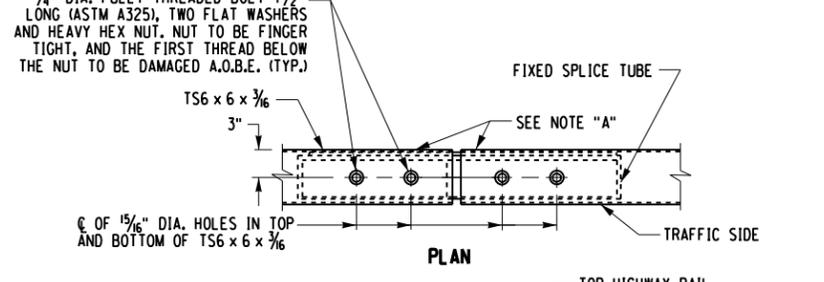
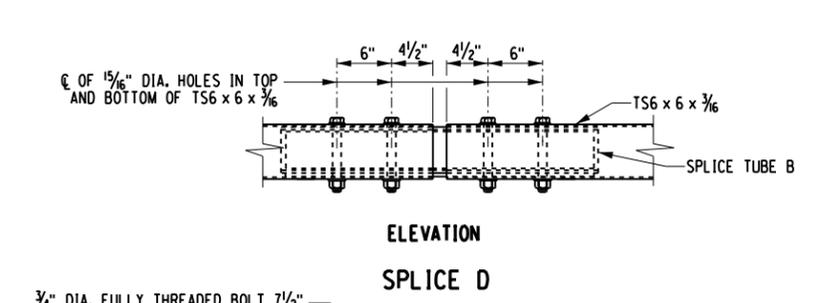
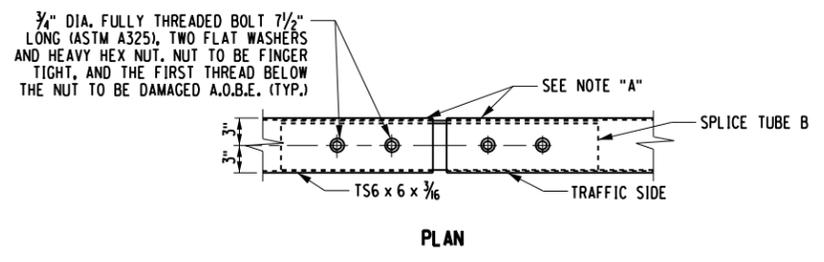
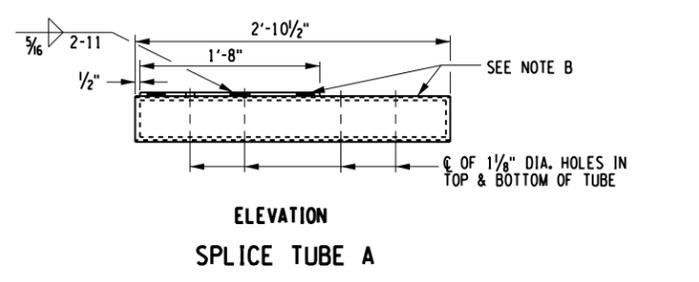
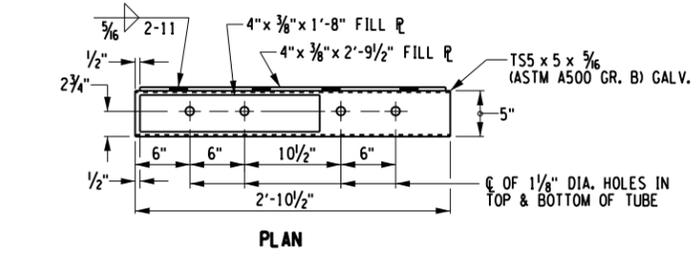
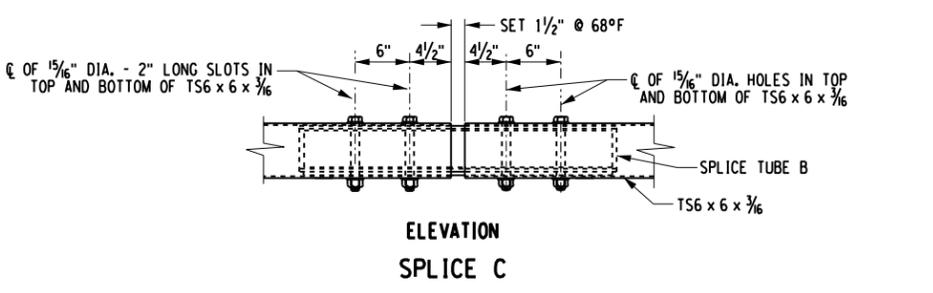
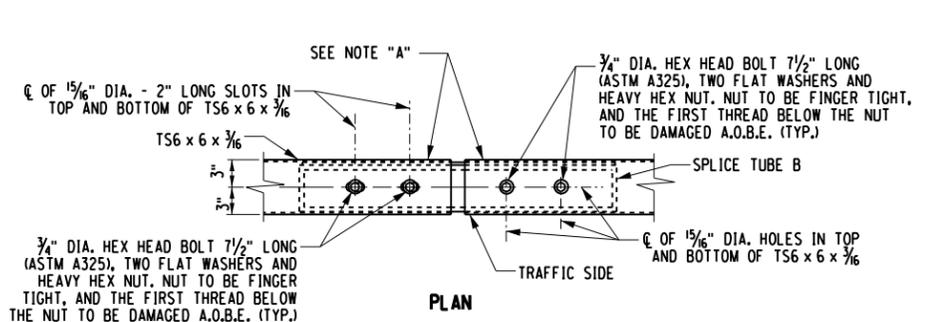
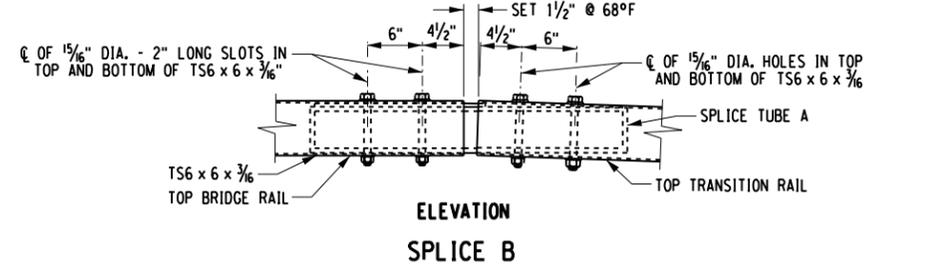
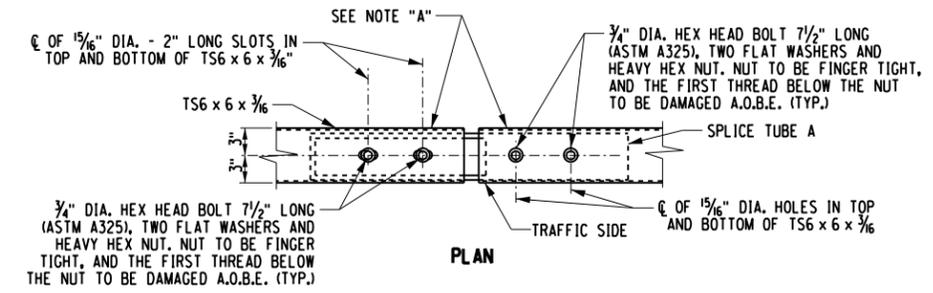
BIN:3314400

WATERBURG ROAD
OVER TAUGHANNOCK CREEK
TOMPKINS COUNTY, NY

DOUBLE BOX BEAM BRIDGE RAIL
TO BOX BEAM TRANSITION

<p>ENGINEERS, ARCHITECTS, & LAND SURVEYORS</p>	SCALE NONE	DRAWING NO. ST-11
	DATE APRIL 2015	SHEET 21 OF 22

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 DESIGNED BY: INKL
 CHECKED BY: JJM
 IN CHARGE OF: JJM



NOTE "A": PROTRUSIONS CAUSED BY WELDING OR GALVANIZING ARE NOT PERMITTED ON THE INSIDE WALLS OF THE SPLICE AREA.
 NOTE "B": PROTRUSIONS CAUSED BY WELDING OR GALVANIZING ARE NOT PERMITTED ON THE OUTSIDE WALLS OF THE SPLICE TUBE AND THE OUTSIDE SURFACES OF THE FILL PLATES.

NOTES:
 1. FOR LOCATION OF SPLICES SEE DWG. ST-11.

BIN:3314400

WATERBURG ROAD
 OVER TAUGHANNOCK CREEK
 TOMPKINS COUNTY, NY

BOX BEAM SPLICE DETAILS

	SCALE NONE	DRAWING NO. ST-12
	DATE APRIL 2015	SHEET 22 OF 22