CITY OF STAMFORD

PLANS FOR THE CONSTRUCTION OF

REPLACEMENT OF

HUNTING RIDGE ROAD BRIDGE

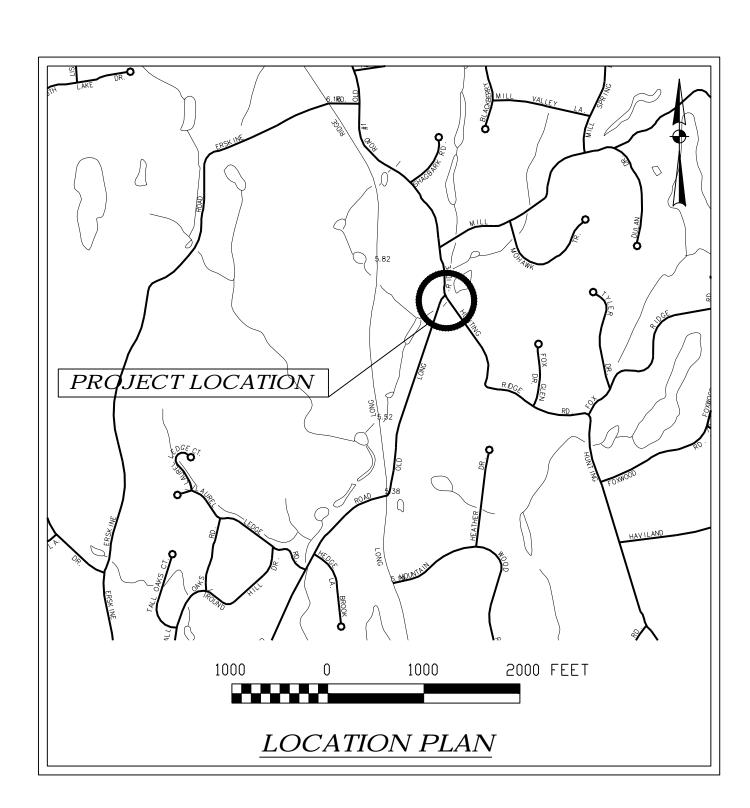
OVER EAST BRANCH MIANUS RIVER

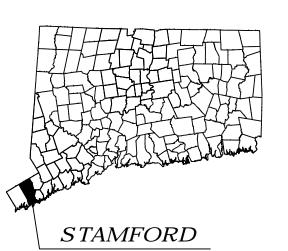
BRIDGE NO. 135009

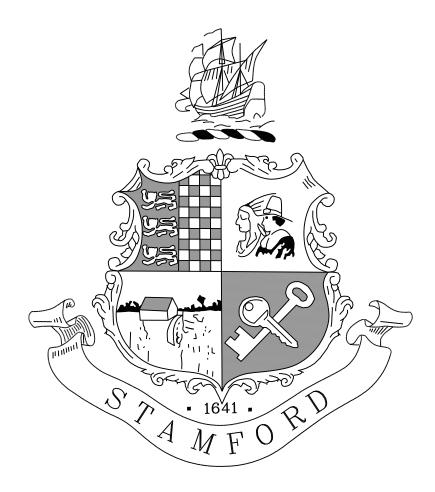
CITY OFFICIALS AND REPRESENTATIVES

MA YOR	_ HONORABLE DAVID MARTIN
DIRECTOR OF OPERATIONS	ERNIE ORGERA
DIRECTOR OF LEGAL AFFAIRS	KATHRYN EMMETT
DIRECTOR OF ADMINISTRATION	MICHAEL E. HANDLER
CITY ENGINEER	LOUIS CASOLO, JR., P.E.
PURCHASING AGENT	ERIK J. LARSON
PLANNING BOARD CHAIRPERSON	THERESA DELL
BOARD OF FINANCE CHAIRPERSON	RICHARD FREEDMAN
BOARD OF REPRESENTATIVES PRESIDENT	MATTHEW QUINONES
OPERATIONS COMMITTEE CO-CHAIRPERSON	JONATHAN JACOBSON
OPERATIONS COMMITTEE CO-CHAIRPERSON	JOHN_RZELINSKY,_JR.
19TH DISTRICT REPRESENTATIVE	BOB LION
19TH DISTRICT REPRESENTATIVE	RAVEN MATHERNE

PROJECT NO. 9135-0009 CP3220 2018







LOUIS CASOLO, JR., P.E. CITY ENGINEER

ERNIE ORGERA DIRECTOR OF OPERATIONS

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90% DESIGN SUBMISSION

JUNE 2018

CONSULTING ENGINEERS



GM2 Associates, Inc.

Consulting Engineers

115 Glastonbury Boulevard
Glastonbury, CT 06033

ANTONIO L. MARGIOTTA CT P.E. LIC. NO. 19614

DATE

ITEM NUMBER	0,010,0	45° (00100)	, , , , , , , , , , , , , , , , , , , ,	05050	2007			000		02001	V2050	100,000	\$00°,	105	02131 ₀₀	921600	2,1300,	, Joseph	\$ \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1719000	0406172	04061/3	0406236	0406311	4. \\ \(\sigma_{1/2}^{2/0} \sigma_{1/2}^{2/0} \)	2003001 _A	100,050	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	0,20,2001	050/050	S. S	0,5210,14	7 000 000 O	0,00,000	0,001,20,	0,00130	15 090 00150	00000	0052100,	0651004	6551 ₀₂₁ ,	5 /050/01/01/05/01/01/01/01/01/01/01/01/01/01/01/01/01/	, /00,00,00,00,00,00,00,00,00,00,00,00,00,	100007	07,520,00
ITEM	REMOVAL OF TREES	CLEARING AND GRUBBING	RESET MAILBOX	EARTH EXCAVATION	TEST PIT	CUT BITUMINOUS CONCRETE PAVEMENT	STRUCTURE EXCAVATION - EARTH (COMPLETE)	STRUCTURE EXCAVATION - EARTH (EXCLUDING	COFFERDAM AND DEWATERING	HANDLING WATER	TRENCH EXCAVATION 0'-4' DEEP	TRENCH EXCAVATION 0'-10' DEEP	FORMATION OF SUBGRADE	ANTI-TRACKING PAD	GRANULAR FILL	PERVIOUS STRUCTURE BACKFILL	SEDIMENTATION CONTROL SYSTEM	SEDIMENT CONTROL SYSTEM AT CATCH BASIN	PROCESSED AGGREGATE BASE	HMA S0.5	HMA S0.375	HMA S 0.25	MATERIAL FOR TACK COAT	SAWING AND SEALING JOINTS IN BITUMINOUS CONCRETE OVERLAY	TEMPORARY DRIVEWAY	REMOVAL OF SUPERSTRUCTURE	TYPE "C" CATCH BASIN	TYPE "C-L" CATCH BASIN	MANHOLE	SHALLOW MANHOLE	PRESTRESSED DECK UNITS (4'-0" X 1'-3")	STEEL-LAMINATED ELASTOMERIC BEARINGS	CLASS "A" CONCRETE	DIMENSION STONE MASONRY	CLASS "F" CONCRETE	UNDERWATER CONCRETE	1" PREFORMED EXPANSION JOINT FILLER FOR BRIDGES	DEFORMED STEEL BARS - EPOXY COATED	BEDDING MATERIAL	CRUSHED STONE BEDDING MATERIAL	12" R.C. PIPE	MODIFIED RIPRAP	MEMBRANE WATERPROOFING (COLD LIQUID ELASTOMERIC)	DAMPPROOFING	GEOTEXTILE (SEPARATION - MEDIUM SURVIVABILITY)
UNIT	EA.	L.S.	EA.	C.Y.	EA.	L.F.	C.Y.	C.Y.	L.F.	L.S.	C.Y.	C.Y.	S.Y.	S.Y.	C.Y.	C.Y.	L.F.	EA.	C.Y.	TON	TON	TON	GAL	L.F.	L.S.	L.S.	EA.	EA.	EA.	EA.	L.F.	C.I.	C.Y.	S.Y.	C.Y.	C.Y.	S.F.	LB.	C.Y.	C.Y.	L.F.	C.Y.	S.Y.	S.Y.	S.Y.
CP3220																																													
HUNTING RIDGE RD.	5	L.S.	2	110	1	150	160	770	380	L.S.	49	103	300	67	3	260	210	3	75	45	53	25	32	131	L.S.	L.S.	2	1	1	1	328	9130	183	41	106	167	288	58800	7	80	97	6	285	120	16
SUBTOTAL	, 5	L.S.	2	110	1	150	160	770	380	L.S.	49	103	300	67	3	260	210	3	75	45	53	25	32	131	L.S.	L.S.	2	1	1	1	328	9130	183	41	106	167	288	58800	7	80	97	6	285	120	16
UNASSIGNED																																													
ESTIMATED TOTAL	. 5	L.S.	2	110	1	150	160	770	380	L.S.	49	103	300	67	3	260	210	3	75	45	53	25	32	131	L.S.	L.S.	2	1	1	1	328	9130	183	41	106	167	288	58800	7	80	97	6	285	120	16

ITEM NUMBER	081500,	, / 1007	08043034	/ N. / J.	Soft And	Ki500150	092001884	0922496	0915004A	0922501	0925201	000 ⁴⁴ 000	0950005	V090800	8000,60	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	09710014	100 ¹ / ₀₀ / ₀₀ / ₀₀	Z				00000	0071880	2/20/2/2009		¹² 200102	, 1210105			//	//	//	//	/					
ITEM	BITUMINOUS CONCRETE LIP CURBING	TEMPORARY PRECAST CONCRETE BARRIER CURB	METAL BRIDGE RAIL - THREE RAIL (TRAFFIC) REBUILD STONE WALL)		MERRITT PARKWAY GUIDERAIL MERRITT PARKWAY GUIDERAIL	END	REMOVE WOOD RAIL	TREE PROTECTION FENCE	BITUMINOUS CONCRETE DRIVEWAY	PAVEMENT FOR RAILING	FURNISHING AND PLACING TOPSOIL	TURF ESTABLISHMENT	CONSTRUCTION FIELD OFFICE, SMALL	POLICE OFFICER) (ESTIMATED COST)	TRAFFICPERSON (UNIFORMED FLAGGER)	MAINTENANCE AND PROTECTION OF TRAFFIC	REMOVAL OF EXISTING MASONRY	MOBILIZATION AND PROJECT CLOSEOUT	BARRICADE WARNING LIGHTS - HIGH INTENSITY	TRAFFIC DRUM	CONSTRUCTION BARRICADE TYPE III	CONSTRUCTION STAKING	42" TRAFFIC CONE	TYPE DE-9 DELINEATOR	- SHEE	4" YELLOW EPOXY RESIN PAVEMENT MARKINGS	EPOXY RESIN PAVEMENT MARKINGS, SYMBOLS AND LEGENDS	CONSTRUCTION SIGNS											
UNIT	L.F.	L.F.	LF. L.F	. L.I	F. L.	F. E/	A. L	L.F.	L.F.	S.Y.	S.Y.	S.Y.	S.Y.	МО	EST	HR	L.S.	C.Y.	L.S.	DAY	EA.	EA.	L.S.	EA.	EA.	S.F.	L.F.	S.F.	S.F.											
CP3220																																								
HUNTING RIDGE RD.	65	320	154 25	12	2 10	10 1	. 7	70 1	190	50	16	200	200	9	1	100	L.S.	40	L.S.	1080	25	11	L.S.	25	11	6	280	25	174											
SUBTOTAL	65	320	154 25	12	2 10	10 1	. 7	70 :	190	50	16	200	200	9	1	100	L.S.	40	L.S.	1080	25	11	L.S.	25	11	6	280	25	174											
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ESTIMATED TOTAL	 	320	154 25	12	2 1	10 1	. 7	70 1	190	50	16	200	200	9	1	100	L.S.	40	L.S.	1080	25	11	L.S.	25	11	6	280	25	174											

				CONSULTANT:
				ASSOCIA
NO.	DATE	DESCRIPTION	CK. BY	HOOCIH
		REVISIONS	•	
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GM2 Associates, Inc. 115 Glastonbury Boulevard Glastonbury, CT 06033



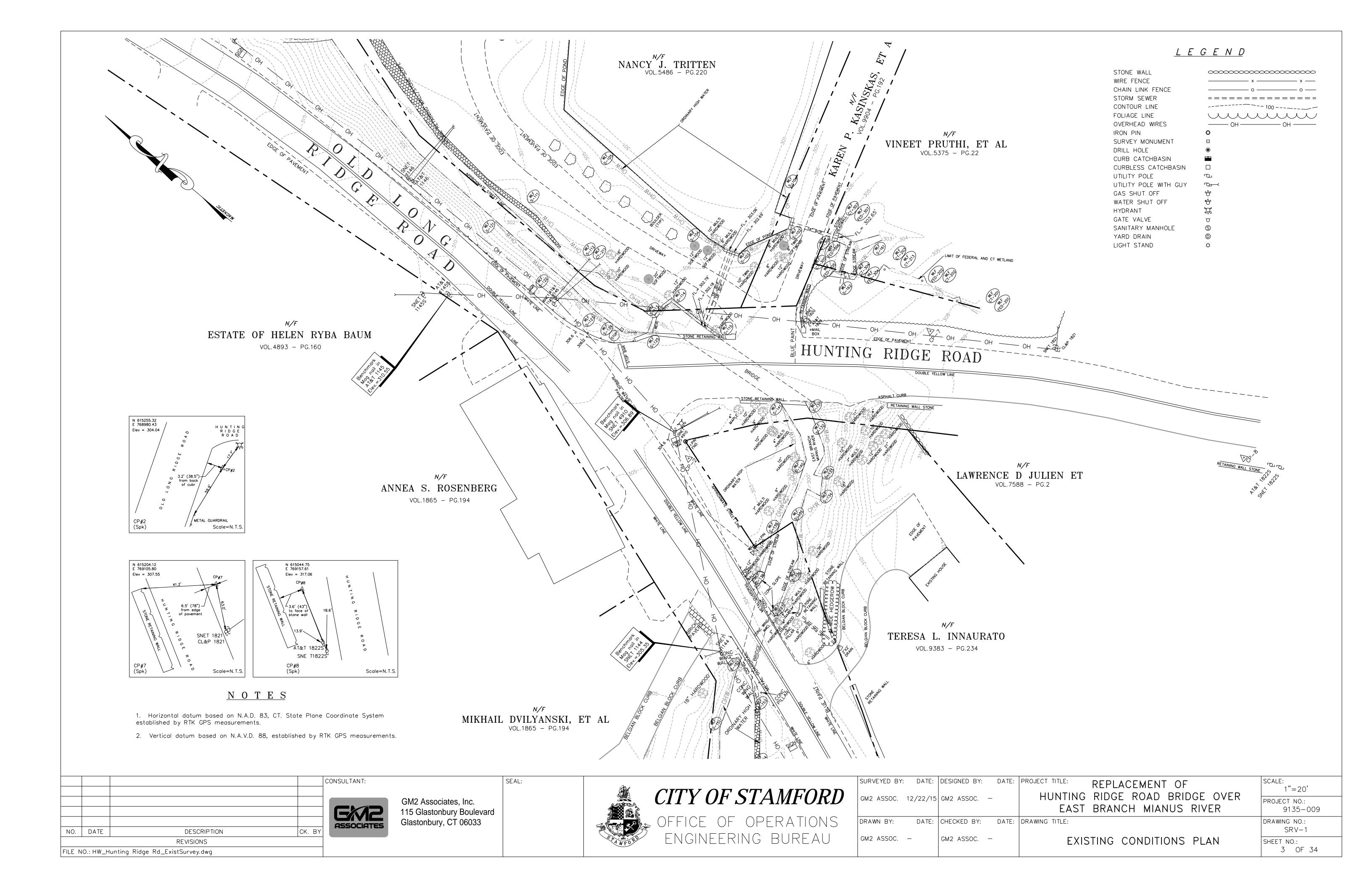
SURVEYED BY: DA	ATE:	DESIGNED E	BY: DATE:	PROJECT TITLE:	REPLACEMENT OF
 GM2 ASSOC. 12/22	2/15	YKM	10/20/17	HUNTING	RIDGE ROAD BRIDGE OVER
				EAST	BRANCH MIANUS RIVER
DRAWN BY:	\TF.	CHECKED B	RY: DATE:	DRAWING TITLE:	

10/20/17

10/20/17 PB

DETAILED ESTIMATE SHEET

SCALE: NOT TO SCALE PROJECT NO.: 9135-009 DRAWING NO.: EST-1 SHEET NO.: 2 OF 34



GENERAL NOTES

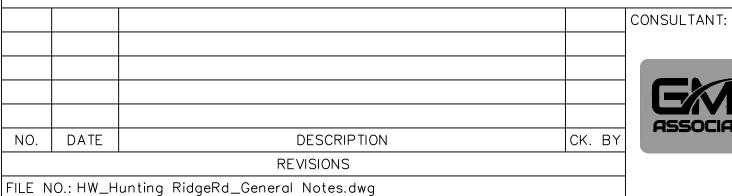
- CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 817 (2016), JANUARY 2017 SUPPLEMENT AND SPECIAL PROVISIONS GOVERN.
- 2. DRIVEWAY ACCESS TO BE MAINTAINED AT ALL TIMES FOR ABUTTING PROPERTY USERS. SEE DRAWING TRF-2.
- 3. REMOVAL OF BITUMINOUS CONCRETE SHALL BE PAID FOR UNDER THE ITEM "EARTH EXCAVATION".
- 4. ALL AREAS OF DISTURBED EARTH REQUIRE "FURNISHING AND PLACING TOP SOIL" 4" THICK AND "TURF ESTABLISHMENT". SEE DRAWING TYP-1.
- 5. THE PROPOSED CHANNEL SHALL BE STABILIZED WITH VEGETATION.
- 6. FINAL PAVEMENT MARKINGS TO BE EPOXY RESIN.
- 7. RESET ANY MONUMENT DISTURBED BY THIS PROJECT PER FORM 817 STANDARDS, TO BE PAID FOR UNDER "EARTH EXCAVATION".

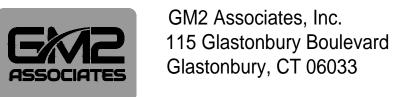
GENERAL UTILITY COORDINATION NOTES

- 1. LOCATION OF UTILITIES BASED ON VISIBLE EVIDENCE.
- 2. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES AND PHYSICAL FEATURES AS IT AFFECTS HIS WORK AND SHALL NOTIFY THE ENGINEER IF CONDITIONS DIFFER FROM THAT SHOWN ON THE PLANS.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK WITH THE UTILITIES.
- 4. CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" AT 1-800-922-4455 PRIOR TO ANY EXCAVATION.

ENVIRONMENTAL NOTES

- 1. UNCONFINED IN-STREAM ACTIVITIES SHALL BE LIMITED TO THE TIME PERIOD JUNE 1ST THROUGH SEPTEMBER 30.
- 2. THE PROJECT SHALL NOT BE CONDUCTED IN A MANNER WHICH IMPEDES STREAM FLOW.
- 3. EFFLUENT FROM DEWATERED WORK AREA SHALL NOT BE DISCHARGED DIRECTLY TO THE STREAM BUT BE PROCESSED THROUGH TREATMENT STRUCTURE(S) (SEE DETAILS).
- 4. ALL APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE ESTABLISHED PRIOR TO AND MAINTAINED THROUGH ALL CONSTRUCTION PHASES.
- 5. LIMIT OF INLAND WETLAND FLAGGED BY PIETRAS ENVIRONMENTAL GROUP.





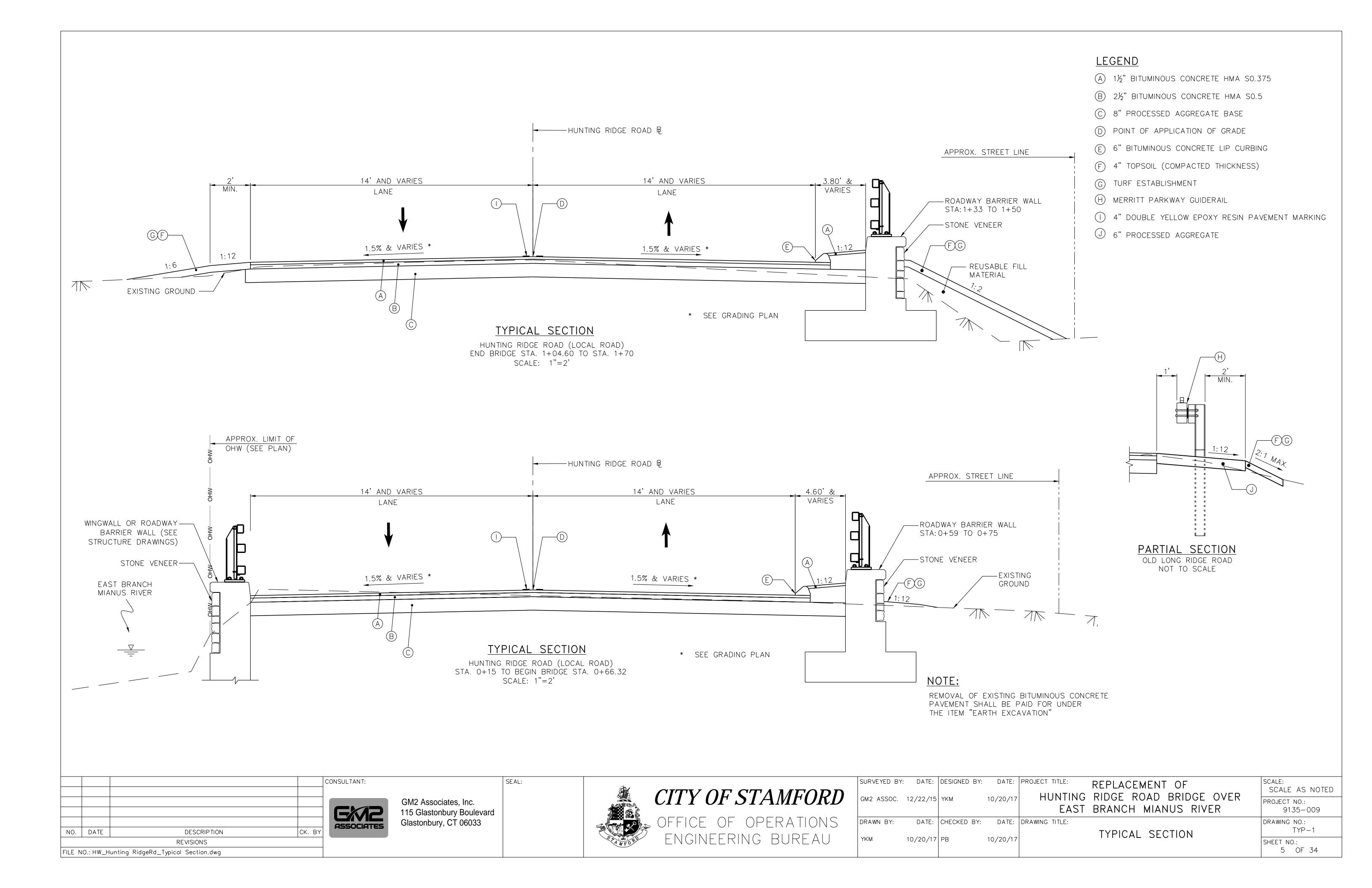


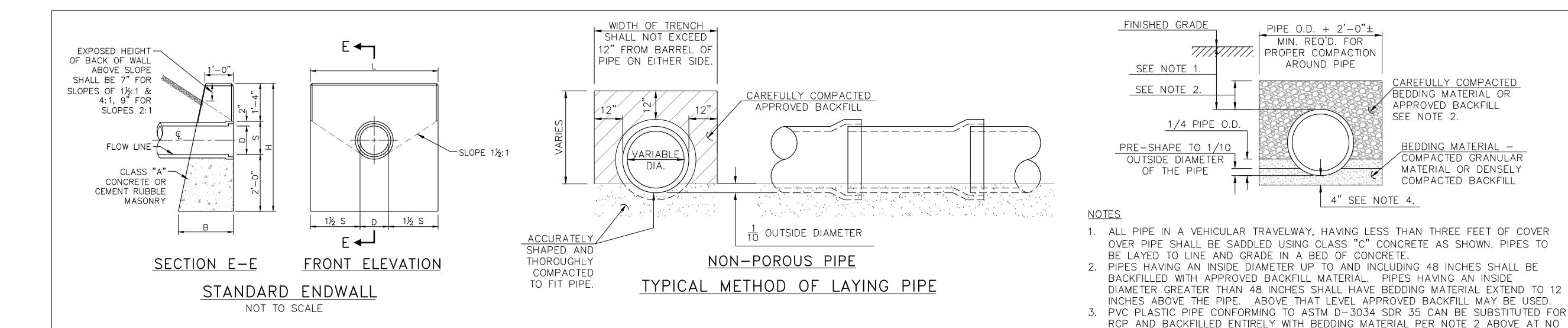
RVEYED BY:	DATE:	DESIGNED B	Y: DATE:	PROJECT TITLE:	REPLACEMENT OF
2 ASSOC.	12/22/15	YKM	10/20/17	HUNTING	RIDGE ROAD BRIDGE OVER
				EAST	BRANCH MIANUS RIVER
AWN BY:	DATE:	CHECKED B	Y: DATE:	DRAWING TITLE:	

10/20/17

10/20/17 PB

REPLACEMENT OF RIDGE ROAD BRIDGE OVER	SCALE: SCALE AS NOTED
BRANCH MIANUS RIVER	PROJECT NO.: 9135-009
GENERAL NOTES	DRAWING NO.: GEN-1
	SHEET NO.: 4 OF 34

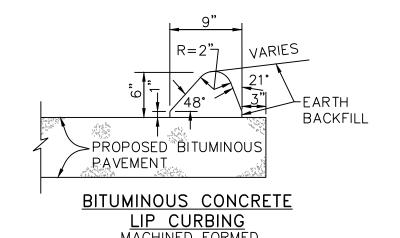


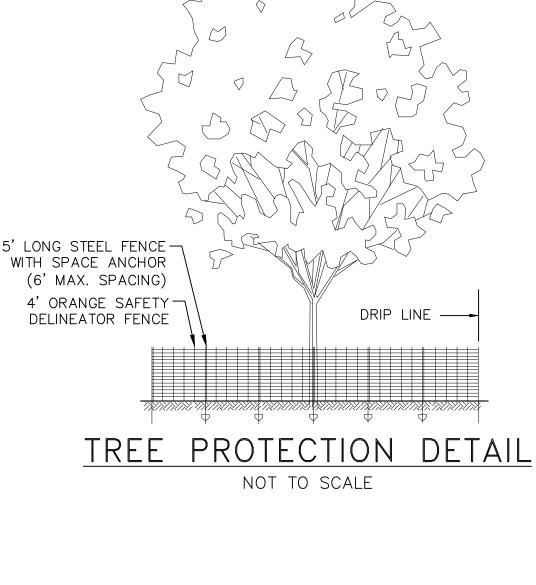


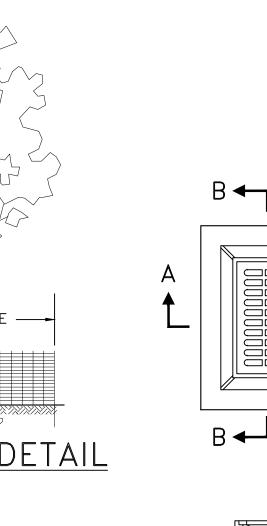
				UANTITIES FOR CON $S = D + 2$		
D	S	Н	L	BATTER	В	VOL.
IN.	FT. & IN.	FT. & IN.	FT. & IN.	FT. & IN.	FT. & IN.	CU. YD.
1'-0"	1'-2"	4'-6"	4'-6"	0'-2 1/2"	1'-11 1/4"	1.10

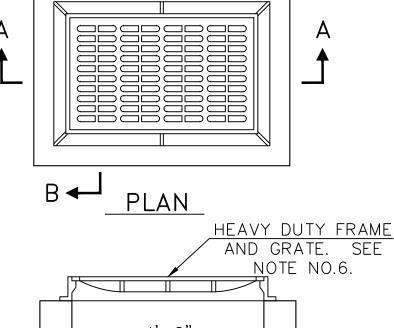
<u>NOTES</u>

- 1. COST OF REINFORCING BARS SHALL BE INCLUDED IN THE CONTRACT UNIT
- PRICE FOR CLASS "A" CONCRETE. 2. ALL REINFORCING BARS SHALL HAVE 3" COVER MIN.
- H = TOTAL HEIGHT OF ENDWALL
- B = BASE
- D = INSIDE DIAMETER OF PIPE
- S = HEIGHT OF SLOPE ABOVE FLOW LINE
- AT FACE OF WALL = D+2" MIN. L = LENGTH OF WALL = 3S+D
- ALL EDGES OF EXPOSED SURFACES SHALL BE
- CHAMFERED APPROXIMATELY ONE INCH.









FINISHED GRADE

SEE NOTE 1.

SEE NOTE :

PRE-SHAPE TO 1/10

OUTSIDE DIAMETER

OF THE PIPE

ADDITIONAL COST TO THE CITY.

1/4 PIPE O.D.

PIPE O.D. + $2'-0"\pm$

MIN. REQ'D. FOR

PROPER COMPACTION

AROUND PIPE

4. BEDDING UNDER PIPE SHALL BE INCREASED TO 12 INCHES MIN. IN ROCK.

REINFORCED CONCRETE PIPE TRENCH DETAIL

NOT TO SCALE

D◀

 $D \longleftarrow$

4'-0"

C.B. TRAP

INVERT

CLASS "A" CONCRETE

SECTION C-C

PLAN

HEAVY DUTY FRAME

AND GRATE. SEE

NOTE NO.5.

LOCATION OF OUTLET PIPE

CONTINGENT ON LOCAL

CONDITIONS.

(TYP.) (TYP.)

CAREFULLY COMPACTED

BEDDING MATERIAL -

MATERIAL OR DENSELY

COMPACTED BACKFILL

COMPACTED GRANULAR

DON'T DUMP

2'-6"

CONCRETE BLOCK

SECTION D-D

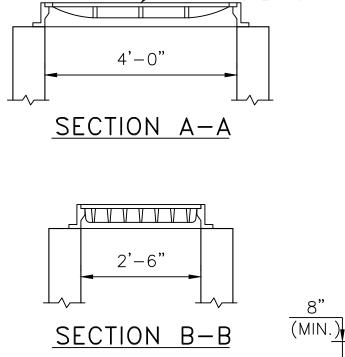
PLAQUE

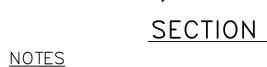
BEDDING MATERIAL OR

APPROVED BACKFILL

SEE NOTE 2.

4" SEE NOTE 4.



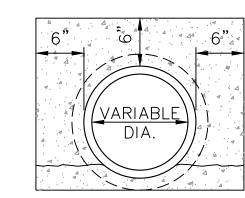


- 1. MASONRY CATCH BASIN SHOWN, PRECAST CATCH BASIN SIMILAR.
- 2. SEE STANDARD CATCH BASIN DETAIL FOR ADDITIONAL INFORMATION.

C-L CATCH BASIN FRAME AND GRATE NOT TO SCALE

CATCH BASIN NOTES

- 1. ALL PRECAST SECTIONS SHALL BE CONSTRUCTED OF REINFORCED CONCRETE, INCLUDING THE SUMP. REINFORCING SHALL CONFORM TO ASTM A615, GRADE 40 OR BETTER. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000
- 2. COMPACTION AROUND ALL STRUCTURES TO BE HAND TAMPED IN ACCORDANCE WITH SECTION 2.05 OF CONNDOT STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION, LATEST EDITION.
- 3. UNREINFORCED PIPES SHALL BE CUT FLUSH WITH INSIDE FACE OF C.B. WALL. REINFORCED PIPES SHALL BE CUT TO PROVIDE 1" RECESS INTO FACE OF C.B. WALL. CUT END SHALL THEN BE PATCHED WITH MORTAR FLUSH WITH WALL
- 4. ALL UNUSED KNOCK-OUTS SHALL BE BRICKED UP WHERE DIRECTED BY THE ENGINEER.
- 5. TYPE "C" CATCH BASIN HEAVY DUTY FRAME AND GRATE TO BE CAMPBELL FOUNDRY CO. NO. 2617 OR ENGINEER APPROVED EQUAL.
- 6. TYPE "C-L" CATCH BASIN HEAVY DUTY FRAME AND GRATE TO BE CAMPBELL FOUNDRY CO. NO. 3408 OR ENGINEER APPROVED EQUAL
- 7. FOR OUTLET PIPES 18"I.D. OR SMALLER C.B. TRAPS TO BE CAMPBELL FOUNDRY NO. 2564 OR ENGINEER APPROVED EQUAL. FOR LARGER PIPES, LARGER TRAPS SHALL BE USED, SUBJECT TO THE APPROVAL OF THE ENGINEER. TRAPS SHALL BE HUNG FROM TWO 1/2" SQUARE STAINLESS STEEL HANGER HOOKS EMBEDDED IN WALL OF C.B.
- 8. AS DIRECTED, THE CONTRACTOR SHALL ADHERE THE APPROPRIATE "DON'T DUMP" PLAQUE FURNISHED BY THE CITY, TO TOPS OF CATCH BASIN FRAMES, AS SHOWN. IN ADDITION TO THE PEEL AND STICK BACKING, CONTRACTOR SHALL BOND PLAQUE TO SUBSTRATE USING EXTERIOR GRADE CONSTRUCTION ADHESIVE. COST OF THIS SHALL BE INCLUDED IN THE COST OF CATCH BASIN WORK.



<u>NOTES</u>

(TYP.)

1. ALL LATERALS HAVING LESS THAN THREE FEET OF FILL OVER PIPE SHALL BE SADDLED USING CLASS "C" CONCRETE AS SHOWN. 2. LATERALS SHALL BE LAYED TO LINE AND GRADE IN A BED OF CONCRETE AND

IMMEDIATELY ENCASED AS SHOWN.

CONCRETE SADDLE FOR LATERALS

NOT TO SCALE

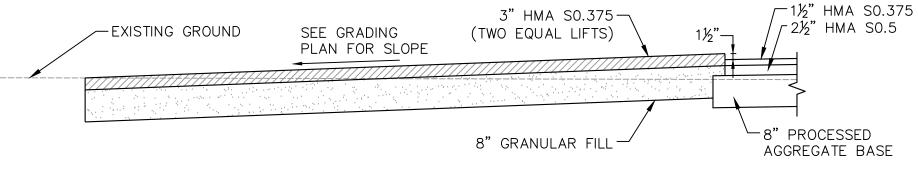
STANDARD CATCH BASIN (MASONRY) TYPE B-1 AND TYPE "C"

PROPERLY COMPACTED

MATERIAL

NOT TO SCALE

10/20/17



BITUMINOUS CONCRETE DRIVEWAY NOT TO SCALE

CONSULTANT: NO. DATE DESCRIPTION CK. BY **REVISIONS** | FILE NO.: HW_Hunting Ridge Rd_DET-1.dwg

GM2 Associates, Inc. 115 Glastonbury Boulevard Glastonbury, CT 06033 ASSOCIATE



CITY OF STAMFORD ENGINEERING BUREAU YKM

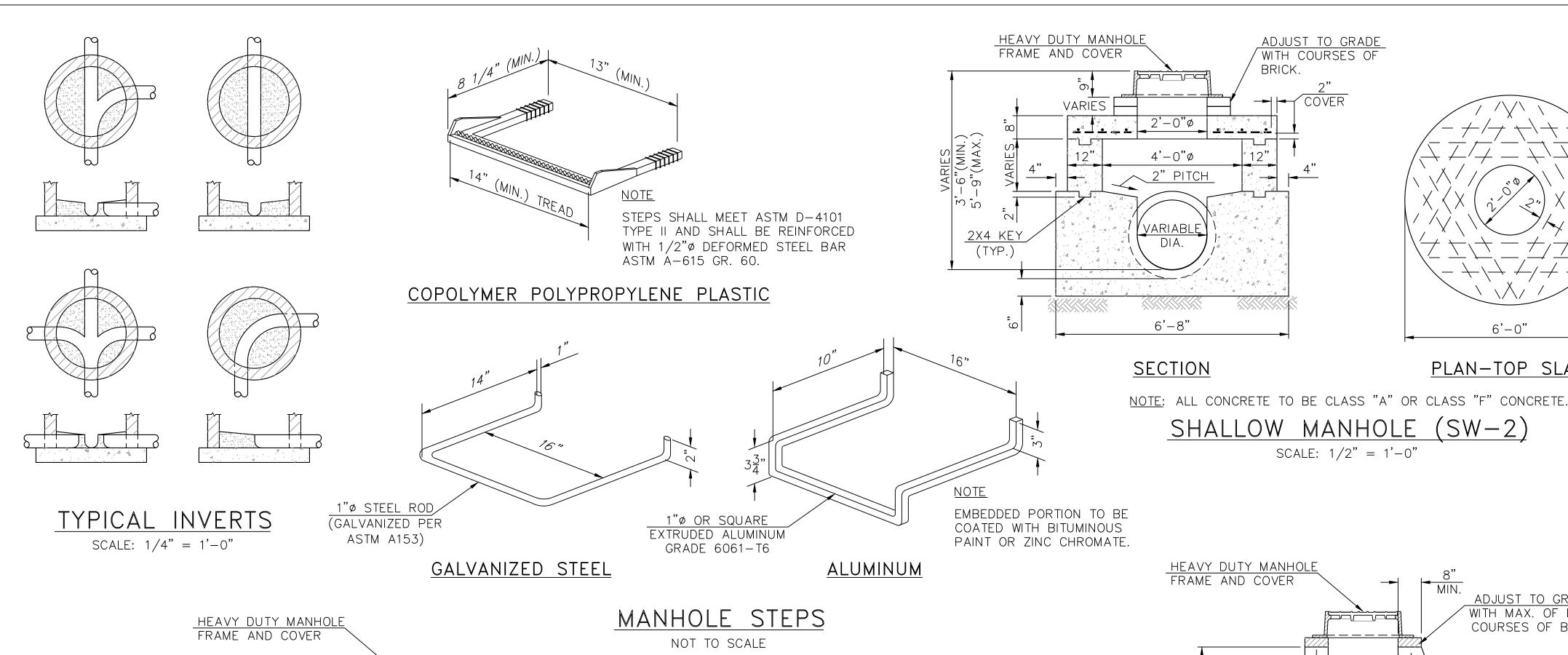
SURVEYED BY: DATE: DESIGNED BY: GM2 ASSOC. 12/22/15 YKM 10/20/17 DRAWN BY: DATE: CHECKED BY:

10/20/17 PB

DATE: PROJECT TITLE REPLACEMENT OF HUNTING RIDGE ROAD BRIDGE OVER EAST BRANCH MIANUS RIVER DATE: DRAWING TITLE: MISCELLANEOUS DETAILS - 1

NOT TO SCALE PROJECT NO .: 9135-009 DRAWING NO .: DET-1 SHEET NO.:

6 OF 34



HEAVY DUTY MANHOLE FRAME AND COVER ADJUST TO GRADE WITH MAX. OF FOUR COURSES OF BRICK REINFORCING STEEL LIFTING HOLES FILL WITH MORTAR) (TYP.) WATERTIGHT GASKET OR SEAL (TYP.) (TYP.) (TYP.) LOCATION OF PIPE 4"(MIN.) TO BOTTOM OF KNOCK-OUT CONTINGENT ON LOCAL 4'-0" DIA. CONDITIONS (TYP.). CLASS "C" CONCRETE PROPERLY COMPACTED 4'-0" DIA. MATERIAL NOTE: FOR ADDITIONAL INFORMATION, SEE 6'-4" DIA. "STANDARD MANHOLE (LESS THAN 36"

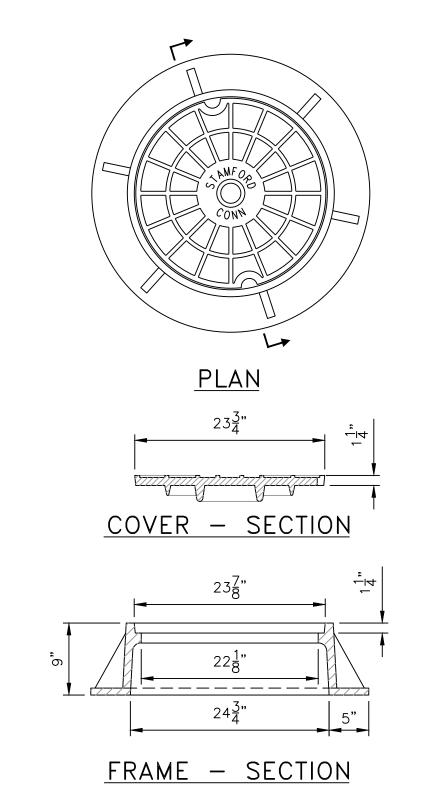
PIPE)" DETAIL, THIS SHEET.

STANDARD MANHOLE (FOR 36" AND LARGER PIPES)

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

NOTES

- 1. CASTINGS DESIGNATED AS "HEAVY DUTY" SHALL SAFELY WITHSTAND AASHTO HS20 HIGHWAY LOADING.
- 2. ALL STEEL TO BE STRUCTURAL GRADE CONFORMING TO ASTM A36.
- 3. CAST IRON SHALL CONFORM TO ASTM A48 CLASS 30.
- 4. SEAT OF MANHOLE FRAMES, EDGES AND BOTTOM OF COVERS SHALL BE MACHINED TO A TRUE SURFACE SO COVERS WILL NOT BIND OR ROCK ON FRAMES.
- 5 FIRST STEP FROM TOP OF MANHOLE SHALL BE SHORTENED SO AS TO EXTEND NOT MORE THAN 4" FROM WALL OF MANHOLE. ALL OTHER STEPS SHALL EXTEND 6" FROM WALL.
- 6. APPROVED CONCRETE BLOCK MAY BE USED IN LIEU OF BRICK IN THE CONSTRUCTION OF CATCH BASINS AND STORM MANHOLES.
- 7. WHERE SHOWN, STEEL ITEMS SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A123 FOR STEEL SHAPES AND PLATES, OR ASTM A153 FOR HARDWARE.
- 8. REINFORCING STEEL SHALL CONFORM TO THE FOLLOWING: BAR REINFORCEMENT - ASTM A615 GRADE 60 WELDED WIRE FABRIC - ASTM A184 WELDED DEFORMED WIRE FABRIC - ASTM A497
- 9. UNREINFORCED PIPES SHALL BE CUT FLUSH WITH INSIDE FACE OF C.B. WALL. REINFORCED PIPES SHALL BE CUT TO PROVIDE 1' RECESS INTO FACE OF C.B. WALL. CUT END SHALL THEN BE PATCHED WITH MORTAR FLUSH WITH WALL.
- 10. ALL UNUSED KNOCK-OUTS SHALL BE BRICKED UP WHERE DIRECTED BY THE ENGINEER.



HEAVY DUTY HIGHWAY MANHOLE FRAME & COVER

SCALE: 1" = 1'-0"

NOTE: MANHOLE FRAME AND COVER TO SHALL BE CAMPBELL FOUNDRY PATTERN NO. 1027 (STAMFORD) OR ENGINEER APPROVED EQUAL.

STANDARD MANHOLE (SW-1)

CONSULTANT: **ASSOCIATES** NO. DATE DESCRIPTION CK. BY

REVISIONS

FILE NO.: HW_Hunting Ridge Rd_DET-2.dwg

<u>NOTES</u>

1. DIMENSIONS "X" VARY ACCORDING TO SIZE OF PIPE.

3. WHERE 5 FT. & 6 FT. DIA. MANHOLES ARE SHOWN

ON THE PLANS, THEY SHALL BE CONSTRUCTED

2. "D" DENOTES OUTSIDE DIAMETER OF PIPE

STANDARD MANHOLE

(LESS THAN 36" PIPE)

(MASONRY CONSTRUCTION)

USING PRECAST CONCRETE UNITS.

3/8" FULL MORTAR JOINT

POINTED FLUSH WITH INSIDE FACE (TYP.)

OUTER SURFACE OF MANHOLE SHALL BE PLASTERED WITH 1/2

THICK MORTAR COAT. MASONRY

MUST BE WET WHEN MORTAR

IS APPLIED.

TO BENCH LEVEL OF INVERT

CLASS "A" OR CLASS "F" CONCRETE BASE

CLASS "C" CONCRETE

GM2 Associates, Inc. 115 Glastonbury Boulevard Glastonbury, CT 06033



CITY OF STAMFORD OF

ADJUST TO GRADE WITH COURSES OF

SHALLOW MANHOLE (SW-2)

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

1. 5 FT. & 6 FT. DIA. PRECAST BASES MAY BE USED WHEN

REQUIRED DUE TO SIZE OR NUMBER OF PIPES AT THE

THE 5' AND 6' BASES AS DIRECTED BY THE ENGINEER.

2. FOR ADDITIONAL INFORMATION, SEE "STANDARD MANHOLE

(LESS THAN 36" PIPE)" DETAIL, THIS SHEET.

OF INSIDE DIAMETER INCREASE.

MANHOLE. PRECAST REDUCERS WILL BE PLACED ABOVE

WALL THICKNESS TO INCREASE 1 INCH FOR EACH 1 FOOT

STANDARD MANHOLE

(PRECAST CONCRETE UNITS)

BRICK.

COVER

SURVEYED BY:	DATE:	DESIGNED	BY:	DATE:	PROJE
GM2 ASSOC.	12/22/15	YKM		10/20/17	
DRAWN BY:	DATE:	CHECKED	BY:	DATE:	DRAW

6'-0"

PLAN-TOP SLAB

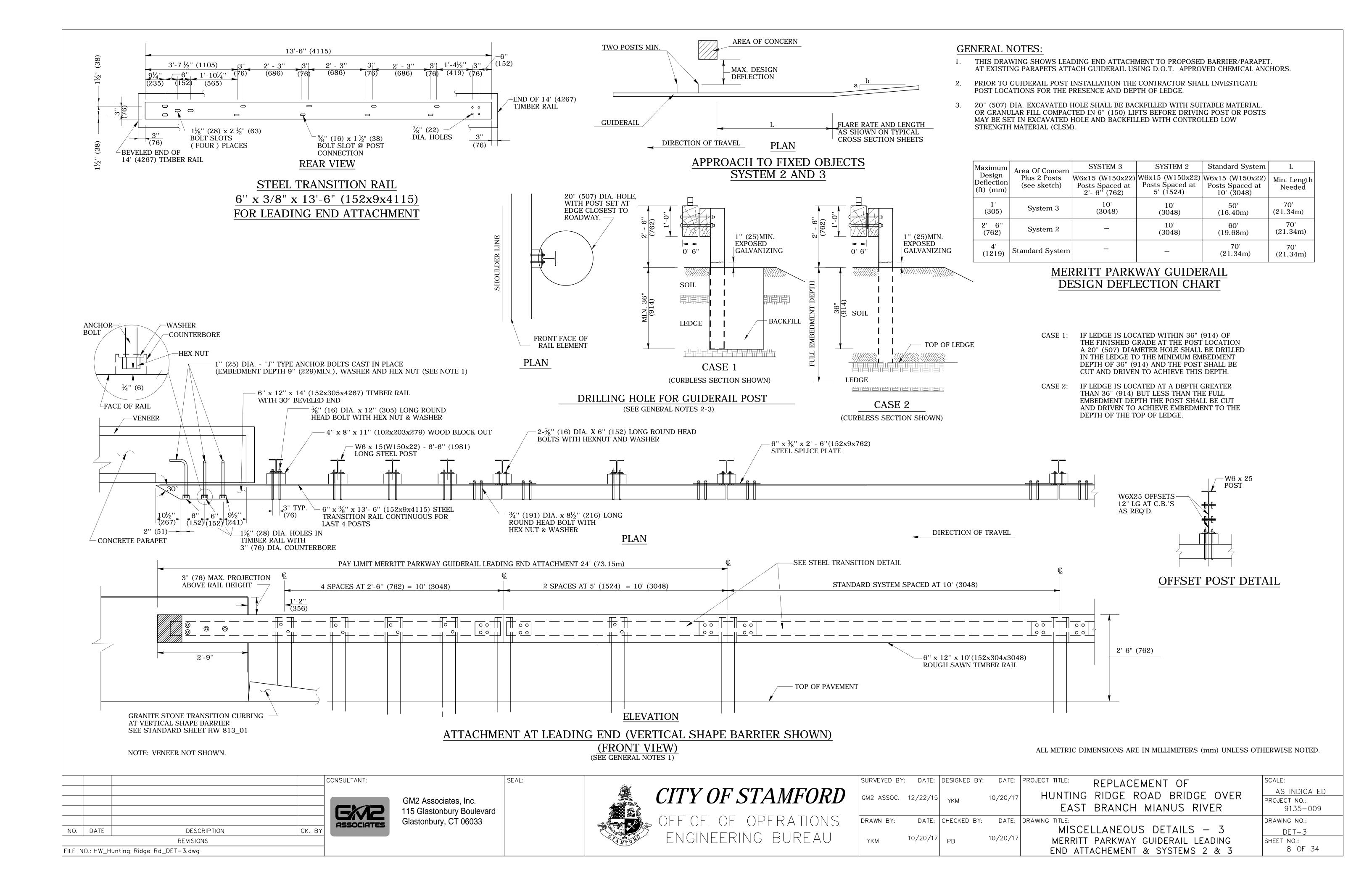
REPLACEMENT OF HUNTING RIDGE ROAD BRIDGE OVER EAST BRANCH MIANUS RIVER WING TITLE:

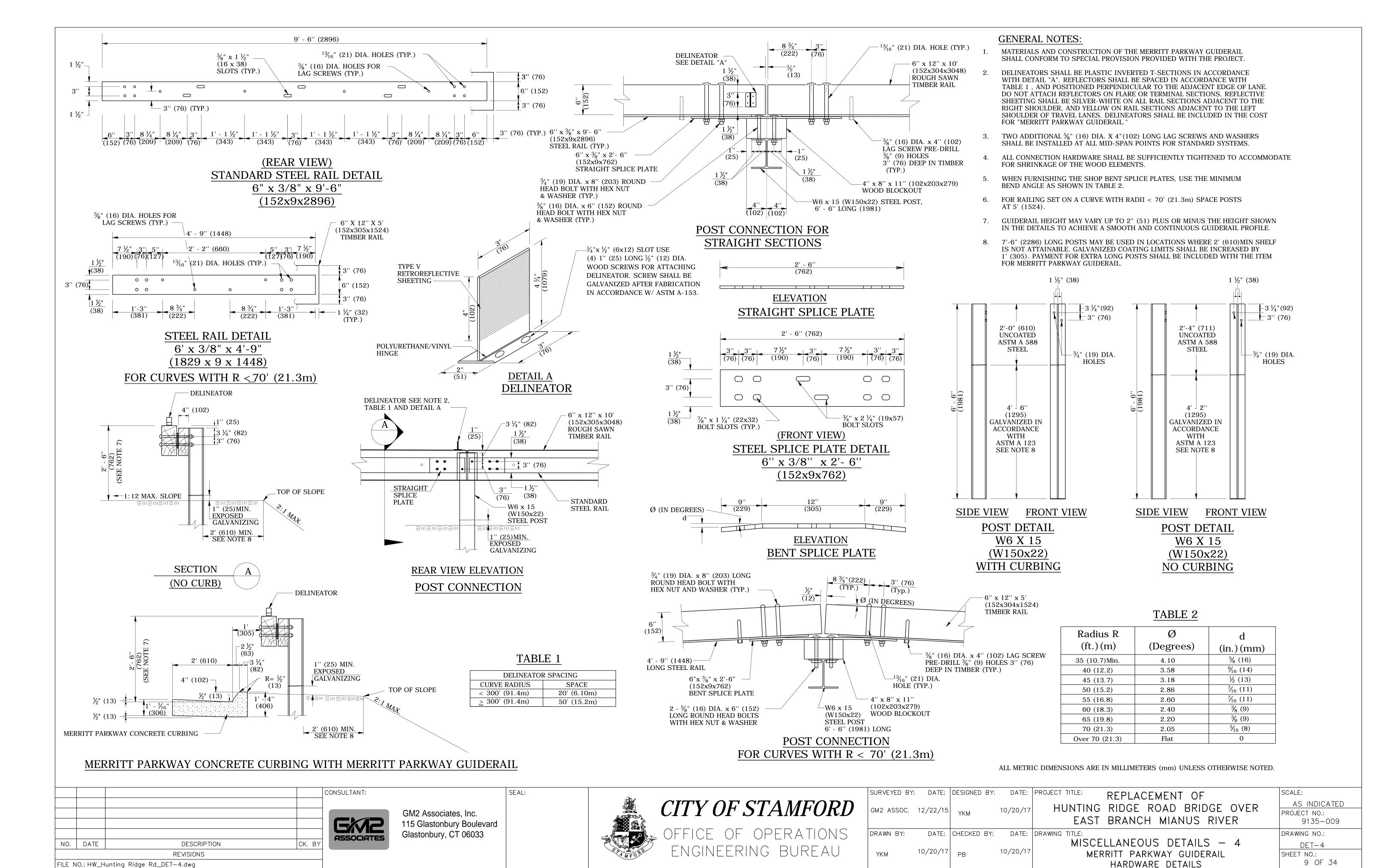
NOT TO SCALE PROJECT NO .: 9135-009 DRAWING NO .: DET-2 SHEET NO.:

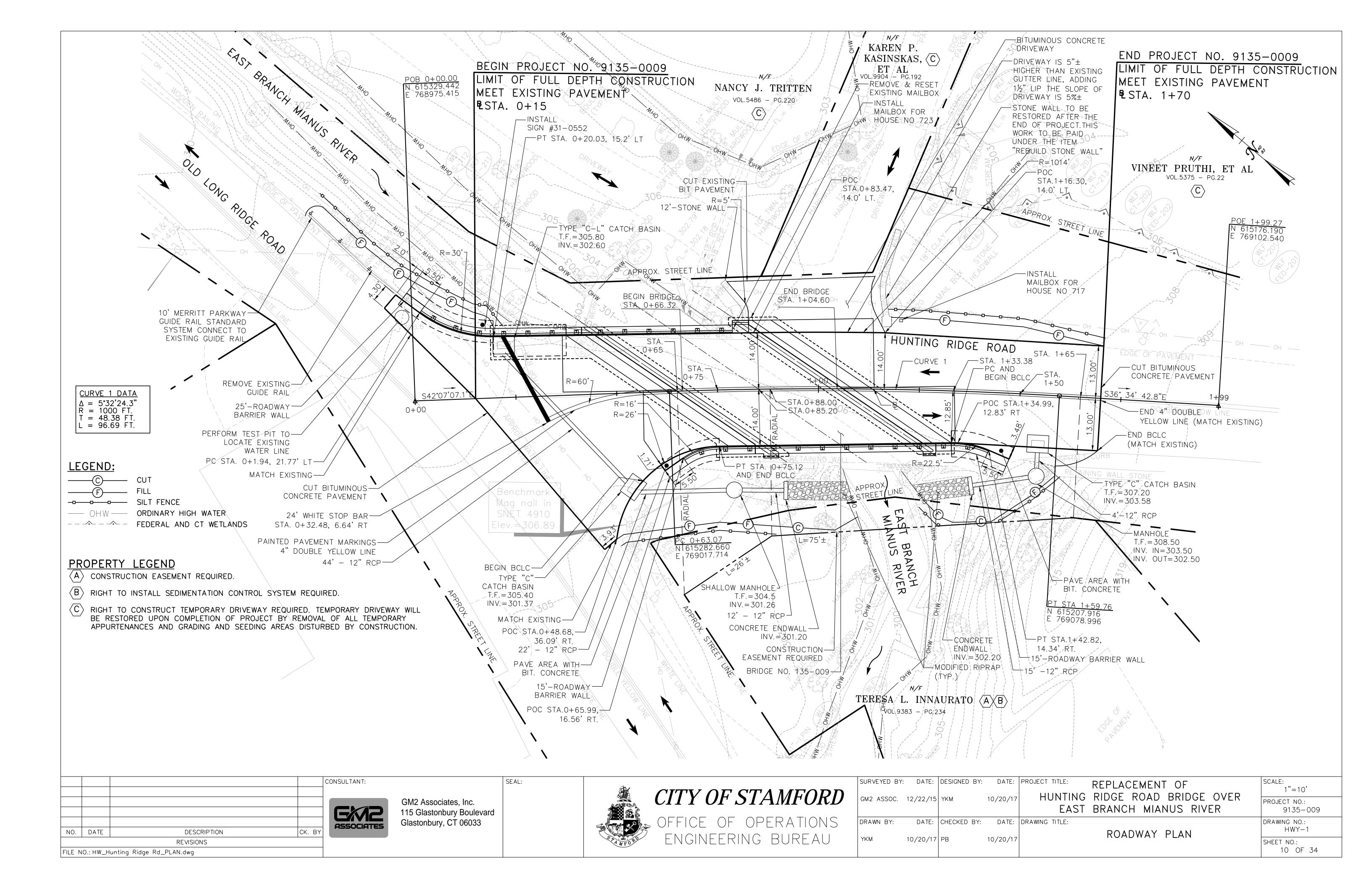
7 OF 34

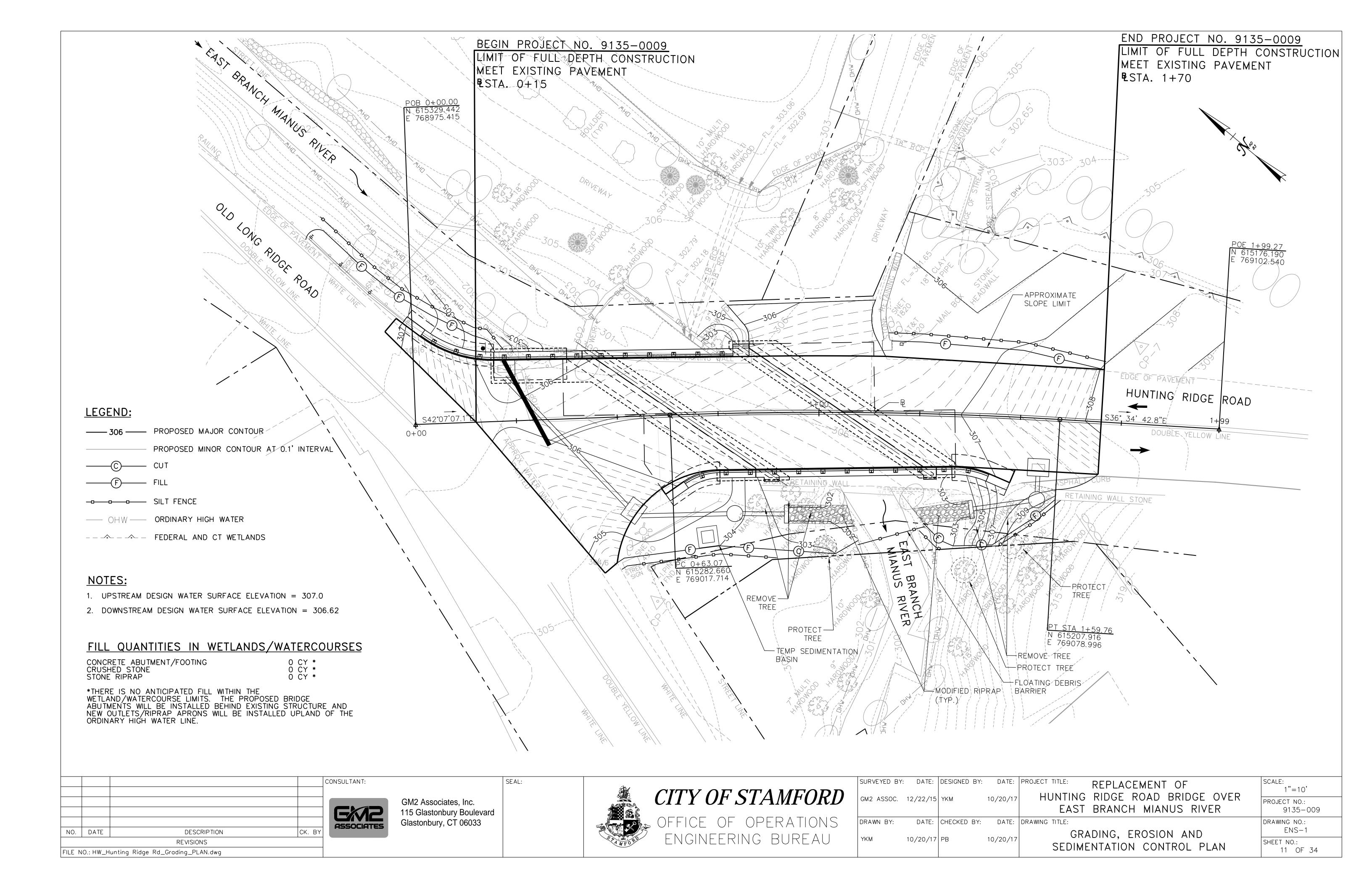
SCALE:

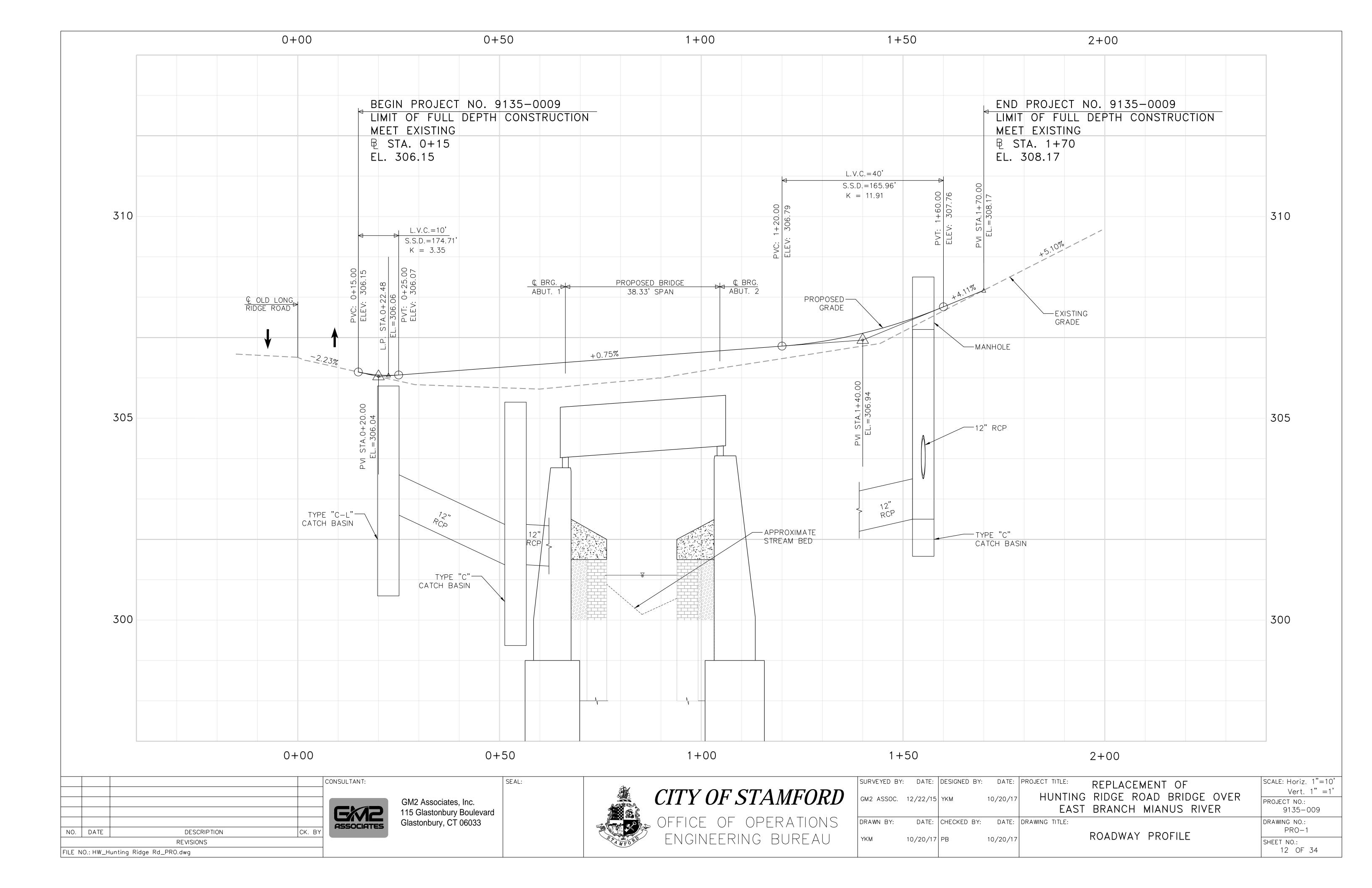
MISCELLANEOUS DETAILS - 2 ENGINEERING BUREAU 10/20/17 PB 10/20/17

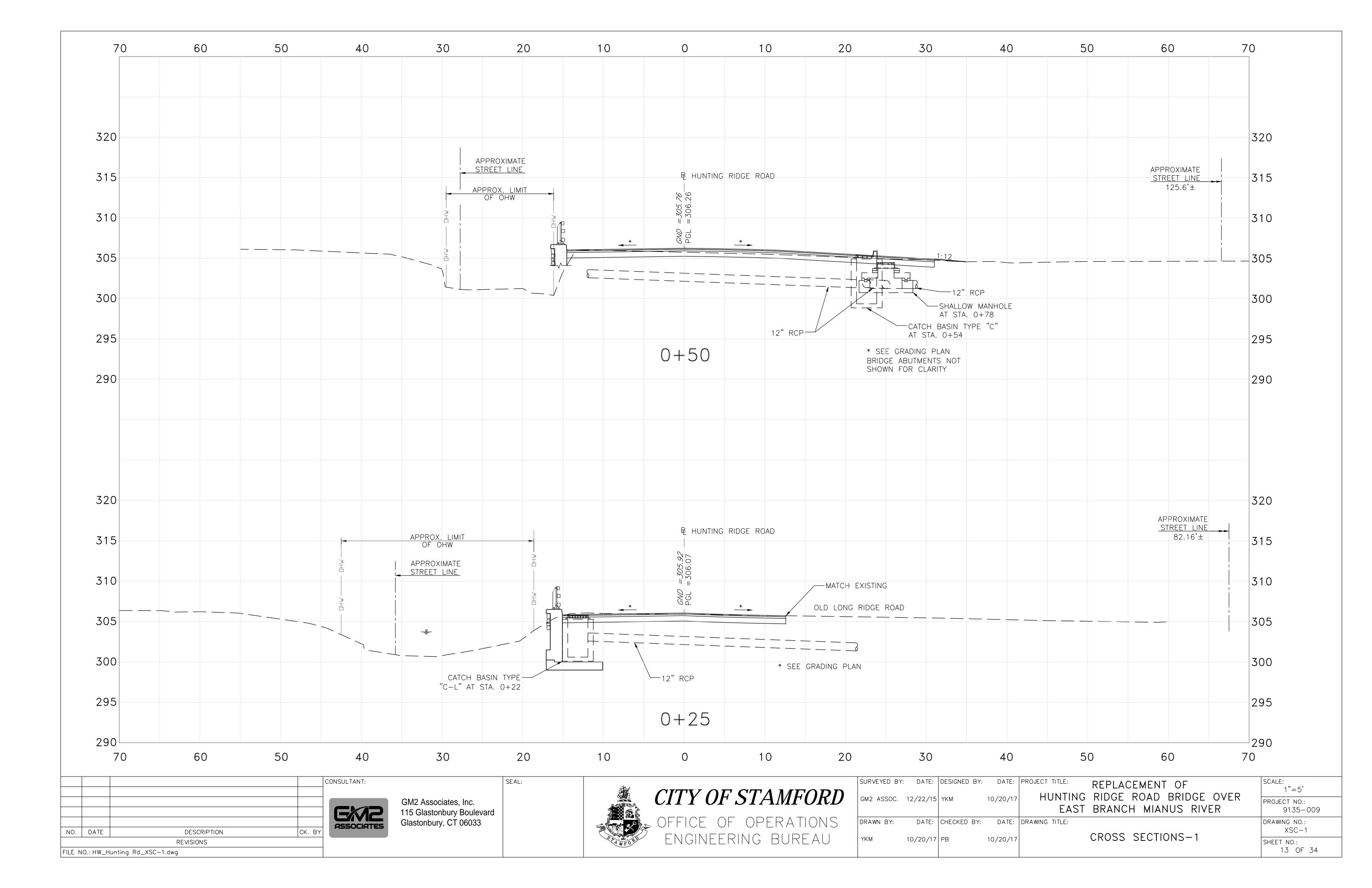


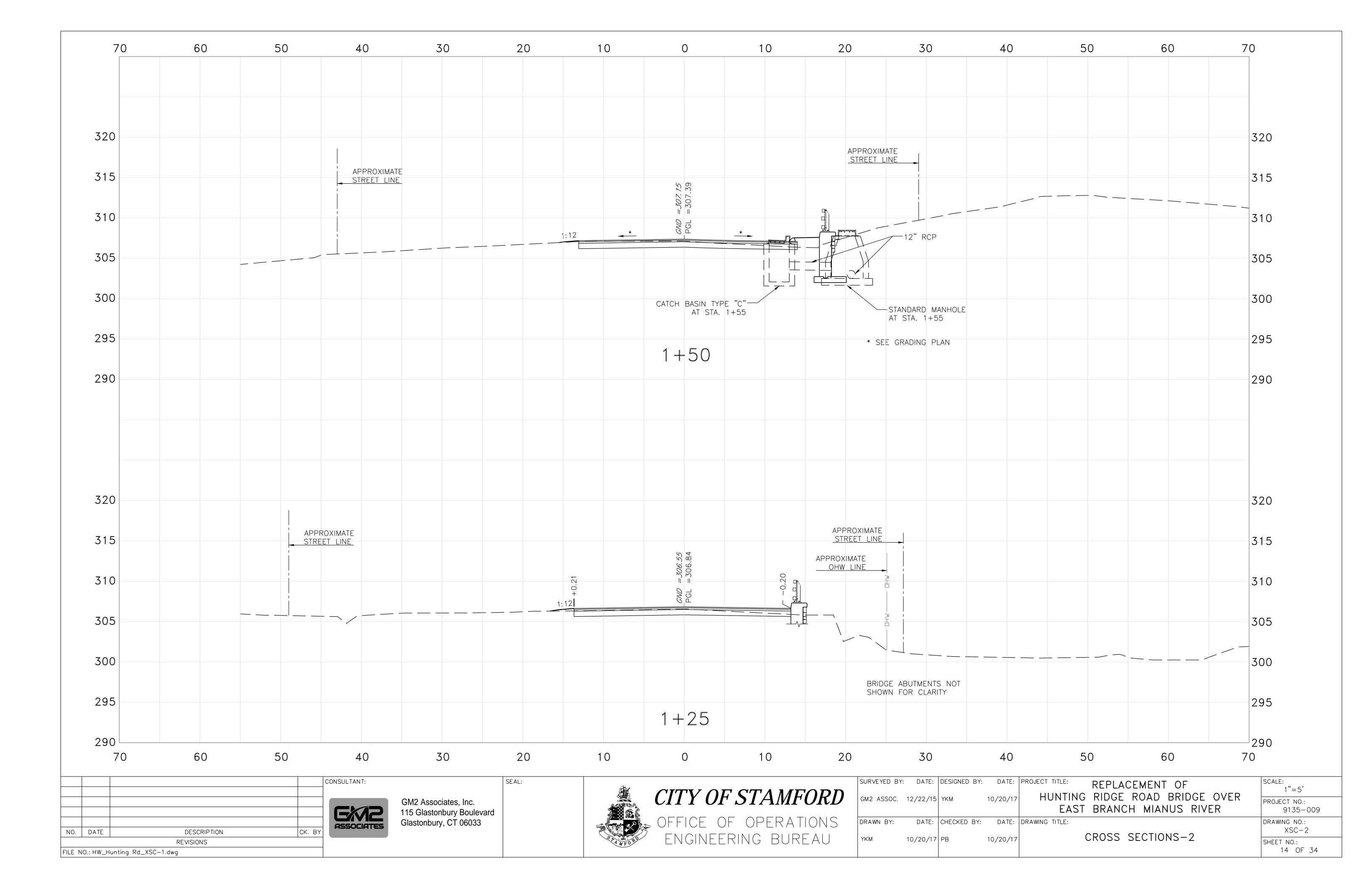


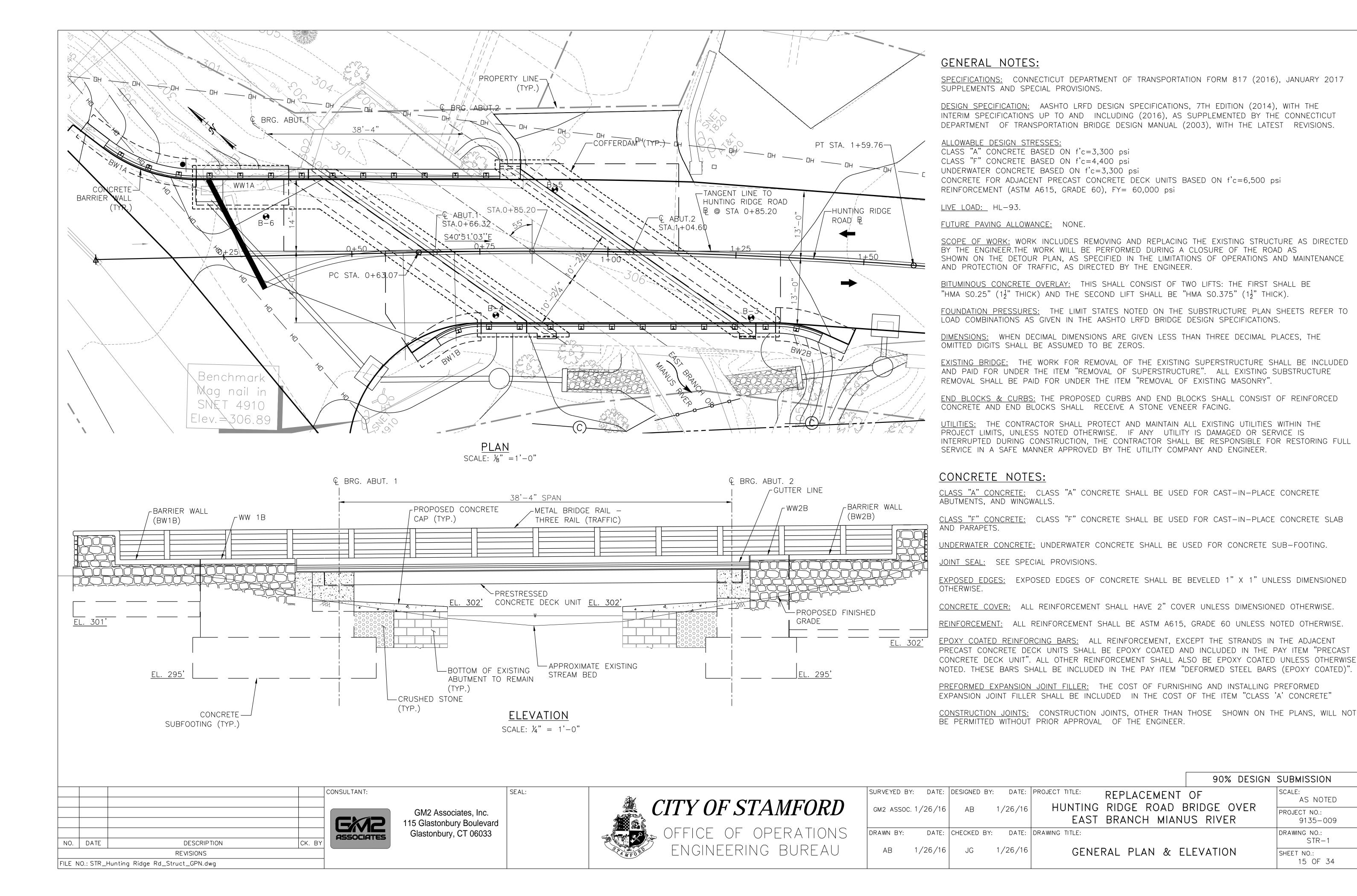












AS NOTED

9135-009

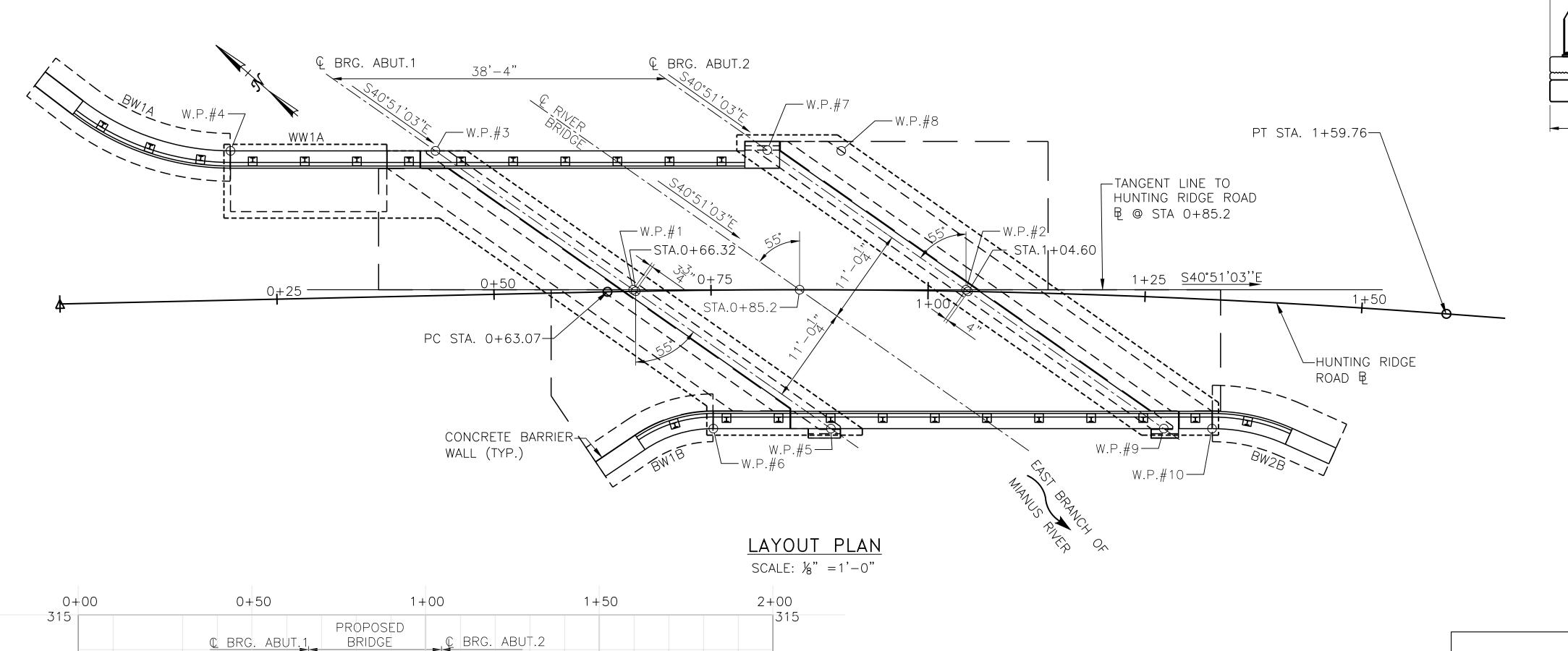
STR-1

15 OF 34

PROJECT NO.:

DRAWING NO .:

SHEET NO.:



END PROJECT NO. 9135-0009
LIMIT OF FULL DEPTH CONSTRUCTION

310

305

300 2+00

MEET EXISTING BL ST. 1+70

-EXISTING GRADE

EL. 308.17

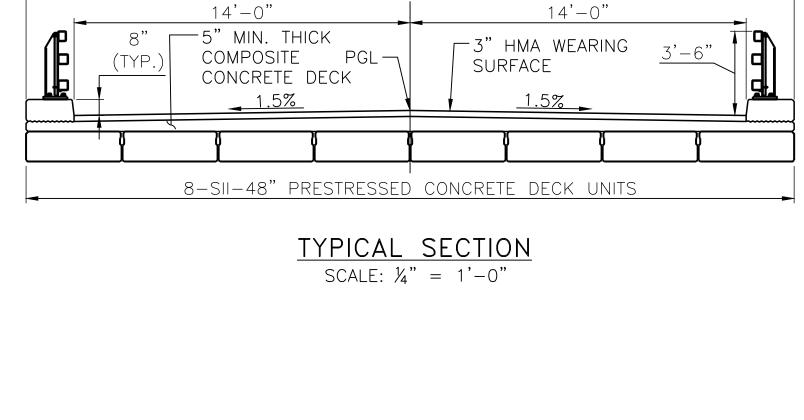
J PVT: 1+60.00 ELEV: 307.76 → PVI STA.1+70. → EL.=308.17

PROPOSED GRADE

L.V.C.=40'

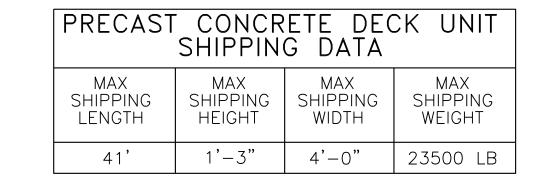
+0.75% 00 +6:

PVI STA.1 EL.=306.



32'-0"

HUNTING RIDGE ROAD



HYDRAULIC DATA	
DRAINAGE AREA	2.45 SQ. MI.
DESIGN FREQUENCY	100 YEAR
DESIGN DISCHARGE	579 CFS
AVERAGE DAILY FLOW ELEVATION	301.12 FT.
UPSTREAM DESIGN WATER SURFACE ELEVATION	307.00 FT.
DOWNSTREAM DESIGN WATER SURFACE ELEVATION	306.62 FT.

WORI	KING POINT	COORDINATES
W.P.#	NORTH	EAST
1	615280.5802	769019.8356
2	615251.5842	769044.9090
3	615326.0921	769001.6328
4	615308.2702	769017.0438
5	615252.8902	769022.6274
6	615263.1317	769013.7714
7	615272.9150	769047.6163
8	615279.4184	769042.1027
9	615223.8943	769047.7008
10	615219.6881	769051.3380

BRIDGE QUANTITIES									
ITEM	UNIT	TOTAL							
STRUCTURE EXCAVATION — EARTH (COMPLETE)		C.Y.	160						
STRUCTURE EXCAVATION — EARTH (EXCLUDING COFFERDAM AND	DEWATERING)	C.Y.	770						
HANDLING WATER		L.S.	L.S.						
COFFERDAM AND DEWATERING		L.F.	380						
PERVIOUS STRUCTURE BACKFILL		C.Y.	260						
HMA S0.375		TON	25						
HMA S 0.25		TON	25						
REMOVAL OF SUPERSTRUCTURE		L.S.	L.S.						
PRESTRESSED DECK UNITS (4'-0" X 1'-3")									
STEEL-LAMINATED ELASTOMERIC BEARINGS	C.I.	9130							
CLASS "A" CONCRETE		C.Y.	180						
DIMENSION STONE MASONRY		S.Y.	41						
CLASS "F" CONCRETE		C.Y.	106						
UNDERWATER CONCRETE		C.Y.	167						
1" PREFORMED EXPANSION JOINT FILLER FOR BRIDGES		S.F.	288						
DEFORMED STEEL BARS — EPOXY COATED		LB.	57300						
CRUSHED STONE BEDDING MATERIAL		CY.	80						
MEMBRANE WATERPROOFING (COLD LIQUID ELASTOMERIC)		S.Y.	285						
DAMPPROOFING		S.Y.	120						
METAL BRIDGE RAIL — THREE RAIL (TRAFFIC)		LF.	154						
REMOVAL OF EXISTING MASONRY		C.Y.	40						
	90% DE	SIGN SUB	MISSION						

				CONSULTANT:
				ASSOCIA
NO.	DATE	DESCRIPTION	CK. BY	
		REVISIONS		
FILE N	O.: STR_Hunting R	idge Rd_Struct_LYT.dwg		

0+50

BEGIN PROJECT NO. 9135-0009

MEET EXISTING

L.V.C. = 10'

S.S.D.=174.71 K = 3.35

₿ ST. 0+15

ĔL. 306.15

PVI STA.0+20.0 EL.=306.04

310

€ OL<u>D</u> LONG RIDGE ROAD___

305

300

LIMIT OF FULL DEPTH CONSTRUCTION

+0.75%



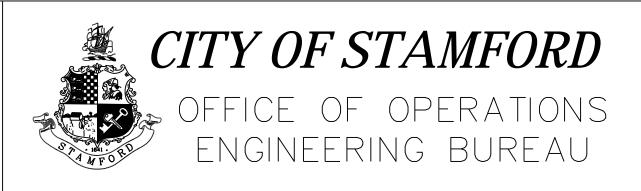
1 + 00

PROFILE

HORIZONTAL SCALE: 1"=20'

GM2 Associates, Inc. 115 Glastonbury Boulevard Glastonbury, CT 06033

1 + 50



SURVEYED BY	Y: DATE:	DESIGNED	BY:	DATE:	PROJECT	ΤI
GM2 ASSOC	. 1/26/16	AB		8/18/17	HU	IJ
DRAWN BY:	DATE:	CHECKED	BY:	DATE:	DRAWING	TI
AB	8/18/17	JG		8/18/17		

REPLACEMENT O HUNTING RIDGE ROAD BR	AS NOTED
EAST BRANCH MIANUS	PROJECT NO.:
RAWING TITLE:	DRAWING NO.: STR-2
LAYOUT PLAN & PR	OFILE SHEET NO.:

Driller:	N	И. St. John	Co	onne	cticu	ıt DOT Borir	g Report Hole No	o.: B-3	
Inspect	or: N	И. Kraemer	Town:		Stam	ford, Connecti	cut Stat./Ot	fset: N/A	
Engine	er: S	S. Lanne	Project	No.:	J215	5208	Northin	g: 4555990.28	
Start D		2-10-15	Route N	0.:	Hunti	ng Ridge Road	d Easting	: 618449.23	
Finish [2-10-15	Bridge N		N/A		Surface	Elevation: UNK	
Project	Descrip	tion: Proposed Brid	ge Repla	acem	ents				2
Casing	Size/Ty	pe: HSA/3.25"	Sample	г Туре	/Size:	SS/2"	Core Ba	arrel Type: NQ2	
The strategraph of the	er Wt.: N	200 min 450 mi	Hamme	61 11/2/1989/81	140	Fall: 30in.			
Ground	lwater O	bservations: @5.5 SAMPLE	n hathadi	ours	T	- o			(£)
Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Pen. (in.)	Rec. (in.)	RQD %	Generalized Strata Description	Material De and N		Elevation (
0-						7" ASPHALT			
		_				FILL			
-	S-1	14 10 10 50/	1" 19	2			Medium dense coarse to gravel, trace silt with cobb		
_	S-2	61/6"	6	4			Very dense coarse to fine gravel, trace silt with cobb		
5— —	S-3	7 9 50/4" =	16	12		GLACIO- FLUVIAL DEPOSIT POSSIBLE BEDROCK	Very dense coarse to fine gravel, trace silt with cobb		
-	C-4		60	60	85		Gneiss, unfractured, sligh	itly weathered, strong.	
10-									
-							END OF BORING 11.5ft		
- 15-									
15									
_									
=									
20-									
-	G);								
_									
_		7. SE = 0.500.	2 0				disturbed Piston V = Va %, Some = 20 - 35%,		_
Total D	enetratio		I &		137		- 2		not.
.12.00.787.3.401.1111.						расктиес with s npletion.	oil cuttings and topped with	1 cold patch Sne	725-5-200
Earth: No. of	DC.σ	Rock: 5ft No. of							
THE STATE OF THE PARTY OF THE P	mples:							SM-001-M	REV. 1/02

nspect		1. Kraemer	Town:	H-Mar		ford, Connecti		Stat./Offset: N/A			
Engine		Lanne	Project			5208		—	005.62		
Start Da	ere mane	2-10-15	Route N	OF NAME OF STREET	*IMARWATATIWITY	ing Ridge Roa		Easting: 6184	ALD INTERPOSED -		
inish E Project	V 1450 (1450)	2-10-15 ion: Proposed Brid	Bridge Ige Repl	ANSSER	N/A ents		0	Surface Elevation: \	JNK		
asing	Size/Typ	oe: HSA/3.25"	Sample	r Type	/Size:	SS/2"		Core Barrel Type: N	/ A		
	er Wt.: N		Hamme		140	Fall: 30in.					
Ground	water Ot	oservations: @5.0		nours		Ť					
		SAMPLE				g Gd					
Depth (ft)	Sample Type/No.	Blows on Sampler per 6 inches	Sampler Sampler and Notes								
0-					-	6" ASPHALT					
=	5					FILL	B.4		OAND		
=	S - 1	4 8 9 1:	3 24	10			little gravel, little s	arse to fine gray-bro ilt with cobbles and t	oulders.		
	S-2 /	, 50/2"	2	2				e to fine gray-brown ilt with cobbles and t			
5— -	S-3	10 40 44 2	7 24	6		GLACIO- FLUVIAL DEPOSIT	Very dense coarse gravel, trace silt w	e to fine gray SAND, ith cobbles.	some		
-	S-4	36 50/2"	8	6		GLACIAL TILL		e to fine brown SANI	D AND		
10-	S-5	18 41 50/1"	13	6	30		Very dense coarse GRAVEL, trace sil	e to fine brown SANI It with cobbles	D AND		
15	S-6	, 50/3"	3	0			Very dense coarse GRAVEL, trace sil	e to fine brown SANI It with cobbles	D AND		
20-							END OF BORING	18.5ft			
otal P		Sample Type: S = Proportions Used:	Trace =	1 - 10	0%,	Little = 10 - 20		35%, And = 35 - 9			
Earth: 1	enetratio 18.5ft mples: 6	Rock: Oft No. of	asp	halt up	on col	mpletion. 18.5 feet.	son cuttings and topp	Jed With Cold patch	1 of 1		

B-3

B-4

					90%	DESIGN SUBMISSION
	GM2 Associates, Inc. 5 Glastonbury Boulevard	CITY OF STAMFORD	SURVEYED BY: DATE: GM2 ASSOC.	DESIGNED BY: DATE: PR	REPLACEMENT OF HUNTING RIDGE ROAD BRIDGE (EAST BRANCH MIANUS RIVEI	IFINOULUI NO
NO. DATE DESCRIPTION CK	Glastonbury, CT 06033	OFFICE OF OPERATIONS		CHECKED BY: DATE: DR		DRAWING NO.: STR-3
REVISIONS FILE NO.: STR_Hunting RidgeRd_Struct_BRNG_LOGS.dwg		ENGINEERING BUREAU	AB 1/26/16	JG 1/26/16	SOIL BORINGS -1	SHEET NO.: 17 OF 34

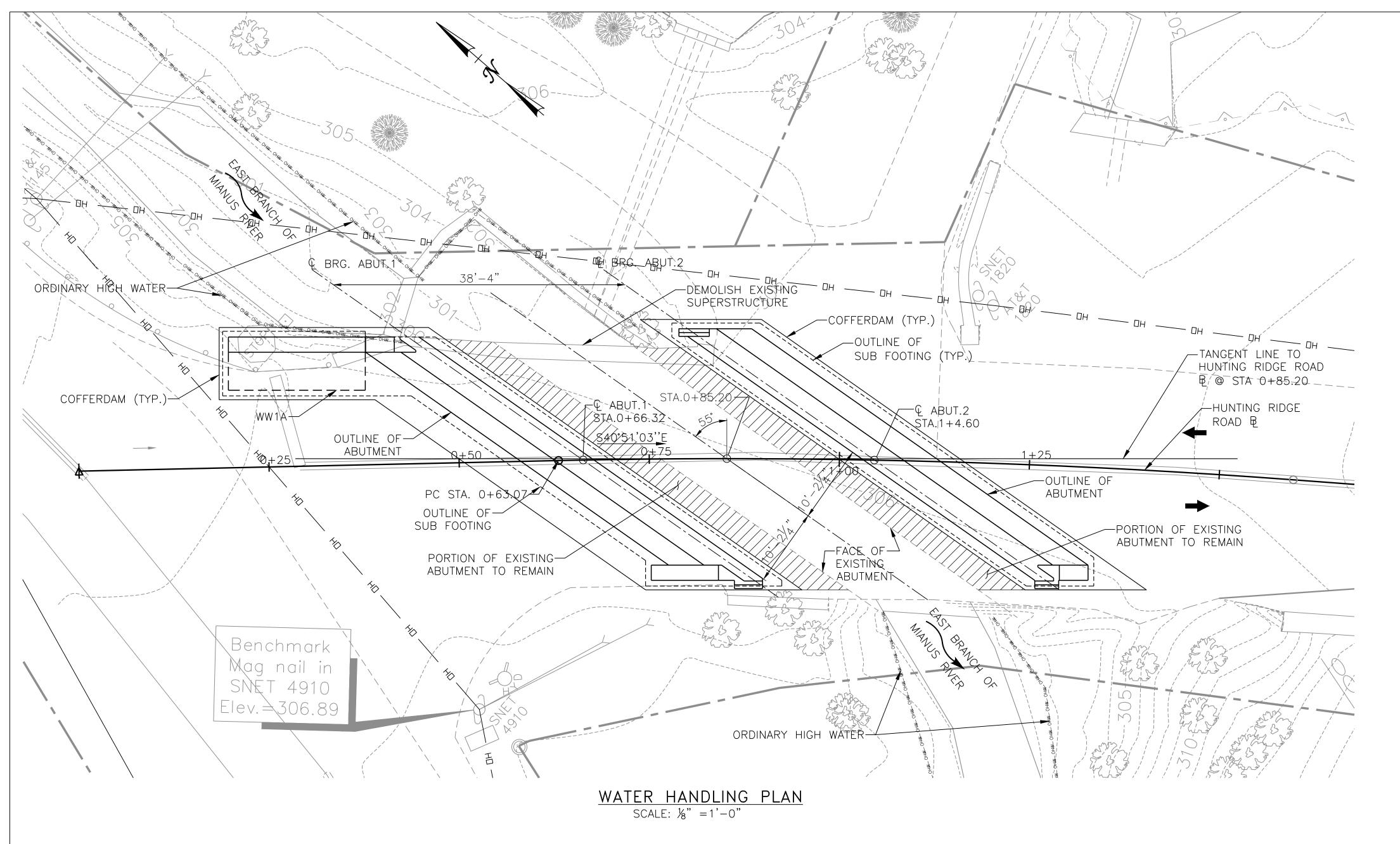
Driller:		M. St. J	lohn		9	Co	onne	cticu	ıt DOT Borir	ng Report	Hole No.:	B-5		
Inspect	or:	M. Krae				Town:		Stam	ford, Connecti	cut	Stat./Offset:	N/A		
Engine		S. Lanr				Project	No.:	J215	- 50		Northing:		993.48	
Start Da	- 14	12-10-1				Route N			ing Ridge Road	d	Easting:	61844		
Finish [O. GAI	12-10-1	15			Bridge N	Mary =	N/A	0 0		Surface Eleva			
Project	Descr	iption: F	ropo	sed E		1000000		ents			I.			
Casing	Size/7	ype: HS	SA/3.2	25"		Sample	r Type	/Size:	SS/2"		Core Barrel T	ype: N	/A	
Hamme		N. 19 10 10 10 10 10 10 10 10 10 10 10 10 10		N/Air	n.	Hamme	r Wt.:	140	Fall: 30in.					
Ground	water	Observa	tions:	@5.	.5 a	fter 0 h	ours				**		No.	
				SAMF	PLES	5	•	46	ם כ					(£)
Œ	_ C	i	Dia			<u> </u>	(T	79586	lize	Ma	terial Descrip	otion		
Depth (ft)	Sample Tyne/No			vs on npler		. (in.)	. (in.)	% (Generalized Strata Description	IVIC	and Notes	MOH		Elevation
Эер	San	5 p		inche	:S	Pen.	Rec.	RQD	Sen Stra Oes					le le
0-	0) [5-				
									6" ASPHALT FILL					
	S-1	18	41	50/1"		13	6		1.1	Very dense coars		SAND,	little	
-										gravel, little silt w	ith coddles.			
	T.													
1-2	S-2	12	4	26	9	24	6			Medium dense c gravel, pockets c				
5-										graver, pockets c	n siity sand wit	יוממטט ווו	cs.	
_	S-3	26	42	40	31	24	10		GLACIO- FLUVIAL	Very dense coars	se to fine gray	SAND,	some	
	3-3	20	42	40	J I	24	10		DEPOSIT	gravel, trace silt				
	S-4	43	40	50/5"		17	12		GLACIAL	Very dense coars	se to fine arav	SAND.	some	
_	3-4	43	49	50/5		1.6	12		TILL	gravel, trace silt		omero (b. 1217 + Post o n 1 124 (9 2).	and the second and the second as	
_														
10-														
	S-5	63	39	48	56	24	16			Very dense coars	se to fine gray	SAND,	some	
W. C.	0-0	0.5	OO		00	27	10			gravel, trace silt	with cobbles.			
-														
_														
15-	S-6	50/1'	•			1	1			Very dense coars		SAND,	some	
_	\3-0									gravel, trace silt	with copples.			
										END OF BORING	G 15.5ft			
-														
-														
20-														
_														
_														
55														
		Comp	do To	IDO:	C - 0	Split Co	0000	C = 1	Coro IID - IIn	dieturbad Diatas	V = Vono C	hoor T	ost	
		-	- 50							idisturbed Piston %, Some = 20 -				
Total P	enetra	tion in				NOT	TES: I	Boring	backfilled with s	soil cuttings and to	oped with cold	patch	Sheet	7
Earth:	15.5ft	Rock	: Oft			asph	nalt up	on col	mpletion.		(1)	7)	1 of 1	
No. of	**************************************	N	o. of			Aug	erreru	ાંગ્લા તેં	15.5 feet.					
Soil Sa	mples	6 C	ore R	luns: (J								SM-001-M RE	V. 1/02

<u>B-5</u>

Oriller:		Л. St. J				************		And the second	ıt DOT Boriı		On History Const.	
nspect	(47.0)	Л. Krae			1	own:	Wil		ford, Connecti	With the second state of t	Waster Filter Was Higgs Technology 1977	
Engine		3. Lann				roject l	w		5208	Northing	E PROCESSASSING CARROLLES SON	
Start Da		2-11-1	1.18			Route N		Hunt N/A	ing Ridge Roa		1 - 30	
Finish [STANDARD ST	2-11-1	2000	2277	name and an in-	Bridge N	Elevation: UNK					
Project	Descrip	tion: F	ropo	sed	Bridge	Repla	acem	ents		W		
Casing	Size/Ty	pe: HS	A/3.2	25"	S	Sample	r Type	/Size:	SS/2"	Core Bar	rrel Type: N/A	
Hamme	er Wt.: N	N/A	Fall:	N/Ai	in. H	łamme	r Wt.:	140	Fall: 30in.			
Ground	water O	bservat				ter 0 h	ours		1			
-		N		SAIVII	PLES		6	0	- 6d -			(£)
(ff.)	о <u>о</u>		Blov	vs on	ì	(in.)	(in.)	%	Generalized Strata Description	Material Des	scription	io
Depth (ft)	mpl oe/¶			pler		(j)			ner ata scri	and No	otes	Elevation
De	Sample Type/No.	p	er 6	inche	es	Pen.	Rec.	RQD	Str			Ele
0-	1						50 11 12 13		6" ASPHALT			
The state of the s									FILL			
	S-1	11	12	6	9	24	6			Medium dense coarse to fi	ne gray-brown SAND,	
	0-1	3 4	12	V	J	2-7				little gravel, little silt with co	obbles.	
										Modium donos socres to fi	no grav brown CANID	
200	S-2	6	10	12	23	24	6			Medium dense coarse to fi some silt, little gravel with or		
5-									GLACIO-			
1	S-3	4	42	36	28	24	10		FLUVIAL DEPOSIT	Very dense coarse to fine g	그녀는 하는 계속되는 사이에 없는 것들이 되지 않아요? 그 사이에 가입하는 이 걸어 먹는 그렇게 !!!	
										some silt, little gravel with	coppies.	
<u>-25</u>	S - 4	33	41	44	50/1"	17	12		GLACIAL TILL	Very dense coarse to fine g		
-										GRAVEL, trace silt with co	bbles.	
												
10		-1.										
- Total	S-5	29	44	45	48	24	14			Very dense coarse to fine g GRAVEL, trace silt with co		
										on the principal of the state of		
<u> </u>												
_												
15—	S - 6	42	58			12	10			Very dense coarse to fine		
-	1000						2,000,000			GRAVEL, trace silt with co	bbles.	
-												
1 <u>500</u>												
_												
20-		عوديون رو				100	O'a II			Very dense coarse to fine	grav SAND AND	
	S-7	63				6	4			GRAVEL, trace silt with co		
= -										F04.5_4_1 10000000000000000000000000000000000		
_										END OF BORING 20.5ft		
<u></u>												
							V5					
			-5	- C		1000				disturbed Piston V = Va		
		Propo	rtions	Use	ed: Tr	race =	1 - 10	0%,	Little = 10 - 20	%, Some = 20 - 35%, A	and = 35 - 50%	
Total Po	enetratio	on in							backfilled with s	oil cuttings and topped with	cold patch Shee	
THE COURT HAVE COME	20.5ft	Rock	1777-1981			aspr	iait up	OH CO	inpietion.		1 01	I
No. of	mples: 7		o. of ore R		0						SM-001-M R	

<u>B-6</u>

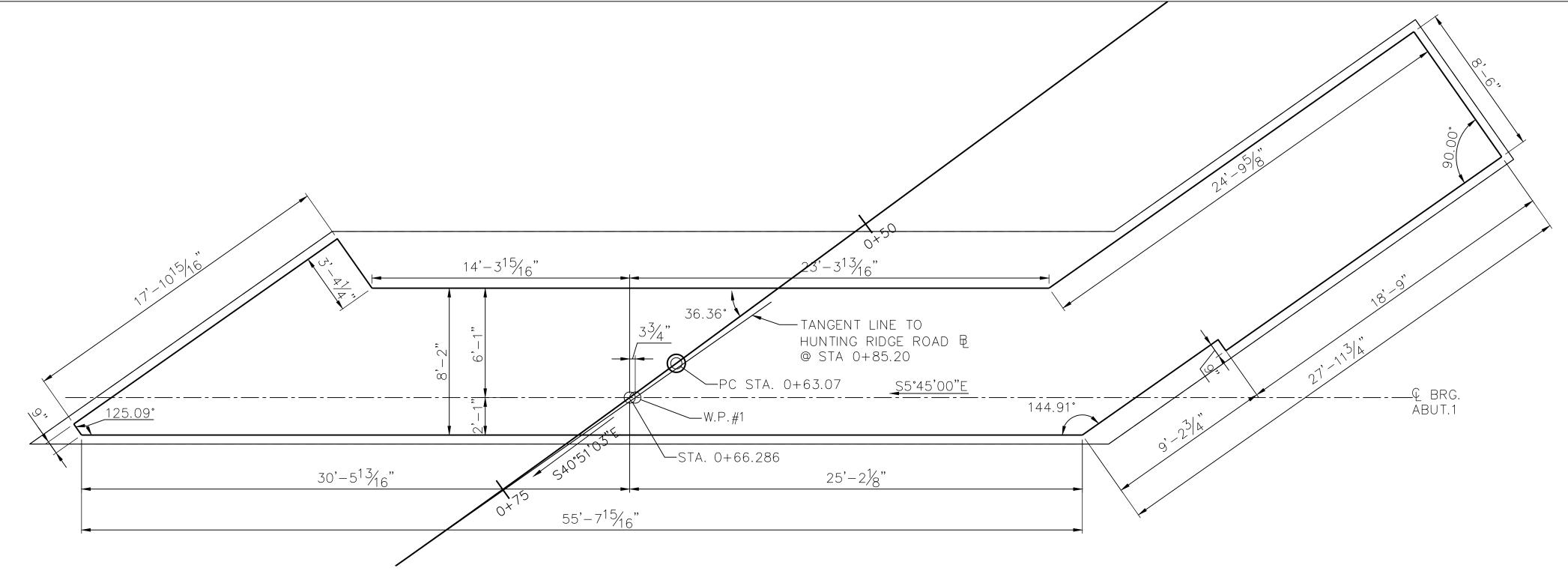
						90% DESIG	SN SUBMISSION
	CONSULTANT:	SEAL:	A CITY OF CTAMEODD		DESIGNED BY: DATE: PRO	REPLACEMENT OF	SCALE: AS NOTED
		GM2 Associates, Inc. 115 Glastonbury Boulevard	CITY OF STAMFORD	GM2 ASSOC.	AB 1/26/16	HUNTING RIDGE ROAD BRIDGE OVER EAST BRANCH MIANUS RIVER	PROJECT NO.: 9135-009
NO. DATE DESCRIPTION C	ASSOCIATES	Glastonbury, CT 06033	OFFICE OF OPERATIONS		CHECKED BY: DATE: DRA		DRAWING NO.: STR-4
REVISIONS FILE NO.: STR_Hunting RidgeRd_Struct_BRNG_LOGS.dwg			ENGINEERING BUREAU	AB 1/26/16	JG 1/26/16	SOIL BORINGS-2	SHEET NO.: 18 OF 34



HANDLING WATER NOTES:

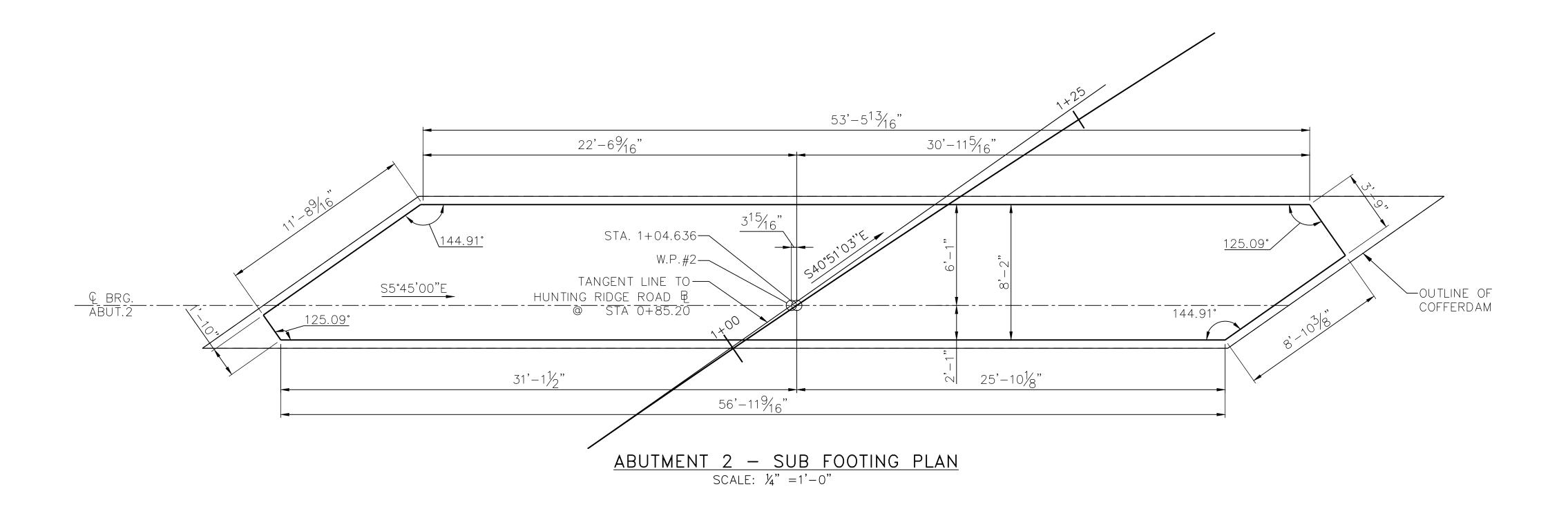
- 1. THE SUGGESTED METHOD OF CONTROLLING WATER DURING CONSTRUCTION CONSISTS OF A TEMPORARY COFFERDAM AS SHOWN ON THIS DRAWING. THE CONTRACTOR SHALL DESIGN AND SUBMIT FOR REVIEW A WATER HANDLING
- 2. THE TEMPORARY COFFERDAM SHALL BE DESIGNED BY THE CONTRACTOR TO CARRY ALL ANTICIPATED LOADS AND TO FACILITATE DEMOLITION OF EXISTING AND CONSTRUCTION OF THE PROPOSED BRIDGE.
- 3. SEQUENCE OF CONSTRUCTION:
 - 1. REMOVE EXISTING SUPERSTRUCTURE.
 - 2. INSTALL TEMPORARY COFFERDAM, DEMOLISH EXISTING STONE RETAINING WALLS, REMOVE PORTION OF EXISTING ABUTMENTS TO COMPLETE DEMOLITION OF EXISTING BRIDGE.
 - 3. CONSTRUCT SUB-FOOTINGS & WINGWALL 1A.
 - 4. REMOVE TEMPORARY COFFERDAM.
 - 5. CONSTRUCT SUPERSTRUCTURE, BARRIER WALLS & APPROACH SLABS TO COMPLETE CONSTRUCTION.
- 4. REFER TO SPECIAL PROVISION "HANDLING WATER" FOR ADDITIONAL REQUIREMENTS.
- 5. MINIMUM ELEVATION OF TEMPORARY COFFERDAM SHALL BE 304.00 FT.
- 6. ALL IN-STREAM UNCONFINED WORK SHALL COMPLETED BETWEEN JUNE 1ST AND SEPTEMBER 30TH UNLESS OTHERWISE APPROVED.

						90% DESIG	N SUBMISSION
	GM2 Associates, Inc. 115 Glastonbury Boulevar	SEAL:	CITY OF STAMFORD OFFICE OF OPERATIONS ENGINEERING BUREAU	SURVEYED BY: DATE: GM2 ASSOC. 1/26/16	DESIGNED BY: DATE: DK 05/11/18	PROJECT TITLE: REPLACEMENT OF HUNTING RIDGE ROAD BRIDGE OVER EAST BRANCH MIANUS RIVER	SCALE: AS NOTED PROJECT NO.: 9135-009
NO. DATE DESCRIPTION CK. B	Glastonbury, CT 06033		OFFICE OF OPERATIONS			DRAWING TITLE:	DRAWING NO.: STR-5
REVISIONS TILE NO.: STR_Hunting Ridge Rd_Struct_Water_Handling.dwg			ENGINEERING BUREAU	DK 05/11/18	8 JG 05/11/18	WATER HANDLING PLAN	SHEET NO.: 19 OF 34

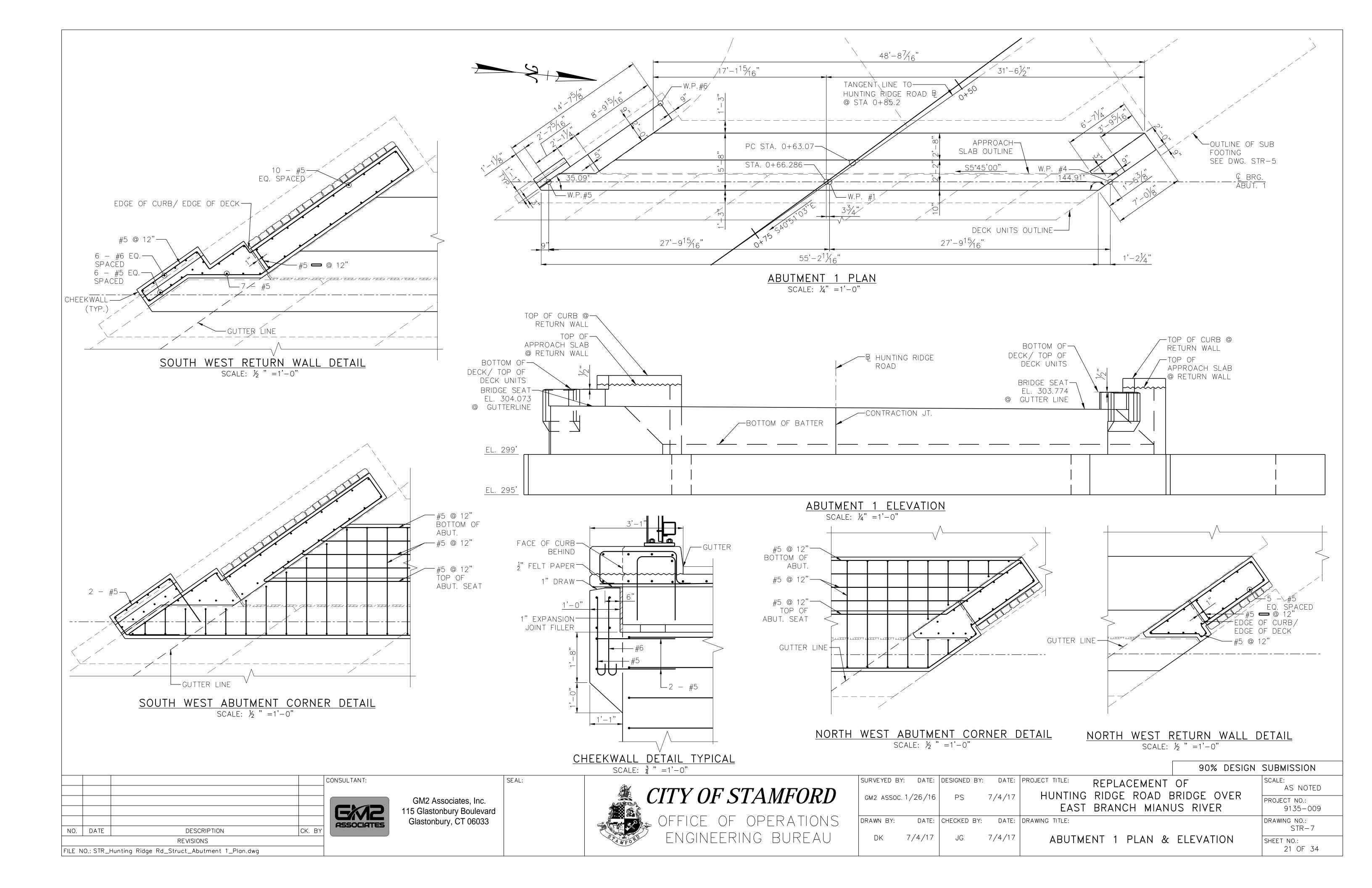


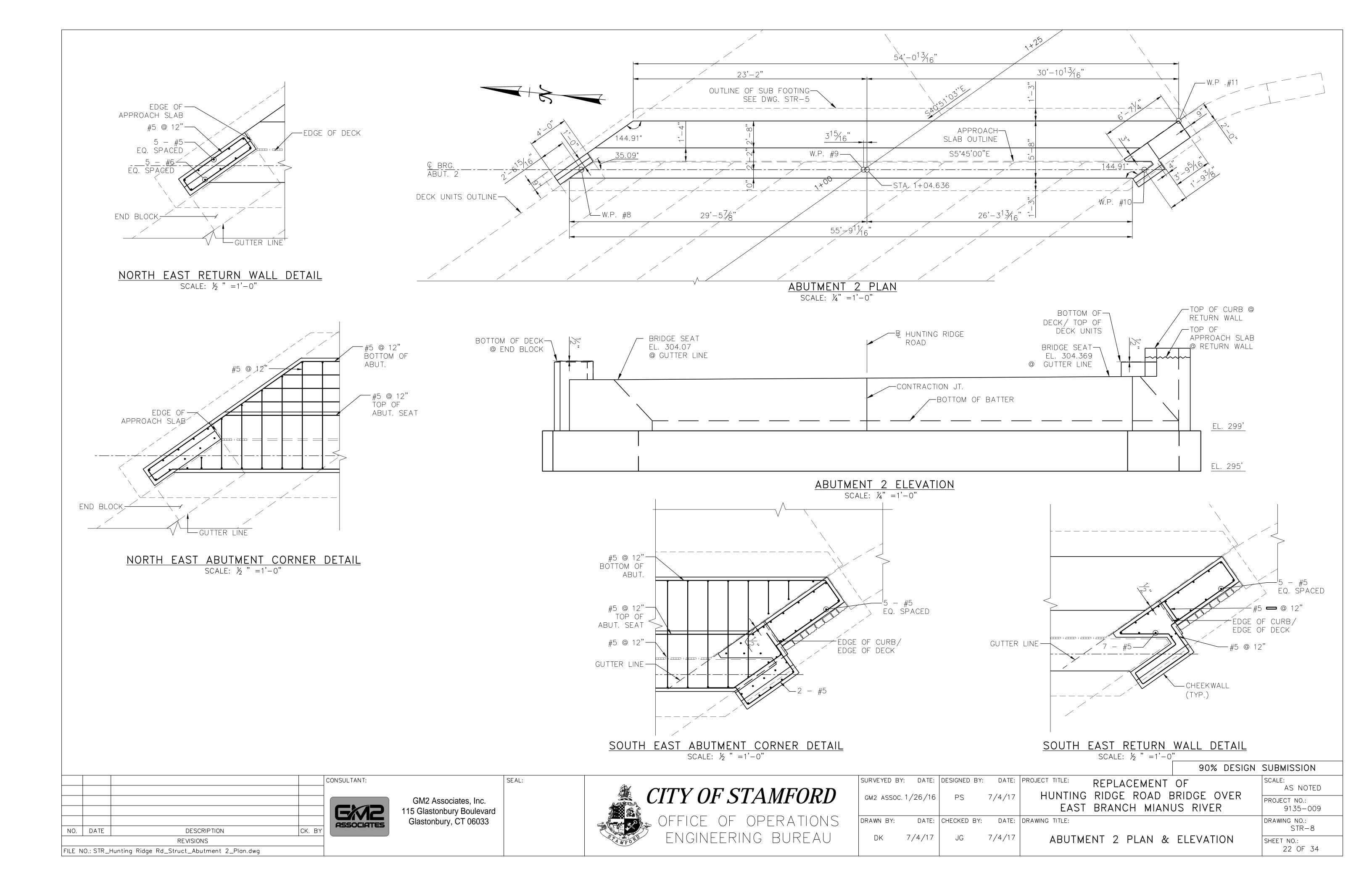
ABUTMENT 1 - SUB FOOTING PLAN

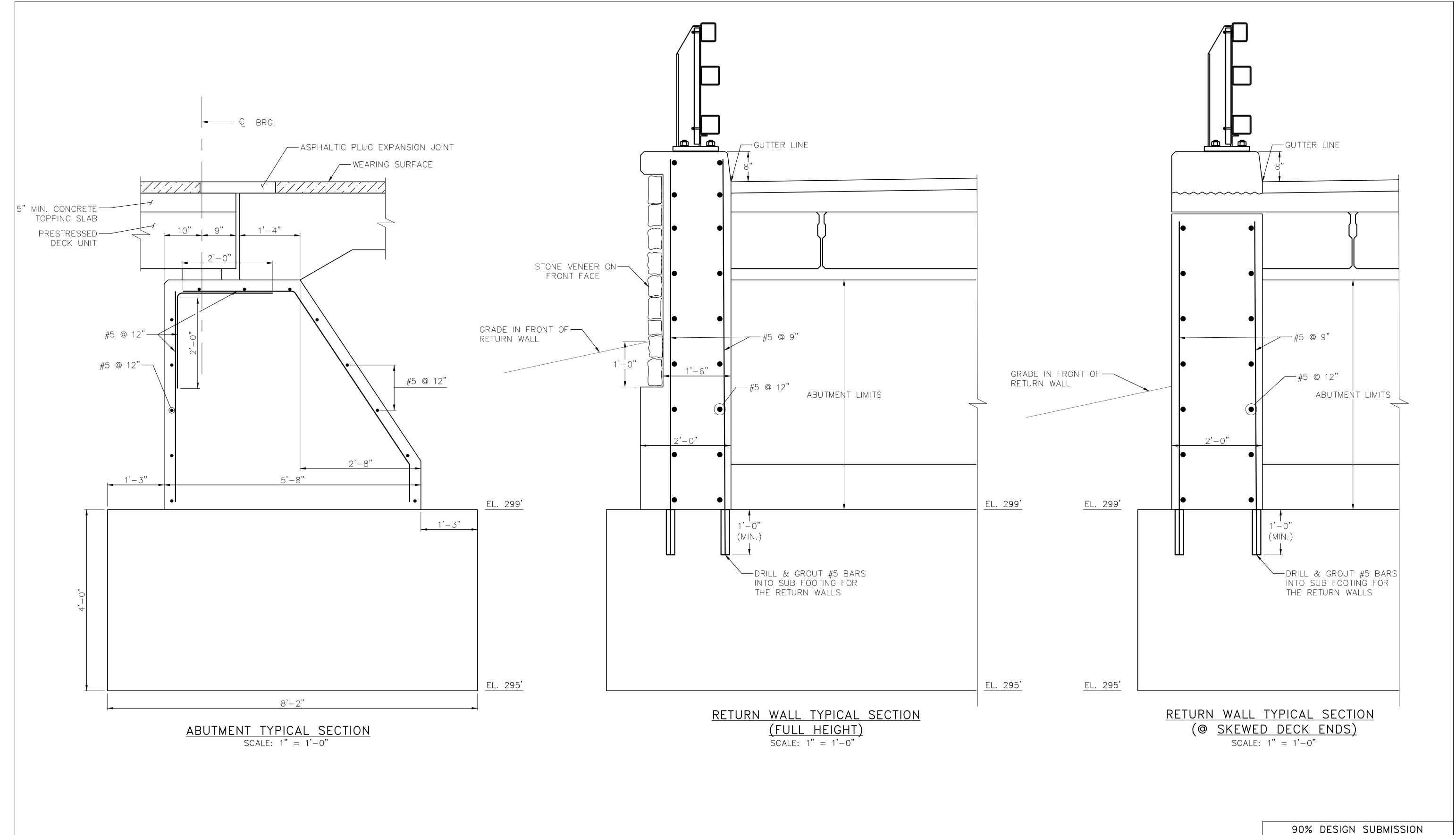
SCALE: 1/4" = 1'-0"



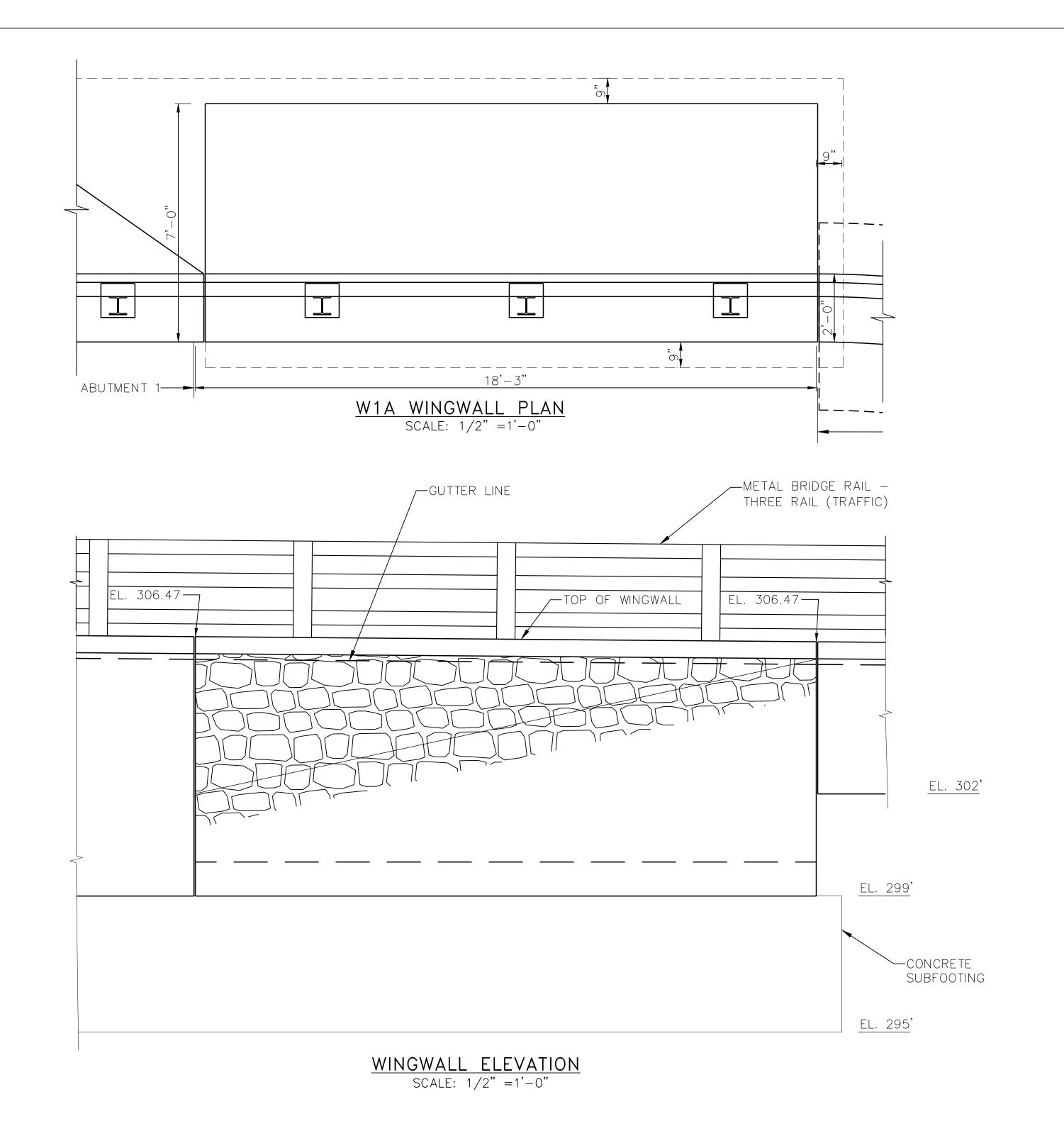
	CONSULTANT:	GM2 Associates, Inc. 115 Glastonbury Boulevard	CITY OF STAMFORD	SURVEYED BY: DATE: DESIGNED BY: DATE: PROG GM2 ASSOC. 1/26/16 PS 7/4/17	REPLACEMENT OF HUNTING RIDGE ROAD BRIDGE OVER EAST BRANCH MIANUS RIVER	SCALE: AS NOTED PROJECT NO.: 9135-009
NO. DATE DESCRIPTION	CK. BY ASSOCIATES	Glastonbury, CT 06033	OFFICE OF OPERATIONS	DRAWN BY: DATE: CHECKED BY: DATE: DRAV	WING TITLE:	DRAWING NO.: STR-6
REVISIONS FILE NO.: STR_Hunting Ridge Rd_Struct_Footing_Plan.dwg			ENGINEERING BUREAU	DK 7/4/17 JG 7/4/17	SUB FOOTING PLAN	SHEET NO.: 20 OF 34

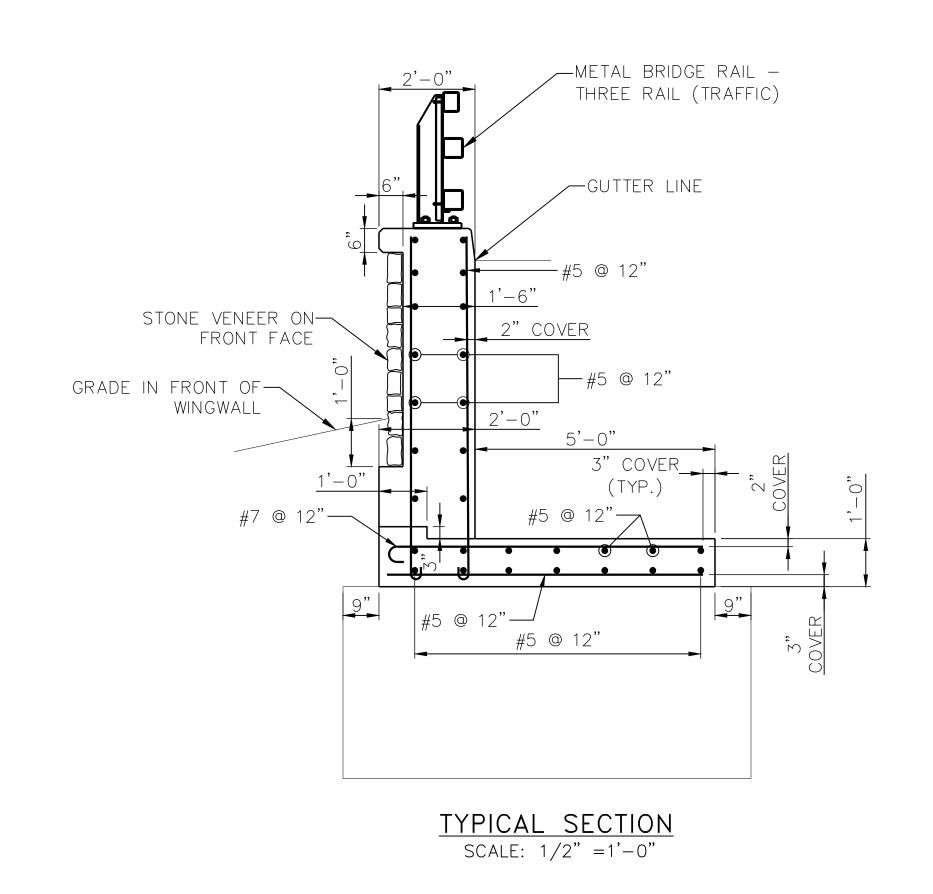




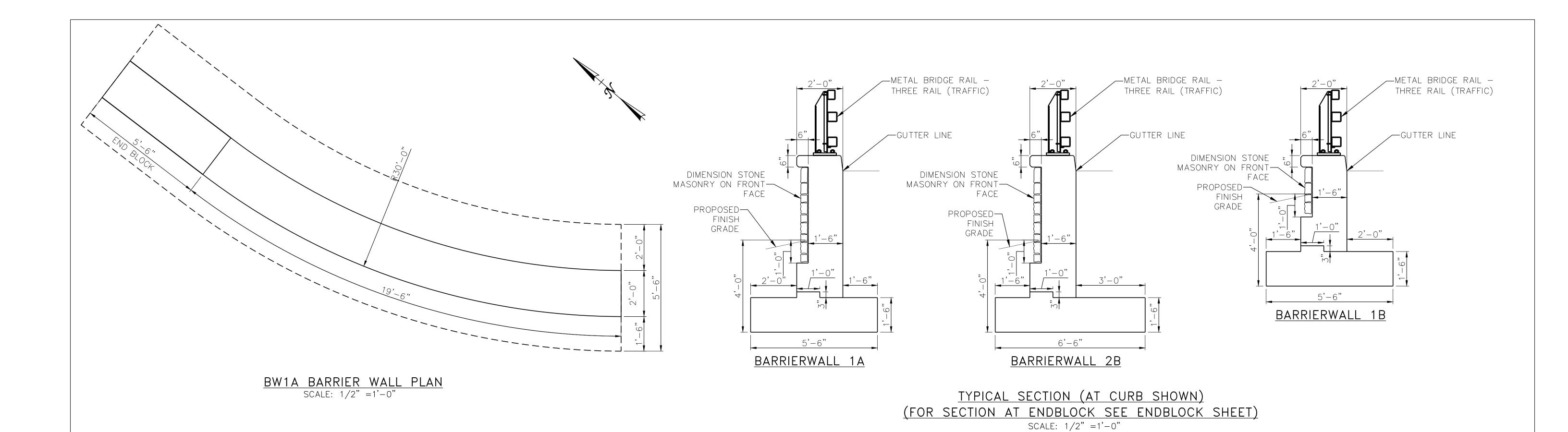


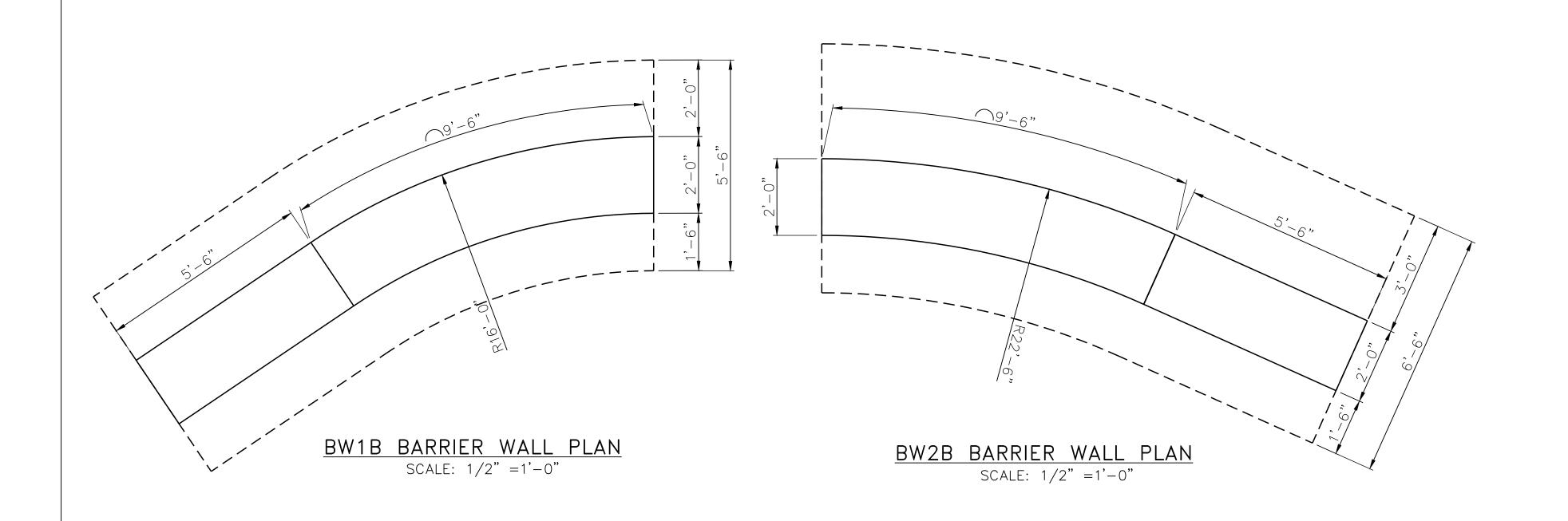


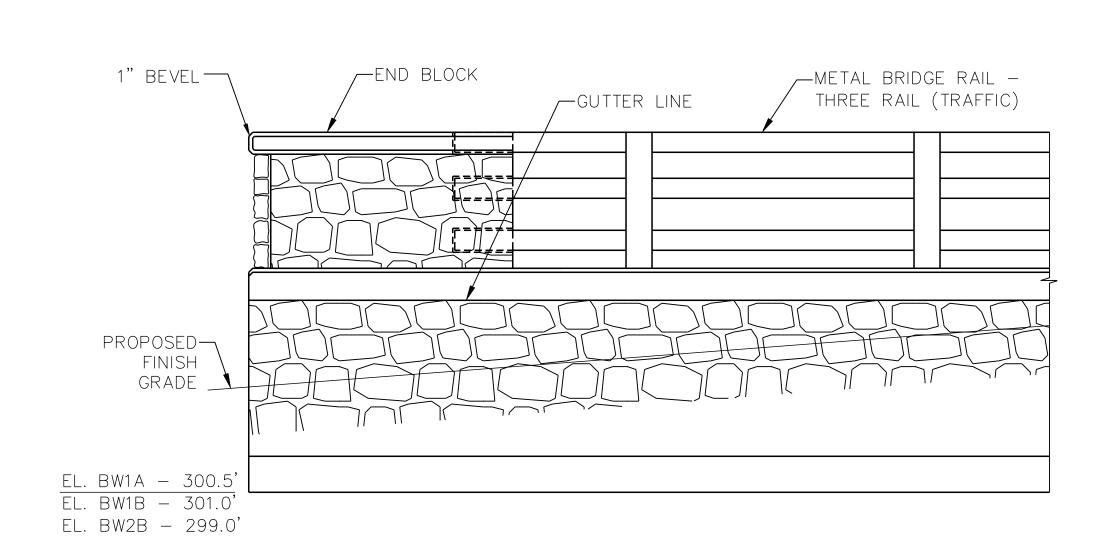




							90% DESIGN	N SUBMISSION
		CONSULTANT:	SEAL:	L:	Au	SURVEYED BY: DATE: DESIGNED BY: DATE:	PROJECT TITLE: REPLACEMENT OF	SCALE: AS NOTED
			GM2 Associates, Inc.		CITY OF STAMFORD	GM2 ASSOC. 1/26/16 PS 7/4/17	HUNTING RIDGE ROAD BRIDGE OVER EAST BRANCH MIANUS RIVER	PROJECT NO.: 9135-009
		ASSOCIATES	115 Glastonbury Boulevard Glastonbury, CT 06033		OFFICE OF OPERATIONS	DRAWN BY: DATE: CHECKED BY: DATE:		DRAWING NO.: STR-10
NO. DATE	DESCRIPTION REVISIONS	CK. BY			ENGINEERING BUREAU	DK 7/4/17 JG 7/4/17	WINGWALL DETAILS	SHEET NO.:
_E NO.: STR_H	lunting Ridge Rd_Struct_Wingwall_Elevations.dwg							24 OF 34



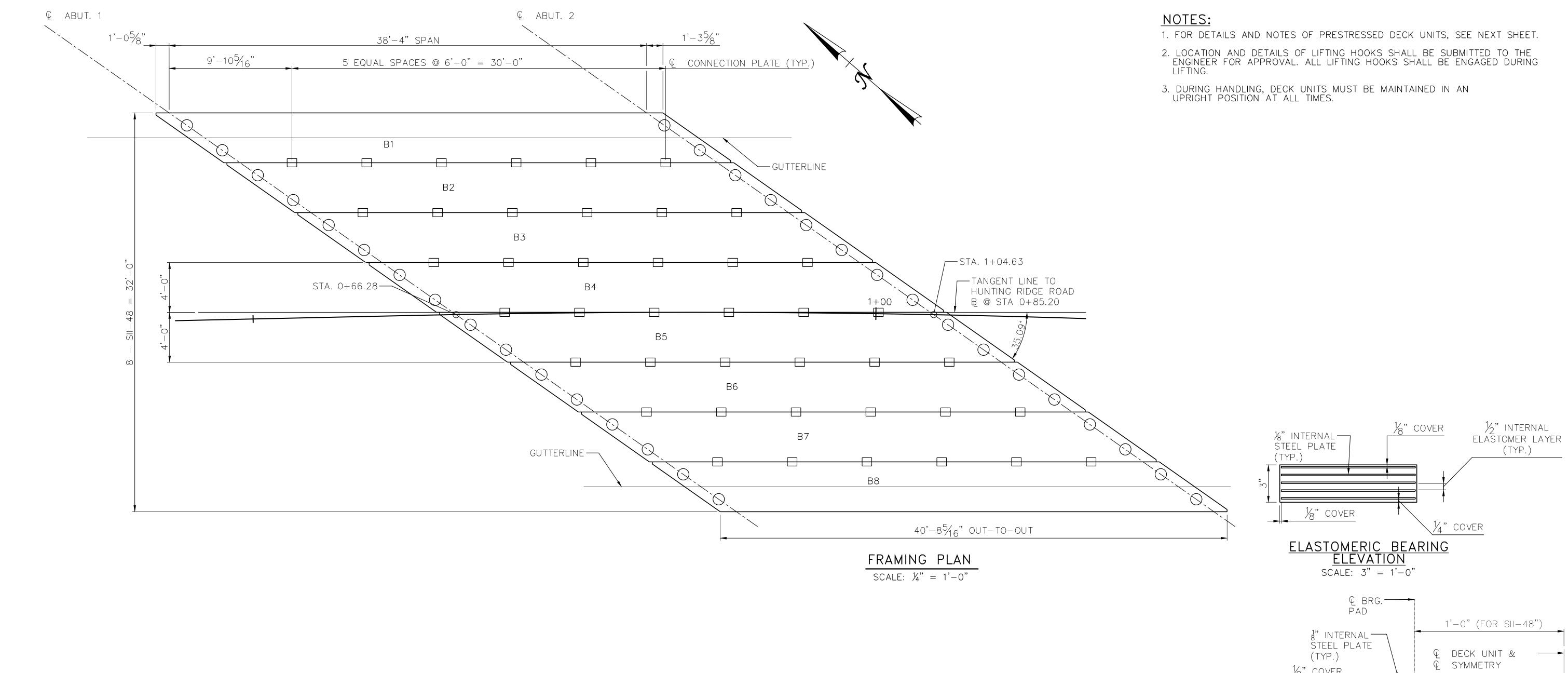




TYPICAL BARRIER WALL ELEVATION

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

						90% DES	SIGN SUBMISSION
	CONSULTANT:	SEAL:	a.	SURVEYED BY: DATE:	DESIGNED BY: DATE:	PROJECT TITLE: REPLACEMENT OF	SCALE:
			CITY OF STAMFORD	GM2 ASSOC. 1/26/16	DK 7/4/17	HUNTING RIDGE ROAD BRIDGE OVER	AS NOTED
	GM2 Associates, Inc. 115 Glastonbury Boulevard			GWIZ A3300. 17 207 10		EAST BRANCH MIANUS RIVER	PROJECT NO.: 9135-009
	Glastonbury, CT 06033		OFFICE OF OPERATIONS	DRAWN BY: DATE:	CHECKED BY: DATE:	DRAWING TITLE:	DRAWING NO.:
NO. DATE DESCRIPTION CK. BY	HSSOCIATES 77			7 /4 /47	7 /4 /47		STR-11
REVISIONS			ENGINEERING BUREAU	DK 7/4/17	JG 7/4/17	BARRIER WALL DETAILS	SHEET NO.:
FILE NO.: STR_Hunting Ridge Rd_Struct_Barrierwall.dwg							25 OF 34



ELASTOMETRIC BEARING NOTES

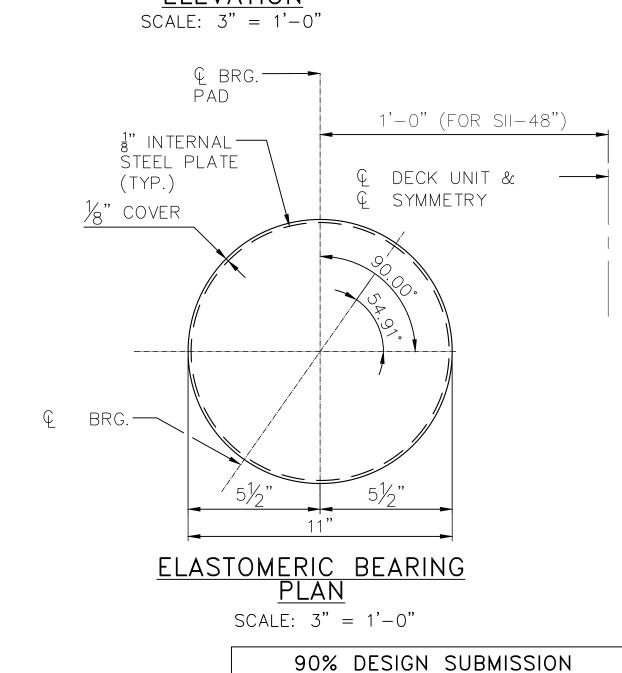
- 1. ELASTOMERIC BEARING PADS SHALL BE NEOPRENE, HARDNESS (SHORE "A" DUROMETER) OF 60, GRADE 3.
- 2. THE COST OF THE BEARING SHALL BE PAID UNDER "STEEL-LAMINATED ELASTOMERIC BEARINGS".
- 3. DESIGN LOADS: (DESIGN METHOD = DESIGN METHOD A)

 UNFACTORED DESIGN LOADS:

 MAXIMUM DEAD LOAD

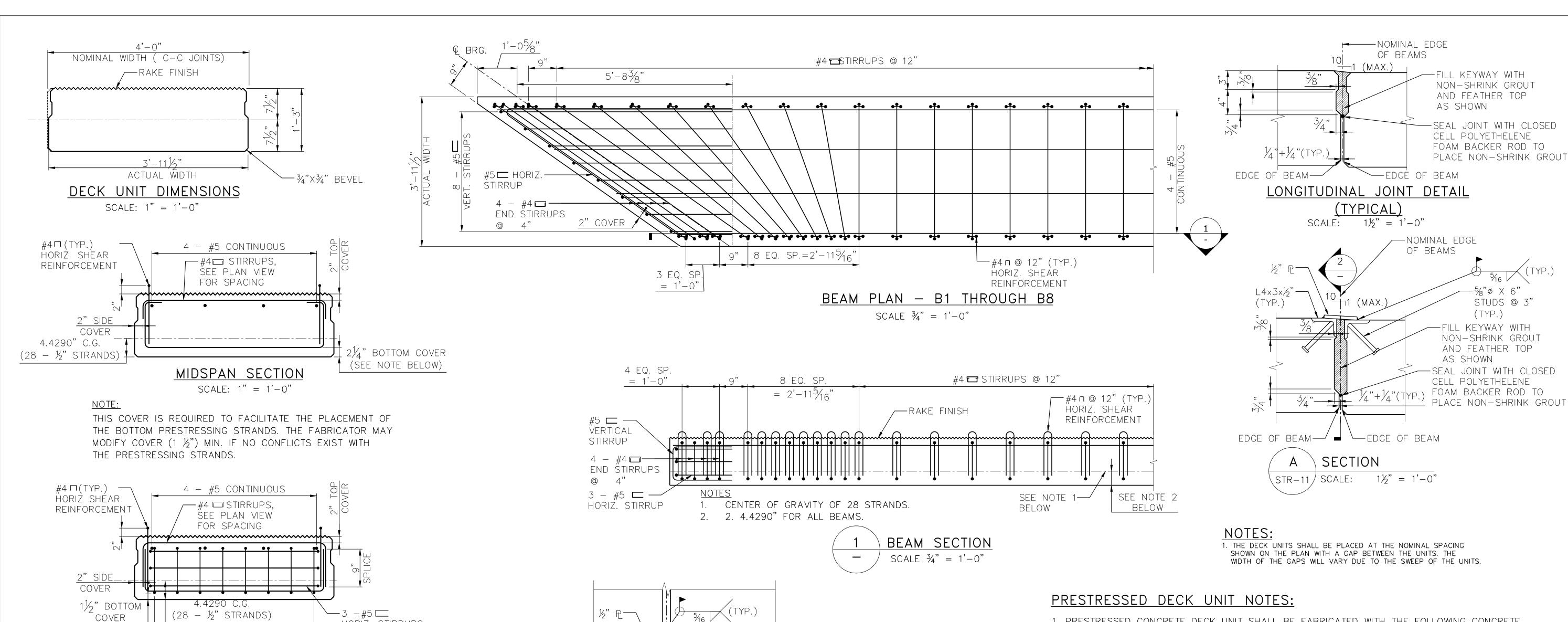
 MAXIMUM SUPERIMPOSED DEAD LOAD 2.0 KIPS

 MAXIMUM LIVE LOAD (+ IMPACT) 24.7 KIPS
- 4. BEARINGS SHOULD BE INSTALLED AT TEMPERATURES BETWEEN 20^F & 70^F. INSTALLATION TEMPERATURES OUTSIDE THIS RANGE WILL REQUIRE ADJUSTMENT.



(TYP.)

	CONSULTANT: GM2 Associates, Inc.	SEAL:	CITY OF STAMFORD	SURVEYED BY: DATE: DESIGNED BY: DATE: GM2 ASSOC. 6/15/17 AB 6/15/17	HUNTING RIDGE ROAD BRIDGE OVER	SCALE: AS NOTED PROJECT NO.:
	115 Glastonbury Boulevard Glastonbury, CT 06033		OFFICE OF OPERATIONS	DRAWN BY: DATE: CHECKED BY: DATE:	EAST BRANCH MIANUS RIVER DRAWING TITLE:	9135-009 DRAWING NO.: STR-12
NO. DATE DESCRIPTION CK. B REVISIONS FILE NO.: STR_Hunting Ridge Rd_Struct_FRAM.dwg			ENGINEERING BUREAU	AB 6/15/17 JG 6/15/17	FRAMING PLAN & SLAB DETAILS	STR-12 SHEET NO.: 26 OF 34



- 1. PRESTRESSED CONCRETE DECK UNIT SHALL BE FABRICATED WITH THE FOLLOWING CONCRETE STRENGTHS: 28 DAYS COMPRESSIVE STRENGTH: f'c = 6.5 KSICOMPRESSIVE STRENGTH AT TRANSFER: f'ci = 5.0 KSI
- 2. STRANDS FOR PRETENSIONING SHALL BE "~, UNCOATED, SEVEN WIRE STRANDS CONFORMING TO THE REQUIREMENTS OF AASHTO M203, GRADE 270, LOW RELAXATION, WITH: ULTIMATE STRENGTH: f's = 270 KSI

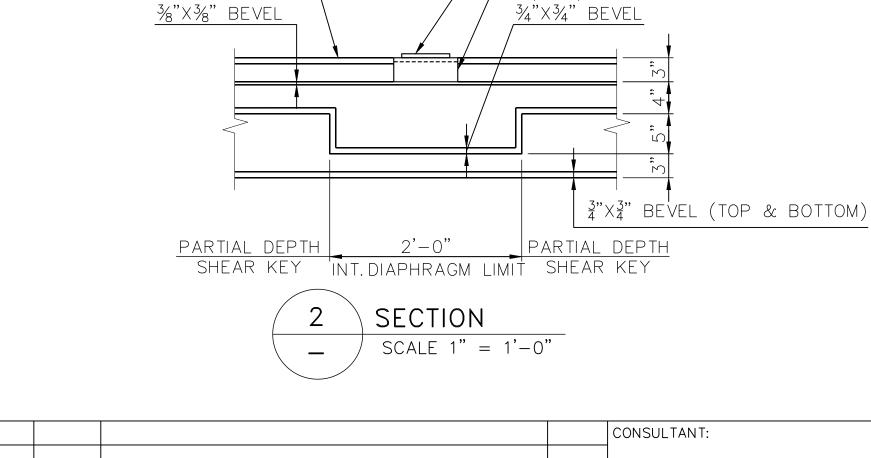
 JACKING TENSION FORCE: Fj = 31 KIPS PER STRAND

-%"ø x 6"

(TYP.)

STUDS @ 3"

- 3. ALL REINFORCING STEEL IN PRESTRESSED CONCRETE DECK UNITS, EXCEPT PRESTRESSING STRANDS, SHALL CONFORM TO ASTM A416, GRADE 60, EPOXY COATED. PRESTRESSING STRANDS SHALL NOT BE EPOXY COATED.
- 4. PRESTRESSING STRANDS SHALL BE PLACED 2" ON CENTER MINIMUM, AND SHALL HAVE 1" MINIMUM COVER
- 5. THE DRILLING OF HOLES IN OR THE USE OF POWER ACTUATED TOOLS ON PRESTRESSED DECK UNITS WILL NOT BE PERMITTED.
- 6. POCKET FOR TRANSVERSE TIE ANCHORAGE SHALL BE DRY PACKED FLUSH WITH EXTERIOR SURFACE OF THE FASCIA SLAB UNIT AFTER THE TRANSVERSE TENSIONING HAS BEEN COMPLETED.
- 7. NO ADDITIONAL DEAD LOADS OR LIVE LOADS SHALL BE APPLIED TO THE BUTTED DECK UNITS UNTIL THE THE TRANSVERSE TIES HAVE BEEN FULLY TENSIONED AND THE GROUT IN THE LONGITUDINAL SHEAR KEYS HAS REACHED A SEVEN-DAY COMPRESSIVE STRENGTH OF 4500 PSI.
- 8. TOP OF ALL DECK UNITS SHALL BE GIVEN A RAKE FINISH (," AMPLITUDE) ACROSS THE WIDTH (PERPENDICULAR THE TO BEAM'S AXIS).
- 9. THE COST FOR FURNISHING AND INSTALLING STEEL CONNECTION PLATES, ANGLES, STUDS AND WELDING TO BE INCLUDED UNDER THE ITEM "PRESTRESSED DECK UNITS (4'-0" X 1'-3")".



8 - #5 =

NOTE: SPLAY STIRRUPS TO AVOID CONFLICT WITH TRANSVERSE TIE STRAND HOLES.

—L4x3x½"

(TYP.)

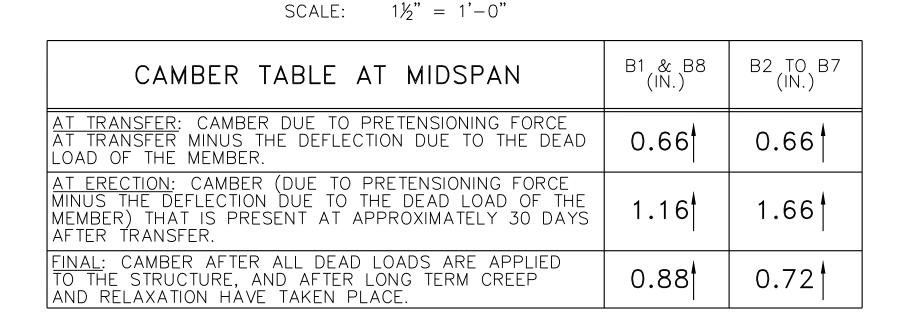
VERT. STIRRUPS

END SECTION

SCALE: 1" = 1'-0"

TOP OF SLAB UNIT

HORIZ. STIRRUPS



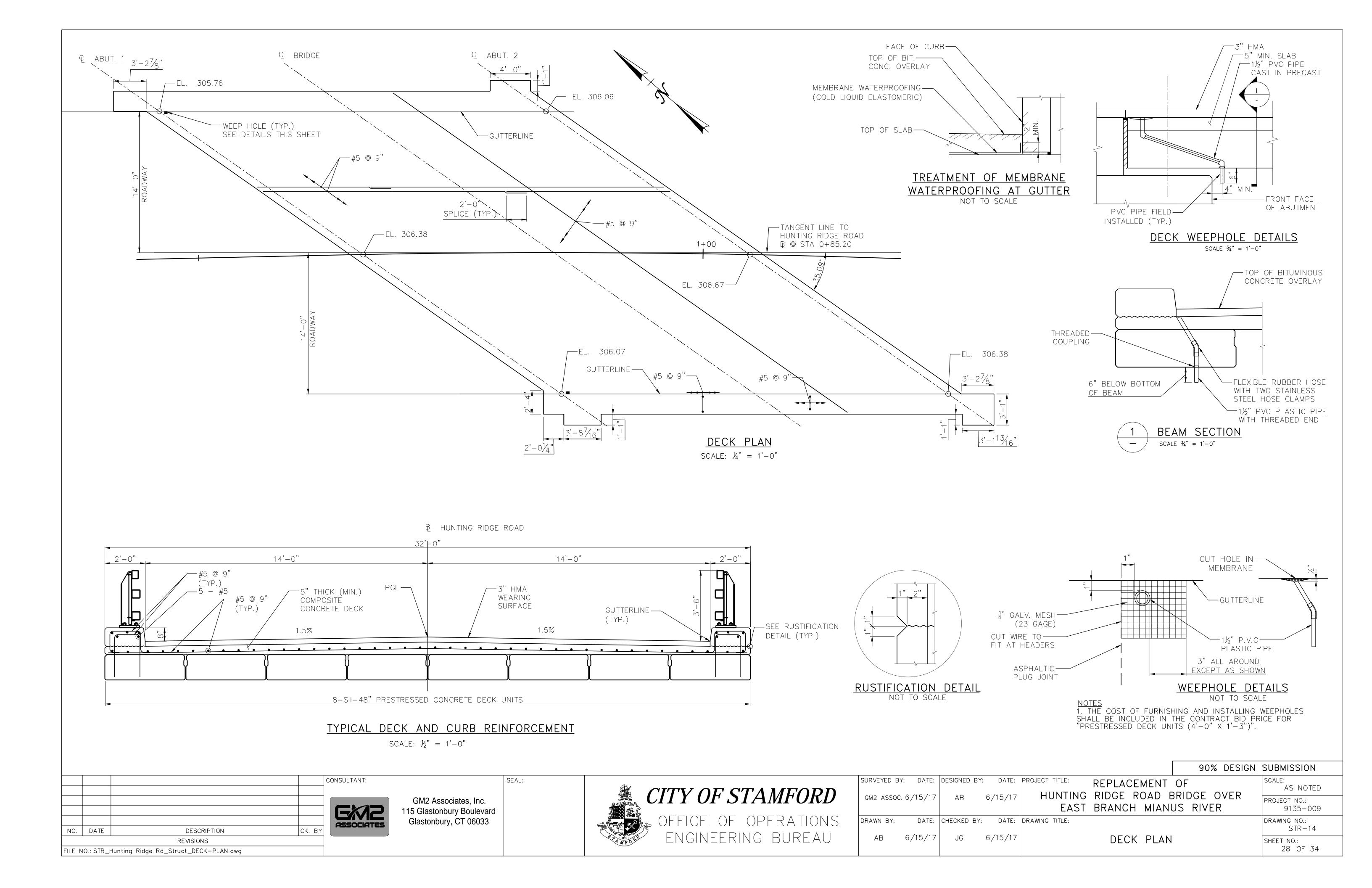
CONNECTION PLATE DETAIL

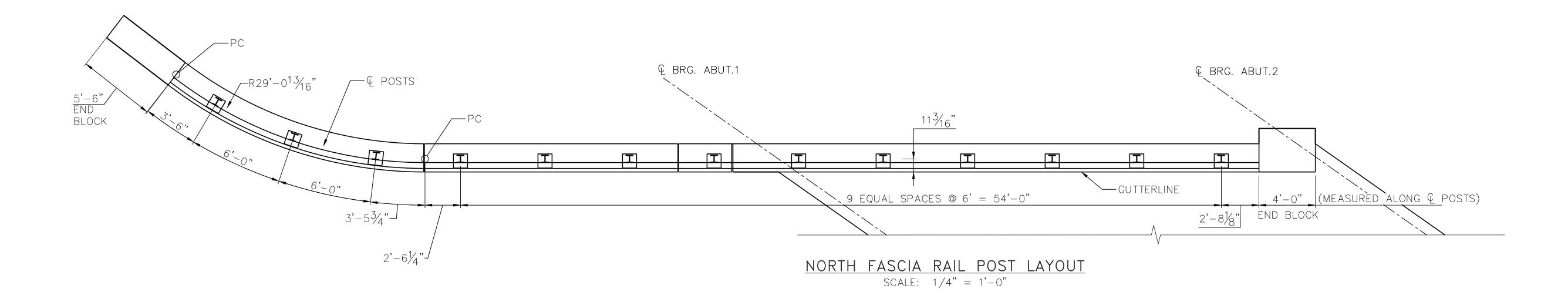
→ (TYP.)

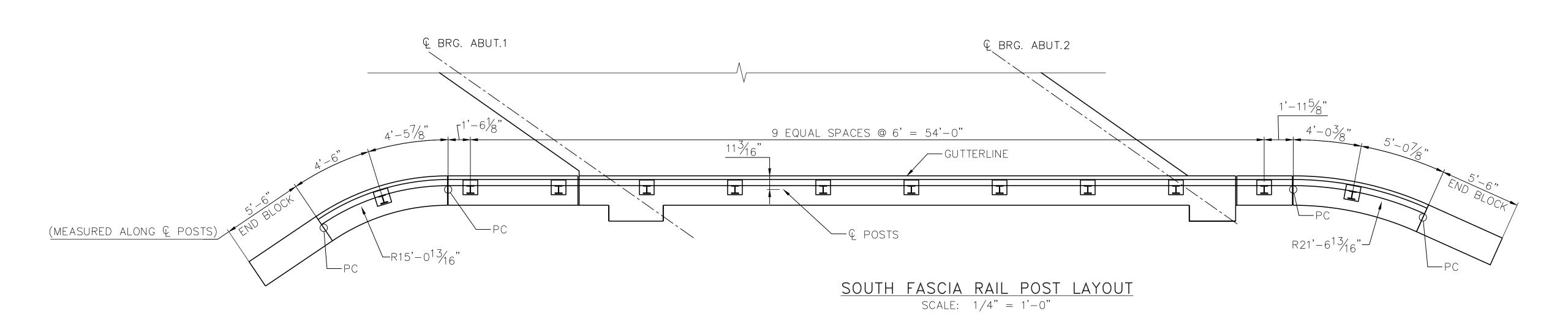
-NOMINAL EDGE

OF BEAMS

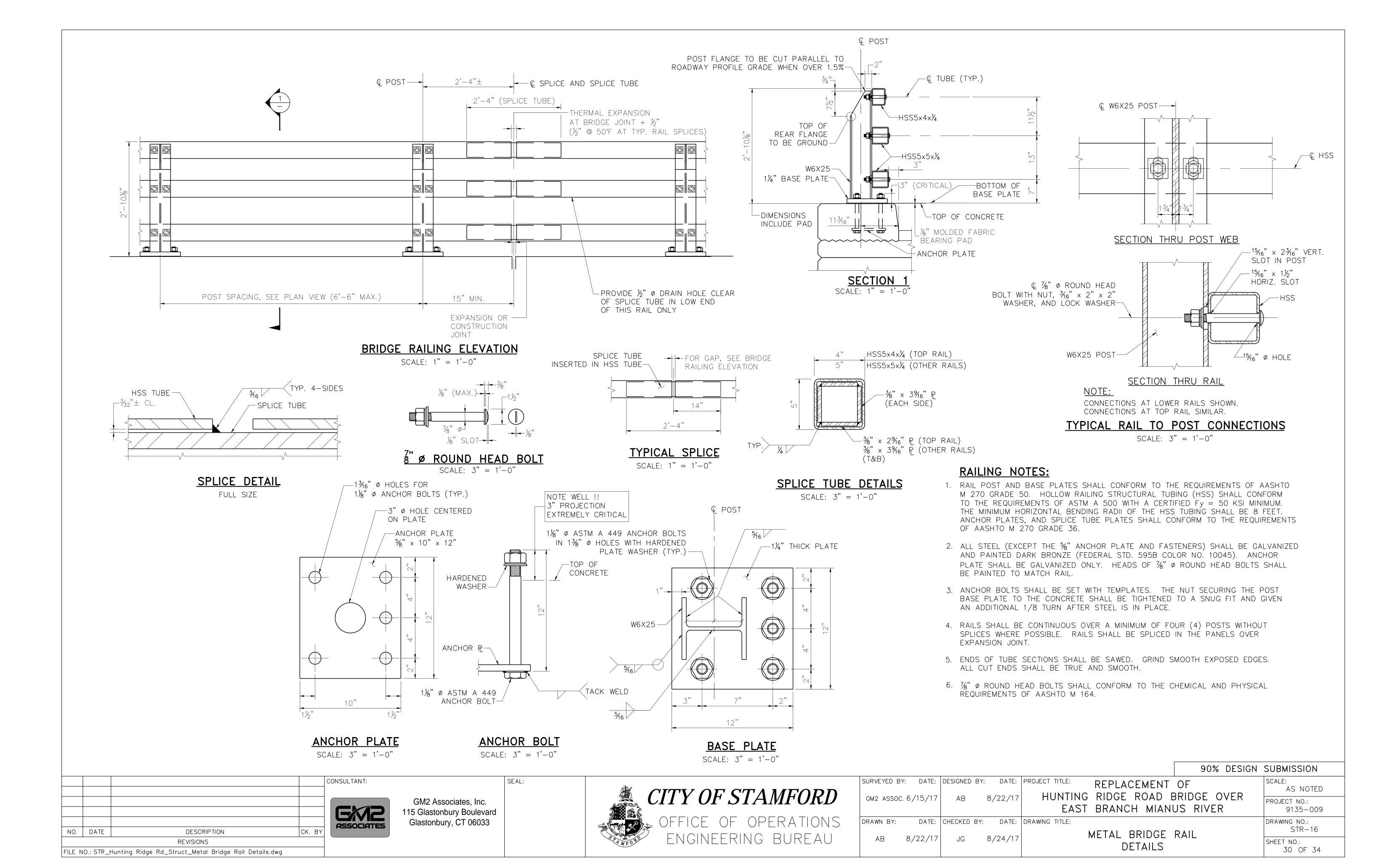
90% DESIGN SUBMISSION SURVEYED BY: DATE: DESIGNED BY: DATE: PROJECT TITLE: REPLACEMENT OF AS NOTED CITY OF STAMFORD HUNTING RIDGE ROAD BRIDGE OVER 6/15/17 GM2 ASSOC. 6/15/17GM2 Associates, Inc. PROJECT NO.: EAST BRANCH MIANUS RIVER 9135-009 115 Glastonbury Boulevard Glastonbury, CT 06033 DATE: DRAWING TITLE: DRAWING NO.: DRAWN BY: DATE: CHECKED BY: RSSOCIATES STR-13 NO. DATE DESCRIPTION CK. BY ENGINEERING BUREAU 6/15/17 AΒ 6/15/17 JG PRESTRESSED DECK UNITS DETAILS SHEET NO.: REVISIONS 27 OF 34 FILE NO.: STR_Hunting Ridge Rd_Struct_PDU.dwg

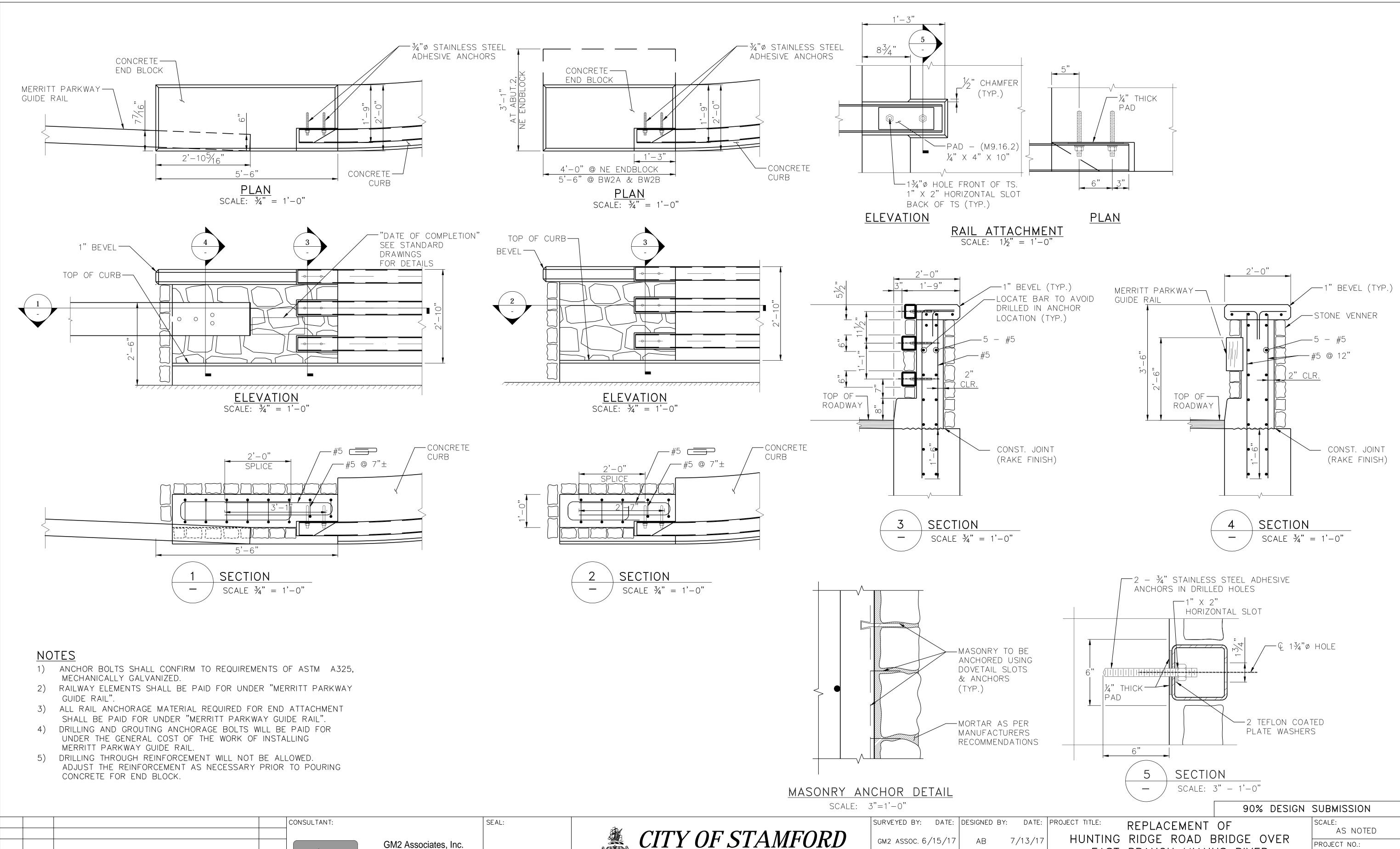




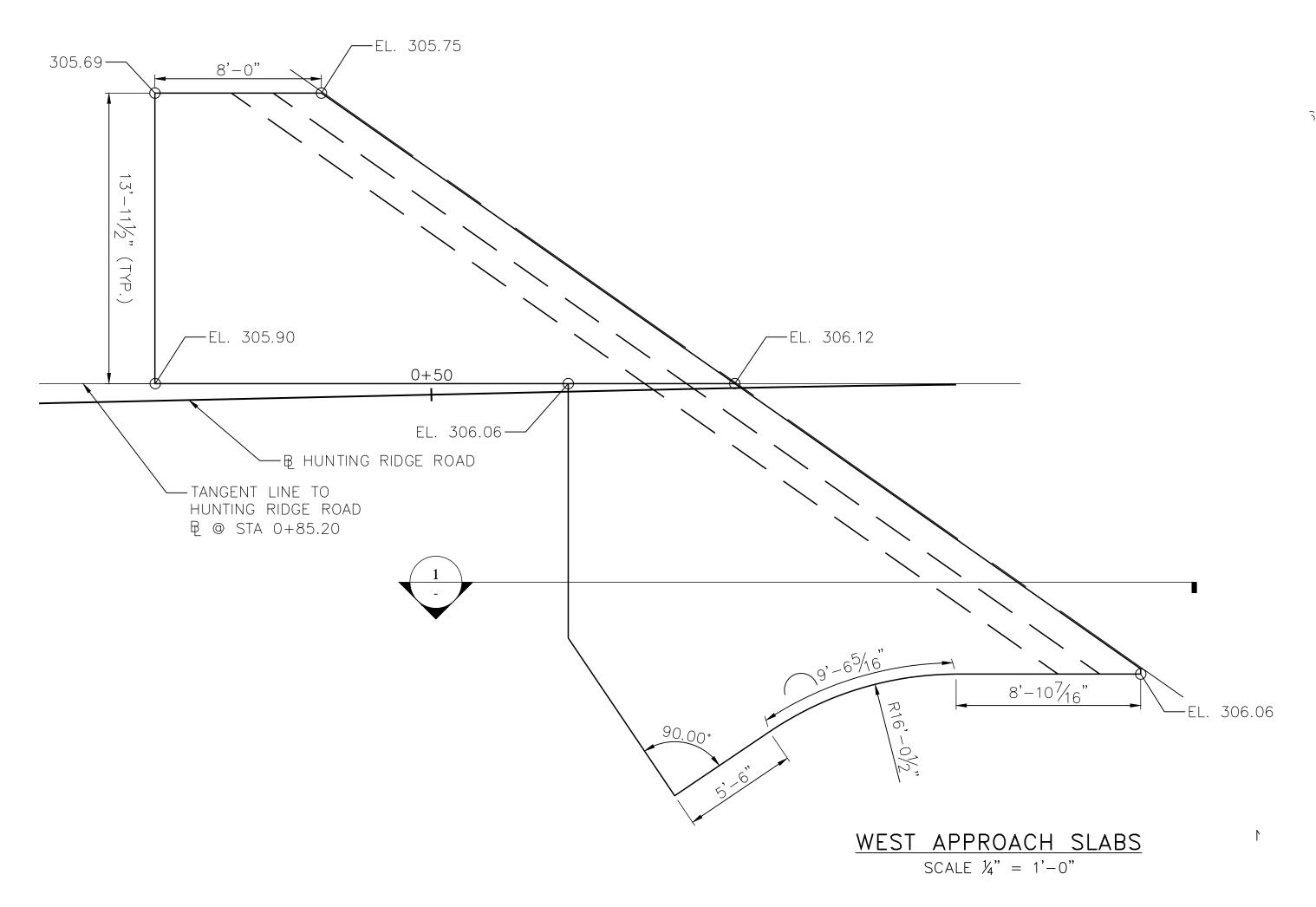


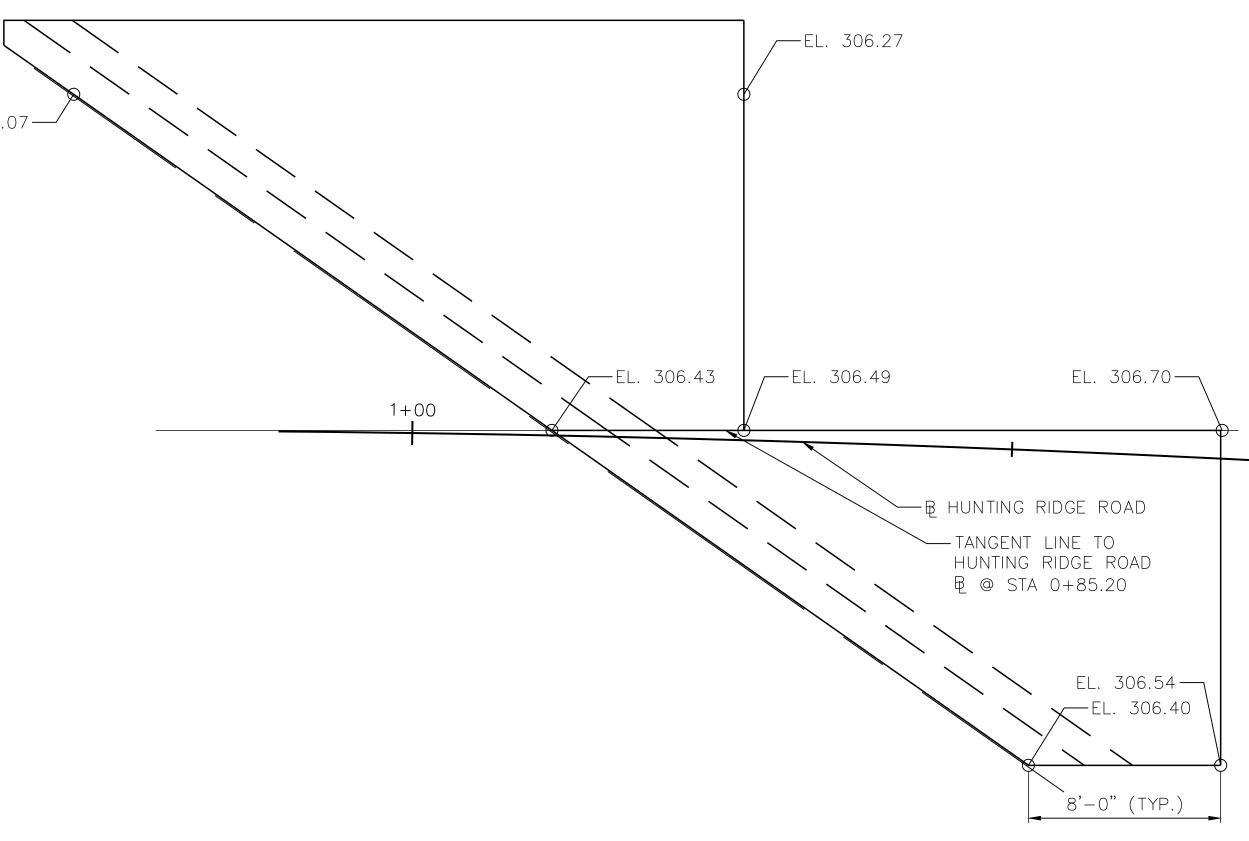
						90% DESIGN	SUBMISSION
		CONSULTANT:	SEAL:	a	SURVEYED BY: DATE: DESIGNED BY: DATE:	PROJECT TITLE: REPLACEMENT OF	SCALE:
				CITY OF STAMFORD	GM2 ASSOC. 6/15/17 AB 6/15/17	HUNTING RIDGE ROAD BRIDGE OVER	AS NOTED
		GM2 As	ssociates, Inc. nbury Boulevard	CITI OF SIAMI OILD	GMZ A330C. 0/13/17 AB 0/13/17	EAST BRANCH MIANUS RIVER	PROJECT NO.: 9135-009
		Ole et e u le	ury, CT 06033	OFFICE OF OPERATIONS	DRAWN BY: DATE: CHECKED BY: DATE:		DRAWING NO.:
NO. DATE	DESCRIPTION CK. E	- Glastonia	J., C. 2000				STR-15
	REVISIONS			ENGINEERING BUREAU	AB 6/15/17 JG 6/15/17	RAIL POST LAYOUT	SHEET NO.:
FILE NO.: STR_Hunting R	Ridge Rd_Struct_Rail Post Layout.dwg						29 OF 34





	GM2 Associates, Inc. 115 Glastonbury GT 06033	EAST BRANCH MIANUS RIVER	SCALE: AS NOTED PROJECT NO.: 9135-009
NO. DATE DESCRIPTION CK. E	Glastonbury, CT 06033	OFFICE OF OPERATIONS DRAWN BY: DATE: CHECKED BY: DATE: DRAWING TITLE:	DRAWING NO.: STR-17
REVISIONS FILE NO.: STR_Hunting Ridge Rd_Struct_ENDBLOCK.dwg		ENGINEERING BUREAU AB 7/13/17 JG 7/13/17 DETAILS	SHEET NO.: 31 OF 34

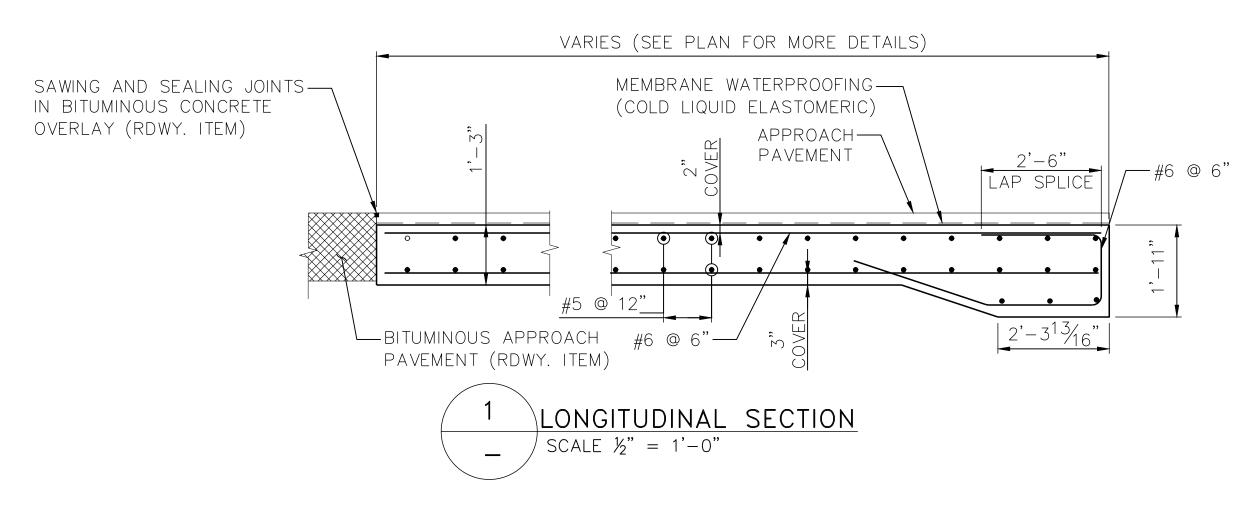




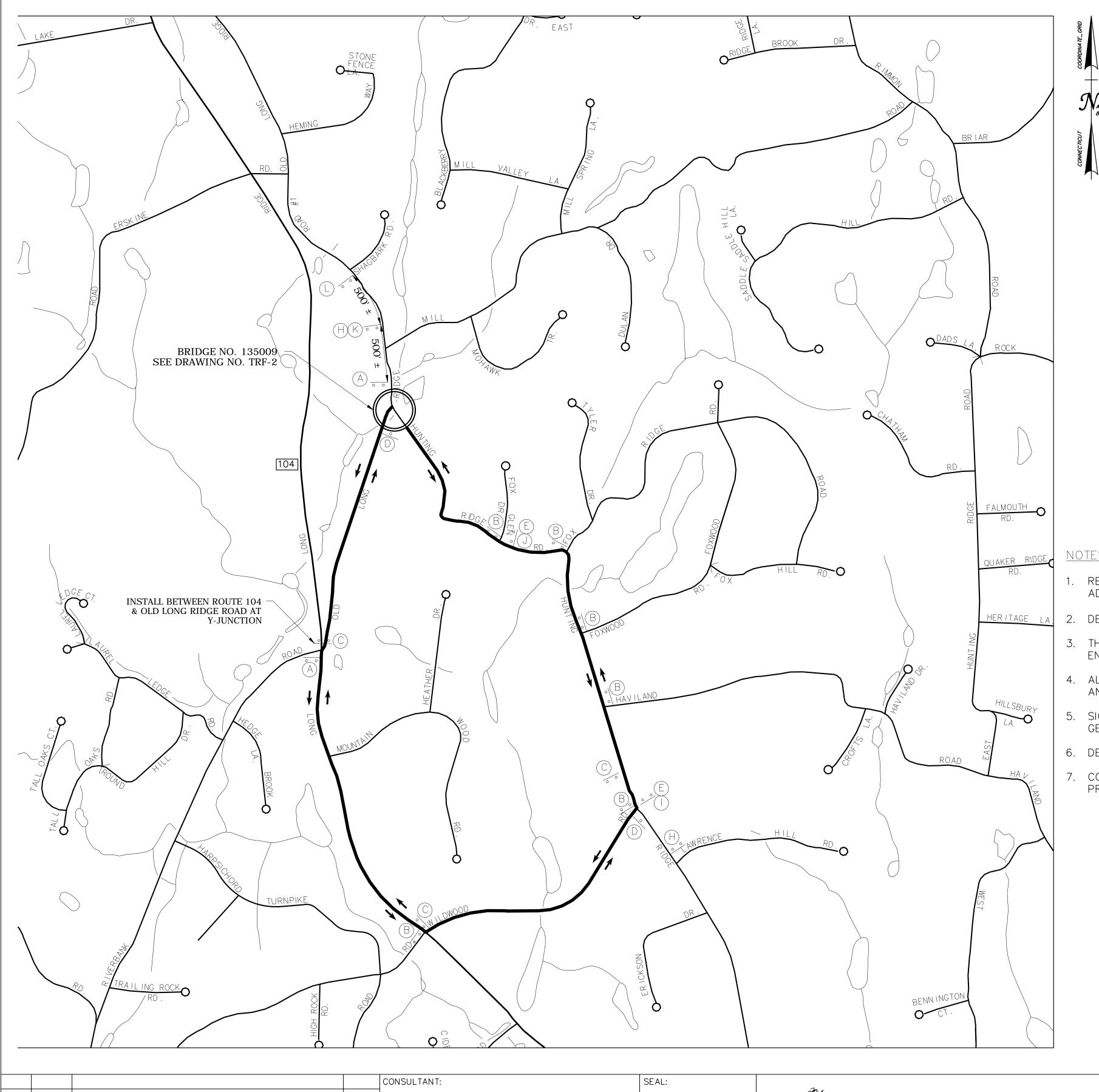
NOTE: ELEVATION SHOWN HERE TO TOP OF APPROACH SLABS

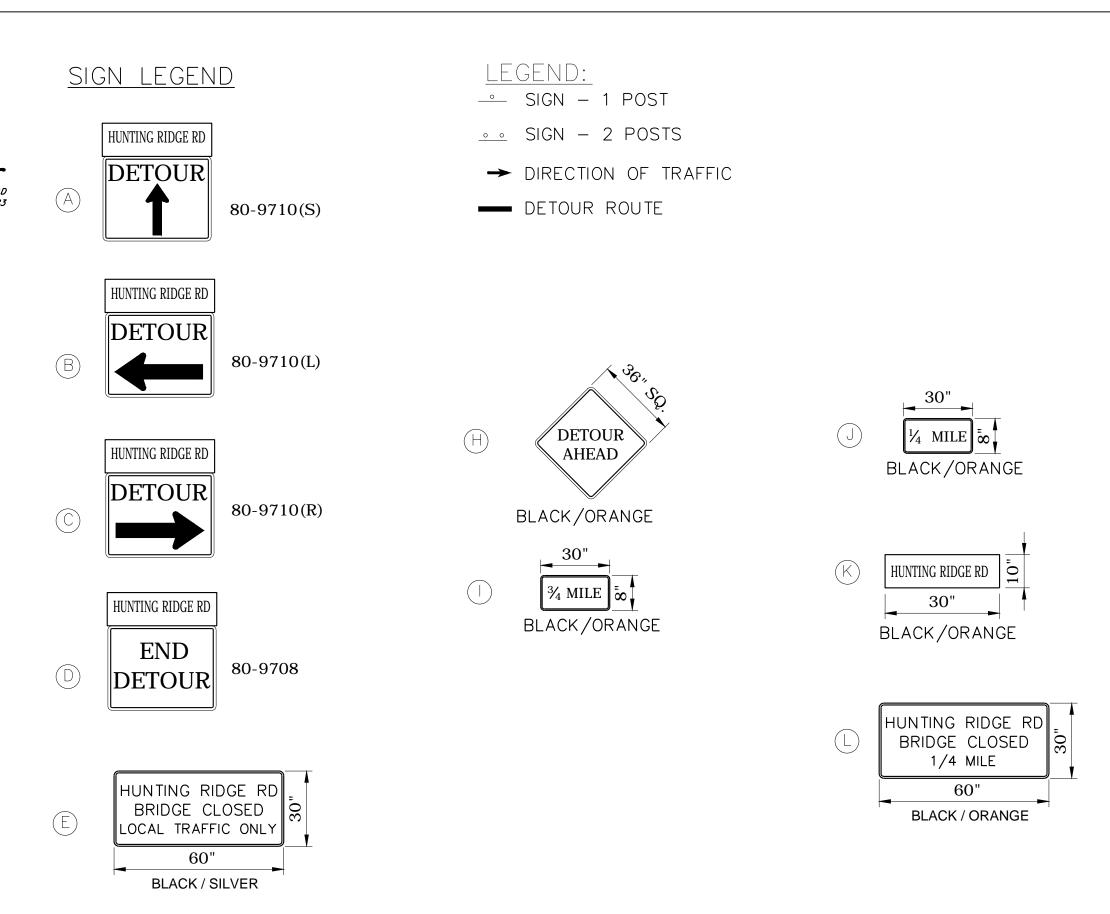
EAST APPROACH SLABS

SCALE 1/4" = 1'-0"



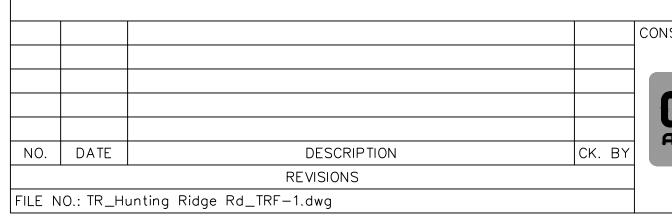
		90% DESIGN	N SUBMISSION
	GM2 Associates, Inc.	CITY OF STAMFORD SURVEYED BY: DATE: DESIGNED BY: DATE: PROJECT TITLE: REPLACEMENT OF GM2 ASSOC. 6/15/17 AB 7/7/17 HUNTING RIDGE ROAD BRIDGE OVER EAST BRANCH MIANUS RIVER	SCALE: AS NOTED PROJECT NO.: 9135-009
NO. DATE DESCRIPTION	115 Glastonbury Boulevard Glastonbury, CT 06033	OFFICE OF OPERATIONS DRAWN BY: DATE: CHECKED BY: DATE: DRAWING TITLE:	DRAWING NO.: STR-18
REVISIONS FILE NO.: STR_Hunting Ridge Rd_Struct_APS.dwg		ENGINEERING BUREAU AB 7/7/17 JG 7/7/17 APPROACH SLAB DETAILS	SHEET NO.: 32 OF 34





NOTES:

- 1. REFER TO THE SPECIAL PROVISIONS "MAINTENANCE & PROTECTION OF TRAFFIC" AND "PROSECUTION AND PROGRESS" FOR ADDITIONAL REQUIREMENTS.
- HERITAGE LA. 2. DETOUR SIGNS ARE PAYABLE UNDER ITEM NO. 1220027 "CONSTRUCTION SIGNS".
 - 3. THE LOCATIONS OF SIGNS SHOWN ON PLANS ARE APPROXIMATE. ACTUAL LOCATIONS OF SIGNS TO BE VERIFIED BY THE ENGINEER.
 - 4. ALL DETOUR SIGNS TO BE INSTALLED ON BREAKAWAY POSTS PER TRAFFIC STANDARD SHEET TR-1208-1, TR-1208-2, AND TR-1220-2.
 - 5. SIGN LOCATIONS SHALL BE ADJUSTED AS NECESSARY TO MAXIMIZE THEIR VISIBILITY WITH RESPECT TO ROADWAY GEOMETRY AT THE DIRECTION OF THE ENGINEER.
 - 6. DETOUR SIGNS ARE TO BE INSTALLED SUCH THAT THEY DO NOT BLOCK OR ARE NOT BLOCKED BY EXISTING SIGNS.
 - 7. CONTRACTOR TO NOTIFY THE ENGINEER, THE CITY OF STAMFORD AND ALL EMERGENCY SERVICES AT LEAST TWO WEEKS PRIOR TO THE ROADWAY CLOSURE.







SURVEYED BY:	DATE:	DESIGNED BY:	DATE:	PROJECT TITLE:	REPLACEMENT OF	SCALE: NO SCALE	
GM2 ASSOC.	12/22/15	 SJ 10/20/1		HUNTING	RIDGE ROAD BRIDGE OVER	PROJECT NO.:	
				EAST	BRANCH MIANUS RIVER	9135-009	
DRAWN BY:	DATE:	CHECKED BY:	DATE:	DRAWING TITLE:		DRAWING NO.:	
C 1	10 /20 /17	A 1 A 4	10 /20 /17		DETOUR PLAN	TRF-1	
SJ	10/20/17	ALM	10/20/17			SHEET NO.: 33 OF 34	

