

ESTIMATED QUANTITIES										CALC. JDG	DATE 1-27-23	CHK'D XAC	DATE 1-31-23
ITEM	ITEM EXT.	TOTAL	UNIT	PART 01/IMS/13	DESCRIPTION	ABUT.	PIERS	SUPER.	GENERAL	SHT. REF.			
202	11203		LS	LS	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN					2/22			
202	22900	182	SY	182	APPROACH SLAB REMOVED				182				
202	75260	612	FT	612	VANDAL PROTECTION FENCE REMOVED				612				
503	21300		LS	LS	UNCLASSIFIED EXCAVATION								
509	20001	100	LB	100	CONCRETE REINFORCEMENT, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN				100	2/22			
509	25000	35,327	LB	35,327	UNCOATED STEEL REINFORCEMENT	3742		31,585					
509	30020	5542	FT	5542	NO. 4 DEFORMED GFRP REINFORCEMENT			5542					
510	10001	2212	EACH	2212	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT (AS PER PLAN)	242		1970		2/22			
511	53014	147	CY	147	CLASS QC3 CONCRETE, MISC.: SUPERSTRUCTURE CONCRETE WITH QC/QA, AS PER PLAN (FOR PARAPETS, DECK SLAB AND APPROACH SLAB SIDEWALKS)			134	7	3/22			
511	53014	41	CY	41	CLASS QC3 CONCRETE, MISC.: SUPERSTRUCTURE CONCRETE WITH QC/QA, AS PER PLAN (FOR BRIDGE SIDEWALK)			41		3/22			
511	53014	42	CY	42	CLASS QC3 CONCRETE, MISC.: SUBSTRUCTURE CONCRETE WITH QC/QA, AS PER PLAN (ABUTMENT WING WALLS)	42				4/22			
512	10050	232	SY	232	SEALING OF CONCRETE SURFACES (NON-EPOXY)			232					
512	10101	1227	SY	1227	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN	114	305	808		2/22			
512	10400	1124	SY	1124	TREATING OF CONCRETE BRIDGE DECK WITH SRS			969	155				
512	10600	6	FT	6	CONCRETE REPAIR BY EPOXY INJECTION	3	3						
512	74000	380	SY	380	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	68	312						
516	10010	78	FT	78	ARMORLESS PREFORMED JOINT SEAL			78					
516	13600	16	SF	16	1" PREFORMED EXPANSION JOINT FILLER			16					
516	13900	245	SF	245	2" PREFORMED EXPANSION JOINT FILLER			245					
516	14020	60	FT	60	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL			60					
518	21200	13	CY	13	POROUS BACKFILL WITH GEOTEXTILE FABRIC	13							
519	11101	88	SF	88	PATCHING CONCRETE STRUCTURE, AS PER PLAN	32	56			2/22			
526	25000	198	SY	198	REINFORCED CONCRETE APPROACH SLABS (T=15")				198				
526	90030	82	FT	82	TYPE C INSTALLATION				82				
SPECIAL	53013000	2193	SF	2193	SPECIAL - FORM LINER			2193		4/22			
607	39994	800	FT	800	TEMPORARY VANDAL FENCE, TYPE B			800					
625	25500	353	FT	353	CONDUIT, 3", 725.04			353					
625	29940	1	EACH	1	BARRIER JUNCTION BOX			1					
HAM-275-34.18 BRIDGE (ALTERNATES)													
607	39900	255	FT	255	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC (ALTERNATE 1)			255					
607	39930	255	FT	255	VANDAL PROTECTION FENCE, 12' CURVED, COATED FABRIC (ALTERNATE 1)			255					
SPECIAL	60740000	510	FT	510	SPECIAL - VANDAL PROTECTION FENCE (DECORATIVE FENCE) (ALTERNATE 2)			510		2/22			
630	95000		LS	LS	SIGNING, MISC.: DECORATIVE LETTERING AND LOGO (ALTERNATE 2)								

ESTIMATED QUANTITIES
 BRIDGE NO. HAM-275-3418
 HOPEWELL ROAD OVER I-275

SFN 3113531
 DESIGN AGENCY

 DESIGNER: JDG CHECKER: XAC
 REVIEWER: SJA 7-15-22
 PROJECT ID: 110564
 SUBSET: 5 TOTAL: 22
 SHEET: 26 TOTAL: 49

GENERAL NOTES FOR AESTHETIC FENCE AND BRIDGE RAILING (ALTERNATE BID 2):

ITEM 512, SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

SEALING OF CONCRETE SURFACES FOR THE BRIDGE RAILING SHALL BE PER ITEM 512 WITH THE TOP COAT COLOR AS LIGHT NEUTRAL FEDERAL COLOR NUMBER FS-595B-17778. NOTE THAT THIS IS A BASELINE AESTHETIC ITEM AND THEREFORE THE QUANTITY IS NOT INCLUDED IN THIS ALTERNATE BID.

ITEM 607, SPECIAL - VANDAL PROTECTION FENCE

THIS ITEM CONSISTS OF FURNISHING AND INSTALLING VANDAL FENCING ON NEW CONCRETE BRIDGE RAILINGS. THIS ITEM SHALL CONSIST OF FURNISHING ALL MATERIALS, LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO FABRICATE AND INSTALL THE AESTHETIC FENCE DETAILED HEREIN. CONSTRUCT IN A MANNER THAT PROVIDES A RIGID, TAUT FENCE CLOSELY CONFORMING TO THE TOP SURFACE OF THE CONCRETE PARAPET, UNLESS OTHERWISE SPECIFIED IN THE PLANS, INSTALL POSTS AND POST SLEEVES PLUMB.

DESIGN PARAMETERS: THE FENCE AND CONNECTIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE ODOT BRIDGE DESIGN MANUAL, 2020, DATED 01-20-23. WIND AND PEDESTRIAN LOADING ARE IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLES 3.8 AND 13.8.2. ANCHORS TO CONCRETE (BOTH ADHESIVE AND CAST-IN OPTIONS) ARE DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 5.13, WHICH REFERENCES ACI 318, CHAPTER 17. STEEL BASEPLATES AND FENCE COMPONENTS ARE DESIGNED PER AISC STEEL CONSTRUCTION MANUAL.

POSTS: POSTS SHALL BE 2.5" x 2.5" SQUARE (OUTSIDE DIMENSION) WITH 1/4" WALL THICKNESS, ASTM A500, GRADE B, Fy = 46,000 PSI AND WELDED IRON CAP.

HORIZONTAL MEMBERS: HORIZONTAL MEMBERS SHALL BE 1.5" x 1.5" SQUARE CHANNEL WITH 1/8" WALL THICKNESS, MINIMUM Fy = 46,000 PSI.

PICKETS: PICKETS SHALL BE 3/4" SQUARE SOLID IRON.

BASE PLATES: SHALL BE ASTM A709 GRADE 36 OR 50 STEEL GALVANIZED PER C&M 711.02.

FASTENERS: THE 3/4" AND 1/2" DIAMETER HIGH STRENGTH BOLTS, NUTS AND WASHERS SHALL MEET THE REQUIREMENTS OF ASTM F3125, GRADE A325 AND BE IN ACCORDANCE WITH C&M 711.09, GALVANIZED. THE 3/4" DIAMETER THREADED ROD FOR ADHESIVE ANCHORS SHALL BE ASTM A193, GRADE B7, WITH ASTM A563 NUTS AND ASTM F436 WASHERS. MECHANICALLY GALVANIZE ALL ANCHOR HARDWARE ACCORDING TO ASTM B695, CLASS 65.

INSTALL ADHESIVE ANCHORS ACCORDING TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS PUBLISHED IN THE ICC-ES REPORTS LISTED BELOW.

THE HOLES FOR THE ADHESIVE ANCHORS SHALL BE DRILLED WITH A HAMMER DRILL AND CARBIDE BIT. PRIOR TO THE INSTALLATION OF THE ANCHORS, THE HOLES SHALL BE CLEANED AND DRIED IN A MANNER CONSISTENT WITH THE MANUFACTURER'S REQUIREMENTS FOR DRY CONCRETE.

WWW.ICC-ES.ORG/EVALUATION REPORTS/INDEX.SHTML

SELECT FROM ONE OF THE FOLLOWING APPROVED PRODUCTS:

HILTI HIT-HY 200 ADHESIVE ANCHOR SYSTEM
(ICC-ES REPORT ESR-3187)

DEWALT PURE110+ EPOXY ADHESIVE ANCHOR SYSTEM
(ICC-ES REPORT ESR-3298)

SIMPSON STRONG-TIE SET-3G EPOXY ADHESIVE ANCHORS
(ICC-ES REPORT ESR-4057)

ATC ULTRABOND HS-ICC ADHESIVE ANCHOR SYSTEM
(ICC-ES REPORT ESR-4094)

INSTALL ADHESIVE ANCHORS ACCORDING TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS PUBLISHED IN SECTION 4.3 OF THE ICCES REPORTS LISTED ABOVE. THE MINIMUM EMBEDMENT DEPTH FOR ANCHORS SHALL BE 12".

THE CONTRACTOR MAY USE A SUBSTITUTE ADHESIVE ANCHOR EVALUATED BY ICC-ES. THE SUBSTITUTE ANCHORS SHALL MEET OR EXCEED THE CAPACITY OF THE ANCHORS LISTED ABOVE. THE ANCHOR ADHESIVE SHALL BE EVALUATED ACCORDING TO ACI 318 CHAPTER 17, "ANCHORING TO CONCRETE", FOR CRACKED AND UNCRACKED CONCRETE APPLICATIONS.

ADHESIVE ANCHORS SHALL NOT BE SUBSTITUTED WITH MECHANICAL ANCHORS.

THE CONTRACTOR SHALL SUPPLY DOCUMENTATION SEALED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER ENSURING THAT THE SELECTED ADHESIVE ANCHORAGE PROVIDES SUFFICIENT CAPACITY FOR THIS APPLICATION IN ACCORDANCE WITH ACI 318. INSTALL SELECTED ANCHORS ACCORDING TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS PUBLISHED IN THE ICC-ES.ORG/EVALUATION_REPORTS/

FOR INSTALLATIONS IN NEW CONCRETE RAILINGS, THE ANCHORS MAY BE CAST-IN-PLACE WITH A MINIMUM 12" EMBEDMENT LENGTH WITH A NUT ATTACHED AT THE EMBEDDED END.

TENSION BARS: TENSION BARS SHALL BE 3/16" x 1/2" STEEL.

TENSION BANDS: TENSION BANDS SHALL BE 1/8" x 1" STEEL ASSEMBLED WITH 3/8" DIAMETER x 1 1/4" BOLTS. ONE TENSION BAND SHALL BE SUPPLIED FOR EACH FOOT OF FABRIC HEIGHT.

DOUBLE WRAP FABRIC TIES: DOUBLE WRAP FABRIC TIES SHALL BE 0.091" CORE DIAMETER PVC COATED STEEL WIRE 15 1/4" LONG. THE PVC COATING SHALL BE POWDER COATED BLACK TO MATCH FENCE. TO CONNECT THE FABRIC TO THE LINE AND TOP RAILS, USE DOUBLE WRAP TIES 2" TO 3" ON EACH SIDE OF THE POSTS AND AT SPACINGS NOT TO EXCEED 12" BETWEEN POSTS.

FABRIC: SHALL CONSIST OF A 1" DIAMOND MESH USING 0.120" DIAMETER (11 GAGE) WIRE CONFORMING TO ASTM F668 CLASS 2A OR 2B EXCEPT AS NOTED. THE PVC COATING SHALL BE POWDER COATED BLACK IN COLOR CLOSELY APPROACHING FEDERAL STANDARD COLOR NUMBER FS-595B-17038. SELVAGES SHALL BE KNUCKLED AT BOTH ENDS. HANDLE ALL PVC COATED FABRIC WITH CARE. IF THE PVC COATING IS DAMAGED, REPLACE THE DAMAGED PORTION OF THE FABRIC AT NO COST TO THE TOWNSHIP.

FILLET WELDS: FILLET WELDS SHALL CONFORM TO CMS 513.

POST SLEEVES: POST SLEEVES SHALL BE 3" x 3" SQUARE (OUTSIDE DIMENSION) WITH 3/16" WALL THICKNESS, ASTM A500, GRADE B, Fy = 46,000 PSI. HEXAGON SOCKET SET SCREWS SHALL BE SAE 4140 ALLOY STEEL, HEAT TREATED, WITH FLAT OR OVAL POINT.

PROTECTIVE COATING: ALL POSTS, HORIZONTAL MEMBERS, PICKETS, BASE PLATES, ACCESSORIES AND HARDWARE SHALL BE HOT-DIP GALVANIZED PER CMS 711.02, THEN PAINTED. THE FINISH COAT COLOR SHALL BE BLACK TO MATCH THE FENCE FABRIC. PAINTING OF FENCE PANELS AND HARDWARE: THE QUALIFIED FABRICATOR OF THE FENCE PANELS SHALL BE RESPONSIBLE FOR THE QUALITY OF THE APPLIED GALVANIZED COATING SYSTEM AND ANY REPAIRS, REFABRICATION AND ADDITIONAL ASSEMBLIES REQUIRED TO ASSURE THE FABRICATED FENCE PANELS MEETS THE PLAN REQUIREMENTS.

TWO SHOP COATS (EPOXY/URETHANE PER CMS 514) SHALL BE APPLIED IN A STRUCTURAL STEEL FABRICATION SHOP HAVING PERMANENT BUILDINGS PER CMS 513.04. THE PAINTER IS UNDER THE SUPERVISION OF A QUALITY CONTROL PAINT SPECIALIST. THE FIELD PAINTING SUBCONTRACTOR PERFORMING TOUCH UP WORK IN THE FIELD AND/OR SHOP PAINTING AT THE FABRICATOR'S FACILITY IS AN INDEPENDENT PAINTER THAT IS CERTIFIED BY SSPC-QP3 WITH FACILITIES EVALUATION AND ACCEPTANCE BY THE DEPARTMENT.

PRIOR TO GALVANIZING, ALL CORNERS OF THERMALLY CUT OR SHEARED EDGES SHALL HAVE A 1/16" RADIUS OR EQUIVALENT FLAT SURFACE AT A SUITABLE ANGLE.

THE FABRICATED FENCE PANELS, ACCESSORIES AND HARDWARE SHALL BE GALVANIZED PER CMS 711.02, EXCEPT THAT FABRICATED FENCE ELEMENTS SHALL NOT BE POST TREATED WITH WATER QUENCHING OR CHROMATE CONVERSION COATED.

AFTER GALVANIZATION, ZINC HIGH SPOTS SUCH AS METAL DRIP LINE AND OTHERS THAT WOULD DETRACT FROM THE PAINT APPEARANCE WILL BE MADE FLUSH WITH THE SURROUNDING SURFACE BY SSPC SP2 OR SP3. CARE SHALL BE TAKEN THAT THE BASE GALVANIZED COATING IS NOT REMOVED. REPAIRED AREAS SHALL BE CHECKED FOR REQUIRED COATING THICKNESS.

GALVANIZED COATINGS DAMAGED IN THE SHOP SHALL BE REPAIRED PER ASTM A780 METHOD A3. GALVANIZED COATINGS DAMAGED IN THE FIELD SHALL BE REPAIRED PER ASTM A780 METHOD A1.

AFTER REMOVING HIGH SPOTS, THE GALVANIZED COATING SHALL BE CLEANED PER SSPC SP-1. THE CLEANING SOLUTION SHALL BE AN ALKALINE SOLUTION WITH A PH RATING FROM A MINIMUM OF 11 TO A MAXIMUM OF 12. THIS SOLUTION CAN BE APPLIED BY IMMERSION, SPRAY OR SOFT NYLON BRUSH. FOLLOW CLEANING WITH A HOT WATER OR HOT PRESSURE WASHER RINSE. INDIVIDUAL PIECES SHALL BE SEPARATED AND POSITIONED TO FACILITATE DRAINAGE AND DRYING. THE PIECES SHALL BE COMPLETELY DRY BEFORE PROCEEDING.

AFTER CLEANING, THE PIECES SHALL BE ABRASIVE BLASTED PER SSPC-SP7 BRUSH-OFF BLAST CLEANING. THE BLASTING OPERATION SHALL ROUGHEN THE GALVANIZED SURFACE TO AN ANGULAR PROFILE OF 0.25 TO 0.5 MILS. THE BLASTING EQUIPMENT, TECHNIQUE AND ABRASIVE MATERIAL SHALL BE SELECTED TO PROVIDE FOR THE SPECIFIED SURFACE PROFILE WITHOUT REMOVAL OF ZINC LAYERS. THE FINAL ZINC MILAGE SHALL NOT BE LESS THAN 3.0 MILS. ALL ABRASIVE RESIDUE SHALL BE REMOVED WITH CLEAN COMPRESSED AIR OR OTHER METHODS ACCEPTABLE TO THE DEPARTMENT. FIELD CONNECTION AREAS SHALL HAVE A UNIFORM GALVANIZED COATING FREE OF LOCAL EXCESSIVE ROUGHNESS WHICH WOULD PREVENT CONNECTIONS FROM MAKING INTIMATE CONTACT.

AFTER OBTAINING SURFACE PROFILE, SHOP APPLY A TWO COAT PAINT SYSTEM CONSISTING OF EPOXY INTERMEDIATE COAT AND A URETHANE FINISH COAT MEETING THE REQUIREMENTS OF CMS 514. THE FINISH COAT SHALL BE BLACK TO MATCH THE FENCE FABRIC. THE EPOXY COATING SHALL BE APPLIED WITHIN 24 HOURS OF THE BRUSH-OFF BLASTING. THE COATINGS SHALL BE APPLIED PER CMS 514 EXCEPT THAT REQUIREMENTS FOR SURFACE PREPARATION AND PRIMING SHALL NOT BE PERFORMED. THE COATING SHALL BE SHOP APPLIED AS SPECIFIED IN THESE NOTES WITHOUT THE WORK LIMITATION SPECIFIED IN CMS 514.

FIELD REPAIRS AND TOUCH UPS SHALL FOLLOW WORK LIMITATIONS SPECIFIED IN CMS 514 AND BE AS DIRECTED BY THE ENGINEER. BOLTS SHALL BE PAINTED IN THE FIELD. THE FINISH COAT FOR THE BOLTS SHALL MATCH THE CONTACT SURFACE.

SHIM PLATES: SHALL BE MADE FROM ANY MULTI-POLYMER PLASTIC WITH A MINIMUM COMPRESSIVE STRENGTH OF 5,000 PSI. IN ORDER TO INSTALL POSTS PLUMB, ENDS OF POSTS AND SLEEVES MAY BE CUT ON A BIAS.

CAULKING COMPOUND: CAULKING COMPOUND SHALL CONFORM TO FEDERAL SPECIFICATION TT-S-00230C TYPE II, CLASS A, ALUMINUM GRAY. WHEN APPLYING THE CAULK TO THE BASE PLATE, PROVIDE A 1" OPENING THROUGH THE CAULKING ON LOW SIDE OF BASE PLATE.

CONSTRUCTION PROCEDURE:

1. FIELD VERIFY THE PLAN LOCATIONS OF ALL BASE PLATES AND MARK PARAPETS ACCORDINGLY.
2. MARK AND DRILL HOLES FOR THE 3/4" DIAMETER HIGH STRENGTH THREADED ANCHORS OR 3/4" BOLTS USING A BASE PLATE OR TEMPLATE.
3. INSTALL 3/4" DIAMETER HIGH STRENGTH THREADED ANCHORS OR 3/4" BOLTS.
4. INSTALL POSTS AND BASE PLATES, AND SHIMS WHERE REQUIRED.
5. CAULK EDGES OF BASE PLATES, SHIMS AND SLEEVES.
6. COMPLETE INSTALLATION OF FENCE.

METHOD OF MEASUREMENT: THE DEPARTMENT WILL MEASURE THE QUANTITY BY THE FOOT. THE DEPARTMENT WILL MEASURE ALONG THE BOTTOM OF THE FENCE FROM CENTER TO CENTER OF END POSTS.

ITEM 630, SIGNING, MISC.: DECORATIVE LETTERING AND LOGO

THIS ITEM CONSISTS OF FURNISHING AND INSTALLING THE DECORATIVE LETTERING AND LOGO PANELS DETAILED HEREIN. THIS INCLUDES ALL MATERIALS, LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO FABRICATE AND INSTALL THE PANELS ON THE FENCE.

DECORATIVE LETTERS AND LOGO PANELS: DECORATIVE LETTERS AND LOGO PANELS SHALL BE FABRICATED FROM ASTM 6061-T6 ALUMINUM INCLUDING THE 2 1/2" x 2 1/2" x 1/4" ANGLES. THE ALUMINUM ANGLES SHALL BE WELDED TO THE ALUMINUM PANEL USING AN ALUMINUM 4043 FILLER METAL.

THE SYMMES TOWNSHIP DECORATIVE LETTERS AND LOGO SHALL BE AS SHOWN IN THE PLANS. THE SYMMES TOWNSHIP LETTER COLORS SHALL BE NAVY BLUE CMYK (100:66:0:69). THE LOGO COLORS ARE AS DETAILED IN THE PLANS. A DIGITAL FILE OF THE LOGO IS AVAILABLE UPON REQUEST FROM THE TOWNSHIP. ALL FASTENERS AND ATTACHMENTS SHALL MATCH PANEL COLORS AS CLOSELY AS POSSIBLE. DECORATIVE LETTERS AND LOGO PANELS AND THEIR CONNECTIONS SHALL BE POWDER COATED.

LETTERS AND LOGO SHALL BE RAISED A MINIMUM OF 1/4" AGAINST THE BACKDROP.

THE DECORATIVE LETTERS AND LOGOS SHALL BE DESIGNED TO WITHSTAND WIND LOADING OF 50 LBS. PER SQUARE FOOT OF PANEL AREA.

CONNECTIONS: FURNISH STAINLESS STEEL CONNECTION HARDWARE ACCORDING TO C&M 730.10. PROVIDE MULTI-POLYMER PLASTIC SHIM PLATES WITH A MINIMUM COMPRESSIVE STRENGTH OF 5,000 PSI BETWEEN ALUMINUM ANGLES AND STEEL FENCE POSTS. PROVIDE RUBBER OR PLASTIC WASHERS BETWEEN STAINLESS STEEL CONNECTION HARDWARE AND THE ALUMINUM ANGLES.

WELDING: SHALL CONFORM TO AWS D1.2 FOR ALUMINUM.

THE CONTRACTOR SHALL SUBMIT LETTERING AND LOGO PANEL SHOP DRAWINGS AND PHYSICAL SAMPLES OF THE COLORED ALUMINUM TO SYMMES TOWNSHIP, AS WELL AS THE ODOT PROJECT ENGINEER FOR APPROVAL PRIOR TO FABRICATION.

BASIS OF PAYMENT: THE TOWNSHIP WILL MAKE PAYMENT FOR THE COMPLETED AND ACCEPTED LUMP SUM QUANTITY OF THE LETTERING AND LOGO SIGN AS ITEM 630, SIGNING, MISC.: DECORATIVE LETTERING AND LOGO.

SEE SHEET 26 OF 49 FOR THE ESTIMATED QUANTITIES TABLE.

HAM-IR 275-34.18

MODEL: Sheet PAPER: 17x11 (in.) DATE: 2/15/2024 TIME: 5:05:53 PM USER: smitchell C:\Symmes Twp\0121607A\00 - Symmes Twp Bridge Aesthetics\121607400-Engineering\Structures\SFN_3113531\Sheets\121607_SFN_3113531_SN001.dgn

AESTHETIC VANDAL PROTECTION FENCE NOTES
BRIDGE NO.: HAM-275-3418
HOPEWELL ROAD OVER I-275

SFN 3113531

DESIGN AGENCY



DESIGNER CHECKER

NRP AMT

REVIEWER

DWS 05/19/23

PROJECT ID

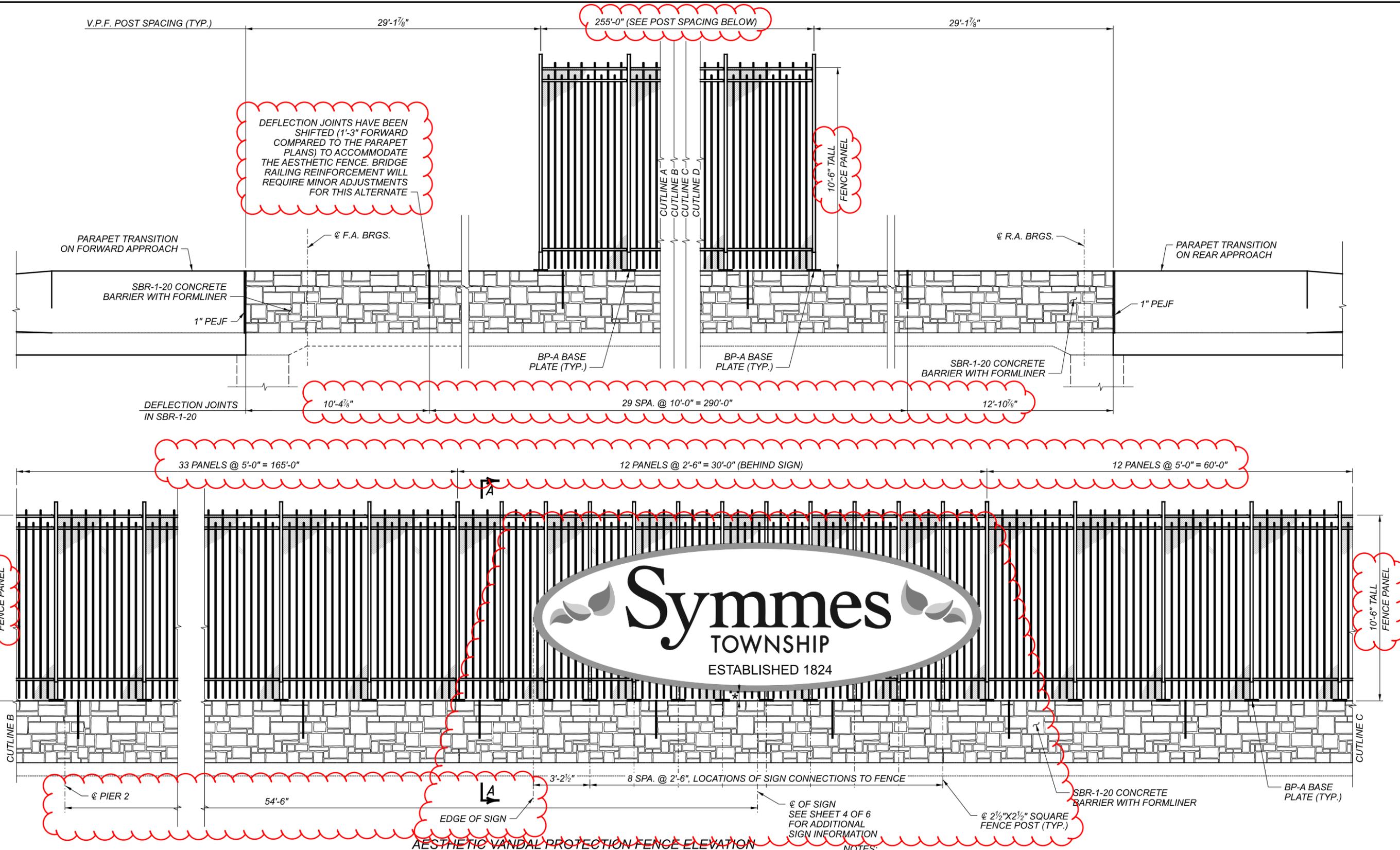
110564

SUBSET TOTAL

1 6

SHEET TOTAL

44 49



DEFLECTION JOINTS HAVE BEEN SHIFTED (1'-3" FORWARD COMPARED TO THE PARAPET PLANS) TO ACCOMMODATE THE AESTHETIC FENCE. BRIDGE RAILING REINFORCEMENT WILL REQUIRE MINOR ADJUSTMENTS FOR THIS ALTERNATE

10'-6" TALL FENCE PANEL

33 PANELS @ 5'-0" = 165'-0"

12 PANELS @ 2'-6" = 30'-0" (BEHIND SIGN)

12 PANELS @ 5'-0" = 60'-0"



AESTHETIC VANDAL PROTECTION FENCE ELEVATION

(NORTH SIDE LOOKING SOUTH)
 ALL DIMENSIONS ARE ON THE EXTERIOR FACE OF PARAPET

* NOTE: BOTTOM OF SIGN IS 6" ABOVE PARAPET

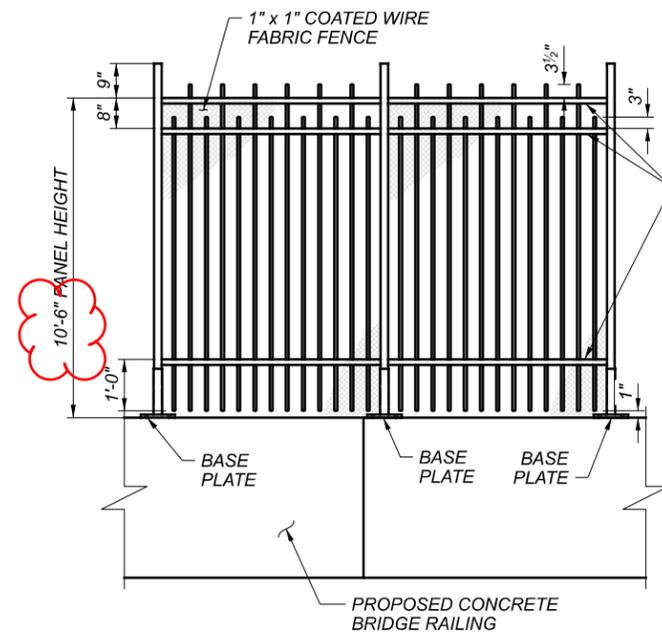
LOCATIONS OF SIGN CONNECTIONS TO FENCE
 8 SPA. @ 2'-6", LOCATIONS OF SIGN CONNECTIONS TO FENCE
 @ OF SIGN SEE SHEET 4 OF 6 FOR ADDITIONAL SIGN INFORMATION

NOTES:

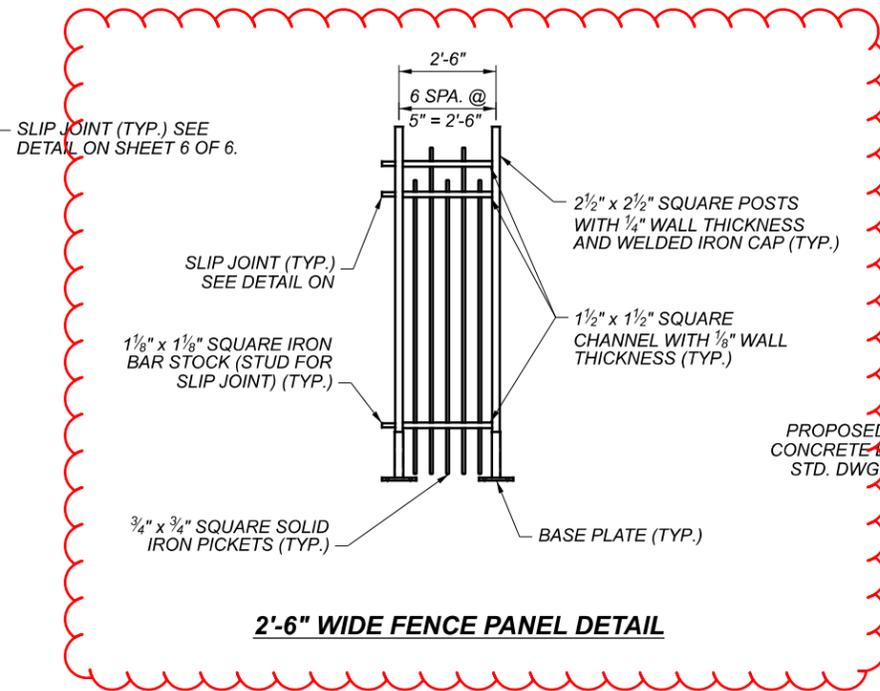
1. FOR FENCE PANEL DETAILS AND SECTION A-A, SEE SHEET 5 OF 6.
2. FOR BASE PLATE DETAILS, SEE SHEET 6 OF 6.
3. THE CENTERLINE OF THE NEAREST BASE PLATE ANCHOR SHALL NOT BE PLACED CLOSER THAN 8" TO A PARAPET DEFLECTION JOINT NOR SHALL BASE PLATES SPAN ACROSS A PARAPET DEFLECTION CONTROL JOINT.
4. DECORATIVE FACING PLACED ON THE EXTERIOR OF THE FENCE ONLY.
5. THE DIMENSIONS MEASURED ALONG THE LENGTH OF THE BARRIER/RAIL DO NOT ACCOUNT FOR THE EFFECT OF THE LONGITUDINAL GRADE. INCLUDE THE PROPER ALLOWANCE FOR THESE DIMENSIONS IN THE SHOP DRAWINGS.

AESTHETIC VANDAL PROTECTION FENCE
 BRIDGE NO.: HAM-275-3418
 HOPEWELL ROAD OVER I-275

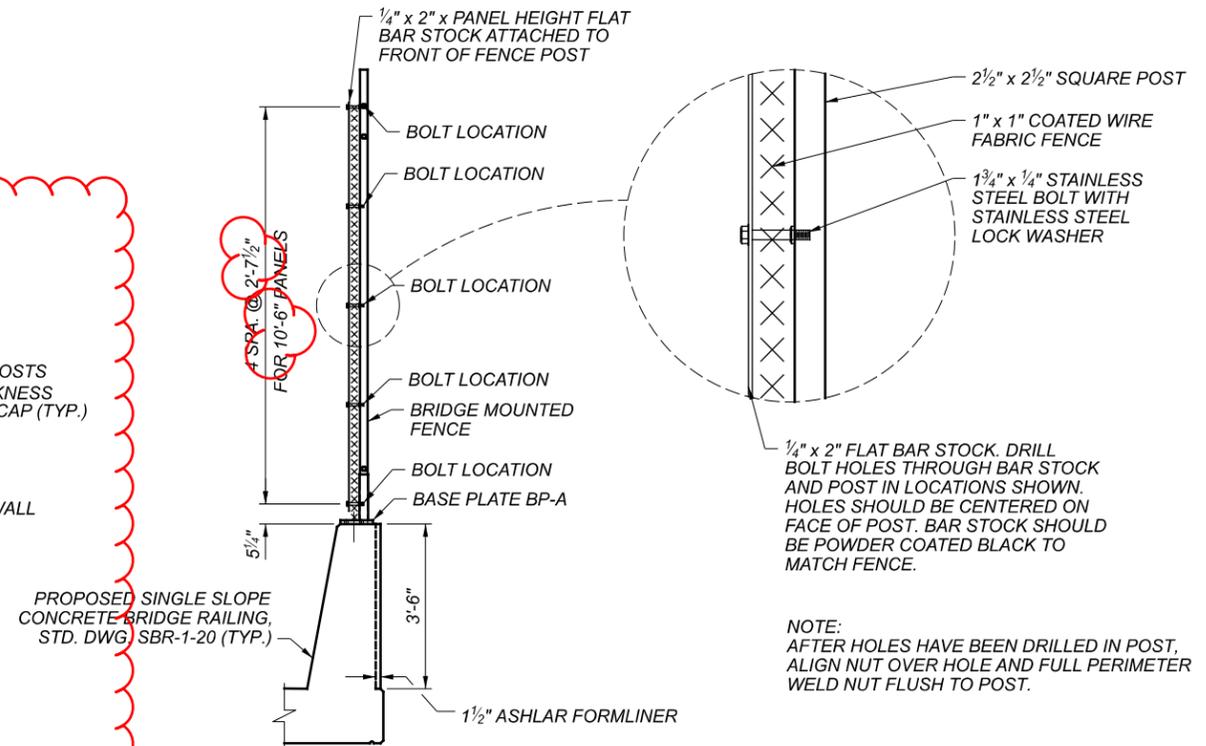
SFN	3113531
DESIGN AGENCY	
DESIGNER	CHECKER
NRP	AMT
REVIEWER	
DWS	05/19/23
PROJECT ID	110564
SUBSET	TOTAL
2	6
SHEET	TOTAL
45	49



BRIDGE MOUNTED VANDAL FENCE

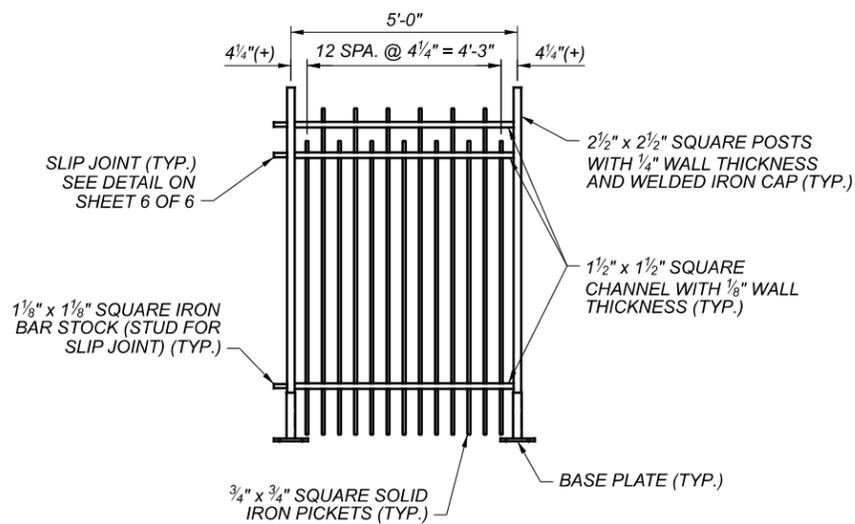


2'-6" WIDE FENCE PANEL DETAIL



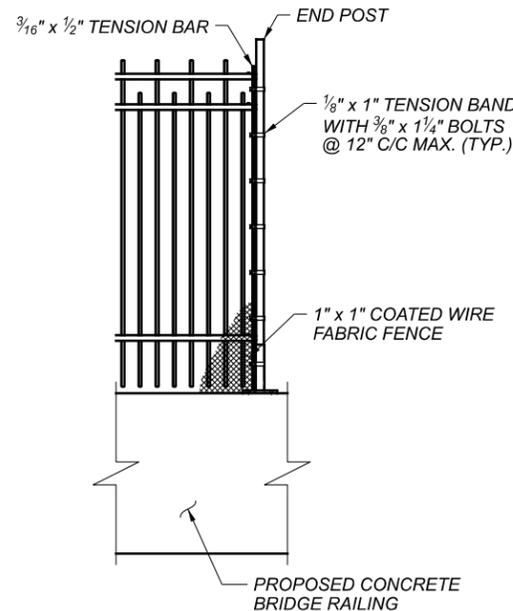
SECTION A-A

NOTE:
 AFTER HOLES HAVE BEEN DRILLED IN POST, ALIGN NUT OVER HOLE AND FULL PERIMETER WELD NUT FLUSH TO POST.

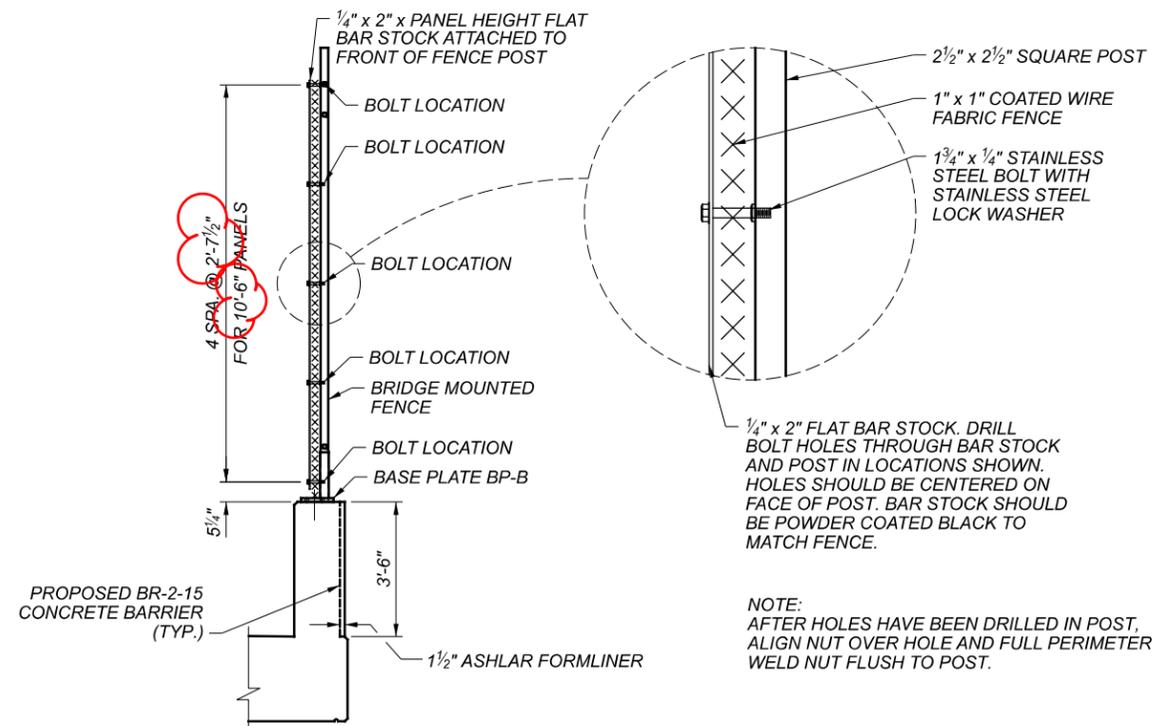


TYPICAL 5'-0" WIDE FENCE PANEL DETAIL

NOTE: FENCE PANELS SHALL BE FACTORY ASSEMBLED WITH PICKETS WELDED TO HORIZONTAL RAILS USING A MINIMUM 1/8" FILLET WELD. HORIZONTAL RAILS SHALL BE WELDED TO POSTS WITH A MINIMUM 1/8" FILLET WELD (SEE SLIP JOINT DETAIL ON SHEET 6 OF 6).



END POST DETAIL



SECTION B-B

NOTE:
 AFTER HOLES HAVE BEEN DRILLED IN POST, ALIGN NUT OVER HOLE AND FULL PERIMETER WELD NUT FLUSH TO POST.

NOTES:

1. FOR ADDITIONAL INFORMATION, SEE GENERAL NOTES, SHEET 1 OF 6.
2. FOR POST SPACING AND PANEL LOCATIONS, SEE SHEETS 2 OF 6 AND 3 OF 6.
3. FOR BASE PLATE DETAILS, SEE SHEET 6 OF 6.



DESIGNER	CHECKER
NRP	AMT
REVIEWER	
DWS	05/19/23
PROJECT ID	110564
SUBSET	TOTAL
5	6
SHEET	TOTAL
48	49