

Matthew G. Bevin Governor

COMMONWEALTH OF KENTUCKY TRANSPORTATION CABINET

Frankfort, Kentucky 40622 www.transportation.ky.gov/

Greg Thomas Secretary

September 27, 2016

CALL NO. 313

CONTRACT ID NO. 162913

ADDENDUM # 1

Subject: Carroll County, FE02 021 0042 B00043N

Letting September 30, 2016

(1) Revised - Set of Plans

(2) Revised - Special Notes - Pages 9-11 of 62

(3) Revised - Traffic Control - Pages 13-14 of 62

Proposal revisions are available at $\frac{\text{http://transportation.ky.gov/Construction-Procurement/.}}{\text{Procurement/.}}$

Plan revisions are available at http://www.lynnimaging.com/kytransportation/.

If you have any questions, please contact us at 502-564-3500.

Sincerely,

Rachel Mills, P.E.

Director

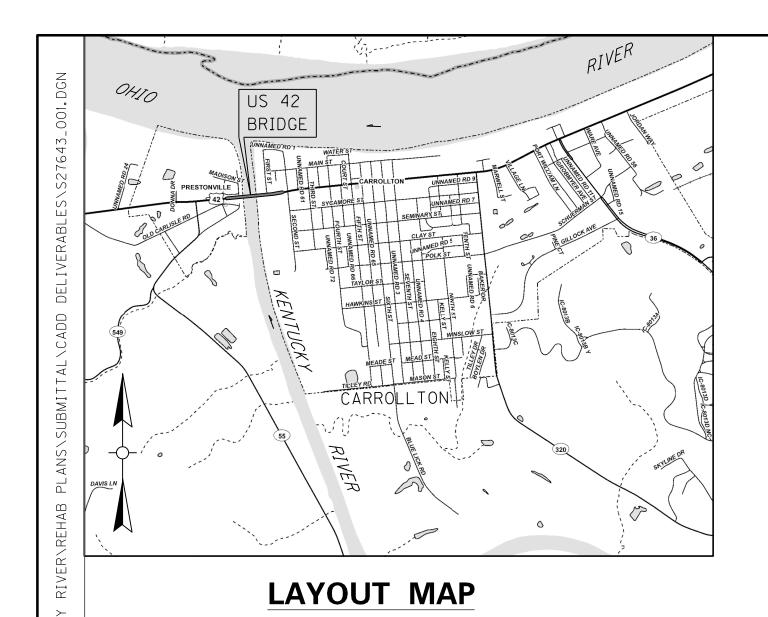
Division of Construction Procurement

Kachel Mille

RM:ks

Enclosures





NOT TO SCALE

TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS CARROLL COUNTY US 42 OVER KENTUCKY RIVER

BRIDGE 021B00043N SUPERSTRUCTURE STEEL REHABILITATION

S3 RETROFIT GUSSET PLATES L6-L6'(OUTBOARD) S4 RETROFIT GUSSET PLATES L6-L6'(OUTBOARD-ALT) S5 RETROFIT GUSSET PLATES L6-L6'(INBOARD) S6 RETROFIT GUSSET PLATES L6-L6'(INBOARD-ALT) S7 RETROFIT GUSSET PLATES L10-L10' S8 RETROFIT EXTERIOR STRINGERS

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TITLE, INDEX, & BRIDGE ELEVATION

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SPECIAL NOTE FOR PAINT

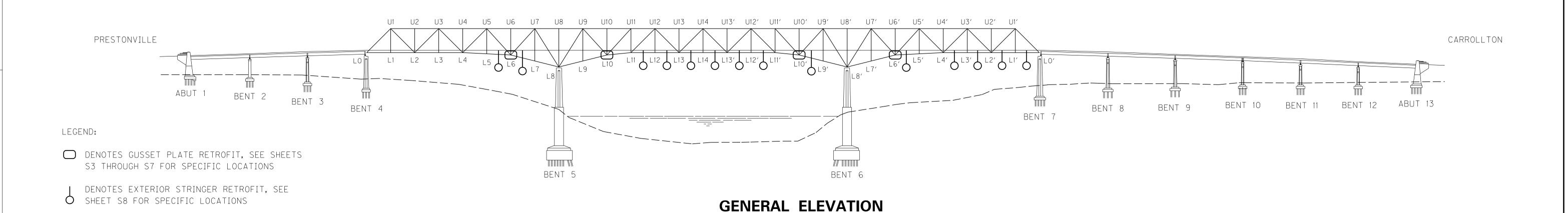
SPECIAL NOTE FOR TRAFFIC CONTROL ON BRIDGE REPAIR CONTRACTS

SPECIAL PROVISIONS

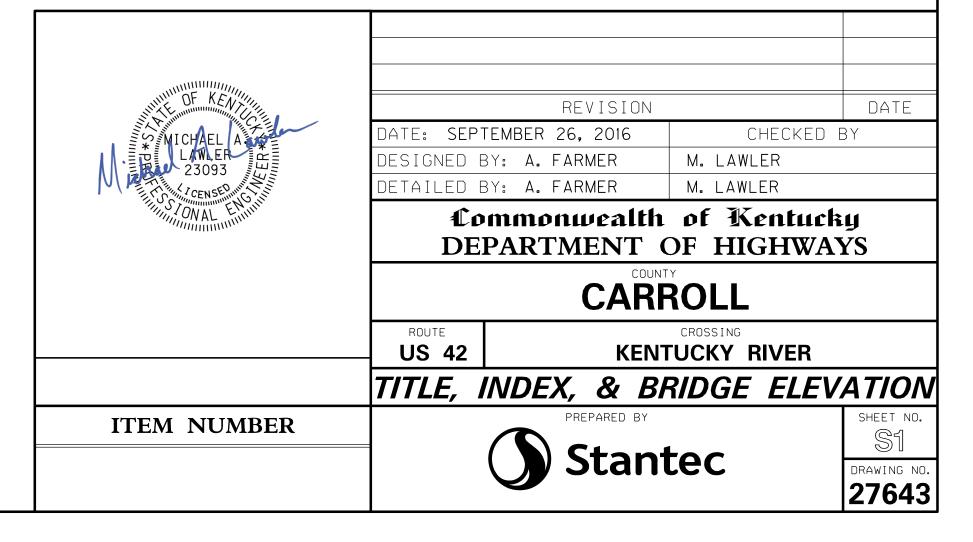
SPECIFICATIONS

2012 STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION.

7TH EDITION AASHTO LFRD DESIGN SPECIFICATIONS 2014 WITH INTERIMS



ESTIMATE OF QUANTITIES								
BID ITEM CODE	02568	02569	02650	24091EC	24092EC	24421EC		
BID ITEM	MOBILIZATION	DEMOBILIZATION	MAINTAIN AND CONTROL TRAFFIC	GUSSET PLATE REPAIR A PLATES L6 / L6'	GUSSET PLATE REPAIR B PLATES L10 / L10'	STRINGER RETROFIT		
UNIT	LS	LS	LS	EACH	EACH	EACH		
BRIDGE TOTAL	1	1	1	2	4	22		



GENERAL NOTES

GENERAL

THESE PLANS ARE TO BE USED FOR RETROFITTING GUSSET PLATES AND STRINGERS AS DESIGNATED.

SPECIFICATIONS

REFERENCES TO THE SPECIFICATIONS ARE TO THE CURRENT EDITION OF THE KENTUCKY DEPARTMENT OF HIGHWAYS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION INCLUDING ANY CURRENT SUPPLEMENTAL SPECIFICATIONS. ALL REFERENCES TO THE AASHTO SPECIFICATIONS ARE TO THE 7TH EDITION AASHTO LRFD DESIGN SPECIFICATIONS, 2014 WITH INTERIMS.

DESIGN LOAD AND METHOD

ALL STRUCTURAL STEEL MODIFICATIONS ARE DESIGNED BY THE LOAD AND RESISTANCE FACTOR METHOD AS SPECIFIED IN THE CURRENT AASHTO SPECIFICATIONS.

MATERIALS DESIGN SPECIFICATIONS

FOR STRUCTURAL STEEL (NEW)

Fy = 50000 PSI FOR GRADE 50

FOR STRUCTURAL STEEL (EXISTING)

Fy = 33000 PSI FOR ASTM A7 AND A373 Fy = 36000 PSI FOR ASTM A36

MATERIALS

ASTM OR AASHTO SPECIFICATIONS, CURRENT EDITION, AS DESIGNATED BELOW SHALL GOVERN THE MATERIALS FURNISHED.

STRUCTURAL STEEL

A.S.T.M. A709, GR 50

. AASHTO R 50 M270 GR 50

HIGH STRENGTH BOLTS, NUTS AND WASHERS

A325 N

ALL NEW TRUSS STEEL SHALL BE ASTM A709, GRADE 50 (FCM). GUSSET, SHIM AND FILL PLATES SHALL MEET THE LONGITUDINAL CHARPY V-NOTCH TEST APPICABLE TO ZONE 2 MINIMUM SERVICE TEMPERATURE FROM 1° TO 30° F, IN ACCORDANCE WITH THE FOLLOWING: M270 GR 50 OF 25 FT-LBS AT 40°F.

CLEANING AND PAINTING

CLEAN AND PAINT ALL SPECIFIED STEEL IN ACCORDANCE WITH SECTION 607 AND 821 OF THE STANDARD SPECIFICATIONS AND SPECIAL NOTE FOR SURFACE PREPARATION AND PAINT APPLICATION.

HIGH STRENGTH BOLT CONNECTIONS

ALL NEW BOLTS SHALL BE $\frac{7}{8}$ " DIAMETER HIGH STRENGTH BOLTS. BOLT HOLES SHALL BE $\frac{7}{16}$ " IN DIAMETER LARGER THAN THE BOLT DIAMETER, WITH THE EXCEPTION OF THE OVERSIZE HOLES IN THE SHIM AND FILL PLATES AT GUSSET PLATE RETROFIT LOCATIONS. ALL BOLTED CONNECTIONS ARE DESIGNED AS FRICTION TYPE CONNECTIONS. TIGHTENING SHALL BE IN ACCORDANCE WITH SECTION 607.08 OF THE STANDARD SPECIFICATIONS.

DIMENSIONS

ANY DIMENSIONS SHOWN ON THESE PLANS ARE BASED ON THE ORIGINAL CONSTRUCTION CONTRACT PLANS, SHOP DRAWINGS, AND FIELD MEASUREMENTS. THE CONTRACTOR SHALL VERIFY DIMENSIONS, INCLUDING GEOMETRY AND THICKNESS OF COMPONENTS, WITH FIELD MEASUREMENTS PRIOR TO ORDERING MATERIALS OR FABRICATING STEEL. ALL PLAN DIMENSIONS ARE FOR A NORMAL TEMPERATURE OF 60° F. LAYOUT DIMENSIONS ARE HORIZONTAL MEASUREMENTS.

PROHIBITED FIELD WELDING

NO WELDING OF ANY NATURE SHALL BE PERFORMED ON THE LOAD CARRYING MEMBERS OF THE BRIDGE WITHOUT THE WRITTEN CONSENT OF THE DIRECTOR, DIVISION OF MAINTENANCE, OR AN AUTHORIZED REPRESENTATIVE, AND THEN ONLY IN THE MANNER AND AT THE LOCATIONS DESIGNATED IN THE AUTHORIZATION.

DAMAGE TO STRUCTURE

THE CONTRACTOR SHALL BEAR FULL RESPONSIBILITY AND EXPENSE FOR ANY AND ALL DAMAGE TO THE STRUCTURE, INCLUDING TRUSS MEMBERS, DURING THE REPAIR AND RETROFIT WORK; EVEN TO THE REMOVAL AND REPLACEMENT OF TRUSS MEMBERS AND FALLEN SPANS, SHOULD THE DAMAGE RESULT FROM THE CONTRACTOR'S ACTIONS.

MAINTAINING TRAFFIC

TRAFFIC SHALL BE MAINTAINED AT ALL TIMES IN ACCORDANCE WITH THE PLANS AND SPECIAL NOTES FOR MAINTENANCE OF TRAFFIC.

PLANS OF EXISTING STRUCTURE

AS AN AID TO THE CONTRACTOR, THE PLANS AND SHOP DRAWINGS OF THE EXISTING STRUCTURE ARE AVAILABLE FROM THE DIVISION OF MAINTENANCE UPON REQUEST. THE COMPLETENESS OF THESE DRAWINGS IS NOT GUARANTEED AND NO RESPONSIBILITY IS ASSUMED BY KYTC FOR THEIR ACCURACY. THE EXISTING DRAWING NUMBER FOR THIS STRUCTURE IS 7952.

ON-SITE INSPECTION

THE CONTRACTOR SHALL MAKE A THOROUGH INSPECTION OF THE BRIDGE AND THE WORK SITE PRIOR TO SUBMITTING
THE FEE AND SHALL BE THOROUGHLY FAMILIARIZED WITH EXISTING CONDITIONS SO THAT WORK CAN BE EXPEDITIOUSLY
PERFORMED AFTER A CONTRACT IS AWARDED. A SUITABLE METHOD OF PERFORMING THE WORK DESCRIBED HEREIN
SHOULD BE INVESTIGATED. SUBMISSION OF A BID WILL BE CONSIDERED EVIDENCE OF THIS INSPECTION HAVING BEEN MADE.
ANY CLAIMS RESULTING FROM SITE CONDITIONS WILL NOT BE HONORED BY KYTC.

REMOVAL OF EXISTING RIVETS

AT THE GUSSET PLATE RETROFIT LOCATIONS, RIVETS MUST BE REMOVED AND REPLACED WITH BOLTS ONE AT A TIME.

THE CONTRACTOR WILL BE PERMITTED TO REMOVE RIVETS IN ANY MANNER WHICH DOES NOT DAMAGE THE ADJACENT STRUCTURAL STEEL. THIS MAY INCLUDE MECHANICAL REMOVAL OR OTHER METHODS APPROVED BY THE ENGINEER. USE OF CUTTING TORCHES WILL NOT BE PERMITTED.

BOLT HOLES AND OVERSIZE HOLES

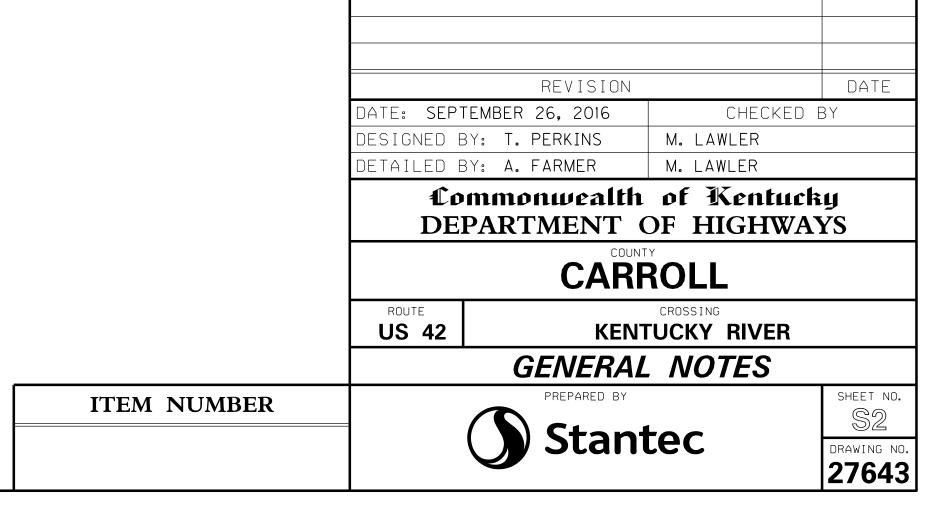
THE BOLT HOLE AND OVERSIZE HOLE LOCATIONS SHOWN ON THE PLANS ARE BASED ON THE MEMBER AND RIVET CONFIGURATIONS AS DEPICTED IN THE SHOP DRAWINGS OF THE BRIDGE AND VIA FIELD MEASUREMENTS, UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL VERIFY THE ACCURACY AT THESE LOCATIONS BY FIELD MEASUREMENTS.

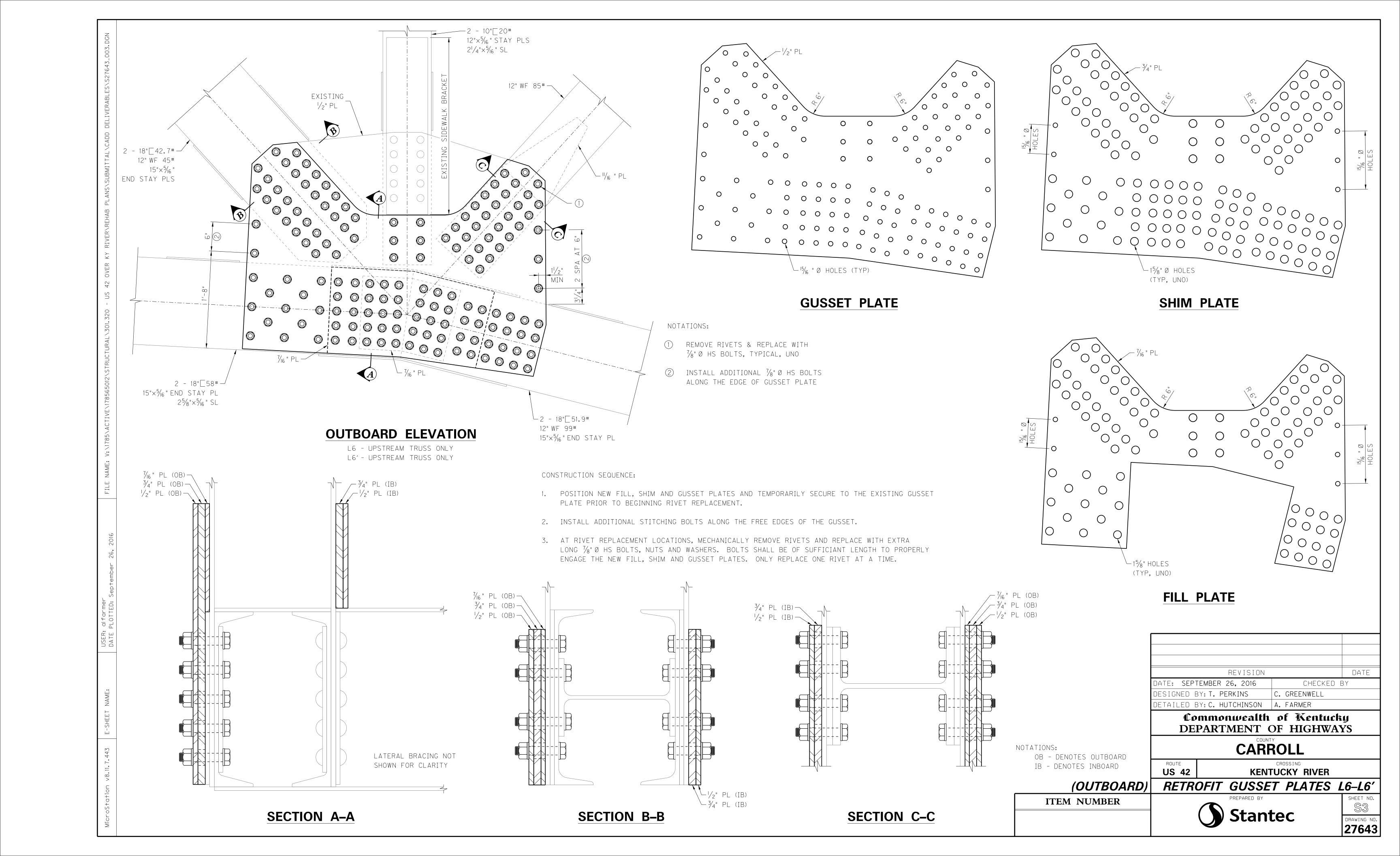
PRE-FABRICATION CONFERENCE

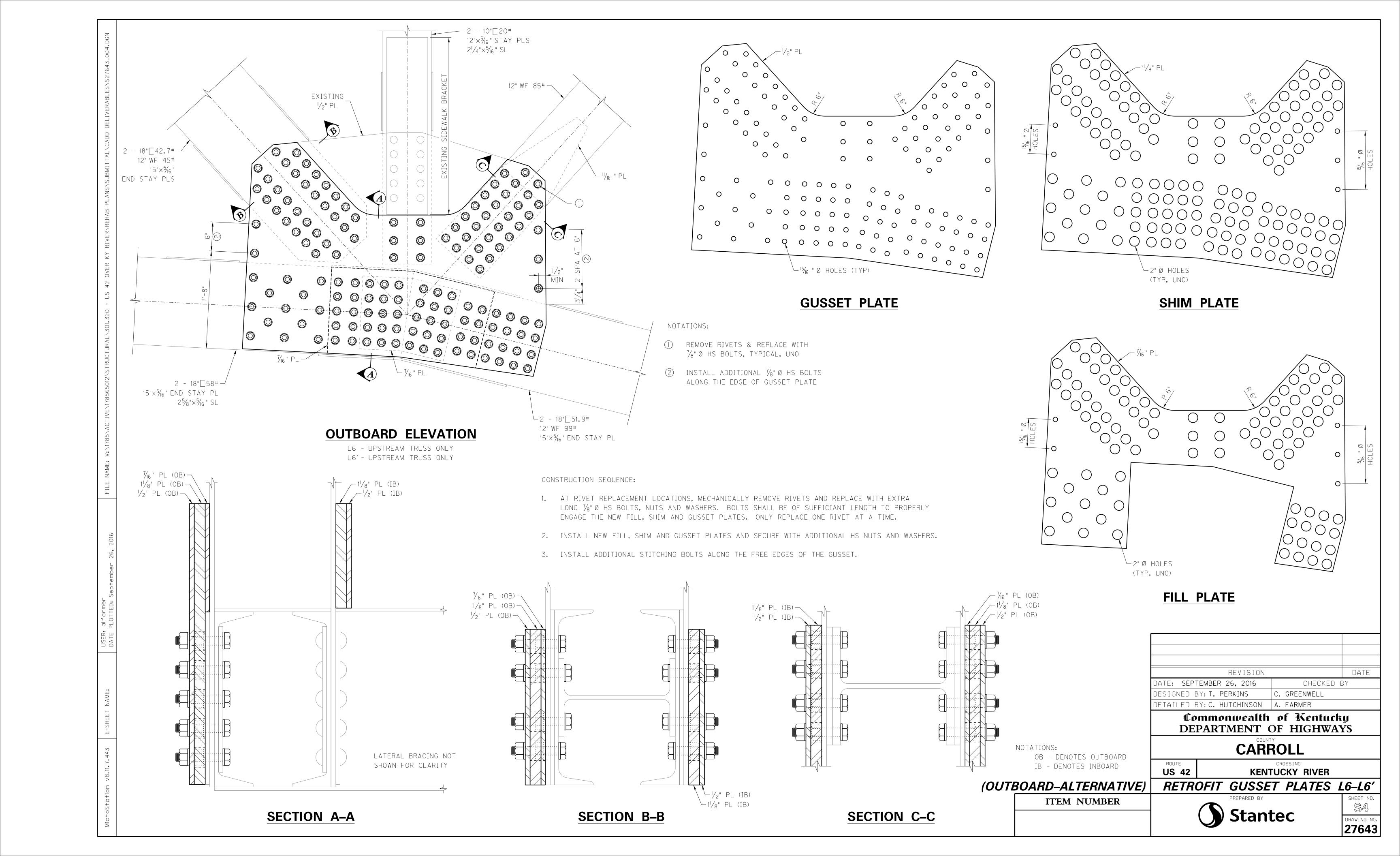
PRIOR TO THE START OF FABRICATION, THE CONTRACTOR AND THE ENGINEER SHALL HAVE A CONFERENCE TO INSURE THAT AN AGREEMENT HAS BEEN REACHED REGARDING THE FABRICATION AND CONSTRUCTION PROCEDURES AND THE INSPECTION THEREOF. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CALL THIS CONFERENCE AT A TIME AND PLACE MUTUALLY CONVENIENT TO ALL PARTIES CONCERNED.

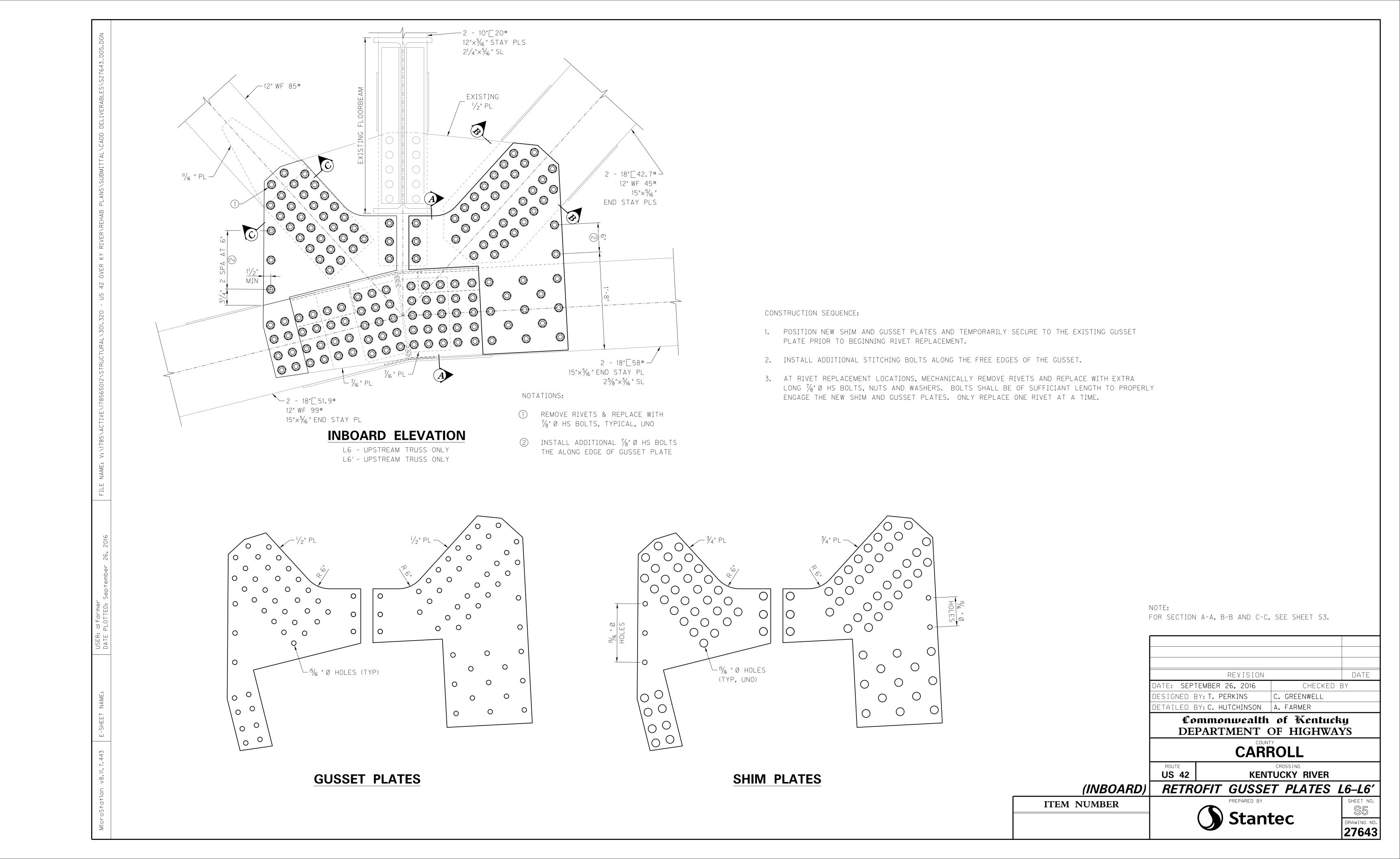
CONSTRUCTION PROCEDURE

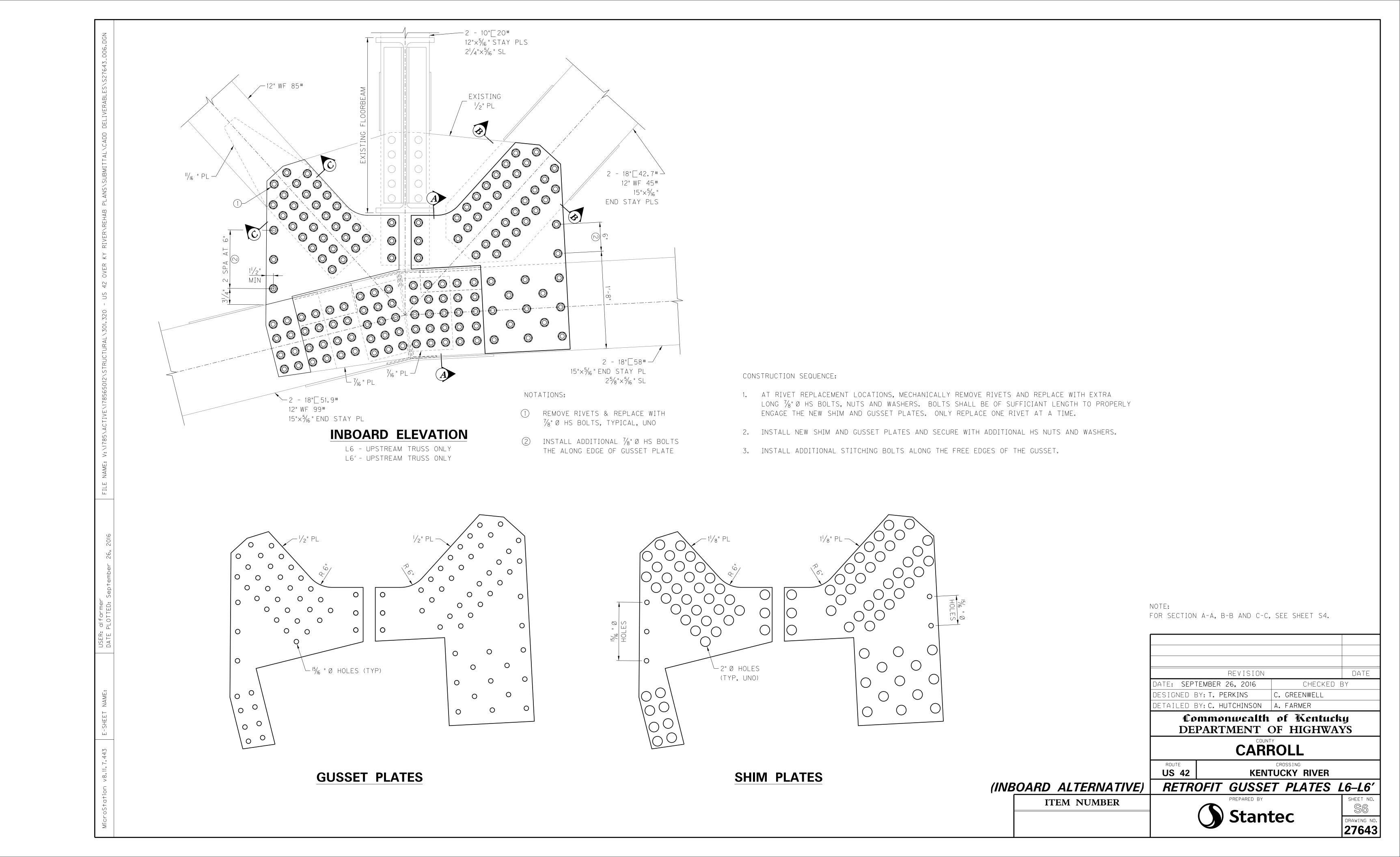
THE CONTRACTOR SHALL FOLLOW THE GENERAL SEQUENCE OF CONSTRUCTION AS DESCRIBED IN THE PLANS. ALTERNATIVE METHODS SHALL NOT BE ALLOWED WITHOUT THE WRITTEN CONSENT OF THE DESIGNER, OR AN AUTHORIZED REPRESENTATIVE.

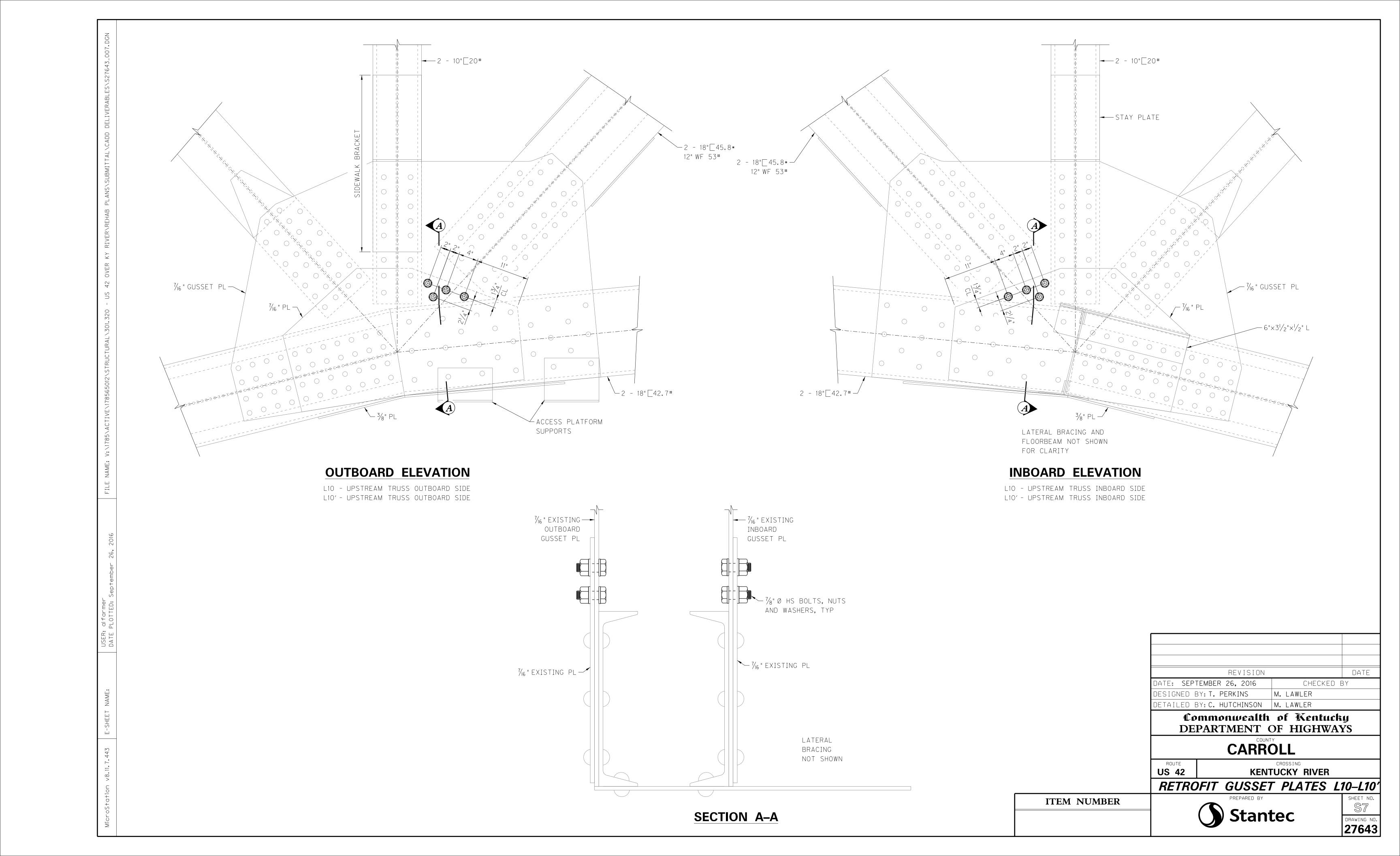


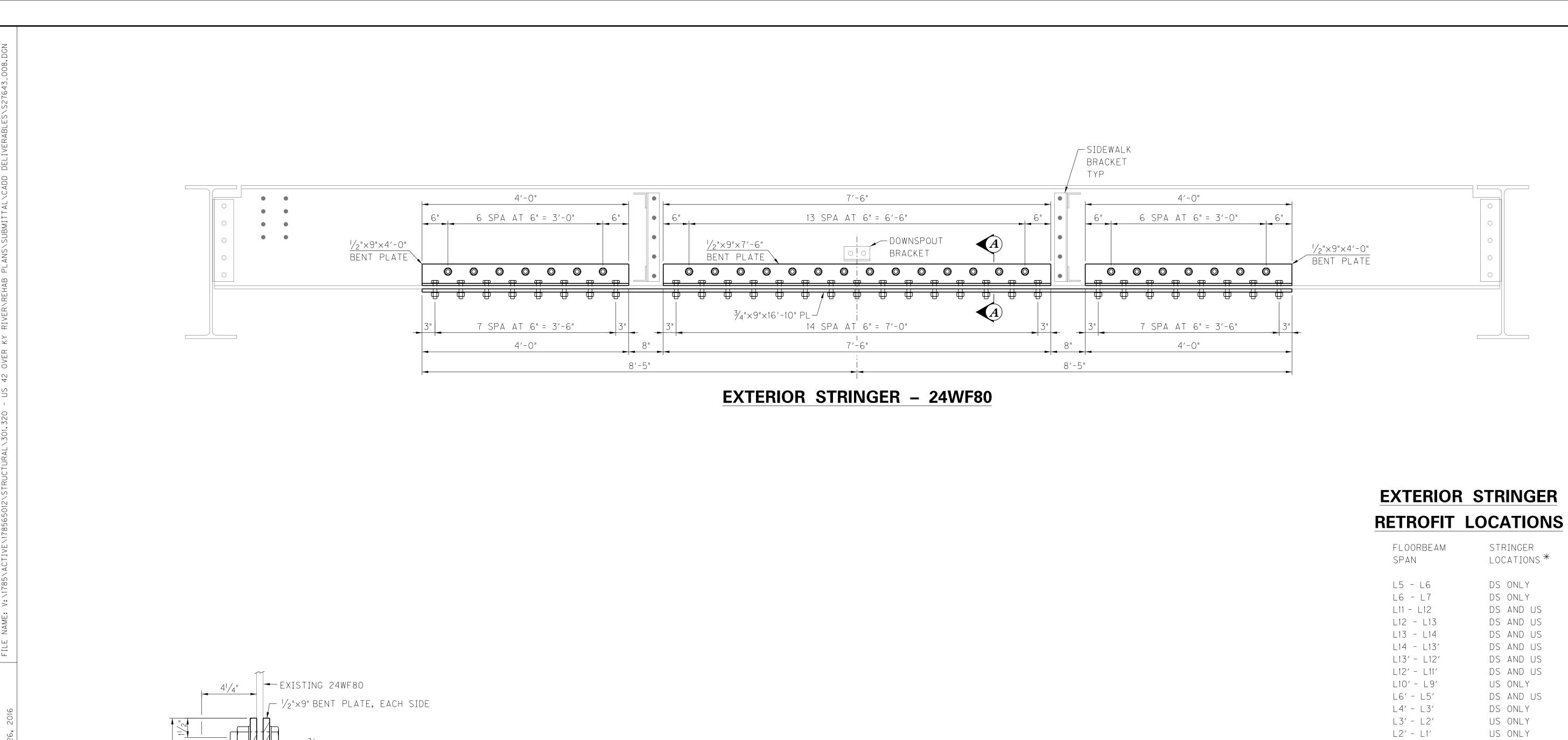


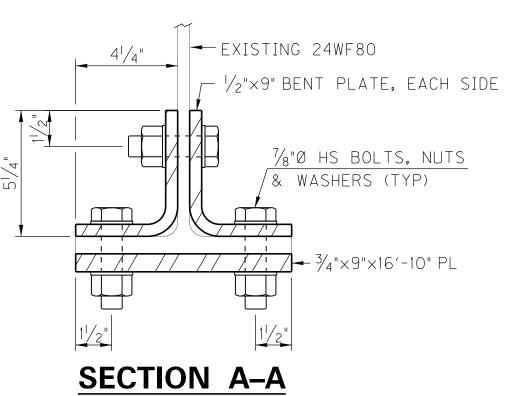












*DS - DENOTES DOWNSTREAM SIDE

US - DENOTES UPSTREAM SIDE

L1' - LO'

DS AND US

REVISION			DATE				
DATE: SEP	ATE: SEPTEMBER 26, 2016 CHECKED (
DESIGNED E	BY: C. GREENWELL	T. PERKINS					
DETAILED E	BY: J. HUMBERT	A. FARMER					
DEPARTMENT OF HIGHWAYS CARROLL							
ROUTE	CROSSING						
US 42	KENI	TUCKY RIVER					
RETR	RETROFIT EXTERIOR STRINGERS						
	PREPARED BY		SHEET NO.				
	(N) Stant	toc	90				

ITEM NUMBER

Juliec

DRAWING NO. **27643**

FE02 021 0042 B00043N

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SPECIAL NOTE FOR SURFACE PREPARATION AND PAINT APPLICATION

T. **DESCRIPTION**

Clean and paint new and existing structural steel to the limits specified in the applicable Special Notes and as directed by the Engineer in accordance with the Kentucky Transportation Cabinet, Department of Highways, 2012 Standard Specifications for Road and Bridge Construction and the following requirements:

II. CONSTRUCTION

A. Surface Preparation

- 1. **Solvent Cleaning.** Prior to using any of the methods of substrate preparation herein, remove visible grease and oil from the surface. Clean the surface in accordance with SSPC-SP 1 to remove oil, grease, and any other surface contaminants. Only use solvents or detergents that are acceptable to the coating manufacturer and the Department. Use clean cloths for the final wiping of the cleaned surface.
- 2. **Pressure Washing.** Clean all structural steel by pressure washing. Size the pressure washers so that no combination of hose length or pressure washer placement will result in an output pressure less the 4,500 psi or more than 5,000 psi from any spray wand at any pressure washing location. Hold the wand nozzle a maximum of twelve (12) inches from the surface being pressure washed approximately normal (perpendicular) to the working surface. Use clean, potable water for pressure washing. Do not use water from streams, ponds, lakes or rivers. At the discretion of the Contractor, a non-sudsing, biodegradable detergent may be added to the water to optimize the cleaning operation. If a detergent is used, thoroughly rinse the surface afterward. After the surface is pressure washed and allowed to dry, inspect it for remaining visible dirt. Wipe the dried surface with black and white rags to ascertain cleanliness. Re-clean and rinse as necessary to remove all contaminants on the working surface. On all surfaces not cleaned satisfactorily by pressure washing, employ one or more of the following methods including: 1) Hand scrubbing using wet rags. 2) Solvent cleaning by wiping with solvent-soaked rags. 3) Steam cleaning. After using any additional cleaning procedures, pressure wash those areas.
- 3. Mechanical Surface Preparation. After pressure washing, perform mechanical surface preparation on all surfaces not possessing clean, adherent paint (e.g. rust, loose paint, or loose mill scale). All surfaces requiring mechanical surface preparation will be cleaned to an SSPC-SP3. Perform all mechanical surface preparations using power tools. Equip all power tools with vacuum shrouds.

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Maintain and operate all vacuum shrouded power tools to collect generated debris. Equip all the air exhausts of the vacuum systems with HEPA filters.

After tool cleaning and prior to painting, remove all residue, dirt, dust, or similar contaminates from the cleaned surface to the satisfaction of the Engineer. The Contractor is solely responsible for any damages arising from the surface preparation operations.

B. Paint Application. Do not paint areas until they have been inspected and approved by the Engineer (or at the direction of the Engineer, the Department's Inspector). Apply paint only to dry, clean surfaces. Apply paint according to the manufacturer's recommendations with the exception that no paint will be applied unless steel temperature and ambient air temperature are above 32° F. For new steel, apply in the shop a Class 1 primer from the approved list referenced in the SPECIAL NOTES FOR PAINT. For new installed structural steel and existing prepared structural steel apply a Class IV (TYPE VI) coating system from the approved list referenced in the SPECIAL NOTES FOR PAINT. Apply paint according to the manufacturer's recommendations and Section 607 of the Standard Specifications.

> The finish coat shall be blue closely matching Federal Standard 595 FSX5095.

- **C. Damages**. Take all steps necessary to preclude damage to public property from paint overspray. Those steps may include changes in the type of containment or cessation of spraying operations. The Contractor is solely responsible for any damages arising from the painting operations.
- **D.** Repair of Paint Defects. Repair all defects in new paint.
- E. Residual lead paint may still be on bridge. The Contractor is advised to take all necessary protective measures including worker safety and environmental regulations when executing this work. The Department will not consider any claims based on residual lead paint.

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SPECIAL NOTE FOR PAINT

Use a coatings system from an approved supplier. A list of approved suppliers may be found in the Department's List of Approved Materials maintained by the Division of Materials. All paint supplied must conform to the applicable Special Notes contained in this proposal. The Department requires acceptance testing of samples obtained on a per-lot basis pershipment. The Division of Materials will perform acceptance testing. At his option, the Engineer may elect to conduct more frequent sampling and testing. Test samples will be taken at the Contractor's paint storage site. Department personnel will perform sampling. Allow (10) working days for testing and approval of the sampled paint.

Note: It is the Contractor's responsibility to maintain an adequate inventory of approved paint. The Department assumes no responsibility for lost work due to rejection of paint or approved paint subsequently found to be defective during the application process.

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REVISED ADDENDUM #1: 9-27-16

SPECIAL NOTE FOR TRAFFIC CONTROL ON BRIDGE REPAIR CONTRACTS

I. TRAFFIC CONTROL GENERAL

Except as provided herein, traffic shall be maintained in accordance with the 2012 Standard Specifications, Section 112. All items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic".

Contrary to Section 106.01, traffic control devices used on this project may be new or used in new condition, at the beginning of the work and maintained in like new condition until completion of the work.

II. TRAFFIC COORDINATOR

Furnish a Traffic Coordinator as per Section 112. The Traffic Coordinator shall inspect the project maintenance of traffic, at least three times daily, or as directed by the Engineer, during the Contractor's operations and at any time a lane closure is in place. The personnel shall have access on the project to a radio or telephone to be used in case of emergencies or accidents.

The Traffic Coordinator shall report all incidents throughout the work zone to the Engineer on the project. The Contractor shall furnish the name and telephone number where the Traffic Coordinator can be contacted at all times.

III. SIGNS

Contrary to Section 112.04.02, signs will be measured once only regardless of how many times set up, moved, or relocated.

The contractor is to install warning signs for wide loads in advance of the bridge under the direction of the Engineer. This shall be paid under the lump sum bid price to Maintain and Control Traffic. The Department will not measure installation, maintenance, or removal for payment, and will consider these incidentals to Maintain and Control Traffic.

IV. LANE CLOSURES

Lane closures will only be paid once. If lane closures are left in place continuously over three days it is the contractors responsibility to install striping meeting MUTCD STANDARDS.

Lane closures will not be permitted on these days:

Easter Weekend (Thursday-Sunday)

Memorial Day Weekend (Friday-Monday)

Independence Day Weekend, Labor Day Weekend (Friday-Monday)

Thanksgiving Day Weekend (Thursday-Sunday)

Christmas/New Years (December 24-January 2)

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V. PROJECT PHASING & CONSTRUCTION PROCEDURES

Lane closures are to be in place during the construction process to move loading to the opposite side of the retrofit being installed. Similar retrofits are to be placed one at a time. Therefore multiple gusset plate retrofits or stringer retrofits will not be allowed at one time, but one each of the gusset plate and stringer retrofits can occur during the same time as long as the retrofits are on the same side of the bridge. Length of lane closure will be the entire length of the truss spans plus tapers. Single lane closures will be in effect for a maximum cumulative total of 24 calendar days. This limit includes total days of lane closures in both directions.

Maintain one lane of traffic during construction in accordance with Standard Drawing No. TTC-100-03 for lane closures. The minimum clear lane width required is 11'-0". Flagging shall be used during peak traffic (6:30am to 8:30am and 3:00pm to 5:00pm).

VI. VARIABLE MESSAGE SIGNS

If deemed necessary by the Engineer, variable message signs will be installed, operated, and maintained by the Department.

VII. **TEMPORARY SIGNAL**

Provide, install, and maintain a temporary multi phase traffic signal in accordance with Standard Drawing No. TTC-110-02. The Contractor must provide a 24-hour contact person and number available to maintain the temporary signals as needed. The signal may be used in lieu of flagging for all hours other than those mentioned in paragraph V.