

ADDENDUM NO. 1

TO: All Holders of Plans and Contract
Documents for the Gamble Road Bridge
No. 2390003 Replacement, BRO-B068(014)
Moniteau County, Missouri

ISSUED: November 12, 2019

Name of Bidder:

Receipt Acknowledged By

This Addendum is hereby made a part of the Contract Documents to the same extent as if it were originally included herein. This Addendum shall be inserted in the Contract Documents and submitted with the Bid, and includes the following items:

CONTRACT DOCUMENTS:

- 1) Specification: Notice to Contractors, Par. (3) Period of Performance, Change Completion Date from March 31, 2020 to June 30, 2020.

CONTRACT DOCUMENTS:

- 1) Plan Sheet 17, replace MSKT-SP-MGS with NCHRP 350 SKT-SP TL2 for the End Terminal to eliminate midspan splice.

Anderson Engineering, Inc.



Gary D. Strack, P.E., F.NSPE, SECB

NOTICE TO CONTRACTORS

Sealed bids, addressed to Moniteau County Commission, 200 E Main Street, California Missouri 65018 for the proposed work will be received by the Moniteau County Commission until 10:00 AM (prevailing local time) on Thursday, December 12th 2019 that the office of the Moniteau County Commission, and at that time will be publicly opened. Bids should be delivered to: 200 E Main Street, California Missouri 65018.

(1) PROPOSED WORK: The proposed work, hereinafter called the work, includes:

Removal and replacement of the existing bridge and associated approach roadways.

(2) COMPLIANCE WITH CONTRACT PROVISIONS: The bidder, having examined and being familiar with the local conditions affecting the work, and with the contract, contract documents, including the current version of the Missouri Highways and Transportation Commission's "2019 Missouri Standard Specifications for Highway Construction," and "Missouri Standard Plans for Highway Construction" (if applicable), their revisions, and the request for bid, including appendices, the special provisions and plans, hereby proposes to furnish all labor, materials, equipment, services, etc., required for the performance and completion of the work. All references are to the 2019 Missouri Standard Specifications for Highway Construction, as revised, unless otherwise noted.

The following documents are available on the Missouri Department of Transportation web page at www.modot.mo.gov under "Business with MoDOT" "Standards and Specifications". The effective version shall be determined by the letting date of the project.

General Provisions & Supplemental Specifications

Supplemental Revisions to Missouri Standard Plans
For Highway Construction (if applicable)

These supplemental bidding documents contain all current revisions to the bound printed versions and have important legal consequences. It shall be conclusively presumed that they are in the bidder's possession, and they have been reviewed and used by the bidder in the preparation of any bid submitted on this project.

Please note that within the above-listed documents, the term "Commission" shall be replaced with the term, "Moniteau County Commission", and the term "Engineer" is a reference to the Engineer of Record from Anderson Engineering, Inc.

The contracting authority for this contract is Moniteau County Commission.

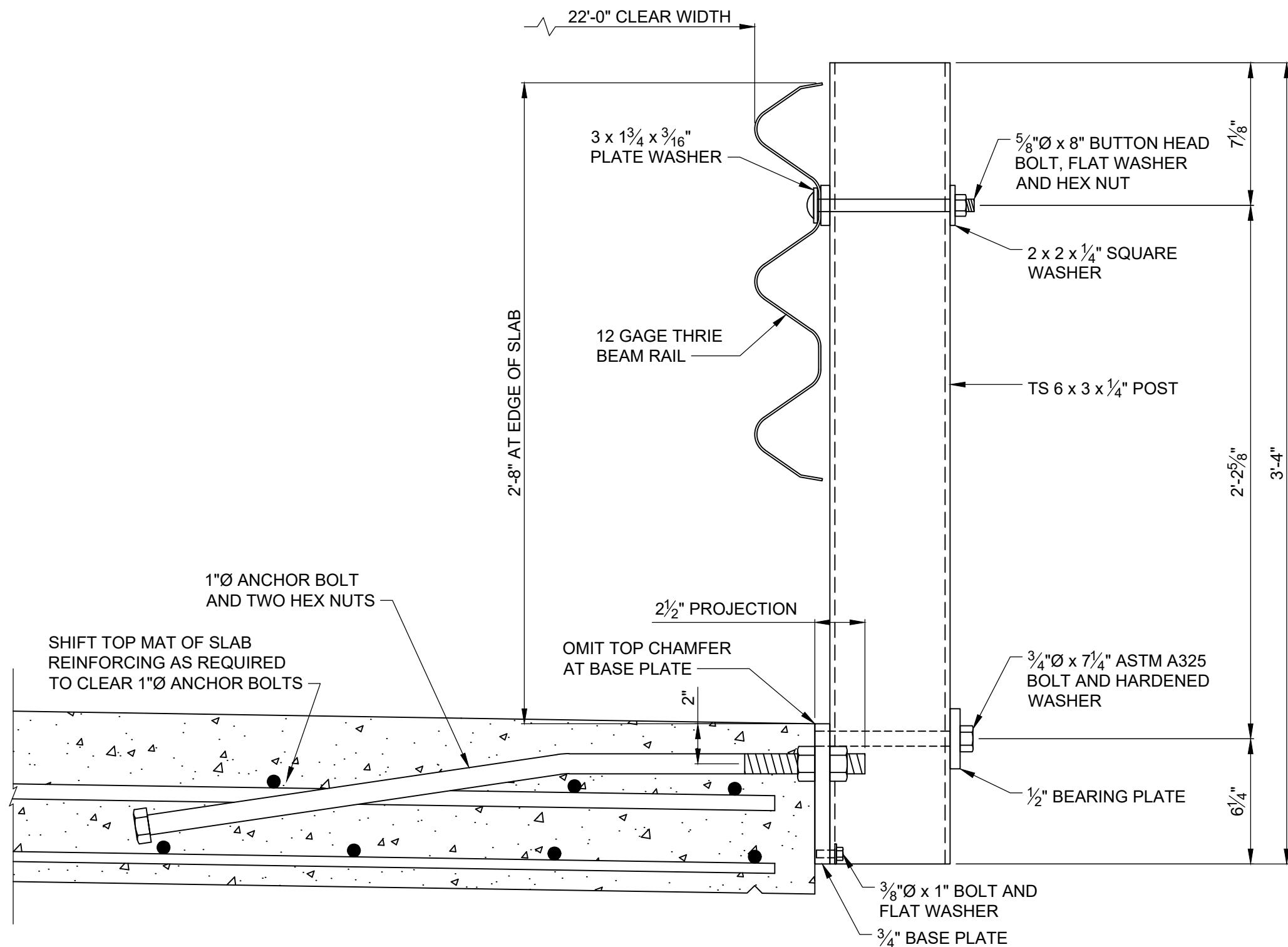
(3) PERIOD OF PERFORMANCE: If the bid is accepted, the bidder agrees that work shall be diligently prosecuted at such rate and in such manner as, in the judgment of the engineer, is necessary for the completion of the work within the time specified as follows in accordance with Sec 108:

Calendar Days: 120

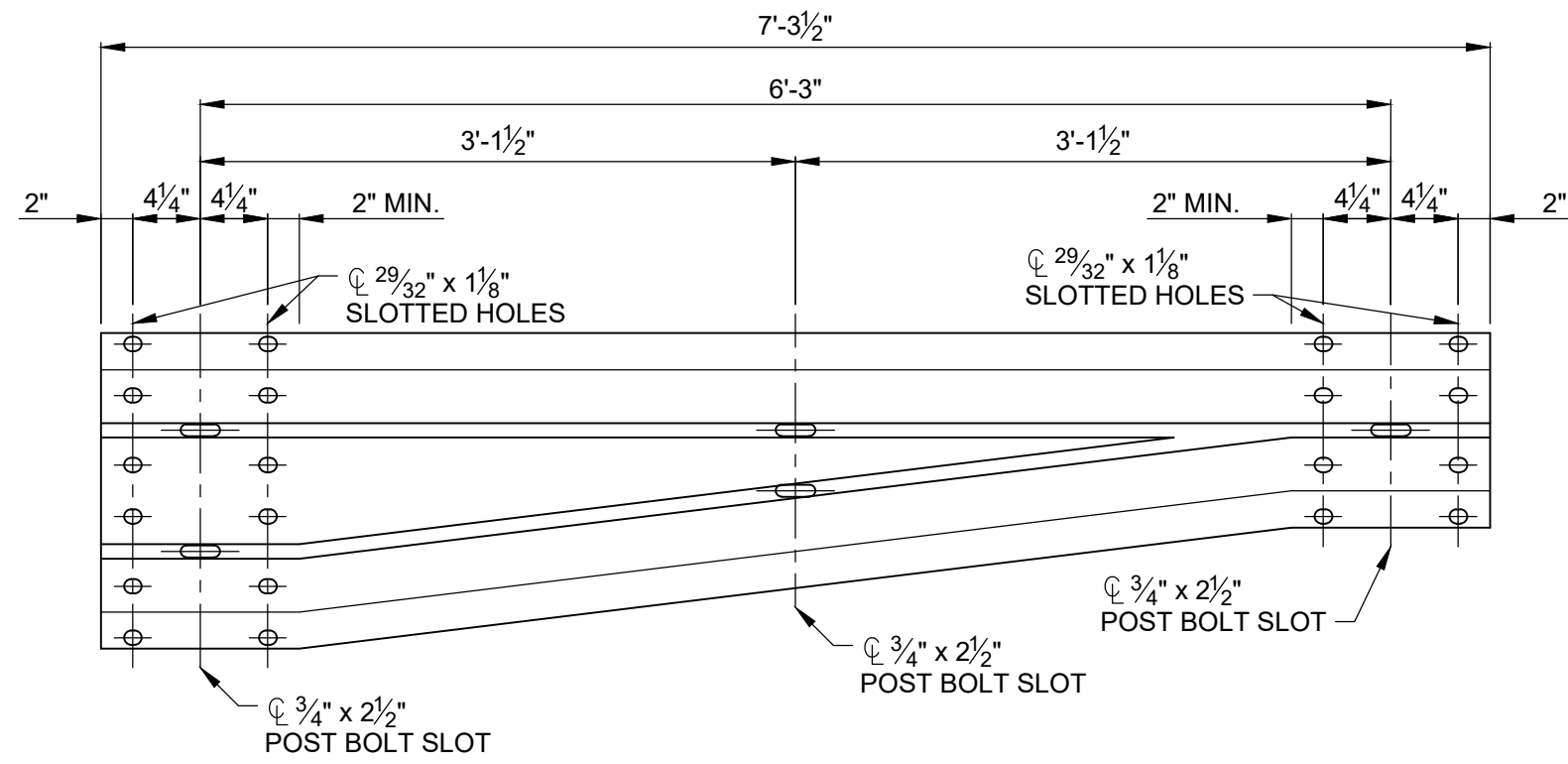
Completion Date: June 30, 2020

(4) LIQUIDATED DAMAGES: The bidder agrees that, should the bidder fail to complete the work in the time specified or such additional time as may be allowed by the engineer under the contract, the amount of liquidated damages to be recovered in accordance with Sec 108 shall be as follows:

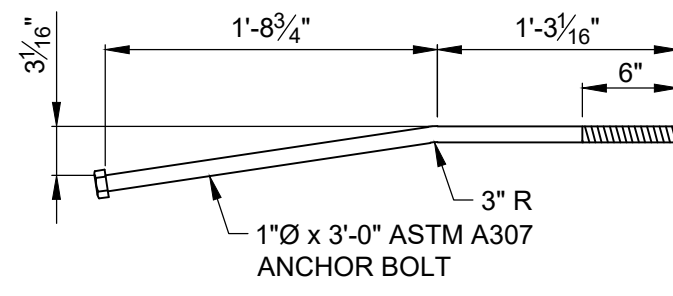
Liquidated damages per day \$ 700.00



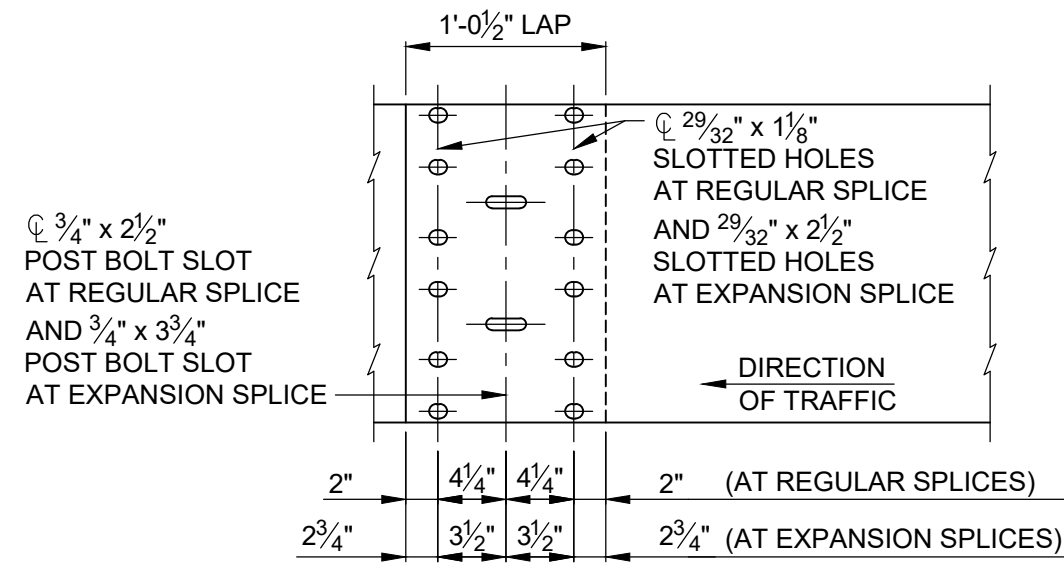
SERVICE LEVEL ONE (SL-1) BRIDGE RAILING
2" = 1'-0"



TRANSITION SECTION - ELEVATION
1" = 1'-0"



ANCHOR BOLT
1" = 1'-0"



RAIL SPLICE DETAIL
1" = 1'-0"

NOTES:

DESIGN CRASH TESTED FOR AASHTO SERVICE LEVEL 1 AND WILL PROVIDE AN EQUIVALENT TL-2 RATING IN ACCORDANCE WITH THE CRITERIA OF NCHRP REPORT 350.

ALL BOLTS, NUTS, WASHERS AND PLATES ARE CONSIDERED AS PART OF THE RAIL FOR PAYMENT.

ALL STEEL CONNECTING BOLTS, POSTS, RAILING, ANCHOR BOLTS, NUTS, WASHERS AND PLATES SHALL BE GALVANIZED AFTER FABRICATION. FOR PROTECTIVE COATING AND MATERIAL REQUIREMENTS, SEE SECTION 1040.

TAPPED HOLES IN BASE PLATE SHALL BE SUFFICIENTLY OVERSIZED TO ACCOMMODATE GALVANIZED BOLTS.

RAIL POSTS SHALL BE SET PERPENDICULAR TO ROADWAY PROFILE GRADE AND VERTICALLY IN CROSS SECTION.

5/8" Ø x 1/2" BUTTON HEAD OVAL SHOULDER BOLTS WITH HEX NUTS SHALL BE PROVIDED AT ALL SLOTS IN RAIL SPLICES (THICKNESS OF HEX NUTS = 3/8").

MINIMUM LENGTH OF THRIE BEAM RAIL SECTION IS EQUAL TO ONE POST SPACE.

THRIE BEAM RAIL SHALL BE MADE OF STEEL AND SHALL BE 12 GAGE.

BASE PLATES, BEARING PLATES, SQUARE AND PLATE WASHERS SHALL BE FABRICATED FROM ASTM A36 STEEL.

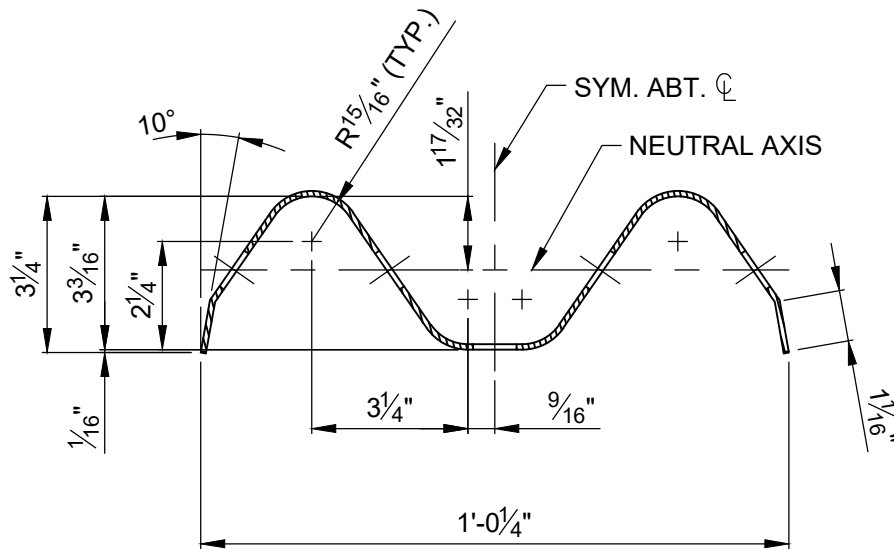
POSTS SHALL BE FABRICATED FROM ASTM A500, GRADE B STEEL.

PLATE WASHERS SHALL BE USED AT ALL POSTS (BETWEEN THE BOLT HEAD AND THRIE BEAM RAIL). THEY SHALL BE RECTANGULAR IN SHAPE (3 x 1 1/4 x 3/16") AND FLAT, OR WHEN NECESSARY, OF SUCH DESIGN TO FIT THE CONTOUR OF THE BEAM. PLATE WASHERS SHALL HAVE 1/16" x 1" SLOT.

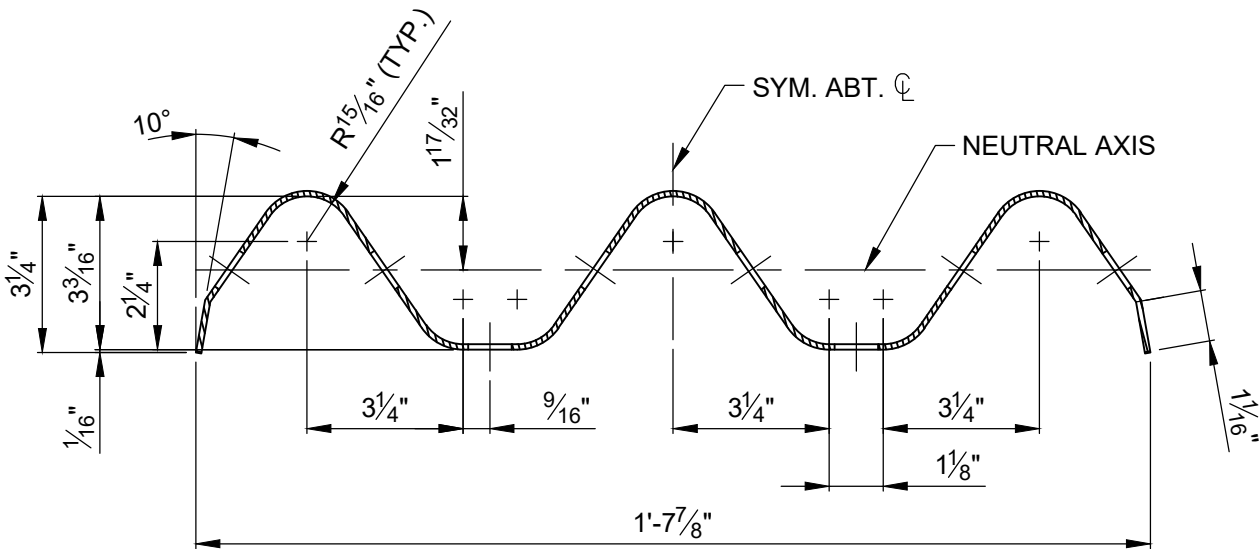
FABRICATION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH SECTION 712.

ALL LAP SPLICES SHALL BE MADE IN THE DIRECTION OF TRAFFIC.

EXPANSION SPLICES IN THRIE BEAM RAIL ARE NORMALLY NOT REQUIRED, BUT SHALL BE PROVIDED AT LOCATIONS SO THAT THE MAXIMUM LENGTH WITHOUT EXPANSION PROVISIONS DOES NOT EXCEED 200 FEET. AT EXPANSION SLOTS IN THE THRIE BEAM RAILS, TIGHTEN BOLTS, BACK OFF ONE-HALF TURN AND BURR THREADS.



STANDARD RAIL - SECTION
3" = 1'-0"



THRIE BEAM RAIL - SECTION
3" = 1'-0"

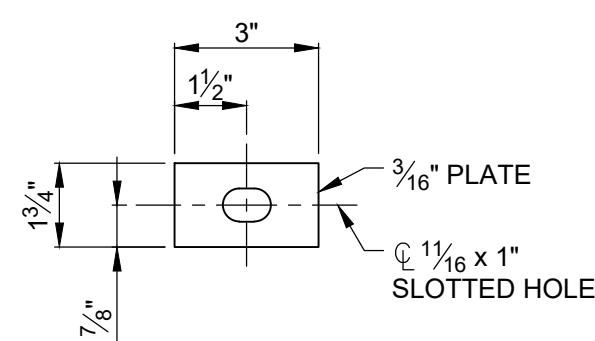
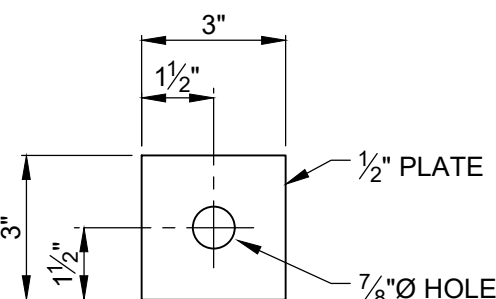
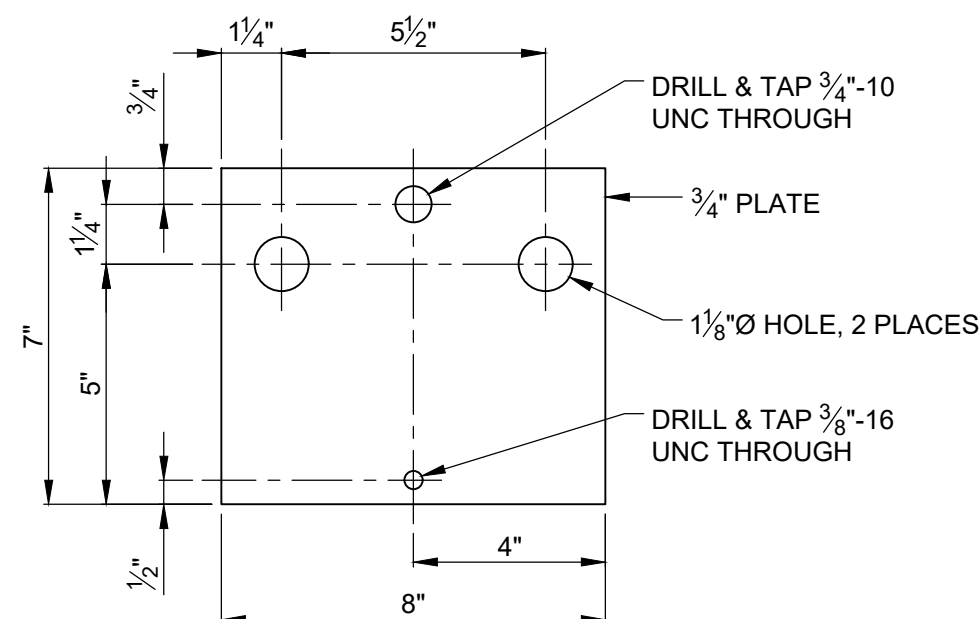


PLATE WASHER
3" = 1'-0"

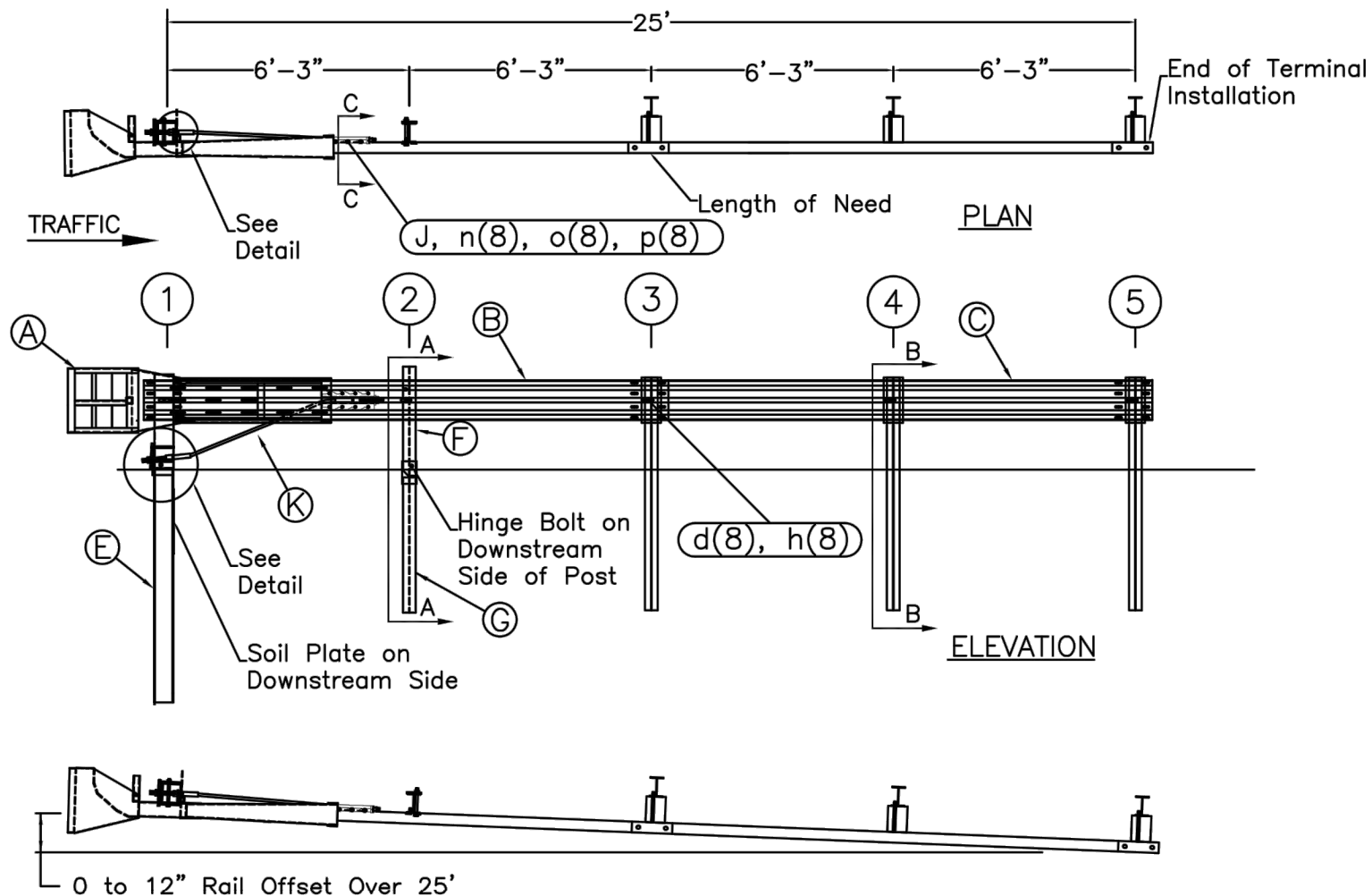


BEARING PLATE
3" = 1'-0"

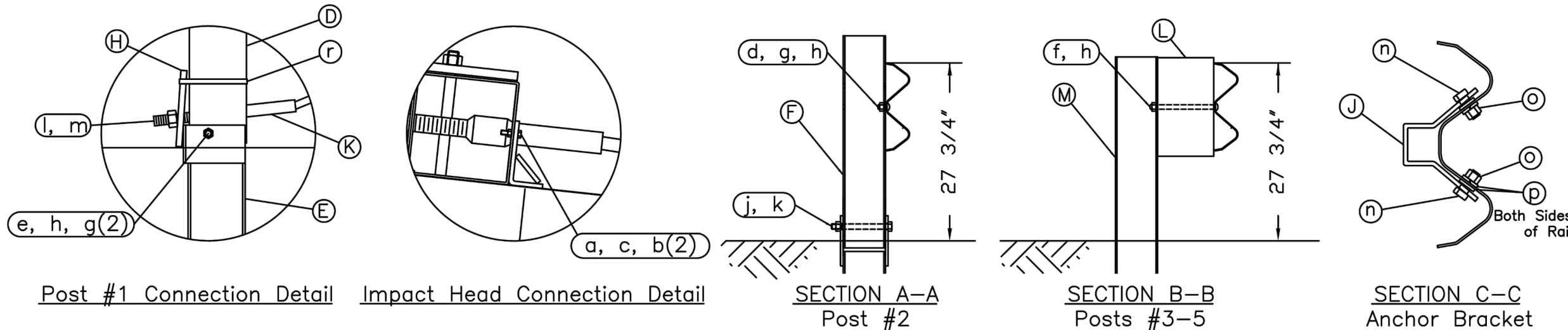


BASE PLATE
3" = 1'-0"

SKT END SECTION IS SHOWN FOR ILLUSTRATIVE PURPOSES, OTHER SIMILAR PRODUCTS ARE ACCEPTABLE.



OPTIONAL FLARED INSTALLATION
25:1 maximum flare rate



GENERAL NOTES:
1. All bolts, nuts, cable assemblies, cable anchors and bearing plates shall be galvanized.
2. The lower sections of the Posts 1&2 shall not protrude more than 4 in above the ground (measured along a 5' cord). Site grading may be necessary to meet this requirement.
3. The lower sections of the hinged posts should not be driven with the upper post attached. If the post is placed in a drilled hole, the backfill material must be satisfactorily compacted to prevent settlement.
4. When competent rock is encountered, a 12" Ø post hole, 20 in. deep cored into the rock surface may be used if approved by the engineer for post 1. Granular material will be placed in the bottom of the hole, approximately 2.5" deep to provide drainage. The first post can be field cut to length, placed in the hole and backfilled with suitable backfill. The soil plate may be trimmed if required.
5. A site evaluation should be considered if there is less than 25' between the outlet side of the terminal and any adjacent driving lane.
6. The breakaway cable assembly must be lout. A locking device (vice grips or channel lock pliers) should be used to prevent the cable from twisting when tightening nuts.

Road Systems, Inc.
Big Spring, TX
Sales: 432-263-2435
Technical: 330-346-0721

SKT-SP
Sequential Kinking Terminal
Test Level -2
Steel Post System
Drawing Name: SKT-SP-TL2-S
Scale: None
Rev: 0

Sheet: 1
Date: 01/09/15
By: JRR
Rev: 0

TYPE A CRASHWORTHY END TERMINAL
N.T.S.

BRIDGE RAIL - DETAILS

GAMBLE ROAD BRIDGE REPLACEMENT
BRO-B068(014)

SEC. 28, T44N, R15W
MONTEAU COUNTY, MISSOURI

SHEET NUMBER

17

OF 21

ANDERSON ENGINEERING
EMPLOYEE OWNED
ENGINEERS - SURVEYORS - LABORATORIES - DRILLING

STATE OF MISSOURI
GARY D. STRACK
ENGINEER
11/17/2019
PROFESSIONAL

NO.	REVISIONS	DESCRIPTION	DATE	BY	DATE	FIELD BY:	DATE	FIELD BOOK:	JOB NUMBER:
1		REVISED END TERMINAL	11/02/2019	CAW		CAW			18H4.10010
						GDS	9/6/2018		

G:\My Drive\Drawings\MO - Montau\BHA\0010 - Gamble Rd over Marmy Branch - Bridge - Revised Drawings\Para17 Bridge Rail - Details