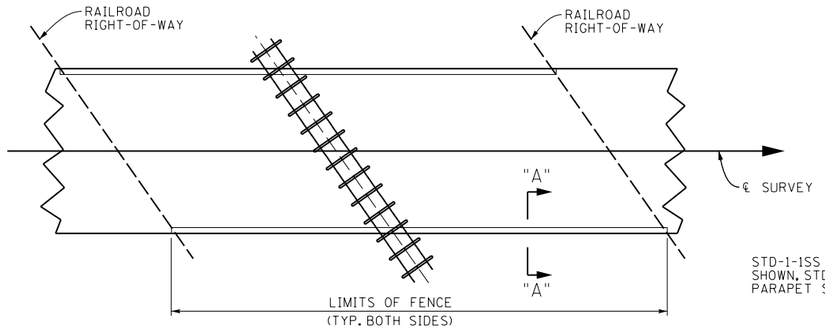
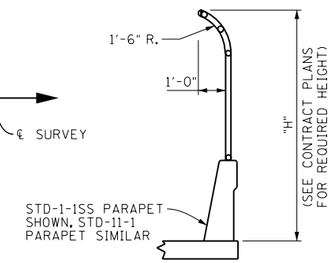
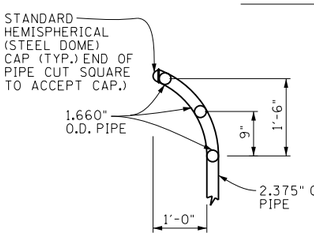


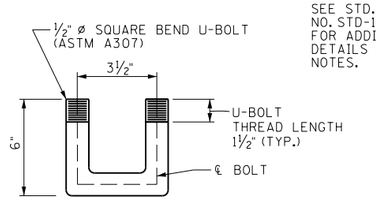
PLAN VIEW FENCE LOCATION



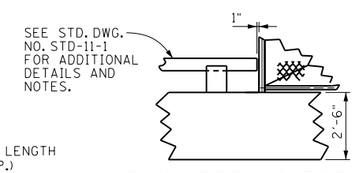
SECTION "A"-"A"



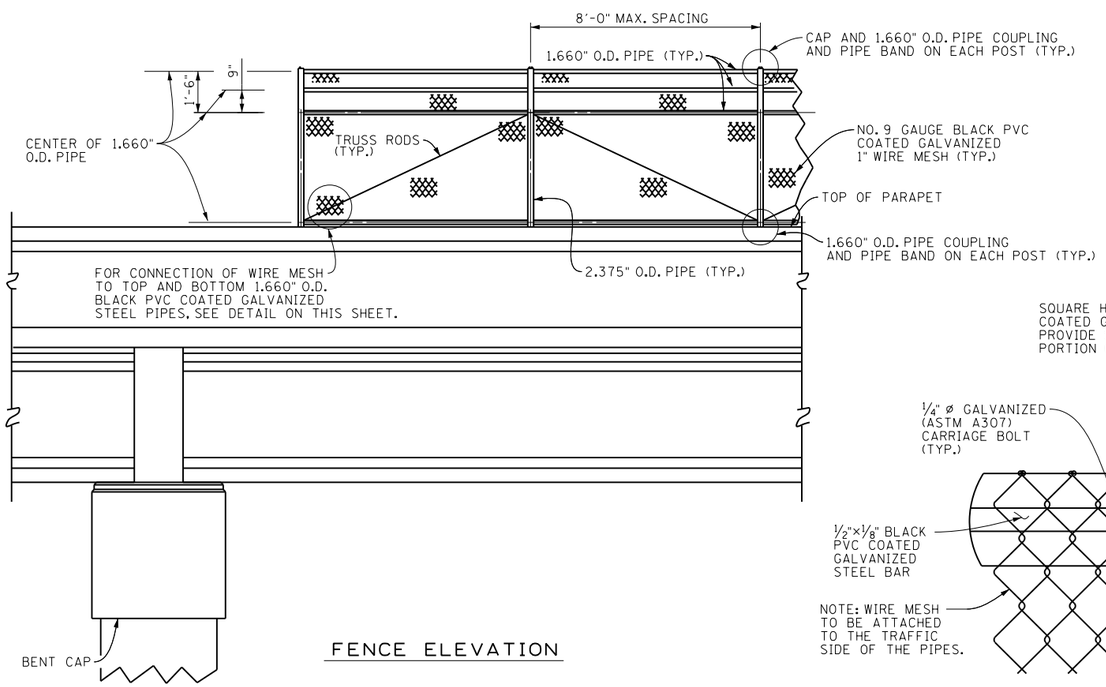
ANTI-CLIMB DETAIL



CAST-IN-PLACE U-BOLT DETAIL



RAIL TERMINATOR DETAIL (STD-11-1 PARAPET)



FENCE ELEVATION

NOTES:

SPECIFICATIONS: TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (CURRENT EDITION).

PROTECTIVE FENCE SHALL BE CONSTRUCTED ACCORDING TO THIS STANDARD DRAWING. NO SHOP DRAWINGS WILL BE REQUIRED FOR PROTECTIVE FENCE CONSTRUCTED ACCORDING TO THIS STANDARD DRAWING.

FENCING SHALL BE BLACK PVC COATED GALVANIZED 1" DIAMOND MESH CHAIN-LINK FABRIC. THE FENCING SHALL BE NO. 9 GAUGE, COMMERCIAL QUALITY, MEDIUM HIGH CARBON, HOT DIPPED GALVANIZED STEEL WIRE MEETING THE REQUIREMENTS OF ASTM F668-CURRENT EDITION. POSTS, RAILS, AND FRAMEWORK SHALL BE BLACK PVC COATED GALVANIZED STRUCTURAL STEEL OR SCHEDULE 40 PIPE. ALL MISCELLANEOUS CONNECTIONS, (BOLTS, WASHERS, NUTS, ETC.) FOR POSTS, RAILS AND FRAMEWORK SHALL BE BLACK PVC COATED GALVANIZED (OR PAINTED BY APPROVED SYSTEM). SEE ELEVATION OF BASE PLATE ON THIS SHEET.

POSTS AND RAILS SHALL BE PERMANENTLY POSITIONED BEFORE FABRIC IS PLACED. ALL LONGITUDINAL RAILS SHALL BE PARALLEL TO THE PARAPET. THE POSTS SHALL BE PERPENDICULAR TO THE TOP OF THE PARAPET.

PROTECTIVE FENCE SHALL BE TRUE IN LINE, TAUT, CLOSE FIT TO TOP OF PARAPET, WITH 1/2" MIN. TO 1" MAX. GAP AND SHALL COMPLY WITH THE BEST PRACTICE FOR FENCE CONSTRUCTION OF THIS TYPE.

2" MESH OPENING WILL NOT BE ALLOWED AS AN ALTERNATE TO THE 1" MESH FOR THE PROTECTIVE FENCE.

WIRE MESH FABRIC SHALL NOT BE STRETCHED IN LENGTHS EXCEEDING 100 FT.

ALL POSTS SHALL BE SET PLUMB, NOT PERPENDICULAR TO THE SLAB.

THE CONTRACTOR HAS THE OPTION TO PAINT THE PROTECTIVE FENCE IN LIEU OF PVC COATING. THE PAINT SYSTEM SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

ALL TOP AND BOTTOM HORIZONTAL RAILS SHALL BE 1.660" O.D. BLACK PVC COATED GALVANIZED STANDARD STEEL PIPE MEETING THE REQUIREMENTS OF ASTM F1083.

NOTES (CONT.):

PRE-COATED LONGITUDINAL RAILS, IF CUT, SHALL HAVE THE CUT END COATED WITH A TDOT APPROVED PVC TOUCH UP MATERIAL SUPPLIED BY THE MANUFACTURER PRIOR TO THE ERECTION.

ALTERNATE PAINT SYSTEM REQUIREMENTS: GALVANIZED COMPONENTS SHALL BE SUBJECT TO A PRETREATMENT WASH UTILIZING ZINC PHOSPHATE. APPLY TWO COATS OF PAINT CONSISTING OF AN ELECTROSTATIC SPRAY APPLICATION OF A 2 MIL. MINIMUM THICKNESS BASE COAT CONSISTING OF ZINC - RICH THERMO SETTING EPOXY FOLLOWED BY AN ELECTROSTATIC SPRAY APPLICATION OF A THERMO SETTING POLYESTER POWDER FINISH COAT OF 2 MIL. MINIMUM THICKNESS.

ALL POSTS, BRACES, FITTINGS, AND HARDWARE SHALL BE BLACK PVC COATED, EXCEPT THAT NUTS, BOLTS, AND WASHERS SHALL ALSO BE BLACK PVC COATED OR PAINTED BY AN APPROVED SYSTEM AND TOUCHED UP AFTER INSTALLATION.

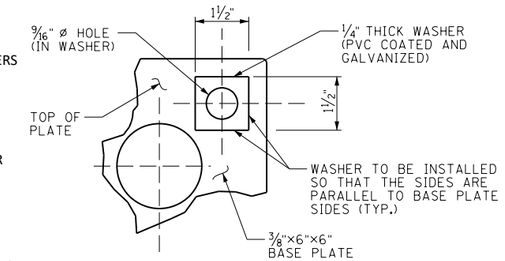
AS AN ALTERNATE TO THE CAST-IN-PLACE U-BOLTS, 1/2" DIAMETER ASTM F1554 GRADE 36 FULLY THREADED ANCHOR RODS MAY BE DRILLED AND EPOXY-GROUTED USING ONE OF THE FOLLOWING PRODUCTS FROM QPL 22.005: SIMPSON STRONG-TIE AT-XP, DEWALT AC200+, ITW RED HEAD A7+. OTHER PRODUCTS FROM THE QPL WITH SUPPORTING DOCUMENTATION AND CALCULATIONS MAY BE SUBMITTED TO THE ENGINEER OF STRUCTURES FOR APPROVAL. EMBEDMENT LENGTH SHALL BE 8 INCHES UNLESS A LONGER EMBEDMENT IS REQUIRED FOR THE ALTERNATE PRODUCT. CONTRACTOR SHALL FOLLOW ALL MANUFACTURER'S INSTRUCTIONS. REINFORCEMENT IN BRIDGE PARAPET SHALL BE PLACED TO PREVENT INTERFERENCE AND/OR DAMAGE TO THE REINFORCING STEEL DURING THE INSTALLATION OF THE ANCHORS. MECHANICAL ANCHORS ARE UNACCEPTABLE AND WILL NOT BE ALLOWED.

THE PRICE BID FOR ITEM NO. 707-07.01 SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY FOR THE COMPLETE INSTALLATION OF THE PROTECTIVE FENCE AND SHALL INCLUDE ALL FITTINGS, BASE PLATES, U-BOLTS, HEX NUTS, WASHERS, ANTI-CLIMB SHIELDS, CHAIN-LINK FABRIC, POSTS, TRUSS RODS, COUPLINGS, AND ANY OTHER MATERIALS REQUIRED FOR INSTALLATION.

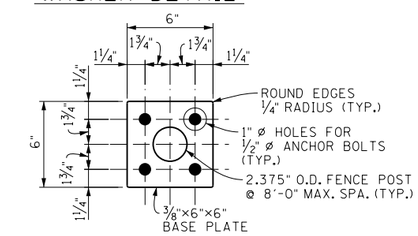
PROJECT NO.	YEAR	SHEET NO.
	2021	

REVISIONS

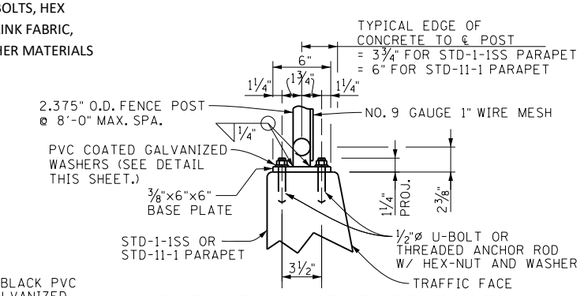
NO.	DATE	BY	BRIEF DESCRIPTION
1	5/10/21	TAK	RE-ISSUED DRAWING



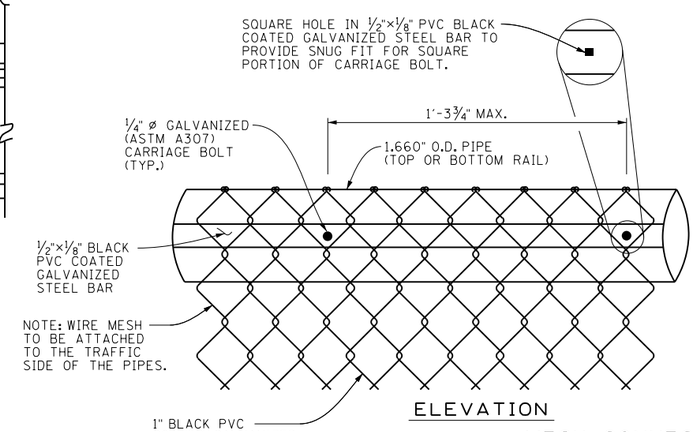
WASHER DETAIL



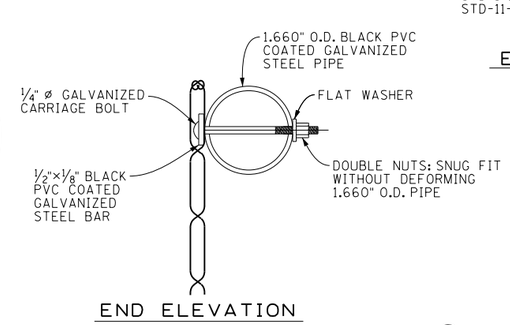
PLAN OF BASE PLATE



ELEVATION OF BASE PLATE



ELEVATION



END ELEVATION

MESH CONNECTION DETAILS

SHOWING ATTACHMENT OF WIRE MESH TO TOP AND BOTTOM 1.660" O.D. BLACK PVC COATED GALVANIZED STEEL PIPE.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STANDARD PROTECTIVE FENCE DETAILS 2021

1

DESIGNED BY A. PRICE DATE
DRAWN BY G. YOUNG DATE
SUPERVISED BY T. KNIAZEWYCZ DATE
CHECKED BY A. PRICE DATE

CORRECT Ted A Kniazewycz
ENGINEER OF STRUCTURES

STD-8-5