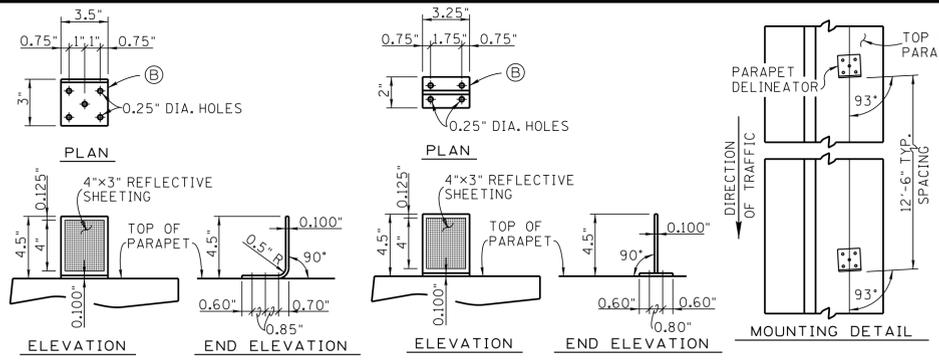
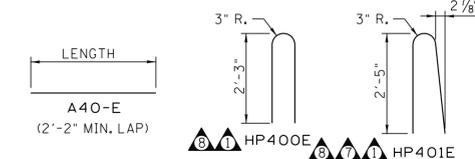


ELEVATION OF PARAPET & WINGWALL WITH CONSTRUCTION JOINT  
ELEVATION OF PARAPET & WINGWALL WITH EXPANSION JOINT



PARAPET DELINEATOR

PARAPET DELINEATORS SHALL BE HIGH IMPACT, UV-STABILIZED, ENGINEERED THERMOPLASTIC OR POLYCARBONATE SUBSTRATE. SEE TDOT APPROVED QUALIFIED PRODUCT LISTS FOR ACCEPTABLE PRODUCTS.



REINFORCING NOTES:

1. BAR DIMENSIONS ARE OUT TO OUT. FIRST DIGIT OF THE NUMBER INDICATES SIZE.
2. THESE BARS SHALL BE FULL LENGTH OF PARAPET EXCEPT THAT NO BAR WILL PASS THROUGH OPEN JOINTS.

☆ BARS A470E AND BARS B470E TO BE INCLUDED IN EPOXY COATED REINFORCING QUANTITIES AND BILL OF STEEL FOR WINGWALLS.  
☆ BARS B471E TO BE INCLUDED IN EPOXY COATED REINFORCING QUANTITIES AND BILL OF STEEL FOR SUPERSTRUCTURE.  
NOTE: BARS LISTED IN ABOVE NOTES ARE NOT INCLUDED IN WINGPOST QUANTITIES OR PARAPET QUANTITIES SHOWN THIS SHEET.

PROJECT NO.	YEAR	SHEET NO.
	1990	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
1	10-25-93	CMH	REV. WINGPOST TAPER, REINF. & QUANT. & DELINEATOR SPECIF., ADDED CHAMFER
2	12-20-94	CMH	ADDED ALT. MOUNT FOR DELINEATOR
3	3-28-94	CMH	REMOVED INSERT ASSEMBLY NOTE
4	12-18-95	CMH	REVISED SPACING OF WINGPOST REINF. AND REVISED LENGTH OF BOLT
5	4-28-97	CMH	ADDED LENGTH TO BARS B47-E
6	5-21-99	CMH	REVISED NOTE (A), (B), DELINEATORS & ADDED V-GROOVE NOTE #5
7	7-31-00	CMH	REVISED NOTE (A) & #5, BARS HP401E, ADDED SLOPE BREAK TO SECTIONS A-A, C-C, D-D, END ELEVATION, PLAN SHOWING JOINT DETAILS, WATERSTOP NOTE #6 & DELETED JOINT & BENT
8	5-1-14	JHW	REVISED DIMENSIONS & QUANTITIES

GENERAL NOTES:

DESIGN: AASHTO SPECIFICATIONS CURRENT EDITION WITH ADDENDA.  
SPECIFICATIONS: STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION, (CURRENT EDITION).  
CONCRETE: TO BE CLASS 'A' f'c = 3,000 psi. SEE SPECIAL PROVISION REGARDING SECTION 604 - CONCRETE STRUCTURES.

REINFORCING STEEL: TO BE ASTM A615 GRADE 60. SPACING DIMENSIONS ARE CENTER TO CENTER UNLESS OTHERWISE NOTED. THE SUFFIX 'E', FOR BARS SO MARKED, DENOTES EPOXY COATED REINFORCEMENT. SEE SPECIAL PROVISION 907A.

NOTE: CONTRACTOR MAY POUR THE PARAPET WITHOUT FELT PAPER PROVIDED HE FORMS A 1/2 INCH V-GROOVE ALONG THE TRAFFIC FACE AND TOP OF PARAPET DURING CASTING OF CONCRETE OR SOON AFTER SLIP-FORMING.

1. PARAPET DELINEATOR REFLECTIVE SHEETING SHALL MEET ASTM D4956, TYPE V SPECIFICATIONS. THE REFLECTIVE SHEETING SHALL BE A MINIMUM OF 4"x3" AND HAVE MINIMUM COVERAGE AREA OF 12 SQUARE INCHES. THE COLOR OF THE DELINEATORS SHALL CONFORM TO THE REQUIREMENTS OUTLINED IN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. PARAPET DELINEATORS WILL NOT BE REQUIRED IN AREAS WHERE ROADWAY IS LIGHTED.
2. THE COST OF FURNISHING AND INSTALLING PARAPET DELINEATORS, INCLUDING ALL MATERIALS, LABOR AND INCIDENTALS NECESSARY TO COMPLETE THE INSTALLATION, SHALL BE INCLUDED IN BID PRICE FOR CONCRETE PARAPET.
3. PARAPET DELINEATORS SHALL BE MOUNTED TO THE CONCRETE PARAPET WITH A ONE COMPONENT ADHESIVE AS RECOMMENDED BY THE MANUFACTURER. THEY SHALL BE INSTALLED NO EARLIER THAN THREE WEEKS AFTER THE TEXTURE COATING HAS BEEN APPLIED.

FABRICATION NOTES:

1. OPEN JOINTS OR FILLED JOINTS WILL BE ALLOWED IN PARAPET ONLY WHEN SHOWN ON PROJECT DRAWINGS. JOINTS SHALL CONFORM TO THE JOINT DETAILS ON THIS SHEET OR AS OTHERWISE SHOWN ON PROJECT DRAWINGS.
2. PARAPET CONCRETE SHALL NOT BE CAST PRIOR TO REMOVAL OF ALL SUPERSTRUCTURE RELATED FALSEWORK.
3. ALIGNMENT AND PROFILE OF PARAPET SHALL CONFORM TO ROADWAY PROFILE AND GEOMETRY.
4. IF THE PARAPET IS SLIP-FORMED, ROUNDED EDGES WITH A 3/4 INCH RADIUS MAY BE USED INSTEAD OF THE 3/4 INCH CHAMFER AS SHOWN.
5. A 1/2 INCH DEEP V-GROOVE ALONG THE TRAFFIC FACE AND TOP OF PARAPET SHALL BE FORMED DURING CASTING OF CONCRETE OR SOON AFTER SLIP-FORMING @ 10'-0" CENTER-TO-CENTER.
6. A 3/8"x4" FLAT DUMBBELL OR FLAT RIBBED P.V.C. (POLYVINYL CHLORIDE) WATERSTOP MAY BE USED IN LIEU OF THE 1/4" SLOPE AT EDGE OF SLAB. WATERSTOP MUST BE CONTINUOUS ENTIRE LENGTH OF PARAPET. RUBBER WATERSTOP MUST BE FACTORY OR FIELD VULCANIZED OR CEMENT SPLICED WITH THE AID OF PREMOLDED JOINTS, AND/OR UNIONS.

WINGPOST QUANTITIES

(PER WING, BASED ON 11'-8" WINGPOST)

CLASS 'A' CONCRETE C.Y.	REINFORCING STEEL LB.
1.09	81

PARAPET QUANTITIES

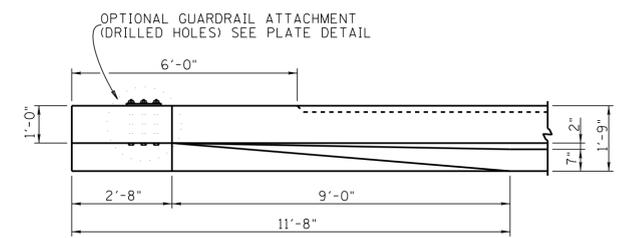
(PER LINEAR FOOT)

CLASS 'A' CONCRETE C.Y.	REINFORCING STEEL LB.
.1119	8

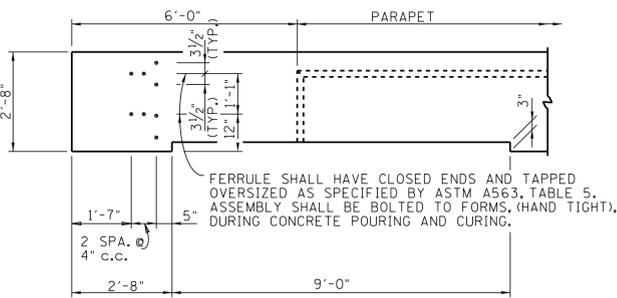
MINOR REVISION - FHWA APPROVAL NOT REQUIRED

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BRIDGE RAILING  
CONCRETE PARAPET  
1990

CORRECT *Edward P. Wasserman*  
ENGINEER OF STRUCTURES



PLAN OF WINGPOST



ELEVATION

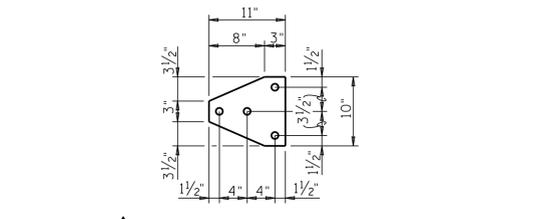
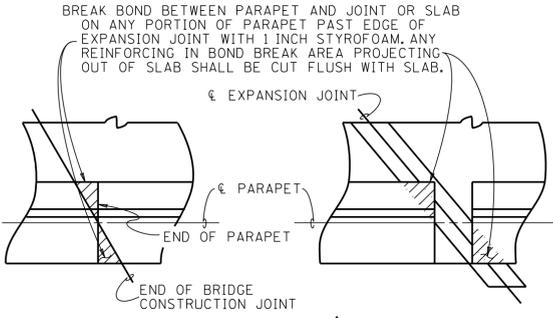
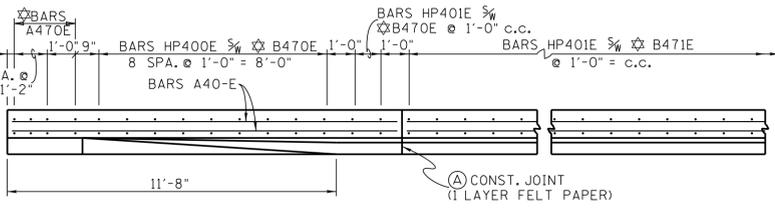


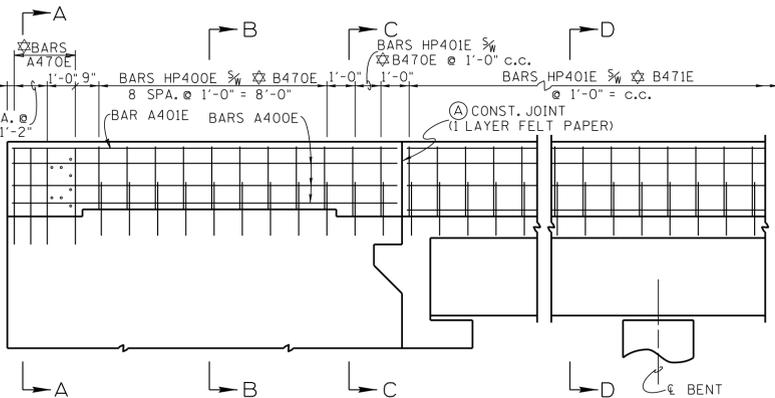
PLATE DETAIL  
1/2" ASTM A36 GALVANIZED PLATE WITH 7/8" HEX HEAD GALVANIZED BOLTS (A307) HOT DIP ZINC COATING ASTM A153



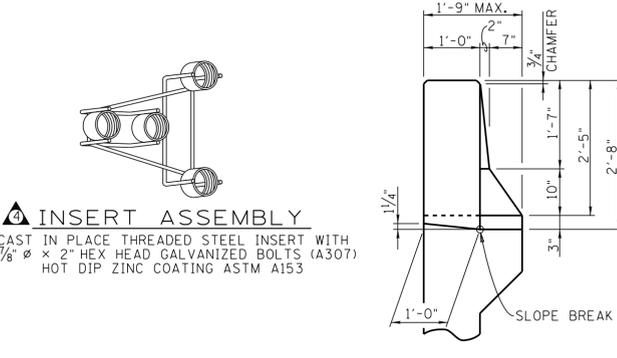
PLAN (SHOWING DETAIL @ OPEN JOINT)



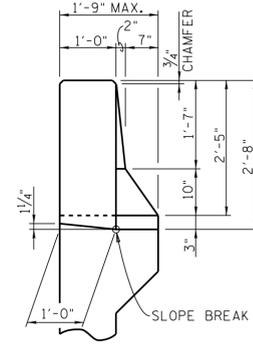
PLAN SHOWING REINFORCING STEEL



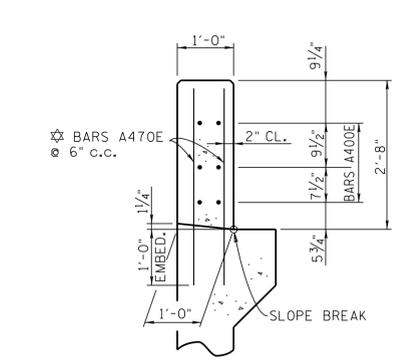
ELEVATION SHOWING REINFORCING STEEL



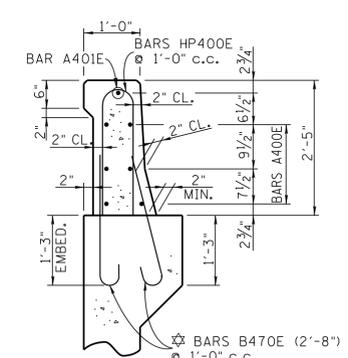
INSERT ASSEMBLY  
CAST IN PLACE THREADED STEEL INSERT WITH 1/8" x 2" HEX HEAD GALVANIZED BOLTS (A307) HOT DIP ZINC COATING ASTM A153



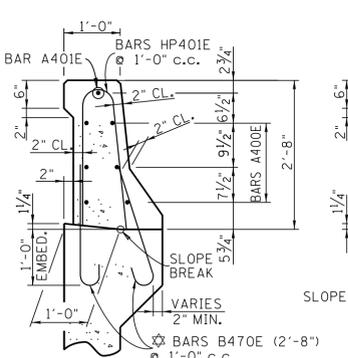
END ELEVATION



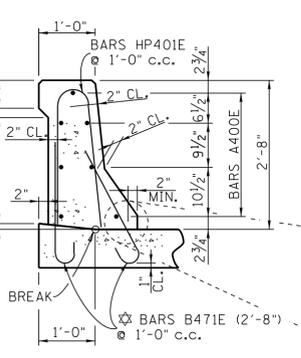
SECTION A - A



SECTION B - B



SECTION C - C



SECTION D - D

DESIGNED BY C.M. HILES  
DRAWN BY KIM FRANKENFIELD  
SUPERVISED BY C.M. HILES  
CHECKED BY \_\_\_\_\_

DATE \_\_\_\_\_  
DATE \_\_\_\_\_  
DATE \_\_\_\_\_  
DATE \_\_\_\_\_