

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

PROJECT NO.	YEAR	SHEET NO.	
	1996		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	6-10-96	BRB	NEW METRIC STANDARD
2	4-28-97	CMH	ADDED LENGTH TO BARS B137-E
3	5-21-99	CMH	REVISED NOTE 6, DELINEATORS & ADDED V-GROOVE NOTE #5
4	7-31-00	CMH	REVISED NOTE 6 & #5, BARS HP40E, ADDED SLOPE BREAK TO SECTIONS A-A, C-C, D-D, END ELEVATION, PLAN SHOWING JOINT DETAILS, WATERSTOP, NOTE #6 & DELETED JOINT & BENT

PARAPET DELINEATOR

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

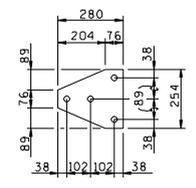
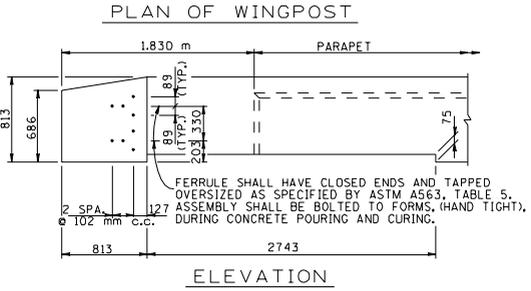
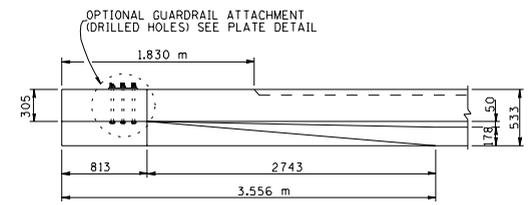
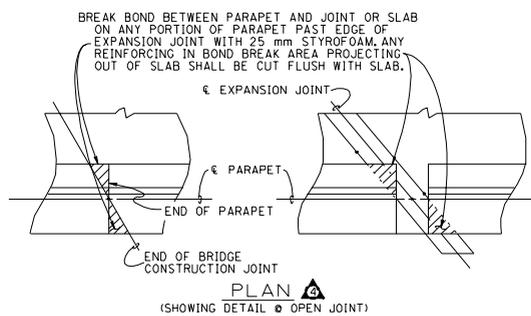
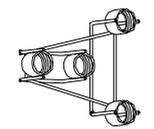
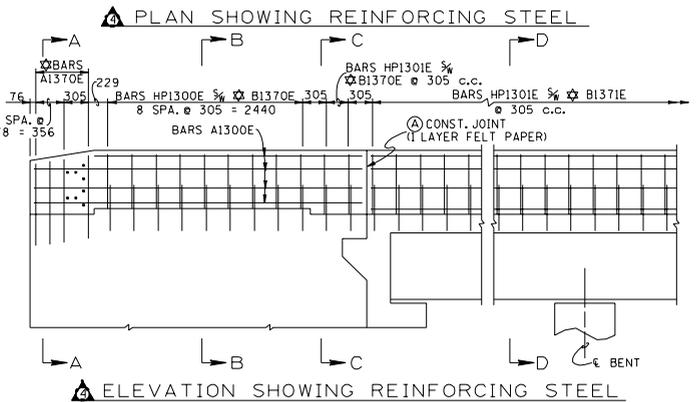
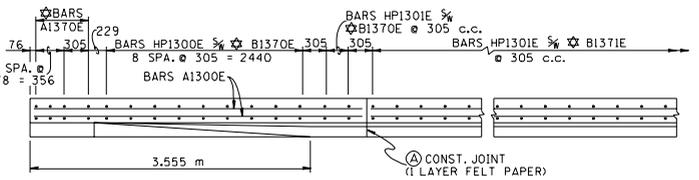


PLATE DETAIL
 13mm ASTM A36M GALVANIZED PLATE WITH M22 Ø HEX HEAD GALVANIZED BOLTS (A307) HOT DIP ZINC COATING ASTM A153



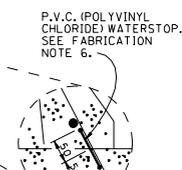
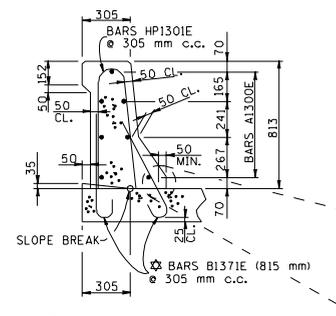
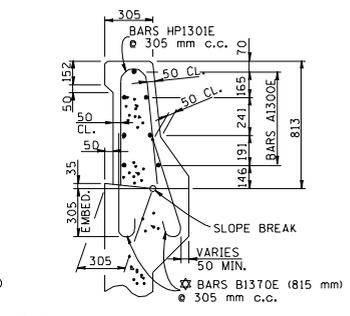
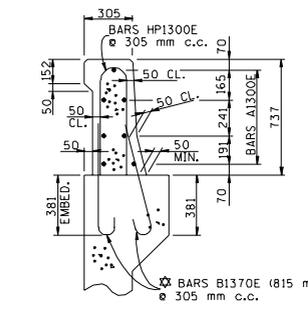
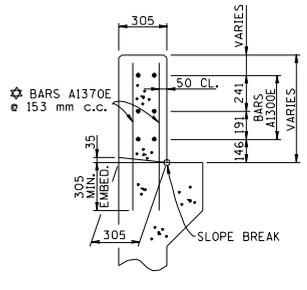
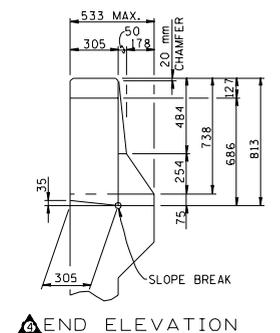
INSERT ASSEMBLY
 CAST IN PLACE THREADED INSERT WITH M22 x 51 HEX HEAD GALVANIZED BOLTS (A307) HOT DIP ZINC COATING ASTM A153



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 = 21 MPa. SEE SPECIAL PROVISION REGARDING SECTION 604 - CONCRETE STRUCTURES.
 REINFORCING STEEL: TO BE ASTM A615M GRADE 400. 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 13 mm DEEP V-GROOVE ALONG THE TRAFFIC FACE AND TOP OF PARAPET DURING CASTING OF CONCRETE OR SOON AFTER SLIP-FORMING.
 PARAPET DELINEATOR REFLECTIVE SHEETING SHALL MEET ASTM D4956, TYPE V SPECIFICATIONS. THE REFLECTIVE SHEETING SHALL BE A MINIMUM OF 102x76 AND HAVE MINIMUM COVEREDGE AREA OF 7740 SQUARE MILLIMETERS. 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.
 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.
 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 20 mm RADIUS MAY BE USED INSTEAD OF THE 20 mm CHAMFER AS SHOWN.
 5. A 13 mm DEEP V-GROOVE ALONG THE TRAFFIC FACE AND TOP OF PARAPET SHALL BE FORMED DURING CASTING OF CONCRETE OR SOON AFTER SLIP-FORMING @ 3050 mm CENTER-TO-CENTER.
 6. A 10x100 FLAT DUMBBELL OR FLAT RIBBED P.V.C. (POLYVINYL CHLORIDE) WATERSTOP MAY BE USED IN LIEU OF THE 35 mm 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 JUNCTIONS, AND/OR UNIONS.

WINGPOST QUANTITIES		PARAPET QUANTITIES	
(PER WING, BASED ON 3.555 m WINGPOST)		(PER METER)	
CLASS 'A' CONCRETE	REINFORCING STEEL	CLASS 'A' CONCRETE	REINFORCING STEEL
m ³	kg	m ³	kg
0.82	42	0.2807	12



ALL UNITS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

MINOR REVISION - FHWA APPROVAL NOT REQUIRED

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BRIDGE RAILING
 CONCRETE PARAPET
 1996

DESIGNED BY C.M. MILES
 DRAWN BY J.M. FRANKENFIELD
 SUPERVISED BY C.M. MILES
 CHECKED BY _____
 DATE _____
 DATE _____
 DATE _____

CORRECT *Edward P. Wasserman*
 ENGINEER OF STRUCTURES

