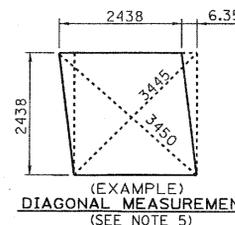
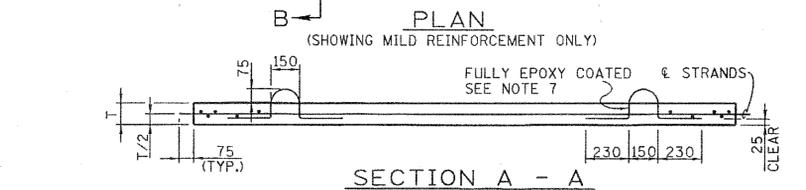
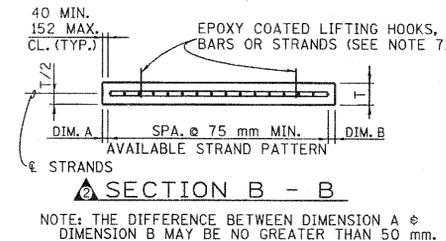
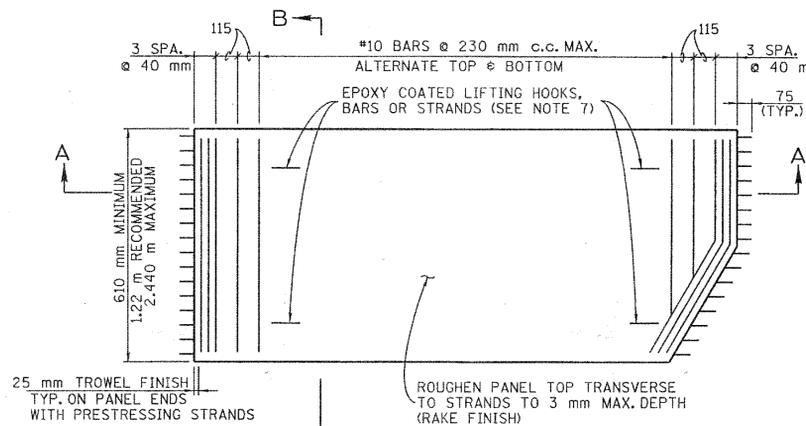


GENERAL NOTES

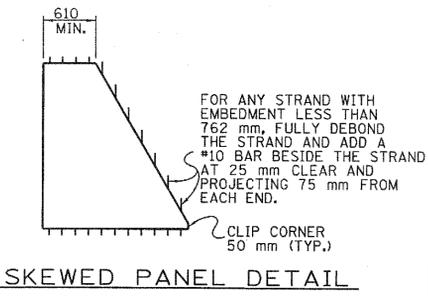
- CONSTRUCTION SPECIFICATIONS: STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF HIGHWAYS (CURRENT EDITION).
- PORTIONS OF THE CONCRETE DECK FOR BRIDGES MAY BE CONSTRUCTED OF PRESTRESSED BRIDGE DECK PANELS PROVIDED THEY ARE FABRICATED AND USED IN ACCORDANCE WITH THESE DRAWINGS AND STANDARD SPEC. ART. 604.05. SHOP DRAWINGS AND PROPOSED CONSTRUCTION DETAILS SHALL BE SUBMITTED TO THE ENGINEERING DIRECTOR OF STRUCTURES FOR APPROVAL.

MANUFACTURE

- REINFORCEMENT AND STRANDS IN THE PANEL SHALL HAVE A MINIMUM OF 25 mm CONCRETE COVER ON THE BOTTOM OF THE PANEL. THE CONTRACTOR MAY SUBSTITUTE 152x152-MD40xMD40 WELDED WIRE FABRIC, ASTM A497M, FOR NO. 10 BARS, EXCEPT THAT THE NO. 10 BARS AT THE PANEL ENDS LOCATED AT 40 mm AND 115 mm SPACING MUST BE MAINTAINED AT BOTH ABOVE AND BELOW THE STRANDS AS SHOWN ON THIS DRAWING. BARS IN WIRE FABRIC WHICH ARE PARALLEL TO THE STRANDS MUST BE A MINIMUM OF 25 mm CLEAR FROM THE STRANDS.
- THE TOP OF PANELS SHALL HAVE A ROUGHENED SURFACE WITH APPROXIMATELY 3 mm DEEP DEPRESSION AT 25 mm CENTERS RUNNING TRANSVERSE TO THE STRANDS. CARE SHALL BE TAKEN SO AS NOT TO DISPLACE THE COARSE AGGREGATES WHEN PREPARING THE ROUGHENED SURFACE.
- MATING SURFACES OF THE PRESTRESSED PANELS SHALL NOT DEVIATE FROM A STRAIGHT LINE BY MORE THAN 6 mm IN 3.050 m. ALL OTHER DIMENSIONS SHALL BE FABRICATED TO +6 mm, -3 mm EXCEPT ALL STRANDS SHALL BE LOCATED TO +3 mm, -6 mm VERTICALLY. PANELS SHALL BE SUPPORTED SO AS TO PRESENT A UNIFORM BOTTOM SURFACE. THE DIAGONAL DIMENSION OF RECTANGULAR PANELS SHALL NOT DIFFER BY MORE THAN 12 mm.
- WHERE UTILITIES ARE SUPPORTED FROM THE BOTTOM OF THE BRIDGE DECK, HOLES SHALL BE CAST THROUGH DECK PANELS. INSERTS SHALL BE PLACED ABOVE THESE HOLES IN THE CAST-IN-PLACE PORTION OF THE DECK TO SUPPORT THE UTILITY HANGERS. THE HOLES SHALL BE 3 mm LARGER THAN THE DIAMETER OF THE HANGER.
- THE DESIGN OF THE EPOXY COATED LIFTING STRAPS AND PRESTRESSED PANEL SUPPORT BRACKETS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. SHOP DRAWINGS WILL NOT BE REQUIRED FOR SUPPORT BRACKETS. HOWEVER, THE PANEL SHOP DRAWINGS SHALL CLEARLY INDICATE THE METHOD OF ATTACHMENT OF SUPPORT BRACKETS TO THE BRIDGE GIRDERS. STEEL SUPPORT BRACKETS SHALL MEET THE REQUIREMENTS OF STANDARD SPECIFICATIONS ART. 908.03. THE CONTRACTOR MAY SUBMIT AN ALTERNATE PANEL SUPPORT SYSTEM TO THE ENGINEERING DIRECTOR OF STRUCTURES FOR APPROVAL. THE ALTERNATE SUPPORT SYSTEM MUST PROVIDE FOR THE REQUIRED ADJUSTMENT DUE TO THE PROFILE GRADE AND BEAM CAMBER SUCH THAT THE DECK THICKNESS AS SHOWN ON THE CONTRACT PLANS IS MAINTAINED.



DIAGONAL TOLERANCE CHECK:
 3450 mm
 3445 mm
 5 mm
 5 mm < 12.7 mm MAX.



NOTE: STRANDS SHALL BE LOCATED AT THE MIDPOINT OF THE PRESTRESSED BRIDGE DECK PANELS WITH A MAXIMUM TOLERANCE OF +3 mm ABOVE THE CENTROID TO -5 mm INCH BELOW THE CENTROID. STRANDS FOR BOX CULVERT PANELS MAY BE LOCATED ECCENTRICALLY PROVIDED ALL OTHER DESIGN REQUIREMENTS ARE MET. STRANDS SHALL BE PLACED SYMMETRICALLY AND UNIFORMLY WITHIN THE AVAILABLE STRAND PATTERN WITH A MAXIMUM SPACING OF 305 mm AND A MINIMUM SPACING OF 75 mm. ALL STRANDS SHALL PROJECT 75 mm FROM BOTH ENDS OF THE PANEL. DURING PANEL ERECTION, ANY INDIVIDUAL STRAND WHICH CONFLICTS WITH BEAM STIRRUPS OR STUDS MAY BE MECHANICALLY CUT THE MINIMAL AMOUNT SUFFICIENT TO PROVIDE CLEARANCE. ONLY THOSE STRANDS WHICH INTERFERE WITH PANEL PLACEMENT MAY BE CUT.

REINFORCING IN CAST-IN-PLACE PORTION OF SLAB

- IF PANELS ARE USED, THE BOTTOM MATS OF TRANSVERSE AND LONGITUDINAL SLAB REINFORCEMENT MAY BE OMITTED BETWEEN EXTERIOR BEAMS. BARS A13-- AND ANY OTHER SUPPLEMENTAL BARS REQUIRED TO BE PLACED IN CAST-IN-PLACE PORTIONS OF THE SLAB SHALL BE ASTM A615M GRADE 400. THE MINIMUM AMOUNT OF NON-PRESTRESSED LONGITUDINAL REINFORCEMENT IN THE CAST-IN-PLACE PORTION OF SLABS UTILIZING PRESTRESSED DECK PANELS SHALL BE 530 mm² PER METER OF SLAB WIDTH. THIS SUPPLEMENTAL STEEL SHALL BE INCLUDED AS PART OF THE SHOP DRAWING DETAILS AND BILL OF STEEL. IN AREAS OF THE BRIDGE DECK WHERE PANELS ARE OMITTED, THE BOTTOM MAT REINFORCING REQUIRED SHALL ALSO BE FULLY DETAILED ON THE SHOP DRAWING DETAILS AND BILL OF STEEL. REINFORCEMENT IN THE CAST-IN-PLACE CONCRETE SHALL HAVE 15 mm MINIMUM CLEARANCE BETWEEN THE PANEL AND SLAB REINFORCEMENT. SEE TABLE OF MINIMUM BRIDGE DECK THICKNESS REQUIRED FOR BAR CLEARANCE, THIS SHEET.

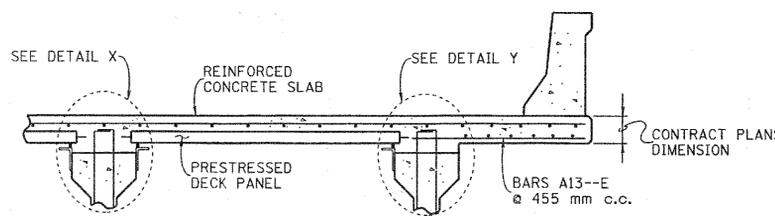
POURING OF DECK CONCRETE

- CONCRETE SHALL BE PLACED IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS. PARTICULAR EMPHASIS SHOULD BE GIVEN TO PROPER VIBRATION OF THE CONCRETE TO AVOID HONEYCOMBS AND VOIDS, ESPECIALLY AT CONSTRUCTION JOINTS, EXPANSION JOINTS AND ENDS OF PANELS. ALL PANEL JOINTS MUST BE MORTAR TIGHT. IMMEDIATELY PRIOR TO PLACING THE CAST-IN-PLACE PORTION OF THE DECK SLAB, THE PRESTRESSED DECK SLABS SHALL BE WETTED UNTIL FREE MOISTURE APPEARS AND REMAINS.

- PRESTRESSED CONCRETE PANELS SHALL NOT BE CONSIDERED AS LATERAL BRACING FOR FLANGES OF SUPPORTING STRUCTURAL MEMBERS.

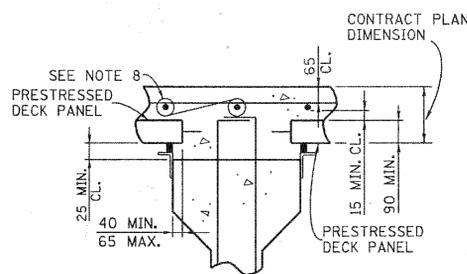
PAYMENT

- PAYMENT WILL BE BASED ON PLANS DIMENSIONS AND DETAILS FOR THE REGULAR REINFORCED CONCRETE SLAB. NO ADDITIONAL COMPENSATION SHALL BE MADE TO ACCOMMODATE THE PRESTRESSED PANELS.
- ANY INCREASE IN QUANTITIES OF CONCRETE, MILD REINFORCING, PRESTRESSING STRAND OR OTHER ITEMS OF LABOR AND EQUIPMENT DUE TO THE USE OF PRESTRESSED BRIDGE DECK PANELS, SHALL BE AT THE CONTRACTORS EXPENSE. THIS ALSO APPLIES TO INCREASES REQUIRED TO ACCOMMODATE PRESTRESSED BEAM CAMBER AND VERTICAL CURVES.

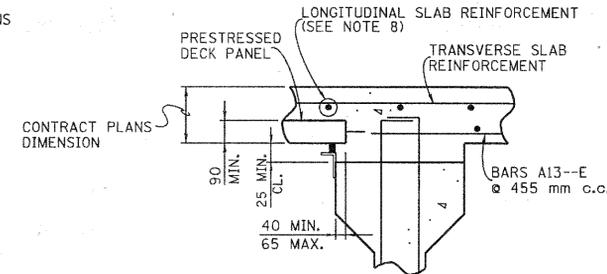


SUPERSTRUCTURE SECTION

SHOWING PRESTRESSED DECK PANEL
 (SEE CONTRACT PLANS FOR REINFORCING SIZE AND SLAB DIMENSIONS)



DETAIL X



DETAIL Y

MINIMUM BRIDGE DECK THICKNESS REQUIRED FOR BAR CLEARANCE

TRANSVERSE BAR	LARGEST LONGITUDINAL BAR						
#16	#16	#19	#22	#25	#29	#32	#36
#19	#16	#19	#22	#25	#29	#32	#36
MIN. DECK REQ'D. FOR 90 mm PANEL	203	210	210	216	216	222	229
MIN. DECK REQ'D. FOR 100 mm PANEL	216	222	222	229	229	235	241
MIN. DECK REQ'D. FOR 115 mm PANEL	229	235	235	241	241	248	254

ALL UNITS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

MINOR REVISION - FHWA APPROVAL NOT REQUIRED

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 STANDARD
 PRECAST PRESTRESSED
 BRIDGE DECK PANELS
 GENERAL DETAILS
 1996

DESIGNED BY M.A.H. DATE _____
 DRAWN BY K.D.F. DATE 10-92
 SUPERVISED BY M.A.H. DATE 10-92
 CHECKED BY _____ DATE _____

CORRECT Edward P. Wasserman
 ENGINEER OF STRUCTURES

