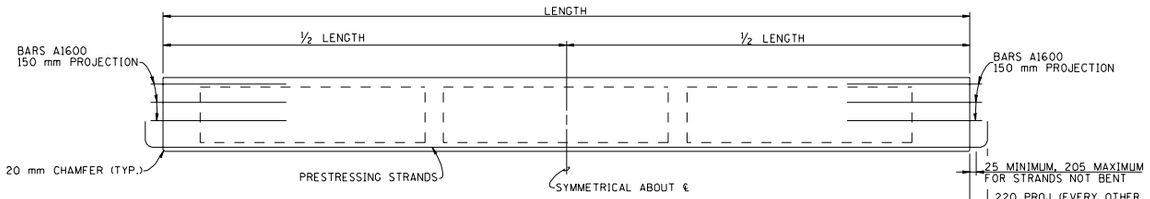
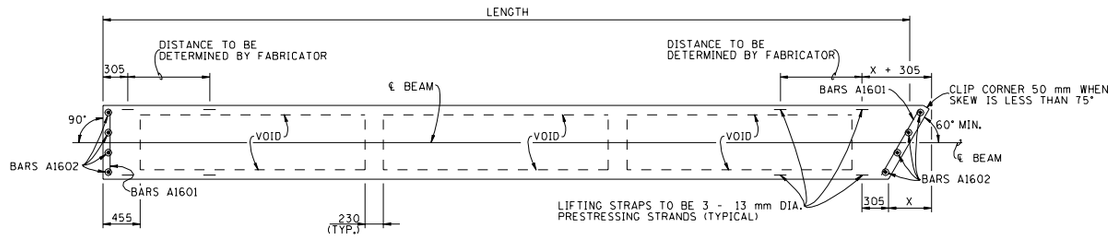
PROJECT NO.	YEAR	SHEET NO.
	1996	

REVISIONS

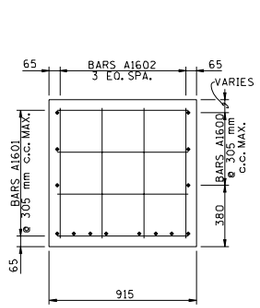
	NO.	DATE	BY	BRIEF DESCRIPTION
M/R	1	6-10-96	BRB	NEW METRIC STANDARD
M/R	2	7-31-00	CMH	DELETED BARS C1600. REVISED NOTE 6. BENDING DETAIL FOR PRESTRESSING STRANDS & ELEVATION



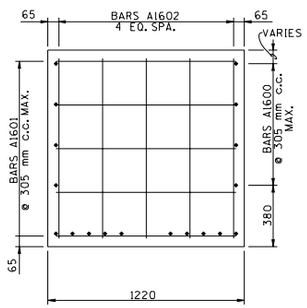
2 ELEVATION
(ALONG ℄ BEAM)



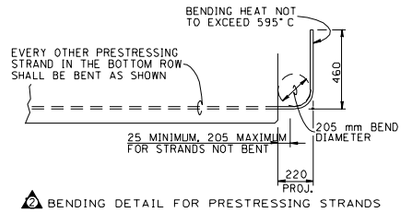
PLAN
FOR BEAM AND VOID DIMENSIONS NOT
SHOWN, SEE CONTRACT PLANS.



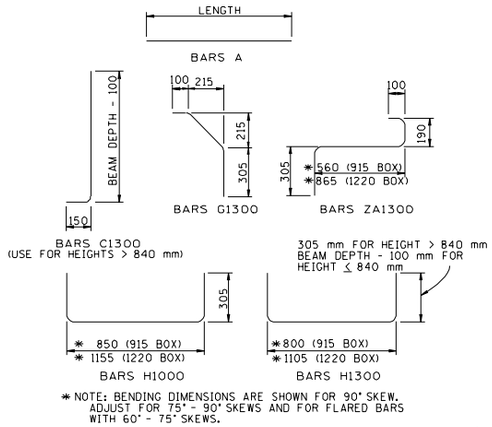
2 END ELEVATION



2 END ELEVATION



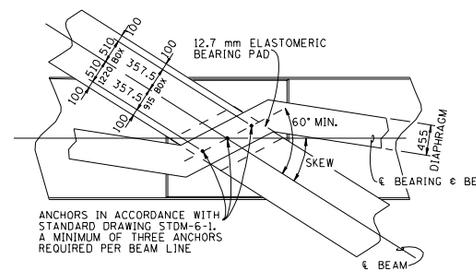
2 BENDING DETAIL FOR PRESTRESSING STRANDS



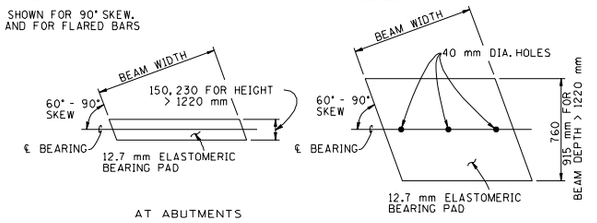
* NOTE: BENDING DIMENSIONS ARE SHOWN FOR 90° SKEW. ADJUST FOR 75° - 90° SKEWS AND FOR FLARED BARS WITH 60° - 75° SKEWS.

BEAM NOTES:

1) THE TOP OF ALL BEAMS ARE TO BE ROUGH FLOATED. AT APPROXIMATELY THE TIME OF INITIAL SET. THE TOP OF THE BEAMS SHALL ALSO BE SCRUBBED TRANSVERSELY WITH A COARSE WIRE BRUSH TO REMOVE ALL LAITANCE AND PRODUCE A ROUGH SURFACE.
2) MILD STEEL REINFORCING SHALL BE ASTM A615M GRADE 400.
3) ALL PRESTRESSING STRANDS SHALL BE 13 mm DIA. ASTM GRADE 1860 MPa, 7 WIRE UNCOATED STRESS RELIEVED LOW RELAXATION PRESTRESSING STRANDS.
4) AN INITIAL FORCE OF 137908 N SHALL BE APPLIED TO EACH STRAND IN ALL BEAMS.
5) AFTER THE BEAM IS REMOVED FROM THE PRESTRESSING BED, BARS PROJECTING FROM THE ENDS OF THE BEAM SHALL BE COLD BENT (DO NOT HEAT). THE MINIMUM DIAMETER OF THE BEND SHALL BE IN ACCORDANCE WITH STANDARD CRSI HOOK DETAILS.
2 6) THE PRESTRESSING STRANDS SHALL BE LEFT PROJECTING AS SHOWN IN THE BENDING DETAIL FROM THE ENDS OF THE BEAMS. THE STRANDS SHALL BE CUT WITHOUT HEATING ADJACENT STRANDS. THERE SHALL NOT BE ANY PROTECTIVE COATING PLACED ON THE ENDS OF THE BEAM OR ON THE PROJECTING STRANDS.
7) COST OF ELASTOMERIC BEARING PADS AND RUBBER BONDING CEMENT TO BE INCLUDED IN THE COST OF THE PRESTRESSED BEAMS.
8) THE SEQUENCE FOR TRANSFER OF STRESS OR THE CUTTING STRANDS SHALL BE IN ACCORDANCE WITH ARTICLE 615.14 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND SHALL BE SHOWN ON THE APPROVED SHOP DRAWINGS. AT NO TIME SHALL MORE THAN 1/6th OF THE TOTAL PRESTRESSING FORCE BE ECCENTRIC ABOUT THE CENTERLINE OF THE BEAM.
9) PRESTRESSING STRANDS SHALL NOT BE GREATER THAN NOMINAL 13 mm DIAMETER.
10) 25 mm DIA. WEEP HOLES SHALL BE PROVIDED AT THE LOW POINT OF EACH CELL. VENT HOLES SHALL BE PROVIDED IN THE TOP OF EACH CELL DURING FABRICATION TO RELIEVE GAS PRESSURES THAT OCCUR DURING CURING. THE VENT HOLES SHALL BE PLUGGED AFTER CURING IS COMPLETED.



PLAN SHOWING ANCHORS IN BENT CAP



ELASTOMERIC BEARING PAD DETAILS

USE 12.7 mm THICK ELASTOMERIC BEARING PADS UNLESS SHOWN OTHERWISE ON THE CONTRACT PLANS.

ALL UNITS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

M/R MINOR REVISION - FHWA APPROVAL NOT REQUIRED

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STANDARD DETAILS FOR PRESTRESSED BOX BEAMS 1996

DESIGNED BY MARK HOLLORAN DATE 3-95
DRAWN BY KIM FRANKENFIELD DATE 3-95
SUPERVISED BY MARK HOLLORAN DATE 3-95
CHECKED BY DATE

CORRECT. Edward P. Wasserman
ENGINEER OF STRUCTURES

DIVISION OF METRIC ENGINEERING

SHEET 3 OF 3
STDM-14-3