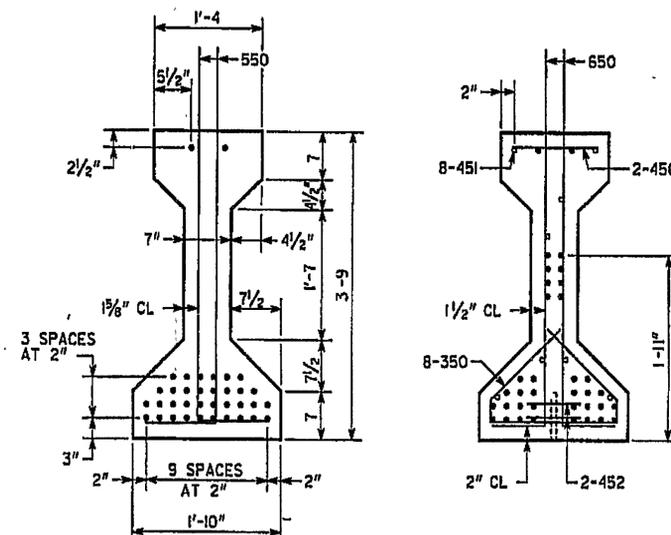


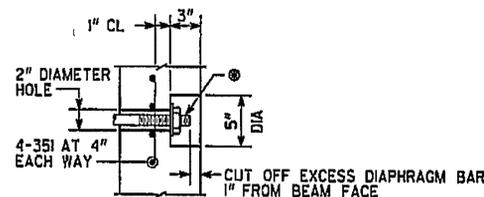
ELEVATION



SECTION AT MIDPOINT SECTION AT END

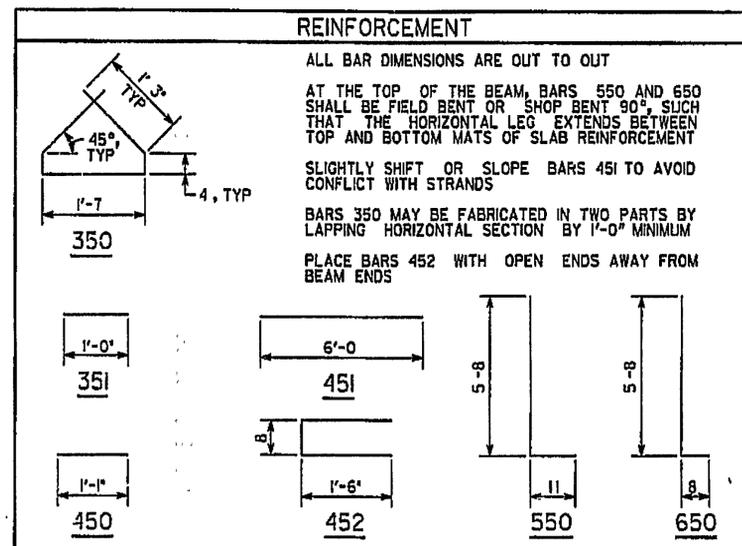
NOTES

- BEAMS SHALL BE MAINTAINED IN AN UPRIGHT POSITION AT ALL TIMES AND SHALL BE PICKED UP WITHIN 5'-6" FROM THEIR ENDS DISREGARDING THIS REQUIREMENT COULD LEAD TO COLLAPSE OF THE BEAM PICK-UPS SHALL BE EMBEDDED TO WITHIN 4" OF THE BOTTOM OF THE BEAM DETAILS OF PICK UPS SHALL BE INCLUDED IN THE SHOP DRAWINGS
- CHAMFER EDGES OF BEAMS 1/2" OR 3/4"
- HORIZONTAL DIMENSIONS ARE IN PLACE DIMENSIONS THE BEAM LENGTH INCLUDES THE 1/8" EPOXY MORTAR AT EACH END SHOP DRAWINGS SHALL ADJUST HORIZONTAL DIMENSIONS FOR GRADE AND FABRICATION EFFECTS SUCH AS SHRINKAGE AND ELASTIC SHORTENING
- AT ϕ BEARING, FORM A 1 1/2" DIAMETER X 7" DEEP HOLE AT THE FIXED ENDS AND A 4" X 1 1/2" X 7" DEEP SLOT AT THE EXPANSION ENDS FOR A 1 1/4" DIAMETER SMOOTH DOWEL SEE PLAN AND ELEVATION SHEET FOR LOCATION OF FIXED AND EXPANSION ENDS
- TOPS OF BEAMS SHALL BE ROUGH FLOATED AT APPROXIMATELY THE TIME OF INITIAL SET ENTIRE TOP SHALL BE SCRUBBED TRANSVERSELY WITH A COARSE BRUSH TO REMOVE ALL LAITANCE AND TO PRODUCE A ROUGHENED SURFACE FOR BONDING TO THE SLAB ROUGHENED SURFACE SHALL HAVE AN AMPLITUDE OF APPROXIMATELY 1/4" CONCRETE FINS OR PROJECTIONS SHALL BE REMOVED TO PRODUCE A VERTICAL FACE AT THE EDGE OF THE BEAM
- NON-COMPOSITE DEAD LOAD DEFLECTION (Δ NC) AT THE MIDPOINT IS DUE TO THE WEIGHT OF THE SLAB AND COPING
- COMPOSITE DEAD LOAD DEFLECTION (Δ C) AT THE MIDPOINT IS DUE TO THE WEIGHT OF BARRIER
- STRANDS SHALL MEET ALL REQUIREMENTS OF ASTM A 416 GRADE 270
- PRESTRESSING DATA IS AS FOLLOWS:
 - USE 36 - 1/2" DIAMETER SPECIAL LOW-RELAXATION ($\lambda = 0.167$ SQ IN) STRANDS PRETENSION STRANDS TO 33,818 LBS EACH
 - PRETENSIONED STRANDS SHALL BE RELEASED AFTER THE CONCRETE HAS REACHED A MINIMUM STRENGTH (f_c) OF 7,000 PSI
 - THE TOTAL JACKING FORCE OF PRETENSIONING IS 1,217,448 LBS
 - THE NET PRESTRESSING FORCE OF THE STRANDS AFTER LOSSES IS 914,707 LBS
- CONCRETE STRENGTH (f_c) = 8,000 PSI
- ALLOWABLE PSC BEAM TENSION = 537 PSI



DIAPHRAGM BAR SHALL BE A 1" DIAMETER PLAIN BAR, THREADED 5" ON EACH END, WITH 1/4" X 3/2" DIAMETER WASHERS AND HEX NUTS (ASTM A 709 GRADE 36) TIGHTEN DIAPHRAGM BAR AS PER SUB-SECTION 507.3.05 C OF THE GEORGIA DOT SPECIFICATIONS AFTER EXCESS DIAPHRAGM BAR HAS BEEN CUT OFF, PAINT DIAPHRAGM BAR, WASHER, AND NUT EXPOSED IN RECESS WITH SPECIAL PROTECTIVE COATING NO 2 P AS PER SECTION 535 OF THE GEORGIA DOT SPECIFICATIONS AFTER PAINTING, FILL THE RECESS WITH AN APPROVED EPOXY GROUT GALVANIZING OF THE DIAPHRAGM BAR AS PER SUB-SECTION 865.2.01 B 12 OF THE GEORGIA DOT SPECIFICATIONS IS NOT REQUIRED

RECESS DETAIL FOR DIAPHRAGM BAR ENDS



BRIDGE NO 1

GEORGIA
DEPARTMENT OF TRANSPORTATION
PRECONSTRUCTION DIVISION-OFFICE OF BRIDGE DESIGN

SPAN I BEAM DETAILS TYPE III
C.R. 69 (BROWNS CROSSING ROAD)
OVER FISHING CREEK
BALDWIN COUNTY CSBRG-0006-0(47)

NO SCALE JULY 2009

DRAWING NO 35-XX	DESIGNED DCK	CHECKED ACB	REVIEWED WEI/RMD
BRIDGE SHEET 8 OF 18	DRAWN DCK/RCA	DESIGN GROUP ACB	APPROVED PVL