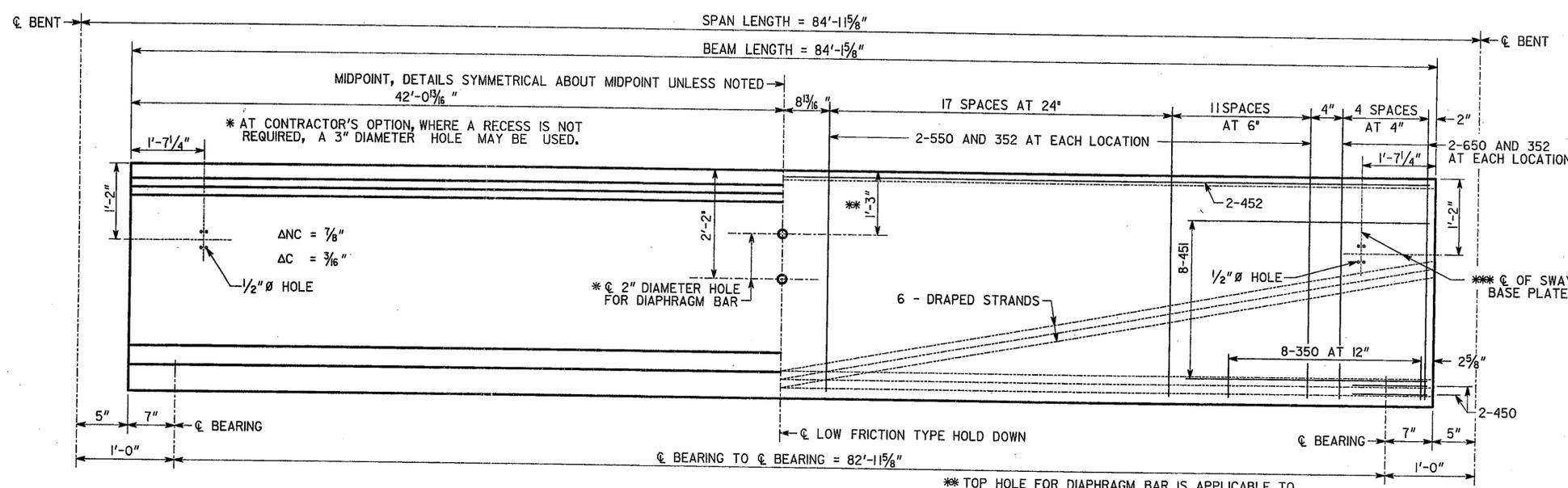
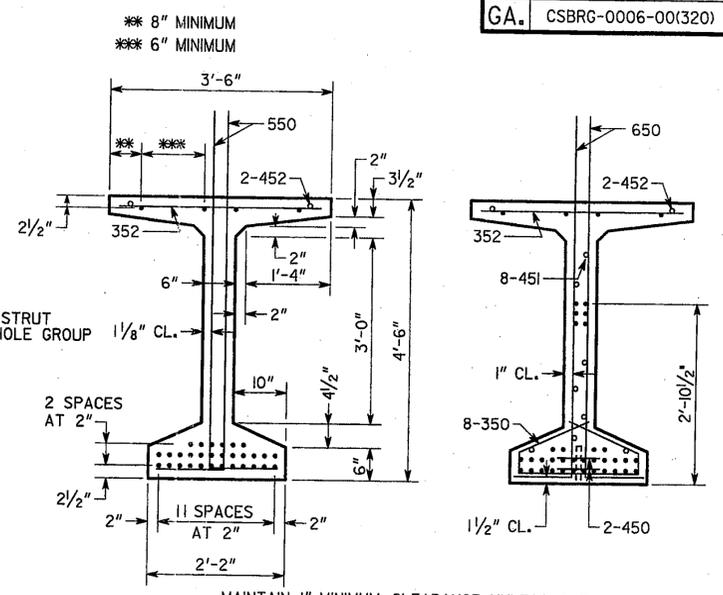


STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSBRG-0006-00(320)	80	197



ELEVATION

** TOP HOLE FOR DIAPHRAGM BAR IS APPLICABLE TO BEAMS 2 THRU 5, 9 & 10. SEE SECTION THRU DIAPHRAGM, SHEET 9, FOR ADDITIONAL DETAILS.
 *** PROVIDE 4 - 1/2" Ø HOLES FOR SWAY STRUT BASE PLATE. THE HOLES SHALL BE PROVIDED FOR BEAMS 3, 5, AND 10 AT ENDS ADJACENT TO BENTS 2 & 3. SEE SHEET 11 FOR ADDITIONAL DETAILS.

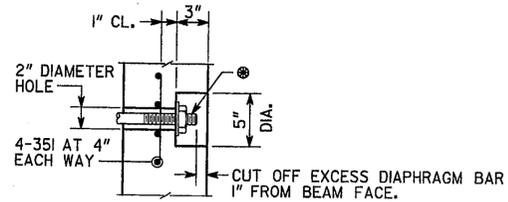


SECTION AT MIDPOINT

SECTION AT END

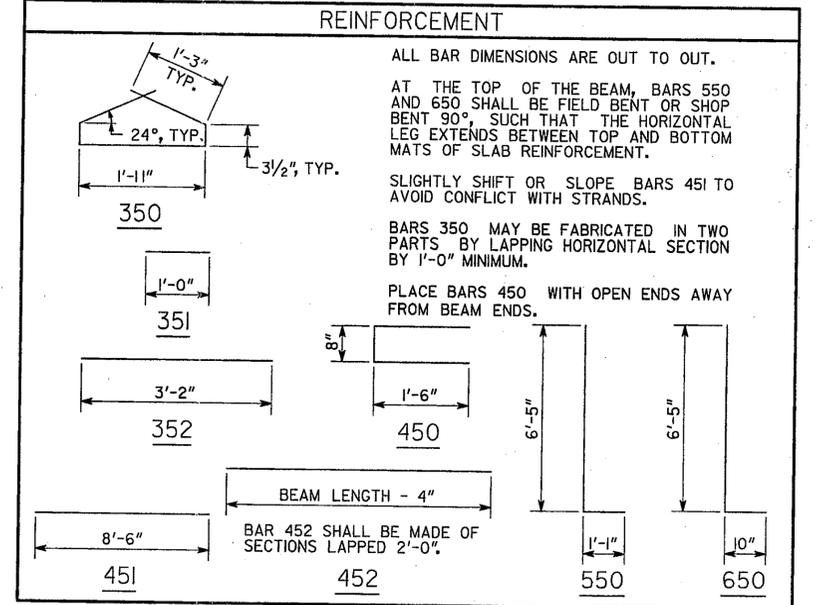
NOTES

- BEAMS SHALL BE MAINTAINED IN AN UPRIGHT POSITION AT ALL TIMES AND SHALL BE PICKED UP WITHIN 6'-9" 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", 3/4" OR 1".
- 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 \bar{C} BEARING, FORM A 1 1/2" DIAMETER X 7" DEEP HOLE AT THE FIXED ENDS AND A 6" 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, SIDEWALK, AND MEDIAN.
- STRANDS SHALL MEET ALL REQUIREMENTS OF ASTM A 416 GRADE 270.
- PRESTRESSING DATA IS AS FOLLOWS:
 - USE 34 - 1/2" DIAMETER SPECIAL LOW-RELAXATION ($A = 0.167$ SQ IN) STRANDS. PRETENSION TOP FOUR (4) STRANDS TO 10,000 LBS EACH. PRETENSION BOTTOM STRANDS TO 33,818 LBS EACH.
 - PRETENSIONED STRANDS SHALL BE RELEASED AFTER THE CONCRETE HAS REACHED A MINIMUM STRENGTH (f'_c) OF 5,000 PSI.
 - INCLUDING THE TOP STRANDS, THE TOTAL JACKING FORCE OF PRETENSIONING IS 1,054,540 LBS.
 - INCLUDING THE TOP STRANDS, THE NET PRESTRESSING FORCE OF THE STRANDS AFTER ALL LOSSES IS 787,954 LBS.
- CONCRETE STRENGTH (f'_c) = 6,000 PSI.
- ALLOWABLE PSC BEAM TENSION = 465 PSI.



⊗ DIAPHRAGM BAR SHALL BE A 1" DIAMETER PLAIN BAR, THREADED 5" ON EACH END, WITH 1/4" X 3 1/2" 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



REINFORCEMENT

BRIDGE NO. 1

GRESHAM SMITH AND PARTNERS
 GEORGIA
 DEPARTMENT OF TRANSPORTATION
 ENGINEERING DIVISION-OFFICE OF BRIDGES AND STRUCTURES

BULB TEE, 54 IN PSC BEAM - SPAN 2
 CR 481 (COLLEGE STATION ROAD)
 OVER NORTH OCONEE RIVER
 CLARKE COUNTY CSBRG-0006-00(320)

NO SCALE
 OCTOBER 2013

DRAWING NO. 35-013	DESIGNED: NC	CHECKED: TGT	REVIEWED: DLC/WMD
BRIDGE SHEET 13 OF 21	DRAWN: RCP	DESIGN GROUP: DDF	APPROVED: BFR

11/26/2013 9:32:11 AM
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