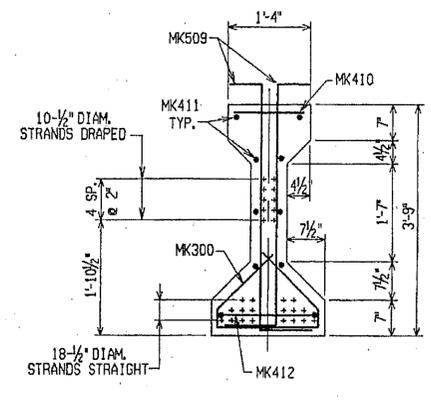
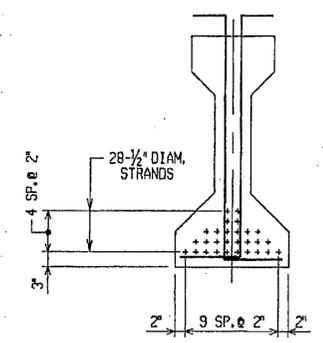


STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	FD-675-1(137)	120	591

Resub 4/18/83

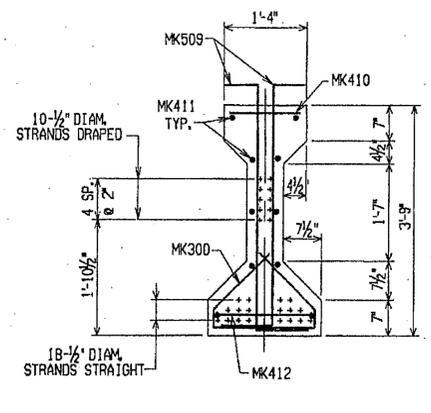


SECTION AT GIRDER END

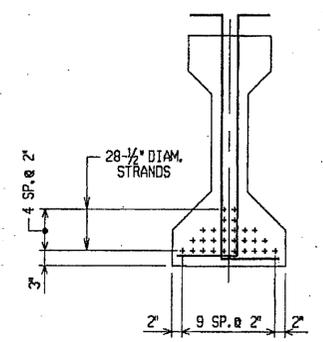


SECTION AT MID-SPAN

SPAN 1  
SCALE: 3/4" = 1'-0"

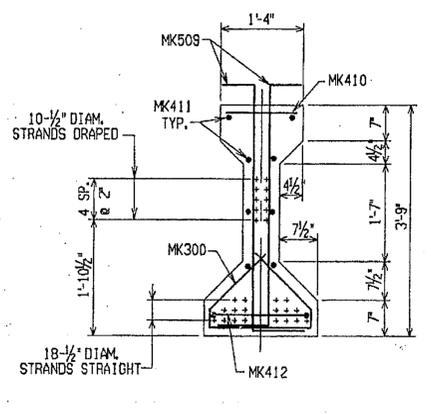


SECTION AT GIRDER END

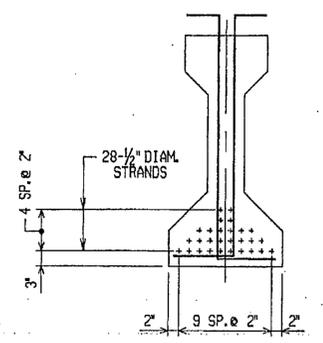


SECTION AT MID-SPAN

SPAN 2  
SCALE: 3/4" = 1'-0"

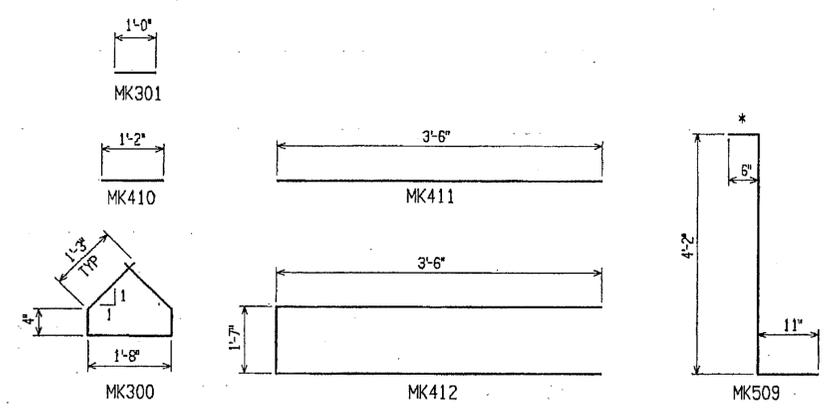


SECTION AT GIRDER END



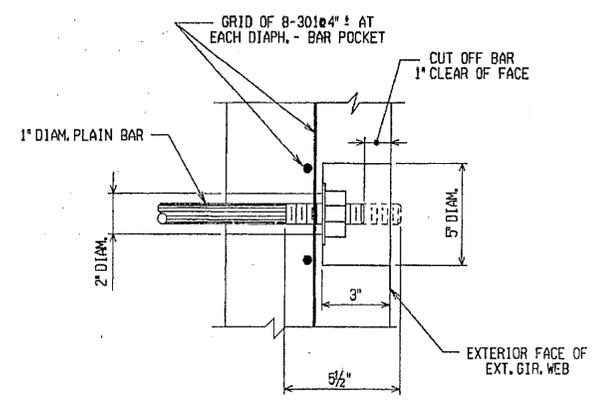
SECTION AT MID-SPAN

SPAN 3  
SCALE: 3/4" = 1'-0"



REINFORCING BAR DETAILS

NOTES:  
ALL BAR DIMS. ARE OUT TO OUT.  
\* THE 6" LEG OF THESE BARS SHALL BE FABRICATED STRAIGHT AND FIELD BENT. CLEARANCE OF REINF. IS 2" U.N.O.



NOTE:  
RODS, NUTS, AND WASHERS SHALL BE PAINTED IN ACCORDANCE WITH GA. STD. SPECIFICATIONS SECT. 534.04C WITH 2 COATS OF No 2P PAINT.  
NUTS SHALL BE BROUGHT TO SNUG FIT AGAINST GIRDERS BEFORE DIAPHRAGMS ARE POURED. 5 DAYS MIN. AFTER DIAPHRAGMS ARE POURED AND CONCRETE HAS REACHED 1500psi MIN. NUTS SHALL BE TORQUED TO 180 FT-LBS AND POCKETS SHALL BE GROUTED AND DRESSED.

ROD POCKET DETAILS AT EXTERIOR GIRDERS  
SCALE: 3" = 1'-0"

- NOTES:
- STRANDS SHALL MEET ALL REQUIREMENTS OF ASTM A-416 GRADE 270.
  - HOLD DOWN FOR RAISED STRANDS SHALL BE LOW FRICTION TYPE.
  - STRAND SHALL BE PRESTRESSED TO 28,910 LBS. U.N.O.
  - STRAND MAY BE RELEASED AFTER CONCRETE HAS REACHED 4500 PSI MINIMUM COMPRESSIVE STRENGTH.
  - STRANDS OF DIFFERENT ARRANGEMENT AND/OR SIZE MAY BE CONSIDERED AS SUBSTITUTIONS WHEN THE FOLLOWING REQUIREMENTS ARE MET:
    - NET PRESTRESSING FORCE OF STRANDS AFTER LOSSES REMAINS AS SHOWN IN TABLE.
    - ECCENTRICITY OF STRANDS EQUALS ECCENTRICITY OF ORIGINAL STRANDS SHOWN.
    - STRANDS MEET ALL REQUIREMENTS OF ASTM A-416-68 GRADE 270.
    - ULTIMATE STRENGTH OF GIRDERS MEETS REQUIREMENTS OF APPLICABLE A. A. S. H. T. O. SPECIFICATIONS.
 ALL SUBSTITUTIONS SUBJECT TO APPROVAL BY STATE BRIDGE ENGINEER.
  - ENTIRE END OF GIRDER INCLUDING STRAND ENDS SHALL BE COVERED WITH 1/8" EPOXY MORTAR AFTER DETENSIONING IS COMPLETE.
  - TOPS OF GIRDERS SHALL BE ROUGH FLOATED AT APPROXIMATE TIME OF INITIAL SET. ENTIRE TOP OF GIRDER SHALL BE SCRUBBED TRANSVERSELY WITH A COURSE WIRE BRUSH TO REMOVE ALL LAITANCE AND TO PRODUCE A VERTICAL FACE AT TOP EDGE OF GIRDER.
  - EDGES OF GIRDERS SHALL BE CHAMFERED 1/2" OR 3/4" DEPENDING UPON FORMS USED.
  - THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON STANDARD PLAN SIZE 22x36 INCH SHEETS SHOWING COMPLETE DETAILS OF GIRDERS INCLUDING THE FOLLOWING:
    - NON-PRESTRESSED REINFORCEMENT.
    - THE METHOD OF RETAINING DEPRESSED STRANDS IN PLACE.
    - CALCULATIONS FOR DETERMINATION OF THE STRAND ELONGATION REQUIRED TO PRODUCE THE SPECIFIED PRESTRESSING FORCE, AND DETENSIONING SCHEDULE.
    - CALCULATIONS FOR DETERMINATION OF CASTING LENGTH.
    - DETAILS OF LIFTING DEVICES EMBEDDED IN GIRDER ENDS.

ITEM / SPAN	1	2	3
CU. YDS. CLASS "AA" CONCRETE	10.2	10.3	10.2
LBS. BAR REINF. STEEL**	895	920	895
LIN. FT. 1/2" DIAM. 270K STRAND	1976	2007	1976

\*\* WEIGHT OF 1" DIAM. PLAIN BARS IS INCLUDED IN QUANTITIES.

SPAN	NO. OF STRANDS	PI (LBS)	PF (LBS)	ΔNC (IN'S)	ΔC (IN'S)
1	28	809,480	616,740	0.90	0.11
2	28	809,480	616,740	0.90	0.11
3	28	809,480	616,740	0.90	0.11

PI - TOTAL INITIAL PRESTRESS FORCE  
 PF - TOTAL PRESTRESS FORCES AFTER LOSSES  
 ΔNC - DEAD LOAD DEFLECTION AT MIDSPAN DUE TO WEIGHT OF SLAB, COPING & DIAPHRAGM.  
 ΔC - DEAD LOAD DEFLECTION AT MIDSPAN DUE TO WEIGHT OF BARRIER & FUTURE PAVING.  
 \* - NEGLIGIBLE DEFLECTION.

BRIDGE NO. 8LT. & 8RT.

**SIMONS • EASTERN COMPANY**  
ATLANTA, GEORGIA

GEORGIA  
**DEPARTMENT OF TRANSPORTATION**  
 HIGHWAY DIVISION-BRIDGE DESIGN

GIRDER DETAILS - SHT. 2  
 I-675 OVER SOUTHERN RAILWAY  
 CLAYTON COUNTY I-675-1(137)

SCALE: AS SHOWN DEC. 14, 1982

DESIGNED	L. EATON	TRACED	
DRAWN	M. STOKES	CHECKED	B. A. SMITH
REVIEWED		APPROVED	

FILE	203
SIMECO JOB NO.	1947
BRIDGE SHEET	5 OF 12