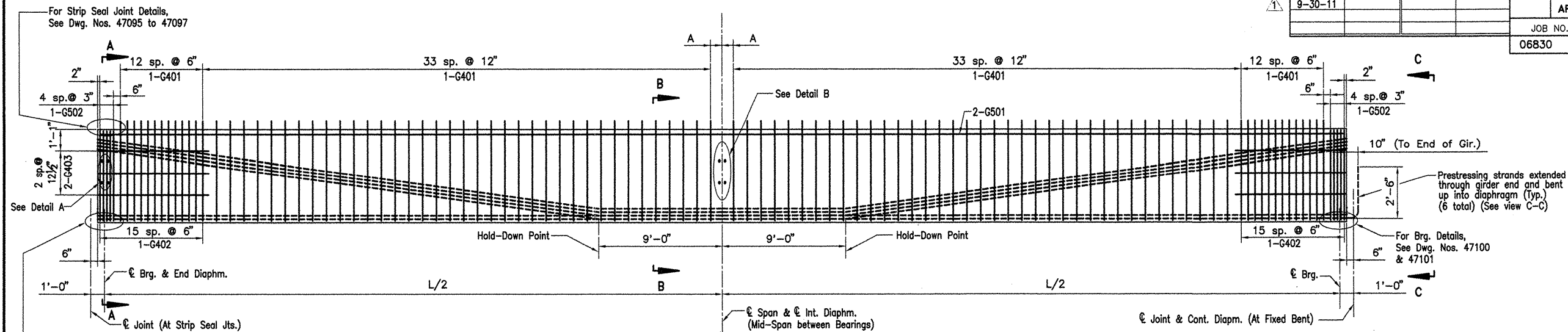


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
9-30-11					ARK.			
				JOB NO.		110395	82	203
				06830		330' UNITS		47077A



TYPICAL GIRDER ELEVATION  
N.T.S.

GENERAL NOTES - GIRDER ONLY

Prestressing steel shall be  $\frac{1}{2}$ " low relaxation strands with a minimum ultimate strength of 270 KSI, and shall conform to AASHTO M203 & supplement.

All girders shall be type IV as noted on the details and shall be the standard prestressed sections adopted by the Joint Committee of AASHTO and the Prestressed Concrete Institute. All girders shall be cast in concrete floor slabs and in metal forms. All work & materials shall be as specified in section 802.22 of the Standard Specifications.

Concrete shall be class "S" and shall have a minimum of 28 day compressive strength.  $f'_c = 6,000$  PSI

The initial tensile force applied to each  $\frac{1}{2}$ " strand shall be 30.98 Kips. Transfer of this tensioning load to the girder shall not be done until the compressive strength of the concrete is 4,500 PSI.

Dimensions shown are to the center of the strands.

The contractor shall submit the method and sequence for release of strands, to the Bridge Engineer for approval prior to the casting of the girders.

Tops of the girders shall be rough floated at approximately the time of set. The entire tops of the girders shall be scrubbed transversely with a coarse wire brush to remove all laitance and to produce a roughened surface for bonding slabs.

Girder lengths shown on the design plans are net lengths measured horizontally along the girder centerlines. The girder manufacturer shall make necessary allowances for grade, shortening due to elastic shortening, creep and shrinkage, and expansion joints and etc.

All exposed steel at ends of girders not extended into diaphragm at interior bents shall be protected against corrosion by coating of tar or other waterproofing material.

Girders must be maintained in an upright position at all times and must be picked up from points near the girder ends. Disregard of this requirement may lead to collapse of the girder. The contractor's proposed lifting details shall be submitted on shop drawings to the Bridge Engineer for approval. The use of holes for lifting purposes will not be permitted.

Reinforcing steel shall be AASHTO M31-94, Gr.60 and shall be paid as subsidiary to prestressed girders.

The contractor may submit alternate strand patterns with design calculations for review and approval.

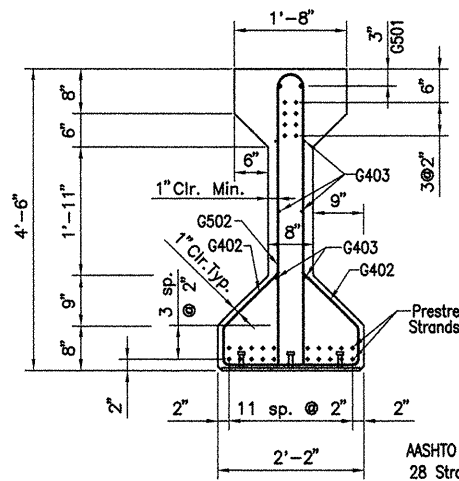
For additional General Notes, Dwg No. 47076

TABLE OF VARIABLES

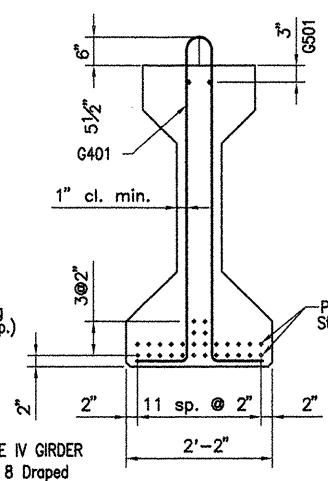
Girder Mark	L
PG12 IV-28	80'-29"
PG13 IV-28	80'-43"
PG14 IV-28	80'-61"
PG15 IV-28	80'-77"
PG16 IV-28	80'-99"

L = Distance from  $\bar{C}$  Brg. to  $\bar{C}$  Brg.  
(Net Lengths measured horizontally along the girder centerlines, adjustment required)

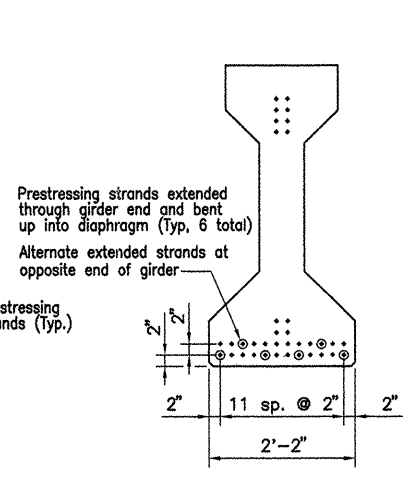
A =  $L/2 - (40'-2")$



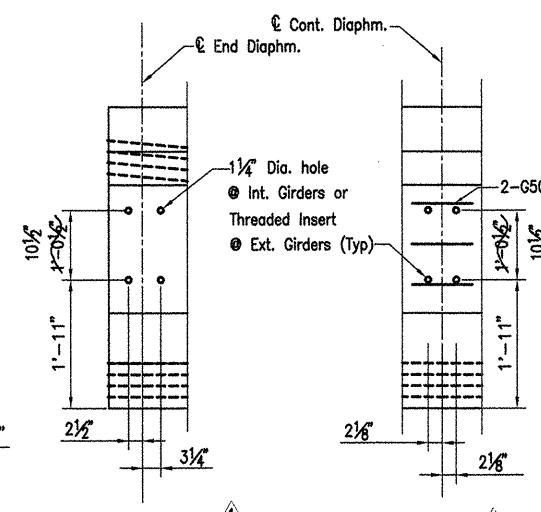
SECTION A-A  
N.T.S.



SECTION B-B  
N.T.S.



VIEW C-C  
N.T.S.



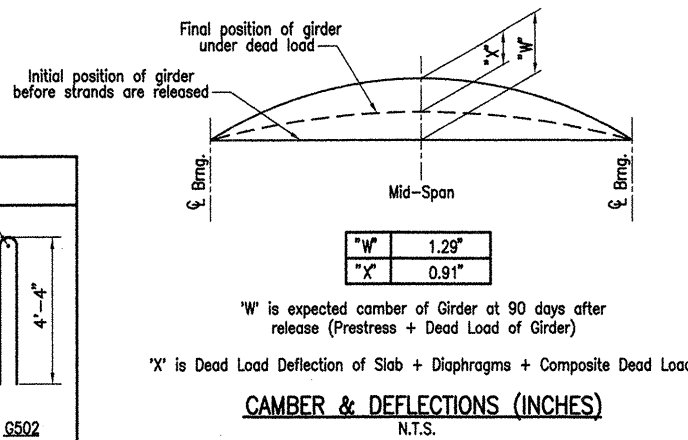
DETAIL A  
N.T.S.

DETAIL B  
N.T.S.

BAR LIST-PER GIRDER

Mark	No. Req'd	Length	P.D.	Bending Diagrams (Dimensions are out to out of bars.)
G401	92	11'-4"	2"	
G402	32	5'-3"	2"	
G403	12	8'-0"	STR.	
G501	6	28'-4"	STR.	
G502	10	8'-10"	4"	
G503	6	2'-0"	STR.	

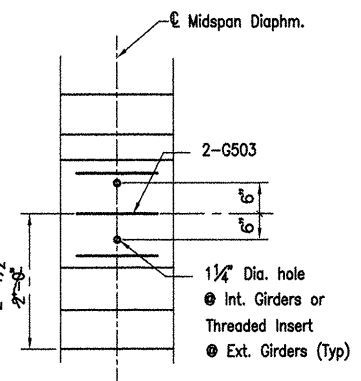
Note: 2 -  $\frac{1}{2}$ " dia. strands stressed to 2000 lbs. min. may be used in place of G502.



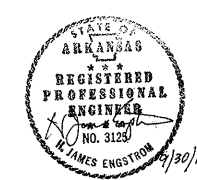
"W" is expected camber of Girder at 90 days after release (Prestress + Dead Load of Girder)

"X" is Dead Load Deflection of Slab + Diaphragms + Composite Dead Load

CAMBER & DEFLECTIONS (INCHES)  
N.T.S.



DETAIL B FOR  
ALT. STEEL DIAPH



ALTERNATE NO. 1  
DETAILS OF 284', 330' & 368' CONT.  
PRESTRESSED CONCRETE GIRDER UNIT  
(SHEET 18 OF 19)

WHITE RIVER STR. & APPRS.  
(CLARENDON) (PH III) (F)  
MONROE COUNTY

ROUTE 79 SEC. 13

ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.

Engstrom/Modjeski and Masters

DRAWN BY: JDB DATE: Sep. 10  
CHECKED BY: EBC DATE: Sep. 10  
DESIGNED BY: GPT DATE: Sep. 10  
BRIDGE NO. 06830 DRAWING NO. 47077A

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

COMPANY\1999 JOBS\99-044 AHTD\WHITERIVER\JOB 110395\368 psgirder