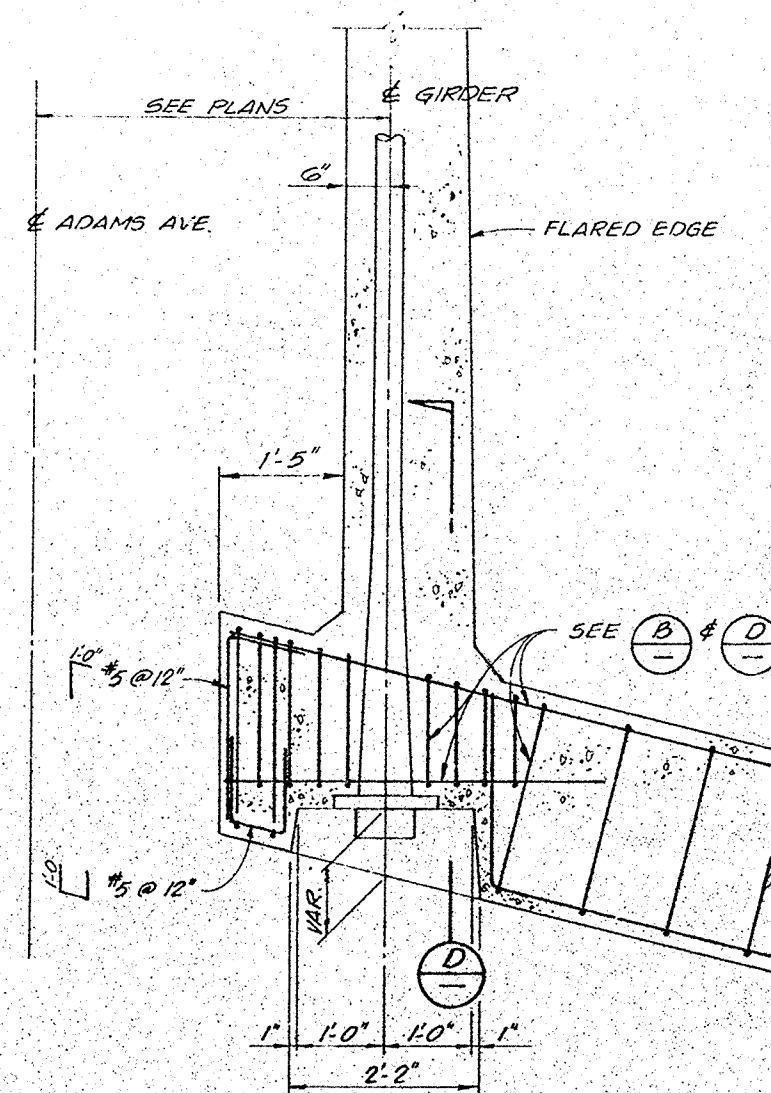
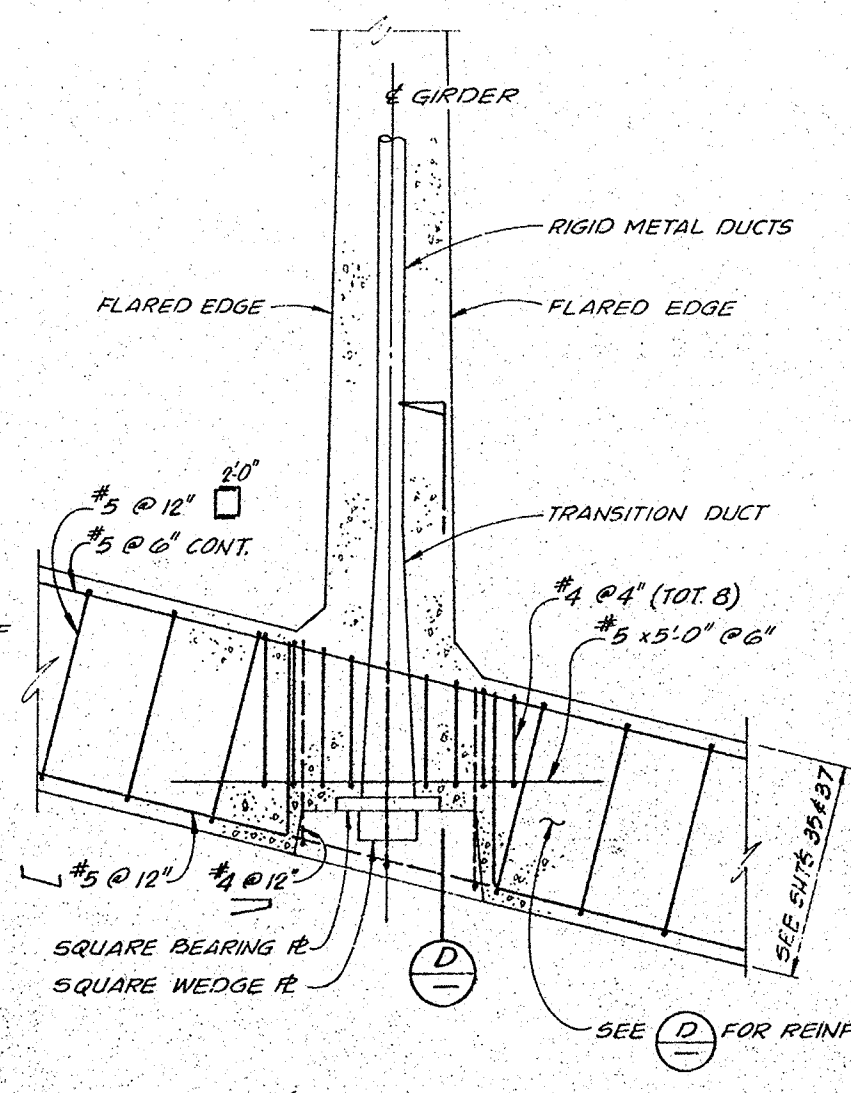


PRESTRESSING NOTES

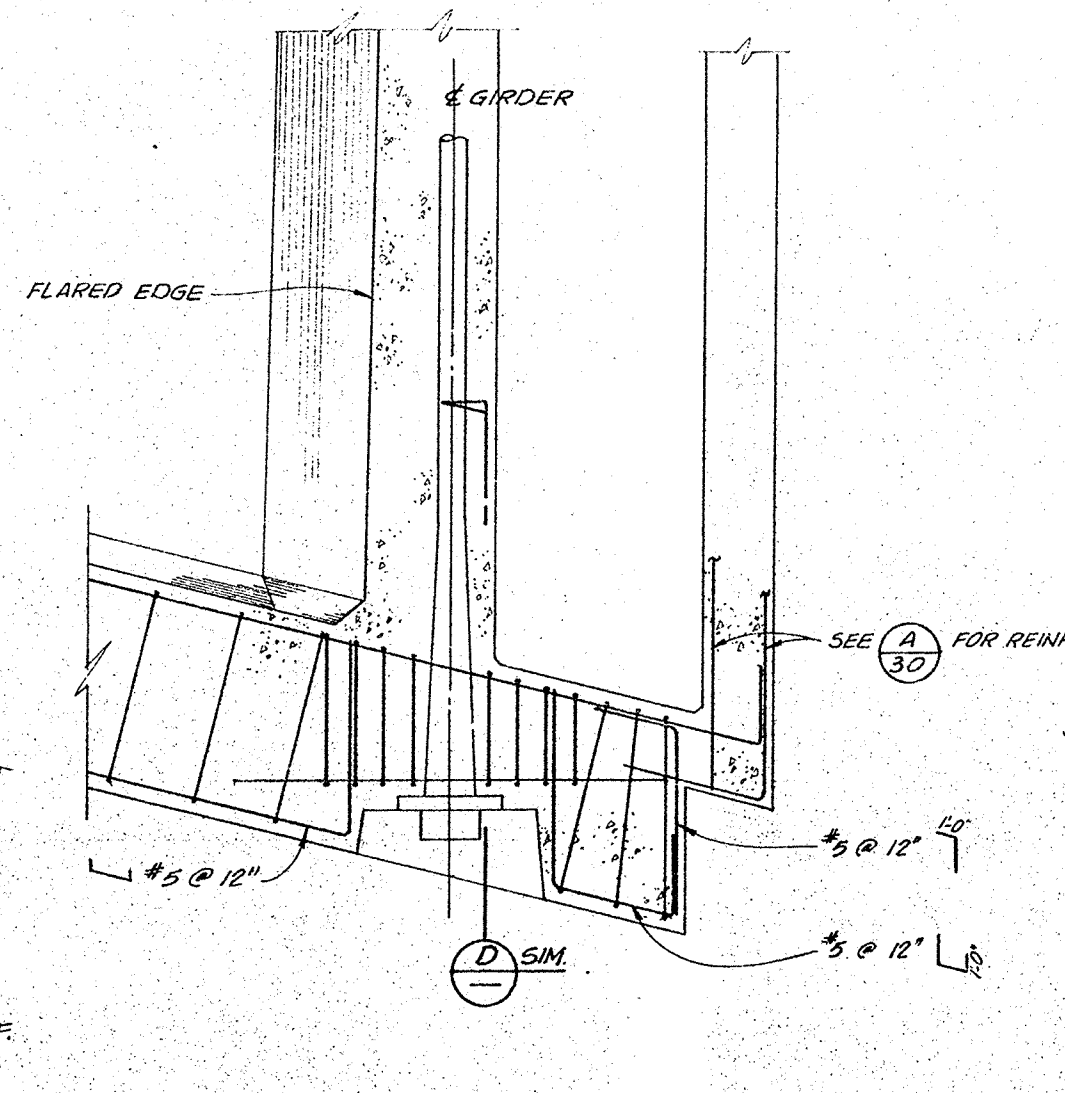
- Jacking Force:
Pjack = 1093 lbs. per girder.
As: Pjack = 0.75 f_y
Total number of girders = 6 each side Total 12
Pjack specified at ends includes friction losses and provision for 32,000 psi loss in stress.
- Concrete:
Ultimate compressive strength of concrete at 28 days f'_c = 5,000 psi.
At time of stressing f'_{ci} = 3,500 psi.
- Prestressing steel:
Tendons are composed of 1/2-inch-diameter, 270-ksi, seven-wire, stress-relieved strand, conforming to ASTM A 416.
- Stressing Sequence Shall Be As Follows:
 - Stress no more than half the tendons in one girder before an equal number are stressed in adjacent girders.
 - At no time during stressing operations shall more than one-sixth of the total prestressing force be eccentric about the centerline of the bridge section under construction.
 - Tendons shall be stressed to P_j from both ends. The two ends need not be stressed simultaneously.
- Tendon Ducts:
 - Tendons are to be placed in galvanized semirigid metal duct after bridge section concrete placement is completed.
 - Duct shall be placed to the trajectory shown on the drawings.
 - Duct shall be securely tied at 5-foot centers to the vertical stirrups to prevent displacement during concreting.
 - Bearing plates must be placed tight against forms. Centerline of tendons are to be normal to plates. Forms shall be braced and anchored to support the weight of the bearing plates.
 - Reinforcing steel interfering with the prestressing tendon alignment shall be adjusted as directed by the engineer.
 - Clearances:
 - Horizontal clearance between tendon ducts = 2-1/2 inches minimum.
 - Tendon ducts may be bundled vertically in groups of three maximum.
 - Vertical clearance between groups = 3 inches minimum.
 - Tendon ducts to be vented through slab within 3 feet of high points of cable path.
- General:
 - Design is based on $\mu = 0.25$ and $K = 0.0002$.
 - Tendons to be jacked to 0.75 f'_y and anchored at an equivalent anchor set of 5/8 inch.
 - Contractor to submit elongation and jacking calculations based on an average tendon stress of 0.85 times the jacking stress.



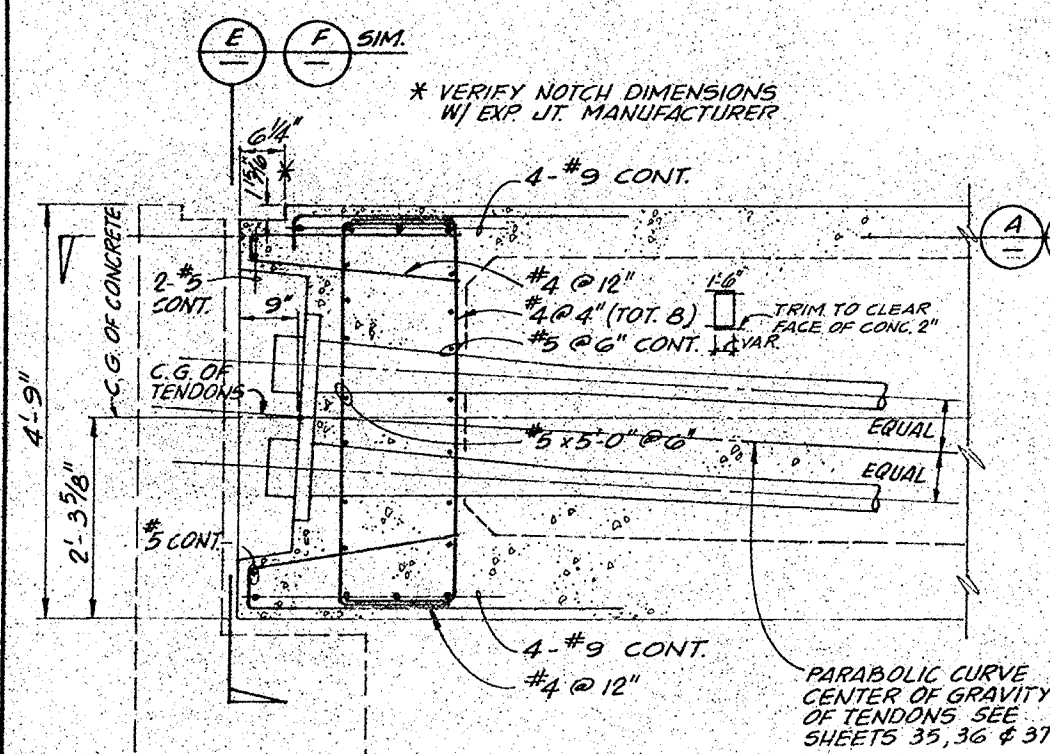
PLAN-SECTION (A)
SCALE: 3/4" = 1'-0"



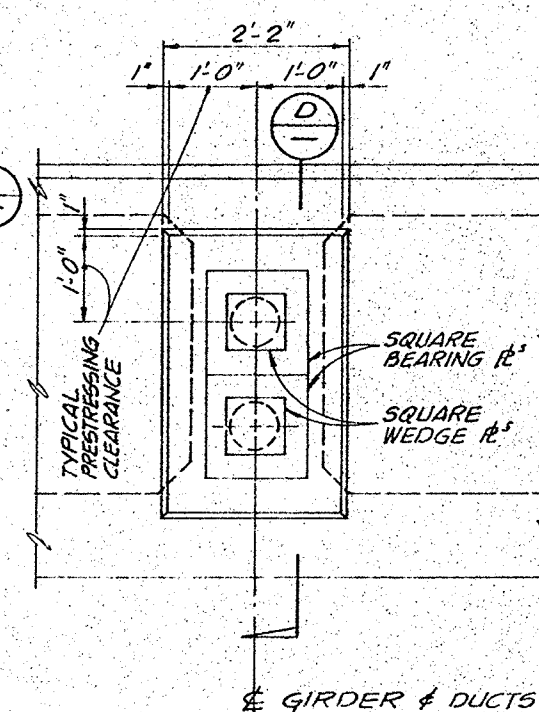
PLAN-SECTION (B)
SCALE: 3/4" = 1'-0"



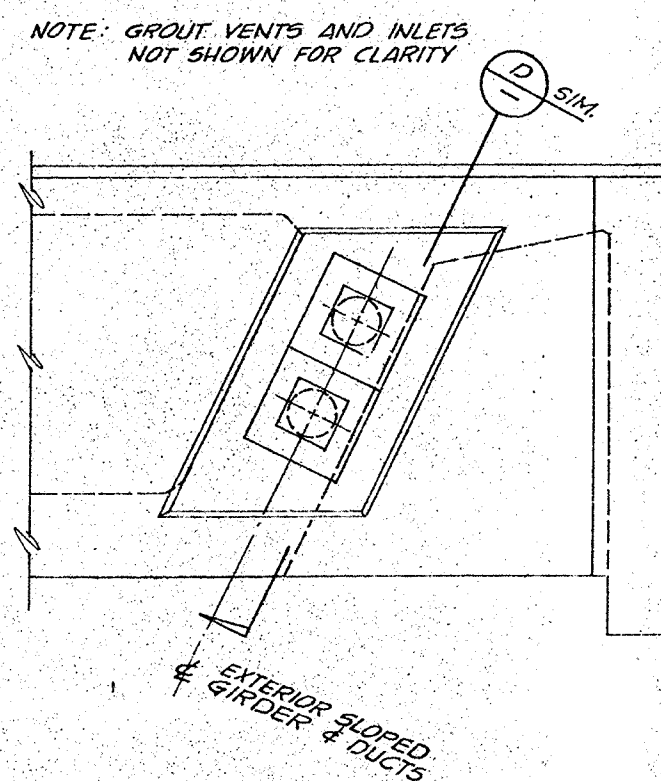
PLAN-SECTION (C)
SCALE: 3/4" = 1'-0"



(TYPICAL FOR ALL GIRDERS)
SECTION (D)
SCALE: 3/4" = 1'-0"



ELEVATION (E)
SCALE: 3/4" = 1'-0"



ELEVATION (F)
SCALE: 3/4" = 1'-0"

AS BUILT
WHILE THE INFORMATION SHOWN IS BELIEVED TO BE ACCURATE, THE ORANGE COUNTY ENVIRONMENTAL MANAGEMENT AGENCY WILL NOT BE RESPONSIBLE FOR OMISSIONS, ERRORS, OR INACCURACIES.

1 1/2 0 1 2
3 inches on original drawing

Bridge Plans
Dr. #7 13329
Sheet 39 of 53
Red: # 24.1
Type: Lined

ORANGE COUNTY ENVIRONMENTAL MANAGEMENT AGENCY			
ADAMS AVENUE BRIDGE OVER SANTA ANA RIVER			
PRESTRESSING DETAILS & NOTES			
MARK	DATE	DESCRIPTION	PREPARED UNDER SUPERVISION OF
			Cal/C.L. 4/2/77
DESIGNED		SCALE	DATE
J.S.		AS SHOWN APRIL 1977	DATE
DRAWN		CHECKED	DWG. NO.
R.R.R.		G.S.	S.A. 35
			OF 53

39

DR#7 13329