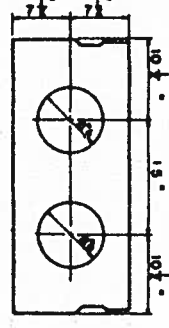
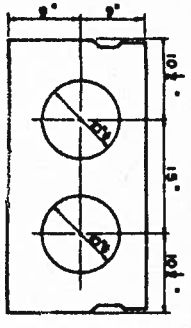


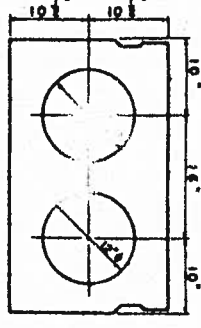
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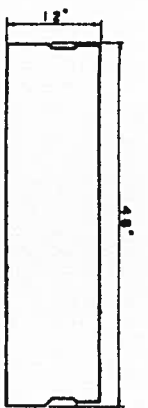
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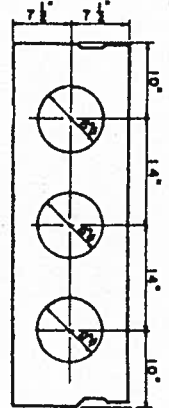
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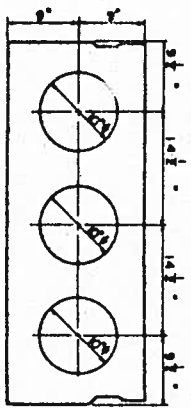
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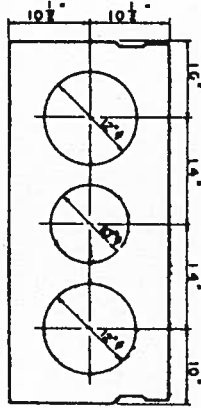
SI-48



SI-48



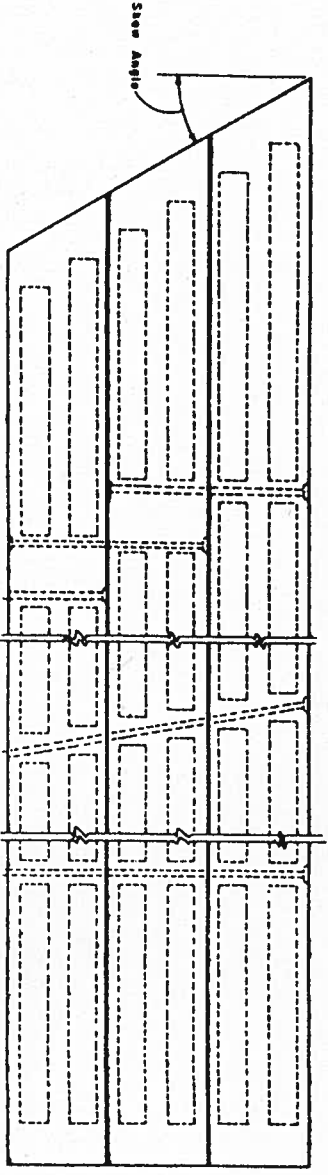
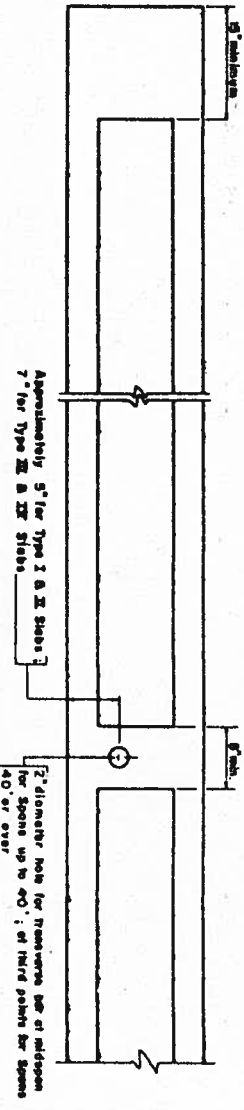
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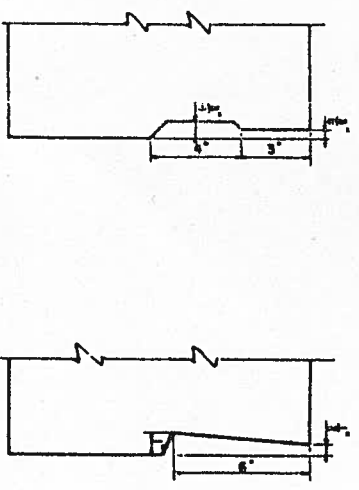
SI-48

SLAB SECTIONS

TYPICAL LONGITUDINAL SECTION



SECTION PROPERTIES				
SECTION	AREA (sq ft)	MOMENT OF INERTIA (in ⁴)	SECTION MODULUS (in ³)	APPROXIMATE SPAN (ft.)
SI-36 (12' x 36')	432	5,184	86.4	20-28
SI-36 (12' x 36')	432	5,184	86.4	20-28
SI-36 (10' x 36')	491	14,514	1,235	34-42
SI-36 (21' x 36')	530	20,747	2,492	41-49
SI-48 (12' x 48')	576	6,912	1,152	20-28
SI-48 (15' x 48')	662	12,697	1,720	27-35
SI-48 (18' x 48')	828	21,858	2,420	34-42
SI-48 (21' x 48')	703	54,517	3,287	41-50
				48-55



SHEAR KEYS

GENERAL NOTES

REGULATIONS: AASHTO Standard Specifications for Highway Bridges, Current edition. Criteria for Prestressed Concrete Bridges, U.S. Bureau of Public Roads, 1954. Tentative Recommendations for Prestressed Concrete by ACI-ASCE Joint Committee 353, and the AASHTO.

LIVE LOAD: All highway live loads are specified by the AASHTO Standard Specifications for Highway Bridges. Live loads shall be distributed as specified on the AASHTO Standard Specifications for Highway Bridges.

PURPOSE: The purpose of the standards shown on this sheet shall be to establish a limited number of simple, practical sections leading to uniformity and simplicity of form and production methods. These standards shall be applicable to all conditions of highway bridge loading and usage within the approximate span limits indicated in the SUMMARY or SECTIONS on this sheet. The purpose is specifically not to disrupt or support established prestressed concrete slab practice utilizing present plant or forms. Similar sections with minor dimensional variations, manufactured with established plant facilities, which meet structural and geometrical requirements of a specific project may be substituted upon submission by the producer of the data necessary to show compliance with the requirements of the job and upon approval of the substitution by the engineer. Further, the purpose is not to supersede other standard sections adopted by the AASHTO and PCI, but rather to complement these standards.

SPAN LIMITS: Span limits shown are approximate only and are not a rigid limitation of the section. Slabs may be used for spans up to 4000 psi; 2 equal; to 5000 psi; 28 foot roadway, including and allowable stresses. Do not use for spans over 28 foot span length may be extended by reduced loading, increased concrete strength, use of high strength concrete, draped tendons, or other approved means within the limits of the design specifications.

CONCRETE: Recommended minimum strength for concrete in slabs on 1 1/2" x 50000 psi. If greater of existing form, for 4000 psi. Concrete of greater or less compressive strength should not be used, in which case allowable working stresses and resulting particular project.

PRESTRESSING REINFORCEMENT: Prestressing reinforcement shall generally be designed for particular projects or for prevailing bridge practices and available manufacturing facilities. For prestressing reinforcement may be any of the materials specified by governing standards and approved by manufacturer which have generally been accepted in common prestressed practice.

END BLOCKS: The slabs shown utilize end blocks 15" long which have proven satisfactory in many installations. The length of end blocks may be increased to accommodate local joint facilities or particular job requirements. Sufficient mild steel reinforcement should be provided in end blocks to resist the tensile forces due to concentrated prestressing loads.

SHEAR KEYS: After lateral ties have been placed and lightened, shear keys shall be filled with high strength, non-shrinking mortar.

FORMS: The use of steel forms on concrete finished casting beds is recommended.

CHAMFERS AND CORNERS: All exposed concrete shall be chamfered 1/4" or rounded to 1/4" radius.

FINISH: Tops shall be given a broom finish, normal to construction of roadway.

HANDLING: In handling, the slabs must be maintained in an upright position at all times and must be picked up only by means of approved devices near the ends of the slabs.

MILD STEEL REINFORCING, BEARING PADS, ANCHORAGE AND MISCELLANEOUS DETAILS: All details not shown or specified herein shall be designed for particular job requirements and shall be in accordance with applicable job specifications.

JOINT COMMITTEE
AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS
COMMITTEE ON BRIDGES AND STRUCTURES
AND
PRESTRESSED CONCRETE INSTITUTE

STANDARD PRESTRESSED CONCRETE SLABS
FOR HIGHWAY BRIDGE SPANS UP TO 55 FT.

SUBMITTED BY
W. B. Schultz
W. B. Schultz
FOR AASHTO

W. B. Schultz
W. B. Schultz
FOR PCI 14887

NOTE
THE SCALE OF THIS PRINT IS 1/4" = 1'-0"
FOR EXAMPLE:
INDICATED SCALE 1/4" = 1'-0"
SHOULD BE READ 1/4" = 1'-0"