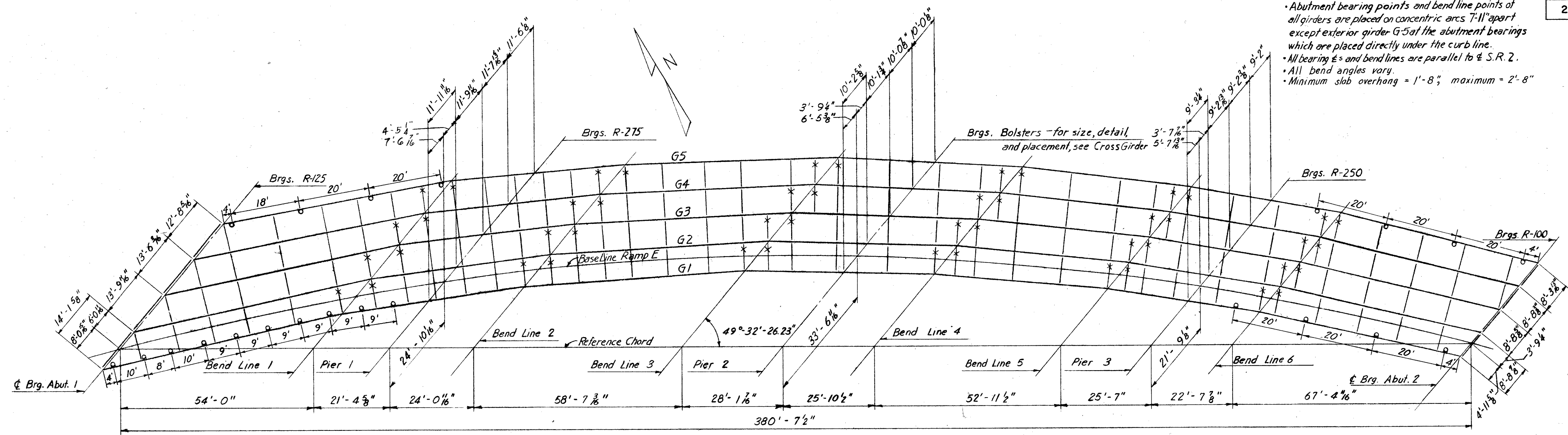


LAYOUT PROCEDURE

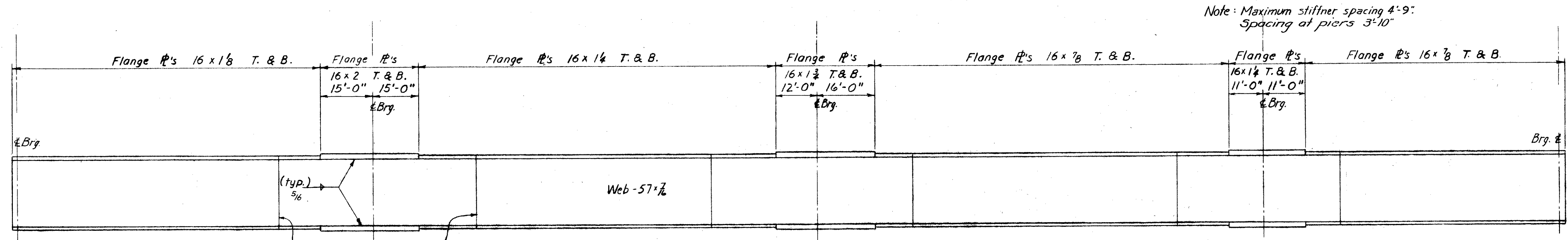
- Abutment bearing points and bend line points of all girders are placed on concentric arcs 7-11' apart except exterior girder G-5 at the abutment bearings which are placed directly under the curb line.
- All bearing lines and bend lines are parallel to S.R. 2.
- All bend angles vary.
- Minimum slab overhang = 1'-8"; maximum = 2'-8"

NOTES

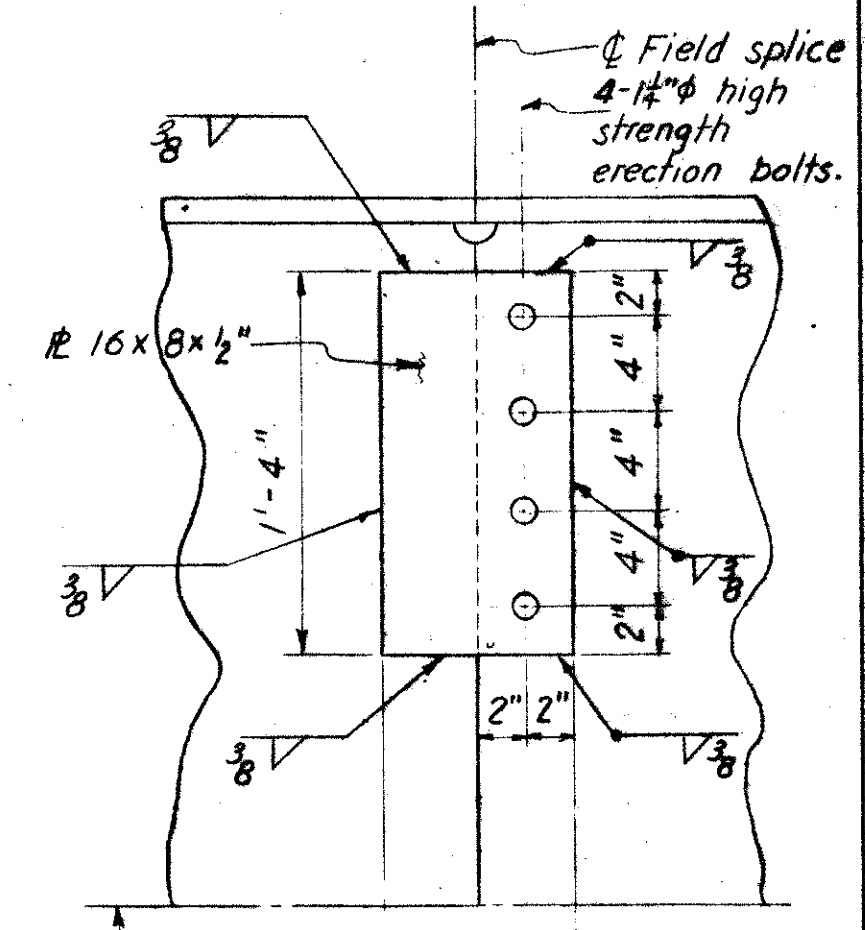
- PAINTING: After erection and after the shop coat has been cleaned and, where necessary, repainted in accordance with Sec. 8.04, an additional coat of the same paint as used in the shop shall be applied over the outside face of the outside steel girders and all sides of the bottom flange.
- SHOP DRAWINGS for the girders shall include an overall layout with dimensions showing the relative unloaded vertical position of each girder or girder segment with respect to the others in the same girder line and with respect to a full length base or work line taking into account camber and the profile of the highway.
- SHOP ASSEMBLY: At least three adjacent girder segments shall be shop assembled in their correct unloaded positions as shown on the shop drawing layout required in the above note so that the faced joints for welding the segments together may be checked for proper fit-up.
- X denotes special crossframe detail shown on Deck Detail sheet.



STEEL FRAMING PLAN

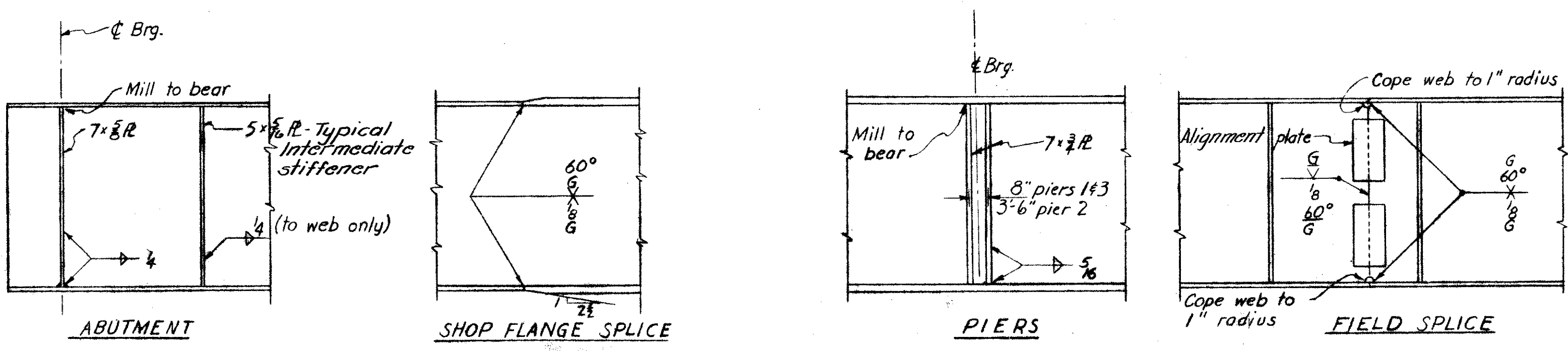


TYPICAL GIRDER ELEVATION



ALIGNMENT PLATE DETAIL

These plates shall be used on interior face of girders only. After the girder welds are completed, the erection bolts in outside girders only shall be removed, the bolt holes welded shut and the field welding of alignment plates completed. Bolt holes shall be subpunched and reamed assembled or drilled full size while assembled. Alignment plates shall not be used to carry erection stresses through the girder. All splice points shall be supported until splices are welded and special cross frames are welded in position.



GIRDER DETAILS

DEFLECTION DIAGRAM

MID-SPAN DEFLECTION AND CAMBER

	SPAN 1	SPAN 2	SPAN 3	SPAN 4
Deflection due to weight of steel	3/16"	3/8"	1/2"	1/8"
Deflection due to remaining dead load	5/8"	1 1/8"	1/2"	3/8"
Convexity required for vertical curve	1 1/4"	2"	1 3/8"	8"
Sum of deflection and convexity	2 1/8"	2 7/8"	1 5/8"	1 5/8"
Required camber	2"	2 3/8"	2"	1 3/8"

SEC. L-33

PREPARED BY
CAPITOL ENGINEERING ASSOCIATES, DILLSBURG, PA.
FOR

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

STEEL FRAMING PLAN
BRIDGE NO. LAK-2-1351
S.R.2 UNDER RAMP E
LAKE COUNTY
STA. 613+25.24

DESIGNED	DRAWN	TRACED	CHECKED	REVISED DATE	REVISED
	CUB				

MICROFILMED
JUL 1 1985