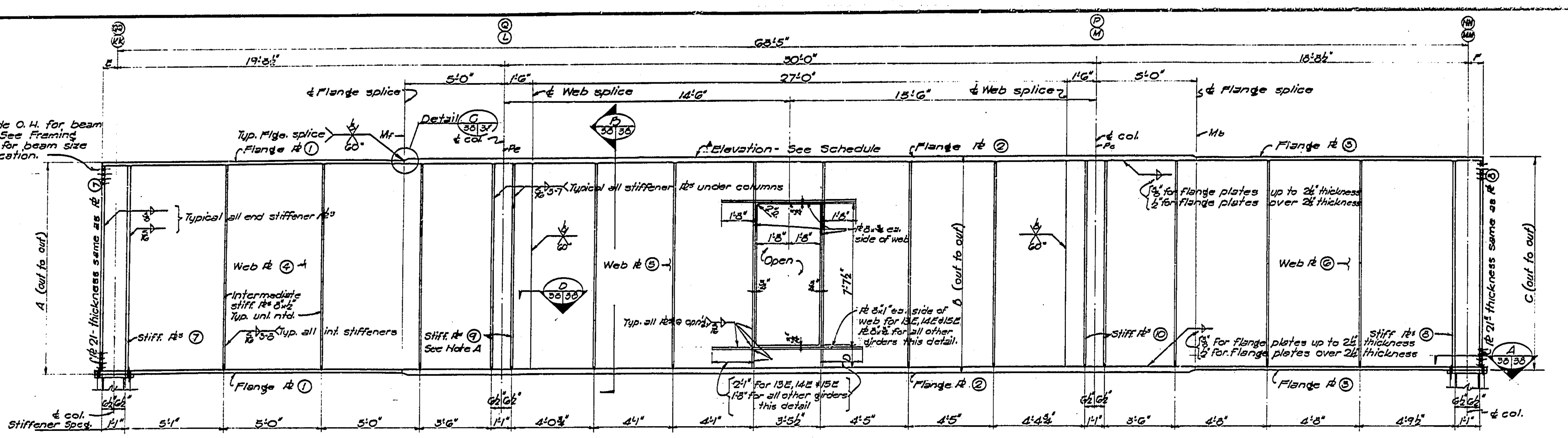
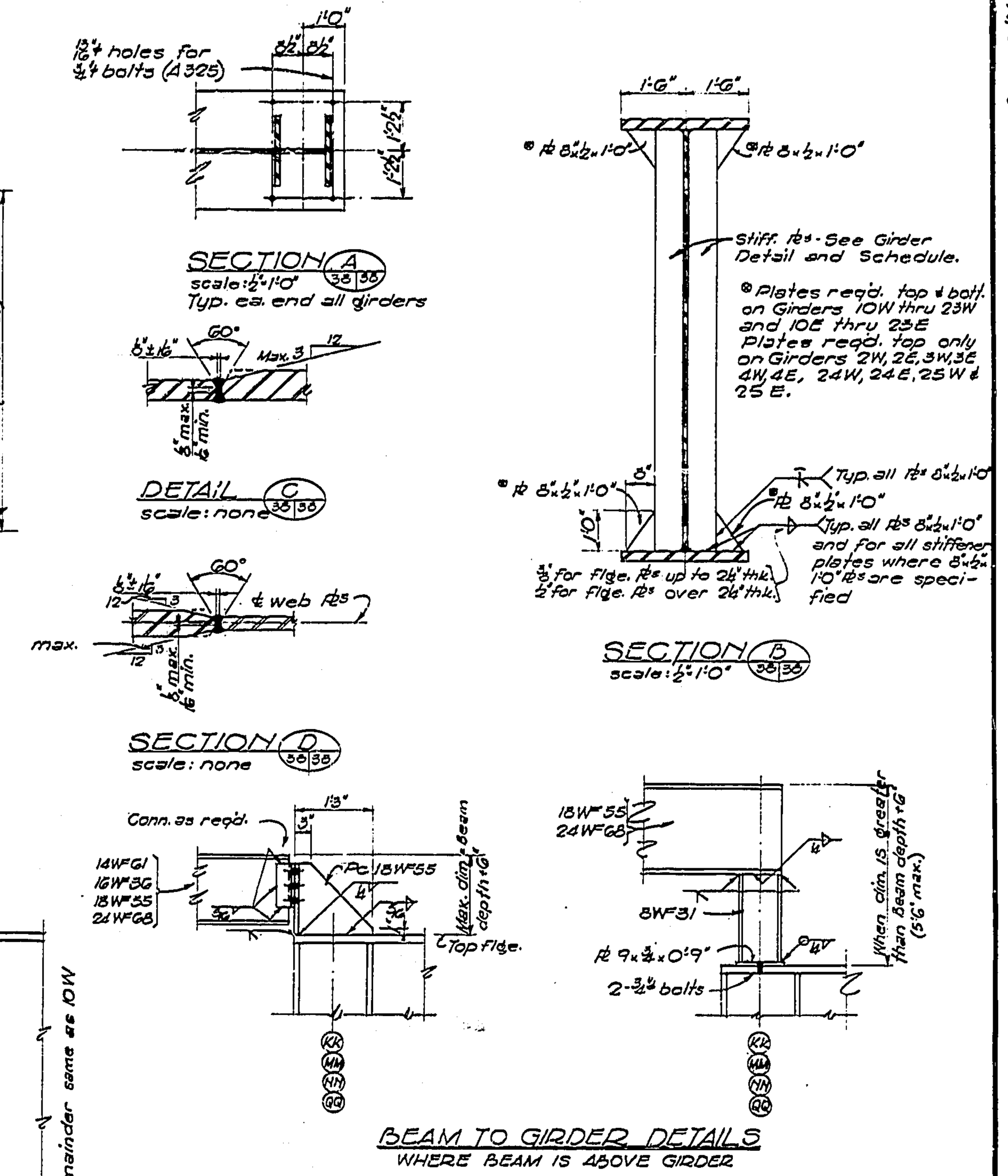


Note A. 1-stiff. Pl 8x½ on ℄ col. ea. side of web for 13E, 14E & 15E. Other girders typ. as shn.

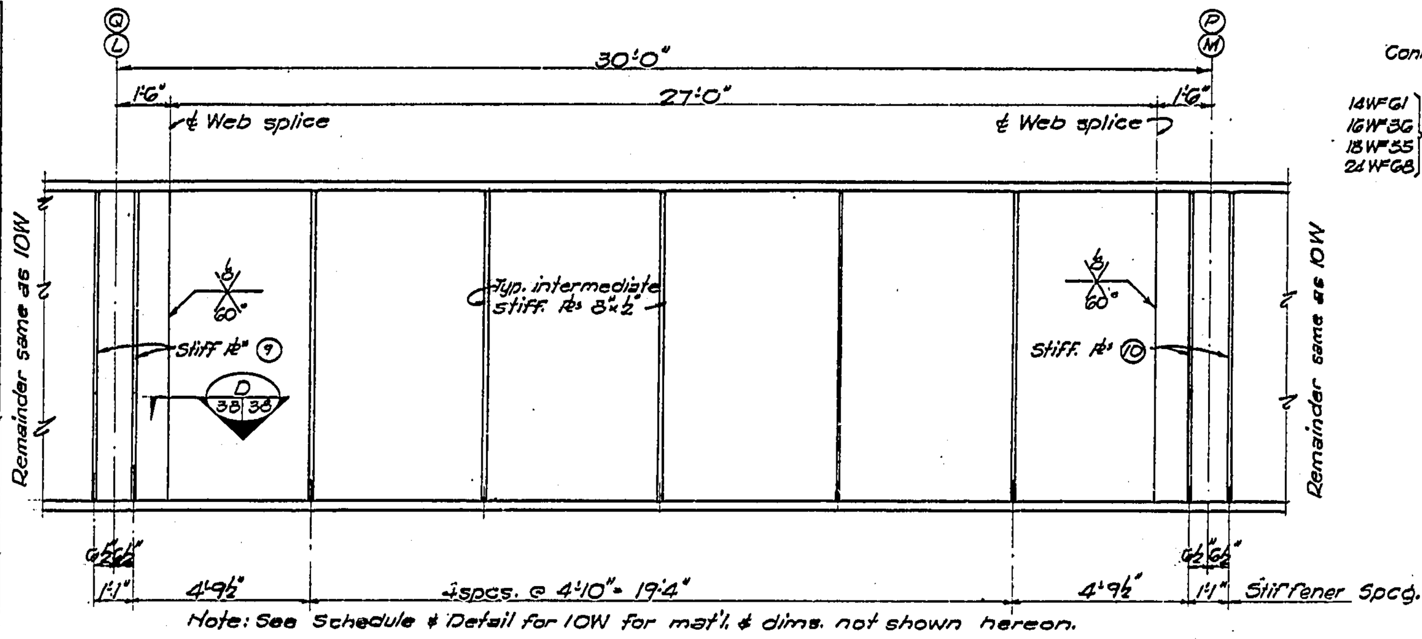
GIRDER DETAIL - 10W, 11W, 12W, 13W, 14W, 15W LOOKING NORTH
10E, 11E, 12E, 13E, 14E, 15E LOOKING SOUTH



GIRDER SCHEDULE

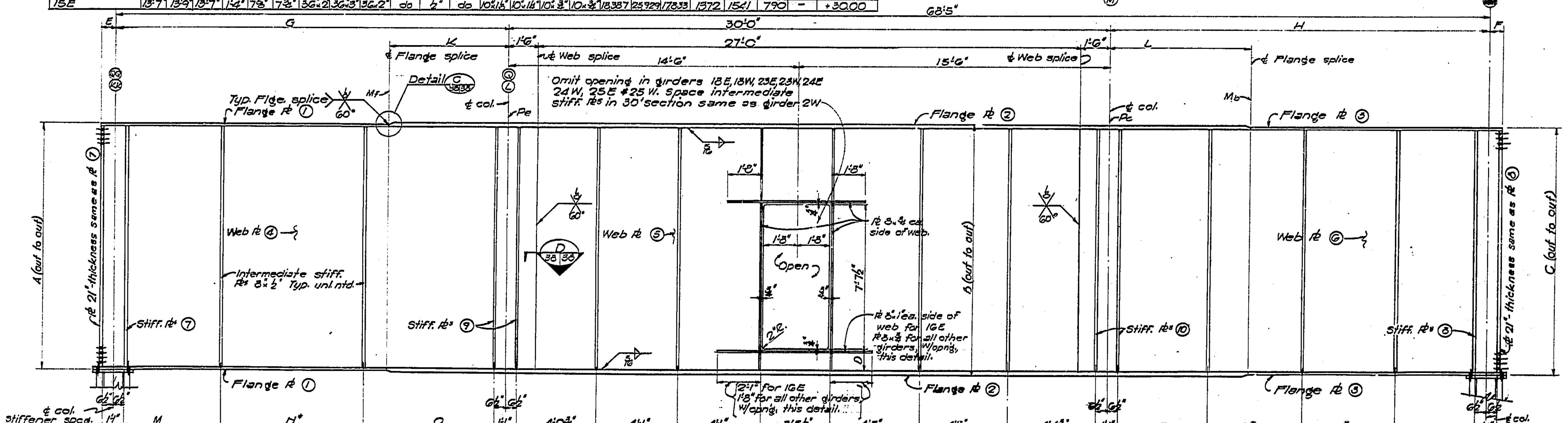
▲ Elevations shown in schedule are theoretical elevations for weightless, un-cambered girders.

Mark	Dimensions A	B	C	D	E	F	Material: Flange Pls ①	②	③	Web Pls ④	⑤	⑥	Stiffener Pls ⑦	⑧	⑨	⑩	Design Data: Moments Mb	Max.	Mf	Reactions VL	VR	Col. Loads Pc	Pe	▲Elevation Top of Flange Pl ②
10E, 11E, 12E	10'10	11'0	10'10	1'2"	7⅜	7⅜	36x2	36x3	36x2	⅜	½	⅜	10x1⅜	10x1¼	10x¾	10x¾	18,387	25,929	17,833	1572	1541	790	570	+29.42
14E	13'0"	13'2"	13'0"	1'4"	do	do	do	do	do	do	do	do	do	do	do	do	do	do	do	do	do	do	–	+29.42
10W, 11W	11'10½	12'0½	11'10"	1'8"	8"	8"	36x2⅝	36x3½	36x2⅝	1"	½"	1"	10x1½	10x1½	10x¾	10x¾	21,852	32,449	23,488	1801	1778	915	995	+29.92
12W, 14W	11'1"	11'3"	11'0½	1'4"	do	do	36x2⅜	36x3⅜	36x2⅜	1⅛"	do	1⅛"	do	do	do	do	do	do	do	do	do	do	do	+29.42
3E, 4E, 3W, 4W	9'5½	9'6½	9'5½	–	8"	8"	36x2⅜	36x3⅛	36x2⅜	⅜"	½"	⅜"	10x1½	10x1½	10x¾	10x¾	17,081	24,653	17,846	1331	1354	894	822	+15.67
13E	10'10	10'11"	10'10"	1'2"	7½"	7½"	36x1½	36x2"	36x1½	⅜"	½"	⅜"	10x1"	10x1"	10x⅝	10x⅝	11,859	15,608	8513	691	967	612	–	+29.42
13W	10'10"	11'0	10'10"	1'2"	7⅝	7⅝	36x1⅝	36x2⅜	36x1⅝	1"	½"	1"	10x1⅜	10x1⅜	do	do	16,149	23,600	17,330	1285	1279	734	816	+29.42
19E, 20W, 21W	12'11⅛	13'0⅜	12'11⅛	1'2"	8"	8"	36x1½	36x2⅝	36x1½	⅜"	do	⅜"	10x1½	10x1½	do	do	18,025	28,773	22,688	1625	1535	846	903	+34.04
20E, 21E	12'11½	13'0½	12'11½	do	do	do	do	36x2"	do	do	do	do	do	do	do	do	16,639	24,916	18,325	1389	1350	770	670	+34.04
22W	12'9½	12'11½	12'9½	do	do	do	do	36x2½	do	do	do	do	do	do	do	do	19,286	26,923	17,299	1460	1395	855	602	+34.04
22E	do	do	do	do	do	do	do	36x2¼	do	do	do	do	do	do	do	do	17,991	25,139	16,801	1422	1311	770	648	+34.04
23E, 23W	10'5⅜	10'7⅜	10'5⅜	–	7⅞	7⅞	36x2¼	36x3¼	36x2¼	do	do	do	10x1⅜	10x1⅜	10x¾	10x¾	20,433	27,830	17,509	1555	1435	829	700	+34.04
24E, 24W	9'9½	9'11½	9'9½	–	do	do	do	do	do	do	do	do	do	do	do	do	18,502	24,815	15,340	1447	1277	626	626	+33.42
25E, 25W	9'8½	9'10½	9'8½	–	do	do	36x1⅜	36x2⅜	36x1⅜	do	do	do	do	do	do	do	16,152	21,265	12,600	1247	1083	534	534	+33.42
15W	11'6½	11'8½	11'6"	1'4	8"	8"	36x2⅝	36x3½	36x2⅝	do	do	do	10x1½	10x1½	do	do	21,852	32,449	23,488	1801	1778	915	995	+29.92
2W	9'3"	9'4"	9'3"	–	do	do	36x1½	36x2"	36x1½	do	do	do	do	do	do	do	9,747	14,793	10,521	824	826	308	324	+15.67
16W	14'6"	14'7"	14'6"	1'4"	8⅝	8⅝	do	do	do	⅜	⅝	⅜	10x1⅜	10x1⅜	10x⅜	10x⅜	17,152	25,500	18,888	1403	1366	734	900	+32.92
17E	14'10½	14'11½	14'10½	1'2"	do	do	36x1⅜	36x2½	36x1⅜	do	do	do	do	do	do	do	18,437	31,172	25,568	1748	1668	863	1010	+33.42
18E	14'10⅜	14'11½	14'10⅜	–	do	do	36x2"	do	36x2"	do	do	do	do	do	do	do	19,025	31,694	26,010	1818	1667	880	1080	+33.42
17W	15'4½	15'5½	15'4½	1'8"	do	do	36x1⅜	do	36x1⅜	do	do	do	do	do	do	do	18,437	31,172	25,568	1748	1668	863	1010	+33.42
18W	15'4⅜	15'5½	15'4⅜	–	do	do	36x2	do	36x2	do	do	do	do	do	do	do	19,025	31,694	26,010	1818	1667	880	1080	+33.42
19W	13'5½	13'6½	13'5½	1'8"	8	8	36x1½	36x2⅝	36x1½	do	½"	do	10x1½	10x1½	10x¾	10x¾	18,025	28,773	22,688	1625	1535	846	903	+34.04
16E	14'7	14'8	14'7	1'4"	8⅝	8⅝	do	36x2"	do	do	⅝	do	10x1⅜	10x1⅜	10x⅜	10x⅜	17,152	25,500	18,888	1403	1366	734	900	+31.00
15E	13'7	13'9	13'7	1'4"	7⅜	7⅜	36x2	36x3	36x2"	do	½"	do	10x1⅜	10x1¼	10x¾	10x¾	18,387	25,929	17,833	1372	1541	790	–	+30.00



Note: See Schedule & Detail for 10W for mat'l. & dims. not shown hereon.

GIRDER DETAIL - 2W, 3W, 4W LOOKING NORTH
3E, 4E LOOKING SOUTH



*One space N for girders 19E Thru 25E and 19W Thru 25W
2 spcs. N for girders 16E Thru 18E & 16W Thru 18W.

See Girder Detail 10W for details not shown hereon.

* 2spaces Q for girders 16E Thru 22E, and 16W THRU 22W.
3spcs. Q for girders 23E, 23W 24E, 24W, 25E & 25W.

GIRDER DETAIL - 16W THRU 25W LOOKING NORTH
16E THRU 25E LOOKING SOUTH

ADD'L. DIMENSION SCHEDULE

Mark	G	H	K	L	M	N*	O	P	Q*	R
19E	18'6⅞	19'10⅛	4'0"	7'0"	4'5½	6'5⅜	6'6½	4'11½	4'11 1/16	3'11½
19W	18'6⅞	19'10⅛	6'0"	do	do	do	do	do	do	do
20E, 20W	17'10⅜	20'6⅜	3'0"	do	3'11½	6'4⅜	6'5½	4'5½	5'6⅜	do
21E, 21W	17'0⅜	21'4¾	do	do	do	5'6¾	do	4'11½	5'5⅛	4'5½
22E	16'1⅛	22'5⅝	do	do	do	5'7⅝	5'5½	do	5'10⅝	do
22W	16'1⅛	22'3⅞	do	8'0"	do	do	do	do	do	do
23E	15'2½	23'4½	do	7'0"	4'5½	5'2½	4'5½	4'5½	4'7½	3'11½
23W	15'2½	23'4½	do	8'0"	do	do	do	do	4'7½	do
24E, 24W	14'6⅝	23'10⅜	do	7'0"	do	4'6⅝	do	do	4'9⅜	do
25E, 25W	13'11 1/16	24'5¾	do	do	do	3'11 1/16	do	do	4'11⅛	do
16E, 16W	19'7⅜	18'9⅝	5'0"	5'0"	do	4'9⅜	do	do	4'7⅝	do
17E, 17W	19'5⅜	18'11⅜	3'0"	7'0"	do	4'8 11/16	do	do	4'8 13/16	do
18E, 18W	19'1"	19'4"	do	do	do	4'6½	do	do	4'11"	do

See Dwg. 7-1 for General Notes
See Dwg. 7-6 for list of Standard Details.

Notes on Steel Girders.
All steel shall be A36 unless otherwise noted.
All bolts shall be A325 with threads excluded from shear plane. Bolts to be ¾" dia. where not otherwise shown.
All end stiffener plates shall be milled to bear on bottom flange.
All stiffener plates under columns shall be milled to bear on top flange.
See dwg. 7-28 for bracing struts between girders.
All girders shall be cambered. Exact amounts of camber will be supplied by the Engineer.

LOCKWOOD, ANDREWS & NEWNAM, INC.
CONSULTING ENGINEERS

DC0116ZZ 87

BROOKS BARR GRAEBER & WHITE
AND
PITTS MEBANE PHELPS & WHITE
ARCHITECTS AND ENGINEERS
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APPROVED	ELC 9/26/67 ARCHITECTURAL	RSB 9-26-67 STRUCTURAL	9/26/67 MECHANICAL & ELECTRICAL

GENERAL SERVICES ADMINISTRATION
PUBLIC BUILDINGS SERVICE • WASHINGTON D C

PROJECT	U S DEPARTMENT OF LABOR		
LOCATION	WASHINGTON D C		
STREET	200 CONSTITUTION AVENUE N W		
PROJ NO	49918	FILE NO	
DRAWN BY	JRMS	CHECKED BY	LBS
DRAWING TITLE	FREEWAY GIRDERS, SHEET 1		
	STRUCTURAL		
DRAWING NUMBER	7-38	PHASE	I

30X