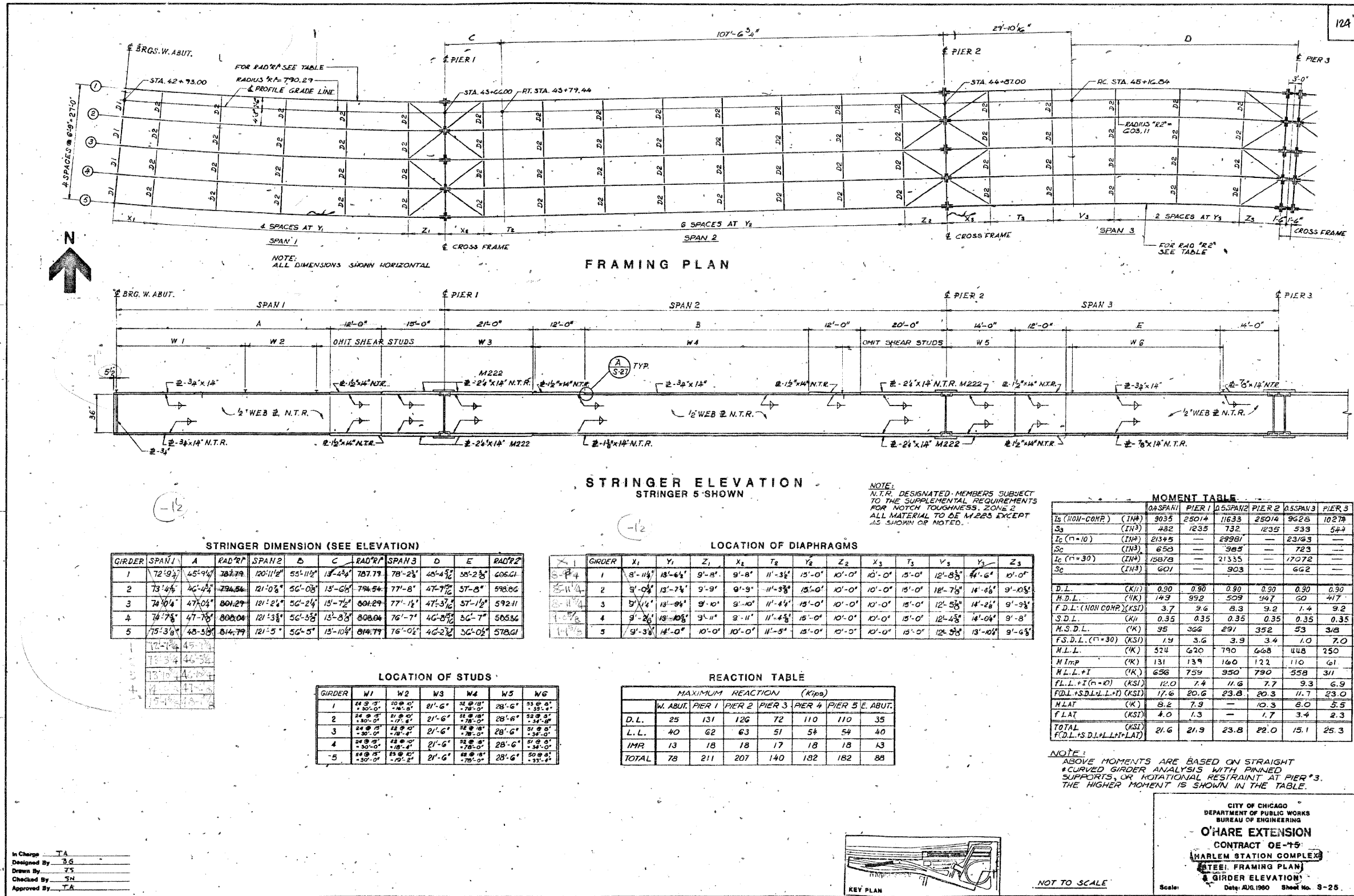


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



FRAMING PLAN

STRINGER ELEVATION  
STRINGER 5 SHOWN

STRINGER DIMENSION (SEE ELEVATION)

GIRDER	SPAN 1	A	RAD' R/P	SPAN 2	B	C	RAD' R/P	SPAN 3	D	E	RAD' R/P
1	72'-9"	45'-4"	783.79	120'-11"	55'-11"	13'-4 1/2"	787.79	78'-2 1/2"	45'-4 1/2"	55'-2 1/2"	605.61
2	73'-4 1/2"	46'-4 1/2"	794.56	121'-0 1/2"	56'-0 1/2"	13'-6"	794.54	77'-8"	47'-7 1/2"	57'-8"	598.86
3	74'-0 1/4"	47'-0 1/4"	804.29	121'-2 1/4"	56'-2 1/4"	13'-7 1/2"	804.29	77'-1 1/2"	47'-3 1/2"	57'-1 1/2"	592.11
4	74'-7 1/8"	47'-7 1/8"	808.04	121'-3 1/8"	56'-3 1/8"	13'-8 1/8"	808.04	76'-7"	46'-8 1/8"	56'-7"	585.36
5	75'-3 3/8"	48'-3 3/8"	814.79	121'-5"	56'-5"	13'-10 1/4"	814.79	76'-0 1/2"	46'-2 1/2"	56'-0 1/2"	578.61

LOCATION OF DIAPHRAGMS

X	GIRDER	X <sub>1</sub>	Y <sub>1</sub>	Z <sub>1</sub>	X <sub>2</sub>	T <sub>2</sub>	Y <sub>2</sub>	Z <sub>2</sub>	X <sub>3</sub>	T <sub>3</sub>	V <sub>3</sub>	Y <sub>3</sub>	Z <sub>3</sub>
1	1	8'-11 1/4"	13'-6 1/2"	9'-8"	9'-8"	11'-3 1/2"	15'-0"	10'-0"	10'-0"	15'-0"	12'-8 1/2"	14'-6"	10'-0"
2	2	9'-0 1/4"	13'-7 1/4"	9'-9"	9'-9"	11'-3 3/8"	15'-0"	10'-0"	10'-0"	15'-0"	12'-7 1/8"	14'-6 1/2"	9'-10 1/2"
3	3	9'-1 1/4"	13'-8 1/4"	9'-10"	9'-10"	11'-4 1/4"	15'-0"	10'-0"	10'-0"	15'-0"	12'-5 1/4"	14'-2 1/4"	9'-9 1/2"
4	4	9'-2 1/8"	13'-9 1/8"	9'-11"	9'-11"	11'-4 1/2"	15'-0"	10'-0"	10'-0"	15'-0"	12'-4 1/8"	14'-0 1/4"	9'-8"
5	5	9'-3 3/8"	14'-0"	10'-0"	10'-0"	11'-5"	15'-0"	10'-0"	10'-0"	15'-0"	12'-3 3/8"	13'-10 1/2"	9'-6 1/2"

LOCATION OF STUDS

GIRDER	W1	W2	W3	W4	W5	W6
1	54'-3"	10'-0"	21'-6"	52'-0"	28'-6"	53'-0"
2	54'-0"	10'-0"	21'-6"	52'-0"	28'-6"	53'-0"
3	54'-0"	10'-0"	21'-6"	52'-0"	28'-6"	53'-0"
4	54'-0"	10'-0"	21'-6"	52'-0"	28'-6"	53'-0"
5	54'-0"	10'-0"	21'-6"	52'-0"	28'-6"	53'-0"

REACTION TABLE

	MAXIMUM REACTION (KIPS)					
	W. ABUT.	PIER 1	PIER 2	PIER 3	PIER 4	PIER 5 E. ABUT.
D.L.	25	131	126	72	110	110
L.L.	40	62	63	51	54	40
IMR	13	18	18	17	18	13
TOTAL	78	211	207	140	182	88

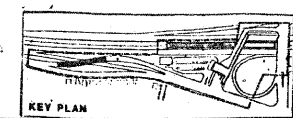
NOTE:  
N.T.R. DESIGNATED MEMBERS SUBJECT TO THE SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS, ZONE 2 ALL MATERIAL TO BE M222 EXCEPT AS SHOWN OR NOTED.

MOMENT TABLE

	04 SPAN 1	PIER 1	05 SPAN 2	PIER 2	06 SPAN 3	PIER 3
I <sub>s</sub> (NON-COMP) (IN <sup>4</sup> )	9035	25014	11633	25014	9626	10274
S <sub>g</sub> (IN <sup>3</sup> )	482	1235	732	1235	533	544
I <sub>c</sub> (n=10) (IN <sup>4</sup> )	21345	—	29987	—	23763	—
S <sub>c</sub> (IN <sup>3</sup> )	650	—	985	—	723	—
I <sub>c</sub> (n=30) (IN <sup>4</sup> )	18878	—	21335	—	17072	—
S <sub>c</sub> (IN <sup>3</sup> )	601	—	903	—	662	—
D.L.	(K/ft)	0.90	0.90	0.90	0.90	0.90
M.D.L.	(K)	149	992	509	947	60
F.D.L. (NON COMP) (KSI)	3.7	9.6	6.3	9.2	1.4	9.2
S.D.L.	(K/ft)	0.35	0.35	0.35	0.35	0.35
M.S.D.L.	(K)	95	366	291	352	53
F.S.D.L. (n=30) (KSI)	1.9	3.6	3.9	3.4	1.0	7.0
M.L.L.	(K)	524	620	790	668	448
M.I.M.P.	(K)	131	139	160	122	110
M.L.L.+I	(K)	656	759	950	790	558
F.L.L.+I (n=0) (KSI)	12.0	1.4	11.6	7.7	9.3	6.9
F.D.L.+S.D.L.+I (KSI)	17.6	20.6	23.8	20.3	11.7	23.0
M.L.A.T.	(K)	8.2	7.9	—	10.3	8.0
F.L.A.T.	(KSI)	4.0	1.3	—	1.7	3.4
TOTAL	(KSI)	21.6	21.9	23.8	22.0	15.1
F.D.L.+S.D.L.+L.L.+I+L.A.T.						

NOTE:  
ABOVE MOMENTS ARE BASED ON STRAIGHT CURVED GIRDER ANALYSIS WITH PINNED SUPPORTS, OR ROTATIONAL RESTRAINT AT PIER #3. THE HIGHER MOMENT IS SHOWN IN THE TABLE.

In Charge: TA  
Designed By: J.S.  
Drawn By: J.S.  
Checked By: S.N.  
Approved By: TA



NOT TO SCALE

CITY OF CHICAGO  
DEPARTMENT OF PUBLIC WORKS  
BUREAU OF ENGINEERING  
**O'HARE EXTENSION**  
CONTRACT OE-75  
HARLEM STATION COMPLEX  
STEEL FRAMING PLAN  
& GIRDER ELEVATION  
Scale: Date: AUG. 1960 Sheet No. 9-25

ISSUED FOR: BID 17 DEC 60

FOR INFORMATION ONLY

**benesch**  
Engineers - Surveyors - Planners  
205 North Michigan Avenue, Suite 2400  
Chicago, Illinois 60601  
312-565-0450 Job No. 10032.13

SHEET NO. 11	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	3531	1515.1-1	COOK	35	22
14 SHEETS	CONTRACT NO. 60J58		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		

EXISTING PLAN INFORMATION 1 OF 4  
STRUCTURE NO. 016-2519

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