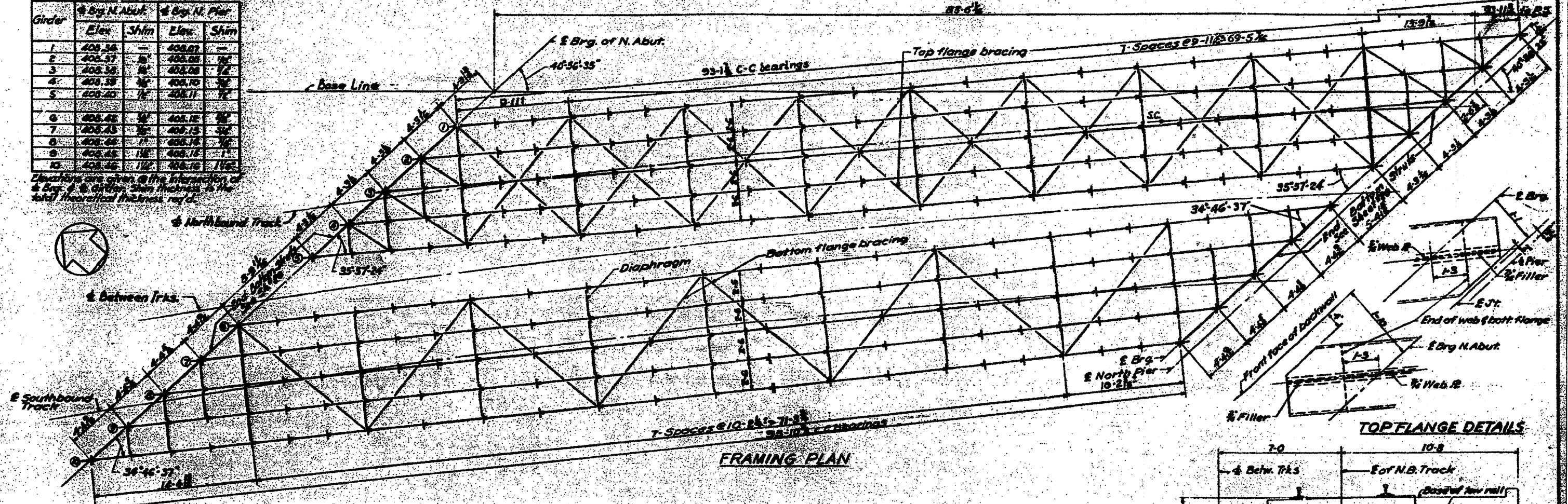


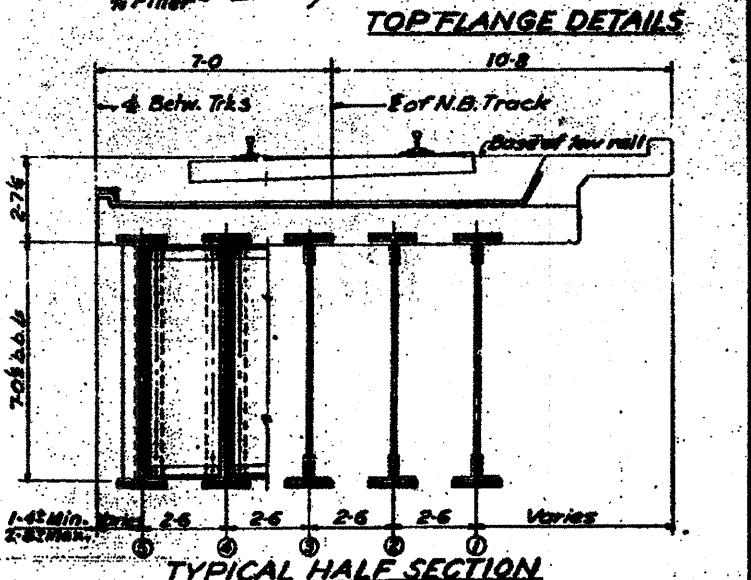
ELEVATIONS BACK OF BOTTOM FLANGE ANGLES & BEARING SHIM THICKNESS REQUIRED

| Girder | E. Brg. N. Abut. | | E. Brg. N. Pier | |
|--------|------------------|------|-----------------|------|
| | Elev. | Shim | Elev. | Shim |
| 1 | 408.34 | — | 408.02 | — |
| 2 | 408.37 | 1/8" | 408.08 | 1/8" |
| 3 | 408.38 | 1/8" | 408.08 | 1/8" |
| 4 | 408.39 | 1/8" | 408.10 | 1/8" |
| 5 | 408.40 | 1/8" | 408.11 | 1/8" |
| 6 | 408.42 | 1/8" | 408.12 | 1/8" |
| 7 | 408.43 | 1/8" | 408.13 | 1/8" |
| 8 | 408.44 | 1/8" | 408.14 | 1/8" |
| 9 | 408.45 | 1/8" | 408.15 | 1/8" |
| 10 | 408.46 | 1/8" | 408.16 | 1/8" |

Elevations are given @ the intersection of E. Brg. & Girders. Shim thickness is the total theoretical thickness req'd.

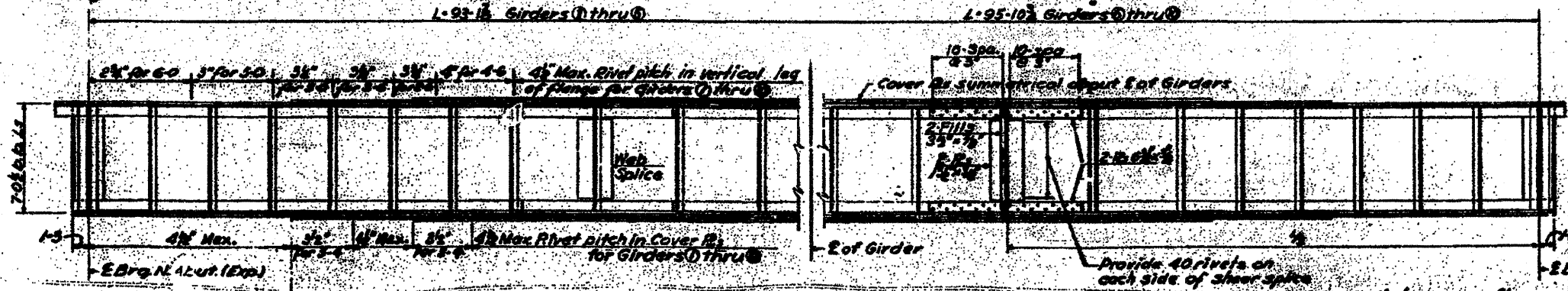


FRAMING PLAN



TOP FLANGE DETAILS

TYPICAL HALF SECTION



ELEVATION

DEAD LOAD PER TRACK

| | |
|------------------------|-------|
| Ballast, Ties & Rails | 2.73% |
| Slab, Waterproof (W&K) | 3.00% |
| 5.73% | |
| Gir. 1 thru 5 | 1.15% |
| Gir. 6 thru 10 | 1.15% |
| D.L. ecc. 57.000 | .78% |
| D.L. Steel | .71% |
| 2.64% | |

MOMENTS & SHEAR FOR GIRDER NO. 1 & 6

| End Shear | Gir. 1 | | Gir. 6 | |
|-----------|--------|--------|--------|-------|
| | DL | LL | DL | LL |
| DL | 124.1K | 82.1K | 2916" | 1970" |
| LL | 1025K | 104.1K | 2077" | 2156" |
| Imp. | 636K | 64.0K | 324" | 336" |
| Centri. | 357K | 36.2K | 1431" | 1468" |
| Total | 3259K | 286.4K | 723" | 750" |
| Total | 3558K | 316.7K | 6680" | 6680" |

SECTION ALL GIRDERS BOTH FLANGES

| Web | Flange | Net |
|----------------|------------------|-----------|
| 1/2 8" x 1/2" | 2 1/2 8" x 1/2" | 4.60 |
| 1/2 8" x 1/2" | 2 1/2 8" x 1/2" | 2.64 |
| 1/2 17" x 1/2" | 1 1/2 17" x 1/2" | 14.88 |
| 1/2 17" x 1/2" | 1 1/2 17" x 1/2" | 14.88 |
| 1/2 17" x 1/2" | 1 1/2 17" x 1/2" | 14.88 |
| Total | 75.70" Gross | 6585" Net |

Gross I - 275,865 in² Gross S.M. - 6,147 in²
 Net I - 235,369 in² Net S.M. - 5,245 in²
 Allow. Stress - 17,200 psi Gr. 1 thru 5; 16,800 psi Gr. 6 thru 10
 Unit Stress - Gir. 1 - 17,100 psi
 Gir. 6 - 15,300 psi

ADDITIONAL MATERIAL

Web - 84" x 1/2" - 36.75"
 End Stiff 4 1/2 x 7-4"
 Use 20 Rivets per pair
 2 End 17 1/2 x 1 1/2"
 Inter Stiff 2 1/2 x 6-3 1/2" on fills at Diaphragms. 2 1/2 x 6-3 1/2" on fills elsewhere.
 Cover Pl. - Girder 6 to 10
 2 R. 17" x 1/2" Full length
 2 R. 17" x 1/2" x 69-6
 2 R. 17" x 1/2" x 58-0

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS
 DIVISION OF HIGHWAYS
 CITY OF EAST ST. LOUIS
 EAST ST. LOUIS EXPRESSWAY
 L&N RR. OVER WEST BOUND EXPWAY.
 EAST BOUND EXPRESSWAY RAMP

FRAMING PLAN SPAN I
 H. W. LOCHNER, INC.
 ENGINEERS
 CHICAGO, ILLINOIS

Notes:
 For details of Diaphragm, Lateral bracing & Connections see sh. no. 20
 For details of bearings see sh. no. 21
 For General Notes see sh. no. 1.
 For Framing Notes see sh. no. 1.

DATE JULY 1950 SHEET NO. 8

Designed by: LK
 Drawn by: ES
 Checked by: PK & FAE

FOR INFORMATION ONLY