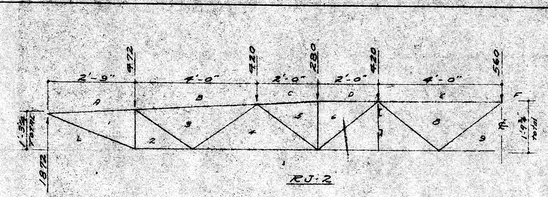
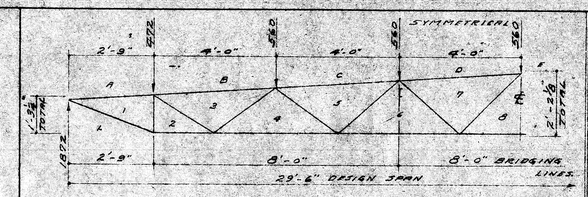
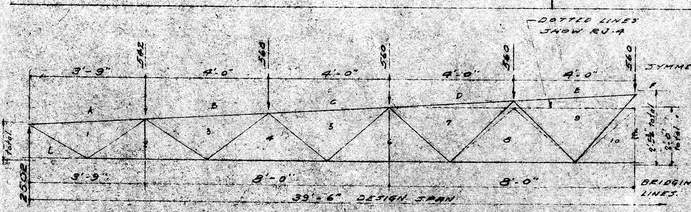
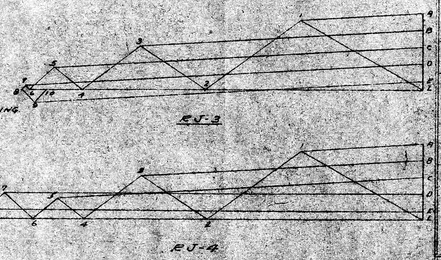
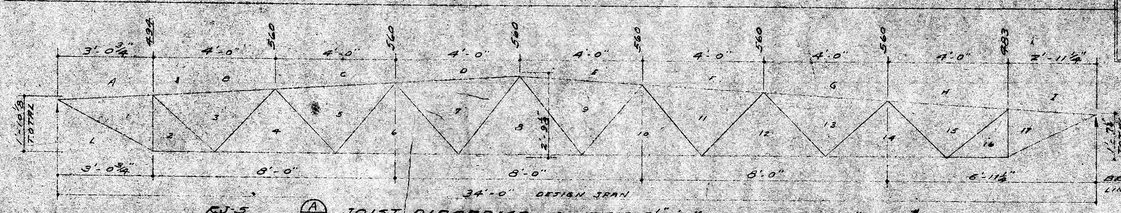
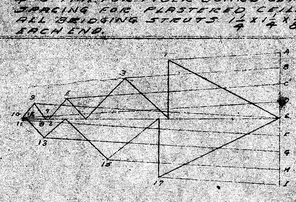


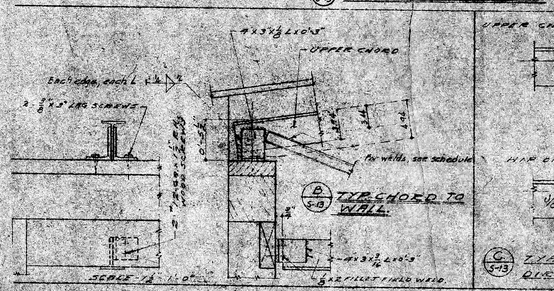



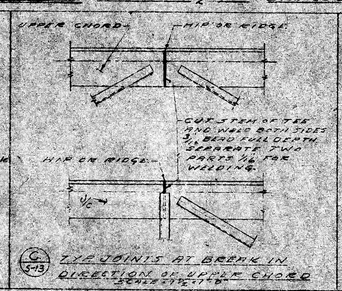



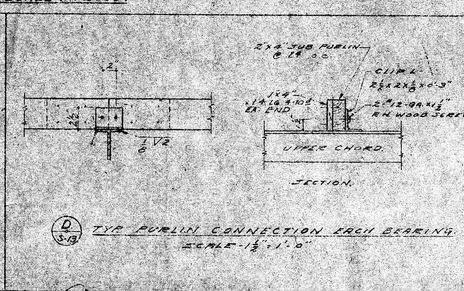



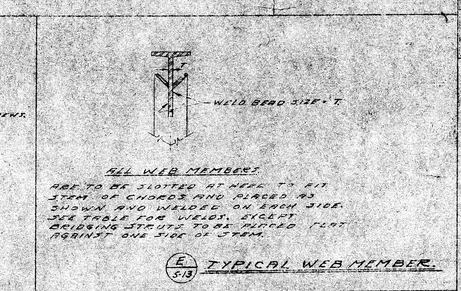



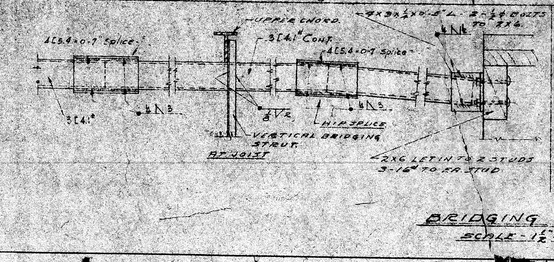



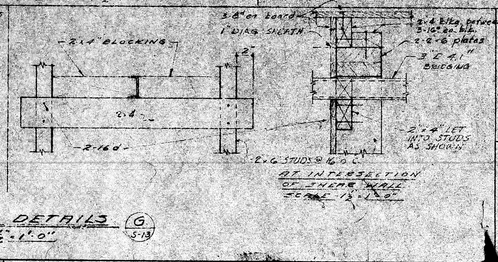




RJ-1

| NUMBER | STRESS | SIZE | P/A | L | L/R | WELD EA. END |
|---|---|---|---|---|---|---|
| U.C | 7900 C | T2 | 14100 | 48 | 75 | |
| L.C | 8100 T | T1 | 13700 | | | |
| L.1 | 4500 T | 1¼x1¼x⅜ L | 15000 | | | 8½ |
| 1-2 | 2100 C | do | 7000 | 15 | 60 | 4 |
| 2-3 | 1990 T | do | 6330 | | | 4 |
| 3-4 | 1750 C | do | 5830 | 30 | 120 | 3½ |
| 4-5 | 600 T | 1x1x⅛ | 2610 | | | 3 |
| 5-6 | 500 C | 1¼x1¼x⅜ | 1670 | 32 | 128 | 3 |
| 6-7 | 350 C | do | 1170 | 32 | 128 | 3 |
| 7-8 | 300 T | 1x1x⅛ | 1310 | | | 3 |

RJ-2

| | | | | | | |
|---|---|---|---|---|---|---|
| U.C | 9100 C | T3 | 11300 | 48 | 62 | |
| L.C | 9450 T | T4 | 14750 | | | |
| L.1 | 4500 T | 1¼x1¼x⅜ | 15000 | | | 8½ |
| 1-2 | 2100 C | do | 7000 | 15 | 60 | 4 |
| 2-3 | 1900 T | do | 6330 | | | 4 |
| 3-4 | 1750 C | do | 5830 | 30 | 120 | 3½ |
| 4-5 | 600 T | 1x1x⅛ | 2610 | | | 3 |
| 5-6 | 250 T | do | 1080 | | | 3 |
| 6-7 | 1100 C | 1¼x1¼x⅛ | 3670 | 31 | 124 | 3 |
| 7-8 | 450 T | 1x1x⅛ | 1960 | | | 3 |
| 8-9 | 450 C | 1¼x1¼x⅛ | 1500 | 31 | 124 | 3 |

RJ-3

| | | | | | | |
|---|---|---|---|---|---|---|
| U.C | 12900 C | T5 | 12760 | 48 | 60 | |
| L.C | 13000 T | T6 | 19340 | | | |
| L.1 | 4500 T | 1¾x1¾x5/16 | 11460 | | | 11 |
| 1-2 | 3900 C | 1¼x1¼x5/16 | 9080 | 27 | 112 | 6 |
| 2-3 | 2550 T | 1¼x1¼x⅛ | 6350 | | | 4½ |
| 3-4 | 2300 C | 1¼x1¼x⅛ | 7660 | 30 | 120 | 4½ |
| 4-5 | 1150 T | 1¼x1¼x⅛ | 3830 | | | 3 |
| 5-6 | 1050 C | do | 3500 | 33 | 132 | 3 |
| 6-7 | 200 T | do | 670 | | | 3 |
| 7-8 | 200 C | do | 670 | 35 | 140 | 3 |
| 8-9 | 600 C | do | 2000 | 35 | 140 | 3 |
| 9-10 | 350 T | do | 1830 | | | 3 |

RJ-4

| NUMBER | STRESS | SIZE | P/A | L | L/R |
|---|---|---|---|---|---|
| U.C | 14840 C | T5 | 14700 | 48 | 60 |
| L.C | 15140 T | T6 | 15670 | | |
| L.1 | 4500 T | 1¼x1¼x3/16 | 11460 | | |
| 1-2 | 3900 C | 1¼x1¼x5/16 | 9080 | 27 | 112 |
| 2-3 | 2550 T | 1¼x1¼x⅛ | 6350 | | |
| 3-4 | 2300 C | 1¼x1¼x⅛ | 7660 | 30 | 120 |
| 4-5 | 1150 T | 1¼x1¼x⅛ | 3830 | | |
| 5-6 | 1050 C | do | 3500 | 33 | 132 |
| 6-7 | 1260 T | do | 4200 | | |
| 7-8 | 1260 C | do | 4200 | 33 | 132 |
| 8-9 | 400 T | do | 1330 | | |
| 9-10 | 400 C | do | 1330 | 33 | |

RJ-5

| | | | | | | |
|---|---|---|---|---|---|---|
| U.C | 9400 C | T3 | 10300 | 48 | 62 | |
| L.C | 9400 T | T4 | 13700 | | | |
| L.1 | 4100 T | 1¼x1¼x⅜ | 13670 | | | 7 |
| 1-2 | 1950 C | do | 6500 | 22 | 88 | 3½ |
| 2-3 | 1900 T | do | 6330 | | | 3 |
| 3-4 | 1900 C | 1¼x1¼x⅛ | 4270 | 35 | 117 | 3½ |
| 4-5 | 900 T | 1¼x1¼x⅛ | 3000 | | | 3 |
| 5-6 | 900 C | 1¼x1¼x⅛ | 2300 | 31 | 123 | 3 |
| 6-7 | 100 T | 1¼x1¼x⅛ | 330 | | | 3 |
| 7-8 | 100 C | 1¼x1¼x⅛ | 280 | 30 | 130 | 3 |
| 8-9 | 600 T | do | 1670 | | | 3 |
| 9-10 | 600 C | do | 1600 | 37 | 124 | 3 |
| 10-11 | 100 C | do | 280 | 37 | 124 | 3 |
| 11-12 | 100 T | 1¼x1¼x⅛ | 330 | | | 3 |
| 12-13 | 900 C | do | 3000 | 37 | 148 | 3 |
| 13-14 | 900 T | do | 3000 | | | 3 |
| 14-15 | 1950 C | 1¼x1¼x⅛ | 5420 | 34 | 110 | 3 |
| 15-16 | 2100 T | 1¼x1¼x⅛ | 7000 | | | 3 |
| 16-17 | 1900 C | do | 6330 | 19 | 76 | 3 |
| 17-L | 4350 T | do | 14500 | | | 3 |

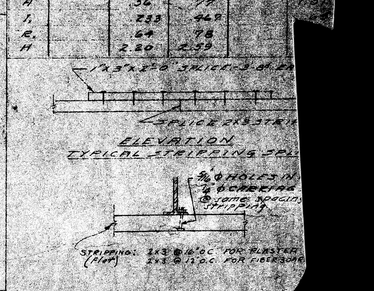
NOTES -
TOTAL LOAD USED IN DESIGN 35#/SQ.FT. SPACING 4'-0" MAX. FOR FIBER BOARD CEILINGS. 3'-6" MAX. SPACING FOR PLASTERED CEILINGS.
ALL BRIDGING STRUTS 1¼x1¼x⅜ L 2 1/8" Ø WELDS AT EACH END.

GROSS SECTIONS

| | RJ-1 | RJ-2 | RJ-3 | RJ-4 | RJ-5 |
|---|---|---|---|---|---|
| H | 2.44 | 3.44 | 3.94 | 2.84 | 3.14 |
| W | 1.84 | 1.84 | 2.28 | 1.84 | 2.42 |
| T | .114 | .113 | .193 | .113 | .193 |
| X | .69 | 1.02 | 1.46 | 1.02 | 1.46 |
| Y | 1.80 | 2.44 | 2.78 | 2.13 | 2.57 |
| A | .159 | .210 | .356 | .210 | .356 |
| I | .35 | .89 | 1.48 | .58 | 1.18 |
| R | .177 | 1.13 | 1.27 | .92 | 1.08 |

NET SECTIONS

| | | | | | |
|---|---|---|---|---|---|
| X | | .68 | .68 | | |
| Y | | 1.66 | .95 | | |
| A | | .36 | .77 | | |
| I | | .233 | .849 | | |
| R | | .64 | .78 | | |
| H | | 2.20 | 2.59 | | |

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Lawrence Nowell

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