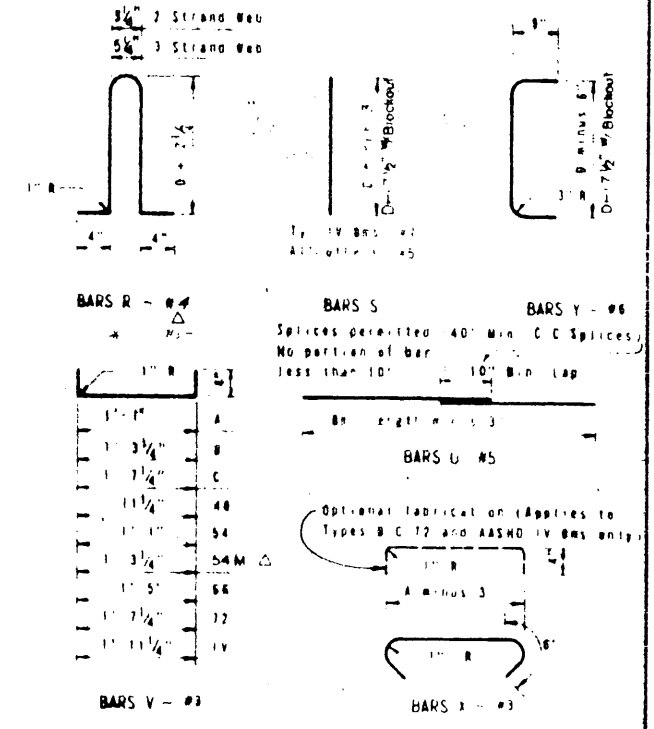


| ADDITIONAL BARS R | | | | | | | |
|--------------------------|-------|----|----|--------|------|---|---|
| BRIDGE | SPAN | M | N | BRIDGE | SPAN | M | N |
| VERDE VALLEY LANE | 1 & 3 | 14 | 40 | | | | |
| VERDE VALLEY LANE | 2 | 12 | 33 | | | | |
| BELTLINE ROAD | 1 | 21 | 64 | | | | |
| ARAPAHO ROAD (BMS 1-4) | 1 | 14 | 28 | | | | |
| ARAPAHO ROAD (BMS 5-7) | 1 | 10 | 31 | | | | |
| ARAPAHO ROAD (BMS 8-12) | 1 | 11 | 33 | | | | |
| ARAPAHO ROAD (BMS 14-16) | 1 | 12 | 35 | | | | |
| ARAPAHO ROAD (BMS 1-16) | 2 | 9 | 27 | | | | |

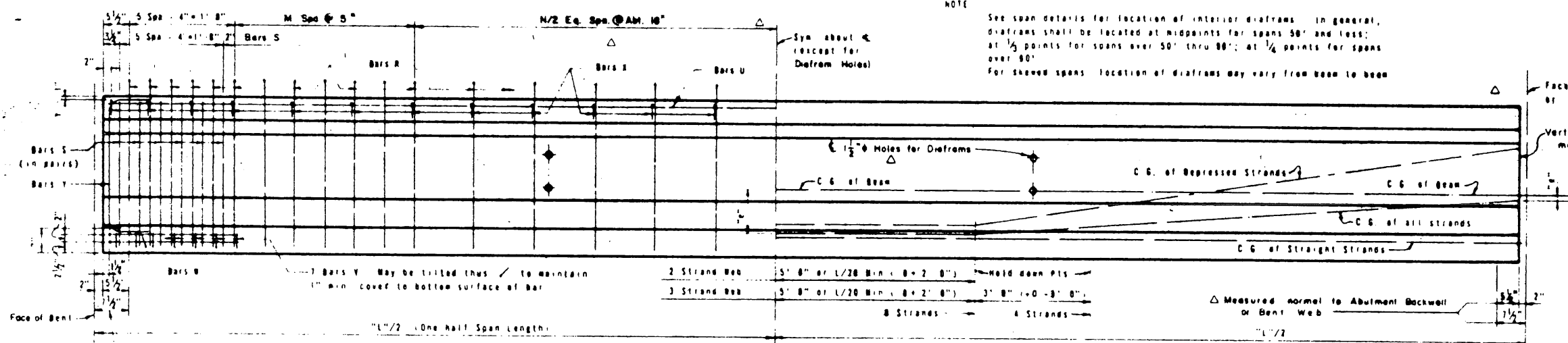
NOTE
It is permissible for bars or strands to come in contact with materials used in forming anchor and diaphragm holes.



NOTE
Reinforcing patterns shown above are to be used as guides in determining the reinforcement for the actual beam type and skew angle used. In general, the distances between consecutive Bars R and S shall be 2". This spacing may be varied in order to avoid diaphragm holes; however, a minimum cross sectional area equivalent to that of Bars R and S in square beam and shall be provided.

DETAILS OF SKEWED BEAM ENDS

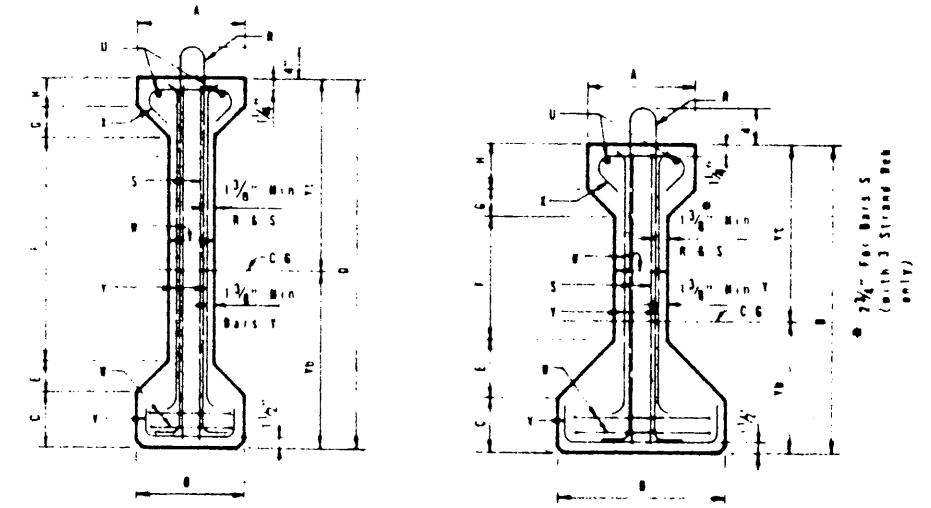
NOTE
See span details for location of interior diaphragms. In general, diaphragms shall be located at midpoints for spans 50' and less; at 1/3 points for spans over 50' thru 80'; at 1/4 points for spans over 80'. For skewed spans, location of diaphragms may vary from beam to beam.



NOTE: Width tolerance for Bars Y = ± 1/4"

NOTE: All reinforcing bars for beams shall be ASTM Grade 60 steel.

GENERAL NOTES
Designed in accordance with current AASHTO Specifications.
All concrete shall be Class N.
Bottom corners of all beam flanges and outside corners of exterior beam ends shall be chamfered 3/4" or rounded to a 3/4" radius.
The use of diaphragm holes for lifting purposes will not be permitted.



| BEAM DIMENSIONS AND SECTION PROPERTIES | | | | | | | | | | | | | | | | |
|--|------|------|------|------|-------|--------|-------|-------|---|---|-------|-------|-------|----------------------|-------------------|-----------|
| BEAM TYPE | A IN | B IN | C IN | D IN | E IN | F IN | G IN | H IN | Δ | Δ | W IN | Y1 IN | Y2 IN | AREA IN ² | I IN ⁴ | WT PLF LB |
| A | 12 | 16 | 5 | 28 | 5 | 11 | 3 | 4 | | | 6 | 15.39 | 12.61 | 275.4 | 22.650 | 287 |
| B | 12 | 18 | 6 | 34 | 5 1/2 | 14 | 2 1/2 | 5 1/2 | | | 6 1/2 | 19.07 | 14.93 | 360.3 | 43.177 | 375 |
| C | 14 | 22 | 7 | 40 | 7 1/2 | 16 | 3 1/2 | 6 | | | 7 | 22.91 | 17.09 | 494.9 | 82.602 | 516 |
| 48 | 14 | 14 | 7 | 48 | 4 | 29 1/2 | 4 | 3 1/2 | | | 6 | 25.13 | 22.87 | 403.4 | 101.950 | 420 |
| 54 | 16 | 16 | 8 | 54 | 5 | 32 | 5 | 4 | | | 6 | 28.47 | 25.53 | 493.4 | 164.022 | 514 |
| 54M | 18 | 18 | 8 | 54 | 5 | 32 | 5 | 4 | | | 8 | 28.20 | 25.79 | 601.4 | 190.522 | 626 |
| 66 | 20 | 20 | 10 | 66 | 6 1/2 | 38 | 6 1/2 | 5 | | | 7 | 34.93 | 31.07 | 740.9 | 374.686 | 772 |
| 72 | 22 | 22 | 11 | 72 | 7 1/2 | 40 1/2 | 7 1/2 | 5 1/2 | | | 7 | 38.27 | 33.73 | 863.4 | 532.060 | 899 |
| IV | 20 | 26 | 8 | 54 | 9 | 23 | 6 | 8 | | | 8 | 29.25 | 24.75 | 788.4 | 260.403 | 821 |

For Diaphragm Hole Locations, see Standard Drawing No 26

7 TYPES 48, 54, 54M, 66, & 72 BEAMS
8 TYPES A, B, C, & AASHTO IV BMS.

REPRODUCED FROM
TEXAS STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION
STANDARD DRAWING Gp A
Rev 4-82

| | | |
|----------------------------|--------------|--------------|
| General Revisions | TCB | 10-83 |
| NO. | REVISION | BY DATE |
| TEXAS TURNPIKE AUTHORITY | | |
| DALLAS NORTH TOLLWAY | | |
| PRESTRESSED CONCRETE BEAMS | | |
| BEAM DETAILS | | |
| HNTB | | SECTION VI |
| DRAWN TMD | DATE 4-82 | DESIGNED TMD |
| CHECKED GDM | DATE 3-16-83 | DATE 4-82 |
| STANDARD DRAWING NO 23 | | |
| CONTRACT NO. DNT-114 | | |