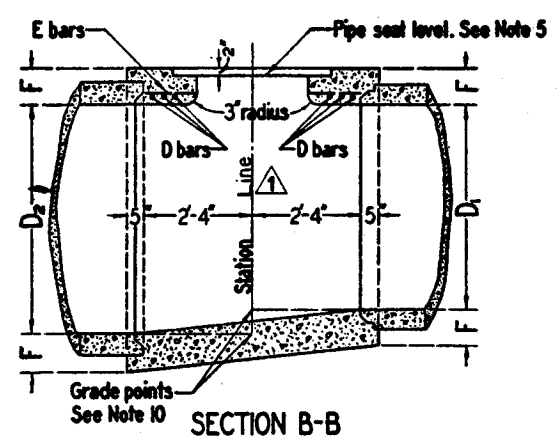


SECTION A-A-A'



SECTION B-B

| D ₂ | F |
|----------------|---------|
| 36" | 6 1/2" |
| 39" | 7" |
| 42" | 7 1/2" |
| 45" | 7 3/4" |
| 48" | 8" |
| 51" | 8 1/2" |
| 54" | 9" |
| 57" | 9 1/2" |
| 60" | 9 3/4" |
| 63" | 10" |
| 66" | 10 1/2" |
| 69" | 10 3/4" |
| 72" | 11" |
| 78" | 11 1/2" |
| 84" | 12 1/2" |
| 90" | 13 1/2" |
| 96" | 14" |

APPROVED *Robert T. Wabbe* DATE *7/14/78*
 PUBLIC WORKS DIRECTOR - R.C.E. 18793

| | | | |
|---|------------------------------------|---------------|----------------|
| 1 | Note Revision | <i>Wabbe</i> | <i>8-25-80</i> |
| 2 | Defined Approval | <i>B.R.R.</i> | <i>4-7-82</i> |
| 3 | Changed Riverside Fdy. to Alhambra | <i>Wabbe</i> | <i>7-7-82</i> |

CITY OF RIVERSIDE
 PUBLIC WORKS DEPT. - ENGINEERING DIV.

MANHOLE AX

STANDARD DRAWING NO. **430**
 Sheet 1 of 2

| MARK | REVISIONS | APPR. | DATE |
|------|-----------|-------|------|
|------|-----------|-------|------|

NOTES

- 1 - TABLE of values for F are on this standard Drawing, Sheet 1.
- 2 - CENTER OF MANHOLE SHAFT shall be located over center line of storm drain when diameter D_1 is 48" or less, in which case place E bars symmetrically around shaft at 45° with center line.
- 3 - LENGTH L shall be 5'-6" unless shown otherwise on improvement plan. At option of Contractor L may be increased or location of manhole shifted to meet pipe ends.
- 4 - DETAIL M: When depth of manhole from street grade to top of box is less than 2'-10 1/2" for paved streets or 3'-6" for unpaved streets, construct monolithic shaft as per Detail M. The Contractor shall have the option of constructing shaft as per Detail M for any depth of manhole. When diameter D_1 is 48" or less, center of shaft shall be located as per Note 2.
- 5 - THICKNESS OF DECK shall vary when necessary to provide level pipe seat, but shall not be less than tabular values for F shown on this plan.
- 6 - REINFORCING STEEL shall be round, deformed bars, 1 1/2" clear from face of concrete unless shown otherwise. Sizes and lengths are shown in table below.
- 7 - CONCRETE shall be in accordance with the table of Concrete Specifications.
- 8 - STEPS shall be 3/4" round, galvanized steel and anchored not less than 6 inches in the walls of structure. Unless otherwise shown the spacing shall be 1'-5" on centers. The lowest step shall be not more than 2'-6" above the invert. (Alhambra Fdy. A-3320 or equal approved by city.) ⚠ ⚠
- 9 - RINGS, REDUCER, AND PIPE for access shaft shall be seated in cement mortar and neatly pointed or wiped inside the shaft.
- 10 - STATIONS of manholes shown on improvement plan apply at center of shaft. Elevations shown at stations refer to prolonged invert grade lines.
- 11 - FLOOR of manhole shall be steel-troweled to springing line.
- 12 - BODY of manhole shall be poured in one continuous operation, except that the Contractor shall have the option of placing at the springing line a construction joint with a longitudinal keyway.

| Diam. D_2 | D bars | | | | E bars | | |
|-------------|-----------|-------|--------|-----------|--------|--------|--|
| | No. Reqd. | Size | Length | No. Reqd. | Size | Length | |
| 36" | 6 | No. 4 | 3'-10" | 4 | No. 4 | 2'-9" | |
| 39" | 6 | " | 4'-2" | 4 | " | 2'-11" | |
| 42" | 6 | NO. 5 | 4'-6" | 4 | " | 3'-2" | |
| 45" | 6 | " | 4'-10" | 4 | " | 3'-5" | |
| 48" | 6 | " | 5'-1" | 4 | " | 3'-7" | |
| 51" | 6 | " | 5'-5" | 6 | " | 4'-9" | |
| 54" | 6 | " | 5'-9" | 6 | " | 5'-1" | |
| 57" | 6 | " | 6'-1" | 6 | " | 5'-6" | |
| 60" | 6 | " | 6'-4" | 6 | " | 5'-11" | |
| 63" | 6 | " | 6'-8" | 6 | " | 6'-3" | |
| 66" | 6 | " | 7'-0" | 8 | " | 6'-8" | |
| 69" | 6 | " | 7'-4" | 8 | " | 6'-8" | |
| 72" | 6 | " | 7'-7" | 8 | " | 6'-8" | |
| 76" | 6 | " | 8'-3" | 8 | " | 6'-8" | |
| 84" | 6 | " | 8'-10" | 10 | " | 6'-8" | |
| 90" | 6 | NO. 6 | 9'-6" | 10 | " | 6'-8" | |
| 96" | 6 | " | 10'-1" | 10 | " | 6'-8" | |

| F | CONC. CLASS |
|---------------|----------------|
| 6 1/2 - 7 1/2 | 560 - C - 3250 |
| 7 3/4 - 9 1/2 | 560 - C - 3250 |
| 10 - 14 | 560 - B - 3250 |

D bars shall be spaced 3" o.c. E bars shall be spaced 4" o.c. Tie bars shall be No. 3 spaced 18" o.c. or closer.

When L greater than 5'-6" is specified on improvement plan, continue D bars at 6" o.c.

Lengths shown in table are for longest bars. Where shorter bars are required, bend or cut to meet field requirements.

- 13 - COVER shall have letter D in center.

(Adapted from City of Los Angeles std. plan no. B-1700)

| | | | |
|----------|--------------------------------------|-------|---------|
| APPROVED | <i>[Signature]</i> | DATE | 7/14/78 |
| | PUBLIC WORKS DIRECTOR - R.C.E. 18793 | | |
| 1 | defined approval | DLR | 4-7-82 |
| 2 | Changed Riverside Fdy to Alhambra | WJG | 7-7-82 |
| MARK | REVISIONS | APPR. | DATE |

CITY OF RIVERSIDE
 PUBLIC WORKS DEPT. - ENGINEERING DIV.

MANHOLE AX

 STANDARD DRAWING NO. **430**
 Sheet 2 of 2