



SECTION

GENERAL NOTES:

1. MANHOLE TYPE "A2" SHALL BE USED FOR LINES 21" AND SMALLER, WHEN SPECIAL SOIL CONDITIONS REQUIRE FOUNDATION TO BE STABILIZED.
2. PRE-CAST MANHOLE SECTIONS SHALL BE OF REINFORCED CONCRETE CONFORMING TO ASTM C-478 AND SHALL MEET HS-20 LOADING. PROVIDE REINFORCEMENT WITHIN 3" @ OPENINGS OR KNOCKOUTS, OPENINGS (UP TO 8") MADE IN FIELD SHALL BE CORE DRILLED.
3. CEMENT SHALL BE TYPE I-II, PER ASTM C-150, AND MUST CONTAIN A MINIMUM OF 4% FLY ASH OF THE TOTAL MANHOLE WEIGHT.
4. THE BASE SHALL BE CAST IN PLACE CONCRETE (MINIMUM 28 DAY COMPRESSIVE STRENGTH 4000 PSI.) POURED ON UNDISTURBED OR THOROUGHLY COMPACTED SUB-BASE.
5. MANUFACTURER TO PROVIDE LIFTERS OF ADEQUATE SIZE AS NEEDED.
6. THE SUBGRADE UNDER THE BASE SHALL BE COMPACTED TO 95% DENSITY IN ACCORDANCE WITH ASTM D-1557.
7. MANHOLES BELOW GROUNDWATER TO BE EXTERNALLY AND INTERNALLY COATED WITH BITUMINOUS COATING.
8. DEPTHS OVER 14' SHALL HAVE STRENGTHENED WALLS (REFER TO CONTRACT DRAWINGS OR SPECIFICATIONS).

CONSTRUCTION KEY NOTES:

- A. MANHOLE RING AND COVER (SEE DETAILS 377 & 378). SET FRAME AND COVER FLUSH WITH ROADWAY SURFACE OR FINISHED GRADE (SEE DETAIL 185).
- B. ALL JOINTS TO BE TONGUE, GROOVE AND SEALED WITH RAM-NEK OR APPROVED EQUAL.
- C. ON MAINLINE, PIPE IS TO BE LAID THRU AND UPPER HALF CUT OUT.
- D. No. 4 AT 12" ON CENTER CIRCUMFERENTIAL BAR, LAP END 12".
- E. No. 4 AT 12" ON CENTER EACH WAY, TYPICAL.
- F. No. 4 AT 2" ON CENTER VERTICAL.
- G. No. 4 AT 12" ON CENTER.
- H. 1" TO 2" GROUT SPACING.

STANDARD
DETAIL

DATE: 11/1992
REV: 6/22/2009

MANHOLE TYPE "A2"

N.T.S.



DETAIL No.
370-3