REINFORCING WHERE REQUIRED ACCORDING TO ASTM C 478.

MANUFACTURE MANHOLE RISERS, BASES, CONES, AND GRADE RINGS, INCLUDING STEEL CAST FORMED INVERT TO BE POURED IN PLANT, WHEN SPECIFIED.

PLACE STAIR REQUIREMENTS NOT TO EXCEED 2 INCH BELOW FINISH GRADE AND PLACE ADDITIONAL STEPS ACCORDING TO STD DWG GF 6. MANUFACTURER WILL ADJUST GRADE RINGS AND RISER HEIGHTS TO ACCOMMODATE UNIFORM SPACING OF STEPS PER STD DWG GF 6.

USE TYPE II CEMENT (LOW ALKALI).

PROVIDE PRECAST CONCRETE STANDARD MANHOLE SECTIONS THAT CONFORM TO STRUCTURAL CONCRETE:  \( f'_c = 4,000 \text{ psi}; \)  \( f_y = 60,000 \text{ psi}; \)  \( n = 8 \)

PROVIDE PRECAST CONCRETE STANDARD MANHOLE SECTIONS THAT CONFORM TO STRUCTURAL STEEL:  \( F_y = 36,000 \text{ psi} \)

NOTES

1. PROVIDE PRECAST CONCRETE STANDARD MANHOLE SECTIONS THAT CONFORM TO AASHTO M 198 (ASTM C 426) EXCEPT THAT THE MINIMUM WALL THICKNESS WILL BE INCREASED TO 3 INCHES.

2. USE DEFORMED-CARBON REINFORCING STEEL BARS CONFORMING TO M 31, GRADE 60 OR WELDED WIRE REINFORCING CONFORMING TO AASHTO M 221.

3. CONSTRUCT RISERS IS NOT REQUIRED FOR PRECAST MANHOLES.

4. USE CLASS AA (A) CONCRETE.

5. USE DEFORMED-CARBON REINFORCING STEEL BARS CONFORMING TO M 31, GRADE 60 OR WELDED WIRE REINFORCING CONFORMING TO AASHTO M 221.

6. PROVIDE 2 INCH CONCRETE COVER TO REINFORCING STEEL.

7. PLACE STAIR REQUIREMENTS NOT TO EXCEED 2 INCH BELOW FINISH GRADE AND PLACE ADDITIONAL STEPS ACCORDING TO STD DWG GF 6. MANUFACTURER WILL ADJUST GRADE RINGS AND RISER HEIGHTS TO ACCOMMODATE UNIFORM SPACING OF STEPS PER STD DWG GF 6.

8. USE TYPE II CEMENT (LOW ALKALI).

9. PROVIDE HYDRAULIC CEMENT MORTAR ACCORDING TO ASTM C 1329.

10. REPLACE MANHOLE SECTIONS, CONES AND GRADE RINGS DAMAGED BY CONSTRUCTION TO THE SATISFACTION OF THE ENGINEER, AT NO COST TO THE DEPARTMENT.

11. REMOVE DEBRIS FROM MANHOLE AND PIPE INVERTS.

12. USE STD DWG GF 2 FOR RING AND LID, UNLESS OTHER GF SERIES IS SHOWN ON PLANS.

13. REMOVE DEBRIS FROM MANHOLE AND PIPE INVERTS.

14. PROVIDE HYDRAULIC CEMENT MORTAR ACCORDING TO AASHTO M 198.

15. PROVIDE HYDRAULIC CEMENT MORTAR ACCORDING TO AASHTO M 198.

16. CAST FORMED INVERT 10% RAINED IN PLANT, WHEN SPECIFIED.

17. MANUFACTURE MANHOLE SECTIONS GROUND, BASES, CONES, AND GRADE RINGS, INCLUDING STEEL REINFORCING WHERE REQUIRED ACCORDING TO ASTM C 478.

18. USE 3, 4, 6, OR 8 INCH GRADE RINGS FOR RISERS.

19. USE DEFORMED-CARBON REINFORCING STEEL BARS CONFORMING TO M 31, GRADE 60 OR WELDED WIRE REINFORCING CONFORMING TO AASHTO M 221.

20. PLACE STAIR REQUIREMENTS NOT TO EXCEED 2 INCH BELOW FINISH GRADE AND PLACE ADDITIONAL STEPS ACCORDING TO STD DWG GF 6. MANUFACTURER WILL ADJUST GRADE RINGS AND RISER HEIGHTS TO ACCOMMODATE UNIFORM SPACING OF STEPS PER STD DWG GF 6.