MANHOLE NOTES

GENERAL NOTES:

1. The following notes shall apply unless noted otherwise on the plans or specifications. In the case of conflict with the plans or specifications, the more restrictive requirements shall apply.

REFERENCE SPECIFICATIONS:

1. Design Criteria: AASHTO Manhole Design Specifications

2. Manufacture: ASTM C478

MATERIALS:

- 1. Aggregate conforms to ASTM C33.
- 2. Portland cement conforms to ASTM C150.
- 3. Fly Ash conforms to ASTM C618.
- 4. All bar reinforcing steel conforms to ASTM A615 Grade 60.
- 5. Welded Wire Fabric conforms to ASTM A1064, 65 KSI.
- 6. Admixtures conform to ASTM C494.
- 7. Concrete minimum compressive strength (at 28 days) 4000 PSI, unless greater strength is required.

DELIVERY AND INSTALLATION:

- 1. The contractor provides rigging and off loading at the job site.
- 2. The contractor provides all weld plates and accessories which are not cast directly into the concrete.
- 3. Follow any installation procedures described in the project documents. More restrictive requirements outlined in the project documents or a corresponding geotechincal report take precedence. Refer to ASTM C1821 for installation methods.
- 4. The subgrade preparation and backfill sections of these notes provide basic installation criteria.

SUBGRADE PREPARATION:

- 1. All loose and disturbed soil shall be removed prior to placing manhole sections.
- 2. The manhole sections should be underlain by at least 4 inches of compacted gravel over compacted structural fill or undisturbed native soils.

MANHOLE JOINTS:

- 1. Joints using a mastic sealant use a material in compliance with ASTM C990.
- 2. Rubber gasketed joints conform to ASTM C443.

BACKFILL:

- 1. Backfill should consist of well graded soil free of organics and deleterious material.
- 2. Backfill should be placed in 12 inch lifts and compacted to a minimum of 90% modified proctor density.



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