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SPECIFICATION FOR CABLE TRENCH

1. GENERAL

1-A. Furnish a precast Fibercrete® (G.F.R.C.) cable trench system as manufactured by Concast Incorporated, Zumbrota, Minnesota. A trench system installed in the earth with covers extending above the surrounding crushed rock surface. Trenches with covers shall be constructed at the locations shown on the drawings. With all necessary fittings, offsets, and terminations.

1-B. It shall be composed of cement mortar reinforced by alkali resistant glass fiber, and deformed high tensile welded wire, manufactured by means of the Concast spray lay up method incorporating a minimum of 4 percent volume A.R. glass fibers.

1-C. The trench system should consist of precast glass fiber reinforced concrete (G.F.R.C.), one piece channel sections, and removable cover sections assembled to form a completely enclosed trench, with a 4" sand bedding on bottom.

1-E. The trench should be 14 or 18" deep overall (including cover), with an interior clear cross sectional distance of 10, 20, 24, 30, 40, or 50" by 12 or 16" deep, depending on cable space required. It's design shall be such that the channel is self supporting and can be set above grade if required.

1-F. The one piece channel designed trench system shall be furnished in standard 4 or 8' lengths. Special lengths shall be furnished where required according to the layout design. Each channel section shall mate with an interlocking male-female joint.

1-G. A universal channel shall be provided for ells, tees, crosses, and reducers.

1-H. The precast trench covers shall be furnished in sections of lightweight construction, sized to permit removal by a single person, and each shall have slots for lifting tools. Covers shall be of Fibercrete®, an alkali resistant glass fiber and deformed prefabricated high tensile welded wire system, as specified in Concast Fibercrete trench system components. All covers and special length covers shall be packaged for easy field identification.

1-I. The trench system shall be designed to support at least 200 psf live load. Except where vehicular or heavy traffic ratings are required.

2. ROAD CROSSING TRENCH

2-A. Heavy traffic rated trench shall meet the ASHTO H-20 heavy equipment requirements 32,000 lb. Axle load. Light traffic rated trench shall meet the ASHTO H-10 light equipment requirements 16,000 lb. Axle load.

2-B. Precast trench members shall be cast in steel forms using 5000 PSI or greater, compressive strength concrete with Type One Portland Cement.

2-C. Covers for road crossing trench shall be made of either precast steel reinforced concrete or fabricated hot-dipped galvanized steel. They too shall meet either ASHTO H-20 or ASHTO H-10 requirements.

3. DRAWINGS

3-A. Drawings will be provided for engineering approval and field installation. Final drawings will include individual details, the layout, a complete B.O.M, and installation guidelines. Electronic drawings can be available upon request.