MICHIGAN

DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

FOR

**UNDERGROUND PROPANE TANK**

UTL:CJD 1 of 2 APPR:KSH:NJM:07-30-21

**a. Description.** This work consists of arranging for and paying fees for the underground propane tank system required for this project, including furnishing and installing an underground propane tank and all necessary piping and appurtenances to provide propane to the building and all excavation, bedding, backfill, compaction, and dewatering as necessary to complete the item. Ensure the entire installation is in accordance with *National Fire Protection Association* (*NFPA) 58 Liquefied Petroleum Gas Code*, including, but not limited to, protection of the container and piping against physical damage, location of the regulator vent, container coating against corrosion, cathodic protection, backfill, regulator installation, piping connections, valves, remote tank monitoring system and leak and pressure testing.

**b. Materials.** Furnish a 1,000 gallon water capacity container in compliance with *section 5 of* *NFPA 58.* Furnish documentation of required cathodic protection. Furnish gauges, regulators, and all other equipment in accordance with *NFPA 58.*

Anode test wires must terminate in the manway and be labeled.

Install two concrete deadman anchors on either side of the tank. Secure the tank to the deadman anchors with straps, isolated from the tank, with a smooth material that will not rub or scrape the tank’s coating. Ensure the deadman anchors are of adequate size to restrain an empty tank and appurtenances in a fully-submerged condition. The propane tank manufacturer is responsible for determining the appropriate size deadman and providing buoyancy calculations to the Engineer.

Furnish HDPE piping that is compatible with the liquid service. Install tracer wire along the underground piping. Ensure tracer wire, and the method of installation is approved by the Engineer.

Install a remote tank monitoring system for the propane system. Contact Ferrellgas at 810-667-7550 to provide the tank monitoring system and coordinate the installation.

Furnish granular Class IIIA bedding material in accordance with section 902 of the Standard Specifications for Construction.

**c. Construction.** Construct in accordance with applicable sections of the Standard Specifications for Construction, EGLE rules and regulations, *NFPA 58*, and standard industry practices. Install piping underground to the building, bring pipe above grade with an anodeless riser along the wall of the building and penetrate the building wall no higher than 18 inches above finished grade. Fasten the aboveground piping to the building in such a manner as to be vandal resistant. Grade away from the manway to prevent ponding above the tank.

Minimize disturbance to the existing ground and avoid damage to existing vegetation.

Immediately after award of the Contract, make application to Ferrellgas in the name of the MDOT. Submit all application forms for signature of the Engineer. Additional payment will not be granted due to delays in completing the tank and gas feed within the required Construction schedule.

Submit PDF shop drawings for all equipment associated with the propane tank system. Ensure shop drawings are reviewed and approved prior to beginning work on the propane tank system.

**d. Measurement and Payment.** The completed work, as described, will be measured as a lump sum and paid for at the contact price using the following pay item:

**Pay Item Pay Unit**

Underground Propane Tank System Lump Sum