*INCLUDE THE FOLLOWING FOR LOCATING UTILITIES*

Add the following after Section 637:

$$645.00A

Section 645.—LOCATING UTILITIES

Revised 10 July 2014

**Description**

**645.01** This work consists of locating and marking existing utilities by excavating test pits to, or using electromagnetic devices, where a physical conflict with proposed construction is suspected and the location is ordered by the CO.

**Material**

**645.02** Materials for restoring the test pit area to its original condition shall be replacement of the materials excavated or their equivalent in newly furnished materials meeting the various applicable sections of this specification.

**Construction Requirements**

**645.03 General.** Notify *(insert name of local locator service)* 48 hours prior to any excavation, at *(insert phone number)* to have the utilities marked in the field. Notify the CO 48 hours prior to any excavation.

Exercise special care and extreme caution in order to protect and avoid damage to any utility company facilities. Existing utilities have been generally located and shown on the plans as they are believed to exist. The Government assumes no responsibility for the accuracy of locations shown on the plans. Locate and ensure the safety of all existing utilities. Repair any damage resulting from Contractor’s operations at no additional expense to the Government.

Locate by test pit any utility that may be in conflict with the proposed work. If a conflict appears to exist, then notify the CO in writing immediately and provide information on the location and elevation of the utility so that the CO can adjust the proposed work.

**645.04 Locating Utility.** Use electromagnetic devices to establish alignment of utilities where applicable. When necessary, thread a metal rod through non-metallic utility pipes to locate them. Where neither method is feasible, locate the utility by perpendicular trench or test pits.

**645.05 Excavation.** Excavate carefully so as not to disturb utility at it's assumed depth. When excavating within roadway pavements where traffic is being maintained, excavate by air-vacuum methods or equivalent, keeping the area of disturbance to a minimum. Uncover the utility sufficiently to make accurate measurements.

**645.06 Record.** Describe the utility found (size, material, function), determine the elevation of the top of utility, and prepare a field sketch of the pit. Indicate the date and the station and offset of the utility, noting whether the baseline or the centerline of proposed facility is being referenced. Submit 1 copy to the CO within 24 hours.

**645.07 Marking.** Mark the utility location by flags or paint. Maintain the markings, including repainting faded or damaged markings as ordered by the CO, for the duration of the project, or until the CO determines that the markings are no longer needed.

**645.08 Restoration.** Backfill with original material, thoroughly compacting the material with a mechanical tamper. Restore aggregate base courses and pavement using equivalent materials and thicknesses. For portland cement concrete pavements, use fast setting concrete. For asphalt concrete pavements, cold patch, resurfacing of pit will be permitted so long as, in the opinion of the CO, it is thoroughly compacted.

**645.09 Acceptance.** Locating utilities will be evaluated under Subsection 106.02.

**Measurement**

**645.10** Measure the Section 645 items listed in the bid schedule according to Subsection 109.02.

**Payment**

**645.11** The accepted quantities will be paid at the contract price per unit of measurement for the Section 645 pay items listed in the bid schedule. Payment will be full compensation for the work prescribed in this Section. See Subsection 109.05.