

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

Specifications for Subsurface Utility Engineering

January, 2022

Purpose of this Contract

The service includes, Subsurface Utility Engineering (SUE) to FHWA/ASCE specification. But are not limited to, the marking of all underground utilities for ODOT projects. Also providing ODOT CADD files as stated in the **January 2022 Survey Specification** and/or **Survey Special Provisions**, meeting the ASCE Standard Guideline for Collection and Depiction of Existing Subsurface Utility Data.

Department Expectations

ODOT Survey Division, expects a deliverable that is graphically consistent, complete, and accurate. This document is assembled for the express purpose of assisting in accomplishing these goals. Following these guidelines helps ensure that the SUE provider is delivering a standard product. Disclaimer: Nothing in this document is meant to take away from or diminish the duties of consultants to provide ODOT with the highest quality required products.

Project control, XY&Z will be provided to the consultant and is to be used for the project mapping.

Centerline alignment will be furnished to the consultant to be used for station and offset callouts on the reports.

The information contained herein is not meant to be inclusive of all possible scenarios, nor does it release the SUE provider from the contract obligations. This document is intended to provide a guideline for SUE deliverables. Please use your best judgement in the implementation of this material.

ODOT and the SUE provider should discuss and agree to the best way for the provider to submit the deliverables to the point of contact at the Survey Division. Note: Ensure the project stationing and the baseline is the same as used on the Survey, ROW, and Design plans. Ensure to include stationing equations on the affected pages, if necessary. When overhead facilities are requested, poles shall be surveyed with wires depicted between poles and appurtenances for each pole delineated. Overhead facilities do not receive a Utility Quality Level. Please differentiate between electric distribution, electric transmission, and telecommunication lines. Facilities such as storm drain lines or Intelligent Transportation System (ITS) could be included as part of the SUE per request of the district.

Electronic Information Delivery

All SUE information shall be contained within an ODOT, Survey Division Standard ORD file. The cover Utility Summary Sheet shall contain, Date of work, Stamped, signed, and dated by P.E. or the Surveyor of Record. The Summary sheets shall contain a list of company name, and contact information of all utilities within the project limits. A Survey Division SD #7 form, shall be required, unless the consultant's data sheets contain all the information normally shown on said report. All reports are to be submitted in PDF format. All data shall be upload to ODOT, Survey Division Survey-in ftp site.

POT Hole Deliverables

When the test hole deliverable is submitted, it should be in the following order.

1. Title sheet
2. Test hole data form (printed, stamped, dated and signed)
3. ORD DGN file, if requested and PDFs
4. Layout sheet with the test hole location indicated accordingly.

Utility Summary Sheet

Test hole data will be delivered in 11x17 format. Each test hole data form will have the following information:

- Test hole number
- Utility location description
- Date of work completed
- Station/offset
- Northing, easting, ground elevation, top of utility (TOU)
- Utility: type, owner, material, condition, pipe size, etc.
- Utility contact: name, phone, email
- Test hole marker (what was/if used – IE wooden lathe, Steel Post)
- Project control, surface adjustment factor (with county), vertical and horizontal datum used. Geoid, and project control points used for adjustment to the project mapping plane. If requested in the written in the Task Order.
- Location description
- State/district/county/city
- Picture of test hole showing discovered utility

- Picture indicating depth, when possible
- Pavement type/thickness
- Utility cross section
- Plan view with north arrow
- Legend
- Consultant info: name, contact name, phone, address, etc.
- Stamped, signed, and dated by P.E. or the Surveyor of Record
- Project Manager