

When available, electronic data files along with paper sketches and drawings will be furnished by the Department when requested in writing by the Contractor. All electronic data files furnished to the Contractor will be in the format of the Department's current computer hardware and software or a format fully compatible with such hardware and software.

Additional surveying work and supplemental layout work shall be performed by the Contractor as needed to successfully complete the work. The Contractor shall provide and protect temporary construction benchmarks within the construction limits. Temporary construction benchmarks shall be located not farther than 500 feet apart for the total length of the project or as indicated on the plans. Temporary construction benchmarks that are disturbed during construction operations shall be reestablished by the Contractor at no additional cost to the Department. All drawings, field notes, and computations from such survey work performed by the Contractor shall be submitted to the Engineer.

2. **Minimum Plan (M) Projects:**

Survey Stakeout Descriptions:

Unless otherwise stated, the Department will provide required horizontal and vertical control for the proper construction stakeout of the project. The Contractor shall preserve all horizontal and vertical controls furnished by the Department.

The following surveying work will be performed by the Department:

- (1) **Digital Terrain Model (DTM) and Construction Cross-Sections:** "M" projects are based on plan quantities; therefore DTM and construction cross-sections are not required, except for borrow pits.

Should the Engineer determine at any time that an actual measurement is warranted, the Department will make the necessary measurement in the field.

- (2) **Borrow Pits:** All borrow pit DTM's, originals and finals, will be secured by the Department. The Contractor is encouraged to also secure DTM's or cross-sections of borrow areas. A claim of discrepancy in borrow volume will not be considered by the Engineer unless survey data was obtained by the Contractor to substantiate his claim.
- (3) **Horizontal and vertical control for bridges:** Certified plats, field notes, coordinates and computations will be furnished to the Contractor prior to the Contractor beginning work on these structures.
- (4) **Horizontal and Vertical Control for all Box Culverts, all Pipe Culvert Installations (including single and multiple line installations) with a total**