

870 - BENCHMARK MONUMENT

870.1 DESCRIPTION

This work shall be performed in accordance with Section 802 of the Standard Specifications, as amended herein.

At locations shown on the plans, the Contractor shall reestablish and reset the benchmark monument that is disturbed by construction operations under this contract. All land surveying shall be performed by land surveyors registered by the State of Kansas.

870.2 CONSTRUCTION REQUIREMENTS

Prior to construction Johnson County Bench Marks that will be damaged or removed by construction shall be replaced by a benchmark outside of construction area. New benchmarks shall be an aluminum cap (caps will be furnished by the County) set in a rigid concrete structure. A hole shall be drilled into concrete and the cap grouted into place. The preferred locations are traffic signal bases, culvert headwalls and bridge handrails. A standard monument record sheet shall be completed for each permanent benchmark. Elevations shall be determined with a double rod level run using digital level and bar code rods and shall tie into Johnson County vertical control network at each end of the level run. Level runs shall close within 0.1 ft. per 4 miles. Level run data shall be furnished in digital and paper format. Mapping grade state plane coordinates shall also be provided. This effort shall be coordinated with the Johnson County Public Works Department County Surveyor.

870.3 MEASUREMENT AND PAYMENT

The Engineer will measure each benchmark monument.

Payment for "Benchmark Monument" at the contract unit price bid is full compensation for the specified work including furnishing and placing the aluminum cap and all appurtenances in place and accepted.