

PN 623 - 4/15/2005 - Providing Electronic Equipment for Construction Layout

The requirements of Item 623 apply, except as modified below:

623.02 General

If the Contractor elects to perform any portion of the projects construction layout by electronic methods according to Item 623, then provide the Department's Project Engineer with a real time survey grade global positioning satellite (GPS) receiver and data collector. Provide a device that has a radio able to receive real time correctors and has an accuracy of 0.10 of a foot in both horizontal and vertical from true stationing. These requirements will permit the Department to verify the construction layout, perform check sections, and document pay items.

Provide all 3D models, control points, alignments, templates, and all other pertinent design files and information used to construct the project, including, but not limited to: DEM's (digital elevation models), DTM's (digital terrain models), TIN's (triangulated irregular network), DXF's (drawing exchange formats), DWG's (autocad files), DGN's (microstation), PRO's (terramodel)...ect." Provide the computer to run the necessary software.

Provide the technical assistance to the Engineer and train the Engineer on how to use the provided equipment and software. Sixteen hours shall be spent with the authorized manufacture representative, the engineer, and the contractor.

Upon completion of the project, this equipment will remain property of the Contractor.

623.03 Method of Measurement

The Department will measure the number of Providing Electronic Instrumentation by each. The Department will measure the amount of Technical Assistance by the hour.

623.04 Basis of Payment

The Department will pay for the accepted quantities at the contract prices as follows:

Item	Unit	Description
Special	Each	Providing Electronic Instrumentation
Special	Hours	Technical Assistance

Designer Note: The Districts that want this equipment provided to their projects for grade checking and quantity verification should include this note in the contract documents. It is recommended that all large projects include this note. Provide 16 hours of technical assistance in the contract. Normally only one electronic equipment is required. If you have any questions contact Randy Morris at 614-644-6638.