



Completed Machine Control Modeling & Localization Projects Utilizing Topcon®:

- Gibsonville Culvert-Stream Restoration, Letchworth State Park, Castile, NY
- Restaurant Depot, Ridgeland Site, Rochester, NY
- Dairy Queen, Town of Webster, NY
- Advanced Auto Parts, Ontario, NY
- Rochester & Southern Railroad Bypass, Silver Springs, NY
- Magnolia Heights, Town of Perinton, NY
- American Rock Salt, Railway Extension, Mt. Morris, NY

Scope of Work Utilizing Topcon® PS-103 Total Stations and Topcon 3-D Office Systems

1. Build a machine control model to the finished surface of the site for Topcon Machine Control System. Files included in the model will be:
 - A Points File (.pt3) which included PC, PT and Radii.
 - Line work File (.ln3) which includes a 3D line on all site improvements, i.e. top and bottom of curbing, sidewalk, retaining walls, building outline, concrete pads, grade benches, etc.
 - A Surface file (.tn3) was completed to the finish grade of the site as shown upon the approved plans. Building pads will be calculated at the finished floor elevation shown on the plans.

2. The above files will be combined into Topcon Project File format (.tp3), to be uploaded into the contractors Automated Machine Guidance (AMG) hardware, uploading assistance can be provided if requested by the contractor.
3. Strategic topographic measurements will be taken to ensure the approved design ties into existing conditions.
4. Horizontal and vertical control will be verified onsite. Additional control will be set as needed for file localization. A localization file (.gc3) will be provided during this phase.

Utility Model Services:

1. Review of approved construction documents. Any discrepancies or errors will be reported to the contractor.
2. Build a machine control model for the utilities of the proposed site for Topcon Machine Control System. Files included in the model will be:
 - Points File (.pt3) for utilities that have features on the finished surface, i.e. catch basins, manholes, sanitary cleanouts, valves, etc. The points will reflect the center of the structures.
 - Line work File (.ln3) includes a 3D line calculated along the invert of all gravity dependent utilities. For all other utilities a 3D line will be placed on the finished surface, which will allow the contractor to set the depth of the utility.
 - The above files will be combined into Topcon Project File format (.tp3), to be uploaded into the contractors Automated Machine Guidance (AMG) hardware, uploading assistance can be provided if requested by the contractor.

