

AGTEK SEMINAR CLASS OUTLINE

Day 4: Highway

8:00 am to 5:00 pm

This training will guide you through cross-section takeoffs, centerline alignments, corridor modeling, and managing highway electronic files.

- Performing highway cross-section takeoffs and generating mass haul diagrams for efficient haul analysis.
- Strategically phasing materials, earthwork, and utility quantities across highway construction projects.
- Enhancing field productivity by delivering geo-referenced, graphical production feedback directly to foremen via AGTEK mobile applications—empowering them with real-time insights on their smartphones or tablets.

Time	Item
8:00-8:30 AM	Welcome: Introduction of presenters and online resources. Training videos, videos, training guides and training files.
8:30 AM-9 AM	Review of Basic Functions (Modes, Menus, Toolbar, hot keys, panning, tracing) Review of finished Project
9 AM-10 AM	Cross Section Takeoff • Cross section scale • Entering existing and proposed • Vectorizing Cross section. • Importing and exporting (station, offset, elevation format) • Average area method volume calculation, and mass haul diagram.
10 AM-10:15 AM	15 min Break
10:15 AM-11 AM	Center Line Alignments • Vectorizing Center Line from pdf plans • Attaching center lines to cross sections • Creating corridor model takeoff by surfacing cross sections • Aligning PDFs to Center line alignments. Removals, Paving, and phasing. • PDF management tools using image selection.
11 AM-12:00 PM	Highway, Gradework, Materials & Underground Workflow • Classes, structures, and materials for Highway jobs. • Removals, Paving, and Phasing using traffic control plans. • Applying Materials to Sectional and stripping areas.
12:00 PM	End of Block 1. Lunch from 12:00 pm to 1:00 pm

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Time	Item
1 PM- 1:15 PM	Welcome
	Adding ponds and site takeoff to corridor takeoff mode.
1:15 PM- 2 PM	• Ponds, and site takeoffs. • Adding highway stops and starts, entering spoils and borrows to mass haul diagrams, and adding compaction. • Roadway intersection clean-up
	Electronic Files
2 PM-3 PM	• Center lines: XML, dgn, and other common formats. • Cross sections: dgn & dwg, and station offset elevation formats. • Corridor models. • Generate cross sections from corridor models to check accuracy.
3:00 PM	15 min Break
	Advanced Examples
3:15 PM-5 PM	• Over excavation of walls and calculation of backfill. • Undercut of unsuitable soils using the cross section staging tool. • Mass Haul diagram by Phases of construction • Generating Reports. • Utilities for Highway jobs. • Bid review with Google Earth • Horizontal and Vertical COGO for machine control models. • Travel way transitions. • SmartDirt.
5:00 PM	• End of Block 2.