LiDAR Solutions for Rail

SOKKIA

Design | Alignment | Track Geometry | Infringement | Cable Clearance | Maintenance

New route design & alignment
Track maintenance
Planning – ROW, quantity, earthwork
Disaster management

New rail route design
Maintenance
Derailment prevention
Accident prevention
Disaster management
LiDAR survey and generate 3d terrain model & contours
Technical viability study, location and layout
Engineering detail, investigation, gradient & slopes
Preliminary design support for track, bridges and structures
Help in BOQ and cost estimate
Topographic classification, wetland, city, low-lying,
Information to determine 3 preliminary route selections
Survey data for topographic, alignment and land use
Inventory of safety devices, culverts, bridges, drainage
Hydrology & drainage information
Cut and fill material analysis
Generating digital terrain model and contours
Horizontal, vertical alignment
Calculation of cant deficiency and gradient with weight
Measuring of track transition curves
Railroad switch and turnout conditions
Rail inventory, track condition, bridge condition survey
Infringement
Track clearance
Slope instability

Export :
Line work, 3D model, polylines, features, assets, street furniture, planes, edges, cross-sections, mesh, features, angles, lengths, heights, volume, vectors, annotation, colour 3D point cloud, break lines, ground, non-ground, surface grid, hill-shades, draped imagery, contours, intensity, texture, layers, DTM, classified points, assets, dimensions, line of sight, fly through, projection, etc.

Export Format:
DXF, DWG, BMP, GIF, JPEG, PNG, TIFF, CL3, CLR, PTX, CLD, IJ, LAS, OBJ, WRL, X3D, CLT, TRG, PTS, TXT, MSH, TN3, DGN, SHP, XML, PTC, ASCII, GeoTiFF, ESRI, USGS DEM, FLT, and other GIS & CAD formats.

Compatibility:
Softwares like AutoCAD Civil 3D, OPTRAM, RailTrack, Bentley, Microstation, Insight, sb Insight, BrIM, ESRI, GIS, etc.

N. E. Parrott Surveys Ltd.