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Chapter 11: Reports

Introduction

GEOPAK uses the cross section files to produce staking reports in the format required by CFLHD. The creations of staking reports are required on all CFLHD projects with proposed cross sections. These staking reports include Subgrade Template Report, Staking Detail Report and Blue Top Report.

CFLHD has developed a Microsoft Visual Basic Application (MVBA) to generate a Subgrade Template Report. The Staking Detail Report and Blue Top Report are generated from cross section file through accessing the cross section reports. This chapter will describe the processes used to create the Subgrade Template Report, as well as the Staking Detail Report and Blue Top Report.

Subgrade Template Report

The Subgrade Template Report MVBA evaluates text elements within GEOPAK cross sections and produces a report based on the text elements found that match the user-specified search criteria. The Subgrade Template Report includes the red top stake locations plus points at all breaks in the roadway prism cross-section (i.e. ditch lines, hinge points, curb lines, sidewalks, benches, walls, etc.), plus the slope stake catch point and the reference hub point.

GEOPAK progresses from left to right across each cross section while preparing each report. To do this, the user will need to provide the level symbology of the existing ground and all the proposed elements required to progress through the points and lines, to be reported on, completely across the cross section.

Subgrade Template Point Identification Sheets were developed to help clarify the information contained in the Subgrade Template Reports. Subgrade Template Point Identification Sheets are used to identify template points along each typical cross section. Subgrade Template Point Identification Sheets should be downloaded from the CFLHD Website (CFLHD Template Drawings and Files) and modified with project specific information. Project specific Subgrade Template Point Identification Sheets should be included with the Subgrade Template Reports.

This MVBA can be found on the CFLHD network at:
[N:\V8i_resource\FLH_Common\MicroStation\MVBA](#)

The Subgrade Template Report MVBA is available through the **V8i_Resource.zip** download on the FLH Website.

Workflow 1: Subgrade Template Report

To access this workflow, follow this link:

http://flh.fhwa.dot.gov/resources/cadd/cfl/documents/Workflow_11.1_v8i.pdf

Cross Section Reports

Staking Detail Reports and Blue top reports are generated from cross section files by accessing the cross section reports. Workflow 2 will outline the steps involved in accessing cross section reports.

Report Headers

All reports will require a header to describe the project and report type. The date, first two master headers and page number should be marked. The first master header should have the complete project number, i.e. **CA FLAP SR 36(13)**.

The second master header should have the name of the road. The tolerance should be around the values shown. If GEOPAK stops at many cross sections these values can be adjusted.



The File pull down menu will allow you to save this information to a text file. If you are working on more than one project, you can easily import the correct information on subsequent runs.



Keep in mind that the Radius of Display Circle needs to be less than the smallest line segment on the proposed cross section. If the smallest line segment is the top of curb and it is 6 in. (0.15 m) then the Radius of Display Circle needs to be 0.25 ft. (0.07 m).

Staking Detail Report

The Staking Detail Report is used to locate the catch points at each section.

Workflow 2: Access Cross Section Reports

To access this workflow, follow this link:

http://flh.fhwa.dot.gov/resources/cadd/cfl/documents/Workflow_11.2_v8i.pdf

Blue Tops Reports

Blue Tops reports indicate all breakpoints at the top of base course. There are two reports that are needed, the standard Blue Top Report and the XYZ Blue Top Report.

Workflow 3: Blue Top Report

To access this workflow, follow this link:

http://flh.fhwa.dot.gov/resources/cadd/cfl/documents/Workflow_11.3_v8i.pdf



Printing Staking Reports

All staking reports should be opened using Ultra Edit.

Workflow 4: Printing Staking Reports

To access this workflow, follow this link:

http://flh.fhwa.dot.gov/resources/cadd/cfl/documents/Workflow_11.4_v8i.pdf