CONTROL DIAGRAM – MICROSTATION (ENHANCED)

Contents

Overview

Development of a Utility Plan control diagram in the Microstation Enhanced workspace.

Process Provenance

- Date of development: N/A

- Revision date: *N/A*

- Application/Tool(s): *MicroStation V8i SS10 / Power GEOPAK V8i SS10*

- Version(s): *N/A*

- Environment(s): *OpenRoads (Enhanced) Workspace*

- Author: *MDT EngOps Workflow Steering Committee*

Statement of Need

This process develops a sheet that is a part of the Utility plans which play a vital role in moving MDT Highway projects toward completion.

Process Description and Examples
Section I.   Control Diagram Sheet Creation

Procedure

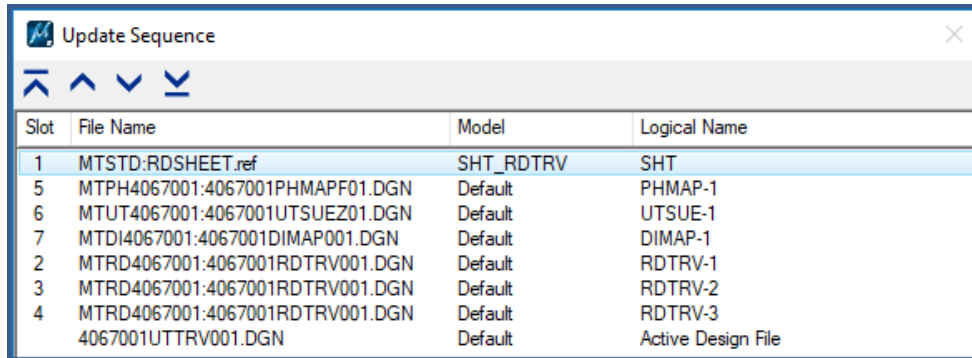Use the following procedure for creating the utility control diagram and abstract sheet:

1. Download the traverse file from the RD workgroup in DMS, usually named 1234000RDTRV001. Copy this file to the c:\dgn\ref directory for referencing.

2. Create a new UT Traverse sheet from the UT Seed files found at ..\CaddStdOR\SEED\UT_Plans (ex. 1234000**UTTRV001**.DGN).

3. In 'Active file' 'View Attributes', ensure Level Overrides are turned on.

4. Attach RD Traverse Sheet as a reference.

   - Within the Reference dialog, choose "Tools", "Attach"

   - Within the Attach Reference dialog, select the RD Traverse Sheet, then choose "Open".

   - Insert RDTRV-1 as the logical name.

   - Select "Coincident – World" from the orientation options. Adjust Nested Attachments option to "Copy Attachments", then choose "OK".

   - Select each duplicated occurrence of RDSHEET.REF but leave "SHT", then choose "Tools", "Detach".

   - Check reference prefixes and fix as needed or use the reference macro.

5. Turn off sheet labels from the RD Traverse Sheet, typically level "P_Sheets_Plan_Label_Sheet_Text" and "S_SHEETS_DesignBlock_Data_Fields". If the labels are on a different level, adjust accordingly or mask the reference file as outlined below.

   - Select the pink clip boundary around the bottom of the first sheet to create a fence. Within the Reference dialog, select the RDDET-1 Road Design detail sheet reference file, then choose "Tools", "Clip Boundary then accept the pink shape outlining the plan data fields in sheet 1.

   - Repeat for sheet 2 and sheet 3 as needed.

6. Attach all survey, utility map and right of way files (PH, DI, UTSUE, UTMAP, ROMAP etc.) if not already attached.

- Scale, Rotate, and Move the files to fit the displayed control points of the traverse.

- Check reference prefixes and fix as needed or use the reference macro.

- Turn on levels from survey map files to show general topography such as fences, buildings, streams, PTW, mailboxes, etc.

- Turn on levels from utility map files to show the utilities.

- Turn on levels from right of way map files to show section lines.

- In 'Reference' 'Settings' 'Level Manager', for the survey files set the color to 80, line weight and symbology override to off, except utility features.

- In 'Reference' 'Settings' 'Level Manager', for the utility files set the line weight and symbology override to off and the color symbology as follows:

🟦	Water levels	color 1
🟩	Sanitary sewer levels	color 2
🟥	Power levels	color 3
🟪	TV levels	color 5
🟧	Communication levels	color 54
🟫	Gas levels	color 56
⬜	Drainage levels	color 0

- In 'Reference' 'Settings' 'Level Manager', for the right of way files set the color to 0, line weight and symbology override to off.

7. Adjust drawing scale as necessary for line style and text annotation scale.

8. In 'Reference' 'Settings' 'Level Manager', choose active file and ensure all style and weight attributes are off, color attributes are 0 (white).

9. In 'Reference' 'Settings' 'Update Sequence' and change update sequence as follows:

Slot	File Name	Model	Logical Name
1	MTSTD:RDSHEET.ref	SHT_RDTRV	SHT
5	MTPH4067001:4067001PHMAPF01.DGN	Default	PHMAP-1
6	MTUT4067001:4067001UTSUEZ01.DGN	Default	UTSUE-1
7	MTDI4067001:4067001DIMAP001.DGN	Default	DIMAP-1
2	MTRD4067001:4067001RDTRV001.DGN	Default	RDTRV-1
3	MTRD4067001:4067001RDTRV001.DGN	Default	RDTRV-2
4	MTRD4067001:4067001RDTRV001.DGN	Default	RDTRV-3
	4067001UTTRV001.DGN	Default	Active Design File