V8*i* (SELECTseries 3)

Workspace Configuration Considerations

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OVERVIEW

A fully functional workspace is essential to the success of the integration of our V8*i* (SELECTseries 3) line of Civil Products. Along with the release of our newest product line, we have introduced several new configuration variables to assist in managing a robust workspace.

CONFIGURATION VARIABLES

CIVIL_SHOW_MS_PROPERTIES	***Display extra MS properties that are normally hidden on Civil Elements***
CIVIL_STOP_COMMAND_DEFAULTS	***This stops the Civil commands storing their defaults as xml. Mainly used for Automated testing. Existing files will have to be deleted as it does not stop the system reading them.***
CIVIL_DISALLOW_LOCKCHANGES	***If set to a value of 1, it disallows any lock changes to existing rules. In other words, it prevents a locked rule from being unlocked or an unlocked rule from being locked.***
CIVIL_SUPERELEVATION_RULES_DIRECTORY	***Defines the directory to be used as the default location for superelevation preference (SEP/SR) files.***
CIVIL_DEFAULTSETTINGS	***Used to locate the Folder holding the XML file that include the Civil Accudraw defaults.***
CIVIL_DEFAULT_LINEAR_STROKING	***Defines how often to compute a point or template drop interval location on a tangent segment. This variable is not used by Corridor Modeling. If not set, the value defaults to 10. This is used when generating 3d elements and the apply Template command.***
CIVIL_DEFAULT_PROFILE_STROKING	***Defines how often to compute a point or template drop interval location along a profile, with extra points being computed based on a chord offset from the profile. The value defines the chord height used to calculate the extra points. If not set, the value defaults to 0.1. This is used in Corridor Modeling when Vertical Curve Densification is applied.***

CIVIL_DEFAULT_CURVE_STROKING	***Defines how often to compute a point or template drop interval location along a curve segment with extra points being computed based on the chord offset from the horizontal curve. The value defines the chord height used to calculate the extra points. If not set, the value defaults to 0.01. This is used in Corridor Modeling when Horizontal Curve Densification is applied.***
CIVIL_DEFAULT_STATION_LOCK	***If set to 'true' then stations for various commands are calculated and kept at even numbers. For example, template drops would always fall on even stations in the event of an equation that could cause it to do otherwise. If not set or set to 'false', then the station values will be maintained at the specified increments.***
CIVIL_DISALLOW_REFERENCEDELETIONS	***If set to a value of 1, it does not allow an element to be deleted if that element is referenced by another. Does not work across reference files.***
CIVIL_ROADWAY_TEMPLATE_LIBRARY	***Defines the default template library (ITL).***
CIVIL_XIN_FILE	***Defines the default XIN file.***
CIVIL_CIVILSETTINGS_READONLY	***If set to a value of 1, all standards, preferences or features that come from a DGN Library are persisted as read-only in the active file.***
CIVIL_SURVEY_DISABLE_DIVIDE_BY_TWELVE	***If set to a value of 1, this variable indicates that the sizes read from a GEOPAK SMD XML file should not be divided by 12 when linked into Survey Feature Definitions. (Applicable for GEOPAK XML SMD files in an English environment only)***
CIVIL_SURVEY_ELEVATION_POSITION_FIVE_ANGLE	***If set to a value of 1, allow the elevation annotation to be rotated by the angle specified when the label position is set to position 5. (GEOPAK XML SMD only)***
CIVIL_SURVEY_USERTIW_FOLDER	***Defines an alternate directory where user .TIW files can be located.***
CIVIL_SURVEY_STYLEFILE_FILE	***Defines the Style file that is linked in the Survey Feature definitions. Available options are an XIN from InRoads, an XML from a GEOPAK SMD or a PSS from MX.***
CIVIL_SURVEY_SURVEYOPTIONS_NAME	***As the XIN can contain multiple instances of Survey Options, this allows the definition of a particular Survey Options to apply when reading the XIN file. If this variable is not defined, then the LAST occurrence of the Survey Options is used. (InRoads only)***
CIVIL_SURVEY_GEOID_BINFILE_FOLDER	***Defines an alternate directory where the GEOID BIN files may be located. If not set, the standard GEOID BIN location is used.***

CIVIL_REPORTS_DIRECTORY	***If the variable is set to a valid directory location, then the software would look at this specific location to locate the XML reports. If this variable is NOT set or it's set to an invalid location, then the software would look at the location where Civil installs the reports by default. NOTE: If the InRoads Project Default XSL location is defined then that is used before CIVIL_REPORTS_DIRECTORY. This maintains continuity for InRoads users.***
CIVIL_CIVILCELLDGNLIBLIST	***This variable defines both the directory and specific file name of the Civil Cells DGN Library.*** ***Example: CIVIL_CIVILDGNLIBLIST = c:\workspace\dgnlibs\civilcells.dgnlib*** ***2. This variable should allow the use of wildcards.*** ***Example: CIVIL_CIVILDGNLIBLIST = c:\workspace\dgnlibs*.dgnlib*** ***3. If this variable is NOT set or the dgnlib file is not found, then the process should just work as it does today (i.e. just look inside each dgnlib and list any that contain civil cells).*** ***4. If this variable IS set and the file is found, then this file should be used to list the civil cells and for nothing further. In other words, if this file contains other civil items (such as feature definitions or project settings or filters), they should be ignored.***
CIVIL_CONTENTMANAGEMENTDGNLIBLIST	***This variable defines both the directory and specific file name of the feature definitions DGN Library.*** **See CIVIL_CIVILCELLDGNLIBLIST for more details.**
CIVIL_DESIGNSTANDARDSDGNLIBLIST	***This variable defines both the directory and specific file name of the design standards DGN Library.*** **See CIVIL_CIVILCELLDGNLIBLIST for more details.**
CIVIL_PROJECTSETTINGSDGNLIBLIST	***This variable defines both the directory and specific file name of the project settings DGN Library.*** **See CIVIL_CIVILCELLDGNLIBLIST for more details.**
CIVIL_CIVILTMDGNLIBLIST	***This variable defines both the directory and specific file name of the terrain model filters DGN Library.*** **See CIVIL_CIVILCELLDGNLIBLIST for more details.**

Many new considerations must be taken into account when developing a workspace for V8*i* (SELECTseries 3) Civil Products.

Suggested considerations may include but not limited to:

- Features
- Native Styles
- Element Templates
- Project Settings
- Graphical Filters for Terrain Modeling
- Design Standards
- Superelevation
- Special Considerations for Seed Files
- XIN File
- Survey Style File
- Template Library
- Civil Cells
- Dimension Styles
- Text Styles
- Custom Linestyles

Note	An example workspace has been delivered with V8*i* (SELECTseries 3). To access the example workspace, in MicroStation Manager, choose "examples" as the "User". Then for the "Project" choose either "Bentley-Civil-Imperial" or "Bentley-Civil-Metric". Lastly, optionally choose the Interface entitled "Bentley-Civil".

In the example workspace, all of the above aforementioned items have been established. It is recommended best practice all of these listed items be defined and located through configurations within all workspaces.

Shown on the next three pages is an example MicroStation Project Configuration File (PCF File) used in the delivered Bentley-Civil Examples Workspace. The intent of this example is to provide the user and adequate working configuration for consideration when customizing their unique environment.

EXAMPLE PROJECT CONFIGURATION

1. MS_FULLPATHINTITLEBAR = 1
2. _USTN_USERDESCR = Bentley Civil - Survey Feet
3. _USTN_USERINTNAME = Bentley-Civil # Interface Folder

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MicroStation configuration variables.

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1. MS_DGNLIBLIST > $(_USTN_PROJECTDATA)/dgnlib/Element_Templates_Imperial.dgnlib
2. MS_DGNLIBLIST > $(_USTN_PROJECTDATA)/dgnlib/Project_Settings_Imperial.dgnlib
3. MS_DGNLIBLIST > $(_USTN_PROJECTDATA)/dgnlib/Line_Styles_Imperial.dgnlib
4. MS_DGNLIBLIST > $(_USTN_PROJECTDATA)/dgnlib/Text_Styles_Dimensions_Imperial.dgnlib
5. MS_DGNLIBLIST > $(_USTN_PROJECTDATA)/dgnlib/Saved_Views.dgnlib
6. MS_DEF = $(_USTN_PROJECTDATA)/dgn/ # Default design file directory
7. MS_CELL < $(_USTN_PROJECTDATA)/cell/ # Cell library directory
8. MS_CELLLIST < $(_USTN_PROJECTDATA)/cell/*.cel # Cell library
9. MS_SEEDFILES = $(_USTN_PROJECTDATA)/seed/ # Seed Directory
10. _USTN_PREFNAMEBASE = $(_USTN_PROJECTDATA)/prefs/Bentley-Civil-Imperial
11. MS_USERPREF = $(_USTN_PROJECTDATA)/prefs/Bentley-Civil-Imperial.upf
12. MS_VBASEARCHDIRECTORIES > $(_USTN_PROJECTDATA)/prefs/
13. MS_VBAAUTOLOADPROJECTS > $(_USTN_PROJECTDATA)/prefs/ViewSet
14. MS_FKEYMNU = $(_USTN_PROJECTDATA)/prefs/Bentley-Civil.mnu
15. MS_LEVELS_EXCLUDELIBS > $(_USTN_PROJECTDATA)/dgnlib/Line_Styles_Imperial.dgnlib
16. MS_LEVEL_LIB_DIR < $(_USTN_PROJECTDATA)/dgnlib/
17. MS_REF_DEFAULTATTACHDIRECTORY < $(_DGNDIR)
18. # MS_DISALLOWFULLREFPATH = 1
19. MS_REF_DEFAULTSETTINGS = TrueScale=1,AttachMethod=CoincidentWorld,nestMode=live,nestDepth=1
20. MS_RFDIR < $(_DGNDIR)
21. MS_BACKUP = $(_DGNDIR)
22. MS_REF_NEWLEVELDISPLAY = 1

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Civil Specific Variables

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1. CIVIL_ROADWAY_TEMPLATE_LIBRARY = $(_USTN_PROJECTDATA)/data/template_library/Civil_Templates_Imperial.itl
2. CIVIL_XIN_FILE = $(_USTN_PROJECTDATA)/data/feature_definitions/Civil_Features_Imperial.xin
3. CIVIL_SURVEY_STYLEFILE = $(_USTN_PROJECTDATA)/data/feature_definitions/Survey_Features_Imperial.xin
4. CIVIL_CIVILCELLDGNLIBLIST = $(_USTN_PROJECTDATA)/dgnlib/Civil_Cells/*.dgnlib
5. CIVIL_DESIGNSTANDARDSDGNLIBLIST > $(CIVIL_CONTENTDIR)/Standards/$(_CIVIL_CONTENT_VERSION)/$(_CIVIL_CONTENT_LANGUAGE)/Design Standards/A*.dgnlib
6. CIVIL_CONTENTMANAGEMENTDGNLIBLIST > $(_USTN_PROJECTDATA)/dgnlib/Feature_Definitions_Imperial.dgnlib
7. CIVIL_CONTENTMANAGEMENTDGNLIBLIST > $(_USTN_PROJECTDATA)/dgnlib/Survey_Feature_Definitions_Imperial.dgnlib
8. CIVIL_CONTENTMANAGEMENTDGNLIBLIST > $(_USTN_PROJECTDATA)/dgnlib/Project_Settings_Imperial.dgnlib
9. CIVIL_PROJECTSETTINGSDGNLIBLIST > $(_USTN_PROJECTDATA)/dgnlib/Project_Settings_Imperial.dgnlib
10. CIVIL_PROJECTSETTINGSDGNLIBLIST > $(_USTN_PROJECTDATA)/dgnlib/Survey_Feature_Definitions_Imperial.dgnlib
11. CIVIL_CIVILTMDGNLIBLIST > $(_USTN_PROJECTDATA)/dgnlib/Survey_Feature_Definitions_Imperial.dgnlib
12. CIVIL_CIVILTMDGNLIBLIST > $(_USTN_PROJECTDATA)/dgnlib/Feature_Definitions_Imperial.dgnlib
13. # CIVIL_CIVILSETTINGS_READONLY = 1

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Default Stroking Tolerance Settings

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1. CIVIL_DEFAULT_LINEAR_STROKING = 10.0
2. CIVIL_DEFAULT_PROFILE_STROKING = 0.05
3. CIVIL_DEFAULT_CURVE_STROKING = 0.05
4. CIVIL_DEFAULT_STATION_LOCK = 1

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InRoads Specific Variables

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1. %if defined (InRoads_SS3)
2. MS_DESIGNSEED = $(_USTN_PROJECTDATA)/seed/Seed2D-InRoads-Imperial.dgn
3. CIVIL_SUPERELEVATION_RULES_DIRECTORY = $(CIVIL_CONTENTDIR)/Standards/$(_CIVIL_CONTENT_VERSION)/$(_CIVIL_CONTENT_LANGUAGE)/Superelevation/SRL/
4. %endif

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GEOPAK Specific Variables

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1. %if defined (GEOPAK_SS3)
2. MS_DESIGNSEED = $(_USTN_PROJECTDATA)/seed/Seed2D-GEOPAK-Imperial.dgn
3. GPK_FORCE_ACBOOK_DDBFILE = 1
4. GPK_ACBOOK_DDBFILE = $(_USTN_PROJECTDATA)/data/feature_definitions/Civil_Features_Imperial.ddb
5. CIVIL_SUPERELEVATION_RULES_DIRECTORY = $(CIVIL_CONTENTDIR)/Standards/$(_CIVIL_CONTENT_VERSION)/$(_CIVIL_CONTENT_LANGUAGE)/Superelevation/SEP/
6. GPK_LEVEL_XS_CELL = Draft_XS_Sections
7. %endif

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MX Specific Variables

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1. %if defined (MX_SS3)
2. MS_DESIGNSEED = $(_USTN_PROJECTDATA)/seed/Seed2D-MX-Imperial.dgn
3. CIVIL_SUPERELEVATION_RULES_DIRECTORY = $(CIVIL_CONTENTDIR)/Standards/$(_CIVIL_CONTENT_VERSION)/$(_CIVIL_CONTENT_LANGUAGE)/Superelevation/SRL/
4. MX_DEFAULTCIVILSTYLESET = $(_USTN_PROJECTDATA)/data/feature_definitions/Civil_Features_Imperial.pss
5. MX_SNAP = MASTER
6. MS_SEEDFILES < $(_USTN_PROJECTDATA)/seed/
7. MX_MODEL_SEED = Seed2D-MX-imperial.dgn
8. MX_DRAWING_SEED = Seed2D-MX-imperial.dgn
9. MX_VDRAWING_SEED = Seed2D-MX-imperial.dgn
10. MX_ACTIVE_MODEL = Default
11. %endif