Workflow MS 1 - Explaining File Types

This document describes the various file types used in plan production at CDOT.

CADD Files	
File Extention	**Description**
dgn	MicroStation CADD file format. Files of this format are called **Drawings** or **Design Files**.
cel	MicroStation Cell Library. A cell library contains small drawings tha ca be used over and over. The "Cell" is treated as a group so that it can be placed, moved, copied, manipulated, or deleted as one element.
dgnlib	MicroStation Design Library. Design Libraries store standard settings for MicroStation. Items like Text Styles, Level Names and Symbology, Dimension Styles, and Line Styles. These files are stored within the workspace and should not be modified by the users.
pcf	Project Configurtion File. This file is used by MicroStation to set the directory path to reference file locations for a specific project. The pcf file is used for projects stored locally, and is only accessed when MicroStation is launched from the Start Menu or desktop icon.
dwg/dxf	AutoCAD CADD file format. This is similar to the dgn file. MicroStation can read dgn and dxf file formats, but they need to be converted to dgn format so that CDOT standards can be applied to them.

Image Files	
File Extention	**Description**
jpg	An image file format use for aerial photos that can be attached to plan sheets. It may come with a sister file.
tif	An image file format use for aerial photos that can be attached to plan sheets. It may come with a sister file.
tfw	A sister file (or world file) is an ASCII text file that contains special formatted coordinate information about where the image is in relation to the surface of the earth.
tif	GeoTiff files (also with a tif extension) but these do not have a sister file. They have the coordinate (and sometimes GeoCoordinate system) embedded within the file

InRoads Files	
File Extension	**Description**
dtm	Digital Terrain Model, sometimes called a surface file. This file contains triangulated and untriangulated data that describes the topography of the site. An existing ground dtm describes the current state of the site. A design dtm describes what is to be constructed.
alg	Geometry Project or alignment file. This file contains the horizontal and vertical geometry (alignments) for a design project. It is used by ROW/Survey to store Right of way, property, and easement lines.
itl	Template Library. This file contains the templates (an InRoads version of the typical sections) used for a design project. It also contains various parts of templates (called sections and components) that are use to create finished templates.
ird	Roadway Design file. This file is used to combine and compare the data from the dtm, alg, and itl files to create the design model of the proposed roadway. The alg file is used to define the Corridor of the proposed road, the itl file profides the cross section of the road prism, and the dtm is used as a target for the end conditions of the template to tie the design to the existing terrain.
rwk	InRoads Project File. This is an ASCII text file that contains the name and directory path to the InRoads data file used for a specific project. It is used to load and save all of the data files at one time.
fwd	Fieldbook file. This file contains survey information translated from the data collector to the InRoads format.
sup	Superelevation Rate Tables. These are ASCII text files that contain superelevation transition rate information based off of the ASSHTO Greenbook. sup files are used with in Roadway Designer to calculate superelevation for a corridor's horizontal alignment. The calculated data is stored in the ird file.
xin	Preference file. This file contains all of the style settings that control how elements displayed from InRoads will look in MicroStation. It also contains dialog box Preferences (predefined settings for dialox boxes).
xsl	Style Sheets. These files are used to format xml reports generated by InRoads
dft	Drafting Notes file. This file contains formats for commonly used notes, like station and offset notes, that can be extracted from InRoads data.
vdf	View Definition File. This file works with Plan and Profile Generator. It contains the data for plan view and profile view settings.
xsc	Cross Section File. This file contains the data used to define a custom cross section set.