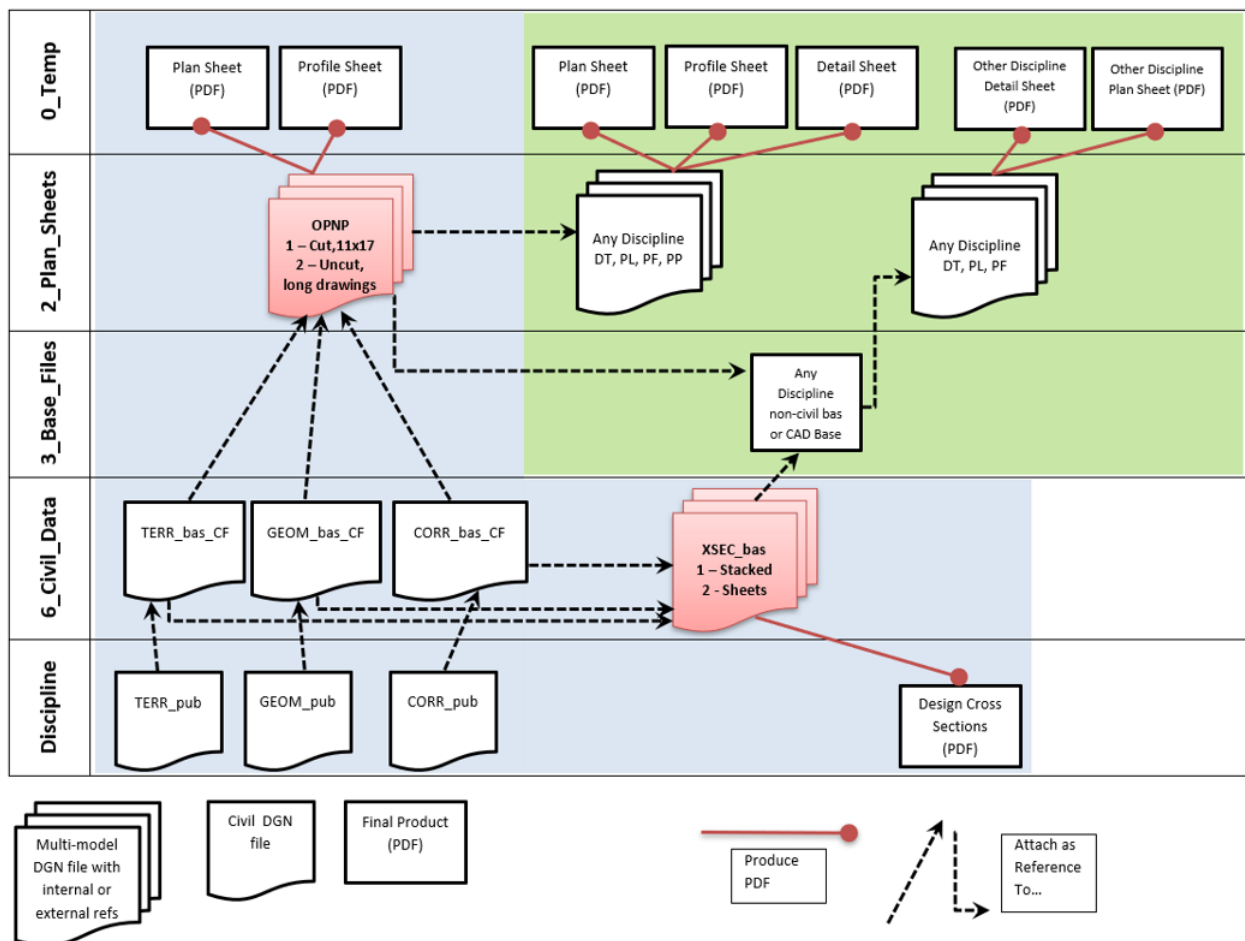


## Folders for Plans Production and Survey & Design Deliverables

Several folders under the 1\_Design hierarchy were created and named to clarify the contract plans sheet assembly process for CAD technicians and to reduce errors when displaying design data from different disciplines. Non-civil DGN documents are those produced using MicroStation. Civil DGN documents are produced using Power InRoads, OpenRoads, OpenSite, or OpenBridge software. When the folders and documents are used as described in this section, contract plans products will be produced with current and accurate depictions of design intent.

PW Folder	Description
2_Plan_Sheets	CAD files, linked spreadsheets and print sets used to print PDFs for all plan sheets included in the contract plans
3_Base_Files	<b>Non-civil</b> design content shared with others or used for plan sheet development
6_Civil_Data	<b>Civil</b> design content shared with others or used in plan sheet development



## 2\_Plan\_Sheets

The preparers of plan sheets (typically, CAD technicians) are responsible for the documents (.dgn files) in the 2\_Plan\_Sheets folder. It is a best practice to create 2D plan sheet .dgn files that use one sheet per model. When reference attachments are made to assemble a plan sheet, the OPNP file (also stored in the 2\_Plan\_Sheets folder) is the *civil* design deliverable from roadway. Other deliverables may be attached as references from the 3\_Base\_Files folder if the data is not produced with OpenRoads Designer. Civil data for sharing with others, that is produced with OpenRoads Designer, will be stored in the 6\_Civil\_Data folder (except for the OPNP file).

Other types of files that may be found in the 2\_Plan\_Sheets folders are Print Organizer print set files (.pset). PDFs created from .dgn files should be stored in the 0\_Temp folder, under the 1\_Milestone\_Submissions folder, or in a Discipline folder.

## 3\_Base\_Files

DGN documents containing non-civil data that are used as references to create plan sheets or that are used by other disciplines to perform design work are stored in the 3\_Base\_Files folder. Designers of different disciplines are responsible for the DGN base files stored in the 3\_Base\_Files folder. A CAD technician will typically be responsible for CAD base files and project name files for title block information files that are also stored in the 3\_Base\_Files folder.

Non-civil discipline base files (DGN documents stored in the 3\_Base\_Files folder) have the following requirements:

1. Name DGN documents using the ProjectWise Document Naming Tool. Using the naming tool is the approved method of naming documents.
2. DGN has a Default (Master) model that contains no graphical elements.
3. DGN has a minimum of one base model that contains:
  - a. only those graphics that are current, accurate, convey the design intent.
  - b. a base model name that is consistent within each discipline for a particular product. For example, **RW Base** for Right-of-Way, **Basemap** for Survey (existing features), **R\_Design** for Roadway plan design, and **R\_Profiles** for Roadway profiles.
  - c. no reference attachments (any reference made while updating the base model will be detached when update is completed).
  - d. no point cloud attachments (point cloud attachments force rasterized printing and can cause PDF production to fail; any point cloud attachments made while updating the base model will be removed when update is complete).

Different types of data (plan, profile, cross section, etc.) should be delivered in separate base files. The model containing the data should be named consistently and appropriately, as stated above.

CAD base files (if used by a CAD technician) will have the same multi-model structure as discipline base files. CAD technicians may populate a base model with text and/or cells from design data in order to shift the location of text or cells that would otherwise mask important design line work. Suggestions for CAD base model names are: RW Base\_Text, Exist\_Text, and R\_Design\_Text. CAD base files may also be used to create multiple coordinate correct references for sheet assembly using live nested referencing.

## 6\_Civil\_Data

DGN documents that contain up-to-date and accurate civil data produced by Power InRoads, OpenRoads, OpenSite, or OpenBridge software, and that are used for collaboration with other disciplines or consultants, should be stored in 6\_Civil\_Data. Container files for terrain, geometry, and corridors (bas\_CF) are stored in 6\_Civil\_Data. Container files will have reference attachments to “published” DGN documents containing the active design data that are stored in the Discipline folders. The correct avenue for accessing published data is to attach the container file in 6\_Civil\_Data as a nested reference.

File types found in 6\_Civil\_Data include, but are not limited to, InRoads Geometry Projects (.alg), InRoads Surfaces (.dtm), InRoads Template Libraries (.itl), InRoads Roadway Libraries (.ird), OpenRoads Designer bas\_CF DGNs for terrain, geometry, or corridor, spreadsheets, text documents (formatted or unformatted), and XML data.

### DGN Documents in Discipline Folders

Discipline folders contain “working” and “published” DGN documents. “Working” documents are not shared with others. “Published” DGN documents contain the active design work. “Published” DGN documents are shared with others as reference attachments to the container files in the 6\_Civil\_Data folder. It is not recommended to make a direct reference attachment to a “published” DGN document in a different discipline folder.