PIM 2022-012 – Attachment 3
Scanning Cadastral Survey Documents for CSS in GLORAS

The Cadastral Survey System (CSS) works with image files that you will create using third-party scanning applications. The names you assign to the scanned images when you save them, and the folders you put them in, are both very important for CSS to work correctly.

The images will be migrated to folders that exist in a special shared subdirectory named "CSS_SCAN". The plat image folders, and the field notes volume root folder, are created when the machine is configured to be a scan station using the Configure dialog box. The subfolders in the next levels down depend on whether you are scanning a plat, or a field note volume. Survey plats must be stored in a directory containing the two-character State abbreviation.

Directory structure for plats:

\\blm\dfs\loc\GLO\CSS_Deliverables\<State folder>\

Naming the Scanned Plat TIF Files
The names you assign to the scanned image files help the CSS application to: 1) tell one plat from another, 2) distinguish between multiple pages in the same plat, and 3) determine whether an image is the back of a plat.

File name format for plats:

[document sequence number]_[page number][B].tif

- The document sequence number can be up to four digits. The exact number is not important. It is used only for ordering the files during import. Padding with zeroes is not required
- The page number is the number of the page within the document. Padding with zeroes is not required.
- The optional suffix B denotes that this is the back of the plat.

Examples:

1_1.tif The first (and in this case only) page of the first plat in the subdirectory.

2_1.tif
        The front of the first page of the second plat.
2_1B.tif
        The back side of page 2_1.tif.
2_2.tif
        The second page of the second plat.

Scanning Field Note Volumes
Image Format

CSS pages are archived as TIF images. CSS indexing and publishing to the GLO website pages are performed in JPEG2000 format. When importing field note volumes, both versions must already exist.

Scanning Normal Field Note Pages
Normal Page Name Format
- **TIF version:** *[sequence number]***.tif**
- **JPEG2000 version:** *[sequence number + 1]***.jp2**
- **[Sequence number]**
  - The scanner operator must save, for each normal page, both a TIF image file and a JPEG2000 image file. The two file types alternate in sequence numbers. The odd sequence numbers are for TIF files (1, 3, 5, etc.) and the even sequence numbers are for their JEG2000 counterparts (2, 4, 6, etc.).
  - Sequence numbers must be zero-padded to 4 places.
  - The import process will skip the entire volume if there are gaps in the number sequence or files with the wrong extension, or extraneous files in the volume folder.
- E*xamples:*
  - 0001.tif, 0002.jp2 (*first scanned page*)
  - 0003.tif, 0004.jp2 (*second scanned page*)
  - 0005.tif, 0006.jp2 (*third scanned page*)

Naming Volume Folders for Import
During scanning, the location and name of the folder containing the new image files doesn't matter to CSS. But for CSS to import the image files, they must be in what's called a volume folder on a designated CSS scan share. The name of the volume folder contains static information regarding the physical volume.

- The volume folder name must follow the format that CSS expects, or it will be ignored by the Import process.
- The name of the folder is important because it's the only way to tell CSS the volume's state and volume number, among other things.

Volume Folder Name Format

*[**state code**][**volume prefix**][**volume suffix/number**] Where:*

- **state code** = The two-character US state code. The value must be valid within the CSS system's database
- **volume prefix** = A single character or digit.
- **volume suffix/number** = The volume number, zero padded to at least four digits. No longer than 6 digits.
- **Volume fraction/duplicate** = Optional for volume numbers with 4 digits. Required in all other cases. A placeholder 0 should be used if the volume is not a fraction or a duplicate. Otherwise, any alphabetical character can be used to denote a duplicate

volume. In addition, the character 5 my be used to denote fractional volumes (used by MnGeo on the MN field notes)

- Examples:
    - FLR0104 (Florida field notes, Volume 104)
    - MNL00205 (Minnesota field notes, Volume 20, fractional)
    - NMSHC1090 (New Mexico field notes, Volume HC109)
    - IDSR10278A (Idaho field notes, Volume R10278, duplicate)

\\blm\dfs\loc\GLO\CSS_Deliverables\<State folder>\
    Field Notes\
        <new volume folder name>\
            0001.tif (TIFF of 1st page of volume)
            0002.jp2 (JPEG2000 of 1st page of volume)
            0003.tif (TIFF of 2nd page of volume)
            0004.jp2 (JPEG2000 of 2nd page of volume)
            ...
            ...