2019 PLS-CADD Advanced Training and User Group

File Management

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- Project.xyz or .pfl file
  - Terrain File that stores information about surveyed points and obstacles.
- Project.num
  - Stores the alignment information in the project and is created automatically by PLS-CADD
- Project.tin
  - Stores the Triangulated Irregular Network (TIN) or surface
  - Terrain/TIN/ Create TIN or Load TIN File or Save TIN File

### - Project.fea

- Dictates how survey points appear within a project and clearance requirements for various voltages.
- Terrain/Feature Code Data/ Edit or Load FEA file

### Project.brk

- Break Line information in the project. They are linear features dictating smoothness and continuity of a surface. TIN triangles may not cross.
- Terrain/ Break Lines/ Add, Delete, Show, Import, Load, or Save commands to add or create as well as merge

### Project.cri file

- Design Criteria for the line which includes sag-tension, loads, weather cases, load cases, etc.
- Criteria/ Load CRI File or Save CRI File

### Project.don

- Heart of PLS-CADD project. Stores structure locations, types, materials, cable installation, etc.
- Lines/ Load DON file or Save DON file which allows you to load different designs on the same terrain model.

- Project.pps file
  - Stores view and drafting settings for the project.
  - Drafting/ Load PPS or Save PPS commands
- Project.str
  - List of structure files used within a project as well as structure related information used in Optimum Spotting.
  - Structures/Available Structure List/Load STR File or Save STR File

- Project.con
  - Terrain constraints used in optimum spotting prohibited zones, extra cost zones, required structures or structure locations.
  - Structures/Automatic Spotting/Spotting Constraints/Load CON file or Save CON file

## PLS-CADD File Preferences

#### - File/ Preferences

- PLS-CADD.ini file
  - Preference settings
- Part and Assembly Library
  - Material and Labor units for use in the structures programs or material added in the PLS-CADD project
  - Structures/Material/Parts and Assemblies File/Edit Parts or Edit Assemblies
- PLS-CADD.sma
  - Schema file for personal customizations such as report or toolbars.

## Other PLS-CADD Files

### Import Files

.imp for ASCII text file import or .lmp for .las/.laz import settings

#### Wire Files

Conductor or wires strung in the project (drake.wir)

#### Structure Files

- PLS-POLE.pol or TOWER.tow files (Method 4 structures)
- PLS-CADD.stk stick files (Method 1 structures)

### Drafting/ Attachments/ Attachment Manager

.jp2, .jpg, .png, .ecw, .bmp, .tif, .dxf, .shp, files as references

## PLS-POLE and TOWER files

- PLS-POLE.pol file
  - PLS-POLE model that references several component libraries
- TOWER.tow file
  - TOWER model that references several component libraries
- Loading files
  - Loading .lca or .lic files that can be manually input in the program or created using PLS-CADD

# PLS-POLE and TOWER Component Libraries

- Common Component Libraries under File/ Preferences
  - Part/Assembly Library.prt
  - Equipment Library.eqp
  - Connect and Anchor Library.can
  - Insulator Library.inl

## PLS-POLE files

- Brace Library.brc
- Davit Arm Library.dvt
- Tubular Davit Arm Library.tdv
- X-arm Library.xrm
- Tubular X-Arm Library.xtm
- Framing Library.frm
- Mast Library.mas
- Wood Pole Library.wpp

- Wood Material Library.mat
- Steel Pole Library.spp
- Concrete Pole Library.cpp
- Lam Wood Pole Library.lpp
- FRP Pole Library.fpp
- Steel Shape Library.ssl

## TOWER files

- Steel Material Library.smp
- Angle Library.ang
- Bolt Library.blt

### Standard Files

- Setup Standard Files
  - Structures (.pol, .tow, .stk)
  - Feature Codes (working.fea, final.fea, printing.fea)
  - Criteria (voltage, design districts)
  - Conductor and Wire Files
  - Part and Assembly (Contractor A, Contractor B)
  - Plan and Profile (working.pps, final.pps, printing.pps)
  - Attachments (P&P borders, company logos)

## Seed Files

- Setup Seed Files
  - NESC Heavy 69 KV.xyz
  - GO95 Light.xyz
  - Working.xyz
    - Use the working file to set up any annotation or such.
  - Seed files should have reference to other files
    - Wires in the Automatic Sagging
    - STR file for structures
    - Use notes to include items such as import files or .prt files

## Distribution Files as .bak

- Setup Seed Files
  - NESC Heavy 69 KV.xyz
  - GO95 Light.xyz
  - Working.xyz
    - Use the working file to set up any annotation or such.
  - Seed files should have reference to other files
    - Wires in the Automatic Sagging
    - STR file for structures
    - Use notes to include items such as import files or .prt files

# Seed File Advantages with .bak

- All standard files kept under the control of one team for update and distribution.
- Changes to standard files do not propagate through to archive projects.
- Designers are more productive.
- Legacy projects created with same conventions easily updated.
- Project design specifications easily delivered and final deliverables easily merged into filing system.

Advanced Sag & Tension

IEC

FAC 008/009

NESC

Materials Management

**CSA** 

Pole Analysis

CENELEC

LiDAR Modeling

**Transmission** 

**NERC Ratings** 

Line

Optimization

**Project Estimating** 

Questions?

Joint Use

PLS-POLE

R

GO95

Vegetation Management

1000+ Users in 120+ Countries

Storm Hardening

Distribution

Line Ratings

ASCE

Drafting

Structural Analysis



IT'S THE SOLUTION