

Data and Deliverables from PLS-GRID

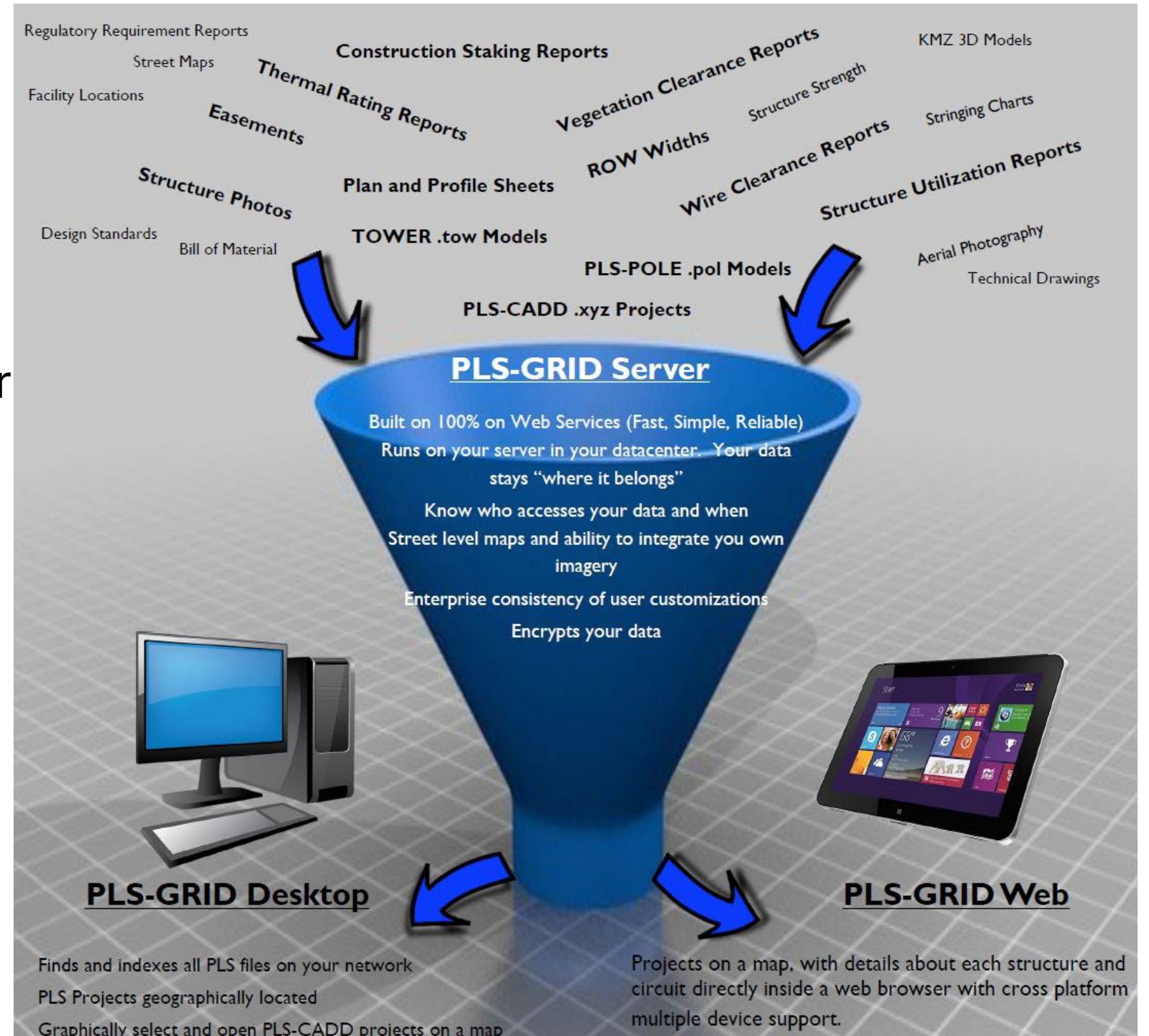


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PLS-GRID Enterprise Application

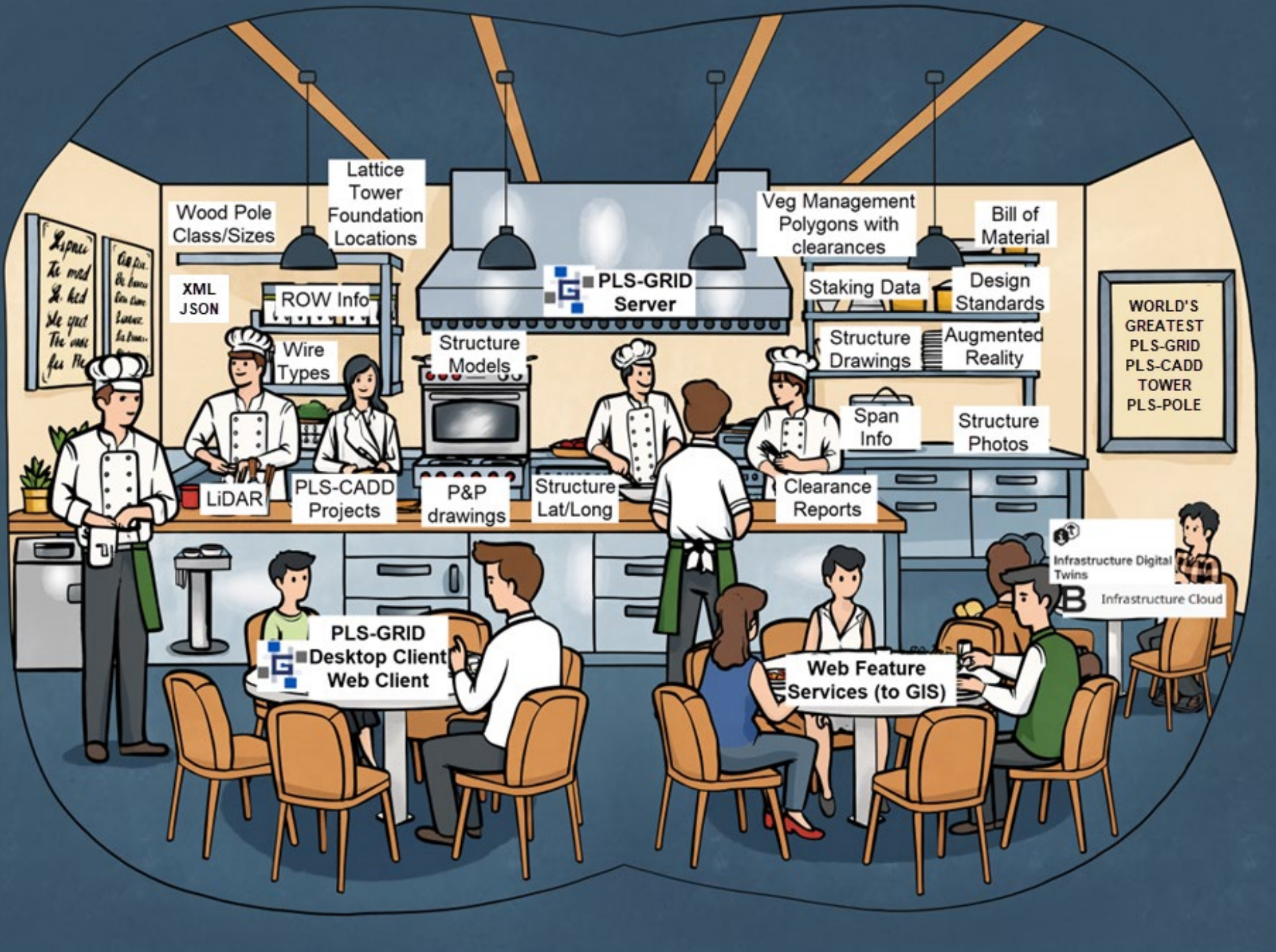
The PLS-GRID Enterprise Application consists of three separate PLS applications.

- PLS-GRID Server – Stores, manages, organizes PLS projects
- PLS-GRID Desktop Client – PLS-GRID Server access through PLS software
- PLS-GRID Web Client – PLS-GRID Server access through internet browser



PLS-GRID Server Application

The **PLS-GRID Server application** functions like a top-tier restaurant kitchen for PLS projects, quietly working in the background to handle incoming requests and serve results quality product in an efficient way to many users.

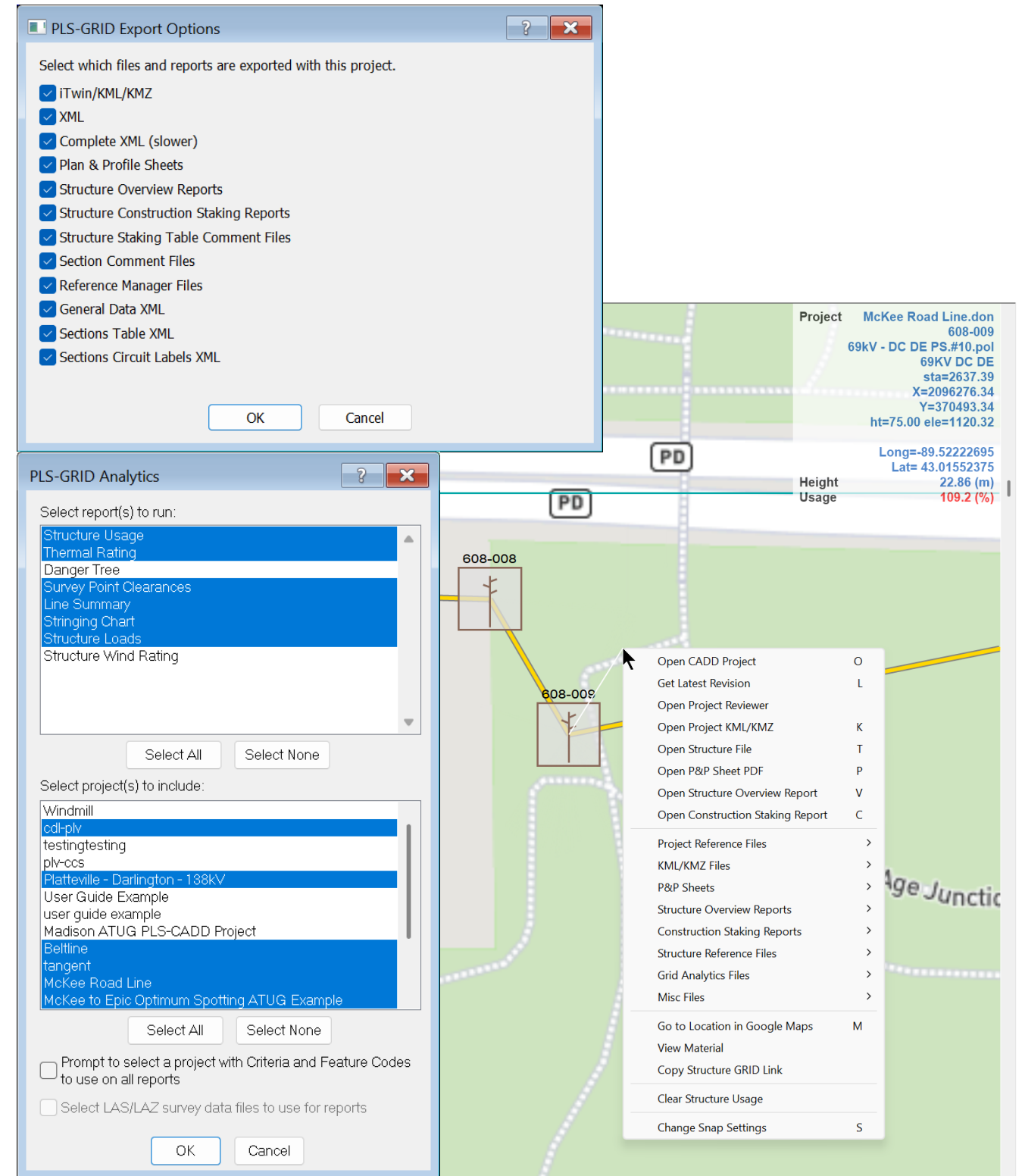


Customers of PLS-GRID content:

- PLS-GRID Desktop Client
 - PLS software users
- PLS-GRID Web Client
 - PLS software users
 - Construction crews
 - Project managers
 - Utility real estate personnel
 - Planning department
 - Third party apps
 - IT
 - AI
- Bentley Infrastructure Cloud
 - Bentley software users
- Web Feature Services (WFS)
 - Third party apps
 - GIS

PLS-GRID Desktop Client (DC)

- PLS-GRID DC is run in PLS software
- PLS-GRID DC creates content from PLS-CADD models on the PLS-GRID Server
- **Export capabilities exclusive to PLS-GRID:**
- PLS-GRID Analytics = Multi-Project reporting
- Files from Reference Manager in PLS-CADD
- Construction documents created in PLS-CADD
- Engineering reports
- Project XMLs (or json)
- Data/files from Structure and Section comments
- Material from PLS-CADD project
- Automatically package up specified exports
- Access to data uploaded from field



PLS-GRID Web Client

PLS-GRID Web Client

- Run in an internet browser
- Map View
- Project data and references
- Construction documents
- Offline mode option
- User location, directions
- Upload pic, vid, file to PLS-GRID
- Query/Reporting on Project Data
- Bill of Material
- Structure Photos
- Augmented Reality

*Read Only. No access to actual PLS projects



Structure: 09-003

Pan: Shift + Mouse Move, Rotate: Ctrl + Mouse Move, Zoom: Scroll

Close

09-003 Material

C9370.25	Strain property: 138kV DE Assembly - w/ 3' Ext. Link	Quantity: 6.00
C9384.3	Post property: 138kV Non-Porcelain Horizontal Post	Quantity: 3.00
SW clamp	Strain property: SW	Quantity: 4.00

Close

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PLS-GRID Map

Project //BTS Training Line - OHL for Data Center.xyz

Project Name BTS Training Line - OHL for Data Center

Line Name Proposed Stargate Data Center 345kV

Line Code 8675309

Voltage 345kV

Operating Zone North Central Texas

PLS-CADD Model Status Prelim Design

Recent Work Orders n/a

Substation Sub A, Sub BB

Permit Requirements none

LIDAR Survey Date Public Data Used

Maximum Operating Temp 212 F

Right of Way Width 75'

Company Bentley

Company Division PLS

Thermal Rating (deg) 212 F

Vegetation Survey Date n/a

Options

- Structure Overview Report
- Construction Staking Report
- Structure Loads Report
- KMZ File

Structure Reference Files

- TS-5.pdf

Project User-Generated Reference Files

- YII_Sub_Connection_4_PLS.dxf
- BTS Training Line - OHL for Data Center_archive_2.rtf

Grid Analytics Files

- Line_Summary.rtf
- Stringing_Chart.rtf
- Structure_Wind_Rating.rtf

- View Location in Maps
- View Structure
- View Material
- Take Photo

Legend

- 345 kV

Web Feature Services

The screenshot displays the QGIS interface with a map of a residential area. The map shows several utility lines, including a power line labeled '69kV - DC DE'. A metadata table is open on the right side of the screen, showing details for a selected feature.

Feature	Value
Structures	
Name	608-009
Feature ID	85
X	-9965565.7
Y	5314331.4
CPID	14c7a101c
Strid	10
Name	608-009
608-009	608-009
69kV - DC DE	69kV - DC DE
sta=2637.39	sta=2637.39
X=2096276.34	X=2096276.34
Y=370493.34	Y=370493.34
ht=75.00 ele=1120.21	ht=75.00 ele=1120.21
line angle=-71°00'51"	line angle=-71°00'51"
Long=-89.52222695	Long=-89.52222695
Lat=43.01552375	Lat=43.01552375
608-009	608-009
C:\GRID workspace\Dev GRID Server\McKee Road Line\References\StructureComments\str 608-008_2.jpg	C:\GRID workspace\Dev GRID Server\McKee Road Line\References\StructureComments\str 608-008_2.jpg
Height	22.86 (m)
MaxUsage	65.74 (%)
UsageElement	Steel Pole
UsageLoadCase	RULE 250C GRADE B NA-I NA-
Projects	
FileName	//McKee Road Line.lyz
CPID	14c7a101c
File Name	//McKee Road Line.lyz
Client	NULL
Company	NULL
LIDAR_Survey_Date	none, public data
Line_Code	608
Line_Name	McKee Road Line from data within PLS software
Line_Number	NULL
Maximum_Operating_T...	212 deg F
Milestone	NULL
Model_Status	NULL
Normal_Operating_Temp	n/a
Operating_Zone	SC WI
PLS_CADD_Model_Status	As-Built
Permit_Requirements	DOT
Project_Name	McKee Road Line
Recent_Work_Orders	None
Right_of_Way_Width	50 (ft)
Substation	Pleasant View, McKee Road
Voltage	69kV

Web Feature Service

PLS-GRID Server can be configured to be queried by other applications that use Web Feature Service

2D Layers w/ data for Project, Structure, Spans

PLS Video Showcasing this topic:

<https://www.youtube.com/watch?v=0Sasz2rGTdA>

PLS-GRID sync with Bentley Infrastructure Cloud

Bentley Infrastructure Cloud:

- iModels created from PLS-GRID
- iModel for each PLS-CADD project
- 3D Line Geometry
- Structure & Section Data

