



# Introductie OpenCities Map PowerView

**Instap voor viewing en editing van 2D  
geospatial informatie**

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7 dec 2022

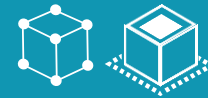
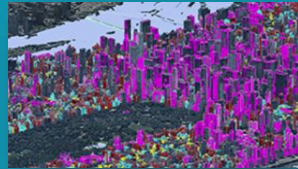


## OpenCities Map PowerView Agenda

- **Introductie van OpenCities Map soorten**
- **Overeenkomsten en verschillen met MicroStation**
- **Installatie & Configuratie**
- **Oefeningen**

# OpenCities Map PowerView: 3 soorten OpenCities Map

## OpenCities Map Ultimate



3D Editing &  
Solid Modeling



Advanced  
Image Editing



3D Reality Meshes,  
Terrain Models &  
Point Clouds

## OpenCities Map Advanced



Spatial Database  
Read / Write



Thematic  
Analysis

## OpenCities Map PowerView



Spatial Database  
Read-only



Basic 2D

## OpenCities Map PowerView

**For users that primarily need to view and perform 2D feature acquisition and editing**

- **Includes the MS design tools**
- **Supports editing capabilities and GPS, making it ideal for field-based operations requiring feature editing**
- **Query leading spatial databases such as Oracle Spatial, Esri ArcGIS Server, PostGIS and Microsoft SQL Server**
- **Optimize the workflows with your applications (VBA, C, C++)**





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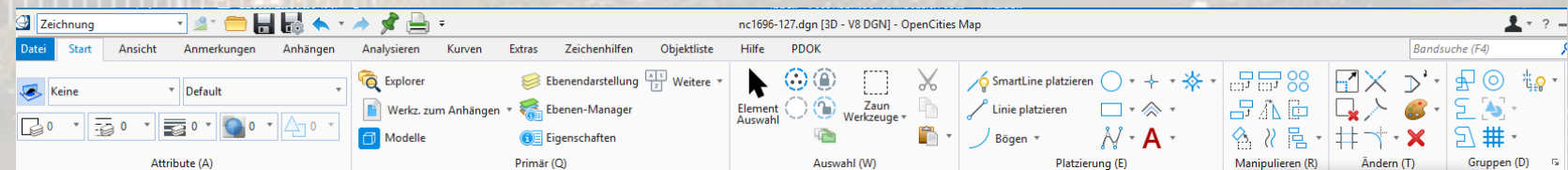
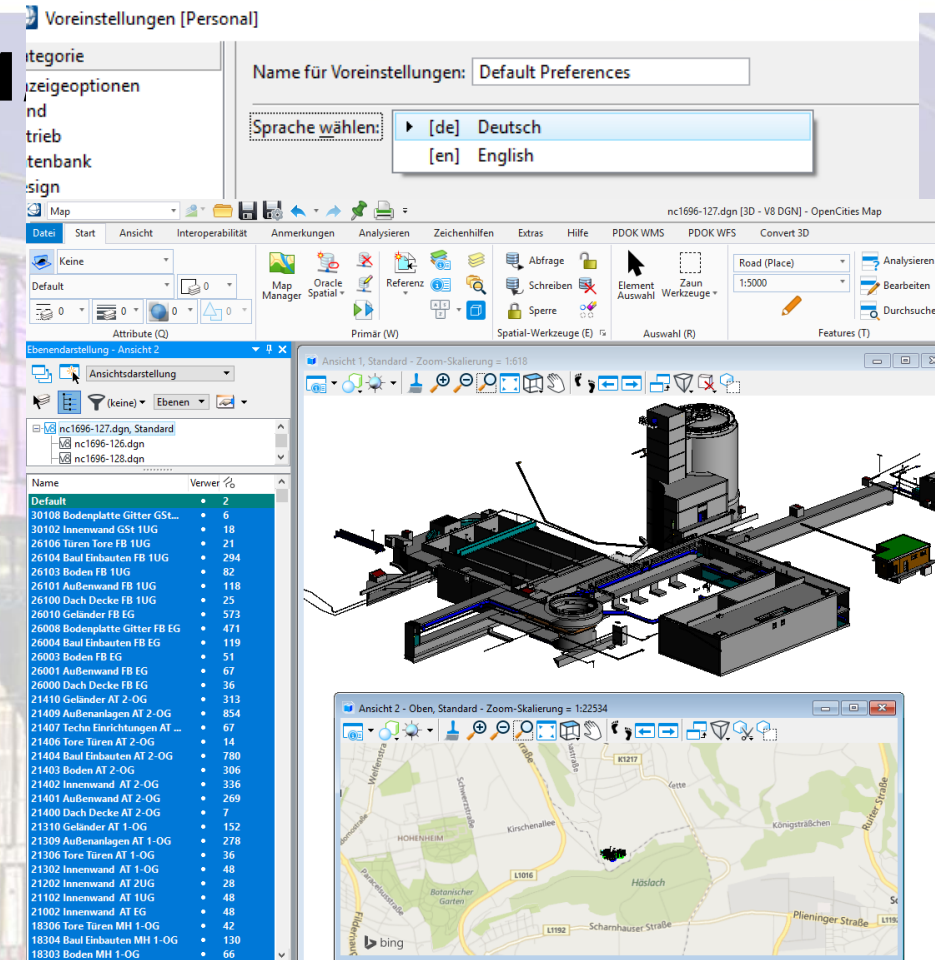


# OpenCities Map PowerView Engine 1



## MicroStation Engine

- Same Interface
- Various language packages
- DGN format compatible
- All MicroStation tools are available
  - References (incl. SHP)
  - Rasters
  - Native DWG support
  - Coordinate systems
  - Import/Export to many formats
    - Google Earth, SKP
  - 2D/3D





# OpenCities Map PowerView Engine 2/2



## MicroStation Engine without:

- **No Animation Creation**
- **No Curve tools** (except place curve)
- **No Solid Modeling**
- **No Constraints**
- **No 3D DWG**
- **No 3D printing**
- **Limited Import/export 3D format**
- **No Meshes**
- **No Surface**
- **Visualization**
- **No design history**
- **No I-Model publishing**
- **No raster save**
- **No terrain**
- **No (MS) Cleanup tool**
- **No Standards Checker**

# Comparison OpenCities Map products

Features	OpenCities Map Ultimate	OpenCities Map Advanced	OpenCities Map PowerView
<b>Update Features</b>	●	●	◐
<b>FME integration</b>	●	●	◐
<b>Posting to Spatial Data Sources (Oracle, SQL Server, FGDB, PostGIS)</b>	●	●	◐
<b>Posting to Spatial Data Sources (ArcGIS Server and ArcGIS Online)</b>	●	●	◐
<b>Querying from Spatial Data Sources (WFS, Oracle, SQL Server, FGDB, PostGIS, ArcGIS Server and ArcGIS Online)</b>	●	●	●
<b>Importing from Spatial Data Sources (WFS, Oracle, SQL Server, FGDB, PostGIS, ArcGIS Server and ArcGIS Online)</b>	●	●	●
<b>Importing Geospatial Files (SHP, MIF, TAB, GML)</b>	●	●	●
<b>Enhanced Analyze Tool</b>	●	●	●
<b>Auto Promote</b>	●	●	●
<b>Free support of Bing Map</b>	●	●	●
<b>Display of Reality Meshes, Point Clouds, Textures</b>	●	●	●
<b>2D placement methods and editing tools</b>	●	●	●
<b>Map Management and Thematic Mapping</b>	●	●	●



# Comparison OpenCities Map products

Features	OpenCities Map Ultimate	OpenCities Map Advanced	OpenCities Map PowerView
<b>Reality Data Processing (Raster, STM, Point Cloud and Reality Meshes)</b>	●	◐	◐
<b>3D Placement and Editing Tools</b>	●	◐	◐
<b>Animation Creation</b>	●	◐	◐
<b>XFM 3D Smart Editing</b>	●	◐	◐
<b>XFM Textures Editing</b>	●	◐	◐
<b>Export to LumenRT</b>	●	◐	◐
<b>3D Buffer</b>	●	◐	◐
<b>3D Split / Merge</b>	●	◐	◐
<b>Geographic Coordinate System Management and Editing</b>	●	●	◐
<b>Buffers and Overlays analysis</b>	●	●	◐
<b>Exporting Geospatial Data (SHP, MIF, TAB, GML, FGDB)</b>	●	●	◐
<b>Export To MicroStation Elements (From Map Manager)</b>	●	●	◐
<b>DGN2DB (Oracle and PostgreSQL/PostGIS)</b>	●	●	◐
<b>Update Configuration</b>	●	●	◐



## OpenCities Map PowerView Agenda

- **Introductie van OpenCities Map soorten**
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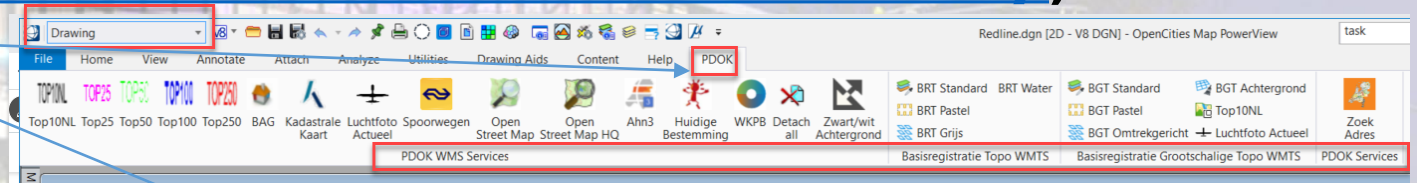
# OpenCities Map PowerView Installatie en Configuratie

- **Idem als MicroStation**
  - **Deployment image, setup\_PowerViewxxx\_.exe /layout**
  - **Dezelfde configuratie kan worden gebruikt door MicroStation en OCM PowerView**
  - **Gebruik een shared drive met een gemeenschappelijke configuratie.**  
**In ConfigurationSetup.cfg**  
`_USTN_CUSTOM_CONFIGURATION = M:\bentley\Configuration/`
  - **Dezelfde opstart parameters**
    - **-wr, -wk, -ww**  
`"<path>\MapPowerView" -WR"M:\bentley\configuration"`
  - **Documentatie**
    - [Readme](#)
    - [Algemeen](#)
    - [Wiki](#)
    - [Learning](#)
    - [V8i migratie naar Connect Edition](#)

# OpenCities Map PowerView Installatie en Configuratie

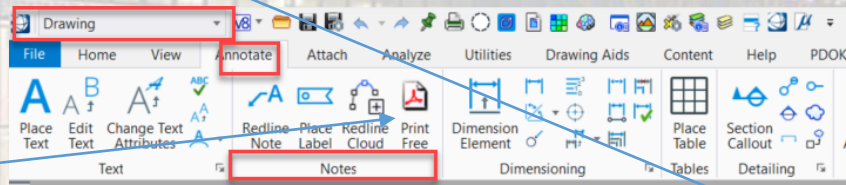
- Tools toegevoegd
- Beschikbaar op [Bentley Communities](#)  
(of in dataset [20221207 Winterschool OCM PowerView.zip](#))

- **PDOK** tools met WMS, WMTS en WFS

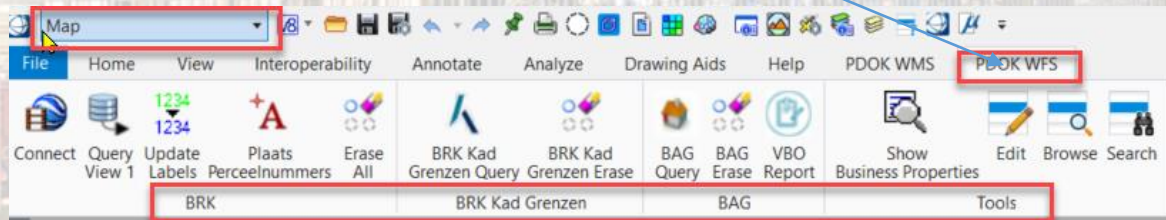


- **Klic-melding** importeer  
**Klic-melding**

- **Redline**  
**Plaats opmerking**



- **Print**  
**Maak snel een print met 2 klikken**





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# OpenCities Map PowerView Update 17.1

- **Start de applicatie**
- **Interface**
  - **Workflow**
  - **PDOK achtergrond WMS/ WMTS**
  - **Tools**
  - **Kadastrale kaart**
  - **Topografie**
  - **Ontsluiten van andere bronnen**
    - **SHP Import**
    - **ArcGIS server**
- **Redline**
  - **Printen**
  - **Klic-melding**
- **Use-case: parkeervakken aanmaken**
  - **Plaatsen**
  - **Presentatie**
  - **Labels**



## Data Set

Used dataset available in the ZIP file **20221207 Winterschool OCM PowerView.zip**.

Installation dataset:

- In the root of the C-drive create a folder data. Optionally another drive can be used. In that case, change the drive letter too in the instruction below.
- Unzip the file *TMC Winterschool 2022 OpenCities Map PowerView.zip* into the folder C:\Data\.
- Move or copy the folder **c:\data\20221207 Winterschool OCM PowerView\Configuration** to the Configuration folder used by OpenCities Map PowerView,  
e.g. **C:\ProgramData\Bentley\Map Connect Edition\MapPowerView\**.

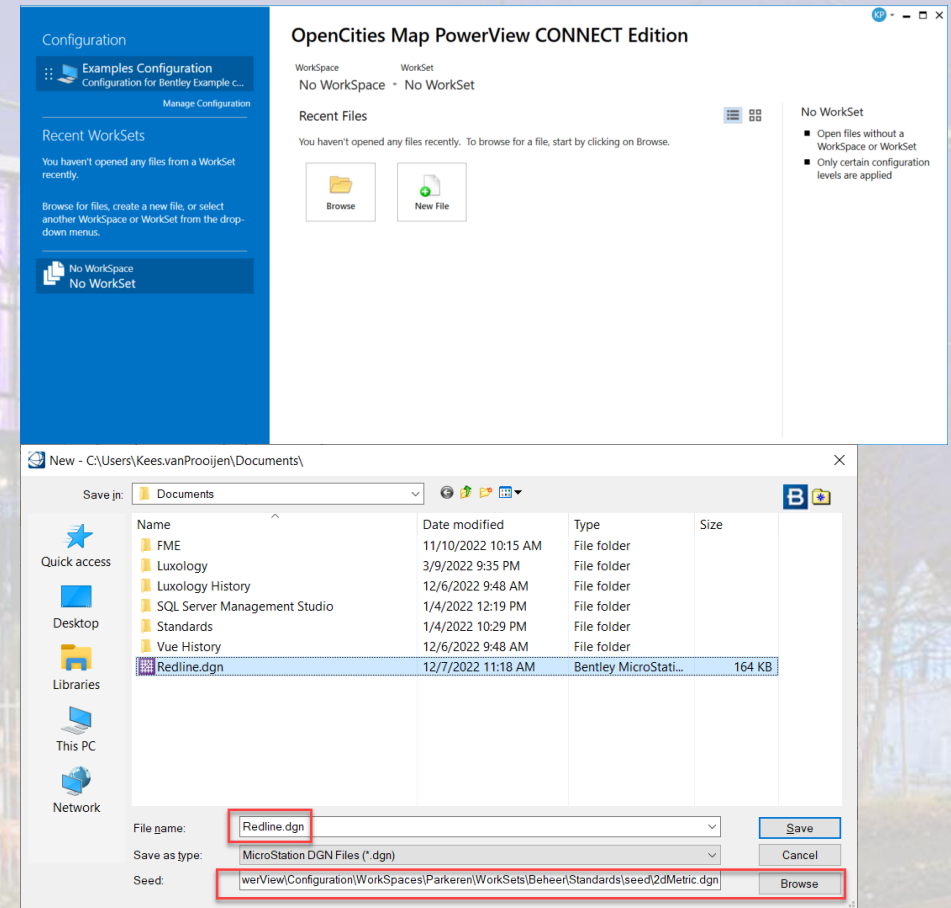
De volgende folders bevatten files die gebruikt worden tijdens de oefeningen.

- The Organization folder met bestanden die door alle workspaces en worksets gebruikt worden:  
*C:\ProgramData\Bentley\Map CONNECT Edition\MapPowerView\Configuration\Organization\*
- Folder met bestanden die door derden worden geleverd  
*C:\Data\20221207 Winterschool OCM PowerView\*
  - *Klic-melding*
  - *Hoorn*
- De workspace *Parkeren* met workset *Beheer*:  
*C:\ProgramData\Bentley\Map CONNECT Edition\MapPowerView\Configuration\WorkSpaces\Parkeren*

## Start and discover interface and tools

In OpenCities Map PowerView gaan we in een nieuwe tekening naar een locatie van een adres. Bij dit adres gaan we de nodige gegevens ophalen en de luchtfoto vergelijken met de BAG en kadastrale gegevens.

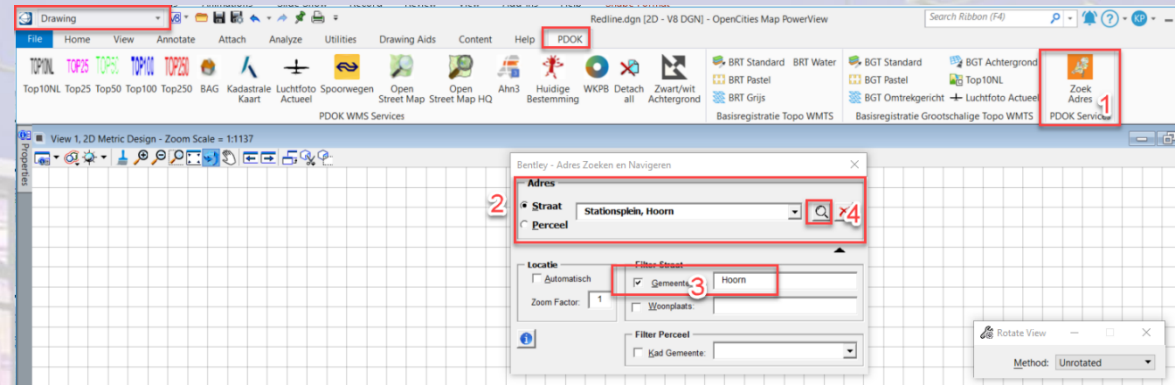
- Start OpenCities Map PowerView via het Start menu. The *Backpage* is opened.
- In de *Backpage* selecteer **No Workspace**.
- Maak een nieuwe DGN file.
  - Selecteer **New File**.
  - Selecteer de seed file **C:\Data\2022\1207 Winterschool OCM PowerView\Configuration\WorkSpaces\Parkeren\WorkSets\Beheer\Standards\seed\2dMetric.dgn**
  - Voer de naam in van de nieuwe file **Redline.dgn**.
  - Open deze nieuwe DGN file.



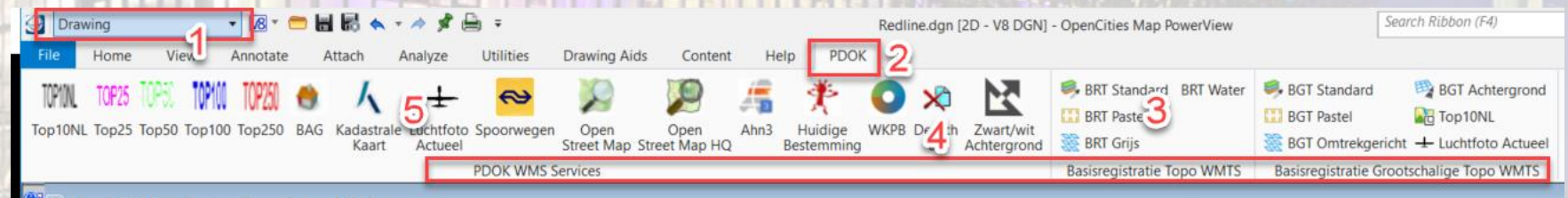


## Navigeer naar een locatie en koppel ondergronden

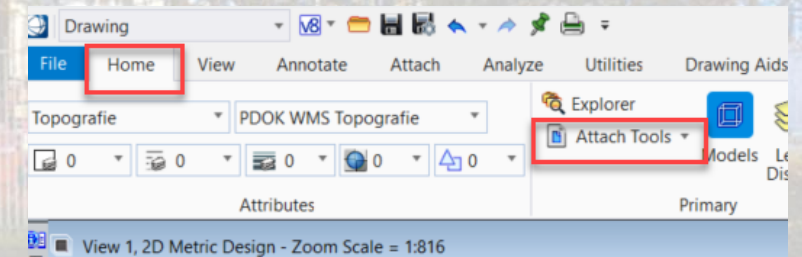
- Zoek het adres op in Hoorn: Stationsplein.
  - Open de *Zoek Adres* tool.



- Bekijk de mogelijke PDOK ondergronden
  - Top10NL, Top\*\*\*
  - BRT
  - BGT

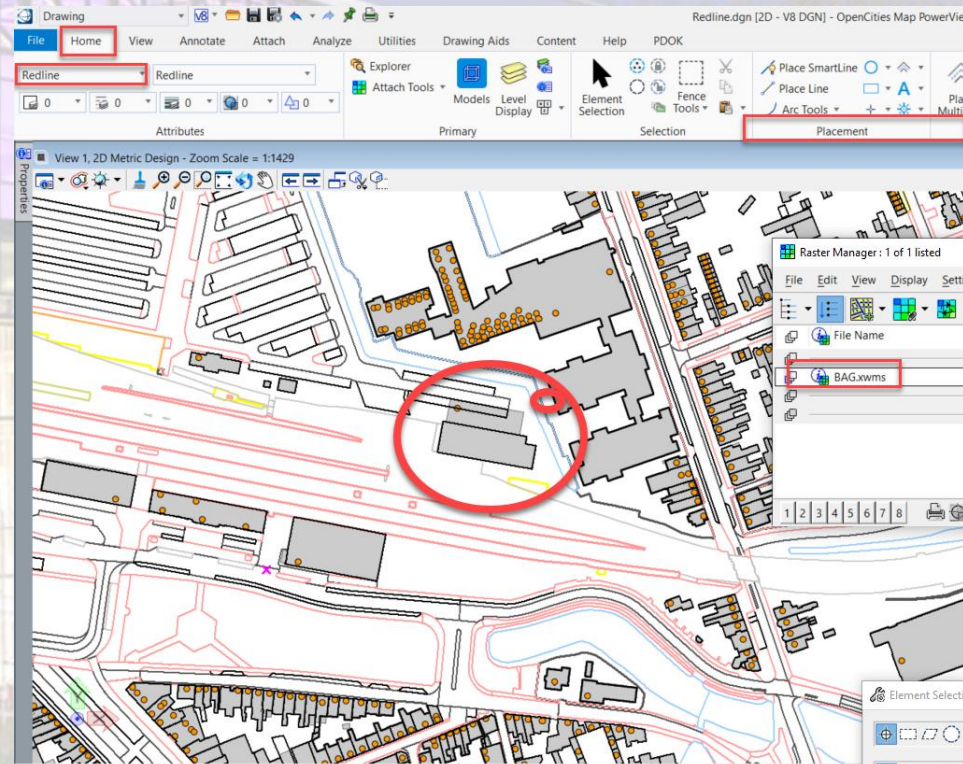
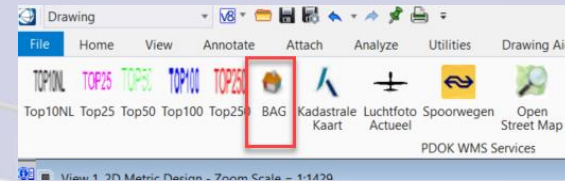


- Koppel een DGN file met de BGT.  
Selecteer de file **C:\Data\2022\1207 Winterschool OCM PowerView\Hoorn\BGT.dgn**



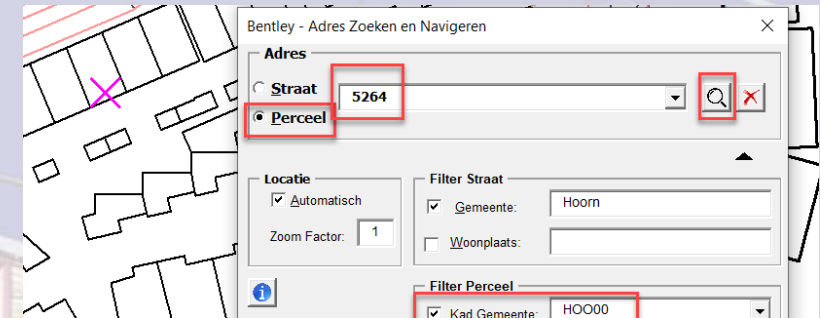
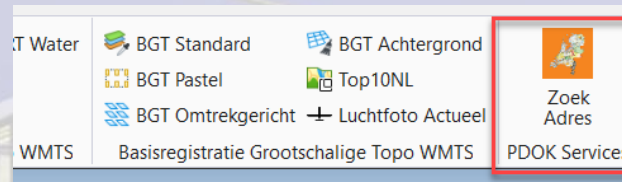
## Bekijk de drawing tools en maak een melding

- Koppel de PDOK BAG ondergrond.
- Ten noorden van het station is een verschil tussen de BAG en BGT.
- Gebruik de Placement tools (*Drawing > Home > Placement*) om dit signaleren.
- Selecteer de template **Redline** om de juiste symbologie en tekst grootte te activeren.



## Bekijken van kadastrale gegevens

- Navigeer naar perceel H000-A-5264.  
(Gedempte Appelhaven 40)



- Haal de actuele kadastrale grenzen op.

- Selecteer de workflow *Map* (1) en open de tab *PDOK WFS*.

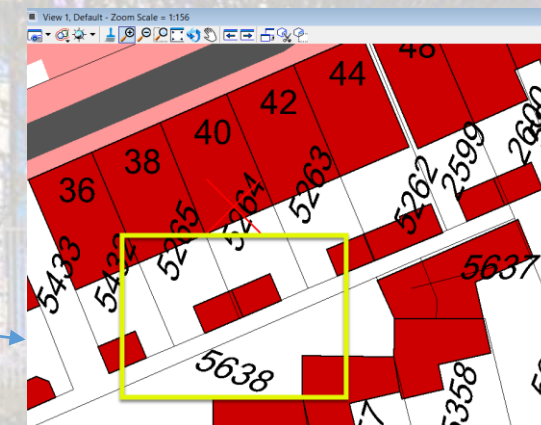
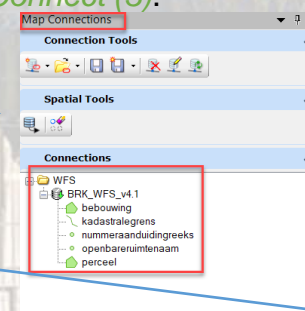
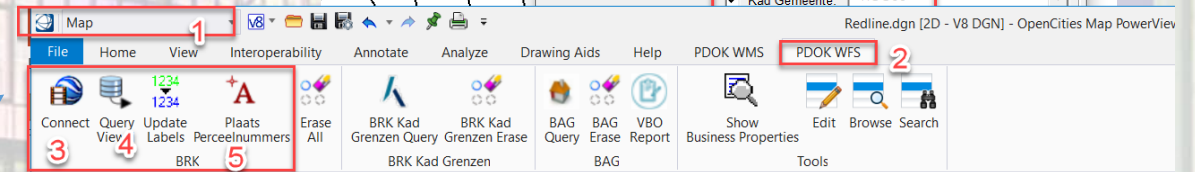
- Maak een connectie met de PDOK server *Map > PDOK WFS > BRK > Connect* (3).

- De *Map Connections* dialog wordt geopend.

- Haal de percelen op. Selecteer *Query View* (4).  
In het *Default* model worden de grenzen geplaatst.

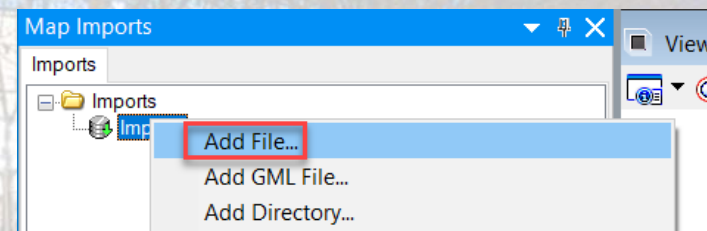
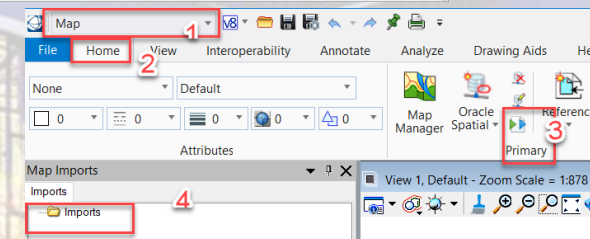
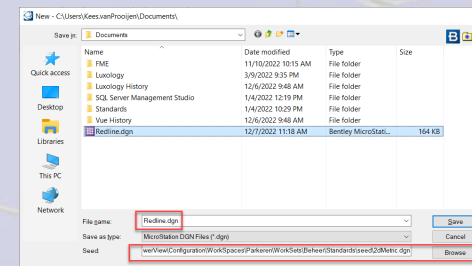
- Plaats de perceelnummers. Selecteer *Plaats Perceelnummers* (5).

- Controleer de schuur tussen nr 40 en 38



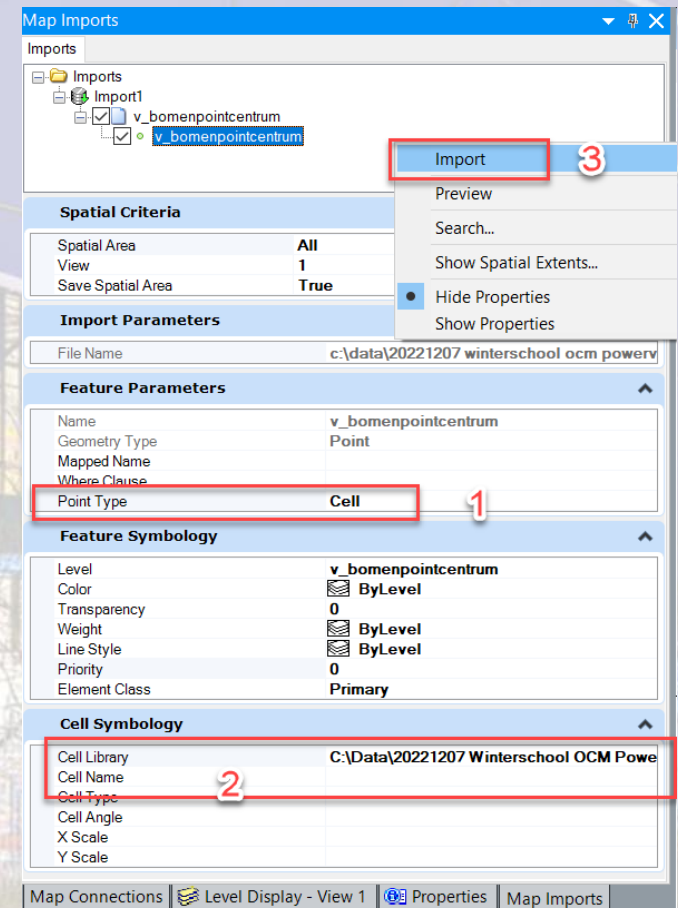
## Ontsluiten van andere bronnen 1/2

- Maak een nieuwe DGN file **Redline2.dgn** met de seed file  
**C:\Data\20221207 Winterschool OCM  
PowerView\Configuration\WorkSpaces\Parkeren\WorkSets\Beheer\Standards\seed\  
2dMetric.dgn**
- Koppel de SHP file  
**C:\Data\20221207 Winterschool OCM  
PowerView\Hoorn\Bomen\v\_bomenPointCentrum.shp**
  - Open de *Map Imports* dialog (*Map > Home > Primary > Import*)
  - In de *Map Imports* dialog, selecteer **Imports** en open een popup menu met de rechtermuisknop en kies **New Import**.
  - In de *Map Imports* dialog, selecteer **Import1** en open een popup menu de rechtermuisknop en kies **Add File**
  - Selecteer de SHP file **C:\Data\20221207 Winterschool OCM  
PowerView\Hoorn\Bomen\v\_bomenPointCentrum.shp**
  -



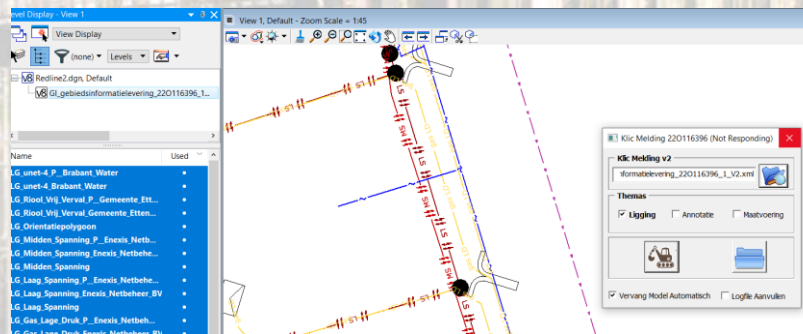
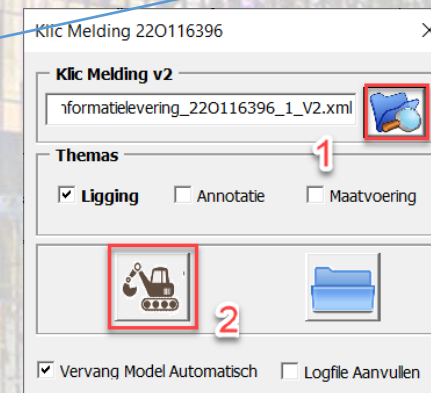
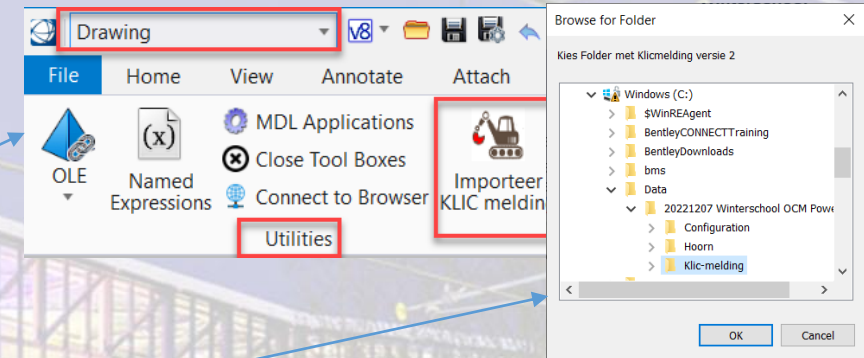
## Ontsluiten van andere bronnen 2/2

- Zet de presentatie van de SHP file
  - In de *Map Imports* dialog, selecteer *Point Type* en kies **Cell (1)**.
  - In de *Map Imports* dialog, selecteer *Import1* en open een popup menu de rechtermuisknop en kies de *cell library (2)*  
**C:\Data\20221207 Winterschool OCM PowerView\Hoorn\Bomen\Bomen & struiken.cel**
  - En *Cell Name BB02*
  - Start de import met het popup menu *Import (3)*



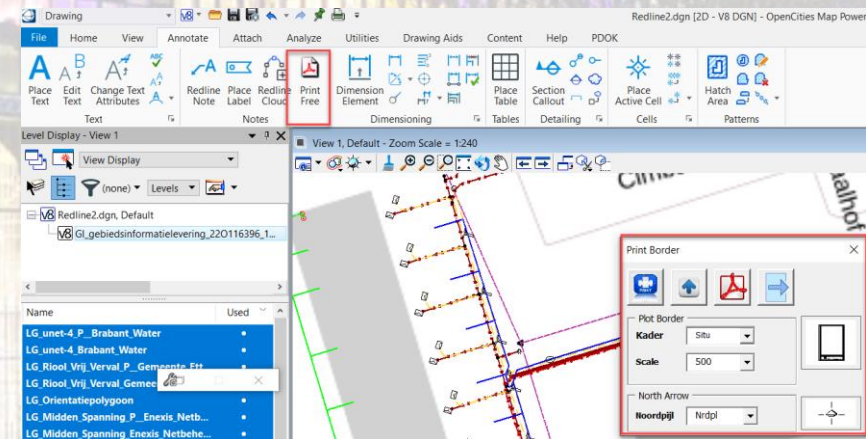
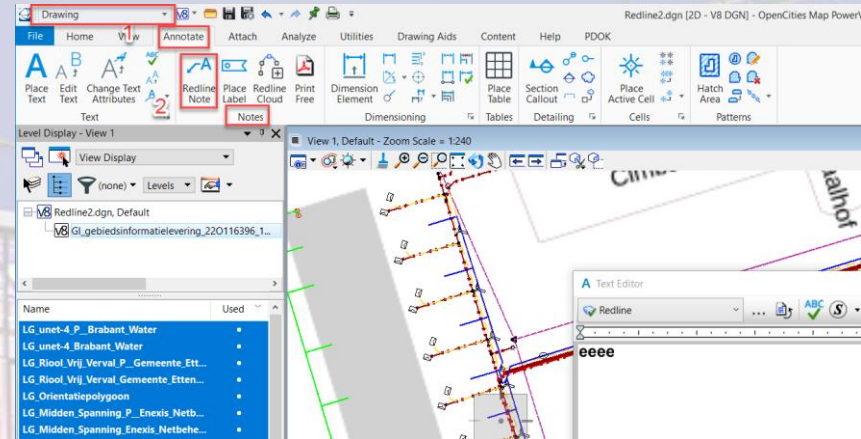
## Presenteren van een Klic melding

- Maak een nieuwe DGN file **Redline3.dgn** met de seed file **C:\Data\20221207 Winterschool OCM PowerView\Configuration\WorkSpaces\Parkeren\WorkSets\Beheer\Standards\seed\2dMetric.dgn**
- Importeer een Klic-melding in de DGN file
  - In de *Drawing* workflow, open de *KLIC melding* tool *Drawing > Utilities > Importeer KLIC ...*
  - Selecteer de folder met de melding met de *Select* knop (1) **C:\Data\20221207 Winterschool OCM PowerView\Klic-melding**
  - Start de import met de knop (2)
  - De melding wordt getoond.
  - Koppel de ondergronden uit de folder **C:\Data\20221207 Winterschool OCM PowerView\Configuration\WorkSpaces\Parkeren\WorkSets\Beheer\dgn**



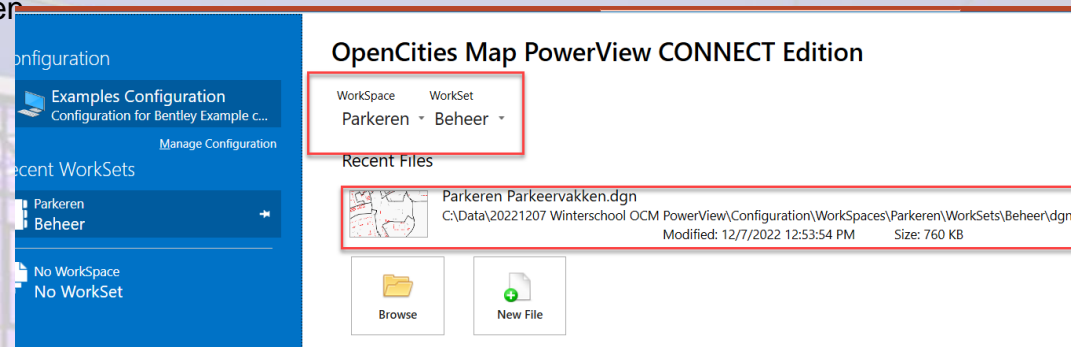
## Verwerk de Klic melding

- Voeg opmerkingen toe.
  - In de *Drawing* workflow, open de *Redline Note* tool (*Drawing > Annotate > Notes*)
- Print de Klic-melding
  - In de *Drawing* workflow, open de *PrintFree* tool (*Drawing > Annotate > Notes*)



## Use-case Parkeer vakken

- Een tekenaar krijgt de opdracht om parkeervakken in te tekenen
- Sluit OCM PowerView
- Open OCM PowerView en kies de workspace **Parkeren**.



- Open de DGN file  
**C:\Data\20221207 Winterschool OCM PowerView\Configuration\WorkSpaces\Parkeren\WorkSets\Beheer\dgn\Parkeren Parkeervakken.dgn**
- **Koppel de BGT file**





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7 dec 2022