



Version 9.1



INTRODUCING CIVIL DESIGNER 9.1

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We are always proud to bring you time saving features, functionality enhancements and improvement to every new release of Civil Designer and this version is no exception.

Our team make every effort to stay at the forefront of changes in the AEC digital design industry. For this reason, we are proud to introduce a BIM Bridge interface that allows you to collaborate using a single, up-to-date design model in your own Open BIM Common Data Environment (CDE). You can now manage different versions of your design, track changes over time, communicate and resolve clashes with other industry specialists, all from within Civil Designer.

One platform. One design model. Everything you need, all in one place.

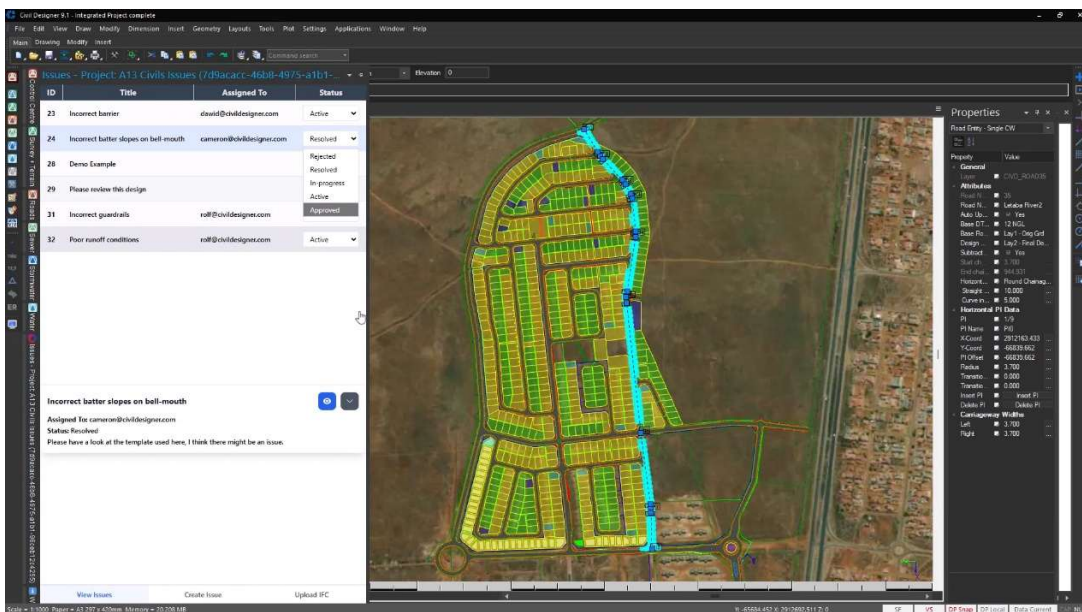
NEW FEATURES & IMPROVEMENTS



Design Centre

New Features

- BIM Bridge
 - Issue handling and BCF file handling
 - Integrations with **Autodesk** Construction Cloud (ACC)
 - Integration with **Catenda** CDE Issue bar



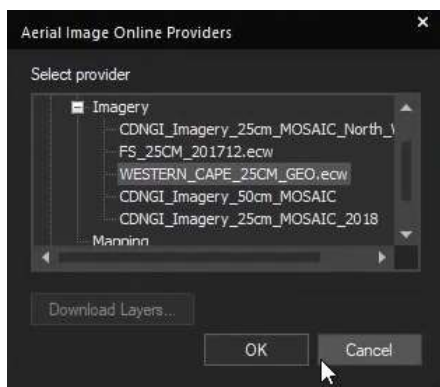
- Import Civil 3D data into Civil Designer entities
- BIM Naming for IFC export can use an Excel template
- Load IFC properties from dictionary into properties dialog
- Implement logic to add properties and Psets to IFC objects
- IFC Properties Dialog allows add/delete properties from the Civil Designer property set
- IFC export for Terrain, CAD Meshes, Sewer, Storm, and Water includes object types, RSets and PSets
- IFC Validation for Water and CAD Meshes



CAD Module

New Features

- Groups in the Control Centre allows easy management of entity groups for visibility, selection, and editing.
- Render View Selected allows you to render only selected entities
- Command Search function has been added to the Toolbar
- Live Measure Feature gives real-time feedback as you measure distances or areas in the drawing
- Draw RText
- Insert Point in Hatch Boundary
- Aerial Imagery supports Chief Directorate of National Geospatial Information
- Aerial Image supports imagery from South Africa's Chief Surveyor General



- Batch Convert DR4 to DR5
- Table Entity: CSV & Excel Export
- Table Entity: DWG Cell Borders & Colours

Enhancements

- Autoload remember last used addon
- Added an XRef Manager Refresh button (unloads and reloads all the loaded xrefs that are "out of date").
- User interface updates
- Control Centre Listboxes resize like Block Browser
- Export KML can export CAD entities using ByLayer colours
- Draw Line cad bar added to enable entering line length and angle.
- Add "Paste" option to Coordinate Jump CAD bar.
- Geometry > Divide Equally function can now divide ellipses and elliptical arcs.
- Modify > Fillet now has a mode to graphically indicate fillet arc radius.
- Draw dimensions now remembers snap mode for each step of the draw function.
- Pen Mapping option for PDF Export and Publish to PDF.
- Export to PDF can now handle MrSID and ECW images.
- Export to PDF can now export 3D PDFs (embedded PRC data).
- Import 3D Models: Improved to import as SubDMeshes if possible.

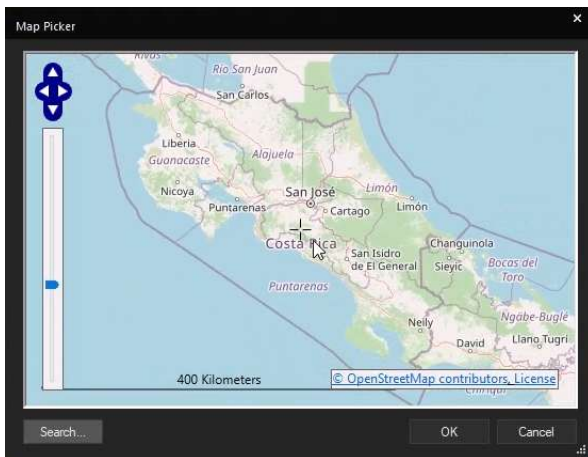
- DWG/PDF import/export updated to use ODA 25.9 DWG libraries
- Adjust Geometry Circle Size for "Divide Equally" Based on Segment Length



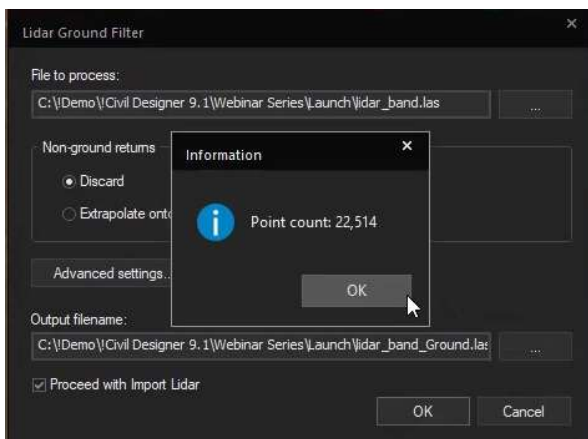
Survey & Terrain Module

New Features

- Import Projection Settings from PRJ File
- Choose Projection via World Map



- Import Civil 3D Model
- Lidar Ground Filter for non-ground points



- GeoSmart elevation included in Point Grid data
- Export IFC Includes Terrain Strings
- Export LandXML Includes Terrain Strings
- Shapefile export Includes Parcels

- Reheight String includes an Add Constant Option
- Create Child Strings retains Toe settings
- Terrain Strings Visibility Control using 'Show All' and 'Hide All' buttons
- Multi-Select Display Settings
- Parcels with Land Use Categories
- Elevation Annotation is linked to the terrain surface
- Slope Annotation Enhancements

Enhancements

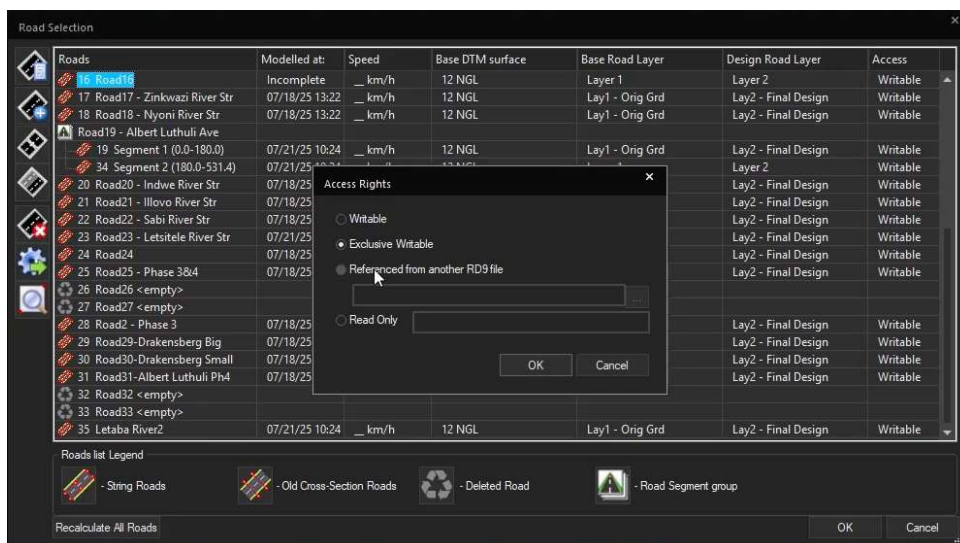
- Improvements to the grid Subcatchment function
- Improvements to the Parcels list
- Filenames stored in the system %temp% folder are now unique



Roads Module

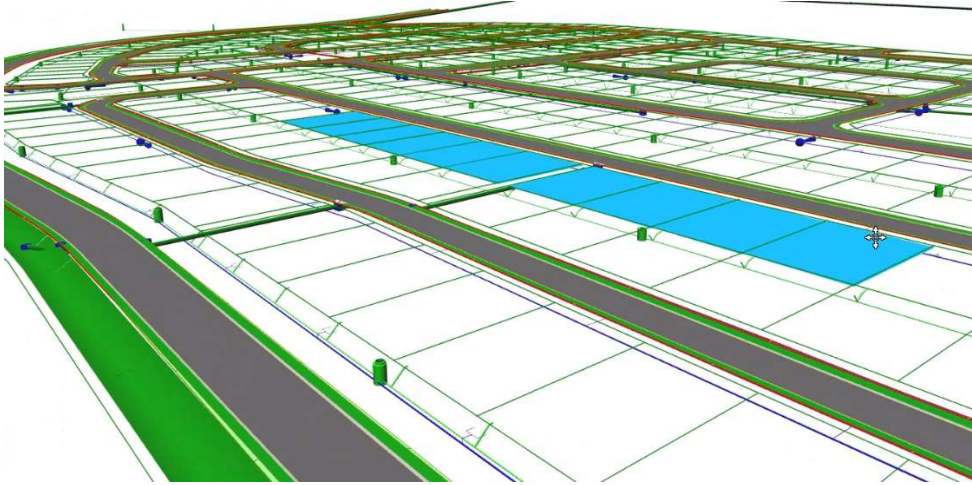
New Features

- Allow input of Urban design criteria in the Design Criteria Dialog
- Cross-section roads are automatically converted to Strings model if modified.
- Output Component Quantities per continuous chainage range for left and right
- Writable, exclusive writable, referenced and read-only road access permissions
- IFC Export for roads aligned with IFC4x3 standard
- Interface for Roads files access and permissions
- Writable, exclusive writable, referenced file and read-only road access permissions



- Allow single roads to be read only
- Component Quantities output by chainages or chainage range.

- Roads Control Panel handles crossfalls for a Dual Crowned Carriageway
- Calculate minimum drainage level to road for parcels



- Specify the CAD output layer for each run of a Water Film Thickness analysis

Enhancements

- Import Civil 3D services as Auxiliary services.
- Junctions are listed in Control Centre for the current road
- Addon Strings are listed in Control Centre for the current road
- Add curve length to the PI data box in the Vertical Alignment graphical view
- Cursor position on the cross-section view is indicated on Plan
- Resetting Report Quantities clears all reports
- Roads Control Panel can handle crossfalls for a Dual Crowned Carriageway
- Addon Strings are used to define median geometry including bull-nose intersections



Signage Module

New Features

- Auto-Height Linear Road Furniture option
- Arrow Markings are dynamically linked to a road



Turn Module

New Features

- Wind Turbine Transporter vehicle configurations



Sewer Module

New Features

- Vertical alignment displays a graphically marked selection, or specified section of the network
- View Erf Connections in the vertical alignment according to colour scheme
- Import Sewer networks from a Civil 3D DWG
- Filter input, edit and results spreadsheets
- Tie an Erf connection to a parcel
- Show Sewer Connection Types for Parcels
- Land use categories automatically assigned to connections

Number	Y Coord	X Coord	Area	Perimeter	Category	Sub-category	Sewer ID	Water ID
4606	-66628.510	2912402.731	400.126	78.775	Residential	Medium density	LMH_164_4606 [1]	88-7B
4629	-66848.480	2912205.940	310.890	70.240	Residential	Medium density	LMH_11_4629 [2]	77-14B
4628	-66832.047	2912205.213	302.124	72.080	Residential	Medium density		77-14A
4627	-66817.301	2912208.387	316.965	71.420	Residential	Medium density	LMH_77_4627 [3]	77-12B
4626	-66799.710	2912208.944	312.485	69.663	Residential	Medium density		77-12A
4625	-66801.889	2912202.044	446.839	125.981	Residential	Medium density	LMH_5_4625 [4]	77-10B
4624	-66783.285	2912207.709	333.702	79.838	Residential	Medium density	LMH_5_4624 [5]	77-10A
4623	-66771.477	2912210.139	305.916	75.207	Residential	Medium density	LMH_5_4623 [6]	77-8B
4622	-66759.427	2912210.589	301.211	71.946	Residential	Medium density	LMH_5_4622 [7]	77-8A
4621	-66728.937	2912225.072	310.185	70.847	Residential	Medium density	LMH_5_4621 [8]	77-6B
4620	-66718.915	2912235.136	317.845	72.558	Residential	Medium density	LMH_7_4620 [9]	77-6A
4619	-66707.561	2912244.411	321.374	73.344	Residential	Medium density	LMH_7_4619 [10]	77-4B
4618	-66696.716	2912253.270	308.311	72.691	Residential	Medium density	LMH_7_4618 [11]	77-4A
4617	-66688.222	2912264.308	303.260	72.461	Residential	Medium density	LMH_8_4617 [12]	88-2A
4616	-66677.858	2912273.097	302.771	71.425	Residential	Medium density	LMH_8_4616 [13]	88-2B
4615	-66669.120	2912283.693	301.810	71.780	Residential	Medium density	LMH_8_4615 [14]	88-3A
4614	-66661.456	2912295.006	311.222	72.692	Residential	Medium density	LMH_162_4614 [15]	88-3B
4613	-66654.950	2912306.853	297.000	71.400	Residential	Medium density	LMH_162_4613 [16]	88-4A

- Use up to 150 land use categories

Enhancements

- Improved parcel connection information
- Improved the analysis speed and disk usage efficiency

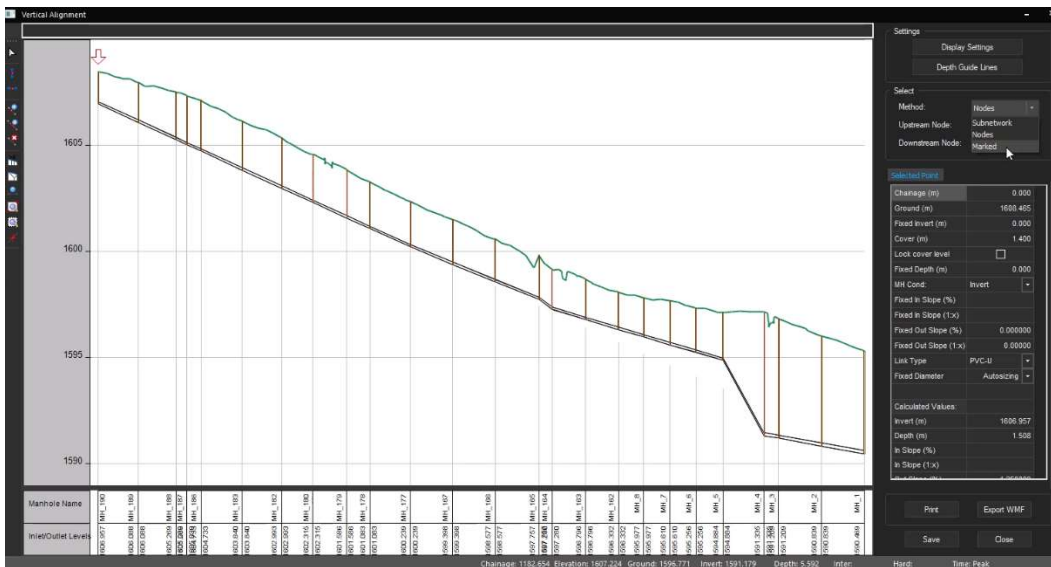
- Unused node and link types can be deleted
- Load and save land use categories to file
- Add parcel information to sewer connection spreadsheet



Storm Module

New Features

- Vertical alignment displays a graphically marked selection, or specified network section



- View Erf Connections in the vertical alignment according to colour scheme
- Import Storm networks from a Civil 3D DWG

Enhancements

- Improved the analysis speed and disk usage efficiency
- Improved ease of changing SWMM Node and Link Types
- Filter input, edit and results spreadsheets

Connection Name	Date of Sewer from Boundary	Sewer Position	Minimum Ground Level	Ground Level	Minimum Cover on Conn	Minimum Cover on HouseCon	Conn Slope (%)	Conn Slope (1/x)	Conn Diameter (in)	Inflow Units	Category	Sub category
1 LMH_154_4656	0	0.900 In Road Reserve	1598.913	1598.922	0.700	0.300	1.667	60.000	150	1	Group cluster	Medium density
3 LMH_77_4627	0	1.000 In Road Reserve	1597.263	1597.621	0.700	0.300	1.667	60.000	150	1	Low-income (wet)	Low density
4 LMH_5_4625	0	1.000 In Road Reserve	1597.164	1597.185	0.700	0.300	1.667	60.000	150	1	Low-income (wet)	Medium density
5 LMH_5_4624	0	1.000 In Road Reserve	1597.164	1597.165	0.700	0.300	1.667	60.000	150	1	Low-income (wet)	Medium density
6 LMH_11_4625	0	0.950 In Road Reserve	1597.460	1597.725	0.700	0.300	1.667	60.000	150	1	Low-income (wet)	Medium density
7 LMH_5_4623	0	1.000 In Road Reserve	1597.133	1597.139	0.700	0.300	1.667	60.000	150	1	Residential	Medium density
8 LMH_5_4622	0	1.000 In Road Reserve	1597.133	1597.141	0.700	0.300	1.667	60.000	150	1	Residential	Medium density
9 LMH_5_4621	0	0.920 In Road Reserve	1597.105	1597.226	0.700	0.300	1.667	60.000	150	1	Residential	Medium density
9 LMH_7_4620	0	1.000 In Road Reserve	1597.364	1597.373	0.700	0.300	1.667	60.000	150	1	Residential	Medium density
10 LMH_7_4619	0	1.000 In Road Reserve	1597.482	1597.484	0.700	0.300	1.667	60.000	150	1	Residential	Medium density
11 LMH_2_4618	0	1.000 In Road Reserve	1597.637	1597.642	0.700	0.300	1.667	60.000	150	1		



Water Module

New Features

- Create custom bedding classes

Bedding Classes

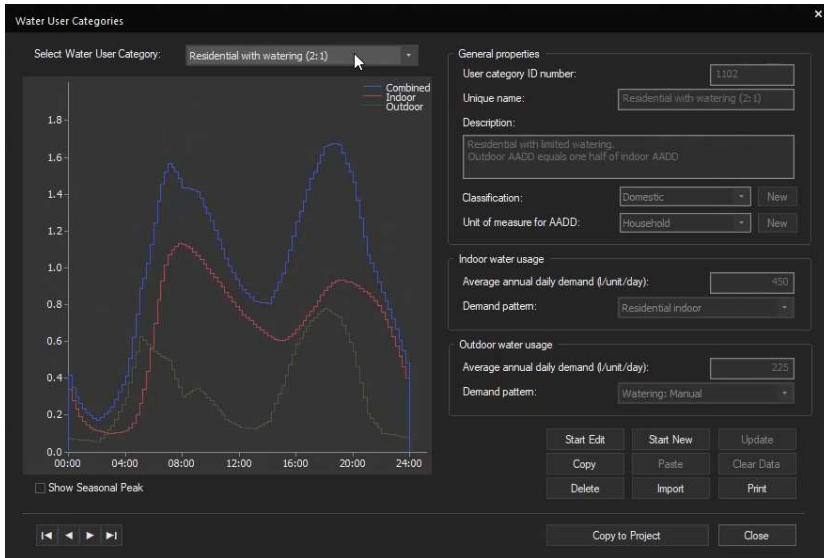
ID	Class Name	Pipe Bottom to Floor (A) (mm)	Min. Soft (mm)	Max. Soft (mm)	Min. Hard (mm)	Max. Hard (mm)	Pipe Bottom to Bedding Top (B) (mm)	Pipe Bottom to Fill Top (C) (mm)	Bedding is Concrete
1	Class A	D/4	100	300	50	300	D/4	D+300	<input type="checkbox"/>
2	Class B	D/4	100	200	100	200	D/2	D+300	<input type="checkbox"/>
3	Class C	D/8	100	200	100	200	D/6	D+300	<input type="checkbox"/>
4	Class D	0	0	0	0	0	0	D+300	<input type="checkbox"/>
5	Flexible	D/4	100	200	100	200	D+100	D+300	<input type="checkbox"/>
6	Class6	D/4	100	200	100	200	D/4	D+300	<input type="checkbox"/>
▶	Class7	D/4	100	200	100	200	D/4	D+300	<input checked="" type="checkbox"/>

Print Add Delete OK

- Import Water networks from Civil3D DWG
- Catalogue items can now be stored in the Water project
- New Pipe materials added to catalogue
- Land Use Categories now included
- Node Data dialog shows contributing demands from erf connections
- Connections Data dialog has a new field AADD
- Analyse open surface flow

Enhancements

- Mark preferred pipe materials in the catalogue and change pipe material names
- New results format and additional results
- Improved Results Graph dialogs



- Optionally set liquid temperature when working with hot water supply
- Demand patterns, user categories and fire risk categories can be imported
- User categories include an indoor and outdoor component

Plotting

New Features

- Cross section plotting allows a slope option for Auxiliary services annotation
- Plan plotting generates a list on plan layout plots with erf number and level
- Sewer and Water connections Plan lists include erf number column
- Setting out lists are generated as Table entities, instead of grouped text and lines.
- Publish plan setting out lists as CSV files
- Plot road markings on Road long sections
- Update plotted viewport centre, grids and setting out lists are automatically re-generated
- Dedicated Masshaul diagram plotting
- Remove all button in the plan plot setup dialog

Enhancements

- Extra Plan junction list label options
- Improve the plotting of long section grids
- Terrain string long section plotting: Added an auto scroll to next page option
- Sewer/Storm long section plotting: Add options to plot either (or both) hydraulic grade line and energy line.
- Water long section plotting: Added chainage range specification.
- Support for leading zeros in Plot Layout naming ("PLOTNO2" and "PLOTNO3" tags)
- Plot Generate BIM Naming scheme updated to use new Excel template (ISO 19650-2)

Sheet File Editor

New Features

- All sheet file entities can now be manipulated graphically, or via the properties bar.
- Autofill Plan List grids with default data [19049]

Enhancements

- Sheetfile Editor now displays all coordinates, lengths, heights in mm (not 10ths/mm)

Did you know:

- We have a library of FAQ support videos for your reference:
www.civildesigner.com/videos/
- You can book online Civil Designer training:
www.civildesigner.com/training-centre/
- We provide introductory self-learning videos:
www.civildesigner.com/training-centre/

