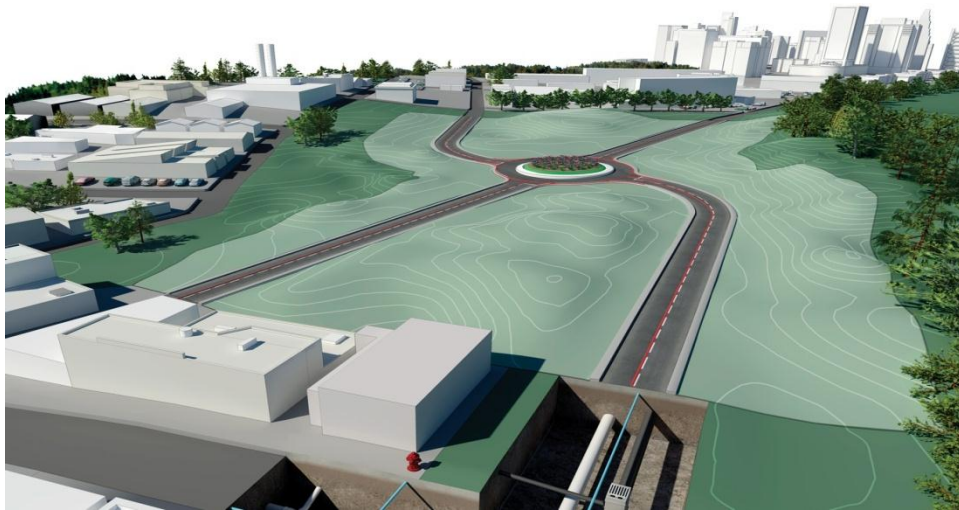


AutoCAD® Civil 3D® 2014

“Country Kit Denmark”



Purpose:

Describe general settings of AutoCAD Civil 3D 2014 Country kit for Denmark

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1 General

1.1 Introduction

The document is an overview of all settings that AutoCAD Civil 3D 2014 Country Kit Denmark contains.

The document contains abbreviations mention below:

- AutoCAD Civil 3D 2014 - Civil 3D
- AutoCAD Civil 3D 2014 Country Kit Denmark - CKD

1.2 Overview

CKD contains folders mention below:

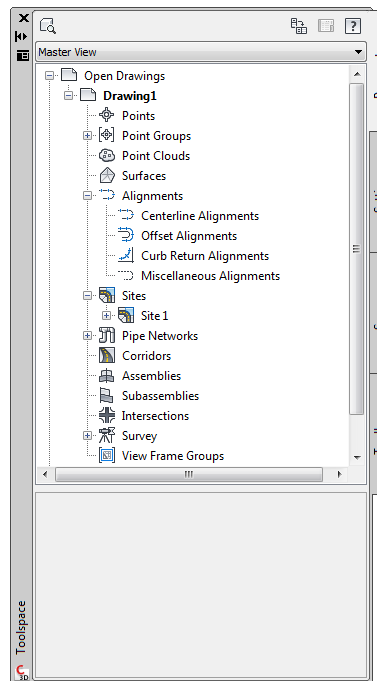
- **Template.** Folder with template for Danish styles for Civil 3D objects and labels.
- **_DK Pipes Catalog.** Folder with pipes files that correspond with Parts Lists (styles) in the template.
- **Plan Production.** Folder with templates that contains settings for Plan Production and Cross Sections.
- **Corridor Design Standards.** Folder with a setup file for Design Criteria and Superelevation for Corridor models.
- **Quantities Reports.** Folder with files containing settings for generating reports of volume for Corridor models or dynamic tables in the current drawing.
- **Toolbox.** Folder with files containing reports, which can be run from the Toolbox tab in the Toolspace.
- **Assemblies.** Folder containing drawings with predefined assemblies that can be accessed by the Tools Palettes or create intersections.
- **Pay Item Data.** Folder with files containing settings for reporting areas and length from objects in the current drawing.

Toolspace is the Primary Civil 3D property window. This window is used for handling Civil 3D objects and settings of all Civil 3D styles for Civil 3D objects and labels. The Toolspace has two important tabs:

- **Prospector.** Use this tab for handling properties and styles for Civil 3D objects and labels.
- **Settings.** Use this tab for general settings of Civil 3D styles.

1.2.1 Prospector

Any Civil 3D object contains its own style. This style controls the Civil 3D object appearance (object and label) in the drawing. The Prospector tab in the Toolspace is the Primary window for handling property, styles and commands for all Civil 3D objects.



Below is a list of Civil 3D object types:

- Points
- Point Groups
- Point Clouds
- Feature Lines
- Surfaces
- Alignments
- Profiles
- Corridors og Sections
- Pipes
- Parcels
- Grading
- Survey
- View Frame Groups – Plan Production
- Intersections

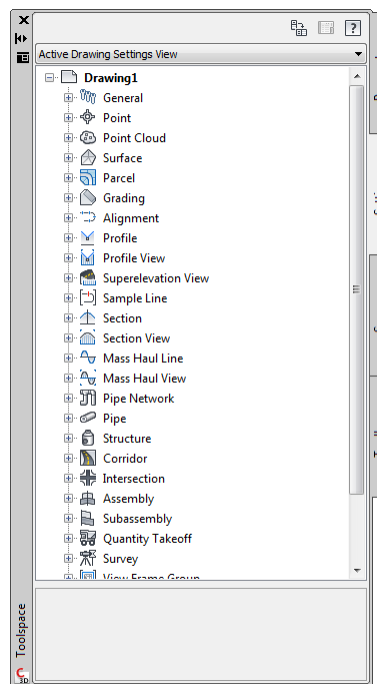
From the Prospector tab in the Toolspace it is possible to create, copy or edit styles for Civil 3D objects. In addition to this labels are generated as dynamic data mostly annotative.

Note that new styles not automatically will be saved in the template for the CKD. This has to be done manually with Drag and Drop.

1.2.2 Settings

Civil 3D objects are generated with their own styles when created in the drawing with a Civil 3D command. Styles are standard in the template for the current CKD which is recommended to use for every new drawing in Civil 3D so new objects are created with the same look (Danish). Use the QNEW settings in AutoCAD Options to startup Civil 3D with the correct template.

Style setting happens from the Settings tab in the Toolspace. Here it is possible create, copy or edit Civil 3D styles. Note that new or edited styles not automatically will be saved in the template for the CKD. This has to be done manually with Drag and Drop.



US or UK styles are not removed from the CKD. In Denmark there are no standards for layer and color. Regarding the layers Civil 3D objects are assigned with standard Civil 3D layers while other objects are placed in layer 0.

1.2.3 Colors

In general there is an idea regarding colors for some Civil 3D objects. This is:

- **Red color.** Is primary used for Profiles, Sections and Mass Haul Diagram together with grey and black/white nuance
- **Black/white color.** Is primary used for labels and tables created in the drawing

By this it is quick

By this color choice you will get a fast visual overview of the Civil 3D drawing regarding to find the plan, profiles, sections and dynamic tables that are created in the drawing.

2 Text

The table below lists used text styles.

Text Style	Description	Font	Plotted Size
Standard		ISOCP	1.5mm > 5.0mm

3 Hatch

The table below lists used hatch types.

Hatch Pattern Name	Description	Hatch Pattern File
SOLID	Used for hatching Corridor elements in Plan, some specific views in Profiles and Sections	Template
ANSI31	Used for hatching some views in Profiles and in Sections	Template

4 Layers

The table below lists used layers and selected settings.

Layer	On	Freeze	Lock	Color	Linetype
0	True	False	False	white	Continuous
A-BLDG	True	False	False	white	Continuous
AHP	True	False	False	white	Continuous
Block amenity light columns	True	False	False	50,50,50	Continuous
Block amenity light glass	True	False	False	200,200,200	Continuous
Block tree concept canopy	True	False	False	white	Continuous
Block tree concept trunk	True	False	False	white	Continuous
C-ALIGN	True	False	False	white	DASHED
C-FLINE	True	False	False	152	Continuous
C-FLINE-PROF	True	False	False	152	Continuous
C-FLINE-SCTN	True	False	False	152	Continuous
C-HLP-KURVETEKST	True	False	False	blue	Continuous
C-PIPE-DRN	True	False	False	green	ACAD_ISO02W100
C-PIPE-FLS	True	False	False	red	DASHED
C-PIPE-RGV	True	False	False	blue	Continuous
C-PIPE-SPV	True	False	False	red	Continuous
C-PIPE-STD	True	False	False	white	Continuous
C-PIPE-STD-LABL	True	False	False	white	Continuous
C-PIPE-STD-PROF	True	False	False	white	Continuous
C-PIPE-STD-SCTN	True	False	False	white	Continuous
C-PIPE-TABL	True	False	False	white	Continuous
C-PROP	True	False	False	white	Continuous
C-PROP-LABL	True	False	False	white	Continuous
C-PROP-LINE	True	False	False	magenta	Continuous
C-PROP-LINE-LABL	True	False	False	magenta	Continuous
C-PROP-TABL	True	False	False	white	Continuous
C-ROAD	True	False	False	white	Continuous
C-ROAD-ALG-LABL	True	False	False	white	Continuous
C-ROAD-ASSM	True	False	False	40	Continuous
C-ROAD-CORR	True	False	False	blue	Continuous
C-ROAD-INTS	True	False	False	white	Continuous
C-ROAD-INTS-LABL	True	False	False	white	Continuous
C-ROAD-LABL	True	False	False	white	Continuous
C-ROAD-PROF	True	False	False	white	Continuous
C-ROAD-PROF-LABL	True	False	False	white	Continuous
C-ROAD-SAMP	True	False	False	white	HIDDEN
C-ROAD-SAMP-LABL	True	False	False	white	HIDDEN

C-ROAD-SCTN	True	False	False	white	Continuous
C-ROAD-SCTN-CORR	True	False	False	blue	Continuous
C-ROAD-SCTN-LABL	True	False	False	white	Continuous
C-ROAD-SCTN-QTO	True	False	False	white	Continuous
C-ROAD-SCTN-SHET	True	False	False	white	Continuous
C-ROAD-SE-VIEW	True	False	False	White	Continuous
C-ROAD-SE-VIEW-TEXT	True	False	False	11	Continuous
C-ROAD-SE-VIEW-TICK	True	False	False	White	Continuous
C-ROAD-SE-VIEW-TITL	True	False	False	11	Continuous
C-ROAD-SE-VIEW-TTBL	True	False	False	Blue	Continuous
C-ROAD-SHAP	True	False	False	Blue	Continuous
C-ROAD-SHAP-PATT	True	False	False	Blue	Continuous
C-ROAD-TABL	True	False	False	White	Continuous
C-ROAD-VC-OBS-AREA	True	False	False	Red	Continuous
C-ROAD-VC-OBS-EYE-PATH	True	False	False	Magenta	Continuous
C-ROAD-VC-OBS-SIGHT-LINES	True	False	False	Red	Continuous
C-ROAD-VC-VIS-EYE-PATH	True	False	False	White	Continuous
C-ROAD-VC-VIS-SIGHT-LINES	True	False	False	71	Continuous
C-STRM-PIPE	True	False	False	white	Continuous
C-STRM-SCTN	True	False	False	white	Continuous
C-STRUCT-STD	True	False	False	white	Continuous
C-STRUCT-STD-LABL	True	False	False	white	Continuous
C-TOPO	True	False	False	white	Continuous
C-TOPO-GRAD	True	False	False	94	Continuous
C-TOPO-GRAD-FLIN	True	False	False	152	Continuous
C-TOPO-LABL	True	False	False	white	Continuous
C-TOPO-TABL	True	False	False	white	Continuous
DEFPOINTS	True	False	False	white	Continuous
Hjälplinje Nivåkurvtext	True	False	False	blue	Continuous
NOT-TABELL	True	False	False	green	Continuous
NOT-TABELL-RAM	True	False	False	green	Continuous
NOT-TABELL-RASTER	True	False	False	green	Continuous
NOT-TABELL-TEXT	True	False	False	green	Continuous
NOT-TABELL-TITEL	True	False	False	green	Continuous
PROFIL-DIAG	True	False	False	red	Continuous
PROFIL-RAM	True	False	False	red	Continuous
PROFIL-TEXT	True	False	False	red	Continuous
PROFIL-TICK	True	False	False	red	Continuous
PROFIL-TITL	True	False	False	red	Continuous
TERRAENKOTEPKT	True	False	False	white	Continuous
V-NODE	True	False	False	red	Continuous
V-NODE-TABL	True	False	False	white	Continuous
V-SITE-SCAN	True	False	False	White	Continuous
VAG-SHAPE-2D	True	False	False	red	Continuous

VAG-SHAPE-3D	True	False	False	8	Continuous
VAG-SHAPE-RASTER	True	False	False	31	Continuous

5 Reports

The table below lists all CKD reports (Toolspace > Toolbox > DK rapporter).

<i>Report Name</i>	<i>Description</i>	<i>Sample File Name</i>	<i>Priority</i>
<i>Alignment > Kurver</i>	Danish report with a list of curves for a selected Alignment.		
Alignment > Station og kurver	Danish report with a list of station and curve for a selected Alignment.		
Parcel > Arealer	Danish report with a list of Parcel areas.		
Parcel > Arealer til Excel...	Microsoft Excel of Parcel areas.		
Points > Punkter	Danish report with a list of Points.		
Points > Punkter til Excel...	Microsoft Excel of Points.		
Profile > PVI stationer	Danish report with a list of PVI points.		
Profile > Ver. Profiler til Excel...	Microsoft Excel with PVI points.		
Ledningsnetværk > Ledninger	Danish report with a list of pipes.		
Ledningsnetværk > Komponenter	Danish report with a list of structures.		
Ledningsnetværk > Ledninger og komponenter	Danish report with a list of pipes and structures.		
Ledningsnetværk > Komponenter til Excel...	Microsoft Excel with structures.		
Surface > Information	Danish report with summary data for Surfaces.		
Surface > Punkter til Excel...	Microsoft Excel with surface points.		

6 Drawing Settings

6.1 Object Layers

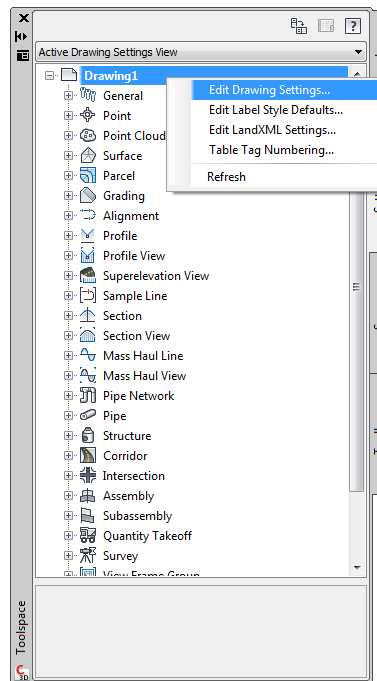
The table below lists all assigned Civil 3D object layers.

Object	Default Layer
Object	Layer
Alignment	C-ROAD
Alignment-Labeling	C-ROAD-LABL
Alignment Table	C-ROAD-TABL
Assembly	C-ROAD-ASSM
Building Site	A-BLDG
Corridor	C-ROAD-CORR
Corridor Section	C-ROAD-SCTN-CORR
Feature Line	C-FLINE
General Note Label	0
General Segment Label	0
Grading	C-TOPO-GRAD
Grading-Labeling	C-TOPO-LABL
Grid Surface	C-TOPO
Grid Surface-Labeling	C-TOPO-LABL
Interference	0
Intersection	C-ROAD-INTS
Intersection-Labeling	C-ROAD-INTS-LABL
Mass Haul Line	0
Mass Haul View	0
Match Line	0
Match Line-Labeling	0
Material Section	0
Material Table	0
Parcel	C-PROP
Parcel-Labeling	C-PROP-LABL
Parcel Segment	C-PROP-LINE
Parcel Segment-Labeling	C-PROP-LINE-LABL
Parcel Table	C-PROP-TABL
Pipe	C-PIPE-STD
Pipe-Labeling	C-PIPE-STD-LABL

Pipe and Structure Table	C-PIPE-TABL
Pipe Network Section	C-PIPE-STD-SCTN
Pipe or Structure Profile	C-PIPE-STD-PROF
Point Table	V-NODE-TABL
Profile	C-ROAD-PROF
Profile-Labeling	C-ROAD-PROF-LABL
Profile View	C-ROAD-PROF
Profile View-Labeling	C-ROAD-PROF-LABL
Sample Line	C-ROAD-SAMP
Sample Line-Labeling	C-ROAD-SAMP-LABL
Section	C-ROAD-SCTN
Section-Labeling	C-ROAD-SCTN-LABL
Section View	C-ROAD-SCTN
Section View-Labeling	C-ROAD-SCTN-LABL
Section View Quantity Takeoff Table	C-ROAD-SCTN-QTO
Sheet	C-ROAD-SCTN-SHET
Structure	C-STRUCT-STD
Structure-Labeling	C-STRUCT-STD-LABL
Superelevation View	C-ROAD-SE-VIEW
Subassembly	C-ROAD-ASSM
Surface Legend Table	C-TOPO-TABL
Survey Figure	0
Survey Network	0
Tin Surface	C-TOPO
Tin Surface-Labeling	C-TOPO-LABL
View Frame	0

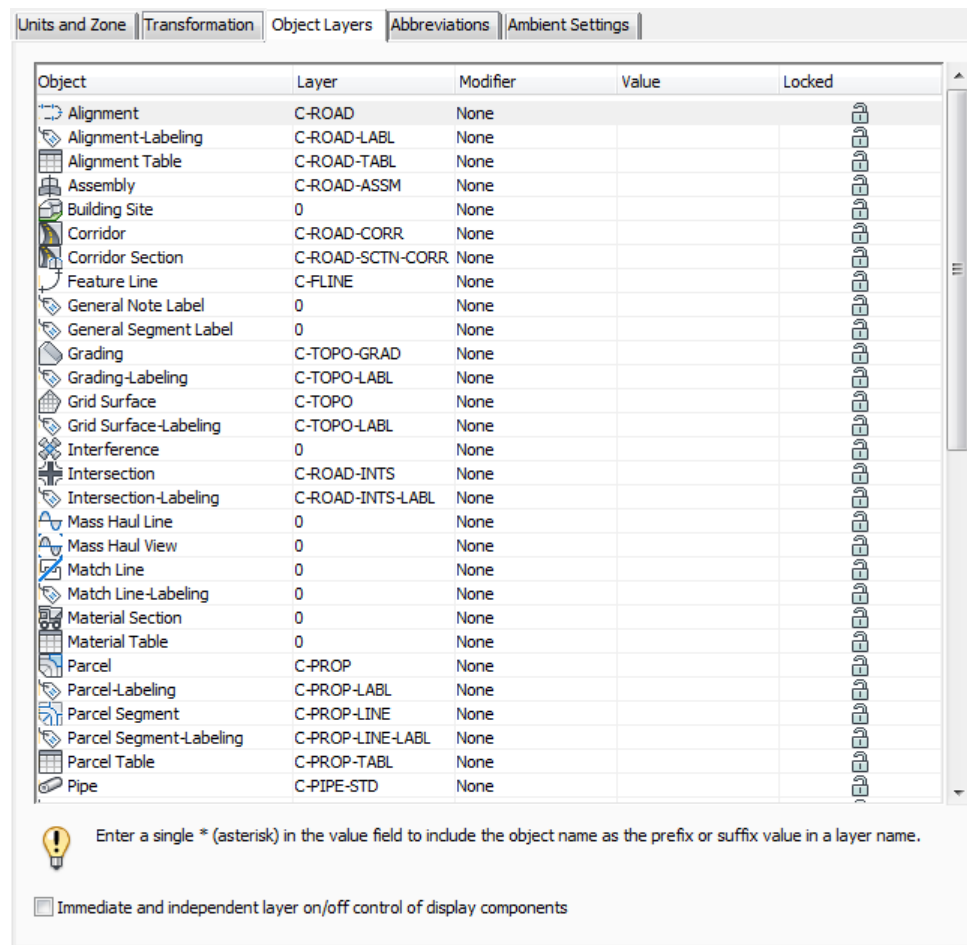
6.1.1 Edit Drawing Settings...

Civil 3D object layers are available from Edit Drawing Settings. The figure below shows from where the command is accessible.



6.1.2 Object Layers...

Figure below show the window and tab with Object Layers.



6.2 Ambient Settings

Table below lists all values for Civil 3D units.

Property	Value
General	
Plotted Unit Display Type	decimal
Set AutoCAD Units	no
Save Command Changes to Settings	no
Show Event Viewer	yes
Show Tooltips	yes
Imperial to Metric conversion	Use International Foot
New Entity Tooltip State	on
Driving Direction	Right Side of the Road
Drawing Unit	meter
Drawing Scale	0.500
Scale Inserted Objects	yes
Independent Layer On	no

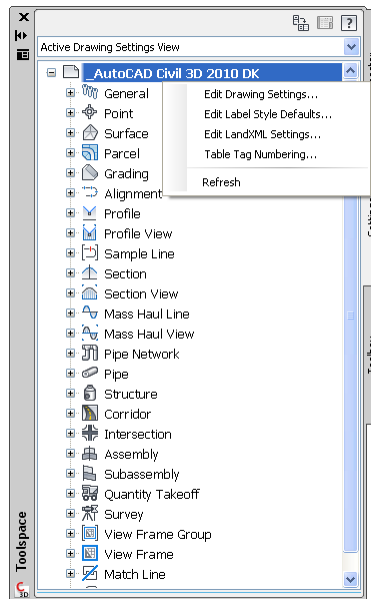
Labeling	Labeling Prompt Method	Command Line
Unitless	Precision	3
	Rounding	round normal
	Sign	sign negative '-'
Distance	Unit	meter
	Precision	3
	Rounding	round normal
	Sign	sign negative '-'
Dimension	Unit	millimeter
	Precision	3
	Rounding	round normal
	Sign	sign negative '-'
Coordinate	Unit	meter
	Precision	3
	Rounding	round normal
	Sign	sign negative '-'
Grid Coordinate	Unit	meter
	Precision	4
	Rounding	round normal
	Sign	sign negative '-'
Elevation	Unit	meter
	Precision	3
	Rounding	round normal
	Sign	sign negative '-'
Area	Unit	square meter
	Precision	2
	Rounding	round normal
	Sign	sign negative '-'

Volume	Unit	cubic meter
	Precision	2
	Rounding	round normal
	Sign	sign negative '-'
Speed	Unit	kilometer/hr.
	Precision	0
	Rounding	round normal
	Sign	sign negative '-'
Angle	Unit	grad
	Precision	3
	Rounding	round normal
	Format	decimal
	Sign	sign negative '-'
	Drop Decimal for Whole Numbers	no
	Drop Leading Zeros for Degrees	yes
Direction	Unit	grad
	Precision	3
	Rounding	round normal
	Format	decimal
	Direction	short name
	Capitalization	upper case
	Sign	sign negative '-'
	Measurement Type	North Azimuth
	Bearing Quadrant	1 - NE
	Drop Decimal for Whole Numbers	no
	Drop Leading Zeros for Degrees	yes
Lat Long	Unit	degree
	Precision	3
	Rounding	round normal
	Format	DD° MM' SS.SS" (spaced)
	Direction	prefix short name
	Capitalization	upper case
	Drop Decimal for Whole Numbers	no

	Drop Leading Zeros for Degrees	yes
Grade	Precision	3
	Rounding	round normal
	Format	percent
	Sign	sign negative '-'
Slope	Precision	3
	Rounding	round normal
	Format	rise:run
	Sign	sign negative '-'
Grade/Slope	Precision	2
	Rounding	round normal
	Format	rise:run
	Sign	sign negative '-'
Station	Unit	meter
	Format	station format
	Precision	3
	Rounding	round normal
	Sign	sign negative '-'
	Station Delimiter Character	plus sign '+'
	Station Delimiter Position	1+000
	Drop Decimal for Whole Numbers	yes
	Drop Leading Zeros Right of Station Character	yes
	Minimum Display Width	0
	Transparent Commands	
	Prompt for 3D Points	false
	Prompt for Y before X	false
	Prompt for Easting then Northing	false
	Prompt for Longitude then Latitude	false

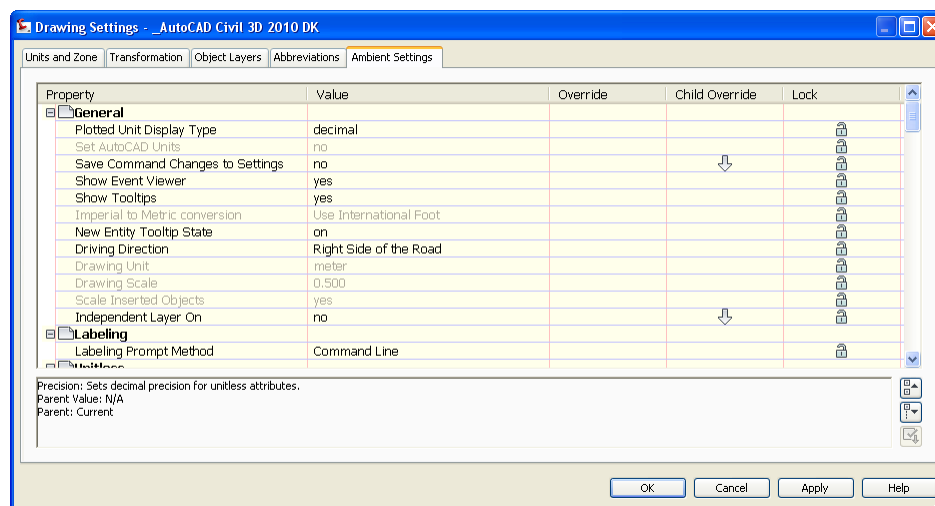
6.2.1 Edit Drawing Settings...

Civil 3D units are available from Edit Drawing Settings. The figure below shows from where the command is accessible.



6.2.2 Ambient Settings...

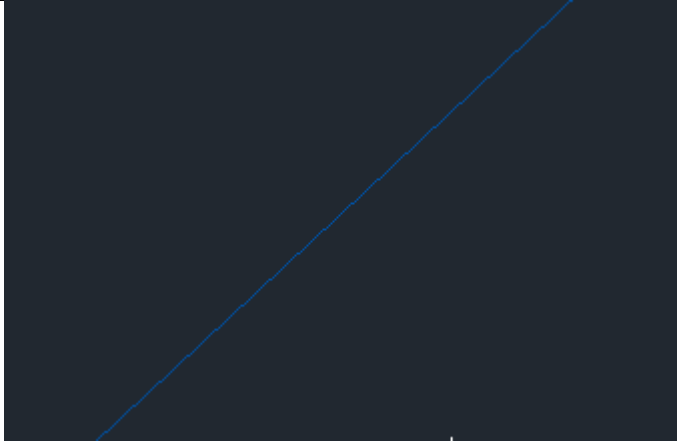
Figure below show the window and tab with Ambient Settings.

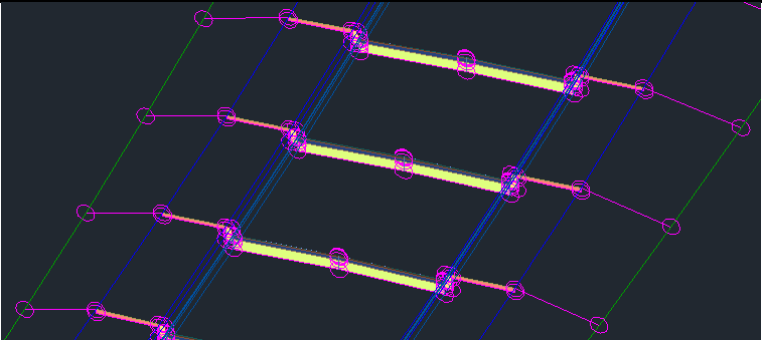


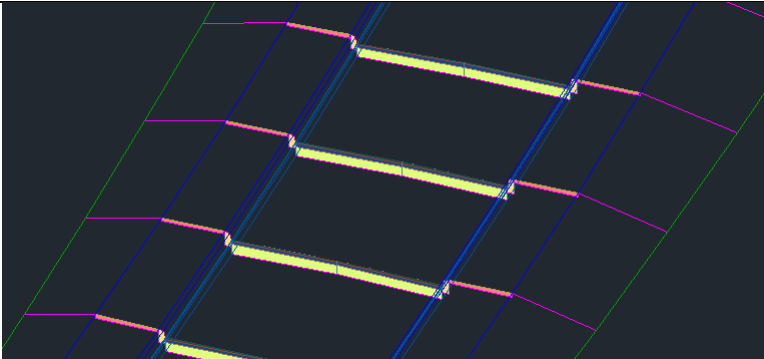
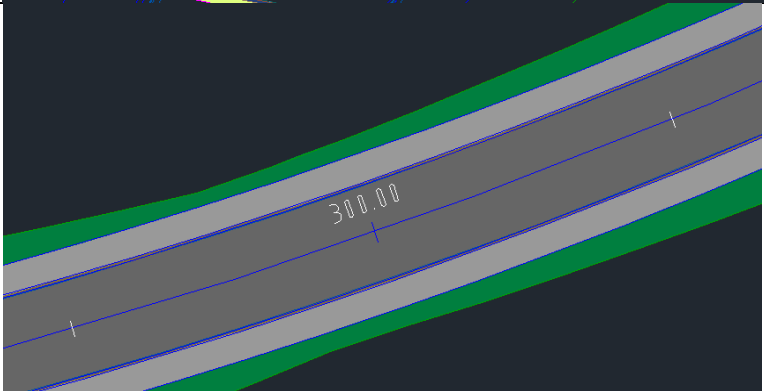
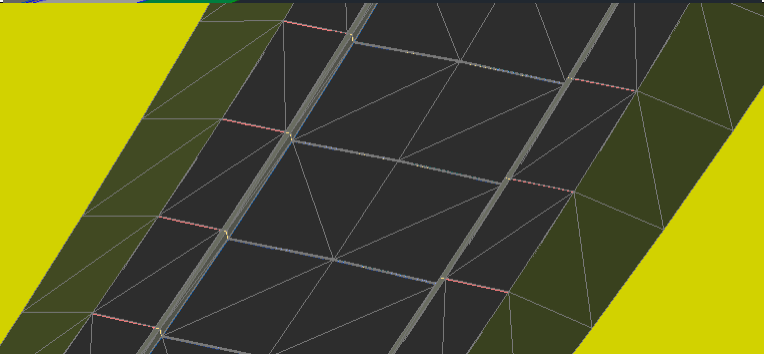
7 Object styles

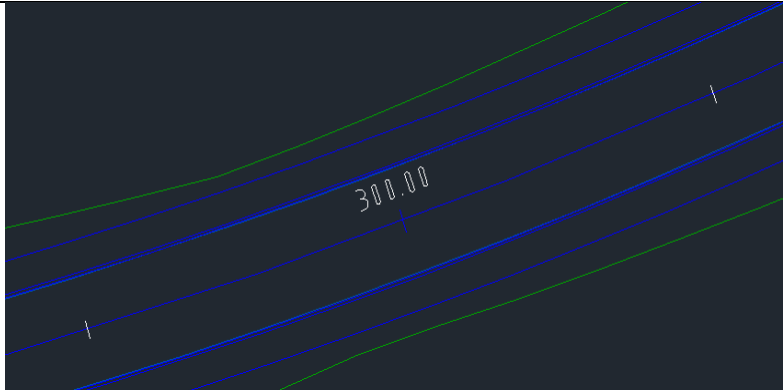
All Civil 3D object styles is in the CKD template. The name and the template is <_AutoCAD Civil 3D 2014 DK.dwt>. All Civil 3D object styles with no CKD modification are indicated with <None>.

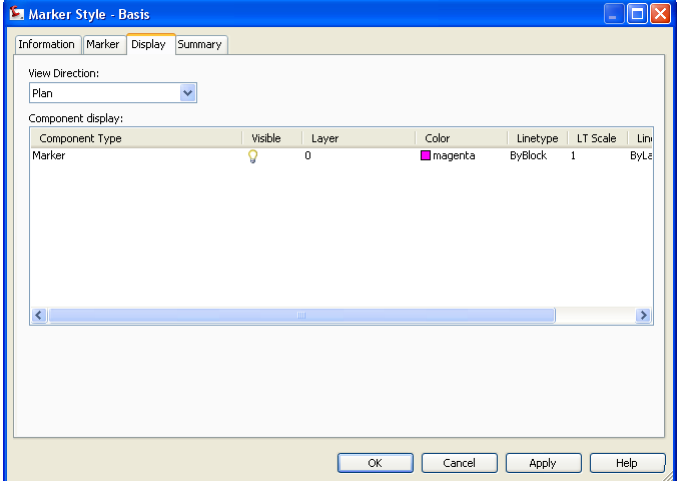
7.1 Multi-purpose Styles

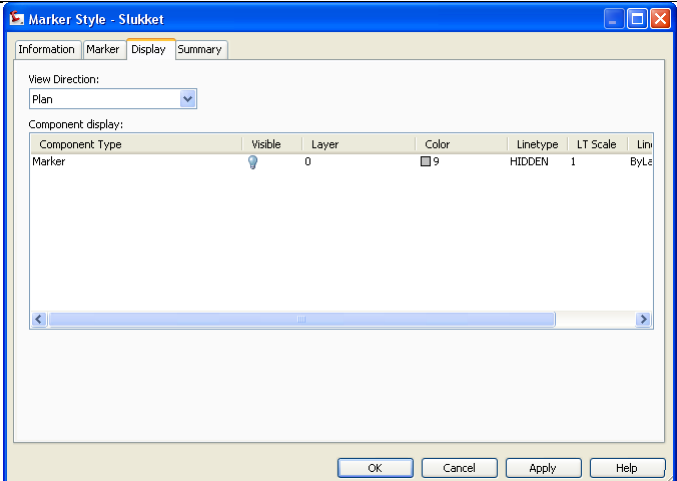
Feature Line Styles	Description	Screen grab / DWF / DWG	Default
Basis Feature Line	Feature Line with color 152 and linetype Continuous		Yes

Code Set Styles	Description	Screen grab / DWF / DWG	Default
Alle koder	Show all Corridor Subassemblies with markers.		Yes

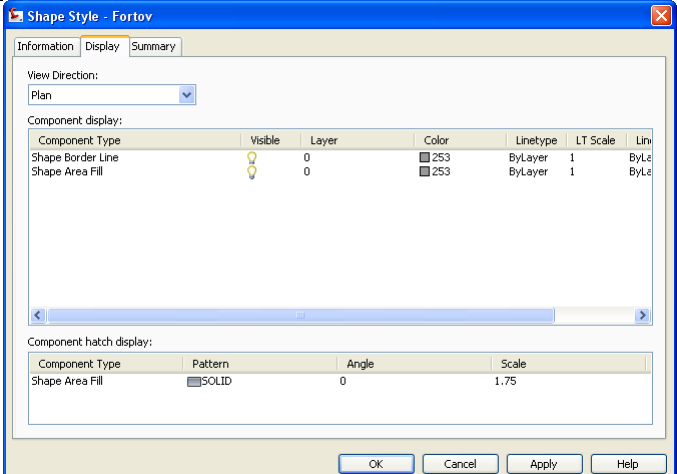
Uden markør	<p>Show all Corridor Subassemblies without markers.</p>		
Skravering	<p>Show all Corridor Subassemblies as hatch without markers.</p> <p>Only for use in Top View.</p>		
Visualisering	<p>Show all Corridor Subassemblies with Materials and without markers.</p> <p>Only for use in Isometric View and Visual Style different from 2D Wireframe.</p>		

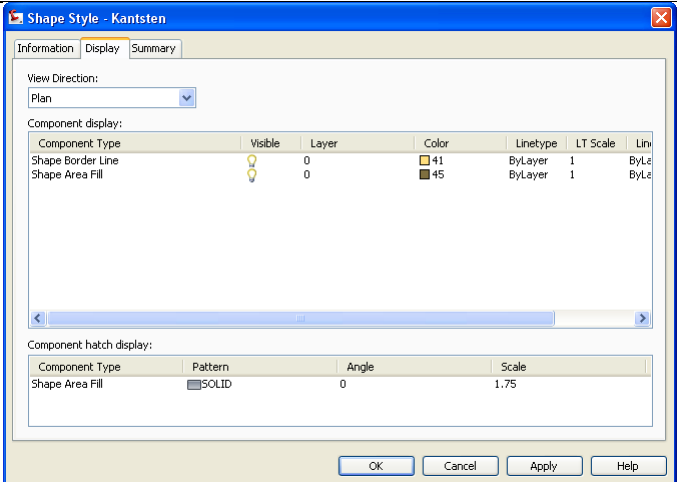
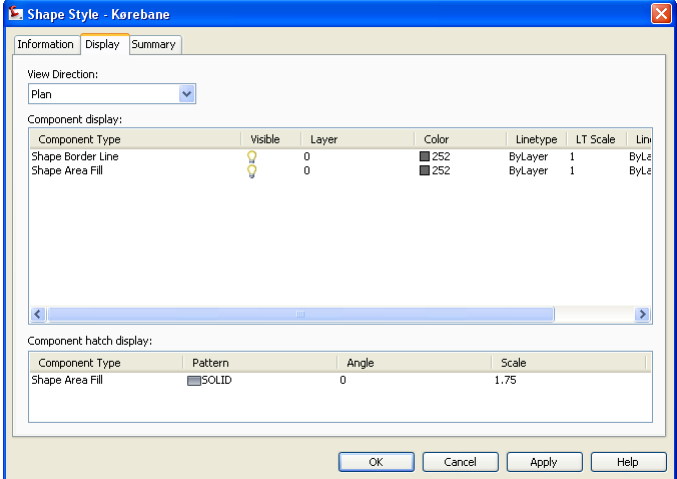
Plot	<p>Show Corridor Feature Lines without markers and Sections.</p> <p>To use for plot without Corridor elements. Can also be used in Isometric View.</p>		
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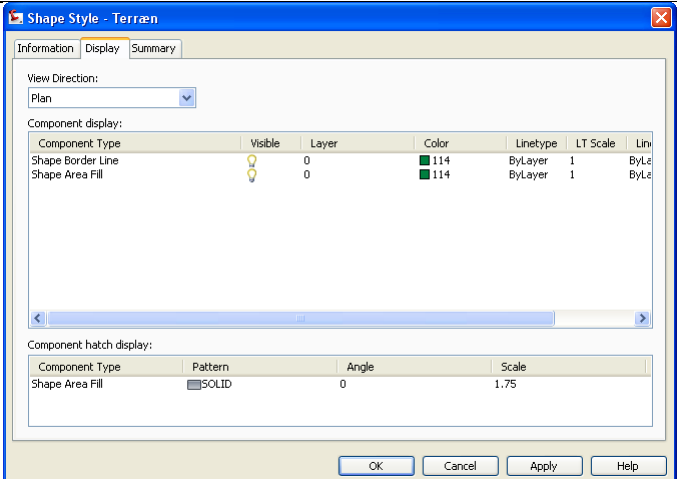
Marker Styles	Description	Screen grab / DWF / DWG	Default
Basis	Marker is a small circle with magenta color		Yes

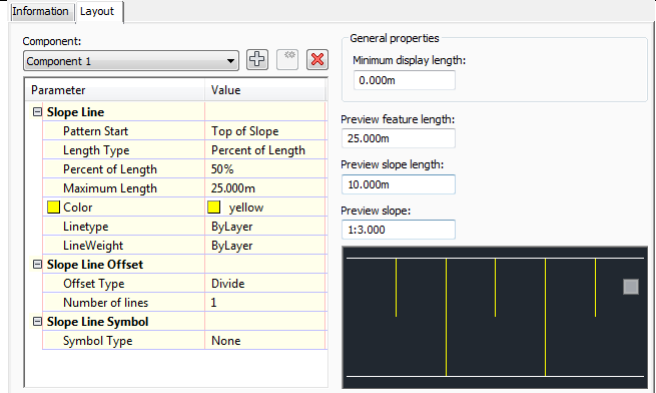
Slukket	No marker		
---------	-----------	---	--

Link Styles	Description	Screen grab / DWF / DWG	Default
<None>			

Shape Styles	Description	Screen grab / DWF / DWG	Default
Fortov	Hatch of Sidewalk when using Code Set Style Alle koder uden markør [Hatch].		Yes

Kantsten	Hatch of Curb when using Code Set Style Alle koder uden markør [Hatch].		Yes
Kørebane	Hatch of Pave when using Code Set Style Alle koder uden markør [Hatch].		Yes

Terræn	Hatch of Daylight (Cut and Fill) when using Code Set Style Alle koder uden markør [Hatch].		Yes
--------	--	---	-----

Slope Pattern Style	Description	Screen grab / DWF / DWG	Default
Skråningssignatur	Slopes with yellow color.		Yes

Skråningssignatur (Cut)	Slopes with color 32.		
Skråningssignatur (Fill)	Slopes with color 96.		

Multi-purpose Label Styles	Description	Screen grab / DWF / DWG	Default
Note			
<None>			
Line			
<None>			
Curve			
<None>			
Marker			
<None>			
Link			
<None>			




Shape			
<None>			

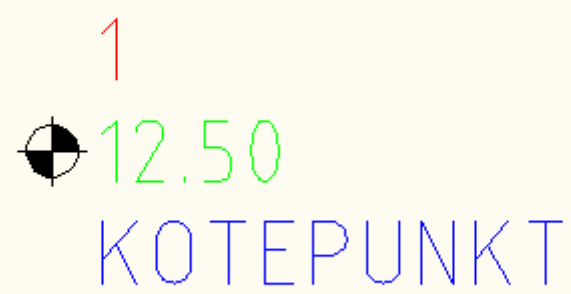
Projection Styles	Description	Screen grab / DWF / DWG	Default
<None>			Yes

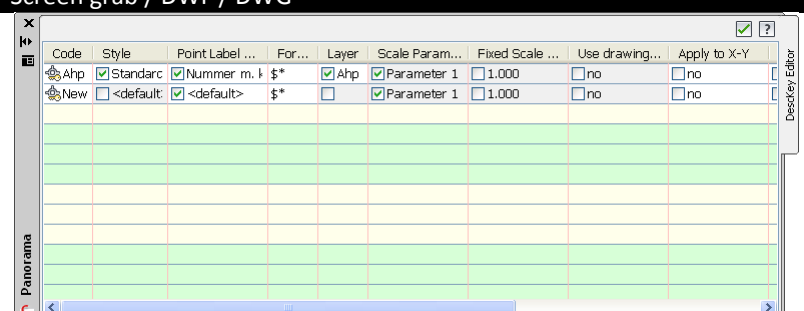
7.2 Points

User Defined Attribute Classifications	Description	Screen grab / DWF / DWG	Default
<None>			

Point Styles	Description	Screen grab / DWF / DWG	Default
<None>			

Point Label Styles	Description	Screen grab / DWF / DWG	Default
Kode	Show only the code (Raw Description).		
Kote	Show only the elevation (Point Elevation).		
Nummer	Show only the number (Point Number)		

Nummer m. kode og kote	Show number, elevation and code.		
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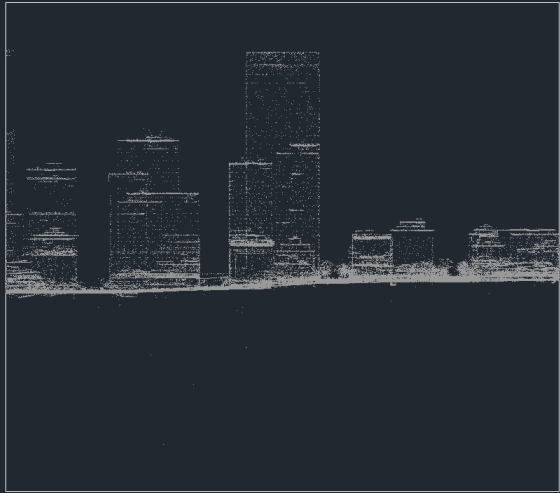
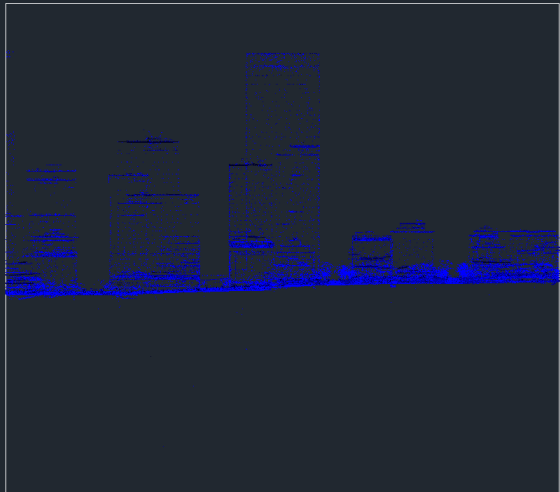
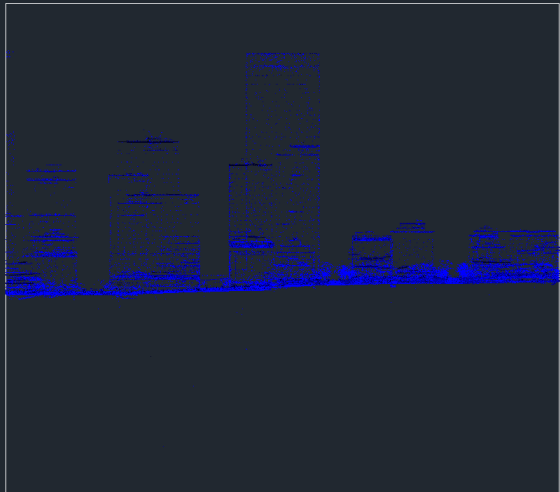
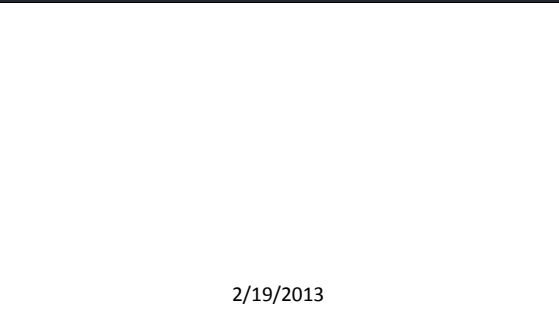
Description Key Sets	Description	Screen grab / DWF / DWG	Default
Nummer	Example of a Description key Sets.		


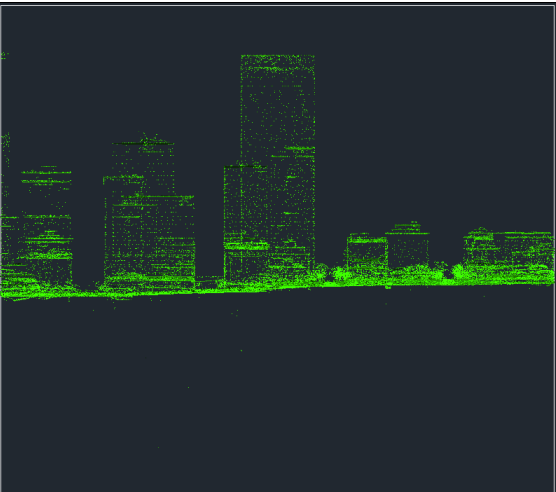




Point Table Styles	Description	Screen grab / DWF / DWG	Default
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Koordinater	Table in drawing listing number, code, x, y and z coordinates.	<table><tr><th colspan="5">KOORDINATTABEL</th></tr><tr><th>NUMMER</th><th>KODE</th><th>X</th><th>Y</th><th>Z</th></tr><tr><td>1</td><td>KOTEPUNKTER</td><td>-221221.053</td><td>341102.300</td><td>30.10</td></tr><tr><td>2</td><td>KOTEPUNKTER</td><td>-221120.418</td><td>341193.771</td><td>29.58</td></tr><tr><td>3</td><td>KOTEPUNKTER</td><td>-221021.827</td><td>341185.220</td><td>29.05</td></tr><tr><td>4</td><td>KOTEPUNKTER</td><td>-221924.799</td><td>341172.441</td><td>28.53</td></tr><tr><td>5</td><td>KOTEPUNKTER</td><td>-221834.312</td><td>341143.687</td><td>28.12</td></tr><tr><td>6</td><td>KOTEPUNKTER</td><td>-221751.161</td><td>340997.855</td><td>27.95</td></tr><tr><td>7</td><td>KOTEPUNKTER</td><td>-221678.532</td><td>340936.701</td><td>27.99</td></tr><tr><td>8</td><td>KOTEPUNKTER</td><td>-221616.728</td><td>340862.300</td><td>28.12</td></tr><tr><td>9</td><td>KOTEPUNKTER</td><td>-221556.889</td><td>340782.267</td><td>28.21</td></tr><tr><td>10</td><td>KOTEPUNKTER</td><td>-221496.381</td><td>340701.937</td><td>27.94</td></tr><tr><td>11</td><td>KOTEPUNKTER</td><td>-221426.077</td><td>340625.149</td><td>27.64</td></tr><tr><td>12</td><td>KOTEPUNKTER</td><td>-221341.960</td><td>340562.750</td><td>27.50</td></tr><tr><td>13</td><td>KOTEPUNKTER</td><td>-221249.191</td><td>340517.117</td><td>27.50</td></tr><tr><td>14</td><td>KOTEPUNKTER</td><td>-221155.272</td><td>340479.084</td><td>27.45</td></tr><tr><td>15</td><td>KOTEPUNKTER</td><td>-221054.194</td><td>340452.475</td><td>27.50</td></tr><tr><td>16</td><td>KOTEPUNKTER</td><td>-219949.664</td><td>340445.946</td><td>27.50</td></tr><tr><td>17</td><td>KOTEPUNKTER</td><td>-219846.438</td><td>340459.287</td><td>27.50</td></tr><tr><td>18</td><td>KOTEPUNKTER</td><td>-219748.378</td><td>340481.498</td><td>27.50</td></tr></table>	KOORDINATTABEL					NUMMER	KODE	X	Y	Z	1	KOTEPUNKTER	-221221.053	341102.300	30.10	2	KOTEPUNKTER	-221120.418	341193.771	29.58	3	KOTEPUNKTER	-221021.827	341185.220	29.05	4	KOTEPUNKTER	-221924.799	341172.441	28.53	5	KOTEPUNKTER	-221834.312	341143.687	28.12	6	KOTEPUNKTER	-221751.161	340997.855	27.95	7	KOTEPUNKTER	-221678.532	340936.701	27.99	8	KOTEPUNKTER	-221616.728	340862.300	28.12	9	KOTEPUNKTER	-221556.889	340782.267	28.21	10	KOTEPUNKTER	-221496.381	340701.937	27.94	11	KOTEPUNKTER	-221426.077	340625.149	27.64	12	KOTEPUNKTER	-221341.960	340562.750	27.50	13	KOTEPUNKTER	-221249.191	340517.117	27.50	14	KOTEPUNKTER	-221155.272	340479.084	27.45	15	KOTEPUNKTER	-221054.194	340452.475	27.50	16	KOTEPUNKTER	-219949.664	340445.946	27.50	17	KOTEPUNKTER	-219846.438	340459.287	27.50	18	KOTEPUNKTER	-219748.378	340481.498	27.50
KOORDINATTABEL																																																																																																						
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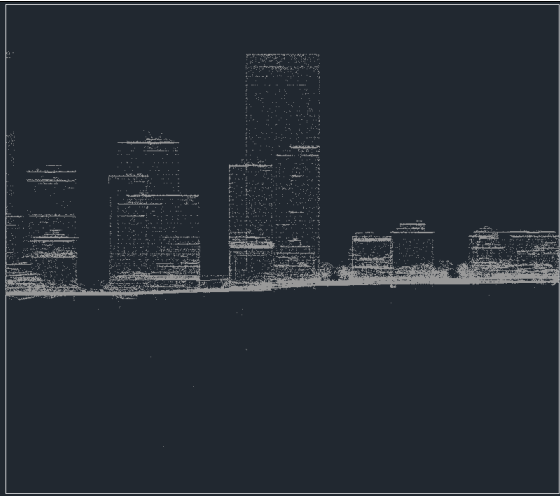
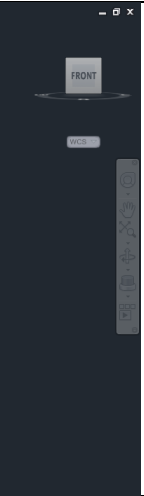
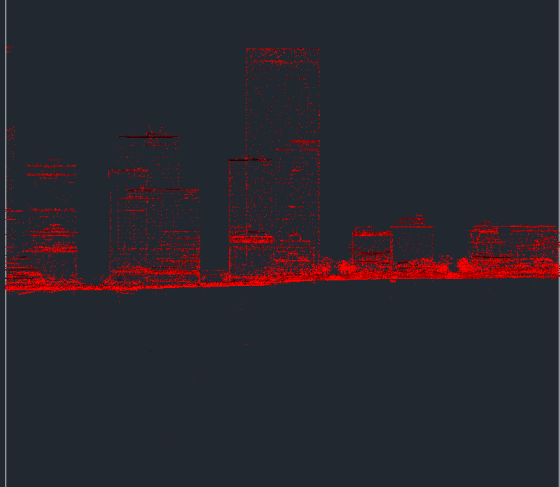

7.3 Point Clouds

Point Cloud Styles	Description	Screen grab / DWF / DWG	Default
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Basis (samme farve)	Grayscale Intensity: <div><div>Single Color</div><div>Rainbow</div><div>0.000</div><div>1.000</div><div> 253</div></div>			Ja
Blå (skala)	Scaled Color Intensity – Blue: <div><div>Scaled Color Intensity</div><div>Blues</div></div>			

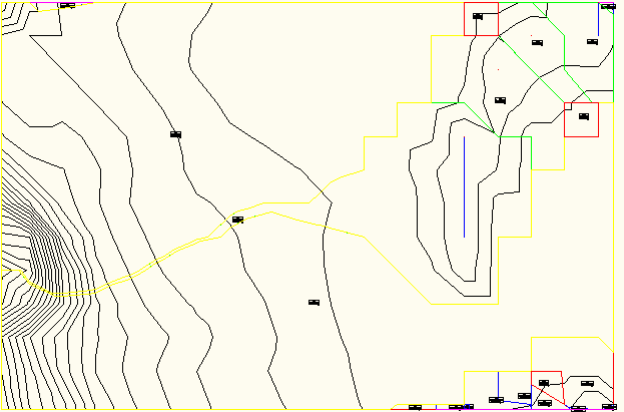
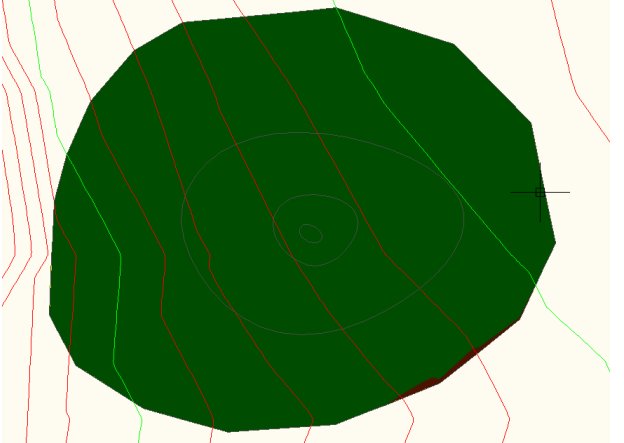
Grøn (skala)	<div>Scaled Color Intensity – Green:</div> <div><div>Scaled Color Intensity</div><div>Greens</div></div>	  	
Grå (skala)	<div>Scaled Color Intensity – Gray:</div> <div><div>Grayscale Intensity</div><div>Rainbow</div></div>	  	


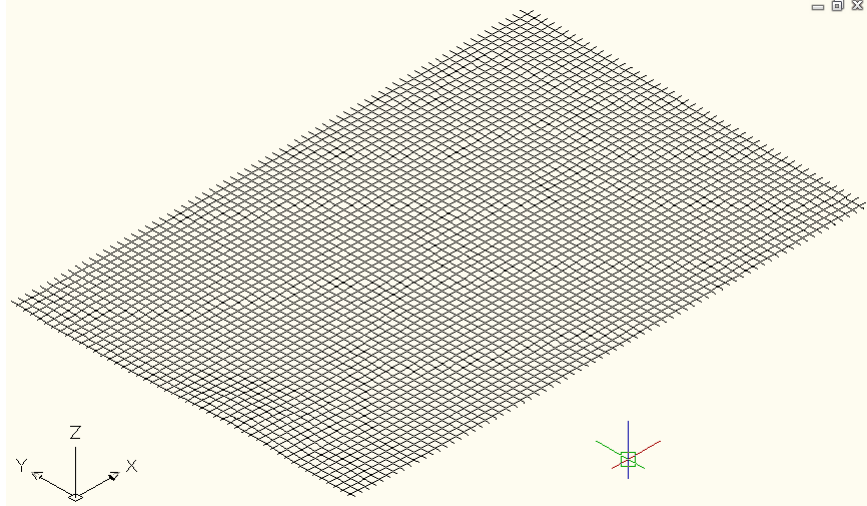
2/19/2013

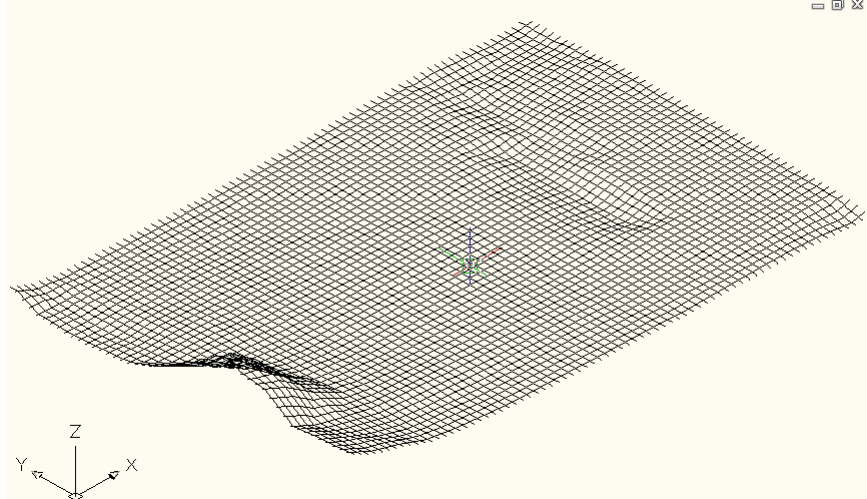
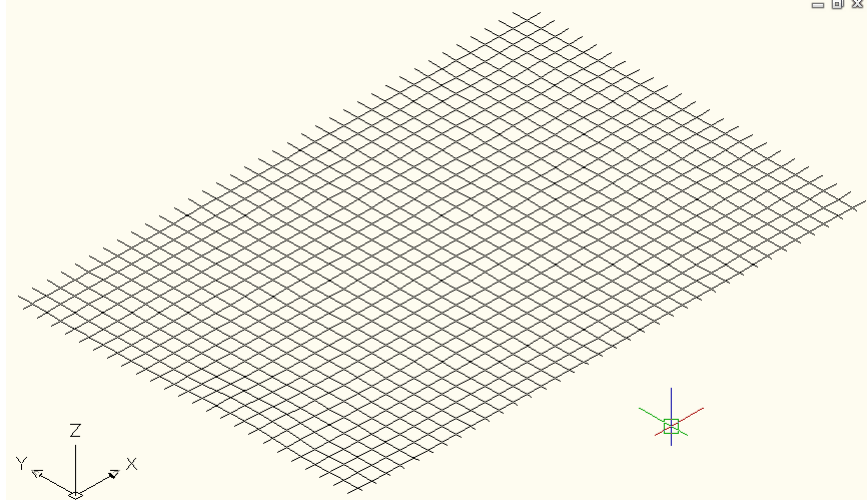
RGB (True Color)	<p>True Color:</p> <div> <div>True Color (RGB)</div> <div>Rainbow</div> </div>		
Rød (skala)	<p>Scaled Color Intensity – Red:</p> <div> <div>Scaled Color Intensity</div> <div>Reds</div> </div>		

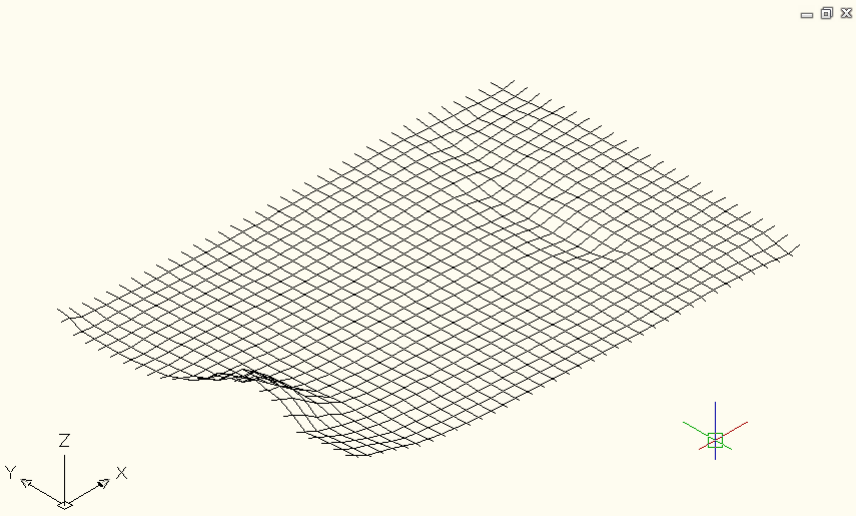
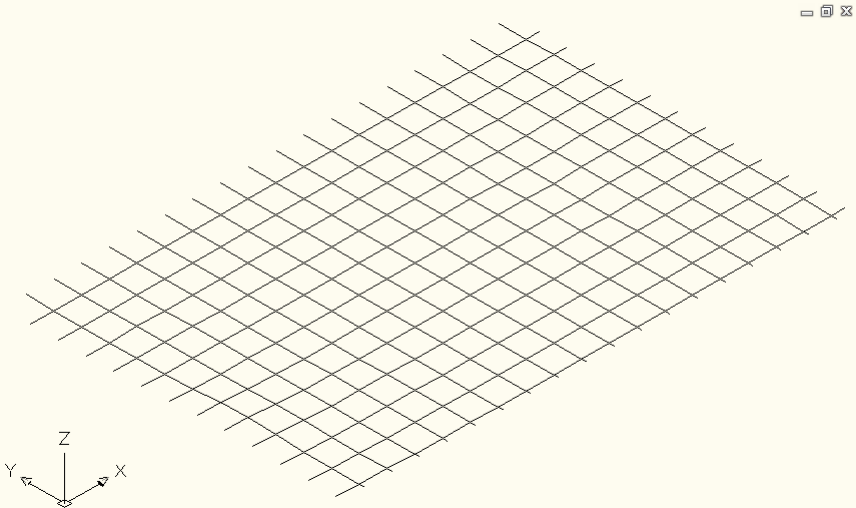
7.4 Surfaces

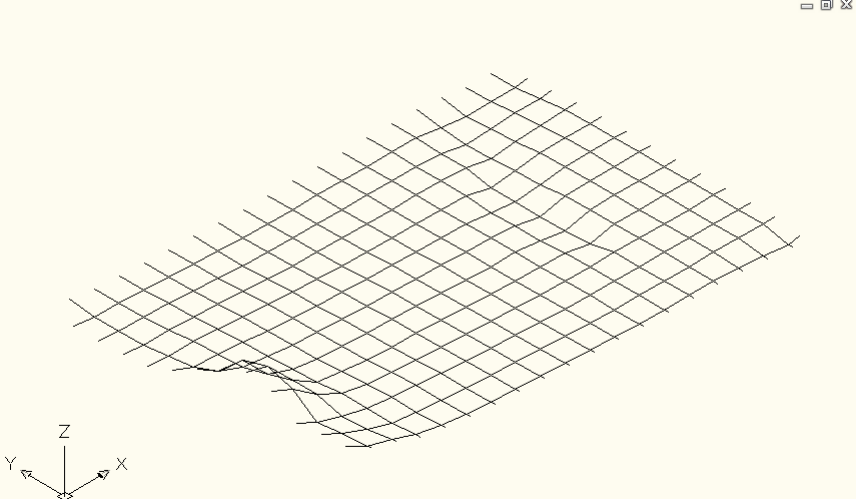
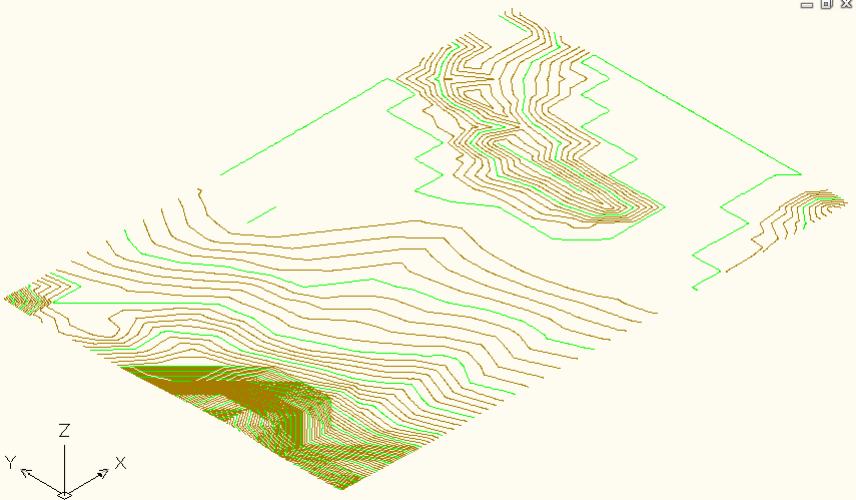
Surface Styles	Description	Screen grab / DWF / DWG	Default
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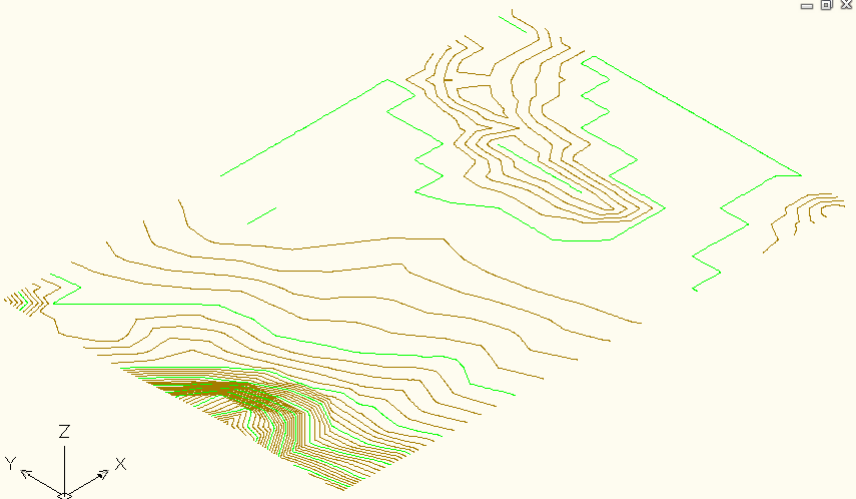
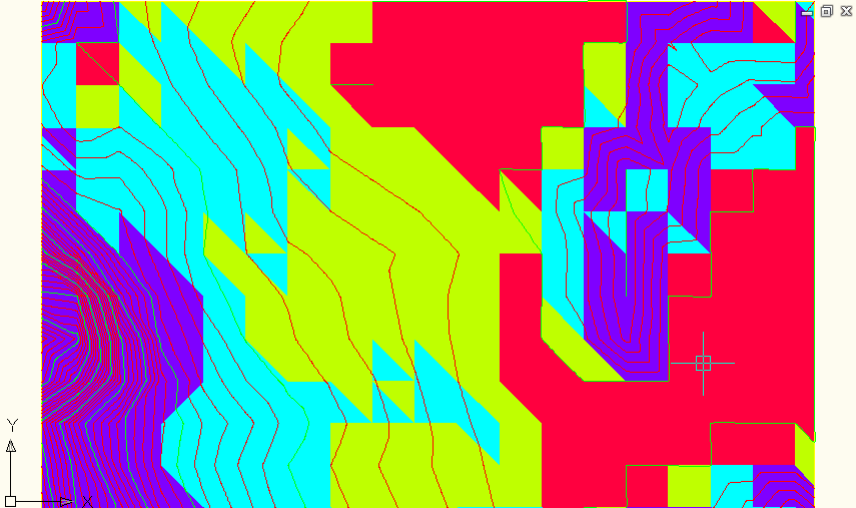
Afvandingsområde	Show surface Watersheds with labels		
Cut og Fill (TIN Volume)	<p>Show surface with 2 colors for Cut and Fill plans (TIN Volume surface).</p> <p>Adjusts colors in Surface Properties > Definition by creating 2 elevation interval with elevation 0 as focal point.</p> <p>Elevation in TIN Volume Surfaces is relative elevations.</p>		

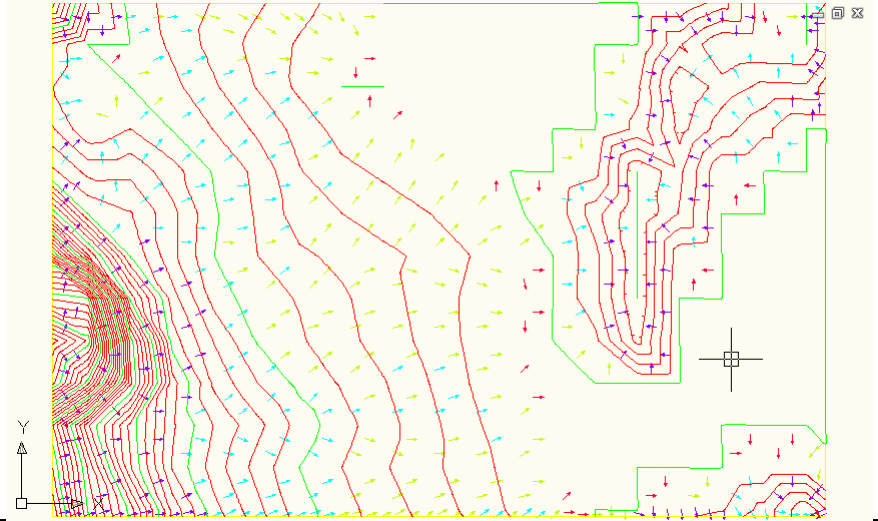
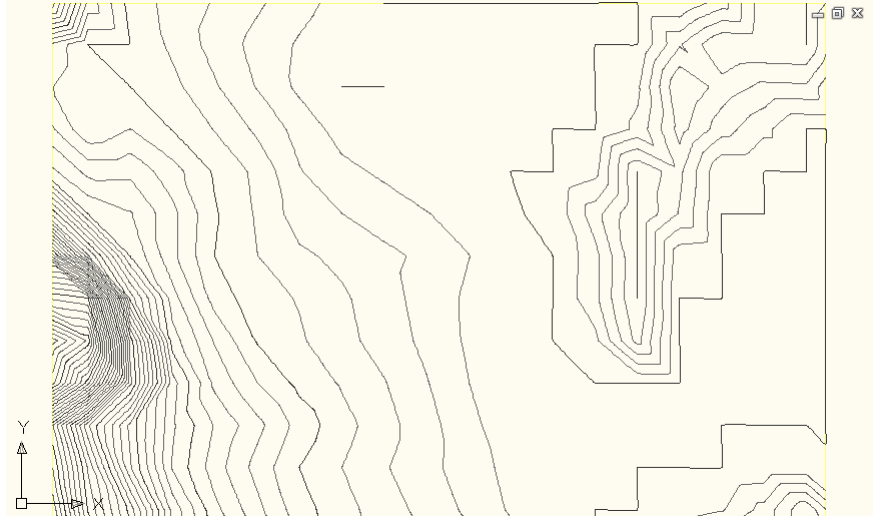
Farver (1 m)	Show surface with colors for 4 elevation intervals.		
Grid (25 m)	Show surface with grid in 25m in X and Y direction.		

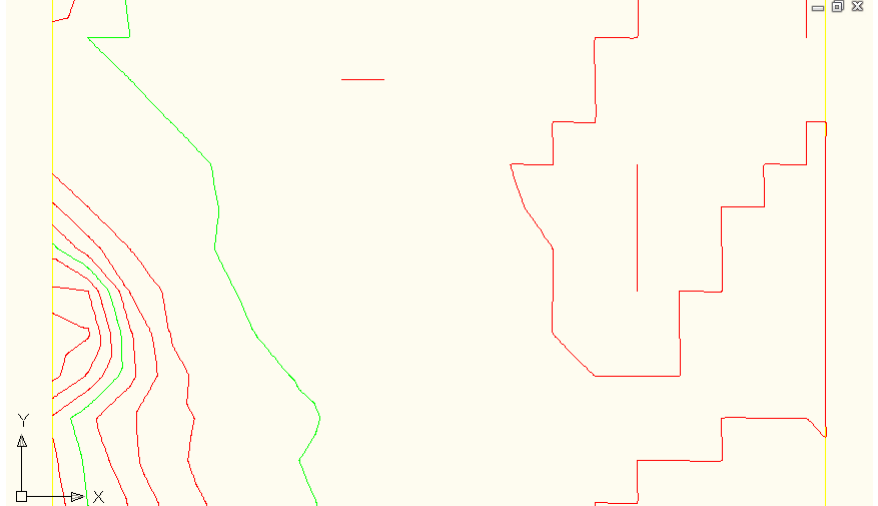
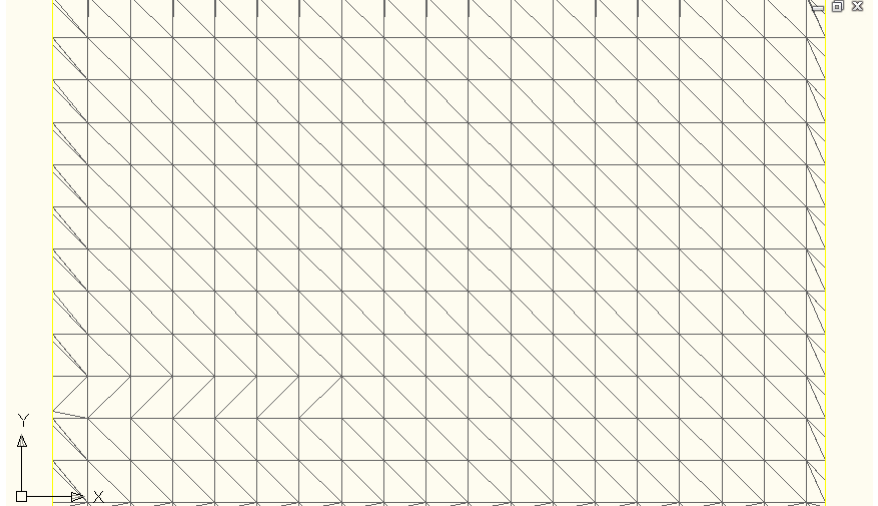
Grid (25 m) som overdrivelse	Show surface with grid in 25m in X and Y direction and 10x exaggerate I elevation.	 A 3D wireframe surface plot showing a terrain with a grid. The grid is composed of lines spaced 25m apart in the X and Y directions. The surface is exaggerated 10 times in the Z direction. A coordinate system with X, Y, and Z axes is shown in the bottom left corner. A small legend box is in the bottom right corner.	
Grid (50 m)	Show surface with grid in 50m in X and Y direction.	 A 3D wireframe surface plot showing a terrain with a grid. The grid is composed of lines spaced 50m apart in the X and Y directions. A coordinate system with X, Y, and Z axes is shown in the bottom left corner. A small legend box is in the bottom right corner.	

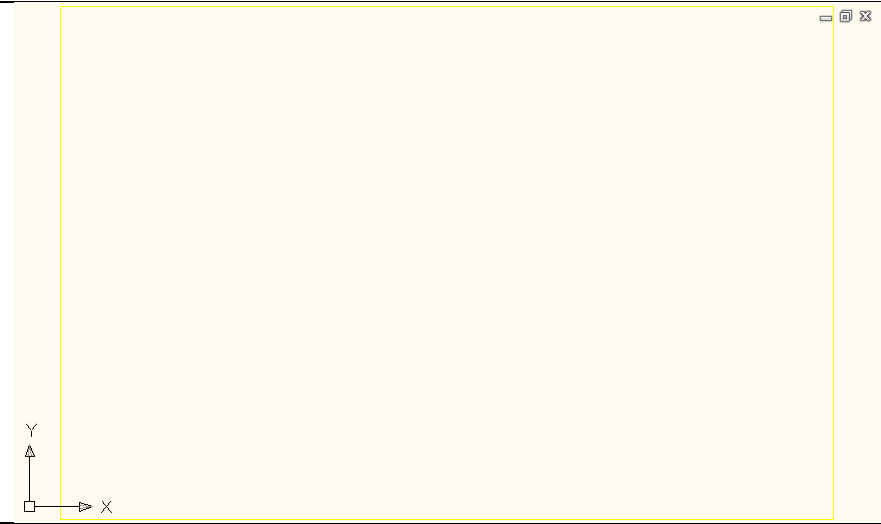
Grid (50 m) som overdrivelse	Show surface with grid in 50m in X and Y direction and 10x exaggerate I elevation.	 <p>A 3D perspective view of a surface plot. The surface is represented by a grid of lines that follow the contours of the terrain. The grid is composed of lines spaced at 50m intervals in the X and Y directions. The elevation is exaggerated by a factor of 10. A 3D coordinate system is visible in the bottom left corner, with axes labeled X, Y, and Z. A small green square is located on the surface. In the top right corner, there are icons for zooming and panning.</p>	
Grid (100 m)	Show surface with grid in 100m in X and Y direction.	 <p>A 3D perspective view of a surface plot. The surface is represented by a grid of lines that follow the contours of the terrain. The grid is composed of lines spaced at 100m intervals in the X and Y directions. A 3D coordinate system is visible in the bottom left corner, with axes labeled X, Y, and Z. In the top right corner, there are icons for zooming and panning.</p>	

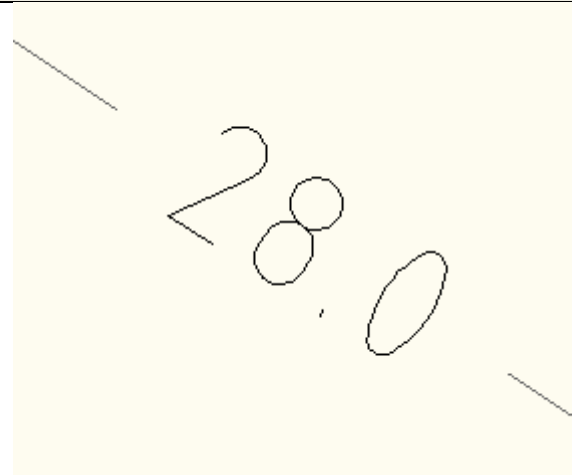
Grid (100 m) som overdrivelse	Show surface with grid in 100m in X and Y direction and 10x exaggerate I elevation.	 A 3D perspective view of a surface plot. The surface is represented by a grid of lines in the X and Y directions, with a 10x exaggeration in the Z (elevation) direction. The grid lines are black. A 3D coordinate system is shown in the bottom left corner with axes labeled X, Y, and Z. In the top right corner, there are small icons for zooming and panning.	
Kurver (0.25 m)	Show surface with contours with interval 25cm. Colors are red and green.	 A 3D perspective view of a surface plot showing contour lines. The contour lines are colored red and green, representing different elevation levels. The surface is also colored with a gradient from green to brown. A 3D coordinate system is shown in the bottom left corner with axes labeled X, Y, and Z. In the top right corner, there are small icons for zooming and panning.	

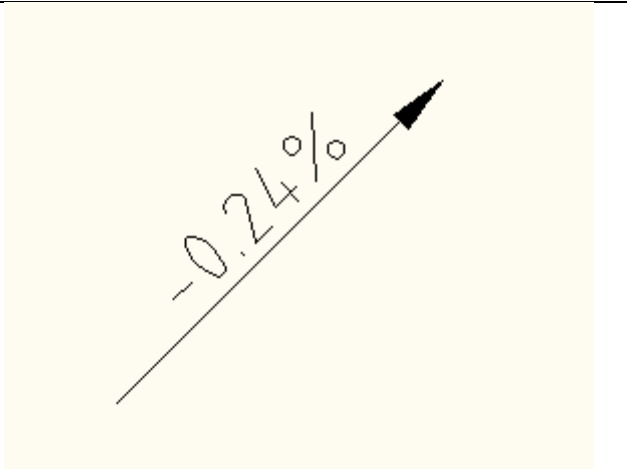
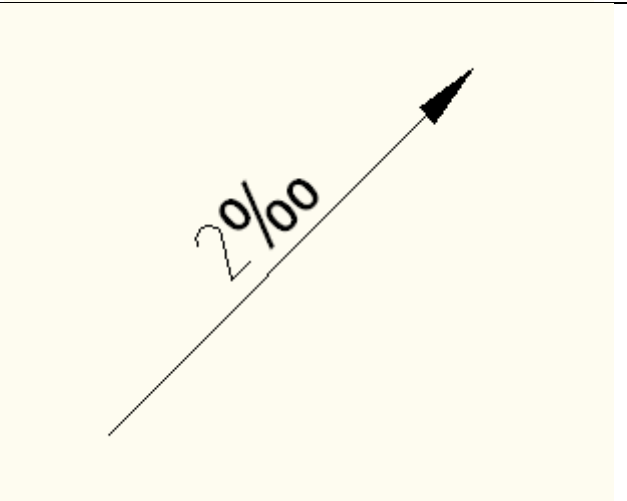
Kurver (½ m)	<p>Show surface with contours with interval ½m.</p> <p>Colors are red and green.</p>		
Kurver (½ m) med hældninger	<p>Viser surface med forskellige farver efter størrelse på hældninger</p> <p>Show surface with different colors depending the value of slopes</p>		

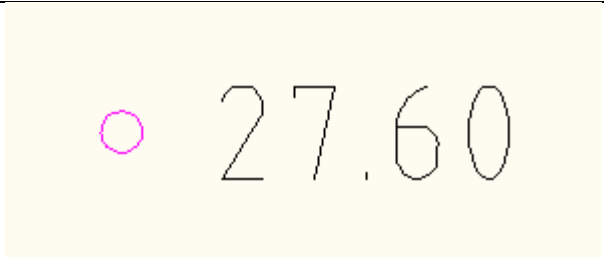
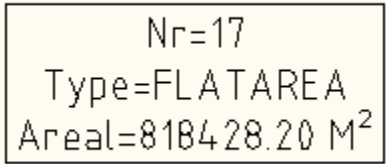
<p>Kurver (½ m) med hældningspile</p>	<p>Show surface with contours with interval ½m with colored slope arrows.</p> <p>Colors are red and green for contours.</p>		
<p>Kurver (½ m) som baggrund</p>	<p>Show surface with contours with interval ½m.</p> <p>Color is grey.</p>		

Kurver (2½ m)	<p>Show surface with contours with interval 2½m.</p> <p>Colors are red and green.</p>		
Net og punkter	<p>Show surface triangles and points.</p>		

Slukket	Show surface border in Plan and Model view.		
Slukket (uden grænser)	Don't show any surface items at all in both Plan and Model view.		

Surface Label Styles Name/Type	Description	Screen grab / DWF / DWG	Default
Contour			
Højdekurver	Spot Elevation.		
Slope			

Hældning i procent	Slope in per mille.		
Hældning i promille	Slope in percent.		
Spot Elevation			

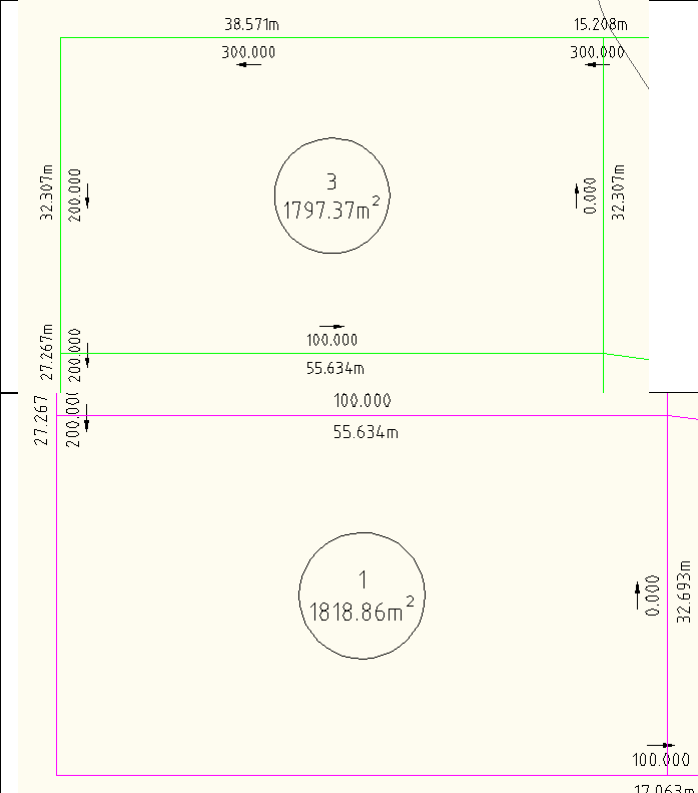
Punkthøjde	Spot Elevations.		
Watershed			
Afvandingsområde	Label for Watersheds.		

Surface Table Styles Name/Type	Description	Screen grab / DWF / DWG	Default
Direction			
Min og max tegning			
Elevation			
Min og max højde			
Slope			
Min og max hældning			
Slope Arrow			
Hældningspil			
Contour			
Min og max højdekurver			
Watershed			
Afvandingsområde			
User Defined Contour			
Ekstra højdekurver			

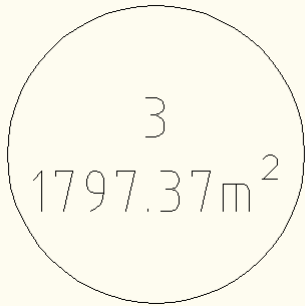

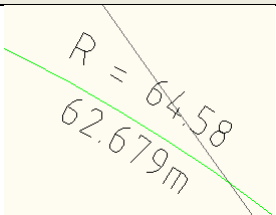
7.5 Parcels

User-Defined Attributes	Description	Screen grab / DWF / DWG	Default
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<None>			
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Parcel Styles	Description	Screen grab / DWF / DWG	Default
Ejendom	Show Parcels with green color.		
Område	S		

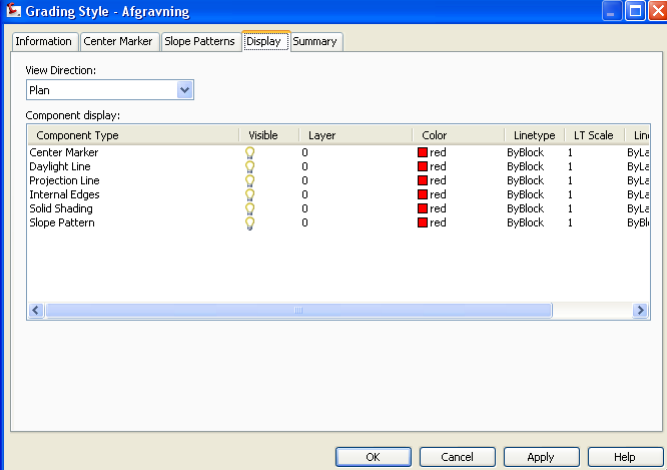
Parcel Label Styles	Description	Screen grab / DWF / DWG	Default
Area			
Betegnelse	Show parcel number i a circle.		

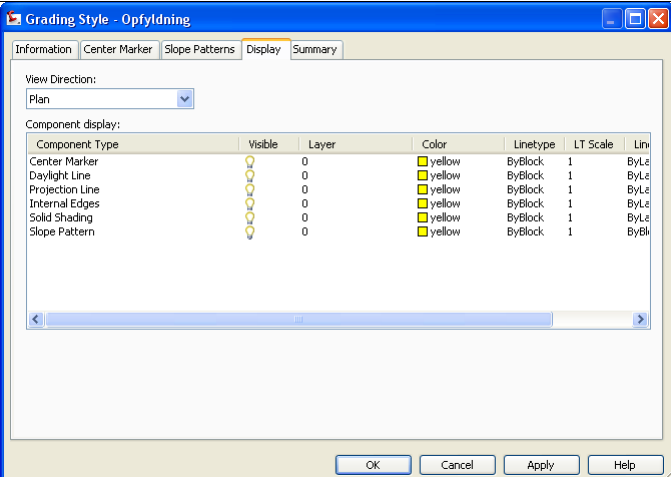
Betegnelse og areal	Show Parcel number and area in a circle.		
Område	Show number and area in a rectangle.		
Line			
Ejendom	Show length and direction for lines.		
Curve			
Kurver	Show length and radius for curves.		

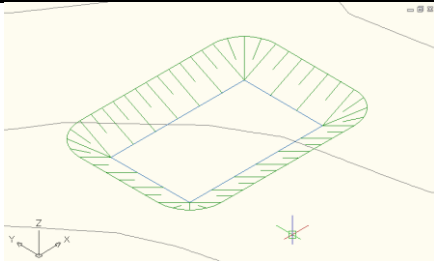
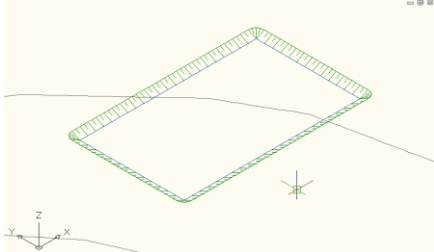
Parcel Table Styles	Description	Screen grab / DWF / DWG	Default
Line			
<None>			
Curve			
<None>			
Segment			
<None>			
Area			

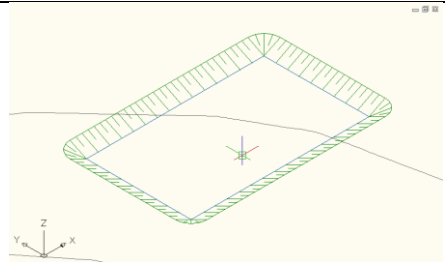
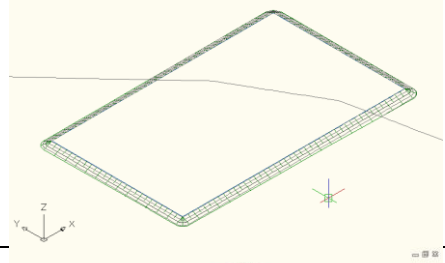
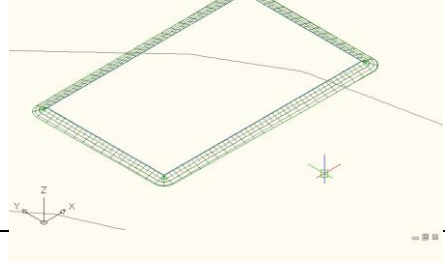
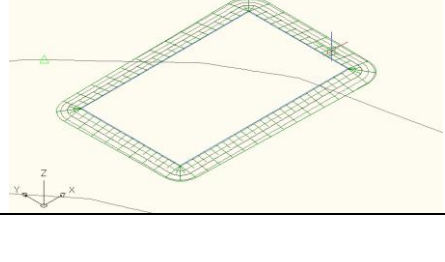
Ejendom	Table with Parcel number, area, length for lines and curves that defines a Parcel.	<table border="1"> <thead> <tr> <th colspan="4">EJENDOMS DATA</th></tr> <tr> <th>EJENDOM</th><th>AREAL (M²)</th><th>OMKREDS (M)</th><th>SEGMENT LÆNGDE (M)</th></tr> </thead> <tbody> <tr> <td>1</td><td>1818.86</td><td>176.66</td><td>5.43 27.27 55.63 32.69 17.06 33.14 5.43</td></tr> <tr> <td>2</td><td>2403.42</td><td>218.11</td><td>67.68 32.31 54.37 65.00 3.76</td></tr> <tr> <td>3</td><td>1797.37</td><td>175.88</td><td>55.63 32.31 38.57 1.86 15.21 32.31</td></tr> <tr> <td>4</td><td>1130.35</td><td>145.98</td><td>67.68 0.81 49.79 32.49</td></tr> </tbody> </table>	EJENDOMS DATA				EJENDOM	AREAL (M ²)	OMKREDS (M)	SEGMENT LÆNGDE (M)	1	1818.86	176.66	5.43 27.27 55.63 32.69 17.06 33.14 5.43	2	2403.42	218.11	67.68 32.31 54.37 65.00 3.76	3	1797.37	175.88	55.63 32.31 38.57 1.86 15.21 32.31	4	1130.35	145.98	67.68 0.81 49.79 32.49	
EJENDOMS DATA																											
EJENDOM	AREAL (M ²)	OMKREDS (M)	SEGMENT LÆNGDE (M)																								
1	1818.86	176.66	5.43 27.27 55.63 32.69 17.06 33.14 5.43																								
2	2403.42	218.11	67.68 32.31 54.37 65.00 3.76																								
3	1797.37	175.88	55.63 32.31 38.57 1.86 15.21 32.31																								
4	1130.35	145.98	67.68 0.81 49.79 32.49																								

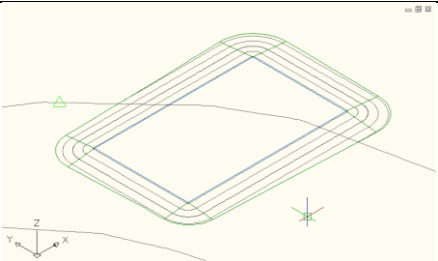
7.6 Grading

Grading Styles	Description	Screen grab / DWF / DWG	Default
Afgravning	Slope Pattern Style for cut with red color in Plan and Model view.		Yes

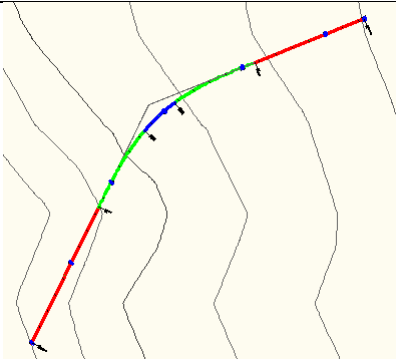
Opfyldning	Slope Pattern Style for fill with yellow color in Plan and Model.		Yes
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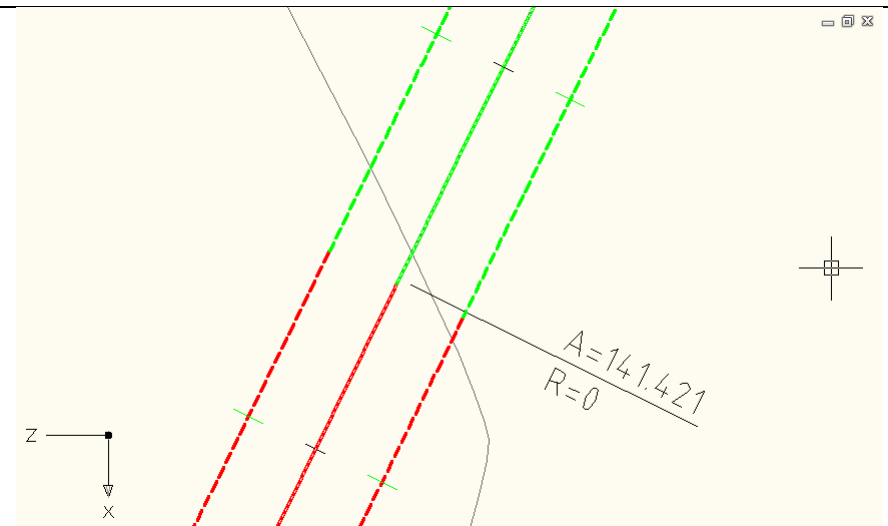
Grading Criteria Sets	Description	Screen grab / DWF / DWG	Default
Basis	Afstand & hældning Slope with distance from Feature Line with Grade.		
	Afstand & skråning Slope with distance from feature Line with slope fx 1:2.		

	<p>Højde & hældning</p> <p>Slope with height and grade fx 1:2 from Feature Line.</p>		
	<p>Terræn & 1-2 hældning</p> <p>Slope to daylight with slope 1:2.</p>		Yes
	<p>Terræn & 1-3 hældning</p> <p>Slope to daylight with slope 1:3.</p>		
	<p>Terræn & 1-6 hældning</p> <p>Slope to daylight with slope 1:6.</p>		

	<p>Terræn og hældning</p> <p>Slope to daylight with slope input for cut and fill.</p>		
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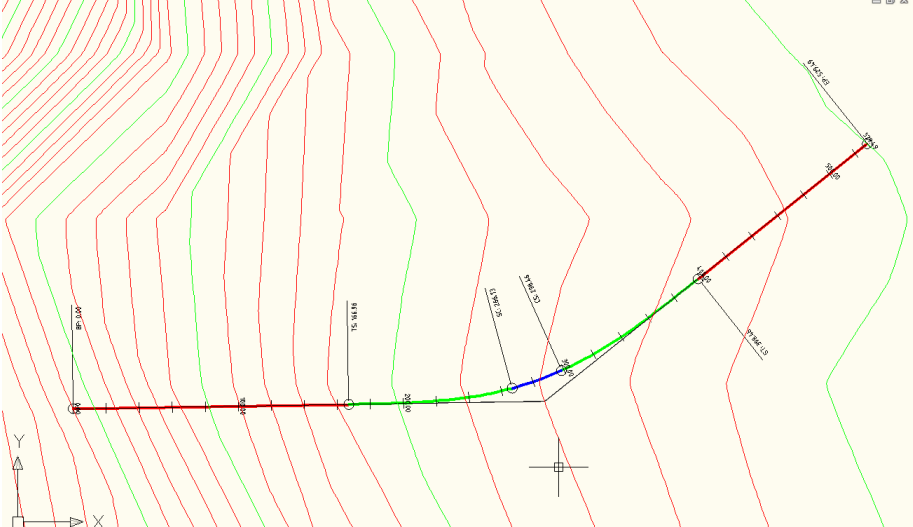
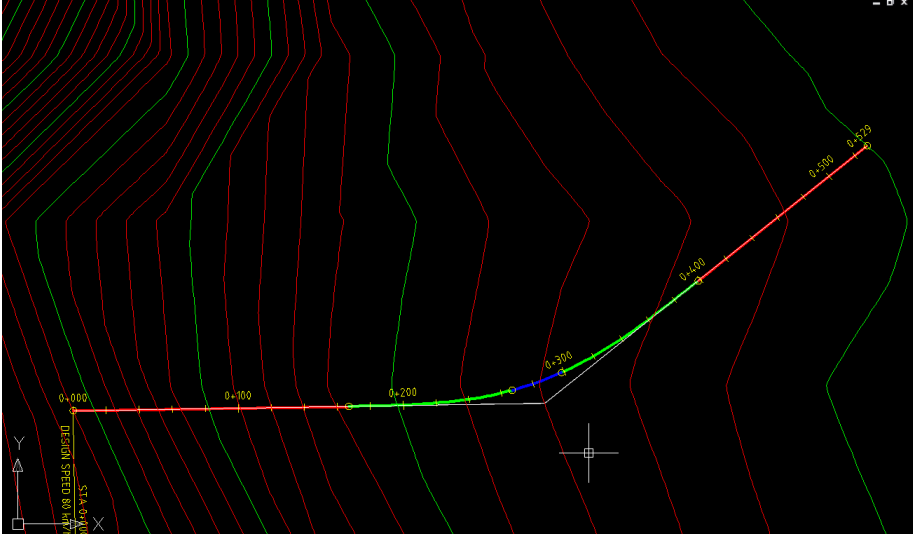
7.7 Alignments

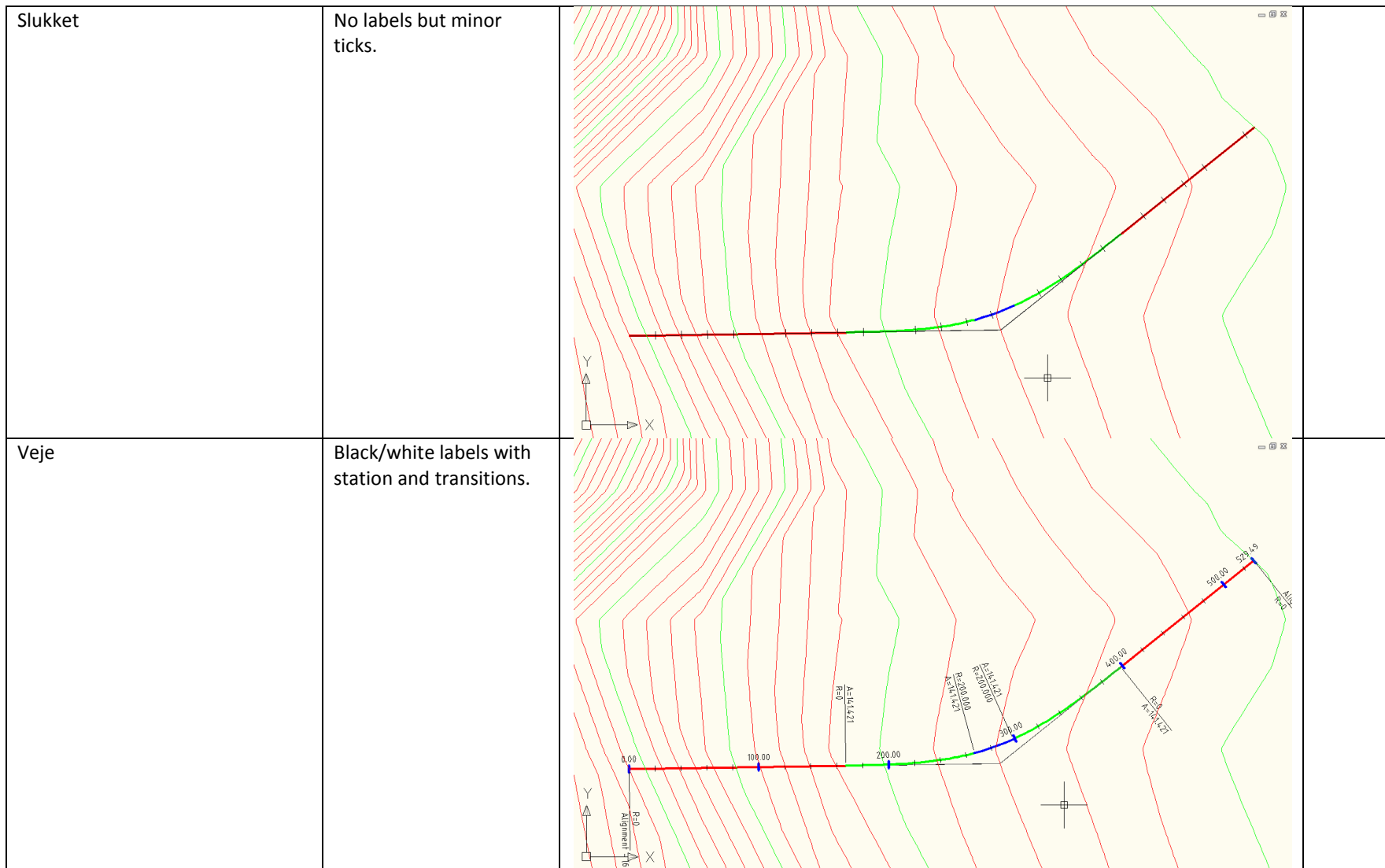
Alignment Style	Description	Screen grab / DWF / DWG	Default
Plot	Alignment (color red) without indicating transitions.		
Veje	Alignment with red color for tangents, green color for spirals and blue color for curves.		Yes

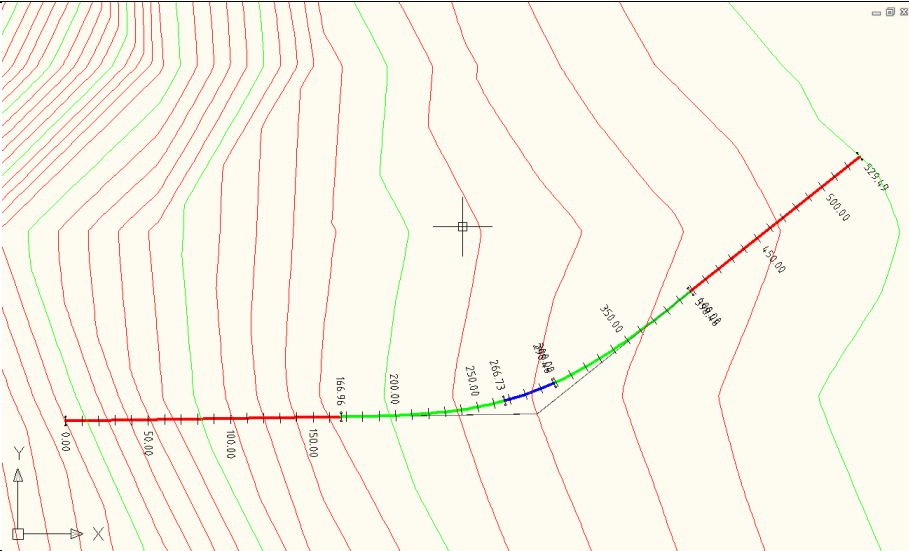
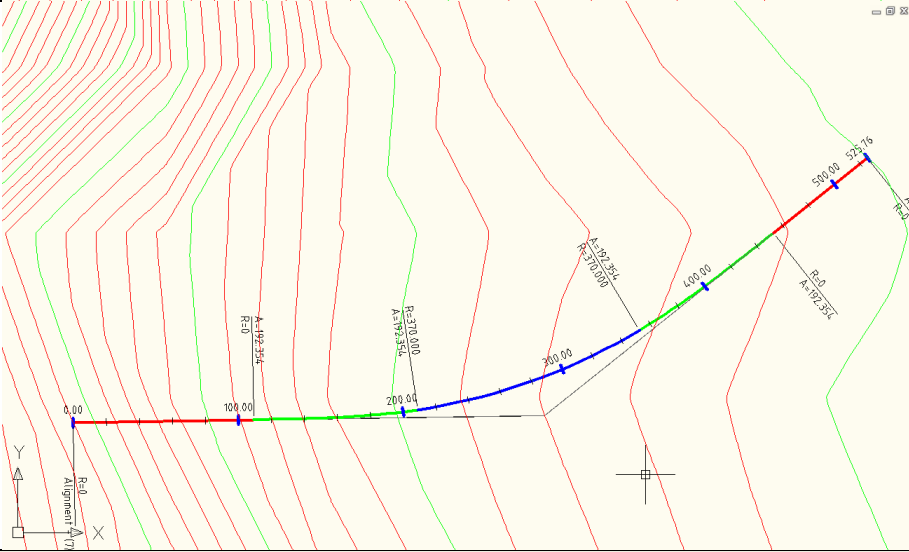
Veje parallel	<p>Offset Alignments with red color for tangents, green color for spirals and blue color for curves.</p> <p>Linetype is HIDDEN for visual separation from primary Alignment.</p>		
---------------	--	--	--

Alignment Design Checks	Description	Screen grab / DWF / DWG	Default
Design Check Sets			
<None>			
Line			
<None>			
Curve			
<None>			
Spiral			
<None>			
Tangent Intersection			
<None>			

Alignment Label Type/Name	Description	Screen grab / DWF / DWG	Default
Alignment Label Sets			

Basis	Black/white labels with station and transitions.	 <p>A topographic map showing a proposed road alignment. The map features contour lines in red and green. The road alignment is shown in red and green, with black/white labels for stationing and transitions. The labels include 'STATION 0+000', 'STATION 0+100', 'STATION 0+200', 'STATION 0+300', 'STATION 0+400', 'STATION 0+500', and 'STATION 0+600'. The alignment starts at a 'START' point and ends at an 'END' point. The map also shows a 'DESIGN SPEED 80 MPH' label.</p>	
Jernbane	Yellow labels with station and no transitions.	 <p>A topographic map showing a proposed road alignment. The map features contour lines in red and green. The road alignment is shown in red and green, with yellow labels for stationing. The labels include 'STATION 0+000', 'STATION 0+100', 'STATION 0+200', 'STATION 0+300', 'STATION 0+400', 'STATION 0+500', and 'STATION 0+600'. The alignment starts at a 'START' point and ends at an 'END' point. The map also shows a 'DESIGN SPEED 80 MPH' label.</p>	



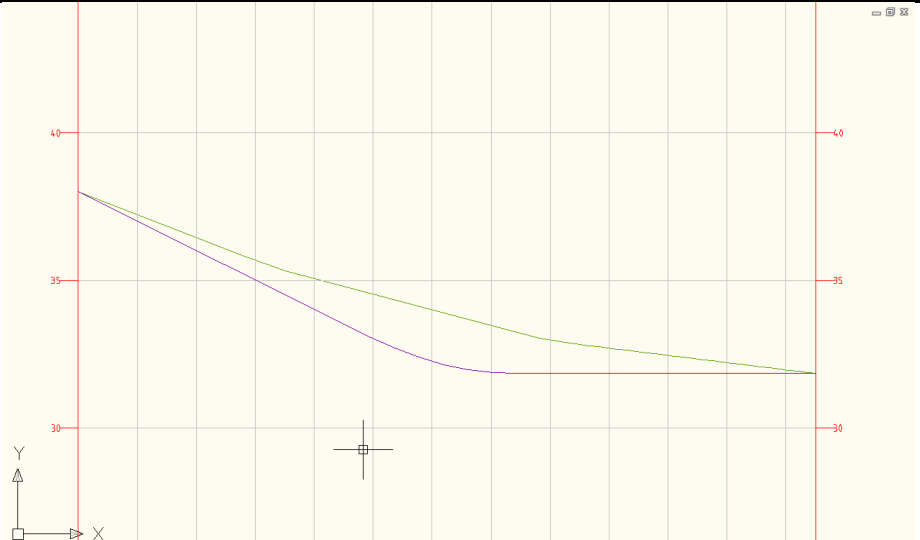
Veje (simpl)	Black/white labels with stations.		
Veje (superelevation)	Black/white labels with station and transitions.		
Major Station	Label at Major Stations		
Basis			
Jernbane			
Slukket			

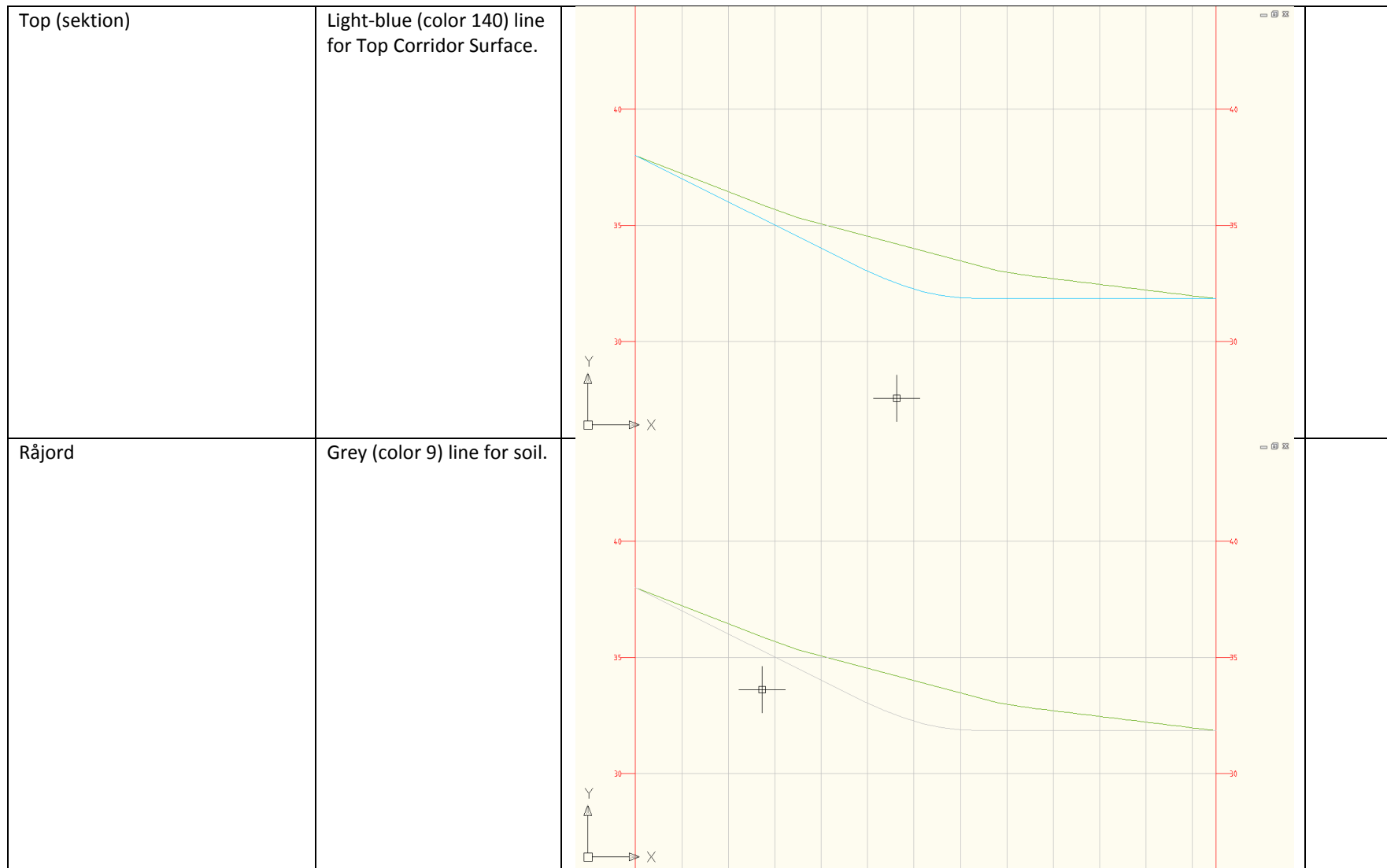
Veje			
Veje (simpel)			
Minor Station	Label at Minor Stations		
Basis			
Jernbane			
Veje			
Veje (simpel)			
Geometry Point	Label at Geometry Points		
Basis			
Jernbane			
Veje			
Veje (simpel)			
Profile Geometry Point	Labels at the profile geometry points on the alignment		
<None>			
Station Equation	Station equation Labels		
Konnektion Jernbane			
Konnektion Veje			
Design Speed	Design Speed labels		
Jernbane			
Veje			
Superelevation Critical Points	Labels at the critical Superelevation points on the alignment		
Skulder superelevation (model)			
Superelevation (model)			
Station Offset	Station Offset Labels		
Sektion og sideafstand			
Line	Tangent labels		
Elementnummer			
Curve	Arc Labels		
Elementnummer			
Spiral	Spiral Labels		
Elementnummer			

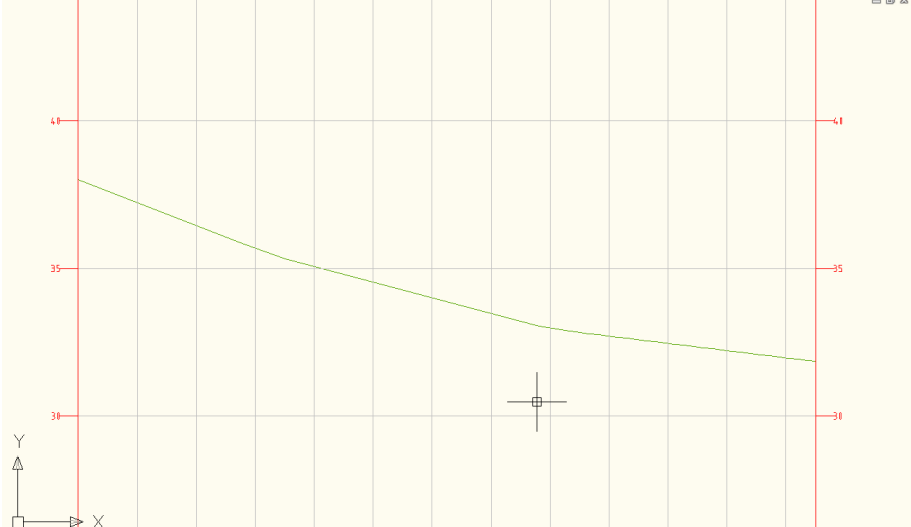
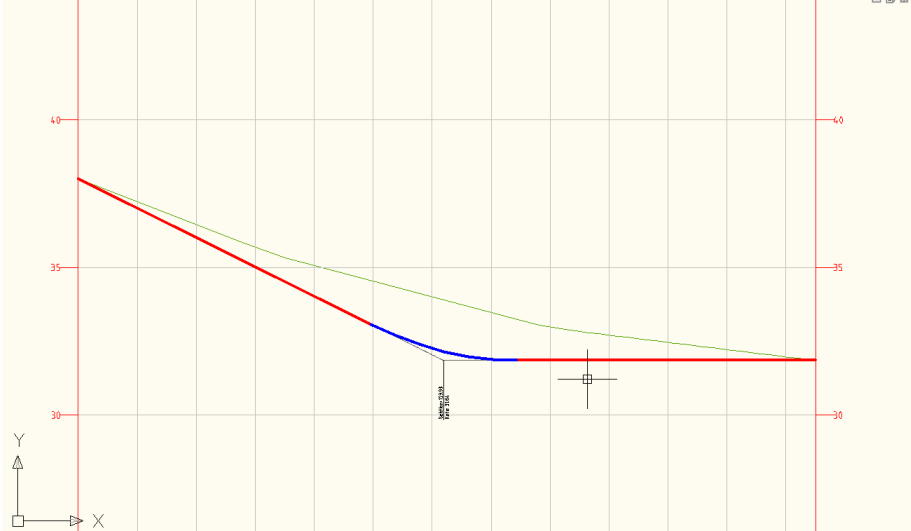
Tangent Intersection	PI Labels		
Vinkelspot			

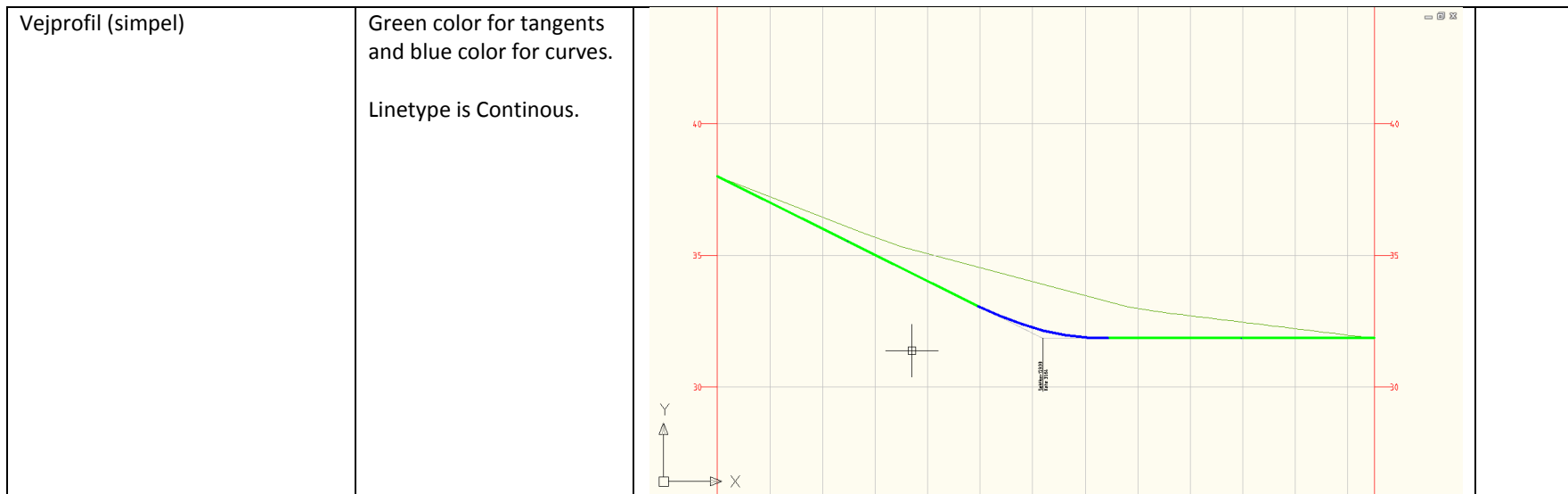
Alignment Table Type/Name	Description	Screen grab / DWF / DWG	Default
Line			
Linietabel			
Curve			
Kurvetabel			
Spiral			
Koltoidetabel			
Segment	Line, curve or spiral element in a single table		
Elementtabel			

7.8 Profiles

Profile Style	Description	Screen grab / DWF / DWG	Default
Bund (sektion)	Purple (color 202) line for Datum Corridor Surface.		

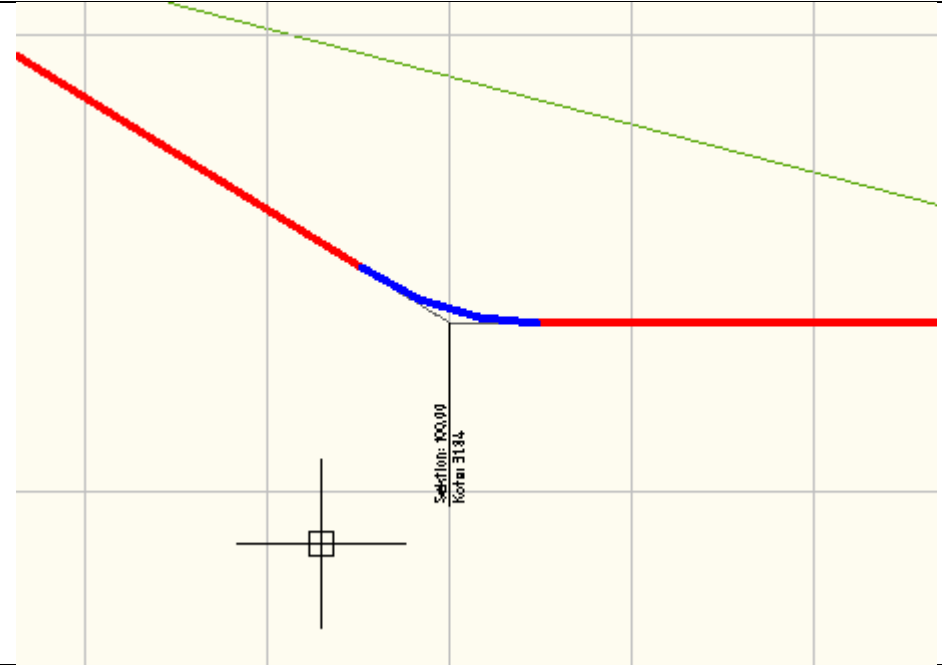


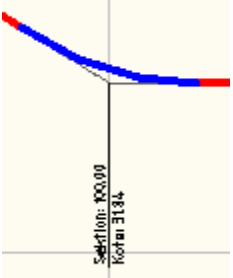
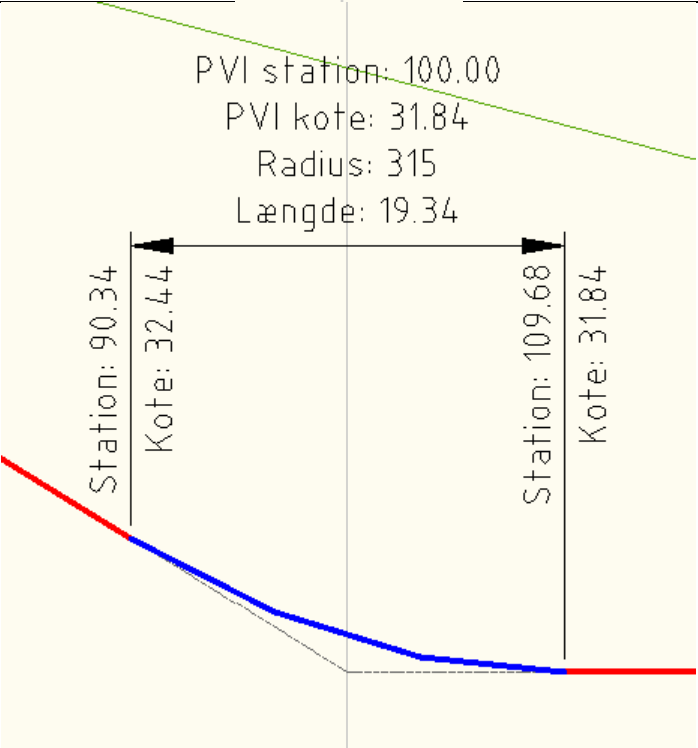
Terræn	Green (color 72) line for existing ground.		
Vejprofil	Red color for tangents and blue colors for curves. Linetype is Continous.		



Profile Design Checks	Description	Screen grab / DWF / DWG	Default
Design Check Sets			
<None>			
Line			
<None>			
Curve			
<None>			

Profile Label Type/Name	Description	Screen grab / DWF / DWG	Default
Profile Label Sets			

Vejprofil	Standard label for PVI.		
Major Station			
Hovedsektion			
Minor Station			
Sektion			
Horizontal Geometry Point			
Sektion og type			
Grade Breaks			
Hældning og højde			
Line	Tangent Labels		
Tangent			
Curve			

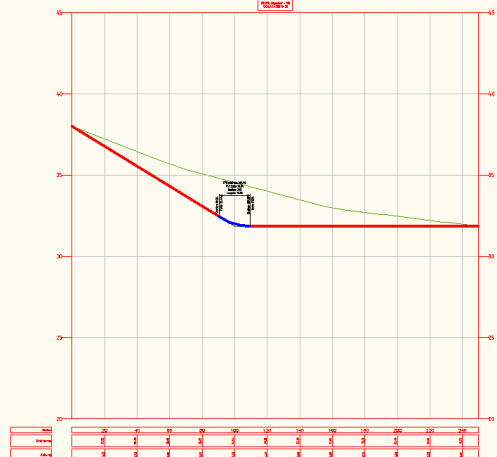
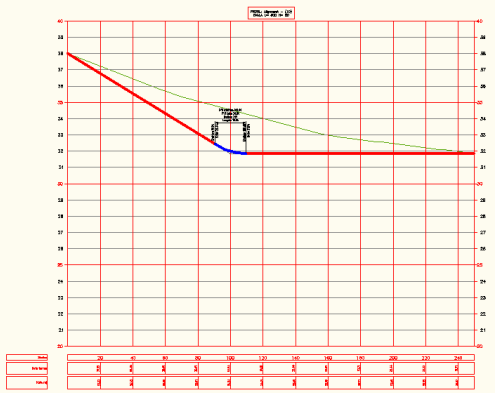
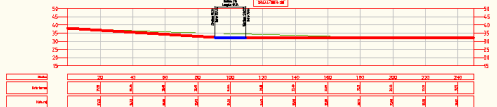
<p>Kurver</p> <ul style="list-style-type: none"> • Konkav • Konvex 	<p>Standard label for Concave and Convex curves.</p>		
<p>Data</p>	<p>Detail label for Concave and Convex curves.</p>		

Profile View Type/Name

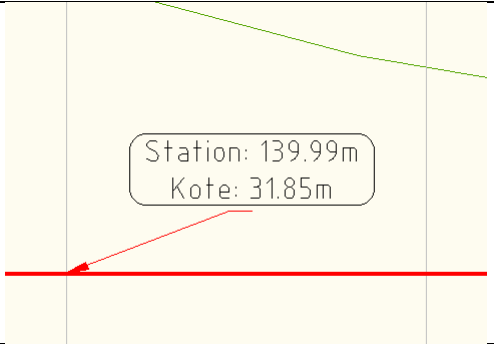
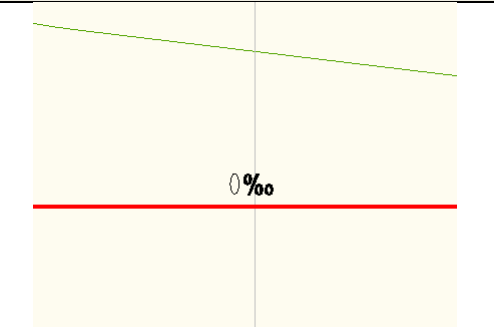
Description

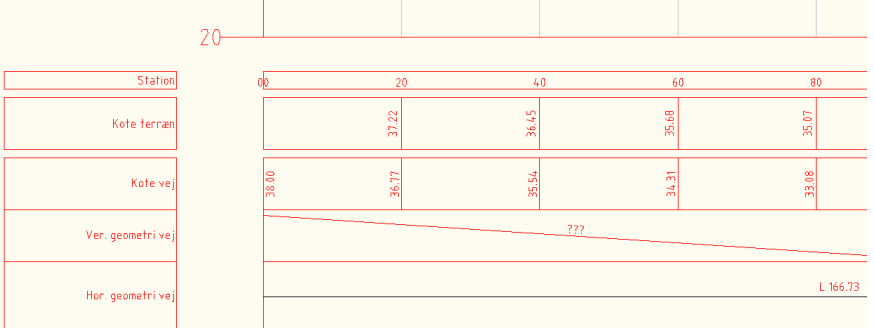
Screen grab / DWF / DWG

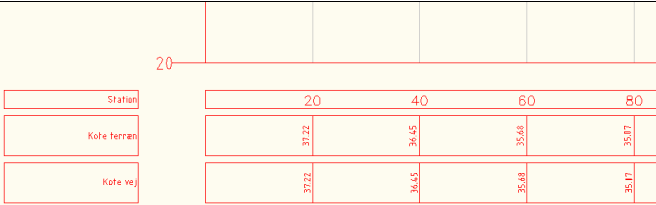
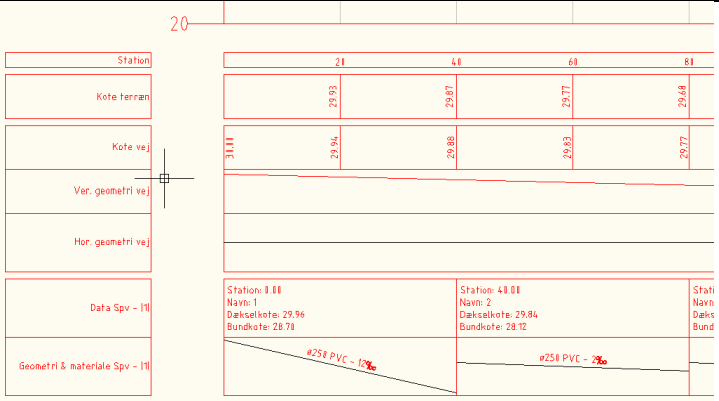
Default

Vejprofil	<p>Standard Profile with a 5m block above and below lowest and highest elevation for vertical profiles.</p> <p>Grid is 5m for elevation and 20m for station.</p> <p>Grid is 10x exaggerated.</p>		Yes
Vejprofil (simpel)	<p>Profile with a 1m grid for elevation and 20m for station.</p> <p>Grid is 10x exaggerated.</p>		
Vejprofil (uden overdrivelse)	<p>Som vejprofil uden overdrivelse</p> <p>Profile like Vejprofil but without exaggerated.</p>		

Profile View Label Type/Name	Description	Screen grab / DWF / DWG	Default
Station Elevation			


Station og kote	Standard label for a selected point.		
Depth			
Hældning (promille)	Slope in per mille.		

Profile Band Type/Name	Description	Screen grab / DWF / DWG	Default
Profile Band Set			
Vejprofil	Bands for station, elevation (EG), elevation (Top Corridor model), vertical (Top Corridor model) and horizontal (Alignment) geometry.		

Vejprofil (simpel)	Bands for station, elevation (EG) and elevation (Top Corridor model).		Yes
Vej- og ledningsprofil	See Vej- og ledningsprofil (Spildevand) but with 3 sets of Structures and Pipes.	Se under Vej- og ledningsprofil (Spildevand)	
Vej- og ledningsprofil (Fælles)	See under Vej- og ledningsprofil (Spildevand)	Se under Vej- og ledningsprofil (Spildevand)	
Vej- og ledningsprofil (Regnvand)	Se under Vej- og ledningsprofil (Spildevand)	Se under Vej- og ledningsprofil (Spildevand)	
Vej- og ledningsprofil (Spildevand)	<p>Bands for station, elevation (EG), elevation (Top Corridor model), vertical (Top Corridor model) and horizontal (Alignment) geometry.</p> <p>Additional data for Structures and Pipes.</p>		
Profile Data			
Jordart			
Kote terræn			
Kote vej			
Kote vej simpel			
Markslog			
Station			
Station simpel			
Tangeringspunkt			
Vertical Geometry			

Geometri terræn			
Hældning vej i procent			
Profildata			
Ver. Geometri vej			
Horizontal Geometry			
Hor. Geometri vej			
Plandata			
Superelevation Data			
Tværfald			
Sectional Data			
<None>			
Pipe Network			
Fv. Geometri og materiale			
Fv. Komp.data			
Rgv. Geometri og materiale			
Rgv. Komp.data			
Spv. Geometri og materiale			
Spv. Komp.data			

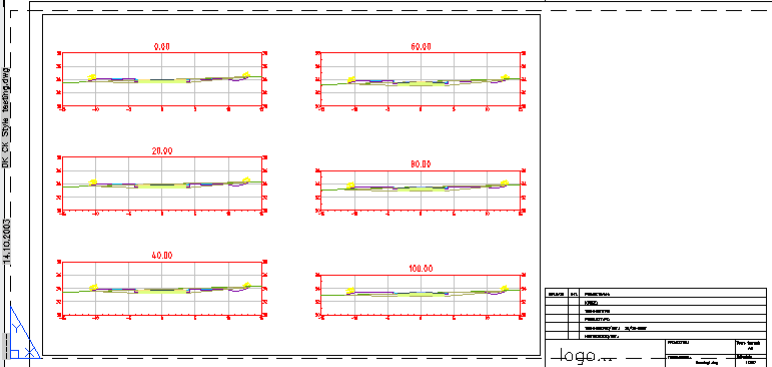
7.8 Superelevation Views

Superelevation View Style	Description	Screen grab / DWF / DWG	Default
Basis	<p>View is Red color and Lines and Labels is color 9 (gray).</p> <p>Lane and Shoulder is colored runing the Superelevation View command.</p>		Ja

See chapter 12 for a more detailed description of Super elevation. Currently there is no settings for adjust slope and other labels.

7.9 Sections

Cross Sections Sheet Templates	Description	Screen grab / DWF / DWG	Default
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_AutoCAD Civil 3D A3 Section_DK	Indeholder følgende mål forhold for A3 (liggende): A3L Tvaersnit 1-100 A3L Tvaersnit 1-1000 A3L Tvaersnit 1-200 A3L Tvaersnit 1-2000 A3L Tvaersnit 1-500		
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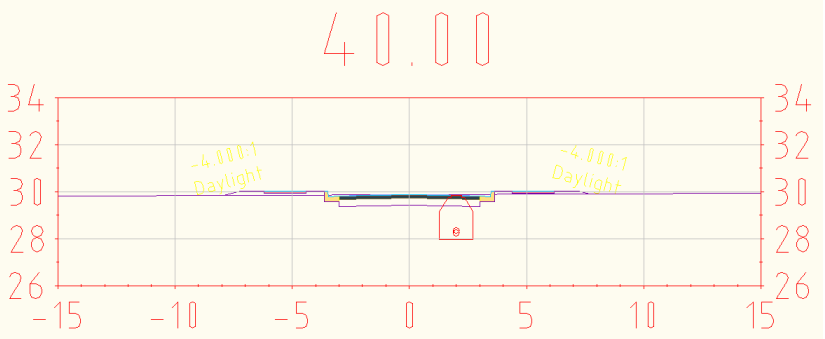
Sample Line Styles	Description	Screen grab / DWF / DWG	Default
Sektionsmarkering			

Sample Line Label Styles	Description	Screen grab / DWF / DWG	Default
Sektionsnavn			

Section Styles	Description	Screen grab / DWF / DWG	Default
Bund	Dark-purple (color 202) line.		
Terræn	Dark-green (color 72) line.		
Top	Light-blue (color 140) line.		
Vejsektion	Red line.		

Section Label Styles	Description	Screen grab / DWF / DWG	Default
Label Sets			
Slukket			
Major Offset			
<None>			
Minor Offset			
<None>			
Grade Break			
<None>			
Segment			

<None>			
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Section View Styles	Description	Screen grab / DWF / DWG	Default
Tværsprofil	Standard Section view without bands. Structure and Pipes are colored by their Parts List.		Yes

Group Plot Styles	Description	Screen grab / DWF / DWG	Default
<None>			

Sheet Styles	Description	Screen grab / DWF / DWG	Default
<None>			

Label Styles	Description	Screen grab / DWF / DWG	Default
Offset Elevation			
Offset over kote			
Grade			
Fald (mellem to punkter)			

Section Band Styles	Description	Screen grab / DWF / DWG	Default
Band Sets			
<None>			
Section Data			
<None>			

Section Table Styles	Description	Screen grab / DWF / DWG	Default
Total Volume			
<None>			

Material			
<None>			

7.10 Pipe Networks

Parts Lists	Description	Screen grab / DWF / DWG	Default
Dræn	Material and dimension for Drain system. Only for Pipes.		
Fælles	Material and dimension for Common system for Structure and Pipes.		
Regnvand	Material and dimension for Rain water system for Structure and Pipes.		
Spildevand	Material and dimension for Sewage water system for Structure and Pipes.		

Interference Styles	Description	Screen grab / DWF / DWG	Default
<None>			

Pipe Styles	Description	Screen grab / DWF / DWG	Default
Dræn	Pipes are green and linetype is ACAD_ISO02W100 and layer C-PIPE-DRN.		
Fælles	Pipes are red and linetype is DASHED and layer C-PIPE-FLS.		
Regnvand	Pipes are blue and layer is C-PIPE-RGV		
Spildevand	Pipes are red and layer is C-PIPE-SPV		

Pipe Rule Set	Description	Screen grab / DWF / DWG	Default
Dræn		<div> <div> Cover And Slope </div> <div> Maximum Cover7.000m </div> <div> Maximum Slope50.00% </div> <div> Minimum Cover1.000m </div> <div> Minimum Slope0.20% </div> </div> <div> <div> Length Check </div> <div> Maximum Length200.000m </div> <div> Minimum Length1.000m </div> </div>	
Fælles		<div> <div> Cover And Slope </div> <div> Maximum Cover7.000m </div> <div> Maximum Slope50.00% </div> <div> Minimum Cover1.000m </div> <div> Minimum Slope0.20% </div> </div> <div> <div> Length Check </div> <div> Maximum Length200.000m </div> <div> Minimum Length1.000m </div> </div>	

Regnvand		<div> <div> Cover And Slope Maximum Cover Maximum Slope Minimum Cover Minimum Slope </div> <div> 7,000m 50,00% 1,000m 0,20% </div> </div> <div> <div> Length Check </div> <div> Maximum Length Minimum Length </div> <div> 200,000m 1,000m </div> </div>	
Spildevand		<div> <div> Cover And Slope Maximum Cover Maximum Slope Minimum Cover Minimum Slope </div> <div> 7,000m 50,00% 1,000m 0,20% </div> </div> <div> <div> Length Check </div> <div> Maximum Length Minimum Length </div> <div> 200,000m 1,000m </div> </div>	

Pipe Label Styles	Description	Screen grab / DWF / DWG	Default
Plan Profile			
Dræn	Label dimension, material and grade in per mille with green color along pipes.		
Fælles	Label dimension, material and grade in per mille with red color along pipes.		
Regnvand	Label dimension, material and grade in per mille with blue color along pipes.		
Spildevand	Label dimension, material and grade in per mille with red color along pipes.		
Crossing Section			
<None>			

Pipe Table Styles	Description	Screen grab / DWF / DWG	Default
<None>			

Structure Styles	Description	Screen grab / DWF / DWG	Default
Dræn	Structure are green colored.		
Fælles	Structure are red colored.		
Regnvand	Structure are blue colored.		
Spildevand	Structure are red colored.		

Structure Rule Styles	Description	Screen grab / DWF / DWG	Default
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Regnvand		<div> <div>Maximum pipe size check</div> <div>Maximum pipe diameter or width</div> <div>1.000m</div> </div> <div> <div>Pipe Drop Across Structure</div> <div>Drop Reference Location</div> <div>Invert</div> <div>Drop Value</div> <div>0.000m</div> <div>Maximum Drop Value</div> <div>0.250m</div> </div> <div> <div>Set Sump Depth</div> <div>Sump Depth</div> <div>0.000m</div> </div>	
Spildevand		<div> <div>Maximum pipe size check</div> <div>Maximum pipe diameter or width</div> <div>1.000m</div> </div> <div> <div>Pipe Drop Across Structure</div> <div>Drop Reference Location</div> <div>Invert</div> <div>Drop Value</div> <div>0.100m</div> <div>Maximum Drop Value</div> <div>0.500m</div> </div> <div> <div>Set Sump Depth</div> <div>Sump Depth</div> <div>0.000m</div> </div>	

Structure Label Styles	Description	Screen grab / DWF / DWG	Default
Dræn	<None>		
Child of Dræn	<None>		
Fælles	Display number on right side of Structure with red color.		
Child of Fælles	Display number, top and bottom elevation in a rounded box on right side of Structure with red color. Label can be dragged.		
Regnvand	Display number on right side of Structure with blue color.		
Child of Regnvand	Display number, top and bottom elevation in a rounded box on right side of Structure with blue color. Label can be dragged.		
Spildevand	Display number on right side of Structure with red color.		
Child of Spildevand	Display number, top and bottom elevation in a rounded box on right side of Structure with red color. Label can be dragged.		

Structure Table Styles	Description	Screen grab / DWF / DWG	Default
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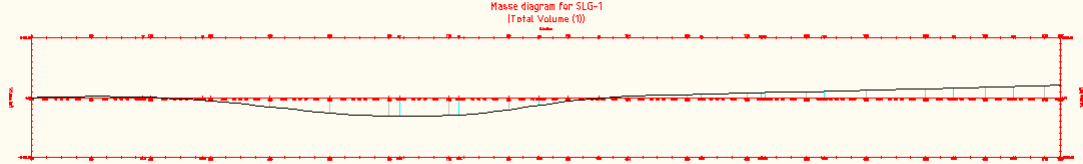
<None>			
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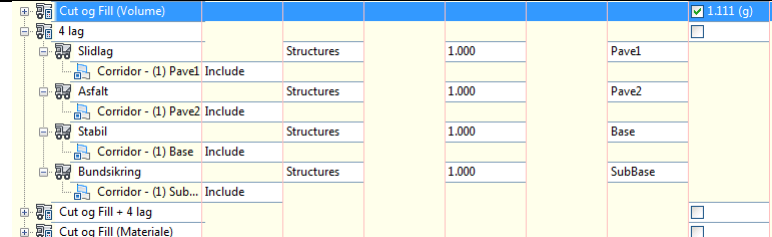
7.11 Corridors

Corridor Styles	Description	Screen grab / DWF / DWG	Default
<None>			

Assembly Styles	Description	Screen grab / DWF / DWG	Default
Basis			Yes

Mass Haul Line Styles	Description	Screen grab / DWF / DWG	Default
<None>			

Mass Haul View Styles	Description	Screen grab / DWF / DWG	Default
Masse	Standard "Profile" for Mass Haul Diagram.		Yes

Quantity Takeoff Criteria	Description	Screen grab / DWF / DWG	Default
4 lag			

Cut og Fill (Materiale)			1.111 (g)	
Cut og Fill (Volume)			1.111 (g)	
Cut og Fill + 4 lag				

QTO Table Styles	Description	Screen grab / DWF / DWG	Default
Total Volume			

Cut og Fill	Table with Cut and Fill volumes (per section).	TOTAL VOLUME							
		STATION	CUT M³	FILL M³	CUT M³	FILL M³	AKK. CUT M³	AKK. FILL M³	NETTO M³
		0+000	3.28	0.67	0.00	0.00	0.00	0.00	0.00
		0+020	3.19	0.80	64.77	14.71	64.77	14.71	50.06
		0+040	3.14	0.86	63.35	16.55	128.12	31.26	96.86
		0+060	2.87	1.17	60.14	20.28	188.26	51.54	136.72
		0+080	2.60	1.50	54.75	26.70	243.01	78.24	164.77
		0+100	2.33	1.84	49.29	33.41	292.30	111.64	180.66
		0+120	2.02	2.25	43.44	40.89	335.74	152.54	183.21
		0+140	1.64	2.76	36.54	50.05	372.28	202.58	169.70
		0+160	1.28	3.26	29.15	60.18	401.43	262.77	138.67
		0+180	0.93	3.80	22.12	70.67	423.55	333.44	90.11
		0+200	0.64	4.41	15.71	82.15	439.26	445.59	23.68
		0+220	0.34	5.03	9.79	94.45	449.06	510.04	-60.98
		0+240	0.07	5.71	4.15	107.42	453.21	617.46	-164.25
		0+260	0.00	6.55	0.73	122.64	453.93	740.10	-286.17
		0+280	0.00	7.42	0.01	139.81	453.94	879.92	-425.98
		0+300	0.00	8.24	0.00	156.72	453.94	1036.64	-582.70
		0+320	0.00	9.02	0.00	172.72	453.94	1209.36	-755.42
		0+340	0.00	9.79	0.00	188.24	453.94	1397.59	-943.66
		0+360	0.00	10.17	0.00	199.78	453.94	1597.37	-1143.43
		0+380	0.00	10.54	0.00	207.29	453.94	1804.66	-1350.72
Material									

Areal og volume	Area and total volume per section.	Materiale tabel			
		Station	Areal	Volume	Akk. volume
		0.00	3.28	0.00	0.00
		20.00	3.19	64.77	64.77
		40.00	3.14	63.35	128.12
		60.00	2.87	60.14	188.26
		80.00	2.60	54.75	243.01
		100.00	2.33	49.29	292.30
		120.00	2.02	43.44	335.74
		140.00	1.64	36.54	372.28
		160.00	1.28	29.15	401.43
		180.00	0.93	22.12	423.55
		200.00	0.64	15.71	439.26
		220.00	0.34	9.79	449.06
		240.00	0.07	4.15	453.21
		260.00	0.00	0.73	453.93
		280.00	0.00	0.01	453.94
		300.00	0.00	0.00	453.94
		320.00	0.00	0.00	453.94
		340.00	0.00	0.00	453.94
		360.00	0.00	0.00	453.94
		380.00	0.00	0.00	453.94

Asfalt	Pave 2 area and volume per section.	Asfalt			
		Station	Areal	Volume	Akk. volume
		0.00	0.15	0.00	0.00
		20.00	0.15	3.00	3.00
		40.00	0.15	3.00	6.00
		60.00	0.15	3.00	9.00
		80.00	0.15	3.00	12.00
		100.00	0.15	3.00	15.00
		120.00	0.15	3.00	18.00
		140.00	0.15	3.00	21.00
		160.00	0.15	3.00	24.00
		180.00	0.15	3.00	27.00
		200.00	0.15	3.00	30.00
		220.00	0.15	3.00	33.00
		240.00	0.15	3.00	36.00
		260.00	0.15	3.00	39.00
		280.00	0.15	3.00	42.00
		300.00	0.15	3.00	45.00
		320.00	0.15	3.00	48.00
		340.00	0.15	3.00	51.00
		360.00	0.15	3.00	54.00
		380.00	0.15	3.00	57.00

Bundsikring	SubBase area and volume per section.	Bundsikring			
		Station	Areal	Volume	Akk. volume
		0.00	1.80	0.00	0.00
		20.00	1.80	36.00	36.00
		40.00	1.80	36.00	72.00
		60.00	1.80	36.00	108.00
		80.00	1.80	36.00	144.00
		100.00	1.80	36.00	180.00
		120.00	1.80	36.00	216.00
		140.00	1.80	36.00	252.00
		160.00	1.80	36.00	288.00
		180.00	1.80	36.00	324.00
		200.00	1.80	36.00	360.00
		220.00	1.80	36.00	396.00
		240.00	1.80	36.00	432.00
		260.00	1.80	36.00	468.00
		280.00	1.80	36.00	504.00
		300.00	1.80	36.00	540.00
		320.00	1.80	36.00	576.00
		340.00	1.80	36.00	612.00
		360.00	1.80	36.00	648.00
		380.00	1.80	36.00	684.00

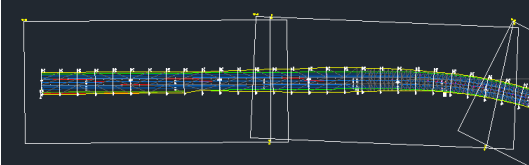
Cut	Cut area and volume per section.	<table border="1"> <thead> <tr> <th colspan="4">Cut</th></tr> <tr> <th>Station</th><th>Areal</th><th>Volume</th><th>Akk. volume</th></tr> </thead> <tbody> <tr><td>0.00</td><td>3.28</td><td>0.00</td><td>0.00</td></tr> <tr><td>20.00</td><td>3.19</td><td>64.77</td><td>64.77</td></tr> <tr><td>40.00</td><td>3.14</td><td>63.35</td><td>128.12</td></tr> <tr><td>60.00</td><td>2.87</td><td>60.14</td><td>188.26</td></tr> <tr><td>80.00</td><td>2.60</td><td>54.75</td><td>243.01</td></tr> <tr><td>100.00</td><td>2.33</td><td>49.29</td><td>292.30</td></tr> <tr><td>120.00</td><td>2.02</td><td>43.44</td><td>335.74</td></tr> <tr><td>140.00</td><td>1.64</td><td>36.54</td><td>372.28</td></tr> <tr><td>160.00</td><td>1.28</td><td>29.15</td><td>401.43</td></tr> <tr><td>180.00</td><td>0.93</td><td>22.12</td><td>423.55</td></tr> <tr><td>200.00</td><td>0.64</td><td>15.71</td><td>439.26</td></tr> <tr><td>220.00</td><td>0.34</td><td>9.79</td><td>449.06</td></tr> <tr><td>240.00</td><td>0.07</td><td>4.15</td><td>453.21</td></tr> <tr><td>260.00</td><td>0.00</td><td>0.73</td><td>453.93</td></tr> <tr><td>280.00</td><td>0.00</td><td>0.01</td><td>453.94</td></tr> <tr><td>300.00</td><td>0.00</td><td>0.00</td><td>453.94</td></tr> <tr><td>320.00</td><td>0.00</td><td>0.00</td><td>453.94</td></tr> <tr><td>340.00</td><td>0.00</td><td>0.00</td><td>453.94</td></tr> <tr><td>360.00</td><td>0.00</td><td>0.00</td><td>453.94</td></tr> <tr><td>380.00</td><td>0.00</td><td>0.00</td><td>453.94</td></tr> </tbody> </table>	Cut				Station	Areal	Volume	Akk. volume	0.00	3.28	0.00	0.00	20.00	3.19	64.77	64.77	40.00	3.14	63.35	128.12	60.00	2.87	60.14	188.26	80.00	2.60	54.75	243.01	100.00	2.33	49.29	292.30	120.00	2.02	43.44	335.74	140.00	1.64	36.54	372.28	160.00	1.28	29.15	401.43	180.00	0.93	22.12	423.55	200.00	0.64	15.71	439.26	220.00	0.34	9.79	449.06	240.00	0.07	4.15	453.21	260.00	0.00	0.73	453.93	280.00	0.00	0.01	453.94	300.00	0.00	0.00	453.94	320.00	0.00	0.00	453.94	340.00	0.00	0.00	453.94	360.00	0.00	0.00	453.94	380.00	0.00	0.00	453.94	
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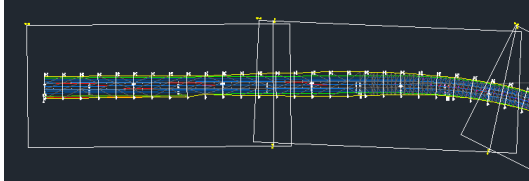
Fill	Fill area and volume per section.	Fill			
		Station	Areal	Volume	Akk. volume
		0.00	0.67	0.00	0.00
		20.00	0.80	14.71	14.71
		40.00	0.86	16.55	31.26
		60.00	1.17	20.28	51.54
		80.00	1.50	26.70	78.24
		100.00	1.84	33.41	111.64
		120.00	2.25	40.89	152.54
		140.00	2.76	50.05	202.58
		160.00	3.26	60.18	262.77
		180.00	3.80	70.67	333.44
		200.00	4.41	82.15	415.59
		220.00	5.03	94.45	510.04
		240.00	5.71	107.42	617.46
		260.00	6.55	122.57	740.03
		280.00	7.42	139.71	879.73
		300.00	8.24	156.58	1036.32
		320.00	9.02	172.57	1208.89
		340.00	9.79	188.10	1396.99
		360.00	10.17	199.64	1596.63
		380.00	10.54	207.13	1803.75

Slidlag	Pave 1 area and volume per section.	<table><tr><th colspan="4">Slidlag</th></tr><tr><th>Station</th><th>Areal</th><th>Volume</th><th>Akk. volume</th></tr><tr><td>0.00</td><td>0.15</td><td>0.00</td><td>0.00</td></tr><tr><td>20.00</td><td>0.15</td><td>3.00</td><td>3.00</td></tr><tr><td>40.00</td><td>0.15</td><td>3.00</td><td>6.00</td></tr><tr><td>60.00</td><td>0.15</td><td>3.00</td><td>9.00</td></tr><tr><td>80.00</td><td>0.15</td><td>3.00</td><td>12.00</td></tr><tr><td>100.00</td><td>0.15</td><td>3.00</td><td>15.00</td></tr><tr><td>120.00</td><td>0.15</td><td>3.00</td><td>18.00</td></tr><tr><td>140.00</td><td>0.15</td><td>3.00</td><td>21.00</td></tr><tr><td>160.00</td><td>0.15</td><td>3.00</td><td>24.00</td></tr><tr><td>180.00</td><td>0.15</td><td>3.00</td><td>27.00</td></tr><tr><td>200.00</td><td>0.15</td><td>3.00</td><td>30.00</td></tr><tr><td>220.00</td><td>0.15</td><td>3.00</td><td>33.00</td></tr><tr><td>240.00</td><td>0.15</td><td>3.00</td><td>36.00</td></tr><tr><td>260.00</td><td>0.15</td><td>3.00</td><td>39.00</td></tr><tr><td>280.00</td><td>0.15</td><td>3.00</td><td>42.00</td></tr><tr><td>300.00</td><td>0.15</td><td>3.00</td><td>45.00</td></tr><tr><td>320.00</td><td>0.15</td><td>3.00</td><td>48.00</td></tr><tr><td>340.00</td><td>0.15</td><td>3.00</td><td>51.00</td></tr><tr><td>360.00</td><td>0.15</td><td>3.00</td><td>54.00</td></tr><tr><td>380.00</td><td>0.15</td><td>3.00</td><td>57.00</td></tr></table>	Slidlag				Station	Areal	Volume	Akk. volume	0.00	0.15	0.00	0.00	20.00	0.15	3.00	3.00	40.00	0.15	3.00	6.00	60.00	0.15	3.00	9.00	80.00	0.15	3.00	12.00	100.00	0.15	3.00	15.00	120.00	0.15	3.00	18.00	140.00	0.15	3.00	21.00	160.00	0.15	3.00	24.00	180.00	0.15	3.00	27.00	200.00	0.15	3.00	30.00	220.00	0.15	3.00	33.00	240.00	0.15	3.00	36.00	260.00	0.15	3.00	39.00	280.00	0.15	3.00	42.00	300.00	0.15	3.00	45.00	320.00	0.15	3.00	48.00	340.00	0.15	3.00	51.00	360.00	0.15	3.00	54.00	380.00	0.15	3.00	57.00
Slidlag																																																																																										
Station	Areal	Volume	Akk. volume																																																																																							
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340.00	0.15	3.00	51.00																																																																																							
360.00	0.15	3.00	54.00																																																																																							
380.00	0.15	3.00	57.00																																																																																							

Stabil	Base area and volume per section.	Stabil			
		Station	Areal	Volume	Akk. volume
		0.00	0.60	0.00	0.00
		20.00	0.60	12.00	12.00
		40.00	0.60	12.00	24.00
		60.00	0.60	12.00	36.00
		80.00	0.60	12.00	48.00
		100.00	0.60	12.00	60.00
		120.00	0.60	12.00	72.00
		140.00	0.60	12.00	84.00
		160.00	0.60	12.00	96.00
		180.00	0.60	12.00	108.00
		200.00	0.60	12.00	120.00
		220.00	0.60	12.00	132.00
		240.00	0.60	12.00	144.00
		260.00	0.60	12.00	156.00
		280.00	0.60	12.00	168.00
		300.00	0.60	12.00	180.00
		320.00	0.60	12.00	192.00
		340.00	0.60	12.00	204.00
		360.00	0.60	12.00	216.00
		380.00	0.60	12.00	228.00

7.12 Plan and Profile Sheets

View Frame Sheet Templates	Description	Screen grab / DWF / DWG	Default
_AutoCAD Civil 3D A1 Plan_DK	Contains scales below for plan for plotting in A1: A1 Plan 1-1000 A1 Plan 1-2000 A1 Plan 1-500		
_AutoCAD Civil 3D A1 Plan+Profil_DK	Contains scales below for plan and profile for plotting in A1:		

	A1 Plan over Profil 1-1000 A1 Plan over Profil 1-2000 A1 Plan over Profil 1-500 A1 Plan under Profil 1-1000 A1 Plan under Profil 1-2000 A1 Plan under Profil 1-500		
_AutoCAD Civil 3D A3 Plan_DK	Contains scales below for plan for plotting in A3 portrait: A3 Plan 1-1000 A3 Plan 1-2000 A3 Plan 1-500		
_AutoCAD Civil 3D A3L Plan_DK	Contains scales below for plan for plotting in A3 landscape: A3L Plan 1-1000 A3L Plan 1-2000 A3L Plan 1-500		

View Frame Styles	Description	Screen grab / DWF / DWG	Default
<None>			

View Frame Label Styles	Description	Screen grab / DWF / DWG	Default
<None>			

Match Line Styles	Description	Screen grab / DWF / DWG	Default
<None>			

Match Line Label Styles	Description	Screen grab / DWF / DWG	Default
Match Line Left			
<None>			
Match Line Right			
<None>			

7.13 Survey

Network Styles	Description	Screen grab / DWF / DWG	Default
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<None>			
Figure Styles	Description	Screen grab / DWF / DWG	Default
<None>			

8 Tool palette(s)

8.1 Assemblies

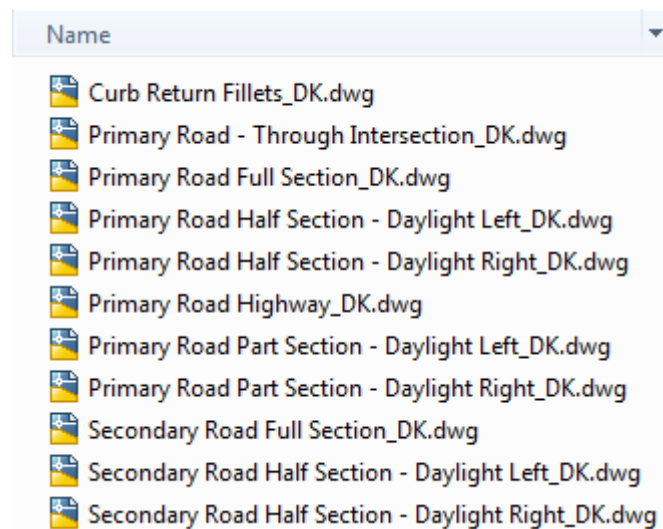
8.1.1 Subassemblies

<None>

8.1.2 Assemblies

Figur nedenfor viser liste med tegninger med dansk standard tværprofiler, som kan anvendes i forbindelse med automatisk opret af kryds.

Figure below lists CKD drawings with assemblies for automatically creation of intersections.



8.2 Material styles

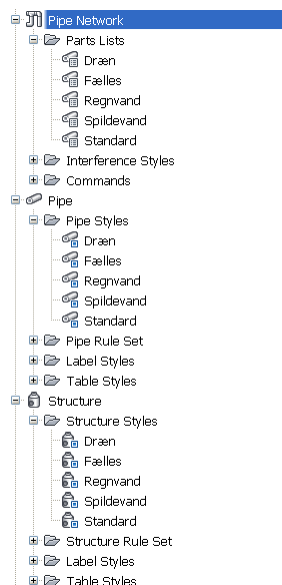
<None>

8.3 Drawing symbols and (MV) Blocks

<None>

9 Pipe and Structure Catalog

The CKD contains 4 Parts Lists for designing Pipes and Structures. It is Spildevand (Waste), Regnvand (Rain), Fælles (Common) and Dræn (Drain). See the figure below.



Hver Parts Lists er oprettet egne Civil 3D styles, som styrer udseende og farver. Lag ved start af netværk og dermed også Parts List (system) er 0. Der findes lag til de enkelte Parts Lists. Tabel nedenfor viser dette.

Each Parts Lists is created with thier own Civil 3D object style who manage appearance and color. Layers are 0 when start up a new Pipe Networks and therefore choosing Parts Lists. The template contains pre-defined layers that can be used. See the figure below.

Parts Liste	Color	AutoCAD Layer
Spildevand	Rød	C-PIPE-SPV
Regnvand	Blå	C-PIPE-RGV
Fælles	Rød	C-PIPE-FLS
Dræn	Grøn	C-PIPE-DRN
Standard	Sort/hvid	0

Section below describe each Parts Lists listed in the table above.

9.1 Spildevand

Figure below lists material and dimension for Pipes.

Spildevand					
Beton					
150	Spildevand	Spildevand	Global	Beton-150	
200	Spildevand	Spildevand	Global	Beton-200	
250	Spildevand	Spildevand	Global	Beton-250	
300	Spildevand	Spildevand	Global	Beton-300	
400	Spildevand	Spildevand	Global	Beton-400	
500	Spildevand	Spildevand	Global	Beton-500	
600	Spildevand	Spildevand	Global	Beton-600	
PVC					
110 mm	Spildevand	Spildevand	Global	PVC-110	
160 mm	Spildevand	Spildevand	Global	PVC-160	
200 mm	Spildevand	Spildevand	Global	PVC-200	
250 mm	Spildevand	Spildevand	Global	PVC-250	
315 mm	Spildevand	Spildevand	ByLayer	PVC-315	
400 mm	Spildevand	Spildevand	ByLayer	PVC-400	
500 mm	Spildevand	Spildevand	ByLayer	PVC-500	
LER					
50 mm	Spildevand	Spildevand	ByLayer	LER-50	
63 mm	Spildevand	Spildevand	ByLayer	LER-63	
75 mm	Spildevand	Spildevand	ByLayer	LER-75	
90 mm	Spildevand	Spildevand	ByLayer	LER-90	
110 mm	Standard	Standard	ByLayer	LER-110	
160 mm	Standard	Standard	ByLayer	LER-160	

Figure below lists type and dimension for Structures.

Spildevand					
Excentrisk Cylindrisk Top cirkel					
Brønd 1.0 dia	Spildevand	Spildevand	Global	ECT-1000	
Brønd 1.25 dia	Spildevand	Spildevand	Global	ECT-1250	
Brønd 1.5 dia	Spildevand	Spildevand	Global	ECT-1500	
Brønd 2.0 dia	Spildevand	Spildevand	Global	ECT-2000	
Brønd 2.5 dia	Spildevand	Spildevand	Global	ECT-2500	
Brønd 3.0 dia	Spildevand	Spildevand	Global	ECT-3000	
Brønd 4.0 dia	Spildevand	Spildevand	Global	ECT-4000	
Centrisk cylindrisk Top cirkel					
Brønd 1.0 dia	Spildevand	Spildevand	Global	CCT-1000	
Brønd 1.25 dia	Spildevand	Spildevand	Global	CCT-1250	
Brønd 1.5 dia	Spildevand	Spildevand	Global	CCT-1500	
Brønd 2.0 dia	Spildevand	Spildevand	Global	CCT-2000	
Brønd 2.5 dia	Spildevand	Spildevand	Global	CCT-2500	
Brønd 3.0 dia	Spildevand	Spildevand	Global	CCT-3000	
Brønd 4.0 dia	Spildevand	Spildevand	Global	CCT-4000	
Null Structure					

9.2 Regnvand

Figure below lists material and dimension for Pipes.

Regnvand					
Beton					
150	Regnvand	Regnvand	ByLayer	Beton-150	
200	Regnvand	Regnvand	ByLayer	Beton-200	
250	Regnvand	Regnvand	ByLayer	Beton-250	
300	Regnvand	Regnvand	ByLayer	Beton-300	
400	Regnvand	Regnvand	ByLayer	Beton-400	
500	Regnvand	Regnvand	ByLayer	Beton-500	
600	Regnvand	Regnvand	ByLayer	Beton-600	
PVC					
110 mm	Regnvand	Regnvand	ByLayer	PVC-110	
160 mm	Regnvand	Regnvand	ByLayer	PVC-160	
200 mm	Regnvand	Regnvand	ByLayer	PVC-200	
250 mm	Regnvand	Regnvand	ByLayer	PVC-250	
315 mm	Regnvand	Regnvand	ByLayer	PVC-315	
400 mm	Regnvand	Regnvand	ByLayer	PVC-400	
500 mm	Regnvand	Regnvand	ByLayer	PVC-500	
LER					
50 mm	Regnvand	Regnvand	ByLayer	LER-50	
63 mm	Regnvand	Regnvand	ByLayer	LER-63	
75 mm	Regnvand	Regnvand	ByLayer	LER-75	
90 mm	Regnvand	Regnvand	ByLayer	LER-90	
110 mm	Standard	Regnvand	ByLayer	LER-110	
160 mm	Standard	Regnvand	ByLayer	LER-160	

Figure below lists type and dimension for Structures.

Regnvand					
Excentrisk Cylindrisk Top cirkel					
Brønd 1.0 dia	Regnvand	Regnvand	ByLayer	ECT-1000	
Brønd 1.25 dia	Regnvand	Regnvand	ByLayer	ECT-1250	
Brønd 1.5 dia	Regnvand	Regnvand	ByLayer	ECT-1500	
Brønd 2.0 dia	Regnvand	Regnvand	ByLayer	ECT-2000	
Brønd 2.5 dia	Regnvand	Regnvand	ByLayer	ECT-2500	
Brønd 3.0 dia	Regnvand	Regnvand	ByLayer	ECT-4000	
Brønd 4.0 dia	Regnvand	Regnvand	ByLayer	ECT-4000	
Centrisk cylindrisk Top cirkel					
Brønd 1.0 dia	Regnvand	Regnvand	ByLayer	CCT-1000	
Brønd 1.25 dia	Regnvand	Regnvand	ByLayer	CCT-1250	
Brønd 1.5 dia	Regnvand	Regnvand	ByLayer	CCT-1500	
Brønd 2.0 dia	Regnvand	Regnvand	ByLayer	CCT-2000	
Brønd 2.5 dia	Regnvand	Regnvand	ByLayer	CCT-2500	
Brønd 3.0 dia	Regnvand	Regnvand	ByLayer	CCT-3000	
Brønd 4.0 dia	Regnvand	Regnvand	ByLayer	CCT-4000	
Null Structure					
Cylinder uden Top					
315 mm	Regnvand	Regnvand	ByLayer	CT-315	
425 mm	Regnvand	Regnvand	ByLayer	CT-425	
600 mm	Regnvand	Regnvand	ByLayer	CT-600	
Riste					
35x35cm	Regnvand	Regnvand	ByLayer	RIST-35x35	

9.3 Fælles

Figure below lists material and dimension for Pipes.

Fælles					
Beton					
150	Fælles	Fælles	ByLayer	Beton-150	
200	Fælles	Fælles	ByLayer	Beton-200	
250	Fælles	Fælles	ByLayer	Beton-250	
300	Fælles	Fælles	ByLayer	Beton-300	
400	Fælles	Fælles	ByLayer	Beton-400	
500	Fælles	Fælles	ByLayer	Beton-500	
600	Fælles	Fælles	ByLayer	Beton-600	
PVC					
110 mm	Fælles	Fælles	ByLayer	PVC-110	
160 mm	Fælles	Fælles	ByLayer	PVC-160	
200 mm	Fælles	Fælles	ByLayer	PVC-200	
250 mm	Fælles	Fælles	ByLayer	PVC-250	
315 mm	Fælles	Fælles	ByLayer	PVC-315	
400 mm	Fælles	Fælles	ByLayer	PVC-400	
500 mm	Fælles	Fælles	ByLayer	PVC-500	
LER					
50 mm	Fælles	Fælles	ByLayer	LER-50	
63 mm	Fælles	Fælles	ByLayer	LER-63	
75 mm	Fælles	Fælles	ByLayer	LER-75	
90 mm	Fælles	Fælles	ByLayer	LER-90	
110 mm	Fælles	Fælles	ByLayer	LER-110	
160 mm	Fælles	Fælles	ByLayer	LER-160	

Figure below lists type and dimension for Structures.

Fælles					
Excentrisk cylindrisk Top cirkel					
Brønd 1.0 dia	Fælles	Spildevand	ByLayer	ECT-1000	
Brønd 1.25 dia	Fælles	Spildevand	ByLayer	ECT-1250	
Brønd 1.5 dia	Fælles	Spildevand	ByLayer	ECT-1500	
Brønd 2.0 dia	Fælles	Spildevand	ByLayer	ECT-2000	
Brønd 2.5 dia	Fælles	Spildevand	ByLayer	ECT-2500	
Brønd 3.0 dia	Fælles	Spildevand	ByLayer	ECT-3000	
Brønd 4.0 dia	Fælles	Spildevand	ByLayer	ECT-4000	
Centrisk cylindrisk Top cirkel					
Brønd 1.0 dia	Fælles	Spildevand	ByLayer	CCT-1000	
Brønd 1.25 dia	Fælles	Spildevand	ByLayer	CCT-1250	
Brønd 1.5 dia	Fælles	Spildevand	ByLayer	CCT-1500	
Brønd 2.0 dia	Fælles	Spildevand	ByLayer	CCT-2000	
Brønd 2.5 dia	Fælles	Spildevand	ByLayer	CCT-2500	
Brønd 3.0 dia	Fælles	Spildevand	ByLayer	CCT-3000	
Brønd 4.0 dia	Fælles	Spildevand	ByLayer	CCT-4000	
Null Structure					
Cylinder uden Top					
315 mm	Fælles	Standard	ByLayer	CT-315	
425 mm	Fælles	Standard	ByLayer	CT-425	
600 mm	Fælles	Standard	ByLayer	CT-600	

9.4 Dræn

Figure below lists material and dimension for Pipes.

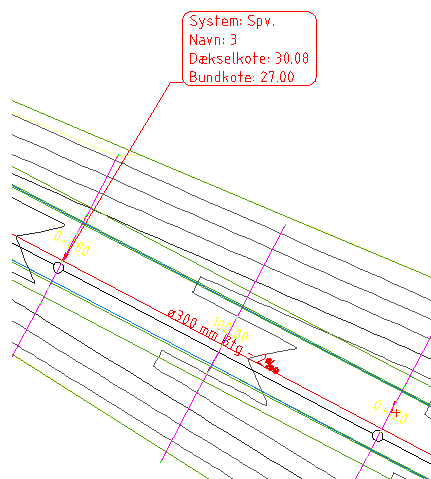
Draen					
PVC					
74/65 mm	Draen	Draen	ByLayer	DRN-65	
92/80 mm	Draen	Draen	ByLayer	DRN-80	
128/113 mm	Draen	Draen	ByLayer	DRN-113	
160/145 mm	Draen	Draen	ByLayer	DRN-145	

Figure below lists type and dimension for Structures.

Draen					
Null Structure					

9.5 Labels

Each Parts Lists contains label (Structures and Pipes) that can be dragged for plot purpose. Figure below is an example in Plan view.



The dragged labels for plot purpose can also be used in Model, Profile and Section view.

9.6 Tables

Figure below is a table containing Pipes data for a Pipe Network.

LEDNINGER Net - (4)						
NUMMER	DIM	MATERIALE	LÆNGDE	FALD	START KOMPONENT	SLUT KOMPONENT
{1}	250	Beton	205.99	12‰	1	2
(2)	250	Beton	188.69	2‰	2	3
(3)	250	Beton	122.60	2‰	3	4

Figure below is a table containing Structure data for a Pipe Network.

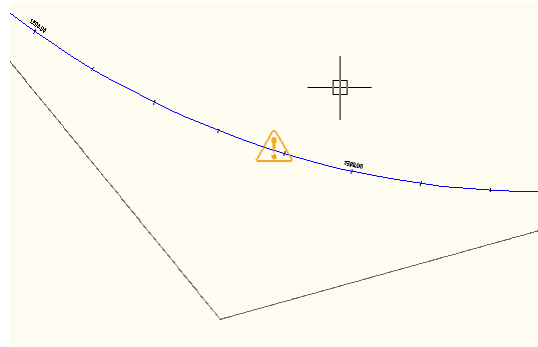
KOMPONENTER Net - [4]								
NUMMER	MATERIALE	X	Y	DÆKSELKOTE	BUNDKOTE	SUMP	LEDNING IND	LEDNING UD
1	Beton	-220589.317	341366.188	28.739	27.447	0.000		[1] Dim=250 VG=27.447
2	Beton	-221429.409	341497.391	27.770	24.864	0.000	[1] Dim=250 VG=24.96	[2] Dim=250 VG=24.864
3	Beton	-220243.802	340537.352	27.500	24.384	0.000	[2] Dim=250 VG=24.48	[3] Dim=250 VG=24.384
4	Beton	-220121.490	340556.439	26.843	24.136	0.000	[3] Dim=250 VG=24.14	

For both table counts that they are dynamic and will be updated when the Corridor model is adjusted.

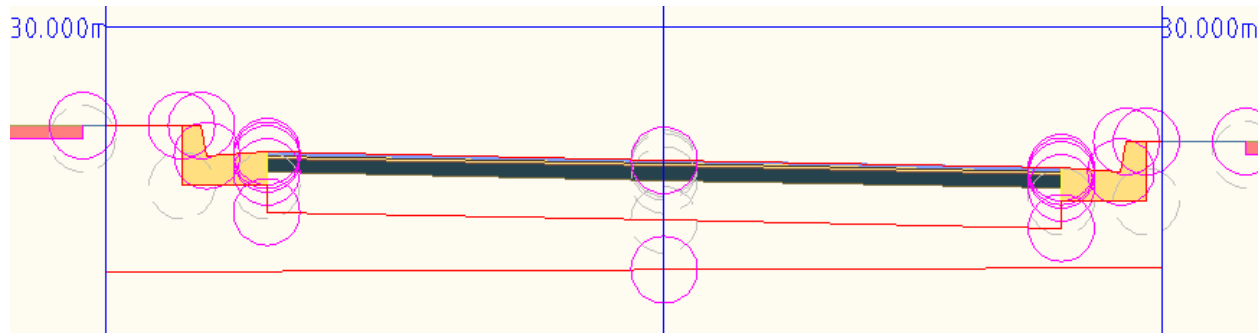
10 Highway design check files

Design Criteria is used for alignments and profiles used in corridor models for road design. The design will therefore follow the local standard for road design.

If violate the design criteria Civil 3D gives you a warning in the drawing for curves that are violated. The figure below is an example of violating the design criteria.



Design Criteria is also used for calculating super elevation for spirals and curve in road design. Figure below is an example for automatic calculation of super elevation in a right curve.



CKD design criteria are saved in <_Civil 3D Vej kriterier_DK.xml>. Figure below show CKD design criteria.

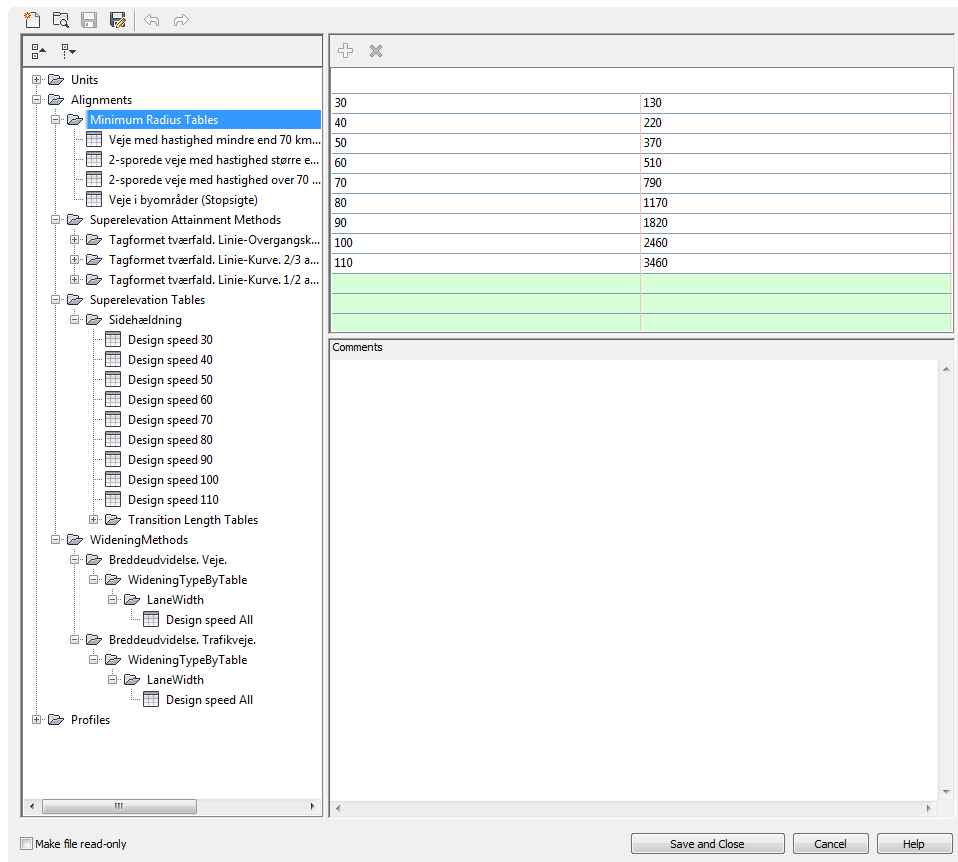
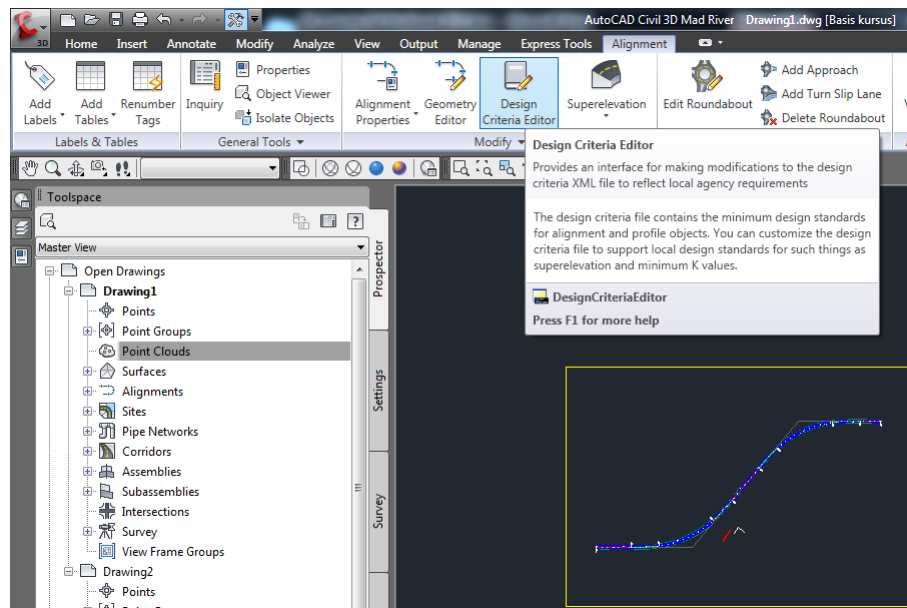


Figure below shows where Civil 3D internal editor can be found.



11 Quantity Take Off

11.1 Introduction of QTO

In Civil 3D it is possible to create a link between a Pay Item list and Civil 3D objects as well as AutoCAD objects. The link is on 2 levels:

1. **Settings in the template.** Corridor (Subassemblies), Pipes and Structures are automatically linked to the Pay Item list.
2. **Select objects.** Select polygon, polylines, lines or Feature Lines by manual select in the Pay item list.

If objects in the Civil 3D drawing are linked to the pay Item list, then it is possible to run a report that prints areas and length for objects, that are linked.

Figure below shows a report with summary of Pay Items.

<u>Samlet QTO rapport</u>			
Element	Beskrivelse	Antal	Enhed
CCT-1250	1250 mm	6	EA
CorrAreal-Datum	Datum	30358.44	M2
CorrAreal-Daylight	Daylight	4747.74	M2
CorrAreal-Fortov	Fortov	12111.26	M2
CorrAreal-Kørebane	Kørebane	10092.72	M2
CorrAreal-Top	Top	30361.80	M2
CorrLgd-Fortov	Fortov	3364.294	M1
PVC-200	PVC 200 mm	200.394	M1
PolyLgd-Basis	Polyline	761.667	M1

It is possible to summary different types based on count, area or length. For example, 761.667m polyline(s) in the Civil 3D drawing that is not a Corridor Subassembly or Pipe or Structure.

The Pay Item can contain a formula that can multiply the summary with a price. This can be a very easy way to calculate prices on for example curbs.

Information from QTO can be shown in reports (CSV, HTML or TXT) or be exported to use in third party application.

11.2 QTO Settings

11.2.1 Pay Items List

<Pay Item Data\Denmark_DK standard.csv> is the Pay Item list.

This is an CSV file that can be edited with Microsoft Excel or Notepad. The CSV file contains Pay Items that can be linked directly to Civil 3D objects or common AutoCAD objects for counting in meters and areas.

11.2.2 Pay Items Index

<..\Pay Item Data\Denmark_DK standard.xml> contains Setting of the Pay Item list. Fx. Is it possible to group by by:

- Pipes
- Structures
- Corridor Subassemblies
- Uncategorized

The file can be edited with Notepad.

11.2.3 Enheder - Units Mapping Fil

<Pay Item Data\Units\QTOUnits.xml> contains the "units" definition for the Pay Item list in general.

Unit	Description
EA	Each (count)
M1	Meter (length)
M2	Kvadrat meter (area)
M3	Kubik meter (volume)

11.2.4 Reports

QTO reports to an HTML style sheets (.XSL) files with the QTO counting from the current drawing. After this is it possible to change format to CSV, HTML or TXT format.

CKD style sheets are saved in the folder <Takeoff Report Style Sheets> under %DataDir% folder.

12 Superelevation

Design Criteria, se chapter 10, is also used for automatic calculation of super elevation for curve with or without spirals. The design criteria are stored in <_Civil 3D Vej kriterier_DK.xml>.

Figure below show settings for calculation of super elevation in curves and spirals.

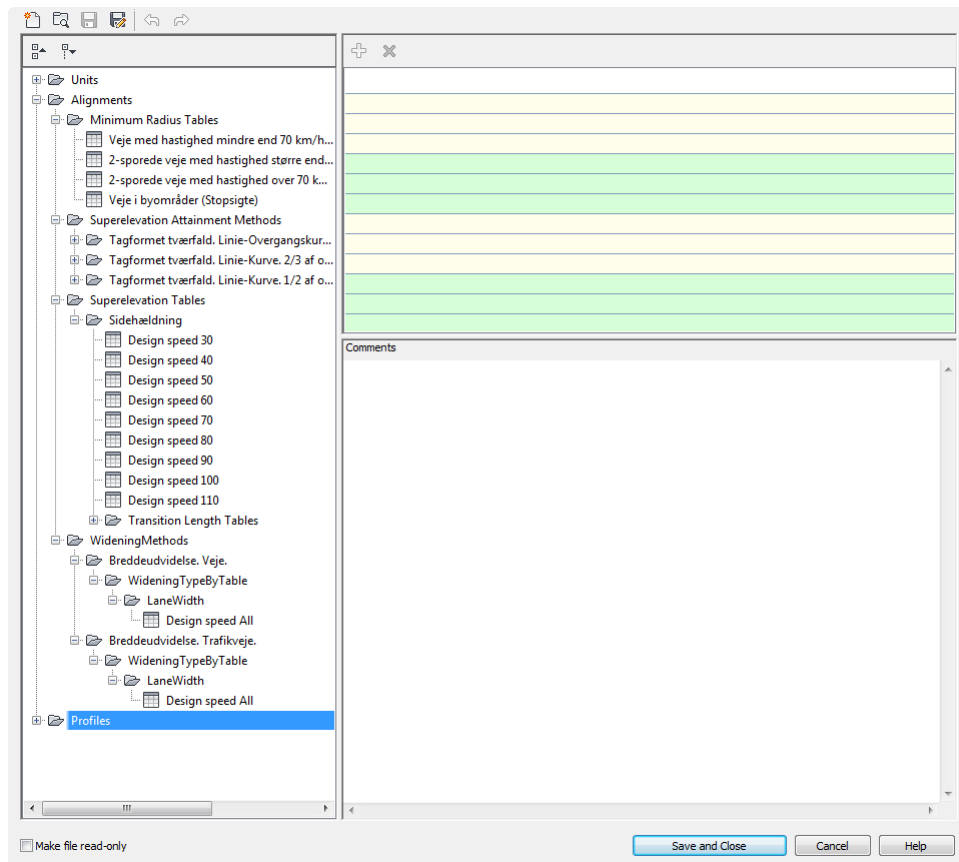


Figure below is an example for automatic calculation of super elevation in a right curve.

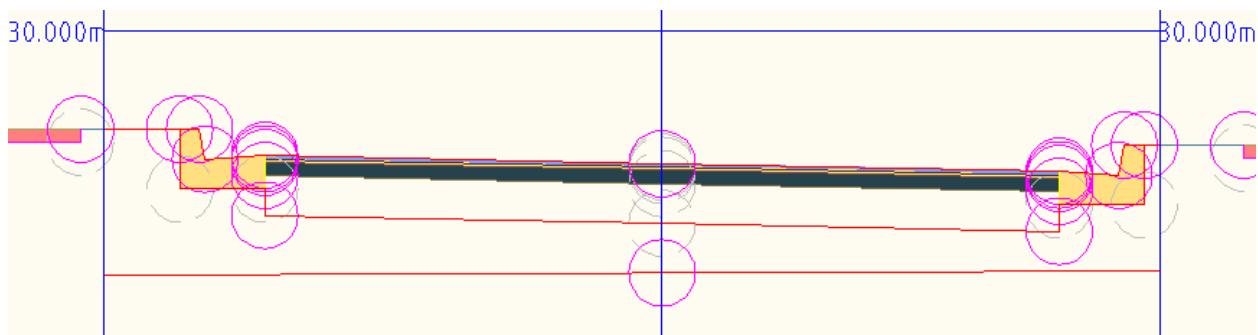


Figure below show the Superelevation View.

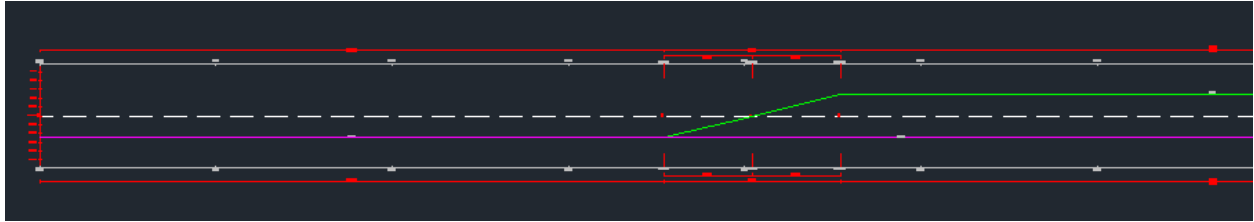
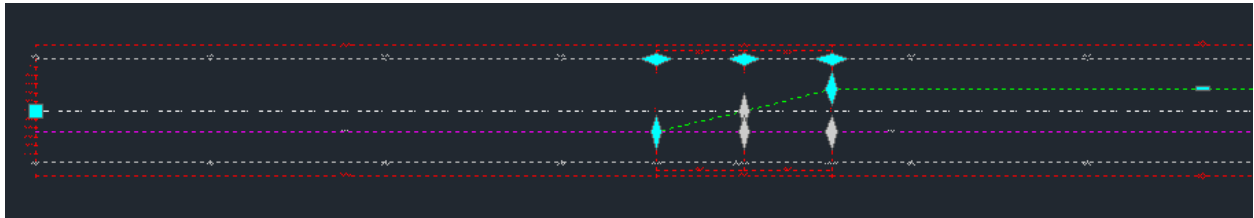


Figure below show the Superelevation View. It also show AutoCAD Grips which means that you can graphical can adjust Start, End and the size of Slope. For Denmark the max slope is 7%.



Currently it is not possible to adjust slope and other labels because there is no Style for this. It is just possible to adjust colors for the view and the automatic generated labels.

13 Intersections

Table below lists settings for automatically creation of intersections.

General type	Name	Value	Comments
Default Styles			
	Intersection Style	Basis	
	Intersection Label Style	Basis	
	Offset Alignment Style	Veje parallelt	Som Veje, men linetype er HIDDEN
	Curb Return Alignment Style	Veje parallelt	Som Veje, men linetype er HIDDEN
	Offset Profile Style	Vejprofil	
	Curb Return Profile Style	Vejprofil	
	Offset Alignment Label Set	Basis	
	Curb Return Alignment Label Set	Basis	
Default Name Format			
	Intersection Name Format	Kryds - (<[Next Counter(CP)]>)	
	Intersection Quadrant Name Format	<[Quadrant Location]> - Quadrant	
	Offset Alignment Name Format	<[Parent Alignment Name(CP)]>-<[Side]>-<[Offset Value(Um P3 RN Sn OF AP)]>	
	Curb Return Alignment Name Format	<[Intersection Name(CP)]> - <[Intersection Quadrant Name(CP)]>	
	Offset Profile Name Format	<[Parent Alignment Name(CP)]> - <[Side]> - <[Cross Slope Value(FRise P2 RN Sn OF AP)]>	
	Curb Return Profile Name Format	<[Alignment Name(CP)]> - Profile	
	Corridor Region Name Format	RG - <[Assembly Name(CP)]> - (<[Next Counter(CP)]>)	

<_Autodesk (Metric) Assembly Sets DK.xml> is the setting file that contains links to drawings with Danish Assemblies. Section 9.1 contains the Danish Subassemblies used for create an Civil 3D intersection.

It is possible to select between different Settings (Assemblies) in the Wizard window used for creating Intersection.

