

Devotech
PO Box 2028
Montana Park
Pretoria
South Africa
0159



www.devotech.co.za
sales@devotech.co.za
Tel: +27 12 547 7873

What's New in Devotech iDAS V11



CONTENT

SUPPORTED AUTODESK CIVIL 3D VERSIONS	3
SEWER MANAGER.....	3
Performance	3
User Interface	3
Grading Tools in the Profile View Tab	5
Sewer House Connections	8
Graphs	9
Create Polylines from Pipe Network	9
PIPE NETWORK CATALOGUE	10
Pipes	10
Structures	12
RSA CIVIL 3D TEMPLATE.....	13
Mass-haul Styles	13
Dual Road Dynamic Profile View and Band Set	14
Water Structure Styles for Plan and Profile.....	15
Layers	18
Vertical Curve Label Sets	20
Structure Table	20
Surface Table.....	21
Code Set Style	21
Style Names.....	23
AUTODESK CIVIL 3D SUBASSEMBLIES.....	26
HELP FILE	26
VIDEOS	26
KNOWN ISSUES.....	28

SUPPORTED AUTODESK CIVIL 3D VERSIONS

Devotech iDAS V11 supports Autodesk Civil 3D 2015-2020.

SEWER MANAGER

For videos related to the Devotech iDAS V11 Sewer Manager, use the link below and watch the videos with the prefix **iDAS 11**:

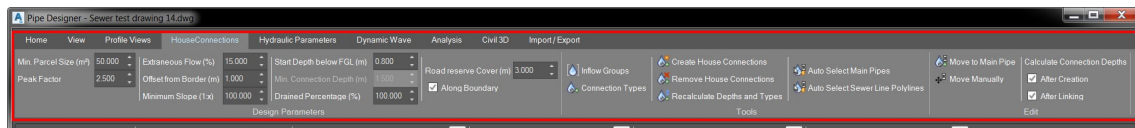
<https://www.devotech.co.za/sewer-training>

Performance

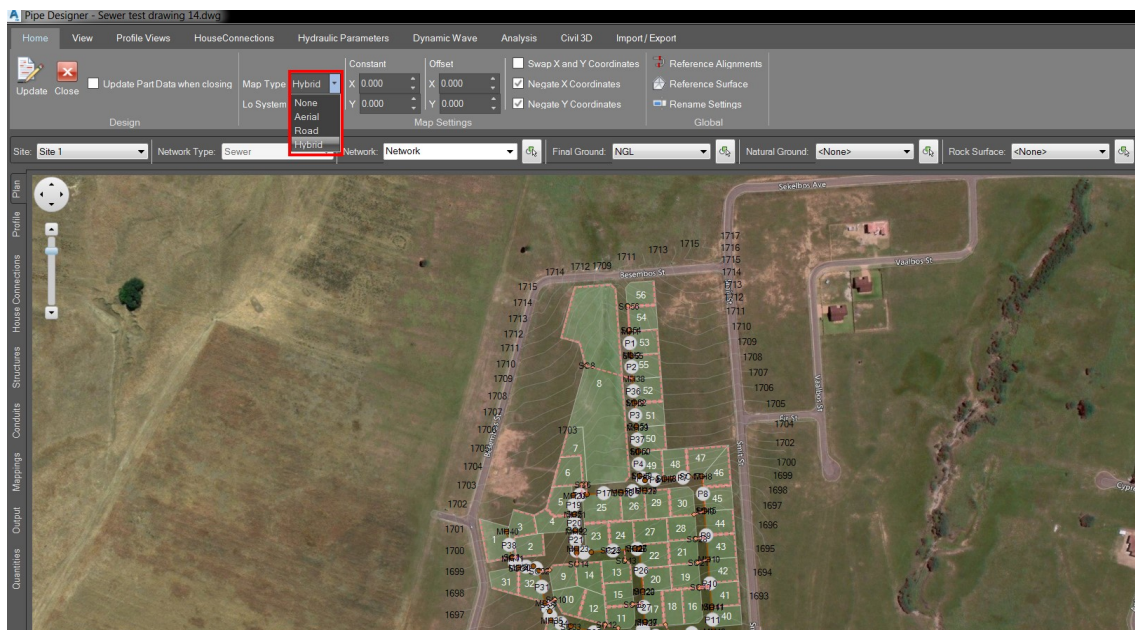
- Better performance (switching between tabs, displaying data)
- Multithreaded support (multiple processor cores are utilised)
- Less RAM usage

User Interface

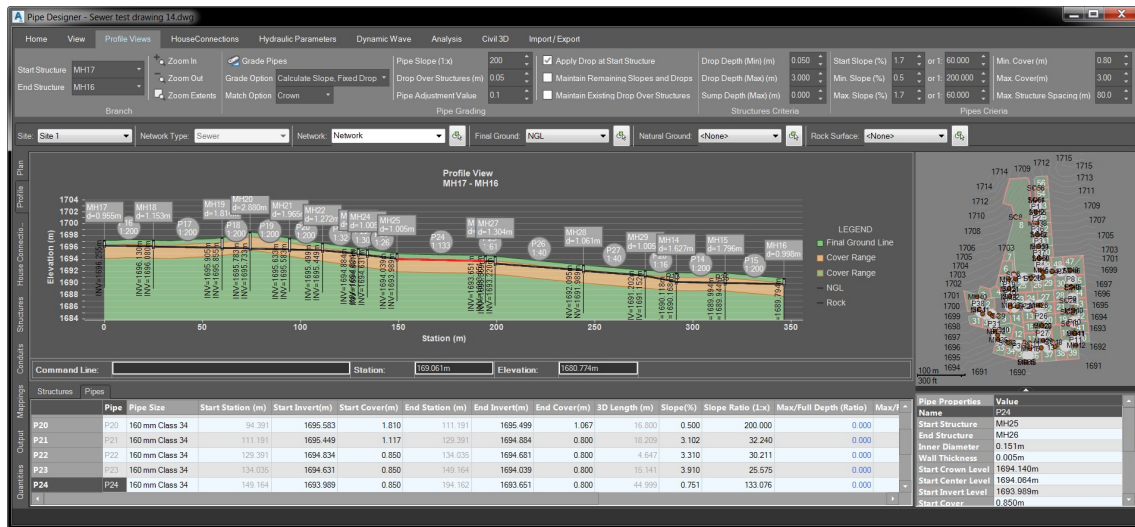
Ribbons are used to access the settings and commands:



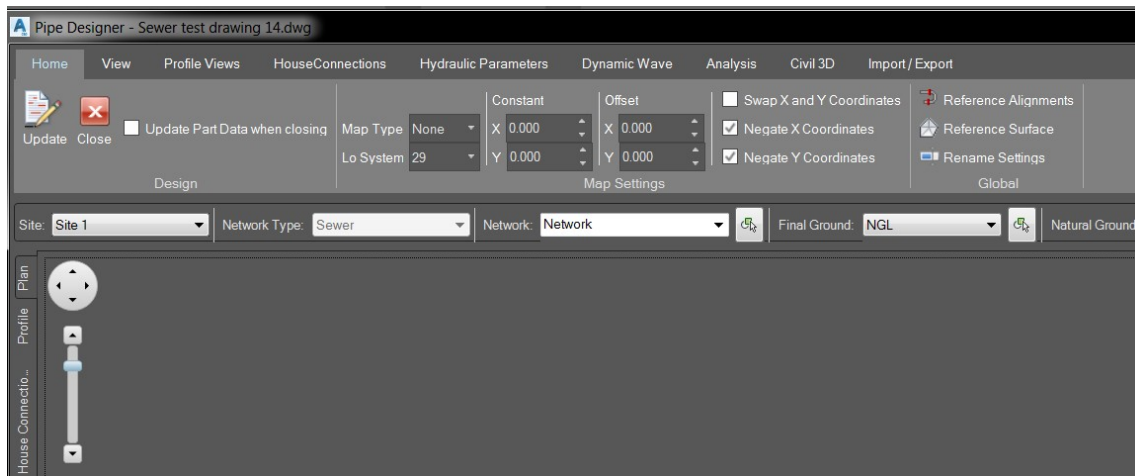
The Plan tab was added to display the network with the Labels and background Map (aerial, road or hybrid):



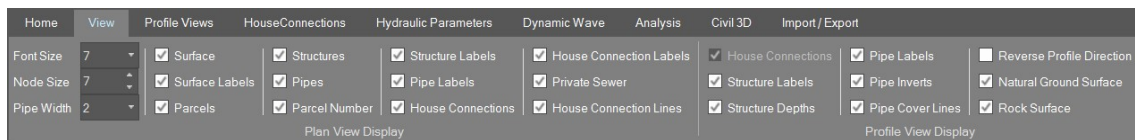
The Profile View tab displays a plan view to simplify the navigation:



The User Interface uses a dark colour scheme to minimise eye strain:

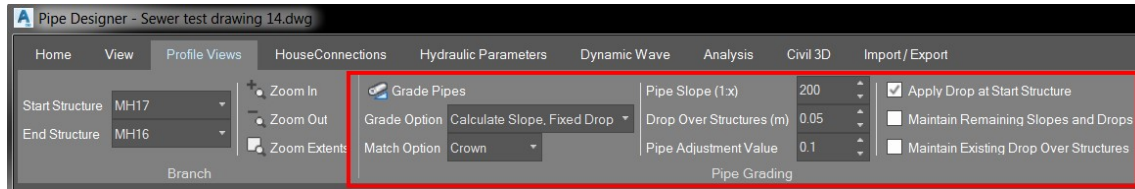


The View tab is used for setting label sizes, as well as managing label visibility:



Grading Tools in the Profile View Tab

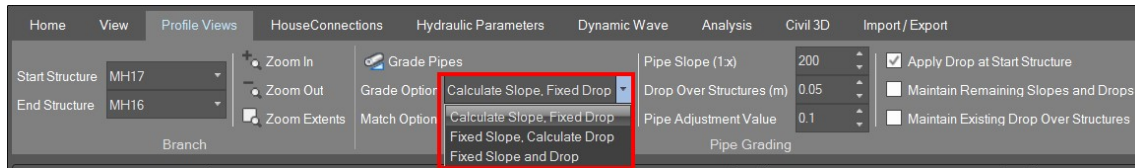
The *Grade Pipes* command allows you to grade the selected section forwards or backwards with the defined parameters such as *Slope*, *Drop over Structures* and *Apply Drop at Start Structure*:



The *Pipe Slope* as well as *Drop Over Structure* can be a negative value, which is used for rising mains or backward grading.

The *Grade Pipes* command offers the following Grade Options:

- *Calculate Slope, Fixed Drop*
- *Fixed Slope, Calculate Drop*
- *Fixed Slope, Fixed Drop*



Match Options are used to match pipes with different diameters. The pipes can match at *Invert*, *Centre* or *Crown*. The Match Option setting will always be used when the *Drop Over Structures* option is applied, either from the *Grade Pipes* command or when using the Keyboard Shortcuts.

The following Keyboard Shortcuts can be used for pipe and structure editing:

Selections applicable to pipes and structures

Ctrl – hold the Ctrl key to add/remove a single pipe or structure to/from the selection

Shift – hold the Shift key to add a range of pipes or structures to the selection (select the start and end object, they must be of the same object type)

Escape – deselects all pipes and structures

Ctrl+A – selects all the pipes/structures shown in the Profile View, depending on what object was selected (either pipe or structure)

Ctrl+B – selects entire branch

Pipe(s) editing

Ctrl+1 – moves the start of the selected pipe(s) downwards

Ctrl+7 – moves the start of the selected pipe(s) upwards

Ctrl+2 – moves the selected pipe(s) downwards

Ctrl+8 – moves the selected pipe(s) upwards

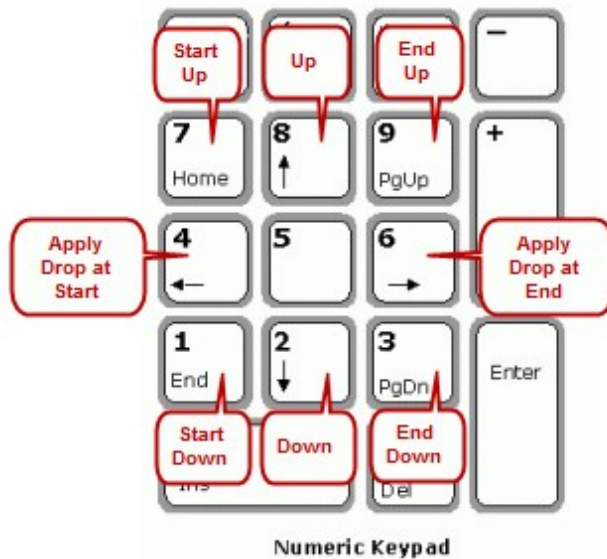
Ctrl+3 – moves the end of the selected pipe(s) downwards

Ctrl+9 – moves the end of the selected pipe(s) upwards

Ctrl+4 – applies drop over the structure at the start of the selected pipe(s), the selected pipe start elevation is used for the calculation

Ctrl+6 – applies drop over the structure at the end of the selected pipe(s), the selected pipe end elevation is used for the calculation

The image below shows the Ctrl Keyboard Shortcuts layout on the numeric keypad:



Alt +1 – moves the start of the selected pipe(s) downwards and applies pipe grading

Alt +7 – moves the start of the selected pipe(s) upwards and applies pipe grading

Alt +3 – moves the end of the selected pipe(s) downwards and applies pipe grading

Alt +9 – moves the end of the selected pipe(s) upwards and applies pipe grading

Structure(s) editing

Ctrl+8 – moves the selected structure(s) sump elevation upwards

Ctrl+2 – moves the selected structure(s) sump elevation downwards

Undo

Ctrl+Z – Undo (it is only applicable to certain editing commands)

Navigation

Ctrl+E – Zoom Extents

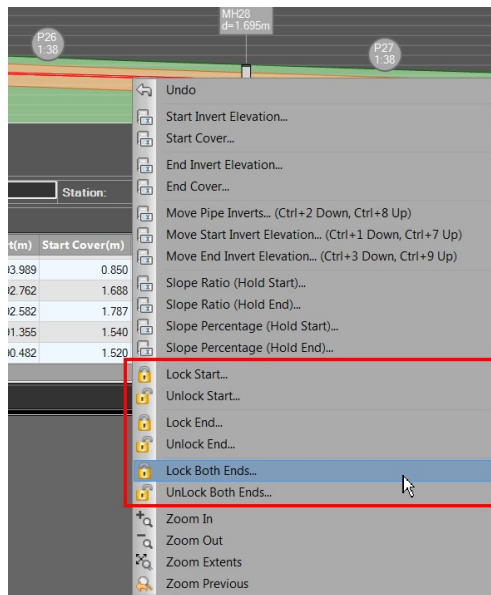
Pipes and structures can be Locked, which means that their levels are maintained during the calculations.

Locked structures can be used to represent the existing manholes, meaning the rim or sump elevations cannot be changed. Pipe grading can create pipes above or below the locked

structure, if this is the case structure demolition might be considered, or manual pipe adjustment will be needed.

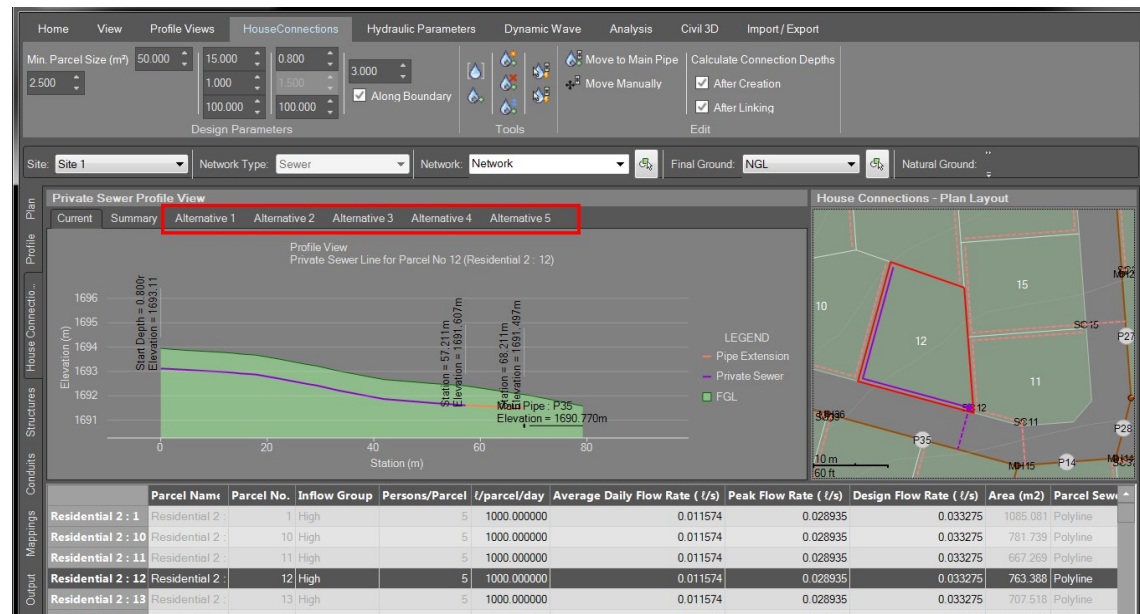
Pipes can be locked at the start, end or at both sides. Locked pipes' elevations are maintained during the calculations, and they are used as start/end elevations for calculations.

Pipes and structures can be Locked from the right click menu or with the Keyboard Shortcut Ctrl+L. To unlock pipes or structures, use the right click menu or keyboard shortcut Ctrl+U (pipes or structures must be selected first):

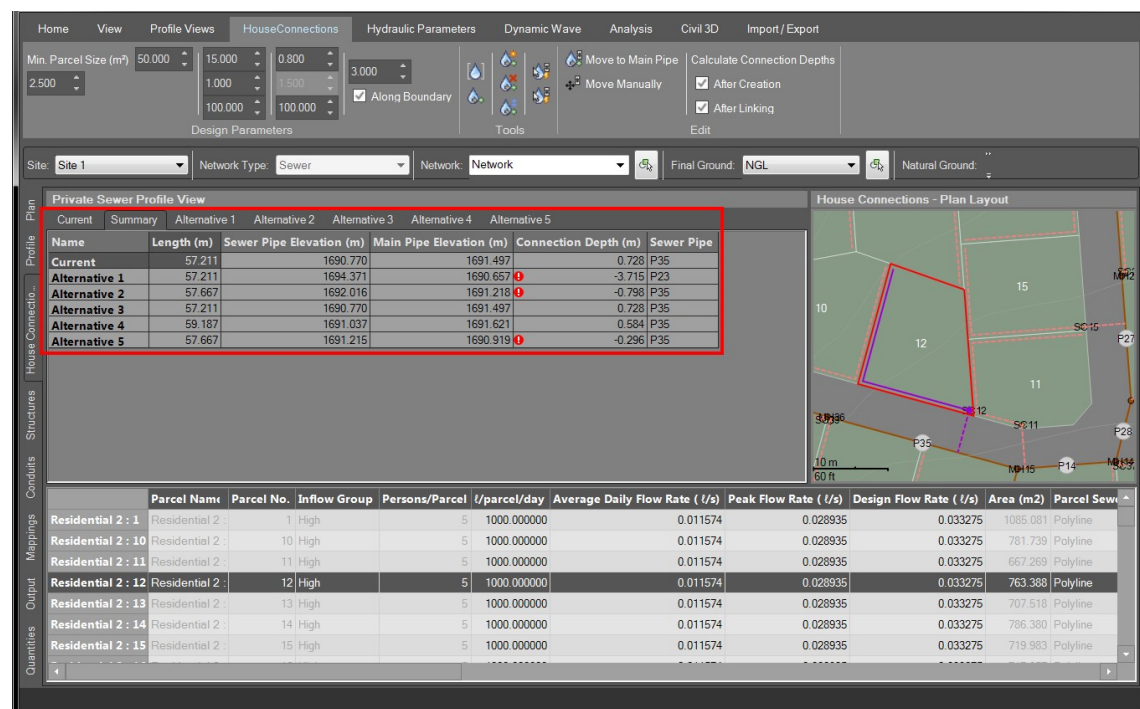


Sewer House Connections

The Sewer Manager calculates all the possible alternative layouts and offers them as previews. The user can choose the most suitable alternative.

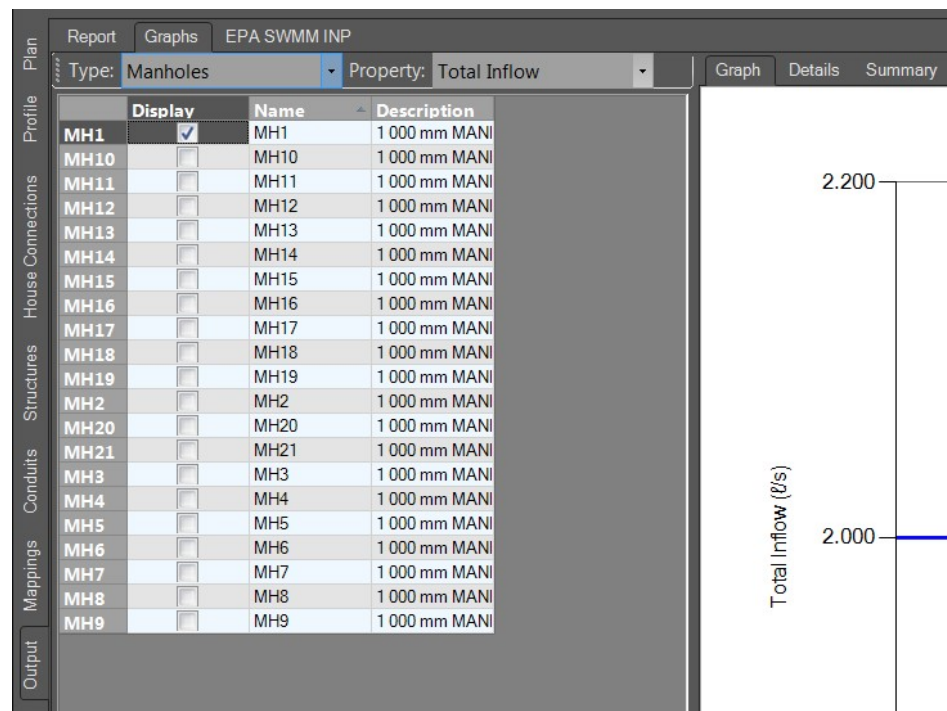


The Summary tab provides details for each alternative:



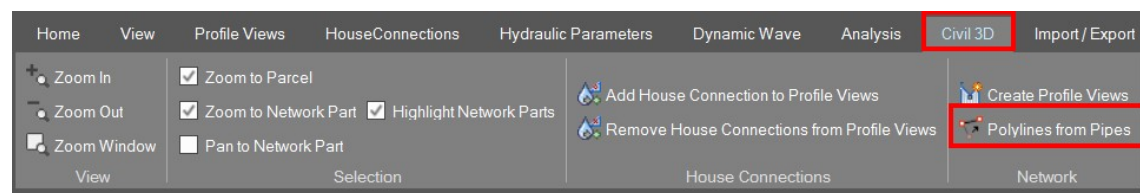
Graphs

Graphs gives you the option to select the object Type and Property to simplify the navigation:



Create Polylines from Pipe Network

The *Polylines from Pipes* command is available in the Sewer Manager. It creates 3D polylines for each pipe:












PIPE NETWORK CATALOGUE

























Pipes

The following pipes were added to the Pipe Network Catalogue:


Mining Pressure Systems SABS 719

 Mining Pressure Systems SABS 719 Wall Th. 4.5 mm
 Mining Pressure Systems SABS 719 Wall Th. 6.0 mm
 Mining Pressure Systems SABS 719 Wall Th. 8.0 mm
 Mining Pressure Systems SABS 719 Wall Th. 10.0 mm
 Mining Pressure Systems SABS 719 Wall Th. 12.0 mm
 Mining Pressure Systems SABS 719 Wall Th. 14.0 mm
 Mining Pressure Systems SABS 719 Wall Th. 16.0 mm
 Mining Pressure Systems SABS 719 Wall Th. 20.0 mm
 Mining Pressure Systems SABS 719 Wall Th. 22.0 mm











Aquaflow HDPE

 Aquaflow HDPE PE 63 PN 3.2
 Aquaflow HDPE PE 63 PN 4
 Aquaflow HDPE PE 63 PN 6.3
 Aquaflow HDPE PE 63 PN 8
 Aquaflow HDPE PE 63 PN 10
 Aquaflow HDPE PE 63 PN 12.5
 Aquaflow HDPE PE 63 PN 16
 Aquaflow HDPE PE 80 PN 3.2
 Aquaflow HDPE PE 80 PN 4
 Aquaflow HDPE PE 80 PN 6.3
 Aquaflow HDPE PE 80 PN 8
 Aquaflow HDPE PE 80 PN 10
 Aquaflow HDPE PE 80 PN 12.5
 Aquaflow HDPE PE 80 PN 16
 Aquaflow HDPE PE 80 PN 20
 Aquaflow HDPE PE 100 PN 5
 Aquaflow HDPE PE 100 PN 4
 Aquaflow HDPE PE 100 PN 6.3
 Aquaflow HDPE PE 100 PN 8
 Aquaflow HDPE PE 100 PN 10
 Aquaflow HDPE PE 100 PN 12.5
 Aquaflow HDPE PE 100 PN 16
 Aquaflow HDPE PE 100 PN 20 (Update 1)
 Aquaflow HDPE PE 100 PN 25



Armco MP200 KB

 Armco MP200 KB
--



Jidal Saw Ductile Iron

-  Jidal Saw Ductile Iron C20
-  Jidal Saw Ductile Iron C25
-  Jidal Saw Ductile Iron C30
-  Jidal Saw Ductile Iron C40
-  Jidal Saw Ductile Iron C50
-  Jidal Saw Ductile Iron C64
-  Jidal Saw Ductile Iron C100
-  Jidal Saw Ductile Iron BSEN-598
-  Jidal Saw Ductile Iron K7
-  Jidal Saw Ductile Iron K9

Robor Longitudinally Welded SANS 62

-  Robor Longitudinally Welded SANS 62 Class Medium
-  Robor Longitudinally Welded SANS 62 Class Heavy

SANS 62

-  SANS 62 Wall Thickness Medium
-  SANS 62 Wall Thickness Heavy


SANS 719

-  SANS 719 Steel Pipe Wall Thickness 4.5 mm
-  SANS 719 Steel Pipe Wall Thickness 5 mm
-  SANS 719 Steel Pipe Wall Thickness 6 mm
-  SANS 719 Steel Pipe Wall Thickness 8 mm
-  SANS 719 Steel Pipe Wall Thickness 10 mm
-  SANS 719 Steel Pipe Wall Thickness 12 mm


SPS HDPE

-  SPS HDPE PE 100 PN16 SDR 11 ISO-4427

Enviropipes HDPE

-  Enviropipes HDPE (PE 100) Corrugated

Humes Flush Joint Pipes

-  HUMES Flush Joint Pipes Class 8

Note: Some pipe types were not imported into the parts list as they are not applicable to the South African market.

Structures

The following structures were added to the Pipe Network Catalogue:

eThekwini manholes

- Manhole-eThekwini Type A with Traffic Load
- Manhole-eThekwini Type A without Traffic Load
- Manhole-eThekwini Type B

eThekwini Kerb Inlets:

- Kerb Inlets-eThekwini Type S1 LH
- Kerb Inlets-eThekwini Type S1 RH
- Kerb Inlets-eThekwini Type S2, S3, S4, S5 LH
- Kerb Inlets-eThekwini Type S2, S3, S4, S5 RH
- Kerb Inlets-eThekwini Type D3, D5
- Kerb Inlets-eThekwini Type D4 Chamber on LH
- Kerb Inlets-eThekwini Type D4 Chamber on RH
- Kerb Inlets-eThekwini Type V1 LH
- Kerb Inlets-eThekwini Type V1 RH
- Kerb Inlets-eThekwini Type V2, V3, V4 LH
- Kerb Inlets-eThekwini Type V2, V3, V4 RH
- Kerb Inlets-eThekwini Type VD3
- Kerb Inlets-eThekwini Type VD4 Chamber on LH
- Kerb Inlets-eThekwini Type VD4 Chamber on RH
- Kerb Inlets-eThekwini Type S1 LH without Gutter
- Kerb Inlets-eThekwini Type S1 RH without Gutter
- Kerb Inlets-eThekwini Type S2, S3, S4, S5 LH without Gutter
- Kerb Inlets-eThekwini Type S2, S3, S4, S5 RH without Gutter
- Kerb Inlets-eThekwini Type D3, D5 without Gutter
- Kerb Inlets-eThekwini Type D4 Chamber on LH without Gutter
- Kerb Inlets-eThekwini Type D4 Chamber on RH without Gutter
- Kerb Inlets-eThekwini Type V1 LH without Gutter
- Kerb Inlets-eThekwini Type V1 RH without Gutter
- Kerb Inlets-eThekwini Type V2, V3, V4 LH without Gutter
- Kerb Inlets-eThekwini Type V2, V3, V4 RH without Gutter
- Kerb Inlets-eThekwini Type VD3 without Gutter
- Kerb Inlets-eThekwini Type VD4 Chamber on LH without Gutter
- Kerb Inlets-eThekwini Type VD4 Chamber on RH without Gutter

See the video below for details on how to use eThekwini structures:

<https://www.devotech.co.za/storm-water-training?wix-vod-video-id=fd0bd8416239430f8f8be4c4fa257b4d5&wix-vod-comp-id=comp-ick4lbf2#>

Culvert Inlets Outlets and Dummy

- Culvert Inlets Outlets and Dummy

Rodding Eye

- Rodding Eye Rectangular

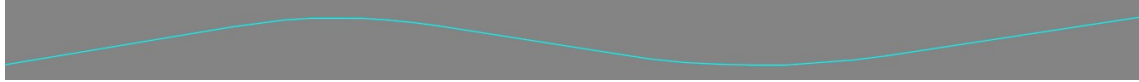
RSA CIVIL 3D TEMPLATE

Mass-haul Styles

New styles were created for mass-haul diagrams:

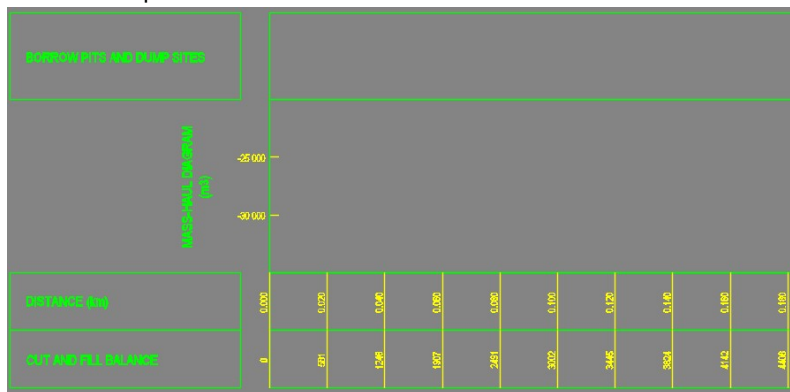
Profile

Mass-haul



Profile view and band set

Mass-haul | m

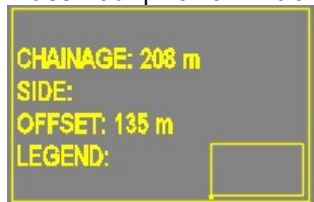


Profile view labels

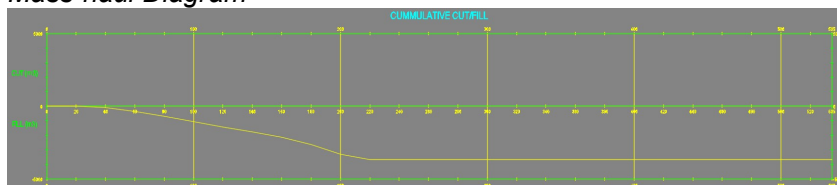
Mass-haul | Material Description

MATERIAL FROM:















































































Mass-haul | Borrow Pit or Dump Site | Details



Mass-haul Diagram



Water Structure Styles for Plan and Profile

WATER STRUCTURES LEGEND			WATER STRUCTURES LEGEND		
NAME	PLAN	PROFILE VIEW	NAME	PLAN	PROFILE VIEW
ACCESS MANHOLE			EXPANSION JOINT		
ACTUATING VALVE			FIRE HOSE REEL		
AIR VALVE			FIRE HYDRANT		
AIR VALVE WITH 600 mm MH			FIRE HYDRANT-TWIN		
BALL VALVE			FLOW CONTROL VALVE		
BEND			GATE VALVE		
BOREHOLE			GENERAL PURPOSE VALVE		
BUTTERFLY VALVE			GLOBE VALVE		
CHECK VALVE			HORIZONTAL AND VERTICAL BEND		
COMBINED THRUST BLOCK			HORIZONTAL BEND		
CONNECT TO EXISTING			HORIZONTAL THRUST BLOCK		
CONNECT TO EXISTING PIPE			INLINE SLUICE VALVE		
CONNECT TO EXISTING SYSTEM			INLINE SLUICE VALVE WITH DOUBLE SCOURS		
CROSSING CONVEYOR			ISOLATING VALVE		
CROSSING PIPE			JUNCTION		
CROSSING RAIL			MAGNETIC FLOW METER		
CROSSING ROAD			METER		
DISCONNECT EXISTING PIPE			NON RETURN VALVE		
DOUBLE HOUSE CONNECTION			NON RETURN VALVE WITH DOUBLE SCOURS		
END CAP			NONE STRUCTURE	-	

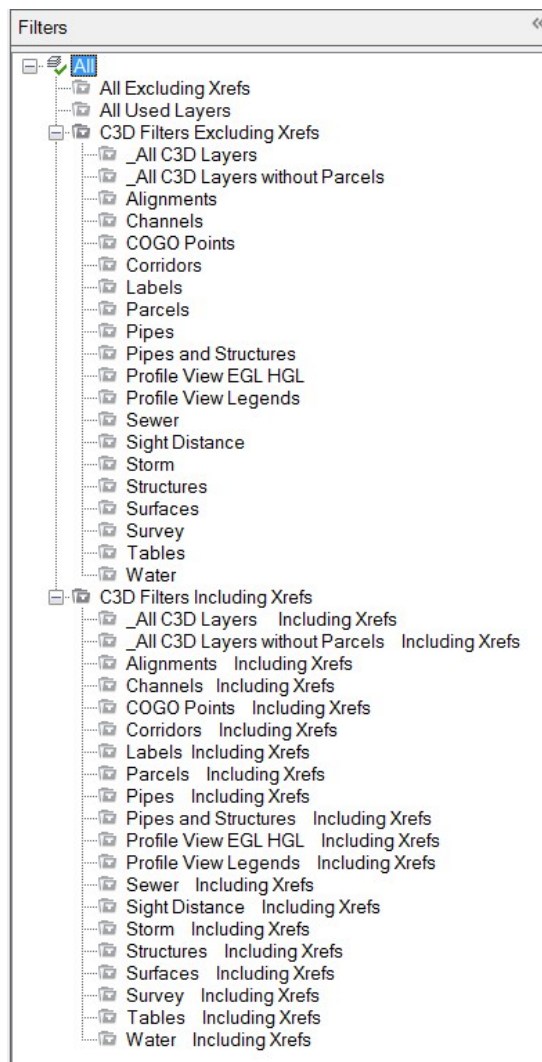
WATER STRUCTURES LEGEND		
NAME	PLAN	PROFILE VIEW
PIPE CONNECTION		
PIPE LOCATOR TEST POINT		
PRESSURE BREAKER VALVE		
PRESSURE REDUCING VALVE		
PRESSURE RELIEF VALVE		
PRESSURE SUSTAINING VALVE		
PUMP		
REDUCER		
REFLUX VALVE		
RESERVOIR		
SADDLE		
SCOUR VALVE		
SHUT-OFF VALVE		
SINGLE HOUSE CONNECITON		
STAND PIPE		
TANK		
TAP		
THROTTLE CONTROL VALVE		
VERTICAL BEND		
VERTICAL THRUST BLOCK		
WATER HAMMER ELIMINATOR		

Layers

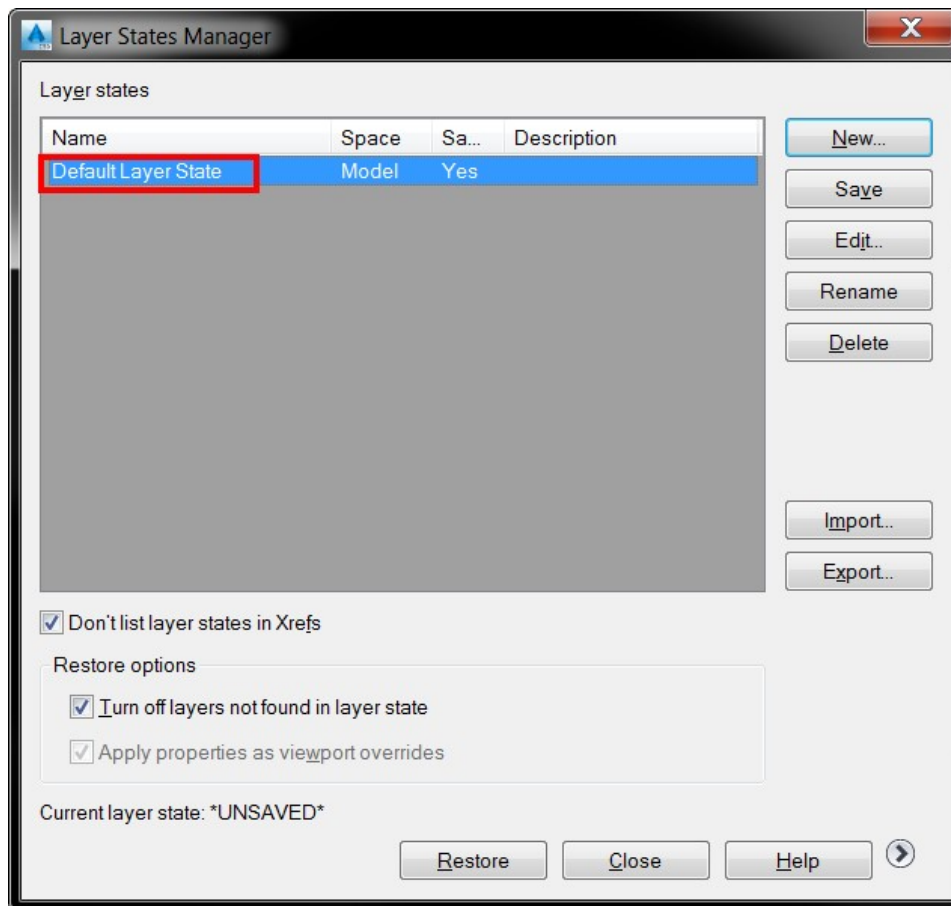
Layers' C3D prefix was changed to suffix to support quick navigation with the keyboard keys:

Alignment-C3D				yellow
Alignment-Label-C3D				yellow
Alignment-Pipe Network-C3D				yellow
Alignment-Table-C3D				white
Assembly-C3D				white
Assembly-Label-C3D				white
Building Site-C3D				white
C3D-Surface				white
Cant View-C3D				yellow
Corridor-Auxiliary-C3D				white
Corridor-C3D				yellow
Corridor-Section-C3D				white
Defpoints				white
Feature Line-C3D				white
General Note Label-C3D				white
General Segment Label-C3D				white

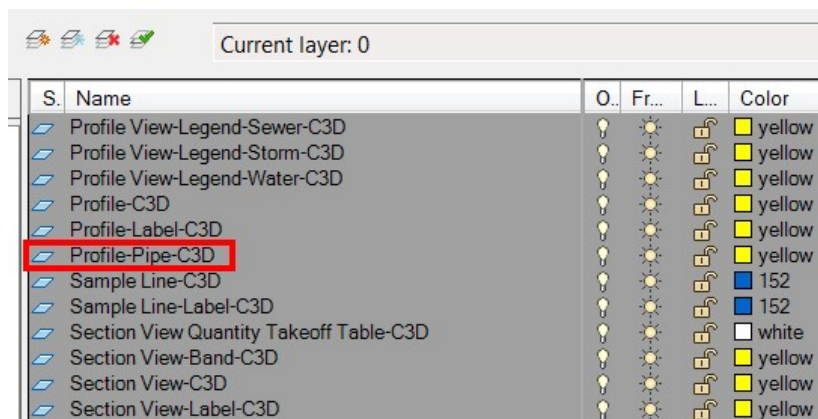
Layer filters were added to the Layer Manager:



Default Layer State was added to the Layer States Manager:



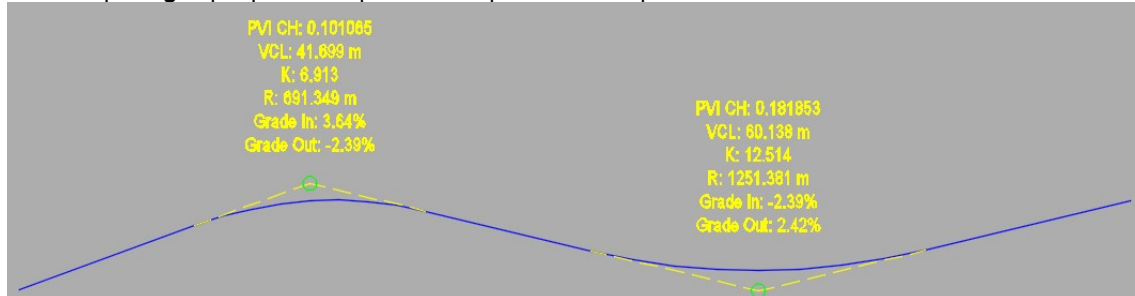
New layer added for profiles from pipes Profile-Pipe-C3D:



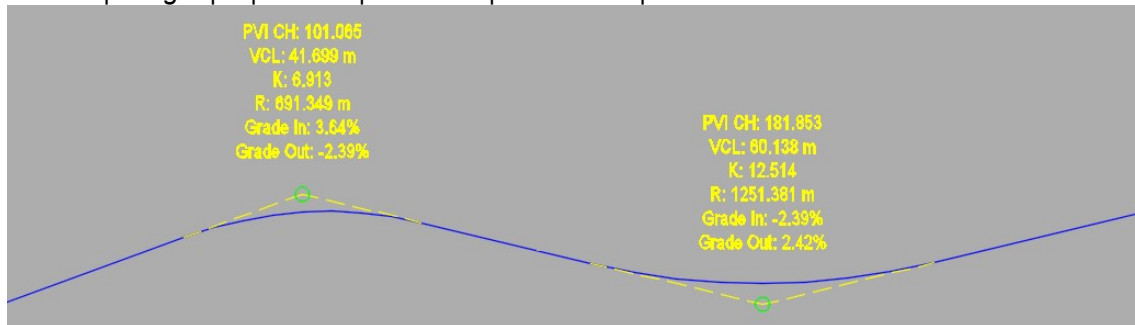
Vertical Curve Label Sets

These Curve Label Sets are suitable for vertical alignment designs. They display all the information at the PVI, including the grades, thus there is no need to zoom to tangent labels.

PVI Ch | Length | K | Radius | Grade In | Grade Out | km



PVI Ch | Length | K | Radius | Grade In | Grade Out | m



Structure Table

Name | RSA YX | Ground Elevation | Invert Elevation | Sump Depth | Length | Slope | Material | Diameter | Class

STRUCTURE TABLE-Storm Water									
STRUCTURE NAME	Y	X	GROUND ELEVATION	INVERT ELEVATION	RM TO SUMP DEPTH	PIPE LENGTH	PIPE SLOPE	PIPE MATERIAL	PIPE SIZE CLASS
MH1.1	710 469.612	1 020 990.065	221.075	218.584	2.491	50.111	2.50%	CONCRETE	600mm Class 50
MH1.2	710 419.501	1 020 990.065	219.988	217.391	2.596	50.111 48.098	2.50% 0.50%	CONCRETE CONCRETE	600mm Class 50 600mm Class 50
MH1.3	710 371.465	1 020 990.065	219.561	217.091	2.470	48.098 38.892	0.50% 0.50%	CONCRETE CONCRETE	600mm Class 50 600mm Class 50
MH1.4	710 334.264	1 020 978.718	219.175	216.996	2.279	38.892 38.400	0.50% 1.96%	CONCRETE CONCRETE	600mm Class 50 600mm Class 50
MH1.5	710 297.929	1 020 981.141	217.951	216.142	1.802	38.400	1.96%	CONCRETE	600mm Class 50

Surface Table

Pressure Legend | Min | Max | Colour

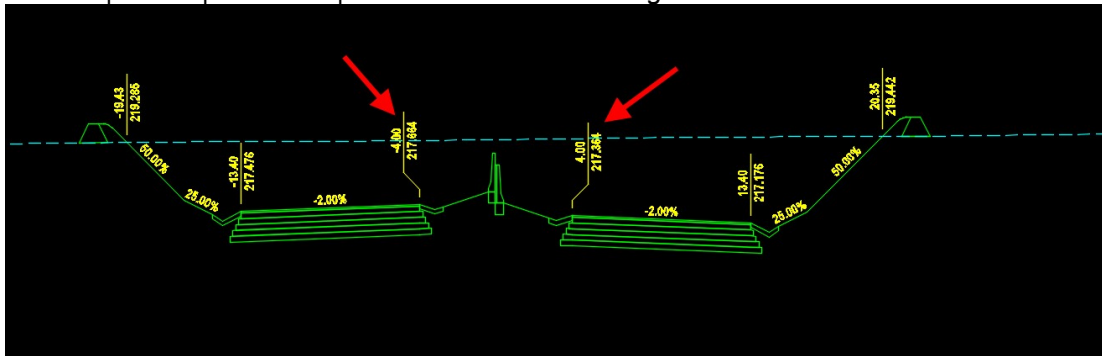
PRESSURE LEGEND		
MINIMUM	MAXIMUM	COLOR
185.045	194.771	
194.771	197.000	
197.000	200.000	
200.000	204.902	
204.902	210.000	
210.000	214.485	
214.485	220.000	
220.000	230.000	

Code Set Style

New Marker Label Styles were added:

Section | Offset | Elevation | Extension Line Offset Left and

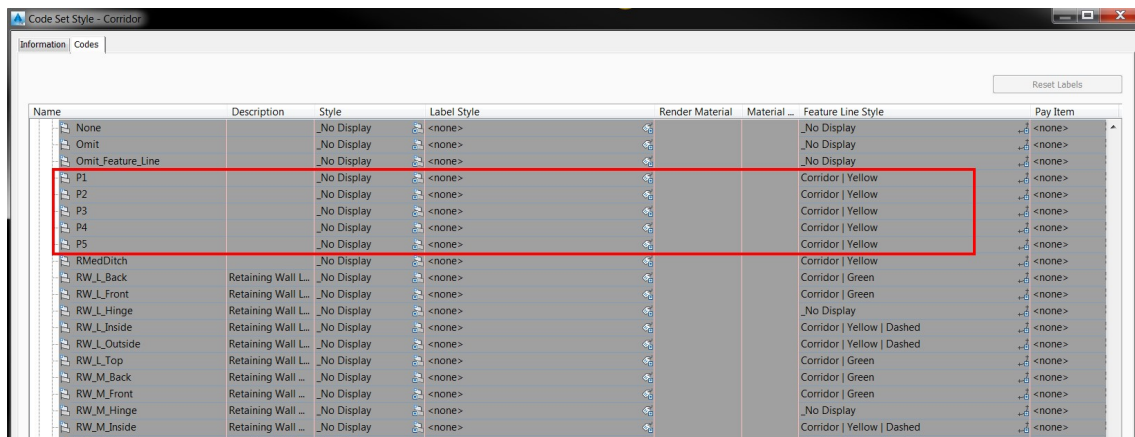
Section | Offset | Elevation | Extension Line Offset Right



New point codes for drains:

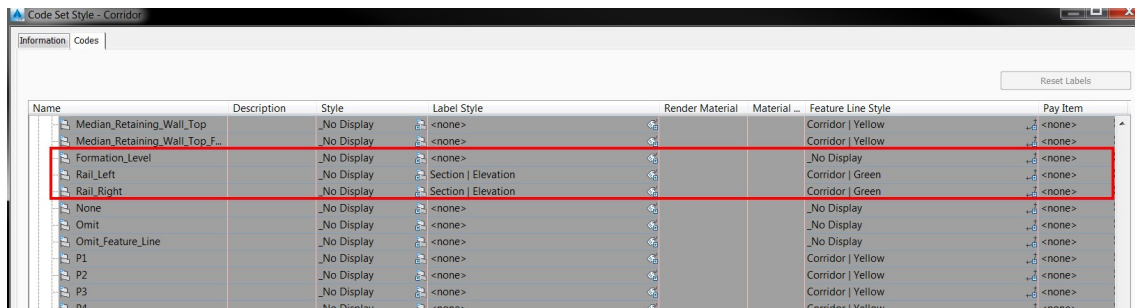
Name	Descr...	Style	Label Style	Render...	Material	Feature Line Style	Pay Item
Median_Retaining_Wall_Top_F...		No Display	<none>			Corridor Yellow	<non...>
Drain_Backslope		No Display	<none>			Corridor Yellow	<non...>
Drain_Bottom		No Display	<none>			No Display	<non...>
Drain_Extension		No Display	<none>			Corridor Yellow	<non...>
Drain_Flowline		No Display	<none>			No Display	<non...>
Drain_In		No Display	<none>			Corridor Yellow	<non...>
Drain_Out		No Display	<none>			Corridor Yellow	<non...>
Drain_Top		No Display	<none>			Corridor Yellow	<non...>
None		No Display	<none>			No Display	<non...>
Omit		No Display	<none>			No Display	<non...>

New point codes for points:



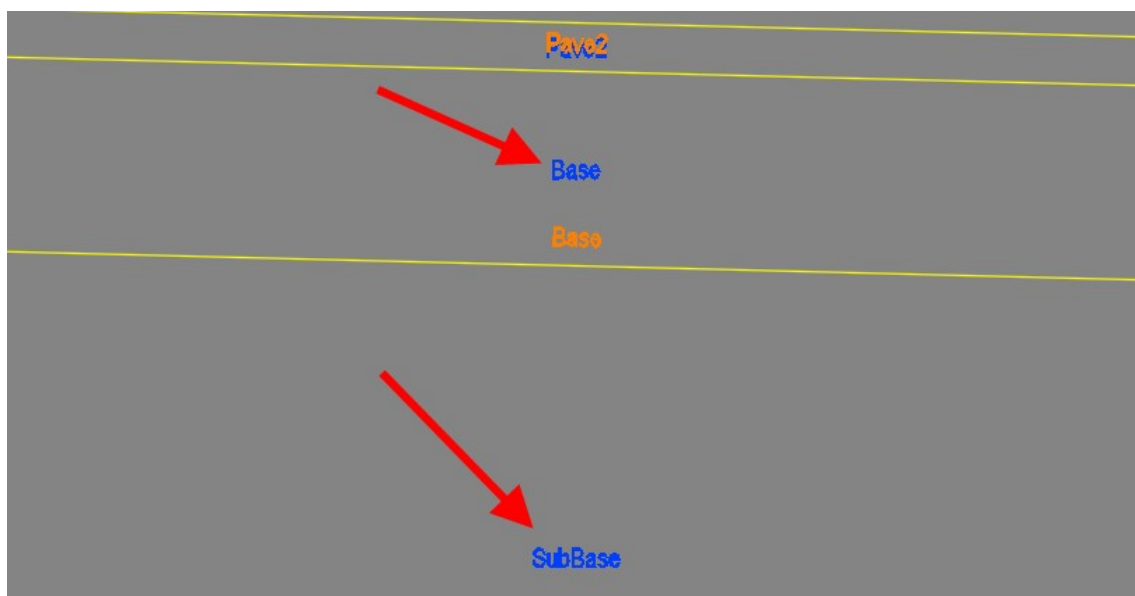
Name	Description	Style	Label Style	Render Material	Material ...	Feature Line Style	Pay Item
None		_No Display	<none>			_No Display	<none>
Omit		_No Display	<none>			_No Display	<none>
Omit_Feature_Line		_No Display	<none>			_No Display	<none>
P1		_No Display	<none>			Corridor Yellow	<none>
P2		_No Display	<none>			Corridor Yellow	<none>
P3		_No Display	<none>			Corridor Yellow	<none>
P4		_No Display	<none>			Corridor Yellow	<none>
P5		_No Display	<none>			Corridor Yellow	<none>
RMedDitch		_No Display	<none>			Corridor Yellow	<none>
RW_L_Back	Retaining Wall L...	_No Display	<none>			Corridor Green	<none>
RW_L_Front	Retaining Wall L...	_No Display	<none>			Corridor Green	<none>
RW_L_Hinge	Retaining Wall L...	_No Display	<none>			_No Display	<none>
RW_L_Inside	Retaining Wall L...	_No Display	<none>			Corridor Yellow Dashed	<none>
RW_L_Outside	Retaining Wall L...	_No Display	<none>			Corridor Yellow Dashed	<none>
RW_L_Top	Retaining Wall L...	_No Display	<none>			Corridor Green	<none>
RW_M_Back	Retaining Wall ...	_No Display	<none>			Corridor Green	<none>
RW_M_Front	Retaining Wall ...	_No Display	<none>			Corridor Green	<none>
RW_M_Hinge	Retaining Wall ...	_No Display	<none>			_No Display	<none>
RW_M_Inside	Retaining Wall ...	_No Display	<none>			Corridor Yellow Dashed	<none>

New point codes for rails:



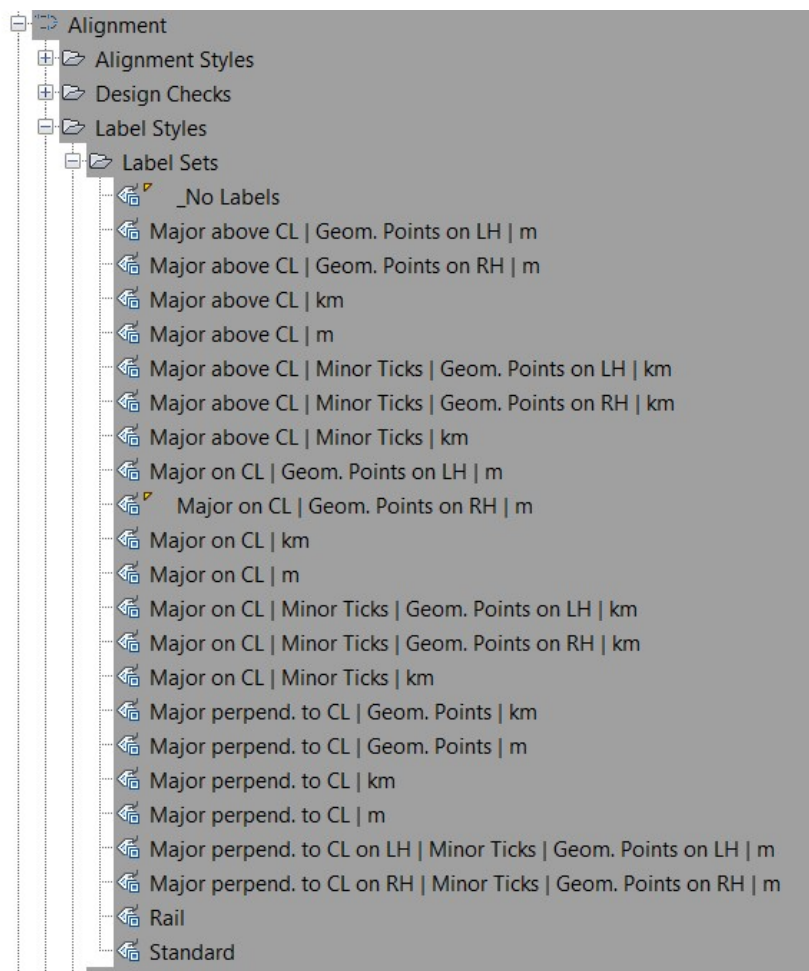
Name	Description	Style	Label Style	Render Material	Material ...	Feature Line Style	Pay Item
Median_Retaining_Wall_Top		_No Display	<none>			Corridor Yellow	<none>
Median_Retaining_Wall_Top_F...		_No Display	<none>			Corridor Yellow	<none>
Formation_Level		_No Display	<none>			_No Display	<none>
Rail_Left		_No Display	Section Elevation			Corridor Green	<none>
Rail_Right		_No Display	Section Elevation			Corridor Green	<none>
None		_No Display	<none>			_No Display	<none>
Omit		_No Display	<none>			_No Display	<none>
Omit_Feature_Line		_No Display	<none>			_No Display	<none>
P1		_No Display	<none>			Corridor Yellow	<none>
P2		_No Display	<none>			Corridor Yellow	<none>
P3		_No Display	<none>			Corridor Yellow	<none>
P4		_No Display	<none>			Corridor Yellow	<none>

New point code for Slope_Pattern (Sanral cut/fill uses it for the slope pattern)
The Shape Code Label Colour was changed to blue to improve visibility on the grey background:

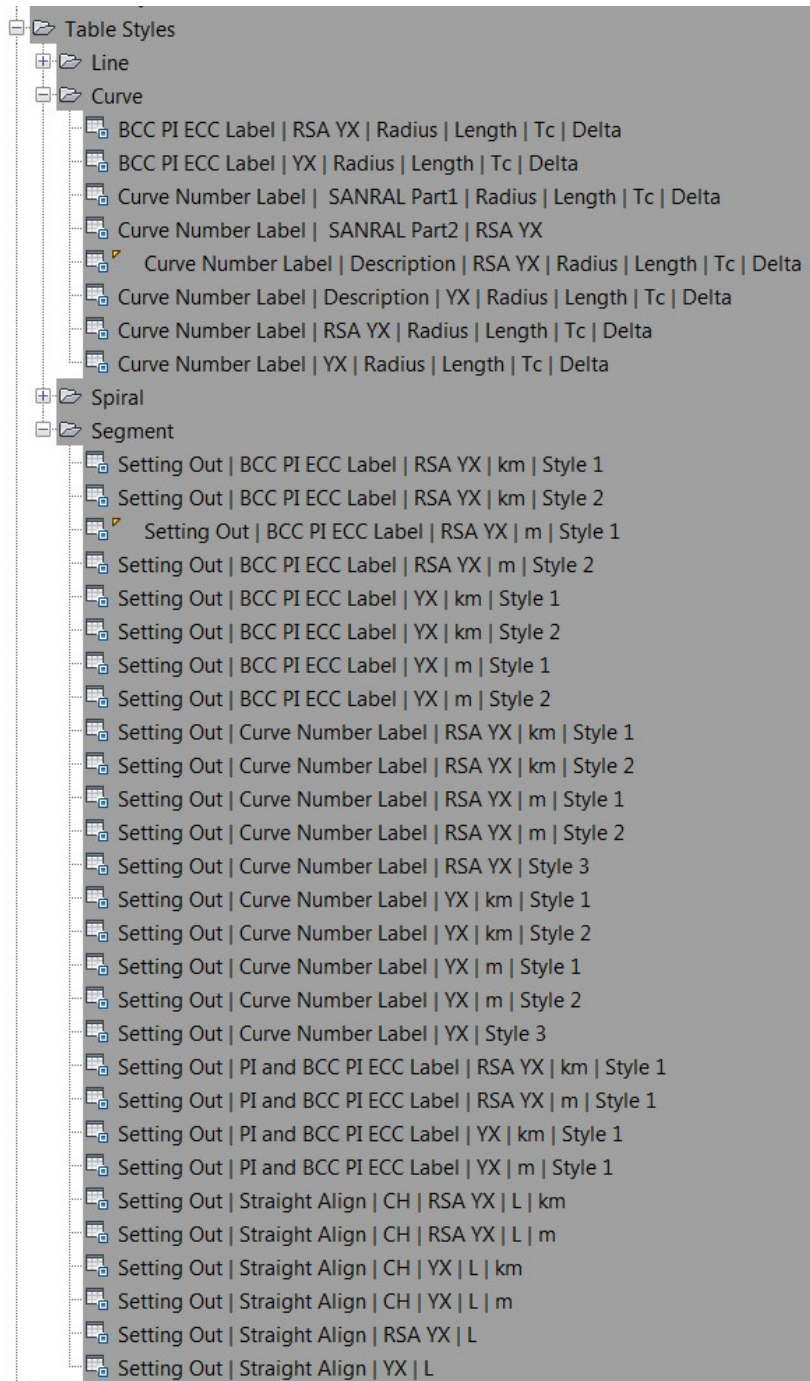


Style Names

The Alignment Label Sets were renamed to make it easier to read:











































The Alignment Curve and Segment Tables were renamed to ensure that they are sorted correctly according to the label name used for the tables:



Road Profile View Styles and Band Sets were renamed accordingly:

Single Road | ... TO *Road* | *Single* | ...

Dual Road | ... TO *Road* | *Dual* | ...

	Road Dual Band Set 1 Full Grid
	Road Dual Band Set 1 Major Grid
	Road Dual Band Set 1 Major Horizontal Grid
	Road Dual Band Set 2 Full Grid
	Road Dual Band Set 2 Major Grid
	Road Dual Band Set 2 Major Horizontal Grid
	Road Dual Band Set 3 Full Grid
	Road Dual Band Set 3 Major Grid
	Road Dual Band Set 3 Major Horizontal Grid
	Road Dual Band Set 4 Full Grid
	Road Dual Band Set 4 Major Grid
	Road Dual Band Set 4 Major Horizontal Grid
	Road Dual Band Set 5 Bottom Full Grid
	Road Dual Band Set 5 Bottom Major Grid
	Road Dual Band Set 5 Bottom Major Horizontal Grid
	Road Dual Band Set 5 Top Full Grid
	Road Dual Band Set 5 Top Major Grid
	Road Dual Band Set 5 Top Major Horizontal Grid
	Road Dual Band Set 6 Full Grid
	Road Dual Band Set 6 Major Grid
	Road Dual Band Set 6 Major Horizontal Grid
	Road Dual Band Set 7 Bottom Full Grid
	Road Dual Band Set 7 Bottom Major Grid
	Road Dual Band Set 7 Bottom Major Horizontal Grid
	Road Dual Band Set 7 Top Full Grid
	Road Dual Band Set 7 Top Major Grid
	Road Dual Band Set 7 Top Major Horizontal Grid
	Road Single Band Set 1 Full Grid
	Road Single Band Set 1 Major Grid
	Road Single Band Set 1 Major Horizontal Grid
	Road Single Band Set 2 Full Grid
	Road Single Band Set 2 Major Grid
	Road Single Band Set 2 Major Horizontal Grid
	Road Single Band Set 3 Full Grid
	Road Single Band Set 3 Major Grid
	Road Single Band Set 3 Major Horizontal Grid
	Road Single Band Set 4 Full Grid
	Road Single Band Set 4 Major Grid
	Road Single Band Set 4 Major Horizontal Grid
	Road Single Band Set 5 Full Grid

AUTODESK CIVIL 3D SUBASSEMBLIES

The following Subassemblies were added:

- Devotech SANRAL Cut Fill Ver 12
- Devotech SANRAL Median Barrier with Retaining Wall Ver 06
- Devotech Conditional Road Edge Barrier Curb and Channel Ver 01
- Devotech Conditional Road Edge Barrier Curb and Channel or U Channel Ver 01
- Devotech Conditional Road Edge Barrier Curb and Channel Ver 02
- Devotech Single Railway Ver 01
- Devotech Single Railway Cant Calculations Ver 01

HELP FILE

The following chapters were added to the Devotech iDAS and Autodesk Civil 3D Help File:

- Devotech iDAS and Autodesk Civil 3D System Requirements
- Autodesk Civil 3D Essentials – Guardrail and drainage quantities
- Autodesk Civil 3D Advanced – Roundabout design
- Autodesk Civil 3D Advanced – Cul-de-sac design
- Devotech iDAS Pipe Network Design – Water Network Analysis in Devotech iDAS – Valves
- Devotech iDAS Pipe Network Design – Water Network Analysis in Devotech iDAS – Minor losses
- Autodesk Civil 3D Performance and Settings
- Some other chapters were improved or updated

VIDEOS

Devotech iDAS introduction for new users:

<https://www.devotech.co.za/miscellaneous-training?wix-vod-video-id=057596b89804491ba11045c223961610&wix-vod-comp-id=comp-jeo1tay#>

Alignments – Create setting out data table for alignment with and without curves at PIs:

<https://www.devotech.co.za/alignments-training?wix-vod-video-id=b964548e82ca44b3b8aabd25e7ca8abc&wix-vod-comp-id=comp-jeo1fyl5#>

COGO Points – Create COGO points at alignment geometry points:

<https://www.devotech.co.za/points-training?wix-vod-video-id=5d594953e1a44250a3d6259bf71110e6&wix-vod-comp-id=comp-jeo1dtxg#>

Mass-haul diagram

<https://www.devotech.co.za/roads-training?wix-vod-video-id=53997a63719c43c182fcd538f05f0ae4&wix-vod-comp-id=comp-jck9pzzl#>

Dual carriageway dynamic profile views:

<https://www.devotech.co.za/roads-training?wix-vod-video-id=59f4de1e8ea94079a0f1b5c69e019c89&wix-vod-comp-id=comp-jck9pzzl#>

Assemblies – Create dual road assembly with pivot point at inside edges:

<https://www.devotech.co.za/assemblies-training?wix-vod-video-id=a10af770385d47ec8a31a00aeecc44930&wix-vod-comp-id=comp-jckaarb6#>

Corridors – Create profile from corridor for inside edge crossing centreline:

<https://www.devotech.co.za/corridors-training?wix-vod-video-id=24c2e360b9344af1b39940bf688f0f9a&wix-vod-comp-id=comp-jcka8q48#>

Corridors – Create corridor surface boundary from toe line polyline

<https://www.devotech.co.za/corridors-training?wix-vod-video-id=415ba302665848528851b6da9f19e6d7&wix-vod-comp-id=comp-jcka8q48#>

Corridors – Change feature style for referenced corridor

<https://www.devotech.co.za/corridors-training?wix-vod-video-id=99345d30e04148fc816bb94e871028bc&wix-vod-comp-id=comp-jcka8q48#>

Stormwater network design and analysis (entire video channel):

<https://www.devotech.co.za/storm-water-training?wix-vod-comp-id=comp-jck4lbf2#>

Culvert design and sections:

<https://www.devotech.co.za/storm-water-training?wix-vod-video-id=979258833db84d5c8ef479f74f96d852&wix-vod-comp-id=comp-jck4lbf2#>

Bulk Water – Rename structures in the chainage direction:

<https://www.devotech.co.za/bulk-water-training?wix-vod-video-id=caea3c2def2e4215adaecb3966e42088&wix-vod-comp-id=comp-jck6l0rb#>

Bulk Water – Create setting out data table for horizontal bends:

<https://www.devotech.co.za/bulk-water-training?wix-vod-video-id=b25e4cb6679d4069acc8a0771b274c45&wix-vod-comp-id=comp-jck6l0rb#>

Bulk Water – Create alignment setting out table every 20 m and at Pis:

<https://www.devotech.co.za/bulk-water-training?wix-vod-video-id=ef8c81d7d0db40fe88079987213f57a9&wix-vod-comp-id=comp-jck6l0rb#>

Pipe jacking:

<https://www.devotech.co.za/bulk-water-training?wix-vod-video-id=963d0bdba8674b389fb9bed65a0f51c2&wix-vod-comp-id=comp-jck6l0rb#>

Sewer – Rodding eyes:

<https://www.devotech.co.za/sewer-training?wix-vod-video-id=976205ed86234d6389d709eafe03e15b&wix-vod-comp-id=comp-jckb9foq#>

Pipe Networks – Display only one invert elevation at structure in the profile view:

<https://www.devotech.co.za/pipe-networks-training?wix-vod-video-id=59c4ce4d26774ee2be9ea93c86cdb37f&wix-vod-comp-id=comp-jeo1nzp7#>

Pipe Networks – Display depth to invert in the profile view band:

<https://www.devotech.co.za/pipe-networks-training?wix-vod-video-id=5e42205c6cdd42898a791bb565167686&wix-vod-comp-id=comp-jeo1nzp7#>

Pipe Networks – Create pipe network parallel with another network:

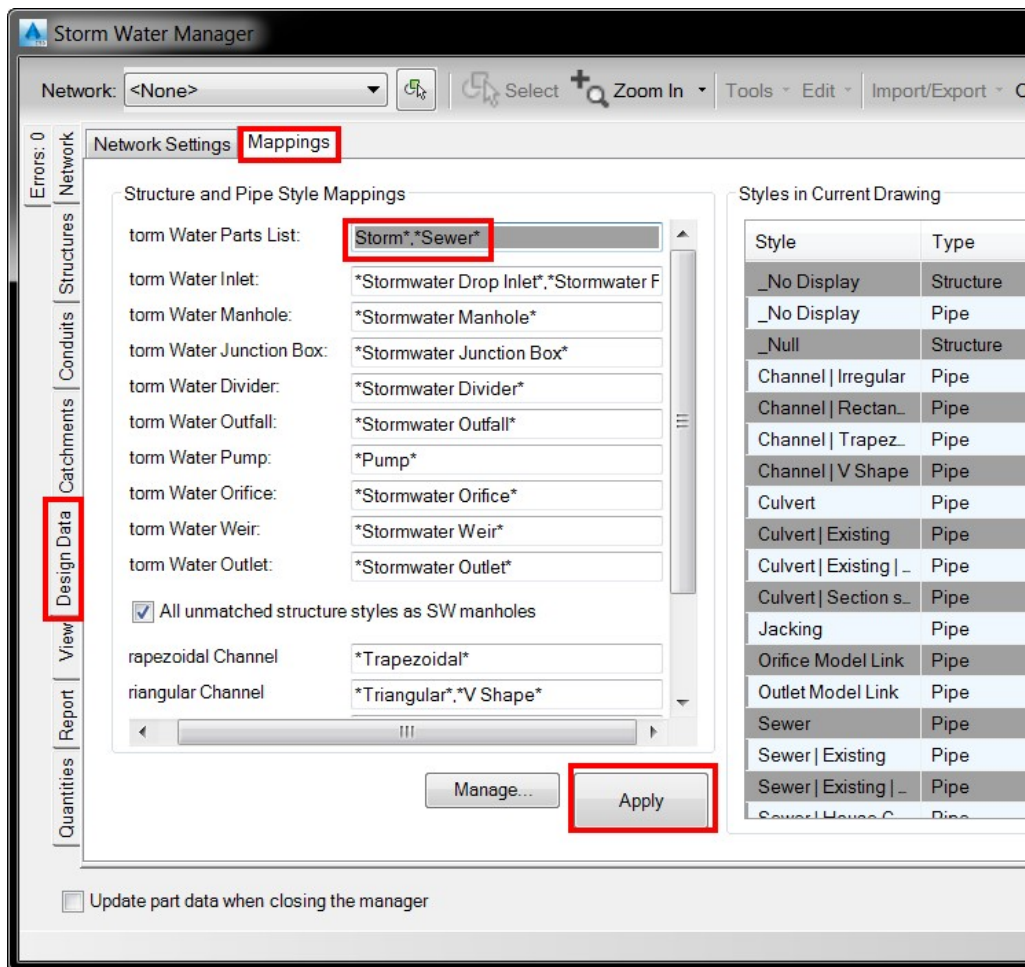
<https://www.devotech.co.za/pipe-networks-training?wix-vod-video-id=54ae2d059c604c08a0e39c93e5d8d7b0&wix-vod-comp-id=comp-jeo1nzp7#>

Quantities – How to calculate alignment length crossing specific area (land usage):

<https://www.devotech.co.za/quantities-training?wix-vod-video-id=10d15037b5b04c3abf637fe978e6291f&wix-vod-comp-id=comp-jeo1pxpt#>

KNOWN ISSUES

- Profiles from pipes do not update the existing profiles. New profiles must be created.
- Sewer Manager quantities are disabled in the new Sewer Manager due to the performance issues. To calculate quantities, use the Storm Manager. Open the Storm Manager and go to the Design Data tab, click on the horizontal Mappings tab, under Stormwater Parts List add “,*Sewer*” and click Apply:



It will load all the sewer networks available in the drawing and you can calculate the quantities as usual.

- Plan Production – Profile Views sometimes overlap, see this video for a solution <https://www.devotech.co.za/plan-production-training?wix-vod-video-id=9ac580e84fa042c7bbae0b68451eb206&wix-vod-comp-id=comp-jeo1rxd6#>
- The Water and Stormwater Managers are flickering on some computers when the mouse cursor hovers over the Grid Lines.
- If you open the Water or Stormwater Manager without a surface in the drawing, it takes a while to open.