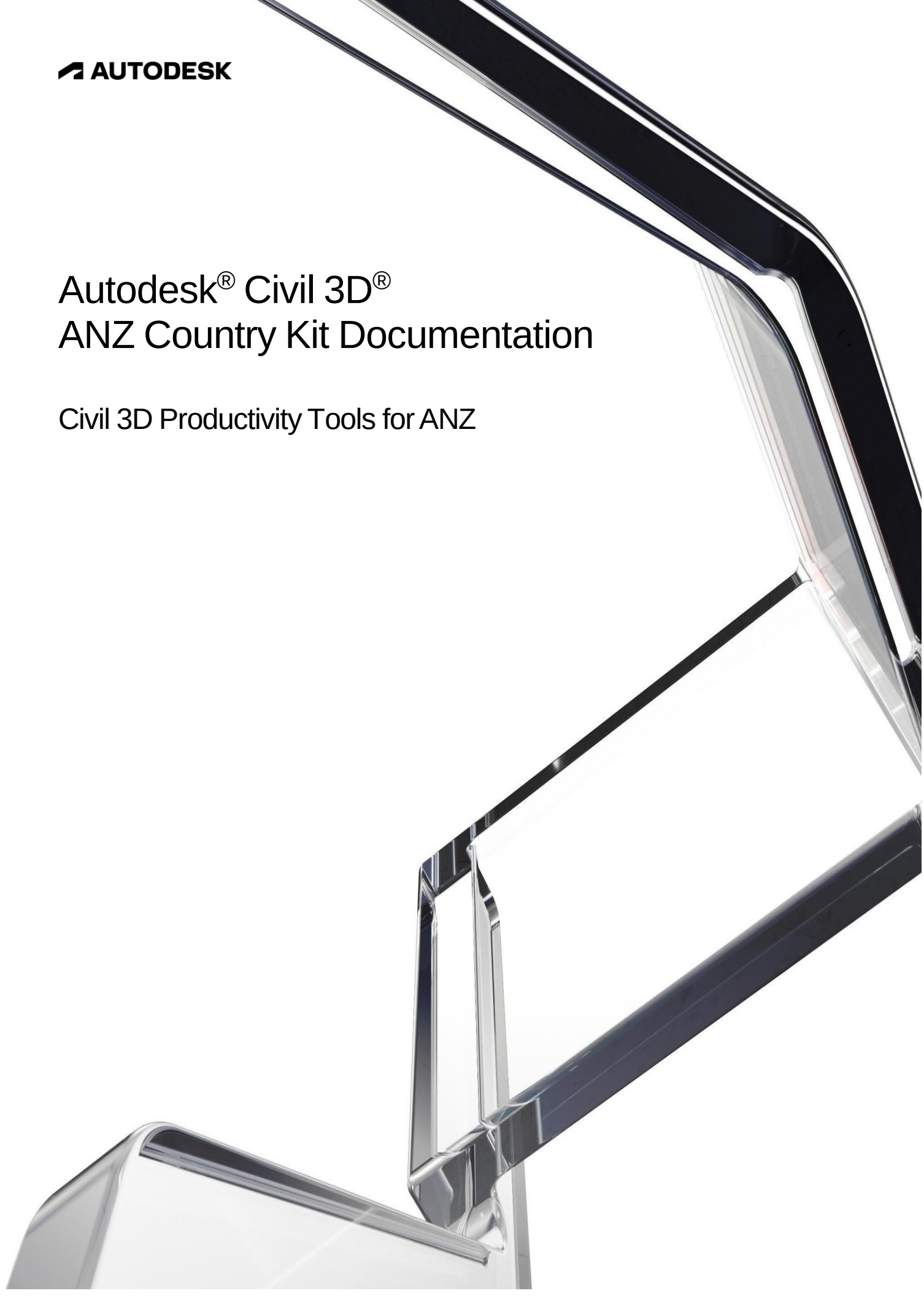
AUTODESK

Autodesk® Civil 3D®
ANZ Country Kit Documentation

Civil 3D Productivity Tools for ANZ



Contents

1.0 Overview

1.1 Version History

Versions of this document:

Version	*Date*	*Update Description*
1.0	20/04/2023	Updated for Autodesk® Civil 3D® 2024

1.2 Introduction

Civil 3D Productivity Tools for ANZ is a suite of customized add-ins to allow more productive design and documentation of your Civil 3D projects. The tools cover a broad range of tasks, including:

- Aquaplaning analysis
- Annotating of Section Views (including corridor point cuts and staggering)
- Exporting flattened 2D AutoCAD drawings from a 3D GENIO import
- Exporting corridors and feature lines for construction
- Create roadside barriers in 3D
- Exporting Feature lines to 3D XYZ coordinates
- Copy Data Band Profile parameters
- Adjusting datum levels on multiple Profile Views

These tools currently reside in the Toolbox folder located at:
%LocalAppData%\Autodesk\C3D <version>\enu\Data\ToolBox\ANZ

2.0 Change List

2.1 What's New in 2024 Release

- Profile Band Styles – Depth to Invert Band Style
- Modified Templates With TMR and MRWA Title Blocks and New Object Styles
- Updated Corridor Design Files – From Austroads 2016 Version to Austroads 2021 Version
- Additional Object Styles
- General and Transportation Blocks
- Pipe Network Part List
- Pressure Network Part List
- Subassemblies

3.0 Civil 3D Drip

Drip allows users to perform immediate on-screen aquaplaning calculations through a custom dialog. The user selects a Civil 3D surface object, a point to analyses and a terminating (or break) string. The program will determine the flow path and calculate the aquaplaning depths for each segment along the flow path in accordance to Austroads Guide to Road Design Part 5a – Section 4 (Aquaplaning).

The resulting aquaplaning calculation is shown on-screen through a series of colored bands (green, orange and red) to indicate whether issues exist on the surface.

This output can finally be output to Excel for use in design reports.

3.1 General Notes

- A Point Code Terminator is required to run the analysis, regardless of whether a terminator is required or not. This issue will be addressed in a future release.
- It is recommended to turn on viewport line weights (in the status bar)  to better visualize the flow paths.
- The Drip add-in will create an XML file, called ‘Drip.xml’, in the same folder where the current drawing is located. The XML file will read and write settings so when the program is re-run, the latest settings in the dialog are not lost.
- The analysis result shown in the bottom portion of the dialog (after clicking ‘Drip’) is a simplified analysis that utilizes the Gallaway method (1979), and uses the average length and slope of the entire flow path (i.e. point to point). Detailed analysis results are found in the generated Excel report.
- To get a better aquaplaning result, it is preferred to create a corridor region through the aquaplaning analysis zone with lower region frequencies (i.e. 1-2m). This creates a smoother triangulation used to calculate the water drop flow path.

3.2 Loading

Navigate to the Tool space – Toolbox - Australia and New Zealand Reports Manager – ANZ Tools – Drip (Aquaplaning), and either right-click and select 'Execute' or double-click the left mouse button to run the command.

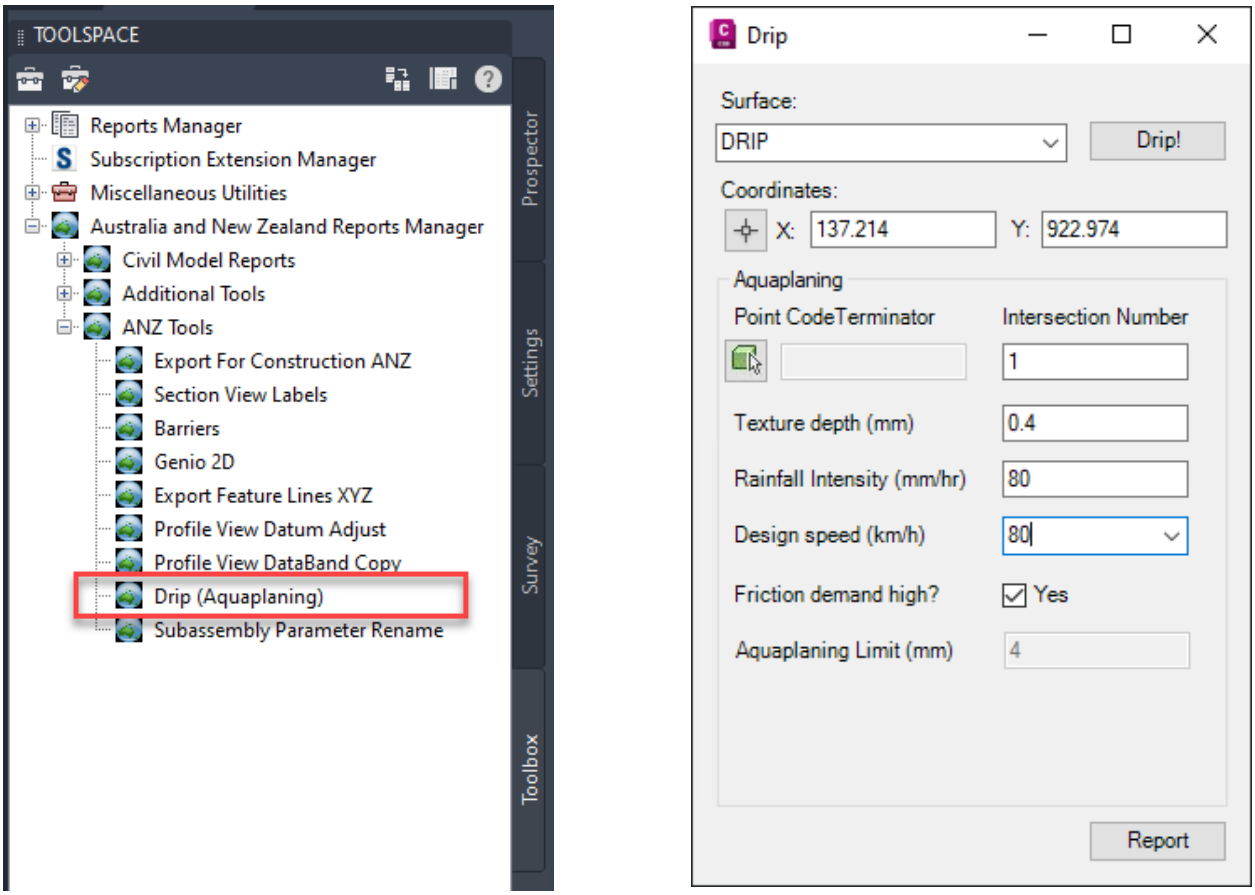


Figure 1: Location of ANZ Tools within Tool space (left) and Drip dialog (right)

3.3 Process

3.3.1 Surface

The surface pulldown lists all surfaces in the drawing. The currently selected surface is the surface the analysis will be run on.

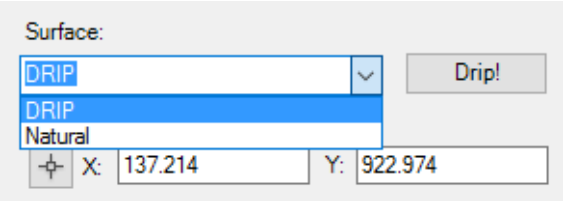


Figure 2: Selecting a surface

3.3.2 Coordinates

Coordinates are used to select the upstream flow path point on the Surface (see above). Values can be entered directly into the X and Y boxes, or simply clicking the icon.

Once the point selection icon is selected, a point can then be selected directly on screen. Points are selected on screen by using the left-click button. Clicking on the surface will display a thick blue line indicating the selected flow path (running from the selected upstream point to the downstream end, stopping at the low point on the surface)

If the selected point does not lie on the surface, a red cross marker will appear.

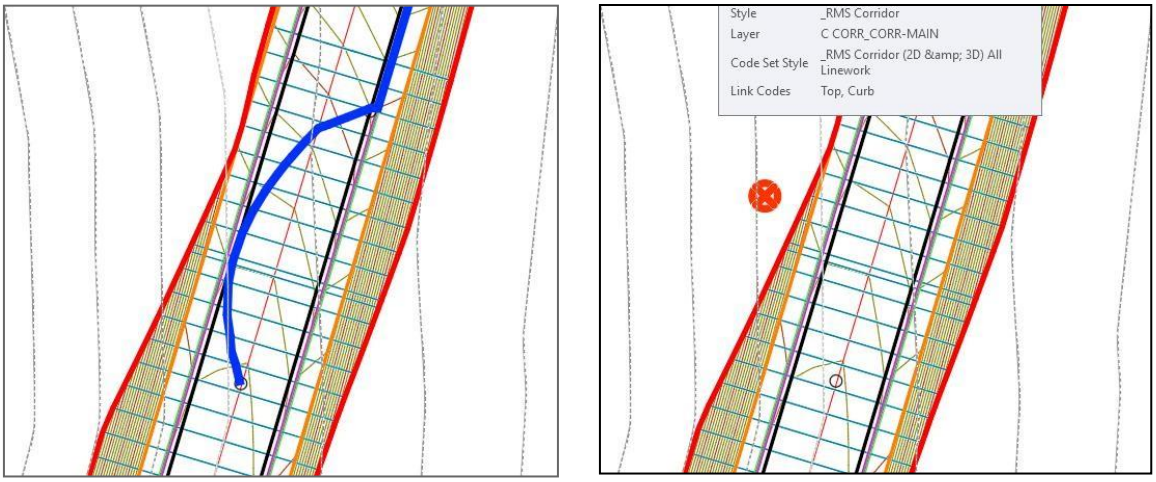


Figure 3: Point selection on surface (left) and invalid point selection (right)

To finalize and confirm the selected point, either right-click the mouse button. The X and Y coordinates in the Drip dialog will update to reflect the new analysis point.

3.3.3 Aquaplaning Point Code Terminator

The Point Code Terminator is a selected feature line from the underlying corridor model, and a related Intersection Number will determine where the two strings (Point Code Terminator and the Water Drop flow path) intersect.

Typically, when a flow-path is selected, the initial flow path runs from the selected upstream point to the surfaces low-point. This full-length line is not typically used for the analysis, as the waterdrop will typically stop at a feature on the pavement (i.e. line marking edge, lip of kerb etc.). The image below shows this scenario.

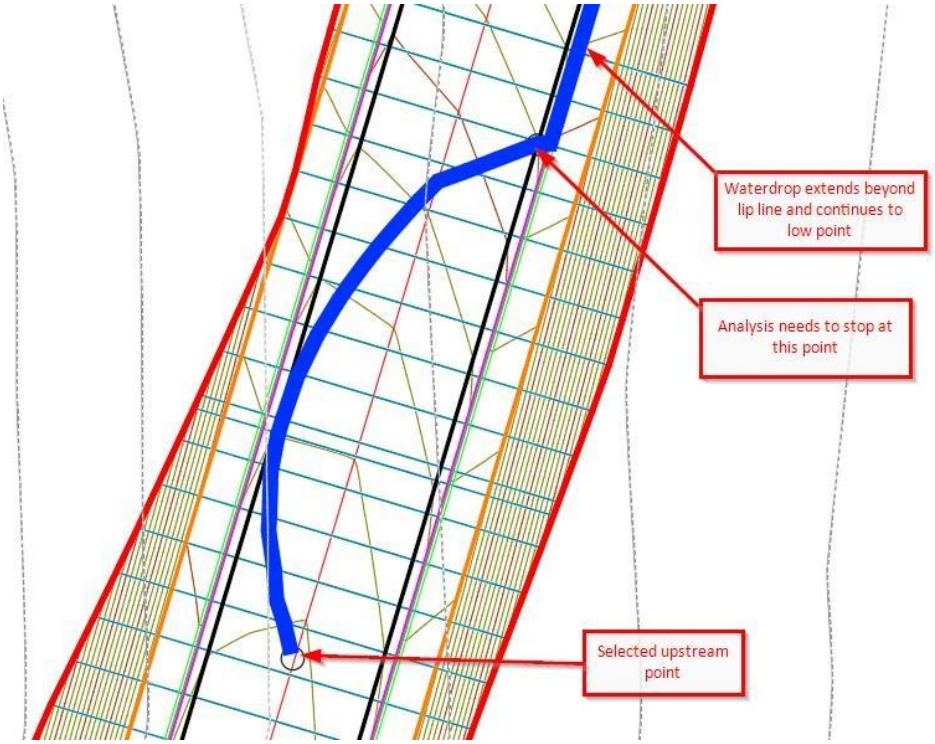


Figure 4: Point Code Terminator

Once the Point Code  Terminator icon is selected, a feature line can be selected from a corridor model. This corridor model is typical the same one used to generate the surface for the analysis.

At the command prompt, select either a CorridorFeatureLine or FeatureLine on-screen. If a CorridorFeatureLine is selected and the cursor detects more than one featureline under the cursor, a list will appear prompting the Feature Line section. Double click the feature or highlight the line or select OK to confirm.

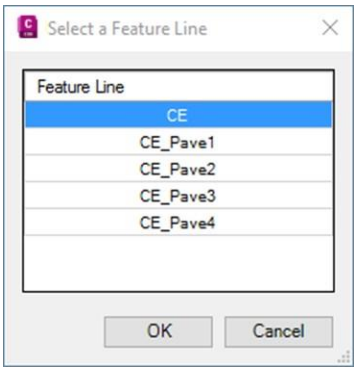


Figure 5: Select A Corridor Feature Line

On confirmation of a selected Feature Line, the textbox next to the Point Code Terminator will display the Corridor name followed by the feature line name, separated by a '->' symbol (i.e. CORR-MAIN->CE)

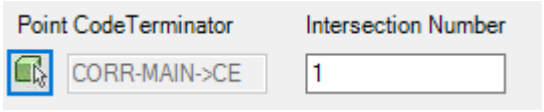


Figure 1: Point Code Terminator and Intersection Number

The Intersection Number is an integer value calculating when and how many times the two lines intersect (flow path and feature line). For instance, an Intersection Number of 0 indicates that the entire flow path string will be used for the analysis. In the image below, the Intersection Number of 1 is used to terminate the analysis at the first intersection point between the water drop and the feature line.

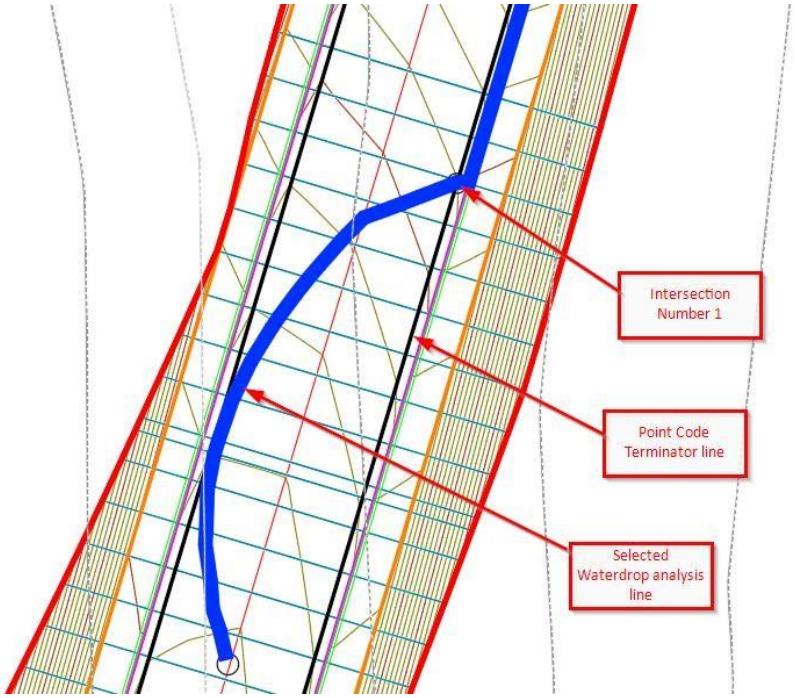


Figure 2: Intersection Number 1 selected for analysis

3.3.4 Aquaplaning Parameters

Aquaplaning parameters are used to calculate the flow path analysis and are described below.

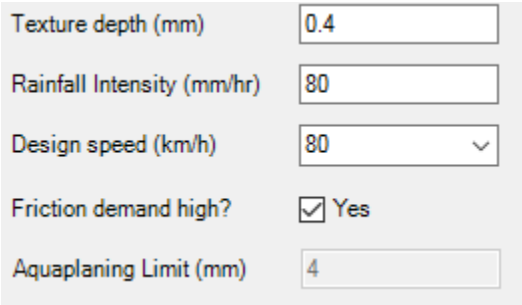
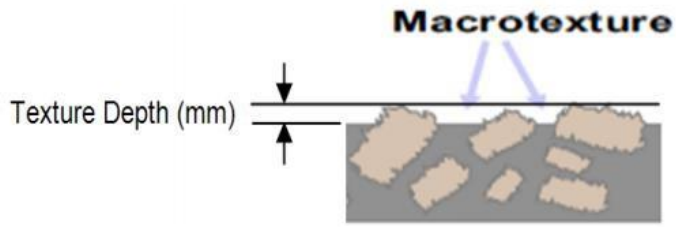


Figure 3: Aquaplaning Parameters

3.3.5 Texture Depth (mm)

Refers to the average depth of the macrotexture of the road surface.



Source: DTMR (2010).

Figure 4: Pavement Texture Depth

3.3.6 Rainfall Intensity (mm/hr.)

For design, rainfall intensity is determined from an appropriate rainfall intensity-frequency-duration (IFD) chart for a particular site, using a selected ARI and appropriate duration.

3.3.7 Design Speed (km/h)

A design speed is selected from the drop-down menu. Design speeds range from 30km/h to 120km/h. The design speeds, in conjunction with the ‘Friction Demand High’ checkbox, determine the overall Aquaplaning Limit

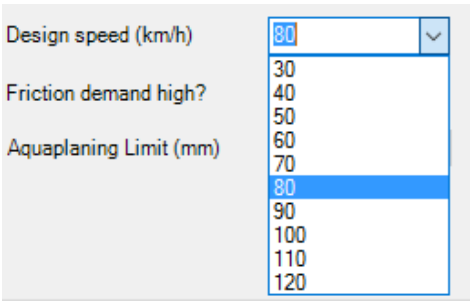


Figure 5: Design Speeds

3.3.8 Friction Demand High?

This checkbox is used where the friction demand is high, such as at intersections, steep downhill grades or where the road design speed is 80km/h or higher. See Section 4.10.1 in Austroads Part 5a: Drainage – Road Surface, Networks, Basins and Subsurface for more details.

3.3.9 Aquaplaning Limit (mm)

The Aquaplaning limit is a read-only value calculated from a combination of design speed and Friction Demand. The values fall between 4mm and 5mm.

3.3.10 Analysis

Aquaplaning analysis is performed by left-clicking the 'Drip' button in the upper-right corner of the dialog.

It is required to have all elements in the dialog populated before a successful analysis is calculated.

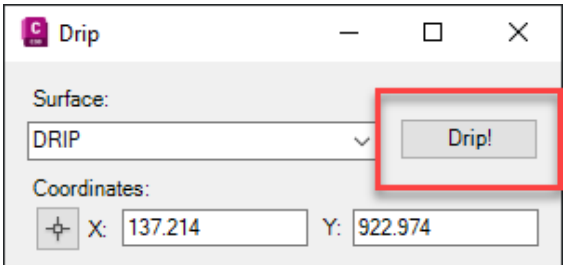


Figure 6: 'Drip' Analysis button

Analysis results are displayed on-screen as a thick polyline, with color bands indicating successful or non-successful aquaplaning calculations. Note the original blue flow path is removed from screen upon running the analysis.

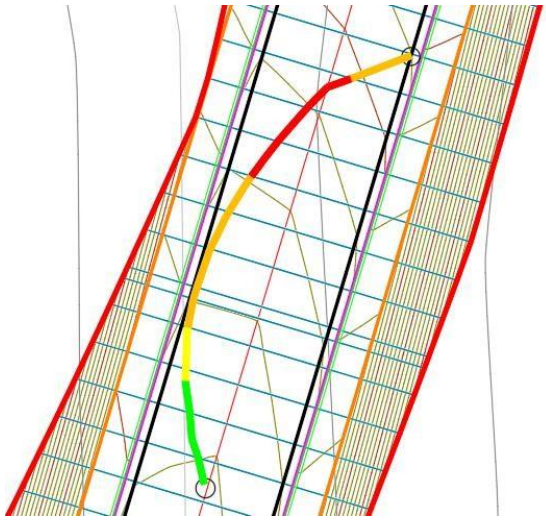


Figure 7: Analysis result on-screen

The analysis result shown in the bottom portion of the dialog (after running a 'Drip' analysis) is a simplified analysis that utilizes the Gallaway method (1979) and uses the average length and slope of the entire flow path (i.e. point to point). Detailed analysis results are found in the generated Excel report.

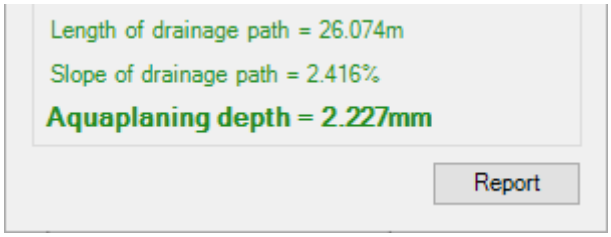


Figure 8: Point to Point analysis (simplified)

The image below shows a successful aquaplaning analysis on a corridor design surface using the following design parameters:

- Right-edge lip as the Point Code Terminator (CORR-MAIN->CE)
- Intersection Number 1
- Texture Depth 0.4mm
- Rainfall Intensity 50mm/hr.
- Design Speed 80km/h
- Friction Demand High? Yes
- Aquaplaning Limit 4mm

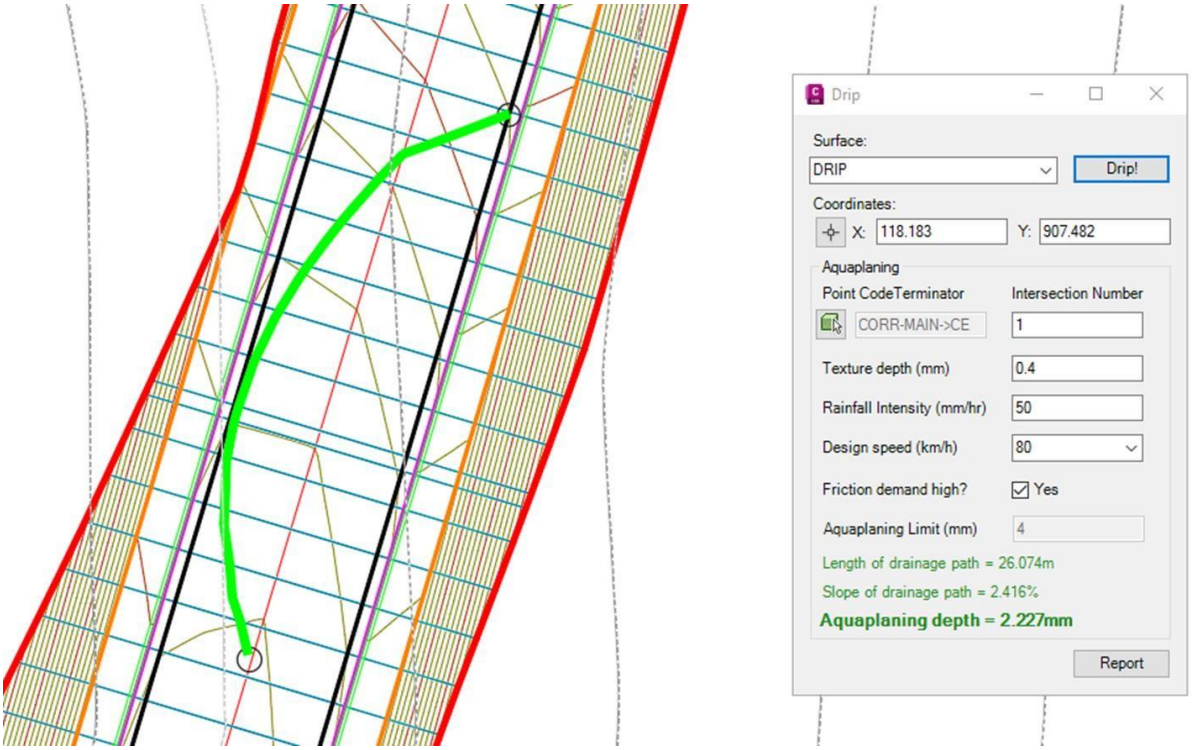


Figure 9: Successful aquaplaning analysis

The image below shows an unsuccessful aquaplaning analysis on a corridor design surface using the following design parameters:

- Right-edge lip as the Point Code Terminator (CORR-MAIN->CE)
- Intersection Number 1
- Texture Depth 0.4mm
- Rainfall Intensity **120mm/hr.**
- Design Speed 80km/h
- Friction Demand High? Yes
- Aquaplaning Limit 4mm

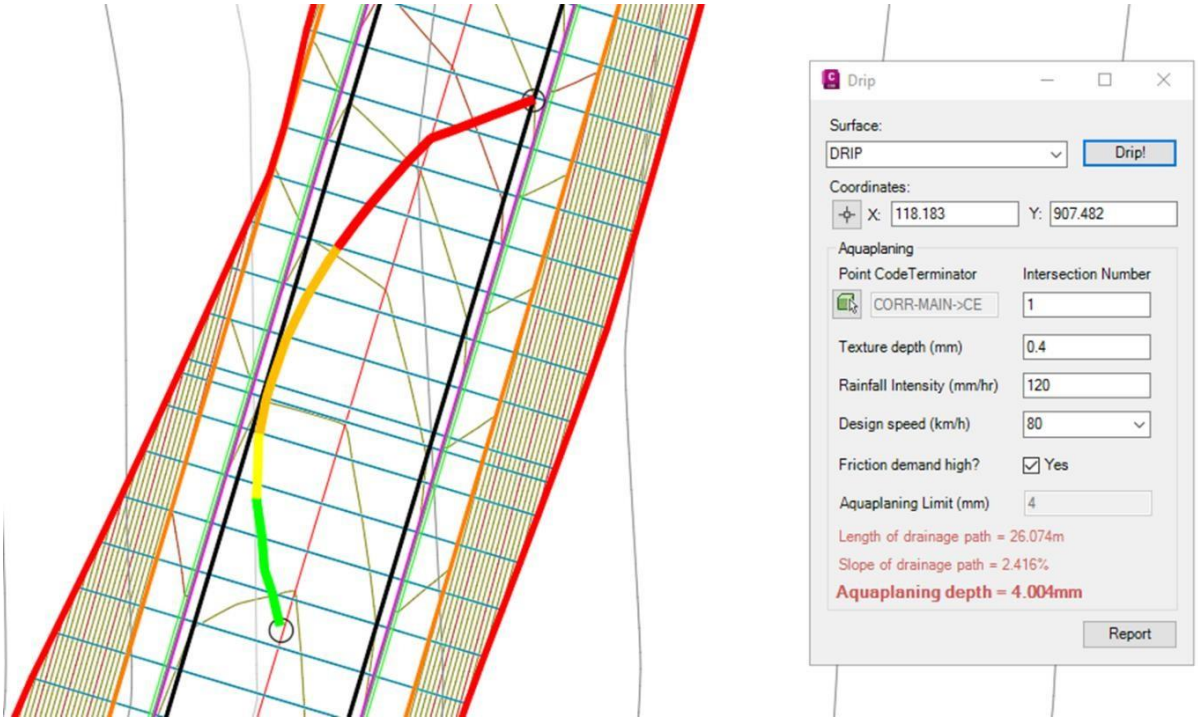


Figure 10: Unsuccessful aquaplaning analysis

3.3.11 Reporting

Upon completion of an analysis. Select the 'Report' button in the bottom-right of the dialog. This will create an Excel file (called 'Drip.xlsx'), which can then be saved in another location (Save-As) for use in reports

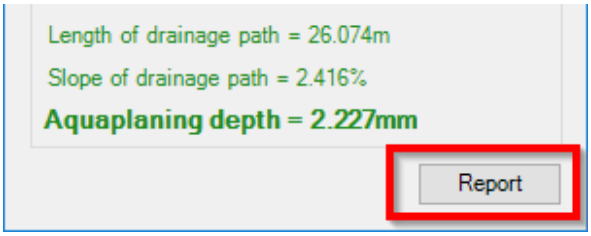
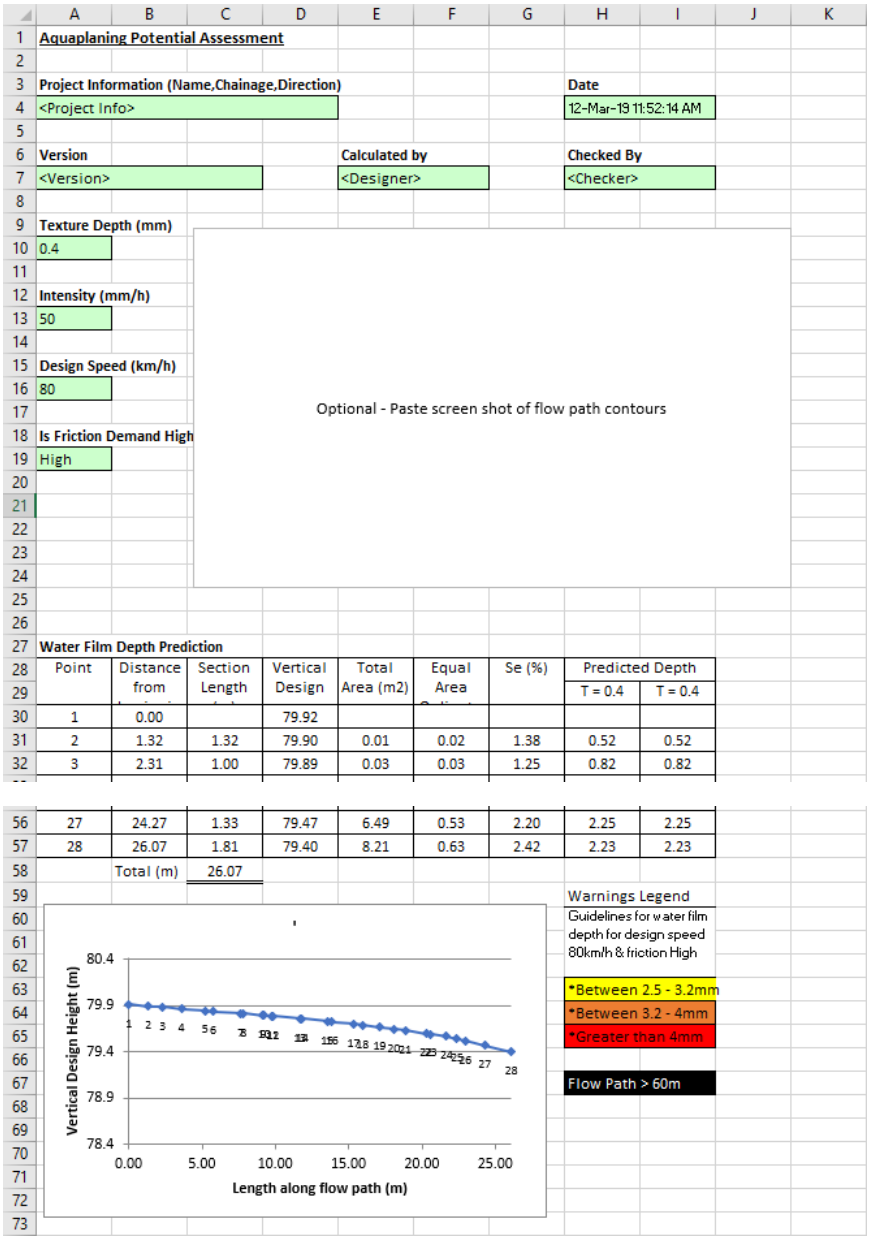


Figure 11: Reporting to Excel

The Excel report includes all calculation information, including charts and a table of the calculation segments.



Aquaplaning Potential Assessment

Project Information (Name,Chainage,Direction)			**Date**
<Project Info>			12-Mar-19 11:52:14 AM
Version		**Calculated by**	**Checked By**
<Version>		<Designer>	<Checker>
Texture Depth (mm)			
0.4			
Intensity (mm/h)			
50			
Design Speed (km/h)			
80			
Is Friction Demand High			
High			

Optional - Paste screen shot of flow path contours

Water Film Depth Prediction

Point	Distance from	Section Length	Vertical Design	Total Area (m2)	Equal Area	Se (%)	Predicted Depth T = 0.4	Predicted Depth T = 0.4
1	0.00		79.92					
2	1.32	1.32	79.90	0.01	0.02	1.38	0.52	0.52
3	2.31	1.00	79.89	0.03	0.03	1.25	0.82	0.82
27	24.27	1.33	79.47	6.49	0.53	2.20	2.25	2.25
28	26.07	1.81	79.40	8.21	0.63	2.42	2.23	2.23
	Total (m)	26.07						

Warnings Legend

Guidelines for water film depth for design speed 80km/h & friction High

*Between 2.5 - 3.2mm

*Between 3.2 - 4mm

*Greater than 4mm

Flow Path > 60m

Figure 12: Sample Excel report

4.0 Civil 3D Section Label

SectionLabel will allow the user to select a single Section View (as part of a Section View Group) and annotate user-defined point codes within data bands, allowing for staggering of overlapping text labels.

Steps to be considered when using the SectionLabel tool:

- Use a Code Set Style to add point code labels to a Corridor Section on a Section View. The SectionLabel tool will only annotate Corridor Sections (i.e. not Surface Sections). See *'Section View Corridor Sections - Code Set Style'* for more details.
- Add Data Bands to Section View(s). See *'Section View Data Bands'* for more details.
- Edit the Section View Style description to add/remove specific customized Section View attributes (no ticks, XYZ annotation etc.). See 'Section View Style' for more details.
- Select a single Section View contained in the Section View Group

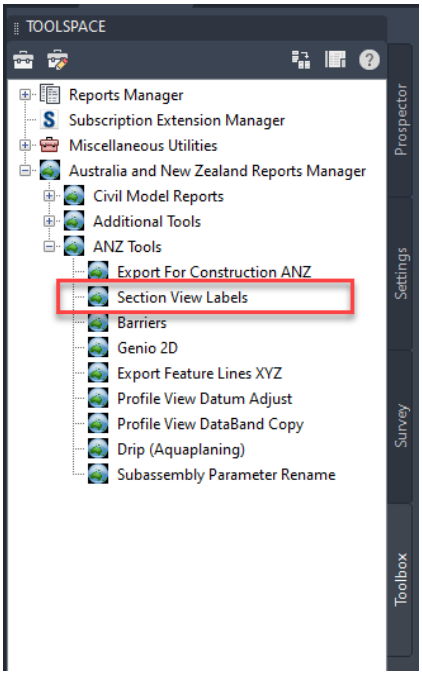
The program relies on specific coding standards and Civil 3D Settings that the user must conform with to successfully use the add-in.

4.1 General Notes

- The Section Views must be part of a Section View Group (no Individual Sections)
- To scale the text in the data bands correctly, the system variable 'Measurement' should be set to '0' for Imperial and '1' for Metric

4.2 Loading

Navigate to the Toolspace – Australia and New Zealand Reports Manager – ANZ Tools – Section View Labels, and either right-click and select 'Execute' or double-click the left mouse button to run the command.



4.3 Section View Corridor Sections - Code Set Style

The SectionLabel add-in annotates only Corridor Sections displayed on a Section View. Surface Sections are not used to label the specific point codes, except for the existing surface, which is used to extract levels at the Corridor Section cut offset locations.

To annotate labels on Corridor Sections, the Corridor Section Code Set Style must be setup for the section labels to be cut.

1. Assign a Code Set Style to the Corridor Sections

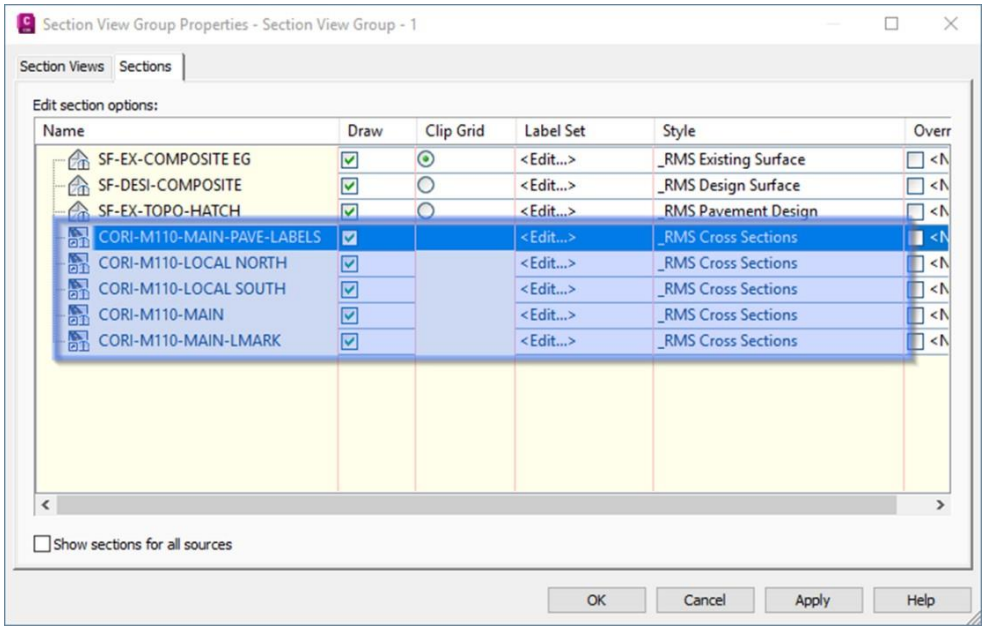


Figure 13- Assign Code Set Style to Corridor Sections

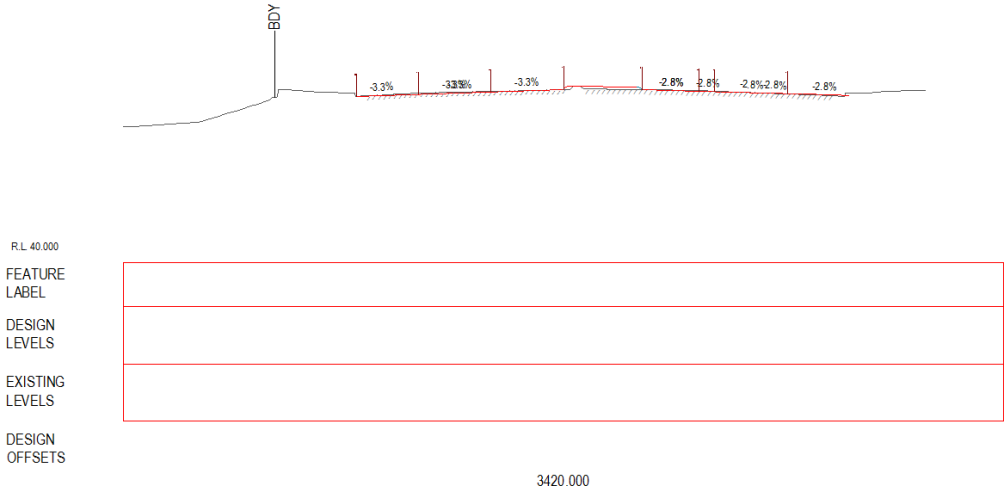


Figure 14 - Starting point for Section View labelling

2. Edit the Code Set Style.
   To determine which labels to annotate, edit the Code Set Style.
   Under the Point category, assign a Label Style called 'ADSK_SectionLabel' (not case sensitive). This tells the program which codes to annotate. For example, in the image below, the codes CB, CE, CF and CT will be labelled through the program.
   a. Additionally, assigning a label style called 'ADSK_SectionLabel_Sub' will allow you to annotate a separate set of points along the Subgrade (or Datum) data band, separate from the top surface design strings.
3. Optionally, add a value to the Points 'Description' column to override the value of the feature label in the data band.
4. Note: 'ADSK_SectionLabel' and 'ADSK_SectionLabel_Sub' labels are design for use in the SectionLabel tool only. It is recommended to place the resulting Section View objects onto non-plotting layers

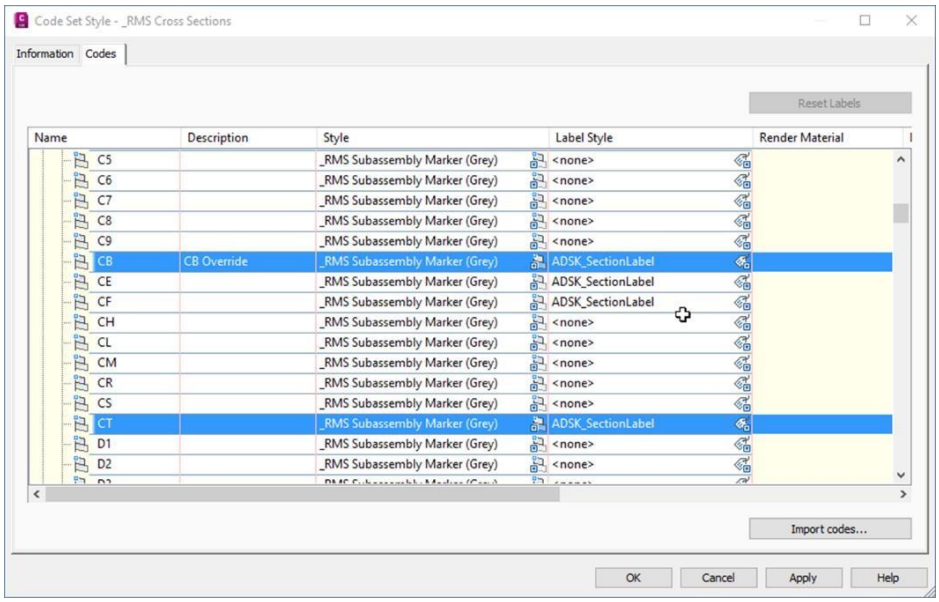
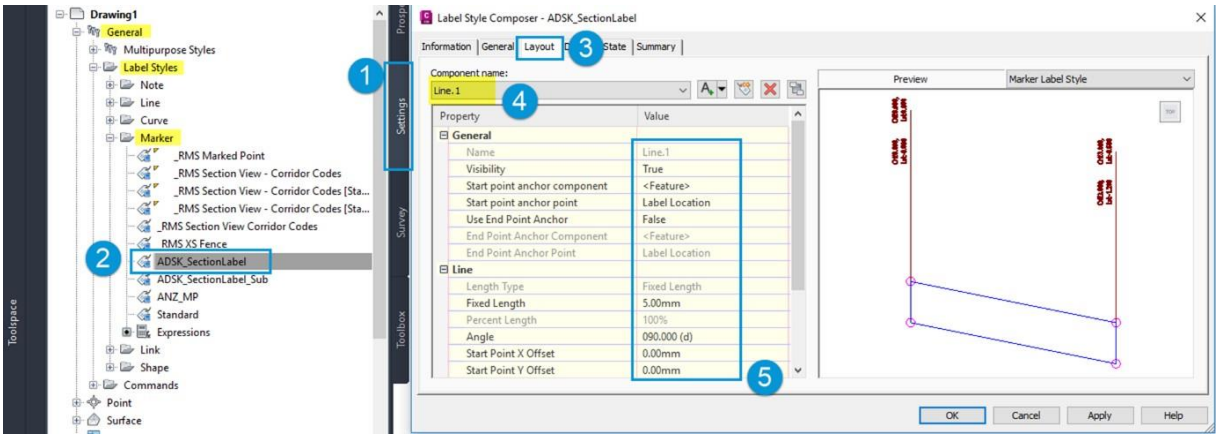


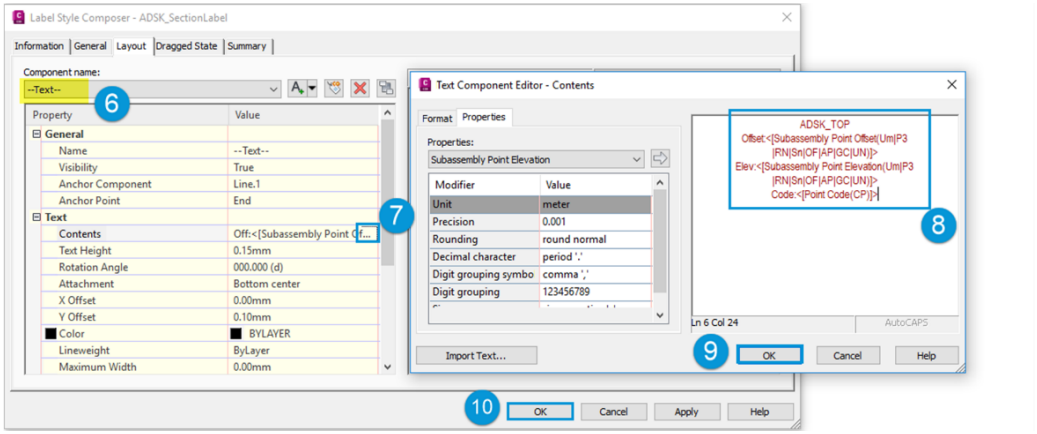
Figure 15 - Adding Label Styles to determine Section View annotation

5. In case old template, or other than an ANZ template is used the 'ADSK_SectionLabel' and 'ADSK_SectionLabel_Sub' marker label styles must be created:
   a. Go to General > Label Style > Marker.
   b. Update or Create a new style called 'ADSK_SectionLabel' or copy from ANZ template.
   c. Setup the line component.



d. Setup the text component, Copy and paste the codes below.

ADSK_TOP
Offset:<[Subassembly Point Offset(Um|P3|RN|Sn|OF|AP|GC|UN)]>
Elev:<[Subassembly Point Elevation(Um|P3|RN|Sn|OF|AP|GC|UN)]>
Code:<[Point Code(CP)]>



e. **NOTE**: If 2020 or older ANZ templates used the first line of the above text, 'ADSK_TOP' must be added as the first line in the label text, otherwise the tool won't recognise the labels!

f. If needed to use **'ADSK_SectionLabel_Sub'** repeat similar steps a-d above.

6. Check system variable 'Measurement' to be 0 for imperial and 1 for metric.

4.4 Section View Styles

In the Section View Styles dialog, adding the text string '#XYZ' to the description box annotate the master baseline (alignment) label just above the datum (LHS)

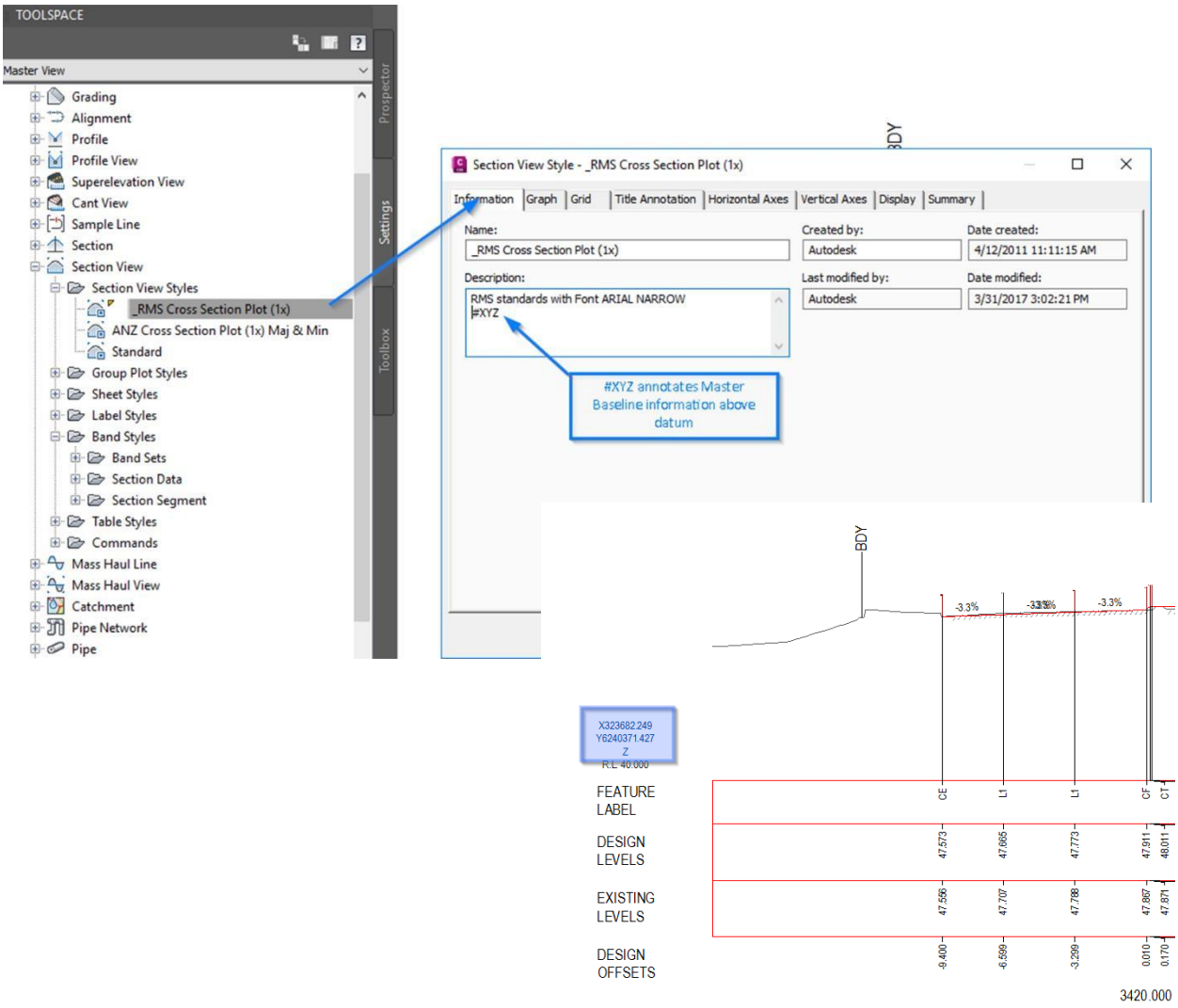


Figure 16- Adding XYZ annotation to Section View

4.5 Section View Data Bands

The SectionLabel add-in annotates all specified text values within existing Section View Data Bands, including labelling the existing surface at the same ‘cut’ locations, specified by the user. To avoid excessive user-interface, the program is hard-coded to search through all Section View Data Bands in your DWG file, and return text information (height, style etc.) that matches any of the following naming criteria. Note the data band labels only have to contain any of the following text strings and is not case sensitive.

1. Name the Data Bands in accordance with the following criteria

   Section View – Band Styles – Section Data - Data Band Names

   - Feature Lines / Codes
     - ‘FEAT’
     - ‘LABEL’
     - ‘CODE’
   - Design Levels
     - ‘DESI’
     - ‘PROP’
   - Existing Levels
     - ‘EXISTING’
     - ‘NATU’
   - Level Difference
     - ‘DIFF’
   - Offset
     - ‘OFF’
     - ‘DIST’
   - Subgrade/Datum
     - ‘SUB’
     - ‘STRAT’
     - ‘DATUM’

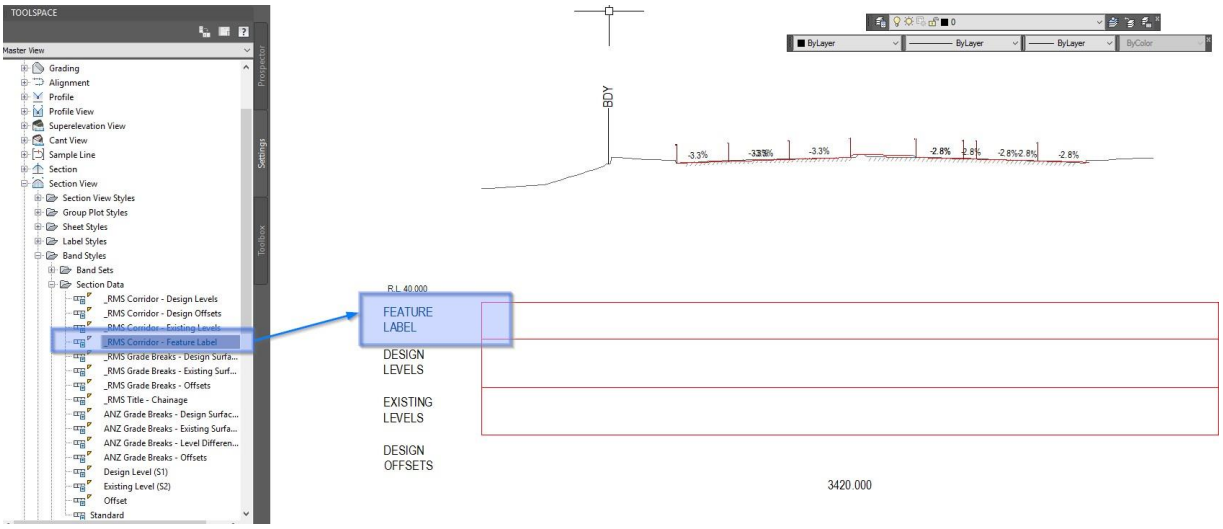


Figure 17- Data Band Naming Convention

2. In the Section Data Band Style dialog, edit the Data Band text style through the ‘Summary’ tab – Band Details – Band Text Style.

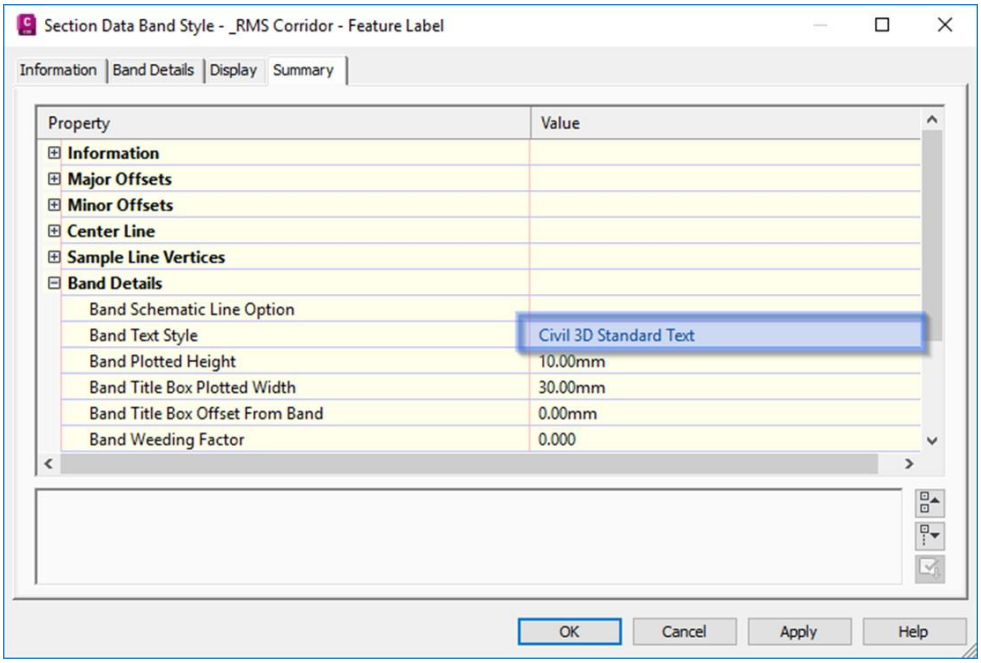


Figure 18 - Edit Data Band Text Style

3. In the Section Data Band Style dialog, edit the Data Band text height through the ‘Band Details’ tab – Grade Breaks – Compose Label.

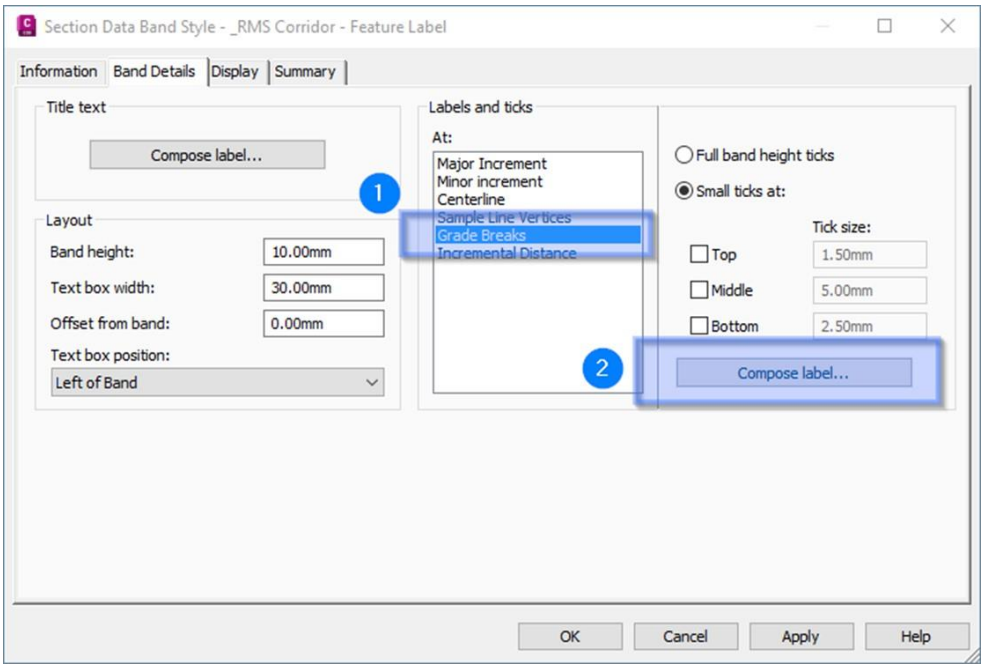


Figure 19 - Edit the Data Band Text Height (through Grade Breaks)

In the Label Style Composer, add a Text Component, and change its text height value. The add-in will read this value and set the text heights for the data band.

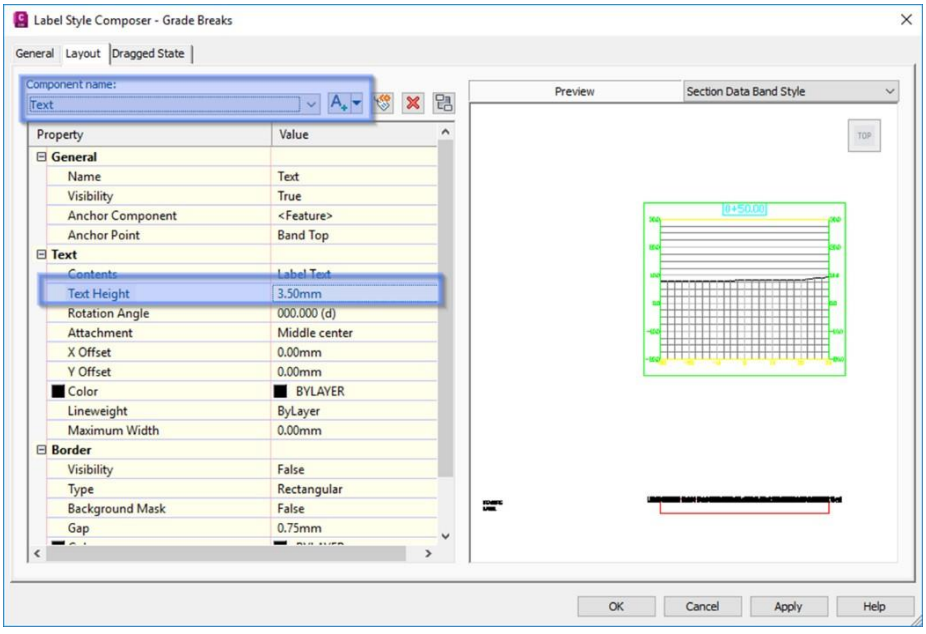


Figure 20 - Changing the Data Band Text Height property

4. Inside the Section Data Band Style dialog, adding the text string '#NoTicks' into the Description will remove ticks from the Data Band

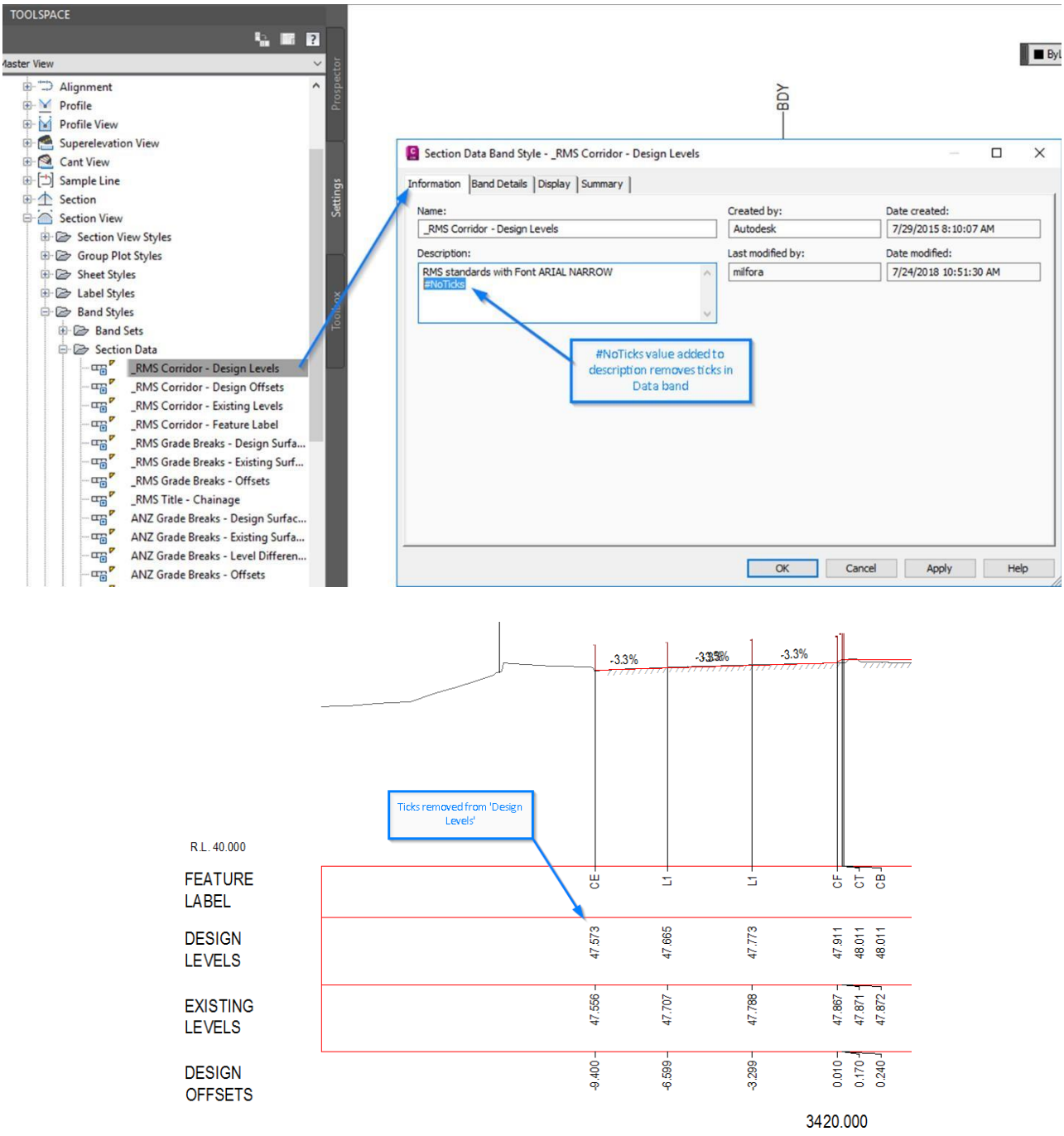


Figure 21 - Remove ticks from a Data Band

4.6 Surfaces

The SectionLabel add-in annotates an existing (or natural) surface at the same ‘cut’ locations as specified by the user. To avoid excessive user-interface, the program is hard-coded to search through all TIN surfaces in your DWG file and return the first surface that matches any of the following naming criteria. Note the surface only has to *contain* any of the following text strings and is not case sensitive.

- ‘EX’
- ‘EG’
- ‘GROU’
- ‘TERR‘
- ‘NGL’
- ‘TX’
- ‘SURV’
- ‘NATU’

For example, a surface called ‘*Existing Ground’* will be returned, as it contains ‘EX’ and ‘GROU’ within the name.

5.0 Civil 3D Genio2D

Genio2D allows users to take a 3D Genio import (from the Autodesk® Import-Export Extension for GENIO) and create a flattened 2D version of the file for Xref underlays and CAD exports.

This add-in will convert all 3D elements based on layer and object type. 3D Linework and COGO points are all converted to their relative 2D polyline and block counterparts through a text mapping file (*.txt)

GENIO (General Input-Output) is a text-based file format developed for exchanging data between MOSS/MX and other design packages.

The current version of the product is setup for RMS workflows (although the add-in can be customized to suit any region).

Future releases will include functionality for other regions.

5.1 Prerequisites

Prior to running the Genio2D add-in, the following steps are required

- Create a new drawing using the default survey template. The template must contain all relevant layers and block definitions to match the mapping file.
  The default survey template for the RMS Country Kit is in the user's Local 'AppData' folder (%LocalAppData%\Autodesk\C3D <version>\enu\Template)
  - _AutoCAD Civil 3D 2019 ANZ Survey_RMS.dwt
- A Genio Import tables mapping file is required for the initial Genio file import.
  C:\ProgramData\Autodesk\C3D <version>\enu\Data\Import Export Extension for GENIO\
  - 'Genio Import Survey RMS No Layer Prefix.tbl'
- A Genio2D mapping file is required to successfully run the add-in. The default table is located in
  C:\ProgramData\Autodesk\C3D <version>\enu\Data\ToolBox\ANZ\Settings\
  - 'genio_import_app_settings_2D.txt'

5.2 General Notes

- Prior to running the Genio2D add-in, it is required to have a drawing open that contains a 3D survey model that has been imported via the GENIO Import module

5.3 Loading

Navigate to the Toolspace – Toolbox - Australia and New Zealand Reports Manager – ANZ Tools – Genio 2D, and either right-click and select 'Execute' or double-click the left mouse button to run the command.

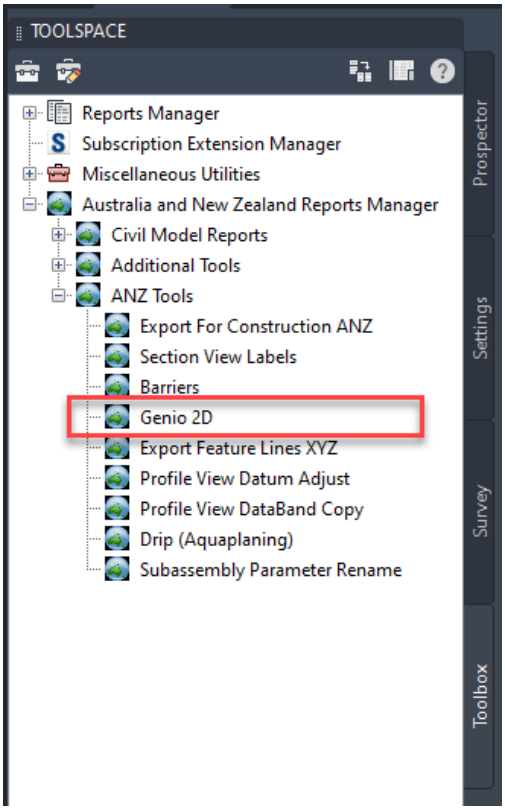


Figure 22: Genio 2D Loader

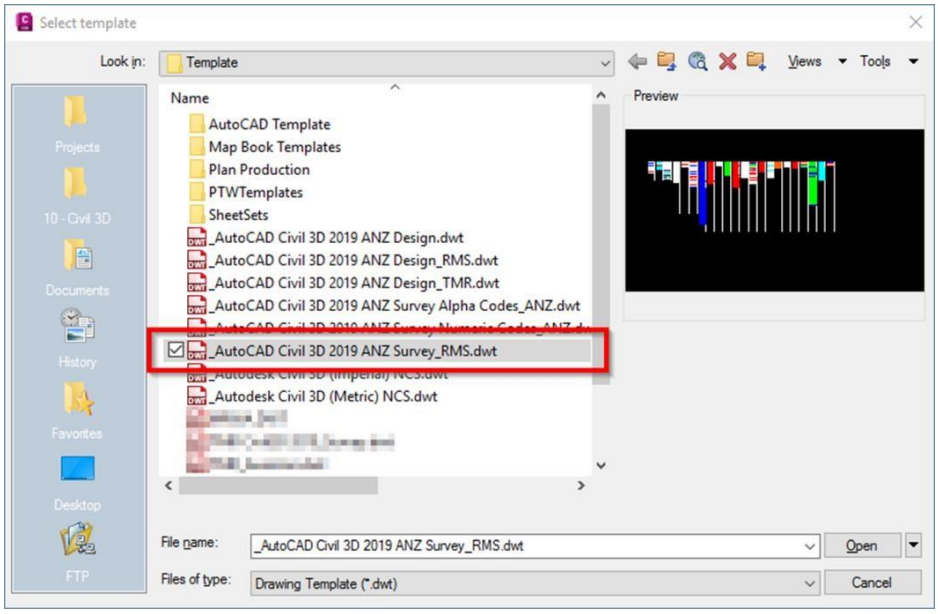
5.4 Process

5.4.1 Create a new drawing

Create a new file using the default survey template (File – New). This DWT should will contain the layers and block for local standards.

For example, the image below shows a new file created from template '*_AutoCAD Civil 3D 2019 ANZ Survey_RMS.dwt*'

Delete any linework and blocks from the new drawing, as these are at origin (0,0) and for display purposes only.



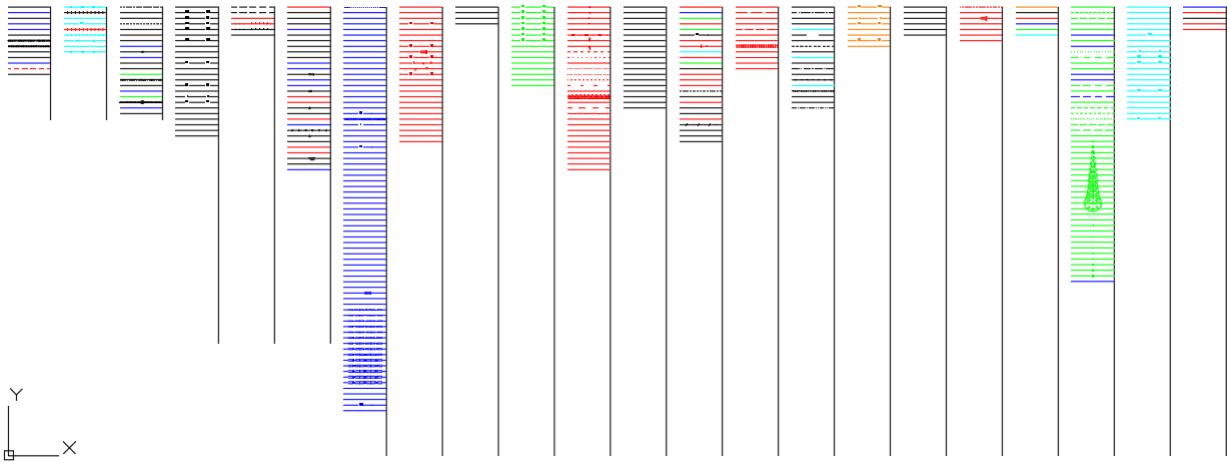


Figure 23: New file with survey template

5.4.2 Import a GENIO file

The Autodesk® Import-Export Extension for GENIO is a separate add-in provided with Civil 3D to subscription customers, and can be downloaded from the user's Autodesk Account page (https://manage.autodesk.com/)

The image below shows the GENIO extension on the Autodesk Accounts page

- https://manage.autodesk.com/
- Login
- Product Updates
- Search for 'GENIO'
- Download (if available)
- View Release Notes (includes installation guide)

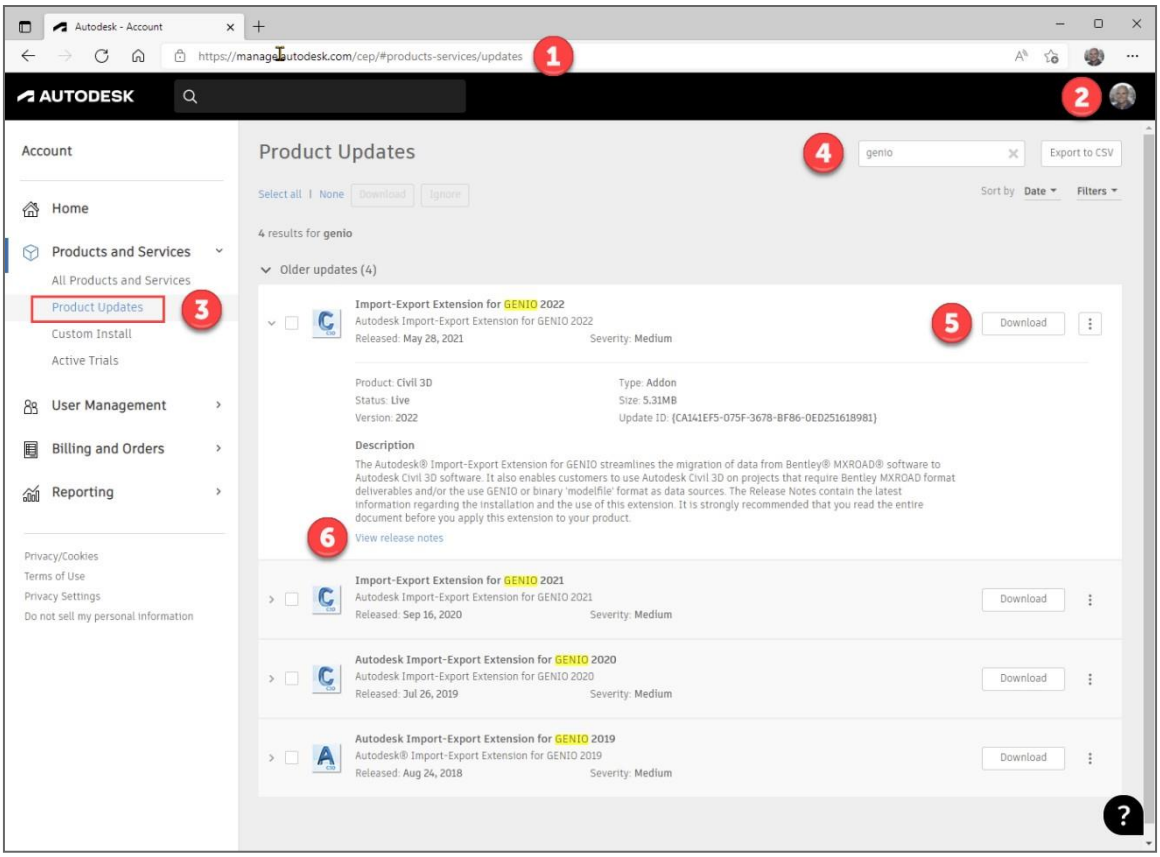
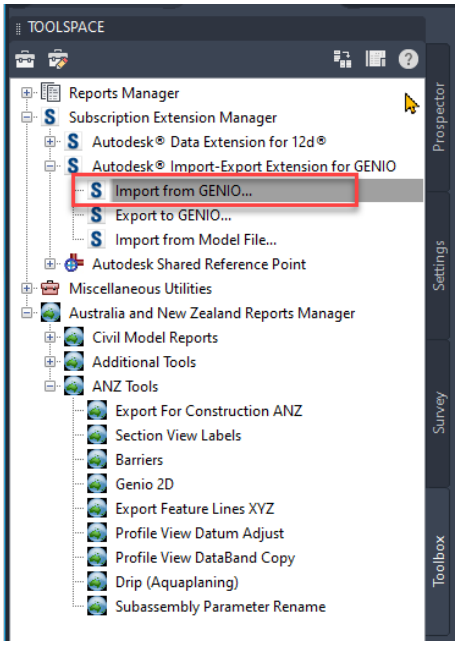


Figure 24: GENIO download from Autodesk Accounts page

- From the Toolbox, navigate and select ‘Subscription Extension Manager – Autodesk® Import-Export Extension for GENIO – Import from GENIO…’



- Update or check the ‘GENIO Import Options’ tab, and load the String Label Layer Table ‘*Genio Import Survey RMS No Layer Prefix.tbl*’, which is installed as part of the ANZ Country Kit

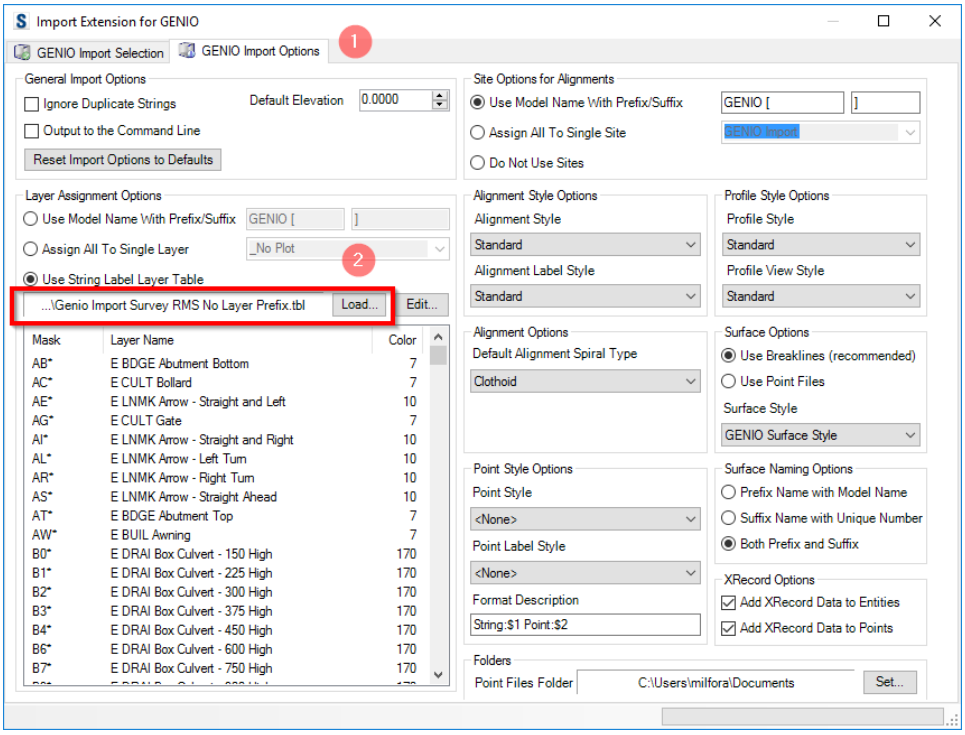


Figure 25: GENIO Import Options

- In the ‘GENIO Import Selection’ tab,
- Open the Genio file
- Select the Genio file from the left column (Models)
- Select the strings to import from the right column (Strings)
- Click ‘Import’

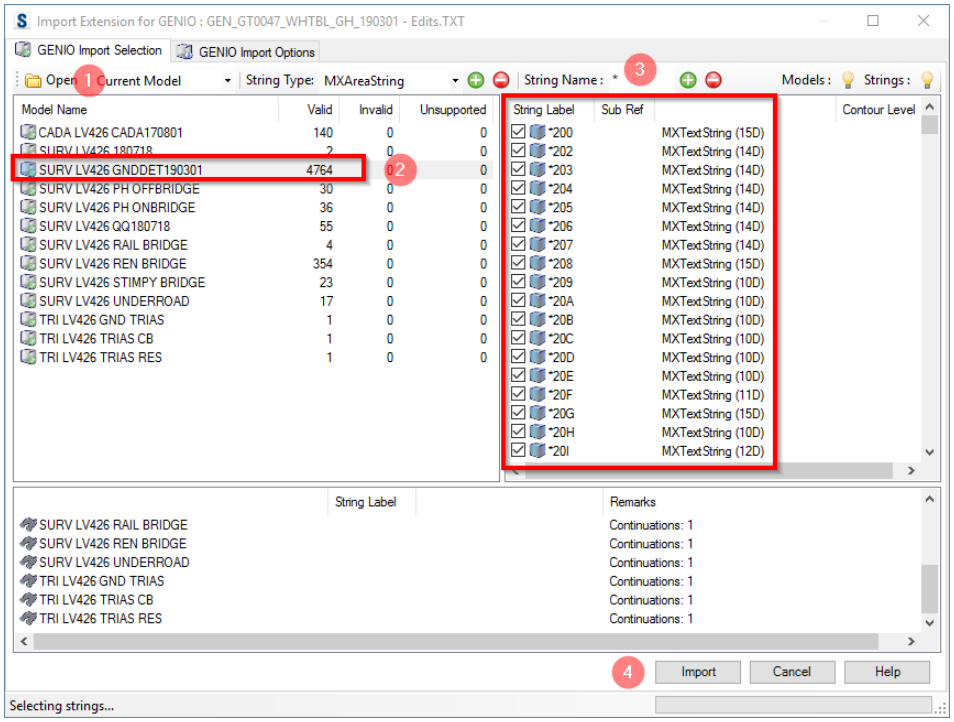


Figure 26: GENIO Import Selection

- The imported Genio provides 3D Polylines and COGO Points

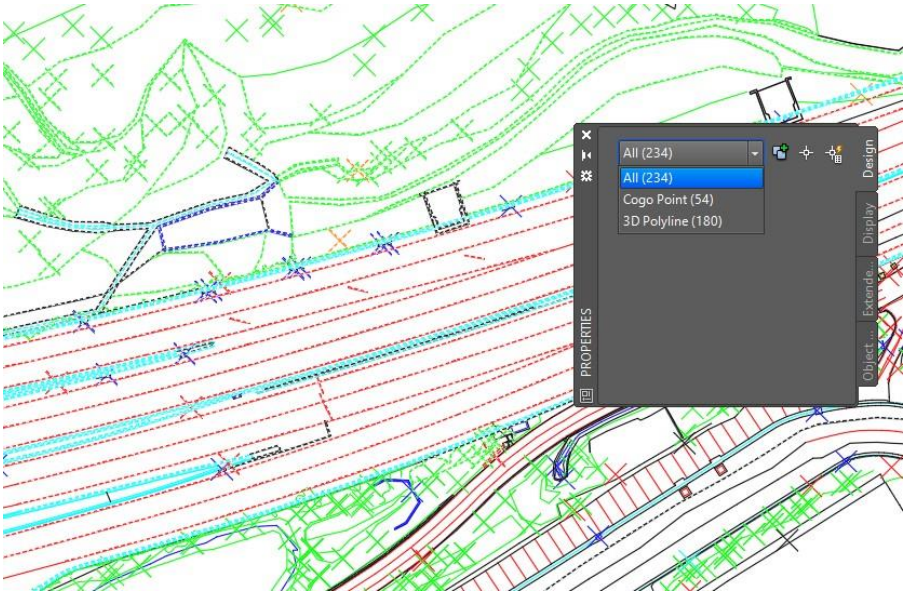
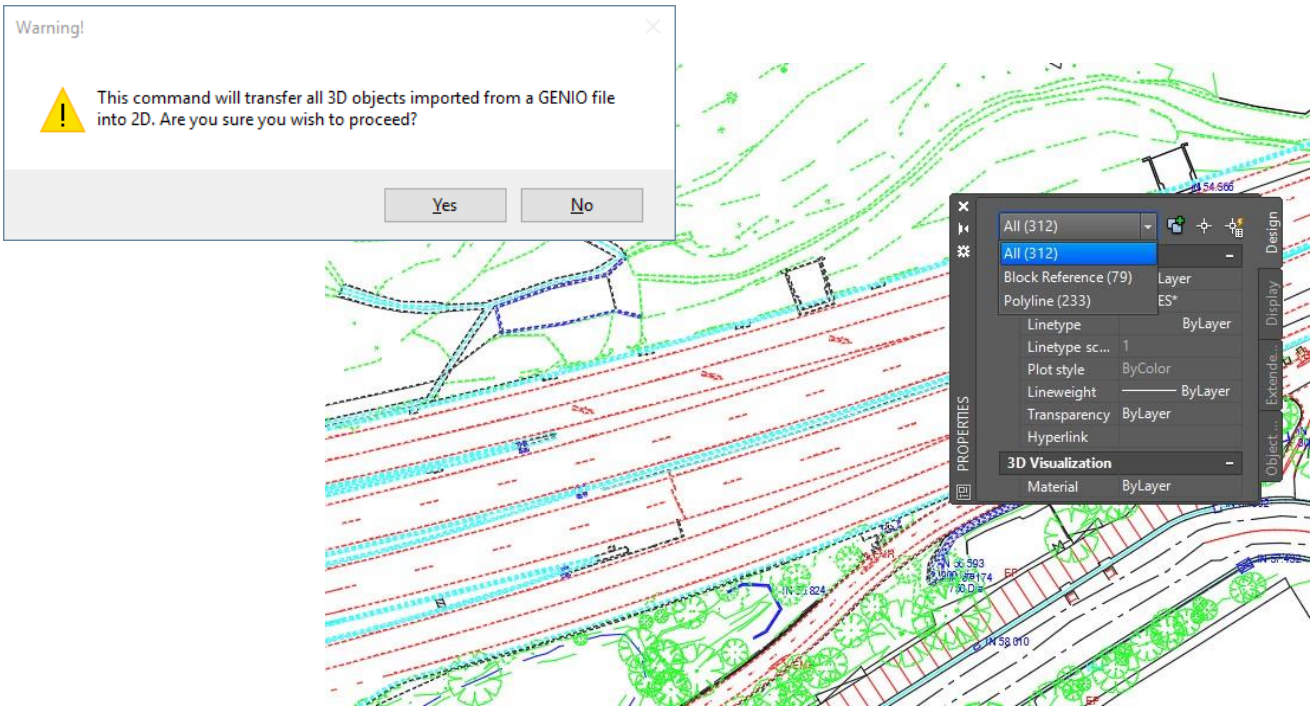


Figure 27: GENIO Import 3D Polylines and COGO Points

5.5 Convert the drawing to 2D

- Run the Genio2D add-in from the Toolbox (described above)
- A warning dialog will ask if you wish to proceed. Please note that all 3D polylines and COGO points are deleted (or converted) into a 2D Polylines, Block References and MText.
- Click ‘Yes’



- This applied mapping file is in a subfolder (called **\Settings**) under the add-in installation folder, for example, the executable file in:
- C:\ProgramData\Autodesk\C3D <version>\enu\Data\ToolBox\ANZ\ Autodesk.Consulting.Civil3D.Genio2D.<version>.dll

  Looks for a mapping file in the folder:

- C:\ProgramData\Autodesk\C3D <version>\enu\Data\ToolBox\ANZ**Settings**
- ‘genio_import_app_settings_2D.txt’

- Save the drawing and open it again to see all the block references applied correctly.
- This drawing is now ready to be used as a 2D representation of the survey Genio.

6.0 Civil 3D ExportForConstruction

ExportForConstruction allows users to export Corridor Feature Lines and Site Feature Lines into a new AutoCAD drawing as a 2D or 3D drawing.

6.1 Prerequisites

Prior to running the Export add-in, the following steps are required

- The drawings should contain either:
- One (1) Corridor containing feature line(s)
- One or more ground Feature Lines

6.2 General Notes

- The ExportForConstruction add-in will create an XML file, called '*ExportForConstruction.xml*', in the same folder where the current drawing is located. The XML file will read and write settings so when the program is re-run, the latest settings in the dialog are not lost.

6.3 Loading

Navigate to the Toolspace – Toolbox - Australia and New Zealand Reports Manager – ANZ Tools – Export For Construction ANZ, and either right-click and select 'Execute' or double-click the left mouse button to run the command.

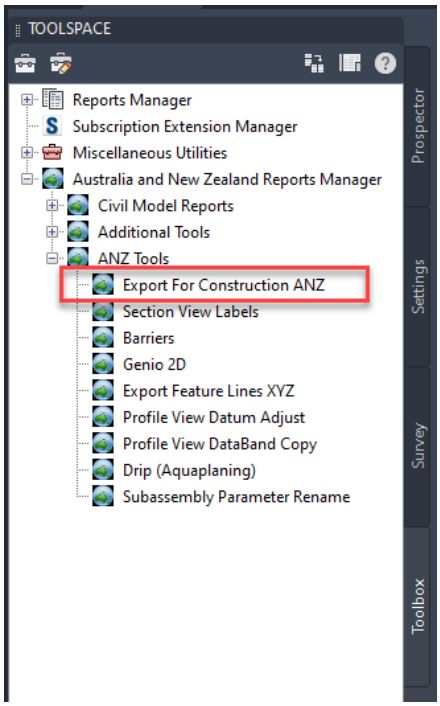


Figure 28: Export For Construction Loader

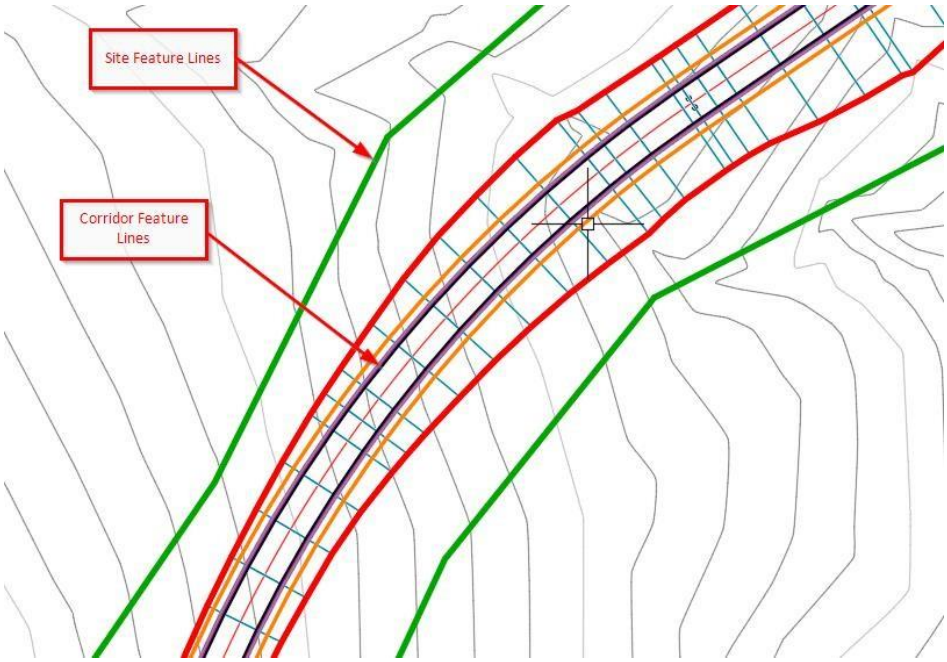
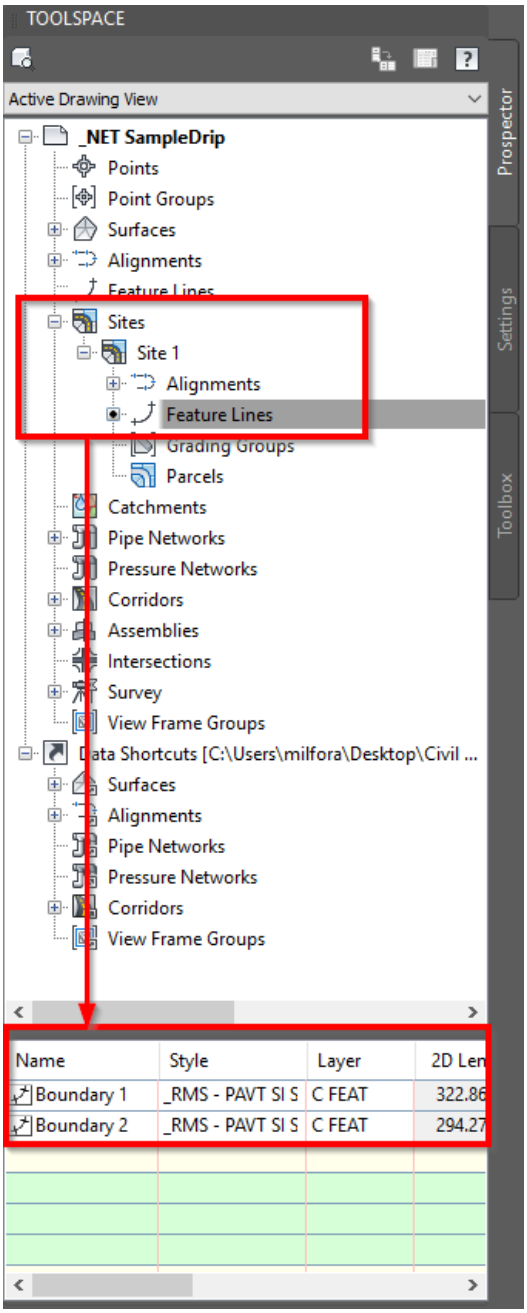
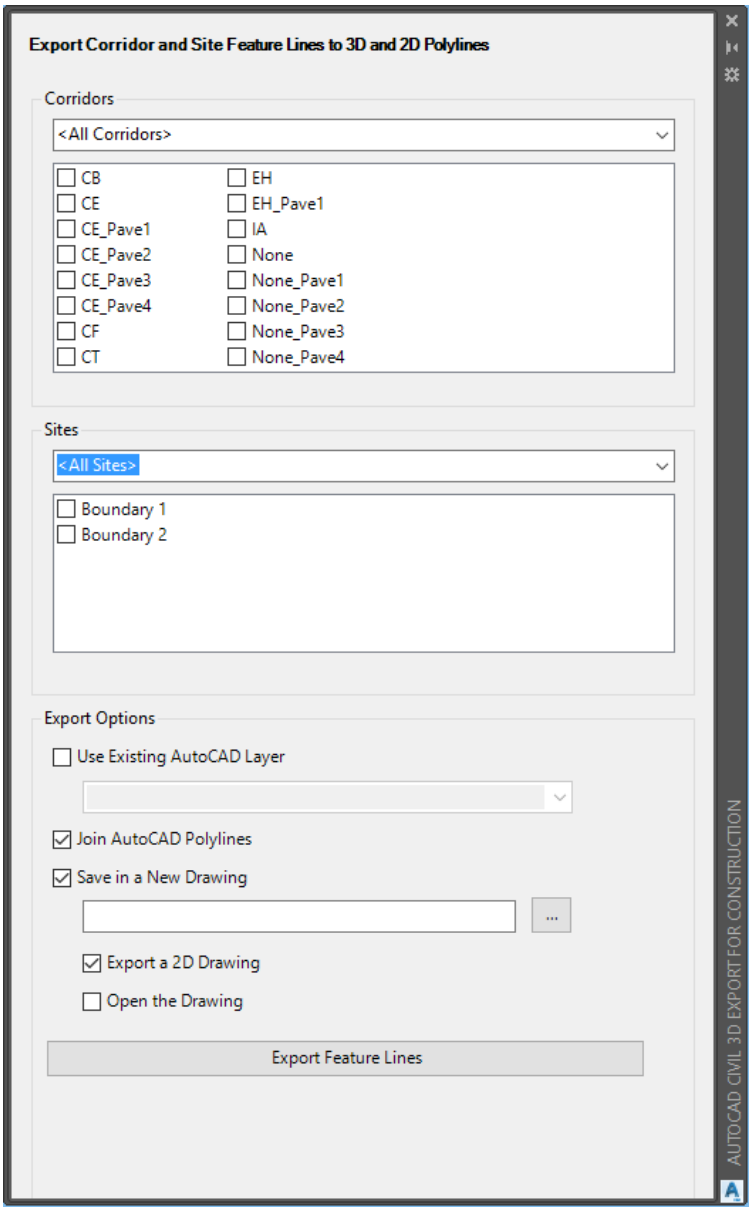


Figure 29: Corridor Feature Lines and Site Feature Lines

6.4 Process

Run the Genio2D add-in from the Toolbox (described above)





6.5 Corridors

The **ExportForConstruction** add-in will allow exporting from either multiple corridors or allow selection of a single corridor.

The drop-down <All Corridors> will combine the feature line codes for all corridors in the current drawing. Conversely, selecting a single corridor from the drop-down will display feature line codes for that specific corridor. Note that when changing the corridor selection in the drop-down, the checkboxes in the selection panel underneath will change also.

The check list boxes below the corridor selection displays the specific corridor's codes, which can be individually selected for export.

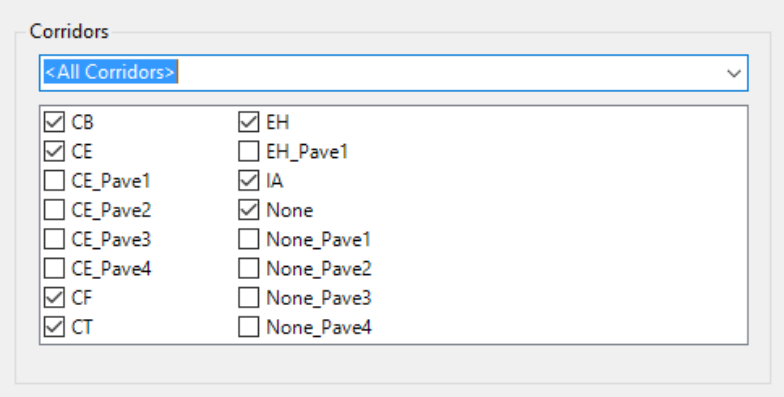


Figure 30: All Corridors selected with specific feature line codes

6.6 Sites

The drop-down <All Sites> will combine the feature line codes for all sites in the current drawing. Conversely, selecting a single site from the drop-down will display feature lines for that specific site. Note that when changing the site selection in the drop-down, the checkboxes in the selection panel underneath will change also.

The check list boxes below the site selection displays the specific site's feature lines, which can be individually selected for export.

Figure 31: All Sites selected with specific feature lines

6.7 Export Options

Several export options are available to customize the exports, including:

- Use Existing AutoCAD Layer
  Checking this box will enable a drop-down list allowing the selection of a custom layer. This option will force all exported 3d polylines onto the layer specified in the drop-down

- Join AutoCAD Polylines

  Checking this box will attempt to join adjacent 3D polylines based on endpoint proximity and the exported feature line code.
  Note: this option can take longer to process

- Save in a New Drawing
  Clicking the ... icon will open a 'Save As' dialog. Enter a new drawing name and click 'Save'
- Export a 2D Drawing
  Checking this option will create an additional 2D 'flattened' version of the export. The name given to the 2D version is the same as the name give from the Save option above, with a suffix '_2D' added.
- Open the Drawing
  Checking this option will open the new 3D drawing upon processing.

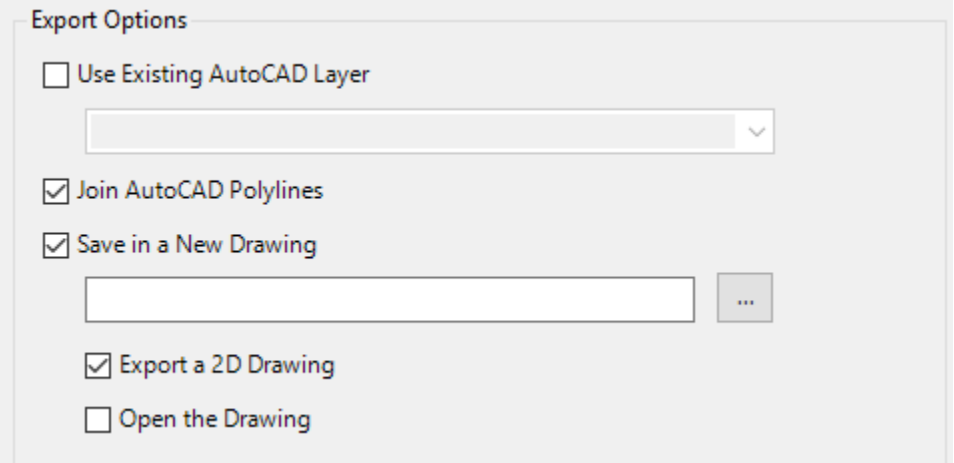


Figure 32: Export Options

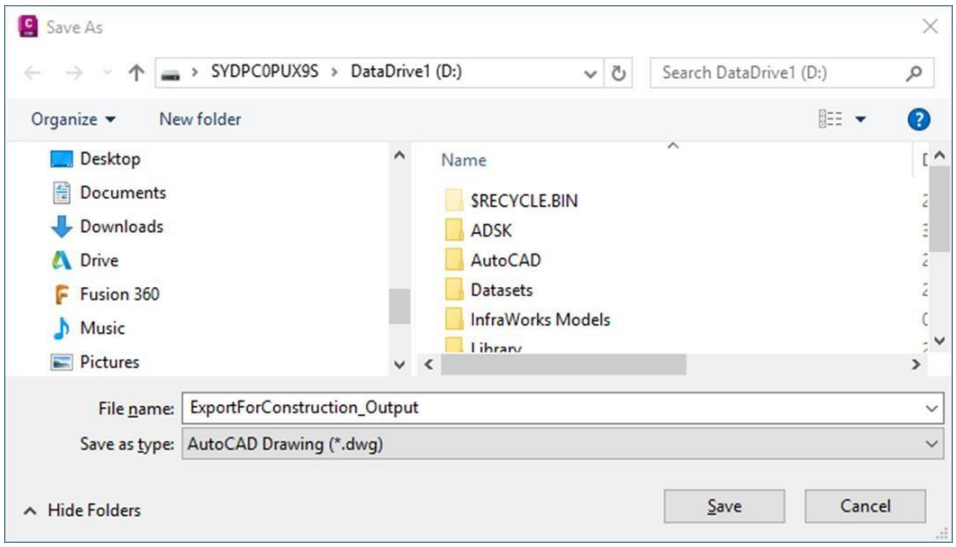


Figure 33: Save in a new drawing dialog

6.8 Export Feature Lines

This button will begin exporting the feature lines into new drawing(s)

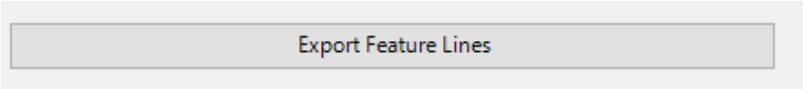


Figure 34: Export Feature Lines

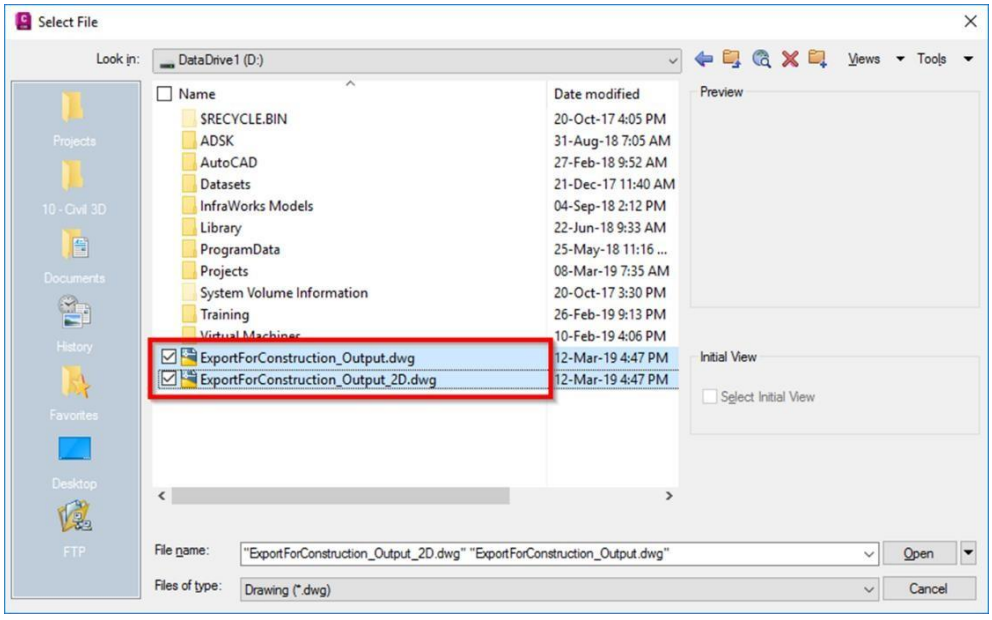


Figure 35: Resulting output drawings (3D and 2D)

7.0 Civil 3D Barriers

Civil 3D Barriers allows users to create custom safety barrier objects from Civil 3D Alignments as 3D AutoCAD solids within the design model, for use in design review and clash detection workflows.

Barrier systems currently available are Wire Rope (4-wire) and W-Beam barrier types.

Barrier terminals and posts are added at the ends of the alignment and at regular spacing's,respectively, and can be customized to local requirements.

7.1 Prerequisites

Prior to running the Barriers add-in, the following steps are required

- The drawings should contain:
- One (1) Alignment object defining the setout control of the barrier
- A Civil 3D Surface with the text characters 'BARR' in the name (not case sensitive). The add-in will search for and return the first Tin Surface containing the characters 'BARR', and use the surface levels to layout the 3D AutoCAD solid barrier objects.

7.2 General Notes

- The Barrier add-in creates Extended Data on each Alignment object in the model so that when the program is re-run, previous settings (barrier type, terminal type, post spacing etc.) are retained for future use.
- For AutoCAD blocks (Posts and Terminals) to be read into the Barrier dialog, a single instance of each block must exist in the drawing Model space prior to running the command. This is a limitation of the software and will be addressed in a future release.
- To add custom Terminals, create a 3D block containing the characters 'TERM' (not case sensitive)
- To add custom Posts, create a 3D block containing the characters 'POST' (not case sensitive)
- Sample 3D Terminal and Post 3D blocks can be found in the ANZ template drawing
- %LocalAppData%\Autodesk\C3D <Version>\enu\Template_AutoCAD Civil 3D <Version> ANZ Design_RMS.dwt

7.3 Loading

Navigate to the Toolspace – Toolbox - Australia and New Zealand Reports Manager – ANZ Tools – Barriers, and either right-click and select 'Execute' or double-click the left mouse button to run the command.

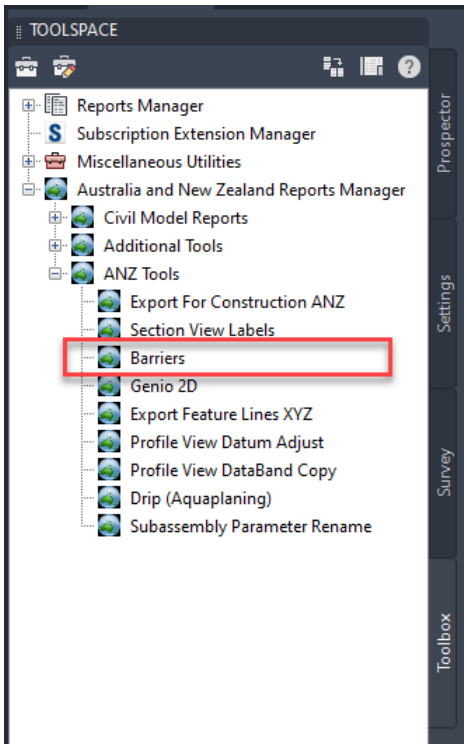


Figure 36: Barriers loader

Figure 37: Corridor surface and Alignments

7.4 Process

Run the Barrier add-in from the Toolbox (described above)

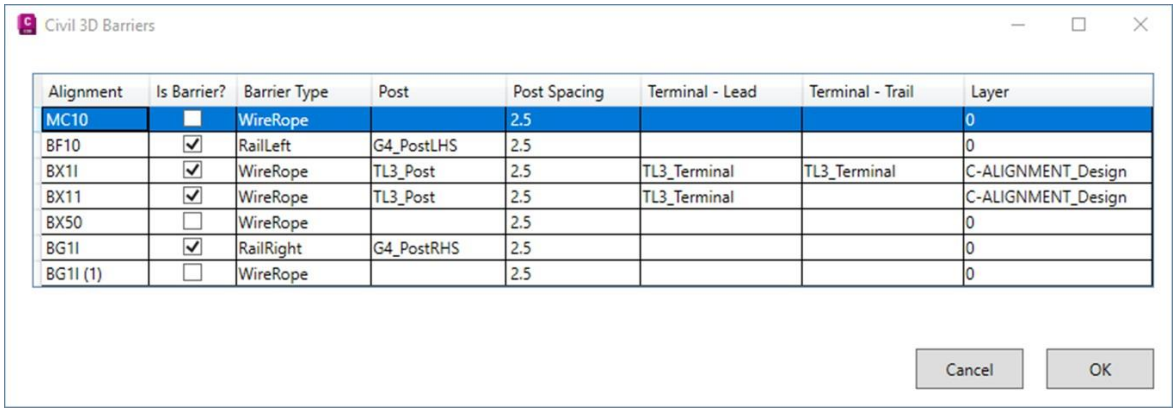
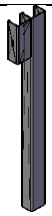
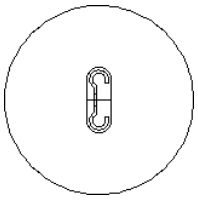
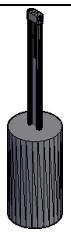
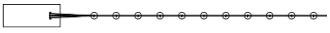
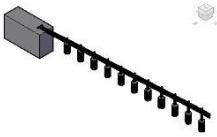


Figure 38: Civil 3D Barriers

The table below depicts the provided 3D blocks from the template file ' _AutoCAD Civil 3D <Version> ANZ Design_RMS.dwt'

	Block Name	2D View w/ Insertion	2D View	3D View
1	G4_PostLHS			
2	G4_PostRHS			
3	TL3_Post			
4	TL3_Terminal			

7.5 Civil 3D Barrier Options

Several options are available to customize the barriers, including:

- Alignment
  This column takes the name of the Civil 3D alignment. It is a read-only column. It is good practice to name alignments using a clear and concise naming convention.

- IsBarrier?

  Checking this box will enable the creation of the barrier 3D Solid objects along the alignment. An unchecked box will ignore the alignment object for processing

- Barrier Type

  The drop-down list enables selection of the barrier type, including:

WireRope	4-post Wire Rope barrier swept object
RailLeft	W-Beam swept object (Left side)
RailRight	W-Beam swept object (Right side)
None	Does not create a swept barrier

- Post

  Posts are 3D block objects that reside in the AutoCAD / Civil 3D Modelspace. The drop-down list enables selection of the barrier post type and is populated by searching through all block names in the drawing containing the characters ’POST’ (not case sensitive)

  To add a custom post, create a 3D block containing the characters ‘POST’ (not case sensitive)

- Post Spacing

  Setting the post spacing will array the selected posts along the alignment at the nominated interval.

- Terminal – Lead

  Terminals are 3D block objects that reside in the AutoCAD / Civil 3D Modelspace. The drop-down list enables selection of the barrier terminal type and is populated by searching through all block names in the drawing containing the characters TERM' (not case sensitive)

  To add a custom terminal, create a 3D block containing the characters 'TERM' (not case sensitive)

  The Lead terminal is applied to the start of the Alignment string and aligns the rotation to the bearing of the start point.

- Terminal – Trail

  The Trail terminal is identical to the Lead terminal described above.

  The Trail terminal is applied to the end of the Alignment string and aligns the rotation to the bearing of the end point.

- Layer

  Enables a drop-down list allowing the placement of the 3D barrier objects to a specific layer. On object creation, all 3D solid objects and block references for a specific alignment will be placed onto the layer specified in the drop-down.

8.0 Civil 3D Export Feature Lines XYZ

Civil 3D FeatureLineExport allows the export of selected Civil 3D Feature Lines to a single CSV file. The output report includes values such as Chainage, Easting, Northing and Elevation. Unlike the built-in report tools. 'i.e. Corridor Points Report', the FeatureLineExport sorts the outputs by object type, not by chainage, for use in downstream export compatibility.

8.1 General Notes

- The Barrier add-in creates Extended Data on each Alignment object in the model so that when the program is re-run, previous settings (barrier type, terminal type, post spacing etc.) are retained for future use.
- For AutoCAD blocks (Posts and Terminals) to be read into the Barrier dialog, a single instance of each block must exist in the drawing Modelspace prior to running the command. This is a limitation of the software and will be addressed in a future release.
- To add custom Terminals, create a 3D block containing the characters 'TERM' (not case sensitive)
- To add custom Posts, create a 3D block containing the characters 'POST' (not case sensitive)
- Sample 3D Terminal and Post 3D blocks can be found in the ANZ template drawing

  %LocalAppData%\Autodesk\C3D <Version>\enu\Template_AutoCAD Civil 3D <Version> ANZ Design_RMS.dwt

8.2 Loading

Navigate to the Toolspace – Toolbox - Australia and New Zealand Reports Manager – ANZ Tools – Export Feature Lines XYZ, and either right-click and select ‘Execute’ or double-click the left mouse button to run the command.

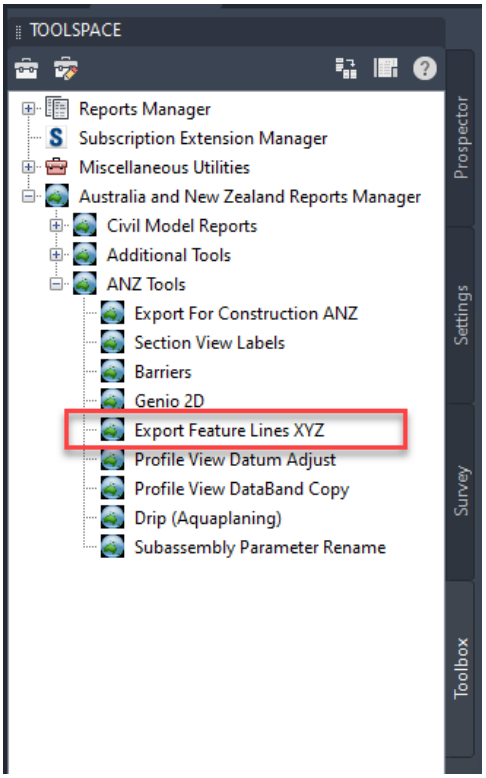


Figure 39: Barriers Export Feature Lines XYZ loader

8.3 Process

Run the Export Feature Lines XYZ add-in from the Toolbox (described above)

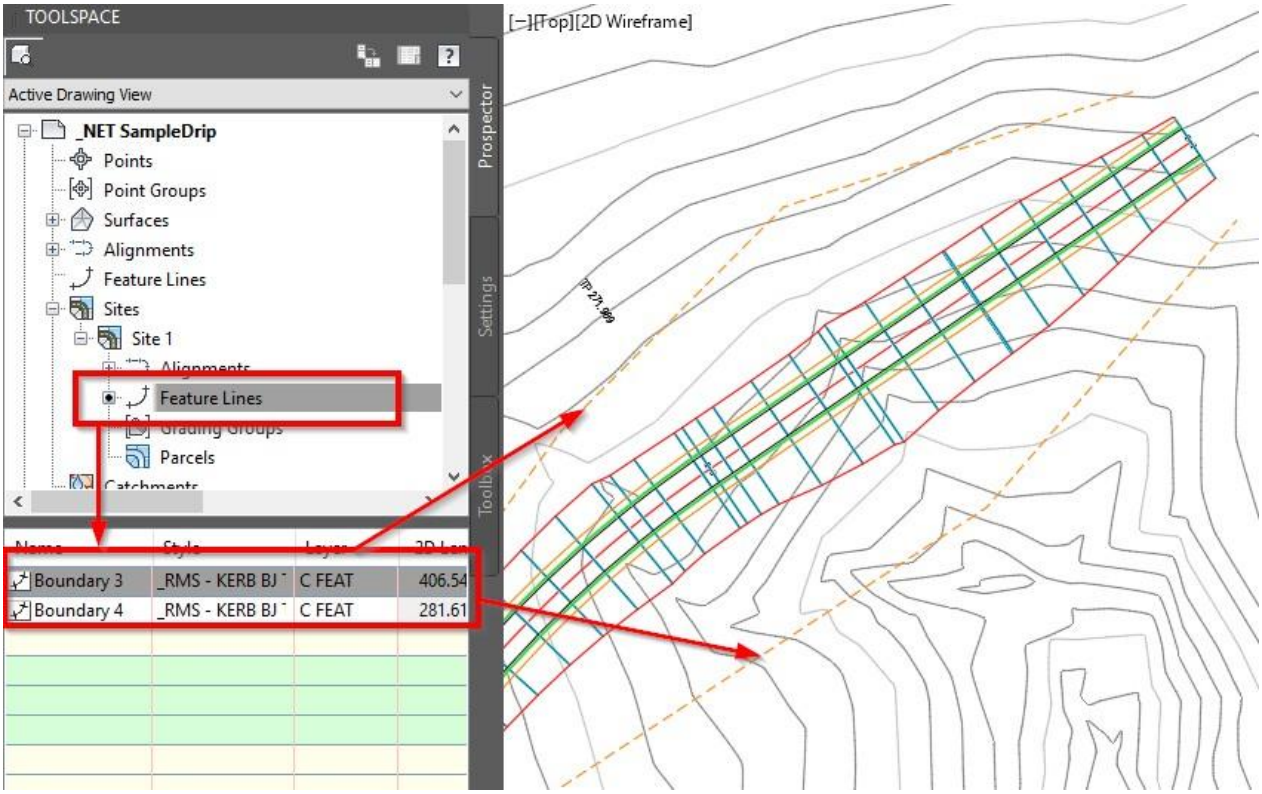
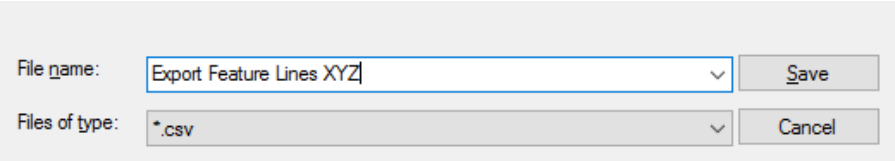


Figure 40: Export Feature Lines XYZ

- Select objects on-screen.

Figure 41: Select Feature Lines

- Select a folder and filename to save the CSV file



- Open the CSV file to view / edit

	A	B	C	D
1	Civil 3D Feature Line Export			
2				
3	FeatureLine Name: Boundary 4			
4	Chainage	X	Y	Z
5	0	346.418	1141.961	0
6	82.443	292.226	1079.832	0
7	214.779	181.609	1007.189	0
8	281.619	152.6	946.972	0
9				
10	FeatureLine Name: Boundary 3			
11	Chainage	X	Y	Z
12	0	87.983	866.088	0
13	57.156	102.928	921.255	0
14	116.297	125.246	976.024	0
15	165.959	145.596	1021.325	0
16	258.731	200.099	1096.4	0
17	327.013	248.234	1144.828	0
18	406.546	323.785	1169.68	0

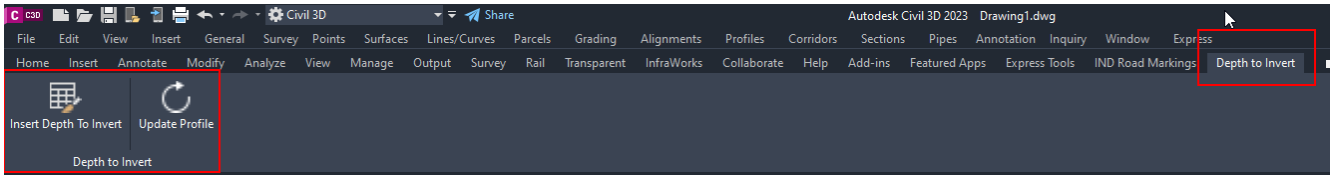
9.0 Profile Band Style

This feature allows user to add depth between rim elevation/finished ground level and the invert level of the pipe at regular intervals.To facilitate “Depth to Invert” band following functionality has been added to Civil 3D ANZ Country Kit 2024.

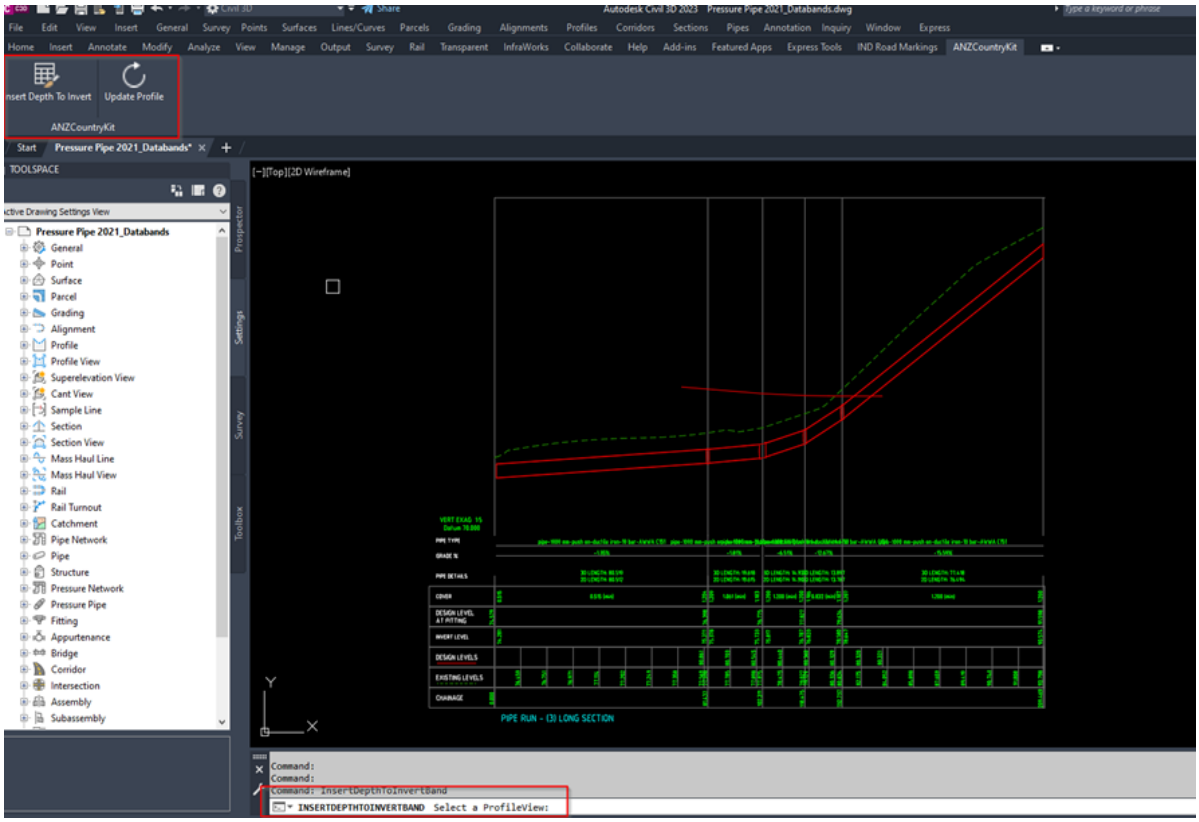
The additional ribbon is added to the toolbar.

User can access that ribbon for adding depth to invert band.

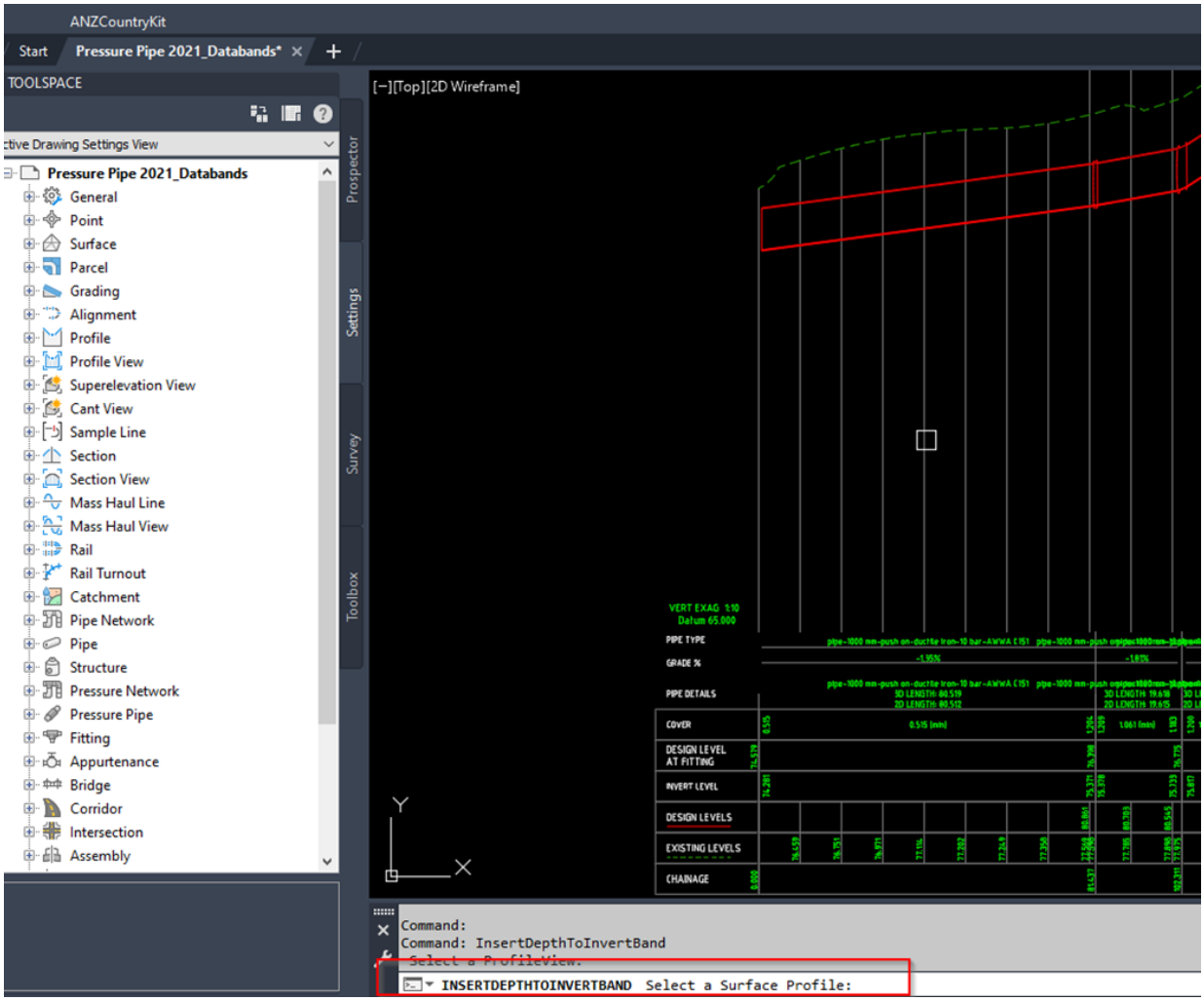
- Click “Insert Depth To Invert” or Type “INSERTDEPTHTOINVERTBAND”.



- Select profile view then select required profile view.

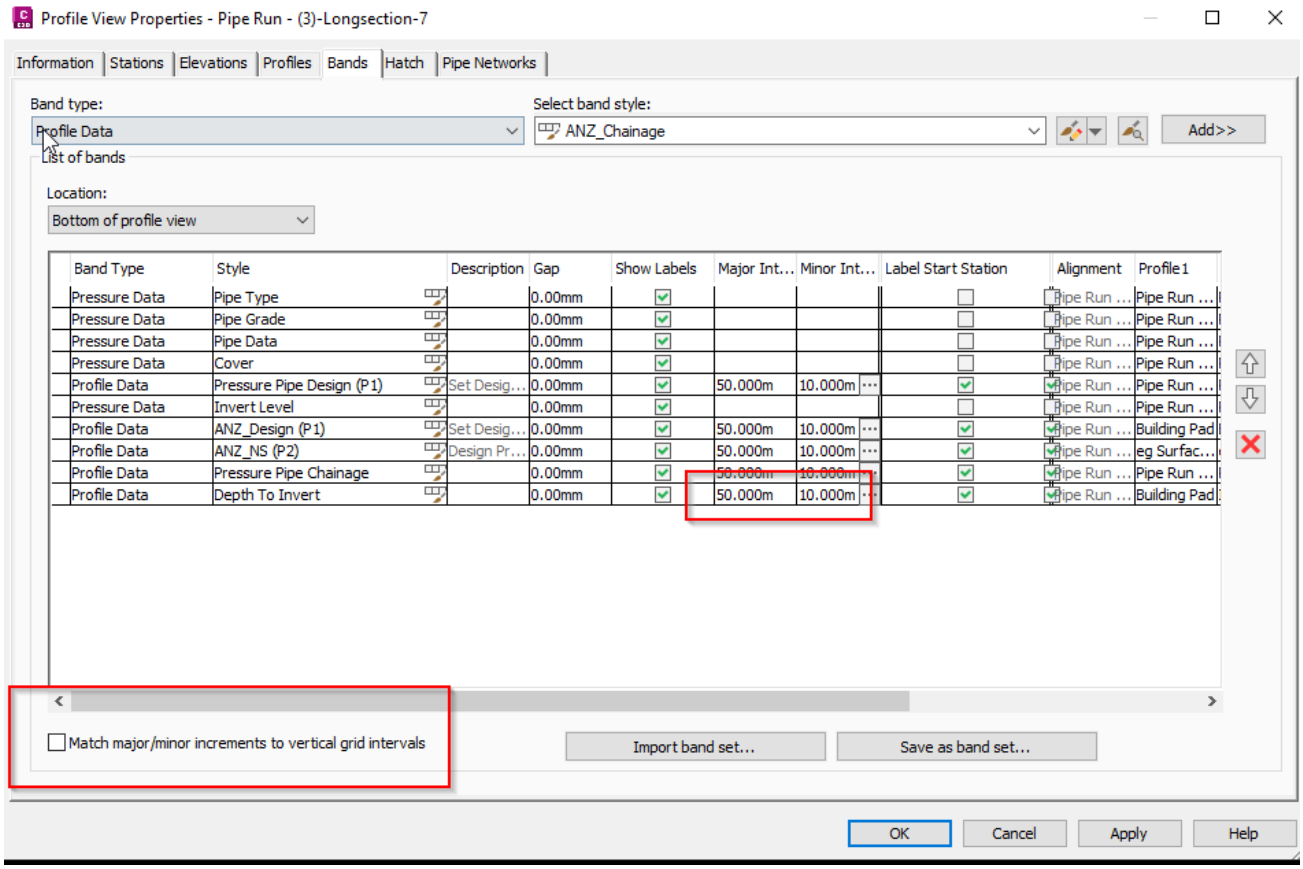


- Select the required surface.

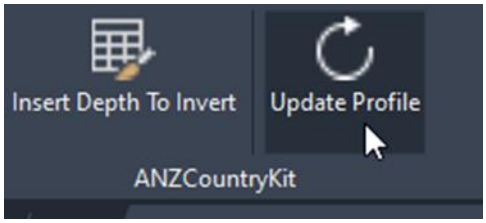


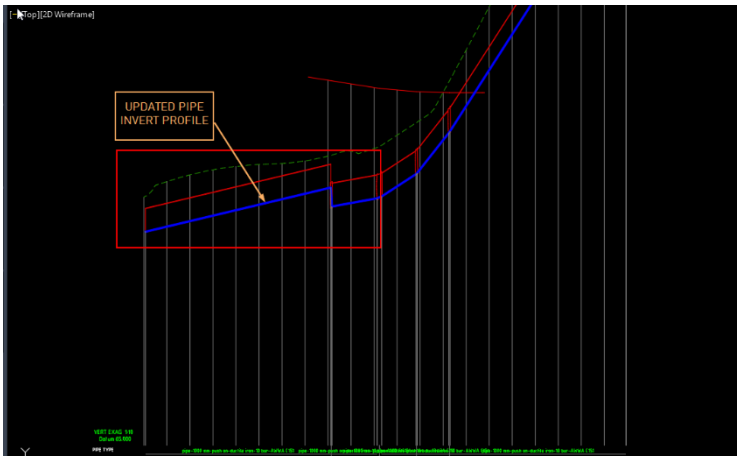
- Requested band style will get added to the profile view.

- For adding the depth to invert at regular intervals user need to untick Match major/minor increments to vertical grid intervals then the user can change intervals according to requirement.

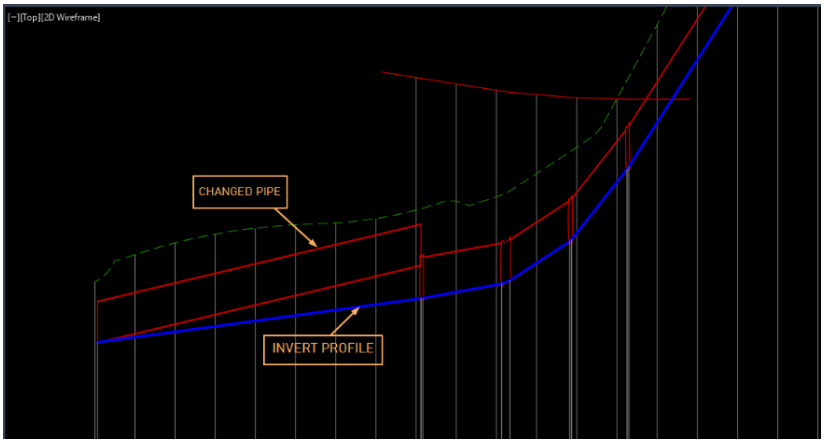


- After adding the band if the user changes any pipe or structure then the user needs to add the command “UPDATEPROFILE” button available near depth to invert in ribbon,then the profile will automatically update to the changed invert levels and the same will be reflected in band .





(The following images contain exaggerated changes in pipes just to visualize the functionality of the command)

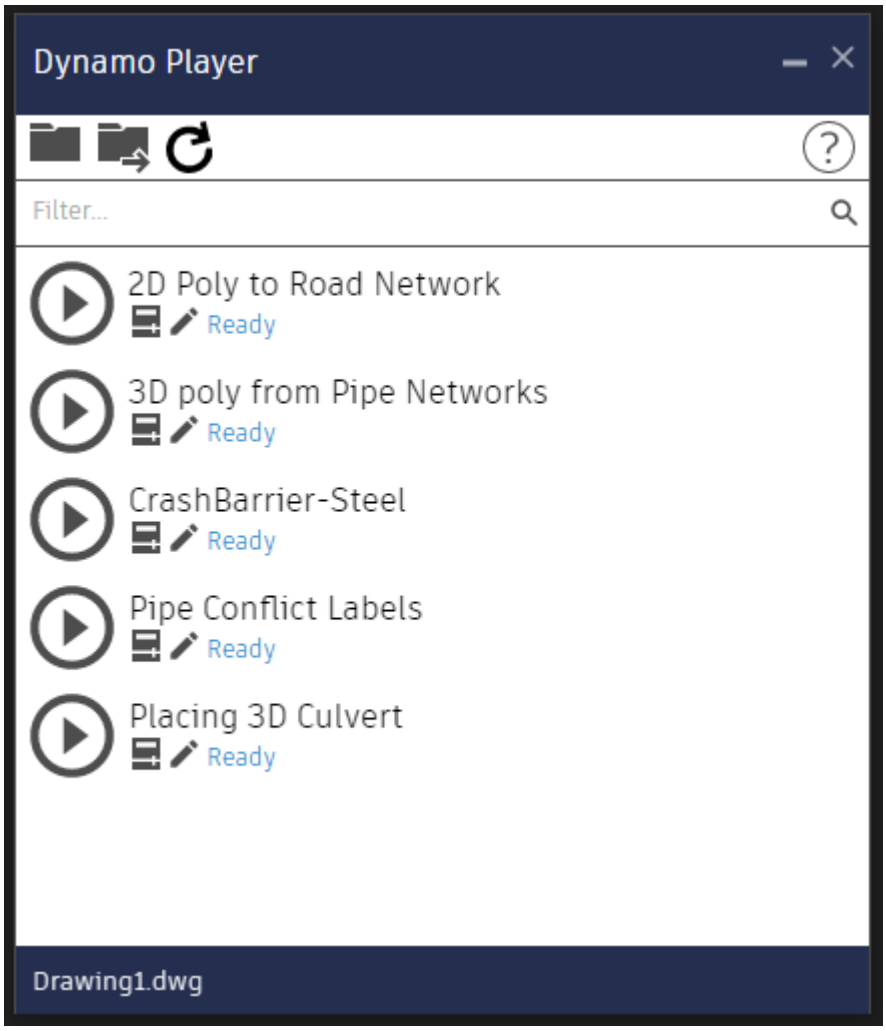


10.0 Dynamo Scripts

Following dynamo scripts have been incorporated in the ANZ Country Kit 2024.

All these dynamo scripts are placed at below path.

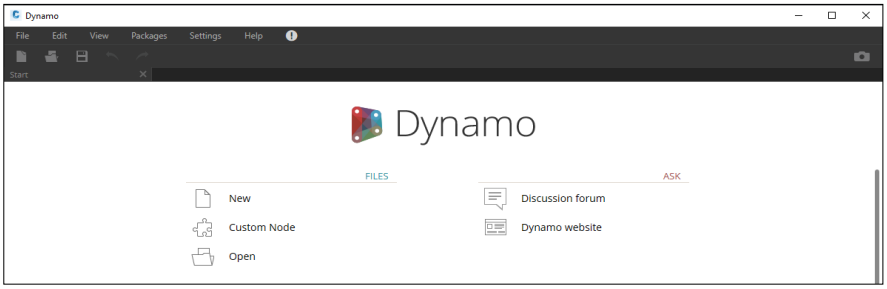
"C:\Program Files\Autodesk\AutoCAD 2024\C3D\Sample\Dynamo"



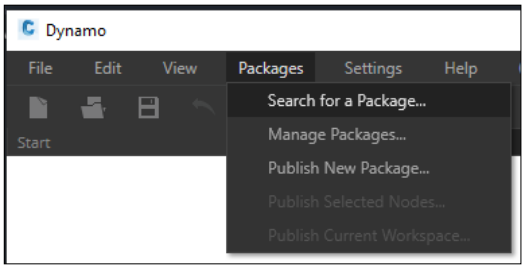
10.1 .Pre-requisites

- Make sure you have the required version of iron python and .NET Framework.
- Make sure the required Civil3DToolkit v 1.1.16 is installed, if not installed dynamo will inform the user about the missing package and the user can install the same by clicking on it.
- The following scripts are compatible with 1.1.16 version and 1.1.32 version too.
- If you do not have the required packages then follow the below steps.
- Go to manage >> Go to Visual Programming.
- Click on Dynamo.

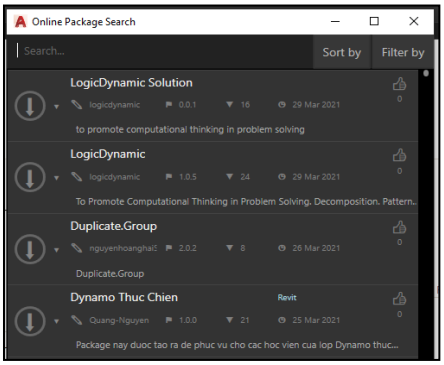
- Below window will appear.



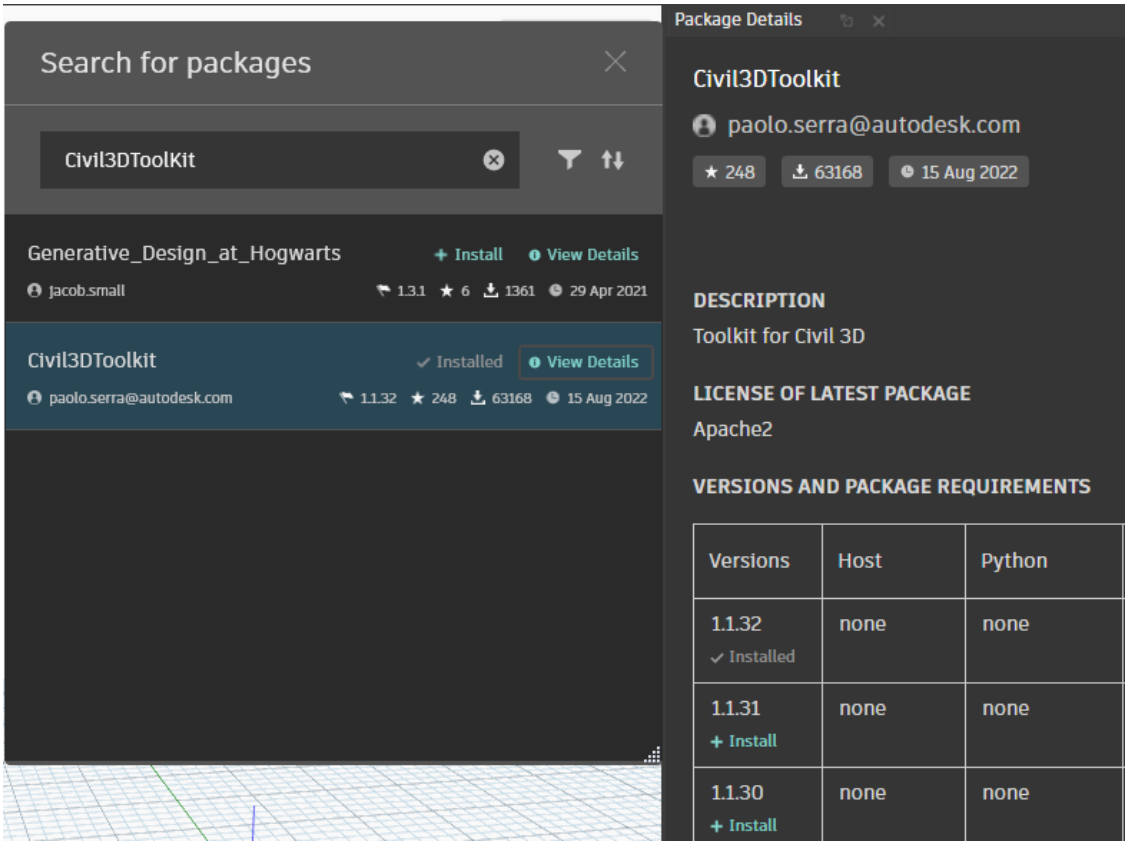
- Go to Packages >> Select “Search for a Package…”



- Below window appears.



- Search for **“Civil3DToolkit**” and select the “**Civil3DToolkit**” from result and install the version **1.1.32** from list.

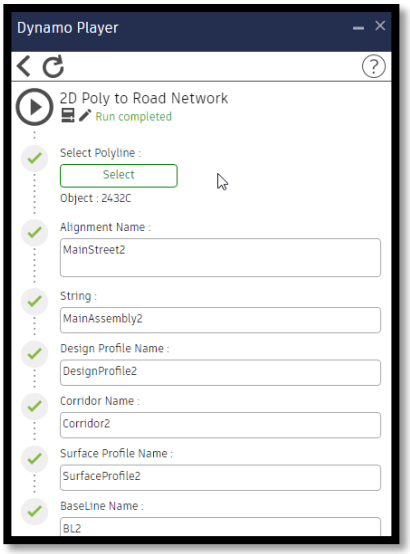


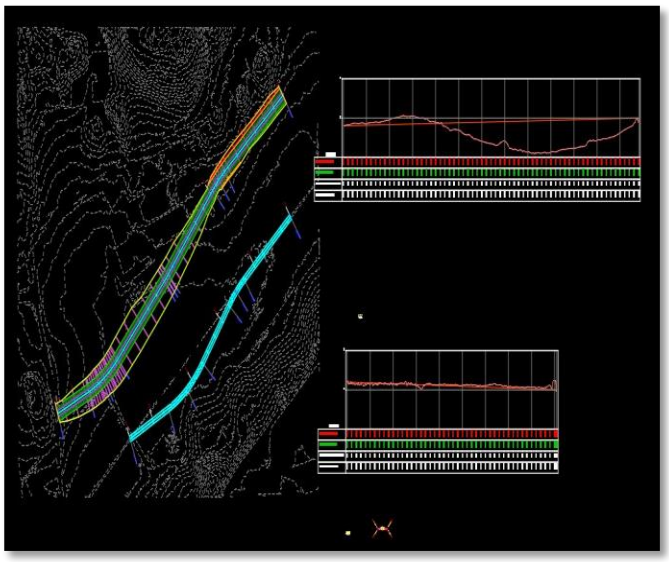
- Restart Civil 3D 2023 application.

10.2 Converting 2D Polyline to Road Network

Script Name: 2D Poly to Road Network.

This script is basically developed to create a quick road corridor from 2D polyline. It will create alignment, profile, and corridor using the default design set and styles. This created road corridor can be modified later as per user requirements.





To use these scripts user should have a minimum of one ground surface in the drawing file where he wants to create a road network from selected polylines.

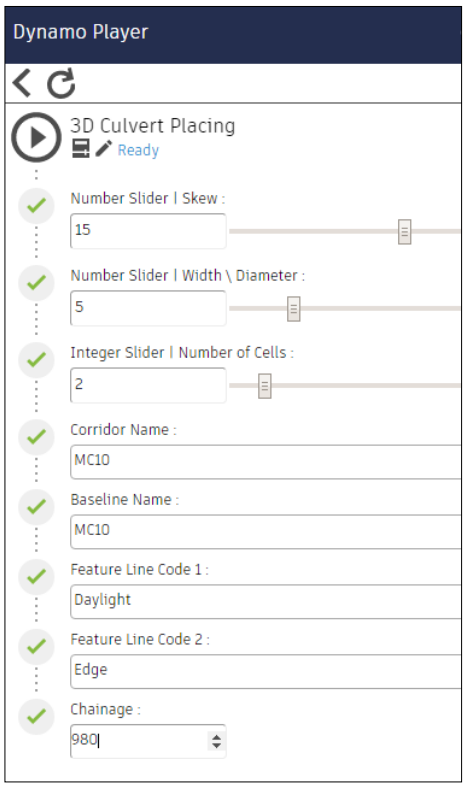
The same script can be run multiple times to create road networks from each polyline.

A design profile connecting start and end of the profile view is generated, as designing a profile is peculiar task, user can modify the design profile as per requirements.

10.3 Placing 3D Culverts

Script Name: 3D Culvert Placing.dyn

Objective: It is basically developed to place the 3D solid culvert with user defined number of sand pipe diameters at identified chainages along the road corridor.

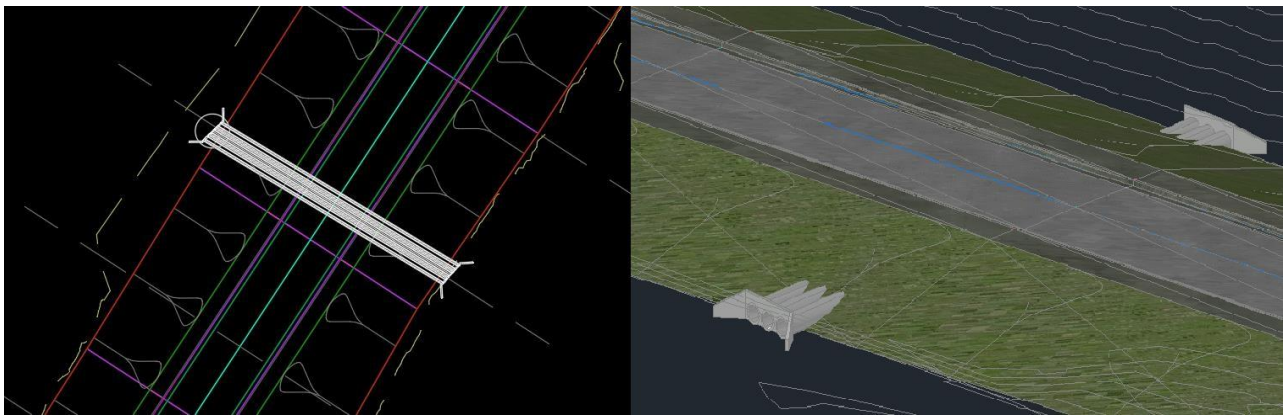


Number Slider Width\Diameter	Culvert Pipe Sizes	Wall Thickness
No.s	m	m
1	0.225	0.05
2	0.300	0.062
3	0.375	0.07
4	0.450	0.084
5	0.525	0.088
6	0.600	0.096
7	0.750	0.102
8	0.825	0.108
9	0.900	0.114
10	1.050	0.128
11	1.200	0.14
12	1.350	0.152
13	1.500	0.152
14	1.650	0.166
15	1.800	0.178
16	1.950	0.204
17	2.100	0.228
18	2.250	0.28
19	2.400	0.28
20	2.700	0.33
21	3.000	0.35
22	3.300	0.6
23	3.600	0.64

Number Slider I Skew: It is basically the angle of orientation of culvert with road alignment.

Number Slider I Width\ Diameter: User has to select one number and it will fill the culvert pipe diameter and associated wall thickness with that. Currently the following table is with pipe sizes and wall thickness is configure in the dynamo. User can change the list as per requirements.

Integer Slider I Number of cells: It is no. of pipes that user want to use.



Corridor Name: User needs to select the required corridor name from the document.

Baseline Name: User needs to select the associated base line name from the corridor.

Feature Line Code 1: These codes shall be selected based on the requirement of position and the assemblies that one has used.

Feature Line Code 2: These codes shall be selected based on the requirement of position and the assemblies that one has used.

Chainages: Need to select the chainages from the associated alignment.

10.4 Creating 3D Polylines from Pipe Networks

Script Name: 3D poly from Pipe Networks.dyn

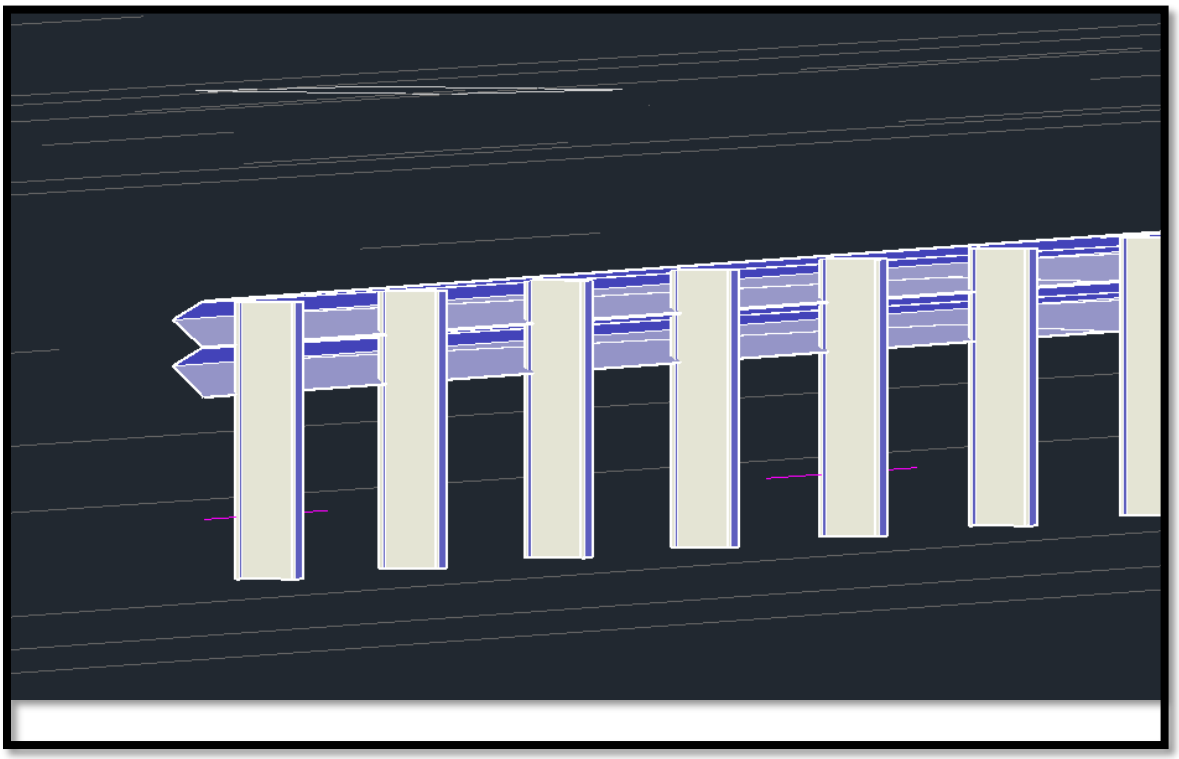
Objective: The objective of this script is to extract 3D polylines from the invert elevation of pipes. It extracts all pipe networks at a once from document.

10.5 Crash Barriers Steel

Script Name: CrashBarrier-Steel.dyn

Objective: This script is developed to place 3D crash barriers along road corridor following 2D polylines.

However, user needs to give .csv file prepared with default values to create shape of crash barrier as below.



10.6 Pipe Conflict Labels

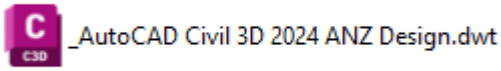
Script Name: Pipe Conflicts Label.dyn

Objective: This script is developed to place a marker and callout on the crossing of pipes (both gravity and pressure) for a Civil3D drawing.

This script will color code the created markers based on the user input value for 'minimum clearance'. If the crossing pipes are closer than the 'minimum clearance' a red marker will be placed. Otherwise, a green marker is placed. If the pipes are on alignments, the alignment name and crossing station is provided in the crossing label's text.

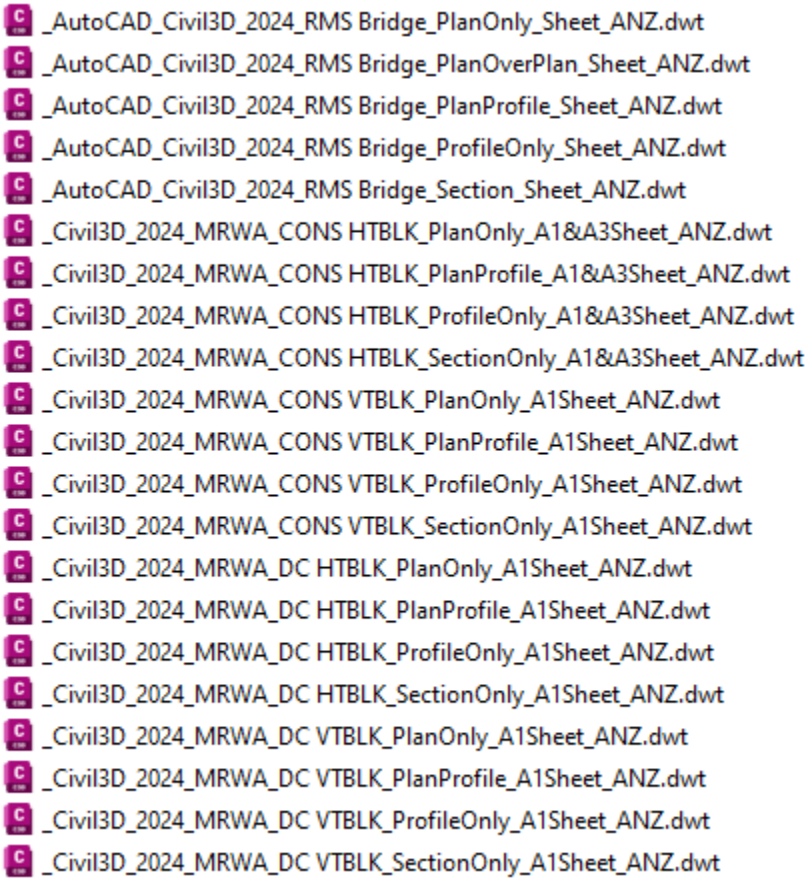
11.0 Template

Default Template – With Added Object Styles Listed Ahead, The templates can be accessed at their default location: C:\Users\<UserName>\AppData\Local\Autodesk\C3D 2024\enu\Template



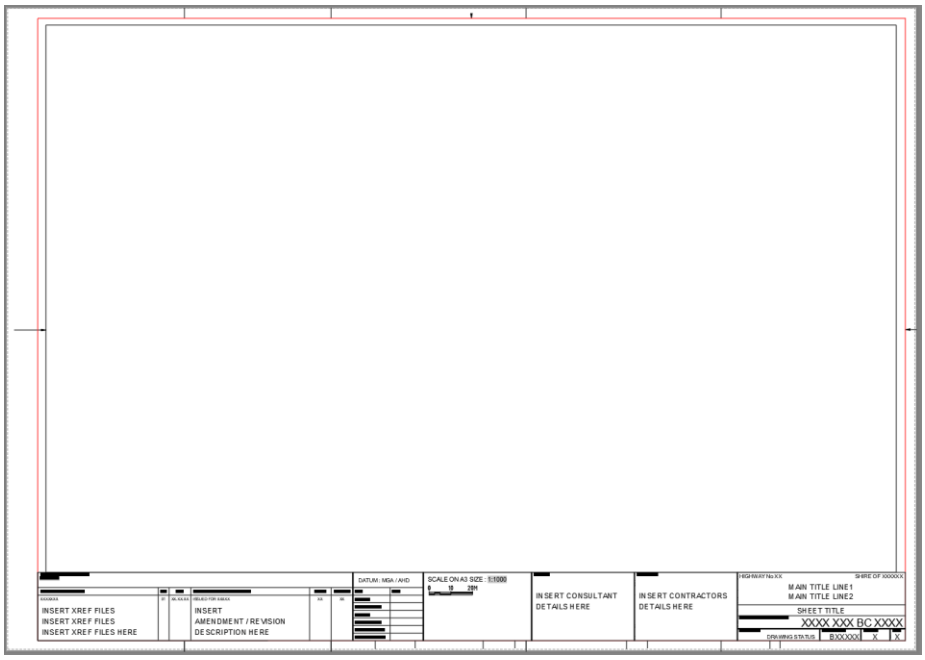
11.1 Plan Production

Creation of Title blocks for RMS (Road and Maritime Services) and MRWA (Main Roads Western Australia).
The Plan Production title blocks are created with different sizes and scales for RMS & MRWA respectively.



11.2 Road and Maritime Services (RMS) Title Blocks

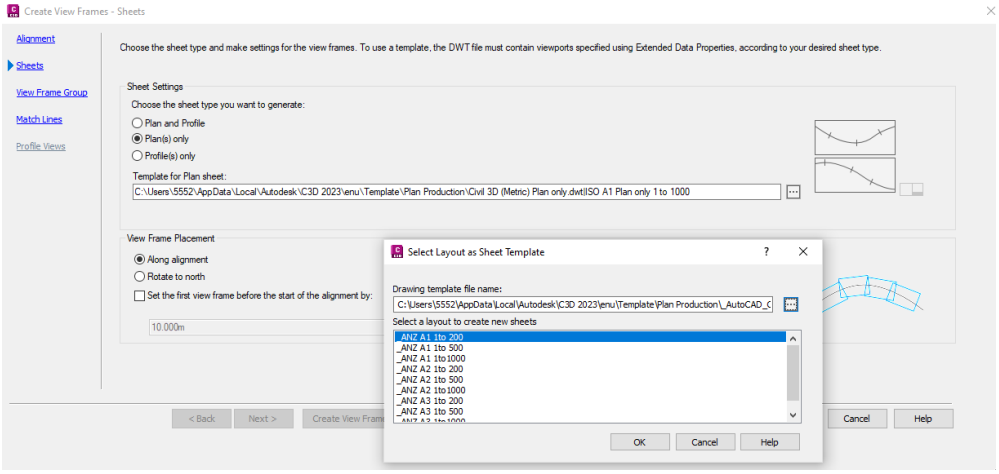
Added title blocks with the sizes of A1, A2, and A3 with scales of 1:200, 1:500 and 1:1000 each.



11.3 Main Roads Western Australia (MRWA) Title Blocks

For MRWA Title Blocks drawings projects undertaken mainly done for projects undertaken by Consultants and for Construct Contracts.

- Title Block drawings for a project undertaken by consultants
  - Added with A1 and A3 sizes with scales of 1:200, 1:500, 1:1000 and 1:2000.
  - In Title Block sizes A1 and A3 two different styles are created i.e. horizontal and vertical.

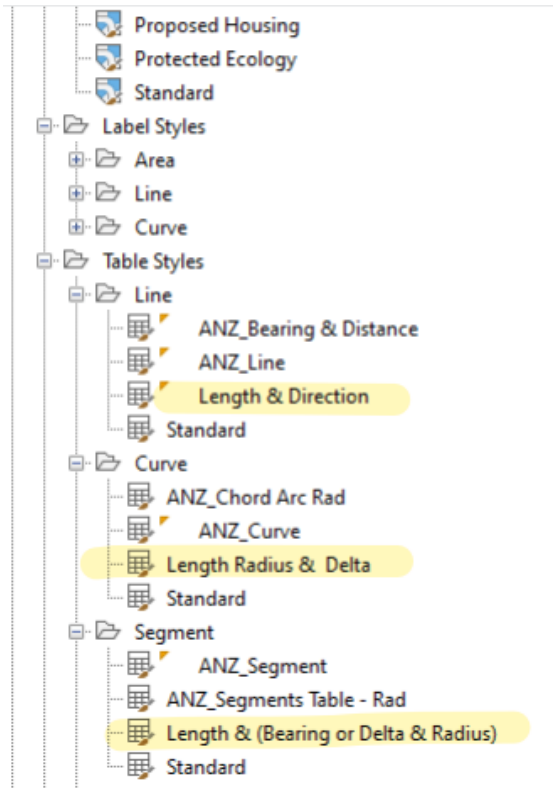


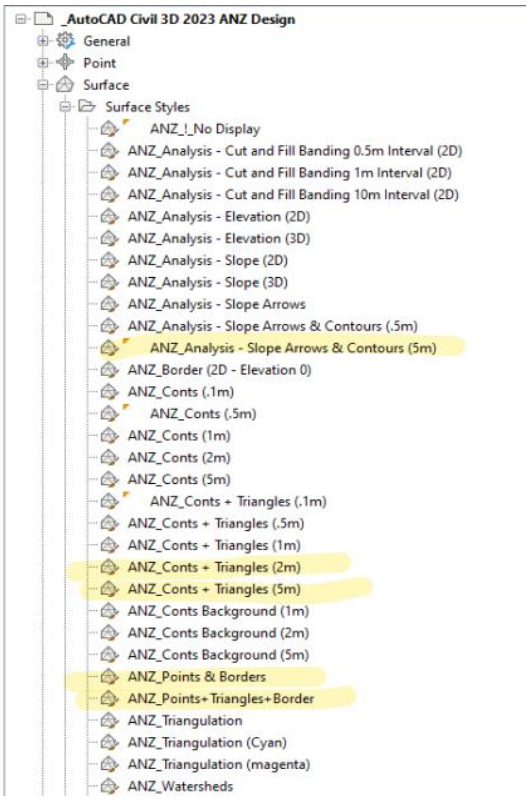
- Title Block drawings for a project undertaken by Design Construct
  - Created for A1 size with scales of 1:200, 1:500, 1:1000, and 1:2000.
  - For this also two different styles are provided i.e., Horizontal and Vertical.

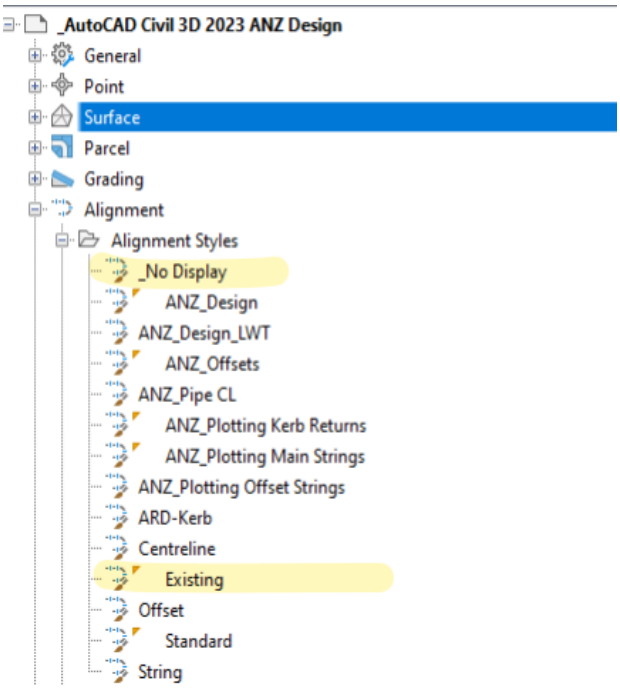
11.4 Object Styles:

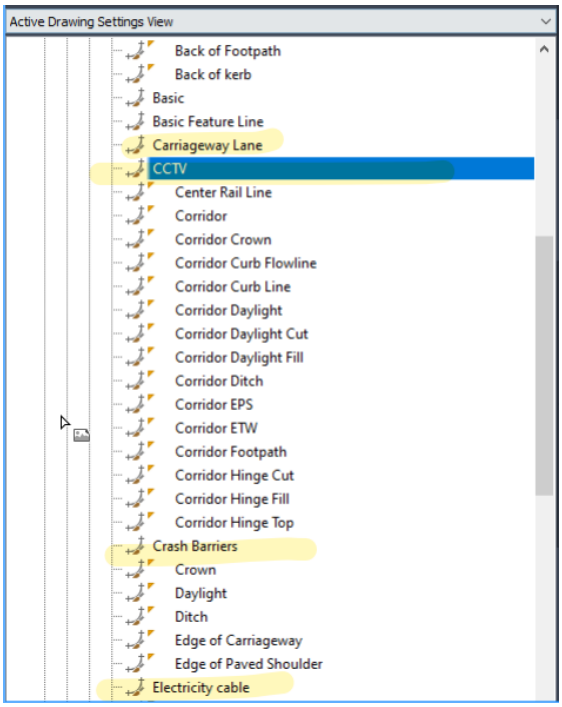
The following styles have been added to the latest version of ANZ country kit 2024.

Sr. No	Content	Object	To ANZ
1	**Parcels**	**Parcel style** 1. No display 2. Drainage Area 3. Housing 4. Private 5. Proposed Housing 6. Protected Ecology	_AutoCAD Civil 3D 2023 ANZ Design. DWT
		Parcel label style **Area :-** 1. Number Area (m2 and hectares) & Perimeter (m) 2. Parcel Number Area (m2 and acres) & Perimeter (m) 3. Parcel Number Area (m2) & Perimeter (m) Parcel Table style Line :- 1. Length & Direction Curve :- 1. Length Radius & Delta Segment 1. Length & (Bearing or Delta & Radius)	_AutoCAD Civil 3D 2023 ANZ Design. DWT
2	**Surface style created new**	1. ANZ_Points & Borders 2. ANZ_Conts + Triangles (2m) 3. ANZ_Conts + Triangles (5m) 4. ANZ_Points + Triangles + Borders 5. ANZ_Analysis - Slope Arrows & Contours (5m)	_AutoCAD Civil 3D 2023 ANZ Design. DWT
3	**Alignment style**	1. Existing 2. No Display	_AutoCAD Civil 3D 2023 ANZ Design. DWT
	Road Geometry Table	3. Table Style 01 4. Table Style 02	_AutoCAD Civil 3D 2023 ANZ Design. DWT
4	**Multipurpose styles**	Feature line styles :- 1. Electricity cable 2. Carriageway Lane 3. Crash Barriers 4. CCTV	_AutoCAD Civil 3D 2023 ANZ Design. DWT
5	**Sample line**	1. ANZ_252-Hidden - 2L 2. ANZ_Sample Lines - Blue – Cont 3. ANZ_Sample Lines - Red – Phantom	_AutoCAD Civil 3D 2023 ANZ Design. DWT

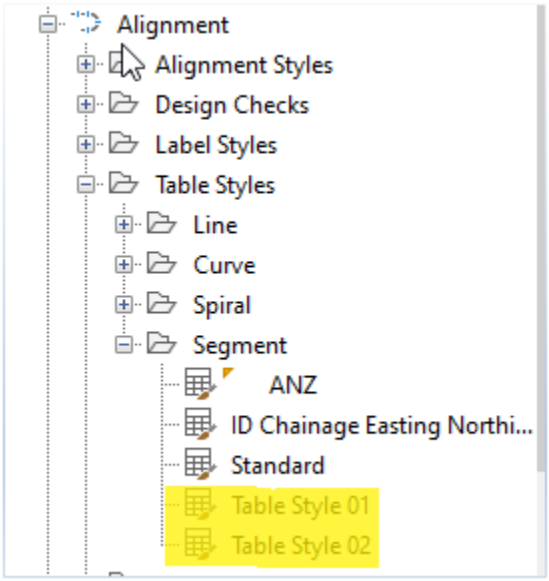








The following alignment geometry table styles are created.



12.0 Country Kit Design Elements

The design criteria file used in roadway design in Civil 3D was updated to match with the latest version of Austroads Guide to Road Design – Part 3 – Geometric Design.

All the values present are cross-checked and modified where required as per the latest edition of the Austroads Code.

All these design criteria files can be accessed at below path.

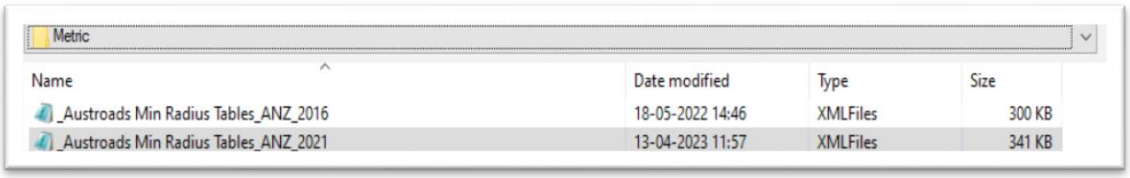
C:\ProgramData\Autodesk\C3D 2024\enu\Data\Corridor Design Standards\Metric

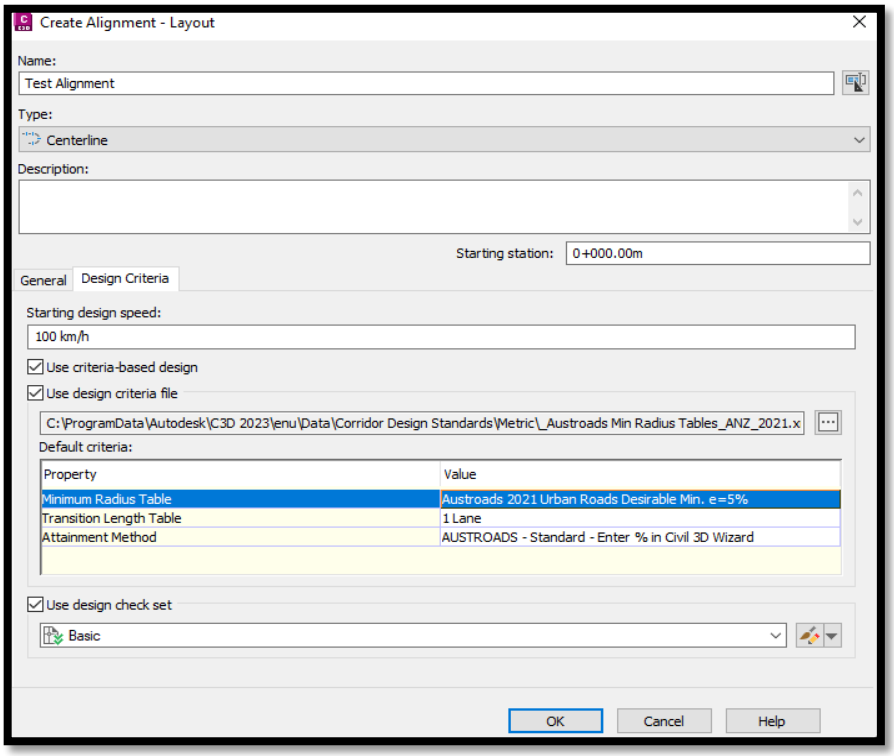
12.1 Modifications

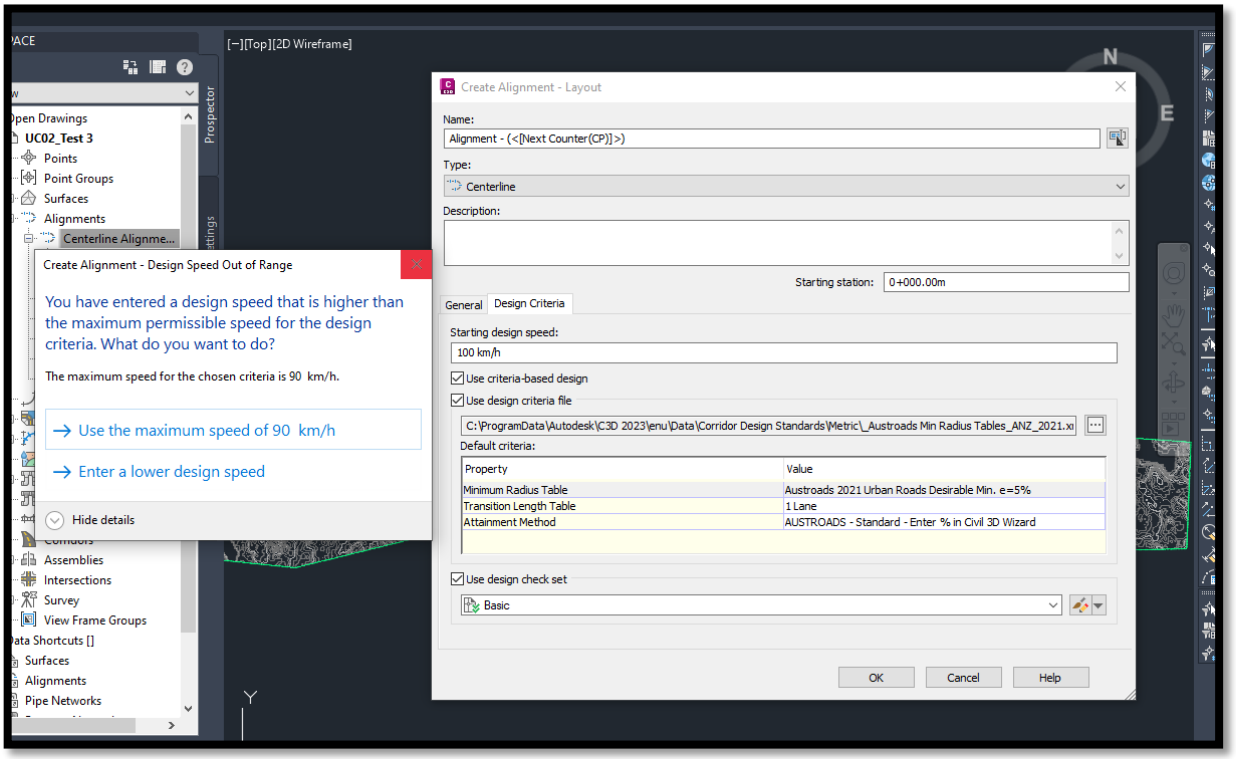
- Minimum Radius Table: Removed the absolute and desirable minimum radius values for – Urban roads with emax=5% for design speeds of 100 kmph, 110 kmph, 120 kmph adhering to Austroads guide.
- Updated the clause, table and page number references.

12.2 Crosschecking

- All the values for super elevation rates, design speeds, minimum K values, and extra widening values have been checked with Austroads 2021 Edition.
- The latest modification – The minimum radius value for urban roads with emax=5% for design speed 100,110,120 kmph were removed hence the pop up giving information on the same.





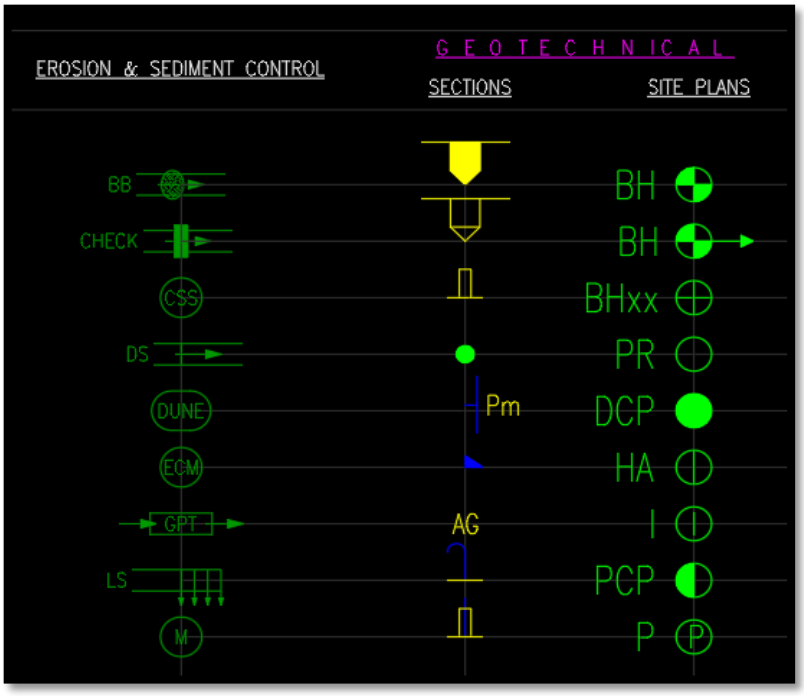


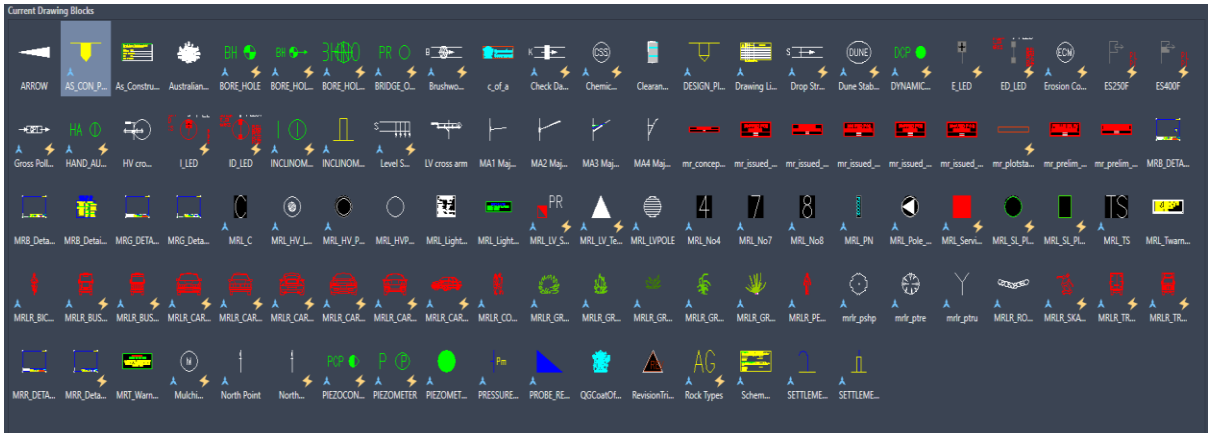
13.0 Road Signs & Blocks

Following Blocks have been incorporated in the ANZ Country Kit 2024.

13.1 TMR (Transport and Main Roads) Blocks

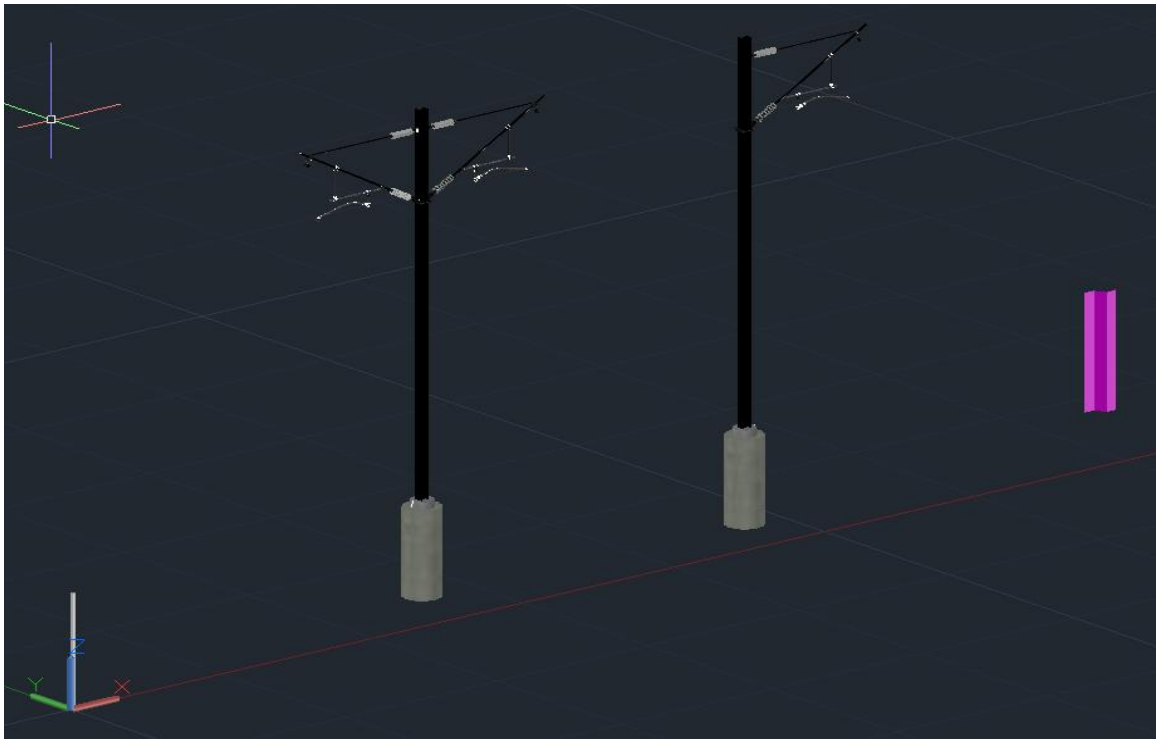
- TMR blocks have been incorporated in this country kit are given below.
- The blocks can be found at "_AutoCAD Civil 3D 2024 ANZ_TMR.dwt"





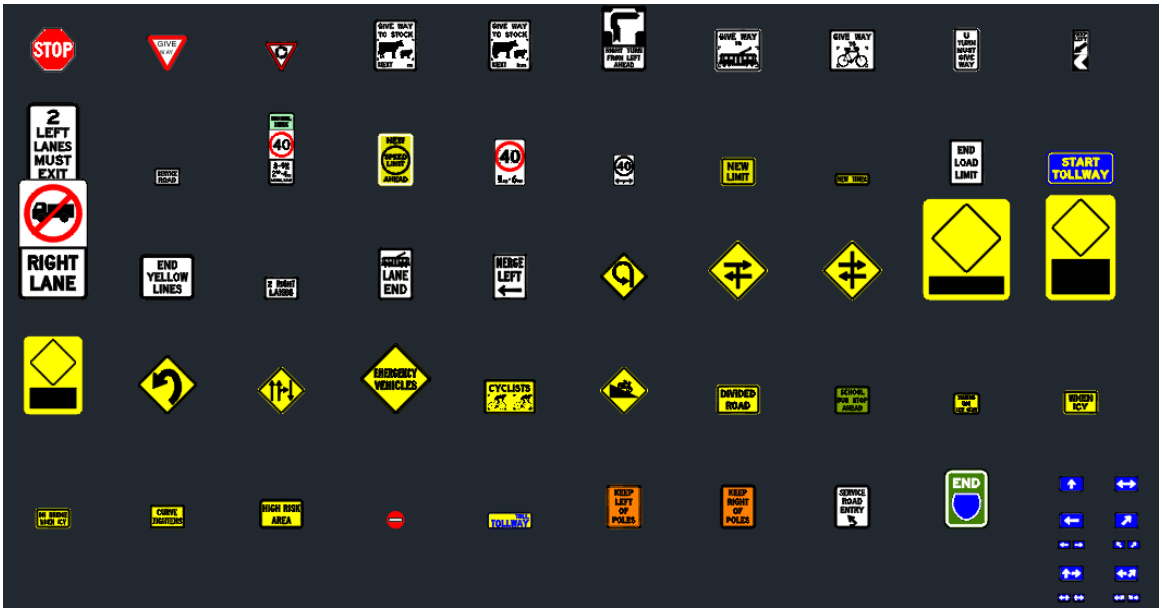
13.2 Transportation Blocks

- Created the transportation blocks, please see the image which is given below
- Circular Solid Pile, Rail_CaternaryPole_Double, Rail_CaternaryPole_Single, Sheet Pile



13.3 Road Sign 2D

- Following commonly used 2D Road signs has been added to the new version of ANZ country kit, they are placed in master template "_AutoCAD Civil 3D 2024 ANZ Design"



14.0 Pipe Catalog and Pressure Pipe Catalog

14.1 Pipe Catalog and Part List

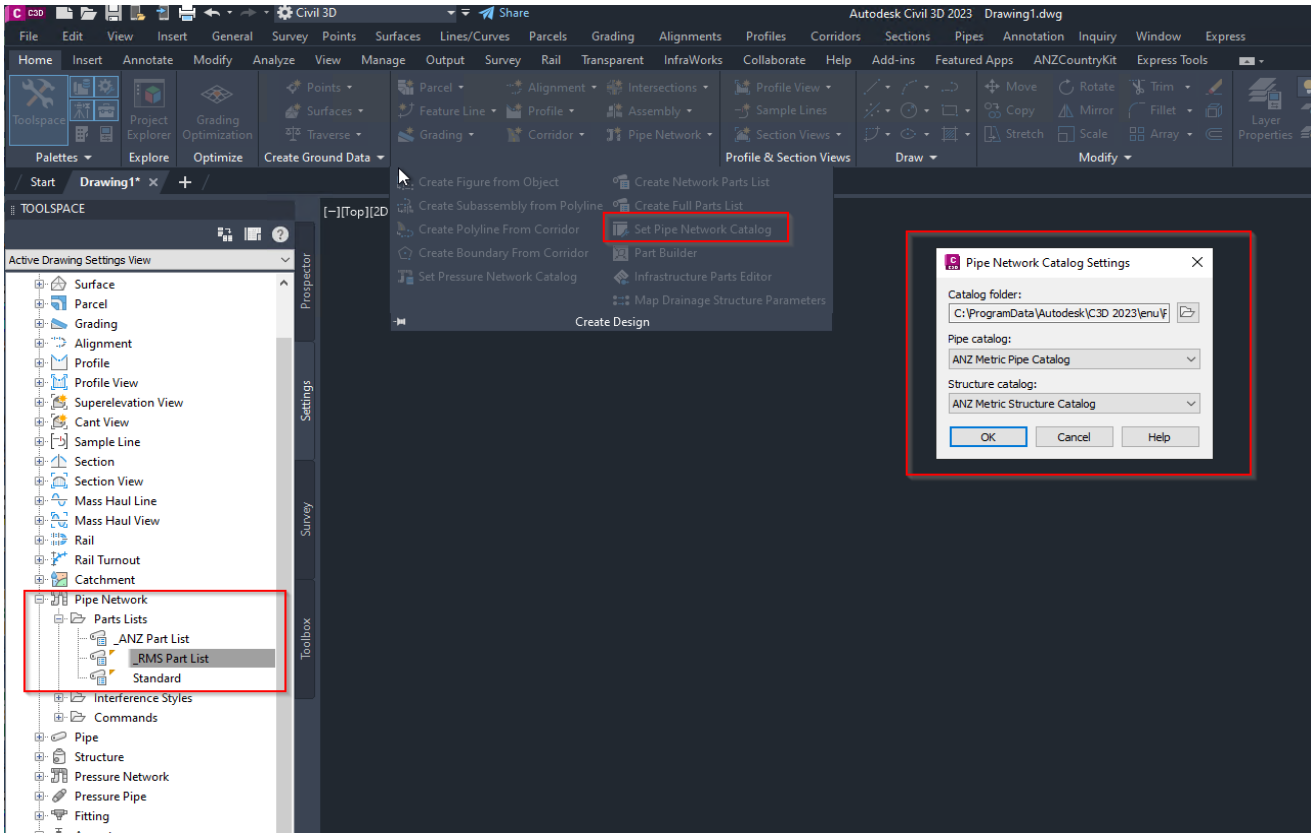
The new version has the addition of ANZ Pipe Catalog based on AS/NZS material codes and standards as listed below:

- AS/ NZS 5065 – Polyethylene and polypropylene pipes and fittings for drainage and sewerage applications.
- AS /NZS 4058- Precast Concrete pipes for pressure and non-pressure applications.

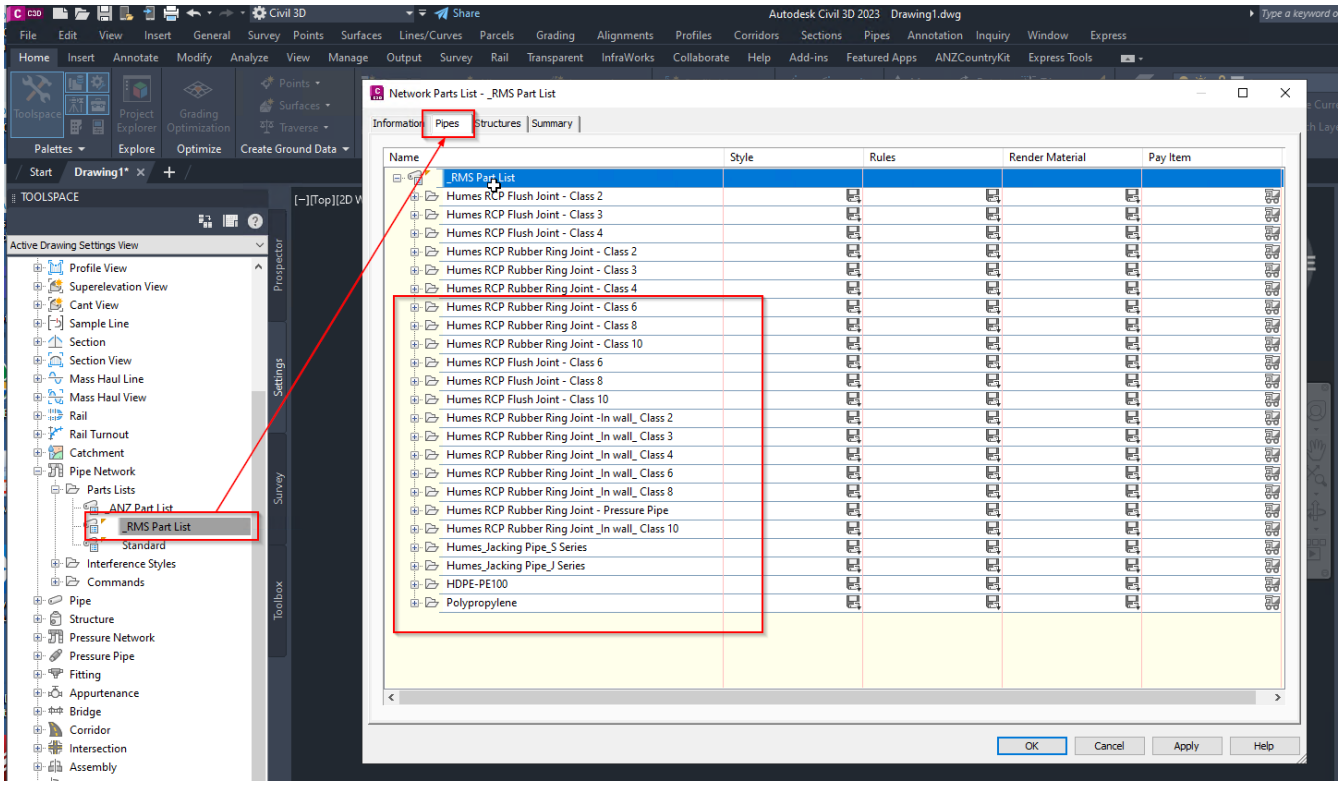
Pipe catalog and corresponding part lists are enlisted and available at the following location.

C:\ProgramData\Autodesk\C3D 2024\enu\Pipes Catalog

User need to enter command “SetPipeNetworkCatalog” to set the correct local catalog.



Pipe materials are added into RMS Part List and use of materials as per local market.



Refer below list of pipes & materials added under pipe catalog

Humes RCP Rubber Ring Joint-Class 6

Name	Style
300 mm Concrete Pipe	_RMS Standard Pipe
375 mm Concrete Pipe	_RMS Standard Pipe
450 mm Concrete Pipe	_RMS Standard Pipe
525 mm Concrete Pipe	_RMS Standard Pipe
600 mm Concrete Pipe	_RMS Standard Pipe
675 mm Concrete Pipe	_RMS Standard Pipe
750 mm Concrete Pipe	_RMS Standard Pipe
825 mm Concrete Pipe	_RMS Standard Pipe
900 mm Concrete Pipe	_RMS Standard Pipe
1,050 mm Concrete Pipe	_RMS Standard Pipe
1,200 mm Concrete Pipe	_RMS Standard Pipe
1,350 mm Concrete Pipe	_RMS Standard Pipe
1,500 mm Concrete Pipe	_RMS Standard Pipe
1,650 mm Concrete Pipe	_RMS Standard Pipe
1,800 mm Concrete Pipe	_RMS Standard Pipe

Humes RCP Rubber Ring Joint-Class 8

Name	Style
300 mm Concrete Pipe	_RMS Standard Pipe
375 mm Concrete Pipe	_RMS Standard Pipe
450 mm Concrete Pipe	_RMS Standard Pipe
525 mm Concrete Pipe	_RMS Standard Pipe
600 mm Concrete Pipe	_RMS Standard Pipe
675 mm Concrete Pipe	_RMS Standard Pipe
750 mm Concrete Pipe	_RMS Standard Pipe
825 mm Concrete Pipe	_RMS Standard Pipe
900 mm Concrete Pipe	_RMS Standard Pipe
1,050 mm Concrete Pipe	_RMS Standard Pipe
1,200 mm Concrete Pipe	_RMS Standard Pipe
1,350 mm Concrete Pipe	_RMS Standard Pipe
1,500 mm Concrete Pipe	_RMS Standard Pipe
1,650 mm Concrete Pipe	_RMS Standard Pipe
1,800 mm Concrete Pipe	_RMS Standard Pipe

Humes RCP Rubber Ring Joint-Class 10

Name	Style
300 mm Concrete Pipe	_RMS Standard Pipe
375 mm Concrete Pipe	_RMS Standard Pipe
450 mm Concrete Pipe	_RMS Standard Pipe
525 mm Concrete Pipe	_RMS Standard Pipe
600 mm Concrete Pipe	_RMS Standard Pipe
675 mm Concrete Pipe	_RMS Standard Pipe
750 mm Concrete Pipe	_RMS Standard Pipe
825 mm Concrete Pipe	_RMS Standard Pipe
900 mm Concrete Pipe	_RMS Standard Pipe
1,050 mm Concrete Pipe	_RMS Standard Pipe
1,200 mm Concrete Pipe	_RMS Standard Pipe
1,350 mm Concrete Pipe	_RMS Standard Pipe
1,500 mm Concrete Pipe	_RMS Standard Pipe
1,650 mm Concrete Pipe	_RMS Standard Pipe
1,800 mm Concrete Pipe	_RMS Standard Pipe

Humes RCP Flush Joint-Class 6

Name	Style
300 mm Concrete Pipe	_RMS Standard Pipe
375 mm Concrete Pipe	_RMS Standard Pipe
450 mm Concrete Pipe	_RMS Standard Pipe
525 mm Concrete Pipe	_RMS Standard Pipe
600 mm Concrete Pipe	_RMS Standard Pipe
675 mm Concrete Pipe	_RMS Standard Pipe
750 mm Concrete Pipe	_RMS Standard Pipe
825 mm Concrete Pipe	_RMS Standard Pipe
900 mm Concrete Pipe	_RMS Standard Pipe
1,050 mm Concrete Pipe	_RMS Standard Pipe
1,200 mm Concrete Pipe	_RMS Standard Pipe
1,350 mm Concrete Pipe	_RMS Standard Pipe
1,500 mm Concrete Pipe	_RMS Standard Pipe
1,650 mm Concrete Pipe	_RMS Standard Pipe
1,800 mm Concrete Pipe	_RMS Standard Pipe
1,950 mm Concrete Pipe	_RMS Standard Pipe
2,100 mm Concrete Pipe	_RMS Standard Pipe
2,250 mm Concrete Pipe	_RMS Standard Pipe
2,400 mm Concrete Pipe	_RMS Standard Pipe
2,700 mm Concrete Pipe	_RMS Standard Pipe
3,000 mm Concrete Pipe	_RMS Standard Pipe

Humes RCP Flush Joint-Class 8

Name	Style
300 mm Concrete Pipe	_RMS Standard Pipe
375 mm Concrete Pipe	_RMS Standard Pipe
450 mm Concrete Pipe	_RMS Standard Pipe
525 mm Concrete Pipe	_RMS Standard Pipe
600 mm Concrete Pipe	_RMS Standard Pipe
675 mm Concrete Pipe	_RMS Standard Pipe
750 mm Concrete Pipe	_RMS Standard Pipe
825 mm Concrete Pipe	_RMS Standard Pipe
900 mm Concrete Pipe	_RMS Standard Pipe
1,050 mm Concrete Pipe	_RMS Standard Pipe
1,200 mm Concrete Pipe	_RMS Standard Pipe
1,350 mm Concrete Pipe	_RMS Standard Pipe
1,500 mm Concrete Pipe	_RMS Standard Pipe
1,650 mm Concrete Pipe	_RMS Standard Pipe
1,800 mm Concrete Pipe	_RMS Standard Pipe
1,950 mm Concrete Pipe	_RMS Standard Pipe
2,100 mm Concrete Pipe	_RMS Standard Pipe
2,250 mm Concrete Pipe	_RMS Standard Pipe
2,400 mm Concrete Pipe	_RMS Standard Pipe
2,700 mm Concrete Pipe	_RMS Standard Pipe
3,000 mm Concrete Pipe	_RMS Standard Pipe

Humes RCP Flush Joint-Class 10

Name	Style
300 mm Concrete Pipe	_RMS Standard Pipe
375 mm Concrete Pipe	_RMS Standard Pipe
450 mm Concrete Pipe	_RMS Standard Pipe
525 mm Concrete Pipe	_RMS Standard Pipe
600 mm Concrete Pipe	_RMS Standard Pipe
675 mm Concrete Pipe	_RMS Standard Pipe
750 mm Concrete Pipe	_RMS Standard Pipe
825 mm Concrete Pipe	_RMS Standard Pipe
900 mm Concrete Pipe	_RMS Standard Pipe
1,050 mm Concrete Pipe	_RMS Standard Pipe
1,200 mm Concrete Pipe	_RMS Standard Pipe
1,350 mm Concrete Pipe	_RMS Standard Pipe
1,500 mm Concrete Pipe	_RMS Standard Pipe
1,650 mm Concrete Pipe	_RMS Standard Pipe
1,800 mm Concrete Pipe	_RMS Standard Pipe
1,950 mm Concrete Pipe	_RMS Standard Pipe
2,100 mm Concrete Pipe	_RMS Standard Pipe
2,250 mm Concrete Pipe	_RMS Standard Pipe
2,400 mm Concrete Pipe	_RMS Standard Pipe
2,700 mm Concrete Pipe	_RMS Standard Pipe
3,000 mm Concrete Pipe	_RMS Standard Pipe

Humes RCP Rubber Ring Joint –In wall_Class 2

Name	Style
1,200 mm Concrete Pipe	_RMS Standard Pipe
1,950 mm Concrete Pipe	_RMS Standard Pipe
2,100 mm Concrete Pipe	_RMS Standard Pipe
2,250 mm Concrete Pipe	_RMS Standard Pipe
2,400 mm Concrete Pipe	_RMS Standard Pipe
2,700 mm Concrete Pipe	_RMS Standard Pipe
3,000 mm Concrete Pipe	_RMS Standard Pipe
3,300 mm Concrete Pipe	_RMS Standard Pipe
3,600 mm Concrete Pipe	_RMS Standard Pipe

Humes RCP Rubber Ring Joint –In wall_Class 3

Name	Style
1,200 mm Concrete Pipe	_RMS Standard Pipe
1,950 mm Concrete Pipe	_RMS Standard Pipe
2,100 mm Concrete Pipe	_RMS Standard Pipe
2,250 mm Concrete Pipe	_RMS Standard Pipe
2,400 mm Concrete Pipe	_RMS Standard Pipe
2,700 mm Concrete Pipe	_RMS Standard Pipe
3,000 mm Concrete Pipe	_RMS Standard Pipe
3,300 mm Concrete Pipe	_RMS Standard Pipe
3,600 mm Concrete Pipe	_RMS Standard Pipe

Humes RCP Rubber Ring Joint –In wall_Class 4

Name	Style
1,200 mm Concrete Pipe	_RMS Standard Pipe
1,950 mm Concrete Pipe	_RMS Standard Pipe
2,100 mm Concrete Pipe	_RMS Standard Pipe
2,250 mm Concrete Pipe	_RMS Standard Pipe
2,400 mm Concrete Pipe	_RMS Standard Pipe
2,700 mm Concrete Pipe	_RMS Standard Pipe
3,000 mm Concrete Pipe	_RMS Standard Pipe
3,300 mm Concrete Pipe	_RMS Standard Pipe
3,600 mm Concrete Pipe	_RMS Standard Pipe

Humes RCP Rubber Ring Joint –In wall_Class 6

Name	Style
1,200 mm Concrete Pipe	_RMS Standard Pipe
1,950 mm Concrete Pipe	_RMS Standard Pipe
2,100 mm Concrete Pipe	_RMS Standard Pipe
2,250 mm Concrete Pipe	_RMS Standard Pipe
2,400 mm Concrete Pipe	_RMS Standard Pipe
2,700 mm Concrete Pipe	_RMS Standard Pipe
3,000 mm Concrete Pipe	_RMS Standard Pipe

Humes RCP Rubber Ring Joint –In wall_Class 8

Name	Style
1,200 mm Concrete Pipe	_RMS Standard Pipe
1,950 mm Concrete Pipe	_RMS Standard Pipe
2,100 mm Concrete Pipe	_RMS Standard Pipe
2,250 mm Concrete Pipe	_RMS Standard Pipe
2,400 mm Concrete Pipe	_RMS Standard Pipe
2,700 mm Concrete Pipe	_RMS Standard Pipe
3,000 mm Concrete Pipe	_RMS Standard Pipe

Humes RCP Rubber Ring Joint –In wall_Class 10

Name	Style
1,200 mm Concrete Pipe	_RMS Standard Pipe
1,780 mm Concrete Pipe	_RMS Standard Pipe
1,920 mm Concrete Pipe	_RMS Standard Pipe
2,250 mm Concrete Pipe	_RMS Standard Pipe
2,438 mm Concrete Pipe	_RMS Standard Pipe
2,700 mm Concrete Pipe	_RMS Standard Pipe
3,060 mm Concrete Pipe	_RMS Standard Pipe

Humes RCP Rubber Ring Joint - Pressure Pipe

Name	Style
300 mm Concrete Pipe	_RMS Standard Pipe
375 mm Concrete Pipe	_RMS Standard Pipe
450 mm Concrete Pipe	_RMS Standard Pipe
525 mm Concrete Pipe	_RMS Standard Pipe
600 mm Concrete Pipe	_RMS Standard Pipe
675 mm Concrete Pipe	_RMS Standard Pipe
750 mm Concrete Pipe	_RMS Standard Pipe
825 mm Concrete Pipe	_RMS Standard Pipe
900 mm Concrete Pipe	_RMS Standard Pipe
1,050 mm Concrete Pipe	_RMS Standard Pipe
1,200 mm Concrete Pipe	_RMS Standard Pipe
1,350 mm Concrete Pipe	_RMS Standard Pipe
1,500 mm Concrete Pipe	_RMS Standard Pipe
1,650 mm Concrete Pipe	_RMS Standard Pipe
1,800 mm Concrete Pipe	_RMS Standard Pipe

Humes_Jacking Pipe_S Series

Name	Style
350 mm Concrete Pipe	_RMS Standard Pipe
400 mm Concrete Pipe	_RMS Standard Pipe
450 mm Concrete Pipe	_RMS Standard Pipe
500 mm Concrete Pipe	_RMS Standard Pipe
600 mm Concrete Pipe	_RMS Standard Pipe
700 mm Concrete Pipe	_RMS Standard Pipe
300 mm Concrete Pipe	_RMS Standard Pipe

Humes_Jacking Pipe_J Series

Name	Style
800 mm Concrete Pipe	_RMS Standard Pipe
900 mm Concrete Pipe	_RMS Standard Pipe
1,000 mm Concrete Pipe	_RMS Standard Pipe
1,100 mm Concrete Pipe	_RMS Standard Pipe
1,200 mm Concrete Pipe	_RMS Standard Pipe
1,350 mm Concrete Pipe	_RMS Standard Pipe
1,500 mm Concrete Pipe	_RMS Standard Pipe
1,650 mm Concrete Pipe	_RMS Standard Pipe
1,800 mm Concrete Pipe	_RMS Standard Pipe
2,100 mm Concrete Pipe	_RMS Standard Pipe
2,400 mm Concrete Pipe	_RMS Standard Pipe
2,500 mm Concrete Pipe	_RMS Standard Pipe
2,700 mm Concrete Pipe	_RMS Standard Pipe
3,000 mm Concrete Pipe	_RMS Standard Pipe

Polypropylene

Name	Style
225 mm Polypropylene Pipe	_RMS Standard Pipe
300 mm Polypropylene Pipe	_RMS Standard Pipe
375 mm Polypropylene Pipe	_RMS Standard Pipe
450 mm Polypropylene Pipe	_RMS Standard Pipe
525 mm Polypropylene Pipe	_RMS Standard Pipe
600 mm Polypropylene Pipe	_RMS Standard Pipe

HDPE-PE100

Name	Style
100 mm Corrugated HDPE Pipe	_RMS Standard Pipe
150 mm Corrugated HDPE Pipe	_RMS Standard Pipe
225 mm Corrugated HDPE Pipe	_RMS Standard Pipe
300 mm Corrugated HDPE Pipe	_RMS Standard Pipe
375mm Corrugated HDPE Pipe	_RMS Standard Pipe
450 mm Corrugated HDPE Pipe	_RMS Standard Pipe
525 mm Corrugated HDPE Pipe	_RMS Standard Pipe
600 mm Corrugated HDPE Pipe	_RMS Standard Pipe
750 mm Corrugated HDPE Pipe	_RMS Standard Pipe
900 mm Corrugated HDPE Pipe	_RMS Standard Pipe
1050 mm Corrugated HDPE Pipe	_RMS Standard Pipe
1200 mm Corrugated HDPE Pipe	_RMS Standard Pipe
1,500 mm Corrugated HDPE Pipe	_RMS Standard Pipe
1600 mm Corrugated HDPE Pipe	_RMS Standard Pipe
1,800 mm Corrugated HDPE Pipe	_RMS Standard Pipe
2000 mm Corrugated HDPE Pipe	_RMS Standard Pipe
2500 mm Corrugated HDPE Pipe	_RMS Standard Pipe
3000 mm Corrugated HDPE Pipe	_RMS Standard Pipe
3500 mm Corrugated HDPE Pipe	_RMS Standard Pipe
4000 mm Corrugated HDPE Pipe	_RMS Standard Pipe

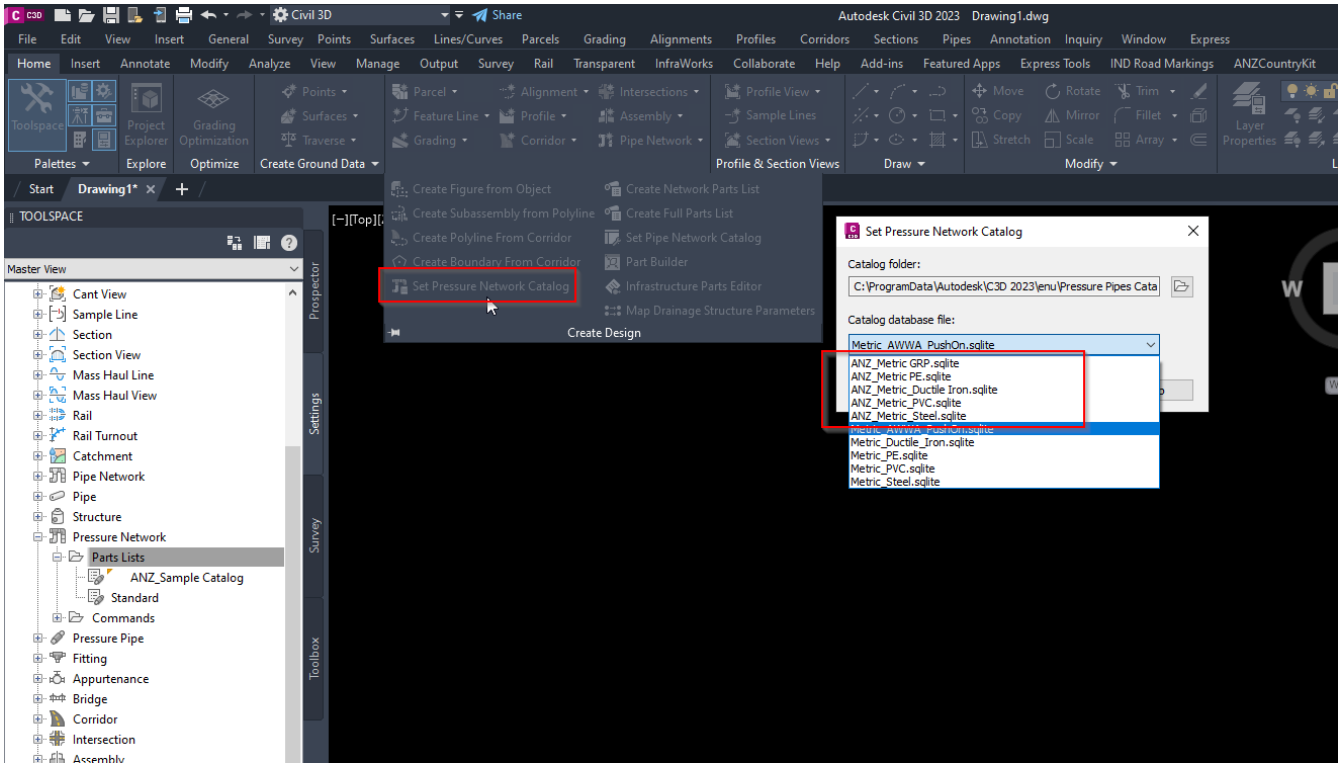
14.2 Pressure Pipe Catalog and Part List

The new version has the addition of ANZ Pressure Pipe Catalog based on AS/NZS material codes and standards as listed below:

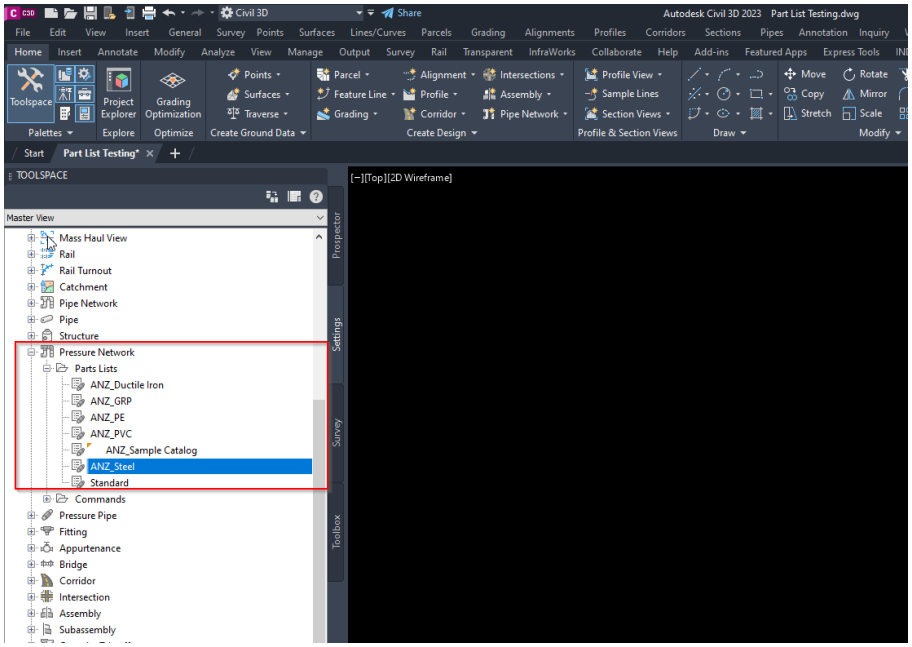
- AS/ NZS 1477 – PVC pipes and fittings for Pressure applications.
- AS/ NZS 4765 - Modified PVC (PVC –M) pipes for Pressure applications.
- AS/ NZS 4441 – Oriented PVC (PVC –O) pipes for Pressure applications.
- AS/ NZS 4130 – Polyethylene pipes and fittings for Pressure applications.
- AS/ NZS 3571 – Glass filament reinforced thermosetting plastic (GRP) pipes and fittings for water supply, Sewerage, and drainage applications.
- AS/ NZS 2280 – Ductile Iron pipes and fittings.
- AS / NZS 1579 – Steel pipes and fittings for water and wastewater applications.

The pressure Pipe catalog and corresponding part lists are available at the location below.

"C:\ProgramData\Autodesk\C3D 2024\enu\Pressure Pipes Catalog\Metric"



The list of pipe materials used in all over Australia added into the Part List.



ANZ_Ductile Iron_Pipe

Name	Style
pipe-100 mm-push-on-ductile iron-35 bar	_RMS Standard Pipe
pipe-150 mm-push on-ductile iron-35 bar	_RMS Standard Pipe
pipe-200 mm-push on-ductile iron-35 bar	_RMS Standard Pipe
pipe-225 mm-push-on-ductile iron-20 bar	_RMS Standard Pipe
pipe-225mm-push on-ductile iron-35 bar	_RMS Standard Pipe
pipe-250 mm-push on-ductile iron-35 bar	_RMS Standard Pipe
pipe-250 mm-push-on-ductile iron-20 bar	_RMS Standard Pipe
pipe-300 mm-push on-ductile iron-35 bar	_RMS Standard Pipe
pipe-300 mm-push-on-ductile iron-20 bar	_RMS Standard Pipe
pipe-375 mm-push on-ductile iron-35 bar	_RMS Standard Pipe
pipe-375 mm-push-on-ductile iron-20 bar	_RMS Standard Pipe
pipe-450 mm-push on-ductile iron-35 bar	_RMS Standard Pipe
pipe-450 mm-push-on-ductile iron-20 bar	_RMS Standard Pipe
pipe-500 mm-push on-ductile iron-35 bar	_RMS Standard Pipe
pipe-500 mm-push-on-ductile iron-20 bar	_RMS Standard Pipe
pipe-600 mm-push on-ductile iron-35 bar	_RMS Standard Pipe
pipe-600 mm-push-on-ductile iron-20 bar	_RMS Standard Pipe
pipe-750 mm-push on-ductile iron-35 bar	_RMS Standard Pipe
pipe-750 mm-push-on-ductile iron-20 bar	_RMS Standard Pipe

ANZ_Ductile Iron_Elbow

Name	Style
elbow-80 mm-11.25 degree-push on-ductile iron	_RMS Fitting
elbow-80 mm-22.5 degree-push on-ductile iron	_RMS Fitting
elbow-80 mm-45 degree-push on-ductile iron	_RMS Fitting
elbow-80 mm-90 degree-push on-ductile iron	_RMS Fitting
elbow-100 mm-11.25 degree-push on-ductile iron	_RMS Fitting
elbow-100 mm-22.5 degree-push on-ductile iron	_RMS Fitting
elbow-100 mm-45 degree-push on-ductile iron	_RMS Fitting
elbow-100 mm-90 degree-push on-ductile iron	_RMS Fitting
elbow-150 mm-11.25 degree-push on-ductile iron	_RMS Fitting
elbow-150 mm-22.5 degree-push on-ductile iron	_RMS Fitting
elbow-150 mm-45 degree-push on-ductile iron	_RMS Fitting
elbow-150 mm-90 degree-push on-ductile iron	_RMS Fitting
elbow-200 mm-11.25 degree-push on-ductile iron	_RMS Fitting
elbow-200 mm-22.5 degree-push on-ductile iron	_RMS Fitting
elbow-200 mm-45 degree-push on-ductile iron	_RMS Fitting
elbow-200 mm-90 degree-push on-ductile iron	_RMS Fitting
elbow-225mm-11.25 degree-push on-ductile iron	_RMS Fitting
elbow-225 mm-22.5 degree-push on-ductile iron	_RMS Fitting
elbow-225 mm-45 degree-push on-ductile iron	_RMS Fitting
elbow-225 mm-90 degree-push on-ductile iron	_RMS Fitting
elbow-250 mm-11.25 degree-push on-ductile iron	_RMS Fitting
elbow-250 mm-22.5 degree-push on-ductile iron	_RMS Fitting
elbow-250 mm-45 degree-push on-ductile iron	_RMS Fitting
elbow-250 mm-90 degree-push on-ductile iron	_RMS Fitting
elbow-300 mm-11.25 degree-push on-ductile iron	_RMS Fitting
elbow-300 mm-22.5 degree-push on-ductile iron	_RMS Fitting
elbow-300 mm-45 degree-push on-ductile iron	_RMS Fitting
elbow-300 mm-90 degree-push on-ductile iron	_RMS Fitting
elbow-375 mm-11.25 degree-push on-ductile iron	_RMS Fitting
elbow-375 mm-22.5 degree-push on-ductile iron	_RMS Fitting
elbow-375 mm-45 degree-push on-ductile iron	_RMS Fitting
elbow-375 mm-90 degree-push on-ductile iron	_RMS Fitting
elbow-450 mm-11.25 degree-push on-ductile iron	_RMS Fitting
elbow-450 mm-22.5 degree-push on-ductile iron	_RMS Fitting
elbow-450 mm-45 degree-push on-ductile iron	_RMS Fitting
elbow-450 mm-90 degree-push on-ductile iron	_RMS Fitting

elbow-500 mm-11.25 degree-push on-ductile iron	_RMS Fitting
elbow-500 mm-22.5 degree-push on-ductile iron	_RMS Fitting
elbow-500 mm-45 degree-push on-ductile iron	_RMS Fitting
elbow-500 mm-90 degree-push on-ductile iron	_RMS Fitting
elbow-600 mm-11.25 degree-push on-ductile iron	_RMS Fitting
elbow-600 mm-22.5 degree-push on-ductile iron	_RMS Fitting
elbow-600 mm-45 degree-push on-ductile iron	_RMS Fitting
elbow-600 mm-90 degree-push on-ductile iron	_RMS Fitting
elbow-750 mm-11.25 degree-push on-ductile iron	_RMS Fitting
elbow-750 mm-22.5 degree-push on-ductile iron	_RMS Fitting
elbow-750 mm-45 degree-push on-ductile iron	_RMS Fitting
elbow-750 mm-90 degree-push on-ductile iron	_RMS Fitting

ANZ_Ductile Iron_Tee

Name	Style
tee-100mmx100mm-push on -ductile iron-20bar	_RMS Fitting
tee-150mmx100mm-push on -ductile iron-20bar	_RMS Fitting
tee-150mmx150mm-push on -ductile iron-20bar	_RMS Fitting
tee-200mmx100mm-push on -ductile iron-20bar	_RMS Fitting
tee-200mmx150mm-push on -ductile iron-20bar	_RMS Fitting
tee-200mmx200mm-push on -ductile iron-20bar	_RMS Fitting
tee-225mmx100mm-push on -ductile iron-20bar	_RMS Fitting
tee-225mmx150mm-push on -ductile iron-20bar	_RMS Fitting
tee-225mmx200mm-push on -ductile iron-20bar	_RMS Fitting
tee-225mmx225mm-push on -ductile iron-20bar	_RMS Fitting
tee-250mmx100mm-push on -ductile iron-20bar	_RMS Fitting
tee-250mmx150mm-push on -ductile iron-20bar	_RMS Fitting
tee-250mmx200mm-push on -ductile iron-20bar	_RMS Fitting
tee-250mmx225mm-push on -ductile iron-20bar	_RMS Fitting
tee-250mmx250mm-push on -ductile iron-20bar	_RMS Fitting
tee-300mmx100mm-push on -ductile iron-35bar	_RMS Fitting
tee-300mmx150mm-push on -ductile iron-35bar	_RMS Fitting
tee-300mmx200mm-push on -ductile iron-35bar	_RMS Fitting
tee-300mmx225mm-push on -ductile iron-35bar	_RMS Fitting
tee-300mmx250mm-push on -ductile iron-35bar	_RMS Fitting
tee-300mmx300mm-push on -ductile iron-35bar	_RMS Fitting
tee-375mmx100mm-push on -ductile iron-35bar	_RMS Fitting
tee-375mmx150mm-push on -ductile iron-35bar	_RMS Fitting
tee-375mmx200mm-push on -ductile iron-35bar	_RMS Fitting
tee-375mmx250mm-push on -ductile iron-35bar	_RMS Fitting
tee-375mmx300mm-push on -ductile iron-35bar	_RMS Fitting

tee-375mmx375mm-push on -ductile iron-35bar	_RMS Fitting
tee-450mmx100mm-push on -ductile iron-35bar	_RMS Fitting
tee-450mmx200mm-push on -ductile iron-35bar	_RMS Fitting
tee-450mmx225mm-push on -ductile iron-35bar	_RMS Fitting
tee-450mmx250mm-push on -ductile iron-35bar	_RMS Fitting
tee-450mmx300mm-push on -ductile iron-35bar	_RMS Fitting
tee-450mmx375mm-push on -ductile iron-35bar	_RMS Fitting
tee-450mmx450mm-push on -ductile iron-35bar	_RMS Fitting
tee-500mmx200mm-push on -ductile iron-35bar	_RMS Fitting
tee-500mmx250mm-push on -ductile iron-35bar	_RMS Fitting
tee-500mmx300mm-push on -ductile iron-35bar	_RMS Fitting
tee-500mmx375mm-push on -ductile iron-35bar	_RMS Fitting
tee-500mmx450mm-push on -ductile iron-35bar	_RMS Fitting
tee-500mmx500mm-push on -ductile iron-35bar	_RMS Fitting
tee-600mmx300mm-push on -ductile iron-35bar	_RMS Fitting
tee-600mmx375mm-push on -ductile iron-35bar	_RMS Fitting
tee-600mmx500mm-push on -ductile iron-35bar	_RMS Fitting
tee-600mmx600mm-push on -ductile iron-35bar	_RMS Fitting
tee-750mmx300mm-push on -ductile iron-35bar	_RMS Fitting
tee-750mmx750mm-push on -ductile iron-35bar	_RMS Fitting

ANZ_GRP Pipe

Name	Style
Pipe_ DN 300_SN10,000	_RMS Standard Pipe
Pipe_DN 300_PN16_SN10,000	_RMS Standard Pipe
Pipe_DN 300_PN16_SN20,000	_RMS Standard Pipe
Pipe_DN 300_PN25_SN10,000	_RMS Standard Pipe
Pipe_DN 300_SN20,000	_RMS Standard Pipe
Pipe_ DN 375_SN10,000	_RMS Standard Pipe
Pipe_DN 375_PN16_SN10,000	_RMS Standard Pipe
Pipe_DN 375_PN16_SN20,000	_RMS Standard Pipe
Pipe_DN 375_PN25_SN10,000	_RMS Standard Pipe
Pipe_DN 375_SN20,000	_RMS Standard Pipe
Pipe_ DN 450_SN10,000	_RMS Standard Pipe
Pipe_DN 450_PN16_SN10,000	_RMS Standard Pipe
Pipe_DN 450_PN16_SN20,000	_RMS Standard Pipe
Pipe_DN 450_PN25_SN10,000	_RMS Standard Pipe
Pipe_DN 450_SN20,000	_RMS Standard Pipe
Pipe_ DN 525_SN10,000	_RMS Standard Pipe
Pipe_DN 525_PN16_SN10,000	_RMS Standard Pipe

Pipe_DN 525_PN16_SN20,000	_RMS Standard Pipe
Pipe_DN 525_PN25_SN10,000	_RMS Standard Pipe
Pipe_DN 525_SN20,000	_RMS Standard Pipe
Pipe_ DN 600_SN10,000	_RMS Standard Pipe
Pipe_DN 600_PN16_SN10,000	_RMS Standard Pipe
Pipe_DN 600_PN16_SN20,000	_RMS Standard Pipe
Pipe_DN 600_PN25_SN10,000	_RMS Standard Pipe
Pipe_DN 600_SN20,000	_RMS Standard Pipe
Pipe_ DN 675_SN10,000	_RMS Standard Pipe
Pipe_DN 675_PN16_SN10,000	_RMS Standard Pipe
Pipe_DN 675_PN16_SN20,000	_RMS Standard Pipe
Pipe_DN 675_PN25_SN10,000	_RMS Standard Pipe
Pipe_DN 675_SN20,000	_RMS Standard Pipe
Pipe_ DN 750_SN10,000	_RMS Standard Pipe
Pipe_DN 750_PN16_SN10,000	_RMS Standard Pipe
Pipe_DN 750_PN16_SN20,000	_RMS Standard Pipe
Pipe_DN 750_PN25_SN10,000	_RMS Standard Pipe
Pipe_DN 750_SN20,000	_RMS Standard Pipe
Pipe_ DN 900_SN10,000	_RMS Standard Pipe
Pipe_DN 900_PN16_SN10,000	_RMS Standard Pipe
Pipe_DN 900_PN25_SN10,000	_RMS Standard Pipe
Pipe_ DN 1000_SN10,000	_RMS Standard Pipe
Pipe_DN 1000_PN16_SN10,000	_RMS Standard Pipe
Pipe_DN 1000_PN25_SN10,000	_RMS Standard Pipe
Pipe_ DN 1100_SN10,000	_RMS Standard Pipe
Pipe_DN 1100_PN16_SN10,000	_RMS Standard Pipe
Pipe_DN 1100_PN25_SN10,000	_RMS Standard Pipe
Pipe_ DN 1200_SN10,000	_RMS Standard Pipe
Pipe_DN 1200_PN16_SN10,000	_RMS Standard Pipe
Pipe_DN 1200_PN25_SN10,000	_RMS Standard Pipe
Pipe_ DN 1300_SN10,000	_RMS Standard Pipe
Pipe_DN 1300_PN16_SN10,000	_RMS Standard Pipe
Pipe_DN 1300_PN25_SN10,000	_RMS Standard Pipe
Pipe_DN 1400_PN16_SN10,000	_RMS Standard Pipe
Pipe_DN 1400_PN25_SN10,000	_RMS Standard Pipe
Pipe_DN 1400_SN10,000	_RMS Standard Pipe
Pipe_DN 1500_PN16_SN10,000	_RMS Standard Pipe
Pipe_DN 1500_PN25_SN10,000	_RMS Standard Pipe
Pipe_DN 1500_SN10,000	_RMS Standard Pipe

Pipe_DN 1600_PN16_SN10,000	_RMS Standard Pipe
Pipe_DN 1600_PN25_SN10,000	_RMS Standard Pipe
Pipe_DN 1600_SN10,000	_RMS Standard Pipe
Pipe_DN 1700_PN16_SN10,000	_RMS Standard Pipe
Pipe_DN 1700_PN25_SN10,000	_RMS Standard Pipe
Pipe_DN 1700_SN10,000	_RMS Standard Pipe
Pipe_DN 1800_PN16_SN10,000	_RMS Standard Pipe
Pipe_DN 1800_SN10,000	_RMS Standard Pipe
Pipe_DN 1900_PN16_SN10,000	_RMS Standard Pipe
Pipe_DN 1900_SN10,000	_RMS Standard Pipe
Pipe_DN 2000_PN16_SN10,000	_RMS Standard Pipe
Pipe_DN 2000_SN10,000	_RMS Standard Pipe
Pipe_DN 3000_PN16_SN10,000	_RMS Standard Pipe
Pipe_DN 3000_SN10,000	_RMS Standard Pipe
Pipe_DN 4000_PN16_SN10,000	_RMS Standard Pipe
Pipe_DN 4000_SN10,000	_RMS Standard Pipe

ANZ_GRP_Elbow

Name	Style
Bend 11.25°_ DN 300	_RMS Fitting
Bend 22.5°_ DN 300	_RMS Fitting
Bend 45°_ DN 300	_RMS Fitting
Bend 90°_ DN 300	_RMS Fitting
Bend 11.25°_ DN 375	_RMS Fitting
Bend 22.5°_ DN 375	_RMS Fitting
Bend 45°_ DN 375	_RMS Fitting
Bend 90°_ DN 375	_RMS Fitting
Bend 11.25°_ DN 450	_RMS Fitting
Bend 22.5°_ DN 450	_RMS Fitting
Bend 45°_ DN 450	_RMS Fitting
Bend 90°_ DN 450	_RMS Fitting
Bend 11.25°_ DN 525	_RMS Fitting
Bend 22.5°_ DN 525	_RMS Fitting
Bend 45°_ DN 525	_RMS Fitting
Bend 90°_ DN 525	_RMS Fitting
Bend 11.25°_ DN 600	_RMS Fitting
Bend 22.5°_ DN 600	_RMS Fitting
Bend 45°_ DN 600	_RMS Fitting
Bend 90°_ DN 600	_RMS Fitting
Bend 11.25°_ DN 675	_RMS Fitting
Bend 22.5°_ DN 675	_RMS Fitting

Bend 45°_ DN 675	_RMS Fitting
Bend 90°_ DN 675	_RMS Fitting
Bend 11.25°_ DN 750	_RMS Fitting
Bend 22.5°_ DN 750	_RMS Fitting
Bend 45°_ DN 750	_RMS Fitting
Bend 90°_ DN 750	_RMS Fitting
Bend 11.25°_ DN 900	_RMS Fitting
Bend 22.5°_ DN 900	_RMS Fitting
Bend 45°_ DN 900	_RMS Fitting
Bend 90°_ DN 900	_RMS Fitting
Bend 11.25°_ DN 1000	_RMS Fitting
Bend 22.5°_ DN 1000	_RMS Fitting
Bend 45°_ DN 1000	_RMS Fitting
Bend 90°_ DN 1000	_RMS Fitting
Bend 11.25°_ DN 1100	_RMS Fitting
Bend 22.5°_ DN 1100	_RMS Fitting
Bend 45°_ DN 1100	_RMS Fitting
Bend 90°_ DN 1100	_RMS Fitting
Bend 11.25°_ DN 1200	_RMS Fitting
Bend 22.5°_ DN 1200	_RMS Fitting
Bend 45°_ DN 1200	_RMS Fitting
Bend 90°_ DN 1200	_RMS Fitting

ANZ_GRP_Cap

Name	Style
Cap_DN 300_Closed Coupling	_RMS Fitting
Cap_DN 375_Closed Coupling	_RMS Fitting
Cap_DN 450_Closed Coupling	_RMS Fitting
Cap_DN 525_Closed Coupling	_RMS Fitting
Cap_DN 600_Closed Coupling	_RMS Fitting
Cap_DN 675_Closed Coupling	_RMS Fitting
Cap_DN 750_Closed Coupling	_RMS Fitting
Cap_DN 900_Closed Coupling	_RMS Fitting
Cap_DN 1000_Closed Coupling	_RMS Fitting
Cap_DN 1100_Closed Coupling	_RMS Fitting
Cap_DN 1200_Closed Coupling	_RMS Fitting
Cap_DN 1300_Closed Coupling	_RMS Fitting
Cap_DN 1400_Closed Coupling	_RMS Fitting
Cap_DN 1700_Closed Coupling	_RMS Fitting
Cap_DN 2000_Closed Coupling	_RMS Fitting

ANZ_GRP_Tee

Name	Style
Tee_DN 300x150_ PN 16	_RMS Fitting
Tee_DN 300x250_ PN 16	_RMS Fitting
Tee_DN 300x300_PN16	_RMS Fitting
Tee_DN 375x150_ PN 16	_RMS Fitting
Tee_DN 375x250_ PN 16	_RMS Fitting
Tee_DN 375x375_PN16	_RMS Fitting
Tee_DN 450x150_ PN 16	_RMS Fitting
Tee_DN 450x250_ PN 16	_RMS Fitting
Tee_DN 450x375_ PN 16	_RMS Fitting
Tee_DN 450x450_PN16	_RMS Fitting
Tee_DN 525x150_ PN 16	_RMS Fitting
Tee_DN 525x250_ PN 16	_RMS Fitting
Tee_DN 525x375_ PN 16	_RMS Fitting
Tee_DN 525x525_PN16	_RMS Fitting
Tee_DN 600x150_ PN 16	_RMS Fitting
Tee_DN 600x300_ PN 16	_RMS Fitting
Tee_DN 600x450_ PN 16	_RMS Fitting
Tee_DN 600x600_PN16	_RMS Fitting
Tee_DN 675x150_ PN 16	_RMS Fitting
Tee_DN 675x300_ PN 16	_RMS Fitting
Tee_DN 675x450_ PN 16	_RMS Fitting
Tee_DN 675x675_PN16	_RMS Fitting
Tee_DN 750x200_ PN 16	_RMS Fitting
Tee_DN 750x450_ PN 16	_RMS Fitting
Tee_DN 750x600_ PN 16	_RMS Fitting
Tee_DN 750x750_PN16	_RMS Fitting
Tee_DN 900x300_ PN 16	_RMS Fitting
Tee_DN 900x525_ PN 16	_RMS Fitting
Tee_DN 900x675_ PN 16	_RMS Fitting
Tee_DN 900x900_PN16	_RMS Fitting
Tee_DN 1000x300_ PN 16	_RMS Fitting
Tee_DN 1000x450_ PN 16	_RMS Fitting
Tee_DN 1000x600_ PN 16	_RMS Fitting
Tee_DN 1000x750_ PN 16	_RMS Fitting
Tee_DN 1000x1000_PN16	_RMS Fitting

ANZ_GRP_Coupling

Name	Style
Double Sockets_ DN 300	_RMS Fitting
Double Sockets_ DN 375	_RMS Fitting
Double Sockets_ DN 450	_RMS Fitting
Double Sockets_ DN 525	_RMS Fitting
Double Sockets_ DN 600	_RMS Fitting
Double Sockets_ DN 675	_RMS Fitting
Double Sockets_ DN 750	_RMS Fitting
Double Sockets_ DN 900	_RMS Fitting
Double Sockets_ DN 1000	_RMS Fitting
Double Socket _ DN 1100	_RMS Fitting
Double Sockets_ DN 1200	_RMS Fitting
Double Sockets_ DN 1300	_RMS Fitting
Double Sockets_ DN 1400	_RMS Fitting
Double Sockets_ DN 1500	_RMS Fitting
Double Sockets_ DN 1600	_RMS Fitting
Double Sockets_ DN 1700	_RMS Fitting
Double Sockets_ DN 1800	_RMS Fitting
Double Sockets_ DN 1900	_RMS Fitting
Double Sockets_ DN 2000	_RMS Fitting
Double Sockets_ DN 3000	_RMS Fitting
Double Sockets_ DN 4000	_RMS Fitting

ANZ_GRP_Reducer

Name	Style
Ecc_Reducer_ DN 375x300	_RMS Fitting
Reducer_ DN 375x300	_RMS Fitting
Ecc_Reducer_ DN 450x300	_RMS Fitting
Reducer_ DN 450x300	_RMS Fitting
Ecc_ Reducer_DN 450x375	_RMS Fitting
Reducer_ DN 450x375	_RMS Fitting
Ecc_Reducer_DN 525x300	_RMS Fitting
Reducer_ DN 525x300	_RMS Fitting
Ecc_Reducer_DN 525x375	_RMS Fitting
Reducer_ DN 525x375	_RMS Fitting
Ecc_Reducer_DN 525x450	_RMS Fitting
Reducer_ DN 525x450	_RMS Fitting
Ecc_Reducer_DN 600x375	_RMS Fitting
Reducer_ DN 600x375	_RMS Fitting
Ecc_Reducer_DN 600x450	_RMS Fitting

Reducer_ DN 600x450	_RMS Fitting
Ecc_Reducer_DN 600x525	_RMS Fitting
Reducer_ DN 600x525	_RMS Fitting
Ecc_Reducer_DN 675x450	_RMS Fitting
Reducer_ DN 675x450	_RMS Fitting
Ecc_Reducer_DN 675x525	_RMS Fitting
Reducer_ DN 675x525	_RMS Fitting
Ecc_Reducer_DN 675x600	_RMS Fitting
Reducer_ DN 675x600	_RMS Fitting
Ecc_Reducer_DN 750x525	_RMS Fitting
Reducer_ DN 750x525	_RMS Fitting
Ecc_Reducer_DN 750x600	_RMS Fitting
Reducer_ DN 750x600	_RMS Fitting
Ecc_Reducer_DN 750x675	_RMS Fitting
Reducer_ DN 750x675	_RMS Fitting
Ecc_Reducer_DN 900x525	_RMS Fitting
Reducer_ DN 900x525	_RMS Fitting
Ecc_Reducer_DN 900x600	_RMS Fitting
Reducer_ DN 900x600	_RMS Fitting
Ecc_Reducer_DN 900x675	_RMS Fitting
Reducer_ DN 900x675	_RMS Fitting
Ecc_Reducer_DN 900x750	_RMS Fitting
Reducer_ DN 900x750	_RMS Fitting
Ecc_Reducer_DN 1000x525	_RMS Fitting
Reducer_ DN 1000x525	_RMS Fitting
Ecc_Reducer_DN 1000x600	_RMS Fitting
Reducer_ DN 1000x600	_RMS Fitting
Ecc_Reducer_DN 1000x675	_RMS Fitting
Reducer_ DN 1000x675	_RMS Fitting
Ecc_Reducer_DN 1000x750	_RMS Fitting
Reducer_ DN 1000x750	_RMS Fitting
Ecc_Reducer_DN 1000x900	_RMS Fitting
Reducer_ DN 1000x900	_RMS Fitting

ANZ_PE Pipe

Name	Style
Pipe_DN 25_PN12.5	_RMS Standard Pipe
Pipe_DN 25_PN16	_RMS Standard Pipe
Pipe_DN 25_PN20	_RMS Standard Pipe
Pipe_DN 25_PN25	_RMS Standard Pipe
Pipe_DN 32_PN10	_RMS Standard Pipe
Pipe_DN 32_PN12.5	_RMS Standard Pipe
Pipe_DN 32_PN16	_RMS Standard Pipe
Pipe_DN 32_PN20	_RMS Standard Pipe
Pipe_DN 32_PN25	_RMS Standard Pipe
Pipe_DN 40_PN10	_RMS Standard Pipe
Pipe_DN 40_PN12.5	_RMS Standard Pipe
Pipe_DN 40_PN16	_RMS Standard Pipe
Pipe_DN 40_PN20	_RMS Standard Pipe
Pipe_DN 40_PN25	_RMS Standard Pipe
Pipe_DN 40_PN8	_RMS Standard Pipe
Pipe_DN 50_PN10	_RMS Standard Pipe
Pipe_DN 50_PN12.5	_RMS Standard Pipe
Pipe_DN 50_PN16	_RMS Standard Pipe
Pipe_DN 50_PN20	_RMS Standard Pipe
Pipe_DN 50_PN25	_RMS Standard Pipe
Pipe_DN 50_PN8	_RMS Standard Pipe
Pipe_DN 63_PN10	_RMS Standard Pipe
Pipe_DN 63_PN12.5	_RMS Standard Pipe
Pipe_DN 63_PN16	_RMS Standard Pipe
Pipe_DN 63_PN20	_RMS Standard Pipe
Pipe_DN 63_PN25	_RMS Standard Pipe
Pipe_DN 63_PN6.3	_RMS Standard Pipe
Pipe_DN 63_PN8	_RMS Standard Pipe
Pipe_DN 75_PN10	_RMS Standard Pipe
Pipe_DN 75_PN12.5	_RMS Standard Pipe
Pipe_DN 75_PN16	_RMS Standard Pipe
Pipe_DN 75_PN20	_RMS Standard Pipe
Pipe_DN 75_PN25	_RMS Standard Pipe
Pipe_DN 75_PN6.3	_RMS Standard Pipe
Pipe_DN 75_PN8	_RMS Standard Pipe
Pipe_DN 90_PN10	_RMS Standard Pipe

Pipe_DN 90_PN12.5	_RMS Standard Pipe
Pipe_DN 90_PN16	_RMS Standard Pipe
Pipe_DN 90_PN20	_RMS Standard Pipe
Pipe_DN 90_PN25	_RMS Standard Pipe
Pipe_DN 90_PN6.3	_RMS Standard Pipe
Pipe_DN 90_PN8	_RMS Standard Pipe
Pipe_ DN 110_PN4	_RMS Standard Pipe
Pipe_DN 110_PN10	_RMS Standard Pipe
Pipe_DN 110_PN12.5	_RMS Standard Pipe
Pipe_DN 110_PN16	_RMS Standard Pipe
Pipe_DN 110_PN20	_RMS Standard Pipe
Pipe_DN 110_PN25	_RMS Standard Pipe
Pipe_DN 110_PN6.3	_RMS Standard Pipe
Pipe_DN 110_PN8	_RMS Standard Pipe
Pipe_ DN 125_PN4	_RMS Standard Pipe
Pipe_DN 125_PN10	_RMS Standard Pipe
Pipe_DN 125_PN12.5	_RMS Standard Pipe
Pipe_DN 125_PN16	_RMS Standard Pipe
Pipe_DN 125_PN20	_RMS Standard Pipe
Pipe_DN 125_PN25	_RMS Standard Pipe
Pipe_DN 125_PN6.3	_RMS Standard Pipe
Pipe_DN 125_PN8	_RMS Standard Pipe
Pipe_ DN 140_PN4	_RMS Standard Pipe
Pipe_DN 140_PN10	_RMS Standard Pipe
Pipe_DN 140_PN12.5	_RMS Standard Pipe
Pipe_DN 140_PN16	_RMS Standard Pipe
Pipe_DN 140_PN20	_RMS Standard Pipe
Pipe_DN 140_PN25	_RMS Standard Pipe
Pipe_DN 140_PN6.3	_RMS Standard Pipe
Pipe_DN 140_PN8	_RMS Standard Pipe
Pipe_DN 160_PN10	_RMS Standard Pipe
Pipe_DN 160_PN12.5	_RMS Standard Pipe
Pipe_DN 160_PN16	_RMS Standard Pipe
Pipe_DN 160_PN20	_RMS Standard Pipe
Pipe_DN 160_PN25	_RMS Standard Pipe
Pipe_DN 160_PN4	_RMS Standard Pipe
Pipe_DN 160_PN6.3	_RMS Standard Pipe
Pipe_DN 160_PN8	_RMS Standard Pipe
Pipe_DN 180_PN10	_RMS Standard Pipe

Pipe_DN 180_PN12.5	_RMS Standard Pipe
Pipe_DN 180_PN16	_RMS Standard Pipe
Pipe_DN 180_PN20	_RMS Standard Pipe
Pipe_DN 180_PN25	_RMS Standard Pipe
Pipe_DN 180_PN4	_RMS Standard Pipe
Pipe_DN 180_PN6.3	_RMS Standard Pipe
Pipe_DN 180_PN8	_RMS Standard Pipe
Pipe_DN 200_PN10	_RMS Standard Pipe
Pipe_DN 200_PN12.5	_RMS Standard Pipe
Pipe_DN 200_PN16	_RMS Standard Pipe
Pipe_DN 200_PN20	_RMS Standard Pipe
Pipe_DN 200_PN25	_RMS Standard Pipe
Pipe_DN 200_PN4	_RMS Standard Pipe
Pipe_DN 200_PN6.3	_RMS Standard Pipe
Pipe_DN 200_PN8	_RMS Standard Pipe
Pipe_DN 225_PN10	_RMS Standard Pipe
Pipe_DN 225_PN12.5	_RMS Standard Pipe
Pipe_DN 225_PN16	_RMS Standard Pipe
Pipe_DN 225_PN20	_RMS Standard Pipe
Pipe_DN 225_PN25	_RMS Standard Pipe
Pipe_DN 225_PN4	_RMS Standard Pipe
Pipe_DN 225_PN6.3	_RMS Standard Pipe
Pipe_DN 225_PN8	_RMS Standard Pipe
Pipe_ DN 250_PN4	_RMS Standard Pipe
Pipe_DN 250_PN10	_RMS Standard Pipe
Pipe_DN 250_PN12.5	_RMS Standard Pipe
Pipe_DN 250_PN16	_RMS Standard Pipe
Pipe_DN 250_PN20	_RMS Standard Pipe
Pipe_DN 250_PN25	_RMS Standard Pipe
Pipe_DN 250_PN6.3	_RMS Standard Pipe
Pipe_DN 250_PN8	_RMS Standard Pipe
Pipe_ DN 280_PN4	_RMS Standard Pipe
Pipe_DN 280_PN10	_RMS Standard Pipe
Pipe_DN 280_PN12.5	_RMS Standard Pipe
Pipe_DN 280_PN16	_RMS Standard Pipe
Pipe_DN 280_PN20	_RMS Standard Pipe
Pipe_DN 280_PN25	_RMS Standard Pipe
Pipe_DN 280_PN6.3	_RMS Standard Pipe
Pipe_DN 280_PN8	_RMS Standard Pipe

Pipe_DN 315_PN10	_RMS Standard Pipe
Pipe_DN 315_PN12.5	_RMS Standard Pipe
Pipe_DN 315_PN16	_RMS Standard Pipe
Pipe_DN 315_PN20	_RMS Standard Pipe
Pipe_DN 315_PN25	_RMS Standard Pipe
Pipe_DN 315_PN4	_RMS Standard Pipe
Pipe_DN 315_PN6.3	_RMS Standard Pipe
Pipe_DN 315_PN8	_RMS Standard Pipe
Pipe_DN 355_PN10	_RMS Standard Pipe
Pipe_DN 355_PN12.5	_RMS Standard Pipe
Pipe_DN 355_PN16	_RMS Standard Pipe
Pipe_DN 355_PN20	_RMS Standard Pipe
Pipe_DN 355_PN25	_RMS Standard Pipe
Pipe_DN 355_PN4	_RMS Standard Pipe
Pipe_DN 355_PN6.3	_RMS Standard Pipe
Pipe_DN 355_PN8	_RMS Standard Pipe
Pipe_DN 400_PN10	_RMS Standard Pipe
Pipe_DN 400_PN12.5	_RMS Standard Pipe
Pipe_DN 400_PN16	_RMS Standard Pipe
Pipe_DN 400_PN20	_RMS Standard Pipe
Pipe_DN 400_PN25	_RMS Standard Pipe
Pipe_DN 400_PN4	_RMS Standard Pipe
Pipe_DN 400_PN6.3	_RMS Standard Pipe
Pipe_DN 400_PN8	_RMS Standard Pipe
Pipe_ DN 450_PN4	_RMS Standard Pipe
Pipe_DN 450_PN10	_RMS Standard Pipe
Pipe_DN 450_PN12.5	_RMS Standard Pipe
Pipe_DN 450_PN16	_RMS Standard Pipe
Pipe_DN 450_PN20	_RMS Standard Pipe
Pipe_DN 450_PN25	_RMS Standard Pipe
Pipe_DN 450_PN6.3	_RMS Standard Pipe
Pipe_DN 450_PN8	_RMS Standard Pipe
Pipe_ DN 500_PN4	_RMS Standard Pipe
Pipe_DN 500_PN10	_RMS Standard Pipe
Pipe_DN 500_PN12.5	_RMS Standard Pipe
Pipe_DN 500_PN16	_RMS Standard Pipe
Pipe_DN 500_PN20	_RMS Standard Pipe
Pipe_DN 500_PN25	_RMS Standard Pipe
Pipe_DN 500_PN6.3	_RMS Standard Pipe

Pipe_DN 500_PN8	_RMS Standard Pipe
Pipe_DN 560_PN10	_RMS Standard Pipe
Pipe_DN 560_PN12.5	_RMS Standard Pipe
Pipe_DN 560_PN16	_RMS Standard Pipe
Pipe_DN 560_PN20	_RMS Standard Pipe
Pipe_DN 560_PN25	_RMS Standard Pipe
Pipe_DN 560_PN4	_RMS Standard Pipe
Pipe_DN 560_PN6.3	_RMS Standard Pipe
Pipe_DN 560_PN8	_RMS Standard Pipe
Pipe_DN 630_PN10	_RMS Standard Pipe
Pipe_DN 630_PN12.5	_RMS Standard Pipe
Pipe_DN 630_PN16	_RMS Standard Pipe
Pipe_DN 630_PN20	_RMS Standard Pipe
Pipe_DN 630_PN25	_RMS Standard Pipe
Pipe_DN 630_PN4	_RMS Standard Pipe
Pipe_DN 630_PN6.3	_RMS Standard Pipe
Pipe_DN 630_PN8	_RMS Standard Pipe
Pipe_DN 710_PN10	_RMS Standard Pipe
Pipe_DN 710_PN12.5	_RMS Standard Pipe
Pipe_DN 710_PN16	_RMS Standard Pipe
Pipe_DN 710_PN20	_RMS Standard Pipe
Pipe_DN 710_PN25	_RMS Standard Pipe
Pipe_DN 710_PN4	_RMS Standard Pipe
Pipe_DN 710_PN6.3	_RMS Standard Pipe
Pipe_DN 710_PN8	_RMS Standard Pipe
Pipe_DN 800_PN10	_RMS Standard Pipe
Pipe_DN 800_PN12.5	_RMS Standard Pipe
Pipe_DN 800_PN16	_RMS Standard Pipe
Pipe_DN 800_PN20	_RMS Standard Pipe
Pipe_DN 800_PN4	_RMS Standard Pipe
Pipe_DN 800_PN6.3	_RMS Standard Pipe
Pipe_DN 800_PN8	_RMS Standard Pipe
Pipe_ DN 900_PN4	_RMS Standard Pipe
Pipe_DN 900_PN10	_RMS Standard Pipe
Pipe_DN 900_PN12.5	_RMS Standard Pipe
Pipe_DN 900_PN16	_RMS Standard Pipe
Pipe_DN 900_PN6.3	_RMS Standard Pipe
Pipe_DN 900_PN8	_RMS Standard Pipe
Pipe_ DN 1000_PN4	_RMS Standard Pipe

Pipe_DN 1000_PN10	_RMS Standard Pipe
Pipe_DN 1000_PN12.5	_RMS Standard Pipe
Pipe_DN 1000_PN16	_RMS Standard Pipe
Pipe_DN 1000_PN6.3	_RMS Standard Pipe
Pipe_DN 1000_PN8	_RMS Standard Pipe
Pipe_ DN 1200_PN4	_RMS Standard Pipe
Pipe_DN 1200_PN10	_RMS Standard Pipe
Pipe_DN 1200_PN12.5	_RMS Standard Pipe
Pipe_DN 1200_PN16	_RMS Standard Pipe
Pipe_DN 1200_PN6.3	_RMS Standard Pipe
Pipe_DN 1200_PN8	_RMS Standard Pipe
Pipe_ DN 1400_PN4	_RMS Standard Pipe
Pipe_DN 1400_PN10	_RMS Standard Pipe
Pipe_DN 1400_PN12.5	_RMS Standard Pipe
Pipe_DN 1400_PN16	_RMS Standard Pipe
Pipe_DN 1400_PN6.3	_RMS Standard Pipe
Pipe_DN 1400_PN8	_RMS Standard Pipe
Pipe_ DN 1600_PN4	_RMS Standard Pipe
Pipe_DN 1600_PN10	_RMS Standard Pipe
Pipe_DN 1600_PN12.5	_RMS Standard Pipe
Pipe_DN 1600_PN6.3	_RMS Standard Pipe
Pipe_DN 1600_PN8	_RMS Standard Pipe
Pipe_DN 1800_PN10	_RMS Standard Pipe
Pipe_DN 1800_PN12.5	_RMS Standard Pipe
Pipe_DN 1800_PN4	_RMS Standard Pipe
Pipe_DN 1800_PN6.3	_RMS Standard Pipe
Pipe_DN 1800_PN8	_RMS Standard Pipe
Pipe_DN 2000_PN10	_RMS Standard Pipe
Pipe_DN 2000_PN12.5	_RMS Standard Pipe
Pipe_DN 2000_PN4	_RMS Standard Pipe
Pipe_DN 2000_PN6.3	_RMS Standard Pipe
Pipe_DN 2000_PN8	_RMS Standard Pipe

ANZ_PE_Elbow

Name	Style
Long Bend 45°_ DN 20_Moulded	_RMS Fitting
Long Bend 90°_ DN 20_Moulded	_RMS Fitting
Long Bend 45°_ DN 25_Moulded	_RMS Fitting
Long Bend 90°_ DN 25_Moulded	_RMS Fitting
Long Bend 45°_ DN 32_Moulded	_RMS Fitting
Long Bend 90°_ DN 32_Moulded	_RMS Fitting
Long Bend 45°_ DN 40_Moulded	_RMS Fitting
Long Bend 90°_ DN 40_Moulded	_RMS Fitting
Long Bend 45°_ DN 50_Moulded	_RMS Fitting
Long Bend 90°_ DN 50_Moulded	_RMS Fitting
Long Bend 45°_ DN 63_Moulded	_RMS Fitting
Long Bend 90°_ DN 63_Moulded	_RMS Fitting
Short Bend 90°_ DN 63_Moulded	_RMS Fitting
Long Bend 45°_ DN 75_Moulded	_RMS Fitting
Long Bend 90°_ DN 75_Moulded	_RMS Fitting
Short Bend 90°_ DN 75_Moulded	_RMS Fitting
Long Bend 45°_ DN 90_Moulded	_RMS Fitting
Long Bend 90°_ DN 90_Moulded	_RMS Fitting
Short Bend 90°_ DN 90_Moulded	_RMS Fitting
Long Bend 45°_ DN 110_Moulded	_RMS Fitting
Long Bend 90°_ DN 110_Moulded	_RMS Fitting
Short Bend 90°_ DN 110_Moulded	_RMS Fitting
Long Bend 45°_ DN 125_Moulded	_RMS Fitting
Long Bend 90°_ DN 125_Moulded	_RMS Fitting
Short Bend 90°_ DN 125_Moulded	_RMS Fitting
Long Bend 45°_ DN 140_Moulded	_RMS Fitting
Long Bend 90°_ DN 140_Moulded	_RMS Fitting
Short Bend 90°_ DN 140_Moulded	_RMS Fitting
Long Bend 45°_ DN 160_Moulded	_RMS Fitting
Long Bend 90°_ DN 160_Moulded	_RMS Fitting
Short Bend 90°_ DN 160_Moulded	_RMS Fitting
Long Bend 45°_ DN 180_Moulded	_RMS Fitting
Long Bend 90°_ DN 180_Moulded	_RMS Fitting
Short Bend 90°_ DN 180_Moulded	_RMS Fitting
Long Bend 45°_ DN 200_Moulded	_RMS Fitting
Long Bend 90°_ DN 200_Moulded	_RMS Fitting
Short Bend 90°_ DN 200_Moulded	_RMS Fitting
Segmented Bend 30°_DN 225_Corrugated	_RMS Fitting
Long Bend 45°_ DN 225_Moulded	_RMS Fitting

Segmented Bend 45°_DN 225_Corrugated	_RMS Fitting
Segmented Bend 60°_DN 225_Corrugated	_RMS Fitting
Long Bend 90°_ DN 225_Moulded	_RMS Fitting
Segmented Bend 90°_DN 225_Corrugated	_RMS Fitting
Short Bend 90°_ DN 225_Moulded	_RMS Fitting
Long Bend 45°_ DN 250_Moulded	_RMS Fitting
Long Bend 90°_ DN 250_Moulded	_RMS Fitting
Short Bend 90°_ DN 250_Moulded	_RMS Fitting
Long Bend 45°_ DN 280_Moulded	_RMS Fitting
Long Bend 90°_ DN 280_Moulded	_RMS Fitting
Short Bend 90°_ DN 280_Moulded	_RMS Fitting
Segmented Bend 30°_DN 300_Corrugated	_RMS Fitting
Segmented Bend 45°_DN 300_Corrugated	_RMS Fitting
Segmented Bend 60°_DN 300_Corrugated	_RMS Fitting
Segmented Bend 90°_DN 300_Corrugated	_RMS Fitting
Long Bend 45°_ DN 315_Moulded	_RMS Fitting
Long Bend 90°_ DN 315_Moulded	_RMS Fitting
Short Bend 90°_ DN 315_Moulded	_RMS Fitting
Short Bend 90°_ DN 355_Moulded	_RMS Fitting
Segmented Bend 30°_DN 375_Corrugated	_RMS Fitting
Segmented Bend 45°_DN 375_Corrugated	_RMS Fitting
Segmented Bend 60°_DN 375_Corrugated	_RMS Fitting
Segmented Bend 90°_DN 375_Corrugated	_RMS Fitting
Short Bend 90°_ DN 400_Moulded	_RMS Fitting
Segmented Bend 30°_DN 450_Corrugated	_RMS Fitting
Segmented Bend 45°_DN 450_Corrugated	_RMS Fitting
Segmented Bend 60°_DN 450_Corrugated	_RMS Fitting
Segmented Bend 90°_DN 450_Corrugated	_RMS Fitting
Short Bend 90°_ DN 450_Moulded	_RMS Fitting
Short Bend 90°_ DN 500_Moulded	_RMS Fitting
Segmented Bend 30°_DN 525_Corrugated	_RMS Fitting
Segmented Bend 45°_DN 525_Corrugated	_RMS Fitting
Segmented Bend 60°_DN 525_Corrugated	_RMS Fitting
Segmented Bend 90°_DN 525_Corrugated	_RMS Fitting
Segmented Bend 30°_DN 600_Corrugated	_RMS Fitting
Segmented Bend 45°_DN 600_Corrugated	_RMS Fitting
Segmented Bend 60°_DN 600_Corrugated	_RMS Fitting
Segmented Bend 90°_DN 600_Corrugated	_RMS Fitting
Segmented Bend 30°_DN 750_Corrugated	_RMS Fitting
Segmented Bend 45°_DN 750_Corrugated	_RMS Fitting
Segmented Bend 60°_DN 750_Corrugated	_RMS Fitting
Segmented Bend 90°_DN 750_Corrugated	_RMS Fitting
Segmented Bend 30°_DN 900_Corrugated	_RMS Fitting

Segmented Bend 45°_DN 900_Corrugated	_RMS Fitting
Segmented Bend 60°_DN 900_Corrugated	_RMS Fitting
Segmented Bend 90°_DN 900_Corrugated	_RMS Fitting

ANZ_PE_Cap

Name	Style
Cap_DN 20	_RMS Fitting
Cap_DN 25	_RMS Fitting
Cap_DN 32	_RMS Fitting
Cap_DN 40	_RMS Fitting
Cap_DN 50	_RMS Fitting
Cap_DN 63	_RMS Fitting
Cap_DN 75	_RMS Fitting
Cap_DN 90	_RMS Fitting
Cap_DN 110	_RMS Fitting
Cap_DN 125	_RMS Fitting
Cap_DN 140	_RMS Fitting
Cap_DN 160	_RMS Fitting
Cap_DN 180	_RMS Fitting
Cap_DN 200	_RMS Fitting
Cap_DN 225	_RMS Fitting
Cap_DN 250	_RMS Fitting
Cap_DN 280	_RMS Fitting
Cap_DN 315	_RMS Fitting

ANZ_PE_Tee

Name	Style
Tee_DN 20x20_Moulded	_RMS Fitting
Tee_DN 25x25_Moulded	_RMS Fitting
Tee_DN 40x40_Moulded	_RMS Fitting
Tee_DN 50x50_Moulded	_RMS Fitting
Tee_DN 63x63_Moulded	_RMS Fitting
Tee_DN 75x75_Moulded	_RMS Fitting
Tee_DN 90x90_Moulded	_RMS Fitting
Tee_DN 110x110_Moulded	_RMS Fitting
Tee_DN 125x125_Moulded	_RMS Fitting
Tee_DN 140x140_Moulded	_RMS Fitting
Tee_DN 160x160_Moulded	_RMS Fitting
Tee_DN 180x180_Moulded	_RMS Fitting
Tee_DN 200x200_Moulded	_RMS Fitting
Tee_DN 225x225_Corrugated	_RMS Fitting
Tee_DN 225x225_Moulded	_RMS Fitting

Tee_DN 250x250_Moulded	_RMS Fitting
Tee_DN 280x280_Moulded	_RMS Fitting
Tee_DN 300x300_Corrugated	_RMS Fitting
Tee_DN 315x315_Moulded	_RMS Fitting
Tee_DN 355x355_Moulded	_RMS Fitting
Tee_DN 375x375_Corrugated	_RMS Fitting
Tee_DN 400x400_Moulded	_RMS Fitting
Tee_DN 450x450_Corrugated	_RMS Fitting
Tee_DN 450x450_Moulded	_RMS Fitting
Tee_DN 500x500_Moulded	_RMS Fitting
Tee_DN 525x525_Corrugated	_RMS Fitting
Tee_DN 600x600_Corrugated	_RMS Fitting
Tee_DN 750x750_Corrugated	_RMS Fitting
Tee_DN 900x900_Corrugated	_RMS Fitting

ANZ_PE_Reducer

Name	Style
Reducer_DN 25x20 Long Spigot	_RMS Fitting
Reducer_DN 32x20 Long Spigot	_RMS Fitting
Reducer_DN 32x25 Long Spigot	_RMS Fitting
Reducer_DN 40x20 Long Spigot	_RMS Fitting
Reducer_DN 40x25 Long Spigot	_RMS Fitting
Reducer_DN 40x32 Long Spigot	_RMS Fitting
Reducer_DN 50x25 Long Spigot	_RMS Fitting
Reducer_DN 50x25 Short Spigot	_RMS Fitting
Reducer_DN 50x32 Long Spigot	_RMS Fitting
Reducer_DN 50x32 Short Spigot	_RMS Fitting
Reducer_DN 50x40 Long Spigot	_RMS Fitting
Reducer_DN 50x40 Short Spigot	_RMS Fitting
Reducer_DN 63x32 Long Spigot	_RMS Fitting
Reducer_DN 63x32Short Spigot	_RMS Fitting
Reducer_DN 63x40 Long Spigot	_RMS Fitting
Reducer_DN 63x40 Short Spigot	_RMS Fitting
Reducer_DN 63x50 Long Spigot	_RMS Fitting
Reducer_DN 63x50 Short Spigot	_RMS Fitting
Reducer_DN75x40 Short Spigot	_RMS Fitting
Reducer_DN 75x50 Long Spigot	_RMS Fitting
Reducer_DN 75x50 Short Spigot	_RMS Fitting
Reducer_DN 75x63 Long Spigot	_RMS Fitting
Reducer_DN 75x63 Short Spigot	_RMS Fitting
Reducer_DN 90x40 Short Spigot	_RMS Fitting
Reducer_DN 90x50 Long Spigot	_RMS Fitting

Reducer_DN 90x50 Short Spigot	_RMS Fitting
Reducer_DN 90x63 Long Spigot	_RMS Fitting
Reducer_DN 90x63 Short Spigot	_RMS Fitting
Reducer_DN 90x75 Long Spigot	_RMS Fitting
Reducer_DN 90x75 Short Spigot	_RMS Fitting
Reducer_DN 110x50 Short Spigot	_RMS Fitting
Reducer_DN 110x63 Long Spigot	_RMS Fitting
Reducer_DN 110x63 Short Spigot	_RMS Fitting
Reducer_DN 110x75 Long Spigot	_RMS Fitting
Reducer_DN 110x75 Short Spigot	_RMS Fitting
Reducer_DN 110x90 Long Spigot	_RMS Fitting
Reducer_DN 110x90 Short Spigot	_RMS Fitting
Reducer_DN 125x50 Short Spigot	_RMS Fitting
Reducer_DN 125x63 Long Spigot	_RMS Fitting
Reducer_DN 125x63 Short Spigot	_RMS Fitting
Reducer_DN 125x75 Long Spigot	_RMS Fitting
Reducer_DN 125x75 Short Spigot	_RMS Fitting
Reducer_DN 125x90 Long Spigot	_RMS Fitting
Reducer_DN 125x90 Short Spigot	_RMS Fitting
Reducer_DN 125x110 Short Spigot	_RMS Fitting
Reducer_DN 140x50 Short Spigot	_RMS Fitting
Reducer_DN 140x63 Short Spigot	_RMS Fitting
Reducer_DN 140x75 Long Spigot	_RMS Fitting
Reducer_DN 140x75 Short Spigot	_RMS Fitting
Reducer_DN 140x90 Long Spigot	_RMS Fitting
Reducer_DN 140x90 Short Spigot	_RMS Fitting
Reducer_DN 140x110 Long Spigot	_RMS Fitting
Reducer_DN 140x110 Short Spigot	_RMS Fitting
Reducer_DN 140x125 Long Spigot	_RMS Fitting
Reducer_DN 140x125 Short Spigot	_RMS Fitting
Reducer_DN 160x50 Short Spigot	_RMS Fitting
Reducer_DN 160x63 Short Spigot	_RMS Fitting
Reducer_DN 160x75 Short Spigot	_RMS Fitting
Reducer_DN 160x90 Long Spigot	_RMS Fitting
Reducer_DN 160x90 Short Spigot	_RMS Fitting
Reducer_DN 160x110 Long Spigot	_RMS Fitting
Reducer_DN 160x110 Short Spigot	_RMS Fitting
Reducer_DN 160x125 Long Spigot	_RMS Fitting
Reducer_DN 160x125 Short Spigot	_RMS Fitting
Reducer_DN 160x140 Long Spigot	_RMS Fitting
Reducer_DN 160x140 Short Spigot	_RMS Fitting
Reducer_DN 180x50 Short Spigot	_RMS Fitting
Reducer_DN 180x63 Short Spigot	_RMS Fitting

Reducer_DN 180x75 Short Spigot	_RMS Fitting
Reducer_DN 180x90 Long Spigot	_RMS Fitting
Reducer_DN 180x90 Short Spigot	_RMS Fitting
Reducer_DN 180x110 Long Spigot	_RMS Fitting
Reducer_DN 180x110 Short Spigot	_RMS Fitting
Reducer_DN 180x125 Long Spigot	_RMS Fitting
Reducer_DN 180x125 Short Spigot	_RMS Fitting
Reducer_DN 180x140 Long Spigot	_RMS Fitting
Reducer_DN 180x140 Short Spigot	_RMS Fitting
Reducer_DN 180x 160 Short Spigot	_RMS Fitting
Reducer_DN 180x160 Long Spigot	_RMS Fitting
Reducer_DN 200x50 Short Spigot	_RMS Fitting
Reducer_DN 200x63 Short Spigot	_RMS Fitting
Reducer_DN 200x75 Short Spigot	_RMS Fitting
Reducer_DN 200x90 Short Spigot	_RMS Fitting
Reducer_DN 200x110 Short Spigot	_RMS Fitting
Reducer_DN 200x125 Long Spigot	_RMS Fitting
Reducer_DN 200x125 Short Spigot	_RMS Fitting
Reducer_DN 200x140 Long Spigot	_RMS Fitting
Reducer_DN 200x140 Short Spigot	_RMS Fitting
Reducer_DN 200x160 Long Spigot	_RMS Fitting
Reducer_DN 200x160 Short Spigot	_RMS Fitting
Reducer_DN 200x180 Long Spigot	_RMS Fitting
Reducer_DN 200x180 Short Spigot	_RMS Fitting
Reducer_DN 225x90 Short Spigot	_RMS Fitting
Reducer_DN 225x110 Long Spigot	_RMS Fitting
Reducer_DN 225x125 Short Spigot	_RMS Fitting
Reducer_DN 225x140 Long Spigot	_RMS Fitting
Reducer_DN 225x140 Short Spigot	_RMS Fitting
Reducer_DN 225x160 Long Spigot	_RMS Fitting
Reducer_DN 225x160 Short Spigot	_RMS Fitting
Reducer_DN 225x180 Long Spigot	_RMS Fitting
Reducer_DN 225x180 Short Spigot	_RMS Fitting
Reducer_DN 225x200 Long Spigot	_RMS Fitting
Reducer_DN 225x200 Short Spigot	_RMS Fitting
Reducer_DN 250x90 Short Spigot	_RMS Fitting
Reducer_DN 250x110 Short Spigot	_RMS Fitting
Reducer_DN 250x125 Short Spigot	_RMS Fitting
Reducer_DN 250x140 Short Spigot	_RMS Fitting
Reducer_DN 250x160 Long Spigot	_RMS Fitting
Reducer_DN 250x160 Short Spigot	_RMS Fitting
Reducer_DN 250x180 Long Spigot	_RMS Fitting
Reducer_DN 250x180 Short Spigot	_RMS Fitting

Reducer_DN 250x200 Long Spigot	_RMS Fitting
Reducer_DN 250x200 Short Spigot	_RMS Fitting
Reducer_DN 250x225 Long Spigot	_RMS Fitting
Reducer_DN 250x225 Short Spigot	_RMS Fitting
Reducer_DN 280x90 Short Spigot	_RMS Fitting
Reducer_DN 280x110 Short Spigot	_RMS Fitting
Reducer_DN 280x125 Short Spigot	_RMS Fitting
Reducer_DN 280x140 Short Spigot	_RMS Fitting
Reducer_DN 280x160 Short Spigot	_RMS Fitting
Reducer_DN 280x180 Long Spigot	_RMS Fitting
Reducer_DN 280x180 Short Spigot	_RMS Fitting
Reducer_DN 280x200 Long Spigot	_RMS Fitting
Reducer_DN 280x200 Short Spigot	_RMS Fitting
Reducer_DN 280x225 Long Spigot	_RMS Fitting
Reducer_DN 280x225 Short Spigot	_RMS Fitting
Reducer_DN 280x250 Long Spigot	_RMS Fitting
Reducer_DN 280x250 Short Spigot	_RMS Fitting
Reducer_DN 315x90 Short Spigot	_RMS Fitting
Reducer_DN 315x110 Short Spigot	_RMS Fitting
Reducer_DN 315x125 Short Spigot	_RMS Fitting
Reducer_DN 315x140 Short Spigot	_RMS Fitting
Reducer_DN 315x160 Short Spigot	_RMS Fitting
Reducer_DN 315x180 Short Spigot	_RMS Fitting
Reducer_DN 315x200 Long Spigot	_RMS Fitting
Reducer_DN 315x200 Short Spigot	_RMS Fitting
Reducer_DN 315x225 Long Spigot	_RMS Fitting
Reducer_DN 315x225 Short Spigot	_RMS Fitting
Reducer_DN 315x250 Long Spigot	_RMS Fitting
Reducer_DN 315x250 Short Spigot	_RMS Fitting
Reducer_DN 315x280 Long Spigot	_RMS Fitting
Reducer_DN 315x280 Short Spigot	_RMS Fitting
Reducer_DN 355x90 Short Spigot	_RMS Fitting
Reducer_DN 355x110 Short Spigot	_RMS Fitting
Reducer_DN 355x125 Short Spigot	_RMS Fitting
Reducer_DN 355x140 Short Spigot	_RMS Fitting
Reducer_DN 355x160 Short Spigot	_RMS Fitting
Reducer_DN 355x180 Short Spigot	_RMS Fitting
Reducer_DN 355x200 Short Spigot	_RMS Fitting
Reducer_DN 355x225 Short Spigot	_RMS Fitting
Reducer_DN 355x250 Long Spigot	_RMS Fitting
Reducer_DN 355x250 Short Spigot	_RMS Fitting
Reducer_DN 355x280 Long Spigot	_RMS Fitting
Reducer_DN 355x280 Short Spigot	_RMS Fitting

Reducer_DN 355x315 Long Spigot	_RMS Fitting
Reducer_DN 355x315 Short Spigot	_RMS Fitting
Reducer_DN 400x90 Short Spigot	_RMS Fitting
Reducer_DN 400x110 Short Spigot	_RMS Fitting
Reducer_DN 400x125 Short Spigot	_RMS Fitting
Reducer_DN 400x140 Short Spigot	_RMS Fitting
Reducer_DN 400x160 Short Spigot	_RMS Fitting
Reducer_DN 400x180 Short Spigot	_RMS Fitting
Reducer_DN 400x200 Short Spigot	_RMS Fitting
Reducer_DN 400x225 Short Spigot	_RMS Fitting
Reducer_DN 400x250 Short Spigot	_RMS Fitting
Reducer_DN 400x280 Long Spigot	_RMS Fitting
Reducer_DN 400x280 Short Spigot	_RMS Fitting
Reducer_DN 400x315 Long Spigot	_RMS Fitting
Reducer_DN 400x315 Short Spigot	_RMS Fitting
Reducer_DN 400x355 Long Spigot	_RMS Fitting
Reducer_DN 400x355 Short Spigot	_RMS Fitting
Reducer_DN 450x160 Short Spigot	_RMS Fitting
Reducer_DN 450x180 Short Spigot	_RMS Fitting
Reducer_DN 450x200 Short Spigot	_RMS Fitting
Reducer_DN 450x225 Short Spigot	_RMS Fitting
Reducer_DN 450x250 Short Spigot	_RMS Fitting
Reducer_DN 450x280 Short Spigot	_RMS Fitting
Reducer_DN 450x315 Short Spigot	_RMS Fitting
Reducer_DN 450x355 Short Spigot	_RMS Fitting
Reducer_DN 500x200 Short Spigot	_RMS Fitting
Reducer_DN 500x225 Short Spigot	_RMS Fitting
Reducer_DN 500x250 Short Spigot	_RMS Fitting
Reducer_DN 500x280 Short Spigot	_RMS Fitting
Reducer_DN 500x315 Short Spigot	_RMS Fitting
Reducer_DN 500x355 Short Spigot	_RMS Fitting
Reducer_DN 500x400 Short Spigot	_RMS Fitting
Reducer_DN 500x450 Short Spigot	_RMS Fitting
Reducer_DN 560x250 Short Spigot	_RMS Fitting
Reducer_DN 560x280 Short Spigot	_RMS Fitting
Reducer_DN 560x315 Short Spigot	_RMS Fitting
Reducer_DN 560x355 Short Spigot	_RMS Fitting
Reducer_DN 560x400 Short Spigot	_RMS Fitting
Reducer_DN 560x450 Short Spigot	_RMS Fitting
Reducer_DN 560x500 Short Spigot	_RMS Fitting
Reducer_DN 630x250 Short Spigot	_RMS Fitting
Reducer_DN 630x280 Short Spigot	_RMS Fitting
Reducer_DN 630x315 Short Spigot	_RMS Fitting

Reducer_DN 630x355 Short Spigot	_RMS Fitting
Reducer_DN 630x400 Short Spigot	_RMS Fitting
Reducer_DN 630x450 Short Spigot	_RMS Fitting
Reducer_DN 630x500 Short Spigot	_RMS Fitting
Reducer_DN 630x560 Short Spigot	_RMS Fitting
Reducer_DN 710x355 Short Spigot	_RMS Fitting
Reducer_DN 710x400 Short Spigot	_RMS Fitting
Reducer_DN 710x450 Short Spigot	_RMS Fitting
Reducer_DN 710x500 Short Spigot	_RMS Fitting
Reducer_DN 710x560 Short Spigot	_RMS Fitting
Reducer_DN 710x630 Short Spigot	_RMS Fitting
Reducer_DN 800x400 Short Spigot	_RMS Fitting
Reducer_DN 800x450 Short Spigot	_RMS Fitting
Reducer_DN 800x500 Short Spigot	_RMS Fitting
Reducer_DN 800x560 Short Spigot	_RMS Fitting
Reducer_DN 800x630 Short Spigot	_RMS Fitting
Reducer_DN 800x710 Short Spigot	_RMS Fitting
Reducer_DN 900x500 Short Spigot	_RMS Fitting
Reducer_DN 900x560 Short Spigot	_RMS Fitting
Reducer_DN 900x630 Short Spigot	_RMS Fitting
Reducer_DN 900x710 Short Spigot	_RMS Fitting
Reducer_DN 900x800 Short Spigot	_RMS Fitting
Reducer_DN 1000x500 Short Spigot	_RMS Fitting
Reducer_DN 1000x560 Short Spigot	_RMS Fitting
Reducer_DN 1000x630Short Spigot	_RMS Fitting
Reducer_DN 1000x710 Short Spigot	_RMS Fitting
Reducer_DN 1000x800 Short Spigot	_RMS Fitting
Reducer_DN 1200x900 Short Spigot	_RMS Fitting
Reducer_DN 1200x1000 Short Spigot	_RMS Fitting
Reducer_DN 1400x1200 Short Spigot	_RMS Fitting
Reducer_DN 1600x1400 Short Spigot	_RMS Fitting
Reducer_DN 1800x1600 Short Spigot	_RMS Fitting
Reducer_DN 2000x1800 Short Spigot	_RMS Fitting

ANZ_PVC Pipe

Name	Style
Pipe_ DN 15_PN4.5_SCJ	_RMS Standard Pipe
Pipe_ DN 15_PN8_SCJ	_RMS Standard Pipe
Pipe_ DN 15_PN9_SCJ	_RMS Standard Pipe
Pipe_DN 15_PN12_SCJ	_RMS Standard Pipe
Pipe_DN 15_PN18_SCJ	_RMS Standard Pipe
Pipe_ DN 20_PN4.5_SCJ	_RMS Standard Pipe
Pipe_ DN 20_PN8_SCJ	_RMS Standard Pipe
Pipe_ DN 20_PN9_SCJ	_RMS Standard Pipe
Pipe_DN 20_PN12_SCJ	_RMS Standard Pipe
Pipe_DN 20_PN18_SCJ	_RMS Standard Pipe
Pipe_ DN 25_PN4.5_SCJ	_RMS Standard Pipe
Pipe_ DN 25_PN9_SCJ	_RMS Standard Pipe
Pipe_ DN 25PN8_SCJ	_RMS Standard Pipe
Pipe_DN 25_PN12_SCJ	_RMS Standard Pipe
Pipe_DN 25_PN18_SCJ	_RMS Standard Pipe
Pipe_ DN 32_PN4.5_SCJ	_RMS Standard Pipe
Pipe_ DN 32_PN8_SCJ	_RMS Standard Pipe
Pipe_ DN 32_PN9_SCJ	_RMS Standard Pipe
Pipe_DN 32_PN12_SCJ	_RMS Standard Pipe
Pipe_DN 32_PN18_SCJ	_RMS Standard Pipe
Pipe_ DN 40_PN4.5_SCJ	_RMS Standard Pipe
Pipe_ DN 40_PN8_SCJ	_RMS Standard Pipe
Pipe_ DN 40_PN9_SCJ	_RMS Standard Pipe
Pipe_40 20_PN18_SCJ	_RMS Standard Pipe
Pipe_DN 40_PN12_SCJ	_RMS Standard Pipe
Pipe_ DN 50_PN4.5_SCJ	_RMS Standard Pipe
Pipe_ DN 50_PN8_SCJ	_RMS Standard Pipe
Pipe_ DN 50_PN9_SCJ	_RMS Standard Pipe
Pipe_DN 50_PN12_RRJ S1	_RMS Standard Pipe
Pipe_DN 50_PN12_SCJ	_RMS Standard Pipe
Pipe_DN 50_PN18_SCJ	_RMS Standard Pipe
Pipe_DN 50_PN4.5_RRJ S1	_RMS Standard Pipe
Pipe_DN 50_PN6_RRJ S1	_RMS Standard Pipe
Pipe_DN 50_PN9_RRJ S1	_RMS Standard Pipe
Pipe_ DN 65_PN4.5_SCJ	_RMS Standard Pipe
Pipe_ DN 65_PN8_SCJ	_RMS Standard Pipe

Pipe_ DN 65_PN9_SCJ	_RMS Standard Pipe
Pipe_DN 65_PN12_SCJ	_RMS Standard Pipe
Pipe_DN 65_PN18_SCJ	_RMS Standard Pipe
Pipe_ DN 80_PN4.5_SCJ	_RMS Standard Pipe
Pipe_ DN 80_PN8_SCJ	_RMS Standard Pipe
Pipe_ DN 80_PN9_SCJ	_RMS Standard Pipe
Pipe_DN 80_PN12_RRJ S1	_RMS Standard Pipe
Pipe_DN 80_PN12_SCJ	_RMS Standard Pipe
Pipe_DN 80_PN18_SCJ	_RMS Standard Pipe
Pipe_DN 80_PN4.5_RRJ S1	_RMS Standard Pipe
Pipe_DN 80_PN6_RRJ S1	_RMS Standard Pipe
Pipe_DN 80_PN9_RRJ S1	_RMS Standard Pipe
Pipe_ DN 100_PN4.5_SCJ	_RMS Standard Pipe
Pipe_ DN 100_PN8_SCJ	_RMS Standard Pipe
Pipe_DN 100_PN12.5_PVC-O	_RMS Standard Pipe
Pipe_DN 100_PN12_PVC-M S1	_RMS Standard Pipe
Pipe_DN 100_PN12_PVC-M S2	_RMS Standard Pipe
Pipe_DN 100_PN12_RRJ S1	_RMS Standard Pipe
Pipe_DN 100_PN12_RRJ S2	_RMS Standard Pipe
Pipe_DN 100_PN12_SCJ	_RMS Standard Pipe
Pipe_DN 100_PN16_PVC-M S2	_RMS Standard Pipe
Pipe_DN 100_PN16_PVC-O	_RMS Standard Pipe
Pipe_DN 100_PN16_RRJ S2	_RMS Standard Pipe
Pipe_DN 100_PN18_PVC-M S2	_RMS Standard Pipe
Pipe_DN 100_PN18_RRJ S2	_RMS Standard Pipe
Pipe_DN 100_PN18_SCJ	_RMS Standard Pipe
Pipe_DN 100_PN20_PVC-M S2	_RMS Standard Pipe
Pipe_DN 100_PN20_RRJ S2	_RMS Standard Pipe
Pipe_DN 100_PN4.5_RRJ S1	_RMS Standard Pipe
Pipe_DN 100_PN6_PVC-M S2	_RMS Standard Pipe
Pipe_DN 100_PN6_RRJ S1	_RMS Standard Pipe
Pipe_DN 100_PN8_PVC-M S1	_RMS Standard Pipe
Pipe_DN 100_PN9_PVC-M S1	_RMS Standard Pipe
Pipe_DN 100_PN9_PVC-M S2	_RMS Standard Pipe
Pipe_DN 100_PN9_RRJ S1	_RMS Standard Pipe
Pipe_DN 100_PN9_SCJ	_RMS Standard Pipe
Pipe_ DN 125_PN4.5_SCJ	_RMS Standard Pipe
Pipe_ DN 125_PN8_SCJ	_RMS Standard Pipe
Pipe_DN 125_PN12_PVC-M S1	_RMS Standard Pipe

Pipe_DN 125_PN12_RRJ S1	_RMS Standard Pipe
Pipe_DN 125_PN12_SCJ	_RMS Standard Pipe
Pipe_DN 125_PN18_SCJ	_RMS Standard Pipe
Pipe_DN 125_PN4.5_RRJ S1	_RMS Standard Pipe
Pipe_DN 125_PN6_RRJ S1	_RMS Standard Pipe
Pipe_DN 125_PN8_PVC-M S1	_RMS Standard Pipe
Pipe_DN 125_PN9_PVC-M S1	_RMS Standard Pipe
Pipe_DN 125_PN9_RRJ S1	_RMS Standard Pipe
Pipe_DN 125_PN9_SCJ	_RMS Standard Pipe
Pipe_ DN 150_PN4.5_SCJ	_RMS Standard Pipe
Pipe_ DN 150_PN8_SCJ	_RMS Standard Pipe
Pipe_DN 150_PN12.5_PVC-O	_RMS Standard Pipe
Pipe_DN 150_PN12_PVC-M S1	_RMS Standard Pipe
Pipe_DN 150_PN12_PVC-M S2	_RMS Standard Pipe
Pipe_DN 150_PN12_RRJ S1	_RMS Standard Pipe
Pipe_DN 150_PN12_RRJ S2	_RMS Standard Pipe
Pipe_DN 150_PN12_SCJ	_RMS Standard Pipe
Pipe_DN 150_PN16_PVC-M S2	_RMS Standard Pipe
Pipe_DN 150_PN16_PVC-O	_RMS Standard Pipe
Pipe_DN 150_PN16_RRJ S2	_RMS Standard Pipe
Pipe_DN 150_PN18_PVC-M S2	_RMS Standard Pipe
Pipe_DN 150_PN18_RRJ S2	_RMS Standard Pipe
Pipe_DN 150_PN18_SCJ	_RMS Standard Pipe
Pipe_DN 150_PN20_PVC-M S2	_RMS Standard Pipe
Pipe_DN 150_PN20_RRJ S2	_RMS Standard Pipe
Pipe_DN 150_PN4._RRJ S1	_RMS Standard Pipe
Pipe_DN 150_PN6_PVC-M S2	_RMS Standard Pipe
Pipe_DN 150_PN6_RRJ S1	_RMS Standard Pipe
Pipe_DN 150_PN8_PVC-M S1	_RMS Standard Pipe
Pipe_DN 150_PN9_PVC-M S1	_RMS Standard Pipe
Pipe_DN 150_PN9_PVC-M S2	_RMS Standard Pipe
Pipe_DN 150_PN9_RRJ S1	_RMS Standard Pipe
Pipe_DN 150_PN9_SCJ	_RMS Standard Pipe
Pipe_DN 200_PN12.5_PVC-O	_RMS Standard Pipe
Pipe_DN 200_PN12_PVC-M S1	_RMS Standard Pipe
Pipe_DN 200_PN12_PVC-M S2	_RMS Standard Pipe
Pipe_DN 200_PN12_RRJ S1	_RMS Standard Pipe
Pipe_DN 200_PN12_RRJ S2	_RMS Standard Pipe
Pipe_DN 200_PN16_PVC-M S2	_RMS Standard Pipe

Pipe_DN 200_PN16_PVC-O	_RMS Standard Pipe
Pipe_DN 200_PN16_RRJ S2	_RMS Standard Pipe
Pipe_DN 200_PN18_PVC-M S2	_RMS Standard Pipe
Pipe_DN 200_PN18_RRJ S2	_RMS Standard Pipe
Pipe_DN 200_PN20_PVC-M S2	_RMS Standard Pipe
Pipe_DN 200_PN20_PVC-O	_RMS Standard Pipe
Pipe_DN 200_PN20_RRJ S2	_RMS Standard Pipe
Pipe_DN 200_PN4.5_RRJ S1	_RMS Standard Pipe
Pipe_DN 200_PN6_PVC-M S2	_RMS Standard Pipe
Pipe_DN 200_PN6_RRJ S1	_RMS Standard Pipe
Pipe_DN 200_PN8_PVC-M S1	_RMS Standard Pipe
Pipe_DN 200_PN9_PVC-M S1	_RMS Standard Pipe
Pipe_DN 200_PN9_PVC-M S2	_RMS Standard Pipe
Pipe_DN 200_PN9_RRJ S1	_RMS Standard Pipe
Pipe_DN 225_PN12_PVC-M S1	_RMS Standard Pipe
Pipe_DN 225_PN12_PVC-M S2	_RMS Standard Pipe
Pipe_DN 225_PN12_RRJ S1	_RMS Standard Pipe
Pipe_DN 225_PN12_RRJ S2	_RMS Standard Pipe
Pipe_DN 225_PN16_PVC-M S2	_RMS Standard Pipe
Pipe_DN 225_PN16_PVC-O	_RMS Standard Pipe
Pipe_DN 225_PN16_RRJ S2	_RMS Standard Pipe
Pipe_DN 225_PN18_PVC-M S2	_RMS Standard Pipe
Pipe_DN 225_PN18_RRJ S2	_RMS Standard Pipe
Pipe_DN 225_PN20_PVC-M S2	_RMS Standard Pipe
Pipe_DN 225_PN20_RRJ S2	_RMS Standard Pipe
Pipe_DN 225_PN4.5_RRJ S1	_RMS Standard Pipe
Pipe_DN 225_PN6_PVC-M S2	_RMS Standard Pipe
Pipe_DN 225_PN6_RRJ S1	_RMS Standard Pipe
Pipe_DN 225_PN8_PVC-M S1	_RMS Standard Pipe
Pipe_DN 225_PN9_PVC-M S1	_RMS Standard Pipe
Pipe_DN 225_PN9_PVC-M S2	_RMS Standard Pipe
Pipe_DN 225_PN9_RRJ S1	_RMS Standard Pipe
Pipe_DN 250_PN12.5_PVC-O	_RMS Standard Pipe
Pipe_DN 250_PN12_PVC-M S1	_RMS Standard Pipe
Pipe_DN 250_PN12_PVC-M S2	_RMS Standard Pipe
Pipe_DN 250_PN12_RRJ S1	_RMS Standard Pipe
Pipe_DN 250_PN12_RRJ S2	_RMS Standard Pipe
Pipe_DN 250_PN16_PVC-M S2	_RMS Standard Pipe
Pipe_DN 250_PN16_PVC-O	_RMS Standard Pipe

Pipe_DN 250_PN16_RRJ S2	_RMS Standard Pipe
Pipe_DN 250_PN18_PVC-M S2	_RMS Standard Pipe
Pipe_DN 250_PN18_RRJ S2	_RMS Standard Pipe
Pipe_DN 250_PN20_PVC-M S2	_RMS Standard Pipe
Pipe_DN 250_PN20_RRJ S2	_RMS Standard Pipe
Pipe_DN 250_PN4.5_RRJ S1	_RMS Standard Pipe
Pipe_DN 250_PN6_PVC-M S2	_RMS Standard Pipe
Pipe_DN 250_PN6_RRJ S1	_RMS Standard Pipe
Pipe_DN 250_PN8_PVC-M S1	_RMS Standard Pipe
Pipe_DN 250_PN9_PVC-M S1	_RMS Standard Pipe
Pipe_DN 250_PN9_PVC-M S2	_RMS Standard Pipe
Pipe_DN 250_PN9_RRJ S1	_RMS Standard Pipe
Pipe_DN 300_PN12_PVC-M S1	_RMS Standard Pipe
Pipe_DN 300_PN12_PVC-M S2	_RMS Standard Pipe
Pipe_DN 300_PN12_RRJ S1	_RMS Standard Pipe
Pipe_DN 300_PN12_RRJ S2	_RMS Standard Pipe
Pipe_DN 300_PN16_PVC-M S2	_RMS Standard Pipe
Pipe_DN 300_PN16_PVC-O	_RMS Standard Pipe
Pipe_DN 300_PN16_RRJ S2	_RMS Standard Pipe
Pipe_DN 300_PN18_PVC-M S2	_RMS Standard Pipe
Pipe_DN 300_PN18_RRJ S2	_RMS Standard Pipe
Pipe_DN 300_PN20_PVC-M S2	_RMS Standard Pipe
Pipe_DN 300_PN20_RRJ S2	_RMS Standard Pipe
Pipe_DN 300_PN4.5_RRJ S1	_RMS Standard Pipe
Pipe_DN 300_PN6_PVC-M S2	_RMS Standard Pipe
Pipe_DN 300_PN6_RRJ S1	_RMS Standard Pipe
Pipe_DN 300_PN8_PVC-M S1	_RMS Standard Pipe
Pipe_DN 300_PN9_PVC-M S1	_RMS Standard Pipe
Pipe_DN 300_PN9_PVC-M S2	_RMS Standard Pipe
Pipe_DN 300_PN9_RRJ S1	_RMS Standard Pipe
Pipe_DN 375_PN12_PVC-M S1	_RMS Standard Pipe
Pipe_DN 375_PN12_PVC-M S2	_RMS Standard Pipe
Pipe_DN 375_PN12_RRJ S2	_RMS Standard Pipe
Pipe_DN 375_PN16_PVC-M S2	_RMS Standard Pipe
Pipe_DN 375_PN16_RRJ S2	_RMS Standard Pipe
Pipe_DN 375_PN18_PVC-M S2	_RMS Standard Pipe
Pipe_DN 375_PN18_RRJ S2	_RMS Standard Pipe
Pipe_DN 375_PN20_PVC-M S2	_RMS Standard Pipe
Pipe_DN 375_PN20_RRJ S2	_RMS Standard Pipe

Pipe_DN 375_PN6_PVC-M S2	_RMS Standard Pipe
Pipe_DN 375_PN8_PVC-M S1	_RMS Standard Pipe
Pipe_DN 375_PN9_PVC-M S1	_RMS Standard Pipe
Pipe_DN 375_PN9_PVC-M S2	_RMS Standard Pipe
Pipe_DN 450_PN12_PVC-M S1	_RMS Standard Pipe
Pipe_DN 450_PN12_PVC-M S2	_RMS Standard Pipe
Pipe_DN 450_PN16_PVC-M S2	_RMS Standard Pipe
Pipe_DN 450_PN18_PVC-M S2	_RMS Standard Pipe
Pipe_DN 450_PN20_PVC-M S2	_RMS Standard Pipe
Pipe_DN 450_PN6_PVC-M S2	_RMS Standard Pipe
Pipe_DN 450_PN8_PVC-M S1	_RMS Standard Pipe
Pipe_DN 450_PN9_PVC-M S1	_RMS Standard Pipe
Pipe_DN 450_PN9_PVC-M S2	_RMS Standard Pipe
Pipe_DN 500_PN12_PVC-M S1	_RMS Standard Pipe
Pipe_DN 500_PN8_PVC-M S1	_RMS Standard Pipe
Pipe_DN 500_PN9_PVC-M S1	_RMS Standard Pipe
Pipe_DN 575_PN12_PVC-M S1	_RMS Standard Pipe
Pipe_DN 575_PN8_PVC-M S1	_RMS Standard Pipe
Pipe_DN 575_PN9_PVC-M S1	_RMS Standard Pipe

ANZ_PVC Elbow

45° Elbow_DN 15	_RMS Fitting
90° Elbow_DN 15	_RMS Fitting
45° Elbow_DN 20	_RMS Fitting
90° Bend_DN_20_Fabricated	_RMS Fitting
90° Elbow_DN 20	_RMS Fitting
45° Bend_DN_25_Fabricated	_RMS Fitting
45° Elbow _ DN 25	_RMS Fitting
90° Bend_DN_25_Fabricated	_RMS Fitting
90° Elbow_DN 25	_RMS Fitting
45° Elbow_DN 32	_RMS Fitting
90° Elbow_DN 32	_RMS Fitting
45° Bend_DN_40_Fabricated	_RMS Fitting
45° Elbow_DN 40	_RMS Fitting
90° Bend_DN_40_Fabricated	_RMS Fitting
90° Elbow_DN 40	_RMS Fitting
Bend 11.25°_ DN 50	_RMS Fitting
22.5° Bend_DN_50_Fabricated	_RMS Fitting
45° Bend_DN_50_Fabricated	_RMS Fitting
45° Elbow_DN 50	_RMS Fitting

30° Bend_DN_50_Fabricated	_RMS Fitting
90° Bend_DN_50_Fabricated	_RMS Fitting
90° Elbow_DN 50	_RMS Fitting
45° Bend_DN_65_Fabricated	_RMS Fitting
90° Bend_DN_65_Fabricated	_RMS Fitting
90° Elbow_DN 65	_RMS Fitting
22.5° Bend_DN_80_Fabricated	_RMS Fitting
45° Bend_DN_80_Fabricated	_RMS Fitting
45° Elbow_DN 80	_RMS Fitting
90° Bend_DN_80_Fabricated	_RMS Fitting
90° Elbow_DN 80	_RMS Fitting
Bend 11.25°_ DN 100	_RMS Fitting
22.5° Bend_DN_100_Fabricated	_RMS Fitting
45° Bend_DN_100_Fabricated	_RMS Fitting
45° Elbow_DN 100	_RMS Fitting
60° Bend_DN_100_Fabricated	_RMS Fitting
90° Bend_DN_100_Fabricated	_RMS Fitting
90° Elbow_DN 100	_RMS Fitting
100° Bend_DN_100_Fabricated	_RMS Fitting
Bend 11.25°_ DN 150	_RMS Fitting
22.5° Bend_DN_150_Fabricated	_RMS Fitting
45° Bend_DN_150_Fabricated	_RMS Fitting
45° Elbow_DN 150	_RMS Fitting
90° Bend_DN_150_Fabricated	_RMS Fitting
90° Elbow_DN 150	_RMS Fitting
45° Bend_DN_200_Fabricated	_RMS Fitting
45° Elbow_DN 200	_RMS Fitting
90° Elbow_DN 200	_RMS Fitting

ANZ_PVC_Cap

Name	Style
Cap_DN 15	_RMS Fitting
Cap_DN 20	_RMS Fitting
Cap_DN 25	_RMS Fitting
Cap_DN 32	_RMS Fitting
Cap_DN 40	_RMS Fitting
Cap_DN 50	_RMS Fitting
Cap_DN 65	_RMS Fitting
Cap_DN 80	_RMS Fitting
Cap_DN 100	_RMS Fitting

Cap_DN 125	_RMS Fitting
Cap_DN 150	_RMS Fitting
Cap_DN 200	_RMS Fitting

ANZ_PVC_Tee

Name	Style
Tee _ DN 15x15	_RMS Fitting
Tee_DN 20x15	_RMS Fitting
Tee_ DN 20x20	_RMS Fitting
Tee_DN 25x20	_RMS Fitting
Tee_DN 25x25	_RMS Fitting
Tee_DN 32x20	_RMS Fitting
Tee_DN 32x25	_RMS Fitting
Tee_DN 32x32	_RMS Fitting
Tee_DN 40x15	_RMS Fitting
Tee_DN 40x20	_RMS Fitting
Tee_DN 40x25	_RMS Fitting
Tee_DN 40x32	_RMS Fitting
Tee_DN 40x40	_RMS Fitting
Tee_DN 50x20	_RMS Fitting
Tee_DN 50x25	_RMS Fitting
Tee_DN 50x50	_RMS Fitting
Tee_DN 65x65	_RMS Fitting
Tee_DN 80x25	_RMS Fitting
Tee_DN 80x40	_RMS Fitting
Tee_DN 80x50	_RMS Fitting
Tee_DN 80x80	_RMS Fitting
Tee_DN 100x25	_RMS Fitting
Tee_DN 100x50	_RMS Fitting
Tee_DN 100x80	_RMS Fitting
Tee_DN 100x100	_RMS Fitting
Tee_DN 150x100	_RMS Fitting
Tee_DN 150x150	_RMS Fitting
Tee_DN 200x200	_RMS Fitting

ANZ_PVC_Coupling

Name	Style
Coupling_DN 15	_RMS Fitting
Coupling_DN 20	_RMS Fitting
Coupling_DN 25	_RMS Fitting
Coupling_DN 32	_RMS Fitting
Coupling_DN 40	_RMS Fitting
Coupling_DN 50	_RMS Fitting
Coupling_DN 65	_RMS Fitting
Coupling_DN 80	_RMS Fitting
Coupling_DN 100	_RMS Fitting
Coupling_DN 125	_RMS Fitting
Coupling_DN 150	_RMS Fitting
Coupling_DN 200	_RMS Fitting

ANZ_Steel Pipe

Name	Style
Pipe_ DN 6_ BW_Schedule 10	_RMS Standard Pipe
Pipe_DN 6_ BW_Schedule 40	_RMS Standard Pipe
Pipe_DN 6_BW_Schedule 80	_RMS Standard Pipe
Pipe_DN 8_ BW_Schedule 10	_RMS Standard Pipe
Pipe_DN 8_ BW_Schedule 40	_RMS Standard Pipe
Pipe_DN 8_BW_Schedule 80	_RMS Standard Pipe
Pipe_DN 10_ BW_Schedule 10	_RMS Standard Pipe
Pipe_DN 10_ BW_Schedule 40	_RMS Standard Pipe
Pipe_DN 10_BW_Schedule 80	_RMS Standard Pipe
Pipe_DN 15_ BW_Schedule 10	_RMS Standard Pipe
Pipe_DN 15_ BW_Schedule 40	_RMS Standard Pipe
Pipe_DN 15_BW_Schedule 160	_RMS Standard Pipe
Pipe_DN 15_BW_Schedule 80	_RMS Standard Pipe
Pipe_DN 20_ BW_Schedule 10	_RMS Standard Pipe
Pipe_DN 20_ BW_Schedule 40	_RMS Standard Pipe
Pipe_DN 20_BW_Schedule 160	_RMS Standard Pipe
Pipe_DN 20_BW_Schedule 80	_RMS Standard Pipe
Pipe_DN 25_ BW_Schedule 10	_RMS Standard Pipe
Pipe_DN 25_ BW_Schedule 40	_RMS Standard Pipe
Pipe_DN 25_BW_Schedule 160	_RMS Standard Pipe
Pipe_DN 25_BW_Schedule 80	_RMS Standard Pipe
Pipe_DN 32_ BW_Schedule 10	_RMS Standard Pipe

Pipe_DN 32_ BW_Schedule 40	_RMS Standard Pipe
Pipe_DN 32_BW_Schedule 160	_RMS Standard Pipe
Pipe_DN 32_BW_Schedule 80	_RMS Standard Pipe
Pipe_DN 40_ BW_Schedule 10	_RMS Standard Pipe
Pipe_DN 40_ BW_Schedule 40	_RMS Standard Pipe
Pipe_DN 40_BW_Schedule 160	_RMS Standard Pipe
Pipe_DN 40_BW_Schedule 80	_RMS Standard Pipe
Pipe_DN 50_ BW_Schedule 10	_RMS Standard Pipe
Pipe_DN 50_ BW_Schedule 40	_RMS Standard Pipe
Pipe_DN 50_BW_Schedule 160	_RMS Standard Pipe
Pipe_DN 50_BW_Schedule 80	_RMS Standard Pipe
Pipe_DN 65_ BW_Schedule 10	_RMS Standard Pipe
Pipe_DN 65_ BW_Schedule 40	_RMS Standard Pipe
Pipe_DN 65_BW_Schedule 160	_RMS Standard Pipe
Pipe_DN 65_BW_Schedule 80	_RMS Standard Pipe
Pipe_DN 80_ BW_Schedule 10	_RMS Standard Pipe
Pipe_DN 80_ BW_Schedule 40	_RMS Standard Pipe
Pipe_DN 80_BW_Schedule 160	_RMS Standard Pipe
Pipe_DN 80_BW_Schedule 80	_RMS Standard Pipe
Pipe_DN 90_ BW_Schedule 40	_RMS Standard Pipe
Pipe_DN 90_BW_Schedule 80	_RMS Standard Pipe
Pipe_DN 100_ BW_Schedule 10	_RMS Standard Pipe
Pipe_DN 100_ BW_Schedule 40	_RMS Standard Pipe
Pipe_DN 100_BW_Schedule 160	_RMS Standard Pipe
Pipe_DN 100_BW_Schedule 80	_RMS Standard Pipe
Pipe_DN 125_ BW_Schedule 10	_RMS Standard Pipe
Pipe_DN 125_ BW_Schedule 40	_RMS Standard Pipe
Pipe_DN 125_BW_Schedule 160	_RMS Standard Pipe
Pipe_DN 125_BW_Schedule 80	_RMS Standard Pipe
Pipe_DN 150_ BW_Schedule 10	_RMS Standard Pipe
Pipe_DN 150_ BW_Schedule 40	_RMS Standard Pipe
Pipe_DN 150_BW_Schedule 160	_RMS Standard Pipe
Pipe_DN 150_BW_Schedule 80	_RMS Standard Pipe
Pipe_DN 200_ BW_Schedule 10	_RMS Standard Pipe
Pipe_DN 200_ BW_Schedule 40	_RMS Standard Pipe
Pipe_DN 200_BW_Schedule 160	_RMS Standard Pipe
Pipe_DN 200_BW_Schedule 80	_RMS Standard Pipe
Pipe_DN 250_ BW_Schedule 10	_RMS Standard Pipe
Pipe_DN 250_ BW_Schedule 40	_RMS Standard Pipe

Pipe_DN 250_BW_Schedule 160	_RMS Standard Pipe
Pipe_DN 250_BW_Schedule 80	_RMS Standard Pipe
Pipe_DN 300_ BW_Schedule 10	_RMS Standard Pipe
Pipe_DN 300_BW_Schedule 160	_RMS Standard Pipe
Pipe_DN 300_BW_Schedule 40	_RMS Standard Pipe
Pipe_DN 300_BW_Schedule 80	_RMS Standard Pipe
Pipe_DN 350_ BW_Schedule 10	_RMS Standard Pipe
Pipe_DN 350_BW_Schedule 160	_RMS Standard Pipe
Pipe_DN 350_BW_Schedule 40	_RMS Standard Pipe
Pipe_DN 350_BW_Schedule 80	_RMS Standard Pipe
Pipe_DN 400_ BW_Schedule 10	_RMS Standard Pipe
Pipe_DN 400_BW_Schedule 160	_RMS Standard Pipe
Pipe_DN 400_BW_Schedule 40	_RMS Standard Pipe
Pipe_DN 400_BW_Schedule 80	_RMS Standard Pipe
Pipe_DN 450_ BW_Schedule 10	_RMS Standard Pipe
Pipe_DN 450_BW_Schedule 160	_RMS Standard Pipe
Pipe_DN 450_BW_Schedule 40	_RMS Standard Pipe
Pipe_DN 450_BW_Schedule 80	_RMS Standard Pipe
Pipe_DN 500_ BW_Schedule 10	_RMS Standard Pipe
Pipe_DN 500_BW_Schedule 160	_RMS Standard Pipe
Pipe_DN 500_BW_Schedule 40	_RMS Standard Pipe
Pipe_DN 500_BW_Schedule 80	_RMS Standard Pipe
Pipe_DN 600_ BW_Schedule 10	_RMS Standard Pipe
Pipe_DN 600_BW_Schedule 160	_RMS Standard Pipe
Pipe_DN 600_BW_Schedule 40	_RMS Standard Pipe
Pipe_DN 600_BW_Schedule 80	_RMS Standard Pipe

ANZ_Steel_Elbow

Name	Style
Elbow 45_DN 15_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 15_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 15_ BW_Short Radius	_RMS Fitting
Return Bend_DN 15_ BW_Long Radius	_RMS Fitting
Elbow 45_DN 20_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 20_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 20_ BW_Short Radius	_RMS Fitting
Return Bend_DN 20_ BW_Long Radius	_RMS Fitting
Elbow 45_DN 25_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 25_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 25_ BW_Short Radius	_RMS Fitting

Return Bend_DN 25_ BW_Long Radius	_RMS Fitting
Elbow 45_DN 32_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 32_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 32_ BW_Short Radius	_RMS Fitting
Return Bend_ DN 32_ BW_Long Radius	_RMS Fitting
Elbow 45_DN 40_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 40_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 40_ BW_Short Radius	_RMS Fitting
Return Bend_DN 40_ BW_Long Radius	_RMS Fitting
Elbow 45_DN 50_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 50_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 50_ BW_Short Radius	_RMS Fitting
Return Bend_DN 50_ BW_Long Radius	_RMS Fitting
Elbow 45_DN 65_ BW_Long Radius	_RMS Fitting
Elbow 90_ DN 65_ BW_Short Radius	_RMS Fitting
Elbow 90_DN 65_ BW_Long Radius	_RMS Fitting
Return Bend_DN 65_ BW_Long Radius	_RMS Fitting
Elbow 45_DN 80_ BW_Long Radius	_RMS Fitting
Elbow 90_ DN 80_ BW_Short Radius	_RMS Fitting
Elbow 90_DN 80_ BW_Long Radius	_RMS Fitting
Return Bend_DN 80_ BW_Long Radius	_RMS Fitting
Elbow 45_DN 90_ BW_Long Radius	_RMS Fitting
Elbow 90_ DN 90_ BW_Short Radius	_RMS Fitting
Elbow 90_DN 90_ BW_Long Radius	_RMS Fitting
Return Bend_DN 90_ BW_Long Radius	_RMS Fitting
Elbow 45_DN 100_ BW_Long Radius	_RMS Fitting
Elbow 90_ DN 100_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 100_ BW_Short Radius	_RMS Fitting
Return Bend_ DN 100_ BW_Long Radius	_RMS Fitting
Elbow 45_DN 125_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 125_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 125_ BW_Short Radius	_RMS Fitting
Return Bend_DN 125_ BW_Long Radius	_RMS Fitting
Elbow 45_DN 150_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 150_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 150_ BW_Short Radius	_RMS Fitting
Return Bend_DN 150_ BW_Long Radius	_RMS Fitting
Elbow 45_DN 200_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 200_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 200_ BW_Short Radius	_RMS Fitting
Return Bend_DN 200_ BW_Long Radius	_RMS Fitting
Elbow 45_DN 250_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 250_ BW_Long Radius	_RMS Fitting

Elbow 90_DN 250_ BW_Short Radius	_RMS Fitting
Return Bend_DN 250_ BW_Long Radius	_RMS Fitting
Elbow 45_DN 300_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 300_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 300_ BW_Short Radius	_RMS Fitting
Return Bend_DN 300_ BW_Long Radius	_RMS Fitting
Elbow 45_DN 350_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 350_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 350_ BW_Short Radius	_RMS Fitting
Return Bend_DN 350_ BW_Long Radius	_RMS Fitting
Elbow 45_DN 400_ BW_Long Radius	_RMS Fitting
Elbow 90_ DN 400_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 400_ BW_Short Radius	_RMS Fitting
Return Bend_DN 400_ BW_Long Radius	_RMS Fitting
Elbow 45_DN 450_ BW_Long Radius	_RMS Fitting
Elbow 90_ DN 450_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 450_ BW_Short Radius	_RMS Fitting
Return Bend_DN 450_ BW_Long Radius	_RMS Fitting
Elbow 45_DN 500_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 500_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 500_ BW_Short Radius	_RMS Fitting
Return Bend_DN 500_ BW_Long Radius	_RMS Fitting
Elbow 45_DN 600_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 600_ BW_Long Radius	_RMS Fitting
Elbow 90_DN 600_ BW_Short Radius	_RMS Fitting
Return Bend_DN 600_ BW_Long Radius	_RMS Fitting

ANZ_Steel_Cap

Name	Style
Cap_ DN 15_ BW	_RMS Fitting
Cap_ DN 20_ BW	_RMS Fitting
Cap_ DN 25_ BW	_RMS Fitting
Cap_ DN 32_ BW	_RMS Fitting
Cap_ DN 40_ BW	_RMS Fitting
Cap_ DN 50_ BW	_RMS Fitting
Cap_ DN 65_ BW	_RMS Fitting
Cap_ DN 80_ BW	_RMS Fitting
Cap_ DN 90_ BW	_RMS Fitting
Cap_ DN 100_ BW	_RMS Fitting
Cap_ DN 125_ BW	_RMS Fitting
Cap_ DN 150_ BW	_RMS Fitting
Cap_ DN 200_ BW	_RMS Fitting

Cap_ DN 250_ BW	_RMS Fitting
Cap_ DN 300_ BW	_RMS Fitting
Cap_ DN 350_ BW	_RMS Fitting
Cap_ DN 400_ BW	_RMS Fitting
Cap_ DN 450_ BW	_RMS Fitting
Cap_ DN 500_ BW	_RMS Fitting
Cap_ DN 600_ BW	_RMS Fitting

ANZ_Steel_Tee

Name	Style
Tee_ DN 15_ BW	_RMS Fitting
Tee (Red)_ DN 20x15_ BW	_RMS Fitting
Tee_ DN 20_ BW	_RMS Fitting
Tee (Red)_ DN 25x15_ BW	_RMS Fitting
Tee (Red)_ DN 25x20_ BW	_RMS Fitting
Tee_ DN 25_ BW	_RMS Fitting
Tee (Red)_ DN 32x15_ BW	_RMS Fitting
Tee (Red)_ DN 32x20_ BW	_RMS Fitting
Tee (Red)_ DN 32x25_ BW	_RMS Fitting
Tee_ DN 32_ BW	_RMS Fitting
Tee (Red)_ DN 40x15_ BW	_RMS Fitting
Tee (Red)_ DN 40x20_ BW	_RMS Fitting
Tee (Red)_ DN 40x25_ BW	_RMS Fitting
Tee (Red)_ DN 40x32_ BW	_RMS Fitting
Tee_ DN 40_ BW	_RMS Fitting
Tee (Red)_ DN 50x20_ BW	_RMS Fitting
Tee (Red)_ DN 50x25_ BW	_RMS Fitting
Tee (Red)_ DN 50x32_ BW	_RMS Fitting
Tee (Red)_ DN 50x40_ BW	_RMS Fitting
Tee_ DN 50_ BW	_RMS Fitting
Tee (Red)_ DN 65x25_ BW	_RMS Fitting
Tee (Red)_ DN 65x32_ BW	_RMS Fitting
Tee (Red)_ DN 65x40_ BW	_RMS Fitting
Tee (Red)_ DN 65x50_ BW	_RMS Fitting
Tee_ DN 65_ BW	_RMS Fitting
Tee (Red)_ DN 80x25_ BW	_RMS Fitting
Tee (Red)_ DN 80x32_ BW	_RMS Fitting
Tee (Red)_ DN 80x40_ BW	_RMS Fitting
Tee (Red)_ DN 80x50_ BW	_RMS Fitting
Tee (Red)_ DN 80x65_ BW	_RMS Fitting
Tee_ DN 80_ BW	_RMS Fitting
Tee (Red)_ DN 90x40_ BW	_RMS Fitting

Tee (Red)_ DN 90x50_ BW	_RMS Fitting
Tee (Red)_ DN 90x65_ BW	_RMS Fitting
Tee (Red)_ DN 90x80_ BW	_RMS Fitting
Tee_ DN 90_ BW	_RMS Fitting
Tee (Red)_ DN 100x40_ BW	_RMS Fitting
Tee (Red)_ DN 100x50_ BW	_RMS Fitting
Tee (Red)_ DN 100x65_ BW	_RMS Fitting
Tee (Red)_ DN 100x80_ BW	_RMS Fitting
Tee (Red)_ DN 100x90_ BW	_RMS Fitting
Tee_ DN 100_ BW	_RMS Fitting
Tee (Red)_ DN 125x50_ BW	_RMS Fitting
Tee (Red)_ DN 125x65_ BW	_RMS Fitting
Tee (Red)_ DN 125x80_ BW	_RMS Fitting
Tee (Red)_ DN 125x90_ BW	_RMS Fitting
Tee (Red)_ DN 125x100_ BW	_RMS Fitting
Tee_ DN 125_ BW	_RMS Fitting
Tee (Red)_ DN 150x50_ BW	_RMS Fitting
Tee (Red)_ DN 150x65_ BW	_RMS Fitting
Tee (Red)_ DN 150x80_ BW	_RMS Fitting
Tee (Red)_ DN 150x90_ BW	_RMS Fitting
Tee (Red)_ DN 150x100_ BW	_RMS Fitting
Tee (Red)_ DN 150x125_ BW	_RMS Fitting
Tee_ DN 150_ BW	_RMS Fitting
Tee (Red)_ DN 200x80_ BW	_RMS Fitting
Tee (Red)_ DN 200x90_ BW	_RMS Fitting
Tee (Red)_ DN 200x100_ BW	_RMS Fitting
Tee (Red)_ DN 200x125_ BW	_RMS Fitting
Tee (Red)_ DN 200x150_ BW	_RMS Fitting
Tee_ DN 200_ BW	_RMS Fitting
Tee (Red)_ DN 250x100_ BW	_RMS Fitting
Tee (Red)_ DN 250x125_ BW	_RMS Fitting
Tee (Red)_ DN 250x150_ BW	_RMS Fitting
Tee (Red)_ DN 250x200_ BW	_RMS Fitting
Tee_ DN 250_ BW	_RMS Fitting
Tee (Red)_ DN 300x150_ BW	_RMS Fitting
Tee (Red)_ DN 300x200_ BW	_RMS Fitting
Tee (Red)_ DN 300x250_ BW	_RMS Fitting
Tee_ DN 300_ BW	_RMS Fitting
Tee (Red)_ DN 350x200_ BW	_RMS Fitting
Tee (Red)_ DN 350x300_ BW	_RMS Fitting
Tee_ DN 350_ BW	_RMS Fitting
Tee (Red)_ DN 400x200_ BW	_RMS Fitting
Tee (Red)_ DN 400x250_ BW	_RMS Fitting

Tee (Red)_ DN 400x300_ BW	_RMS Fitting
Tee (Red)_ DN 400x350_ BW	_RMS Fitting
Tee_ DN 400_ BW	_RMS Fitting
Tee (Red)_ DN 450x250_ BW	_RMS Fitting
Tee (Red)_ DN 450x300_ BW	_RMS Fitting
Tee (Red)_ DN 450x400_ BW	_RMS Fitting
Tee_ DN 450_ BW	_RMS Fitting
Tee (Red)_ DN 500x300_ BW	_RMS Fitting
Tee (Red)_ DN 500x400_ BW	_RMS Fitting
Tee (Red)_ DN 500x450_ BW	_RMS Fitting
Tee_ DN 500_ BW	_RMS Fitting
Tee (Red)_ DN 600x400_ BW	_RMS Fitting
Tee (Red)_ DN 600x450_ BW	_RMS Fitting
Tee (Red)_ DN 600x500_ BW	_RMS Fitting
Tee_ DN 600_ BW	_RMS Fitting

ANZ_Steel_Reducer

Name	Style
Reducer (CON)_ DN 20x15_ BW	_RMS Fitting
Reducer (ECC)_ DN 20x15_ BW	_RMS Fitting
Reducer (CON)_ DN 25x15_ BW	_RMS Fitting
Reducer (ECC)_ DN 25x15_ BW	_RMS Fitting
Reducer (CON)_ DN 25x20_ BW	_RMS Fitting
Reducer (ECC)_ DN 25x20_ BW	_RMS Fitting
Reducer (CON)_ DN 32x15_ BW	_RMS Fitting
Reducer (ECC)_ DN 32x15_ BW	_RMS Fitting
Reducer (CON)_ DN 32x20_ BW	_RMS Fitting
Reducer (ECC)_ DN 32x20_ BW	_RMS Fitting
Reducer (CON)_ DN 32x25_ BW	_RMS Fitting
Reducer (ECC)_ DN 32x25_ BW	_RMS Fitting
Reducer (ECC)_ DN 40x15_ BW	_RMS Fitting
Reducer (CON)_ DN 40x20_ BW	_RMS Fitting
Reducer (ECC)_ DN 40x20_ BW	_RMS Fitting
Reducer (CON)_ DN 40x25_ BW	_RMS Fitting
Reducer (ECC)_ DN 40x25_ BW	_RMS Fitting
Reducer (CON)_ DN 40x32_ BW	_RMS Fitting
Reducer (ECC)_ DN 40x32_ BW	_RMS Fitting
Reducer (CON)_ DN 50x20_ BW	_RMS Fitting
Reducer (ECC)_ DN 50x20_ BW	_RMS Fitting
Reducer (CON)_ DN 50x25_ BW	_RMS Fitting
Reducer (ECC)_ DN 50x25_ BW	_RMS Fitting
Reducer (CON)_ DN 50x32_ BW	_RMS Fitting

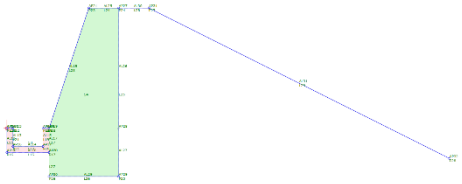
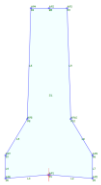
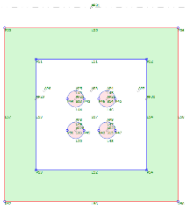
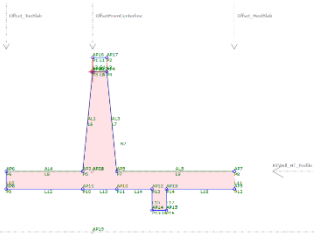
Reducer (ECC)_ DN 50x32_ BW	_RMS Fitting
Reducer (CON)_ DN 50x40_ BW	_RMS Fitting
Reducer (ECC)_ DN 50x40_ BW	_RMS Fitting
Reducer (CON)_ DN 65x25_ BW	_RMS Fitting
Reducer (ECC)_ DN 65x25_ BW	_RMS Fitting
Reducer (CON)_ DN 65x32_ BW	_RMS Fitting
Reducer (ECC)_ DN 65x32_ BW	_RMS Fitting
Reducer (CON)_ DN 65x40_ BW	_RMS Fitting
Reducer (ECC)_ DN 65x40_ BW	_RMS Fitting
Reducer (CON)_ DN 65x50_ BW	_RMS Fitting
Reducer (ECC)_ DN 65x50_ BW	_RMS Fitting
Reducer (CON)_ DN 80x25_ BW	_RMS Fitting
Reducer (ECC)_ DN 80x25_ BW	_RMS Fitting
Reducer (CON)_ DN 80x32_ BW	_RMS Fitting
Reducer (ECC)_ DN 80x32_ BW	_RMS Fitting
Reducer (CON)_ DN 80x40_ BW	_RMS Fitting
Reducer (ECC)_ DN 80x40_ BW	_RMS Fitting
Reducer (CON)_ DN 80x50_ BW	_RMS Fitting
Reducer (ECC)_ DN 80x50_ BW	_RMS Fitting
Reducer (CON)_ DN 80x65_ BW	_RMS Fitting
Reducer (ECC)_ DN 80x65_ BW	_RMS Fitting
Reducer (CON)_ DN 90x40_ BW	_RMS Fitting
Reducer (ECC)_ DN 90x40_ BW	_RMS Fitting
Reducer (CON)_ DN 90x50_ BW	_RMS Fitting
Reducer (ECC)_ DN 90x50_ BW	_RMS Fitting
Reducer (CON)_ DN 90x65_ BW	_RMS Fitting
Reducer (ECC)_ DN 90x65_ BW	_RMS Fitting
Reducer (CON)_ DN 90x80_ BW	_RMS Fitting
Reducer (ECC)_ DN 90x80_ BW	_RMS Fitting
Reducer (CON)_ DN 100x40_ BW	_RMS Fitting
Reducer (ECC)_ DN 100x40_ BW	_RMS Fitting
Reducer (CON)_ DN 100x50_ BW	_RMS Fitting
Reducer (ECC)_ DN 100x50_ BW	_RMS Fitting
Reducer (CON)_ DN 100x65_ BW	_RMS Fitting
Reducer (ECC)_ DN 100x65_ BW	_RMS Fitting
Reducer (CON)_ DN 100x80_ BW	_RMS Fitting
Reducer (ECC)_ DN 100x80_ BW	_RMS Fitting
Reducer (CON)_ DN 100x90_ BW	_RMS Fitting
Reducer (ECC)_ DN 100x90_ BW	_RMS Fitting
Reducer (CON)_ DN 125x50_ BW	_RMS Fitting
Reducer (ECC)_ DN 125x50_ BW	_RMS Fitting
Reducer (CON)_ DN 125x65_ BW	_RMS Fitting
Reducer (ECC)_ DN 125x65_ BW	_RMS Fitting

Reducer (CON)_ DN 125x80_ BW	_RMS Fitting
Reducer (ECC)_ DN 125x80_ BW	_RMS Fitting
Reducer (CON)_ DN 125x90_ BW	_RMS Fitting
Reducer (ECC)_ DN 125x90_ BW	_RMS Fitting
Reducer (CON)_ DN 125x100_ BW	_RMS Fitting
Reducer (ECC)_ DN 125x100_ BW	_RMS Fitting
Reducer (CON)_ DN 150x50_ BW	_RMS Fitting
Reducer (ECC)_ DN 150x50_ BW	_RMS Fitting
Reducer (CON)_ DN 150x65_ BW	_RMS Fitting
Reducer (ECC)_ DN 150x65_ BW	_RMS Fitting
Reducer (CON)_ DN 150x80_ BW	_RMS Fitting
Reducer (ECC)_ DN 150x80_ BW	_RMS Fitting
Reducer (CON)_ DN 150x90_ BW	_RMS Fitting
Reducer (ECC)_ DN 150x90_ BW	_RMS Fitting
Reducer (CON)_ DN 150x100_ BW	_RMS Fitting
Reducer (ECC)_ DN 150x100_ BW	_RMS Fitting
Reducer (CON)_ DN 150x125_ BW	_RMS Fitting
Reducer (ECC)_ DN 150x125_ BW	_RMS Fitting
Reducer (CON)_ DN 200x80_ BW	_RMS Fitting
Reducer (ECC)_ DN 200x80_ BW	_RMS Fitting
Reducer (CON)_ DN 200x90_ BW	_RMS Fitting
Reducer (ECC)_ DN 200x90_ BW	_RMS Fitting
Reducer (CON)_ DN 200x100_ BW	_RMS Fitting
Reducer (ECC)_ DN 200x100_ BW	_RMS Fitting
Reducer (CON)_ DN 200x125_ BW	_RMS Fitting
Reducer (ECC)_ DN 200x125_ BW	_RMS Fitting
Reducer (CON)_ DN 200x150_ BW	_RMS Fitting
Reducer (ECC)_ DN 200x150_ BW	_RMS Fitting
Reducer (CON)_ DN 250x100_ BW	_RMS Fitting
Reducer (ECC)_ DN 250x100_ BW	_RMS Fitting
Reducer (CON)_ DN 250x125_ BW	_RMS Fitting
Reducer (ECC)_ DN 250x125_ BW	_RMS Fitting
Reducer (CON)_ DN 250x150_ BW	_RMS Fitting
Reducer (ECC)_ DN 250x150_ BW	_RMS Fitting
Reducer (CON)_ DN 250x200_ BW	_RMS Fitting
Reducer (ECC)_ DN 250x200_ BW	_RMS Fitting
Reducer (CON)_ DN 300x125_ BW	_RMS Fitting
Reducer (ECC)_ DN 300x125_ BW	_RMS Fitting
Reducer (CON)_ DN 300x150_ BW	_RMS Fitting
Reducer (ECC)_ DN 300x150_ BW	_RMS Fitting
Reducer (CON)_ DN 300x200_ BW	_RMS Fitting
Reducer (ECC)_ DN 300x200_ BW	_RMS Fitting
Reducer (CON)_ DN 300x250_ BW	_RMS Fitting

Reducer (ECC)_ DN 300x250_ BW	_RMS Fitting
Reducer (CON)_ DN 350x200_ BW	_RMS Fitting
Reducer (ECC)_ DN 350x200_ BW	_RMS Fitting
Reducer (CON)_ DN 350x300_ BW	_RMS Fitting
Reducer (ECC)_ DN 350x300_ BW	_RMS Fitting
Reducer (CON)_ DN 400x200_ BW	_RMS Fitting
Reducer (ECC)_ DN 400x200_ BW	_RMS Fitting
Reducer (CON)_ DN 400x250_ BW	_RMS Fitting
Reducer (ECC)_ DN 400x250_ BW	_RMS Fitting
Reducer (CON)_ DN 400x300_ BW	_RMS Fitting
Reducer (ECC)_ DN 400x300_ BW	_RMS Fitting
Reducer (CON)_ DN 400x350_ BW	_RMS Fitting
Reducer (ECC)_ DN 400x350_ BW	_RMS Fitting
Reducer (CON)_ DN 450x250_ BW	_RMS Fitting
Reducer (ECC)_ DN 450x250_ BW	_RMS Fitting
Reducer (CON)_ DN 450x300_ BW	_RMS Fitting
Reducer (ECC)_ DN 450x300_ BW	_RMS Fitting
Reducer (CON)_ DN 450x400_ BW	_RMS Fitting
Reducer (ECC)_ DN 450x400_ BW	_RMS Fitting
Reducer (CON)_ DN 500x300_ BW	_RMS Fitting
Reducer (ECC)_ DN 500x300_ BW	_RMS Fitting
Reducer (CON)_ DN 500x400_ BW	_RMS Fitting
Reducer (ECC)_ DN 500x400_ BW	_RMS Fitting
Reducer (CON)_ DN 500x450_ BW	_RMS Fitting
Reducer (ECC)_ DN 500x450_ BW	_RMS Fitting
Reducer (CON)_ DN 600x400_ BW	_RMS Fitting
Reducer (ECC)_ DN 600x400_ BW	_RMS Fitting
Reducer (CON)_ DN 600x450_ BW	_RMS Fitting
Reducer (ECC)_ DN 600x450_ BW	_RMS Fitting
Reducer (CON)_ DN 600x500_ BW	_RMS Fitting
Reducer (ECC)_ DN 600x500_ BW	_RMS Fitting

15.0 Subassemblies

- The following subassemblies have been added to the new version.
- All of these are parametric and can be modified as per custom requirements.
- The subassemblies are added as. pkt files and the user can easily import them from the tool palette and can be located at "C:\ProgramData\Autodesk\C3D 2024\enu\Subassemblies\Metric"

Roads	Breast Wall	
	Barrier	
Utilities	Basic Trench for Dry Utilities	
General	Retaining wall with target parameters	
Utilities	Basic Trench for Dry Utilities