

TerraPipe

for MicroStation and PowerDraft

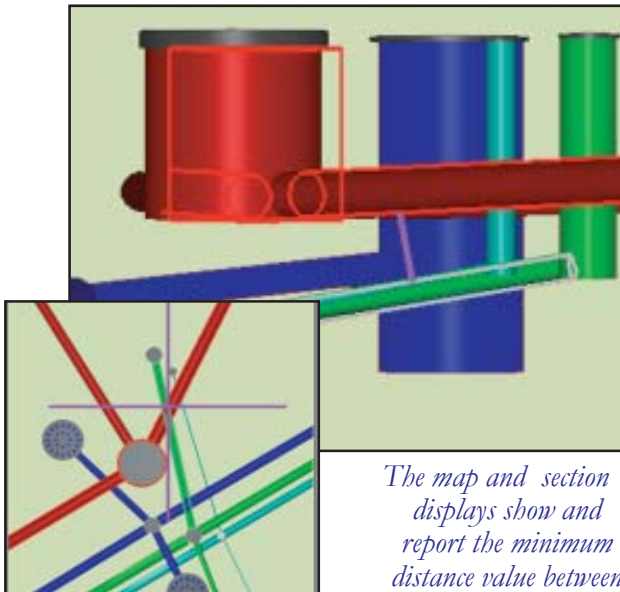
— Working with Network Pipes in 3D

TerraPipe is a highly productive, easy to use MicroStation based application for designing pipelines or underground cables. All of the design of drainage, sewer, potable water and other pipe networks takes place with true three dimensional elements.

The ground is often crowded of all kind of networks. Therefore the space for new pipe lines is limited. The 3D approach of TerraPipe offers a fast way to check the available space. You just identify the lines and then let TerraPipe to show and report the shortest distance in the view window.

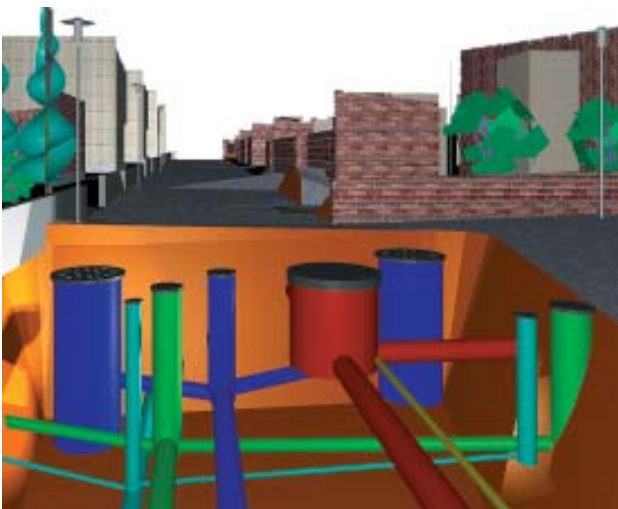
TerraPipe includes everything you need for designing water and sewage pipe lines. The key-features are as follows:

- Configurable settings according to the local needs and standards.
- Instructions to read in survey data and generate a corresponding pipe network as 3D design file elements.
- Saves data as binary files or directly to the database of TerraPipeNet
- Tools to design, edit or delete network elements.
- Tools to generate and update maps, profiles and reports.



The map and section displays show and report the minimum distance value between networks.

TerraPipe offers a very sophisticated approach to read in survey files and create a corresponding 3D network.



All Terrasolid applications are tightly integrated with each other and MicroStation. The final output can consist of different design components produced by several applications.



Terrasolid

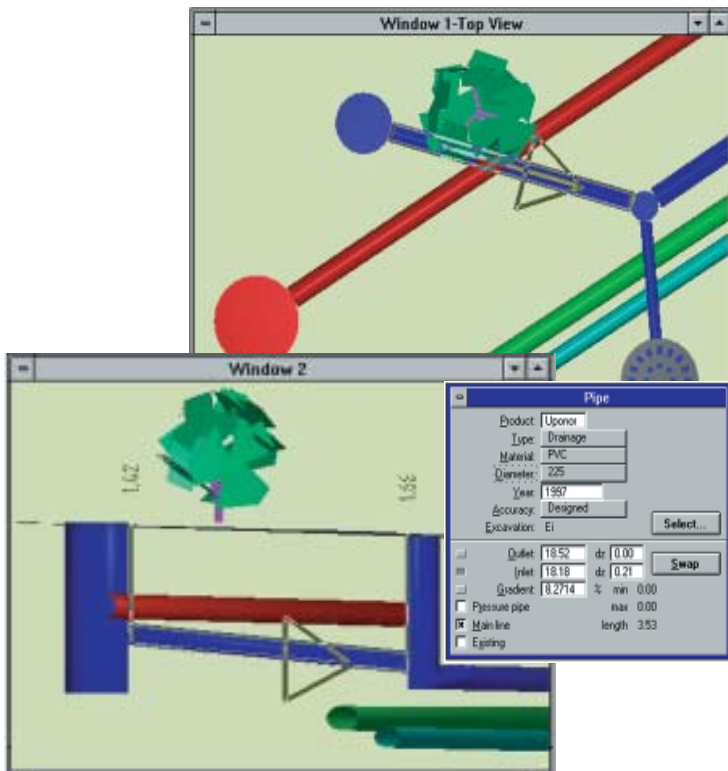
email: info@terrasolid.fi <http://www.terrasolid.com>

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Design with True 3D Elements

Designing with TerraPipe starts by placing manholes interactively. When the first manhole is placed, TerraPipe displays it automatically in a dynamic section view. You can place the bottom of the manhole by mouse in section view. The diameter, material and other numeric values can be entered in a manhole information window.

After the second manhole has been placed, TerraPipe generates a section view between the two manholes. If you move up or down the bottom of a manhole, TerraPipe displays the flow direction and slope value between the bottoms of the manholes. A separate pipe window let you enter pipe information. The location and parameters for each design element can be modified later on.



Designing with TerraPipe takes place in 3D by using top and section view windows as well as surface models of TerraModeler.

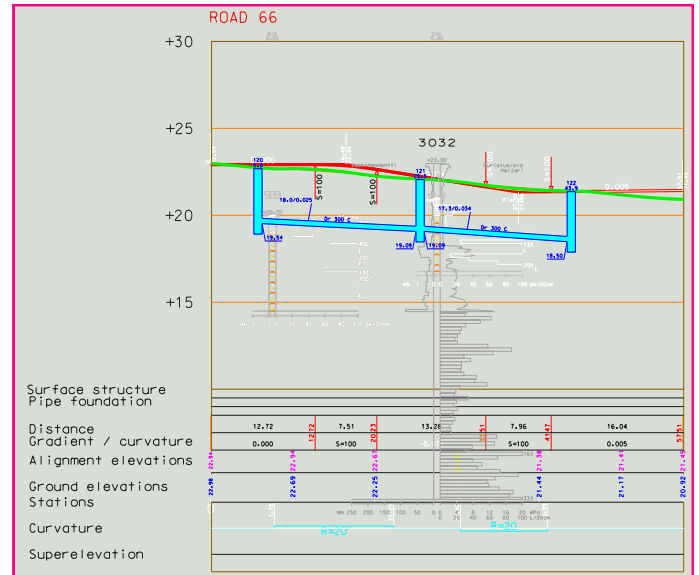
Tailor Settings to Fit Your Needs

You can define your own display settings for model, map and profile displays. The settings include as follows:

- *Eight network types* — each design element belongs to one of these types.
- *Materials* — contains a list of materials to be used.
- *Diameters* — list of accepted pipe diameters
- *Pipe gradients* — list of recommended minimum and maximum gradient for each pipe material and diameter..
- *Manhole minimum depths* — recommended guidelines for manhole minimum depths.

Design Model the Source of Displays

Complete designs always need to be presented as plan view drawings, profiles and text reports. When you need a map display, just let TerraPipe to show it. A profile display can be generated projecting the design elements into a profile or into cross sections.



A profile display is in general a combination of elements produced by TerraPipe, TerraModeler, TerraBore and TerraStreet.

If you modify the design elements, TerraPipe will automatically detect that the displays need updating. If you give permission, the application will redraw the necessary parts of the displays.

You can finish the displays details with the following tools:

- *Remove Hidden Lines* removes hidden lines in a profile display.
- *Offset Line* defines an offset for a pipe line in the map display. This is useful in places where two pipe lines are indistinguishable from each other in a large scale map.
- *Label Manholes* places numbering labels next to manholes.
- *Scale Pipes* changes the scale of map display.

Manhole in	Pipe type	Diameter	In bottom	in degrees	in gradient
Rw3	Outlet				
-157909.0	Inlet	PVC	300	0	239 0.2
-154076.5	Inlet				
2 top	Inlet				
19.5	Inlet				
Depth					
1.67					
Diameter	<input type="checkbox"/> Rain trap <input type="checkbox"/> No rain trap <input type="checkbox"/> Flushing pipe				
Material	<input type="checkbox"/> In addition to depth <input type="checkbox"/> Sand trap				
Plastic	<input type="checkbox"/> Min telescope <input type="checkbox"/> No telescope <input type="checkbox"/> Closed curb				
Drainage	<input type="checkbox"/> Min manhole <input type="checkbox"/> Regulating pipe 0.8m <input type="checkbox"/> Strain curb				
	<input type="checkbox"/> No manhole <input type="checkbox"/> m 25 <input type="checkbox"/> 40 <input type="checkbox"/> 1				

Manhole cards can be produced automatically from network models.