

Pipe Connection

Pipe Connection represents a pipe with a circular cross section. The flow routing through a Pipe Connection is described in [Analysis of Connections](#).



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Parameters to specify:

Length, Slope, Manning's n, Diameter/Base Width, see [Connection Inputs](#).

Upstream (US) Cover Level, Upstream Invert Level, Downstream (DS) Cover Level and Downstream Invert Level, see below.

If the Slope or Downstream Invert Level are changed by the user the other variable will be updated to match the slope.

Automatic Setting of Levels

Where possible connection levels are automatically set from [Surface](#) data, existing [Stormwater Controls](#) and existing [Junctions](#). This is done following the rules below but can be overruled by the user. Where levels have been overruled by the user or by the Pipe Sizing procedure the values will be shown in red to indicate they are no longer following the rules below and will not be automatically updated.

US Cover Level

- If the US coordinate is on a surface then set the US Cover Level to be the surface level at the US coordinate (in the case of a Stormwater Control this may be at the location of an Inlet or Outlet).
- If the US coordinate is not on a surface (either a surface is not loaded or the US coordinate is not on a surface) then set the US Cover Level to the Cover Level of the upstream Manhole or the Exceedance Level of the upstream Stormwater Control.

DS Cover Level

- If the DS coordinate is on a surface then set the DS Cover Level to be the surface level value at the DS coordinate (in the case of a Stormwater Control this may be at the location of an Inlet or Outlet).
- If the DS coordinate is not on a surface (either a surface is not loaded or the DS coordinate is not on a surface) then set the DSCL to the Cover Level to the Cover Level of the downstream Manhole or the Exceedance Level of the downstream Stormwater Control.

US Invert Level

- If the US item is a Simple Junction then the US Invert Level = US Cover Level – [Pipe Sizing Criteria](#) Min Cover Depth – pipe Diameter.
- If the US item is not a Simple Junction then the US Invert Level = the Invert Level of the upstream Manhole or the Base Level of the upstream Stormwater Control.

DS Invert Level

- If the DS item is a Simple Junction then the DS Invert Level = DS Cover Level – [Pipe Sizing Criteria](#) Min Cover Depth – pipe Diameter.
- If the DS item is not a Simple Junction then the DS Invert Level = the Invert Level of the downstream Manhole or the Base Level of the downstream Stormwater Control.

Section Pages

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- [Lagged Flow](#)
- [No Delay](#)
- [Pipe Connection](#)
- [Rectangular Channel](#)
- [Trapezoidal Channel](#)
- [Triangular Channel](#)

Workflow - What's next...?



Connect Inflows to your **Stormwater Control**, specify **Inlets** or **Outlets** or connect to another Stormwater Control or **Junction**.