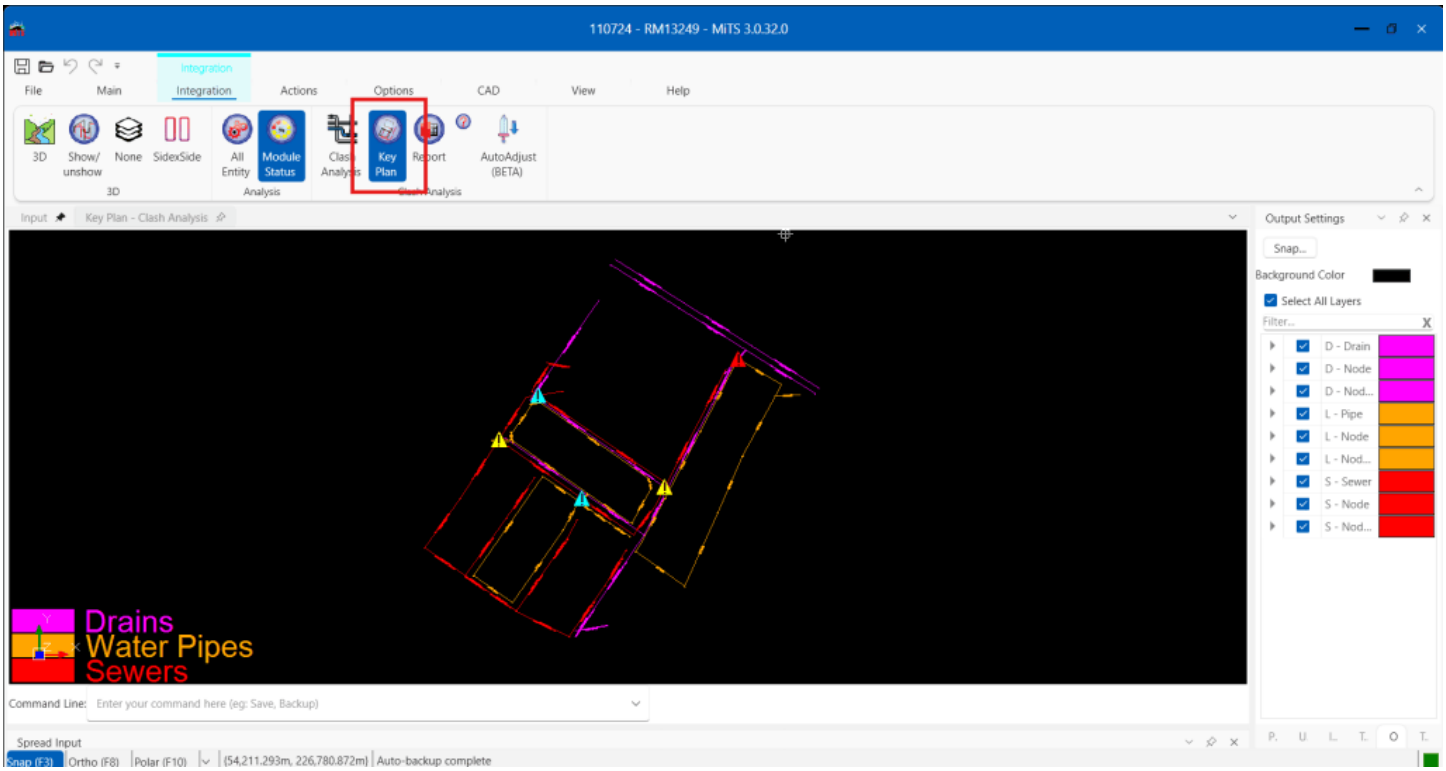
Clash Analysis Outcome

Clash Analysis · https://mes100.com/docs/clash-analysis-outcome/

Vertical

Key Plan

MiTS-Clash Analysis can generate a key plan based on the network systems.



- **Insufficient Warning**
  - A yellow sign will be displayed indicating the vertical clearance between 2 pipes/drains is ***less than the Min. Vertical Clearance set under the parameter*** (The default value is 300mm)

- **Clash Warning**

- A red sign will be displayed indicating clearance between 2 pipes ***less than the material thickness***

Note:

**Clicking on the sign once will link to the conflict point in the report*

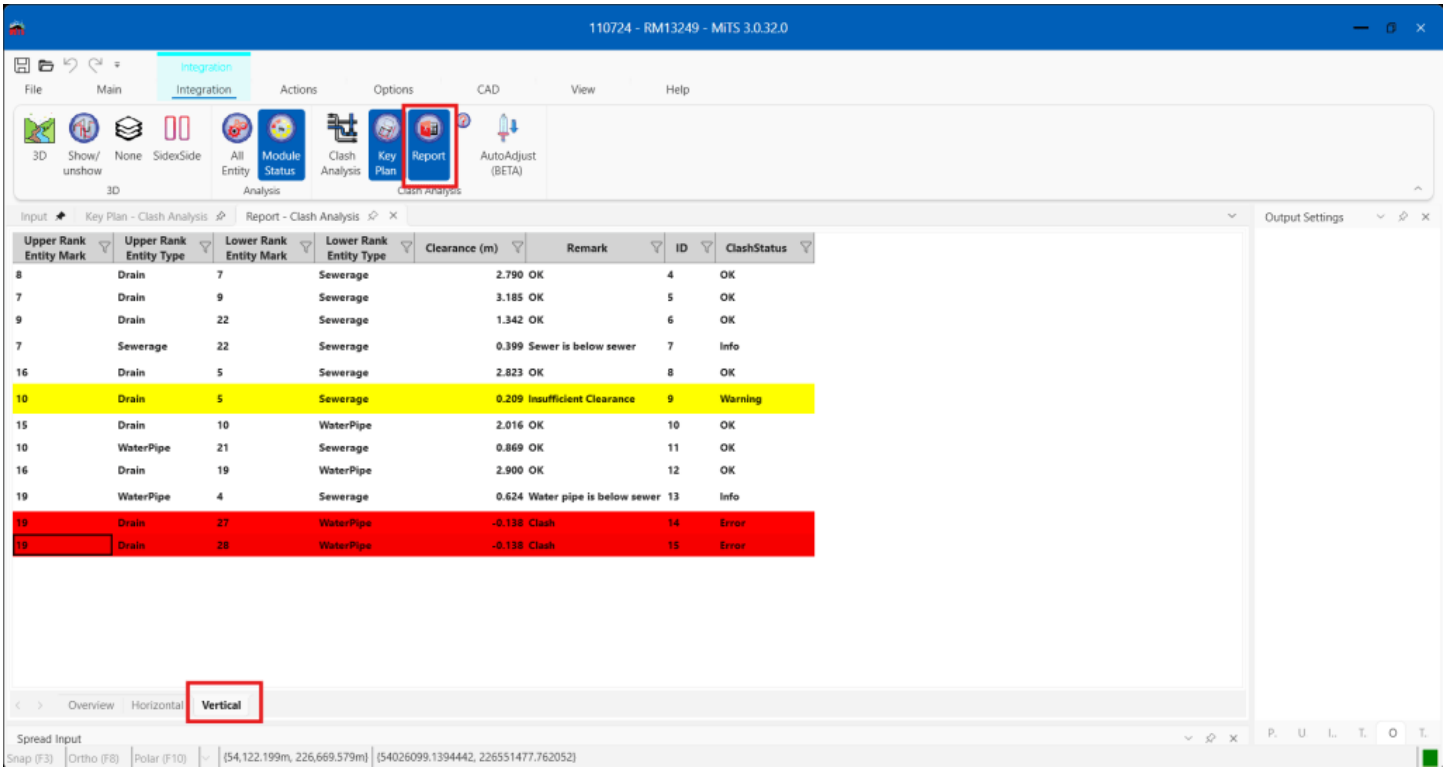
***Right - click on the sign to show the conflict point in 3D View or Long Section*

Embedded media: https://www.youtube.com/embed/HtR8fwl-xg4?version=3&rel=1&showsearch=0&showinfo=1&iv_load_policy=1&fs=1&hl=en-US&autohide=2&wmode=transparent&enablejsapi=1

Report

MiTS-Clash Analysis can generate a detailed report for every intersection point.

**Double-click on the rows will link back to the conflicting point in the Key Plan - Clash Analysis*



Remark

Remark	Explanation
OK	The entities are crossing on the horizontal plan in ***correct*** order (i.e. Water pipe is higher than the sewer pipe) and the vertical clearane is ***more than the Min. Vertical Clearance*** set.
Clash	**Negative clearance** for the entities crossing horizontally. Do note that for vertical clearance, any clash either with the outer or inner profile will result in a negative value.
Insufficient	The entities have **positive clearance** when crossing horizontally, but the distance between them is ***less that the Min. Vertical Clearance*** set.
Inverse with remarks such as *Drain is below sewer pipe*	Based on the assumption that (1) Drain is **above** the water pipe (2) Water pipe is **above** the sewer pipe The remark will be shown once this order is not maintained, even if there is positive clearance with a distance more than the Min. Vertical Clearance set

Vertical Clearance Computation

***Note: The IL considered should be at the conflicting point on the pipes or drains*

Between		Vertical Clearance
Sewer	Drain	(Drain IL - Drain Thickness) - (Sewer + Sewer Pipe Diameter + Sewer Pipe Thickness)

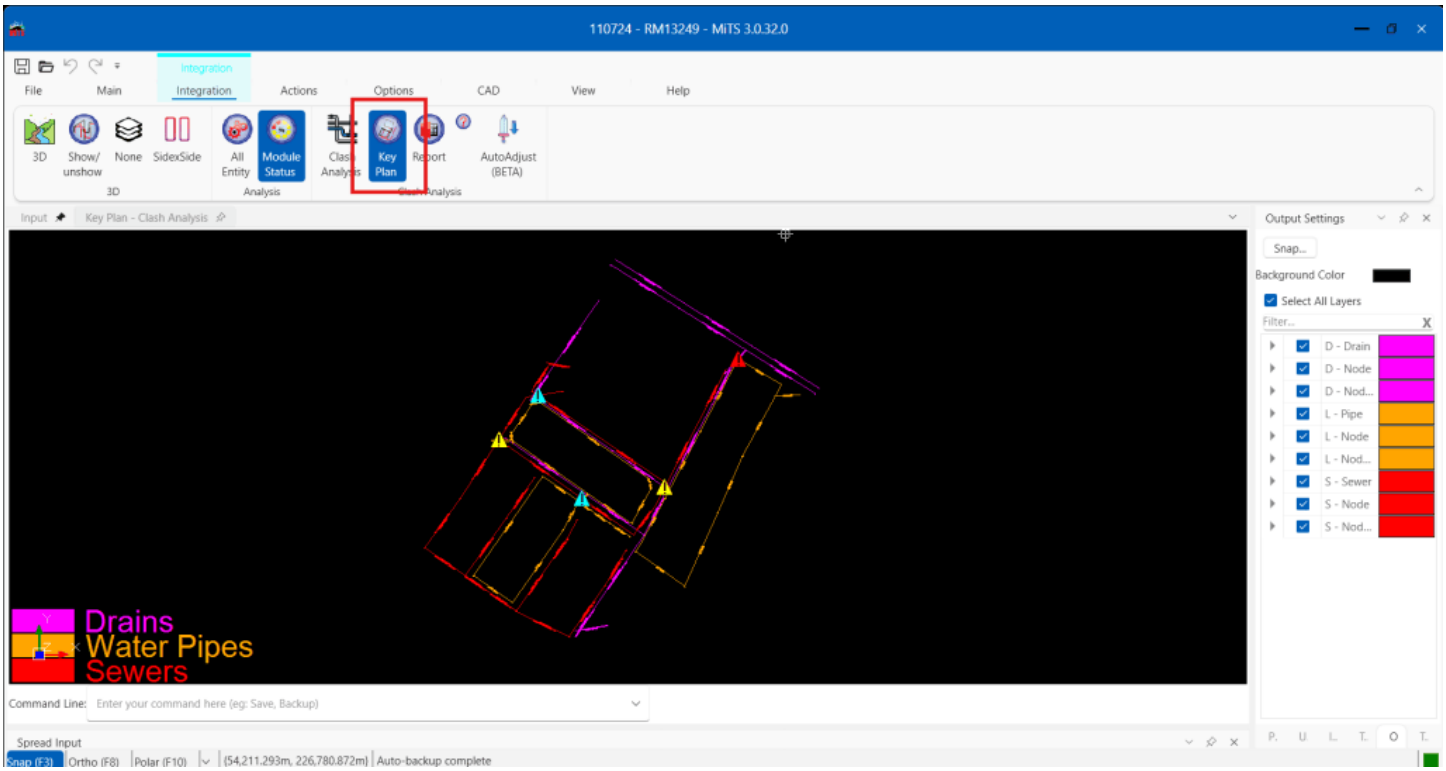
Drain	Water	(Drain IL - Drain Thickness) - (Water IL + Inner Diameter + Water Pipe thickness)
Sewer	Water	(Water IL - Water Pipe thickness) - (Sewer IL + Sewer IL + Sewer Pipe thickness)

Horizontal

Horizontal clash analysis has been improved to give users a sense of a more realistic crash. Refer to this blogpost for more explanation and calculation details - ***Improved Horizontal Clash Analysis Benchmark***.

Key Plan

MiTS-Clash Analysis can generate a key plan based on the network systems.



- **Clash Warning**

- A red sign will be displayed indicating a sump or manhole clashed with another entity

- **Yellow Warning**
  - A yellow sign will be displayed indicating horizontal clearance between the entities is ***less than the Min. Horizontal Clearance***. (The default value is 600mm)

Note:

**Clicking on the sign once will link to the conflict point in the report*

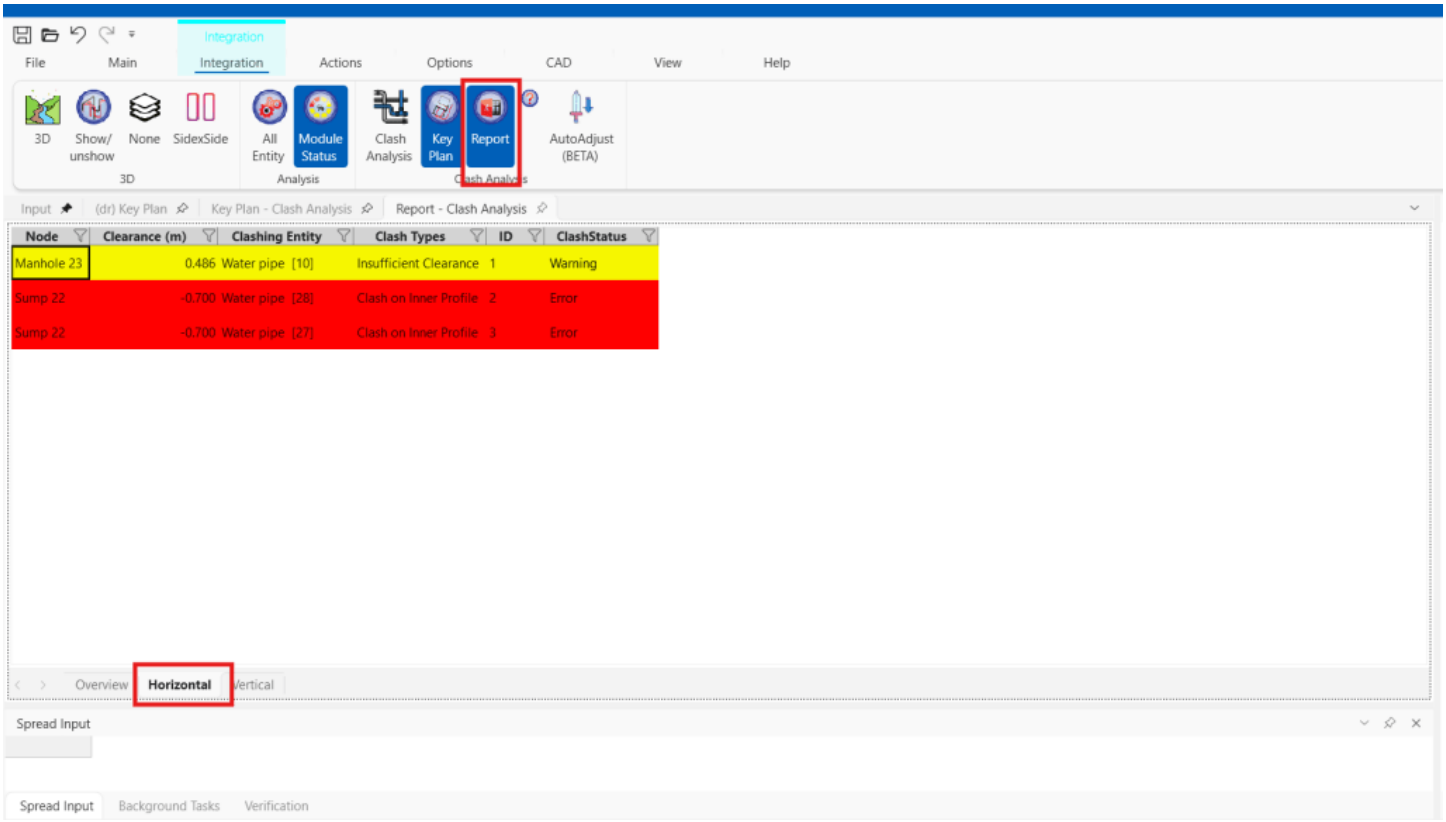
***Right-click on the sign to show the conflict point in 3D View or Long Section*

Embedded media: https://www.youtube.com/embed/HtR8fwl-xg4?version=3&rel=1&showsearch=0&showinfo=1&iv_load_policy=1&fs=1&hl=en-US&autohide=2&wmode=transparent&enablejsapi=1

Report

MiTS-Clash Analysis can generate a detailed report for every clashed point.

**Double-click on any rows will link back to the conflicting point on the key plan.*



Remark

The shortest perpendicular distance needed to avoid clashing between two entities, *can be between node-node or node-pipe*.

Remark	**Explanation**
Clashing with "**-ve**" **clearance**	The clashing is happening inside at least one of the inner profiles of the two entities
	The clashing is happening between the material thickness (It is happening outside of the inner profle of both entities but inside the outer profiles of the two entities)

Insufficient clearance ("**+ve**" **clearance**)	The entities **are not clashing**, but the horizontal distance between them is ***less than the Min. Horizontal Clearance*** set

Long Section

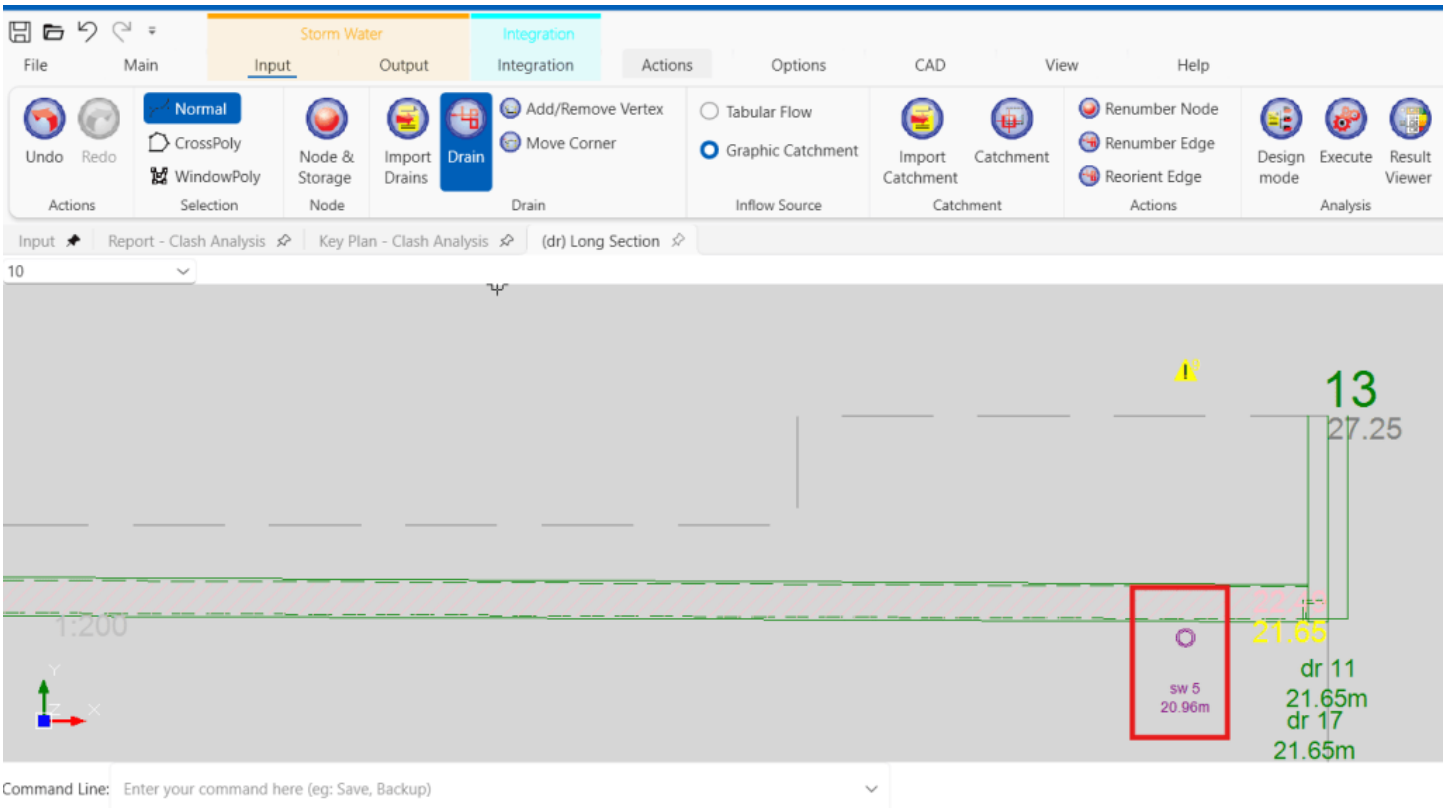
Users may view the long section by right-clicking on the warning and selecting the long section from the options available such as below.

Embedded media: https://www.youtube.com/embed/woDI_-mUizQ?version=3&rel=1&showsearch=0&showinfo=1&iv_load_policy=1&fs=1&hl=en-US&autohide=2&wmode=transparent&enablejsapi=1

Drain Long Section

MiTS - Clash Analysis can generate a drain long section with the water pipes and/or sewer pipes shown at the intersection point.

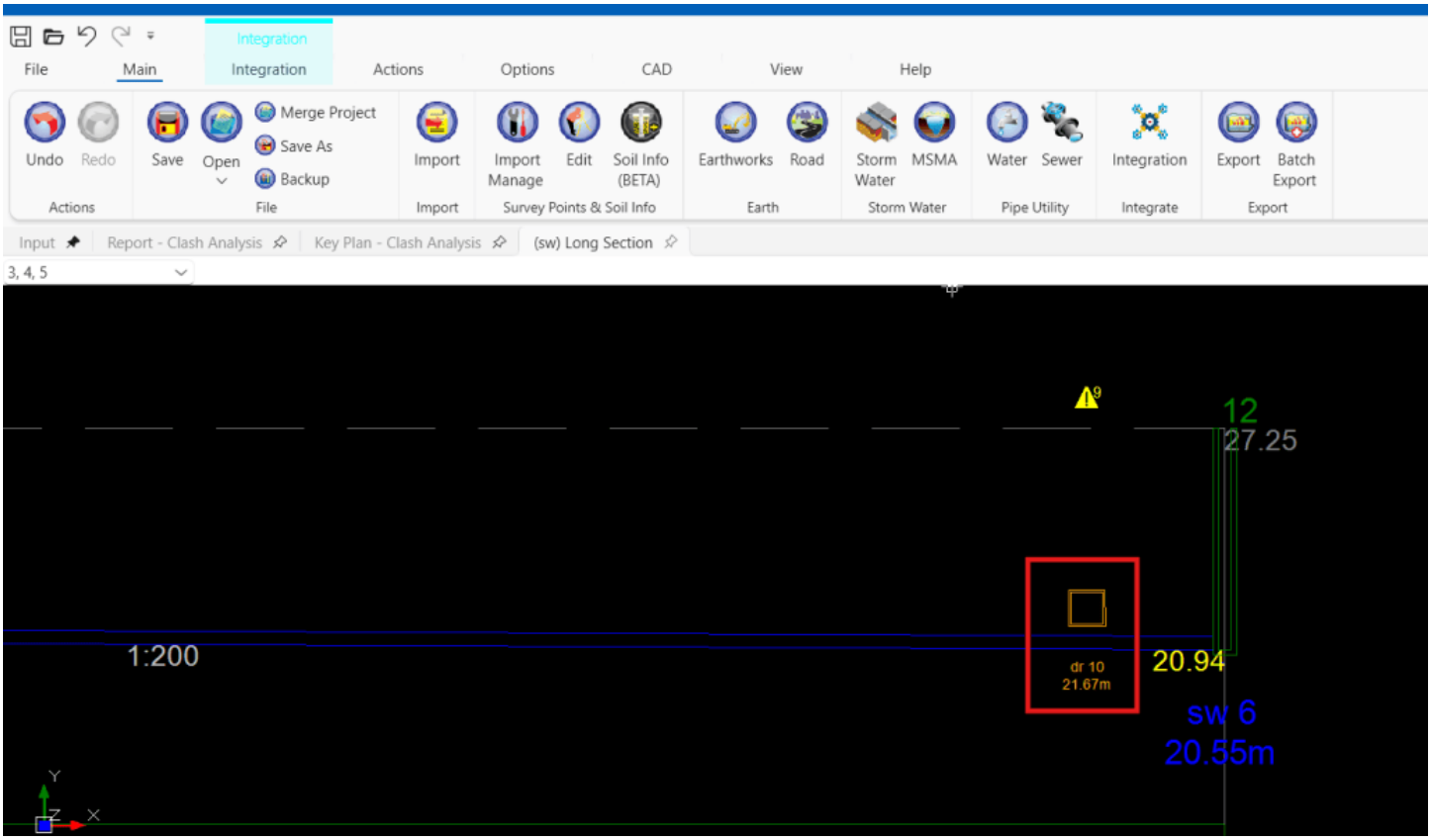
The long section will also display the Invert Levels (Material thickness has been taken into account) of the pipes/drains at the intersecting points.



Sewer Long Section

MiTS - Clash Analysis can generate a sewerage long section with the water pipes and/or drains shown at the intersecting points.

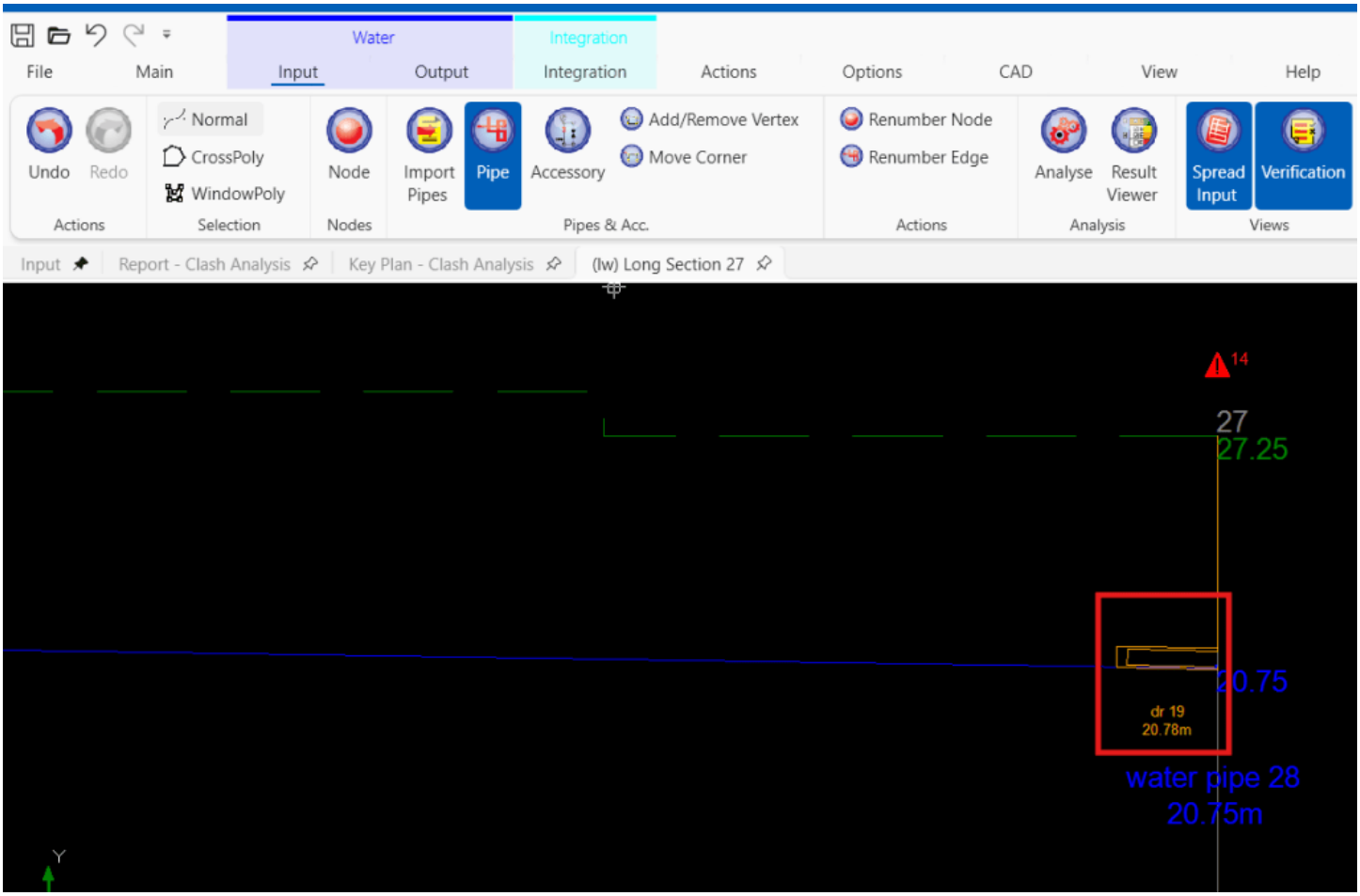
The long section will also display the Invert Levels (Material thickness has been taken into the account) of the pipes/drains at the intersecting points.



Water Long Section

MiTS - Clash Analysis can generate a water reticulation long secting with the drains and/or sewer pipes shown at the intersecting points.

The long section will display the Invert Levels (Material thickness has been taken into account) of the pipes/drains at the intersecting points.



Related Articles

- **Starting Clash Analysis**
- **Clash Point Solution**

Related



Ngu Soon Hui

I'm the Benevolent Dictator for Life for MiTS Software cum Editor of this website. Read more here.

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