ACADEMY

GEOMAX

TUTORIAL
DESIGN 3D TOOLS

Design 3D

DESCRIPTION

- Use the Design 3D menu manage surfaces

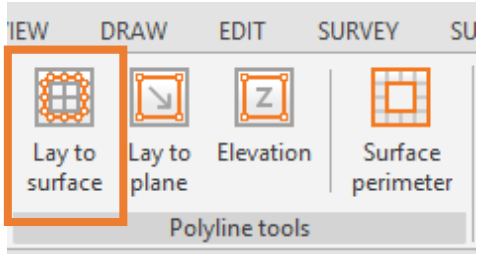
GOAL

- How to use Polyline tools
- How to use Sideslope tools
- How to use Surface tools

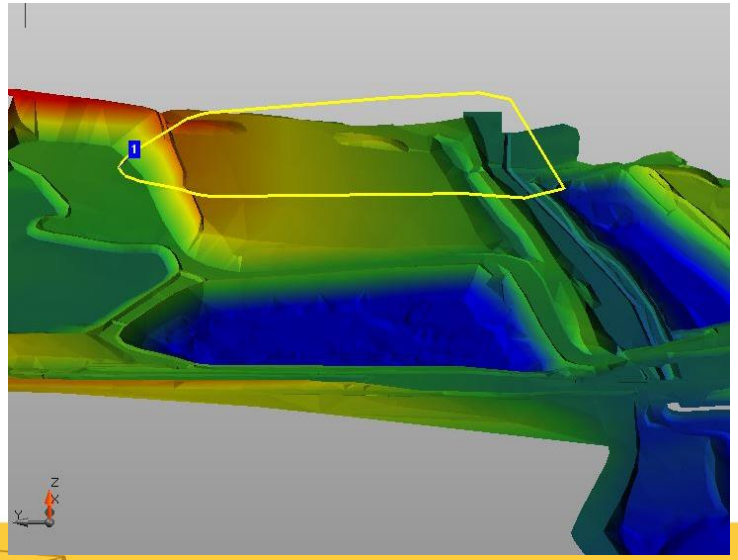
DATA

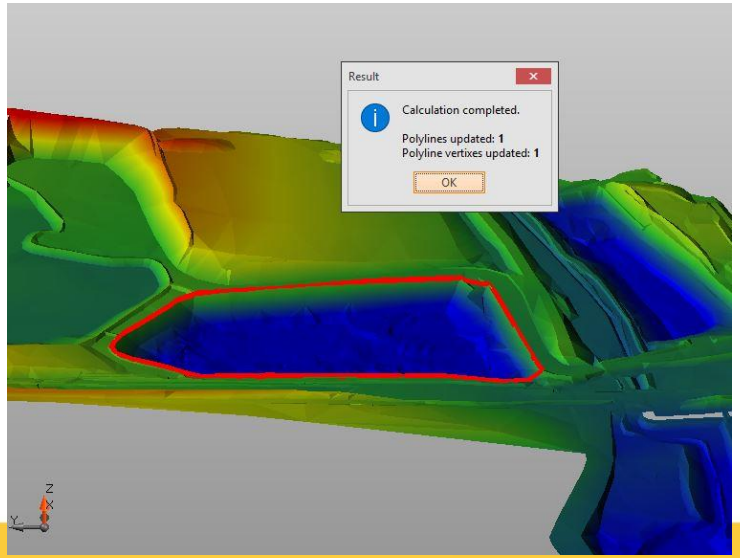
- Design3D. gfdoff

Polyline tools

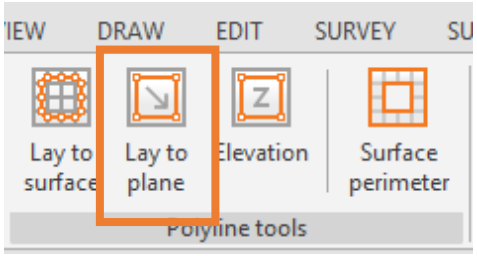


- LAY TO SURFACE: this command allow to project a polyline to a selected surface

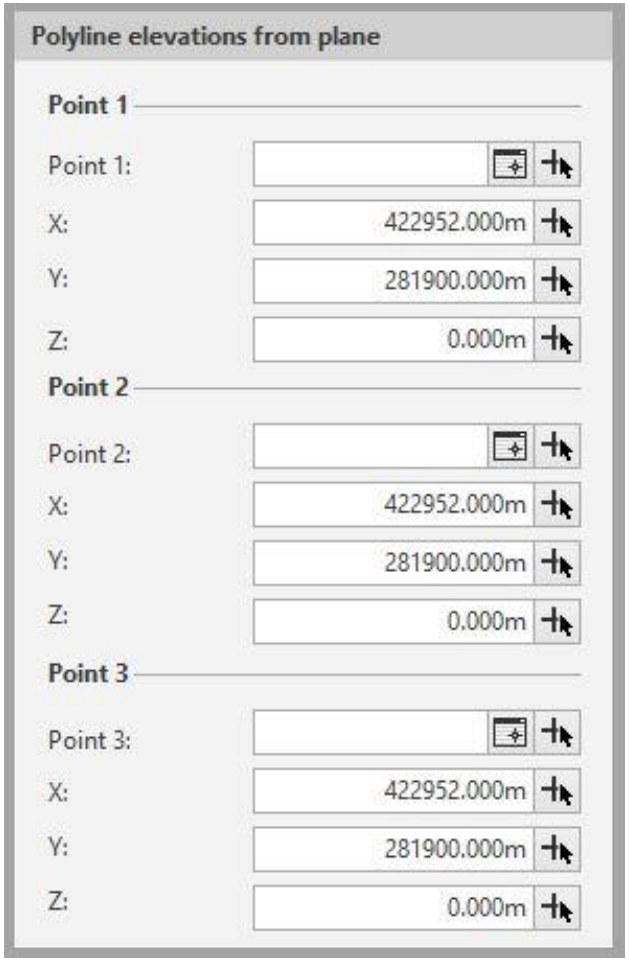




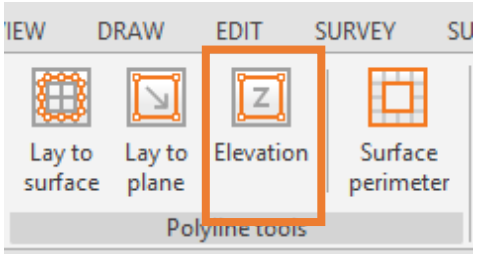
Polyline tools

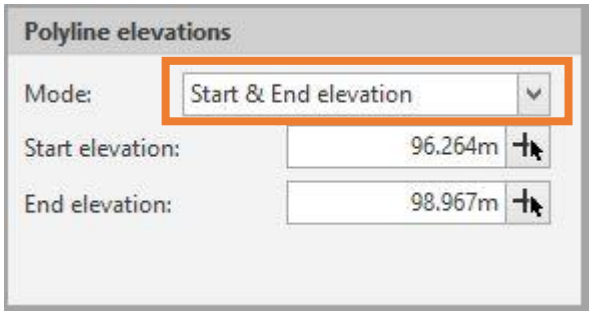


- LAY TO PLANE: this command allow to project a polyline to a 2D plane defined by 3 points

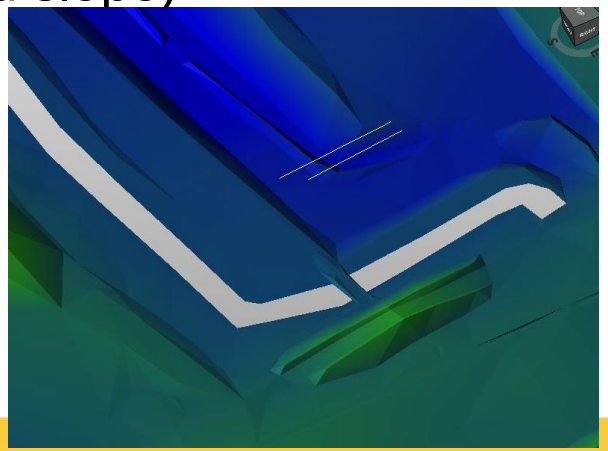


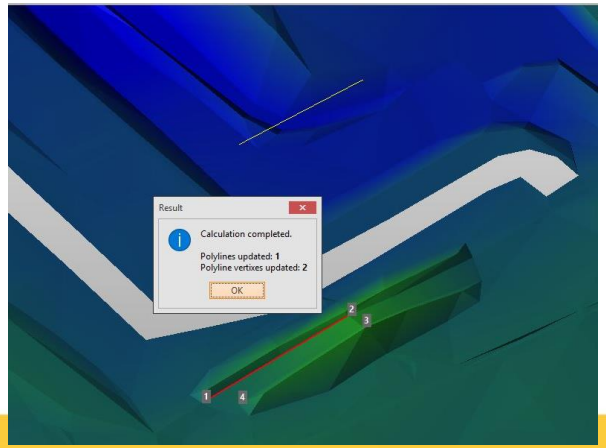
Polyline tools



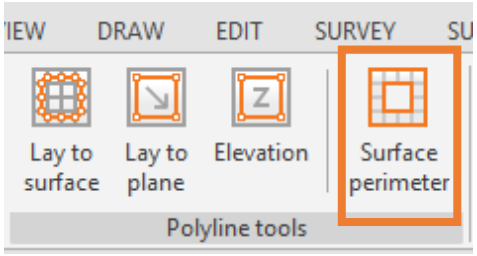


- ELEVATION: this command assigns the polyline vertex elevation depending on different rules (fixed elevation, Start&End elevation, Start/End elevation and slope)

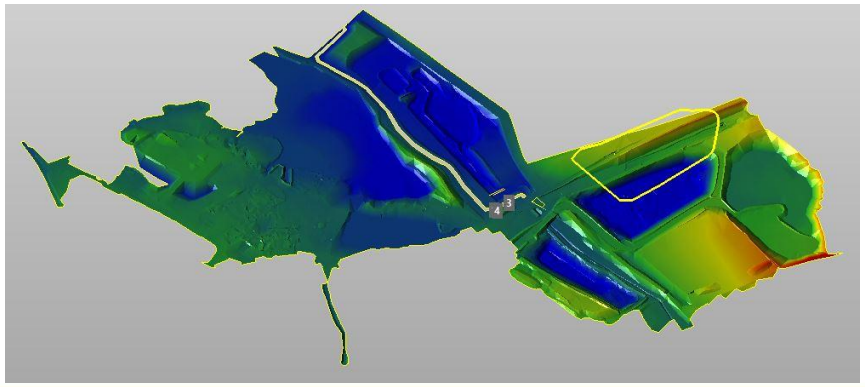


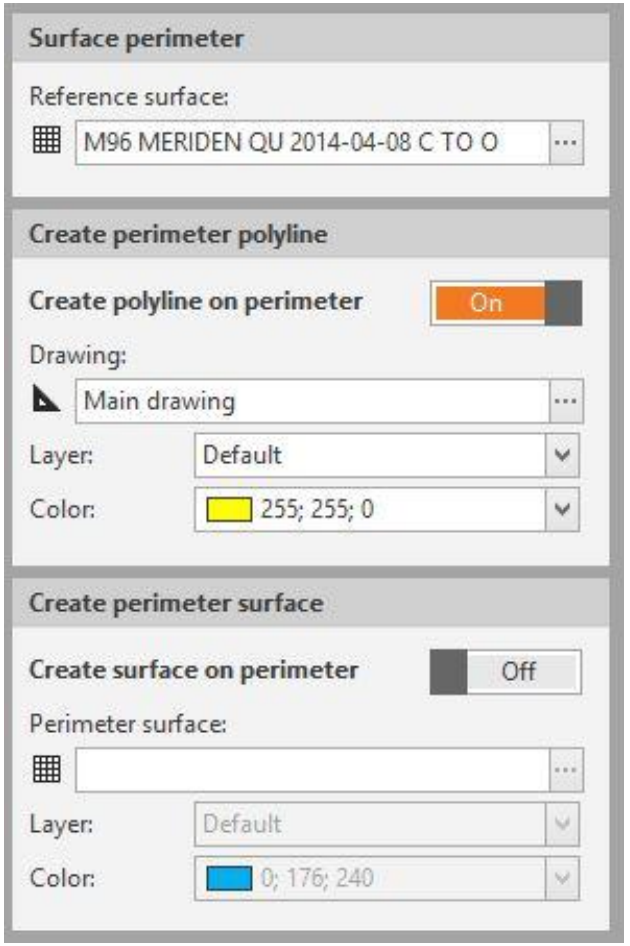


Polyline tools

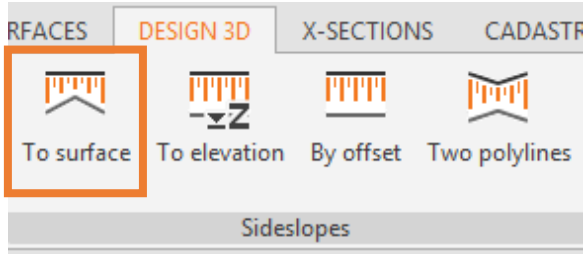


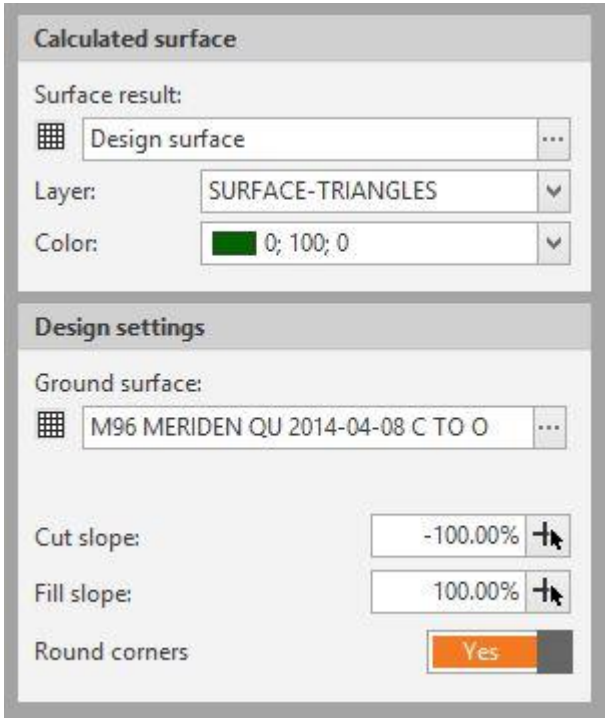
- SURFACE PERIMETER: this command allow to defines the perimeter of an existing surface but also to create a surface on a defined perimeter





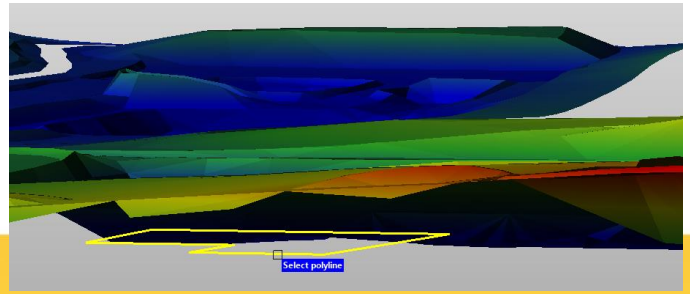
Sideslope tools

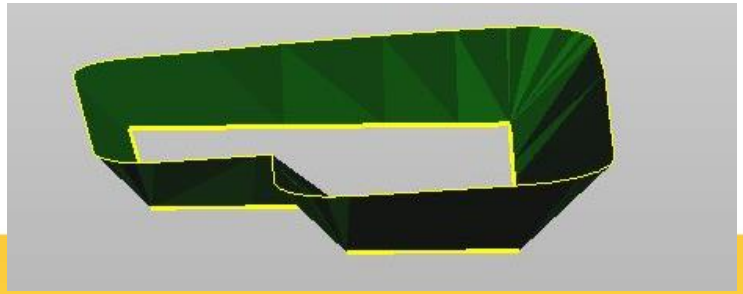




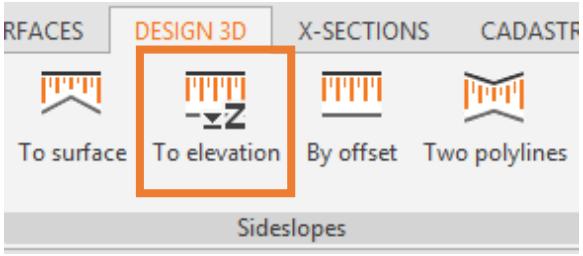
- TO SURFACE: creates a cut/fill surface from a polyline to an existing surface

After selecting the relative parameters, select the defined polyline, than the direction

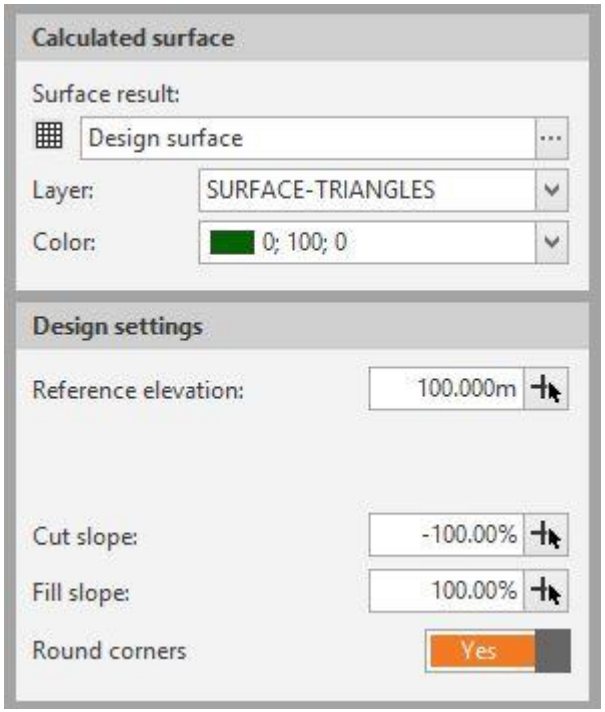


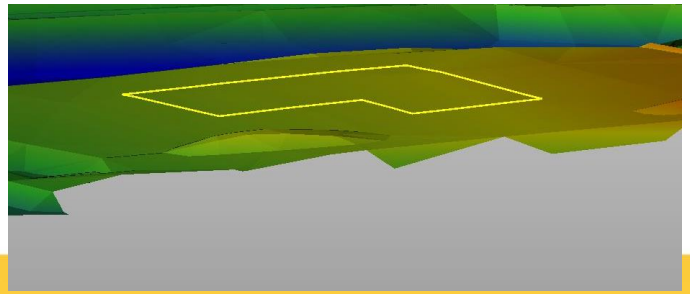


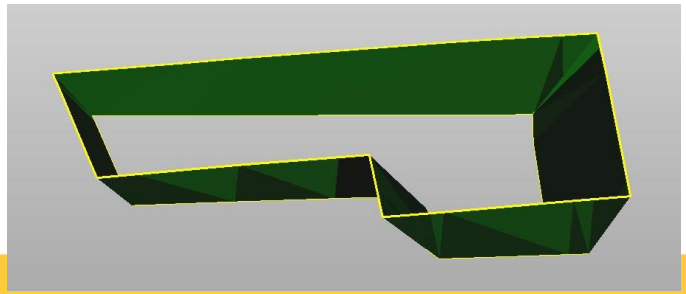
Sideslope tools



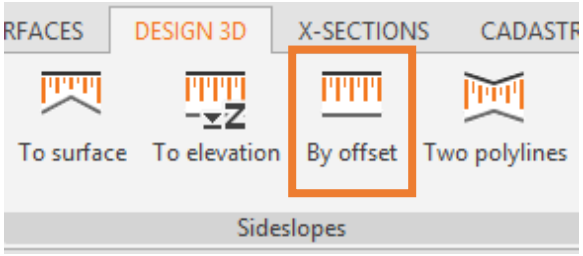
- TO ELEVATION: creates a cut/fill surface from a polyline to a reference elevation

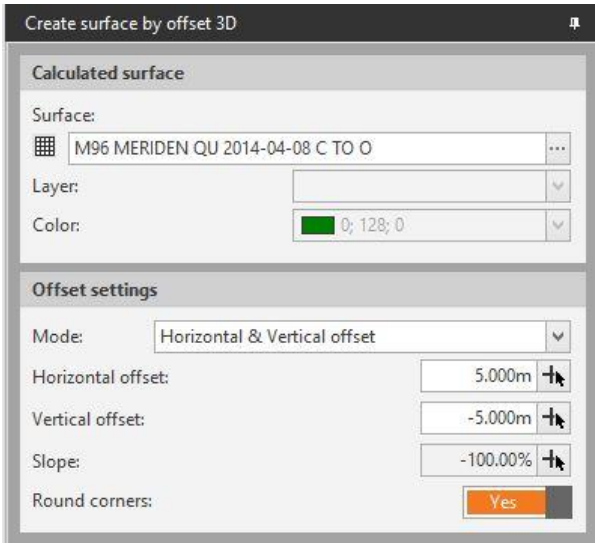




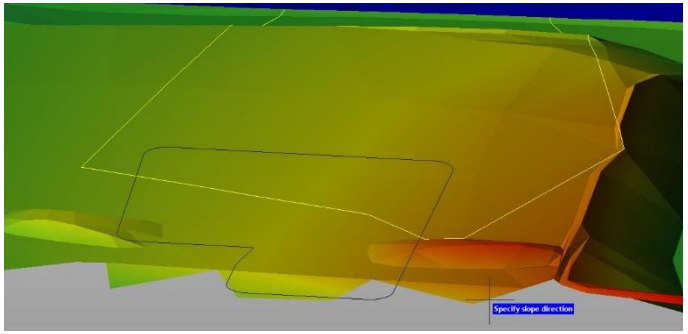


Sideslope tools

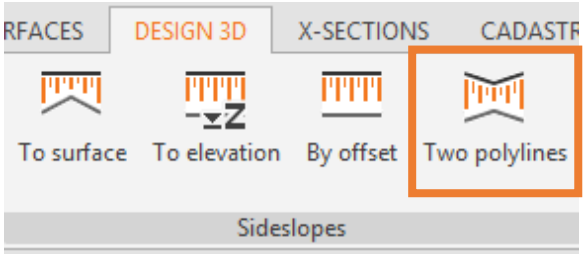


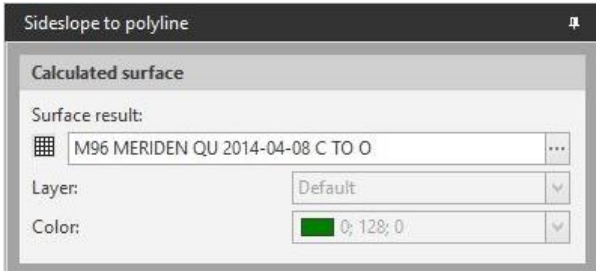


- BY OFFSET: creates a cut/fill surface from a polyline specifying the values of horizontal offset, vertical offset and slope

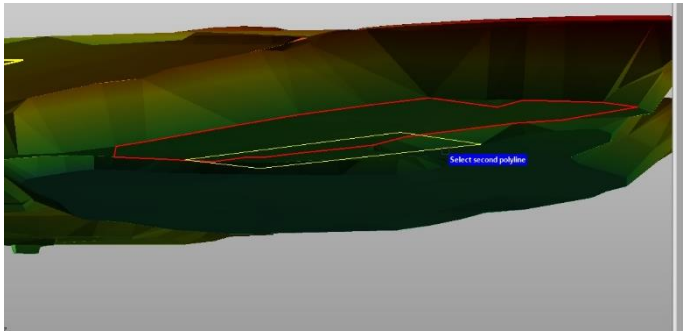


Sideslope tools

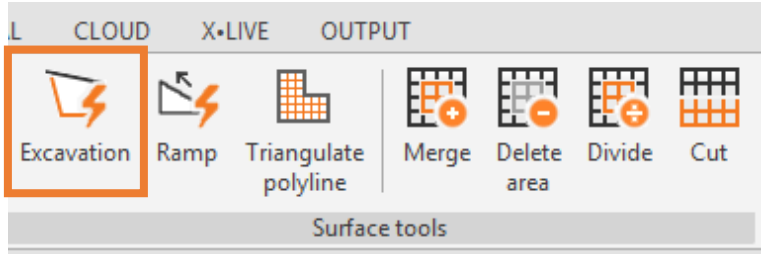


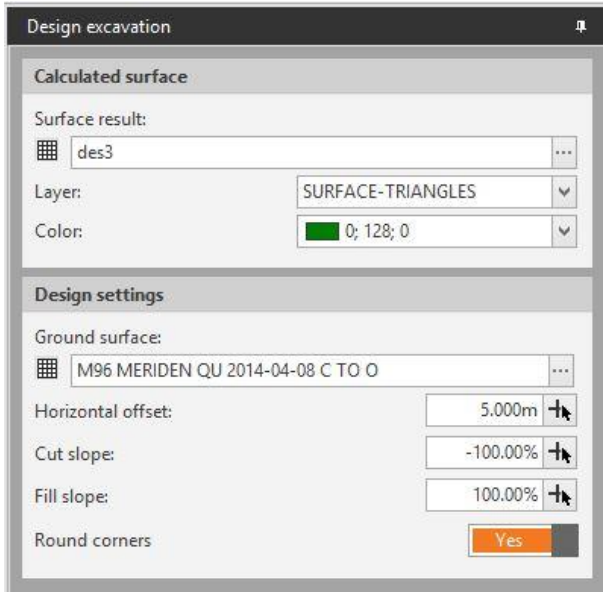


- TWO POLYLINES: creates the cut/fill surface between two 3D polylines

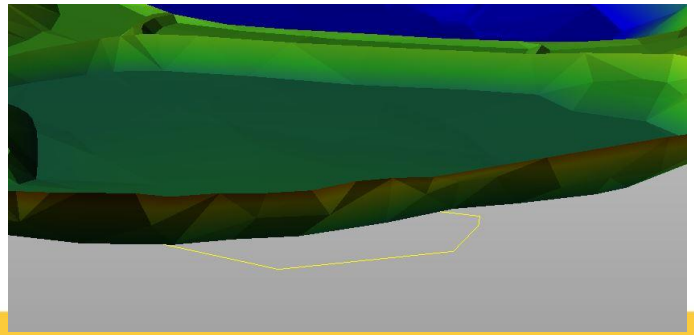


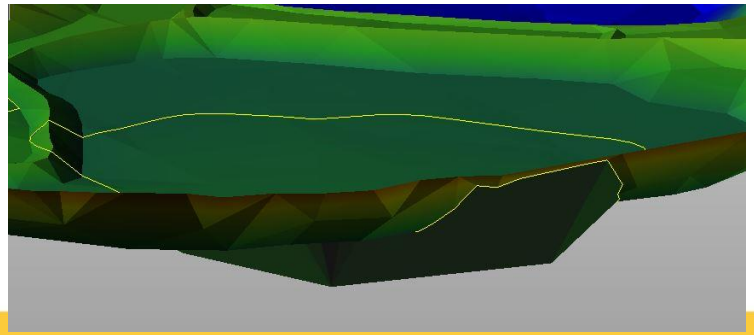
Surface tools



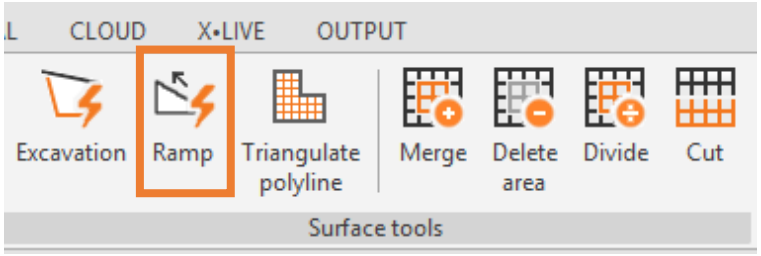


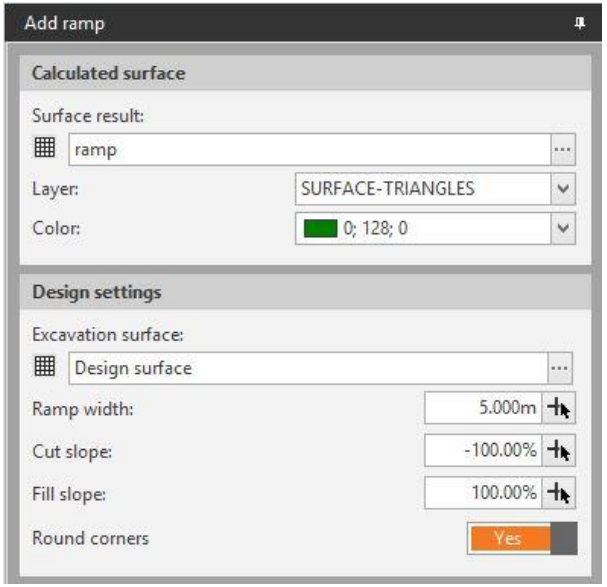
- EXCAVATION: this command allow to calculate the full excavation surface, starting from a closed 2D polyline, just entering offset and slopes



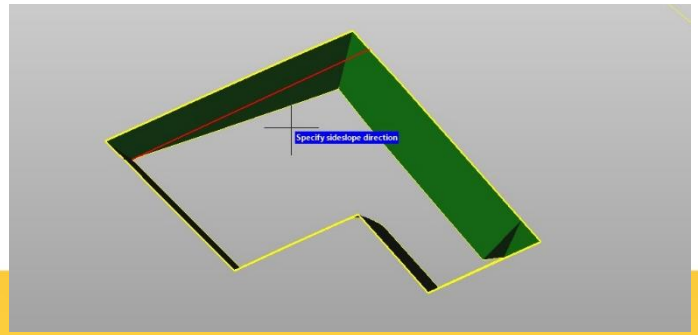


Surface tools

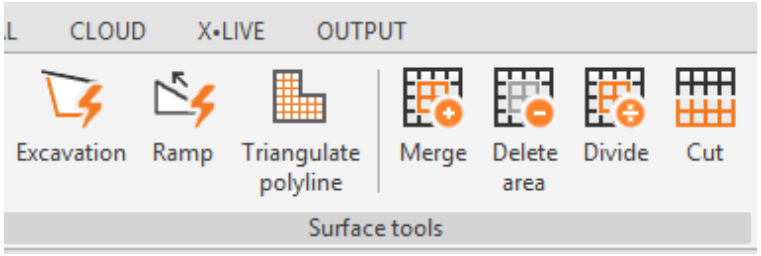




- RAMP: this command allow to creates a 3D surface representing the ramp to enter in the excavation, starting from a polyline which defines the edge of the ramp



Other Surface tools



- TRAIANGULATE POLYLINE: this command triangulates the surface included in a defined polyline
- MERGE: this command merges together two different surfaces
- DELETE AREA: deletes the part of surface within or outside a defined polyline
- DIVIDE: this command moves the triangles included within a polyline in a new surface
- CUT: this command cuts the triangles of a surface, using a defined cut polyline