

# Benefits of using Grading Optimization for Civil 3D

## Productivity study highlights



Grading Optimization for Civil 3D brings dramatic time and effort savings during grading project development.

### Study summary

Autodesk commissioned a study that explored the productivity differences between the standard grading tools in Autodesk® Civil 3D® and the Grading Optimization for Civil 3D\* (Grading Optimization) toolset.

Results showed that using Grading Optimization could allow a user to complete tasks up to 74% more quickly than using standard Civil 3D grading tools alone. The study also observed that the iterative design calculations performed using Grading Optimization reduced user efforts compared to the standard grading tools in Civil 3D where the refinement of grading designs manually would require manual intervention from the user.

### How Grading Optimization saves time

#### 1 Mass site grading

**78%** Time savings

Grading Optimization tools and workflows provide a better mass grading of a site more quickly and with better results for later more detailed site grading.

#### 2 Building pad and parking area

**87%** Time savings

Grading Optimization tools and workflows set the building pad at an optimal elevation in relation to the parking area and surrounding grading. This encouraged beneficial drainage in the more detailed grading.

#### 3 Retaining walls

**24%** Time savings

Grading Optimization tools and workflows created a retaining wall grading that iteratively worked with surrounding grading. This made the design more appropriate for the location.

#### 4 Pond creation and storage volume adjustments

**19%** Time savings

Grading Optimization tools and workflows achieved storage volume requirements in a single run, rather than needing to be adjusted multiple times.

#### 5 Overall project grading comparison

**76%** Time savings

Grading Optimization tools and workflows showed a time savings by combining the already faster individual grading functions. Different graded area of the site can be graded in relation to other areas to provide a better overall result.

**These productivity gains highlight how Grading Optimization provides tools and workflows that enable users to be more efficient in their grading projects. The iterative nature of the Grading Optimization tools provides a better overall outcome to the grading design while saving time, reducing costs, and minimizing material waste.**

\*Grading Optimization for Civil 3D is available to customers with a subscription to the Autodesk® AEC Collection or an Autodesk Enterprise Business Agreement.

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