

**Landform Design Report**

10/4/2014 14:45:2

ClientFarmField: \\

File:E:\Work Files\Dropbox\Optisurface\OptiSurfaceClients\KampenMaarten\Demo\DemoV02.osd

Notes:

**Design Inputs**

Surface Type:	OptiSurface 4Way
Main Slope Direction(deg):	157.0000 (Bearing From North)
Calculation Grid Spacing(m):	5.000
Fill To Import to Field(m3):	0
Cut To Export from Field(m3):	0.000
Cut/Fill Ratio:	1.200

Zone	Main Slope			Cross Slope			Maximum Allowable Cut(m)	Min. Elevation (m)
	Minimum (%)	Maximum (%)	Max. Change (m%)	Minimum (%)	Maximum (%)	Max. Change (m%)		
Demo01	0.050	-	100.000	-	-	-	-	-

**Design Results**

**Design Summary**

Field Area (ha): 21.0  
 Cut Volume (m³): 3090  
 Fill Volume (m³): 2620  
 Cut Per Area (m³/ha): **147**

Import Vol. (m³) : 0  
 Export Vol. (m³) : 0  
 Cut/Fill Ratio\*\*: 1.18

Max. Cut (m): 0.128  
 Max. Fill (m): 0.170

Slope(%)    Min.    Max.  
 Main S.: -0.509    0.552  
 Cross S.: -0.494    0.459  
Max. Slope Change (%/m)  
 Main S.: 0.03094 \*\*\*  
 Cross S.: 0.03087 \*\*\*

Cut/Fill Table

-Cut+Fill (m)	Area (ha)	Vol <sup>^</sup> (m³)
Less -0.30	0.0	0
-0.30 to -0.25	0.0	0
-0.25 to -0.20	0.0	0
-0.20 to -0.15	0.0	0
-0.15 to -0.10	0.1	-86
-0.10 to -0.05	1.6	-1079
-0.05 to 0.00	10.5	-1984
0.00 to 0.05	7.0	1180
0.05 to 0.10	1.5	1047
0.10 to 0.15	0.4	413
0.15 to 0.20	0.0	36
0.20 to 0.25	0.0	0
0.25 to 0.30	0.0	0
More 0.30	0.0	0

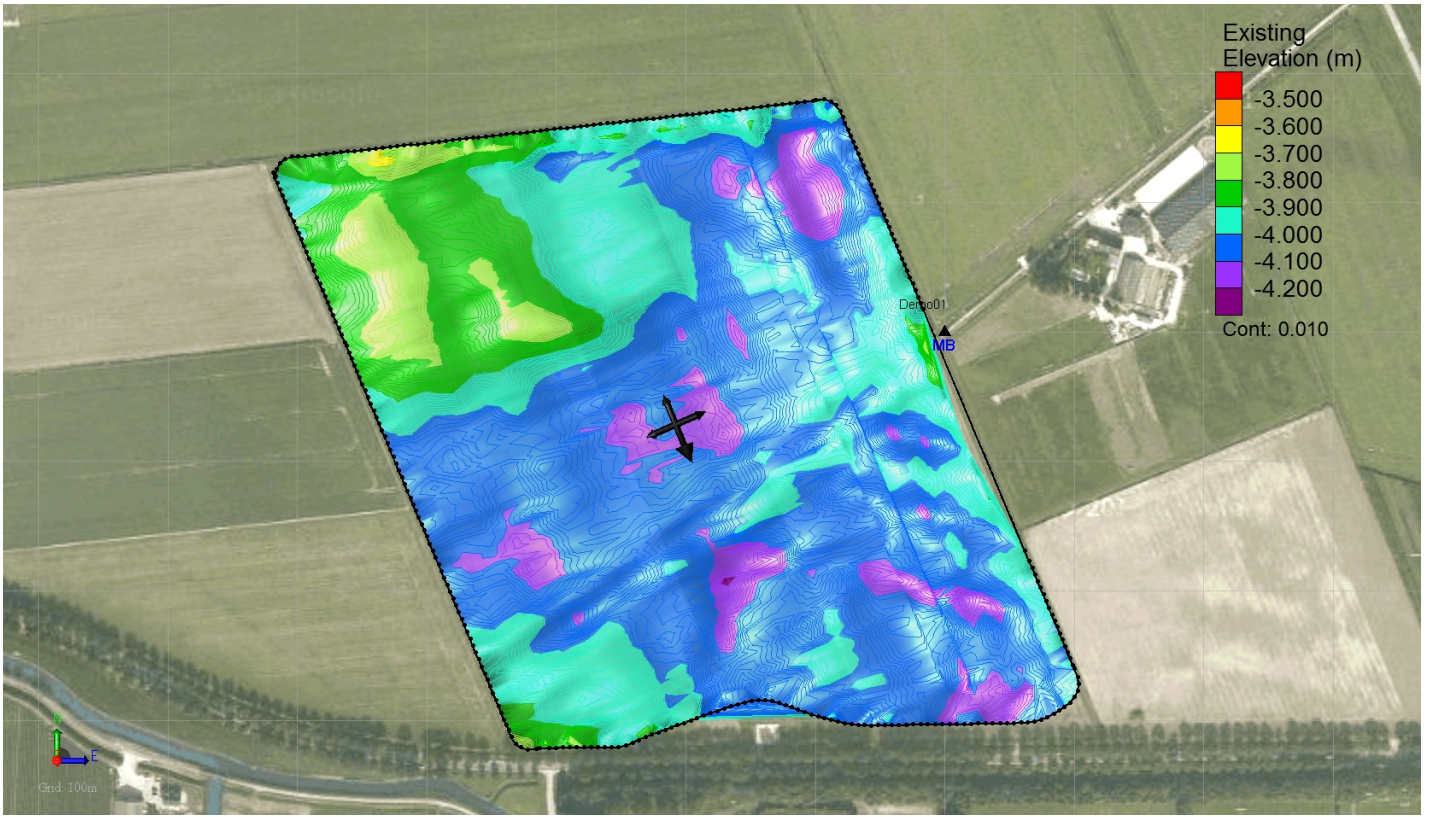
Notes:  
 \* Earthworks volumes based on the 4 Point Method applied to the calculation grid of 5.000 m.  
 \*\* Cut/Fill Ratio maybe slightly different to design input due to calculation methodology, 2 percent tolerance and any export volume.  
 \*\*\* The maximum slope change maybe larger than specified particularly in OptiSurface2D and OptiSurface4D designs at locations where the slopes switch over a crest or trough. At these locations, the maximum slope change is set to be at least 2 x the minimum slope to allow a solution to be calculated.  
<sup>^</sup> Cut/Fill Table Volume is based on single point method and slightly less accurate than 4 Point Method used for Earthworks volumes given at top of summary.

**Benchmark Results**

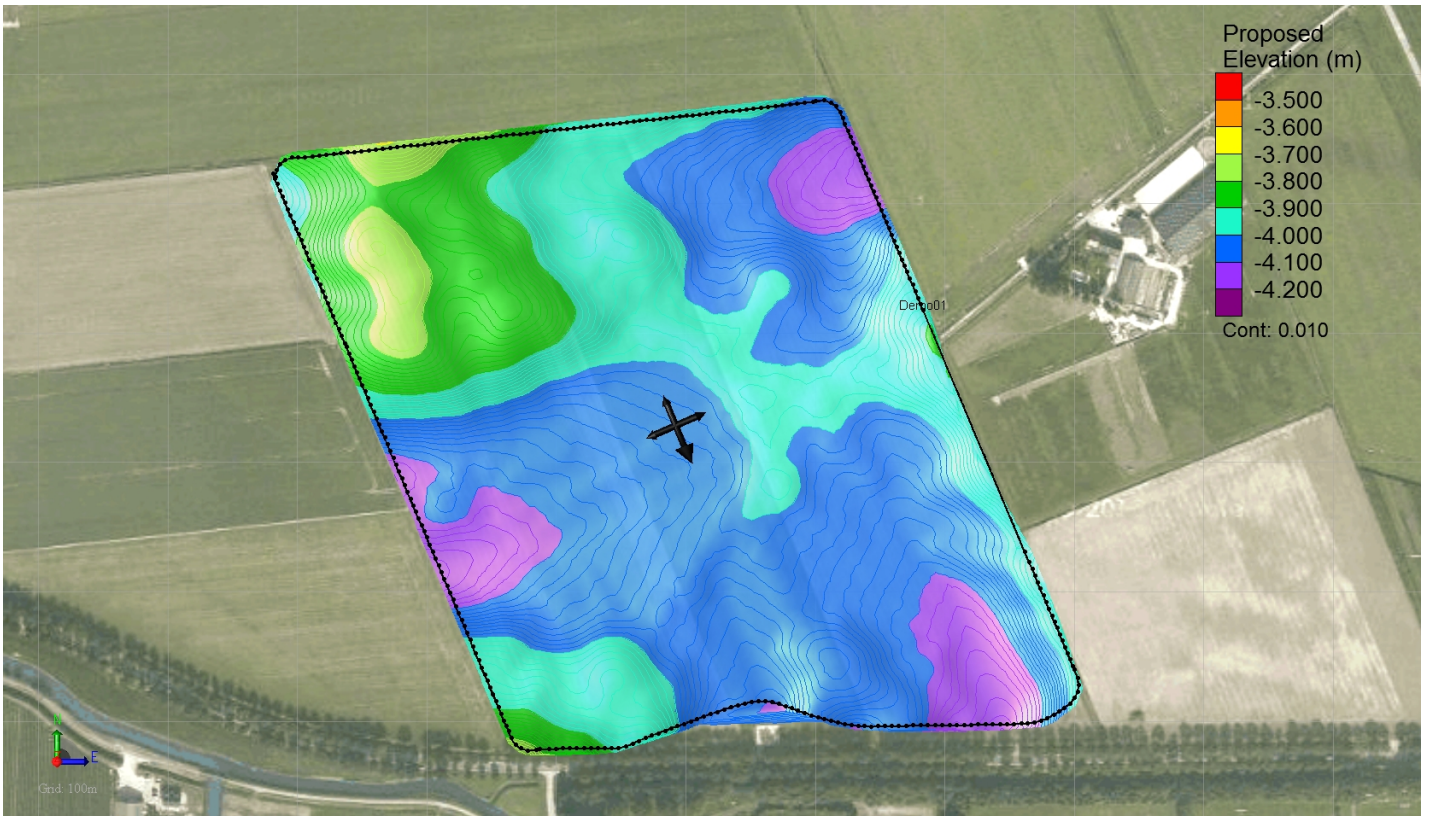
Benchmark	Easting (m)	Northing (m)	BM EL (m)	Prop. EL (m)	-Cut+Fill (m)
<b>MB</b>	0.0	0.0	-3.240	-	-

\*OptiSurface by DAVCO - The Next Generation In Agricultural Landforming" [www.optisurface.com](http://www.optisurface.com)

To view these maps in Google Earth, open the kml file found in the same folder as this html file.

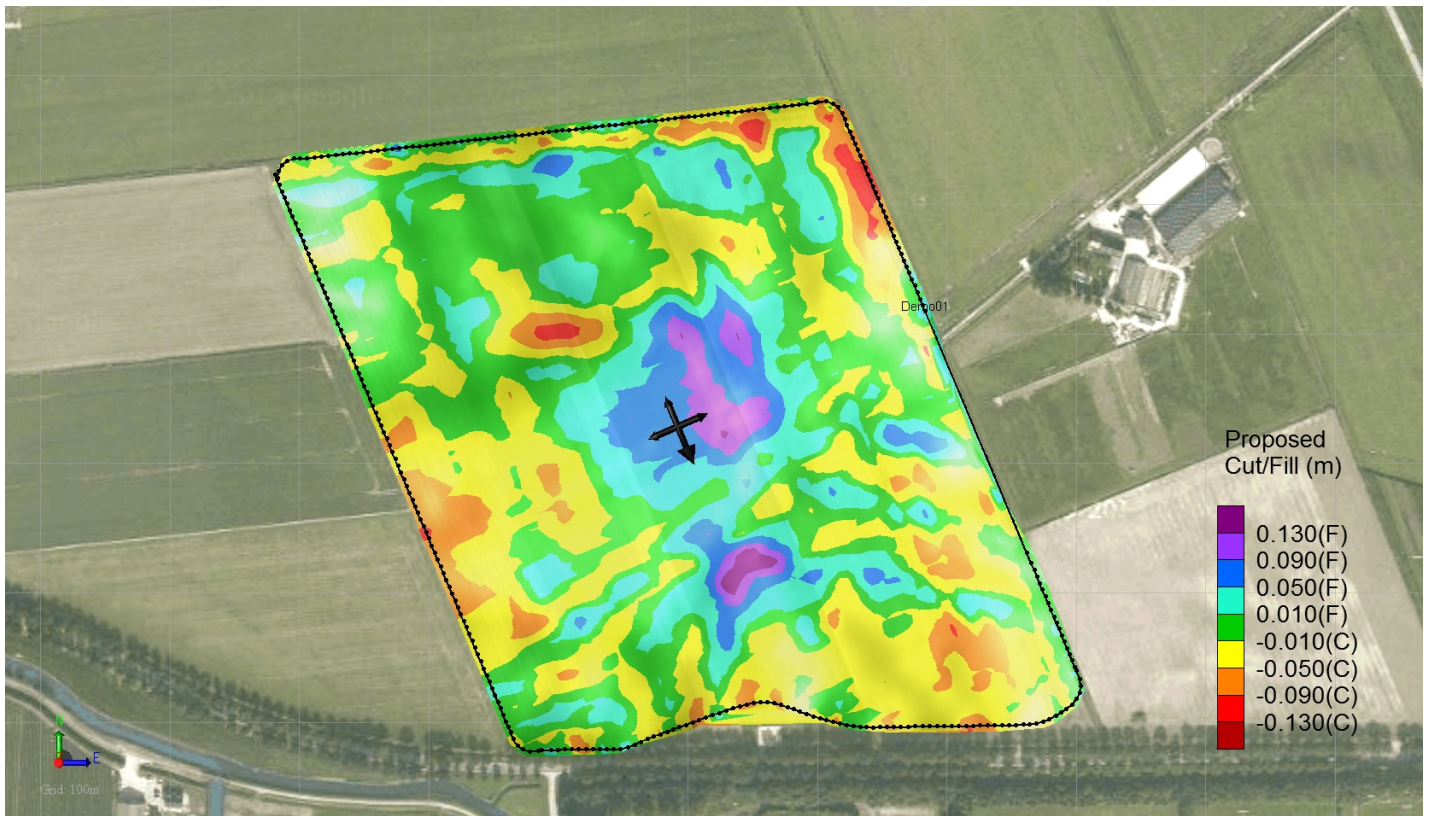


Map 1 - Existing Topography

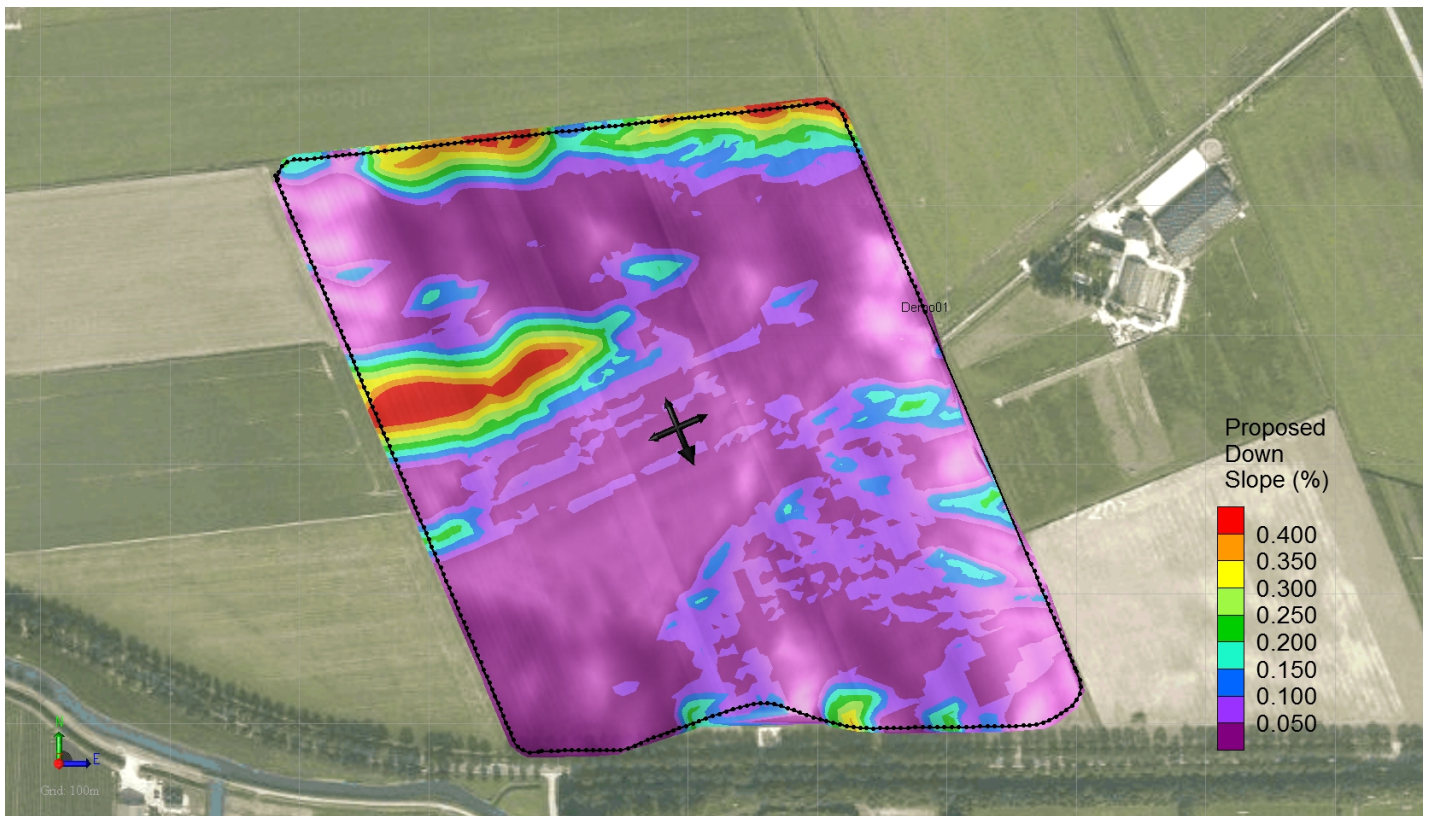


Map 2 - Proposed Topography



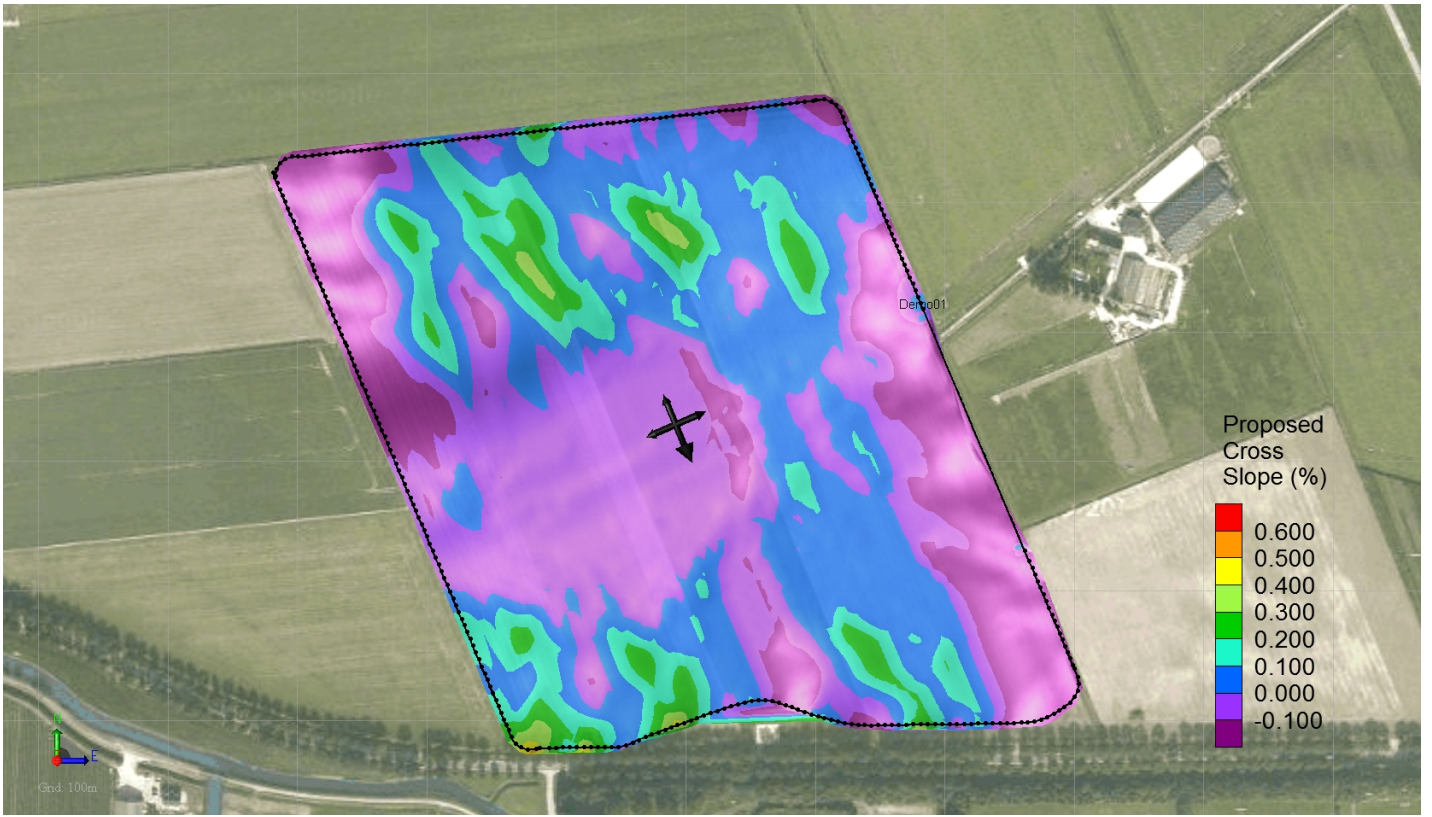


Map 3 - Cut/Fill



Map 4 - Down Slope (Slope In Direction Of Defined Main Slope)





Map 5 - Cross Slope (Slope Perpendicular To Direction Of Defined Main Slope)