

SLOPE/W Analysis

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File Information

Created By: [Rebecca Bertilsson](#)
Revision Number: [19](#)
Last Edited By: [Rebecca Bertilsson](#)
Date: [2011-05-12](#)
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File Name: [V17860_odräneradprint.gsz](#)
Directory: [P:\!Göta älv utredningen 2009-2012\Delområde 1-10\Delområde 5-14085\Geoteknik\Text\Interngranskning\V17860\](#)
Last Solved Date: [2011-05-12](#)
Last Solved Time: [10:52:02](#)

Project Settings

Length(L) Units: [meters](#)
Time(t) Units: [Seconds](#)
Force(F) Units: [kN](#)
Pressure(p) Units: [kPa](#)
Strength Units: [kPa](#)
Unit Weight of Water: [9.807 kN/m³](#)
View: [2D](#)

Analysis Settings

SLOPE/W Analysis

Kind: [SLOPE/W](#)
Method: [Morgenstern-Price](#)
Settings
 Apply Phreatic Correction: [No](#)
 Side Function
 Interslice force function option: [Half-Sine](#)
 PWP Conditions Source: [Piezometric Line](#)
 Use Staged Rapid Drawdown: [No](#)
Slip Surface
 Direction of movement: [Right to Left](#)
 Use Passive Mode: [No](#)
 Slip Surface Option: [Entry and Exit](#)
 Critical slip surfaces saved: [5](#)
 Optimize Critical Slip Surface Location: [Yes](#)
 Tension Crack

Tension Crack Option: **Tension Crack Line**

Percentage Wet: **0.5**

Tension Crack Fluid Unit Weight: **9.807 kN/m³**

FOS Distribution

FOS Calculation Option: **Constant**

Advanced

Number of Slices: **30**

Optimization Tolerance: **0.01**

Minimum Slip Surface Depth: **0.1 m**

Optimization Maximum Iterations: **2000**

Optimization Convergence Tolerance: **1e-007**

Starting Optimization Points: **8**

Ending Optimization Points: **16**

Complete Passes per Insertion: **1**

Driving Side Maximum Convex Angle: **5 °**

Resisting Side Maximum Convex Angle: **1 °**

Materials

CI

Model: **S=f(datum)**

Unit Weight: **17 kN/m³**

C-Datum: **28 kPa**

C-Rate of Change: **0 kPa/m**

Limiting C: **0 kPa**

Elevation: **0 m**

Pore Water Pressure

Piezometric Line: **1**

Crust

Model: **Mohr-Coulomb**

Unit Weight: **18 kN/m³**

Cohesion: **30 kPa**

Phi: **0 °**

Phi-B: **0 °**

Pore Water Pressure

Piezometric Line: **1**

CI 2

Model: **S=f(datum)**

Unit Weight: **17 kN/m³**

C-Datum: **28 kPa**

C-Rate of Change: **1.81 kPa/m**

Limiting C: **0 kPa**

Elevation: **15 m**

Pore Water Pressure

Piezometric Line: 1

CI 3

Model: $S=f(\text{datum})$

Unit Weight: 17 kN/m^3

C-Datum: 28 kPa

C-Rate of Change: 2.1 kPa/m

Limiting C: 0 kPa

Elevation: 5 m

Pore Water Pressure

Piezometric Line: 1

CI 4

Model: $S=f(\text{depth})$

Unit Weight: 17 kN/m^3

C-Top of Layer: 0 kPa

C-Rate of Change: 25 kPa/m

Limiting C: 0 kPa

Pore Water Pressure

Piezometric Line: 1

CI 5

Model: $S=f(\text{depth})$

Unit Weight: 17 kN/m^3

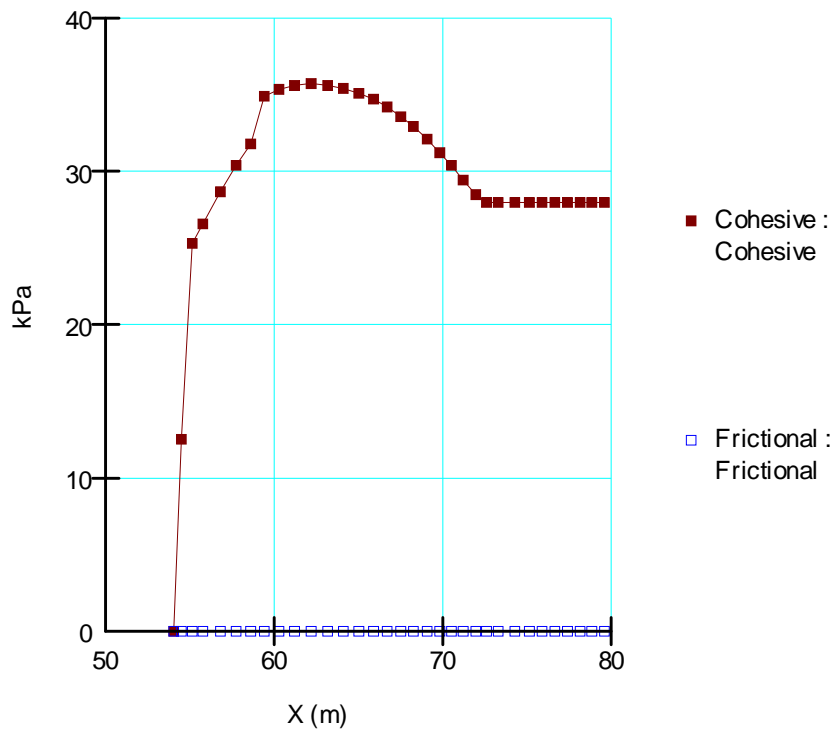
C-Top of Layer: 25 kPa

C-Rate of Change: 2.37 kPa/m

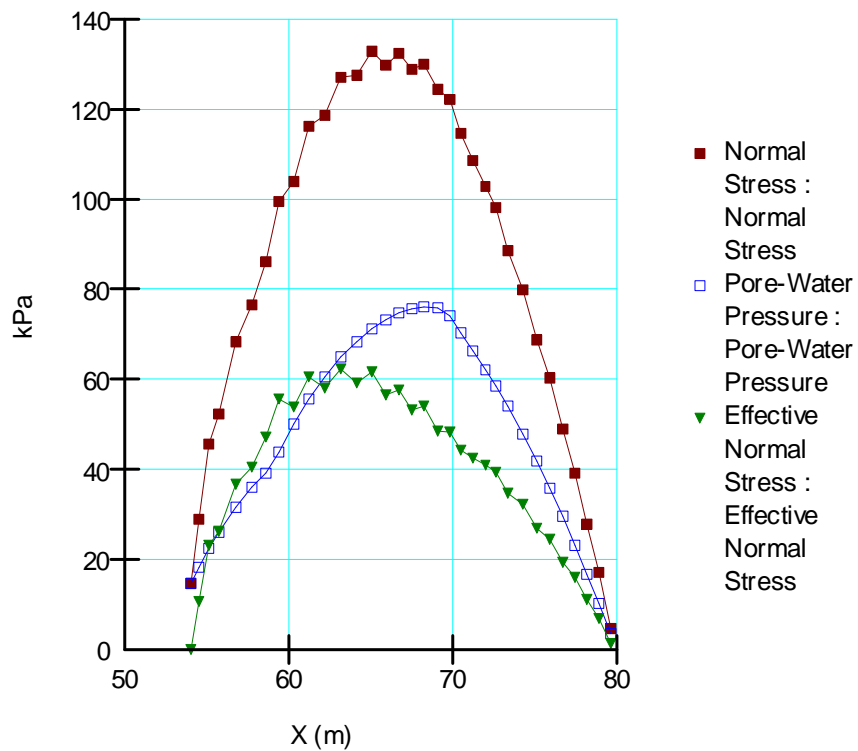
Limiting C: 0 kPa

Pore Water Pressure

Piezometric Line: 1



Figur 1. Kohesion och friktion.



Figur 2. Totalspänning, effektivspänning och portryck.



KLIMATANPASSNING SKREDFÖRUTSÄTTNINGAR I GÖTA ÄLVDALLEN

Sektion: V17860
Delområde: Intagan Ström
Analysmetod: Odränerad analys

Slip Surface Option: Entry and Exit
Method: Morgenstern-Price
PWP Conditions Source: Piezometric Line
Date: 2011-05-12
Created By: Rebecca Bertilsson
Last Edited By: Rebecca Bertilsson

Name: CI
Model: S=f(datum)
Unit Weight: 17 kN/m³
C-Datum: 28 kPa
C-Rate of Change: 0 kPa/m

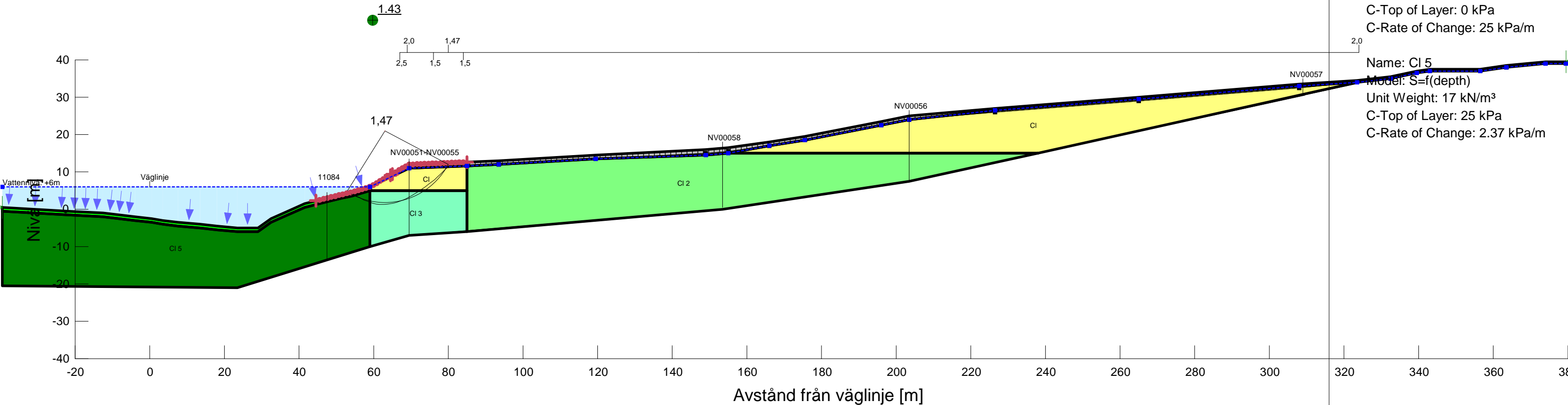
Name: Crust
Model: Mohr-Coulomb
Unit Weight: 18 kN/m³
Cohesion: 30 kPa
Phi: 0 °

Name: CI 2
Model: S=f(datum)
Unit Weight: 17 kN/m³
C-Datum: 28 kPa
C-Rate of Change: 1.81 kPa/m

Name: CI 3
Model: S=f(datum)
Unit Weight: 17 kN/m³
C-Datum: 28 kPa
C-Rate of Change: 2.1 kPa/m

Name: CI 4
Model: S=f(depth)
Unit Weight: 17 kN/m³
C-Top of Layer: 0 kPa
C-Rate of Change: 25 kPa/m

Name: CI 5
Model: S=f(depth)
Unit Weight: 17 kN/m³
C-Top of Layer: 25 kPa
C-Rate of Change: 2.37 kPa/m



SLOPE/W Analysis

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File Information

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Time: [12:22:48](#)
File Name: [V17860_kombinerad print.gsz](#)
Directory: [P:\!Göta älv utredningen 2009-2012\Delområde 1-10\Delområde 5-14085\Geoteknik\Text\Interngranskning\V17860\110831\](#)
Last Solved Date: [2011-05-12](#)
Last Solved Time: [12:23:06](#)

Project Settings

Length(L) Units: [meters](#)
Time(t) Units: [Seconds](#)
Force(F) Units: [kN](#)
Pressure(p) Units: [kPa](#)
Strength Units: [kPa](#)
Unit Weight of Water: [9.807 kN/m³](#)
View: [2D](#)

Analysis Settings

SLOPE/W Analysis

Kind: [SLOPE/W](#)
Method: [Morgenstern-Price](#)
Settings
 Side Function
 Interslice force function option: [Half-Sine](#)
 PWP Conditions Source: [Pressure Head Spatial Function](#)
 Pressure Head Spatial Fn.: [Uppmätta värden](#)
Slip Surface
 Direction of movement: [Right to Left](#)
 Use Passive Mode: [No](#)
 Slip Surface Option: [Entry and Exit](#)
 Critical slip surfaces saved: [5](#)
 Optimize Critical Slip Surface Location: [Yes](#)
Tension Crack
 Tension Crack Option: [Tension Crack Line](#)

Percentage Wet: 0.5

Tension Crack Fluid Unit Weight: 9.807 kN/m³

FOS Distribution

FOS Calculation Option: Constant

Advanced

Number of Slices: 30

Optimization Tolerance: 0.01

Minimum Slip Surface Depth: 0.1 m

Optimization Maximum Iterations: 2000

Optimization Convergence Tolerance: 1e-007

Starting Optimization Points: 8

Ending Optimization Points: 16

Complete Passes per Insertion: 1

Driving Side Maximum Convex Angle: 5 °

Resisting Side Maximum Convex Angle: 1 °

Materials

CI

Model: Combined, S=f(datum)

Unit Weight: 17 kN/m³

Phi: 30 °

C-Datum: 0 kPa

C-Rate of Change: 0 kPa/m

Cu-Datum: 28 kPa

Cu-Rate of Change: 0 kPa/m

C/Cu Ratio: 0.1

Elevation: 0 m

Crust

Model: Combined, S=f(datum)

Unit Weight: 18 kN/m³

Phi: 30 °

C-Datum: 0 kPa

C-Rate of Change: 0 kPa/m

Cu-Datum: 30 kPa

Cu-Rate of Change: 0 kPa/m

C/Cu Ratio: 0.1

Elevation: 0 m

CI 2

Model: Combined, S=f(datum)

Unit Weight: 17 kN/m³

Phi: 30 °

C-Datum: 0 kPa

C-Rate of Change: 0 kPa/m

Cu-Datum: 28 kPa
Cu-Rate of Change: 1.81 kPa/m
C/Cu Ratio: 0.1
Elevation: 15 m

CI 3

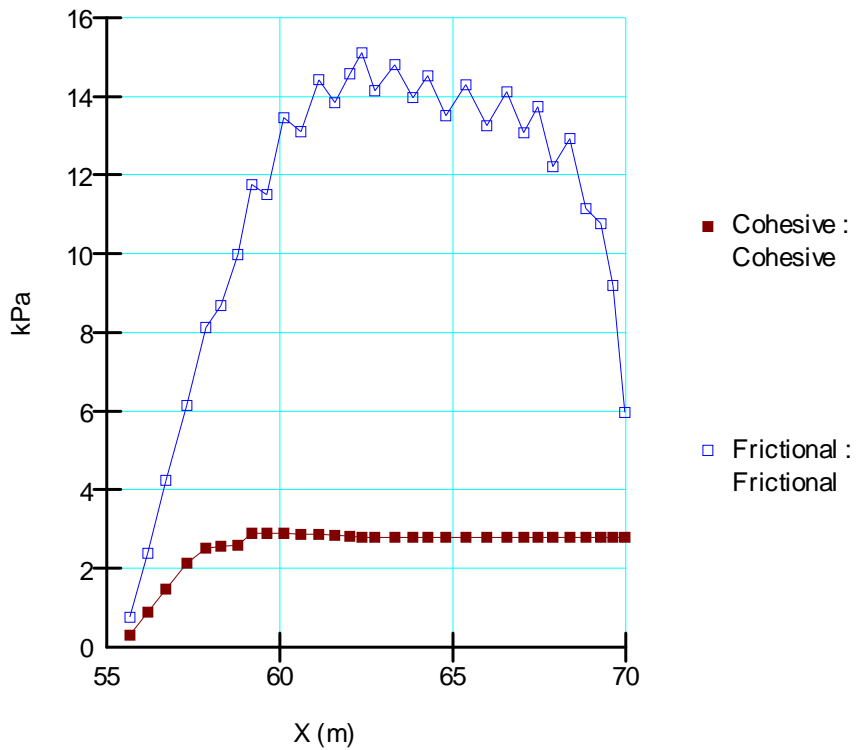
Model: Combined, $S=f(\text{datum})$
Unit Weight: 17 kN/m³
Phi: 30 °
C-Datum: 0 kPa
C-Rate of Change: 0 kPa/m
Cu-Datum: 28 kPa
Cu-Rate of Change: 2.1 kPa/m
C/Cu Ratio: 0.1
Elevation: 5 m

CI 4

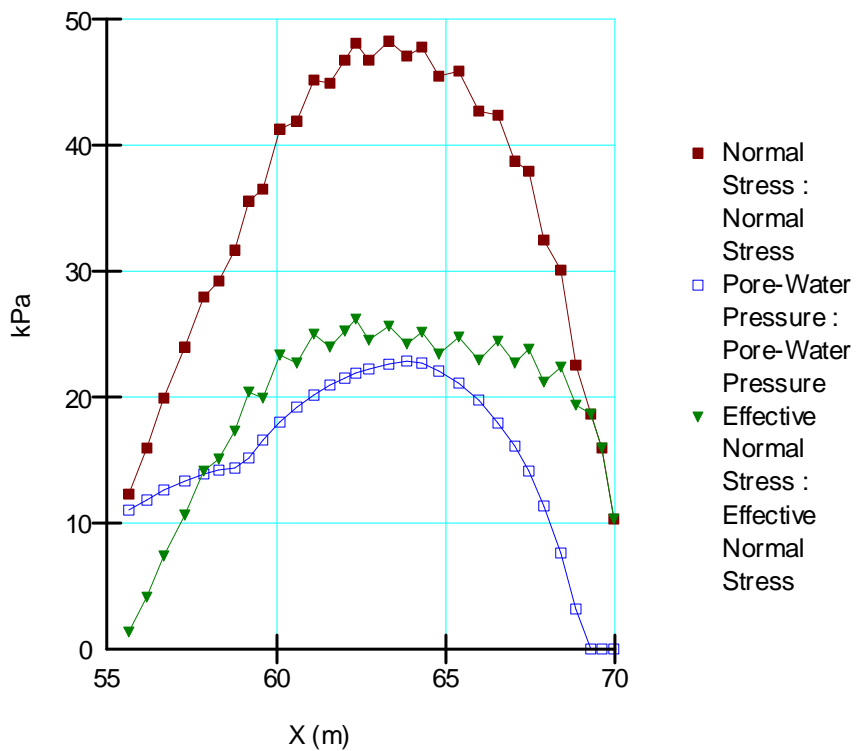
Model: Combined, $S=f(\text{depth})$
Unit Weight: 17 kN/m³
Phi: 30 °
C-Top of Layer: 0 kPa
C-Rate of Change: 0 kPa/m
Cu-Top of Layer: 0 kPa
Cu-Rate of Change: 25 kPa/m
C/Cu Ratio: 0.1

CI 5

Model: Combined, $S=f(\text{depth})$
Unit Weight: 17 kN/m³
Phi: 30 °
C-Top of Layer: 0 kPa
C-Rate of Change: 0 kPa/m
Cu-Top of Layer: 25 kPa
Cu-Rate of Change: 2.37 kPa/m
C/Cu Ratio: 0.1



Figur 1. Kohesion och friktion.



Figur 2. Totalspänning, effektivspänning och portryck.



KLIMATANPASSNING SKREDFÖRUTSÄTTNINGAR I GÖTA ÄLVDALLEN

Skala 1:1000 (A3)

Sektion: V17860
 Delområde: Intagan Ström
 Analysmetod: Kombinerad analys

Slip Surface Option: Entry and Exit
 Method: Morgenstern-Price
 PWP Conditions Source: Pressure Head Spatial Function
 Date: 2011-05-12
 Created By: Rebecca Bertilsson
 Last Edited By: Rebecca Bertilsson

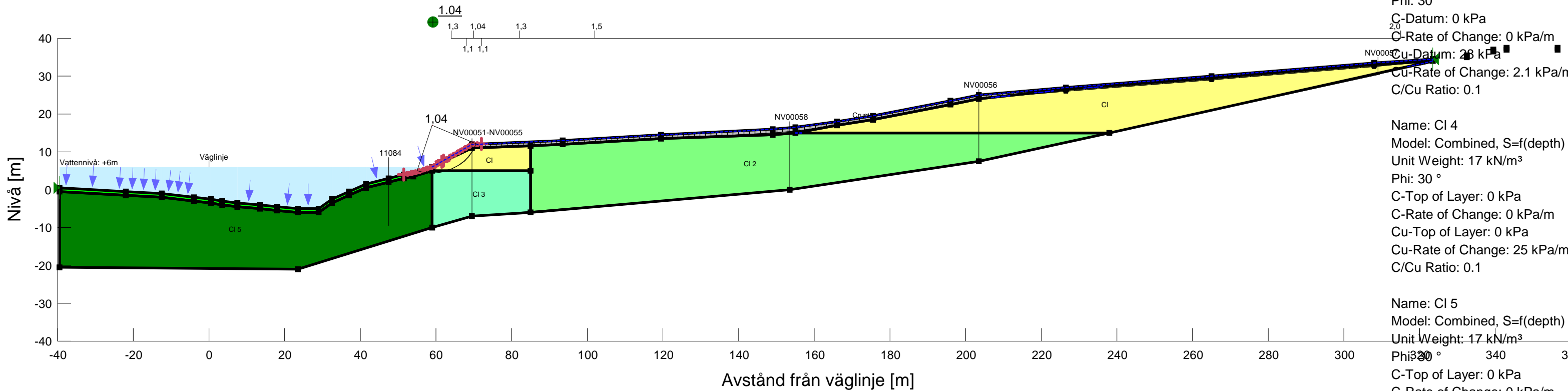
Name: Crust
 Model: Combined, S=f(datum)
 Unit Weight: 18 kN/m³
 Phi: 30 °
 C-Datum: 0 kPa
 C-Rate of Change: 0 kPa/m
 Cu-Datum: 30 kPa
 Cu-Rate of Change: 0 kPa/m
 C/Cu Ratio: 0.1

Name: CI 2
 Model: Combined, S=f(datum)
 Unit Weight: 17 kN/m³
 Phi: 30 °
 C-Datum: 0 kPa
 C-Rate of Change: 0 kPa/m
 Cu-Datum: 28 kPa
 Cu-Rate of Change: 1.81 kPa/m
 C/Cu Ratio: 0.1

Name: CI 3
 Model: Combined, S=f(datum)
 Unit Weight: 17 kN/m³
 Phi: 30 °
 C-Datum: 0 kPa
 C-Rate of Change: 0 kPa/m
 Cu-Datum: 28 kPa
 Cu-Rate of Change: 2.1 kPa/m
 C/Cu Ratio: 0.1

Name: CI 4
 Model: Combined, S=f(depth)
 Unit Weight: 17 kN/m³
 Phi: 30 °
 C-Top of Layer: 0 kPa
 C-Rate of Change: 0 kPa/m
 Cu-Top of Layer: 0 kPa
 Cu-Rate of Change: 25 kPa/m
 C/Cu Ratio: 0.1

Name: CI 5
 Model: Combined, S=f(depth)
 Unit Weight: 17 kN/m³
 Phi: 30 °
 C-Top of Layer: 0 kPa
 C-Rate of Change: 0 kPa/m
 Cu-Top of Layer: 25 kPa
 Cu-Rate of Change: 2.37 kPa/m
 C/Cu Ratio: 0.1





KLIMATANPASSNING SKREDFÖRUTSÄTTNINGAR I GÖTA ÄLVDALLEN

Skala 1:1000 (A3)

Sektion: V17860
 Delområde: Intagan Ström
 Analysmetod: Kombinerad analys

Slip Surface Option: Entry and Exit
 Method: Morgenstern-Price
 PWP Conditions Source: Pressure Head Spatial Function
 Date: 2011-09-01
 Created By: Rebecca Bertilsson
 Last Edited By: Kine Meijer

Name: Crust
 Model: Combined, S=f(datum)
 Unit Weight: 18 kN/m³
 Phi: 30 °
 C-Datum: 0 kPa
 C-Rate of Change: 0 kPa/m
 Cu-Datum: 30 kPa
 Cu-Rate of Change: 0 kPa/m
 C/Cu Ratio: 0.1

Name: CI 2
 Model: Combined, S=f(datum)
 Unit Weight: 17 kN/m³
 Phi: 30 °
 C-Datum: 0 kPa
 C-Rate of Change: 0 kPa/m
 Cu-Datum: 28 kPa
 Cu-Rate of Change: 1.81 kPa/m
 C/Cu Ratio: 0.1

Name: CI 3
 Model: Combined, S=f(datum)
 Unit Weight: 17 kN/m³
 Phi: 30 °
 C-Datum: 0 kPa
 C-Rate of Change: 0 kPa/m
 Cu-Datum: 28 kPa
 Cu-Rate of Change: 2.1 kPa/m
 C/Cu Ratio: 0.1

Name: CI 4
 Model: Combined, S=f(depth)
 Unit Weight: 17 kN/m³
 Phi: 30 °
 C-Top of Layer: 0 kPa
 C-Rate of Change: 0 kPa/m
 Cu-Top of Layer: 0 kPa
 Cu-Rate of Change: 25 kPa/m
 C/Cu Ratio: 0.1

Name: CI 5
 Model: Combined, S=f(depth)
 Unit Weight: 17 kN/m³
 Phi: 30 °
 C-Top of Layer: 0 kPa
 C-Rate of Change: 0 kPa/m
 Cu-Top of Layer: 25 kPa
 Cu-Rate of Change: 2.37 kPa/m
 C/Cu Ratio: 0.1

