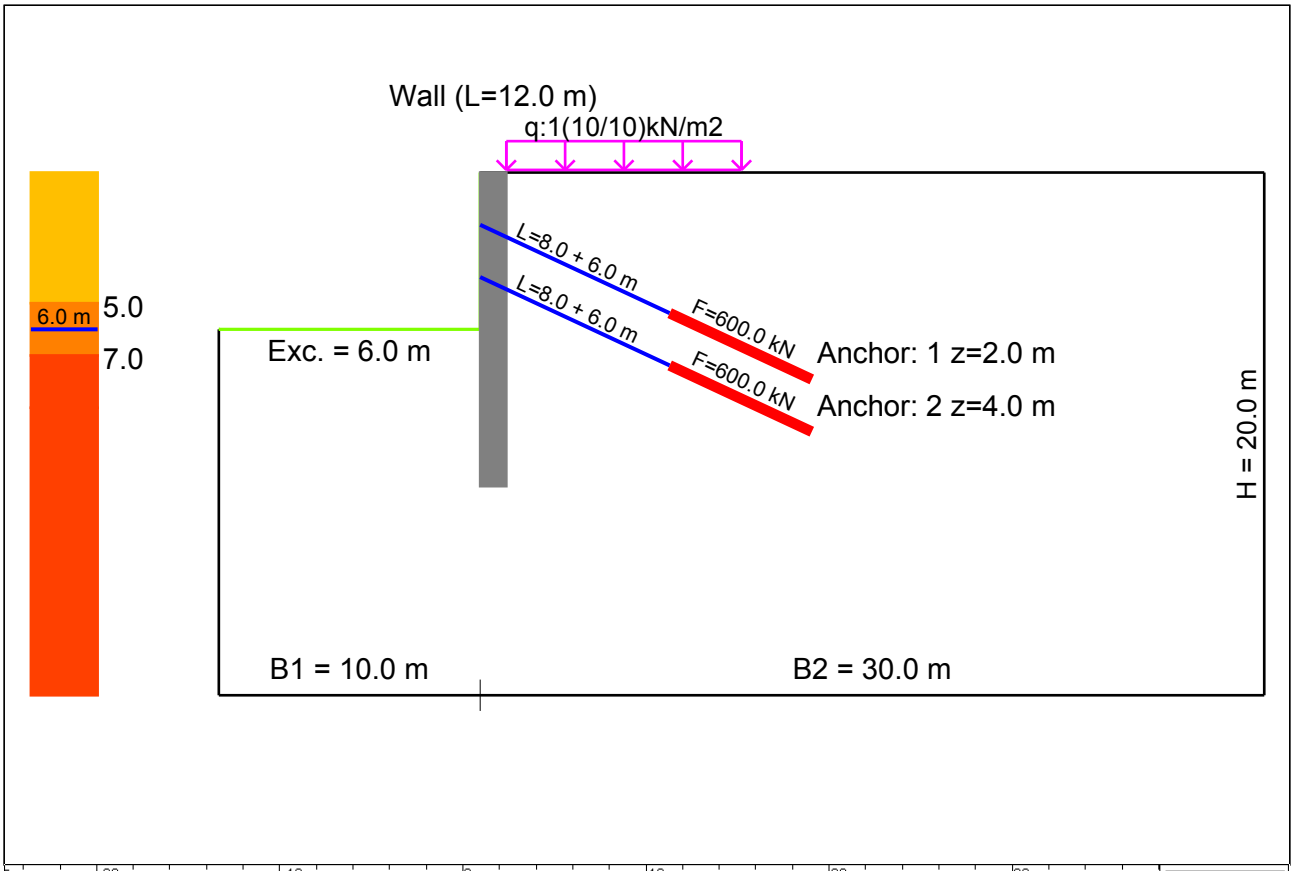
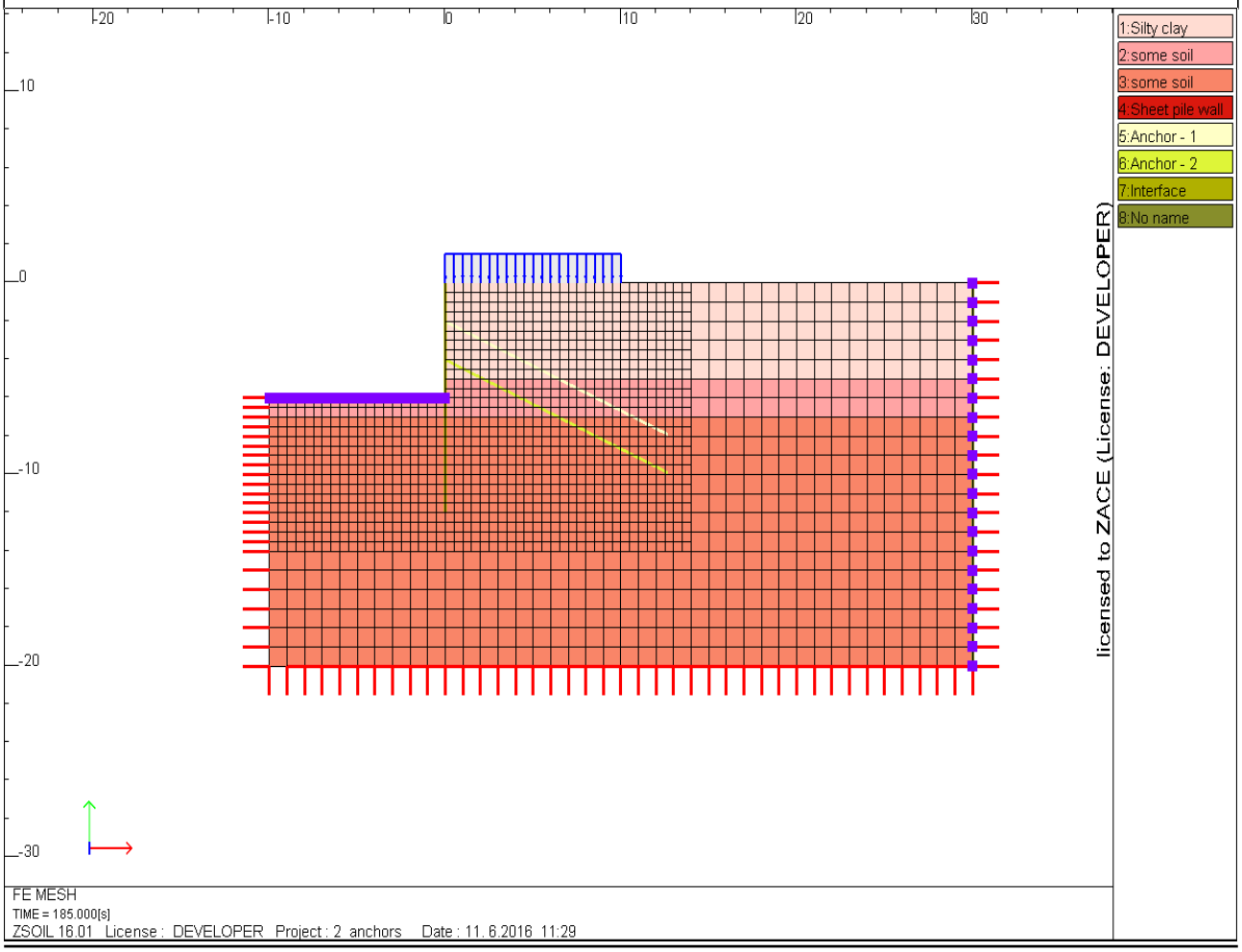
	Geometry and Discretization	Project type	Sheet pile wall
		Project title	2_anchors._t_dph
		Date	11.06.2016





Wall Parameters and General Settings

Project type	Sheet pile wall
Project title	2_anchors._t_dph
Date	11.06.2016

Name	Unit	Value
L	[m]	12.0
E	[MPa]	200000.0
v	[-]	0.2
A	[cm2/m]	197.3
I	[cm4/m]	22580.0
gamma	[kN/m3]	78.5
Installation time	[day]	5.0
Interface frict. coeff. ratio	[-]	0.6

Name	Unit	Value
Consolidation model flag	[-]	1
Final time of excavation	[day]	60.0
Time offset to finalize analysis	[day]	120.0
Split excavation step	[-]	2
Add impermeable layer	[-]	OFF
Impermeable layer depth (relative)	[m]	2.0

Construction stages

	IN SITU - WALL	WALL - ANCH:1	ANCH:1 - ANCH:2
time start - time end	0.0 - 5.0	5.0 - 15.0	15.0 - 16.0
Delay start of excavation by	0.0	0.0	0.0
Subdivide each excavated layer into	1	2	2
No of time steps	1	2	2
Time step amplification factor	1.0	1.0	1.0
Run safety analysis at end of this stage	OFF	OFF	OFF
Stop analysis if current SF in larger than	2.0	2.0	2.0

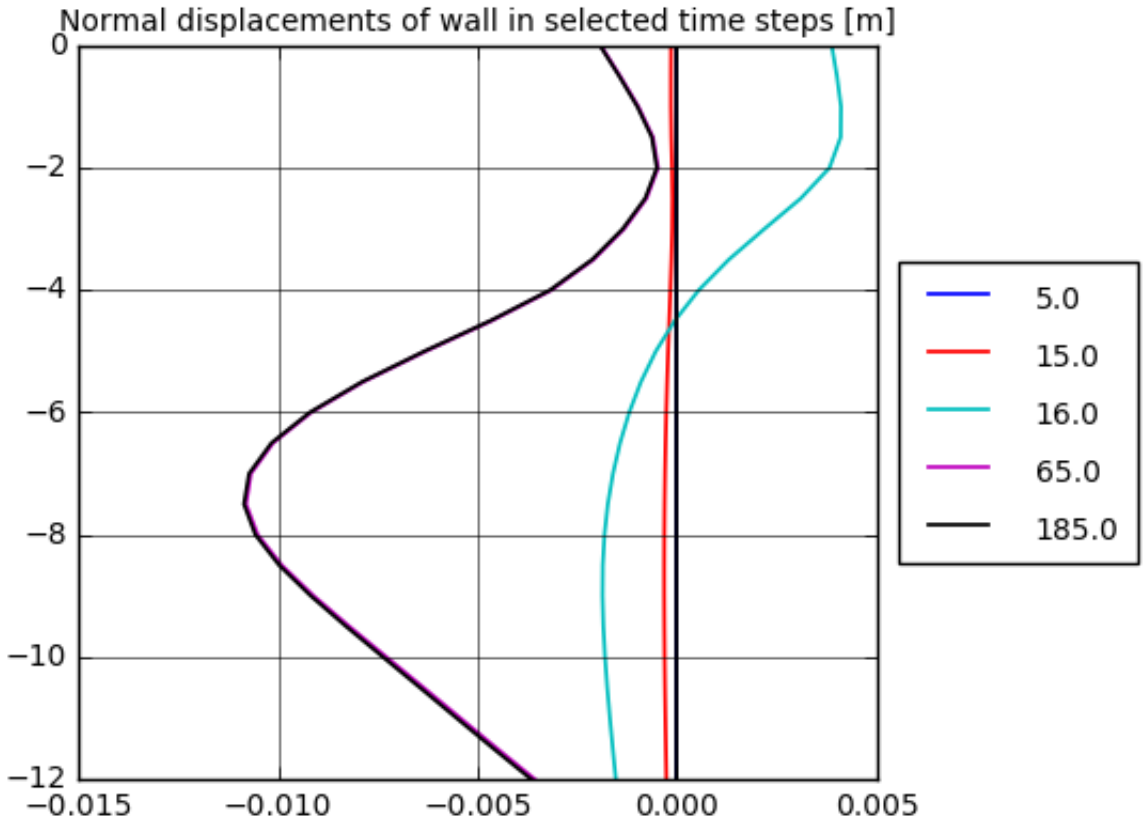
	ANCH:2 - EXC.END	EXC.END - END
time start - time end	16.0 - 65.0	65.0 - 185.0
Delay start of excavation by	0.0	0.0
Subdivide each excavated layer into	2	1
No of time steps	2	2
Time step amplification factor	1.0	1.0
Run safety analysis at end of this stage	OFF	OFF
Stop analysis if current SF in larger than	2.0	2.0

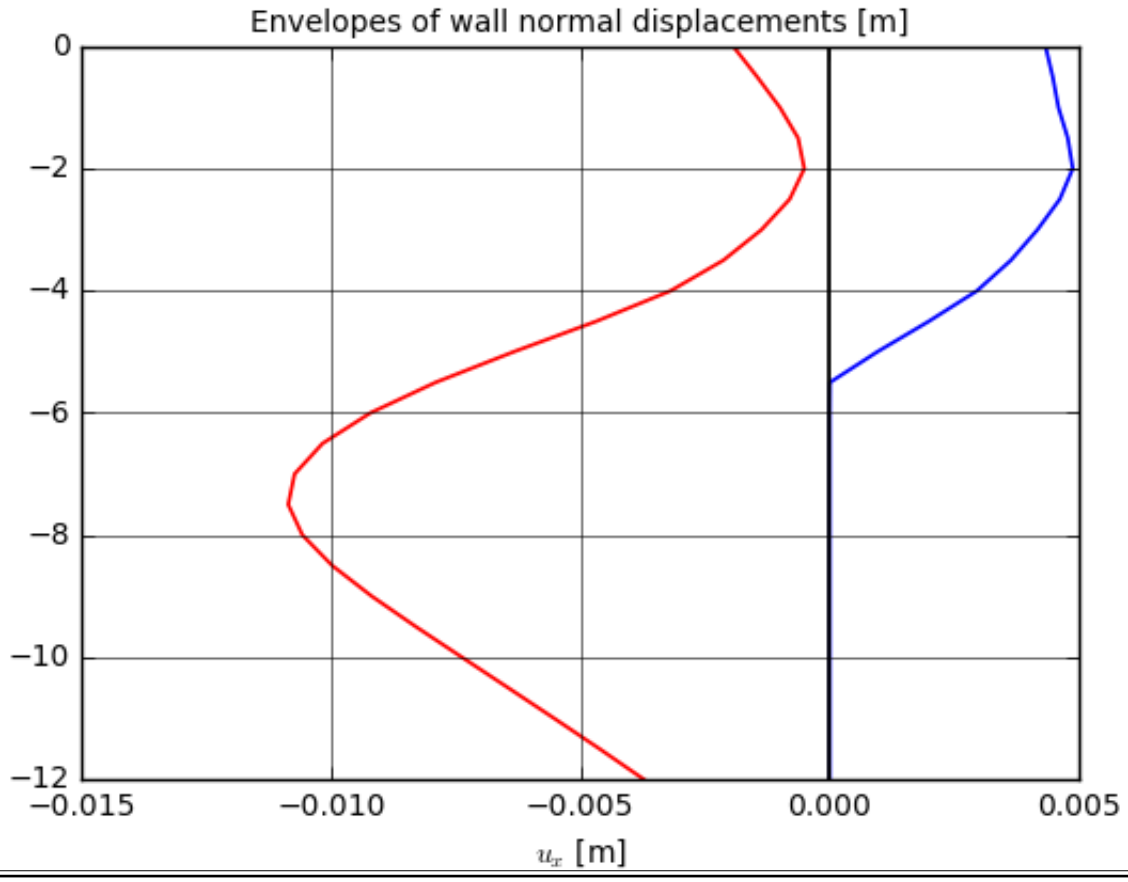
Parameter	Unit	Silty clay	some soil	some soil
Eur-ref	kPa	70000.0	70000.0	70000.0
v	-	0.2	0.2	0.2
m	-	0.5	0.5	0.5
Small strain	-	ON	ON	ON
Eo-ref	kPa	210000.0	210000.0	210000.0
Gamma-0.7	-	0.0001	0.0001	0.0001
Gamma-D	kN/m^3	16.0	16.0	16.0
eo	-	0.65625	0.65625	0.65625
Ko-in situ	-	1.0	1.0	1.0
k	m/s	1e-08	1e-08	1e-08
Alpha	1/m	1.0	1.0	1.0
Sr	-	0.0	0.0	0.0
Phi	deg	30.0	30.0	30.0
Psi	deg	0.0	0.0	0.0
c	kPa	10.0	10.0	10.0
E50-ref	kPa	20000.0	20000.0	20000.0
D	-	0.25	0.25	0.25
E-oed	kPa	20000.0	20000.0	20000.0
KoNC	-	0.5	0.5	0.5
Sig-ref-oed	kPa	200.0	200.0	200.0
Stress history		OFF	OFF	OFF
OCR	-	5.0	5.0	5.0
qPOP	kPa	0.0	0.0	0.0

Anchors

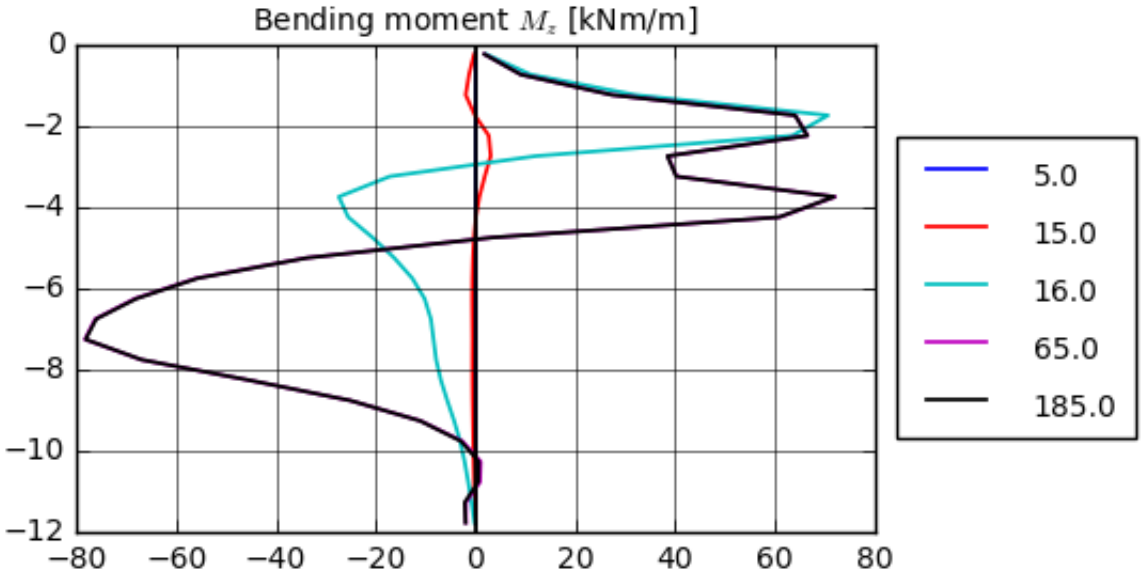
Data	unit	Anchor 1	Anchor 2
L1 - active part length	m	8.0	8.0
L2 - fixed part length	m	6.0	6.0
depth	m	2.0	4.0
Young modulus	MPa	210000.0	210000.0
Cross section	cm^2	20.0	20.0
Prestress force	kN	600.0	600.0
Inclination angle	deg	25.0	25.0
Out of plane distance	m	2.0	2.0
Installation time offset (vs wall)	days	10.0	11.0

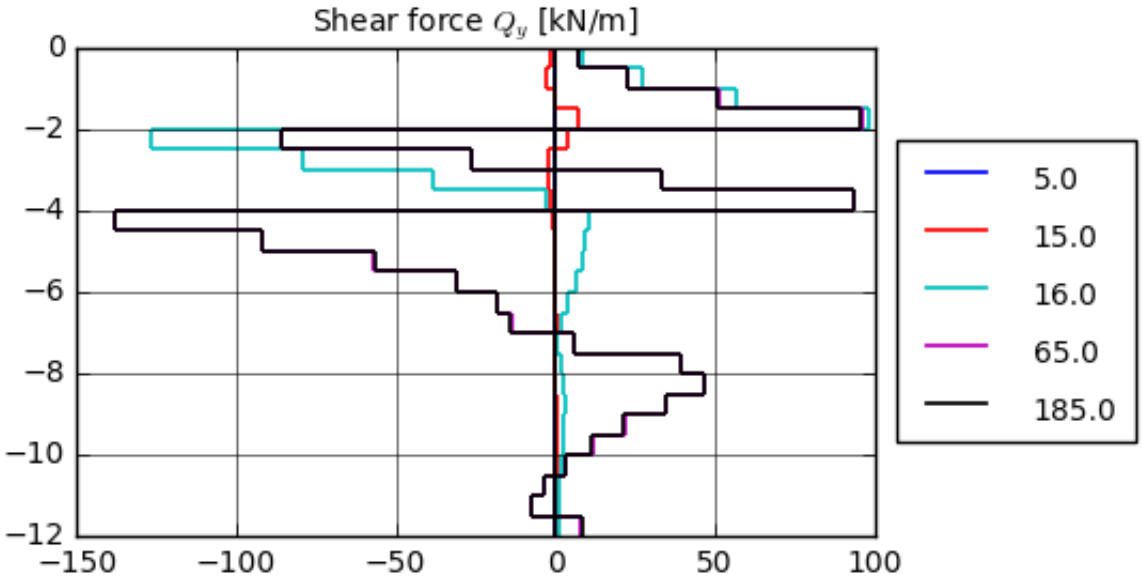
	Normal displacements of wall	Project type	Sheet pile wall
		Project title	2_anchors._t_dph
		Date	11.06.2016

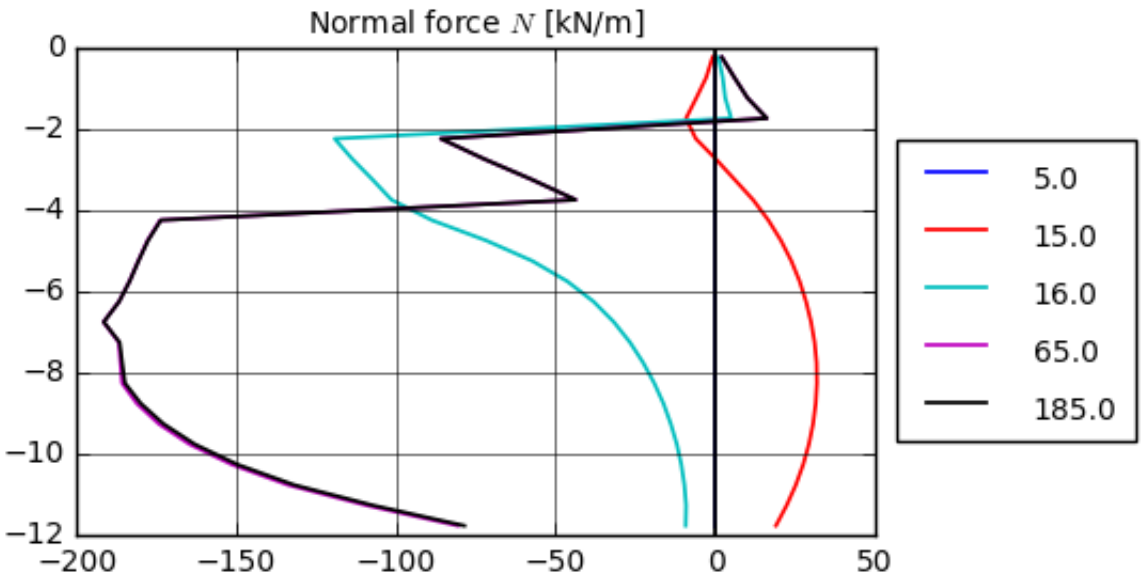




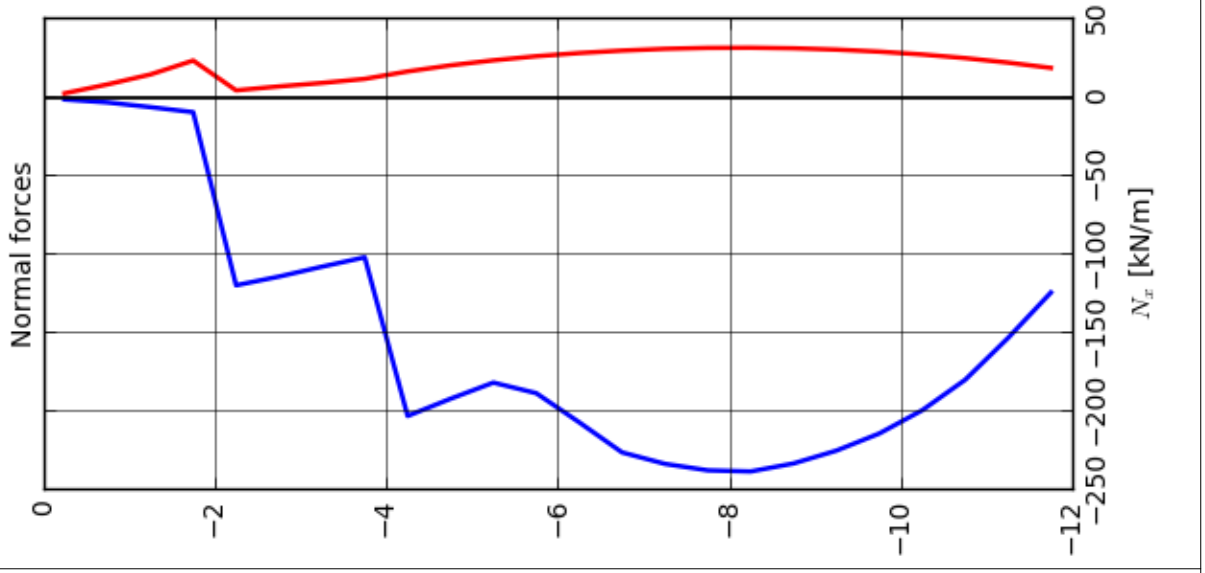
	Sectional Forces	Project type	Sheet pile wall
		Project title	2_anchors._t_dph
		Date	11.06.2016

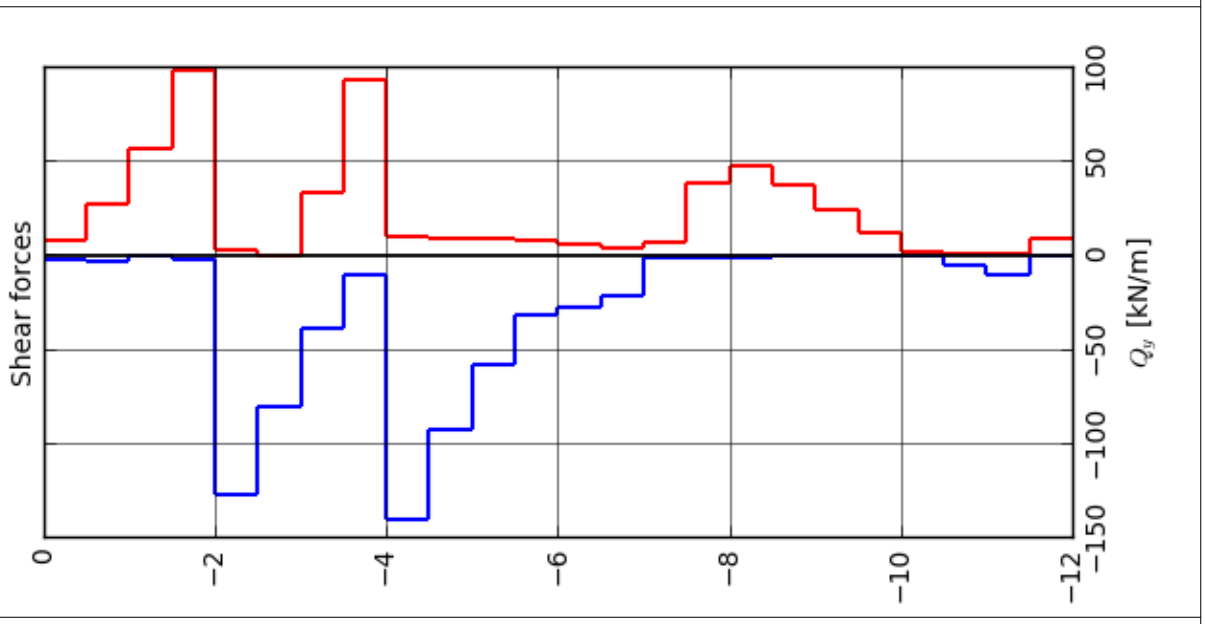


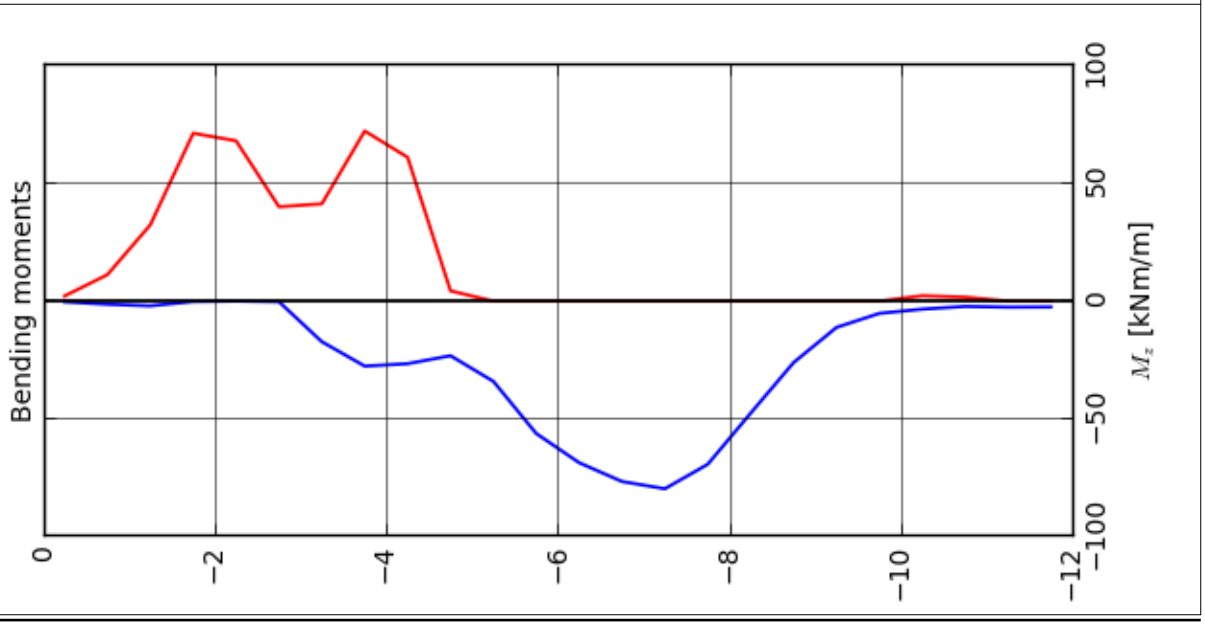




	Envelopes of Sectional Forces	Project type	Sheet pile wall
		Project title	2_anchors._t_dph
		Date	11.06.2016







Envelopes of Sectional Forces

Project type	Sheet pile wall
Project title	2_anchors._t_dph
Date	11.06.2016

Depth [m]	Mz+[kNm/m]	Mz-[kNm/m]	Qy+[kN/m]	Qy-[kN/m]	Nx+[kN/m]	Nx-[kN/m]
-0.25	2.16	-0.33	8.62	-1.33	2.90	-0.98
-0.75	11.21	-1.34	27.58	-2.70	8.56	-2.89
-1.25	32.33	-2.02	56.93	-0.01	14.87	-5.87
-1.75	71.19	-0.20	98.49	-1.24	23.73	-9.10
-2.25	67.97	0.00	3.78	-126.74	4.79	-119.20
-2.75	40.01	-0.27	0.00	-79.19	7.29	-113.67
-3.25	41.24	-17.23	33.49	-38.26	9.48	-107.39
-3.75	72.13	-27.57	93.67	-9.35	12.08	-101.40
-4.25	60.98	-26.55	10.40	-139.28	16.82	-202.33
-4.75	4.35	-23.16	9.13	-92.33	20.70	-191.38
-5.25	0.00	-34.03	9.38	-57.15	23.89	-181.10
-5.75	0.00	-56.17	8.23	-31.40	26.49	-187.84
-6.25	0.00	-68.53	6.75	-26.55	28.52	-206.34
-6.75	0.00	-76.51	5.04	-21.30	30.08	-225.49
-7.25	0.00	-79.58	7.69	-0.02	31.19	-232.80
-7.75	0.00	-69.17	39.51	-0.11	31.81	-236.91
-8.25	0.00	-47.49	47.86	-0.04	31.91	-237.62
-8.75	0.00	-26.08	37.78	-0.01	31.54	-232.52
-9.25	0.00	-11.16	24.61	-0.00	30.71	-224.35
-9.75	0.00	-5.20	12.17	0.00	29.41	-213.46
-10.25	2.27	-3.42	2.96	0.00	27.61	-198.68
-10.75	1.68	-2.27	1.90	-5.01	25.30	-179.34
-11.25	0.00	-2.59	1.71	-9.81	22.44	-152.73
-11.75	0.00	-2.52	10.08	0.00	19.07	-123.80

	Envelopes of Bending Moments with corresponding sectional forces	Project type	Sheet pile wall
		Project title	2_anchors._t_dph
		Date	11.06.2016

Depth[m]	Mz+[kNm/m]	Qy [kN/m]	Nx [kN/m]	Mz-[kNm/m]	Qy [kN/m]	Nx [kN/m]
-0.25	2.16	8.62	1.24	-0.33	-1.33	-0.78
-0.75	11.21	27.58	3.05	-1.34	-2.70	-2.78
-1.25	32.33	56.93	4.42	-2.02	-0.01	-5.84
-1.75	71.19	98.49	7.07	-0.20	7.28	-9.02
-2.25	67.97	-85.28	-74.52	0.00	0.00	0.00
-2.75	40.01	-26.56	-59.14	-0.27	-0.49	7.25
-3.25	41.24	31.49	-44.68	-17.23	-38.09	-107.39
-3.75	72.13	93.67	-43.60	-27.57	-3.13	-101.03
-4.25	60.98	-138.25	-173.79	-26.55	7.51	-88.63
-4.75	4.35	-86.11	-171.29	-23.16	8.98	-59.84
-5.25	0.00	0.00	0.00	-34.03	-57.15	-180.60
-5.75	0.00	0.00	0.00	-56.17	-31.40	-183.32
-6.25	0.00	0.00	0.00	-68.53	-18.07	-186.60
-6.75	0.00	0.00	0.00	-76.51	-13.85	-191.43
-7.25	0.00	0.00	0.00	-79.58	2.77	-200.88
-7.75	0.00	0.00	0.00	-69.17	38.86	-202.42
-8.25	0.00	0.00	0.00	-47.49	47.86	-203.33
-8.75	0.00	0.00	0.00	-26.08	37.78	-199.25
-9.25	0.00	0.00	0.00	-11.16	21.44	-172.86
-9.75	0.00	0.00	0.00	-5.20	4.41	-50.26
-10.25	2.27	2.06	-171.13	-3.42	2.72	-43.06
-10.75	1.68	-4.43	-152.89	-2.27	1.90	-36.58
-11.25	0.00	0.00	0.00	-2.59	-9.81	-152.73
-11.75	0.00	0.00	0.00	-2.52	10.08	-123.80

	Envelopes of Shear Forces with corresponding bending moments and axial forces	Project type	Sheet pile wall
		Project title	2_anchors._t_dph
		Date	11.06.2016

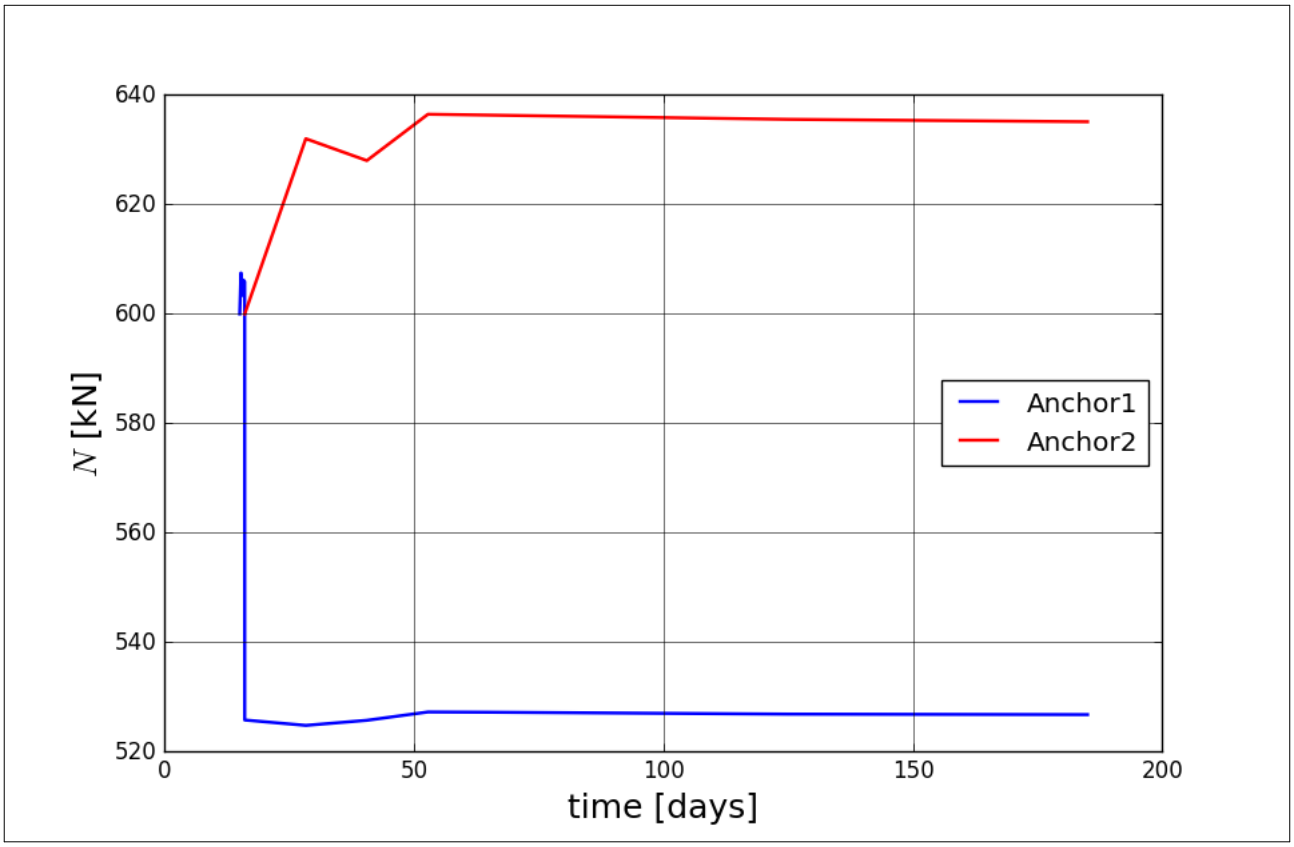
Depth[m]	Qy+[kN/m]	Mz[kNm/m]	Nx[kN/m]	Qy-[kN/m]	Mz[kNm/m]	Nx[kN/m]
-0.25	8.62	2.16	1.24	-1.33	-0.33	-0.78
-0.75	27.58	11.21	3.05	-2.70	-1.34	-2.78
-1.25	56.93	32.33	4.42	-0.01	-2.02	-5.84
-1.75	98.49	71.19	7.07	-1.24	0.62	1.95
-2.25	3.78	2.61	-6.04	-126.74	63.62	-119.06
-2.75	0.00	0.00	0.00	-79.19	12.14	-113.46
-3.25	33.49	40.34	-57.47	-38.26	-17.22	-107.11
-3.75	93.67	72.13	-43.60	-9.35	-25.29	-88.12
-4.25	10.40	-25.57	-88.77	-139.28	59.23	-167.21
-4.75	9.13	-20.69	-71.70	-92.33	3.34	-177.71
-5.25	9.38	-18.57	-48.91	-57.15	-34.03	-180.60
-5.75	8.23	-14.17	-39.77	-31.40	-56.17	-183.32
-6.25	6.75	-10.42	-32.40	-26.55	-62.98	-193.34
-6.75	5.04	-7.48	-26.44	-21.30	-74.94	-203.07
-7.25	7.69	-26.38	-97.11	-0.02	-0.64	31.19
-7.75	39.51	-67.02	-186.53	-0.11	-0.42	30.67
-8.25	47.86	-47.49	-203.33	-0.04	-0.46	30.49
-8.75	37.78	-26.08	-199.25	-0.01	-0.18	16.02
-9.25	24.61	-10.48	-193.13	-0.00	-0.18	15.28
-9.75	12.17	-1.28	-184.23	0.00	0.00	0.00
-10.25	2.96	1.00	-151.40	0.00	0.00	0.00
-10.75	1.90	-2.27	-36.58	-5.01	1.12	-179.34
-11.25	1.71	-1.36	-30.81	-9.81	-2.59	-152.73
-11.75	10.08	-2.52	-123.80	0.00	0.00	0.00

	Envelopes of Axial Forces with corresponding bending moments and shear forces	Project type	Sheet pile wall
		Project title	2_anchors._t_dph
		Date	11.06.2016

Depth [m]	Nz+[kN/m]	Qy[kN/m]	Mz[kNm/m]	Nx-[kN/m]	Qy[kN/m]	Mz[kNm/m]
-0.25	2.90	7.75	1.94	-0.98	-0.03	-0.01
-0.75	8.56	23.05	9.64	-2.89	1.55	0.37
-1.25	14.87	51.51	28.28	-5.87	0.01	-2.01
-1.75	23.73	96.28	65.22	-9.10	7.36	-0.17
-2.25	4.79	-0.92	0.08	-119.20	-126.68	63.50
-2.75	7.29	-0.51	-0.25	-113.67	-79.07	12.06
-3.25	9.48	-0.17	-0.42	-107.39	-38.09	-17.23
-3.75	12.08	-1.74	0.63	-101.40	-2.84	-27.46
-4.25	16.82	-0.92	-0.04	-202.33	-115.75	36.90
-4.75	20.70	-0.37	-0.36	-191.38	-52.33	-5.12
-5.25	23.89	-0.27	-0.55	-181.10	-56.80	-33.86
-5.75	26.49	-0.15	-0.66	-187.84	-28.06	-50.97
-6.25	28.52	-0.02	-0.70	-206.34	-20.70	-63.16
-6.75	30.08	0.14	-0.67	-225.49	-18.51	-72.96
-7.25	31.19	-0.02	-0.64	-232.80	1.29	-77.26
-7.75	31.81	-0.05	-0.65	-236.91	36.38	-67.84
-8.25	31.91	0.05	-0.65	-237.62	46.99	-47.00
-8.75	31.54	0.11	-0.61	-232.52	37.07	-25.99
-9.25	30.71	0.14	-0.55	-224.35	24.34	-10.64
-9.75	29.41	0.14	-0.48	-213.46	12.06	-1.54
-10.25	27.61	0.15	-0.41	-198.68	1.79	1.92
-10.75	25.30	0.23	-0.31	-179.34	-5.01	1.12
-11.25	22.44	0.37	-0.16	-152.73	-9.81	-2.59
-11.75	19.07	0.14	-0.04	-123.80	10.08	-2.52

Time history of Axial Forces in Anchors

Project type	Sheet pile wall
Project title	2_anchors._t_dph
Date	11.06.2016



time	unit	Anchor 1	Anchor 2
15.01	[kN]	600.00	-
15.26	[kN]	607.48	-
15.5	[kN]	603.39	-
15.75	[kN]	606.19	-
16.0	[kN]	605.91	-
16.01	[kN]	525.82	600.00
28.26	[kN]	524.84	632.01
40.5	[kN]	525.77	628.01
52.75	[kN]	527.29	636.48
65.0	[kN]	527.24	636.32
125.0	[kN]	526.90	635.54
185.0	[kN]	526.81	635.11