

Cells with red text have been changed or added compared to the previous release.

Nearshore borehole locations

Section	Subsection	From KP to KP km	KP (Alpha 2) km	Depth of installation m	Additional cover m	Total soil coverage m	Point-ID	Easting	Nording	Comment	Thermal resistivity [K.m/W]	Remarks
Onshore route												
0	Land route			On Landstation and possibly first 200m from Landstation to sea defence	n/a							
						1,2	B1001	62329 (RD)	444778 (RD)		1,00	Thermal resistivity of original soil with low water content but including compaction of the soil is 1,00 K.m/W.
						1,2	B12202	62043 (RD)	444804 (RD)		1,00 (2,90)	Thermal resistivity of dried-out soil is 2,90 K.m/W. Critical temperature (Tcrit) above which soil drying-out occurs, is 40 °C. Contractor shall determine thickness of dried out layer and impact of this layer on ampacity.
						1,2	B1010	61867 (RD)	445074 (RD)		1,00	
						3,5	B1010	61867 (RD)	445074 (RD)	HDD for road crossings (Option 1b only)	0,90	
						7,6	B1010	61867 (RD)	445074 (RD)	HDD for road crossings (Option 1b only)	0,40	

Near shore option 1a and 1b (LONG HDD)

1	HDD				0-1,9							
						1,2	B1010	61867 (RD)	445074 (RD)	HDD exit point	1,00	Points which are decisive for cable design have been determined along the HDD route (1003-0116-01-BT-MM) based on locations B1010 (onshore), HDD_BH11, HDD_BH08 (intermediate points) and HDD_BH01 (offshore exit). Thermal resistivity values are for soil only. HDD liner (duct) and liner filling medium (water) shall be taken into account in the ampacity calculations of Contractor.
						27	B1010	61867 (RD)	445074 (RD)	Deepest point in clay layer	0,60	
						55	B1010	61867 (RD)	445074 (RD)	55 m soil coverage measured from top of sea defence	0,40	
						25	HDD_BH11	571170	5760478	Deepest point near this location	0,50	
						25	HDD_BH08	571136	5760971	Deepest point near this location	0,40	
						20	ADD_BH01	572098	5761061	Deepest point near this location	0,40	
						5,5	ADD_BH01	572098	5761061	HDD exit point	0,60	
3	HDD to jointing of two route alternatives				1,9-2,7							
						5,5	MD_B01_001	571849	5761637	layer of clay present	0,46	
						5,5	BH_T_ADD_BH01	571684.66	5761911.34	layer of clay present	0,51	
						5,5	VC_MD_B01_008	572057.22	5762301.81	layer of clay present	0,68	

Near shore option 2 (SHORT HDD)

1	HDD				0 - 0,5	0,5								
							1,2	B1001	62329 (RD)	444778 (RD)	1,00	Points which are decisive for cable design have been determined along the HDD route (1003-0116-01-BT-MT) based on locations B0105 (onshore) and HDD_EXIT_CPT01 (offshore). Thermal resistivity values are for soil only. HDD liner (duct) and liner filling medium (water) shall be taken into account in the ampacity calculations of Contractor.		
							12,2	B0105	61478.0 (RD)	444975.0 (RD)	0,75			
							28	B0105	61478.0 (RD)	444975.0 (RD)	0,70			
							40	B0105	61478.0 (RD)	444975.0 (RD)	0,50			
							15	HDD_EXIT_CPT01	570502.40	5760534.28	0,50			
							5,5	HDD_EXIT_CPT01	570502.40	5760534.28	0,60			
2	Maasmond crossing			Southbank Maasmond	0,5 - 0,9	0,4						For Maasmond crossing (KP 0.5 to KP3.5) following two soil conditions shall both be used for cable design: a) HDD_EXIT_CPT01 and b) BH_T_ADD_BH04		
				Maasmond	0,9 - 1,6	0,7								
						1,0	5,5	0,5	6	BH_T_ADD_BH04	570768.43		5760641.11	0,72
						1,5	5,5	0,5	6	BH_T_ADD_BH03	570829.76		5761160.86	0,51
				Northbank Maasmond	1,6 - 2,0	0,4								
						1,8	5,5	4	9,5	BH_T_ADD_BH02	571042.32	5761451.92	0,43	
3	Maasmond to sanddump areas.				2,0 - 3,5	1,5	5,5							
						2,6	5,5		5,5	BH_T_ADD_BH01	571684.66	5761911.34	0,51	
						3,2	5,5		5,5	VC_MD_B01_008	572057.22	5762301.81	0,68	

Near shore route part applicable to all options

4	Sanddump areas				3,5 - 8,7							For sand dump area (KP 3.5 - KP 8.7) location VC_MD_B01_004 is leading where both of the soil coverage levels shall be used for cable design: a) 5,5 m b) 14,5 m Please note that each value represents all soil layers from seabed up to and including the cable based on the conformal mapping method. E.g. for b) only the value of 0,65 K.m/W shall be used for the complete 14,5 m of soil coverage. Guidance note: TenneT is investigating if the depth of installation (5,5 m) can be decreased for this section. The final depth of installation will therefore be somewhere between 5,5 m and 1,5 m to be specified in one of the next Information Notices.		
						4,15	5,5		5,5	VC_MD_B01_002	571946.86		5763340.82	0,44
						4,75	5,5		5,5	VC_MD_B01_003	572331.84		5763841.17	0,46
						5,8	5,5		5,5	VC_MD_B01_004	572344.46		5764992.17	0,83
						6,51	5,5		5,5	VC_MD_B01_005	572683.45		5765609.06	0,69
						7,7	5,5		5,5	VC_MD_B01_006	572718.92		5766813.87	0,49
						5,8	5,5	9	14,5	VC_MD_B01_004	572344.46	5764992.17	0,65	
5	Sanddump area border to LAT -17.5m contour line				8,7 - 10,5	1,8								
						9,65	1,5	0,5	2	VC_MD_B01_007A	573085.53	5768745.34	0,85	
						9,65	5,5		5,5	VC_MD_B01_007A	573085.53	5768745.34	0,45	
						10,02	5,5		5,5	VC_MD_B02A_001	572637.29	5769024.24	0,42	

Offshore borehole locations

Section	Subsection	From KP to KP	KP (Alpha 2)	Depth of installation	Additional cover	Total soil coverage	Point-ID	Easting	Nording	Comment	Thermal resistivity [K.m/W]	Remarks		
		km	km	m	m	m								
6	Sand borrow area	10.5 - 14.8	4.3	11,05	1,5	1	2,5	VC_MD_B02A_002	572629.01	5769994.27		For sand borrow area (KP 10.5 - KP 14.8) location VC_MD_B02A_006 is leading with a future soil coverage of 9,3 m		
				11,25	1,5	1,5	3	VC_MD_B02A_003	572942.22	5770373.93	0,46			
				12,05	1,5	1	2,5	VC_MD_B02A_004	572799.51	5771065.12	0,45			
				12,45	1,5	1,5	3	VC_MD_B02A_005	572124.41	5771334.55	0,40			
				13,45	1,5	0,5	2	VC_MD_B02A_006	572110.10	5772326.29	0,42			
				14,1	1,5	0,5	2	VC_MD_B02A_007	572170.60	5773011.52	0,42			
				13,05	1,5	7,8	9,3	VC_MD_B02A_006	572110.10	5772326.29	0,40			
										Worst case soil coverage when sand borrow area will fill up over time	0,43			
7	Sandwave area to Beta Platform	14.8 - 17.5	2.7	14,9	1,5	2	3,5	VC_MD_B02A_008	572172.53	5773900.51		For sand wave area (KP 14.8 to platforms) following two soil conditions shall both be used for cable design: a) TR of 0,6 K*m/W with 3,5 m soil coverage (VC_FH_B02B_005) and b) TR of 0,55 K*m/W with 7,0 m soil coverage (future soil condition)		
				15,85	1,5	1	2,5	VC_MD_B02A_009	571397.94	5774648.47	0,48			
				17,05	1,5	0	1,5	VC_MD_B02A_010	571576.46	5775972.80	0,41			
		17.5 - 25.9		18,15	1,5	2,3	3,8	VC_MD_B02A_011	572306.83	5776923.36	0,45			
				19,45	1,5	0,5	2,0	VC_MD_B02A_012	571734.23	5778249.09	0,43			
				21,05	1,5	3	4,5	VC_FH_B02B_001	572462.04	5779811.35	0,45			
						21,85	1,5	2	3,5	VC_Spatial_05	573154.29		5780436.58	0,50
						21,95	1,5	2	3,5	VC_FH_B02B_002A	572640.62		5780730.11	0,45
						22,65	1,5	0,5	2,0	VC_FH_B02B_003A	573288.38		5781194.93	0,44
						23,6	1,5	1,5	3,0	VC_FH_B02B_004	573688.77		5782080.07	0,59
						24,6	1,5	2	3,5	VC_FH_B02B_005	573739.96		5783173.44	0,45
						25,35	1,5	1,5	3,0	VC_FH_B02B_006	574392.75		5783657.80	0,48
				25.9 - 34.3		26,05	1,5	1,5	3,0	VC_Spatial_06A	574512.88		5784419.83	0,42
						26,6	1,5	2,5	4,0	VC_FH_B02B_007	574915.99		5784834.22	0,43
						27,6	1,5	0,5	2,0	VC_FH_B02B_008	575502.54		5785656.92	0,41
						28,65	1,5	1	2,5	VC_FH_B02B_009	575912.45		5786571.98	0,45
						28,7	1,5	1	2,5	VC_Spatial_04	575382.52		5786858.37	0,39
		29,6	1,5			1	2,5	VC_FH_B02B_010	571576.46	5775972.80	0,48			
		30,7	1,5			1	2,5	VC_FH_B03_011	576285.66	5788747.82	0,42			
		32,15	1,5			1,5	3,0	VC_Spatial_03	576433.19	5789840.91	0,44			
		33,4	1,5			1,5	3,0	VC_FH_B03_012	575113.65	5789956.81	0,47			
		34,55	1,5			0	1,5	VC_FHE_B03_Beta	574066.67	5790269.78	0,50			
8	Sandwave area from Beta to Alpha Platform	34.3 - 42.7		35,75	1,5	2	3,5	VC_FH_B03_013	573914.56	5790779.15	0,44			
				36,25	1,5	1	2,5	VC_FH_B03_014	573016.59	5791029.61	0,45			
				36	1,5	0,5	2,0	VC_FH_B03_015	572514.79	5791025.76	0,45			
				37,7	1,5	1	2,5	VC_FH_B04_016	571747.56	5792229.32	0,47			
				38,1	1,5	1	2,5	VC_Spatial_02	572055.50	5792724.81	0,42			
				38,6	1,5	0,5	2,0	VC_FH_B04_017	571578.26	5793150.70	0,51			
				39,2	1,5	1,5	3,0	VC_FH_B04_018	571642.55	5793971.84	0,43			
				40,6	1,5	1	2,5	VC_FH_B04_019A	571425.71	5795200.59	0,47			
				41,25	1,5	2,5	4,0	VC_Spatial_01	571513.87	5795878.02	0,42			
				41,7	1,5	1,5	3,0	VC_FH_B04_020	571055.37	5796165.33	0,44			
				42,5	1,5	0	1,5	VC_FH_B04_021	571136.76	5797198.72	0,45			
									Top of sandwave.	0,50				