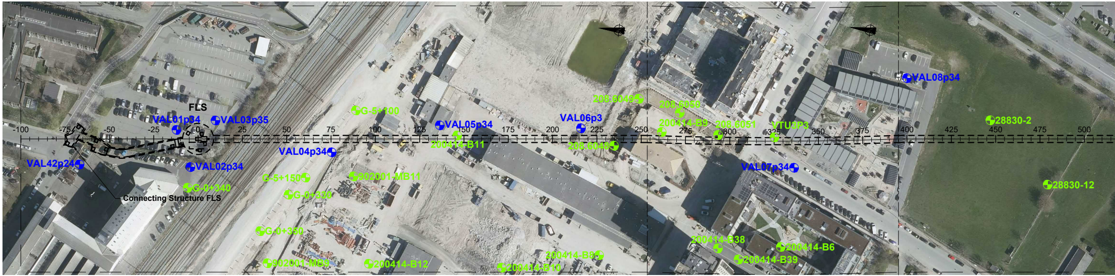
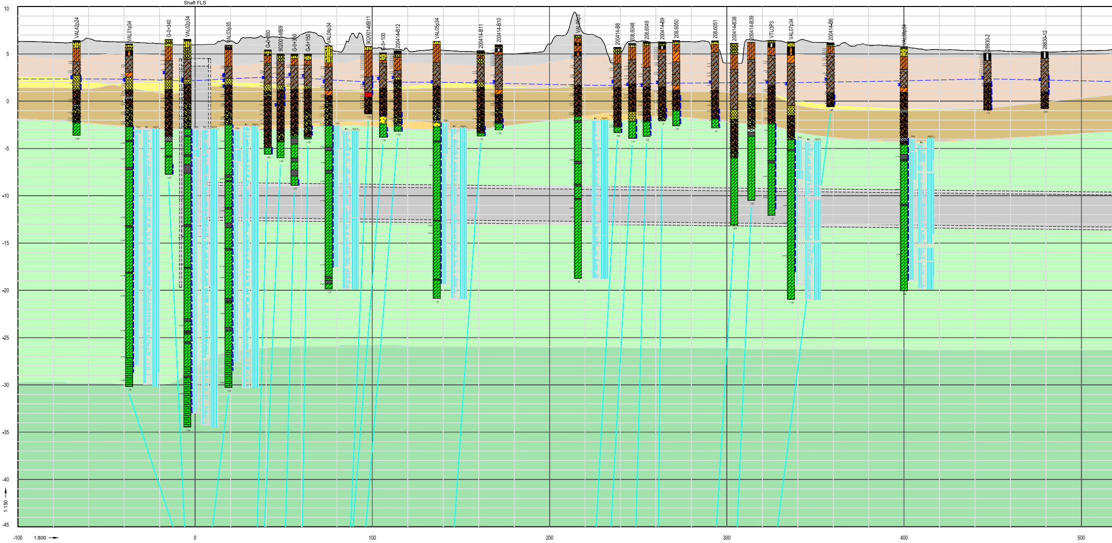
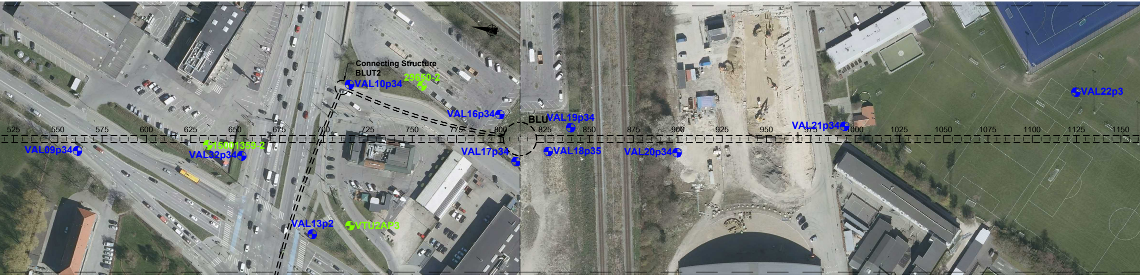
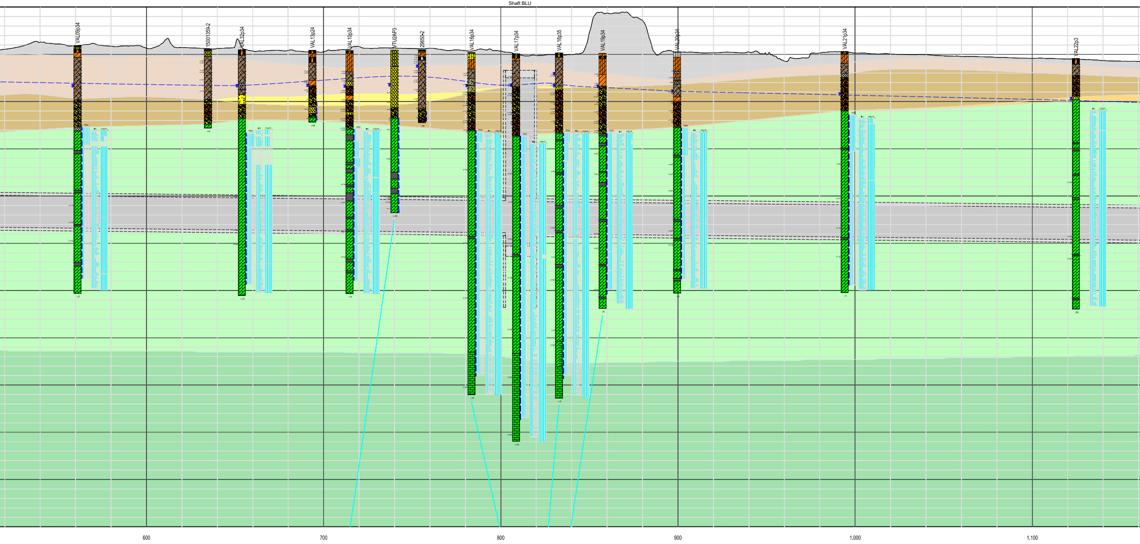
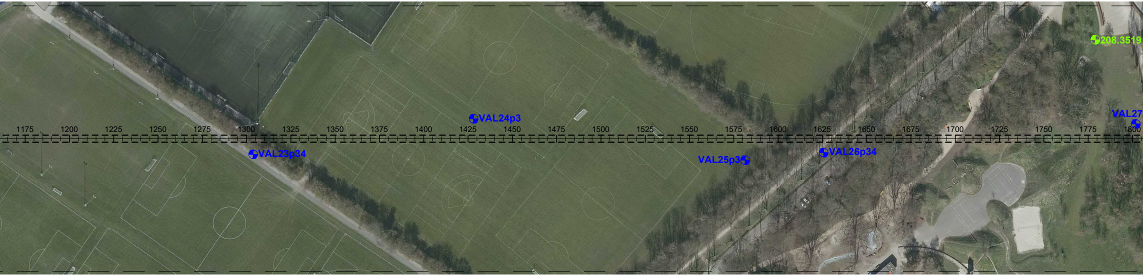
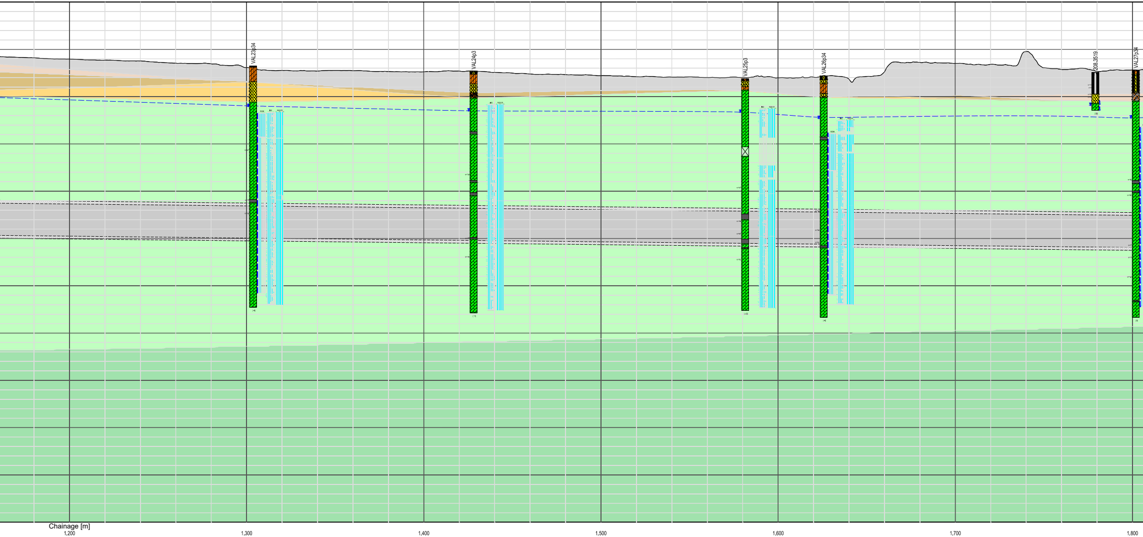

FLS
VAL01p34
VAL03p35
VAL42p24
VAL02p34
VAL04p34
Connecting Structure FLS
G-0+340
G-5+150
G-0+330
G-0+350
902001-MB9
G-5+100
902001-MB11
200414-B12
VAL05p34
200414-B11
VAL06p3
208.6049
208.6048
200414-B8
200414-B10
208.6050
200414-B9
208.6051
VTU3P3
VAL07p34
200414-B38
200414-B6
200414-B39
VAL08p34
28830-2
28830-12
-100
-75
-50
-25
0
25
50
75
100
125
150
175
200
225
250
275
300
325
350
375
400
425
450
475
500

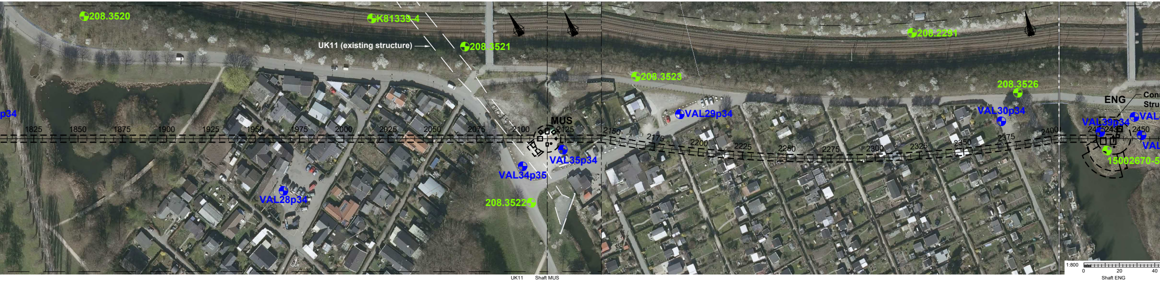

Shaft FLS
VAL42p24
VAL01p34
G-0+340
VAL02p34
VAL03p35
G-0+350
902001-MB9
G-0+330
G-5+150
VAL04p34
902001-MB11
G-5+100
200414-B12
VAL05p34
200414-B11
200414-B10
VAL06p3
200414-B8
208.6048
208.6049
200414-B9
208.6050
208.6051
200414-B38
200414-B39
VTU3P3
VAL07p34
200414-B6
VAL08p34
28830-2
28830-12
10
5
0
-5
-10
-15
-20
-25
-30
-35
-40
-45
1:150
-100
1:800
0
100
200
300
400
500

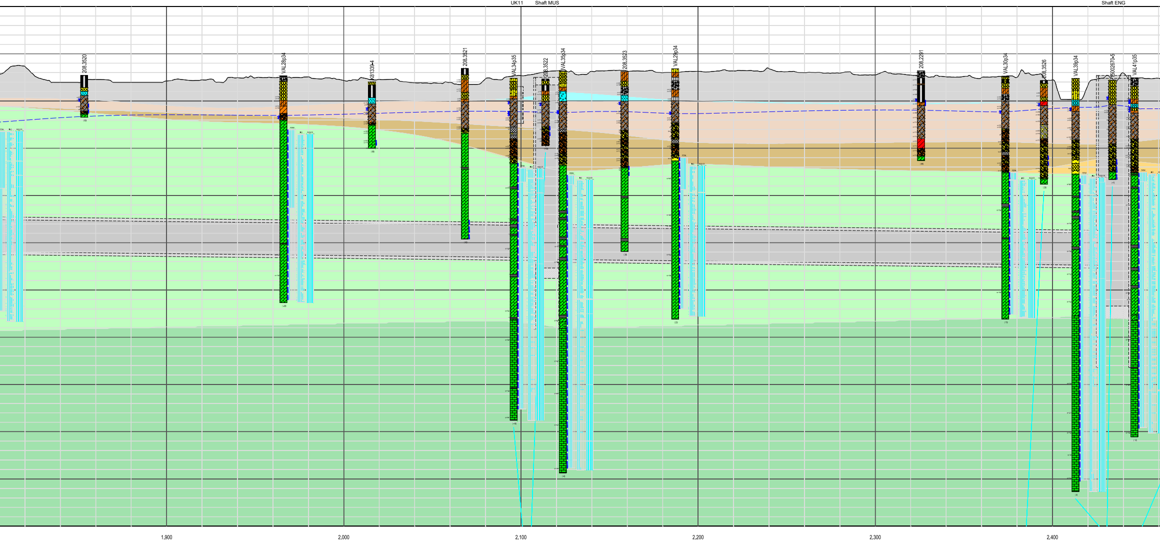

Connecting Structure
BLUT2
VAL10p34
29650-2
VAL16p34
BLU
VAL19p34
VAL21p34
VAL22p3
VAL09p34
15001359-2
VAL32p34
VAL17p34
VAL18p35
VAL20p34
VAL13p2
VTU2AP3
525
550
575
600
625
650
675
700
725
750
775
800
825
850
875
900
925
950
975
1000
1025
1050
1075
1100
1125
1150

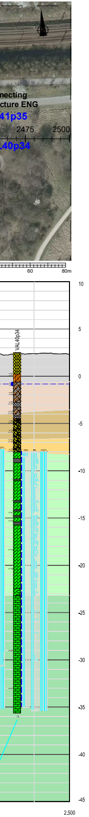

Shaft BLU
VAL09p34
15001359-2
VAL32p34
VAL13p24
VAL10p34
VTU2AP3
29650-2
VAL16p34
VAL17p34
VAL18p35
VAL19p34
VAL20p34
VAL21p34
VAL22p3
600
700
800
900
1,000
1,100


208.3519
VAL27
VAL24p3
1175
1200
1225
1250
1275
1300
1325
1350
1375
1400
1425
1450
1475
1500
1525
1550
1575
1600
1625
1650
1675
1700
1725
1750
1775
1800
VAL23p34
VAL25p3
VAL26p34


VAL23p34
VAL24p3
VAL25p3
VAL26p34
208.3519
VAL27p34
Chainage [m]
1,200
1,300
1,400
1,500
1,600
1,700
1,800


208.3520
K81339-4
UK11 (existing structure)
208.3521
208.2291
208.3523
208.3526
ENG
Con
Stru
p34
VAL29p34
VAL30p34
VAL39p34
VAL
VAL
MUS
VAL35p34
VAL34p35
VAL28p34
208.3522
15002670-5
1825
1850
1875
1900
1925
1950
1975
2000
2025
2050
2075
2100
2125
2150
2175
2200
2225
2250
2275
2300
2325
2350
2375
2400
2425
2450
1:800
0
20
40
Shaft ENG


UK11
Shaft MUS
208.3520
VAL28p34
K81339-4
208.3521
VAL34p35
208.3522
VAL35p34
208.3523
VAL29p34
208.2291
VAL30p34
208.3526
VAL39p34
15002670-5
VAL41p35
1,900
2,000
2,100
2,200
2,300
2,400


necting
cture ENG
41p35
2475
2500
40p34
60
80m
VAL40p34
10
5
0
-5
-10
-15
-20
-25
-30
-35
-40
-45
Elevation [m]
2,500

NOTES:

Levels are shown in DVR90.
Coordinate system: UTM32.
All dimensions are in m, unless otherwise stated.
Shaft excavation levels are indicative.
Tunnel CL with chainage in meters starts at center of Shaft FLS.

A geological 3D model has been prepared by the geotechnical contractor on the basis of relevant new and existing boreholes in and around the project area. The model has been included in this drawing as layer boundaries between boreholes.
Groundwater level measurements have been carried out in new and existing boreholes and applied for generating a 3D groundwater surface using the Krieging interpolation method (in case of several measurements in one borehole, the average has been applied). This surface is presented as blue stippled groundwater table line.
RQD values presented in this drawing originate from core sample evaluations. However, comparison with optical televiewer results indicates that RQD values from core samples may be underestimated by a factor 3 to 5.

REFERENCES:

VAL_F11_GEN_K23_S1_H1_ALG_001.dwg	Tunnel alignment data file (2021-06-04)
VAL_F3_FLS_K09_S1_H7_SKA_001.dwg	FLS shaft export from Revit (2021-12-20)
VAL_F3_BLU_K09_S1_H7_SKA_001.dwg	BLU shaft export from Revit (2021-12-13)
VAL_F3_MUS_K09_S1_H7_SKA_001.dwg	MUS shaft export from Revit (2021-11-24)
VAL_F3_ENG_K09_S1_H7_SKA_001.dwg	ENG shaft export from Revit (2021-11-23)
Valby_terræn_Modelkey_UTM32N_DVR90.xyz	Terrain xyz data from the National Danish Height Model, April 2019 (SDFE)

BOREHOLE LEGEND:

◕ XXX	Borehole Project
◕ XXX	Borehole From existing database
▨	Section through tunnel / shaft concrete wall
2450 ┼─┼─┼	Tunnel CL Alignment with chainage

Ground Type Legend between Boreholes:

▭	Made groud
▭	Organic Soil
▭	Upper Till, Clay/Silt/Sand/Gravel (ML1/MI1/MS1/MG1)
▭	Lower Till, Clay/Silt/Sand/Gravel (ML2/MI2/MS2/MG2)
▭	Middle Meltwater Sand/Gravel (DS2/DG2)
▭	Lower Meltwater Sand/Gravel (DS3/DG3)
▭	Bryozoan Limestone
▭	Cretaceous Limestone

GEOLOGICAL LEGEND

Made Ground

Pavement	▩
Mull	▨
Clay Mull	▨
Sand Mull	▨
Slag	▨
Fly Ash	▥
Clay Fill	▨
Silt Fill	▨
Sand Fill	▨
Gravel Fill	▨
Gytja Fill	▨

Tills

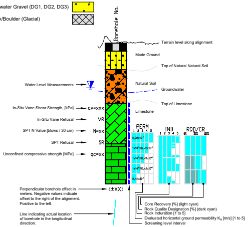
Upper Clay Till (ML1)	▨
Lower Clay Till (ML2)	▨
Upper Silt Till (MI1)	▨
Lower Silt Till (MI2)	▨
Upper Sand Till (MS1)	▨
Lower Sand Till (MS2)	▨
Upper Gravel Till (MG1)	▨
Lower Gravel Till (MG2)	▨

Soils

Gytja (Postglacial)	▨
Peat (Postglacial)	▨
Meltwater Clay (DL1, DL2, DL3)	▨
Meltwater Silt (DI1, DI2, DI3)	▨
Meltwater Sand (DS1, DS2, DS3)	▨
Meltwater Gravel (DG1, DG2, DG3)	▨
Rock/Boulder (Glacial)	▩

Rock

Bryozoan Limestone	▨
Transition Limestone (Bryozoan - Cretaceous)	▨
Cretaceous Limestone (chalk)	▦
Flint	■
Core loss	☒


Borehole No.
Terrain level along alignment
Made Ground
Top of Natural Natural Soil
Water Level Measurements
Natural Soil
Groundwater
Top of Limestone
In-Situ Vane Shear Strength, [kPa]
cv=xxx
Limestone
In-Situ Vane Refusal
VR
SPT N Value [blows / 30 cm]
N=xx
SPT Refusal
SR
Unconfined compressive strength [MPa]
qc=xx
PERM
1 2 3 4 5
IND
1 2 3 4 5
RQD/CR
0% 50% 100%
Perpendicular borehole offset in meters. Negative values indicate offset to the right of the alignment. Positive to the left.
(±XX)
Line indicating actual location of borehole in the longitudinal direction.
Core Recovery [%] (light cyan)
Rock Quality Designation [%] (dark cyan)
Rock Induration [1 to 5]
Evaluated horizontal ground permeability K_H [m/s] [1 to 5]
Screening level interval

5	2022-01-14	TPR/HENP	All boreholes complete
4	2021-08-18	TPR/HENP	All KAL Option boreholes are complete.
3	2021-06-15	TPR/HENP	All KAL Option boreholes are now 95% complete.
2	2021-06-11	TPR/HENP	All KAL Option boreholes (exept by ENG Shaft) are now 95% complete.
1	2021-06-04	TPR/HENP	Alignment revised. FLS & BLU boreh. are 95% complete. Other boreh. are incomplete and will be revised.
0	2021-05-25	TPR/HENP	Shaft BLU boreholes are 95% complete. Remaining VAL boreholes are incomplete and may/will be revised.
REV.	DATO.	TEGN./KONTR.	RETTELSER

NIRAS JACOBS BabEng

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2000 Frederiksberg

HOFOR
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2300 København S.

TEGNET AF & DATO	KONTR. AF & DATO	GODK. AF & DATO	MÅL	FORMAT
TPR 2021-05-25	HENP 2021-05-25	JANN 2021-05-25	Plan 1:800 Profil H1:800 V1:150	3570x594

TEKST		
Design Længdeprofil Geoteknisk profil	Valby Skybrudstunnel Hele strækningen	ENHED meter KOORDINATSYSTEM UTM32 KOTESYSTEM DVR90
DOKUMENT NUMMER	VAL_PD_GEN_K25_8000	REV 5