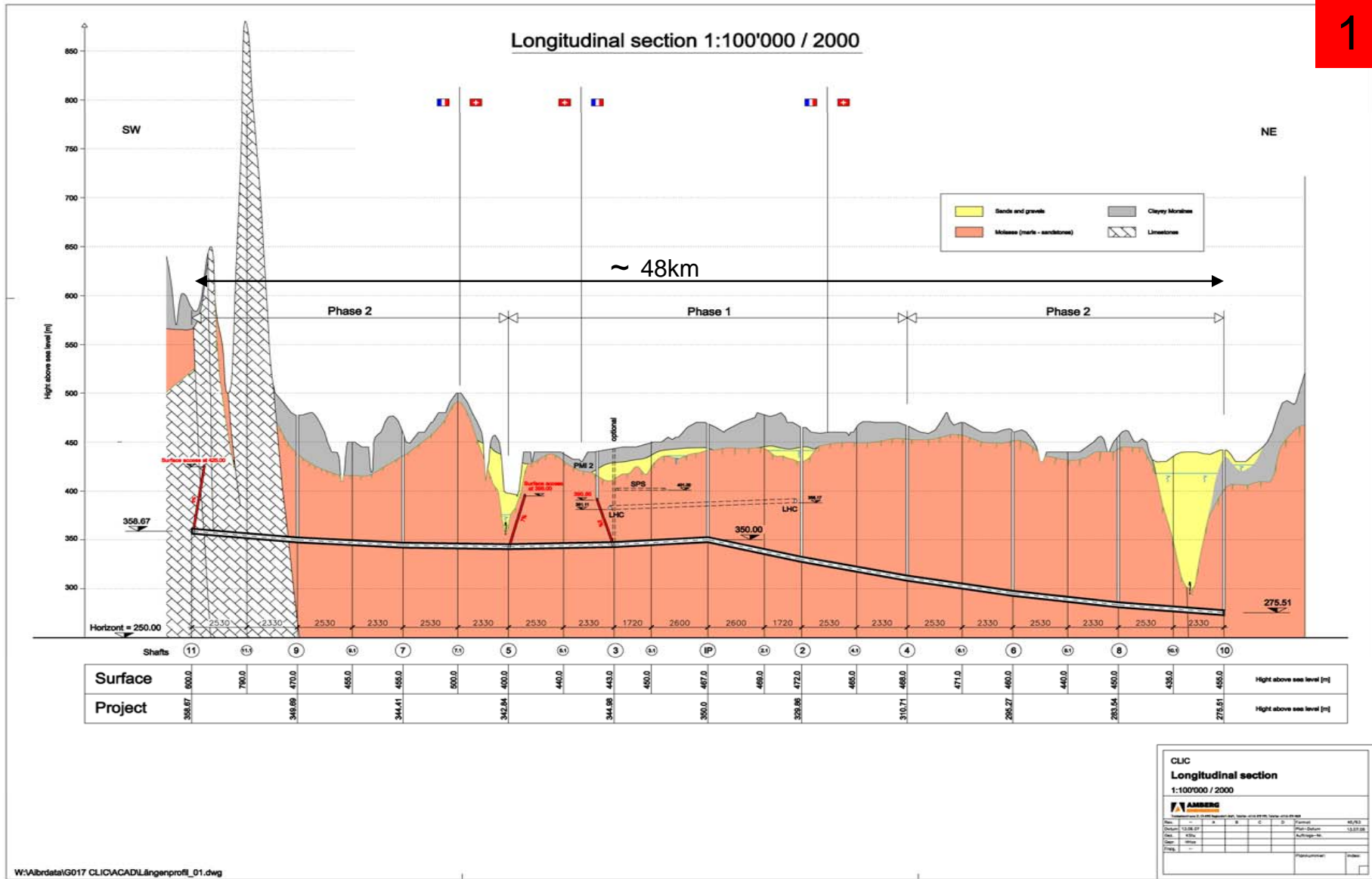
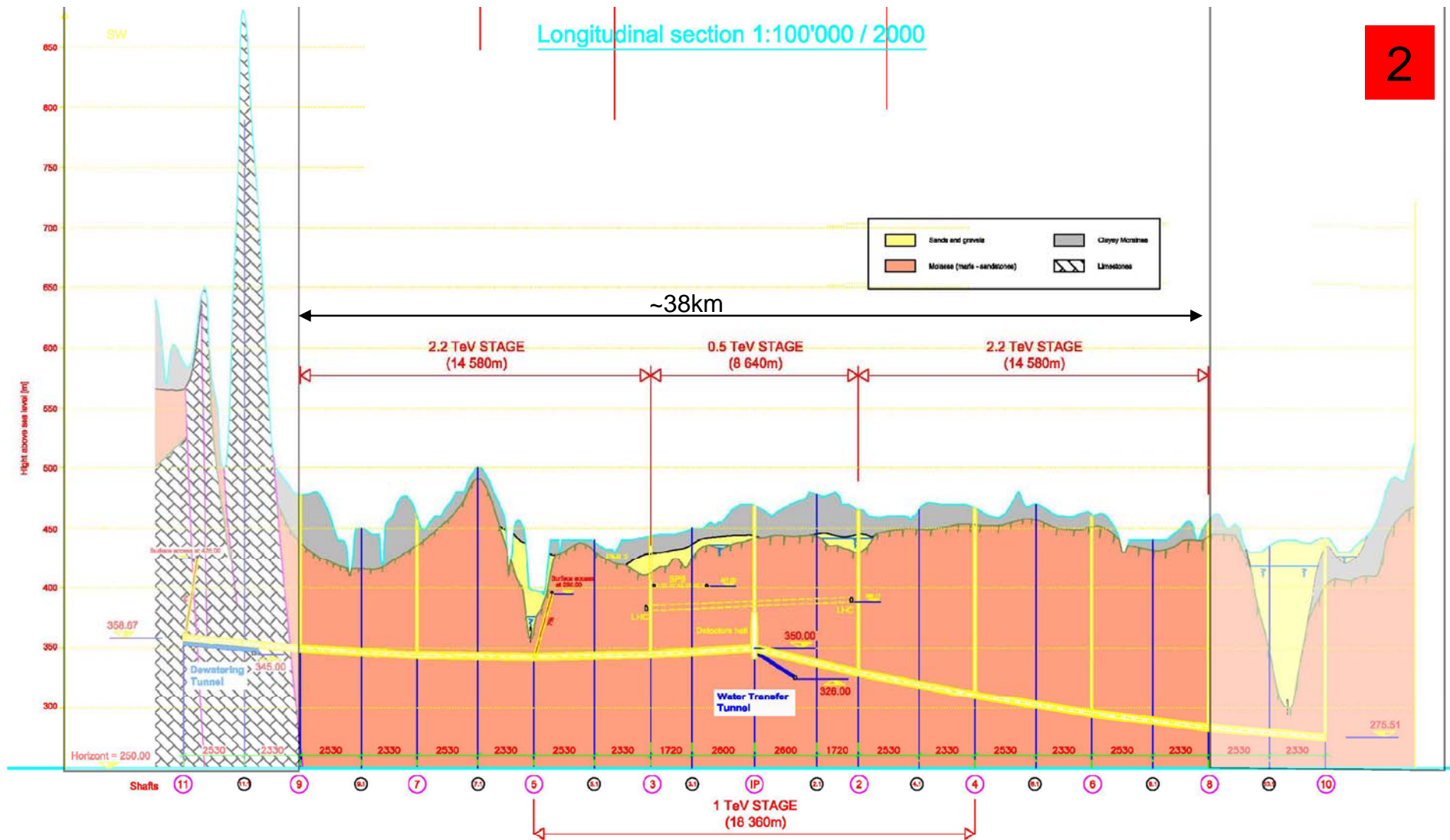


CLIC Civil Engineering and Services (CES) WG 13 Aug 2008

- News on possible CLIC Long Profiles for various stages
- New Sector lengths and beam dump positions

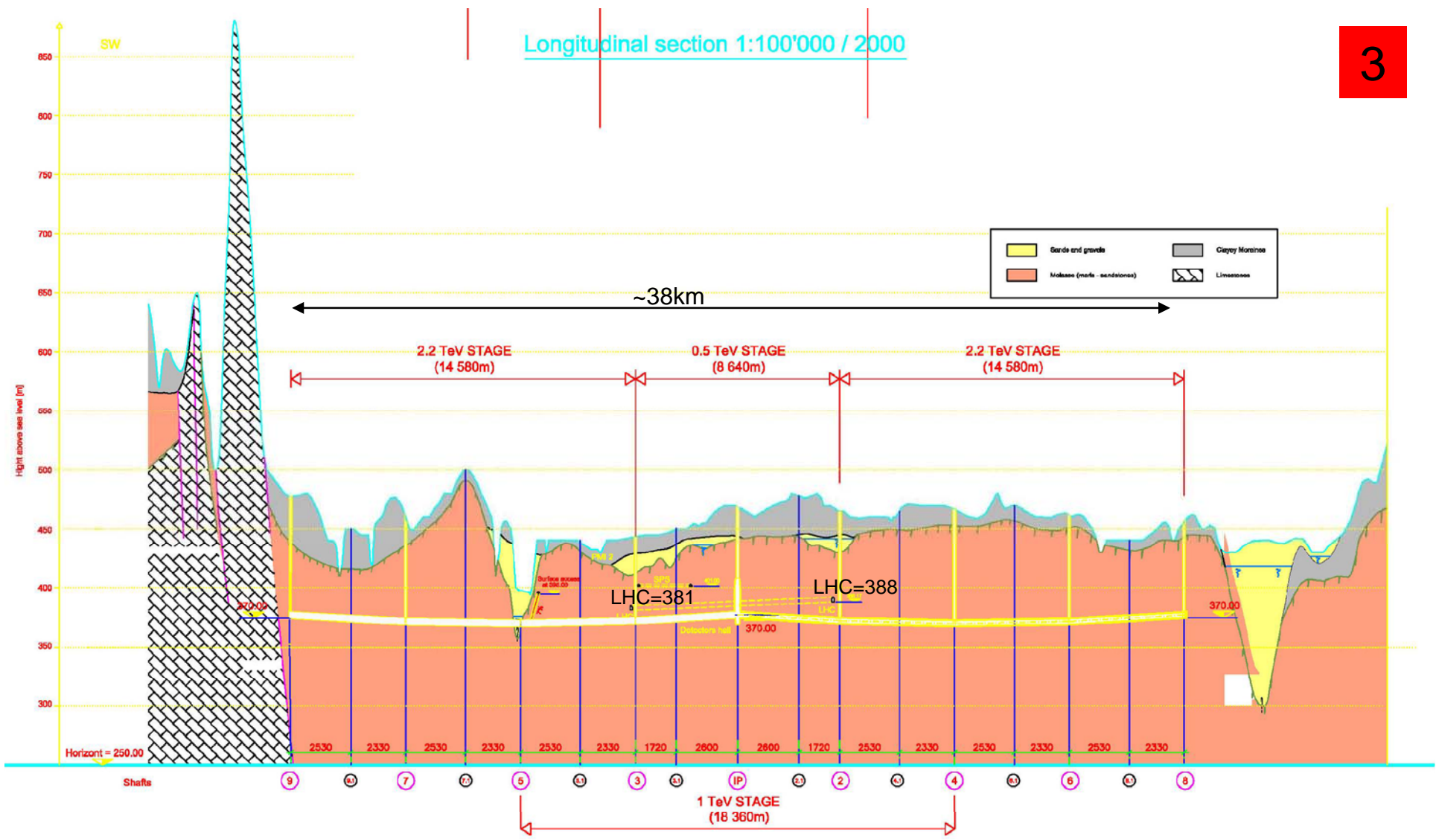


'Baseline' Long Section



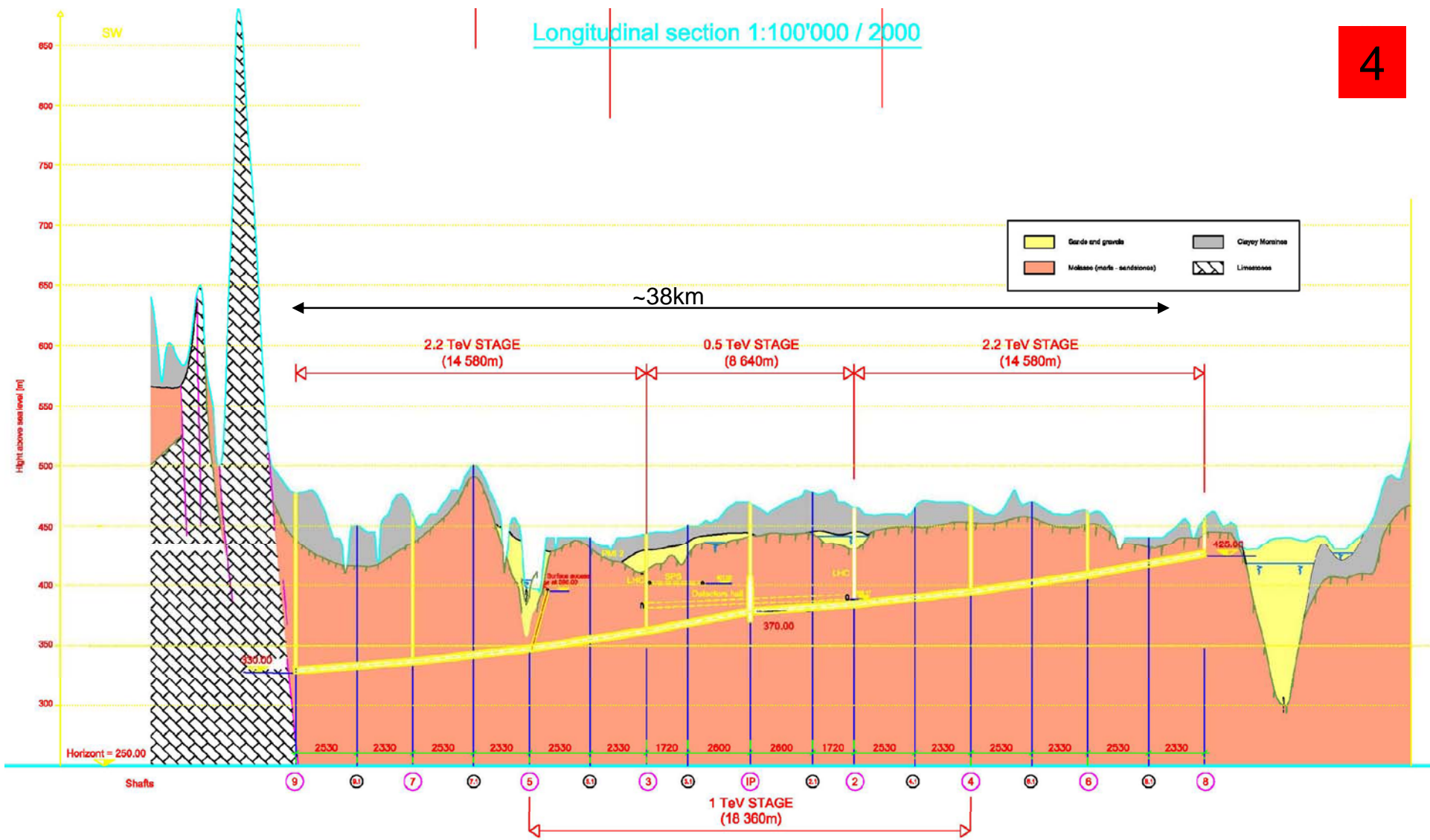
Shortened Option to avoid Limestone & Gland

Longitudinal section 1:100'000 / 2000

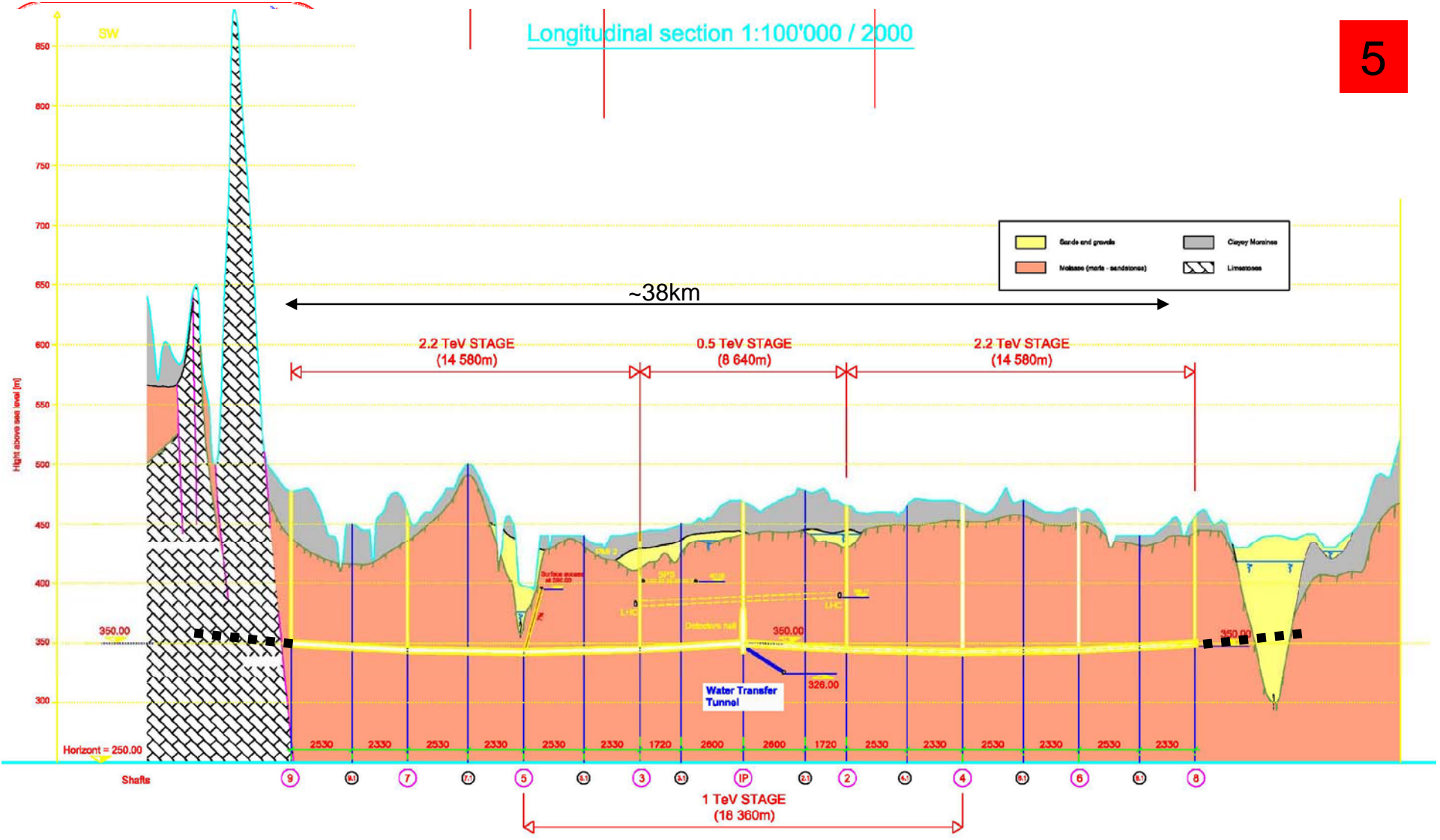


Reduced Depth, thro' Allondon Valley (same level as ILC)

Longitudinal section 1:100'000 / 2000



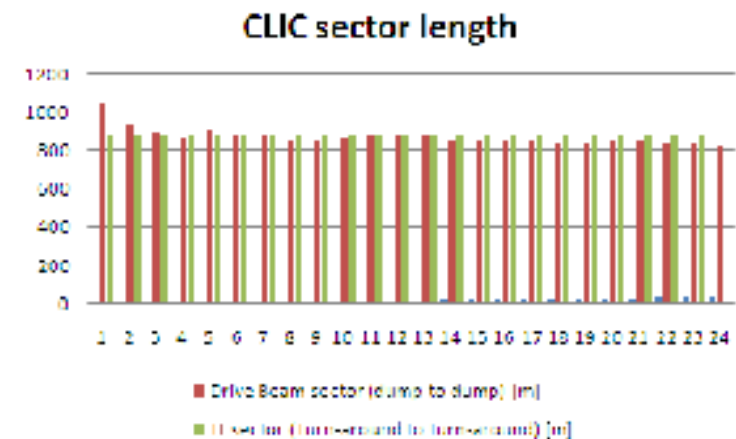
Reduced Depth under Allondon



Reduced depth, below Allondon (WITH Possibility to extend thro' Gland?)

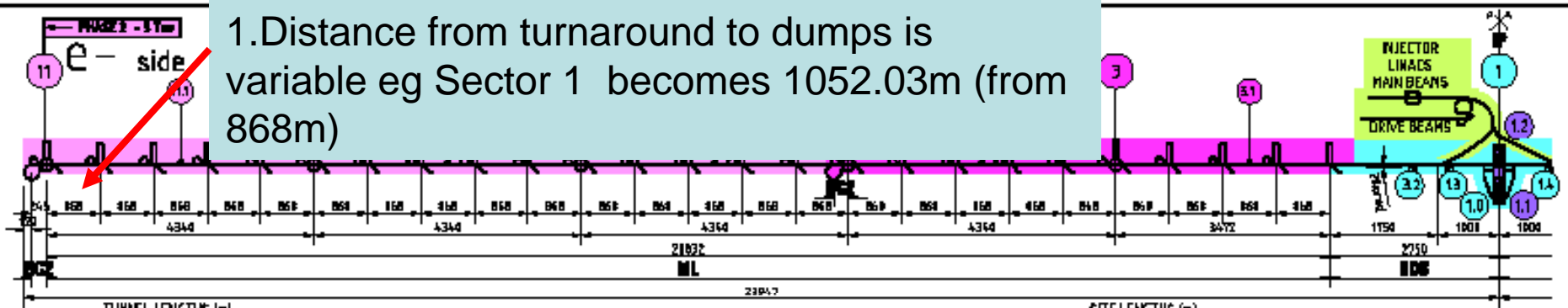
# Sector length

Sector #	Drive Beam sector (Jump to dump) [m]	TL sector (Turn-around to Turn-around) [m]	Delay [m]	Drive Beam sector (dump to dump) [m]	TL sector (Turn-around to Turn-around) [m]
0	0.8	0	0.8	0.0	0
1	1052.03	878.23	173.8	1051.23	878.23
2	1990.7	1756.46	234.24	936.67	878.23
3	2005.15	2634.69	250.46	894.45	878.23
4	3253.47	3512.92	240.55	818.32	878.23
5	4006.01	4391.15	274.86	912.54	878.23
6	5552.42	5269.38	283.04	886.41	878.23
7	6138.83	6147.61	291.22	886.41	878.23
8	7299.11	7025.84	273.27	860.28	878.23
9	8161.4	7904.07	257.33	862.29	878.23
10	9029.72	8782.3	247.42	858.32	878.23
11	9410.1	9660.53	249.57	880.38	878.23
12	10792.49	10538.76	253.73	882.39	878.23
13	11672.87	11416.99	255.88	880.38	878.23
14	12537.17	12295.22	241.95	864.3	878.23
15	13399.46	13173.45	226.01	862.29	878.23
16	14261.75	14051.68	210.07	862.29	878.23
17	15122.03	14929.91	192.12	860.28	878.23
18	15970.25	15808.14	162.11	846.22	878.23
19	16816.47	16686.37	132.1	846.22	878.23
20	17668.7	17564.6	101.1	850.23	878.23
21	18518.93	18442.83	76.1	850.23	878.23
22	19359.11	19321.06	38.05	846.16	878.23
23	20199.29	20199.29	0	840.18	878.23
24	21029.42			836.13	
		Total =	1069.79	21029.42	20199.1



CLIC Layout update from  
G. Riddone, D. Schulte, 2008.007.14

1. Distance from turnaround to dumps is variable eg Sector 1 becomes 1052.03m (from 868m)



	TUNNEL LENGTHS (m)							SITE LENGTHS (m)							
	main beam turn-around	BICZ	e- side ML	BOS	e+ side ML	drive beam accelerator + DL + CR1 + CR2 + links	e- e+ injectors + DA + link + booster linac	main + drive beam transfer tunnels	TOTAL	main beam turn-around	BICZ	e- side ML	BOS	e+ side ML	TOTAL
Phase 1	1500	490	7 812	5 500	7 812	2 216 (to be revised)	1 430 (to be revised)	2 516	21 284	240	490	7 812	5 500	7 812	21 854
Phase 2	1500	490	12 775	-	12 775	-	-	-	27 548	240	490	12 655	-	12 655	26 040
Total	3000	980	20 587	5 500	20 587	2 216									

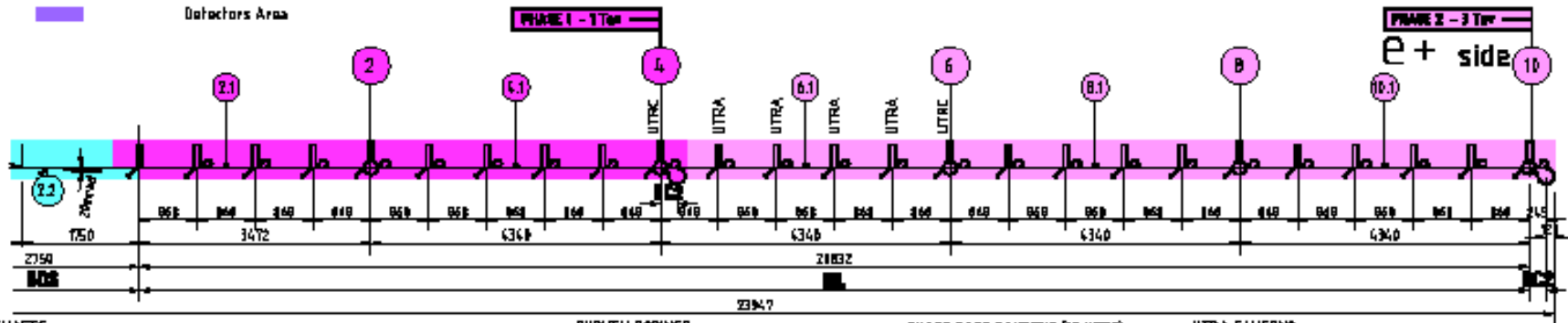
2. Distance between UTRA's is constant at 878.23m

Legend: Phase 1 Phase 2

- ML
- Main/Drive beam injectors
- BOS
- Detectors Area

TUNNELS SECTIONS

Area	beam section diam.
turn-around	0.9 m



SHAFTS

Point	1.0	1.1	1.2	2	3	4	5	6	7	8	9	10	11
Ø m	9	16	16	9	9	9	9	9	9	9	9	9	9

SURVEY BORINGS

Point	2.1, 3.1, 4.1
Ø m	

SHAFT BASE CAVERNS (10 UTRC)

UTRA CAVERNS

DETECTORS HALL + SERVICE HALL

Point	11, 12	1.0
(LxWxH) m	120 x 25 x 39	60 x 16 x 15

MAIN BEAM DUMP CAVERNS & SERVICE HALLS (4)

Point	BOS CAVERNS	BOS SERVICE HALLS
(LxWxH) m	13.16 x 2.2 x 3.2	1.3.16.22.32
	20 x 8 x 14 + 1 storey	30 x 16 x 10

3. At the moment it is not clear if the distance from turnaround to dumps is not the same for 0.5TeV and 3TeV

INDEX A: 24 OB sectors, 868 in each and 5 OB sectors between 2 shafts - UTRB Covers deleted

UTR = Underground Technical Room

CLIC - UNDERGROUND STRUCTURES SCHEMATIC LAYOUT (COLOURED BY ZONES)



CLIC PROJECT  
 CIVIL SUPERVISOR  
 SUPERVISOR : JACQUES  
 DESIGNER : AUKOSNICKI

SCALE : 1/82700 (A3\_FURIMP) DATE : 19 JAN 2008  
 CLIC.CE-1.1749.0003 3 | A