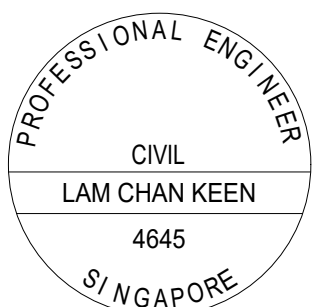


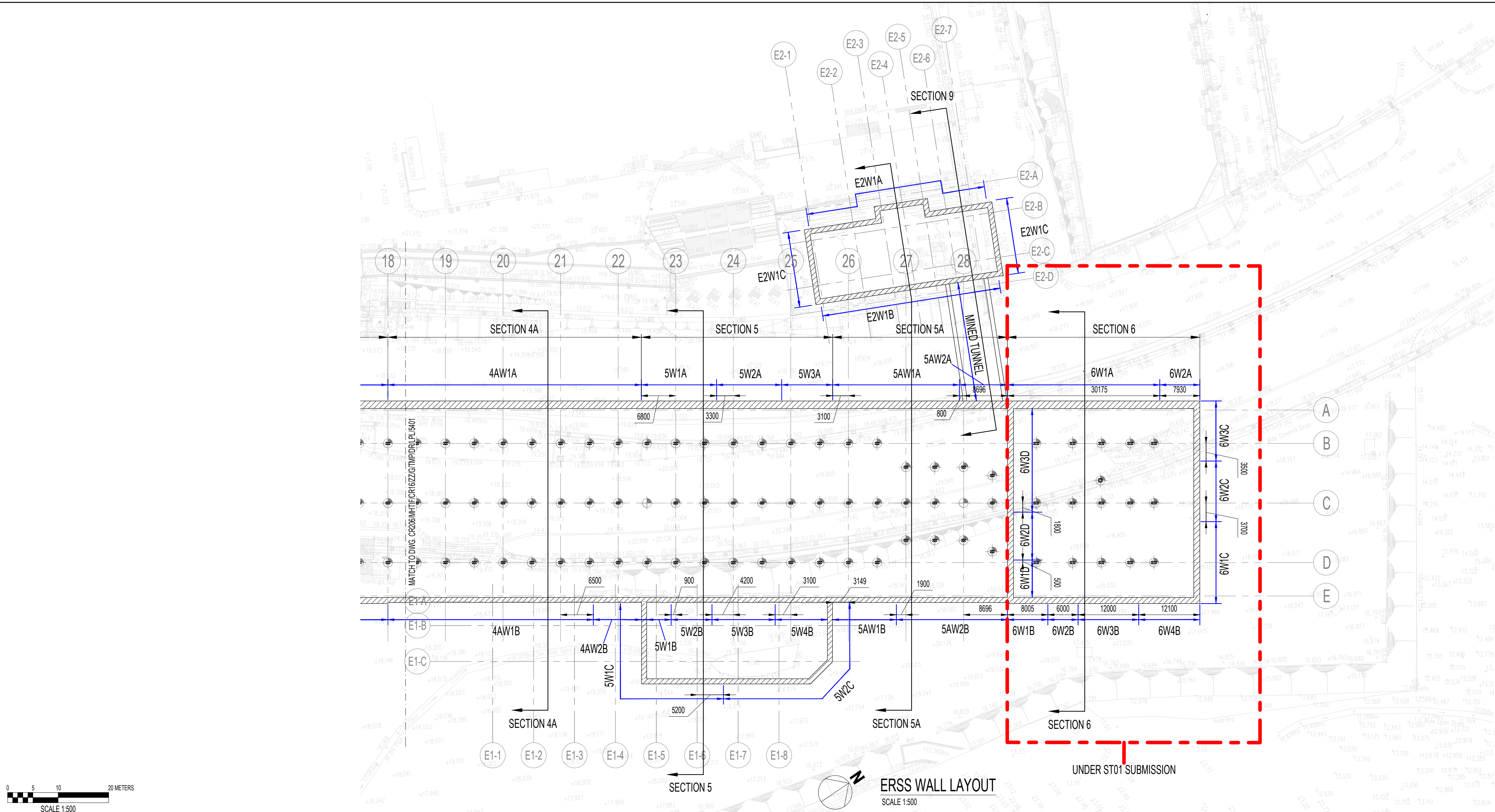
for Commissioner of Building Control



ACCREDITED CHECKER	
No. 1166	RENGASAMY SELVARAJU In AC Organisation Registration No: A004
	BUILDING CONTROL ACT SINGAPORE



SPECIALIST ACCREDITED CHECKER	
No: 7005	VALLIPURAM GANESHAN In AC Organisation Registration No: A004
	BUILDING CONTROL ACT SINGAPORE



ERSS WALL TYPE	REFERENCE BOREHOLE	D-WALL SIZE (mm)	MIN. STIFFNESS (kNm/m)	TOP OF WALL (mSHD)	MIN. REQUIRED TOE LEVEL ¹ (mSHD)	MIN. REQUIRED SOCKET IN LENGTH ¹ (m)				COMPRESSION ACTION (kNm)		TENSILE ACTION (kNm)	GEOTECHNICAL RESISTANCE (kNm)					
						G(II) OR BETTER BELOW FEL	G(IV) OR BETTER BELOW FEL	S(III) OR BETTER BELOW FEL	S(IV) OR BETTER BELOW FEL	PERMANENT ACTION	VARIABLE ACTION		COMPRESSION			TENSION		
													DA1-C1	DA1-C2	LTA CDC	DA1-C1	DA1-C2	LTA CDC
4AW1A	RC/30337	1500	6.50E+06	18.70-19.60	-17.50	2.70	-	-	-	1250	450	600	9646	5061	1967	1656	828	1972
4AW1B	DW-ABH-19	1000	1.93E+06	18.00-18.50	-21.50	2.00	-	-	-	1550	550	600	8339	4438	2217	1866	933	2217
4AW2B	DW&BP-ABH-07	1000	1.93E+06	18.00-18.50	-24.30	1.50	-	-	-	1550	550	600	9090	4907	2993	2518	1259	2993
5W1A	RC/30337	1500	6.50E+06	19.60-19.70	-19.00	4.20	-	-	-	1750	850	700	10728	5737	3086	2597	1298	3086
5W2A	RC/30221	1500	6.50E+06	19.50-19.60	-23.00	1.90	-	-	-	1750	850	700	10526	5611	2877	2421	1210	2877
5W3A	RC/30339	1500	6.50E+06	19.30-19.50	-24.50	2.40	-	-	-	1750	850	700	10763	5759	3122	2627	1314	3122
5W1B	DW&BP-ABH-07	1000	1.93E+06	4.00	-23.00	1.20	-	-	-	1450	485	700	7631	4124	2552	2148	1074	2552
5W2B	RC/30285	1000	1.93E+06	4.00	-24.50	-	2.00	-	-	1450	485	700	5830	3241	2691	2265	1132	2691
5W3B	DW&BP-ABH-10	1000	1.93E+06	4.00	-28.00	0.60	-	-	-	1450	485	700	8484	4657	3434	2889	1445	3434
5W4B	RC/30279	1000	1.93E+06	4.00	-28.50	-	0.60	-	-	1450	485	700	6493	3655	3376	2841	1420	3376
5W1C	DW-ABH-21	1000	1.93E+06	18.00-19.00	-26.00	-	-	-	-	1550	650	800	5993	3342	2859	2406	1203	2859
5W2C	DW-ABH-23	1000	1.93E+06	18.00-19.00	-23.00	-	-	-	-	1550	650	800	6316	3544	3193	2687	1343	3193
5AW1A	RC/30247	1500	6.50E+06	19.00-19.30	-26.00	1.50	-	-	-	1650	685	600	10255	5423	2566	2160	1080	2566
5AW2A	RC/30222	1500	6.50E+06	19.00-19.30	-31.90	1.00	-	-	-	1650	685	600	12116	6604	4519	3803	1902	4519
5AW1B	DW-ABH-26	1000	1.93E+06	18.00	-33.00	1.00	-	-	-	1450	485	600	9675	5402	4664	3925	1963	4664
5AW2B	DW&BP-ABH-11	1000	1.93E+06	18.00	-36.50	-	0.50	-	-	1450	485	600	7320	4172	4231	3560	1780	4231
6W1A	RC/30222	1500	6.50E+06	18.50-19.00	-31.90	1.00	-	-	-	3245	310	800	14405	7794	4886	4111	2056	4886
6W2A	RC/30248	1500	6.50E+06	18.50	-39.90	0.50	-	-	-	3245	310	800	16018	8802	6552	5513	2757	6552
6W1B	DW-ABH-28	1200	3.33E+06	18.00	-39.50	0.50	-	-	-	3020	310	800	9759	5615	6084	5120	2560	6084
6W2B	DW-ABH-29	1200	3.33E+06	18.00	-36.30	0.50	-	-	-	3020	310	800	13219	7294	5659	4762	2381	5659

ERSS WALL LAYOUT
SCALE 1:500

UNDER ST01 SUBMISSION

UNDER ST01 SUBMISSION

ERSS WALL TYPE	REFERENCE BOREHOLE	D-WALL SIZE (mm)	MIN. STIFFNESS (kNm/m)	TOP OF WALL (mSHD)	MIN. REQUIRED TOE LEVEL ¹ (mSHD)	MIN. REQUIRED SOCKET IN LENGTH ¹ (m)				COMPRESSION ACTION (kNm)		TENSILE ACTION (kNm)	GEOTECHNICAL RESISTANCE (kNm)					
						G(III) OR BETTER BELOW FEL	G(IV) OR BETTER BELOW FEL	S(III) OR BETTER BELOW FEL	S(IV) OR BETTER BELOW FEL	PERMANENT ACTION	VARIABLE ACTION		COMPRESSION			TENSION		
													DA1-C1	DA1-C2	LTA CDC	DA1-C1	DA1-C2	LTA CDC
6W3B	DW-ABH-30	1200	3.33E+06	18.00	-25.10	2.00	-	-	-	3020	310	800	11506	6224	3890	3273	1637	3890
6W4B	DW-ABH-31	1200	3.33E+06	18.00	-22.00	2.50	-	-	-	3020	310	800	11099	5969	3468	2919	1459	3468
6W1C	DW-ABH-31	1200	3.33E+06	18.00	-21.50	2.00	-	-	-	2325	350	800	10621	5671	2975	2504	1252	2975
6W2C	DW-ABH-32	1200	3.33E+06	18.00-18.50	-24.80	2.00	-	-	-	2325	350	800	11433	6178	3814	3209	1605	3814
6W3C	DW-ABH-33	1200	3.33E+06	18.00-18.50	-35.10	1.00	-	-	-	2325	350	800	13257	7318	5698	4795	2398	5698
6W1D	DW-ABH-77	1200	3.33E+06	18.00	-39.50	0.50	-	-	-	2325	350	800	9759	5615	6084	5120	2560	6084
6W2D	RC/30281	1200	3.33E+06	18.00	-36.90	0.50	-	-	-	2325	350	800	13180	7270	5619	4729	2364	5619
6W3D	RC/30222	1200	3.33E+06	19.00-19.50	-31.90	1.00	-	-	-	2325	350	800	12470	6826	4886	4111	2056	4886
E2W1A	RC/30376	1000	1.93E+06	19.00	-20.00	-	-	-	-	-	-	-	-	-	-	-	-	-
E2W1B	RC/30375	1000	1.93E+06	19.00	-20.00	-	-	-	-	-	-	-	-	-	-	-	-	-
E2W1C	RC/30245 & RC/30374	1000	1.93E+06	19.00	-20.00	-	-	-	-	-	-	-	-	-	-	-	-	-

¹: D-WALL TOE LEVEL SHALL SATISFY BOTH (i) MINIMUM REQUIRED TOE LEVEL AND (ii) MINIMUM REQUIRED SOCKET IN LENGTH INTO ROCK.

UNDER ST01 SUBMISSION

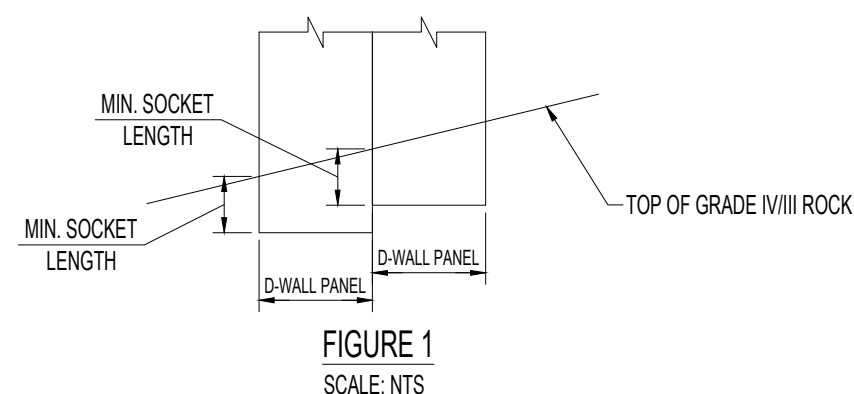
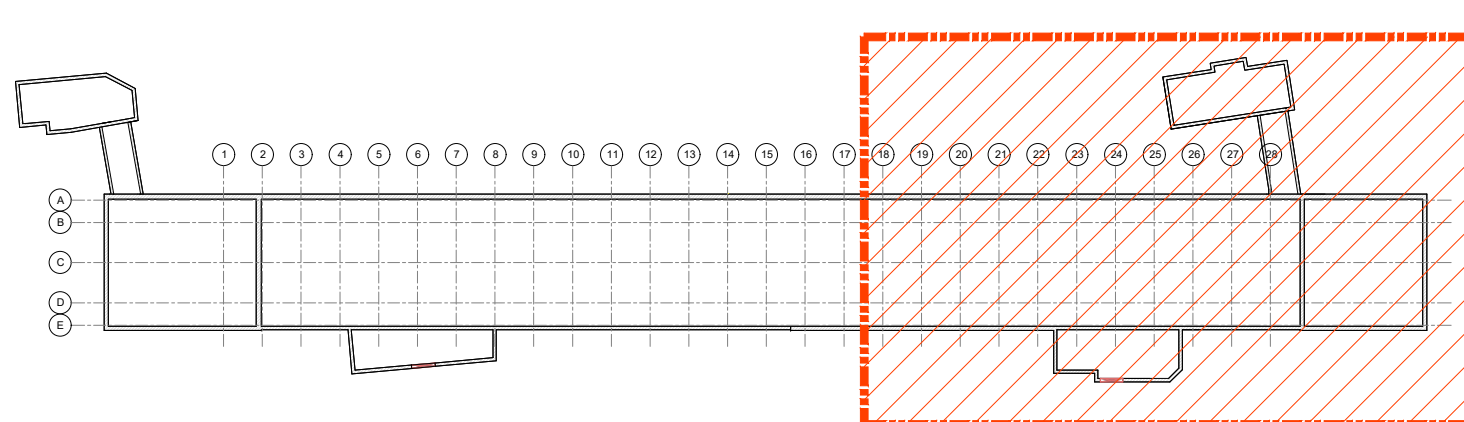
NOTES:

- ALL DIAPHRAGM WALLS SHALL BE WATER TIGHT.
- ALL DIAPHRAGM WALLS SHALL BE CONSTRUCTED WITH NO CONSTRUCTION TOLERANCE BETWEEN PANELS.
- MINIMUM FLEXURAL STIFFNESS 0.7E CALCULATED BASED ON CONCRETE C32/40, UNCRACKED.
- TOP OF WALL LEVEL TO SUIT SITE CONDITIONS. LOCAL WALL TOP LEVEL SHOULD BE DETERMINED FROM GROUND CUT-Off DUE TO TRAFFIC DIVERSION.

LEGEND:

- DIAPHRAGM WALL
 STATION BORED PILE

- MINIMUM REQUIRED SOCKET LENGTH SHALL BE MEASURED FROM THE LOWEST POINT OF THE ROCK HEAD LEVEL FOR EACH D-WALL PANEL (REFER TO FIGURE 1)

FIGURE 1
SCALE: NTS

KEYPLAN

Rev	Date	Drawn By	Description	Designed by	Chk'd	App'd
-	04/12/2024	UY	FOR ST01 SUBMISSION	HYKUY	ML	ML

Drawing Title:

CR16 STATION -
ERSS WALL LAYOUT PLAN

Designed HYKUY	Checked ML	Approved ML
Scale AS SHOWN	Drawn UY	Date OCT 2024
Drawing No.: CR206/MHTIF/CR16/GZ/G/TMP/DR/LPL/5402	Revision -	
File Name: CR206/MHTIF/CR16-GZ-G-TMP-DR-LPL-5402-Z-54-dwg		Sheet 2 of 2 A1