

## Appendix 4

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Approved Fire Service Installations Proposal of  
last application No. A/NE-TKL/721

F. S. NOTES:

1. GENERAL

- 1.1 FIRE SERVICE INSTALLATIONS SHALL BE PROVIDED IN ACCORDANCE WITH THE CODES OF PRACTICE FOR MINIMUM FIRE SERVICE INSTALLATIONS AND EQUIPMENT AND INSPECTION, TESTING AND MAINTENANCE OF INSTALLATIONS AND EQUIPMENT 2012 (COP 2012), FSD CIRCULAR LETTERS AND THE HONG KONG WATERWORKS STANDARD REQUIREMENTS.
- 1.2 ALL TUBES AND FITTINGS SHALL BE G.M.S. TO BS1387 MEDIUM GRADE WHERE PIPEWORK UP TO ø150mm.
- 1.3 ALL TUBES AND FITTINGS SHALL BE DUCTILE IRON TO BS EN545 K12 WHERE PIPEWORK ABOVE ø150mm.
- 1.4 ALL DRAIN PIPES SHALL BE DISCHARGED TO A CONSPICUOUS POSITION WITHOUT THE POSSIBILITY OF BEING SUBMERGED.
- 1.5 ALL PUDDLE FLANGES SHALL BE MADE OF DUCTILE IRON
- 1.6 THE AGGREGATE AREA OF OPENABLE WINDOWS NOT LESS THAN 6.25% OF THE FLOOR AREA OF THE STRUCTURE
- 1.7 VENTILATION/AIR CONDITIONING SYSTEM NOT TO BE PROVIDED.

2. HOSE REEL SYSTEM

- 2.1 NEW FIRE HOSE REEL SHALL BE PROVIDED AS INDICATED ON PLAN TO ENSURE THAT EVERY PART OF THE BUILDING CAN BE REACHED BY A LENGTH OF NOT MORE THAN 30m HOSE REEL TUBING.
- 2.2 THE WATER SUPPLY FOR HOSE REEL SYSTEM WILL BE FED FROM A NEW 2m<sup>3</sup> F.S. FIBREGLASS WATER TANK VIA TWO HOSE REEL PUMPS (DUTY/STANDBY) LOCATED INSIDE FS PUMP ROOM AT EXTERNAL AREA.
- 2.3 HOSE REEL PUMPS SHALL BE STARTED BY ACTUATION OF ANY BREAKGLASS UNIT FITTED ASIDE EACH HOSE REEL SETS
- 2.4 ALL FIRE HOSE REEL OUTLETS SHOULD BE HOUSED IN GLASS FRONTED CABINET SECURED UNDER LOCK & KEY.
- 2.5 ALL FIRE HOSE REEL SHOULD BE PROVIDED WITH FSD APPROVED TYPE INSTRUCTION PLATE & WSD WARNING PLATE
- 2.6 SECONDARY ELECTRICITY SUPPLY DIRECTLY TEE OFF BEFORE CLP'S INCOMING MAIN SWITCH SHALL BE PROVIDED FOR THE FH/HR PUMPS.

3. AUTOMATIC SPRINKLER SYSTEM

- 3.1 NEW AUTOMATIC SPRINKLER SYSTEM SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH LPC RULES FOR AUTOMATIC SPRINKLER INSTALLATIONS INCORPORATING BS EN 12845: 2003 (INCLUDING TECHNICAL BULLETINS, NOTES, COMMENTAR AND RECOMMENDATIONS) AND FSD CIRCULAR LETTER NOTES, COMMENTAR AND RECOMMENDATIONS) AND FSD CIRCULAR LETTER NO. 3/2006 AND 3/2012. THE CLASSIFICATION OF THE OCCUPANCIES WILL BE ORDINARY HAZARD GROUP III.
- 3.2 ONE NEW 135m<sup>3</sup> SPRINKLER WATER TANK WILL BE PROVIDED AS INDICATED ON PLAN. THE TOWN MAIN WATER SUPPLY WILL BE FED FROM SINGLE END.
- 3.3 TWO NEW SPRINKLER PUMPS (DUTY/STANDBY) AND ONE JOCKEY PUMP SHALL BE PROVIDED IN FS PUMP ROOM LOCATED AT EXTERNAL AREA.
- 3.4 NEW SPRINKLER CONTROL VALVE SET AND SPRINKLER INLET SHALL BE PROVIDED AS INDICATED ON PLAN.
- 3.5 A TEST VALVE SHALL BE PROVIDED FOR EACH ZONE OF SPRINKLER PIPE. THIS VALVE SHALL BE AT A CONSPICUOUS POSITION THAT WATER CAN BE DRAINED AWAY EASILY.
- 3.6 ALL SUBSIDIARY STOP VALVES TO BE ELECTRIC MONITORING TYPE.
- 3.7 ALL ELECTRIC TYPE VALVES SHOULD GIVE VISUAL SIGNALS TO FIRE SERVICE MAIN SUPERVISORY CONTROL PANEL TO INDICATE THE STATUS (OPEN/CLOSE) OF THE VALVES.
- 3.8 SECONDARY ELECTRICITY SUPPLY DIRECTLY TEE OFF BEFORE CLP'S INCOMING MAIN SWITCH SHALL BE PROVIDED FOR THE SPRINKLER PUMPS.
- 3.9 THE SPRINKLER SYSTEM DESIGN IS BASED ON THE FOLLOWINGS:  
 HAZARD CLASS : ORDINARY HAZARD GROUP III  
 TYPE OF STORAGE : POST-PALLET (ST2)  
 STORAGE CATEGORY : CATEGORY 1  
 MAXIMUM STORAGE HEIGHT : 3.5m  
 SPRINKLER PROTECTION : CEILING PROTECTION ONLY

4. FIRE ALARM SYSTEM

- 4.1 NEW FIRE ALARM SYSTEM SHALL BE PROVIDED IN ACCORDANCE WITH BS 5839-1:2002 +A2:2008 AND FSD CIRCULAR LETTERS NO. 1/2009 & 3/2010.
- 4.2 NEW BREAKGLASS UNITS AND FIRE ALARM BELLS SHALL BE PROVIDED AT ALL NEW FIRE HOSE REEL POINTS. THE FIRE ALARM INTALLATION WILL BE INTEGRATED WITH THE HOSE REEL SYSTEM.

5. EMERGENCY LIGHTING

- 5.1 EMERGENCY LIGHTING SHALL BE PROVIDED IN ACCORDANCE WITH 'BS 5266-PART 1 :2011 AND BS EN 1838 :2013', COVERING ALL AREA. EMERGENCY LIGHTINGS SHALL BE BACKED UP BY BUILT-IN BATTERY AND CAPABLE OF MAINTAINING FUNCTION OF NOT LESS THAN 2 HOURS IN CASE OF POWER FAILURE

6. EXIT SIGN

- 6.1 ALL EXIT SIGNS/DIRECTIONAL EXIT SIGNS SHALL BE PROVIDED IN ACCORDANCE WITH 'BS 5266-PART 1 :2011 AND FSD CIRCULAR LETTER NO. 5/2008, FOR THE BUILDING. EXIT SIGNS/DIRECTIONAL EXIT SIGNS SHALL BE BACKED UP BY BUILT-IN BATTERY AND CAPABLE OF MAINTAINING FUNCTION OF NOT LESS THAN 2 HOURS IN CASE OF POWER FAILURE.

7. PORTABLE APPLIANCES

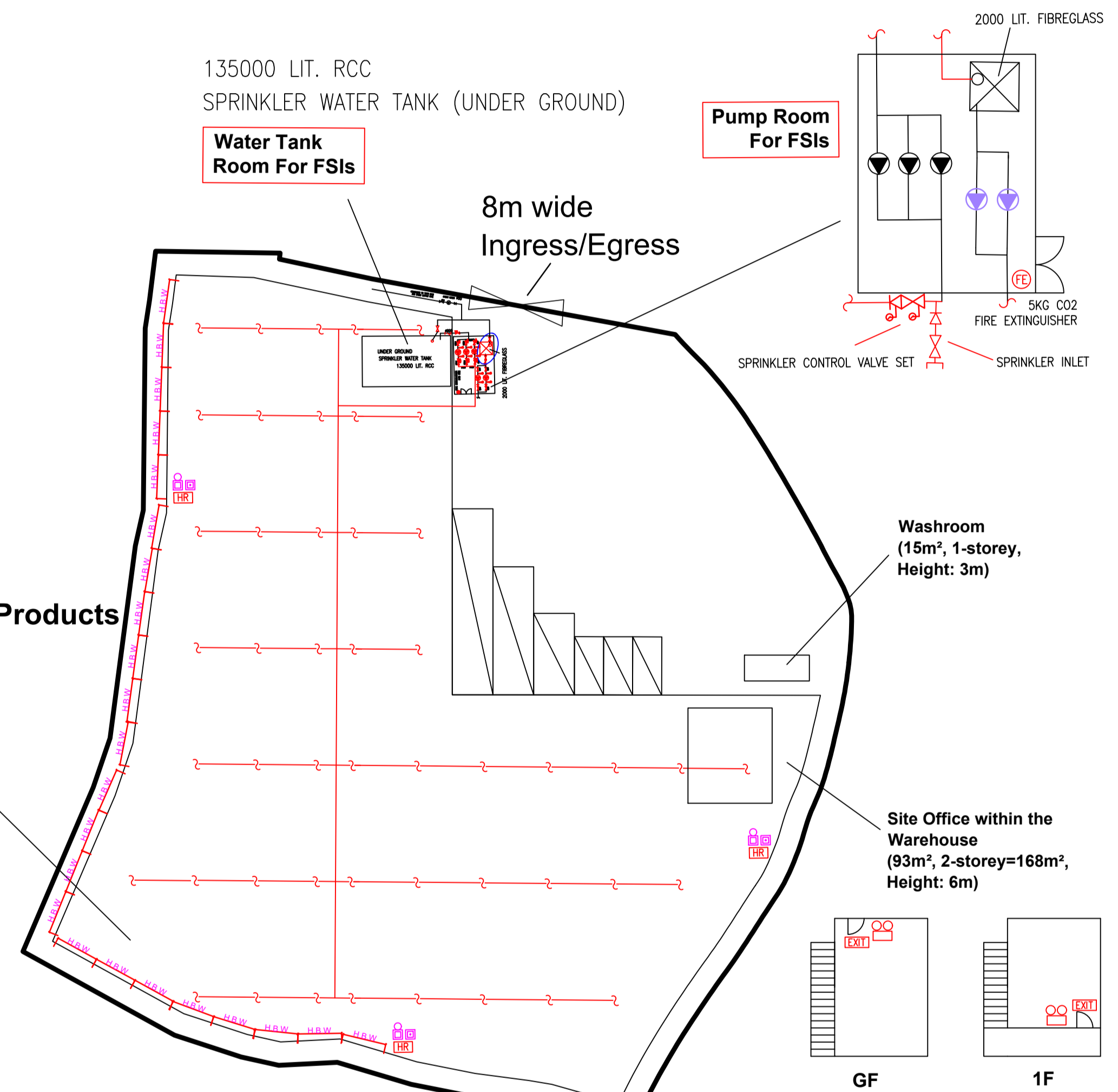
- 7.1 PORTABLE HAND OPERATED APPLIANCES SHALL BE PROVIDED AS INDICATED ON PLAN.

LEGEND

HOSE REEL	EMERGENCY LIGHT	5KG CO2 FIRE EXTINGUISHER	SPRINKLER HEAD (ON PLAN)
BREAK GLASS UNIT	EXIT SIGN	SPRINKLER CONTROL VALVE SET	PUMP SET
FIRE ALARM BELL	SUBSIDIARY VALVE / FLOW SWITCH	SPRINKLER INLET	

**Structure 1 Openable Windows Calculation**  
 Area of Structure 1 = 2571 sq.m.  
 Area of High Bay Window (H.B.W.) = 2.0m(H) x 85m(total length) = 170 sq.m.  
 Total openable window area = 170 sq.m.  
 = 6.61% of floor area

**Structure 1 Warehouse for Storage of Construction Materials and Electronic Products (2,571m<sup>2</sup>, 1-storey, Height: 12m)**



PROJECT : <b>Proposed Temporary Warehouse for Storage of Construction Materials and Electronic Products for a period of 3 years at Lot 4 S.A S.B S.C 6SB in D.D. 84</b>	DRAWING TITLE : <b>F.S. Notes, Legend, Fire Service Installation Layout Plan</b>	ARCHITECT :	CONSULTANT :	FIRE SERVICE CONTRACTOR : <b>Century Fire Service Engineering Co., Ltd.</b>	DRAWN BY	NAME	DATE	DRAWING NO : <b>FS-01</b>	REV. <b>0</b>
					CHECKED BY	C.K.NG	15 JAN 2023		
					APPROVED BY			SOURCE : B.O.O. Ref. BD F.S.D. Ref. FP	
REV	DESCRIPTION	DATE							