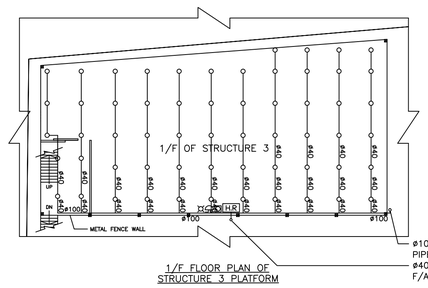
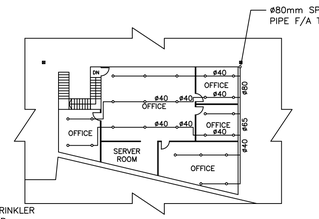


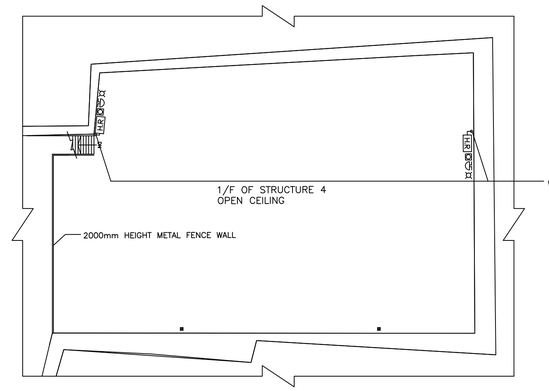
2/F FLOOR PLAN OF STRUCTURE 3 PLATFORM



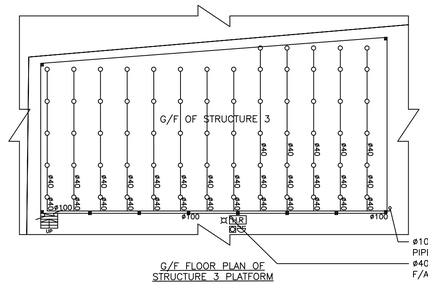
1/F FLOOR PLAN OF STRUCTURE 3 PLATFORM



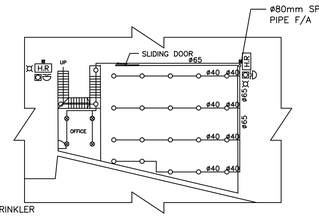
1/F FLOOR PLAN OF STRUCTURE 2



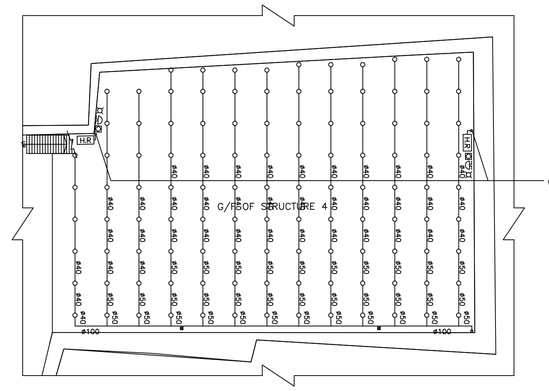
1/F FLOOR PLAN OF STRUCTURE 4 PLATFORM



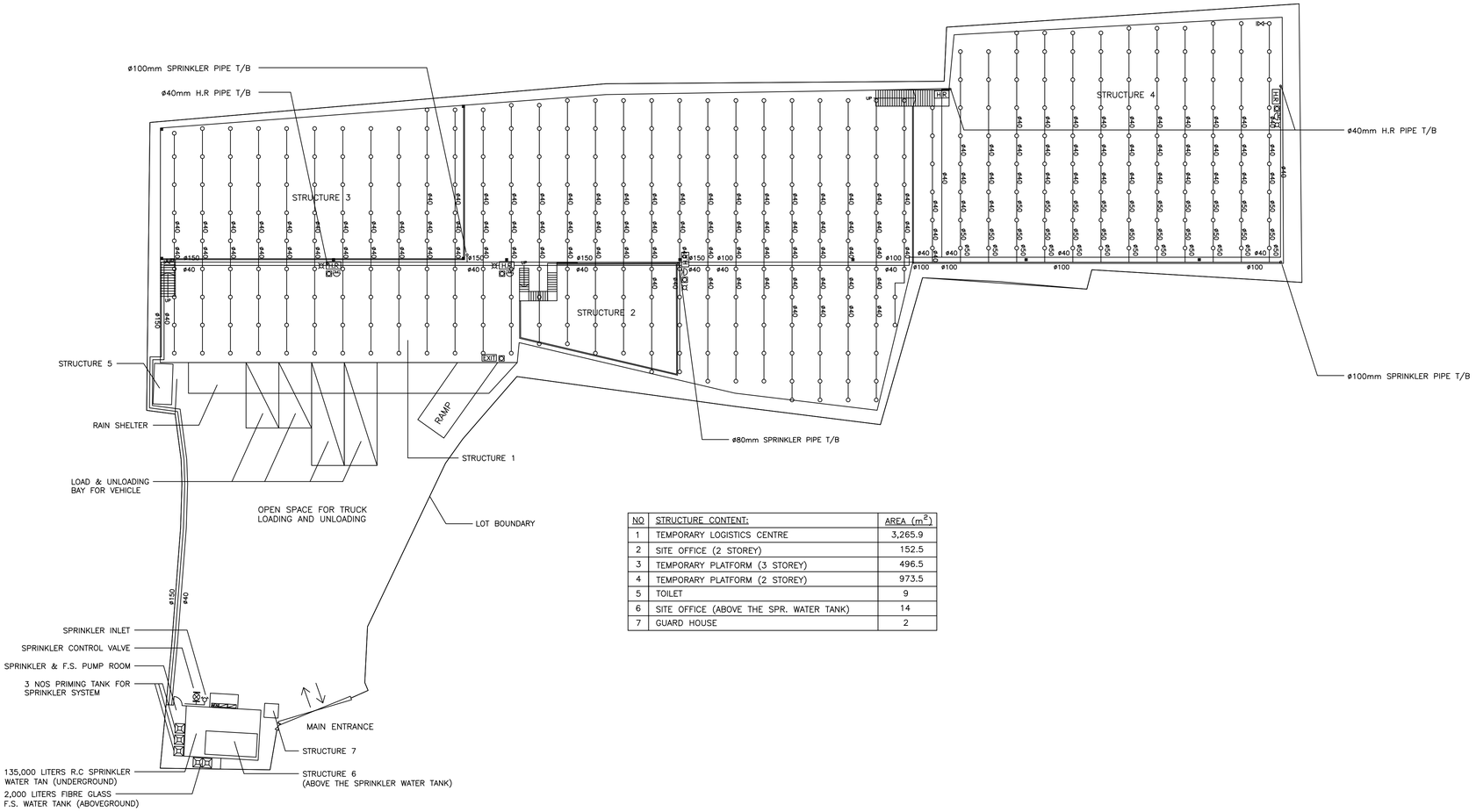
G/F FLOOR PLAN OF STRUCTURE 3 PLATFORM



G/F FLOOR PLAN OF STRUCTURE 2



G/F FLOOR PLAN OF STRUCTURE 4 PLATFORM



NO	STRUCTURE CONTENT:	AREA (m^2)
1	TEMPORARY LOGISTICS CENTRE	3,265.9
2	SITE OFFICE (2 STOREY)	152.5
3	TEMPORARY PLATFORM (3 STOREY)	496.5
4	TEMPORARY PLATFORM (2 STOREY)	973.5
5	TOILET	9
6	SITE OFFICE (ABOVE THE SPR. WATER TANK)	14
7	GUARD HOUSE	2

REV	DESCRIPTION	DATE	BY
B	FSD COMMENT	27-03-2018	HY
A	FSD SUBMISSION	20-11-2017	HY

FSI CONTRACTOR

East Power Engineering Limited
Flat A, 7/F., Hop Shing Commercial Building,
41 Chi Kiang Street, Tokwawan, Kowloon
Fax. : 2394-3772 Tel. : 2397-3238

PROJECT

FIRE SERVICES INSTALLATION WORK AT LOTS 805 S.B RP, 807 RP, 808 RP, 809 RP(PART), 813 RP(PART), 814 RP(PART), 815 (PART) AND 816 S.B RP(PART) IN D.D. 125 AND ADJOINING GOVERNMENT LAND, HA TSUEN, YUEN LONG, NEW TERRITORIES

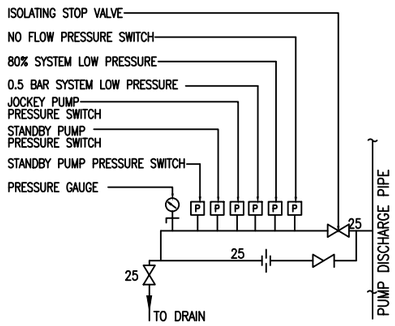
DRAWING TITLE

FIRE SERVICES INSTALLATION LAYOUT PLAN

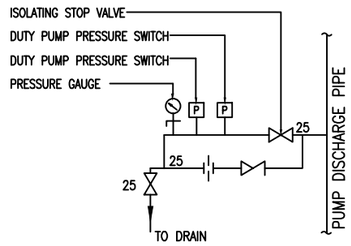
	INITIAL	DESIGNATION	DATE
DRAWN BY	HY	A. ENG	17-11-2017
DESIGN BY	CM	PM	17-11-2017
CHECK BY	CM	PM	17-11-2017
APPROVED BY	--	--	--
PROJECT NO.	10327		
PAPER SIZE	A1	PLOT SCALE	1 : 1
DRAWING NO.	EP-10327-FS02		
SCALE	1 : 300 @A1	REVISION	B

PUMP SCHEDULE

DESCRIPTION	PRESSURE (BAR)	FLOW (L/MIN.)	PUMP SPEED (RPM)	PUMP RATING (KW)	POWER SUPPLY (volts/phases/Hz)
SPRINKLER JOCKEY PUMP (SJP-1)	5	60	2900 MAXIMUM	2.2 KW	380/3/50
TWO SPRINKLER PUMPS (SP-1 AS DUTY & SP-2 AS STAND-BY PUMP)	1.4 / 2.9 / 3.2	2250 / 1350 / 1100	2900 MAXIMUM	18.5 KW	380/3/50



DETAIL 'F' PRESSURE SWITCH ASSEMBLY ARRANGEMENT FOR SPRINKLER JOCKEY PUMP



DETAIL 'G' PRESSURE SWITCH ASSEMBLY ARRANGEMENT FOR SPRINKLER DUTY/STANDBY PUMP

CALCULATION OF SPRINKLER PIPE PRESSURE LOSS FOR SPR. CONTROL VALVE SET

RUN OF DISTRUBTION PIPE FROM CONTROL VALVE TO DESIGN POINT	PIPE SIZE (mm)	PIPE LENGTH (m)	FITTINGS	NOS.	EQU. LENGTH OF FITTINGS	TOTAL EQUIV. LENGTH OF FITTINGS	TOTAL EQUIV PIPE LENGTH
PIPE TO DESIGN POINT D	150	40.2	TEE	0			68.2
			GATE VALVE	2	1.1	2.2	
			90° ELBOW	6	4.3	25.8	
PIPE TO DESIGN POINT D	100	54.8	TEE	0			54.8
			GATE VALVE	0			
			90° ELBOW	0			

REMARK:

IN ALL SECTIONS THE PRESSURE LOSS IN THE DISTRIBUTION PIPE IS LESS THAN 500 mb (0.5 BAR)
THE CALCULATION OF PIPE FRICTION LOSS IS BASED ON HAZEN-WILLIAMS FORMULA

$$P_1 = \frac{6.05 \times 10^5}{C^{1.85} X\ d^{4.87}} X\ L\ X\ Q^{1.85} \quad \text{(FOR 150mm)}$$

$$P_1 = (0.3\ X\ 10^{-8})\ X\ L\ X\ Q^{1.85}$$

$$P_1 = 0.053\ \text{BAR}$$

$$P_2 = \frac{6.05 \times 10^5}{C^{1.85} X\ d^{4.87}} X\ L\ X\ Q^{1.85} \quad \text{(FOR 100mm)}$$

$$P_2 = (1.5\ X\ 10^{-8})\ X\ L\ X\ Q^{1.85}$$

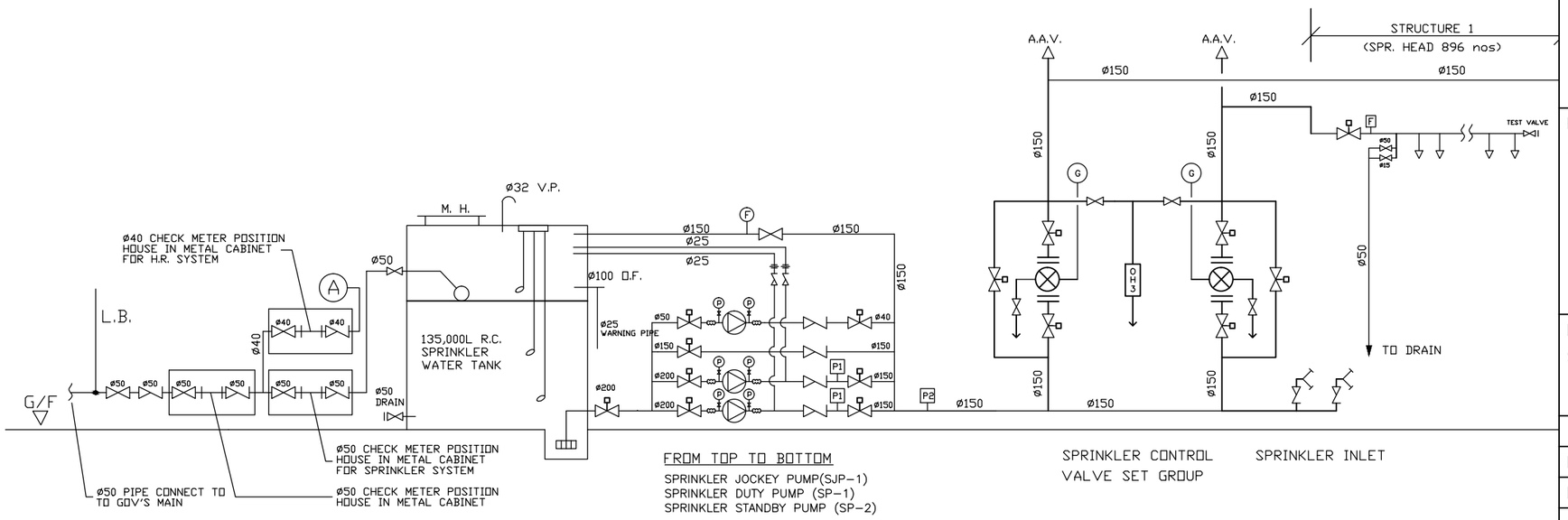
$$P_2 = 0.304\ \text{BAR}$$

TOTAL PRESSURE LOSS IN DISTRIBUTION PIPE FORM SPRINKLER CONTROL VALVE TO DESIGN POINT:

$$P = P_1 + P_2$$

$$P = 0.053 + 0.304$$

$$P = 0.357\ \text{(LESS THAN 0.5 BAR)}$$



SPRINKLER SYSTEM SCHEMATIC DIAGRAM

REV	DESCRIPTION	DATE	BY

FSI CONTRACTOR

East Power Engineering Limited

Flat A, 7/F., Hop Shing Commercial Building
41 Chi Kiang Street, Tokwawan, Kowloon
Fax. : 2394-3772 Tel. : 2397-3238

PROJECT

D.D. 129 , YUEN LONG, N.T.

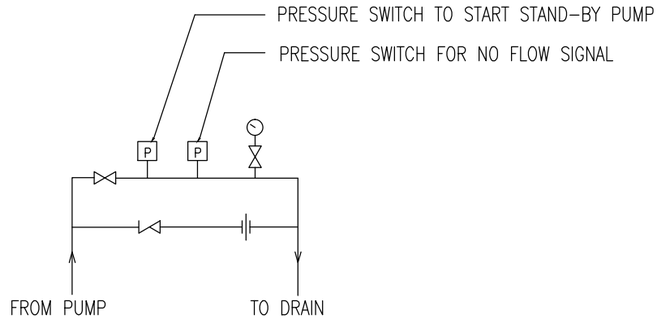
DRAWING TITLE

SCHEMATIC DIAGRAM FOR SPRINKLER SYSTEM

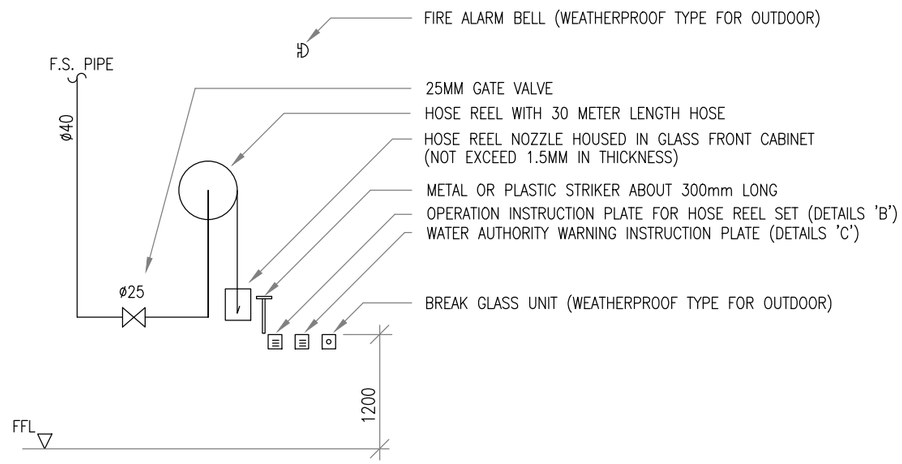
	INITIAL	DESIGNATION	DATE
DRAWN BY	HY	Eng.T	18-03-2016
DESIGNED BY	HY	Eng.T	18-03-2016
CHECKED BY	CM	PM	18-03-2016
APPROVED BY	-	-	-
PROJECT NO.	10270		
PAPER SIZE	A3	PLOT SCALE	1 : 1
DRAWING NO.	EP-10128-FS03		
SCALE	N. T. S.	REVISION	A

PUMP SCHEDULE

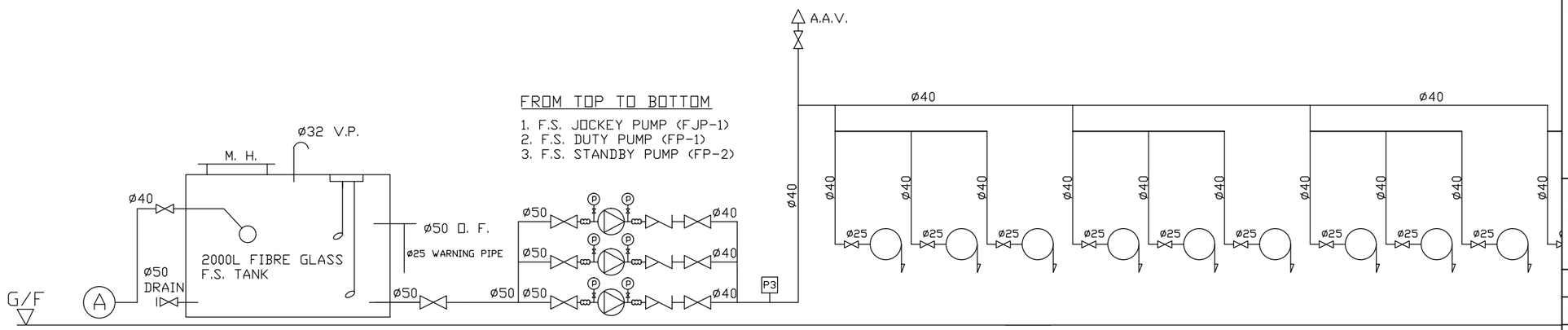
DESCRIPTION	PRESSURE (BAR)	FLOW (L/MIN.)	PUMP SPEED (RPM)	PUMP RATING (KW)	POWER SUPPLY (volts/phases/Hz)
TWO FIRE SERVICES PUMPS (FP-1 AS DUTY & FP-2 AS STANDBY PUMP)	5	60	2900 MAXIMUM	2.2KW	380/3/50



DETAIL ARRANGEMENT FOR 'P3'



TYPICAL ARRANGEMENT OF HOSE REEL



SCHEMATIC DIAGRAM FOR HOSE REEL SYSTEM

REV	DESCRIPTION	DATE	BY

FSI CONTRACTOR

East Power Engineering Limited

Flat A, 7/F., Hop Shing Commercial Building
41 Chi Kiang Street, Tokwawan, Kowloon

Fax. : 2394-3772 Tel. : 2397-3238

PROJECT

D.D. 129 , YUEN LONG, N.T.

DRAWING TITLE

SCHEMATIC DIAGRAM FOR HOSE REEL SYSTEM

	INITIAL	DESIGNATION	DATE
DRAWN BY	HY	Eng.T	18-03-2016
DESIGNED BY	HY	Eng.T	18-03-2016
CHECKED BY	CM	PM	18-03-2016
APPROVED BY	-	-	-
PROJECT NO.	10270		
PAPER SIZE	A3	PLOT SCALE	1 : 1
DRAWING NO.	EP-10128-FS04		
SCALE	N. T. S.	REVISION	A