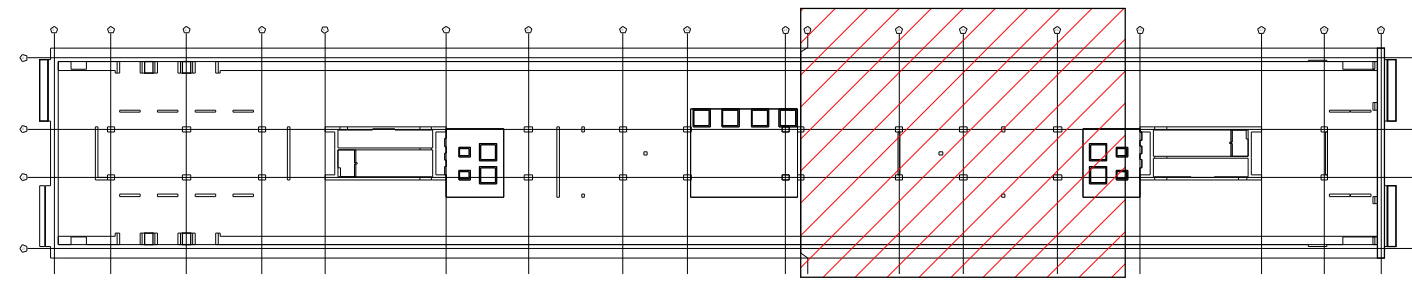
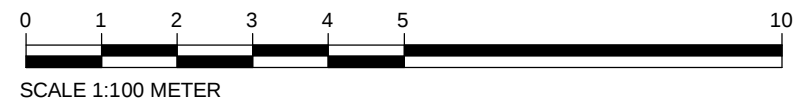
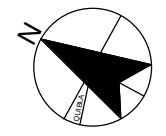
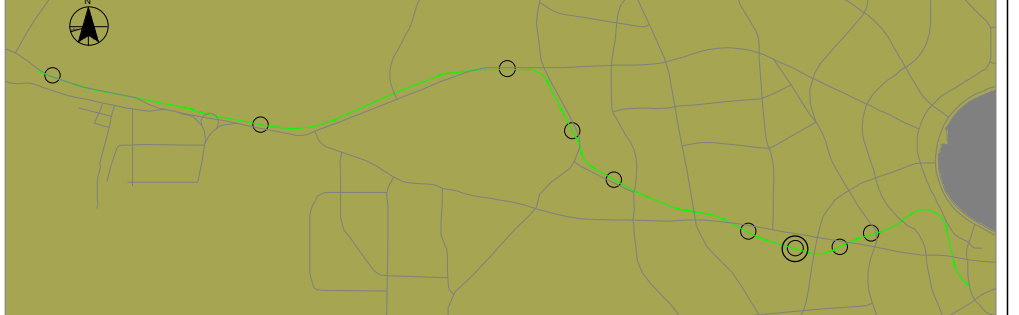


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KEY PLAN



NOTES

- ALL DIMENSIONS ARE IN MILLIMETER UNLESS OTHERWISE SPECIFIED. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS AND PROJECT SPECIFICATIONS.
- FIRE FIGHTING PIPE, FITTINGS AND ALL ITEMS SHALL BE UL/FM AND QCDD APPROVED.
- SPRINKLER PIPING SHALL BE SUPPORTED INDEPENDENTLY OF THE CEILING SHEATHING.
- WHERE SPRINKLER PIPING IS INSTALLED BELOW DUCTWORK, PIPING SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE SEPARATELY.
- THERE SHALL NOT BE LESS THAN ONE HANGER FOR EACH SECTION OF PIPE. THE DISTANCE BETWEEN A HANGER AND THE CENTERLINE OF AN UPRIGHT SPRINKLER SHALL NOT BE LESS THAN 76 MM.
- RISERS SHALL BE SUPPORTED BY PIPE CLAMPS OR BY HANGERS LOCATED ON THE HORIZONTAL CONNECTIONS WITHIN 600 MM OF THE CENTERLINE OF THE RISER.
- DISTANCE BETWEEN SUPPORTS FOR RISER IN VERTICAL SHAFTS OR HIGH BAY AREAS SHALL NOT EXCEED 7.6 M.
- HOSE REELS AND HOSES SHALL BE INSTALLED IN LOCATIONS AS STATED IN THE PROJECT DOCUMENTATION UNLESS OTHERWISE DIRECTED BY THE CIVIL DEFENSE DEPARTMENT.
- PIPE WORK UP TO AND INCLUDING 50MM IN DIAMETER SHALL HAVE MALLEABLE IRON THREADED FITTING.
- ALL CONNECTIONS TO EQUIPMENT ARE VIA DISMANTLING DIELECTRIC UNIONS AND PIPE WORK OVER 50MM IN DIAMETER SHALL BE JOINED BY PROPRIETARY GROOVED JOINTING SYSTEM AND FLANGED JOINTS AT COMPONENT AND EQUIPMENT CONNECTIONS.

REFERENCES:

- M008-ARE-ARC-MD3-GWST050-CL-00101.S4.P7
M008-ARE-ARC-MD3-GWST050-ZZ-00101.S4.P11
M008-HLQ-MEP-MD3-GWST050-PL-00101.RVT
M008-SSF-ARC-MD3-GWST050-CL-00301.S3.P16
M008-SSF-ARC-MD3-GWST050-ZZ-00101.S3.P19
M008-SSF-STR-MD3-GWST050-CL-00301.S3.P14
M008-SSF-STR-MD3-GWST050-ZZ-00101.S3.P24

SCHEMATICS AND DETAIL INSTALLATION REFERENCES:

- M008-RGP-FRS-DWG-GWST050-AA-10031-35
M008-HLQ-FRS-DWG-GWST050-AA-10001-02

LEGENDS / ABBREVIATIONS

ABBREVIATIONS	DESCRIPTIONS
FDC	FIRE DEPARTMENT CONNECTION
SPR	SPRINKLER PIPE
FPA	FIRE PREACTION SPRINKLER PIPE
FTD	FIRE TEST DRAIN PIPE
FSP	FIRE STAND PIPE
FMP	FIRE MAIN PIPE
FHC	FIRE HOSE CABINET
ZCV	ZONE CONTROL VALVE
ELBOW GOING UP	
ELBOW GOING DOWN	
PIPE RISER	
MGV	MOTORIZED GATE VALVE
BOP	BOTTOM OF PIPE
CGS	CLEAN GAS SUPPRESSION PIPE
UP	PIPE OFFSET UP
DN	PIPE OFFSET DN
T/A	TO ABOVE
F/A	FROM ABOVE
T/B	TO BELOW
F/B	FROM BELOW
RN	RISER NIPPLE

C2	ISSUED FOR CONSTRUCTION	MH	30-12-2017	JF	30-12-2017	IM	30-12-2017
C1	ISSUED FOR CONSTRUCTION APPROVAL	NN	13-11-2016	IM	13-11-2016	MN	13-11-2016

SCALES@A1	ISSUING OFFICE	PROJECT NUMBER
1:100	DOHA	M008

CLIENT APPROVAL	A - APPROVED
	B - APPROVED WITH COMMENTS
	C - DO NOT USE

STATUS	PURPOSE OF ISSUE
S4	FOR CONSTRUCTION APPROVAL

CONTRACTOR
PORR - SBG - HBK JOINT VENTURE
P.O. BOX 207471 DOHA
QATAR

CONSULTANT:
HOARE LEA QATAR LLC
P.O. BOX 201834 DOHA
QATAR

SUB CONTRACTOR
PSC S.P.A.
Viale Schiavonelli
27018 - 00173 ROMA
TEL: 06/72630488
FAX: 06/72613393
Website: www.pscgroup.com
QATAR - ITALY

PROJECT
DESIGN & BUILD PACKAGE 4
GREEN LINE UNDERGROUND

TITLE
SHOP DRAWINGS STATION - AL RAYYAN / AL QADEEM UNDER PLATFORM LEVEL - FIRE PROTECTION SERVICES (STATION CENTRAL EAST)

CLIENT
QATAR RAILWAYS COMPANY
P.O. BOX 29988 DOHA
QATAR

DRAWING NUMBER
M008-RGP-FRS-DWG-GWST050-UL-10002

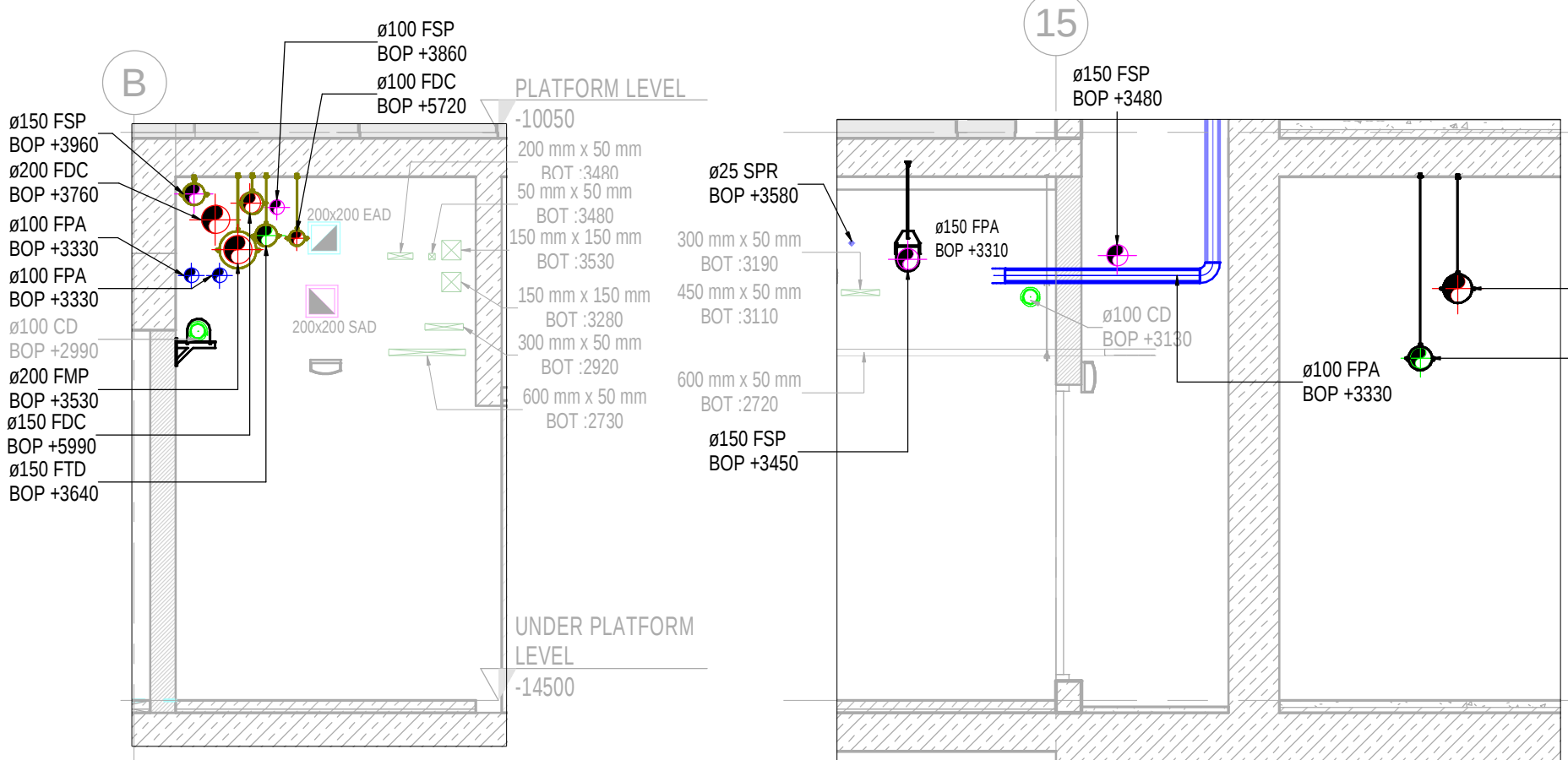
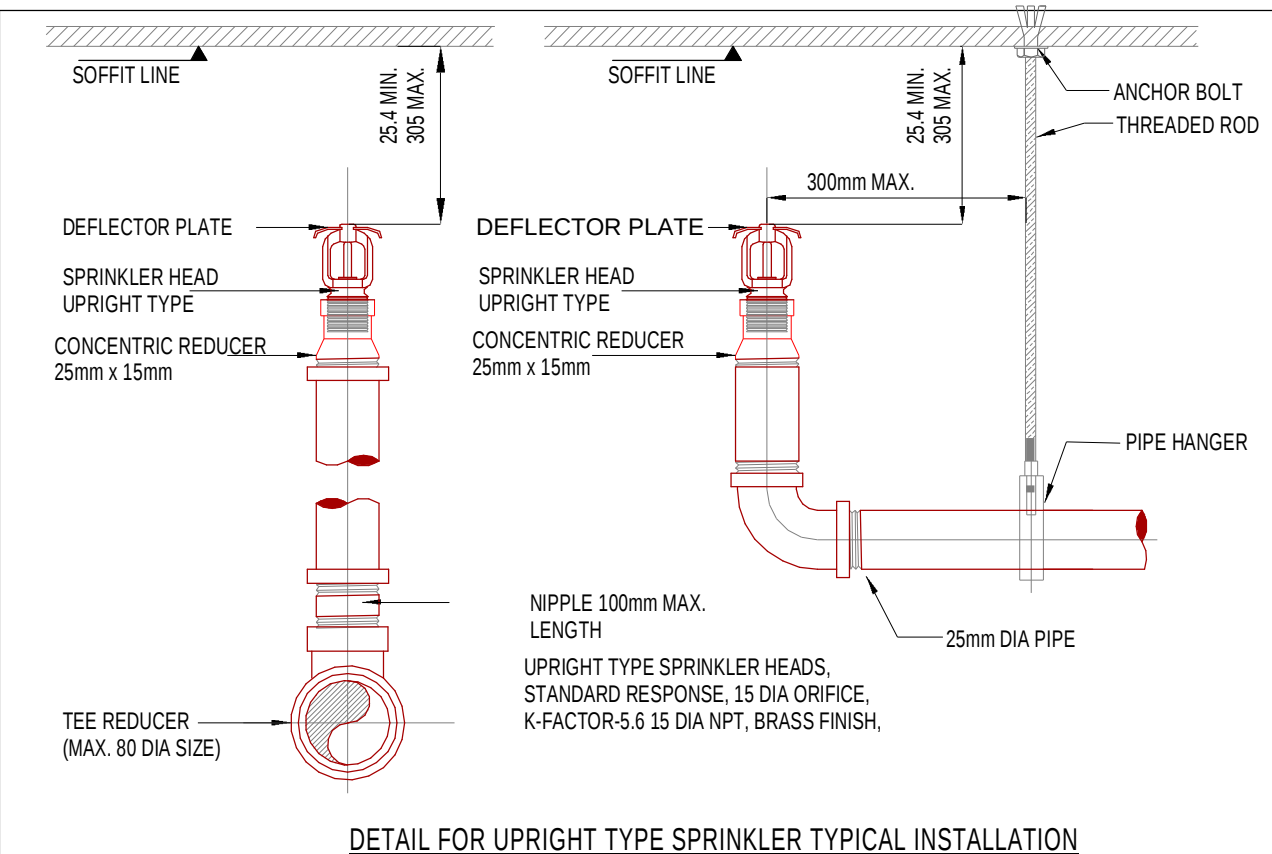
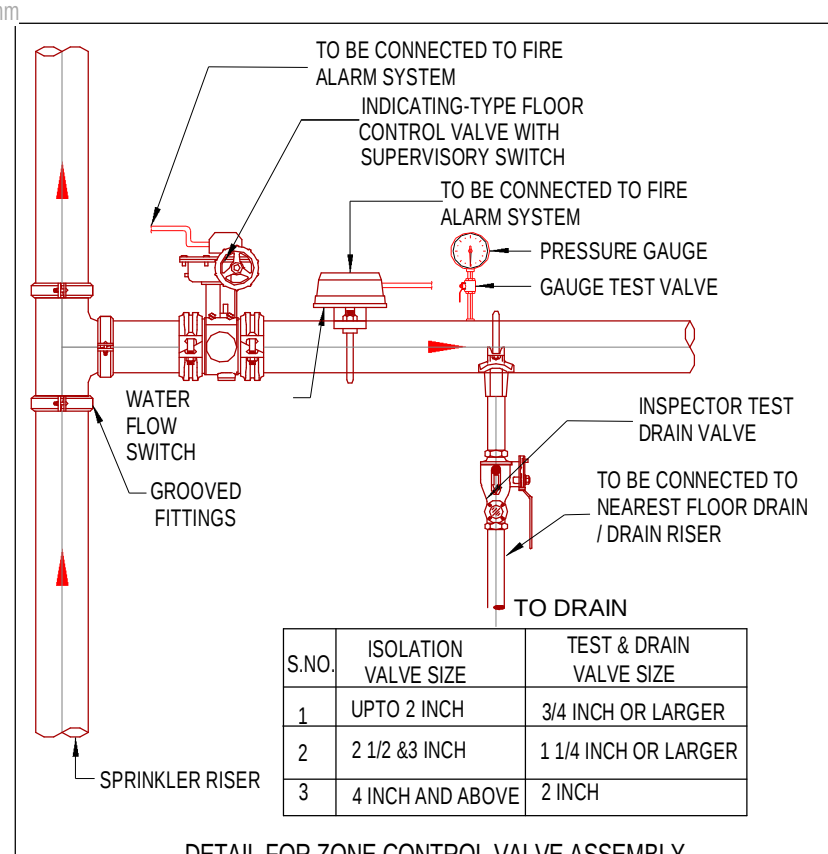
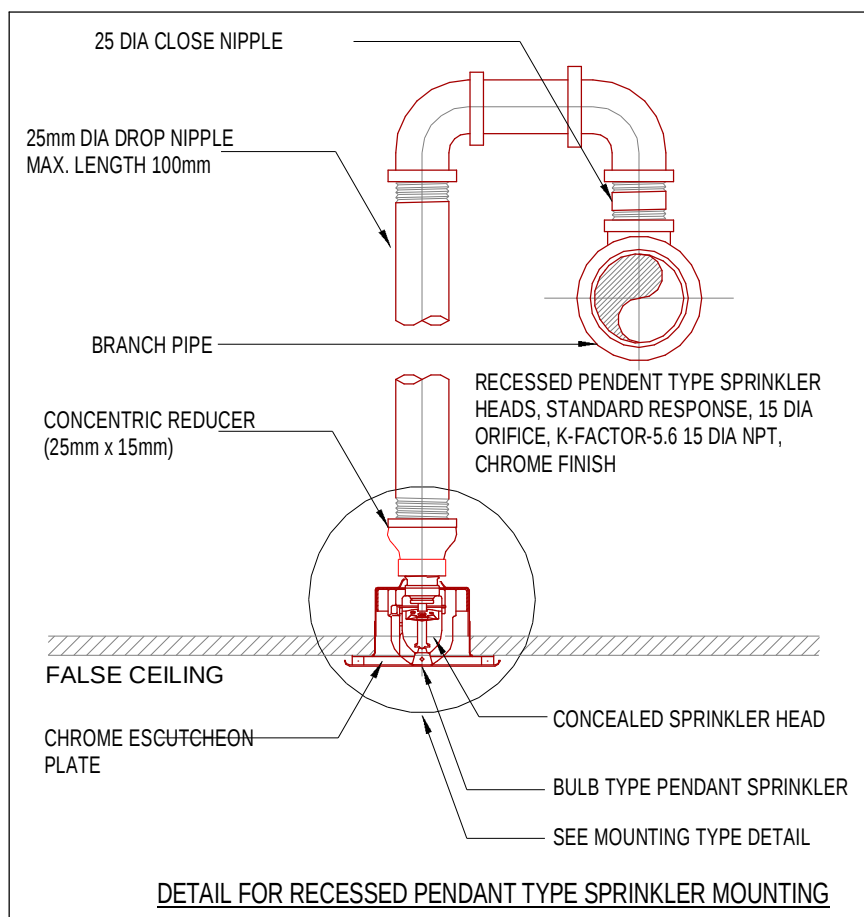
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SHOP DRAWINGS STATION - AL RAYYAN / AL QADEEM UNDER PLATFORM LEVEL - FIRE PROTECTION SERVICES (STATION CENTRAL EAST)

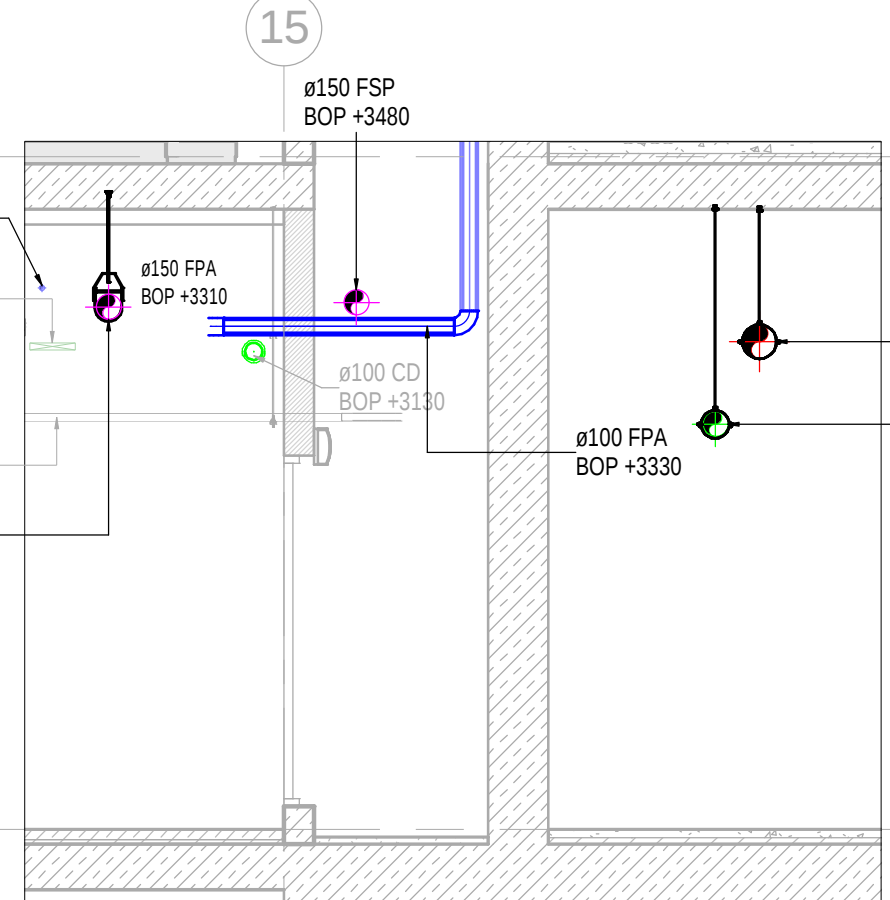
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DETAILS OF FIRE PIPE HANGERS AS PER NFPA

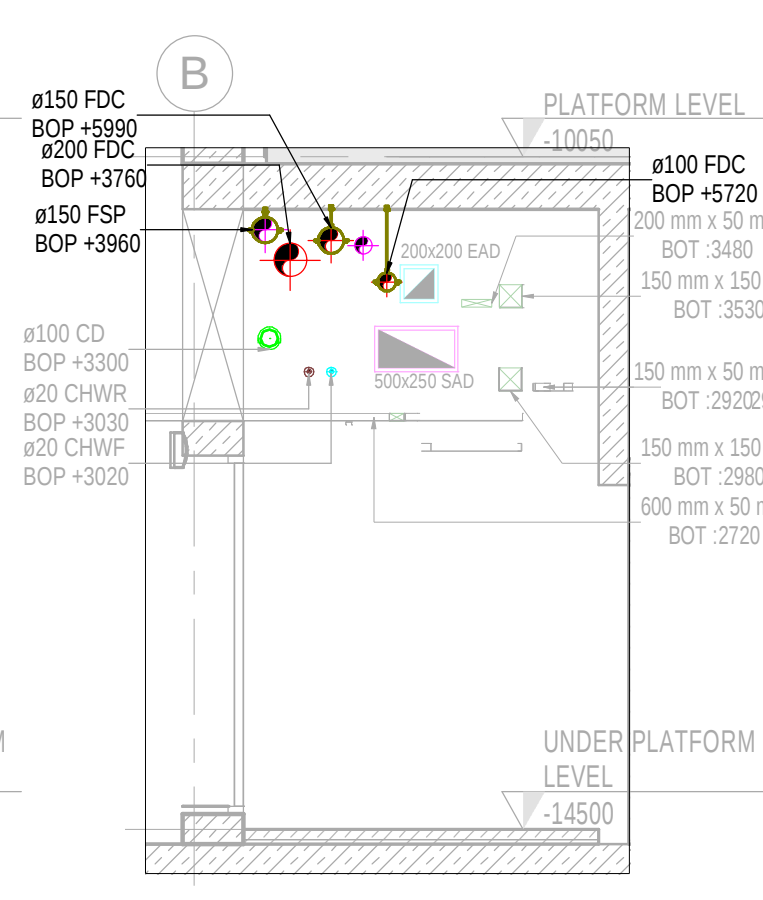
ITEM	PIPE SIZE	PIPE SUPPORT SCHEDULE		ROD & ANCHOR SCHEDULE	
		MAXIMUM SPACING BETWEEN SUPPORTS	MAXIMUM SPACING OF SUPPORTS TO A SPRINKLER	THREADED ROD SIZE	EXPANSION ANCHOR SIZE
1	250	3.7 m	0.90 m	M10	M10
2	320	3.7 m	1.20 m	M10	M10
3	400	4.6 m	1.50 m	M10	M10
4	500	4.6 m	1.50 m	M10	M10
5	650	4.6 m	1.50 m	M10	M10
6	800	4.6 m	1.50 m	M10	M10
7	1000	4.6 m	1.50 m	M10	M10
8	1250	4.6 m	1.50 m	M12	M12
9	1500	4.6 m	1.50 m	M12	M12
10	2000	4.6 m	1.50 m	M12	M12
11	2500	4.6 m	1.50 m	M16	M16
12	3000	4.6 m	1.50 m	M16	M16



SECTION-FH
SCALE : 1:50



SECTION-FI
SCALE : 1:50



SECTION-FJ
SCALE : 1:50