

BOILER SCHEDULE											
NO	TYPE	FUEL	NET OUTPUT (kW)	EFFICIENCY (%)	FLUE SIZE (MM)	WATER CONNECTIONS (MM)		ELECTRICAL			REMARKS
						V	PH	V	PH	HZ	
B-1	150 BHP CAPACITY COIL TUBE HOT WATER BOILER	#2 OIL	1472	80%	406	100		575	3	60	FORCED CIRCULATION, MULTI-COILED TUBE, FORCE DRAFT FIRED PACKAGED (WATER) COIL TUBE BOILER C/W FULLY MODULATING BURNER WITH 10:1 TURNDOWN, CENTRAL CONTROL PANEL, AND INTEGRATED ATOMIZING AIR COMPRESSOR. BOILER SHALL BE ABLE TO BE PARTIALLY DISASSEMBLED PRIOR TO DELIVERY SO THAT MAXIMUM DIMENSIONS ARE 2000mm H x 1725mm W.
B-2	150 BHP CAPACITY COIL TUBE HOT WATER BOILER	#2 OIL	1472	80%	406	100		575	3	60	FORCED CIRCULATION, MULTI-COILED TUBE, FORCE DRAFT FIRED PACKAGED (WATER) COIL TUBE BOILER C/W FULLY MODULATING BURNER WITH 10:1 TURNDOWN, CENTRAL CONTROL PANEL, AND INTEGRATED ATOMIZING AIR COMPRESSOR. BOILER SHALL BE ABLE TO BE PARTIALLY DISASSEMBLED PRIOR TO DELIVERY SO THAT MAXIMUM DIMENSIONS ARE 2000mm H x 1725mm W.

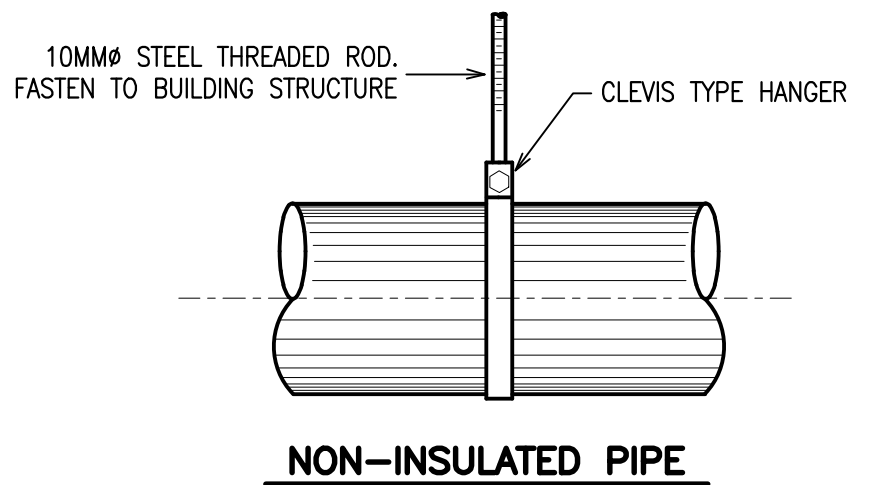
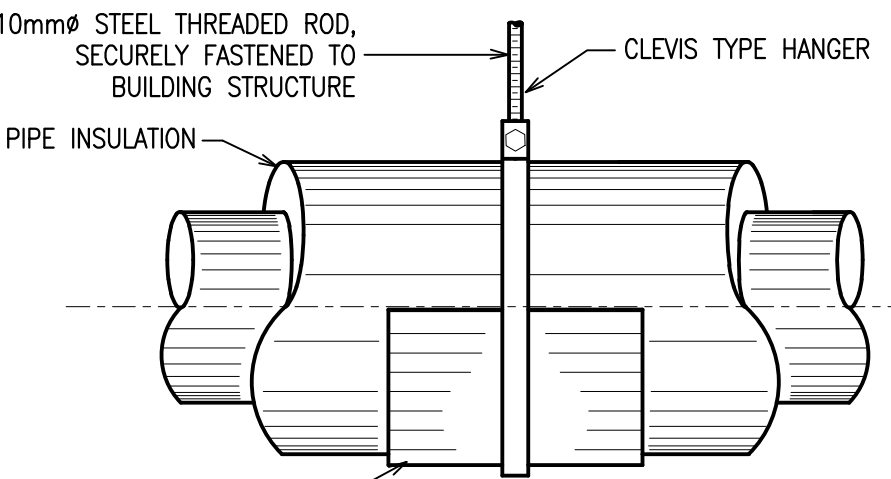
PUMP SCHEDULE										
NO	SERVICE	DESCRIPTION	CAPACITY			ELECTRICAL				REMARKS
			FLOW (L/S)	HEAD (M)	RPM	KW	V	PH	HZ	
CR-1	NEW HOT WATER PRIMARY PUMP	BASE MOUNTED CENTRIFUGAL PUMP	60.86	4.57	1200	5.6	575	3	60	C/W TRIPLE DUTY VALVE, SUCTION GUIDE, STRAINER & FLEX CONNECTOR. TEFC INVERTER DUTY PREMIUM EFFICIENCY MOTOR & VFD
CR-2	NEW HOT WATER PRIMARY PUMP	BASE MOUNTED CENTRIFUGAL PUMP	60.86	4.57	1200	5.6	575	3	60	C/W TRIPLE DUTY VALVE, SUCTION GUIDE, STRAINER & FLEX CONNECTOR. TEFC INVERTER DUTY PREMIUM EFFICIENCY MOTOR & VFD
CR-3	HOT WATER SUPPLY CIRCULATOR	BASE MOUNTED CENTRIFUGAL PUMP	44.16	24.3	1800	18.7	575	3	60	C/W TRIPLE DUTY VALVE, SUCTION GUIDE, STRAINER & FLEX CONNECTOR. TEFC INVERTER DUTY PREMIUM EFFICIENCY MOTOR & VFD
CR-4	HOT WATER SUPPLY CIRCULATOR	BASE MOUNTED CENTRIFUGAL PUMP	44.16	24.3	1800	18.7	575	3	60	C/W TRIPLE DUTY VALVE, SUCTION GUIDE, STRAINER & FLEX CONNECTOR. TEFC INVERTER DUTY PREMIUM EFFICIENCY MOTOR & VFD
FP-1	BOILER FUEL OIL SUPPLY	FUEL OIL PUMP	0.095	10.6	1725	.25	115	1	60	C/W AUTOMATIC CONTROLS WITH LEAD-LAG SWITCH AND ALARM, SINGLE POINT ELECTRICAL CONNECTION, AND CONTROL PANEL
FP-2	BOILER FUEL OIL SUPPLY	FUEL OIL PUMP	0.095	10.6	1725	.25	115	1	60	C/W AUTOMATIC CONTROLS WITH LEAD-LAG SWITCH AND ALARM, SINGLE POINT ELECTRICAL CONNECTION, AND CONTROL PANEL

EXPANSION TANK SCHEDULE									
No.	SERVICE	TYPE	PIPE SIZE (mm)	TANK VOL. (L)	ACCEPTANCE (L)	MAX. PRESS. (kPa)	SYS. PRESS. (kPa)	PRE-CHARGE (kPa)	REMARKS
ET-1 ET-2 ET-3	HOT WATER HEATING	FIXED BLADDER	32	1514	607	207	103	83	C/W SADDLES FOR HORIZONTAL MOUNTING, NPT SYSTEM CONNECTION, GAUGE TAPPINGS AND DRAIN, FACTORY CHARGE AND CHARGING VALVE, AND MINIMUM 50mm THICK INSULATION W/ CANVAS JACKET

SYSTEM FEED WATER TANK SCHEDULE										
NO	SERVICE	MAX. LIQUID TEMP (°C)	VOLUME (L)	PUMP CAPACITY (L/S)		ELECTRICAL				REMARKS
				Ø FREE FLOW	Ø 345 kPa	AMP	V	PH	HZ	
FT-1	HOT WATER HEATING	77	383	.09	.06	.7	115	1	60	C/W COVER, PUMP, INLET STRAINER, INTEGRAL PRESSURE SWITCH, FUSED POWER SUPPLY ADAPTER 24 VDC, 50W (OUTLET BY ELECTRICAL), ALARM PANEL W/ DRY CONTACTS AND AUDIBLE ALARM FOR CONNECTION TO BMS AND REDUCED PRESSURE BACKFLOW PREVENTOR.

AIR SEPARATOR SCHEDULE						
NO	SERVICE	VOLUME (L)	CAPACITY (M3/HR)	MAX. LIQUID TEMP (°C)	MAX. WORKING PRESSURE (kPa)	INLET/OUTLET CONNECTIONS (MM)
AS-1	HOT WATER HEATING	341	431.5	177	862	203

CENTRIFUGAL TYPE CONSTRUCTED TO ASME SECTION VIII, DIV. 1. C/W FLANGED CONNECTIONS, AIR VENT, BLOW DOWN CONNECTION, AND MINIMUM 50mm THICK INSULATION W/ CANVAS JACKET.



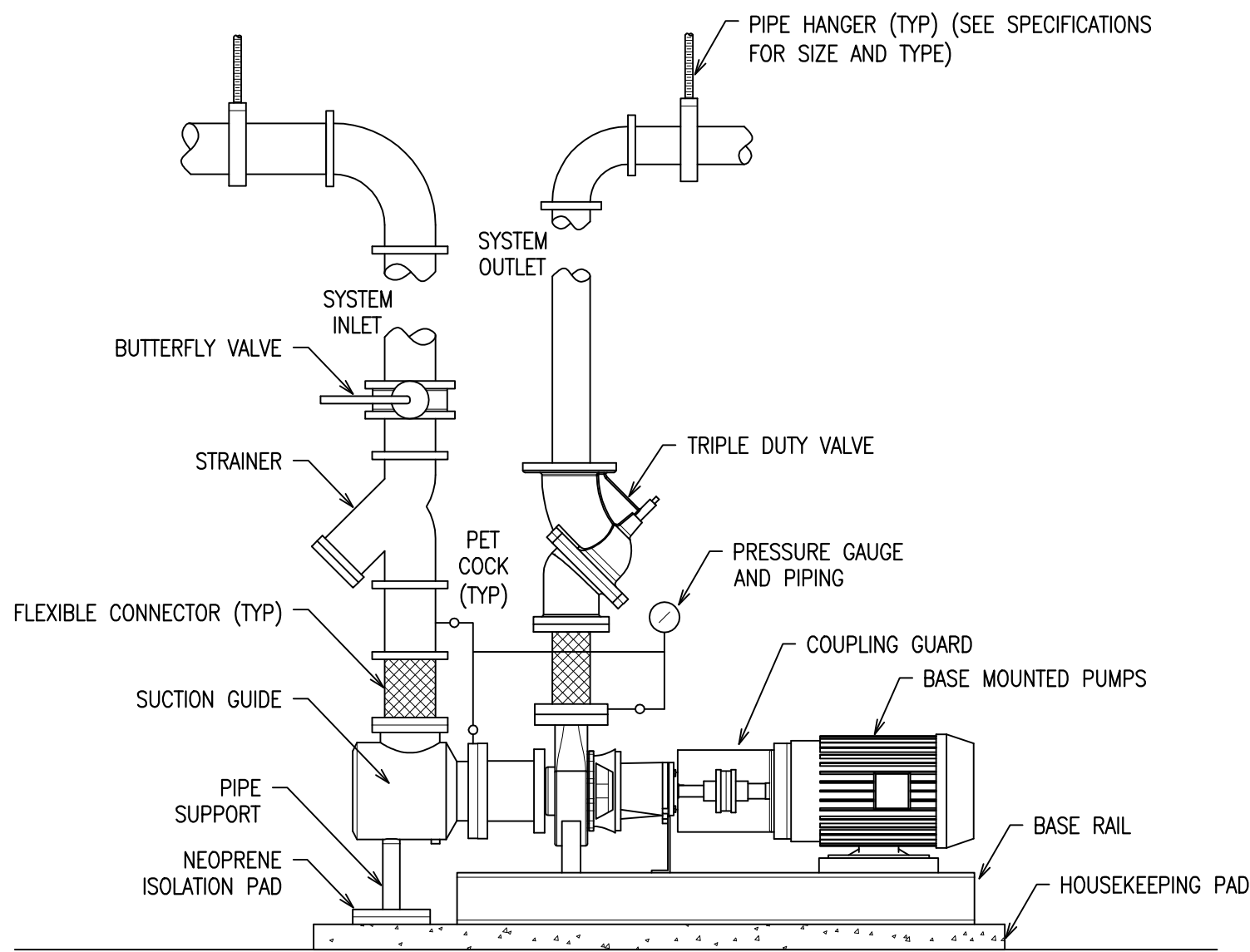
HANGER ROD SCHEDULE			
PIPE SIZE (mm)	ROD SIZE (mm)	PIPE SIZE (mm)	ROD SIZE (mm)
UP TO 50	9.5 DIA.	100 THRU 125	16 DIA.
65 THRU 75	12.7 DIA.	150 THRU 300	22 DIA.

HANGER ROD SPACING SCH.											
PIPE SIZE (mm)	25	32	40	50	65	75	100	125	150	200	300
MAXIMUM ALLOWABLE SPACING (METRES)	2.1	2.4	2.7	3.0	3.3	3.6	4.2	4.8	5.1	5.7	7.0

NOTE: FOR TRAPEZE HANGER, TAKE SPACING FOR SMALLEST DIAMETER PIPE.

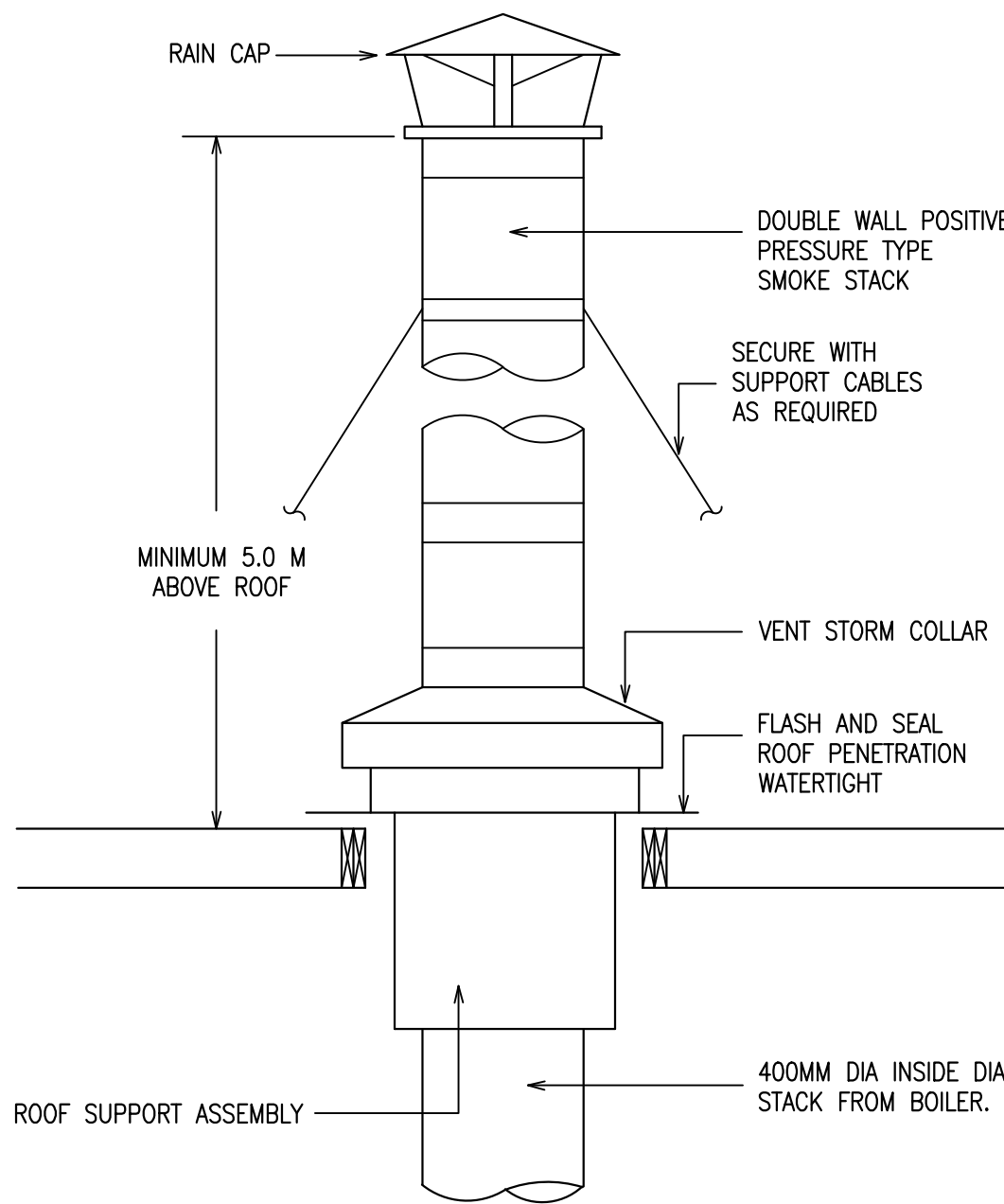
PIPE HANGER DETAILS

SCALE : NTS



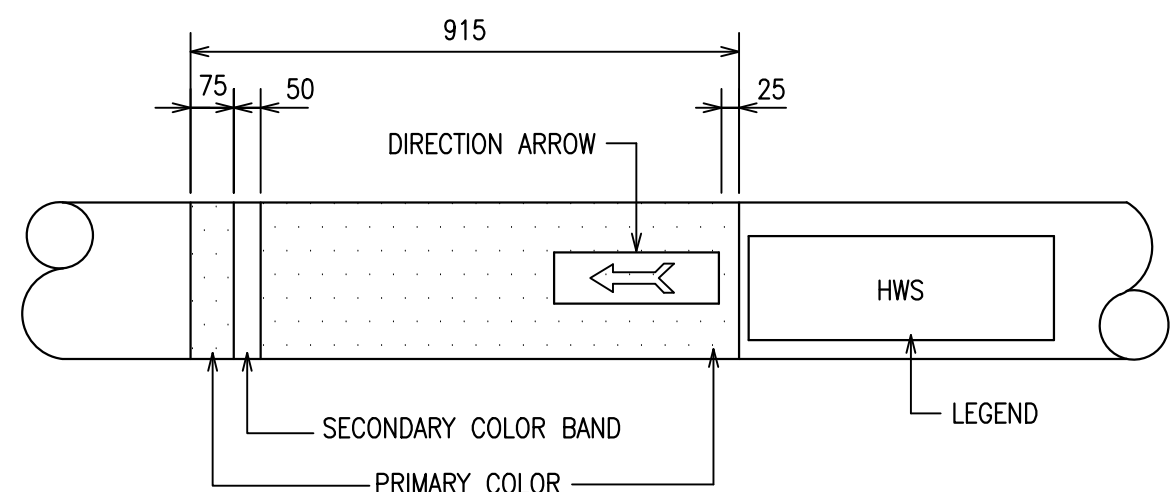
BASE MOUNT CENTRIFUGAL PUMP DETAIL

SCALE : NTS

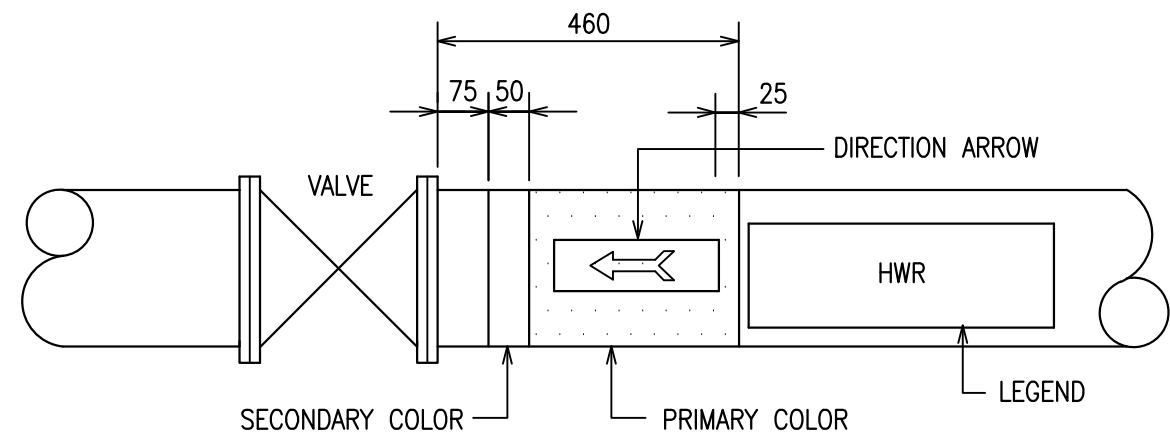


BOILER STACK DETAIL

SCALE : NTS



PIPING IDENTIFICATION ARRANGEMENT FOR STRAIGHT RUNS

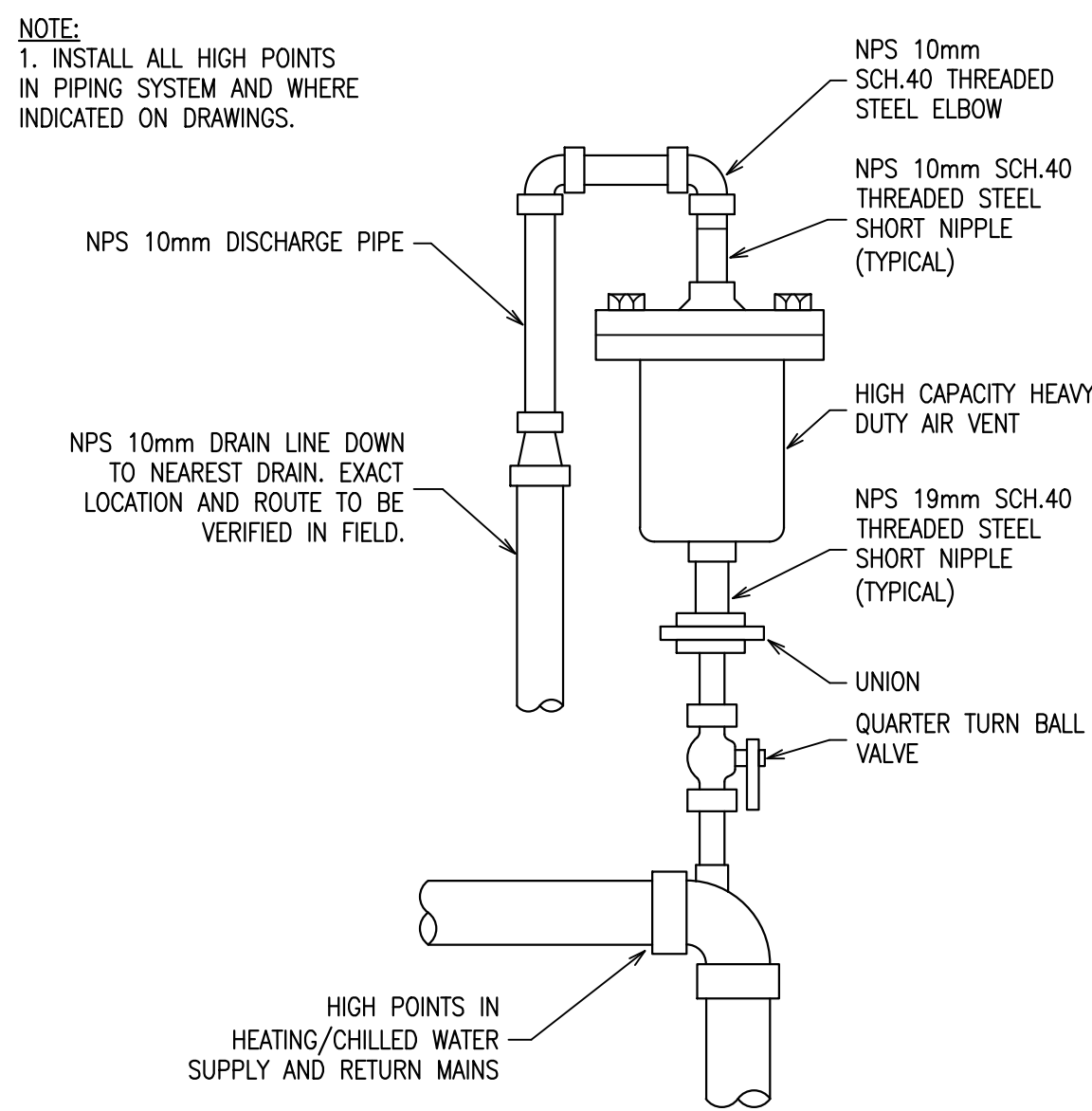


PIPING IDENTIFICATION ARRANGEMENT AT VALVES & FITTINGS

NOTE:
REFER TO SPECIFICATIONS FOR ADDITIONAL PIPE IDENTIFICATION INFORMATION AND COLORS.

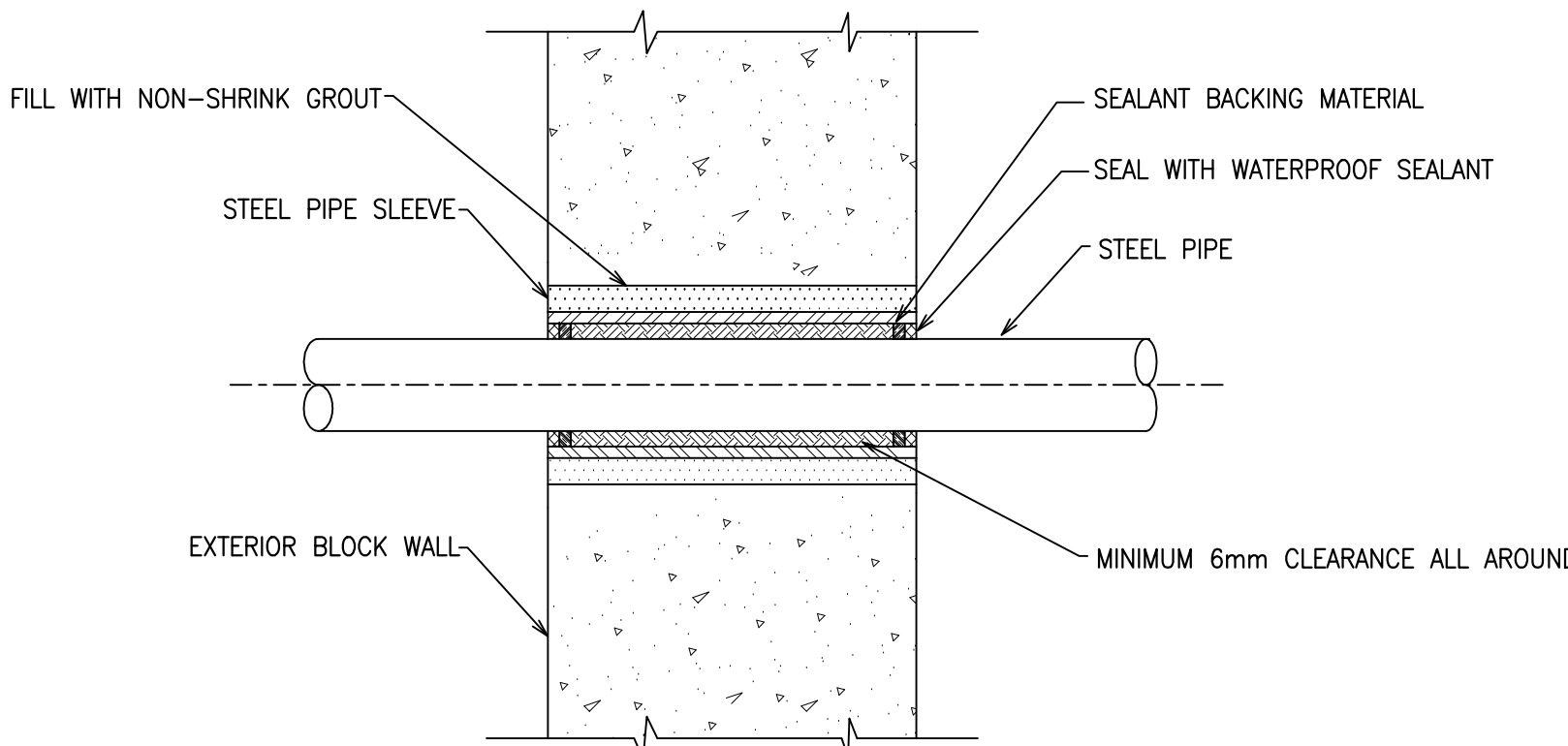
PIPING IDENTIFICATION DETAIL

SCALE : NTS



AIR VENT DETAIL FOR HEATING SYSTEM

SCALE : NTS



TYPICAL EXTERIOR WALL PENETRATION DETAIL

SCALE : NTS



0	ISSUED FOR TENDER	NOV 04 2019
revisions		date
project		project

ATLANTIC INSTITUTION HEATING PLANT UPGRADE

drawing

desirr

MECHANICAL DETAILS AND SCHEDULES

designed B.S.M.	concur
date NOVEMBER 2019	
drown S.E.B.	designé
date NOVEMBER 2019	
approved	approuvé
date	
Tender	Soumission
PMGSC Project Manager	Administrateur de projets TP/SC
project number	no. du projet
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H-103	