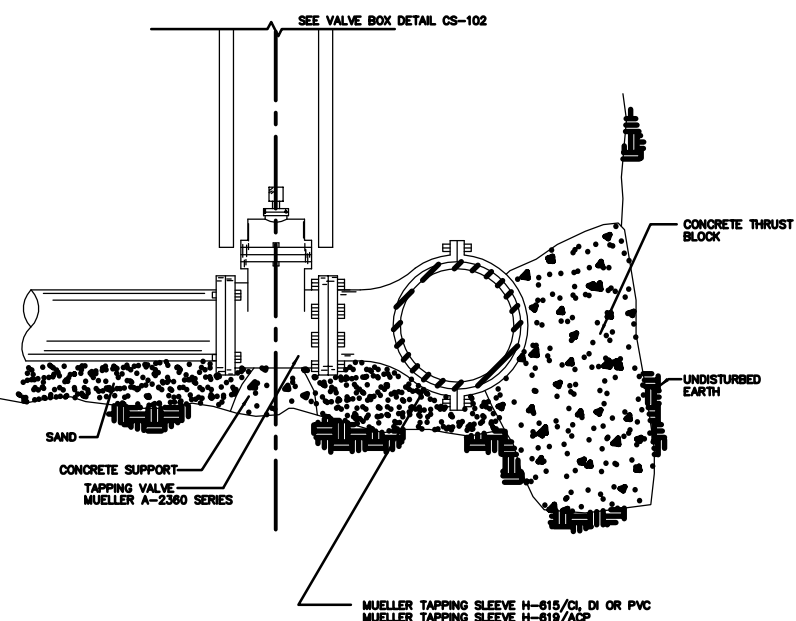
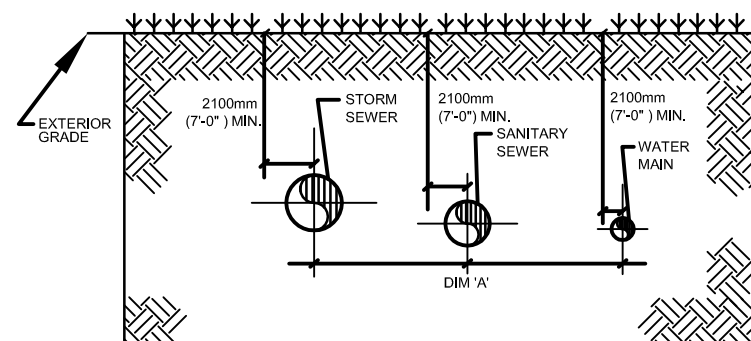


GATE VALVE BOX DETAIL
N.T.S.

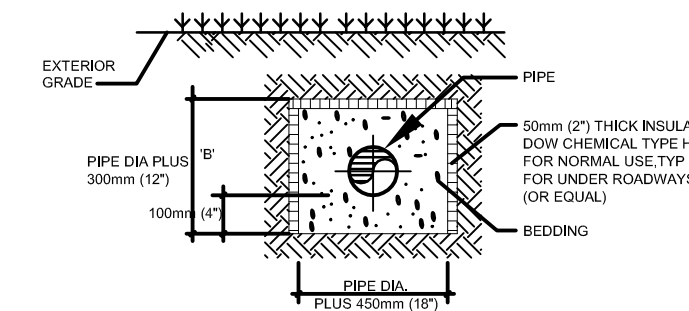


TAPPING SLEEVE AND VALVE DETAIL
N.T.S.

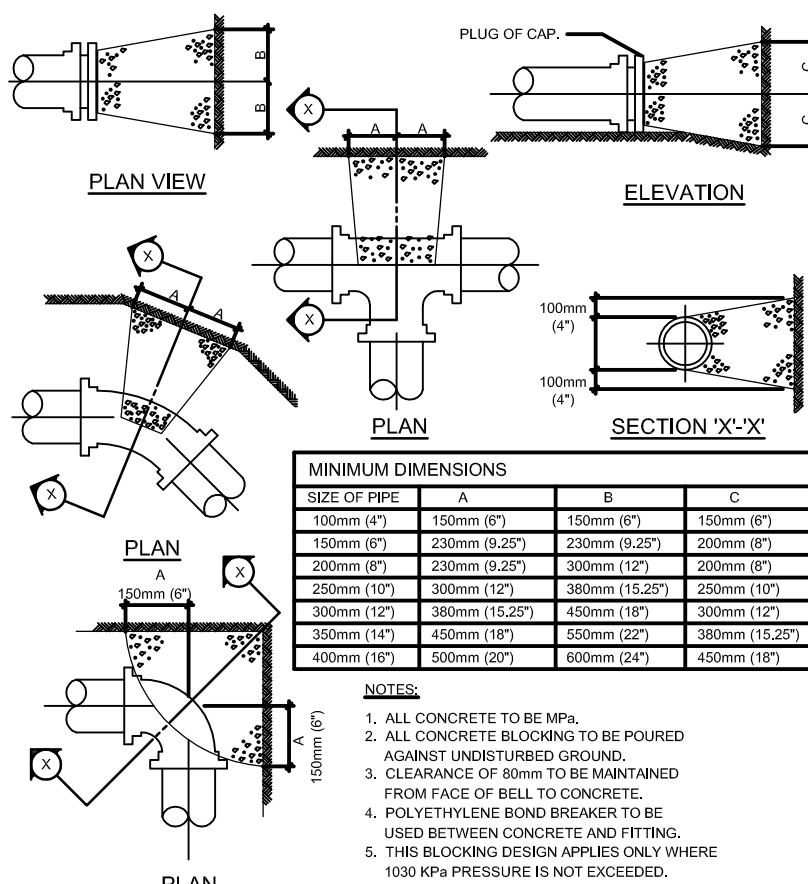


SERVICE	DIRM 'A'	DIRM 'B'
STORM SEWER	AS SHOWN	AS SHOWN
SANITARY SEWER	AS SHOWN	AS SHOWN
WATER MAIN	600mm (24")	600mm (24")
PIPE LINE	600mm (24")	600mm (24")
SPRINKLER LINE	600mm (24")	600mm (24")

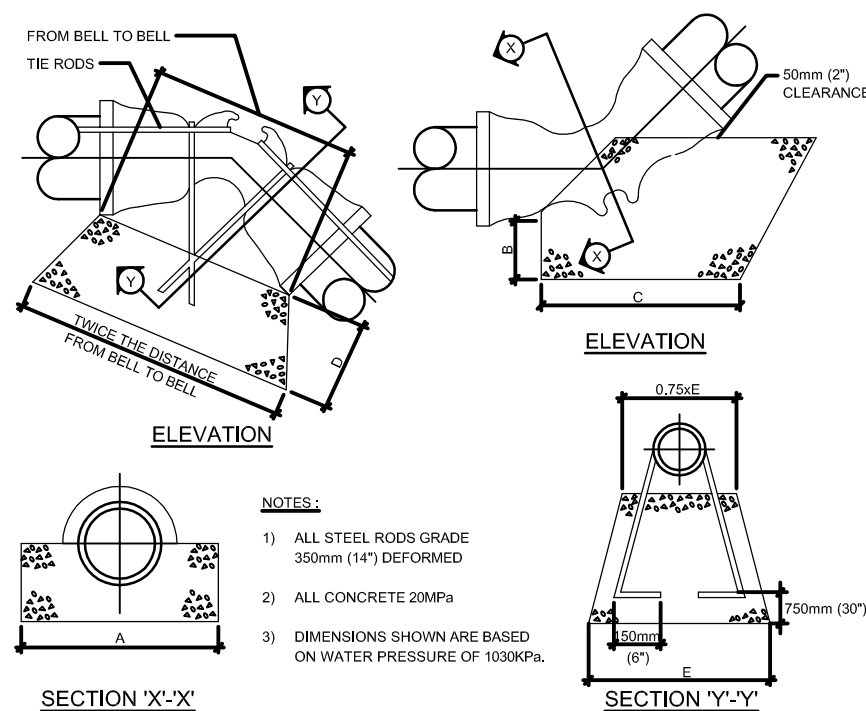
NOTE: WHERE MINIMUM PIPE COVER CAN NOT BE MET AS SHOWN, CONTRACTOR SHALL NOTIFY ENGINEER. PIPE SHALL BE INSTALLED AS PER DETAIL BELOW.



BUILDING SERVICES BURY DETAIL
N.T.S.



CONCRETE THRUST BLOCKS DETAIL
N.T.S.
FOR HORIZONTAL BENDS, TEES & DEAD END MAIN.



SIZE OF BENDS	A	B	C	D	E
150mm (6")	675mm (2'7")	225mm (9")	675mm (2'7")	600mm (36")	675mm (2'7")
200mm (8")	750mm (30")	300mm (14")	600mm (36")	600mm (36")	750mm (30")
250mm (10")	900mm (36")	450mm (18")	1125mm (45")	1125mm (45")	925mm (37")
300mm (12")	1125mm (45")	675mm (27")	1350mm (54")	1125mm (45")	900mm (36")
400mm (16")	1500mm (60")	900mm (36")	1575mm (63")	1350mm (54")	1125mm (45")

CONCRETE THRUST BLOCKS DETAIL
N.T.S.
FOR VERTICAL BENDS



RADIANT CEILING PANEL SCHEDULE							
TAG	ELECTRICAL REQUIREMENTS [V]	PANEL PHYSICAL DIMENSION				WEIGHT [lbs]	WATTS
		WIDTH [mm]	WIDTH [in]	LENGTH [mm]	LENGTH [ft]		
RP-1	208	458	18	2439	8	20.4	260
RP-2	208	458	18	2134	7	17.9	230
RP-3	208	458	18	915	3	7.7	95
RP-4	208	458	18	1829	6	15.3	195

DIFFUSER AND GRILLE SCHEDULE				
TAG	MODEL	COLOUR	NOTES	REMARKS
S-1	AA GRILLES AAG 100	CONFIRM W/ ARCHITECTURAL	1, 2	REFER TO DRAWING FOR FACE SIZE
R-1	AA GRILLES AAG 100	CONFIRM W/ ARCHITECTURAL	1, 2	REFER TO DRAWING FOR FACE SIZE
E-1	EH PRICE SERIES 735Z LOUVERED FACE	CONFIRM W/ ARCHITECTURAL	3	REFER TO DRAWING FOR FACE SIZE
NOTES: 1. APPROVED MANUFACTURERS: WATERLOO, JPR SERVICES 2. PLASTER-IN GRILLES 3. SURFACE MOUNT 4. APPROVED MANUFACTURERS: WATERLOO AND JPR SERVICES				

HEAT RECOVERY VENTILATORS		
TAG	HRV-1	
SERVICE	Big House	
SUPPLY FAN		
AIR FLOW RATE (L/s / CFM)	378	800
E.S.P. (Pa / in.WC)	311	1.25
MOTOR SIZE (kW / HP)	0.75	1.00
RETURN FAN		
AIR FLOW RATE (L/s / CFM)	378	800
E.S.P. (Pa / in.WC)	311	1.25
MOTOR SIZE (kW / HP)	0.75	1.00
HEAT EXCHANGER (WINTER)		
SENSIBLE EFFECTIVENESS (%)	75.0	
FILTERS SECTION		
FILTER DEPTH / TYPE	2", MERV 8	
PHYSICAL DATA		
WEIGHT (kg / lbs)	154	340
LENGTH (m / ft.)	13.11	43
WIDTH (m / ft.)	10.52	35
HEIGHT (m / ft.)	15.24	50
ELECTRICAL DATA		
VOLTAGE/PHASE	120 V / 1 Ph	
NOTES:		
1. Provide preheat and post heat electric coils. Refer to Electrical.		
2. Coordinate structural support with structural drawings.		
3. Indoor unit shall be condensate free with no mounting restrictions.		
4. Provide cetral controller c/w humidistat. Initiate high speed based on humidistat (>60% RH).		
5. Provide differential enthalpy control for free cooling.		
6. Unit shall operate without the need for condensate drainage.		

FAN SCHEDULE										
TAG	MANUFACTURER	TYPE	MODEL	RPM	AIR FLOW RATE		E.S.P.		MOTOR	
					(L/s)	(CFM)	(Pa)	(in.WC)	(W)	(HP)
SF-1	GREENHECK	I	CSP-A900	950	396	840	31	0.13	335	FRAC
SONES										
ACCESSORIES										
TS, MD										
FAN TYPES:										
C CENTRIFUGAL R ROOF I IN-LINE CE CEILING EXHAUST CU CENTRIFUGAL UP BLAST										
TA TUBE AXIAL W WALL MF MIXED FLOW P PROPELLER CF CEILING FAN										
ABBREVIATIONS:										
BG BELT GUARD MT MANUAL RESET TIMER SD SCROLL DRAIN										
AS ADJUSTABLE SHEAVES NSW NON-SPARKING WHEEL FC FACTORY CURB										
SC SOLID STATE SPEED CONTROL SH SPRING HANGERS BS BIRDSCREEN										
IG INLET GRILLE VP VIBRATION PADS MC MOUNTING COLLAR										
BD BACKDRAFT DAMPER SM SPRING MOUNT WH WEATHERPROOF HOUSING										
F FILTER WC WALL CAP RC ROOF CAP										
E EPOXY COATING DS DISCONNECT SWITCH AD ACCESS DOOR										
IH INLET HOOD MDW MOTION DETECTOR, WALL MTD. GN GOOSENECK										
TS THERMOSTAT MD MOTORIZED DAMPERS										
NOTES:										
1. INSTALL ALL UNITS ON VIBRATION ISOLATORS										
2. PROVIDE INSULATED MOTORIZED DAMPER FOR INTAKE AND RELIEF. PROVIDE NON INSULATED MOTORIZED DAMPPER ON RETURN										
3. PROVIDE CONTROLS FOR A MIXED AIR SYSTEM TO MAINTAIN ROOM TEMPERATURE. MIN MIXED AIR SUPPLY TEMP SHALL BE 13 C.										
IF ROOM TEMPERATURE DROPS BELOW 5C, CLOSE INTAKE AND RELIEF DAMPER AND GO TO FULL RECIRCULATION (LOW TEMP CUT OFF).										
4. APPROVED MANUFACTURERS: LOREN COOK, TWIN CITIES										

DOMESTIC WATER HEATING EQUIPMENT SCHEDULE (Based on A. O. Smith)																		
TAG	LOCATION	MODEL	HEATER DATA						STORAGE VOLUME		ASME	PHYSICAL CHARACTERISTICS						NOTES
			ENERGY TYPE	Kw INPUT (kW)	TEMP. RISE (C) (F)		RECOVERY (L/hr) (GPH)		(Litres)	(U.S.Gal.)		WEIGHT (kg) (lbs.)	DIAMETER (mm) (in.)		HEIGHT (mm) (in.)			
DWH-1	BIG HOUSE	DRE-52-6	ELECTRIC	6.0	50.0	90	390	103	189	50	N/A	120	265	552	21.8	1,137	44.8	3 ELEMENTS
NOTES:																		
1. APPROVED MANUFACTURER: RHEEM, BRADFORD WHITE																		
2. PROVIDE RELIEF VALVE PIPED TO DRAIN.																		

PLUMBING FIXTURE SCHEDULE											
LOCATION	PRODUCTS		DESCRIPTION	ACCESSORIES	SAN	VENT	TRAP	HW	CW	RO	APPROVED MANUFACTURER
FD-1	Drainage Specialty		Watts FD-100-C-7-L5-1 Floor Drain	Watts #-L5-1.	50	-	50	-	-	-	Wade, JR Smith
FD-2	Drainage Specialty		Watts FD-320-4-7 Floor Drain	Watts #4.	75	-	75	-	-	-	Wade, JR Smith
HD-1	Drainage Specialty		Watts FD-100-DD Hub Drain	Watts #4.	75	-	75	-	-	-	Wade, JR Smith
LAV-1	Wall hung basin		American Standard #0954.004EC/0059.020EC 'Murro with Everclean' Basin.	Single handle faucet, 1.9 LPM (0.5 GPM) pressure compensating non-aerating spray outlet, lever handle, adjustable hot limit safety stop. Open grid drain. Chrome plated polished brass faucet supplies. Provide p-trap. Basin carrier.	32	32	32	13	13	-	Toto, Kohler
LAV-2	Wall hung basin		DXV Solutions #D20125100 Basin	Single handle Faucet, chrome plated, center hole only, brass, washerless ceramic disc valve cartridges, 5.7 LPM (1.5 GPM) aerator outlet, 120 mm (4-3/4") projection reach, metal lever handle, less pop-up drain, integral hot water limit stop Open grid drain. Chrome plated polished brass faucet supplies. Provide p-trap. Fixture carrier	32	32	32	13	13	-	Toto, Kohler
WC-1	Toilet		American Standard #2467.016.020, 'Cadet Right Height Pressure-Assisted Elongated', 419 mm high Toilet, white Vitreous china, Floor Mounted, 6 L (1.6 US Gal) per flush, two (2) piece, elongated bowl.	Centoco #820STS.001, extra heavy duty Toilet Seat, white solid plastic, open front with cover. Provide all metal construction Toilet Supply. Provide Floor Flange, (same material as the connecting pipe drain), with all brass bolts and with rubber gasket.	75	-	-	-	13	-	Toto, Kohler
WC-2	Toilet		American Standard #2467.016.020, 'Cadet Right Height Pressure-Assisted Elongated', 419 mm high Toilet, white Vitreous china, Floor Mounted, 6 L (1.6 US Gal) per flush, two (2) piece, elongated bowl.	Centoco #500STS.001, extra heavy duty Toilet Seat, white solid plastic, open front with cover. Provide all metal construction Toilet Supply. Provide Floor Flange, (same material as the connecting pipe drain), with all brass bolts and with rubber gasket.	75	-	-	-	13	-	Toto, Kohler