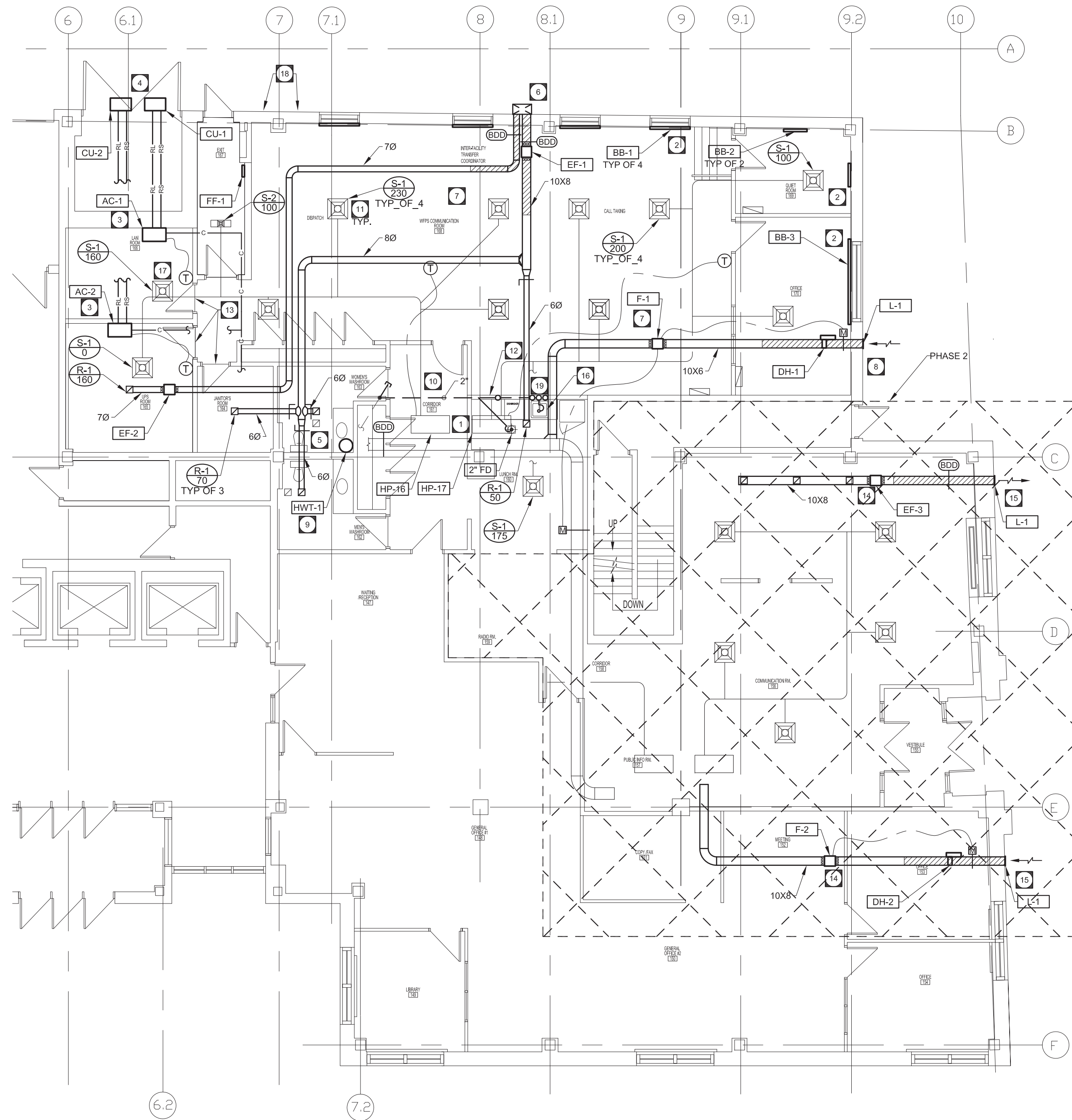
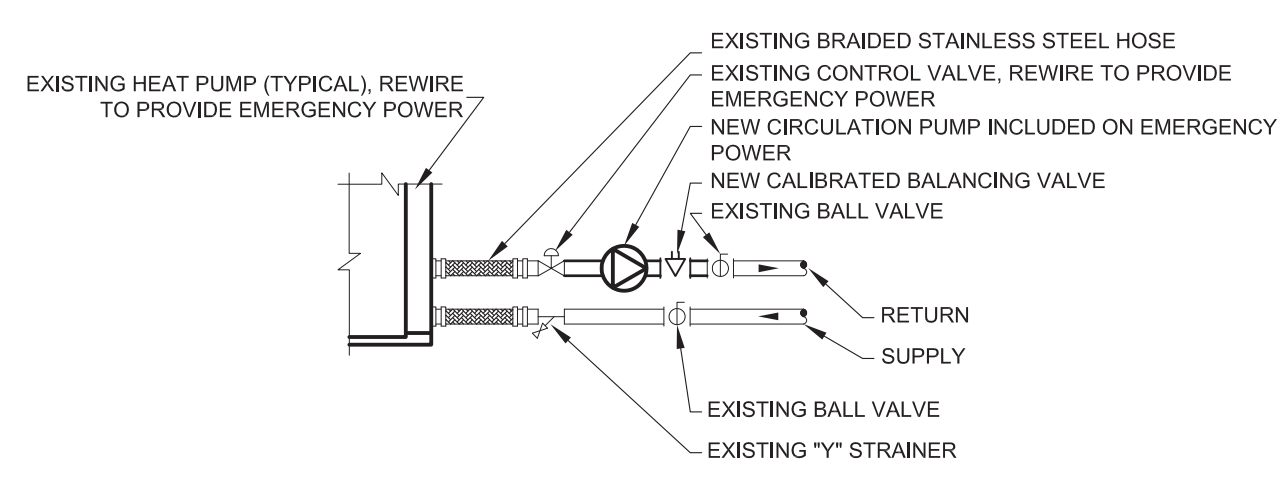


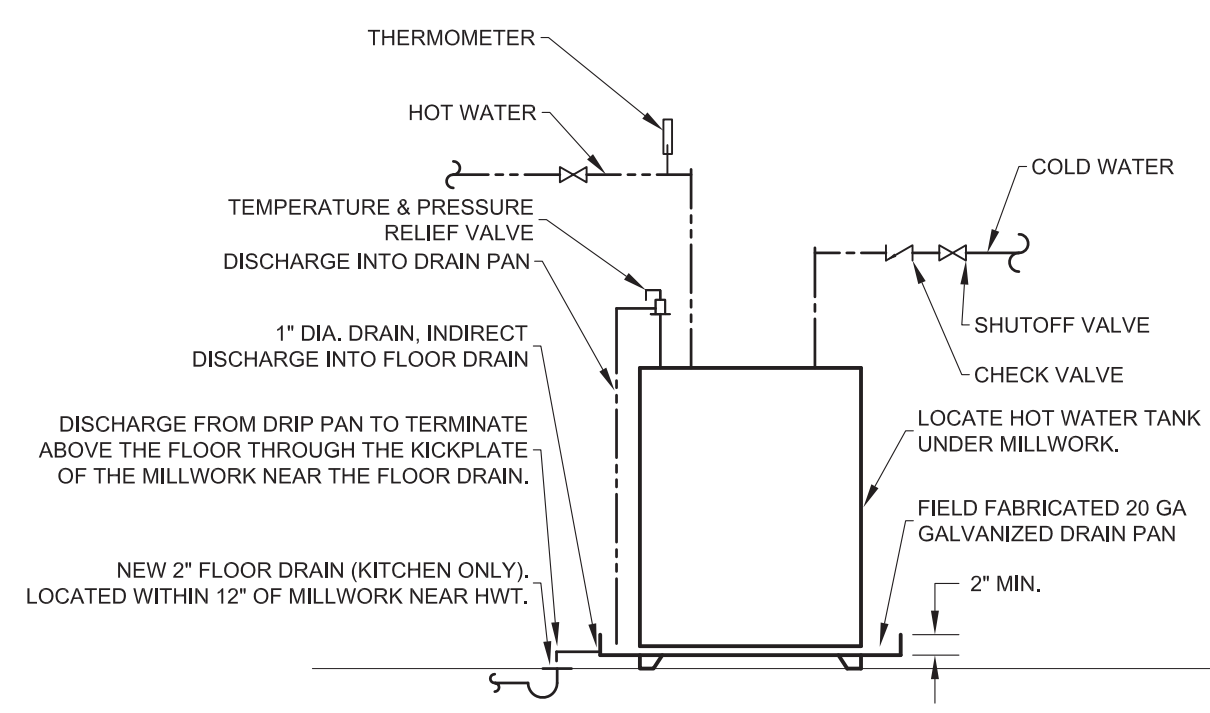
FILE NAME: DATE: 2010.12.07 DESCRIPTION: HVAC - MAIN FLOOR PLAN PROJECT No.: 2008-095-03 ADDRESS: 185 KING STREET



1 PARTIAL MAIN FLOOR PLAN - RENOVATION
SCALE: 1/8" = 1'



2 TYPICAL HEAT PUMP MODIFICATION
SCALE: NTS



3 HOT WATER TANK INSTALLATION - TYPICAL OF 2
SCALE: NTS

DX SPLIT AIR CONDITIONING UNIT

MARK	MODEL	MANUFACTURER	ZONE SERVED	COOLING CAPACITY		EVAPORATOR	CONDENSING UNIT	SEER	DESIGN WEIGH	DIMENSIONS (WxDxH)	NOTES
				TOTAL (MBH)	(tons)						
AC-1	PKA-A24KA	Mitsubishi	Lan Room	24.0	2	208/1 ph	208/1 ph	17	46	47x12x15	1,2,3,4
CU-1	PUY-A24NHA3										
AC-2	PKA-A36KA	Mitsubishi	UPS Room	34.2	3	208/1 ph	208/1 ph	14	46	47x12x15	1,2,3,4
CU-2	PUY-A36NHA3										

- Notes:
 1. R410A
 2. Ultra Low ambient option. Operation down to -40F
 3. Factory supplied High-Performance Drain Pump
 4. Wired remote control

FAN SCHEDULE

MARK	MAKE/MODEL	ZONE SERVED	AIRFLOW (cfm)	FAN E.S.P. (" w.c.)	FAN Watts	FAN RPM	VOLTAGE / PHASE	DESIGN WEIGHT lbs	DIMENSIONS (WxDxH) in.	NOTES
F-1	Greenheck/CSP-A290	Phase 1 Ventilation	260	0.25	80	1033	120/1	21	13x12x10	1,2
F-2	Greenheck/CSP-A390	Phase 2 Ventilation	300	0.25	144	1111	120/1	21	13x12x10	1,2,3
EF-1	Greenheck/CSP-A290	Kitchen, Washroom Exhaust	260	0.25	80	1033	120/1	21	13x12x10	1,2
EF-2	Greenheck/CSP-A250	UPS Exhaust	160	0.25	48	774	120/1	21	13x12x10	1,2
EF-3	Greenheck/CSP-A390	Phase 2 Relief	300	0.25	144	2950	120/1	21	13x12x10	1,2,3

- Notes:
 1. Solid State Speed Control - 5WSSC, Mounted & Wired Internally
 2. Motor w/ Thermal Overloads
 3. Phase 2 - Future

CIRCULATION PUMP SCHEDULE

MARK	MAKE/MODEL	PUMP TYPE	SIZE	SERVES	FLOW (gpm)	HEAD (ft)	MOTOR (KW)	VOLTAGE / PHASE	DESIGN WEIGHT lbs	NOTES
P-1,2	B & G / Booster	Centrifugal	PL-30	HP-17, HP-18	10	11	0.06	120/1	12	1,2

- Notes:
 1. Confirm voltage with electrical drawings.
 2. Pumps included on emergency power.

ELECTRIC DUCT HEATER COIL SCHEDULE

MARK	MAKE/MODEL	SERVES	POWER (kW)	VOLTAGE/ PHASE	CONTROL	NOTES
DH-1	Thermolec FC	WFPS	8	208/1	SCR	1,2,3
DH-2	Thermolec FC	Communications	10	208/1	SCR	1,2,3,4

- Notes:
 1. All units complete with air proving switch, disconnect switch.
 2. Contractor to confirm exact size before ordering.
 3. Discharge air temperature controller by manufacturer.
 4. Phase 2 - Future

HOT WATER TANK SCHEDULE

MARK	MAKE/MODEL	ZONE SERVED	STORAGE CAPACITY (US GAL.)	HEAT INPUT (W)	RECOVERY (GPH)	TEMP. RISE (F)	VOLTAGE / PHASE	WEIGHT lbs	DIMENSIONS (Dia x H) in.	NOTES
HWT-1	RHEEM EGP6	Washrooms	6.0	3000	12.0	100	208/1	93	16x16	1,2

- Notes:
 1. AGA/ASME rated factory-installed temperature and pressure relief valves.
 2. Single Element

ELECTRIC BASEBOARD & FORCEFLOW

MARK	MAKE/MODEL	LENGTH EACH in.	LENGTH EACH mm	NO. OF UNITS each	TOTAL LENGTH in.	TOTAL LENGTH mm	POWER KW/unit	TOTAL POWER KW	VOLTAGE/ PHASE	NOTES
BB-1	Quellet OMF	48	1200	4	192	4800	0.75	3.00	208/1	1
BB-2	Quellet OMF	28	700	2	56	1400	0.38	0.75	208/1	1
BB-3	Quellet OMF	84	2100	1	84	2100	1.50	1.50	208/1	1
FF-1	Quellet OAC	N/A	N/A	1	N/A	N/A	1.13	1.13	208/1	1

- Notes:
 1. Built-in thermostat with control knob or tamperproof adjustable with a screwdriver.

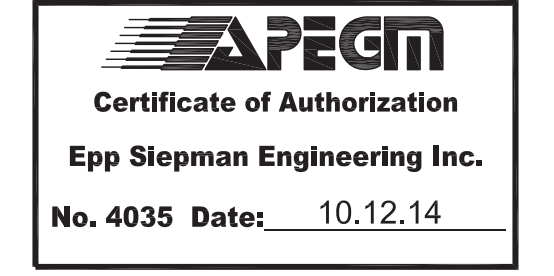
GRILLES REGISTERS & DIFFUSERS

MARK	MODEL AND TYPE (based on Price)	SIZE	NOTES
R-1	8x8/80F/A/B12	8x8	1,2,3
L-1	Price DE439	14x14	1,2,4

- Notes:
 1. Contractor to confirm dimensions before ordering.
 2. Field constructed plenum by contractor
 3. Ceiling tile mounted
 4. Colour to match exterior building colour

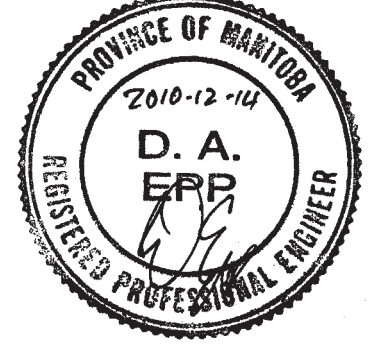
KEY NOTES

- EXISTING HEAT PUMPS, DUCT DISTRIBUTION AND DIFFUSERS TO REMAIN. INSTALL NEW CIRCULATION PUMP AND CIRCUIT SETTER. REFER TO SCHEMATIC DETAIL. MOVE EXISTING THERMOSTATS TO NEW LOCATIONS AS INDICATED. HEAT PUMPS REQUIRE CONNECTION TO EMERGENCY POWER.
- NEW BASEBOARDS ON EMERGENCY POWER SYSTEM ONLY. BASEBOARDS COMPLETE WITH INTEGRATED ADJUSTABLE THERMOSTAT.
- INSTALL NEW WALL MOUNT SPLIT COOLING UNIT AS SHOWN. WALL MOUNT COOLING UNIT AT HIGH LEVEL WITHIN OCCUPIED SPACE. PIPE CONDENSATE LINE UP INTO CEILING SPACE AND SLOPE DOWN TO JANITOR'S ROOM AND INDIRECT DISCHARGE INTO MOP SINK. UNIT TO OPERATE UNDER BOTH NORMAL AND EMERGENCY POWER. LOCATE WALL MOUNT & THERMOSTATS AS INDICATED.
- CONDENSING UNITS MOUNTED ABOVE TRANSFORMER SECURITY GATE A MINIMUM 15 FEET OFF THE GROUND TO LOWEST POINT ON UNIT OR FRAME. GC TO PROVIDE WALL MOUNTING BRACKETS CAPABLE OF HANDLING THE DYNAMIC WEIGHT OF THE UNIT AND MAINTAIN CLEARANCES BASED ON MANUFACTURERS RECOMMENDATION.
- EXISTING EXHAUST SYSTEMS TO REMAIN. INSTALL NEW EXHAUST SYSTEM COMPLETE WITH GRILLES AND DUCT FANS DAMPER AND HOOD AS INDICATED.
- ENLARGE EXISTING WALL PENETRATION TO ACCOMMODATE BOTH DUCTS TERMINATING AT THE HOOD DISCHARGE. INSTALL NEW 22X12 INCH HOOD WITH BIRD SCREEN.
- NEW OUTDOOR AIR INTAKE FANS, EXHAUST AIR FANS, DAMPERS AND ELECTRIC HEATERS OPERATIONAL DURING EMERGENCY POWER ONLY.
- INSTALL NEW 14X14 LOUVERS AT SAME LEVEL AS DUCT WITHIN CEILING PLENUM TO THE OUTSIDE. MATCH COLOUR WITH EXISTING EXTERIOR BUILDING COLOUR.
- DISCONNECT AND CAP EXISTING HOT WATER PIPE TO WASHROOM SINKS. INSTALL NEW POINT OF USE HOT WATER TANK UNDER WOMENS WASHROOM SINKS. REFER TO HOT WATER DETAIL ON DRAWING M-2. DIRECT DISCHARGE TO NEAREST FLOOR DRAIN AND TEST TO ENSURE WATER FLOWS INTO DRAIN. UNIT TO OPERATE UNDER BOTH NORMAL AND EMERGENCY POWER.
- CONNECT TO EXISTING DWV PIPING IN PARKADE CEILING. USE EXISTING 2" BRANCH CONNECTION.
- RE-BALANCE EXISTING DIFFUSERS AS INDICATED ON THE DRAWING TYPICAL. S-1 & S-2 ARE EXISTING.
- ROUGH-IN DCW AND SANITARY AS INDICATED FOR FUTURE ELECTRIC HOT WATER TANK LOCATED UNDER THE NEW COUNTER. REFER TO HOT WATER TANK INSTALL DETAIL ON M-2.
- UNDERCUT DOORS OF LAN, UPS AND JANITORS ROOM. DOOR TO FLOOR CLEARANCE TO BE MINIMUM 3 INCHES.
- PHASE 2. NEW OUTDOOR AIR INTAKE FANS, EXHAUST AIR FANS, DAMPERS AND ELECTRIC HEATERS FOR FUTURE REFERENCE.
- PHASE 2. INSTALL NEW 14X14 LOUVERS AT SAME LEVEL AS DUCT WITHIN CEILING PLENUM TO THE OUTSIDE. MATCH COLOUR WITH EXISTING EXTERIOR BUILDING COLOUR. FOR FUTURE REFERENCE.
- RE-INSTALL SALVAGED SINK AND FIXTURE FROM DEMOLITION OF ORIGINAL SPACE.
- RELOCATE EXISTING DIFFUSER IN LAN ROOM ONE ONE TILE TOWARD THE UPS ROOM. REWORK ASSOCIATED DUCT TO ACCOMMODATE DIFFUSER MOVE.
- ALTERNATE LOCATION FOR CONDENSING UNITS. MINIMUM 15 FEET OFF THE GROUND TO LOWEST POINT ON UNIT OR FRAME.
- PLUMBING CONTRACTOR TO RUN VENTING IN STUD WALL TO CEILING SPACE. CONNECT BACK TO EXISTING VENT PIPE OVER FORMER KITCHEN LOCATION.



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NO.	REVISION/DESCRIPTION	BY	DATE
2	REVISED FOR TENDER	DE	10.12.14
1	ISSUED FOR TENDER	DE	10.12.07



DRAWN BY: DK
 DATE: 2010.12.07
 CHECKED BY: USER APPROVAL
 APPROVED: USER APPROVAL
 CITY OF WINNIPEG
 PLANNING, PROPERTY AND DEVELOPMENT DEPARTMENT
 CIVIC ACCOMMODATIONS DIVISION
 300 - 65 GARRY ST. R3C 4K4

PROJECT
 MANDARIN BUILDING
 ALTERNATE EMERGENCY COMMUNICATION CENTRE - DESIGN
 185 KING STREET
 SHEET TITLE
 PARTIAL MAIN FLOOR PLAN
 MECHANICAL RENOVATION

SCALE	PROJECT NO.	SHEET NO.
AS SHOWN	2008-095-03	M-2

DRAWING SHEET SIZE: A1 (841mm x 594mm) PLOT 1:1