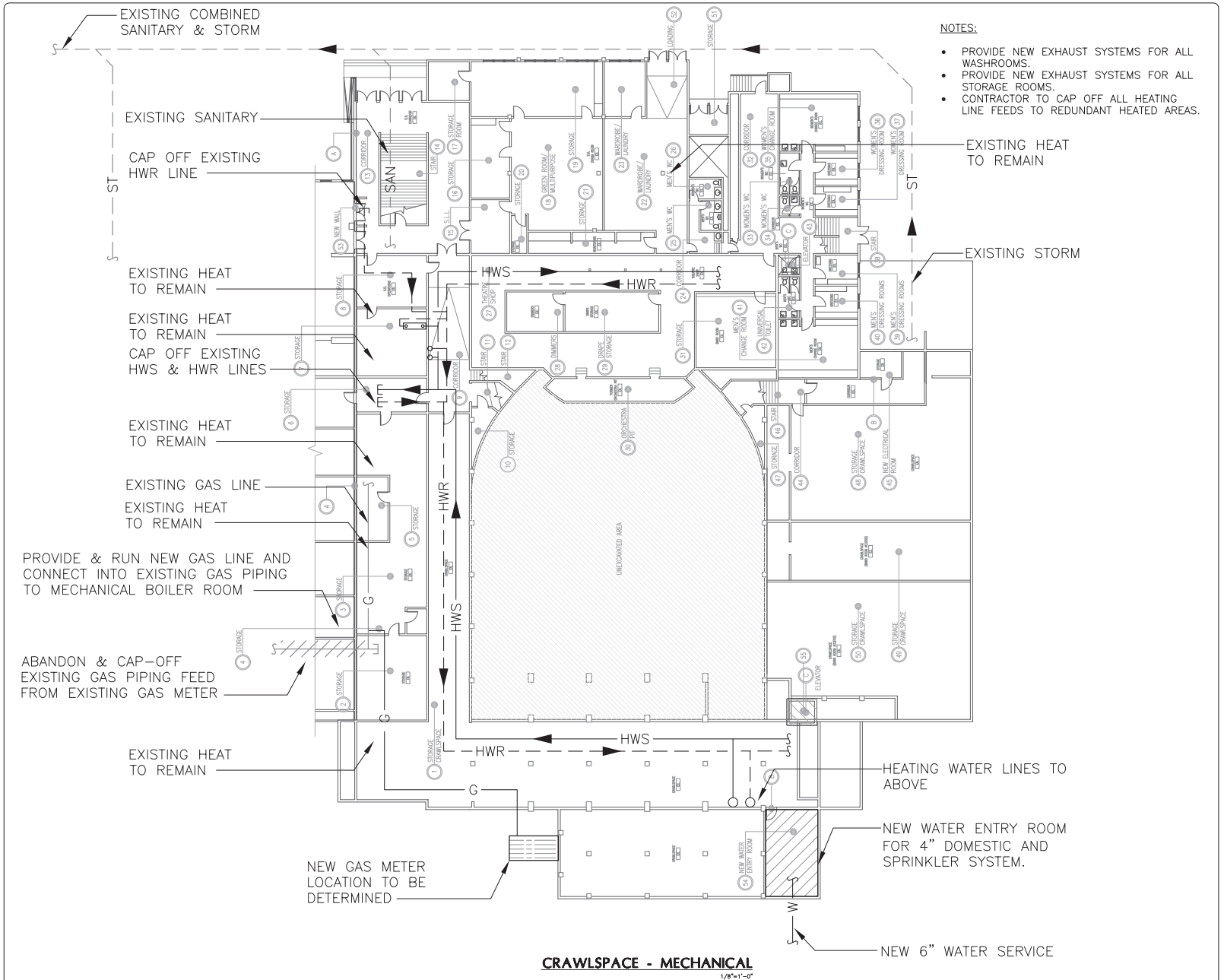


NOTES:

- PROVIDE NEW EXHAUST SYSTEMS FOR ALL WASHROOMS.
- PROVIDE NEW EXHAUST SYSTEMS FOR ALL STORAGE ROOMS.
- CONTRACTOR TO CAP OFF ALL HEATING LINE FEEDS TO REDUNDANT HEATED AREAS.

CRAWLSPACE - MECHANICAL

1/8"=1'–0"

NO.	ISSUE	DATE
01	ISSUED	17/06/15
02	ISSUE FOR REPORT	19/06/15

VINCENT MASSEY THEATRE - RENOVATION

735 EIGHT AVENUE

NEW WESTMINSTER, BC

ENGINEERING CO. LTD.

Professional Mechanical Engineering Services

TITLE: CRAWLSPACE MECHANICAL

SCALE: AS SHOWN

DATE: JUNE 2015

DRAWN: NS

CHECKED: JM

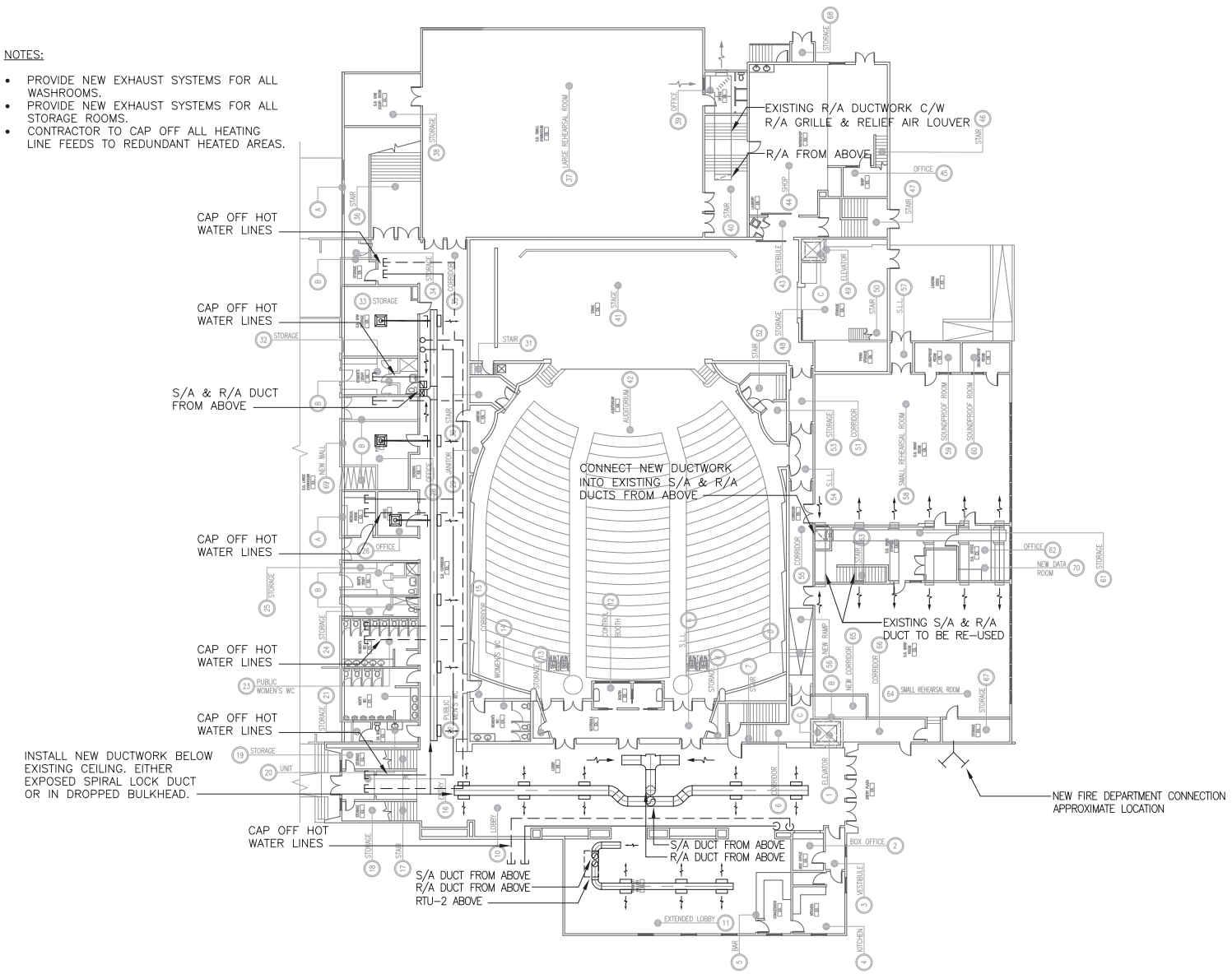
JOB #: NEWM–74

DWG. NO.

M-01

NOTES:

- PROVIDE NEW EXHAUST SYSTEMS FOR ALL WASHROOMS.
- PROVIDE NEW EXHAUST SYSTEMS FOR ALL STORAGE ROOMS.
- CONTRACTOR TO CAP OFF ALL HEATING LINE FEEDS TO REDUNDANT HEATED AREAS.



LEVEL 1 - MECHANICAL

1/8"=1'-0"

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VINCENT MASSEY THEATRE - RENOVATION

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NEW WESTMINSTER, BC

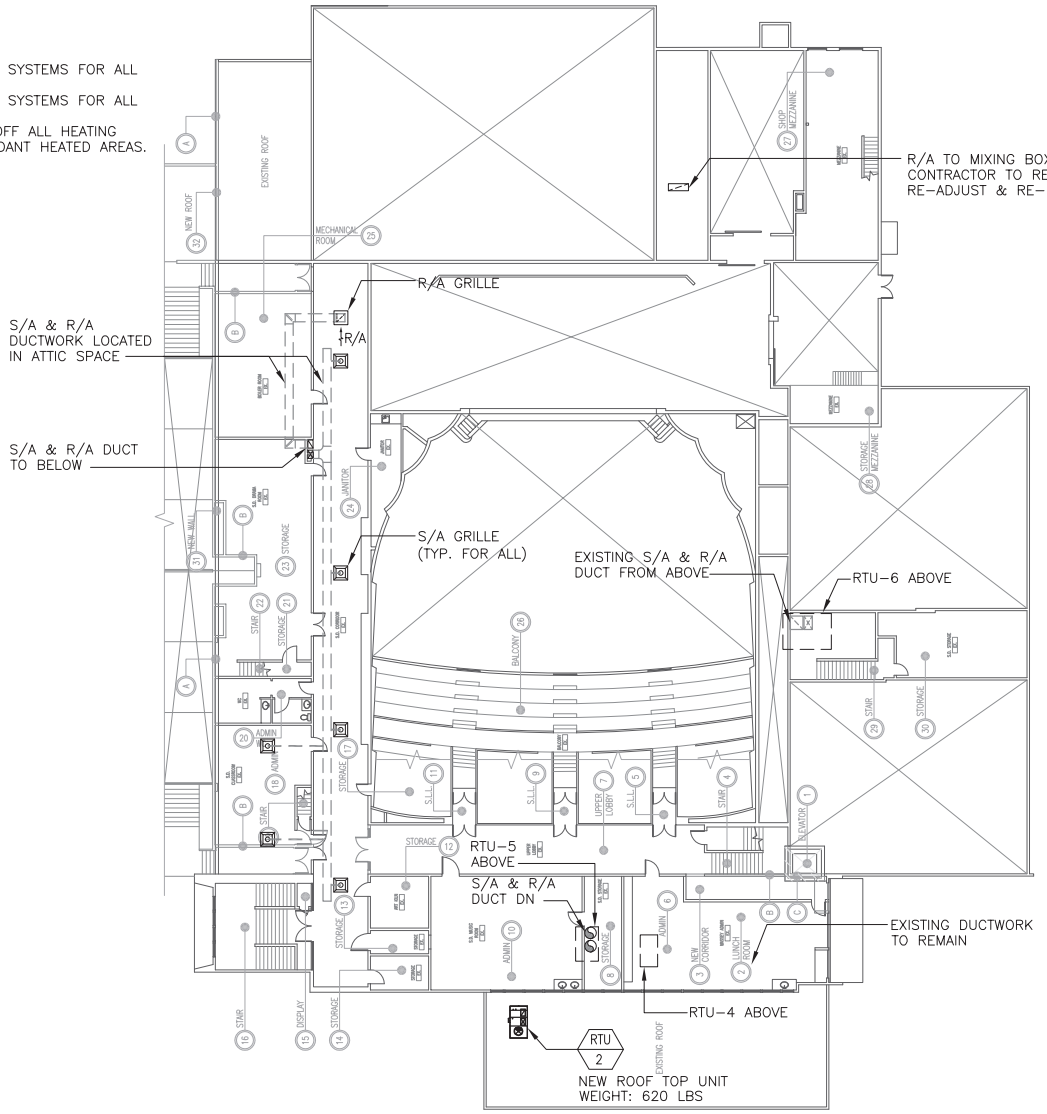
ENGINEERING CO. LTD.

Professional Mechanical Engineering Services

- TITLE: LEVEL 1 MECHANICAL
- SCALE: AS SHOWN
- DATE: JUNE 2015
- DRAWN: NS
- CHECKED: JM
- JOB #: NEWM-74
- DWG. NO. M-02

NOTES:

- PROVIDE NEW EXHAUST SYSTEMS FOR ALL WASHROOMS.
- PROVIDE NEW EXHAUST SYSTEMS FOR ALL STORAGE ROOMS.
- CONTRACTOR TO CAP OFF ALL HEATING LINE FEEDS TO REDUNDANT HEATED AREAS.



LEVEL 2 - MECHANICAL

1/8"=1'-0"

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01	ISSUED	17/06/15
02	ISSUE FOR REPORT	19/06/15

VINCENT MASSEY THEATRE - RENOVATION

735 EIGHT AVENUE
NEW WESTMINSTER, BC

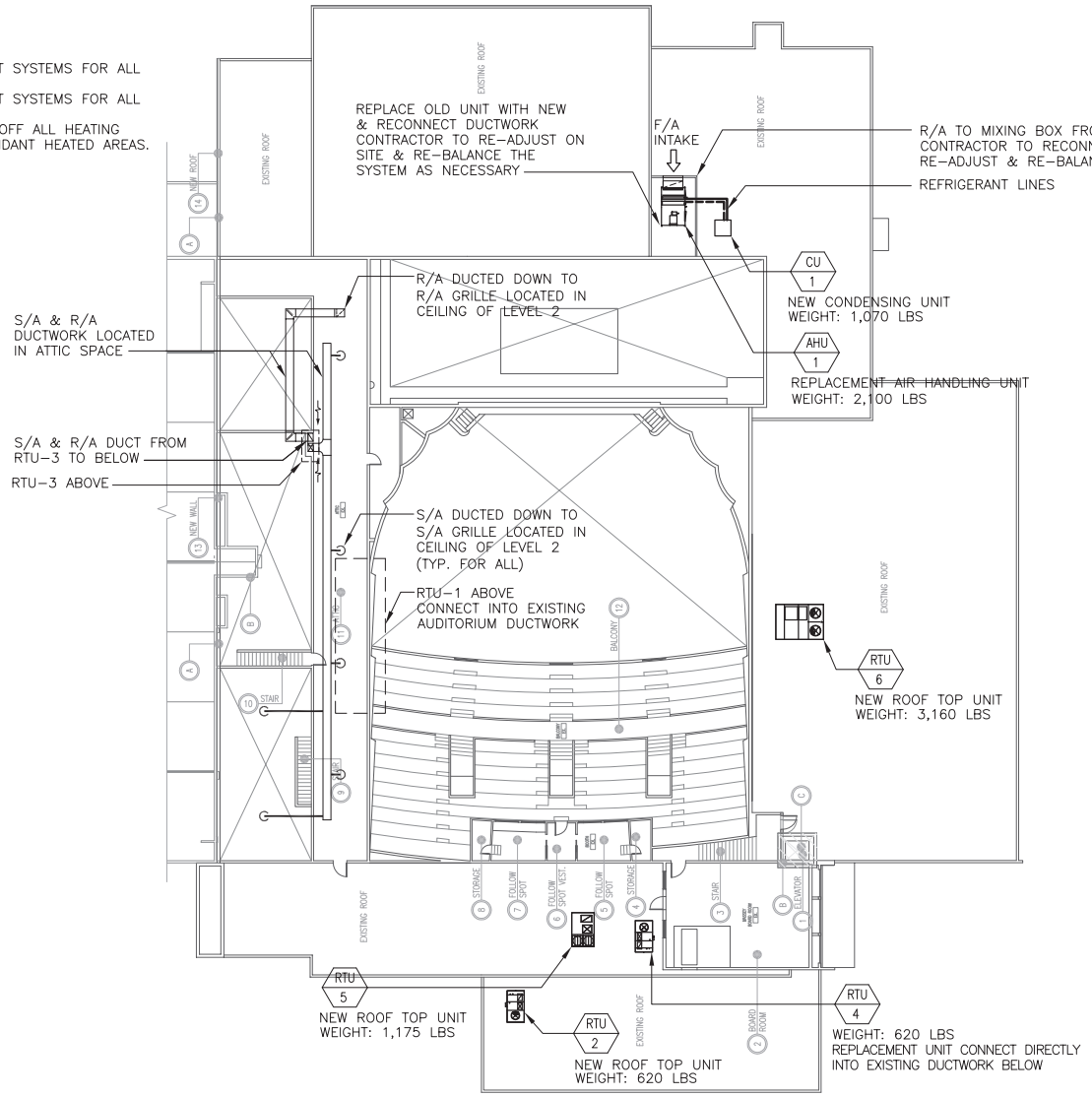
ENGINEERING CO. LTD.
Professional Mechanical Engineering Services

- TITLE: LEVEL 2 MECHANICAL
- SCALE: AS SHOWN
- DATE: JUNE 2015
- DRAWN: NS
- CHECKED: JM
- JOB #: NEWM-74
- DWG. NO.

M-03

NOTES:

- PROVIDE NEW EXHAUST SYSTEMS FOR ALL WASHROOMS.
- PROVIDE NEW EXHAUST SYSTEMS FOR ALL STORAGE ROOMS.
- CONTRACTOR TO CAP OFF ALL HEATING LINE FEEDS TO REDUNDANT HEATED AREAS.



LEVEL 3 - MECHANICAL

1/8"=1'-0"

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VINCENT MASSEY THEATRE - RENOVATION

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NEW WESTMINSTER, BC

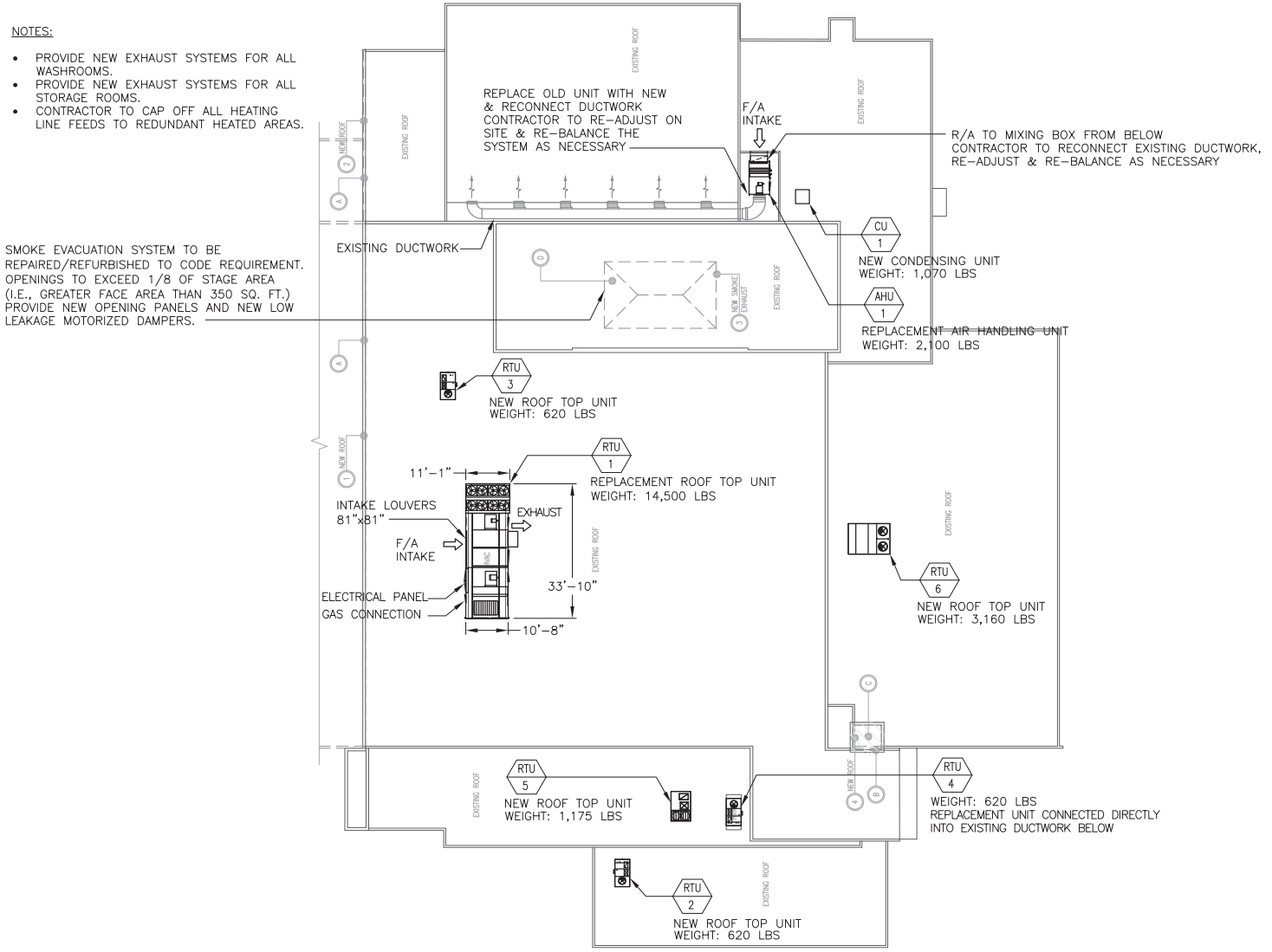
ENGINEERING CO. LTD.
Professional Mechanical Engineering Services

- TITLE: LEVEL 3 MECHANICAL
- SCALE: AS SHOWN
- DATE: JUNE 2015
- DRAWN: NS
- CHECKED: JM
- JOB #: NEWM-74
- DWG. NO.

M-04

NOTES:

- PROVIDE NEW EXHAUST SYSTEMS FOR ALL WASHROOMS.
- PROVIDE NEW EXHAUST SYSTEMS FOR ALL STORAGE ROOMS.
- CONTRACTOR TO CAP OFF ALL HEATING LINE FEEDS TO REDUNDANT HEATED AREAS.



ROOF PLAN - MECHANICAL

1/8"=1'-0"

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VINCENT MASSEY THEATRE - RENOVATION

735 EIGHT AVENUE

NEW WESTMINSTER, BC

ENGINEERING CO. LTD.

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SCALE: AS SHOWN

DATE: JUNE 2015

DRAWN: NS

CHECKED: JM

JOB #: NEWM-74

DWG. NO.

M-05

ROOFTOP AIR CONDITIONING UNIT SCHEDULE

TYPE	SERVICE	MANUFACTURER	MODEL	ELECTRICAL				CAPACITY (CFM)	E.S.P. SA/RA (IN)	EER	COOLING CAPACITY (TONS)	HEATING CAPACITY (MBH)	HEATING COIL @ 180F EWT (GPM)	WEIGHT (Lbs)	NOTES
				MCA	MOCP	VOLTAGE	FAN HP SA/RA								
RTU- 1	AUDITORIUM	ENGINEERED AIR	FWE624/C/M/O/R	399	450	208/3/60	30/15	S/A 26,000 R/A 23,000	2.5/1.0	–	62.0	850	75	14,500	SEE NOTE 1-11
RTU- 2	GALLERY	YORK	ZF048N10N2AZZ40003	21.5	30	208/3/60	1.5	2,000	0.75	13.0	4.0	125/100	–	620	SEE NOTE 1,12,13 & 15
RTU- 3	GYMNASTICS & CORR.	YORK	ZF048N10N2AZZ40003	21.5	30	208/3/60	1.5	2,000	0.75	13.0	4.0	125/100	–	620	SEE NOTE 1,12,13,14 & 15
RTU- 4	OFFICE & ADMIN.	YORK	ZF048N10N2AZZ40003	21.5	30	208/3/60	1.5	2,000	0.75	13.0	4.0	125/100	–	620	SEE NOTE 1,12,13 & 15
RTU- 5	FOYER	YORK	ZF120N20N2AAA7	48.5	60	208/3/60	3.0	4000	0.60	11.2	10.0	240/192	–	1,175	SEE NOTE 1,12,13 & 15
RTU- 6	BAND ROOM #1 & #2	YORK	ZJ210N32G2AAA3	85.7	100	208/3/60	5.0	7,000	0.75	12.1	17.5	400/320	65/52	3,160	SEE NOTE 1,12,13, 14 & 15

NOTES:

1. SINGLE POINT POWER CONNECTION
2. C/W 4 ZONE MULTIZONE HEAD WITH MODULATING ZONE OPERATOR; 0-10vDC BY OTHERS
3. C/W PACKAGED DX COOLING: 4 COMPRESSORS; EngA CTRAC CONTROLLER WITH DDC TEMPERATURE REST
4. C/W 2" MERV 8 FILTERS; MIXING SECTION WITH MODULATING OPERATOR
5. C/W FULL RETURN FAN SECTION WITH 100% RELIEF
6. C/W HOT WATER HEATING COIL SECTION
7. C/W NEW Z-BAR CURB SEALING STRIP
8. C/W ELECTRICAL POWER CONNECTION LOCATION TO MATCH EXISTING
9. SIZED TO FIT EXISTING ROOF CURB, MATH S/A ZONE HEAD R/A DUCTWORK
10. DIMENSIONS TO BE FIELD VERIFIED PRIOR TO FABRICATION
11. REPLACES EXISTING CM@LMR-70-547 HW, SERIAL #11470
12. ROOF CURB C/W SEISMIC CLIPS
13. C/W DRY BULB ECONOMIZER, CO2 ECONOMIZER CONTROL & BAROMETRIC RELIEF DAMPER WITH HOOD KIT
14. C/W POWER EXHAUST OPTION
15. 7 DAY, 24 HOUR PROGRAMMABLE THERMOSTAT C/W MINIMUM 10 HOUR BATTERY BACK-UP POWER
16. HORIZONTAL SUPPLY & RETURN CONNECTIONS
15. VERTICAL DOWN DISCHARGE SUPPLY & RETURN CONNECTIONS

SPLIT SYSTEM UNIT SCHEDULE

TYPE	SERVICE	MANUFAC-TURER	MODEL	NOMINAL COOLING TONS	AIRFLOW (CFM)	E.S.P. (IN.WG.)	FAN MOTOR (HP)	ELEC. REHEAT (KW)	ELECTRICAL			REFRIG-ERANT	DIMENSIONS (LxWxH)	WEIGHT (LBS)	NOTES
									(V/PH/HZ)	MCA	MOCP				
AHU-1	GYMNASIUM	ENGINEERED AIR	LM6/C	12	5,000	1.0	5	N/A	208/3/60	20	30	R-410A	98"x62"x34"	2,100	SEE NOTES 1 TO 5

NOTES:

1: SEISMICALLY RESTRAIN AIR CONDITIONING UNIT TO STRUCTURE.

2: UNITS c/w FILTERS AND INTEGRATED PROGRAMMABLE THERMOSTAT.

3. C/W REFRIGERANT PIPING BETWEEN CONDENSING UNIT AND FAN COIL UNIT. DIV. 15 SHALL PROVIDE LOW VOLTAGE WIRING BETWEEN CONDENSING UNIT AND FAN COIL UNIT.

4: UNIT SUPPLIED WITH SINGLE POINT POWER CONNECTION C/W STARTER AND DISCONNECT SWITCH.

5: INTERLOCKED WITH CU-1.

CONDENSING UNIT SCHEDULE

TYPE	SERVICE	LOCATION	MANUFACTURER	MODEL	ELECTRICAL			FAN MOTOR (HP)	COOLING CAPACITY NOM. TONS	CHARGE	DIMENSIONS (LxWxH)	WEIGHT (LBs)	NOTES
					V/PH/HZ	MCA	MOCP						
CU-1	GYMNASIUM	ROOF	YORK	CUE122/0	208/3/60	58.2	60	1/5	5	R-410A	37.25"x34.25"x37.12"	1,070	SEE NOTES 1 TO 3

NOTES:

1: C/W SUPPLY & RETURN REFRIGERANT PIPING TO AIR CONDITIONING UNIT. SIZING OF REFRIGERANT PIPING BY REFRIGERATION CONTRACTOR.
2: CONTRACTOR TO SEISMICALLY RESTRAIN CONDENSING UNIT TO STRUCTURE TO APPROVAL OF THEIR RETAINED STRUCTURAL ENGINEER.
3: C/W UNIT DISCONNECT SWITCH.
4: C/W LOW AMBIENT KIT

HEATING BOILER SCHEDULE

TYPE	LOCATION	SERVICE	MANUFACTURER	MODEL	INPUT (MBH)	OUTPUT (MBH)	FLOW L/S (GPM)	HEAD LOSS (FT W.C.)	ELECTRICAL CONNECTION	OPERATING WEIGHT (LB)	NOTES
B-1	BOILER ROOM	WATER HEATER	TRIANGLE TUBE	PRESTIGE SOLO	399	382	38	28	120V/1PH, 15A	346	SEE NOTE 1 TO 5
B-2	BOILER ROOM	WATER HEATER	TRIANGLE TUBE	PRESTIGE SOLO	399	382	38	28	120V/1PH, 15A	346	SEE NOTE 1 TO 5
B-3	BOILER ROOM	WATER HEATER	TRIANGLE TUBE	PRESTIGE SOLO	399	382	38	28	120V/1PH, 15A	346	SEE NOTE 1 TO 5
B-3	BOILER ROOM	WATER HEATER	TRIANGLE TUBE	PRESTIGE SOLO	399	382	38	28	120V/1PH, 15A	346	SEE NOTE 1 TO 5

NOTES:

1: PACKAGED BOILER WITH PRESSURE RELIEF VALVE, PRESSURE & TEMP GAUGE, HIGH LIMIT TEMPERATURE SAFETY CONTROL, OUTDOOR TEMPERATURE RESET CONTROL, AIR VENT, 24 VOLT TERMINAL STRIP WITH REMOVABLE JUMPERS FOR MANUAL RESET OR AUTOMATIC RESET, AUTOMATIC LOW WATER CUTOFF FEATURE, VARIABLE SPEED BLOWER
2: C/W CONDENSATE ACID NEUTRALIZER
3: DIV. 16 SHALL SUPPLY AND INSTALL DISCONNECT SWITCH.
4: REPLACEMENT BOILER. 4 TRIANGLE TUBE PRESTIGE SOLO 399 TO REPLACE EXISTING HYDROTHERM BOILERS. CONTRACTOR TO INSTALL 4 TRIANGLE TUBE BOILERS IN A CASCADE SYSTEM C/W RACK & HYDRAULIC SEPARATION.
5: SEISMICALLY RESTRAIN BOILERS TO STRUCTURE.

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TITLE:

MECHANICAL SCHEDULES

SCALE: AS SHOWN
DATE: JUNE 2015
DRAWN: NS
CHECKED: JM
JOB #: NEWW-74
DWG. NO.

M-06