

GENERAL NOTES

1. ALL WORK SHALL BE CARRIED OUT SUCH THAT EXISTING FEATURES, ARCH. FINISHES ARE NOT DAMAGED DURING CONSTRUCTION.

2. SHUT DOWN WATER SUPPLY AS REQUIRED FOR REPLACEMENT OF FAUCETS AND WC. ALL SHUT DOWNS SHALL TAKE PLACE ONLY BETWEEN 10PM–5AM. COORDINATE SHUTDOWNS WITH THE BUILDING SERVICES & ALL OTHER STAFF MEMBERS.

3. IF THERE ARE NO EXISTING ISOLATION VALVES CONTRACTOR SHALL INSTALL ISOLATING VALVES SUCH THAT THE AREA OF THE BUILDING WHERE WORK IS BEING PERFORMED CAN OCCUR WHILE THE REMAINDER OF THE FACILITY IS IN NORMAL OPERATIONS.

4. IN ORDER TO INSTALL NEW ISOLATING VALVES. CONTRACTOR SHALL FREEZE THE PIPELINE, COORDINATE WITH THE OWNER FOR TEMPORARY DISRUPTION OF THE SYSTEM.

5. DRAWINGS ARE NOT TO BE SCALED. CONTRACTOR WILL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS REQUIRED TO PERFORM THE WORK AND REPORT ANY DISCREPANCIES WITH THE CONTRACT DOCUMENTS TO THE PROJECT CONSULTANT BEFORE COMMENCING WORK.

6. THE CONTRACTOR SHALL MAKE A RECORD OF THE EXISTING SERVICES IN THE BUILDING WITH REFERENCE TO THE DRAWINGS. THE ACTUAL CONDITIONS AS RECORDED SHALL BE BROUGHT TO THE ATTENTION OF THE CLIENT & CONSULTANT SO THAT THE DWG & DOCUMENTS CAN BE SUITABLY UPDATED.

7. CONTRACTOR SHALL BE RESPONSIBLE FOR NOTING EX. CONDITIONS DURING SITE WALK THRU & PRE TENDER SITE VISITS. NO EXTRAS WILL BE PAID FOR WORK RESULTING DUE TO OBVIOUS SITE CONDITIONS.

8. IN NO CASE SHALL SERVICES INTERRUPTIONS AFFECT THE TOTAL BUILDING.

MECHANICAL LEGEND & ABBREVIATION

—CD—


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
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
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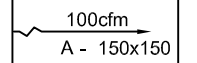





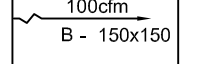















CONDENSATE DRAIN (CD)

DOMESTIC COLD WATER (DCW )

DOMESTIC HOT WATER (DHWS)

CLEANOUT PLUG

PLUMBING TRAP

FLOOR DRAIN

SUPPLY AIR DIFFUSER

EXHAUST AIR GRILLE

GI - DENOTES GREASE INTERCEPTOR

X - DENOTES GREASE INTERCEPTOR NUMBER

EF - DENOTES EXHAUST FAN

X - DENOTES EXHAUST FAN NUMBER

EH - DENOTES EXHAUST HOOD

X - DENOTES EXHAUST HOOD NUMBER

VOLUME DAMPER

100 - DENOTES AIR QUANTITY

A - DENOTES TYPE OF DIFFUSER

150x150 - DENOTES SIZE OF GRILLE (mm)

100 - DENOTES AIR QUANTITY

B - DENOTES TYPE OF GRILLE

150x150 - DENOTES NECK SIZE OF DIFFUSER (mm)

PENDANT SPRINKLER HEAD

DRAWING LIST

DWG. NO.	DRAWING NAME	SCALE
M-001	MECHANICAL DRAWING LIST, LEGEND, GENERAL NOTES & SCHEDULES	N.T.S
M-002	MECHANICAL SPECIFICATION - SHEET 1	N.T.S
M-003	MECHANICAL SPECIFICATION - SHEET 2	N.T.S
M-004	MECHANICAL SPECIFICATION - SHEET 3	N.T.S
M-005	MECHANICAL SPECIFICATION - SHEET 4	N.T.S
M-006	MECHANICAL SPECIFICATION - SHEET 5	N.T.S
M-200D	POTWASH - PLUMBING & DRAINAGE BASEMENT LEVEL - DEMOLITION LAYOUT	1:50
M-200	POTWASH - PLUMBING & DRAINAGE BASEMENT LEVEL - NEW LAYOUT	1:50
M-201	SERVERY FOOD SERVICES PLUMBING & DRAINAGE LEVEL 4	1:50
M-300	POTWASH - FIRE PROTECTION BASEMENT LEVEL - NEW LAYOUT	1:50
M-400	POTWASH - HVAC DUCTWORK BALANCING BASEMENT FLOOR	N.T.S
M-401	POTWASH - HVAC DUCTWORK BASEMENT FLOOR	1:50
M-402	POTWASH - HVAC DUCTWORK BASEMENT FLOOR	1:50
M-403	POTWASH - HVAC DUCTWORK GROUND FLOOR	1:50

GREASE INTERCEPTOR SCHEDULE

TAG NO.	LOCATION	AREA SERVED	FLOW RATE gpm	CAPACITY lbs	DIMENSIONS mm	MANUFACTURER	MODEL NO.
GI-01	BASEMNET POTWASH ROOM	POTWASH	35	80	762(L)x457(W) x 508(H)	WATTS	WD-135-E

EXHAUST FAN SCHEDULE

TAG NO.	LOCATION	AREA SERVED	CFM	TSP I.W.C	FAN RPM	MANUFACTURER	MODEL NO.	MOTOR V/PH/Hz	WATTS	CONTROLS	REMARKS
EF-01	B46a	POTWASH	600	0.282	1022	GREENHECK	BSQ-100-4	120/1/60	12	ON/OFF	(1)

REMARKS:  
1. FAN SHALL BE OFF / ON SWITCH. REFER TO ELECTRICAL DRAWING FOR LOCATION.  
2. FAN SHALL BE SUPPLIED WITH PLUG TYPE DISCONNECT, ADJUSTABLE MOUNTING BRACKETS, VIBRATION ISOLATORS AND INTEGRAL BACKDRAFT DAMPER.

GRILLE AND DIFFUSER SCHEDULE


SYMBOL	TYPE	BORDER	FASTENING	SLOTS	SIZE (mm)	MANUFACTURER	MODEL #	FINISH COLOUR
A	SUPPLY AIR SQUARE PLAQUE DIFFUSER	31	T-BAR/ DRYWALL	-	600 X 600	E.H. PRICE	SPD/31/B12	NOTE (1)
B	SUPPLY AIR SQUARE PLAQUE DIFFUSER	31	T-BAR/ DRYWALL	-	300 X 300	E.H. PRICE	SPD/31/B12	NOTE (1)
C	RETURN AIR/EXHAUST AIR SQUARE PLAQUE DIFFUSER	25	T-BAR/ DRYWALL	-	AS INDICATED ON DRAWINGS	E.H. PRICE	81	NOTE (1)

REMARKS:  
1. TO BE DECIDED BY ARCHITECT.  
2. ALL E/A GRILLES & S/A DIFFUSERS TO BE ALUMINUM.

HEAT AND CONDENSATE HOOD

SYMBOL	LOCATION	AREA SERVED	LENGTH (IN.)	WIDTH (IN.)	EXHAUST SP (in.w.g.)	EXHAUST VOLUME (cfm)	MANUFACTURER	MODEL #	GUTTER
EH-01	B46a	POTWASH	72	45	0.032		GREENHECK	GD1	YES

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4 2024-02-16 ISSUED FOR ADDITIONAL FIRE PROTECTION DRAWING

3 2023-11-15 ISSUED FOR BUILDING PERMIT/TENDER

2 2023-08-09 ISSUED FOR DESIGN SIGN-OFF

1 2023-07-14 ISSUED FOR DESIGN SIGN-OFF

# Date: Revision: By

revisions

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SEVEN OAKS  
KITCHEN RENOVATION

9 NEILSON ROAD, SCARBOROUGH

MECHANICAL DRAWING  
LIST, LEGEND, GENERAL  
NOTES & SCHEDULES

scale: N.T.S.

drawn by: BK/AP/SM

reviewed by: VS

job number: CEL:23509.01  
MSA:21509.F03

plot date:

drawing number:

M-001

GENERAL NOTES:

1. THE GENERAL CONDITIONS AND BASE BUILDING STANDARDS ARE AN INTEGRAL PART OF THIS WORK AND ALL WORK ON THE FACILITY SHALL BE CARRIED OUT IN STRICT ACCORDANCE WITH THE CONSTRUCTION STANDARDS OF THE FACILITY. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO BECOME FAMILIAR WITH THOSE STANDARDS. REFER TO FRONT END DOCUMENTS FOR DETAILS.
2. ALL OTHER AREAS OF THE FACILITY SHALL REMAIN IN OPERATION DURING THE CONSTRUCTION PERIOD. COORDINATE WITH THE FACILITY FOR ALL RULES AND REGULATIONS IN ORDER TO ACHIEVE SUCCESSFUL COMPLETION OF THE PROJECT.
3. CONTRACTORS SHALL ADHERE TO THE WORKING HOURS STIPULATED BY THE CONDITIONS OF THIS CONTACT. REF. ARCH. DOCUMENTS FOR DETAILS.
4. DEFINITIONS:  
'PROVIDE' – CONTRACTOR TO PURCHASE AND INSTALL ITEMS AS DESCRIBED.  
'SUPPLY' – CONTRACTOR TO PURCHASE ITEMS FOR INSTALLATION BY OTHERS.  
'INSTALL' – CONTRACTOR TO INSTALL ITEMS PURCHASED BY OTHERS.  
'UNCONDITIONED SPACE' – AN ENCLOSED SPACE WITHIN A BUILDING THAT IS NOT A CONDITIONED SPACE OR A SEMI-HEATED CRAWL SPACE. CRAWL SPACES, ATTICS AND PARKING GARAGES WITH NATURAL OR MECHANICAL VENTILATION ARE NOT CONSIDERED ENCLOSED SPACES.
5. LOCATION OF ALL EXISTING SERVICES AND EQUIPMENTS HAVE BEEN SHOWN BASED ON ARCHIVE DOCUMENTS AND SITE MEASUREMENTS. CONTRACTOR SHALL FIELD MEASURE ALL SITE CONDITIONS AND MAKE SUITABLE PROVISIONS DURING TENDER. THE MECHANICAL DRAWINGS DO NOT SHOW ALL THE ARCHITECTURAL AND STRUCTURAL DETAILS. ANY INFORMATION INVOLVING ACCURATE DIMENSIONING OF THE BUILDING SHALL BE TAKEN FROM SITE. MAKE, WITHOUT ADDITIONAL CHARGE, ANY NECESSARY MODIFICATIONS OR ADDITIONS TO THE ROUTING OF DRAINS, PIPES, DUCTS, ETC., TO ACCOMMODATE THE SITE CONDITIONS.
6. PRIOR TO SUBMITTING A BID AMOUNT, THE CONTRACTOR SHALL VISIT THE SITE AND EXAMINE THE FOLLOWING:

.1 VERIFY EXISTING CONDITIONS AND ANY LIMITATIONS.

.2 VERIFY EXISTING ARCHITECTURE AND STRUCTURE OF THE BUILDING IE: WALLS, FLOORS, ETC.

.3 VERIFY EXISTING MECHANICAL SYSTEMS IN THE BUILDING, IE: HVAC, PLUMBING, FIRE PROTECTION, ETC.

.4 EXAMINE THE PROPOSED INSTALLATION AGAINST THE EXISTING.

CONTRACTOR SHALL BE RESPONSIBLE FOR NOTING EXISTING CONDITIONS DURING SITE WALK THRU & PRE-TENDER SITE VISITS. NO EXTRAS WILL BE PAID FOR WORK RESULTING DUE TO OBVIOUS SITE CONDITIONS . CONTRACTOR SHALL ENSURE THAT ALL NEW INSTALLATION CAN BE PERFORMED TO MEET DESIGN INTENT AGAINST EXISTING CONDITIONS AND DESIGN DRAWINGS. UPON EXAMINING ALL OF THE ABOVE AGAINST THE PLANS, SPECIFICATIONS AND TERMS OF THE CONTRACT, THE CONTRACTOR MUST SATISFY HIMSELF THAT THE PROPOSED INSTALLATION CAN BE CARRIED OUT AS INTENDED TO THE SATISFACTION OF THE OWNER, AT NO ADDITIONAL COST TO THE OWNER.
7. MATERIAL, PRODUCTS AND EQUIPMENT SHALL BE NEW, OF THE BEST QUALITY AND BE OF UNIFORM PATTERN. ALL WORK SHALL BE CARRIED OUT BY SKILLED WORKERS, EXPERIENCED AND SPECIALISTS IN THEIR FIELD OF WORK TO ENSURE THE HIGHEST LEVEL OF WORKMANSHIP.
8. SUBMIT SHOP DRAWINGS ELECTRONICALLY IN PDF FORMAT FOR ALL EQUIPMENT, VALVES, ETC. TO THE CONSULTING ENGINEER PRIOR TO PLACING ORDER FOR SAME. CONTRACTOR SHALL NOT ORDER EQUIPMENT, VALVES, ETC. UNTIL HE HAS RECEIVED APPROVED SHOP DRAWINGS RETURNED TO HIM BY THE CONSULTING ENGINEERS. (NOTE: CONSULTING ENGINEERS REQUIRE A MINIMUM OF TWO WEEKS FOR SHOP DRAWING REVIEW). NON-APPROVED EQUIPMENT, VALVES, ETC. WHICH APPEAR ON SITE WILL BE REJECTED AND TURNED AWAY AT CONTRACTORS EXPENSE.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT AND CO-ORDINATION OF THE MECHANICAL AND ELECTRICAL WORK OF ALL SUB-TRADES.
10. ADHERE TO THE RULES, REGULATIONS AND STANDARDS OF THE BASE BUILDING.
11. THIS CONTRACTOR SHALL EMPLOY TRADES SPECIALIZING IN CUTTING AND PATCHING AS REQUIRED FOR THIS WORK. ALL PATCHING SHALL BE PERFORMED USING THE SAME TYPE OF MATERIAL WHICH WAS CUT. X-RAY INSPECTION MAY BE REQUIRED PRIOR TO ANY CUTTING AND/OR DRILLING STRUCTURAL ENGINEER. CONSULT WITH BUILDING OWNER WITH REGARD TO X-RAY REQUIREMENTS AND OBTAIN WRITTEN DIRECTION PRIOR TO COMMENCING WORK.

MECHANICAL SPECIFICATIONS

12. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING THE SITE AND REMOVING WASTE MATERIALS CAUSED BY THE PERFORMANCE OF THE WORK FOR DIVISION 15. ANY EQUIPMENT TO BE REMOVED DURING PERFORMANCE OF THIS WORK SHALL BE TURNED OVER TO THE OWNER.
13. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSPECT ALL THE EXISTING SYSTEMS PRIOR TO START OF WORK AND REPORT ANY DEFICIENCIES. THESE INCLUDE, BUT ARE NOT LIMITED TO: HVAC SYSTEM AND COMPONENTS, HEATING SYSTEM AND COMPONENTS, FIRE PROTECTION SYSTEM AND COMPONENTS, AND THE PLUMBING SYSTEM AND COMPONENTS. THE INSPECTION SHALL BE DONE IN THE PRESENCE OF THE BUILDING OWNER’S REPRESENTATIVE.
14. PROVIDE ULC LISTED FIRE STOP SYSTEMS WHERE PIPING PENETRATES FLOOR SLABS OF OTHER FIRE SEPARATIONS.
15. SUBMIT TWO COPIES OF AS-BUILT DRAWINGS PRIOR TO SUBSTANTIAL COMPLETION OF WORK.
16. PROVIDE THREE COPIES OF MAINTENANCE MANUALS COVERING ALL NEW EQUIPMENT INSTALLED FOR THIS PROJECT.
17. THIS CONTRACTOR SHALL PROVIDE A WRITTEN WARRANTY STATING THAT ALL WORK SHALL BE FREE FROM DEFECTS FOR MATERIAL, EQUIPMENT AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL CERTIFICATE, WHICH SHALL INCLUDE ONE (1) COMPLETE WINTER AND ONE (1) COMPLETE SUMMER OF UNINTERRUPTED OPERATION.
18. IDENTIFY ALL EQUIPMENT WITH LAMICOID PLATES. IDENTIFICATION TAG NUMBERS TO MATCH THAT SHOWN ON DRAWINGS.
19. SHUT-DOWN OF EXISTING SYSTEMS REQUIRED FOR THIS INSTALLATION SHALL BE FULLY CO-ORINATED WITH BUILDING OWNER. OBTAIN PERMISSION, IN WRITING, AND PERFORM ALL WORK AS DIRECTED BY OWNER. FINAL CONNECTION TO EXISTING SYSTEMS TO BE PERFORMED AT A TIME PERIOD DESIGNATED BY THE BUILDING OWNER.
20. ANY WORK THAT INVOLVES SHUT DOWN OR DISRUPTION TO EX. SERVICES SHALL BE CARRIED OUT "AFTER NORMAL WORKING HOURS" (6:00PM-8:00AM). THIS MAY INCLUDE, BUT IS NOT LIMITED TO; THE LIFE-SAFETY SYSTEM, HVAC SYSTEM, PLUMBING SYSTEM, AND FIRE PROTECTION SYSTEM. COORDINATE WITH BUILDING OWNER FOR ANY TIMINGS. ANY 'AFTER NORMAL WORKING HOURS' REQUIRED FOR THIS PROJECT SHALL BE INCLUDED IN THE TENDER AMOUNT.
21. VERIFY VOLTAGE, ON SITE, BEFORE ORDERING EQUIPMENT.
22. MECHANICAL DRAWING SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL, STRUCTURAL AND ELECTRICAL DRAWINGS.
23. REMOVE ALL EXISTING PIPING, EQUIPMENT AND DUCTWORK THAT IS MADE REDUNDANT BY THIS NEW WORK, ON A DAILY BASIS.
24. CO-ORDINATE WITH THE BUILDING OWNER FOR SCHEDULING OF WORK EFFECTING THE EXISTING SYSTEMS, INCLUDING BUT NOT LIMITED TO: PLUMBING AND DRAINAGE, HVAC AND SPRINKLER SYSTEMS. IN ADDITION, CO-ORDINATE WITH THE BUILDING OWNER FOR SCHEDULING OF WORK IN THE ADJACENT TENANT SPACES TO COMPLETE THE INSTALLATION OF THE WORK.
25. ALLOW FOR PREMIUM TIME TO PERFORM THE "TIE-IN" OF NEW CONNECTIONS TO EXISTING SYSTEMS AS DESCRIBED ABOVE.
26. FILE ALL NECESSARY DOCUMENTS FOR THE PURPOSE OF OBTAINING ALL PERMITS. ARRANGE FOR AND PAY ALL FEES FOR INSPECTIONS AS REQUIRED BY CODE AND LOCAL AUTHORITIES. PROVIDE THE OWNER WITH THE CERTIFICATES OF ALL INSPECTIONS PRIOR TO FINAL COMPLETION.
27. NOTHING CONTAINED HEREIN SHALL BE CONSTRUED TO RELIEVE THE CONTRACTOR FROM MAKING GOOD AND PERFECT IN ALL USUAL DETAILS OF CONSTRUCTION.

TIE-INS TO EXISTING SERVICES:

1. ALL EXISTING PIPING SYSTEMS, NAMELY BUT NOT LIMITED TO HEATING, COOLING, PLUMBING AND FIRE PROTECTION SYSTEMS SHALL BE MAINTAINED IN OPERATING CONDITIONS DURING THE DURATION OF CONSTRUCTION.
2. CONTRACTOR SHALL EXAMINE EXISTING ISOLATING VALVES TO ENSURE THAT THEY ARE IN GOOD WORKING CONDITION. IF THE EXISTING VALVES ARE NOT IN GOOD CONDITION AND ARE NOT PROVIDING A POSITIVE SHUT OFF, THE CONTRACTOR SHALL PERFORM THE FOLLOWING.

1. FREEZE THE EXISTING PIPING SYSTEM.

2. CO-ORDINATE WITH THE FACILITIES DEPARTMENT FOR TEMPORARY SHUT DOWN OF PUMPS TO FACILITATE FREEZING.

3. INSTALL NEW ISOLATION VALVES TO PERFORM NEW WORK AS PER DRAWINGS.

4. UNFREEZE THE PIPING AND RESTORE THE SYSTEM TO NORMAL OPERATION

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SEVEN OAKS  
KITCHEN RENOVATION

9 NEILSON ROAD, SCARBOROUGH

MECHANICAL  
SPECIFICATION  
SHEET 1

scale: N.T.S.  
drawn by: BK/AP/SM  
reviewed by: VS  
job number: CEL:23509.01  
plot date: MSA:21509.F03

drawing number:

M-002

DEMOLITION:

1. PROVIDE FOR THE REMOVAL OF EQUIPMENT AND DEVICES AS NOTED ON THE DRAWINGS.
2. REMOVAL OF DEBRIS AND RUBISH FROM THE JOB SITE TO BE EXECUTED ON A DAILY BASIS IN ORDER TO MAINTAIN A CLEAN AND SAFE WORK ENVIRONMENT.
3. UNLESS OTHERWISE NOTED, EQUIPMENT SHALL BE THE PROPERTY OF THE OWNER AND EQUIPMENT NOT RE-USED SHALL BE TURNED OVER TO THE OWNER. EQUIPMENT NOT WANTED BY THE OWNER SHALL BE REMOVED AND DISPOSED OF AWAY FROM THE SITE.
4. PRIOR TO DEMOLITION, MAKE NOTE OF ANY DAMAGE TO THE EXISTING SYSTEM. IDENTIFY THESE ITEMS AND INFORM THE CONSULTING ENGINEER IMMEDIATELY. FAILURE TO REPORT ANY DEFICIENCIES, PRIOR TO DEMOLITION, IMPLIES THAT THE CONTRACTOR HAS ACCEPTED THE SITE. IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO MAKE GOOD ALL EXISTING EQUIPMENT NOTED TO REMAIN FOLLOWING THE DEMOLITION WORK.
5. CAP ALL PIPING, WHICH ARE NOT TO BE RE-USED.
6. CAP ALL DUCT TAKE-OFFS, WHICH ARE NOT TO BE RE-USED.
7. ENSURE THE CONTINUED OPERATION OF THE LIFE-SAFETY SYSTEM DURING THE ENTIRE CONSTRUCTION OF THE PROJECT. BYPASS ONLY THE ZONES NECESSARY AND AS REQUIRED TO COMPLETE THE WORK REQUIRED. GIVE 24 HOURS NOTICE TO THE BUILDING OWNER FOR SYSTEM BYPASS AND NOTIFY IMMEDIATELY UPON COMPLETION OF THE WORK SO AS TO RESTORE THE PLUMBING SYSTEM TO THE ENTIRE FACILITY. IN NO CASE SHALL THE PLUMBING SYSTEM SYSTEM, OR ANY PART OF, REMAIN ON BYPASS DURING THE NIGHT (AFTER NORMAL WORKING HOURS.) IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO ENSURE THAT THE PLUMBING SYSTEM IS FULLY FUNCTIONAL PRIOR TO LEAVING THE SITE AT THE END OF EACH WORKING DAY.
8. CO-ORDINATE IN ADVANCE WITH THE BUILDING OWNER, WORK WHICH IS TO BE CARRIED OUT "AFTER NORMAL WORKING HOURS". THIS MAY INCLUDE, BUT IS NOT LIMITED TO; THE LIFE-SAFETY SYSTEM, HVAC SYSTEM, PLUMBING SYSTEM, FIRE PROTECTION SYSTEM AND ANY WORK WHICH MUST BE CONDUCTED IN THE ADJOINING TENANT SPACES.
9. ENSURE THE CONTINUED OPERATION OF THE EXISTING HVAC, PLUMBING AND FIRE PROTECTION SYSTEMS WHICH SUPPLY THE ADJOINING TENANT SPACES.

1. PLUMBING AND DRAINAGE SPECIFICATION

PLUMBING AND DRAINAGE SPECIFICATION:

1. ALL PIPING SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE PLUMBING CODE AND AS REQUIRED FOR APPROVAL BY THE LOCAL INSPECTION AUTHORITIES. PIPING MATERIAL SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED.
2. MATERIAL FITTINGS SANITARY DRAIN i) DWV COPPER OR WROUGHT COPPER OR CAST AND VENTS CAST IRON BRASS, 50-50 SOLDER ii) SANITARY DRAINS CAST IRON TO CSA ASTM A74 CAST IRON FITTINGS B70 ASTM WITH HEAVY BITUMINOUS COATING iii) DOMESTIC WATER TYPE 'L' COPPER WROUGHT COPPER, BRONZE, 95-5 SOLDER
3. ALL COPPER TUBING FOR USE IN THE PLUMBING SYSTEM SHALL BE CERTIFIED FOR COMPLIANCE WITH ASTM B88 AS SPECIFIED IN THE LATEST EDITION OF THE ONTARIO PLUMBING CODE.
4. FOR INSTALLATION OF POTABLE WATER SYSTEM SOLDERS AND FLUXES SHALL BE LEAD FREE.
5. HANGER RODS TO BE STEEL THREADED AND FASTENED TO BUILDING STRUCTURE USING SUBSTANTIAL INSERTS. PERFORATED STRAPS OR CHAIN HANGERS ARE NOT TO BE USED. NO POWER ACTUATED FASTENERS SHALL BE USED. INSERTS SHALL BE INSTALLED IN DRILLED HOLES.
6. HANGERS SHALL BE ADJUSTABLE STEEL CLEVIS TYPE. ISOLATION SHALL BE PROVIDED BETWEEN COPPER PIPE AND STEEL HANGERS. SUPPORT FOR PIPING SHALL BE AS FOLLOWS:  
PIPE SIZE DISTANCE BETWEEN SUPPORTS (ft)  
i) UP TO 3/4" 6'-0" 1"  
ii) 8'-0"  
iii) 1-1/4" AND 1-1/2" 10'-0" 2" AND UP  
iv) 12'-0"
7. PROVIDE ESCUTCHEONS WHERE EXPOSED PIPING PASSES THROUGH WALLS.
8. PROVIDE CLEANOUTS AS REQUIRED BY CODE AND AS SHOWN ON THE DRAWINGS.
9. PROVIDE INDIVIDUAL ACCESSIBLE SHUT-OFF VALVES FOR ALL DOMESTIC WATER CONNECTIONS IF REQUIRED.
  - 1.1. NPS2 AND UNDER SHALL BE BALL VALVES CLASS 125,860 kPA, BRONZE BODY, BRONZE BALL WITH TEFLON SEAL WITH SCREWED ENDS & LOCK SHIELD HANDLES. - STANDARD OF ACCEPTANCE SHALL BE TOYO, JENKINS, CRANE, KITZ & GRINNELL.
  - 1.2. NPS 2 1/2 AND OVER SHALL BE BUTTERFLY VALVES, GROOVED ENDS CLASS 300, BUBBLE TIGHT SHUT OFF & BRONZE BODY. OPERATORS SHALL BE LEVER HANDLE FOR NPS 4 & UNDER. GEAR OPERATED FOR NPS 6 & OVER.
10. INSTALL PIPING PARALLEL AND CLOSE TO WALLS TO CONSERVE SPACE, AND TO SUIT INSTALLATION OF RELATED WORK. NO PVC PIPING SHALL BE UTILISED ABOVE GRADE.
11. IF THERE ARE EXISTING ISOLATION VALVES IN THE PIPING, PRIOR TO CUTTING ANY OF THE PIPING, THE CONTRACTOR SHALL EXAMINE ALL OF THESE ISOLATING VALVES TO ENSURE THEY ARE IN GOOD WORKING CONDITION. IF THEY ARE NOT IN GOOD CONDITION AND THEY CAN NOT BE COUNTED ON TO PROVIDE ISOLATION OF THE SYSTEM THE CONTRACTOR SHALL EITHER FREEZE THE PIPING OR DRAIN IT DOWN PRIOR TO MAKING THE CONNECTION.

12. PROVIDE SHOP DRAWINGS AND SAMPLES FOR ALL SANITARY FIXTURES AND FITTINGS PRIOR TO ORDERING.
- 13.. ENSURE THAT EXISTING SERVICES ARE NOT DAMAGED DURING DEMOLITION AND CONSTRUCTION. IMMEDIATELY CUT OFF AND CAP CONCEALED SERVICES UNCOVERED DURING WORK BY QUALIFIED MECHANICAL AND ELECTRICAL WORKERS.
- 14.. RELOCATE EXPOSED EXISTING MECHANICAL AND ELECTRICAL SERVICES WHERE ALTERATION WORK OCCURS.
- 15.. DO NOT INTERRUPT MECHANICAL OR ELECTRICAL SERVICES OF THE EXISTING BUILDING EXCEPT FOR TEMPORARY CLOSE-DOWNS TO MAKE CONNECTIONS TO NEW WORK, AND AS APPROVED BY PRIOR ARRANGEMENTS WITH CONSULTANT AND OWNER. GIVE THE GENERAL CONTRACTOR, CONSULTANT AND OWNER THREE WORKING DAYS WRITTEN NOTICE OF INTENTION TO INTERRUPT MECHANICAL OR ELECTRICAL SERVICES IN EXISTING BUILDING IN ANY AREA, AND OBTAIN WRITTEN PERMISSION FROM OWNER AND GENERAL CONTRACTOR.
- 16.. SHOULD EXISTING SREVICES BE ACCIDENTALLY UNCOVERED AND DISRUPTED, MAKE COMPLETE RESTORATION IMMEDIATELY, AND PROVIDE ADEQUATE PROTECTION TO AVOID FURTHER DISREPTION UNTIL ALTERNATIVE MEANS OF PROVIDING PERMANENT CONTINUATION OF THE SERVICES ARE MADE.
17. IF THE CONTRACTOR DISCOVERS ANY ISSUES OR DEFICIENCIES WITH RESPECT TO THE EXISTING SERVICES DURING HIS/HER SITE REVIEW THE CONTRACTOR SHALL REPORT THESE ISSUES OR DEFICIENCIES TO THE CONSULTANT PRIOR TO ANY DEMOLITION WORK TAKING PLACE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY THEIR FAILURE TO REVIEW THE EXISTING SYSTEMS PRIOR TO PROCEEDING WITH THE WORK.
- 18.. WHERE SUCH SERVICES SUCH AS MECHANICAL EQUIPMENT, PIPING OR DUCTWORK ARE TO BE REMOVED AS PART OF THE DEMOLITION WORK AND/OR SERVICES NEEDS TO BE REMOVED TO FACILITATE INSTALLATION OF NEW SERVICES OR QUIPMENT, THE MECHANICAL CONTRACTOR SHALL REVIEW THE SITE AND ENSURE THAT THESE SERVICES ARE NOT 'LIVE' AND THAT THEIR REMOVAL/DEMOLITION WILL NOT CAUSE ANY DAMAGE OR ANY DISTURBANCE.

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SEVEN OAKS  
KITCHEN RENOVATION

9 NEILSON ROAD, SCARBOROUGH

MECHANICAL SPECIFICATION SHEET 2

scale: N.T.S.  
drawn by: BK/AP/SM  
reviewed by: VS  
job number: CEL:23509.01  
plot date: MSA:21509.F03

drawing number:

M-003

2. PLUMBING FIXTURES AND TRIM SPECIFICATION

2.1 "FFD-1" FLOOR DRAINS (WITH COMBINATION FUNNEL)

2.1.1 JAY R. SMITH 2005Y-A05NB-3591NB-OT-P050 FINISHED AREA FLOOR DRAIN, DUCO COATED 9" (230MM) DIA. CAST IRON BODY WITH NO HUB OUTLET CONNECTION, REVERSIBLE FLASHING CLAMP COLLAR, 5" (125MM) DIA. NICKEL BRONZE STRAINER WITH OPEN THROAT, 8-1/4" X 3-1/4" X 4-1/2" (210MM X 83MM X 115MM) HIGH OVAL NICKEL BRONZE FUNNEL AND 1/2" (13MM) TRAP PRIMER CONNECTION.

2.1.2 STANDARD OF ACCEPTANCE: JR SMITH, ZURN.

2.2 GREASE INTERCEPTOR-ELECTRONIC

.1 GI - 01: GREASE INTERCEPTOR, BELOW GRADE

- .1 INTERCEPTOR SHALL BE OF GLASS FIBRE CONSTRUCTION USING A THIXOTROPIC POLYESTER RESIN SPECIFICALLY FOR THE MANUFACTURE OF REINFORCED PRODUCTS. THE RESULTING MATERIAL SHALL BE INERT, NON-CORROSIVE AND IMPERVIOUS TO RETAINED WASTES.
- .2 THE INTERCEPTOR SHALL BE SUITABLE FOR UNDERGROUND INSTALLATION.
- .3 INTERCEPTORS SHALL BE DESIGNED TO MINIMIZE TURBULENCE, PROMOTE CENTRIFUGAL SEPARATION AND SETTLING AND PREVENT RESUSPENSION AND SCOURING OF COLLECTED MATERIALS. TEMPORARY BACKWATER CONDITIONS SHALL NOT CAUSE TRAPPED CONTAMINANTS TO BE RESUSPENDED OR SCOURED FROM THE INTERCEPTOR.
- .4 EACH INTERCEPTOR COMPRISE TWO CELLS OR CHAMBERS OF CIRCULAR CROSS SECTION IN THE HORIZONTAL PLANE, PROVING INTEGRAL BAFFLING. WASTEWATER SHALL ENTER BELOW THE NORMAL LIQUID LEVEL AND TANGENTIAL TO THE INTERCEPTOR WALL.
- .5 PROVIDE A CLEANOUT, SAMPLE AND VENTILATION PORTS TOGETHER WITH AN EXTENSION COLLAR AND FRAME AND COVER TO ALLOW ACCESS FOR REMOVAL OF OIL, GREASE AND SOLIDS. THE BOTTOM OF BOTH CELLS OF THE INTERCEPTOR SHALL HAVE A HEMISPHERICAL SHAPE TO CONCENTRATE SOLIDS AND TO ALLOW EASY AND COMPLETE REMOVAL OF OIL, GREASE AND SOLIDS.
- .6 THE INTERCEPTOR SHALL BE DESIGNED TO REMOVE FROM PROCESS WASTEWATER FREE OIL, GREASE AND OTHER FLOATABLE MATERIALS.
- .7 ALL GREASE INTERCEPTORS SERVING MORE THAN ONE LEVEL SHALL BE PROVIDED WITH A SECONDARY FLOW CONTROL DEVICE TO BE INSTALLED WITHIN THE BUILDING ON THE SANITARY PIPING AS REQUIRED BY THE OBC.
- .8 PROVIDE A 24" MANWAY TO INTERCEPTOR AND 4" INLET AND OUTLET CONNECTIONS.
- .9 NO HUB CONNECTION
- .10 HIGH LEVEL ALARM AND FLOAT SWITCH
- .11 NON -SLIP GASKETED EPOXY COATED COVER
- .12 STANDARD OF ACCEPTANCE: WATTS - WD-135-E OR LILMAX - LIL-6-PL-HLA

2.3 BACK FLOW PREVENTERS

.1 FOR FIRE SPRINKLER APPLICATION

- .1 CONSIST OF TWO INDEPENDENT TRI-LINK CHECK MODULES WITHIN A SINGLE HOUSING, SLEEVE ACCESS PORT, FOUR TEST COCKS AND TWO DRIP TIGHT SHUTOFF VALVES.
- .2 TRI-LINK CHECKS SHALL BE REMOVABLE AND SERVICEABLE, WITHOUT THE USE OF SPECIAL TOOLS.
- .3 THE HOUSING SHALL BE CONSTRUCTED OF 304 SCHEDULE 40 STAINLESS STEEL PIPE WITH GROOVE END CONNECTIONS.
- .4 TRI-LINK CHECKS SHALL HAVE REVERSIBLE ELASTOMER DISCS AND IN OPERATION SHALL PRODUCE DRIP TIGHT CLOSURE AGAINST REVERSE FLOW CAUSED BY BACKPRESSURE OR BACKSIPHONAGE.
- .5 THE BYPASS ASSEMBLY SHALL CONSIST OF A METER, WHICH REGISTERS IN EITHER GALLON OR CUBIC MEASUREMENT, A DOUBLE CHECK BACKFLOW ASSEMBLY AND REQUIRED TEST COCKS.
- .6 BACK FLOW PREVENTER SHALL MEET STANDARD ASSE 1048, CSA B64.5, FM APPROVED (BFG & OSY ONLY), UL CLASSIFIED. TEMPERATURES RANGE: 33°F - 140°F (0.5°C - 60°C),
- .7 MAXIMUM WORKING PRESSURE: 175 PSI 12.1 BAR).
- .8 STANDARD OF ACCEPTANCE: WATTS 757DCDA, HERSEY, CONBRACO

.2 FOR POTABLE WATER APPLICATION

- .1 THE HOUSING SHALL BE CONSTRUCTED OF 304 SCHEDULE 40 STAINLESS STEEL PIPE WITH GROOVE END CONNECTIONS. OF TWO INDEPENDENT TRI-LINK CHECK MODULES WITHIN A SINGLE HOUSING, SLEEVE ACCESS PORT, FOUR TEST COCKS AND TWO DRIP TIGHT SHUTOFF VALVES.
- .2 TRI-LINK CHECKS SHALL BE REMOVABLE AND SERVICEABLE, WITHOUT THE USE OF SPECIAL TOOLS.
- .3 BI-LINK CHECKS SHALL HAVE REVERSIBLE ELASTOMER DISCS AND IN OPERATION SHALL PRODUCE DRIP TIGHT CLOSURE AGAINST REVERSE FLOW CAUSED BY BACKPRESSURE OR BACKSIPHONAGE.
- .4 TEMPERATURES RANGE: 33°F - 110°F (0.5°C - 43°C) CONTINUOUS, 140°F (60°C) INTERMITTENT.
- .5 MAXIMUM WORKING PRESSURE: 175 PSI (12.1 BAR).
- .6 THE ASSEMBLY SHALL MEET REQUIREMENTS OF ASSE 1015, CSA B664.5, FM, UL CLASSIFIED.
- .7 STANDARD OF ACCEPTANCE: WATTS 757, HERSEY, CONBRACO

2.4 MANUAL SINK FAUCETS

CHICAGO FAUCETS No. 540-LDL5VBCP, SINK AUCET FOR HOT AND COLD WATER, WALL-MOUNTED WITH ADJUSTABLE ARMS FOR 7-1/4"-8-3/4" CENTERS. CHROME PLATED. L-TYPE SWING SPOUT WITH ATMOSPHERIC VACUUM BREAKER, 5-3/4" CENTER-TO CENTER. 2-3/8" METAL, VANDAL-PROOF, LEVEL HANDLES WITH SIXTEEN-POINT, TAPERED BROACH AND SECURED BLUE AND RED INDEX BUTTONS. QUATUM EBUILDABLE COMPRESSION CARTRIGE, OPENS AND CLOSES 90°, CLOSES WITH WATER PERSSURE, FEATURES SQUARE, TAPERED STEM. 3/8" OFFSET INLET SUPPLY ARM WITH 1/2" NPT FEMALE THREAD INLET. 2-5/16" DIAMETER SLIP FLAGE.

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3	2023-11-15	ISSUED FOR BUILDING PERMIT/TENDER	
2	2023-08-09	ISSUED FOR DESIGN SIGN-OFF	
1	2023-07-14	ISSUED FOR DESIGN SIGN-OFF	
#	Date:	Revision:	By
revisions			

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SEVEN OAKS  
KITCHEN RENOVATION

9 NEILSON ROAD, SCARBOROUGH

MECHANICAL  
SPECIFICATION  
SHEET 3

scale: N.T.S.

drawn by: BK/AP/SM

reviewed by: VS

job number: CEL:23509.01  
MSA:21509.F03

drawing number:

M-004

3. HEATING, VENTILATION & AIR CONDITIONING

1. PROVIDE DUCTWORK IN ACCORDANCE WITH S.M.A.C.N.A., LATEST EDITION. TOTAL ALLOWABLE LEAKAGE RATE NOT TO EXCEED 1.5% OF TOTAL SYSTEM DESIGN AT SYSTEM OPERATING PRESSURE.
2. ALL DUCTWORK TO BE GALVANIZED. DUCTWORK AND HANGERS TO BE FABRICATED TO S.M.A.C.N.A. FOR LOW PRESSURE DUCTWORK, LATEST EDITION. USE GALVANIZED STRAP HANGERS FOR DUCTWORK UP TO 20" (500mm) DEEP AND BLACK GALVANIZED STEEL HANGER ROD FOR LARGER DUCTS.
3. ROUND DUCTWORK TO BE SPIRAL LOCKSEAM CONTRUCTION FABRICATED TO S.M.A.C.N.A., LATEST EDITION.
4. FLEXIBLE DUCTWORK TO BE ALUMINIUM, SPIRAL WOUND WITH 1" (25mm) EXTERNAL INSULATION. SECTIONS OF FLEXIBLE DUCT SHALL NOT BE JOINED TOGETHER. MAXIMUM LENGTH OF FLEXIBLE DUCT NOT TO EXCEED 10'-0" (3 m), MINIMUM OF 3'-0" (1 m).
5. DUCT FITTINGS TO BE FABRICATED TO S.M.A.C.N.A., LATEST EDITION. STANDARD RADIUS ELBOWS TO BE USED ON SUPPLY AIR DUCTWORK. RADIUS ELBOWS TO BE USED FOR RETURN AND EXHAUST DUCTWORK. SQUARE ELBOWS WITH TURNING VANES TO BE USED ONLY WHERE APPROVED BY THE CONSULTING ENGINEER.
6. ROUND DUCT ELBOWS FROM 4"ø TO 8"ø (100mm TO 200mm) TO BE TWO PIECE DIESTAMPED WITH FULLY WELDED LONGITUDINAL SEAM. ELBOWS FROM 9"ø TO 36"ø (225mm TO 900mm) TO BE STANDING SEAM CONSTRUCTION. ELBOWS ABOVE 36"ø (900mm) TO BE STANDARD CORE CONSTRUCTION WITH JOINTS RIVETTED AND BONDED.
7. ALL ROUND DUCT CONNECTIONS TO BE SLIP JOINT CONSTRUCTION WITH MINIMUM 2" (50mm) INSERTION. APPLY DUCT SEALER, PRIOR TO CONNECTION, ON MALE END CONNECTORS AND AFTERWARDS TO COVER THE ENTIRE JOINT. IN ADDITION, PROVIDE SHEET METAL SCREWS AT A MAXIMUM 12" (300mm) SPACING, WITH A MINIMUM 3 SCREWS PER JOINT. FOR LARGE DIAMETER DUCTWORK 24" (600mm) AND OVER, USE FLANGED AND GASKETTED JOINTS.
8. PROVIDE 1" (25mm), 1.5 lbs. (24kg/m3) NEOPRENE FACED ACCOUSTIC DUCT LINER FOR RECTANGULAR DUCTWORK WHERE SHOWN. FOR ROUND SPIRAL DUCT PROVIDE 1" (25mm) FIBERGLASS INSULATION WITH AN INTERNAL PERFORATED LINER. DUCT SIZES INDICATED ARE INTERNAL DIMENSIONS.
9. EQUIVALENT DUCT SIZES MAY BE SUBSITUTED IN LIEU OF THOSE SHOWN, IN ORDER TO AVOID INTERFERENCE WITH STRUCTURE AND OTHER MECHANICAL SERVICES. OBTAIN ENGINEER'S APPROVAL BEFORE FABRICATION OF DUCTS.

1. DUCTWORK INSULATION:

.1 APPLY INSULATION AS PER MANUFACTURERS RECOMMENDATIONS.

.2 INSULATION TO COMPLY WITH NFPA 90A, LATEST EDITION.

.3 INSULATION TO BE INSTALLED IN ACCORDANCE WITH ASHRAE 90.1, LATEST EDITION.

.4 MAXIMUM FLAME SPREAD RATING OF 25 AND SMOKE DEVELOPEMENT RATING OF 50 IN ACCORDANCE WITH NFPA 255 AND CAN4-S102, LATEST EDITIONS.

.5 EMPLOY A LICENSED INSULATION APPLICATOR, WITH AN ESTABLISHED REPUTATION, SPECIALIZING IN THIS TYPE OF WORK.

2. INSTALL DUCTWORK AS FOLLOWS:

.1 INSTALL ALL DUCTWORK AND HANGERS IN ACCORDANCE WITH S.M.A.C.N.A., LATEST EDITION.

.2 INSTALL ALL DUCTWORK TIGHT TO UNDERSIDE OF STRUCTURE.

.3 SUPPORT ALL DUCTWORK DIRECTLY FROM THE STRUCTURE. DUCTS SHALL NOT BE SUPPORTED FROM HANGERS BELONGING TO OTHER TRADES OR FROM OTHER DUCTS OR PIPES.

- .4 DO NOT BREAK CONTINUITY OF INSULATION VAPOUR BARRIER WITH DUCT HANGERS. INSULATE HANGERS 4" (100mm) BEYOND INSULATED DUCT.
- .5 HORIZONTAL DUCTS TO BE SUPPORTED WITHIN 24" (600mm) OF EACH ELBOW AND WITHIN 48" (1200mm) OF EACH BRANCH INTERSECTION. STRAIGHT DUCT RUNS TO HAVE A MAXIMUM SPACING OF 96" (2400mm).
- .6 PROVIDE VOLUME DAMPERS AT ALL DUCT BRANCHES AND TAKE-OFFS.
- .7 THE MECHANICAL CONTRACTOR SHALL VERIFY EXACT LOCATION OF EQUIPMENT PRIOR TO FABRICATION AND INSTALLATION OF DUCTWORK. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED ELBOWS, DUCT ACCESSORIES, ETC. TO COMPLETE THE INTENT OF THE MECHANICAL DRAWINGS. NO EXTRA WILL BE ALLOWED FOR THIS WORK.
- .8 PROVIDE FIRE DAMPERS WHERE SHOWN ON DRAWINGS AND WHERE REQUIRED BY LOCAL AUTHORITIES AND CODES. RATE FIRE DAMPERS TO MATCH THE FIRE RATING OF SEPARATION CROSSED. PROVIDE ONLY ULC LABELLED DAMPERS AND INSTALL AS SPECIFIED IN NFPA/CUA 90A.
- .9 LOCATE THERMOSTATS AS SHOWN ON PLAN. MOUNT AT 5'-6" ABOVE FINISHED FLOOR, UNLESS DIRECTED OTHERWISE.
- .10 PROVIDE AN INDEPENDANT FIRM TO CONDUCT TESTING, ADJUSTING AND BALANCING OF COMPLETE BASEMENT SUPPLY AND RETURN AIR SYSTEM CONNECTED TO AH-1N. SUBMIT WRITTEN REPORT IN TO MECHANICAL CONSULTANT FOR APPROVAL.
- .11 PROVIDE ACCESS DOORS IN THE CEILING IN ORDER TO MAINTAIN/ADJUST THE CONTROL VALVES, DAMPERS. COORDINATE WITH ARCH DWGS. FOR SIZE AND LOCATION.

3. BALANCING TO BE PERFORMED BY ONE OF THE FOLLOWING:

.1 BALANCING CONTRACTOR:

1) FLOWSET

2) PROAIR

3) DESIGN TEST

4) CLARK AIR BALANCING

5) VPG

6) ACE

.2 SCOPE:

BALANCE ALL SUPPLY AIR & EXHAUST AIR GRILLES/ DIFFUSERS CONNECTED TO THE VENTILATION SYSTEM OF THIS PROJECT.

.3 PROVIDE COMPLETE BALANCING REPORTS FOR REVIEW PRIOR TO INCLUDING THEM IN THE O&M MANUAL.

4. RECESSED ACCESS DOOR FOR PLASTER APPLICATIONS

.1 DOOR SHALL BE 16 GAUGE STEEL. MOUNTING FRAME SHALL BE 14 GAUGE GALVANIZED STEEL.

.2 DOOR SHALL BE PROVIDED WITH A 14MM (5/8") RECESS AND SHALL BE LINED WITH SELF FURRING GALVANIZED LATH.

.3 THE FRAME SHALL BE PROVIDED AN EXPANSION CASING BEAD WITH 75 MM (3") WIDE GALVANIZED LATH, RECESSED 20MM (3/4")TO RECEIVE PLASTER.

.4 THE HINGE SHALL BE A CONCEALED PIVOTING ROD.

.5 THE LATCH SHALL BE FLUSH TO THE SURFACE, SCREWDRIVER OPERATED CAM LATCH.

.6 THE STEEL FINISH SHALL BE 5 STAGE IRON PHOSPHATE PREPARATION WITH PRIME COAT OF GREY BAKED ENAMEL.

.7 STANDARD OF ACCEPTANCE: ACUDOR AP-5010, MIFAB, ZURN, WATROUS, WILLIAMS BROTHERS

5. HEAT AND CONDENSATE HOOD

.1 CONDENSATE HOODS SHALL BE OF THE TYPE II, EXHAUST ONLY CANOPY

.2 THE HOOD(S) SHALL BE CONSTRUCTED OF A MINIMUM OF 18 GAUGE 400 SERIES STEEL

.3 THE HOOD(S) SHALL BE CONSTRUCTED USING THE STANDING SEAM METHOD FOR OPTIMUM STRENGTH.

.4 ALL SEAMS, JOINTS AND PENETRATIONS OF THE HOOD ENCLOSURE SHALL BE WELDED AND/OR LIQUID TIGHT. LIGHTER MATERIAL GAUGES, ALTERNATE MATERIAL TYPES AND FINISHES ARE NOT ACCEPTABLE.

.5 THE HOOD(S) SHALL INCLUDE A FULL PERIMETER, WELDED, CONDENSATE COLLECTING GUTTER WITH A 0.5 INCH N.P.T. STAINLESS STEEL DRAIN FITTING

.6 THE HOOD(S) SHALL BE VAPOR PROOF, U.L. LISTED LIGHTING FIXTURES (FLUORESCENT OR LED ETC.) SHALL BE PRE-WIRED TO A JUNCTION BOX SITUATED AT THE TOP OF THE HOOD FOR FIELD CONNECTION. WIRING SHALL CONFORM TO THE REQUIREMENTS OF THE NFPA 70

.7 THE HOOD(S) SHALL BE BUILT IN ACCORDANCE WITH THE NFPA 96, UMC AND BEAR THE NSF SEAL OF APPROVAL

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32023-11-15ISSUED FOR BUILDING PERMIT/TENDER

22023-08-09ISSUED FOR DESIGN SIGN-OFF

12023-07-14ISSUED FOR DESIGN SIGN-OFF

#Date:Revision:By

revisions

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SEVEN OAKS  
KITCHEN RENOVATION

9 NEILSON ROAD, SCARBOROUGH

MECHANICAL SPECIFICATION SHEET 4

scale:As indicated

drawn by:BK/AP/SM

reviewed by:VS

job number:CEL:23509.01  
MSA:21509.F03

plot date:

drawing number:

M-005

4. FIRE PROTECTION

1. THE CONTRACTOR SUBMITTING QUOTATIONS FOR THIS WORK SHALL PROVIDE A COMPLETE, OPERATING SPRINKLER SYSTEM FOR THE CART WASH AREA. THE SYSTEM SHALL BE VERIFIED AND DESIGNED IN ACCORDANCE WITH THE SPECIFICATIONS, NFPA AND THE AUTHORITIES HAVING JURISDICTION. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTING ANY PROPOSAL. THE WORK SHALL INCLUDE RELOCATION OR RENEWAL OF THE SPRINKLER PIPING AND EQUIPMENT NECESSARY TO PROVIDE A COMPLETE SYSTEM. THIS SHALL INCLUDE ANY UPGRADING OF THE EXISTING SYSTEM WHICH MAY BE REQUIRED.
2. DO WORK IN ACCORDANCE WITH THE FOLLOWING, UNLESS OTHERWISE SPECIFIED

.1 NFPA 13, LATEST EDITION; FOR SPRINKLER SYSTEMS

.2 ONTATIO BUILDING CODE, LATEST EDITION

.3 AUTHORITIES HAVING JURISDICTION
3. SUBMIT SHOP DRAWING AND PRODUCT DATA IN ACCORDANCE WITH NFPA, WORKING PLANS AND DESIGN REQUIREMENTS
4. ENGINEERING DESIGN CRITERIA:

.1 DESIGN SYSTEM TO NFPA, USING THE PARAMETER IN NFPA

.2 PIPE SIZE AND LAYOUT:

PIPE SIZE SHALL BE DETERMINED USING HYDRAULIC DESIGN. HYDRAULIC DESIGN IN STRICT TO CONFORMANCE TO NFPA 13.

.3 HEAD LAYOUT IN STRICT TO CONFORMANCE TO MECHANICAL LAYOUT DRAWING AND NFPA 13.

.4 PIPE LOCATIONS: TO SUIT SPECIFIED INSTALLATION CONFORMS TO NFPA REQUIREMENTS OF RELATED WORK.
5. PROVIDE CERTIFICATE INDICATING THAT THE SPRINKLER INSTALLATION CONFORMS TO NFPA REQUIREMENTS AND SPECIFIED COVERAGE.
6. PIPE, FITTINGS AND VALVES:

.1 ALL SPRINKLER PIPING SHALL BE INSTALLED SO THAT ALL PARTS OF EACH SYSTEM MAY BE THOROUGHLY DRAINED, PREFERABLY AT THE MAIN VALVE. ALL TRAPPED HEADS IN EXCESS OF FIVE (5) HEADS SHALL BE PROVIDED WITH DRAIN VALVES AND CAST IRON PLUG. LOW POINTS WHERE MORE THAN TWENTY HEADS ARE TRAPPED SHALL BE PROVIDED WITH AN AUXILIARY DRAIN VALVE.

.2 PIPE:

.1 FERROUS: TO NFPA 13.

.3 FITTINGS AND JOINTS:

.1 SCREWED: TO NFPA 13.

.4 PIPE HANGERS:

.1 ULC LISTED FOR FIRE PROTECTION AND IN ACCORDANCE WITH NFPA 13.
7. SPRINKLER HEADS:

.1 SPRINKLER HEADS SHALL BE TO NFPA 13 AND ULC LISTED SERVICE.

.2 LOCATE SPRINKLER HEADS AS SHOWN ON MECHANICAL PLANS AND/OR AT CENTRE LINES OF PANEL AS REQUIRED TO PRODUCE ORDERLY AND SYMMETRICAL WITH OTHER CEILING-MOUNTED DEVICES, AND TO MEET OR EXCEED THE REQUIREMENTS OF AUTHORITIES AND INSURANCE UNDERWRITERS.

.3 PROVIDE SPARE SPRINKLER HEADS AND TOOLS AS REQUIRED BY NFPA 13, LATEST EDITION.

8. STANDARD OF ACCEPTANCE:

.1 PENDANT SPRINKLER HEADS TO MATCH BASE BUILDING STANDARD.
9. INSTALLATION:

.1 PROVIDE INTERFERENCE DRAWINGS AS REQUIRED TO COORDINATE WORK WITH OTHER TRADES. REFER TO DETAILS ON AND LOCATE SPRINKLER LINES TO AVOID INTERFERENCE WITH LIGHTS, DUCTWORK AND OTHER EQUIPMENT IN THE CEILING SPACE.

.2 MAKE ALLOWANCE FOR EXTRA SPRINKLER HEADS THAT MAY BE REQUIRED DUE TO SITE CONDITIONS DUE TO WORK STATION PARTITIONS, SHELVING ETC.

.3 INSTALL AND TEST SYSTEM TO ACCEPTANCE IN ACCORDANCE NFPA AND TO THE AUTHORITIES HAVING JURISDICTION.

.4 TESTING TO BE WITNESSED BY / OR TO THE SATISFACTION OF AUTHORITIES HAVING JURISDICTION.
10. PRODUCTS

10.1 PIPE, FITTINGS AND VALVES

.1 ALL SPRINKLERS PIPES SHALL BE INSTALLED SO THAT ALL PARTS OF EACH SYSTEM MAY BE THOROUGHLY DRAINED. PREFERABLY AT THE MAIN DRAIN VALVE. ALL TRAPPED HEADS IN EXCESS OF FIVE (5) HEADS SHALL BE PROVIDED WITH DRAIN VALVES AND CAST IRON PLUG. LOW POINTS WHERE MORE THAN TWENTY HEADS ARE TRAPPED SHALL BE PROVIDED WITH AN AUXILIARY DRAIN VALVE.

.2 PIPE:

.1 UL LISTED FOR FIRE PROTECTION SERVICE.

.2 BRONZE TO NPS 2.

.3 THREADED TO NPS 2.

.4 FOR SHUT OFF SERVICE: OS&Y GATE

.5 SWING CHECK VALVES

.6 BALL DRIP.

.1 AS INDICATED IN NFPA 13.

.3 FITTINGS AND JOINTS:

.1 SCREWED AS INDICATED IN NFPA 13.

.4 VALVES:

.1 UL LISTED FOR FIRE PROTECTION SERVICE.

.2 BRONZE TO NPS 2.

.3 THREADED TO NPS 2.

.4 FOR SHUT OFF SERVICE: OS&Y GATE

.5 SWING CHECK VALVES

.6 BALL DRIP.

.5 PIPE HANGERS:

.1 UL LISTED FOR FIRE PROTECTION AS SPECIFIED IN NFPA 13.
- 10.2 SPRINKLER HEADS

.1 GENERAL: TO NFPA 13 AND UL LISTED FOR FIRE SERVICE.

.2 ALL HEADS UTILIZED SHALL BE QUICK RESPONSE HEADS.

.3 ALL HEADS ARE UPRIGHT, RATED FOR USE IN A WET PIPE SYSTEM.

.1 STANDARD HEAD ACTIVATION TEMPERATURE SHALL BE 165°F

–END OF SECTION–

1

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1 2024-02-16 ISSUED FOR ADDITIONAL FIRE PROTECTION DRAWING			
#	Date:	Revision:	By
revisions			

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SEVEN OAKS  
KITCHEN RENOVATION

9 NEILSON ROAD, SCARBOROUGH

MECHANICAL  
SPECIFICATION  
SHEET 5

scale: As indicated

drawn by: BK/AP/SM

reviewed by: VS

job number: CEL:23509.01  
MSA:21509.F03

drawing number:

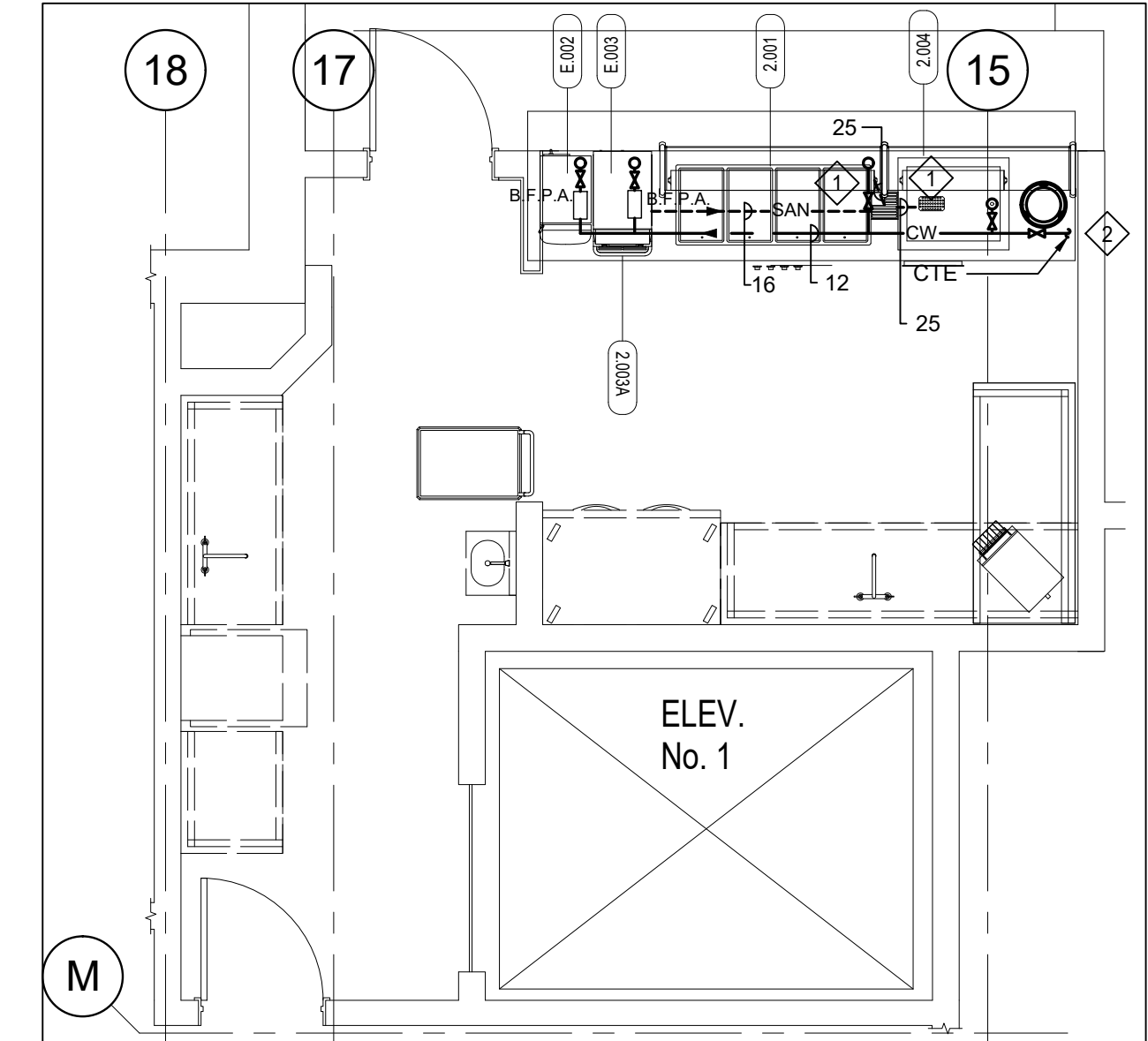
M-006





QF - EXISTING MEP SCHEDULE - LEVEL 4 - SERVERY														
ITEM NO.	QTY.	DESCRIPTION	Equipment Remarks	ELECTRICAL						PLUMBING				
				AMPS	VOLTS	PHASE	CYCLE	ELEC. CONN.		CW SIZE (MM)	HW SIZE (MM)	DIR. WASTE SIZE (MM)	NDIR. WASTE SIZE (MM)	PLUMBING REMARKS
E.002	1	JUICE DISPENSER	EXISTING TO BE RELOCATED K.E.C.	6 A	120	1	60		ALL EXISTING SERVICES T.B.C.	10 mm				T.B.C
E.003	1	SPECIALTY COFFEE DISPENSER	EXISTING TO BE RELOCATED K.E.C.	15 A	208	1	60		ALL EXISTING SERVICES T.B.C.	10 mm				T.B.C
E.004	1	REACH-IN REFRIGERATOR	EXISTING TO BE RELOCATED K.E.C.	15 A	120	1	60	PLUG	ALL EXISTING SERVICES T.B.C.					
E.005	1	5- WELL HOT FOOD STATION	EXISTING TO BE RELOCATED K.E.C.	13 A	208	1	60	PLUG	NEMA 6-20P. ALL EXISTING SERVICES T.B.C	0 mm			0 mm	
E.006	1	ELECTRIC CONVEYOR TOASTER	EXISTING TO BE RELOCATED K.E.C.	15 A	208	1	60	PLUG	ALL EXISTING SERVICES T.B.C.					
E.007	1	CART. UTILITY	EXISTING TO BE RELOCATED K.E.C.											
E.008	1	PORTABLE HAND SINK W/ SINGLE BOWL	EXISTING TO BE RELOCATED K.E.C.	12 A	120	1	60	PLUG	ALL EXISTING SERVICES T.B.C.	0 mm		0 mm		

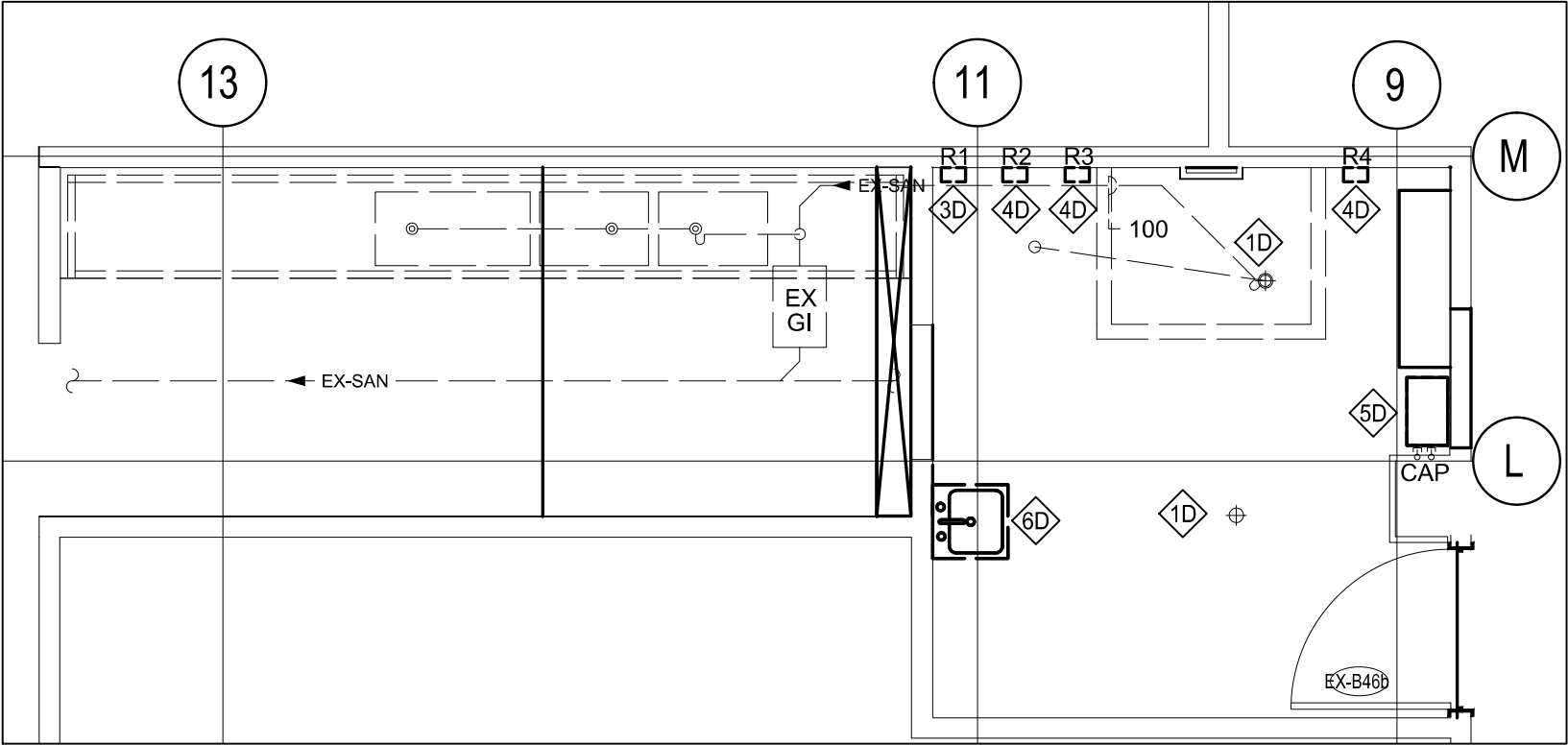
QF - NEW MEP SCHEDULE - LEVEL 4 - SERVERY															
2.001	1	HOT WELLS		7 A	208	3	60	DIRECT			6 mm			25 mm	TO F.S.
2.002	1	FOOD SHIELD													
2.002A	1	HEAT LAMP		9 A	120	1	60	DIRECT							
2.002B	1	HEAT LAMP		6 A	120	0	60	DIRECT							
2.003	1	S.S TABLE		12 A	120	1	60	PLUG	GENERAL PURPOSE RCPT						
2.003A	1	DRIP TRAY												16 mm	TO F.S.
2.004	1	HOT/COLD WELLS		10 A	208	1	60	DIRECT	ADD'L 120/1/160 4.9A		6 mm			25 mm	TO F.S.
2.007	1	ELECTRIC CONVEYOR TOASTERS		16 A	208	1	60	PLUG	NEMA-6-20P						
2.008	1	DROP-IN, DISH DISPENSERS, HEATED		4 A	120	1	60	DIRECT							



NOTES:

- 1 PROVIDE NEW SAN LINE RUN AT LOW LEVEL AND DRAIN TO EXISTING F.S.
- 2 PROVIDE NEW 12 DCW LINE AT LOW LEVEL c/w SHUT-OFF VALVE AND IN-LINE DUC-DUAL CHECK VALVE TO SERVE ITEM 2.001, 2.004, E.002 & E.003.





- DEMOLITION NOTES:**
- GENERAL NOTES:**
- ALL EQUIPMENT AND PIPING SHOWN ON THIS DRAWING MAY VARY FROM ACTUAL SITE CONDITION. CONTRACTOR TO VERIFY SITE.
- 1D DEMOLISH EXISTING FLOOR DRAIN GRATE FOR REPLACEMENT.
  - 2D DISCONNECT EXISTING WASH DOWN FAUCET FROM DCW & DHW PIPING. DEMOLISH FAUCET AND CAP EXISTING DCW & DHW INSIDE WALL CAVITY.
  - 3D DISCONNECT EXISTING CONTROL BOX (R1) FOR EXISTING (G1). RELOCATE CONTROL BOX AS SHOWN IN DRAWING M-200.
  - 4D REMOVE AND RELOCATE ALL 'ECOLAB' EQUIPMENT (R2, R3, R4) c/w ALL ACCESSORIES. REFER TO DRAWING M-200 FOR LOCATION.
  - 5D DEMOLISH EXISTING TRAP. SEAL PRIMER TANK (R5) AND CAP PIPING IN WALL CAVITY.
  - 6D DEMOLISH EXISTING HAND SINK AND CAP DCW, DHW AND DRAIN PIPING WITHIN WALL CAVITY.

1 POT WASH - PLUMBING & DRAINAGE - DEMOLITION LAYOUT  
M-200D 1:50



2 POT WASH ROOM  
M-200D NTS



3 POT WASH ROOM  
M-200D NTS

THIS DRAWING MAY HAVE BEEN REDUCED.  
CHECK SCALE BELOW TO DETERMINE REDUCTION.



SCALE 1:50

3	2023-11-15	ISSUED FOR BUILDING PERMIT/TENDER	
2	2023-08-09	ISSUED FOR DESIGN SIGN-OFF	
1	2023-07-14	ISSUED FOR DESIGN SIGN-OFF	
#	Date:	Revision:	By
revisions			

All drawing and specifications are the property of the architect. The contractor shall verify all dimensions and information on site and report any discrepancy to architect before proceeding.

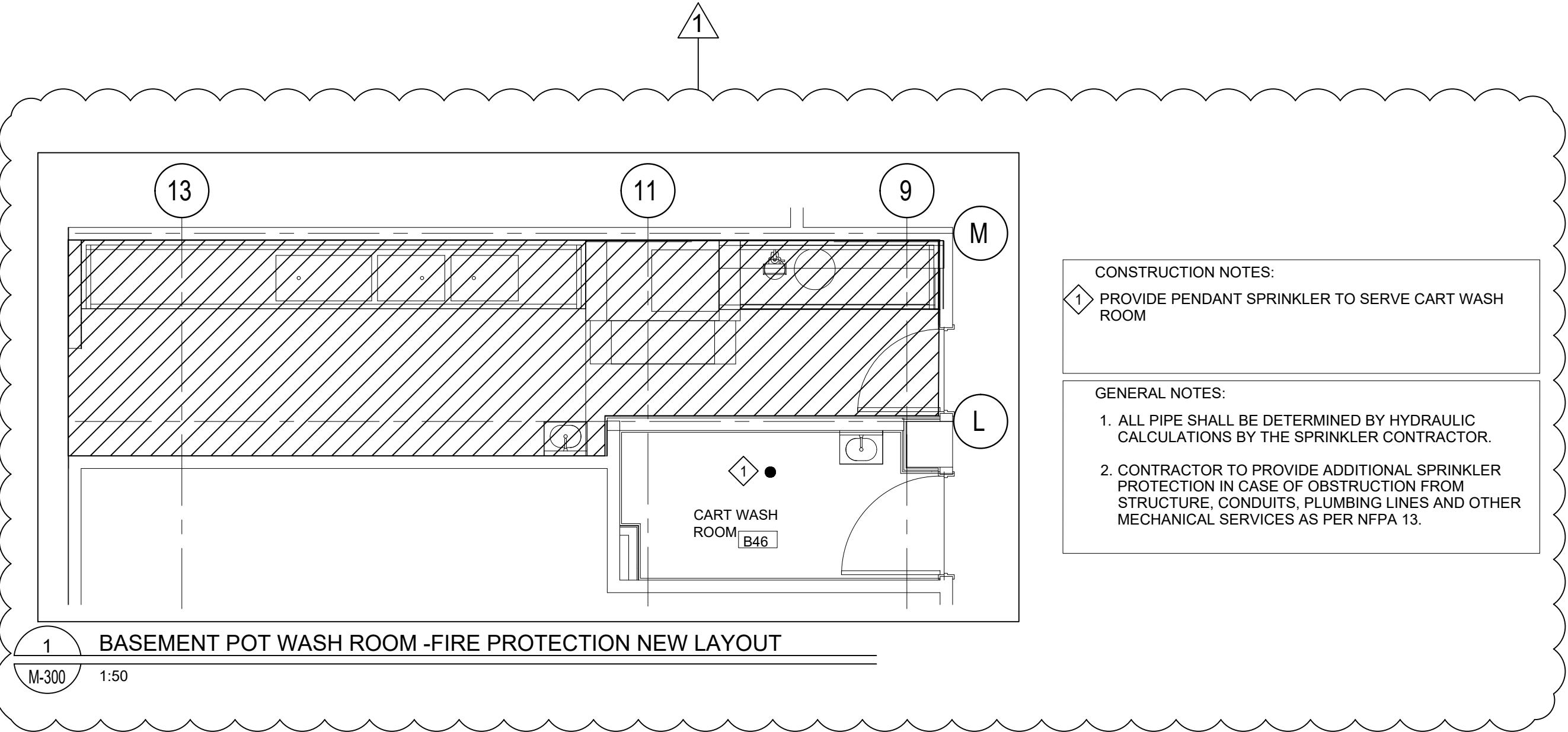
## SEVEN OAKS KITCHEN RENOVATION

9 NEILSON ROAD, SCARBOROUGH

## POTWASH - PLUMBING & DRAINAGE BASEMENT LEVEL- DEMOLITION LAYOUT

scale: As indicated  
drawn by: BK/AP/SM  
reviewed by: VS  
job number: CEL:23509.01  
plot date: MSA:21509.F03  
drawing number:

M-200D



CONSTRUCTION NOTES:

1 PROVIDE PENDANT SPRINKLER TO SERVE CART WASH ROOM

GENERAL NOTES:

1. ALL PIPE SHALL BE DETERMINED BY HYDRAULIC CALCULATIONS BY THE SPRINKLER CONTRACTOR.

2. CONTRACTOR TO PROVIDE ADDITIONAL SPRINKLER PROTECTION IN CASE OF OBSTRUCTION FROM STRUCTURE, CONDUITS, PLUMBING LINES AND OTHER MECHANICAL SERVICES AS PER NFPA 13.

1	2024-02-16	ISSUED FOR ADDITIONAL FIRE PROTECTION DRAWING	
#	Date:	Revision:	By
revisions			

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SEVEN OAKS  
KITCHEN RENOVATION

9 NEILSON ROAD, SCARBOROUGH

POTWASH -  
FIRE PROTECTION  
BASEMENT LEVEL -  
NEW LAYOUT

scale: As indicated

drawn by: BK/AP/SM

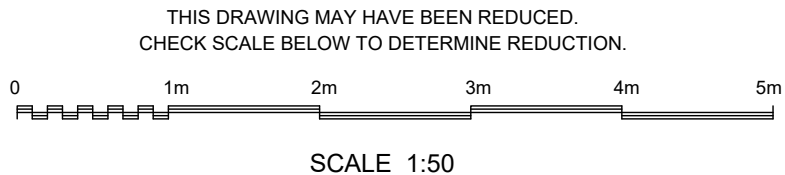
reviewed by: VS

job number: CEL:23509.01

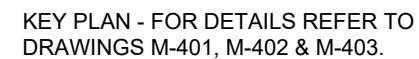
plot date: MSA:21509.F03

drawing number:

M-300



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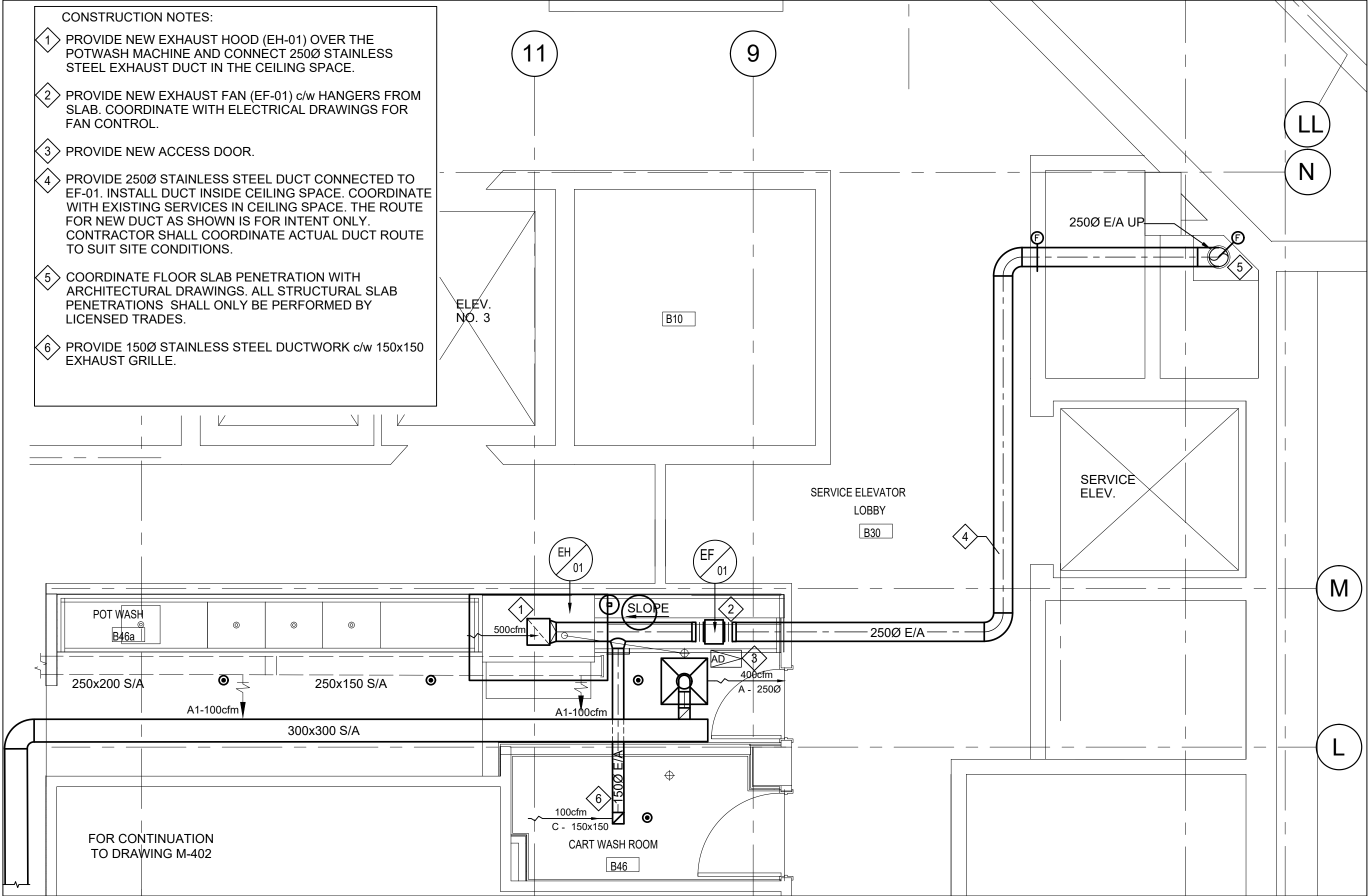


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9 NEILSON ROAD, SCARBOROUGH

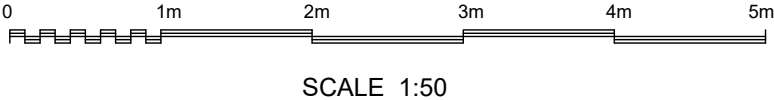
scale: NTS  
drawn by: BK/AP/SM  
reviewed by: VS  
job number: CEL:23509.01  
plot date: MSA:21509.F03

# M-400



1 POT WASH - HVAC DUCTWORK - BASEMENT FLOOR  
M-400 1:50

THIS DRAWING MAY HAVE BEEN REDUCED.  
CHECK SCALE BELOW TO DETERMINE REDUCTION.



2023-11-15	ISSUED FOR BUILDING PERMIT/TENDER		
2023-08-09	ISSUED FOR DESIGN SIGN-OFF		
2023-07-14	ISSUED FOR DESIGN SIGN-OFF		
#	Date:	Revision:	By
revisions			

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SEVEN OAKS  
KITCHEN RENOVATION  
9 NEILSON ROAD, SCARBOROUGH

POT WASH -  
HVAC DUCTWORK  
BASEMENT FLOOR

scale: As indicated  
drawn by: BK/AP/SM  
reviewed by: VS  
job number: CEL:23509.01  
plot date: MSA:21509.F03  
drawing number:

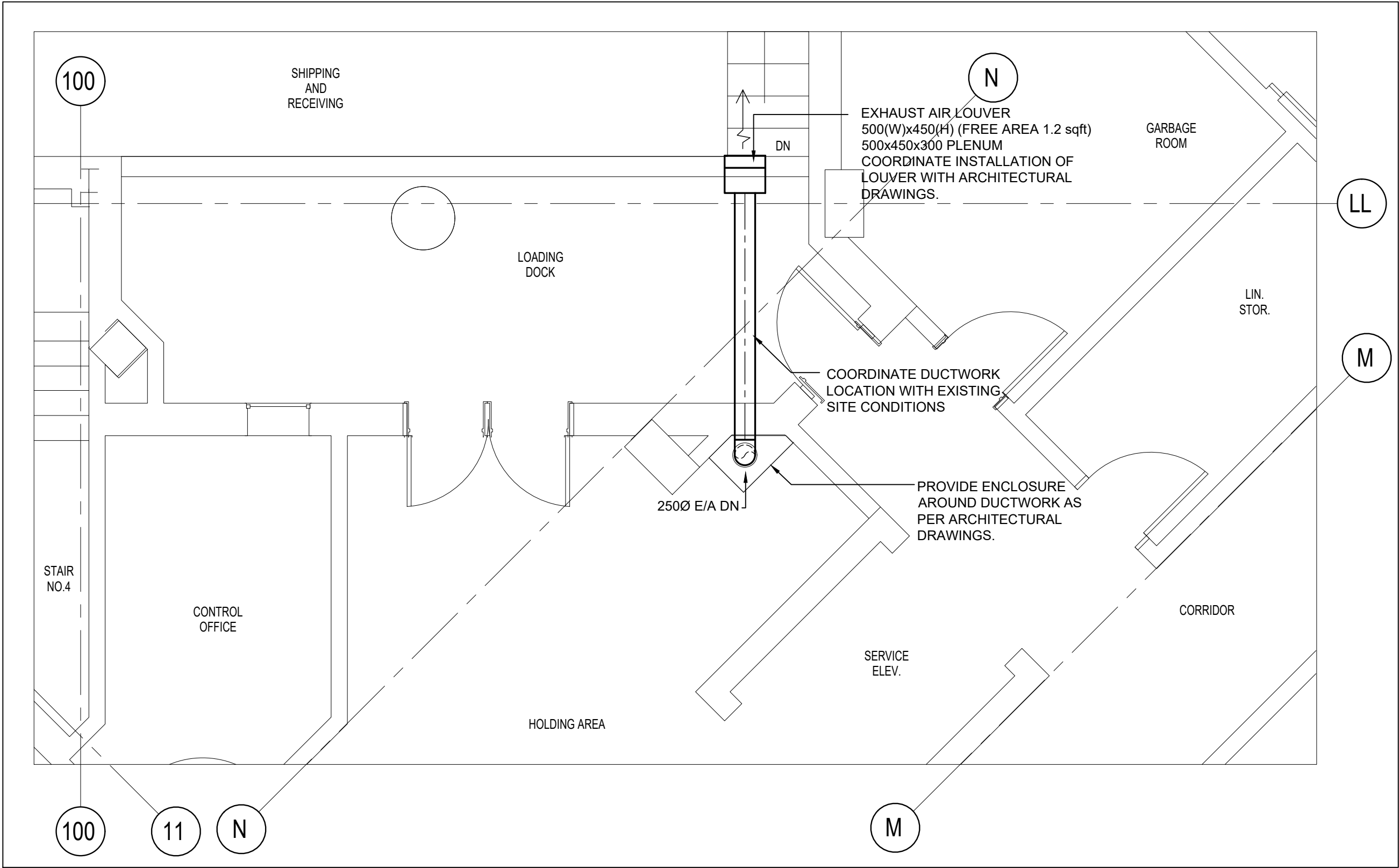
M-401



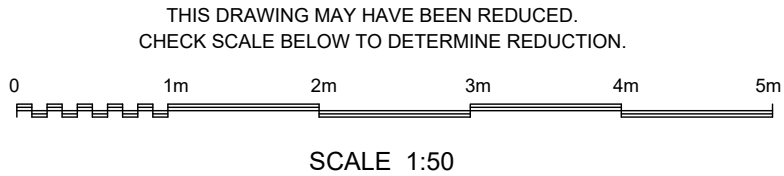
SCALE 1:50

drawing number:

M-402



1 POT WASH - HVAC DUCTWORK - GROUND FLOOR  
M-401 1:50



3	2023-11-15	ISSUED FOR BUILDING PERMIT/TENDER	
2	2023-08-09	ISSUED FOR DESIGN SIGN-OFF	
1	2023-07-14	ISSUED FOR DESIGN SIGN-OFF	
#	Date:	Revision:	By
revisions			

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SEVEN OAKS  
KITCHEN RENOVATION  
9 NEILSON ROAD, SCARBOROUGH

POT WASH -  
HVAC DUCTWORK  
GROUND FLOOR

scale: As indicated  
drawn by: BK/AP/SM  
reviewed by: VS  
job number: CEL:23509.01  
plot date: MSA:21509.F03  
drawing number:

M-403