

Addendum #03

for Tender No.

CSD22-001 -S.G. Nesbitt Memorial Arena Concession Stand Supply and Renovation

This addendum shall be incorporated into and form part of RFT No. CSD22-001 for the provision of S.G. Nesbitt Memorial Arena Concession Stand Supply and Renovation.

Receipt of the Addendum shall be acknowledged as part of your submission as per Section 1.9 – Addenda of the RFT document and **must be included** in the submission package before the closing date of Wednesday, November 23, at 12:00 noon.

The Township of Minden Hills reserves the right to reject any or all Tenders or accept any Proposal, should it deem such actions to be in the best interest of the Township.

This addendum consists of 5 pages.

Submission Deadline:

The deadline for submissions has been extended to **Wednesday November 23, 2022, at 12:00 noon**. A public opening will be held in the Township Administration Office at 7 Milne Street in Minden the same day at 1:30 PM.

Clarifications:

- 1. Appendix J 1821-01 Minden Mechanical, ADD-M2-SK1, Existing sprinkler heads and mechanical diffusers to be adjusted as per Mechanical Addendum M2.
- 2. Appendix J 1821-01 Minden Electrical, Proposed lighting adjusted as per Electrical Addendum E1.

Revised specifications:

- 1. Remove existing upright sprinkler heads within the existing canteen space.
- 2. Provide new pendent sprinkler heads within new canteen T-bar ceiling. Refer to specification for material details.
- 3. Provide supply air diffuser within canteen T-bar ceiling c/w flexible ductwork where indicated.

- 4. Delete suspension kits and provide recess mounting kits for Type 1 light fixtures. Rotate fixtures 90 deg from shown and locate in accordance with architectural drawings.
- 5. New heat detector shall be surface mounted on new T-bar ceiling.
- 6. New occupancy sensor shall be surface mounted on new T-bar ceiling.

If you have questions regarding outlined in Section 1.11 – Inquiries	this matter, please contact the Township directly as of the RFT document.
Sincerely,	
Craig Belfry, Director of Community Services	
Acknowledgement of Receipt	
·	owledge receipt of <u>all</u> addenda by signing the ow. Failure to submit <u>all</u> addenda will constitute an
I/we hereby acknowledge receipt of	of this addendum and make allowances in my bid.
Signature of Bidder	Date
Name of Company	



ELECTRICAL ADDENDUM

PROJECT NAME	55 PARKSIDE ST., MINDEN, ON - SG NESBITT MEMORIAL ARENA CONCESSION STAND FIT-UP
PROJECT NO.	GWAL 2021-439
DATE	NOVEMBER 16, 2022
ADDENDUM NO.	E1

The following additions, deletions & revisions form part of the drawings and specifications for the above referenced project:

DRAWINGS

1. Reference Drawing E2:

- 1.1 Delete suspension kits and provide recess mounting kits for Type 1 light fixtures. Rotate fixtures 90 deg from shown and locate in accordance with architectural drawings.
- 1.2 New heat detector shall be surface mounted on new T-bar ceiling.
- 1.3 New occupancy sensor shall be surface mounted on new T-bar ceiling.

ENCLOSURE(S)	None Issued
ISSUED BY	DISTRIBUTION
Richard Boiyin, P.Eng., ing. /at	Christopher Yap (Parkin Architects Limited)
	Mario Prisone (Parkin Architects Limited)
4700	Robert Lefebvre (GWAL - Mechanical)
	Dana Newton (GWAL - Mechanical)
	Derek Kennedy (GWAL - Mechanical)
	Diego Agudelo (GWAL - Electrical)
	Yves Lavictoire (GWAL - Electrical)



MECHANICAL ADDENDUM

PROJECT NAME	55 PARKSIDE ST., MINDEN, ON - SG NESBITT MEMORIAL ARENA CONCESSION STAND FIT-UP
PROJECT NO.	GWAL 2021-439
DATE	NOVEMBER 16, 2022
ADDENDUM NO.	M2

The following additions, deletions & revisions form part of the drawings and specifications for the above referenced project:

DRAWINGS

- 1. Reference Drawings M1 and Attached Sketch ADD-M2-SK1:
 - 1.1 Remove existing upright sprinkler heads within existing canteen space.
 - 1.2 Provide new pendent sprinkler heads within new canteen T-bar ceiling. Refer to specification for material details.
 - 1.3 Provide supply air diffuser within canteen T-bar ceiling c/w flexible ductwork where indicated.

ENCLOSURE(S)	Sketch ADD-M2-SK1
ISSUED BY	DISTRIBUTION
Dana Newton, C.E.T. /at	Christopher Yap (Parkin Architects Limited) Mario Prisone (Parkin Architects Limited) Robert Lefebvre (GWAL - Mechanical) Derek Kennedy (GWAL - Mechanical) Richard Boivin (GWAL - Electrical) Amy Girard (GWAL - Electrical) Yves Lavictoire (GWAL - Electrical)

SG NESBITT MEMORIAL ARENA CONCESSION STAND FIT-UP

55 PARKSIDE ST., MINDEN, ON MECHANICAL

2 REMOVABLE BOTTOM HOUSING PANEL ALLOWS EASY ACCESS TO

CENTRIFUGAL TYPE. ALL WHEELS ARE DYNAMICALLY BALANCED

MOUNTED ON VIBRATION ISOLATORS. POWER ASSEMBLIES CAN BE

.1 TO MEET CAPACITY, PRESSURE DROP, TERMINAL VELOCITY, NOISE

.2 PLASTER FRAMES WHERE SET INTO PLASTER OR GYPSUM

LOADS, HAVE THERMAL OVERLOAD PROTECTION AND ARE

13. GRILLES, REGISTERS AND DIFFUSER:

LEVEL, NECK VELOCITY AS INDICATED.

BOARD AND AS SPECIFIED.

.4 ACCEPTABLE MANUFACTURER: E.H. PRICE, NAILOR, TITUS

.1 TAB MEANS TO TEST, ADJUST AND BALANCE TO PERFORM IN

.2 DO TAB TO FOLLOWING TOLERANCES OF DESIGN VALUES:

OCCUPIED ZONE (OR AS DIRECTED BY ENGINEER).

.1 HVAC SYSTEMS: PLUS OR MINUS 5%.

ACCORDANCE WITH REQUIREMENTS OF CONTRACT DOCUMENTS

AND TO DO ALL OTHER WORK AS SPECIFIED IN THIS SECTION

3 ADJUST OR REPLACE SHEAVES AS REQUIRED TO MEET DESIGN

.5 FOR ALL ADJUSTABLE DIFFUSERS/GRILLES: ADJUST AIR PATTERN

TO ENSURE PROPER AIR DISTRIBUTION AND TO AVOID DUMPING.

AIR VELOCITY SHALL NOT EXCEED 0.25 M/S (50 FPM) IN THE

1 FORMAT TO BE IN ACCORDANCE WITH ASSOCIATED AIR BALANCING

.1 MINIMUM & MAXIMUM PRIMARY & SECONDARY

.1 INCLUDE BOTH SPECIFIED AND MEASURED DATA:

.3 DUCT SIZE & TRANSVERSE READINGS

.4 MOTOR VOLTS, AMPS & POWER

.2 OPERATING PRESSURES

.2 FOR THE FOLLOWING EQUIPMENT:

.2 DIFFUSERS/GRILLES

.1 FULL PERIMETER GASKETS.

.3 CONCEALED FASTENERS

TESTING, ADJUSTING AND BALANCING (TAB):

.3 CONCEALED OPERATORS

COUNCIL (AABC/CAABC).

.3 SYSTEMS:

.1 AIR SYSTEMS:

	GENERAL LEGEND
SYMBOL	DESCRIPTION
	EXISTING PIPING/DUCTWORK/EQUIPMENT
	EXISTING PIPING/DUCTWORK/EQUIPMENT TO BE REMOVED
	NEW PIPING/DUCTWORK/EQUIPMENT
	EXISTING PIPING/DUCTWORK/EQUIPMENT BELOW SLAB
	NEW PIPING/DUCTWORK/EQUIPMENT BELOW SLAB
(E)	DENOTES EXISTING EQUIPMENT
(N)	DENOTES NEW EQUIPMENT
(X)	DENOTES EQUIPMENT TO BE REMOVED

	PLUMBING LEGEND
SYMBOL	DESCRIPTION
	PIPING BELOW GRADE/SLAB
DCW	DOMESTIC COLD WATER PIPING
—— DHW ———	DOMESTIC HOT WATER PIPING
— DHWR —	DOMESTIC HOT WATER RECIRCULATION PIPING
—— SAN ——	SANITARY PIPING
——PG——	PROPANE GAS PIPING
⊜ FD1	FLOOR DRAIN (TYPE)
>	PIPING OFFSET
	BRANCH PIPING DOWN
— ə	PIPING DOWN
— 0	PIPING UP
\$	PIPE BREAK
Г	CAP
<i></i>	P-TRAP
Q	DRAIN ASSEMBLY
——ICO	CLEAN OUT
 ©C0	FLOOR CLEAN OUT
⋈ ૐ	ISOLATION VALVES
₽ V	CIRCUIT BALANCING VALVE (CBV)
H	STRAINER
b⊠	CHECK VALVE

	HVAC LEGEND
SYMBOL	DESCRIPTION
}	RECTANGULAR DUCTWORK
<u> </u>	ROUND DUCTWORK
<u></u>	ACOUSTICALLY LINED DUCTWORK (RETURN OR SUPPLY)
	THERMALLY INSULATED DUCTWORK (RETURN OR SUPPLY)
€	ROUND DUCTWORK OFFSET
	RECTANGULAR DUCTWORK OFFSET
— TG	TRANSFER GRILLE (TG)
- ~	WALL GRILLE (TYPE)
□ T0	TRANSFER OPENING (TO)
7 🗆	ACOUSTICALLY LINED TRANSFER DUCT (TD)
— - FD	FIRE DAMPER (FD)
→ BD	BALANCING DAMPER (BD)
d BDD	BACK DRAFT DAMPER (BDD)
◎ -^ -	INLINE CABINET FAN (TYPE)
	CABINET FAN C/W UNIT MOUNTED GRILLE (TYPE)
SD1 200ø 95	DIFFUSER TAG —DIFFUSER TYPE —AIRFLOW (L/S)(CFM) —SIZE (mm)(in)
SG1 200x 95 200	GRILLE TAG —GRILLE TYPE —AIRFLOW (L/S)(CFM) —DIMENSIONS (mm)(in)
T	LINE VOLTAGE THERMOSTAT
/	LINE VOLTAGE WIRING
/*\	LOW VOLTAGE WIRING

. [FIRE PROTECTION LEGEND									
	SYMBOL	DESCRIPTION								
	0	SEMI-RECESSED SPRINKLER								
> [8	UPRIGHT SPRINKLER								
, [

1. ALL WORK SHOWN OR IMPLIED ON THESE DRAWINGS SHALL BE CARRIED OUT IN ACCORDANCE WITH: A. ALL CODES AND LAWS APPLICABLE (OBC)

. IN ACCORDANCE WITH SMACNA-LATEST EDITION (DUCTWORK)

. IN ACCORDANCE WITH ULC STANDARDS PRIOR TO SUBMITTING TENDERS, EACH TRADE SHALL EXAMINE THE SITE TO DETERMINE THE CONDITIONS WHICH MAY AFFECT THE PROPOSED WORK. NO CLAIM FOR EXTRA PAYMENT WILL BE CONSIDERED BECAUSE OF FAILURE TO FULFILL THIS CONDITION. START OF WORK WILL BE DEEMED EVIDENCE OF ACCEPTANCE OF, AND SATISFACTION WITH, EXISTING

. INSTRUCTIONS TO BIDDERS

MANUFACTURER PRIOR TO ORDERING

- THE DRAWINGS SHALL BE CONSIDERED TO SHOW THE GENERAL CHARACTER AND SCOPE OF THE WORK AND NOT THE EXACT DETAILS OF THE INSTALLATION. THE INSTALLATION SHALL BE COMPLETE WITH ALL ACCESSORIES REQUIRED FOR A COMPLETE AND OPERATIVE INSTALLATION. MECHANICAL CONTRACTOR IS RESPONSIBLE TO FIELD MEASURE LOCATION OF NEW OR RELOCATED EQUIPMENT TO VERIFY CLEARANCES WITH THE
- THESE MECHANICAL DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTURAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS.

THE WORD "PROVIDE" SHALL DENOTE "SUPPLY AND INSTALL". THE WORD

- "TAB" SHALL DENOTE "TESTING, ADJUSTING, AND BALANCING". CONTRACTOR SHALL FOLLOW THE BIDDING DOCUMENT PROJECT SCHEDULE. UPON AWARD, CONTRACTOR SHALL SUBMIT WORK SCHEDULE TO PROJECT MANAGER & ENGINEER FOR APPROVAL
- COMPLYING WITH OCCUPATIONAL HEALTH AND SAFETY ACT. CONTRACTOR TO PROVIDE. PRIOR TO COMMENCEMENT OF WORK, ONTARIO MINISTRY OF LABOUR CONTRACTOR REGISTRATION FORM AS WELL AS A

THE MECHANICAL CONTRACTOR SHALL COORDINATE THE WORK WITH ALL

COMMUNICATING SAFETY REQUIREMENTS TO ITS EMPLOYEES AND

OTHER TRADES AND THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR

- CURRENT SIGNED AND DATED CORPORATE HEALTH AND SAFETY POLICY. AID KIT ACCEPTABLE TO WSIB AND MOL.
- 11. PAY ALL REQUIRED FEES AND PERMITS. 12. CONTRACTOR SHALL APPLY FOR AND COORDINATE ALL REQUIRED TSSA
- INSPECTIONS/CERTIFICATIONS. CONTRACTOR SHALL ALSO COMPLETE AND SUBMIT ALL FORMS REQUIRED BY TSSA AND PAY ALL ASSOCIATED FEES
- EXISTING AS PRESENTED BY THE PROJECT MANAGER.
- 14. ALL WORK TO BE CONDUCTED DURING HOURS SPECIFIED BY THE PROJECT MANAGER.
- 15. ALL CHANGES AND CONNECTIONS TO EXISTING SERVICES, REQUIRING THE SHUTDOWN OF THAT SERVICE SHALL BE DONE AT THE TIME DESIGNATED BY THE PROJECT MANAGER, UNLESS OTHERWISE STATED. 16. THE CONTRACTOR SHALL AT ALL TIMES KEEP PREMISES FREE FROM THE

ACCUMULATION OF WASTE MATERIAL TO THE SATISFACTION OF THE

PROJECT MANAGER. THE CLEANING OF THE AFFECTED AREA SHALL B

- CONTINUOUS. PLACE DUST PROTECTION IN THE FORM OF COVER SHEETS OVER EQUIPMENT AND FURNITURE TO ENSURE NO DUST INFILTRATION. EQUIPMENT REQUIRING CONNECTION TO AN ELECTRICAL POWER SOURCE SHALL BE CSA OR ULC APPROVED FOR USE AT LOCATION OF
- 18. COORDINATE MATERIAL STORAGE WITH THE SITE SUPERINTENDENT AND
- . MANUFACTURER'S INSTRUCTIONS REGARDING THE HANDLING, INSTALLATION AND TESTING OF EQUIPMENT SPECIFIED HEREIN SHALL BE CONSIDERED
- 20. SUPPLY TOOLS, EQUIPMENT AND PERSONNEL TO DEMONSTRATE AND INSTRUCT OPERATING AND MAINTENANCE PERSONNEL IN OPERATING. CONTROLLING, ADJUSTING, TROUBLESHOOTING AND SERVICING OF A SYSTEMS AND EQUIPMENT DURING REGULAR WORK HOURS, PRIOR TO
- REMOVAL OF MECHANICAL EQUIPMENT. COORDINATE HOISTING SCHEDUL WITH PROJECT MANAGER. TAKE ALL NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO PUBLIC AND PRIVATE PROPERTY. USE PROPE BARRIERS AND/OR PERSONNEL TO ENSURE HOISTING SAFETY FOR FMPLOYEES AND PUBLIC. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EQUIPMENT AND/OR PROPERTY DURING HOISTING. ARRANGE AND PAY FOR ANY REQUIRED PERMITS.

MECHANICAL CONTRACTOR SHALL OBTAIN AND PAY FOR HOISTING AND

- 22. INSPECT ALL NEW AND/OR RELOCATED EQUIPMENT UPON DELIVERY AND/OR RELOCATION AND NOTIFY PROJECT ENGINEER OF ANY DAMAGE OR
- 23. ALL EQUIPMENT, PIPING, DUCTWORK AND WIRING SHALL BE SUSPENDED FROM THE BUILDING STRUCTURE. 24. PROVIDE BLACK WITH WHITE WRITING LAMACOID PLATE ON ALL NEW

EQUIPMENT. LABEL UNIT AS SHOWN ON DRAWINGS. LETTERING SIZE TO

BE MINIMUM 25MM HIGH. MOUNT NEAR CONTROL SECTION OF THE UNIT.

- 25. PROVIDE CUTTING, PATCHING AND CORING OF ALL WALLS, CEILING AND OTHER SURFACES AS REQUIRED FOR MECHANICAL WORK. CHECK WITH BUILDING MANAGEMENT PRIOR TO CORE DRILLING AND CUTTING OF FLOOR SLAB REGARDING BUILDING REQUIREMENTS AND POLICIES. PRIOR TO SLAB CUTTING OR CORING. SCAN THE SLAB USING GPR TECHNOLOGY AND COORDINATE DRILLING TO MINIMIZE CUTTING OF THE REINFORCING STEEL AND CONDUIT. FIRE STOP ALL NEW FIRE RATED PENETRATIONS. REFE TO ARCHITECTURAL DRAWINGS FOR FIRE RATINGS. THE CONTRACTOR IS TO INCLUDE IN TENDER PRICE ALL WORK ASSOCIATED WITH CORE DRILLING
- LOCATIONS FROM THE STRUCTURAL ENGINEER OF RECORD PRIOR TO DRILLING. CUTTING TORCHES SHALL NOT BE USED FOR MAKING HOLES PATCH ALL HOLES THROUGH SLAB WITH FIRE-STOP CAULKING (ULC LISTED). PATCHED SURFACES ARE TO BE PRIMED FINISHED, READY FOR FINAL COVERING BY OTHERS (COORDINATE WITH ROOFING CONTRACTOR).
- 26. PIPING LAYOUT ILLUSTRATED ON DRAWINGS INDICATES GENERAL ROUTING OF PIPE WORK AND DOES NOT SHOW ALL FITTINGS AND OFFSETS REQUIRED FOR COMPLETE INSTALLATION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PIPING FITTINGS & OFFSETS REQUIRED FOR COORDINATED INSTALLATION WITH OTHER SYSTEMS (DUCTWORK, PIPING,
- REFILLING OF DOMESTIC WATER SYSTEMS TO ALLOW PLUMBING FIXTURE

28. DUCT SIZES INDICATED ON DRAWINGS WHERE ACOUSTICALLY LINED ARE

CONTRACTOR SHALL BE RESPONSIBLE FOR DEACTIVATION, DRAINING AND

- FREE AREA SIZES AND NOT SHEET METAL SIZES. 29. UNLESS INDICATED OTHERWISE PROVIDE ONE (1) YEAR WARRANTY STARTING AT SUBSTANTIAL COMPLETION FOR ALL NEW SYSTEMS INCLUDING MATERIALS, EQUIPMENT & LABOUR.
- .1 SUBMIT ONE(1) COPY OF SHOP DRAWINGS AND PRODUCT DATA IN ELECTRONIC PDF FORMAT FOR ENGINEER'S REVIEW PRIOR TO PURCHASING AND ORDERING, HARD COPY SHOP DRAWINGS WILL NOT BE ACCEPTED. REVIEWED ELECTRONIC SHOP DRAWINGS WILL BE RE-DISTRIBUTED AS PER PROJECT MANAGER'S INSTRUCTIONS. SHOP DRAWINGS SHALL INCLUDE ALL SPECIFIED EQUIPMENT & SYSTEMS. 2 PROVIDE SUBMITTALS IN ACCORDANCE WITH APPLICABLE CODES REQUIRED FOR OCCUPANCY INCLUDING BUT NOT LIMITED TO THE .1 PLUMBING & UTILITIES: 1 SEISMIC CERTIFICATION LETTER SUBMITTED.
- 3 MECHANICAL SCOPE OF WORK CONSIDERED COMPLETE WHEN THE FOLLOWING ITEMS HAVE BEEN RECEIVED AND REVIEWED BY ENGINEER: 1 ALL SHOP DRAWINGS LISTED IN THIS SPECIFICATION. 2 BALANCING REPORT IN ACCORDANCE WITH TAB SECTION IN 3 AS-BUILT DRAWINGS SHOWING AS-BUILT CONDITIONS COMPLETE WITH RED LINED MARKUPS TO PROJECT MANAGER WITH CONTRACTOR'S SIGNATURE. 4 START-UP REPORT FROM MANUFACTURER OF EQUIPMENT. 5 OPERATIONS AND MAINTENANCE MANUALS CONTAINING ALL ITEMS PREVIOUSLY REVIEWED BY ENGINEER IN A PDF FORMAT AND ORGANIZED ALL SUBMISSIONS BY EACH MECHANICAL TRADE. OPERATIONS MANUAL TO ALSO INCLUDE THE FOLLOWING BUT SHALL NOT BE LIMITED TO: .1 LIST OF TRADES INVOLVED AND CONTACT INFORMATION.

.2 CONTRACTOR'S LETTER OF WARRANTY.

.3 ALL LETTERS REQUIRED FOR WORKPLACE CONFORMANCE.

GREASE INTERCEPTOR SCHEDULE LOCATION 2.2 75 75 890 580 300 SCHIER GB2 FLOOR MOUNTED CANTEEN | CANTEEN GREASE NOTES: 1. FOR DETAILS REFER TO SPECIFICATIONS. CDILLE VND DIEELIGED SCHEDLILE

	GRILLE AND DIFFUSER SCHEDULE											
UNIT NO.	TYPE	MODULE (mm)	INLET (mm)	MOUNT	FINISH	BASIS OF DESIGN	REMARKS					
SR1	SUPPLY REGISTER	AS INDICATED	AS INDICATED	DUCT	_	EH PRICE 520D	DOUBLE DEFLECTION SUPPLY REGISTER					
SD1	SQUARE CONE DIFFUSER	600x600	AS INDICATED	CEILING	B12	EH PRICE SCD						
RG1	RETURN AIR GRILLE	AS INDICATED	AS INDICATED	DUCT	_	EH PRICE 530	LOUVERED FACE RETURN GRILLE					
NOTES: 1. FO	NOTES: 1. FOR DETAILS REFER TO SPECIFICATIONS.											

	FAN SCHEDULE												
				FAN DATA				ELECTRICAL DATA					
TAG	TAG LOCATION FUNCTION		TYPE	DRIVE (BELT/DIRECT)	AIR FLOW (L/s)	ESP (Pa)	FAN SPEED (RPM)	SONES	MOTOR SIZE (HP)	V/PH/Hz	FLA	BASIS OF DESIGN	REMARKS
TF8	ELECTRICAL ROOM 1-222	ELECTRICAL ROOM COOLING	INLINE CABINET	DIRECT	227	89	1080	2.8	0.16	115/60/1	4.9	GREENHECK CSP-A710	C/W UNIT MOUNTED GRILLE
	NOTES: 1. FOR DETAILS REFER TO SPECIFICATIONS. 2. DISCONNECT SWITCH BY DIV. 26. 3. SPEFD, SWITCHES, SHALL BE SUPPLIED BY MECHANICAL CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR.												

MECHANICAL SPECIFICATIONS:

PROVIDE COMPLETE SEISMIC RESTRAINT SYSTEM FOR ALL MECHANICAL SYSTEMS AS PER ONTARIO BUILDING CODE LATEST EDITION & NFPA13 2 SEISMIC RESTRAINT DESIGN AND SUPERVISION SHALL BE CONDUCTED AND STAMPED BY A PROFESSIONAL SEISMIC ENGINEER. SUBMIT LETTER AND CALCULATION FOR ENGINEER'S REVIEW PRIOR TO SUBSTANTIAL

.3 THE FINAL CERTIFICATION LETTER SHALL BE FORMATTED TO IDENTIFY

THE FOLLOWING WITHIN THE BODY OF THE LETTER:

1 THE DATE OF THE FINAL INSPECTION

.2 A STATEMENT THAT LISTS ALL CONTRACT DOCUMENTS WHICH WERE REVIEWED INCLUDING BUT NOT LIMITED TO THE MECHANICAL DRAWINGS, PROJECT CHANGE ORDERS, SITE INSTRUCTIONS, FTO .3 A STATEMENT WHICH CLEARLY IDENTIFIES ANY EXCLUSIONS OF SCOPE OF SERVICE, AND .4 A STATEMENT THAT CERTIFIES THE COMPLETE MECHANICAL SEISMIC INSTALLATION MEETS THE LATEST VERSION OF OBC & APPLICABLE CODES & STANBARDS

.1 ALL COMPONENTS WITHIN THE SYSTEM TO BE FM & ULC LISTED, WORKING PRESSURE NOT LESS THAN 175 PSI. 2 PIPING: PER NFPA 13 & 14. 3 FITTINGS AND JOINTS TO ANSI/NFPA 13: 1 FERROUS: SCREWED, WELDED, FLANGED OR ROLL GROOVED.

.2 FLEXIBLE SPRINKLER DROPS: BRAIDED ELEXIBLE STAINLESS STEEL SPRINKLER DROPS C-UL-US & FM LISTED FOR FIRE PROTECTION SERVICE FOR INSTALLATION ON SUSPENDED CEILING GRIDS, WOOD OR METAL STUD/JOIST OR FURRING CHANNELS. .2 25 MM (1") NOMINAL ID BRAID HOSE & FITTING MADE OF 304 STAINLESS STEEL, 1206 KPA (175 PSI) MAXIMUM WORKING PRESSURE, 178 MM (7") MINIMUM BENDING RADIUS WITHIN LENGTH OF 750 MM TO 1800 MM AS PER C-UL-US. THE MAXIMUM AMOUNT OF ALLOWABLE BENDS AS PER C-UL-US ARE AS FOLLOWS: 750 MM (36") (5 BENDS); 1200 MM (48") (8 BENDS); 1500 MM (60") (

REDUCER FOR 13 MM (1/2") OR 20 MM (3/4") NPT .4 A STEEL BRACKET WITH SQUARE BAR, ADJUSTABLE CENTRE BRACKET & ADJUSTABLE END BRACKETS SUITABLE FOR CFILING TYPES, FND BRACKET SHALL HAVE PFRMANENT SECUREMENT TO CEILING SYSTEM. .5 ACCEPTABLE MATERIAL: VICTAULIC MODEL VICFLEX AH2 .1 FM & ULC LISTED FOR FIRE PROTECTION SERVICES.

.3 INLET NIPPLE 25 MM (1") NPT WITH STRAIGHT OR 90°

BENDS); 1800 MM (72") (12 BENDS).

.6 PIPING SHALL BE SEISMICALLY RESTRAINED AS PER NFPA .1 (FE1) STORED PRESSURE WET CHEMICAL SOLUTION WITH (RECHARGEABLE) HEAVY DUTY POLISHED STAINLESS STEEL CYLINDER WITH PROTECTIVE SKIRT, SHUT-OFF NOZZLE, CHROME PLATED BRASS VALVE, WATERPROOF STAINLESS STEEL GAUGE, ULC LABELED FOR

.5 SPRINKLER STANDPIPE SYSTEM SHALL BE RATED AT 1380 KPA (200

WALL WOUNTING BRACKET. 1 PENDENT: QUICK RESPONSE FOR HAZARD COVERAGE AS INDICATED, 5.6 K FACTOR, ADJUSTABLE CHROME ESCUTCHEON, FM APPROVED, CHROME

NISTRICATION OF PIREWORK:

CLASS K (KITCHEN) PROTECTION. SIZE 11.1KG/6L, 1-A:K RATING C/W

1 PROVIDE CLEARANCES AROUND SYSTEMS, EQUIPMENT AND COMPONENTS FOR OBSERVATION OF OPERATION, INSPECTION, SERVICING, MAINTENANCE AND AS RECOMMENDED BY MANUFACTURER .2 PIPE WORK INSTALLATION:

.1 SCREWED FITTINGS TO BE JOINTED WITH POLYTETRAFLUOROETHYLENE (PTFE) THREAD SEAL TAPE. 2 PROTECT OPENINGS AGAINST ENTRY OF FOREIGN MATERIAL 3 ASSEMBLE PIPING USING FITTINGS MANUFACTURED TO ANSI .4 EXCEPT WHERE INDICATED OTHERWISE, SLOPE PIPING IN DIRECTION OF FLOW FOR POSITIVE DRAINAGE AND VENTING. .5 EXCEPT WHERE INDICATED, INSTALL SO AS TO PERMIT SEPARATE THERMAL INSULATION OF FACH PIPE. .6 GROUP PIPING WHEREVER POSSIBLE AND AS INDICATED.

POSITIVE DRAINAGE AND VENTING.

.8 PROVIDE DIELECTRIC COUPLINGS WHERE DISSIMILAR METALS ARE .1 INSTALL WHERE PIPES PASS THROUGH CONCRETE STRUCTURES AND FIRE RATED ASSEMBLIES. 2 MATERIAL: SCHEDULE 40 BLACK STEEL PIPE 3 PROVIDE SPACE FOR FIRE STOPPING, MAINTAIN FIRE RATING

.7 USE ECCENTRIC REDUCERS AT PIPE SIZE CHANGES TO ENSURE

- INTEGRITY. ENSURE NO CONTACT BETWEEN COPPER PIPE OR TUBE AND SLEEVE. .4 FIRE STOPPING: .1 SEAL ALL PENETRATIONS OF COPPER/STEEL PIPING THROUGH FIRE SEPARATIONS (I.E. WALL/SLAB) WITH ULC LISTED FIRE STOP
- .2 SEAL ALL PENETRATIONS OF NON-METALLIC PIPING THROUGH FIRE SEPARATIONS (I.E. WALL/SLAB) WITH ULC LISTED FIRE STOP .3 ALL FIRE STOPPING SHALL BE INSTALLED IN ACCORDANCE WITH

DOMESTIC HOT & COLD WATER PIPING: .3 LEAD FREE SOLDER, BRAZE OR SILVER SOLDER (SILFOS 5, 5% SILVER)

.1 NPS 2" AND UNDER, SCREWED OR SOLDERED: 2 BRONZE BODY, STAINLESS STEEL BALL, PTFE TEFLON ADJUSTABLE PACKING, BRASS GLAND AND PTFE TEFLON 3 ACCEPTABLE MATERIAL: CRANE OR EQUAL.

DRAINAGE, WASTE & VENT PIPING: .1 COPPER TYPE DWV ABOVE GRADE; SOLDER: 95:5, 50:50 TO ASTM .2 FIRE & SMOKE RESISTANT COATED DWV PVC PIPING & FITTINGS, IPEX SYSTEM XFR 25/50 PVC-DWV, ABOVE GRADE. .3 CAST IRON ABOVE GRADE; MECHANICAL JOINTS: PROVIDE HUBLESS SOIL PIPE COUPLINGS CONSTRUCTED OF EXTRA WIDE 4 TO 6 BAND CORRUGATED TYPE 304 STAINLESS STEEL BANDS, WITH HEAVY DUTY .4 BELOW GRADE PVC DR28 OR SYSTEM 15. .5 SLOPE SANITARY DRAIN ACCORDING TO CODE.

.6 INSTALL IN ACCORDANCE WITH CANADIAN PLUMBING CODE, PROVINCIAL PLUMBING CODE AND LOCAL AUTHORITY HAVING JURISDICTION.

.1 FILL SYSTEM WITH WATER. ENSURE ALL AIR IS REMOVED FROM SYSTEM, BOOST PRESSURE TO TEST PRESSURE USING WATER ONLY. PRESSURIZATION WITH AIR OR NITROGEN IS NOT ALLOWED. TEST TO 1.5 TIMES NORMAL OPERATING PRESSURE TO A MAXIMUM OF THE PIPING SYSTEMS WORKING PRESSURE INCLUDING DEVICES (I.E. VALVES, FITTINGS, ACCESSORIES). 2 MINIMUM TEST PRESSURE TO BE: .1 862 kPa (125 PSI) FOR COPPER/STEEL PIPING SYSTEMS 3 MAINTAIN SPECIFIED TEST PRESSURE WITHOUT LOSS FOR FOUR CONSTANT DURING ENTIRE DURATION OF TEST.

(4) HOURS MINIMUM. TEMPERATURE OF SYSTEM TO REMAIN .4 BEAR COSTS FOR REPAIRS OR REPLACEMENT, RETESTING, AND MAKING GOOD. ENGINEER TO DETERMINE WHETHER REPAIR OR REPLACEMENT IS APPROPRIATE .5 INSULATE OR CONCEAL WORK ONLY AFTER REVIEW AND APPROVAL OF TEST RESULTS BY ENGINEER. .1 DOMESTIC WATER SYSTEMS: .1 FLUSH ENTIRE SYSTEM FOR 8 HOURS. ENSURE OUTLETS FLUSHED FOR 2 HOURS, LET STAND FOR 24 HOURS.

THEN DRAW ONE SAMPLE OFF LONGEST RUN. SUBMIT TO TESTING LABORATORY TO VERIFY THAT SYSTEM IS CLEAN. LET SYSTEM FLUSH FOR AN ADDITIONAL 2 HOURS, THEN DRAW OFF ANOTHER SAMPLE FOR TESTING. SUBMIT TEST RESULTS TO ENGINEER. CLEANING AND FLUSHING OF NEW PIPING SYSTEMS SHALL BE PERFORMED AFTER PRESSURE TESTING AND PRIOR TO CONNECTION TO EXISTING SYSTEM.

THERMAL INSULATION FOR PIPING:

.1 ALL COMPONENTS OF INSULATION SYSTEM TO HAVE MAXIMUM FLAME SPREAD RATING OF 25 AND MAXIMUM SMOKE DEVELOPED RATING OF 50 IN ACCORDANCE WITH CAN4-S102. .2 TIAC CODE A-3 FORMED MINERAL FIBRE WITH FACTORY APPLIED VAPOUR RETARDER JACKET: .1 APPLICATION: FOR PIPING, VALVES AND FITTINGS ON: 1 DOMESTIC HOT WATER PIPING SYSTEMS. 2 DOMESTIC COLD WATER PIPING SYSTEMS.

.1 MINERAL FIBRE: TO CAN/CGSB-51.9-92. .2 JACKET: TO CGSB 51-GP-52MA. 3 MAXIMUM "K" FACTOR: TO CAN/CGSB-51.9-92. .3 THICKNESS: AS PER TABLE BELOW: PIPE SIZES (NPS) AND INSULATION THICKNESS (MM) <u>TEMP (*C)</u> 1/2 1-1/2 4 <u>TO 1-1/4</u> <u>TO 3</u> <u>TO 6</u>

DOM.COLD WATER ALL 25 25 .1 FOR INSULATION SYSTEMS TIAC CODE: A-3. SECUREMENTS: TAPE AT 300 MM OC. SEALS: VR LAP SEAL ADHESIVE, VR LAGGING ADHESIVE. INSTALLATION: TIAC CODE: 1501-C.

> 11. FIRE DAMPERS: .1 FIRE DAMPERS: ARRANGEMENT TYPE B OR C, LISTED AND BEAR LABEL IN ACCORDANCE WITH CAN/ULC S112. MAINTAIN INTEGRITY OF FIRE WALL AND/OR FIRE SEPARATION. .3 TOP HINGED: OFFSET SINGLE DAMPER, ROUND OR SQUARE; .4 FUSIBLE LINK ACTUATED HAVING NEGATOR-SPRING- CLOSING

> > .6 RATING: 1½ HR.

RUSKIN, VENTEX/ALUMAVENT.

.1 ONTARIO BUILDING CODE COMPLIANT FOR 25/50 FLAME STANDARD OF RATING: SPREAD AND SMOKE DEVELOPED. .1 AMCA 201 FOR FAN APPLICATION. 2 MINIMUM THICKNESS 0.015 MIL. .2 AMCA 302 FOR APPLICATION OF SONE LOUDNESS RATINGS 3 COLOUR WHITE UNLESS OTHERWISE SPECIFIED FOR NON-DUCTED AIR MOVING DEVICES. .4 NON YELLOWING UV STABILIZED. .3 AMCA 303 FOR APPLICATION OF SOUND POWER RATINGS .5 MINIMUM SERVICE TEMPERATURES: -20°C. FOR DUCTED AIR MOVING DEVICES. .6 MAXIMUM SERVICE TEMPERATURE: 65°C .4 PERFORMANCE: TO ANSI/AMCA 210 AND ANSI/ASHRAE 51. MOISTURE VAPOUR TRANSMISSION: 0.02 PERM. UNIT TO BEAR AMCA CERTIFIED SEAL .1 USE SOLVENT WELD ADHESIVE COMPATIBLE WITH .2 PWL SOUND RATINGS TO COMPLY WITH AMCA 303, TESTED TO INSULATION TO SEAL LAPS AND JOINTS. ANSI/AMCA 300 UNIT TO BEAR AMCA CERTIFIED SOUND RATING

3 PRESSURE SENSITIVE VINYL TAPE OF MATCHING .3 ANGLE MOUNTING BRACKETS CAN BE ADJUSTED TO ANY TYPICAL CEILING MATERIAL THICKNESS. .2 APPLICATION: .4 ALL DIRECT DRIVE FANS SHALL BE SUPPLIED WITH VARIABLE SPEED CONTROLLER FOR INSTALLATION AND WIRING BY DIV. 26. EXPOSED PIPING & FITTINGS IN MECHANICAL ROOMS: PVC .5 PERFORMANCE: AS INDICATED ON DRAWING SCHEDULE 3 CONCEALED, INDOORS: PVC ON VALVES AND FITTINGS ONLY. NO FURTHER FINISH. .6 ACCEPTABLE MATERIAL: GREENHECK, PENN, LOREN COOK, TWIN .4 USE VAPOUR RETARDER JACKET ON TIAC CODE A-3 .2 IN-LINE CABINET FAN: INSULATION COMPATIBLE WITH INSULATION. .5 FINISH ATTACHMENTS: STAINLESS STEEL BANDS AT 150 MM .1 FAN HOUSING CONSTRUCTION OF CORROSION RESISTANT GALVANIZED STEEL C/W SOUND ABSORBING LINED INSULATION. .6 INSTALLATION: TO APPROPRIATE TIAC CODE CRF/1

THROUGH CRF/5. THE POWER ASSEMBLY FOR INSPECTION OR SERVICE. .3 OUTLET DUCT CONNECTION WITH INTEGRAL BACKDRAFT DAMPER CAN BE CONVERTED FROM HORIZONTAL TO VERTICAL DISCHARGE. .4 FAN SCROLL IS CONSTRUCTED OF GALVANIZED STEEL. .1 BODY AND CAP: CAST HIGH TENSILE BRONZE TO ASTM B62 OR .5 FAN WHEELS ARE DOUBLE WIDTH FORWARD CURVED BRASS TO ASTM B16/B16M C36000. 2 STEM: TAMPERPROOF BALL DRIVE. FOR VIBRATION FREE OPERATION. STEM PACKING NUT: EXTERNAL TO BODY. .6 MOTORS 115/60/1. ALL MOTORS ARE SIZED TO MATCH FAN .4 BALL AND SEAT: REPLACEABLE CHROME PLATED BRASS SOLID FULL PORT BALL AND TEFLON SEATS. .5 STEM SEAL: TFE WITH EXTERNAL PACKING NUT. EASILY UNPLUGGED AND REMOVED FOR INSPECTION OR SERVICE. .6 OPERATOR: REMOVABLE LEVER HANDLE.

.7 ACCEPTABLE MATERIAL: CRANE, JENKINS, TOYO, VICTAULIC, KITZ. BASES, PIPE HANGERS AND SUPPORTS: .1 BASES, HANGERS, SUPPORTS AND SWAY BRACES SHALL BE OF MANUFACTURED TYPE AND ASSEMBLED AS PER MANUFACTURER'S

INSTRUCTIONS. FNSURF THAT SUPPORTS, GUIDES AND ANCHOR DO NOT TRANSMIT EXCESSIVE QUANTITIES OF HEAT TO BUILDING STRUCTURE. DESIGN HANGERS AND SUPPORTS TO OPERATE UNDER ALL OPERATING CONDITIONS. ALLOW FOR FREE EXPANSION AND CONTRACTION AND PREVENT THE TRANSMISSION OF EXCESSIVE STRESSES INTO PIPE WORK OR CONNECTED EQUIPMENT. PROVIDE FOR VERTICAL ADJUSTMENT AFTER INSTALLATION. DESIGN SHALL BE IN ACCORDANCE WITH ANSI .2 SUPPORT FROM TOP OR BOTTOM OF STRUCTURAL MEMBERS. WHERE STRUCTURAL BEARING DOES NOT EXIST OR INSERTS ARE NOT IN SUITABLE LOCATIONS, PROVIDE SUPPLEMENTARY STRUCTURAL STEEL MEMBERS. .3 SUPPORTS MADE FROM WIRE, WOOD, ROPE OR ANY OTHER VULNERABLE MAKE-SHIFT MATERIAL ARE NOT PERMITTED. .4 FOR UNINSULATED COPPER PIPE OR TUBING THE CLAMPS AN SUPPORTS SHALL HAVE AN ELECTROPLATED COPPER FINISH. .5 PROVIDE ADDITIONAL SUPPORTS AT CHANGES IN PIPE DIRECTION AND FOR CONCENTRATION OF LOADS DUE TO WEIGHT OF

VALVES, STRAINERS, FTC. .6 PIPE HANGERS AND SUPPORTS SHALL BE PAINTED WITH ZING RICH PAINT AFTER MANUFACTURE. 7 PROVIDE INSULATION PROTECTION SHIELDS AS REQUIRED. .1 INSULATED SADDLES SHALL BE INSTALLED BY THE MECHANICAL CONTRACTOR WHEN SETTING PIPE ELEVATION AT ALL PIPE SUPPORT LOCATIONS ON INSULATED SYSTEMS OPERATING BETWEEN -290°F AND 250°F. INCLUDING: .1 DOMESTIC COLD WATER, CHILLED WATER, CONDENSER WATER, CONDENSATE, DOMESTIC HOT WATER, HEATING WATER, AND LOW PRESSURE STEAM.

.2 COMPOSITION INCLUDES:

.1 RIGID PHENOLIC FOAM INSULATION THAT MEETS ASTM E-84 (25/50 FLAME SPREAD / SMOKE DEVELOPED REQUIREMENT) WITH DENSITY OF: .1 3.75 PCF (0.17 BTU-IN/HR-SQ.FT-*F) @ 75*F MEAN FOR PIPE SIZES UP TO 10" IPS. .2 5 PCF (0.20 BTU-IN/HR-SQ.FT-*F) @ 75*F MEAN FOR PIPING 11" IPS TO 30" IPS .2 ZERO PERM RATED (ASTM E-96), ABUSE-RESISTANT VAPOUR BARRIER JACKET WITH 1-1/2" WIDE LONGITUDINAL SELF-SEALING ACRYLIC TAPE CLOSURE .3 PIPE INSULATION PROTECTION SHIELD, MANUFACTURED FROM CARBON STEEL WITH A G90 GALVANIZED FINISH CENTRED AND ADHERED TO BOTTOM WITH AMINIMUM OF 1-1/2" JACKETED INSULATION EXTENDING FROM FACH

SIDE TO ALLOW PROPER CIRCUMFERENTIAL CLOSURE AT

BUTT JOINTS WITH 3" WIDE ZERO PERM TAPE. SHIELDS

SHALL BE 20 GAUGE THICK UP TO 3-1/2" PIPING, 18

GAUGE FOR PIPING FROM 4" TO 10" DIAMETER. .3 ACCEPTABLE MATERIAL: BUCKAROOS COOLDRY, MULTIGLASS M-SADDLE, OR EQUIVALENT. .1 COPPER PIPING UP TO NPS 1/2" EVERY 5FT. .2 HANGERS SHALL BE WITHIN 12" OF EACH ELBOW. .3 HANGERS SHALL BE SPACED IN ACCORDANCE WITH THE MOST STRINGENT REQUIREMENTS OF MANUFACTURER'S RECOMMENDATIONS, CANADIAN PLUMBING CODE, OBC, AUTHORITY

HAVING JURISDICTION, AND AS FOLLOWS: MAXIMUM PIPE MAXIMUM STEEL MAXIMUM COPPER PIPE SPACING: PIPE SPACING:

1-1/2 2.5M

PIPE IDENTIFICATION: .1 PVC MARKERS, CONTINUOUS OPERATING TEMPERATURE OF 212F, 2" HIGH LETTERING FOR PIPING 3" OR LARGER, 3/4" HIGH LETTERING FOR 2 1/2" OR SMALLER. MATCH EXISTING BASE BUILDING STANDARD OR AS FOLLOWS:

DOMESTIC HOT WATER SUPPLY GREEN DOM.HWS RECIRCULATION GREEN DOM. HW CIRC DOMESTIC COLD WATER SUPPLY GREEN DOM. CWS

PLUMBING VENT PLUMBING SPECIALTIES AND ACCESSORIES: .1 FD1: GENERAL DUTY; EPOXY COATED CAST IRON BODY, ROUND,

5"ø, ADJUSTABLE STANDARD NICKEL-BRONZE HEAD, TRAP PRIMING CONNECTION, INTEGRAL SEEPAGE PAN, AND CLAMPING ACCEPTABLE MATERIAL: WATTS FD-100-A OR EQUIVALENT MIFAB, ZURN & J.R. SMITH. .1 CLEANOUT PLUGS: HEAVY CAST IRON MALE FERRULE WITH BRASS SCREWS AND THREADED BRASS OR BRONZE PLUG. SEALING-CAULKED LEAD SEAT OR NEOPRENE GASKET.

> .1 FLOOR ACCESS: ROUND CAST IRON BODY AND FRAME WITH ADJUSTABLE SECURED NICKEL BRONZE TOP CAST BOX WITH ANCHOR LUGS AND: .1 PLUGS: BOLTED BRONZE WITH NEOPRENE GASKET. .2 COVER FOR UNFINISHED CONCRETE FLOORS: NICKE BRONZE ROUND, GASKET, VANDAL-PROOF SCREWS. .3 COVER FOR TERRAZZO FINISH: POLISHED NICKEL BRONZE WITH RECESSED COVER FOR FILLING WITH TERRAZZO, VANDAL-PROOF LOCKING SCREWS. .4 COVER FOR THE AND LINOLEUM FLOORS: POLISHED NICKEL BRONZE WITH RECESSED COVER FOR LINOLEUM OR TILE INFILL, COMPLETE WITH VANDAL-PROOF LOCKING SCREWS. .5 COVER FOR CARPETED FLOORS: POLISHED NICKEL

BRONZE WITH DEEP FLANGE COVER FOR CARPET

INFILL, COMPLETE WITH CARPET RETAINER

.1 ACCEPTABLE MATERIAL: ANCON, ENPOCO, J.R. SMITH &

VANDAL-PROOF LOCKING SCREWS. .1 BRASS TRAP SEAL PRIMER WITH REMOVABLE POPPET, INTEGRAL VACUUM BREAKER, GASKETTED ACCESS COVER 13 NPT (1/2" THREADED INLET AND OUTLET CONNECTIONS, COMPLETE WITH 13 NPT (½") SWEAT CONNECTION ADAPTERS AND 13 NPT (½") DRIP .2 TRAP SEAL PRIMERS ARE LISTED WITH I.A.P.M.O. AND CSA AND ARE TESTED AND CERTIFIED TO THE ASSE 1018. .3 TRAP SEAL PRIMERS SHALL BE INSTALLED MINIMUM 305 MM (12") ABOVE THE GRID OF A FLOOR DRAIN OR FLOOD LEVEL RIM OF EQUIPMENT SERVED. .4 OPERATING RANGE FOR TRAP SEAL PRIMERS IS 138 KPA (20

.5 ACCEPTABLE MATERIALS: PPP PRIME-PRO, MIFAB MI-TSP-3,

.1 DETAILS, CONSTRUCTION AND MATERIALS HEREIN SHALL BE AS PER SMACNA STANDARDS. .2 ALL MATERIALS SHALL CONFORM TO SMOKE AND FLAME SPREAD RATING LIMITATIONS STIPULATED IN THE PROVINCIAL BUILDING .3 ALL GALVANIZED DUCTWORK INDICATED TO BE FABRICATE FROM 0.2% COPPER CONTENT GALVANIZED SHEET STEEL WITH 1-1/4 .4 RECTANGULAR AND FITTINGS: GALVANIZED SHEET STEEL NOT LESS THAN THE FOLLOWING THICKNESS: 24 GA. - 750MM (30") .5 ROUND & OVAL DUCT AND FITTINGS SHALL BE SPIRAL GALVANIZED STEEL MEETING THE ASTM A-527-71 & NOT LESS

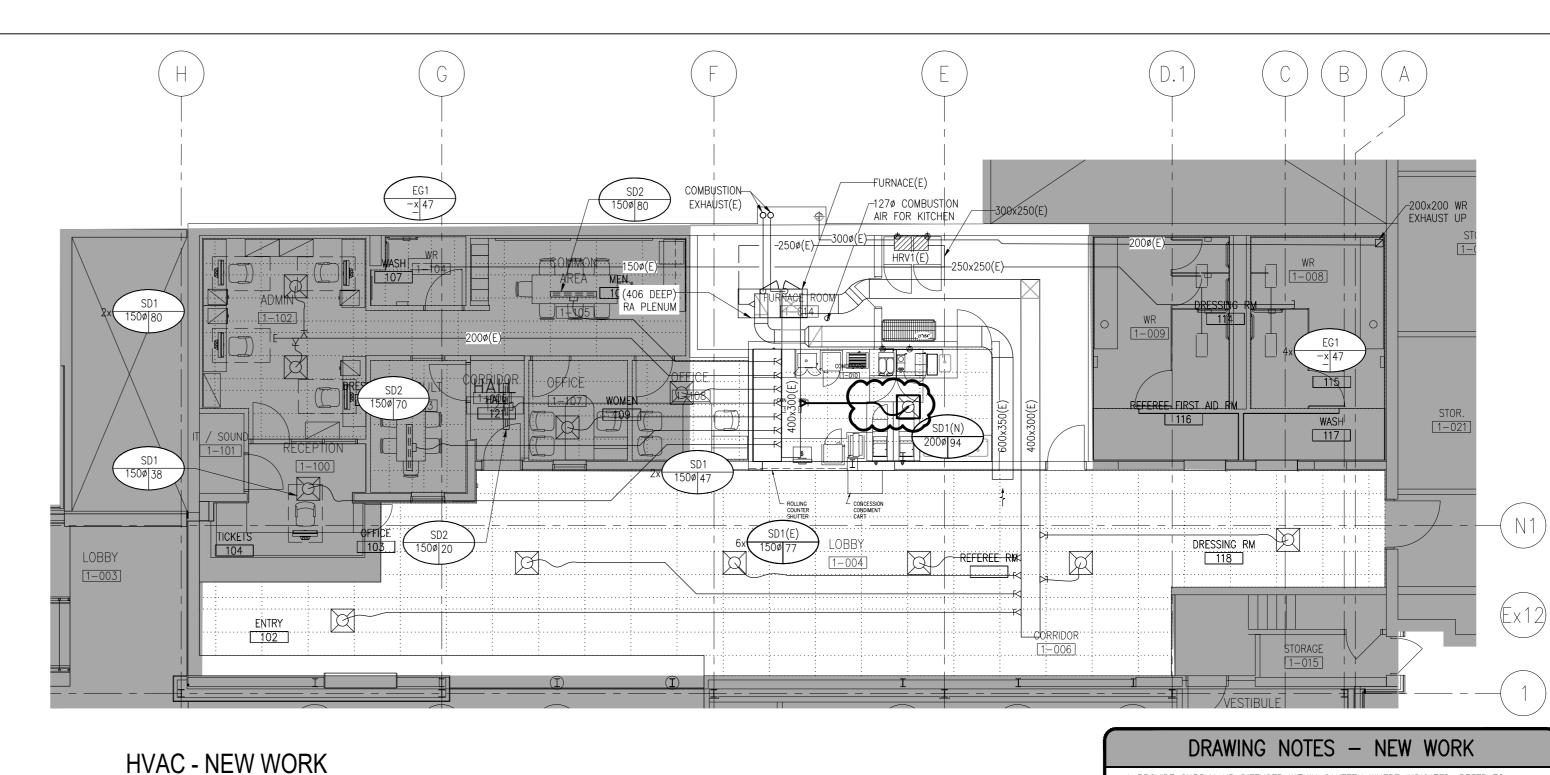
THAN THE FOLLOWING THICKNESS: 26 GA. - 75MM TO 350MM

(3" TO 14")DIA. 24 GA. - 350MM (14") DIA. & LARGER.

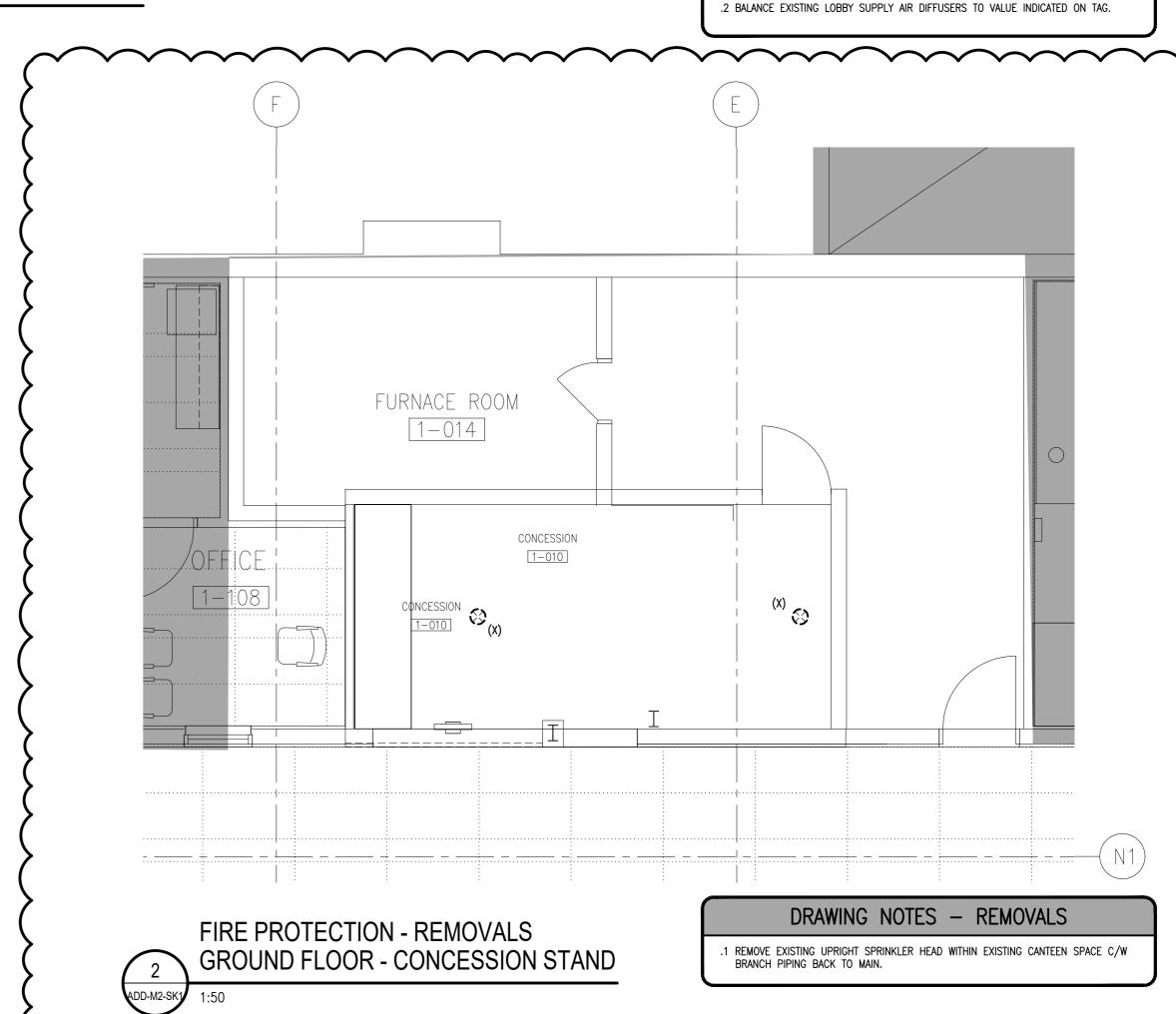
OF ULC, MEET REQUIREMENTS OF NFPA (FIRE) 90A AUTHORITIES HAVING JURISDICTION. FIRE DAMPER ASSEMBLIES TO BE FIRE TESTED .2 MILD STEEL, FACTORY FABRICATED FOR FIRE RATING REQUIREMENT TO INTERLOCKING TYPE; SIZED TO MAINTAIN FULL DUCT CROSS SECTION .5 40 X 40 X 3 MM RETAINING ANGLE IRON FRAME, ON FULL PERIMETER OF FIRE DAMPER, ON BOTH SIDES OF FIRE SEPARATION BEING

.7 ACCEPTABLE MATERIAL: AMI, E.H. PRICE, GREENHECK, NCA, NAILOR,

.6 SEAL CLASSIFICATION: SMACNA SEAL CLASS A.

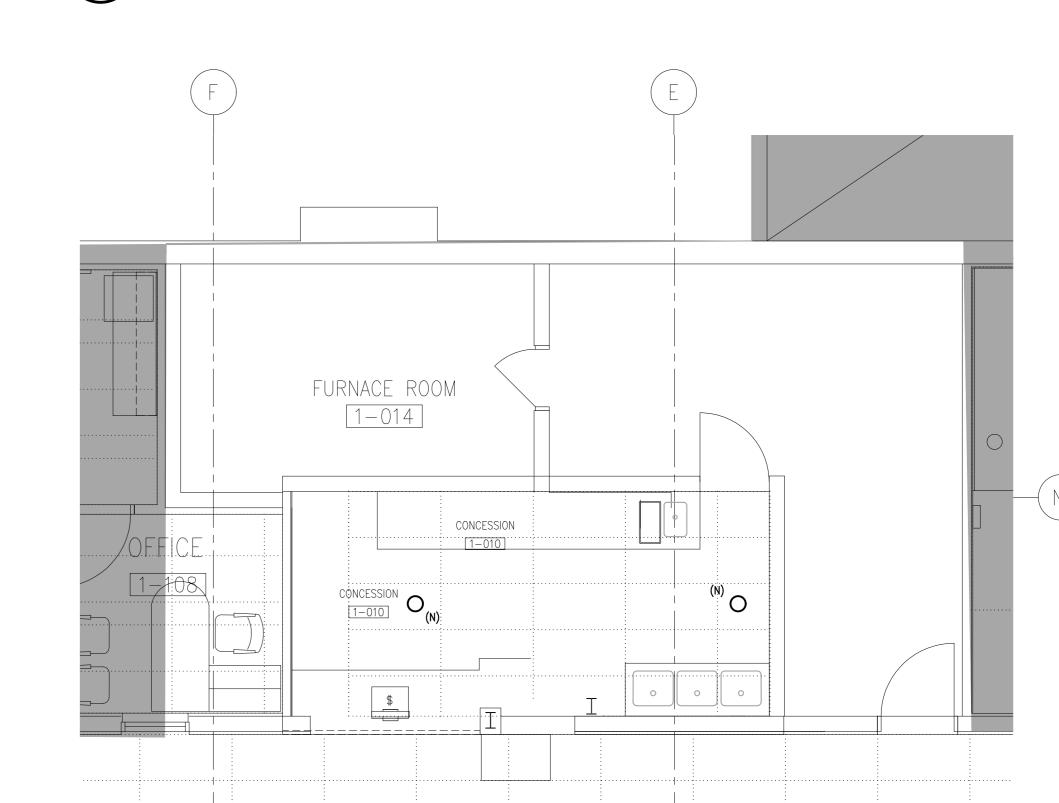


GROUND FLOOR - CONCESSION STAND



PROVIDE SUPPLY AIR DIFFUSER WITHIN CANTEEN WHERE INDICATED, REFER TO

SCHEDULE FOR DETAILS. BALANCE TO VALUE INDICATED ON TAG.



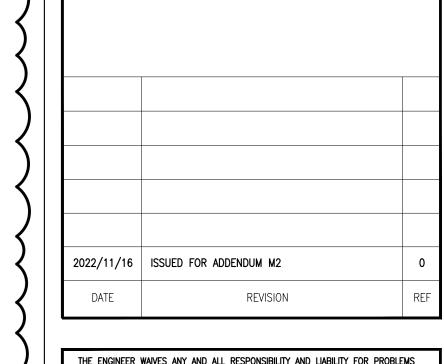
FIRE PROTECTION - NEW WORK

GROUND FLOOR - CONCESSION STAND

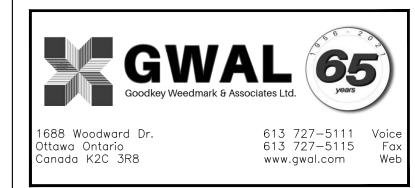
DRAWING NOTES - NEW WORK

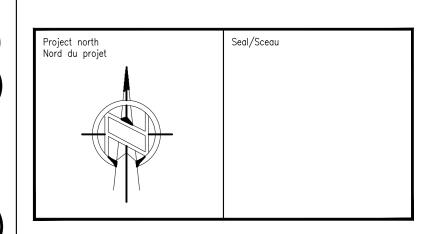
.1 PROVIDE NEW PENDENT SPRINKLER HEAD WITHIN NEW CANTEEN T-BAR CEILING

C/W BRANCH PIPING BACK TO MAIN. REFER TO SPECIFICATION FOR MATERIAL



WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHER FAILURE TO OBTAIN AND / OR FOLLOW THE ENGINEER'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH THIS DRAWING IS THE PROPERTY OF GOODKEY WEEDMARK & ASSOCIATES LIMITED AND ALL COPYRIGHTS ARE RESERVED. NO USE OF THIS DRAWING MAY BE MADE WITHOUT EXPRESS WRITTEN CONSENT. DO NOT SCALE DRAWINGS L'INGÉNIEUR DÉCLINE TOUTE RESPONSABILITÉ DÉCOULANT DE PROBLÈMES FAISANT SUITE AU NON RESPECT DES PLANS, DEVIS ET DE L'INTENTION DU CONCEPT QU'IL: INDIQUENT OU DE TOUS LES PROBLÈMES POUVANT RESULTER DU DÉFAUT CONCERNE LES ERREURS, OMISSIONS, INCONSISTANCES, AMBIGUITÉS OU CONFLITS LIMITED ET TOUS LES DROITS SONT RÉSERVÉS. L'UTILISATION EST INTERDITE SANS LE CONSENTEMENT ÉCRIT DE L'AUTEUR. NE PAS MESURER LES DESSINS A L'ÉCHELLE





TOWN OF MINDEN HILLS MEMORIAL ARENA **EXPANSION**

rawing title/Titre du dessin MECHANICAL FIRE PROTECTION & **HVAC REVISIONS**

AS INDICATED Project no./No. du projet D.NEWTON | Drawing/Dessin

R.LEFEBVR