SPECIFICATIONS:

SUPPLY ALL LABOUR, EQUIPMENT AND MATERIALS NECESSARY TO INSTALL COMPLETE AND OPERATIONAL, THE MECHANICAL SYSTEMS HEREIN AND SHOWN ON THE DRAWINGS. WHERE THE TERM "PROVIDE" IS USED IT SHALL BE UNDERSTOOD TO INCLUDE LABOUR, MATERIALS AND SERVICES NECESSARY TO SUPPLY AND INSTALL ITEMS OR WORK REFERRED TO.

APPLY, PAY AND OBTAIN ALL PERMITS, INSPECTIONS AND FEES REQUIRED BY LOCAL AUTHORITIES.

DRAWINGS AND SPECIFICATIONS

THESE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO PROVIDE FOR A COMPLETE AND OPERATIONAL MECHANICAL INSTALLATION. THE RESPONSIBILITY FOR SUPPLYING AND INSTALLING MATERIALS ESSENTIAL TO ACHIEVE THIS SHALL BE PART OF THIS SECTION, EXCEPT WHERE SPECIFICALLY NOTED THAT SUCH OR MATERIALS IS NOT INCLUDED.

CODES AND STANDARDS

ALL WORK SHALL CONFORM TO ALL APPLICABLE CODES INCLUDING BUT NOT LIMITED TO THE ONTARIO BUILDING CODE CURRENT REVISION (REFERRED TO AS OBC HEREAFTER).

ALL PLUMBING WORK SHALL BE IN ACCORDANCE WITH THE ONTARIO BUILDING CODE, PART 7.

ALL NATURAL GAS PIPING SHALL BE IN ACCORDANCE WITH CAN/CSA-B149.1, NATURAL GAS AND PROPANE INSTALLATION CODE.

ALL DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH ASHRAE AND SMACNA

ALL EQUIPMENT TO BE INSTALLED AS PER MANUFACTURER'S INSTRUCTIONS.

ALL MATERIALS SUPPLIED SHALL BE NEW AND SHALL CONFORM IN ALL RESPECTS TO THE DRAWINGS AND SPECIFICATIONS. SUPPLIED MATERIAL SHALL ALSO BE CSA OR ULC APPROVED. MODELS SPECIFIED IN DRAWINGS AND SCHEDULES FORM ONLY THE BASIS OF DESIGN. CONTRACTOR IS TO MEET THE REQUIREMENTS OF ALL APPLICABLE FEDERAL, PROVINCIAL, AND/OR OWNER SPECIFIED PROCUREMENT POLICIES WHEN SELECTING EQUIPMENT OR FEATURES.

<u>GUARANTEES</u>

GUARANTEE ALL WORK FOR ONE YEAR FOLLOWING THE DAY OF FINAL ACCEPTANCE BY THE OWNER. THIS GUARANTEE SHALL INCLUDE WORK AND MATERIALS FOR ALL PROBLEMS RESULTING FROM IMPROPER INSTALLATION OR EQUIPMENT FAILURE OR DEFECTS.

PROTECTION AND REPAIR

TAKE ALL NECESSARY PROVISIONS TO ENSURE THE SAFETY OF OCCUPANTS AND PERSONNEL. PROTECT FINISHED AND UNFINISHED WORK FROM DAMAGE RESULTING FROM ON-GOING WORK. PROVIDE FULL DUST PROTECTION AND KEEP EQUIPMENT DRY AND CLEAN AT ALL TIMES. PROTECT EXISTING SERVICES NOT INCLUDED IN SCOPE OF WORK. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING, AT NO COST TO THE OWNER, ANY DAMAGES TO SURFACES AND FINISHES CAUSED DIRECTLY OR INDIRECTLY AS A RESULT OF HIS WORK.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CEILING AND WALL OPENINGS REQUIRED TO COMPLETE THIS PROJECTS. THE CONTRACTOR IS RESPONSIBLE TO MAKE GOOD ALL CEILINGS AND WALL AFFECTED BY THIS

CLEAN UP

AT THE END OF EACH DAY, PERFORM REGULAR CLEAN UP TASKS AND REMOVE ALL TOOLS, EQUIPMENT, ETC. TO ENSURE CLEANLINESS OF PREMISES.

SITE EXAMINATION

EXAMINE THE SITE OF WORK AND BECOME FAMILIAR WITH ALL STRUCTURES AFFECTING THIS WORK. REPORT TO THE ENGINEER ANY UNSATISFACTORY CONDITIONS WHICH MAY AFFECT PROPER COMPLETION OF THIS WORK.

NO ADDITIONAL COMPENSATION WILL BE GIVEN FOR EXTRA WORK DUE TO EXISTING CONDITIONS, WHICH SUCH EXAMINATION WOULD REVEAL.

DUCTWORK:

GALVANIZED SHEET STEEL (G90 TO ASTM A525) WITH METAL GAUGES IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE, TO SUIT DUCT CONFIGURATION AND STANDARD PRESSURE CLASSIFICATION. SEAL TRANSVERSE JOINTS WITH SYNTHETIC LATEX DUCT SEALER.

DUCTWORK TO BE SUITABLE FOR OUTDOOR INSTALLATION.

PAINT DUCT WITH WATERPROOF PAINT. CONFIRM COLOUR WITH ARCHITECT.

CONSTRUCT DUCTWORK WITH FULL RADIUS FITTINGS WHERE SPACE PERMITS. WHERE SPACE IS INADEQUATE USE SQUARE ELBOWS WITH TURNING VANES.

ULC LISTED, RATED AND LABELLED GALVANIZED STEEL FOLDING BLADE FIRE DAMPERS, FIRE PROTECTION RATING TO SUIT APPLICATION, BUT IN NO CASE LESS THAN 1 1/2 HOUR, AND COMPLETE WITH REPLACEABLE 71° C FUSIBLE LINK. FIRE DAMPERS SHALL BE TYPE B OR TYPE C AS APPLICABLE, WITH DAMPER BLADES OUTSIDE OF AIRSTREAM. INSTALL FIRE DAMPERS IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

PROIVDE ACCESS DOORS AS REQUIRED TO ENSURE COMPLETE ACCESS TO ALL MECHANICAL COMPONENTS CONCEALED BEHIND BUILDING FINISHES THAT REQUIRE SERVICE OR ADJUSTMENT. ACCESS DOORS SHALL BE 305MM(12") X 305MM(12") FOR HAND ENTRY AND 610MM(24") X 610MM(24") FOR BODY ENTRY.

FOR GYPSUM BOARD CONSTRUCTION, RECESSED CEILING OR WALL ACCESS DOOR WITH DRYWALL BEAD, DESIGNED TO ACCEPT 16MM(5/8") THICK FINISHING MATERIAL IN DOOR RECESS. 14 GA. SATINCOAT STEEL DOOR AND FRAME, CONCEALED PIVOT ROD HINGE, SCREWDRIVER OPERATED CAM, DRYWALL CORNER BEAD ON ALL SIDES, PRIMED WHITE FINISH. MIFAB MODEL CAD-DW OR ACUDOR MODEL DW-5015.

COORDINATE LAYOUT WITH ARCHITECT PRIOR SHOP DRAWING SUBMISSION.

PLUMBING AND VALVES:

DOMESTIC WATER - TYPE "L" HARD DRAWN COPPER TUBE TO ASTM B-88 AND CSA H7.6, WITH WROUGHT COPPER FITTINGS AND 95%/5% TIN/ANTIMONY SOLDER.

DRAINAGE, WASTE AND VENT - PVC DRAIN, WASTE AND VENT PIPE AND FITTINGS WITH SOLVENT WELD JOINTS TO CAN/CSA-B181.2. PROVIDE INTUMESCENT FIRE STOPS WHERE PIPING PENETRATES FIRE-RATED ASSEMBLIES. TRANSITION TO METALLIC PIPING WITHIN RETURN AIR PLENUM CEILINGS (GENERALLY ALL PIPING 2400 mm (95") AFF AND ABOVE), OR USE PLENUM-RATED PVC PIPE (IPEX SYSTEM XFR OR EQUAL).

PROVIDE DOMESTIC WATER PIPING WITH 25MM (1") THERMAL INSULATION.

PROVIDE ALL FIXTURES WITH THUMB SHUTOFF VALVE AND FLEXIBLE SUPPLY.

THERMOSTATIC MIXING VALVES TO BE PROVIDED ON ALL LAVATORIES, SUCH THAT SUPPLY TEMPERATURE WILL

ISOLATION VALVES LESS THAN 65MM (2-1/2IN) NPS- BRONZE BODY BALL VALVES, SOLDER OR SCREWED CLAMP ENDS AS APPLICABLE, CHROME PLATED BRASS BALL, PTFE SEAT, O-RING STEM SEAL, LEVER HANDLE, CLASS 150.

MECHANICAL INSULATION SPECIFICATION:

EXHAUST DUCTWORK - FLEXIBLE BLANKET MINERAL FIBRE INSULATION TO CGSB 51-GP-11M WITH VAPOUR BARRIER JACKET AND FACING MATERIAL TO CGSB 51-GP-52M. THICKNESS 25MM. INSULATE DUCTOWRK FOR MINIMUM 2.4 M UPSTREAM FROM POINT OF DISCHARGE.

AIR BALANCING:

ADJUST AIR DELIVERY AT ALL TERMINALS TO WITHIN 5% OF QUANTITIES SHOWN. INCLUDE COPIES OF AIR BALANCING REPORT IN OPERATING AND MAINTENANCE MANUALS.

SHOP DRAWINGS:

SUBMIT SHOP DRAWINGS FOR:

- GRILLES AND DIFFUSERS
- EXHAUST FANS AND CONTROLS
- INTAKE LOUVRE AND MOTORIZED DAMPERS

CLOSE-OUT DOCUMENTATION:

SUBMIT ONE (1) ELECTRICAL COPY OF MECHANICAL OPERATING AND MAINTENANCE MANUALS AT CONCLUSION OF WORK. MANUALS SHALL BE ASSEMBLED IN HARD COVERED 3-RING BINDERS AND SHALL INCLUDE THE

- STATEMENT OF WARRANTY

- REVIEWED SHOP DRAWINGS
- INSTALLATION AND MAINTENANCE INFORMATION FOR ALL EQUIPMENT
- AIR BALANCING REPORT

SUBMIT ONE SET OF WHITE PRINTS CAREFULLY MARKED UP IN RED PEN TO SHOW ALL DEVIATIONS IN CONSTRUCTION FROM WORKING DRAWINGS.

EQUIPMENT DISPOSAL AND DECOMMISSIONING:

THE CONTRACTOR WILL TAKE ALL NECESSARY STEPS TO HAVE EQUIPMENT THAT WAS REMOVED OR REPLACED AS PART OF ANY WORK DISPOSED OF OR DECOMMISSIONED IN ACCORDANCE WITH APPROPRIATE DISPOSAL OR DECOMMISSIONING PROCESSES, APPLICABLE LAWS, AND IN ACCORDANCE WITH COMMERCIALLY REASONABLE ENVIRONMENTAL PRACTICES.

THE CONTRACTOR MUST SUBMIT WRITTEN PROOF OR EVIDENCE OR ACKNOWLEDGEMENT THAT THE DISPOSAL OF ALL MATERIALS WAS DONE IN ACCORDANCE WITH ALL CURRENT DISPOSAL REQUIREMENTS.

ACCEPTABLE DOCUMENTS:

• INVOICES OR DISPOSAL CERTIFICATES FROM THE DISPOSAL FACILITY

THIS DOCUMENTATION MUST BE ON THE DISPOSAL FACILITY'S LETTERHEAD, INVOICE, OR CERTIFICATE.

MINIMUM INFORMATION REQUIRED:

- BUILDING NAME AND ADDRESS
- EQUIPMENT DESCRIPTION (LAMPS, MOTORS, COOLING EQUIPMENT, ETC.) EQUIPMENT QUANTITIES
- DISPOSAL FACILITY NAME

THE CONTRACTOR MUST SUBMIT A COMPLETED RETROFIT PROGRAM DISPOSAL FORM IF THE DISPOSAL INVOICES OR CERTIFICATES DO NOT PROVIDE ENOUGH INFORMATION TO VERIFY THE EQUIPMENT DETAILS AS REPORTED IN THE INCENTIVE APPLICATION. REFER TO ARCHITECTURAL SPECIFICATION MANUAL, APPENDIX A FOR AN EXAMPLE OF A DISPOSAL FORM.

MECHANICAL DRAWING LIST						
DWG NO.	DESCRIPTION					
M-001	MECHANICAL SPECIFICATIONS AND SCHEDULES					
M-002	MECHANICAL DEMOLITION LAYOUT					
M-200	MECHANICAL SANITARY LAYOUT					
M-300	MECHANICAL DOMESTIC WATER LAYOUT					
M-400	MECHANICAL HVAC LAYOUT					

LIENT LOGO

(EYPLAN (NTS)

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ISSUES/PROBLEMS WHICH MA' OCCUR AS A RESULT OF A FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS AND TH

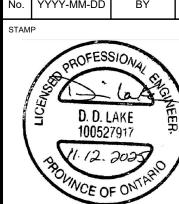
WHERE THERE ARE ALLEGED ERRORS, OMISSIONS, INCONSISTENCIES OR AMBIGUITIES PRESENT IN THE CONTRACT DOCUMENTS, THE CONTRACTOR MUST SEEK CLARIFICATION FROM JP2G. ANY COSTS OR SCHEDULE DELAYS WHICH RESULT AS A FAILURE TO CONTACT JP2G FOR DIRECTION SHALL BE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.

DO NOT SCALE DRAWINGS. REFER ANY DIMENSIONAL CLARIFICATIONS AND/OR POSSIBLE TRADE INTERFERENCE/CONFLICTS TO JP2G FOR CLARIFICATION PRIOR TO COMMENCEMENT

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION WITH SUBTRADES ANI SHALL ADDRESS CONSTRUCTION TEAM COORDINATION ITEMS PRIOR TO ISSUING REQUESTS FOR INFORMATION FROM JP2G.

THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARIL' SHOWN ON THE CONTRACT DRAWING, AND, WHERE SHOWN, THE ACCURACY OF THI POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK. THE CONTRACTOR SHALL INFORM THEMSELVES OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM

REISSUED FOR PERMIT & CONSTRUCTION 1 2025-11-07 ISSUED FOR PERMIT & CONSTRUCTION YYYY-MM-DD DESCRIPTION



CENTENNIAL SECONDARY SCHOOL AESTHETICS **CLASSROOM 204**

160 PALMER RD, BELLEVILLE, ON K8P 4E1

MECHANICAL SPECIFICATIONS AND SCHEDULES



GREER GALLOWAY a division of Jp2g Consultants Inc.

1620 WALLBRIDGE LOYALIST ROAD, R.R. #5, BELLEVILLE, ON, K8N 4Z5 T: 613-966-3068 BELLEVILLE@JP2G.COM Jp2g PROJECT No.: 25-1199A

CLIENT No.:

DRAFTED: T. FUNARI DESIGNED: T. RENDER REVIEWED: D. LAKE

APPROVED: D. LAKE

SCALE AS SHOWN V= AS

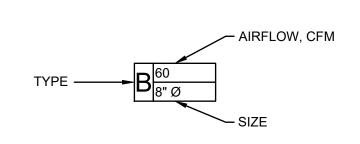
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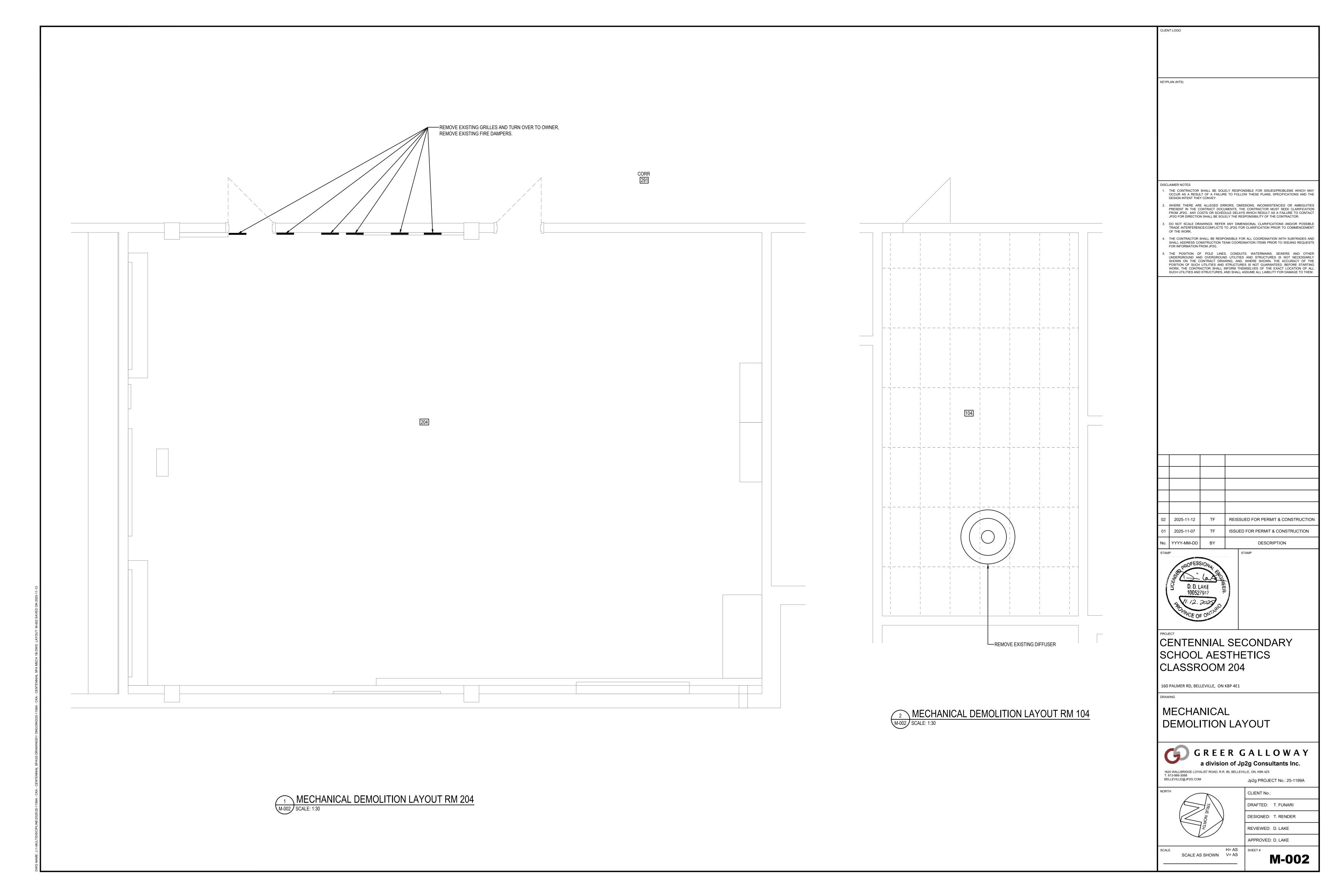
EXHAUST FAN SCHEDULE						
TAG	STYLE	AIR FLOW	STATIC PRESSURE	MODEL	VOLTAGE	REMARKS
EF-1	WALL EXHAUST	800 CFM	0.45	GREENHECK CUE-100-VG	120/1/60	PROVIDE TIMER/SWITCH OR APPROVED ALTERNATE SEE ELECTRICAL, FACTORY MOUNTED SPEED CONTROLLER COMPLETE WITH BACKDRAFT DAMPER AND FACTORY MOUNTED NEMA 3R DISCONNECT SWITCH

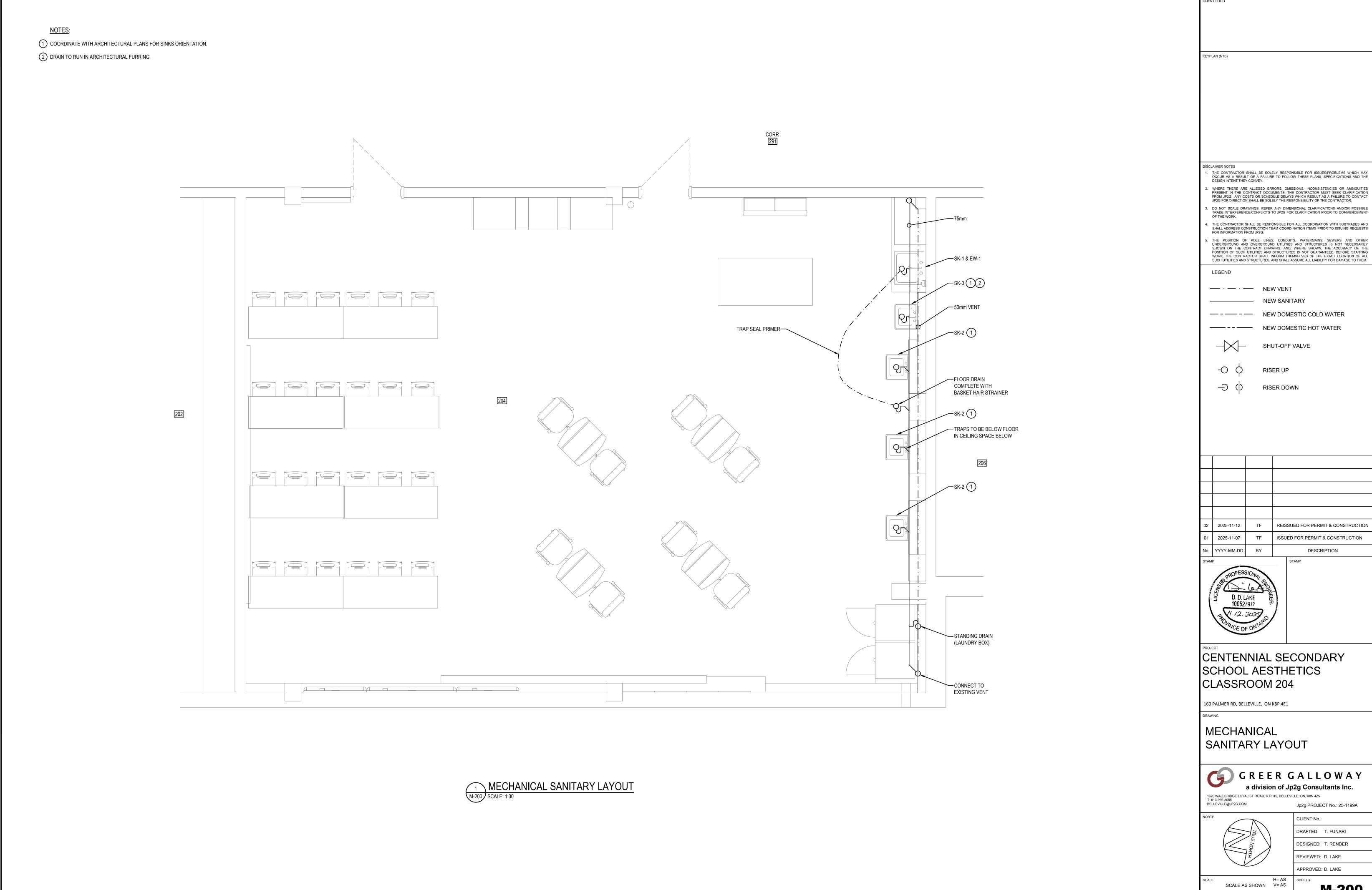
FIXTURE EQUIPMENT SCHEDULE							
TAG	DESCRIPTION	DCW (mm)	DHW (mm)	WASTE (mm)	VENT (mm)	LOCATION	REMARKS
SK-1	DROP IN STAINLESS STEEL SINK			40	40	204	ELKAY GE12521 W/ 3 HOLE, 4" CENTERSET
SK-2	PEDESTAL SINK	10	10	40	40	204	UNION SALON USF-247 OWNER SUPPLIED PROVIDE PRESSURE VACUUM BREAKER
SK-3	HAND WASH SINK	10	10	40	40	204	AMERICAN STANDARD MURRO WALL HUNG W/ 4" CENTERSET COMPLETE W/ CERAMIC SHROUD AND MOEN 8886 METERING FAUCET
EW-1	EYEWASH	15	15	40	40	204	BRADLEY S19-515W

	DIFFUSER GRILLE AND REGISTER SCHEDULE								
TYPE	DESCRIPTION	MANUFACTURER MODEL NO.		BORDER OR FRAME STYLE					
Α	A LOUVERED GRILLE (SUPPLY) B LOUVERED GRILLE (RETURN) PRICE		510	WALL MOUNT					
В			510Z	WALL MOUNT					
С	ROUND RETURN	PRICE	RECG	ACT MOUNT					
D	SQUARE CONE DIFFUSER PRICE		SCD	ACT MOUNT					

ACCEPTABLE MANUFACTURERS ARE E.H. PRICE, NAILOR, CARNES, AND ANEMOSTAT.







M-200

1 COORDINATE WITH ARCHITECTURAL PLANS FOR SINKS ORIENTATION. 2 PROVIDE SUITABLE CARRIER FOR MOUNTING IN ARCHITECTURAL FURRING. KEYPLAN (NTS) CORR 291 CONNECT TO EXISTING— 100mm DCW, 75mm DHW ISCLAIMER NOTES THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ISSUES/PROBLEMS WHICH MAY OCCUR AS A RESULT OF A FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY. WHERE THERE ARE ALLEGED ERRORS, OMISSIONS, INCONSISTENCIES OR AMBIGUITIES
PRESENT IN THE CONTRACT DOCUMENTS, THE CONTRACTOR MUST SEEK CLARIFICATION
FROM JP2G. ANY COSTS OR SCHEDULE DELAYS WHICH RESULT AS A FAILURE TO CONTACT
JP2G FOR DIRECTION SHALL BE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. 3. DO NOT SCALE DRAWINGS. REFER ANY DIMENSIONAL CLARIFICATIONS AND/OR POSSIBLE TRADE INTERFERENCE/CONFLICTS TO JP2G FOR CLARIFICATION PRIOR TO COMMENCEMENT ──MIXING VALVE THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION WITH SUBTRADES AND SHALL ADDRESS CONSTRUCTION TEAM COORDINATION ITEMS PRIOR TO ISSUING REQUESTS FOR INFORMATION FROM JP2G. PLUMBING LOCATED — IN CEILING BELOW 5. THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWING, AND, WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM THEMSELVES OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM. LEGEND — · — · — NEW VENT ----- NEW SANITARY — - — NEW DOMESTIC COLD WATER EYE WASH STATION ----- NEW DOMESTIC HOT WATER SHUT-OFF VALVE RISER DOWN 202 REISSUED FOR PERMIT & CONSTRUCTION 01 2025-11-07 ISSUED FOR PERMIT & CONSTRUCTION —LAUNDRY SUPPLY (LAUNDRY BOX) CENTENNIAL SECONDARY SCHOOL AESTHETICS CLASSROOM 204 160 PALMER RD, BELLEVILLE, ON K8P 4E1 MECHANICAL DOMESTIC WATER LAYOUT GREER GALLOWAY MECHANICAL DOMESTIC WATER LAYOUT a division of Jp2g Consultants Inc. M-300 SCALE: 1:30 1620 WALLBRIDGE LOYALIST ROAD, R.R. #5, BELLEVILLE, ON, K8N 4Z5 T: 613-966-3068
BELLEVILLE@JP2G.COM Jp2g PROJEC Jp2g PROJECT No.: 25-1199A CLIENT No.: DRAFTED: T. FUNARI DESIGNED: T. RENDER REVIEWED: D. LAKE APPROVED: D. LAKE H= AS SHEET # **M-300**

