

THE DRAWINGS AND SPECIFICATIONS ARE TO PROVIDE COMPLETE INTENDED PLUMBING, FIRE SUPPRESSION, HEATING, CONTROL, VENTILATION AND AIR CONDITIONING SYSTEMS FOR THE PROPOSED PROJECT. THE SYSTEMS PROVIDED SHALL CONFORM TO THE DETAILS STATED IN THE SPECIFICATIONS AND SHOWN ON THE DRAWINGS. ITEMS OR WORK NOT SHOWN OR SPECIFIED, BUT REQUIRED FOR A COMPLETE HEATING, VENTILATION AND AIR CONDITIONING SYSTEM, SHALL BE PROVIDED AND SHALL CONFORM WITH ACCEPTED TRADE PRACTICES, LOCAL CODES, AND GOVERNING AUTHORITIES.

THE DRAWINGS AND SPECIFICATIONS ARE PRESENTED TO DEFINE SPECIFIC SYSTEM REQUIREMENTS AND SERVE TO EXPAND ON THE PRIMARY CONTRACT REQUIREMENTS OF PROVIDING COMPLETE SYSTEMS. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE ONLY THE GENERAL ARRANGEMENT OF THE ITEMS COMPRISING THE SEVERAL SYSTEMS INCLUDED IN THE HEATING, VENTILATION AND AIR CONDITIONING WORK.

DO NOT SCALE THE DRAWINGS. BECAUSE OF THE SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, VALVES, OR SIMILAR ITEMS WHICH MAY BE REQUIRED TO MAKE A COMPLETE OPERATING SYSTEM. CAREFULLY INVESTIGATE CONDITIONS AFFECTING WORK AND INSTALL WORK IN SUCH A MANNER THAT INTERFERENCES BETWEEN PIPES, CONDUIT, DUCTS, EQUIPMENT, ARCHITECTURAL AND STRUCTURAL FEATURES SHALL BE AVOIDED. PROVIDE ITEMS THAT MAY BE REQUIRED TO MEET THE CONDITIONS AT THE BUILDING.

CONTRACTORS SHALL HAVE SUFFICIENT EXPERTISE IN THIS TYPE OF CONSTRUCTION TO REALIZE THE EXTENT OF THE WORK REQUIRED. THEREFORE, IT SHOULD BE OBVIOUS TO ANY PRUDENT FIRM WITH EXPERIENCE IN THIS FIELD THAT THESE DOCUMENTS MAY NOT EXPLICITLY DISCLOSE FINAL DETAILS; HOWEVER, CONTRACTORS SHALL HAVE THE EXPERTISE NECESSARY TO INCLUDE NECESSARY APPOINTMENTS.

PROTECT FLOORING FROM DAMAGE DURING THE CONSTRUCTION PERIOD. PROVIDE PLYWOOD OR SIMILAR MATERIAL UNDER EQUIPMENT OR MATERIALS STORED ON FLOORS, AND IN AREA WHERE CONSTRUCTION MAY DAMAGE THE FLOOR SURFACES. FLOOR SURFACES (INCLUDING SEALER) DAMAGED DURING THE CONSTRUCTION SHALL BE REPLACED AT THE COST OF THE CONTRACTOR AT FAULT.

COORDINATE ALL WORK WITH WORK SHOWN ON DRAWINGS FOR OTHER TRADES. COORDINATE EXACT LOCATION OF DIFFUSERS, REGISTERS AND GRILLES WITH ARCHITECTURAL AND ELECTRICAL REFLECTED CEILING PLANS.

PROVIDE MAINTENANCE AREAS AROUND ALL EQUIPMENT AS REQUIRED BY CODES AND RECOMMENDED BY THE EQUIPMENT MANUFACTURER. PAY PARTICULAR ATTENTION TO COIL ACCESS AND REMOVAL.

INDICATED DUCT SIZES ARE CLEAR INSIDE OF DUCT DIMENSIONS, INCLUDING ACOUSTIC DUCT LINER WHERE USED.

INDICATED DUCT AND PIPING RUNS ARE DIAGRAMMATIC. CONTRACTOR SHALL DETERMINE ALL REQUIRED OFFSETS AND DIRECTION CHANGES BEFORE FABRICATION AND INSTALLATION TO AVOID INTERFERENCE WITH OTHER TRADES.

UNLESS OTHERWISE NOTED, ALL DUCTWORK AND PIPING IS OVERHEAD, TIGHT TO UNDERSIDE OF SLAB/STEEL, WITH SPACE FOR INSULATION IF REQUIRED.

ALL PIPING AND DUCTWORK IN FINISHED ROOMS OR SPACES SHALL BE INSTALLED CONCEALED IN A FURRED CHASE OR ABOVE THE CEILING.

INSTALL PIPING AND DUCTWORK SO THAT ALL VALVES, DAMPERS AND ACCESS DOORS ARE ACCESSIBLE.

NO PIPING OR DUCTWORK SHALL BE LOCATED IN ELECTRICAL ROOMS, ELECTRICAL CLOSETS OR TELECOMMUNICATIONS ROOMS UNLESS THOSE PIPES OR DUCTS SERVE ONLY THAT SPACE AND ARE INDICATED ON THE DRAWINGS.

FLOOR PLANS SHOW GENERAL PIPE ROUTING. REFER TO PIPING DIAGRAMS AND DETAILS FOR LOCATIONS OF VALVES AT EQUIPMENT.

INSTALL ALL DRAIN PIPING WITH 2% MINIMUM GRADE UNLESS OTHERWISE NOTED.

PROVIDE DRAIN VALVES AT THE BASE OF ALL RISERS AND AT ALL PIPING LOW POINTS ON HOT WATER, GLYCOL WATER AND CHILLED WATER PIPING SYSTEMS. VALVES SHALL BE COMPLETE WITH HOSE CONNECTIONS AND SCREW-ON CAPS.

PROVIDE MANUAL AIR VENTS ON HOT WATER AND CHILLED WATER PIPING BRANCHES AND AT ALL HIGH POINTS FOR VENTING.

PROVIDE SHUT-OFF VALVES AT EQUIPMENT REQUIRING CONNECTION, REGARDLESS OF WHETHER SHOWN ON DRAWINGS.

PROVIDE SHUT-OFF VALVES IN UTILITY SHAFTS ON EACH FLOOR FOR ALL PIPING SERVING THE FLOOR.

DO NOT PROVIDE VALVES IN WATER PRESSURE RELIEF PIPING.

PIPING, EXCEPT IN MECHANICAL ROOMS AND ROOMS WITHOUT CEILINGS, SHALL BE LOCATED CONCEALED IN CHASES OR ABOVE THE CEILING UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, MINIMUM SIZE FOR ALL PIPING SHALL BE 20mm (3/4").

THE MECHANICAL CONTRACTOR SHALL PROVIDE ACCESS PANELS NOT SMALLER THAN 600mmX600mm (24"x24") FOR ACCESS TO CONCEALED TRAPS, VALVES, CLEANOUTS, MOTORS, FIRE DAMPERS, CONTROLS, DRAIN POINTS, OR SIMILAR ITEMS WHERE NO OTHER MEANS OF ACCESS IS PROVIDED.

COORDINATE ALL DUCTWORK PENETRATIONS IN MASONRY WITH STRUCTURAL ENGINEER PRIOR TO ANY WORK BEING PERFORMED. ALL LINTELS REQUIRED TO BE DETAILED BY STRUCTURAL ENGINEER AND PROVIDED BY GENERAL CONTRACTOR. PROVIDE SLEEVES FOR ROUND DUCTWORK.

PROVIDE SLEEVES IN STRUCTURE FOR ALL PIPING PENETRATING WALLS OR FLOORS.

PROVIDE APPROVED FIRESAFING AT OPENINGS IN FLOORS, WALLS, ETC.

I OCATE ALL ROOM THERMOSTATS 1500mm (5'-0") (CENTERLINE) ABOVE FINISHED FLOOR ON THE VERTICAL CENTERLINE OF THE ROOM LIGHT SWITCH. NOTIFY THE ARCHITECT OF ANY ROOMS WHERE THE ABOVE LOCATION CANNOT BE MAINTAINED OR WHERE THERE IS A QUESTION ON LOCATION.

DIFFUSER, REGISTER AND GRILLE SIZES SHOWN ON FLOOR PLANS ARE NECK SIZES OR AS INDICATED BY SCHEDULE.

PAINT ALL PIPING, SUPPORTS, ETC. THAT WILL BE EXPOSED TO WEATHER.

WHERE SPACE IS AVAILABLE, CONTRACTOR, AT HIS OPTION, MAY SUBSTITUTE RADIUS ELBOWS FOR RECTANGULAR ELBOWS WITH TURNING VANES.

ARCHITECTURAL, MECHANICAL AND ELECTRICAL ITEMS ARE TO BE SUPPORTED FROM SECONDARY MEMBERS. SUPPLIED AND INSTALLED BY THE CONTRACTOR THAT ARE INDEPENDENT OF THE MAIN STRUCTURAL MEMBERS. WHERE THE PRIMARY MEMBERS ARE TRUSSES, THE SECONDARY MEMBERS SHOULD BE LOCATED ON THE TOP CHORD NEAR THE INTERSECTION OF THE VERTICAL / DIAGONAL WEB MEMBERS AND THE TOP CHORD, OR ATTACHED TO THE VERTICAL MEMBERS. LOADS LESS THAN 25 KG. MAY BE SUPPORTED FROM THE BOTTOM CHORD, PROVIDED NO MATERIAL IS REMOVED FROM THE BOTTOM CHORD AND THE SUPPORT IS LOCATED ADJACENT THE INTERSECTION OF THE VERTICAL /DIAGONAL WEB MEMBERS AND THE BOTTOM CHORD OF THE TRUSSES.

ITEMS ARE NOT TO BE SUPPORTED DIRECTLY FROM THE METAL DECK UNLESS APPROVED BY THE CONSULTANT.

IN AREAS WITH EXPOSED CEILING SPACE, ROUTE DUCTS AS HIGH AS POSSIBLE TO UNDERSIDE OF FLOOR DECK. DUCTS TO BE ROUTED BETWEEN STRUCTURAL MEMBERS WHEN RUNNING PARALLEL, AND RUN THRU OPEN WEB STEEL JOISTS WHEN RUNNING PERPENDICULAR TO STRUCTURAL MEMBERS. ONLY RUN DUCTS BELOW STRUCTURAL MEMBERS WHEN RUNNING PERPENDICULAR TO SOLID STRUCTURAL MEMBERS SUCH AS BEAMS, WHERE RUNNING THRU IS NOT AN OPTION.

CONTRACTOR SHALL BE AWARE, AND THEREBY ALLOW ACCORDINGLY, THAT THEY WILL BE WORKING IN HOSPITAL AREAS AND DEPARTMENTS THAT ARE DESIGNATED TO BE CONTINUOUSLY IN A 24 HOUR OPERATION BY HOSPITAL STAFF. AS SUCH THE HOSPITAL'S OPERATION AND DEPARTMENT FUNCTION SHALL NOT BE DISRUPTED OR COMPROMISED IN ANY WAY. PARTICULAR ATTENTION SHALL BE GIVEN TO RELATED WORK IN PATIENT, STAFF, AND VISITOR OCCUPIED AREAS. IN THESE AREAS, THE WORK IS TO BE PERFORMED DURING NIGHT TIME HOURS AS FOLLOWS:

MONDAY THROUGH FRIDAYS DAILY: 22:00 TO 06:00. (CONTRACTOR TO CONFIRM THE DATES AND HOURS WITH THE OWNER).

SATURDAYS AND SUNDAYS DAILY: 06:00 TO 06:00. (CONTRACTOR TO CONFIRM THE DATES AND HOURS WITH THE OWNER). NIGHT-TIME AND WEEKEND WORK ARE REQUIRED FOR ALL SHUTDOWNS AND CONNECTIONS INTO EXISTING, AND FOR THE COORDINATION (IE. PLANNING) OF SUCH WORK. ALLOW FOR MULTIPLE SHUT-DOWNS AND RE-CHARGES, TO ACCOMMODATE THE WORK. (CONTRACTOR TO CONFIRM THE DATES AND HOURS WITH THE OWNER).

PROVIDE FIRE-STOPPING FOR ALL EXISTING AND NEW PIPING AT FIRE SEPARATIONS.

		CONTROL	DAMPERS					
UNIT NUMBER	SERVICE	AIR	FLOW	SIZE	VEL.	TYPE	NORMAL	
		STREAM	l/s	WXH	M/S		POS	
CD-EF-1A	EF-1A	EXHAUST AIR	150	200 x 200	2.40	2P	NO	
CD-EF-1B	EF-1B	EXHAUST AIR	150	200 x 200	2.40	2P	NO	
NOTES	•		•	•	•			

NOTES

1. ALL DAMPERS SHALL BE C/W END SWITCH MONITORED AT BMS.

CONTROL DAMPERS SHALL BE RATED FOR OUTDOOR APPLICATION. (WEATHER).

S. CONTROL DAMPERS TO BE LOW PRESSURE TAMCO HEAVY-DUTY AIR-FOIL CONTROL DAMPER.

. OPTION MR (MOISTURE RESISTANCE).

DAMPER TYPE: 2P - 2 POSITION

MOD - MODULATING NORMAL POSITION IS "BENCH" POSITION

	AIR TERMINALS														
NOTATION MANUFACTURER		TYPE	MODEL NO	IO MATERIAL BORDER		BLADE ORIENT. NOM. SIZE		VOLUME DAMPER	MOUNTING FRAME	FASTENING	FINISH	NOTE			
S1	E.H.PRICE	SUPPLY DIFFUSER	SPD	STEEL	SURFACE PLAQUE	N/A	600x600	N/A	T-BAR OR DRY WALL	N/A	B12	1			
E1	E.H.PRICE	CEILING MOUNTED EXHAUST GRILLE	530	STEEL	TYPE F	TYPE L	REFER TO DWGS	N/A	T-BAR OR DRY WALL	TYPE A	B12	1, 2			
E2	E.H.PRICE	CEILING MOUNTED EXHAUST GRILLE	630	ALUMINUM	TYPE F	TYPE L	REFER TO DWGS	N/A	T-BAR OR DRY WALL	TYPE A	B13	1,2			

LOUVERED SUPPLY / EXHAUST GRILLE, 45°DEFLECTION, 19MM BLADE SPACING. . REFER TO ARCHITECTURAL CEILING PLAN FOR CEILING TYPE. (T-BAR OR SURFACE MOUNT).

SENERAL NOTES:

CONFIRM WITH ARCHITECTURAL CEILING PLAN FOR AIR TERMINAL SIZES IF THEY ARE METRIC OR IMPERIAL CONVERSION. COORDINATE WITH ARCHITECT THE REQUIRED BODER TYPE, END CAP AND FRAME PRIOR TO ORDERING

	FAN SCHEDULE																	
UNIT IDENTIFICATION						FAN WHEEL F		FAN	FAN MOTOR			RICAL						
MARK	LOCATION	UNIT/AREA SERVED	MAX AIRFLOW (I/s)	MIN AIRFLOW (I/s)	ESP (Pa)	CONTROL	TYPE	SPEED (RPM)	BHP	HP	SPEED (RPM)	DRIVE TYPE	VOLTS	PHASE	OPERATING WEIGHT (kg)	MANUFACTURER	MODEL NUMBER	NOTES
EF-1A	ROOF	TUB SHOWER 220	150	150	215.0	DDC	UNIVERSAL SINGLE WIDTH FAN UPBLAST	1,438	0.09	0.25	2,615	DIRECT DRIVE	115	1	40	GREENHECK	USF-08	ALL
EF-1B	ROOF	TUB SHOWER 220	150	150	215.0	DDC	UNIVERSAL SINGLE WIDTH FAN UPBLAST	1,438	0.09	0.25	2,615	DIRECT DRIVE	115	1	40	GREENHECK	USF-08	ALL
NOTES:																·		

1. CSA APPROVED MOTOR. VARI-GREEN EC MOTOR. 3. CONTROL-DIAL FOR BALANCING. (DIAL OR 0-10 VDC INPUT). 4. MOTOR WITH CLASS B OR GREATER INSULATION.

SWITCH-NEMA-3R, TOGGLE, MOUNTED AND WIRED. DISCHARGE POSITION-UB.

UL/Cul-705-POWER VENTILATOR.

WEATHERHOOD-GALVANIZED CONSTRUCTION. 9. EXHAUST FAN TO BE MONITORED AND CONTROLLED BY DDC SYSTEM.

0. EF-1A AND EF-1B ARE DUTY/ STAND-BY FANS FOR REDUNDANCY PURPOSE.

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Permit/Seal



Client/Project Logo



Client/Project Northern Health

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Revision

GENERAL NOTES AND MECHANICAL **EQUIPMENT SCHEDULES**

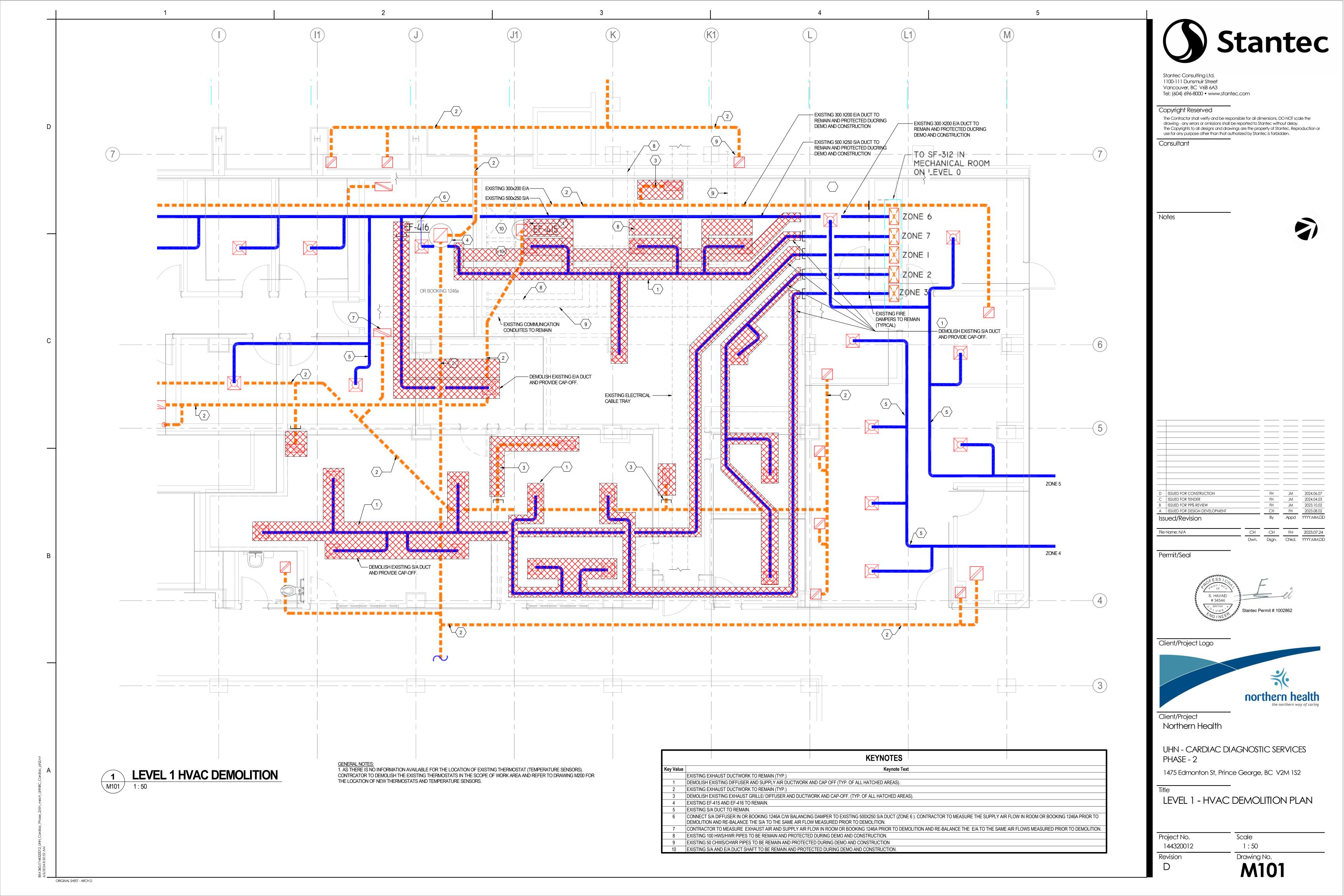
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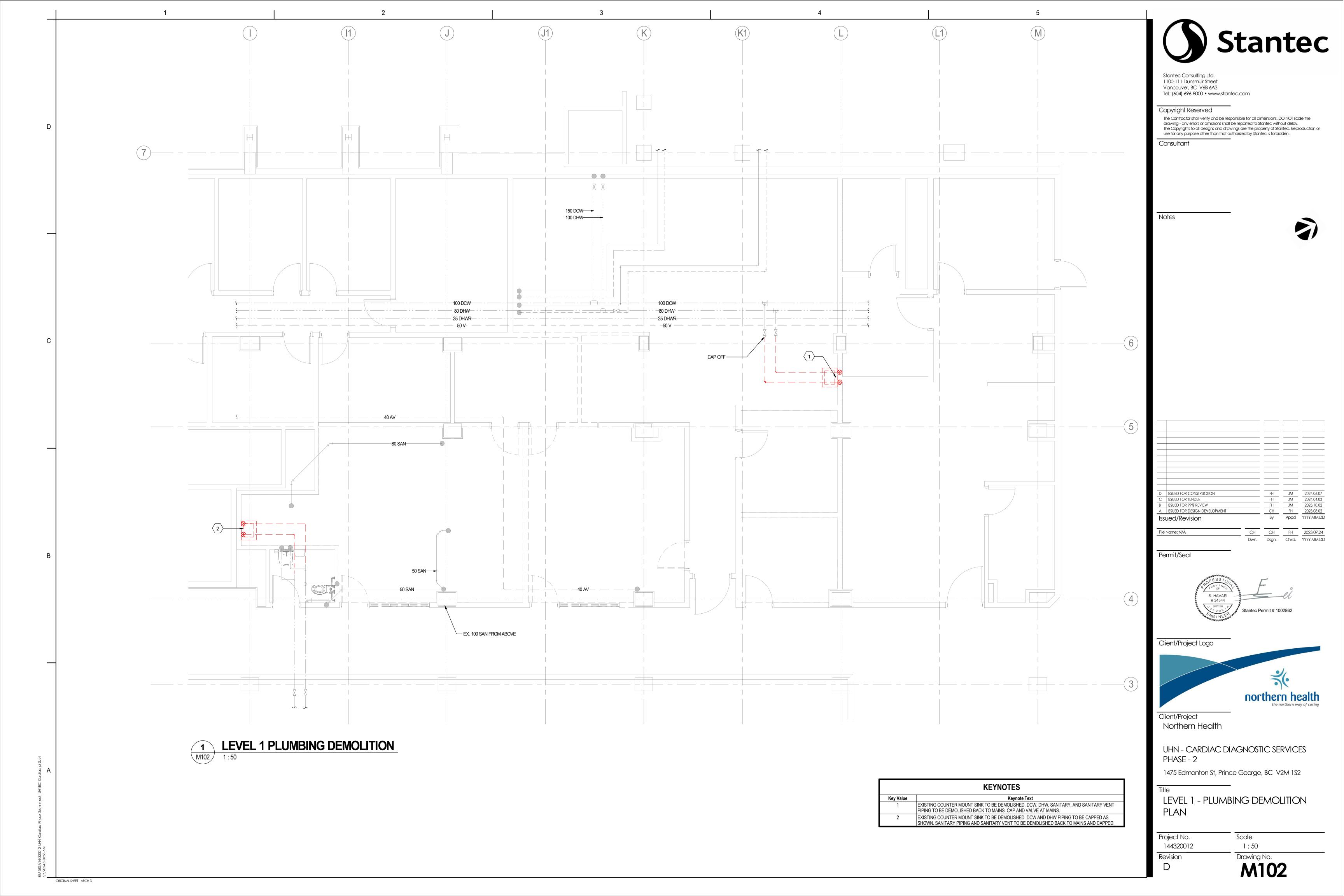
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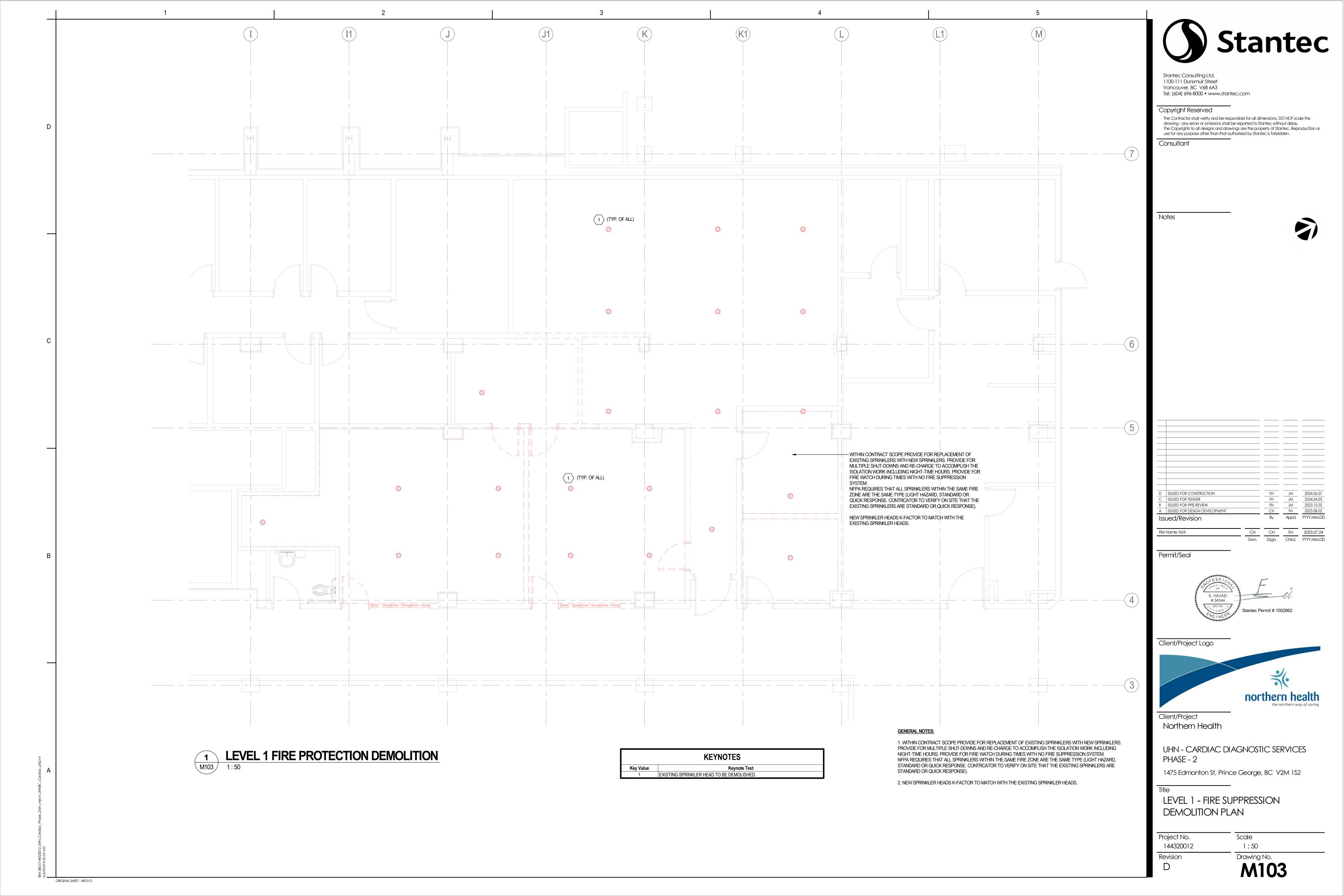
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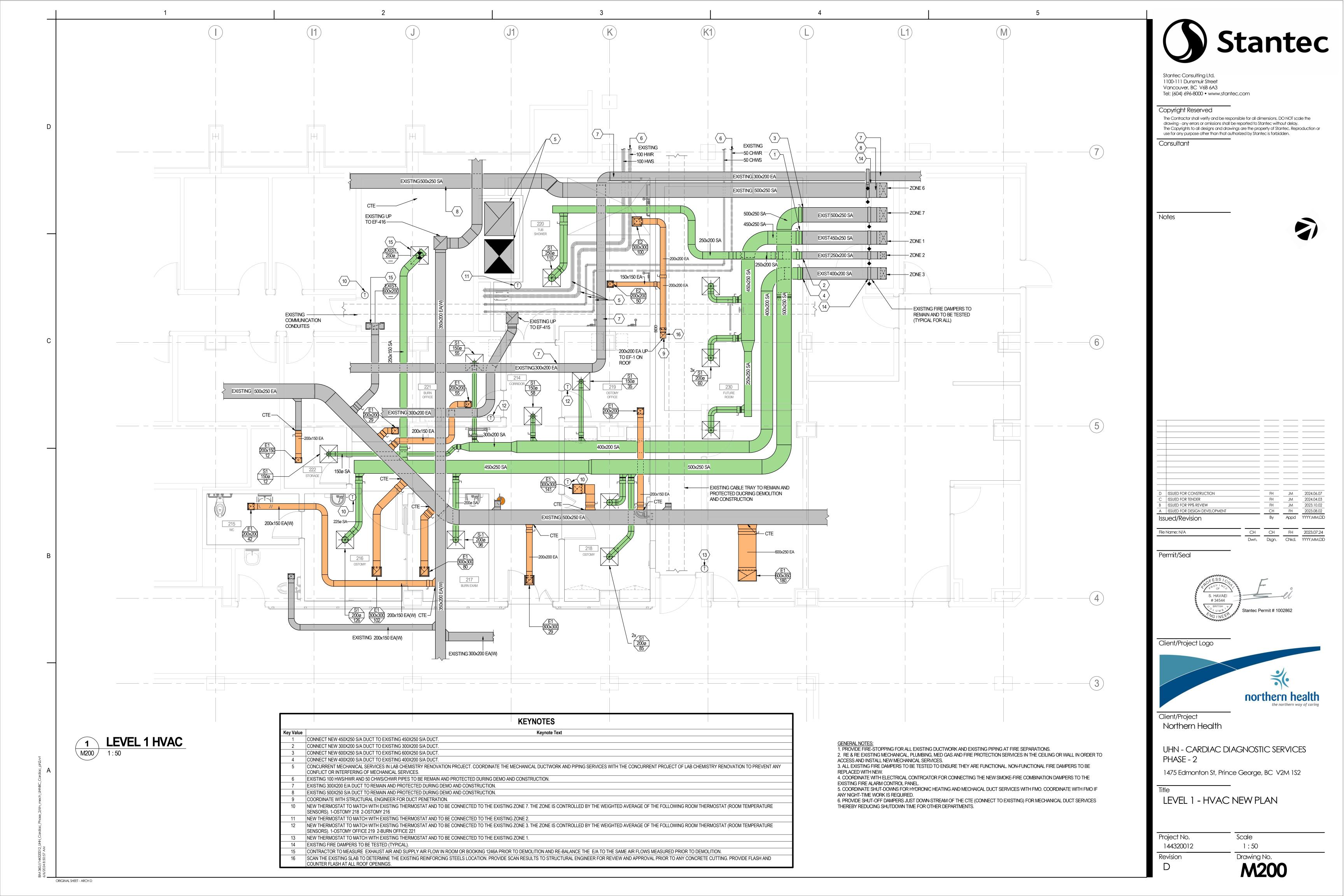
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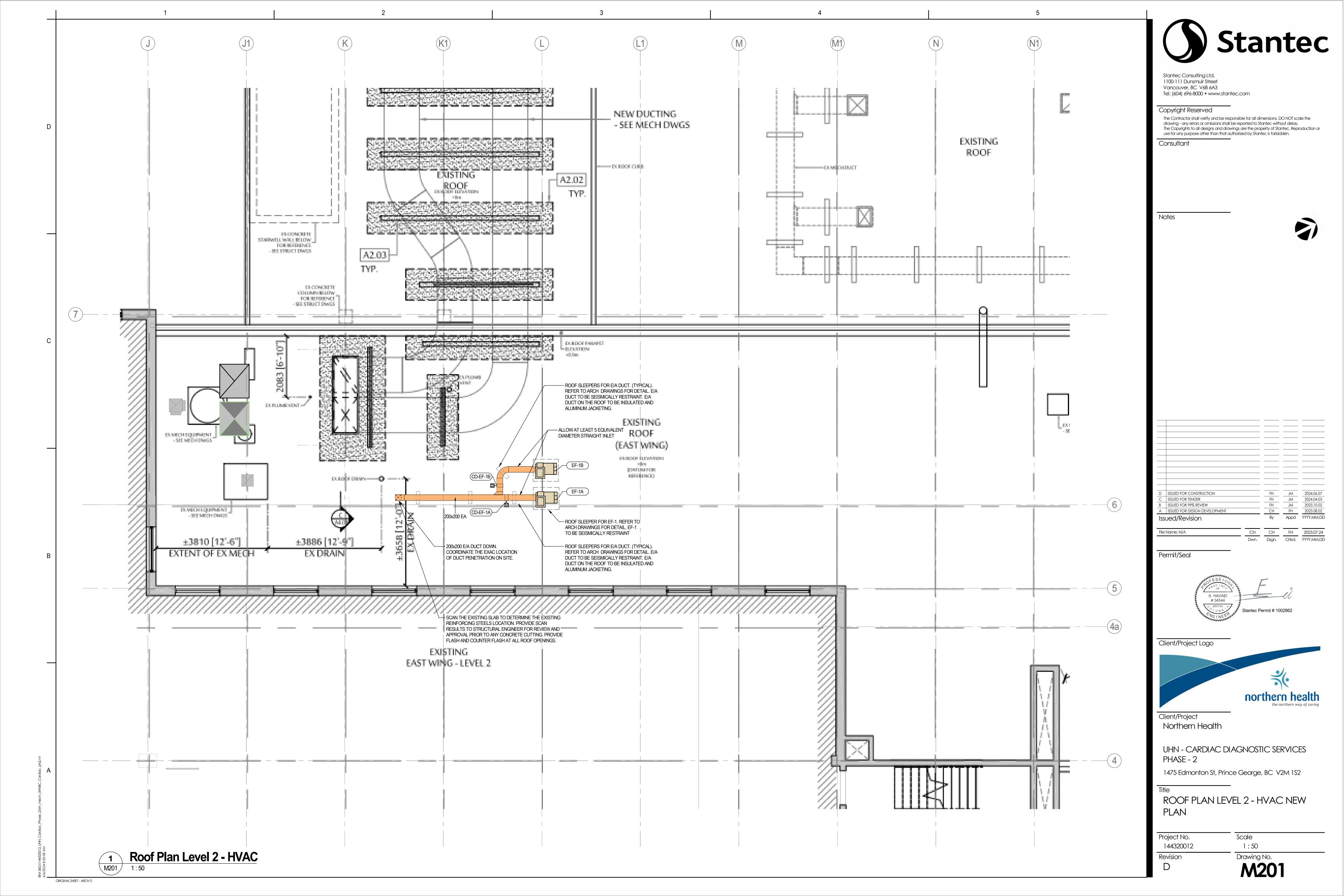


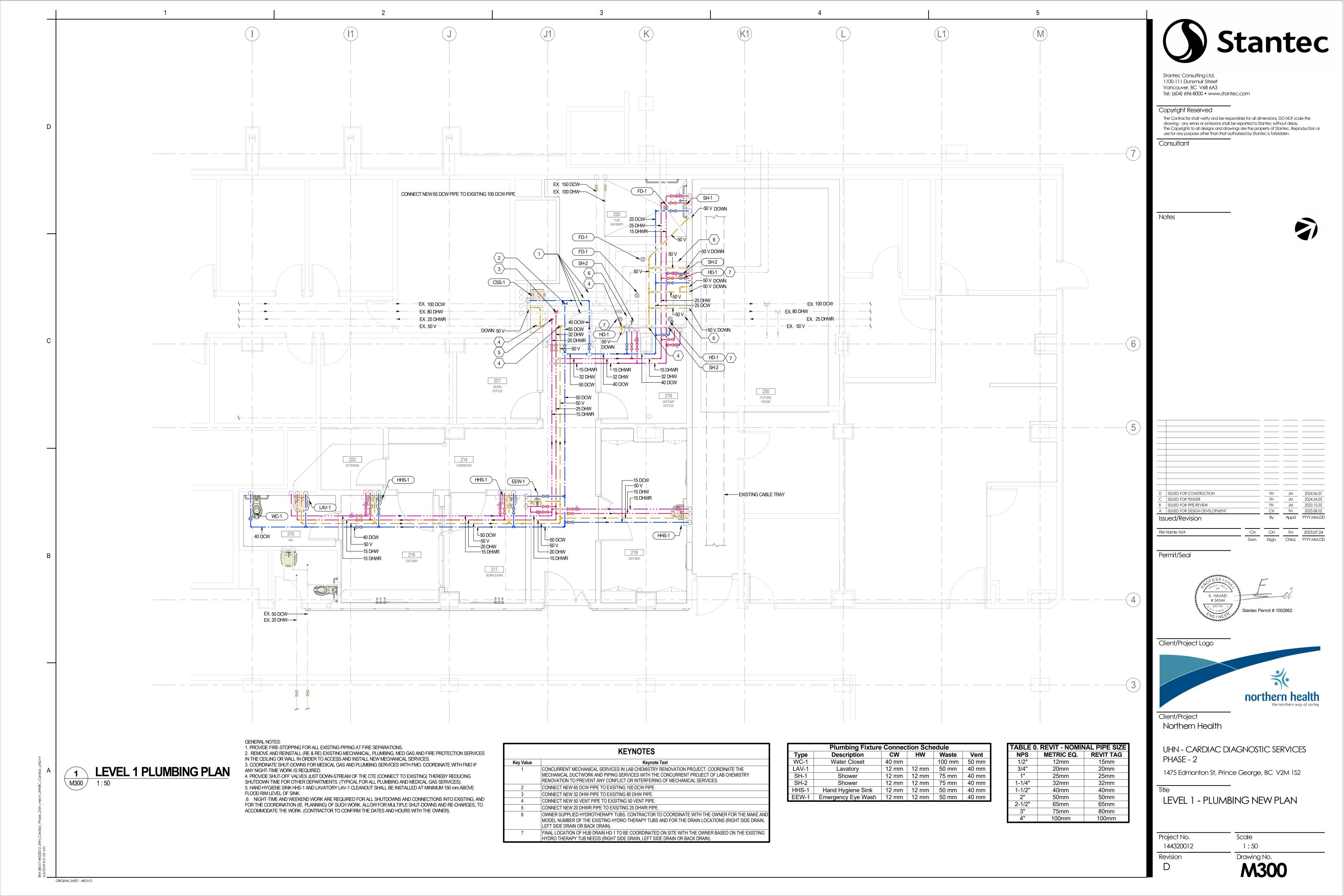


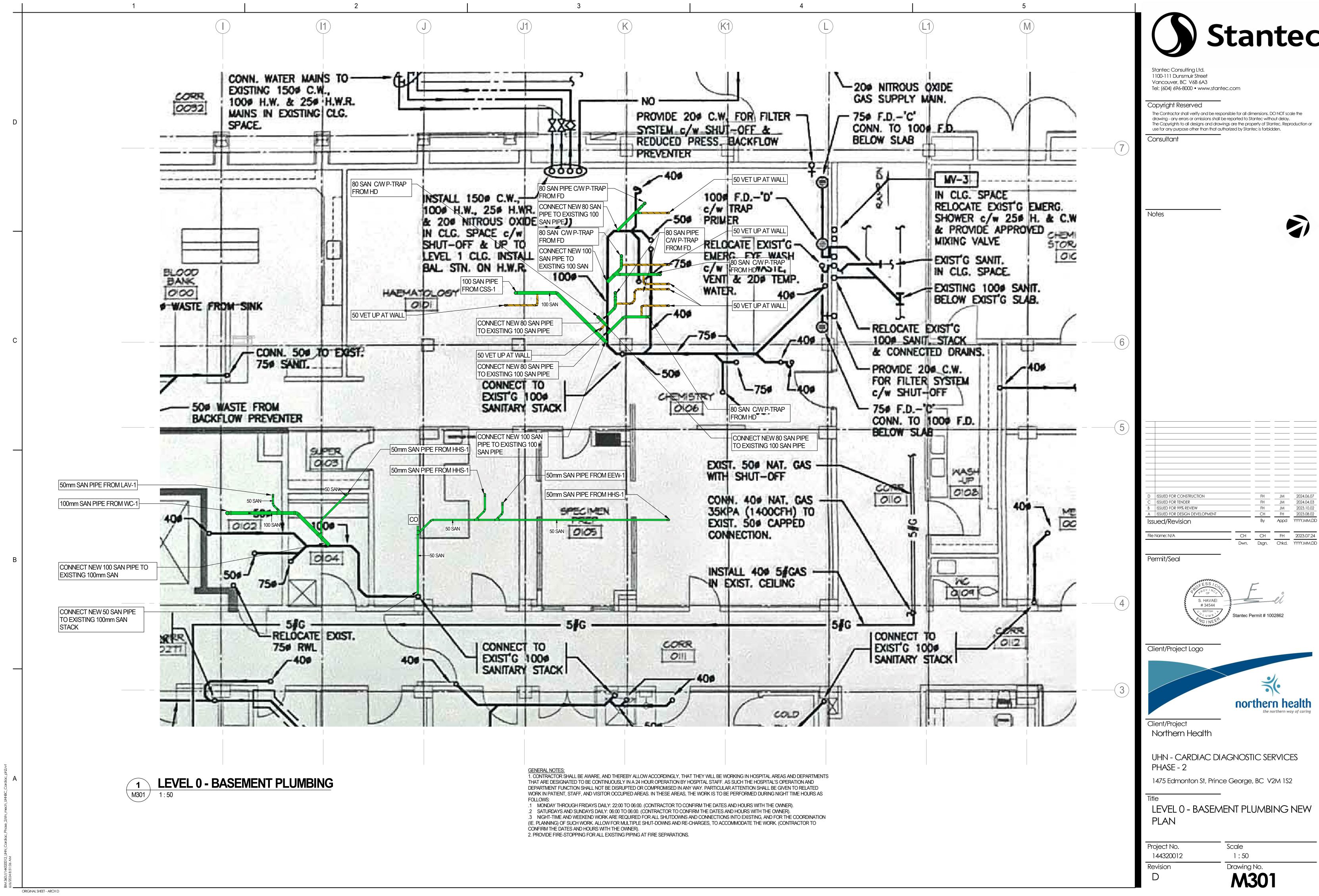












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