

MECHANICAL TENANT LEGEND

SANITARY DRAIN	SANITARY DRAIN - BURIED
EXISTING SANITARY DRAIN	EXISTING SANITARY BURIED
STORM DRAIN	STORM DRAIN - BURIED
EXISTING STORM DRAIN	EXISTING STORM DRAIN BURIED
COLD WATER	HOT WATER
EXISTING COLD WATER	EXISTING HOT WATER
HOT WATER RECIRC.	EXIST. HOT WATER RECIRC.
VENT PIPE	EXISTING VENT PIPE
FLOOR DRAIN	PLUMBING FIXTURE TAG
HOT WATER HEATING SUPPLY	HOT WATER HEATING RETURN
EXISTING H.W. HEATING SUPPLY	EXISTING H.W. HEATING RETURN
CHILLED WATER SUPPLY	CHILLED WATER RETURN
EXISTING CHILLED WTR. SUPPLY	EXISTING CHILLED WTR RETURN
EXISTING SPRINKLER TO REMAIN	NEW SPRINKLER - PENDANT
RELOCATED SPRINKLER	SPRINKLER TO BE REMOVED
SHUT-OFF VALVE	EXISTING SHUT-OFF VALVE
CAP OR PLUG	BALANCING VALVE
EXIST. THERMOSTAT TO REMAIN	NEW DDC SENSOR
EXISTING THERMOSTAT REMOVED	NEW THERMOSTAT
AIR OUTLET OR INLET	RELOCATED THERMOSTAT
NEW DUCTWORK	EXISTING DUCTWORK
ACoustically LINED DUCTWORK	EXISTING DUCTWORK REMOVED
EXISTING BALANCING DAMPER	NEW BALANCING DAMPER
EXISTING FLEX DUCT	NEW FLEX DUCT
EXISTING SQUARE DIFFUSER	NEW SQUARE DIFFUSER
EXISTING DIFFUSER RELOCATED	EXISTING DIFFUSER REMOVED
EXISTING 12"x12" DIFFUSER	NEW TROFFER DIFFUSER
EXISTING TROFFER DIFFUSER	RELOCATED TROFFER DIFFUSER
EXIST. TROFF DIFFUSER REMOVED	NEW LINEAR DIFFUSER
EXISTING LINEAR DIFFUSER	RELOCATED LINEAR DIFFUSER
EXIST. LINEAR DIFFUSER REMOVED	NEW RETURN AIR GRILLE
EXISTING RETURN AIR GRILLE	NEW EXHAUST AIR GRILLE
EXISTING EXHAUST AIR GRILLE	

GENERAL DEMOLITION NOTES:

- PATCH AND MAKE GOOD (TO BASE BUILDING STANDARD) MECHANICAL COMPONENTS AND FINISHES DAMAGED DURING THE RENOVATION. PROVIDE INSULATED CAPED CURBS EQUAL TO OR BETTER THAN R-VALUE FOR FANS, GOOSE NECK OPENINGS, VENTS AND ROOF TOP UNITS BEING REMOVED.
- REMOVE ALL REDUNDANT VENTS (AIR AND PLUMBING) SHOWN WITHIN THE DEMOLITION AREA INCLUDING ROOF JACKS. PATCH AND MAKE GOOD OF ROOF BY OTHERS.
- MECHANICAL TRADES RIDGING DEMOLITION WORK SHALL ALLOW FOR A FULL DAY ON SITE TO REVIEW EXISTING MECHANICAL SERVICES AND EQUIPMENT IN DEMOLITION AND RENOVATED AREAS. ACCESS WILL BE GIVEN TO ROOF AND EXISTING MECHANICAL AND ELECTRICAL ROOMS AS REQUIRED. SEE TENDER FORM FOR DATE OF MANDATORY SITE MEETING.
- INCLUDE FOR REMOVING AND CAPPING PLUMBING LINES ABOVE CEILING AND BELOW FLOOR AT THE NEAREST MAIN AND ASSOCIATED PLUMBING FIXTURES, DRAINS, ETC., WITHIN AREA OF DEMOLITION AND RENOVATION.
- INCLUDE FOR DISPOSAL (FROM SITE) OF ALL REMOVED EQUIPMENT AND SERVICES, DUCTWORK, PIPING, PLUMBING, FIXTURES, SPRINKLERS, ETC. INCLUDING INSULATION AND HANGERS.
- DEMOLISHED WORK SHALL INCLUDE FOR TEMPORARY AND PERMANENT WORK (I.E. SERVICE DIMENSIONS) REQUIRED TO KEEP ACTIVE LEASED PREMISES IN OPERATION. COORDINATE TIMES, ACCESS, TEMPORARY HOARDING, TEMPORARY SCAFFOLDING, TOOL/LIGHT POWER REQUIREMENTS AND OTHER MISCELLANEOUS ITEMS NEEDED TO COMPLETE WORK WITH GENERAL CONTRACTOR IN OCCUPIED AREA AT NIGHT OR IN ACCORDANCE WITH THE OWNER APPROVED SCHEDULE.
- DEMOLITION OF EXTERIOR AND INTERIOR WALLS, ROOF CEILING AND FLOORS TO BE SEQUENCED WITH THE CONSTRUCTION MANAGER. IN AREAS WHERE ADJACENT OCCUPANCIES ARE NOT IN THE DEMOLITION AREA BUT AFFECTED BY NOISE OF DEMOLITION, OR WHERE TRADE REQUIRES ACCESS TO EXISTING LEASED PREMISES, CONTRACTOR SHALL COORDINATE TIMES OF WORK THROUGH THE CONSTRUCTION MANAGER.
- CONTRACTOR SHALL REMOVE ALL EXISTING FAN COIL UNITS (UNLESS OTHERWISE NOTED) IN DEMOLITION AREAS INCLUDING REMOVAL OF:
 - HANGERS, SEISMIC BRACING AND ATTACHMENTS, SUPPLY/RETURN PIPING AND HANGERS TO ISOLATION VALVES AT THE NEAREST MAIN FOR EACH UNIT.
 - CONDENSATE DRAINS FROM EACH FAN COIL.
 - COMPLETE SENSOR CONTROL (WITH WIRING), PLUG REDUNDANT PNEUMATIC AIR LINES AT THE NEAREST MAIN.
 - SHEET METAL DUCT WORK WITH HANGERS, AVERAGE PLENUM SIZE IS 16"x16"x16" LONG, C/W 8" BRANCH DUCTS TO EACH DIFFUSER (REFER TO DRAWING FOR BRACH DUCTS AND INCLUDE VERTICAL DROPS TO DIFFUSERS AND HANGERS).
 - COORDINATE ANY REQUIRED ISOLATION OF THE CHILLED WATER LOOP WHICH INTERFERES WITH OPERATING TENANTS IN UNDEMOLISHED AREAS.
- SUPPLY AIR DUCTWORK AND PIPING NOT SHOWN HATCHED IS TO BE RETAINED, ANY DAMAGE TO EXISTING INSULATION AND DUCTS TO BE REPAIRED TO MATCH EXISTING.
- INSULATE NEW DUCT AND PIPE CAPS.
- REFER TO ARCHITECTURAL DRAWINGS FOR EXTENT OF DEMOLITION.
- DURING DEMOLITION WORK, ALL MECHANICAL SYSTEMS AND BUILDING SERVICES SERVING OCCUPIED AREAS, SHALL BE MAINTAINED OPERATIONAL. WHERE SERVICE OR SERVICE INTERRUPTIONS ARE REQUIRED, COORDINATE AFTER HOUR ACCESS REQUIREMENTS AND SECURITY EXECUTE WORK WITH CONSTRUCTION MANAGERS.

CIVIC ADDRESS:

701 WEST GEORGIA ST.
VANCOUVER B.C.

LEGAL DESCRIPTION:

BLOCK 42 REFERENCE PLAN 10028
DISTRICT LOT 541, 010-240-004
PLAN 210

NOTES

- BUILDING SHALL BE ENTIRELY SPRINKLERED IN ACCORDANCE WITH THE DIVISION 15 SPRINKLER SYSTEM SPECIFICATIONS, NFPA 13 STANDARDS SPRINKLER SYSTEM SHALL BE HYDRAULICALLY DESIGNED BASED ON THE FOLLOWING CRITERIA:

AREA	SYSTEM	DENSITY (GPM/SQ. FT.)	DESIGN AREA (A.S.)	HAZARD GROUP	MAX AREA PER HEAD (R ²)
FOOD COURT	WET	0.20	1500	ORD. GROUP 2	130
- PROVIDE SEISMIC SWAY BRACING IN ACCORDANCE WITH NFPA 13 AND B.C. BUILDING CODE ON STANDPIPE AND SPRINKLER SYSTEM.
- REVIEW MECHANICAL, STRUCTURAL AND ARCHITECTURAL DRAWINGS FOR DETAILS AND COORDINATE FINAL PIPE ROUTES WITH OTHER SUB-TRADES AND GENERAL CONTRACTOR BEFORE START OF SHOP DRAWINGS.
- SPRINKLER SYSTEM SHALL BE SUPERVISED ELECTRICALLY TO INDICATE SEPARATELY AT THE FIRE ALARM ANNUNCIATOR EACH OF THE FOLLOWING FAULTS:
 - MOVEMENT OF VALVE HANDLE
 - LOSS OF WATER PRESSURE
 - LOSS OF AIR PRESSURE
 - LOSS OF ELECTRICAL POWER SUPPLY TO AUTOMATIC FIRE PUMP
- ACTIVATION OF SPRINKLER HEAD SHALL INITIATE THE FLOW SWITCH AND SHALL BE INDICATED ON THE ANNUNCIATOR PANEL ON A FLOOR BY FLOOR BASIS.
- HEAT TRACE AND INSULATE ALL WET SPRINKLER AND STANDPIPE LINES IN UNHEATED SPACE.
- MINIMUM HEAD CLEARANCE FOR ALL PIPING TO BE 2 METERS AS PER VANCOUVER BUILDING BY-LAW.

DRAWING LIST

M-1	SPECIFICATION, LEGEND & PARTIAL UPPER FLR PLAN	1/8" = 1'-0"
M-2	PARTIAL PARKADE P-1 LEVEL PLAN - MECHANICAL	1/8" = 1'-0"
M-3	PARTIAL PARKADE P-1 LEVEL PLAN - EXIST. MECH. LAYOUT	1/8" = 1'-0"
M-4	MAIN FLOOR DEMOLITION PLAN - MECHANICAL	1/8" = 1'-0"
M-5	PARTIAL MAIN FLR PLAN - SPRINKLER & PLUMBING	1/8" = 1'-0"
M-6	PARTIAL MAIN FLR PLAN - HVAC	1/8" = 1'-0"
M-7	PARTIAL MAIN FLR PLAN - HVAC PIPING LOOP	1/8" = 1'-0"
M-8	WASHROOM DETAIL PLAN - PLUMBING	1/4" = 1'-0"
M-9	DETAILS	1/8" = 1'-0"

SCOPE OF WORK NOTES FOR RENOVATIONS:

SPECIFIC INSTRUCTIONS FOR SEQUENCING MECHANICAL WORK IN EXISTING BUILDING.

THE MECHANICAL CONTRACT MUST BE EXECUTED IN THE CORRECT SEQUENCE OF THE OVERALL CONSTRUCTION SCHEDULE AS DETERMINED BY THE CONSTRUCTION MANAGER AND CONSULTANT TO ENSURE CONTINUITY OF OPERATION OF PACIFIC CENTRE DURING ALL OCCUPIED HOURS. MAINTAIN CONTINUOUS OPERATION OF CONTROLS, HEATING, FIRE PROTECTION, EXHAUST, AIR CONDITIONING AND PLUMBING SERVICES TO TENANTS OCCUPYING THE AREA OF THE CONTRACT DURING OCCUPIED HOURS. A SUBMISSION OF A TENDER PRICE WILL SERVE AS CONFIRMATION THAT THE CONTRACTOR HAS A COMPLETE UNDERSTANDING OF THE SCOPE OF WORK, THE RELATED SEQUENCING CRITERIA AND HAS INCLUDED ALL RELATED COST ALLOWANCES FOR OFF HOURS WORK (OUTSIDE MALL OPERATING HOURS) IN THE TENDER SUBMISSION. A SCHEDULE OF PROPOSED SERVICE SHUT DOWNS SHALL BE SUBMITTED TO THE CONSTRUCTION MANAGER FOR MALL OPERATIONS APPROVAL BEFORE COMMENCING WORK. INSURE DOMESTIC WATER SUPPLY IS MAINTAINED TO ANY WATER COOLED AIR CONDITIONING EQUIPMENT IN EXISTING TENANT SPACES. PROVIDE TIGHTLY SEALED PLASTIC CAPS OVER SUPPLY AND RETURN DUCTS OPEN ENDED IN THE CONSTRUCTION AREA TO PREVENT DUST ENTERING EQUIPMENT DUCTWORK OR OCCUPIED AREAS. REMOVE ALL REDUNDANT EQUIPMENT, PIPE DUCT SERVICES INCLUDING HANGERS.

PRESSURE TESTING

TEST ALL NEW PRESSURE SERVICES AT 1.5 TIMES OPERATING PRESSURES BEFORE FINAL TIE INS MADE TO EXISTING SYSTEMS. MONITOR NON PRESSURE TESTED CONNECTIONS AT THE INS AT STANDARD OPERATING PRESSURES THROUGHOUT THE DURATION OF CONSTRUCTION TO ENSURE JOINTS ARE NOT LEAKING; RENOVATE FAULTY JOINTS OR CONNECTIONS IMMEDIATELY UPON DETECTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY WATER DAMAGE CAUSED TO THE BUILDING OR FAILURE OF PRESSURE WATER SYSTEMS RESULTING FROM WORK DONE BY THE CONTRACTOR. PROVIDE WELDED CAPS OR GASKETTED BLIND FLANGES ON REMAINING SHUT OFF VALVES OR OPEN ENDED PIPING.

POWER SUPPLY TO EXISTING EQUIPMENT

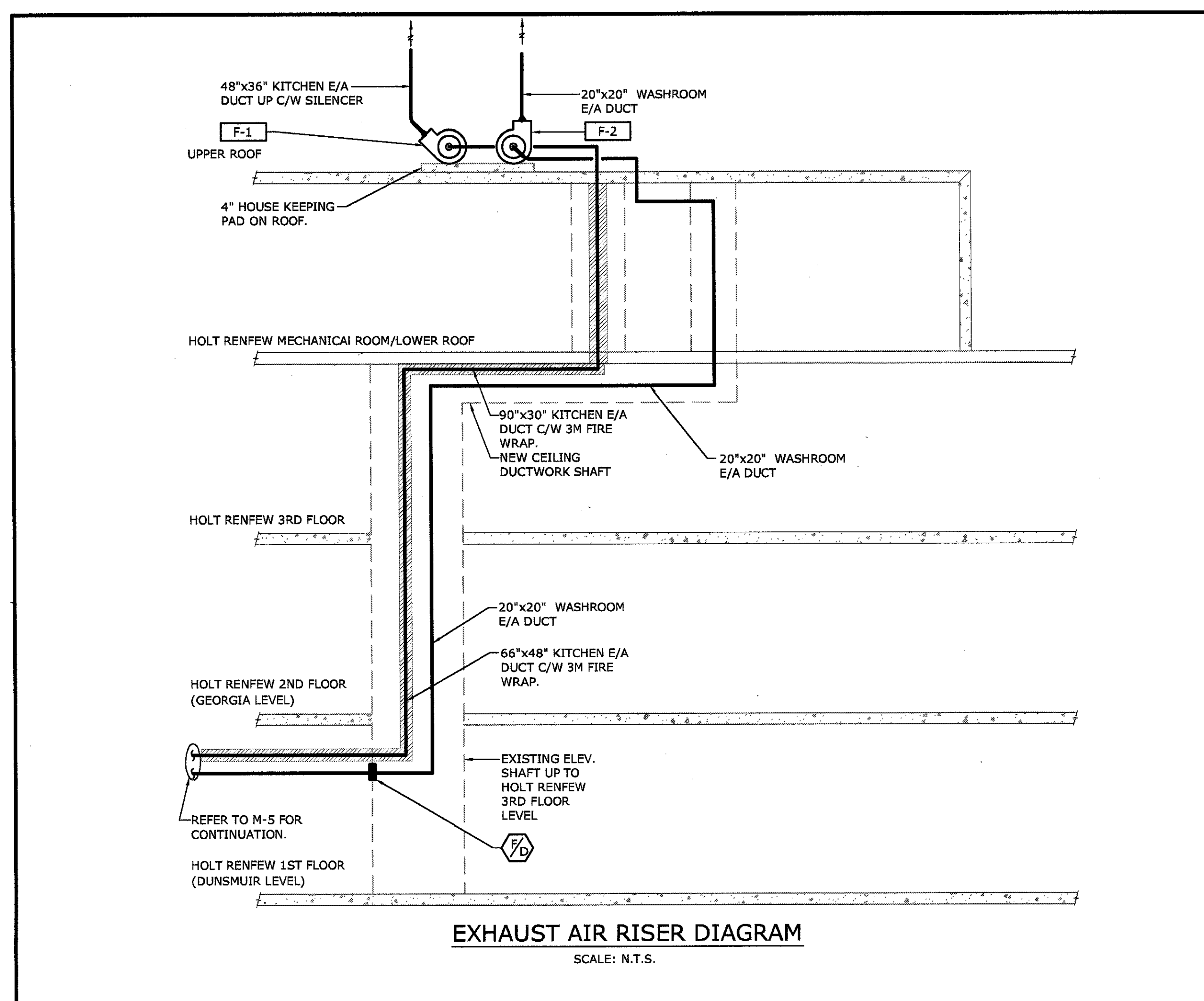
COORDINATE WITH THE CONSTRUCTION MANAGER TO MAINTAIN ELECTRICAL POWER FEEDS (TEMPORARY OR PERMANENT) TO EQUIPMENT SERVING OCCUPIED AREAS OF THE BUILDING THROUGHOUT THE DEMOLITION PERIOD.

SPECIFIC SEQUENCING

COORDINATE ALL DEMOLITION WORK IN CONJUNCTION WITH THE CONSTRUCTION MANAGER TO MAINTAIN SERVICES NECESSARY FOR OPERATION OF OTHER MALL AND RETAIL AREAS.

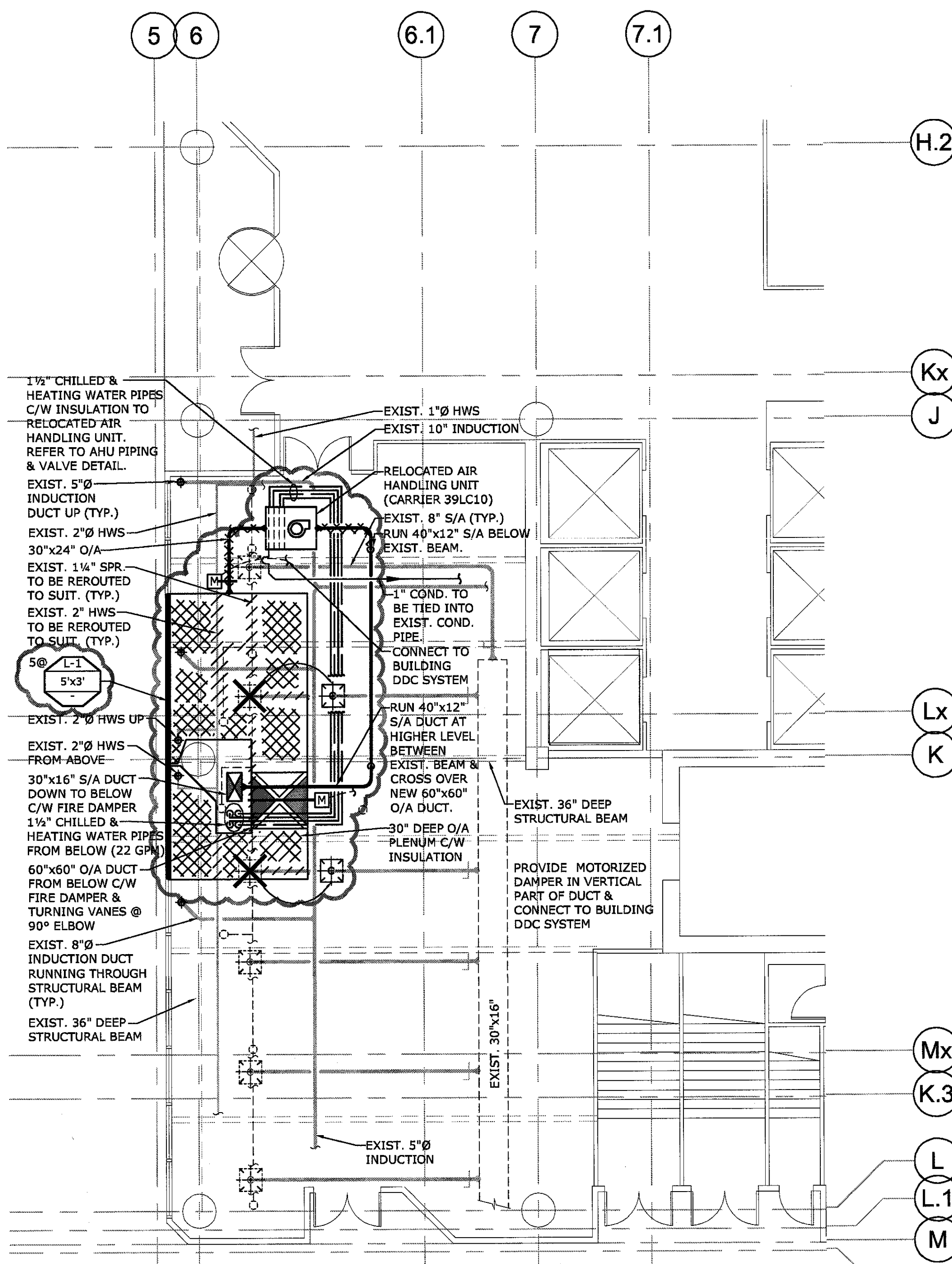
WARRANTIES AND USE OF PERMANENT SYSTEMS

1. EQUIPMENT AND INSTALLATION WARRANTIES SHALL BE EFFECTIVE FROM THE DATE OF SUBSTANTIAL COMPLETION OF THE ENTIRE PROJECT. THIS SHALL INCLUDE ANY EQUIPMENT OR SYSTEM INSTALLED WHICH IS REQUIRED TO OPERATE FOR PERMANENT USE BY THE OWNER BEFORE SUBSTANTIAL COMPLETION OF THE ENTIRE PROJECT IS ACHIEVED. OBTAIN AND PAY FOR EXTENDED WARRANTIES FROM EQUIPMENT MANUFACTURERS AS REQUIRED. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO OPERATE AND MAINTAIN THE NEW HVAC SYSTEMS, AND OTHER SUCH SERVICES / SYSTEMS WHICH MAY BE REQUIRED TO MAINTAIN OPERATION OF OCCUPIED AREAS OF THE PROJECT IN ACCORDANCE WITH THE OWNER'S AND EQUIPMENT MANUFACTURERS REQUIREMENTS UNTIL 30 DAYS AFTER SUBSTANTIAL COMPLETION. MAINTAIN CHEMICAL TREATMENT LEVELS IN CHILLED WATER, HEATING WATER LOOPS AND FOLLOW EQUIPMENT MANUFACTURER'S SERVICE REQUIREMENTS UNTIL 30 DAYS AFTER SUBSTANTIAL COMPLETION. TURN OVER DETAILED RECORDS OF ALL MAINTENANCE PROCEDURES COMPLETED ON SYSTEMS AND EQUIPMENT.



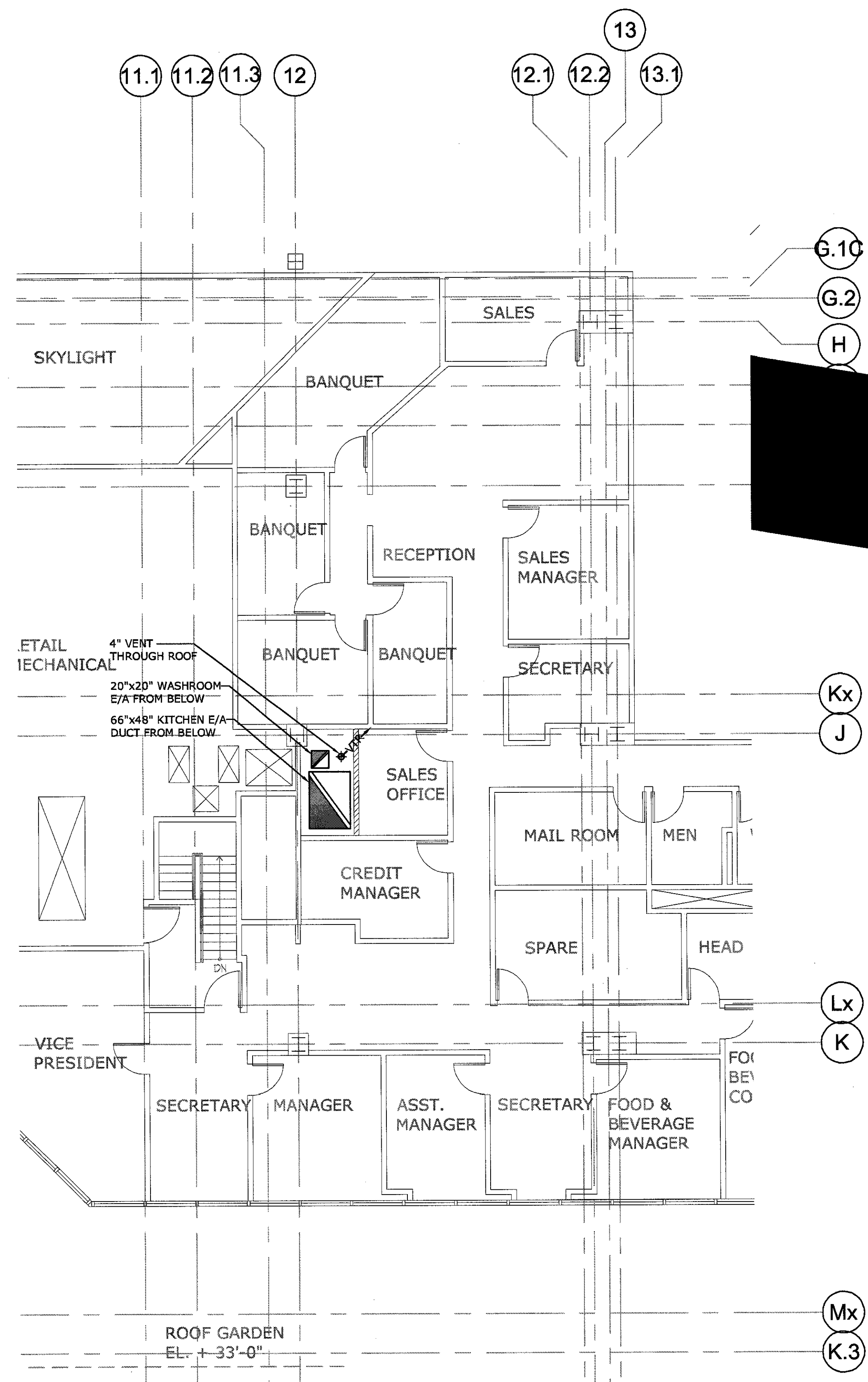
EXHAUST AIR RISER DIAGRAM

SCALE: N.T.S.



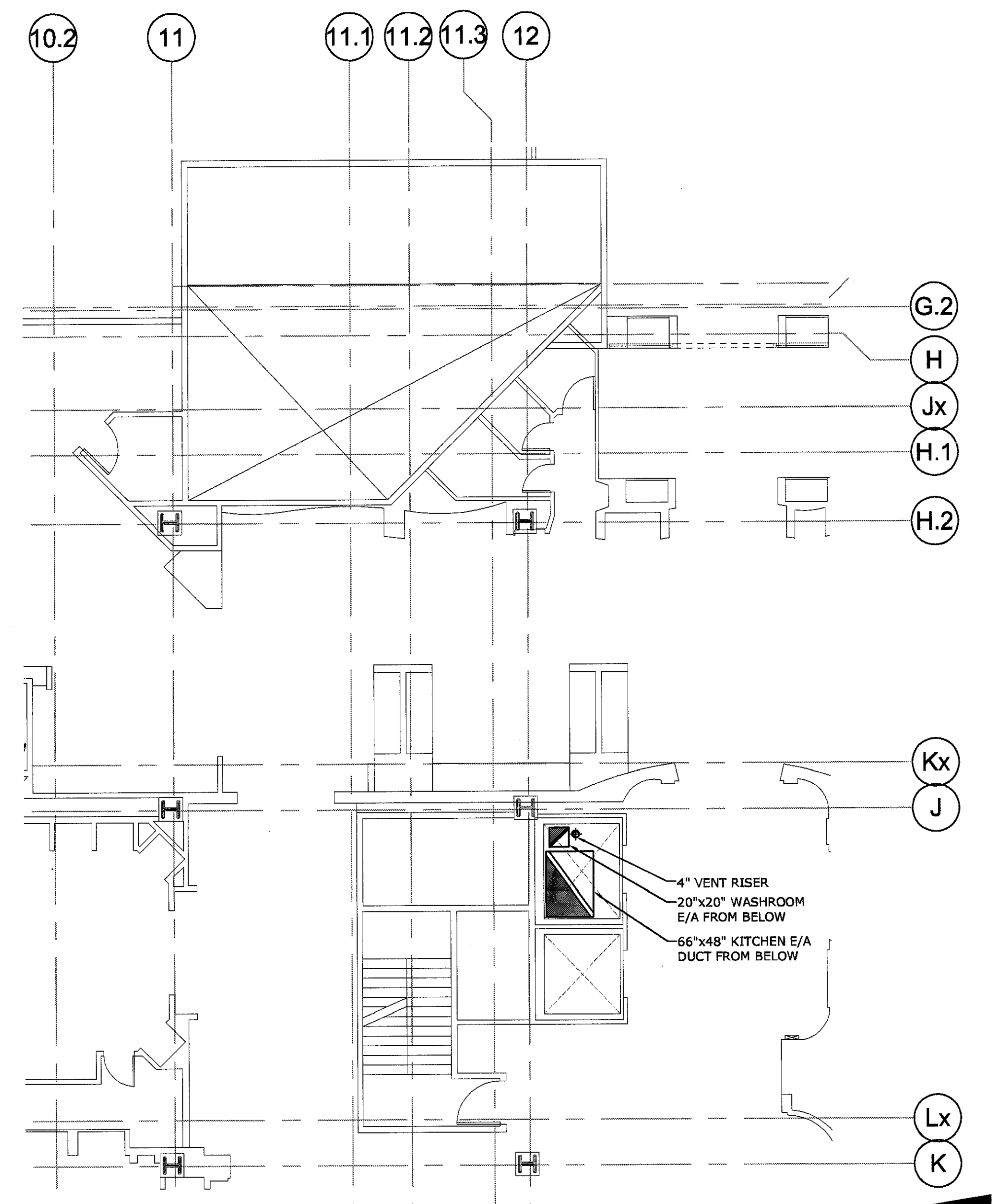
PARTIAL THE SOURCE PLAN - MECHANICAL

SCALE: 1/4" = 1'-0"



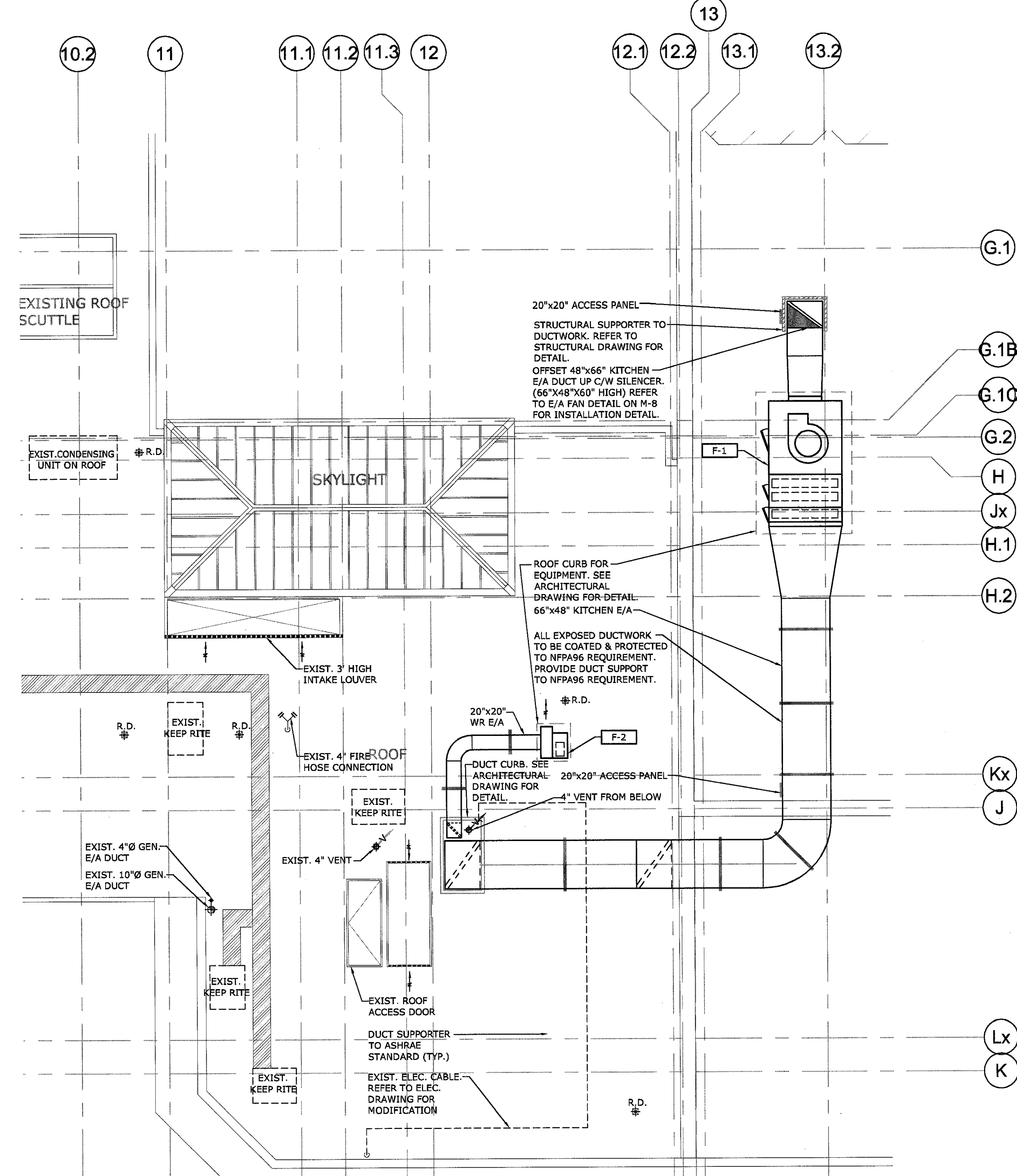
PARTIAL HOLT RENFEW ROOF LEVEL PLAN - MECHANICAL

SCALE: 1/4" = 1'-0"



PARTIAL HOLT RENFEW 3RD LEVEL PLAN - MECHANICAL

SCALE: 1/4" = 1'-0"



PARTIAL MALL ROOF LEVEL PLAN - MECHANICAL

SCALE: 1/4" = 1'-0"

DIV 15 MECHANICAL
CERTIFIED AS-BUILTS
DATE: 11/22/06
SIGNATURE: [Signature]

RECORD DRAWING

THIS DRAWING REPRESENTS ORIGINAL DESIGN INTENT, AND HAS BEEN CHECKED TO REFLECT AS-BUILT CONDITIONS. CONTRACTOR'S RESPONSIBILITY TO MAINTAIN AS-BUILT RECORDS. THIS DRAWING IS NOT TO BE USED AS A BASIS FOR CONSTRUCTION.

DATE: NOVEMBER 23, 2006	
RECORD DRAWING	11/22/06
ISSUED FOR CONSTRUCTION	01/09/06
POST TENDRE ADD. M-3	11/29/05
MECH. ADDENDUM M-2	11/10/05
ISSUED FOR TENDER	10/18/05
ISSUED FOR BP	09/19/05
ISSUED FOR BUDGET PRICING	08/16/05
REVISIONS / ISSUES	DATE

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SPECIFICATION, & PARTIAL UPPER ROOF FLR PLAN

SCALE:	AS NOTED	PROJECT No.	01-9097-092
DRAWN BY:	JN	SHEET No.	M-1 of 8
CHECKED:	KO		