

BUILDING KEY PLAN

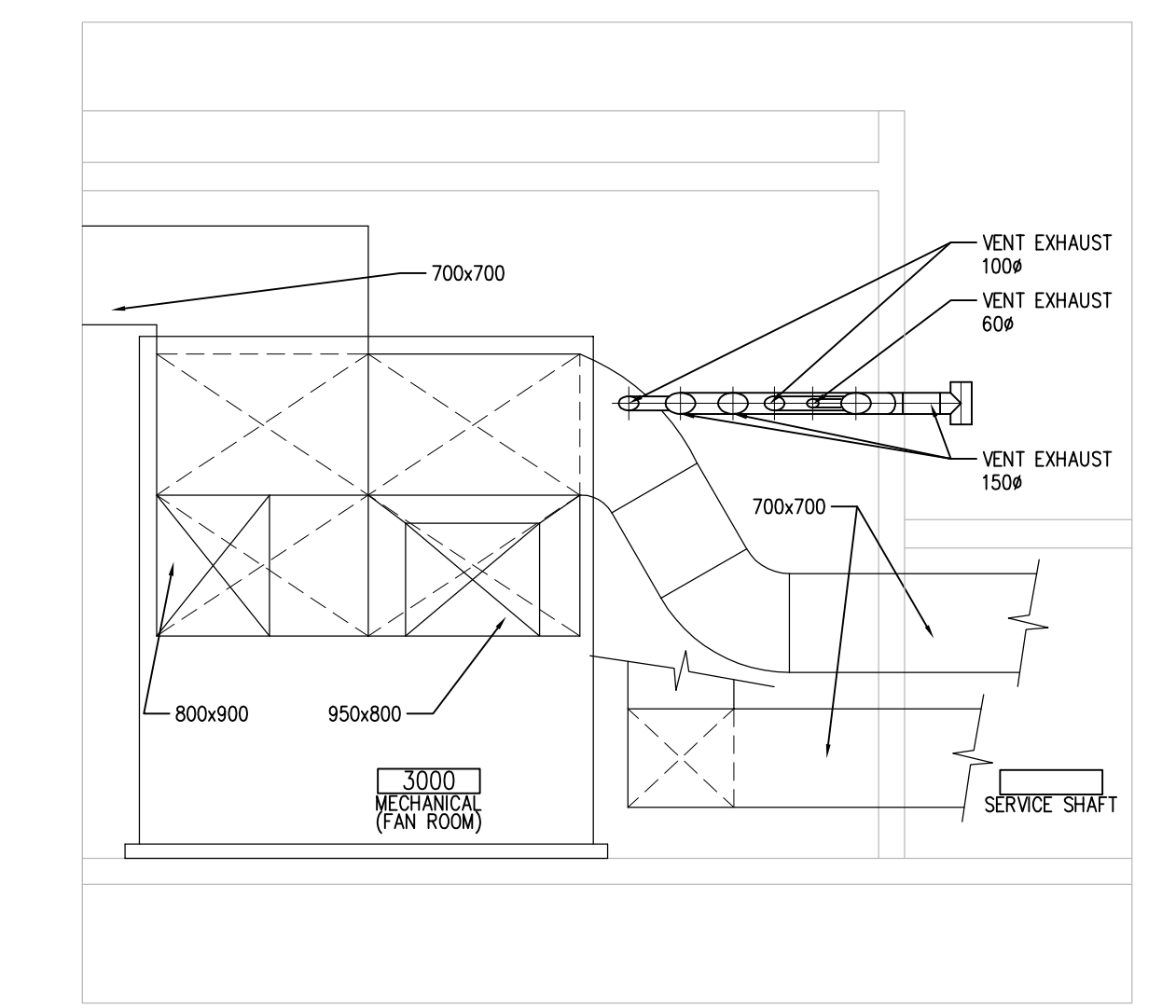
LEGEND

GENERAL NOTES:

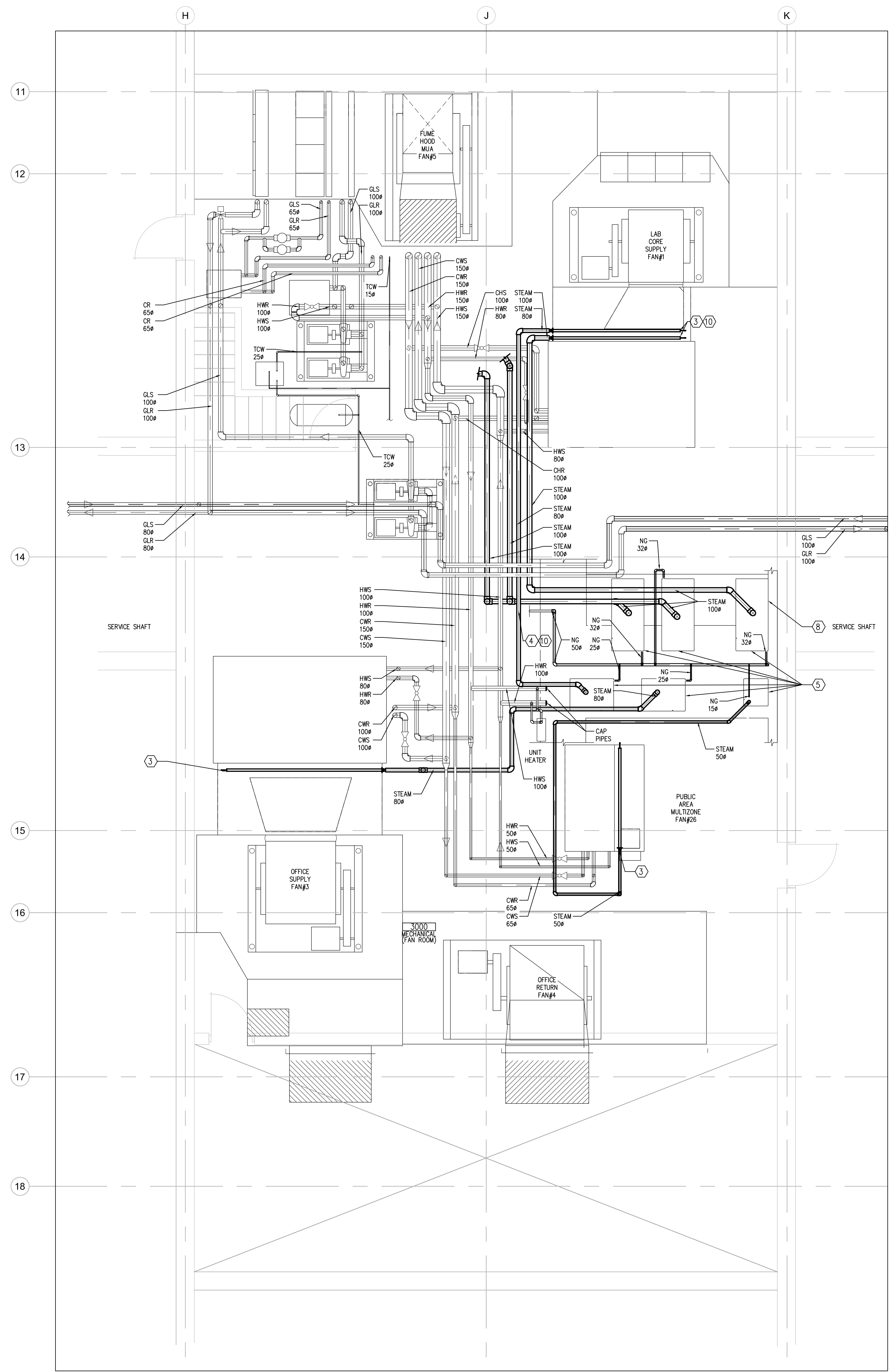
- DO NOT SCALE THIS DRAWING. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO INSTALLATION AND REPORT ANY DISCREPANCY TO THE DEPARTMENTAL REPRESENTATIVE.
- CONTRACTOR SHALL INCLUDE FOR AND PROVIDE ALL COORDINATION BETWEEN TRADES AND CONSULTANT ON AND OFF SITE AS REQUIRED FOR INSTALLATION OF MECHANICAL AND ELECTRICAL SYSTEMS, WHERE MINOR REROUTING OF SERVICES IS REQUIRED DUE TO ON-SITE CONDITIONS, IT SHALL BE PERFORMED AT NO ADDITIONAL COST.
- FIRE STOP ALL PIPE PENETRATIONS WHERE THEY PASS THROUGH FIRE-RATED WALLS. CONFIRM ON-SITE FOR LOCATION OF RATED WALLS AND THEIR RATING IN HOURS.
- CONFORM TO SPECIFICATIONS AND MANUFACTURER GUIDES FOR MATERIALS AND UNITS' INSTALLATION DETAILS.
- CHECK FOR ASBESTOS BEFORE PERFORMING DEMOLITION WORK. ASBESTOS REMOVAL TO BE DONE BY OTHERS.
- PIPING ROUTE AND SIZING WAS DRAFTED BASED ON SITE MARKUPS AND ORIGINAL DRAWINGS. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO INSTALLATION AND REPORT ANY DISCREPANCY TO THE DEPARTMENTAL REPRESENTATIVE.
- PROVIDE TEMPORARY HEATING AS REQUIRED. DO NOT USE NEW EQUIPMENT FOR THIS PURPOSE WITHOUT THE EXPRESS CONSENT OF THE ENGINEER. REFER TO DRAWING M12.
- SCHEDULING OF ALL WORK SHALL BE ARRANGED WITH THE OWNER. COORDINATE THE SHUT-DOWN OF EXISTING UTILITIES AND SERVICES AS REQUIRED FOR CONNECTIONS OF NEW WORK. WORK WITHIN THE BUILDING MAY HAVE TO BE PERFORMED DURING NON-REGULAR HOURS, AND MUST CONFORM TO THE WORK RULES OF THE BUILDING, AS DIRECTED BY THE OWNER.

# NEW SYSTEMS KEYNOTES:

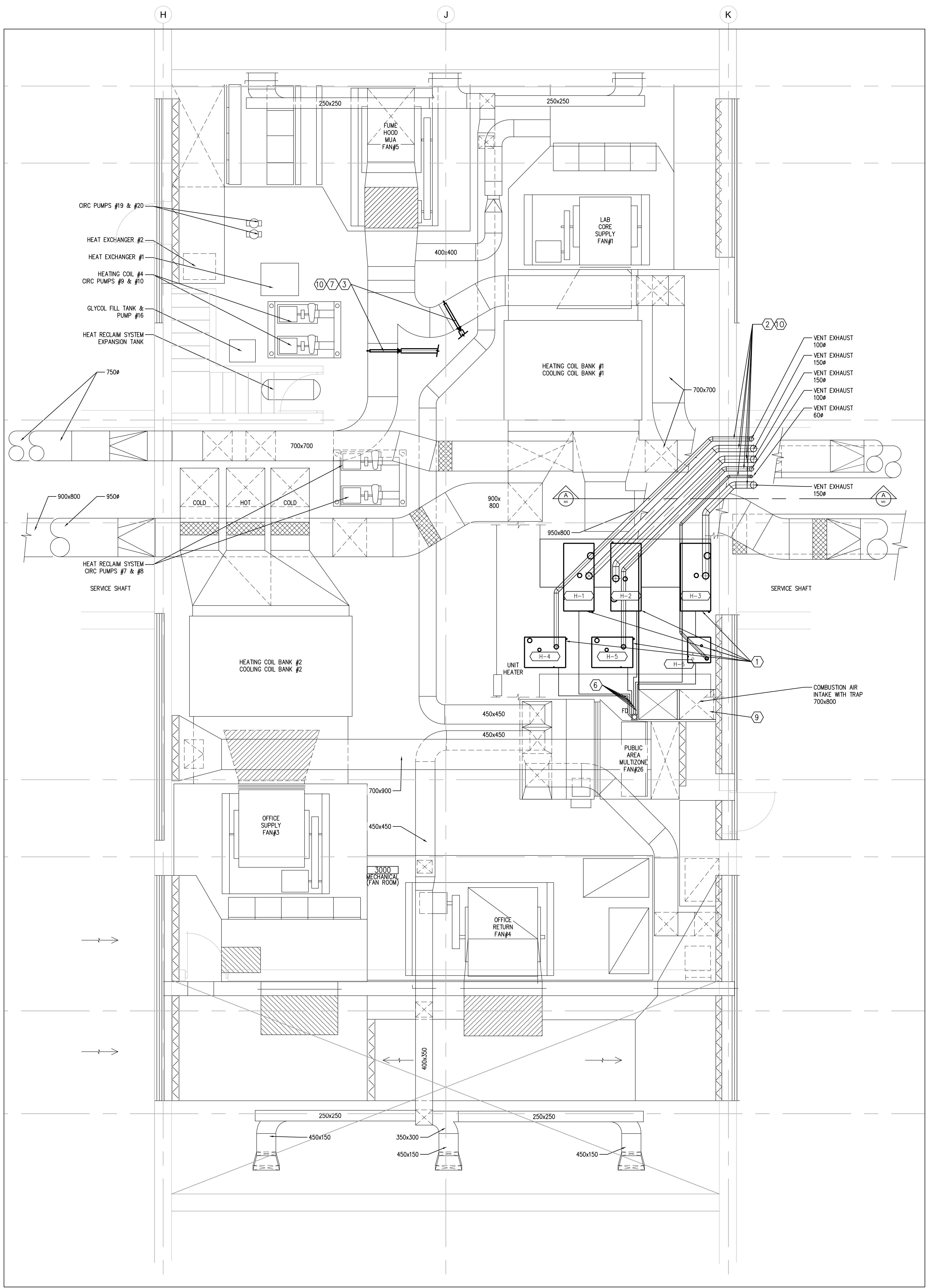
- PROVIDE FOUR NEW GAS-TO-STEAM HUMIDIFIER. PROVIDE STEAM LINES AND CONNECT SYSTEMS TO NEW STEAM MANIFOLD INSTALLED IN THE RESPECTIVE AHU / DUCTWORK.
- PROVIDE NEW EXHAUST VENT THROUGH EXTERIOR WALL TO OUTDOOR WITH TERMINAL EXHAUST "TEE". COORDINATE POSITION ON-SITE TO MAINTAIN MINIMUM SEPARATION DISTANCE OF 5m FROM AIR INTAKE.
- PROVIDE NEW STEAM MANIFOLD AS PER SYSTEM CAPACITY, ACCORDING TO MANUFACTURER'S SIZING RECOMMENDATION AND AIR HANDLER / DUCT DIMENSIONS.
- NEW STEAM LINE, AS PER MANUFACTURER'S RECOMMENDATIONS (TYPICAL).
- CONNECT NEW EQUIPMENT TO EXISTING NATURAL GAS SYSTEM.
- CONNECT NEW EQUIPMENT TO EXISTING DRAIN AND WATER SYSTEMS.
- MUA SYSTEM HAS TWO MAIN SUPPLY DUCTS (EAST AND WEST SUPPLY AIR DUCTS). PROVIDE ONE STEAM MANIFOLD IN EACH SUPPLY DUCT WITH HALF THE HUMIDIFIER STEAM CAPACITY.
- EXTEND HOUSEKEEPING PAD TO ACCOMMODATE NEW HUMIDIFIERS.
- PROVIDE NEW COMBUSTION AIR INTAKE SYSTEM COMPLETE WITH TRAP. CONNECT DUCT TO EXISTING LOUVER.
- COORDINATE REMOVAL AND INSTALLATION OF NEW SYSTEMS WITH EXISTING DUCTS AND PIPING BELOW. ALLOW FOR ADJUSTMENTS AS REQUIRED.



A VENT EXHAUST DETAIL  
M5 N.T.S.



1 FAN ROOM - NEW SYSTEMS (PIPING)  
M5 1:50



2 FAN ROOM - NEW SYSTEMS (HVAC)  
M5 1:50

PROFESSIONAL ENGINEER  
DAHO  
MEMBER 30073  
SASKATCHEWAN  
Association of Professional Engineers & Geoscientists of Saskatchewan  
CERTIFICATE OF AUTHORIZATION  
HDK Consulting Incorporated  
Number 58340  
Permission to Consult held by:  
Discipline: Mechanical Sl. Reg. No. 30273 Signature: [Signature]  
HDK HDK CONSULTING INCORPORATED  
Mechanical | Electrical | Communications | Security Engineering

1	ISSUED FOR CONSTRUCTION	30-JUN-2017
0	ISSUED FOR REVIEW	28-APR-2017
revisions	description	date

A	detail no.	A
C	location drawing no.	B
	sur. design no.	C
	drawing no.	
	design no.	

project  
project  
NHRC  
MECHANICAL UPGRADES  
BOILERS REPLACEMENT  
NATIONAL HYDROLOGY RESEARCH CENTRE  
11 INNOVATION BOULEVARD  
SASKATOON, SASKATCHEWAN  
drawing  
dessin

FAN ROOM  
NEW SYSTEMS

Designed By M/G	Conçu par
Date 2017/04/28	(yyyy/mm/dd)
Drawn By M/G	Dessiné par
Date 2017/04/28	(yyyy/mm/dd)
Reviewed By D/H	Examiné par
Date 2017/06/19	(yyyy/mm/dd)
Approved By D/H	Approuvé par
Date 2017/06/23	(yyyy/mm/dd)
Tender	Submission
NIKOLAS FEHR Project Manager	Administrateur de projets
EC Proj no. NHRC-010	Consultant Proj no. 16131
Drawing no.	No. du dessin

M5