

BUILDING KEY PLAN

LEGEND

Professional Engineer
DAHO
MEMBER 2023
SASKATCHEWAN

Association of Professional Engineers & Geoscientists of Saskatchewan
CERTIFICATE OF AUTHORIZATION
HDK Consulting Incorporated
Number 30273

Permission to Consult held by:
Discipline: Mechanical, Sk. Reg. No.: 30273, Signature: [Signature]

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HDK CONSULTING INCORPORATED
Mechanical | Electrical | Communications | Security Engineering

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

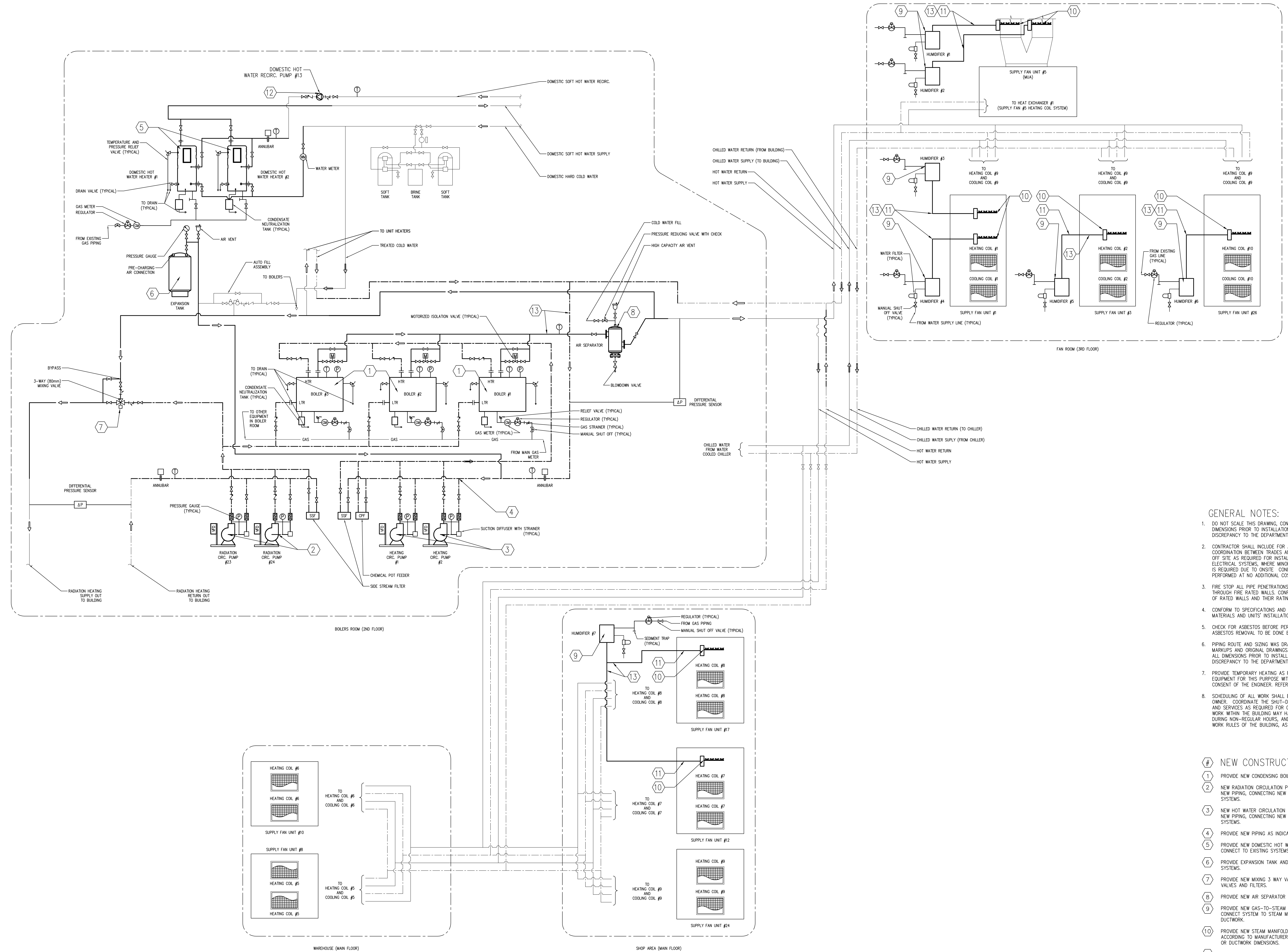
A	A detail no.	A
C	B location drawing no.	B
	C our design no.	C

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

drawing
dessin
**MECHANICAL DIAGRAMS
NEW SYSTEMS**

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

M9



- 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 M2.
 - 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 CONSTRUCTION KEYNOTES:
- PROVIDE NEW CONDENSING BOILER AND ACCESSORIES.
 - NEW RADIATION CIRCULATION PUMP AND ACCESSORIES. PROVIDE NEW PIPING, CONNECTING NEW PUMP TO NEW BOILERS AND EXISTING SYSTEMS.
 - NEW HOT WATER CIRCULATION PUMP AND ACCESSORIES. PROVIDE NEW PIPING, CONNECTING NEW PUMP TO NEW BOILERS AND EXISTING SYSTEMS.
 - PROVIDE NEW PIPING AS INDICATED.
 - PROVIDE NEW DOMESTIC HOT WATER HEATER AND ACCESSORIES. CONNECT TO EXISTING SYSTEMS.
 - PROVIDE EXPANSION TANK AND ACCESSORIES. CONNECT TO EXISTING SYSTEMS.
 - PROVIDE NEW MIXING 3 WAY VALVE WITH BYPASS. COMPLETE WITH VALVES AND FILTERS.
 - PROVIDE NEW AIR SEPARATOR AND STRUCTURE.
 - PROVIDE NEW GAS-TO-STEAM HUMIDIFIER. PROVIDE STEAM LINE AND CONNECT SYSTEM TO STEAM MANIFOLD IN THE RESPECTIVE AHU / DUCTWORK.
 - PROVIDE NEW STEAM MANIFOLD AS PER SYSTEM CAPACITY, ACCORDING TO MANUFACTURER'S SIZING RECOMMENDATION AND AHU OR DUCTWORK DIMENSIONS.
 - NEW STEAM LINE, AS PER MANUFACTURER'S RECOMMENDATIONS.
 - NEW DOMESTIC HOT WATER RECIRCULATION PUMP AND ACCESSORIES.
 - COORDINATE REMOVAL AND INSTALLATION OF NEW SYSTEMS WITH EXISTING DUCTS AND PIPING BELOW. ALLOW FOR ADJUSTMENTS AS REQUIRED.

DRAWING LEGEND:

- EXISTING RETURN PIPE;
- EXISTING SUPPLY PIPE;
- NEW SUPPLY PIPE;
- NEW RETURN PIPE.

1 MECHANICAL DIAGRAMS - NEW SYSTEMS
M9 N.T.S.