

1  
M201  
SCALE: 1:50  
GROUND FLOOR  
EXISTING + NEW

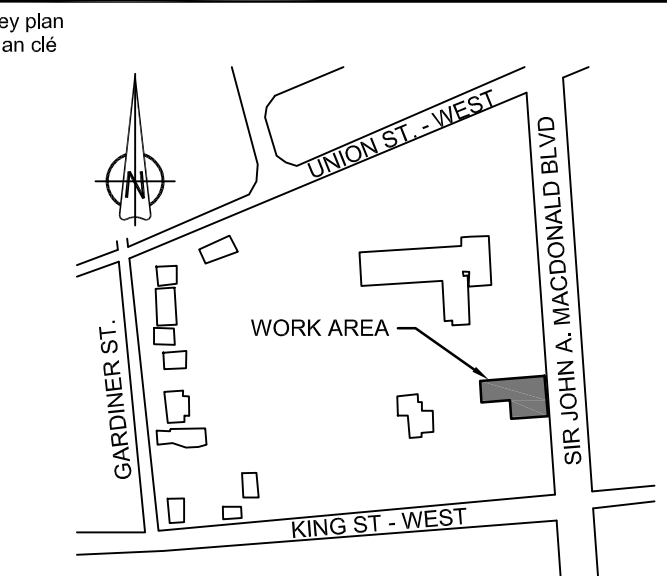
DRAWING NOTES

- EXISTING THERMAL FLUID EXPANSION LOOP FOR THERMAL FLUID BOILER #1 TO REMAIN.
- EXISTING THERMAL FLUID BOILER #1 AND ASSOCIATED SUPPORTS, PIPING, AND ACCOUTREMENTS TO REMAIN. EXISTING BOILER INFORMATION:  
  
BURNER:  
MANUFACTURER: VOLCANO  
CAT. #: V 2 13  
MAX FIRING RATE: 13 MBTUH  
FUEL: NATURAL GAS / #2 OIL (NO LONGER USED)  
GAS SUPPLY PRESSURE: 5 PSIG  
MAX GAS PRESSURE AT BURNER MANIFOLD: 2 PSIG  
MIN GAS PRESSURE AT BURNER MANIFOLD: 0.02 PSIG  
ELECTRICAL: 550/3/60 AT 5 AMPS  
  
BOILER:  
MANUFACTURER: VOLCANO  
MODEL: TJH. C12.5  
SERIAL #: L233  
ORDER #: C-82110  
MAX W. PRESSURE: 2068 kPa  
YEAR: 1982  
CRN: B-8837.5  
CAPACITY: 2.93 MW  
PRESSURE DROP: 59.25 kPa  
HEATING SURFACE RADIATION: 24.06 M^2  
CONVECTION: 78.4 M^2
- EXISTING THERMAL FLUID LOOP #1 PUMP AND ASSOCIATED SUPPORTS, PIPING, AND ACCOUTREMENTS TO REMAIN.
- EXISTING STEAM GENERATOR #1 AND ASSOCIATED SUPPORTS, PIPING, AND ACCOUTREMENTS TO REMAIN.
- NEW LOW WATER VOLUME BOILER TO BE INSTALLED ON EXISTING HOUSEKEEPING PAD FORMERLY OCCUPIED BY BOILER #3. CONTROL PANEL IS TO FACE OFFICE C14-106. ALL ALARMS TO BE CONNECTED TO EXISTING PAGER SYSTEM IN CONTROL ROOM.
- NEW NPS 5 STEAM VENT CONNECTED TO NEW BOILER SAFETY RELIEF VENT AND TIED INTO EXISTING VENT PIPING FORMERLY SERVING STEAM GENERATOR #2. SAFETY RELIEF VALVE DRIP PAN ELBOW TO HAVE A DRAIN LINE PIPED TO NEAREST FLOOR DRAIN.
- NEW NPS 4 862 KPA STEAM SUPPLY PIPE FROM NEW BOILER TO BE TIED INTO EXISTING STEAM HEADER WHERE INDICATED.
- NEW STEAM FLOWMETER.
- NEW NPS 1 SAFETY RELIEF VENT FROM ECONOMIZER UP THROUGH ROOF. ROOF TO BE MADE GOOD UPON COMPLETION OF INSTALLATION AND WEATHERPROOFED. VENT LINE IS TO BE INSTALLED TO ACCOMMODATE 3965 KPA RELIEF PRESSURE.
- CONTRACTOR TO SUPPLY AND INSTALL NEW STANDALONE CONTROL PANEL FOR EXISTING THERMAL FLUID BOILER #1. NEW PANEL TO BE CONFIGURED FOR SEQUENCE OF OPERATIONS SHOWN ON DRAWING M500 AND PROVIDED IN SPECIFICATION SECTION 23 52 00. ALL CONNECTIONS FROM NEW CONTROL PANEL TO THERMAL BOILER #1 AND OTHER EQUIPMENT TO BE DONE BY DIVISION 23. POWER TO CONTROL PANEL FROM MCC TO BE DONE BY DIVISION 26. ALL ALARMS TO BE CONNECTED TO EXISTING PAGER SYSTEM IN CONTROL ROOM.
- NEW WALK-MOUNTED CONTROLLER FOR TEMPERATURE SENSOR INSTALLED IN STEAM TUNNEL TO KINGSTON PENITENTIARY. REFER TO DRAWING M203 FOR LOCATION AND SCOPE OF INSTALLATION. TIE NEW READOUT PANEL INTO EXISTING PAGER SYSTEM LOCATED ADJACENT TO NEW INSTALL LOCATION FOR CONTROLLER.
- EXISTING PAGER SYSTEM.
- CONNECT EXISTING CHEMICAL TREATMENT TANK #2 TO NEW BOILER. ADJUST CHEMICALS FOR NEW BOILER AS REQUIRED.

GENERAL NOTES

- DESIGN DOCUMENTS ARE BASED ON PIPING AND CONNECTION REQUIREMENTS FOR A SPECIFIC BOILER MODEL. CONTRACTOR IS RESPONSIBLE FOR ACCOMMODATING ALL REQUIRED PIPING CONNECTIONS AND OTHER NECESSITIES FOR PROPER INSTALLATION OF NEW STEAM BOILER THAT IS PROVIDED, SHOULD THE PROVIDED BOILER DEViate FROM THE REQUIREMENTS IDENTIFIED IN THESE DESIGN DOCUMENTS.
- CONTRACTOR IS RESPONSIBLE FOR ENSURING BOILER PLANT MEETS OPERATIONAL REQUIREMENTS OF PWGSC BY OCTOBER 15, 2014. CONTRACTOR IS TO PROVIDE AND INSTALL TEMPORARY BOILERS TO MEET DEMAND IF PLANT IS DEEMED BY PWGSC TO NOT MEET OPERATIONAL REQUIREMENTS ON THIS DATE.
- REFER TO DRAWINGS M300, M301, AND M302 FOR SCHEMATICS.

Public Works and  
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Architectural and Engineering Services  
Ontario Region  
  
Travaux publics et  
Services gouvernementaux Canada  
Services d'architecture et de génie  
Région de l'Ontario



revision	description	date
01	ISSUED FOR ADDENDUM 3	2014/08/26
00	ISSUED FOR TENDER	2014/07/24
0A	ISSUED FOR 99% REVIEW	2014/05/22

Detail No. No. du détail	A
drawing no. - where detail required dessin no. - où détail exigé	B
drawing no. - where detailed dessin no. - où détaillé	C

project title  
titre du projet  
**OTTAWA** ONTARIO  
CLIENT  
560 KING STREET,  
KINGSTON, K7L 4V7  
**KINGSTON PENITENTIARY  
HEATING PLANT UPGRADE**

drawing title  
titre du dessin  
**GROUND FLOOR  
PIPING  
NEW**

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project date  
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