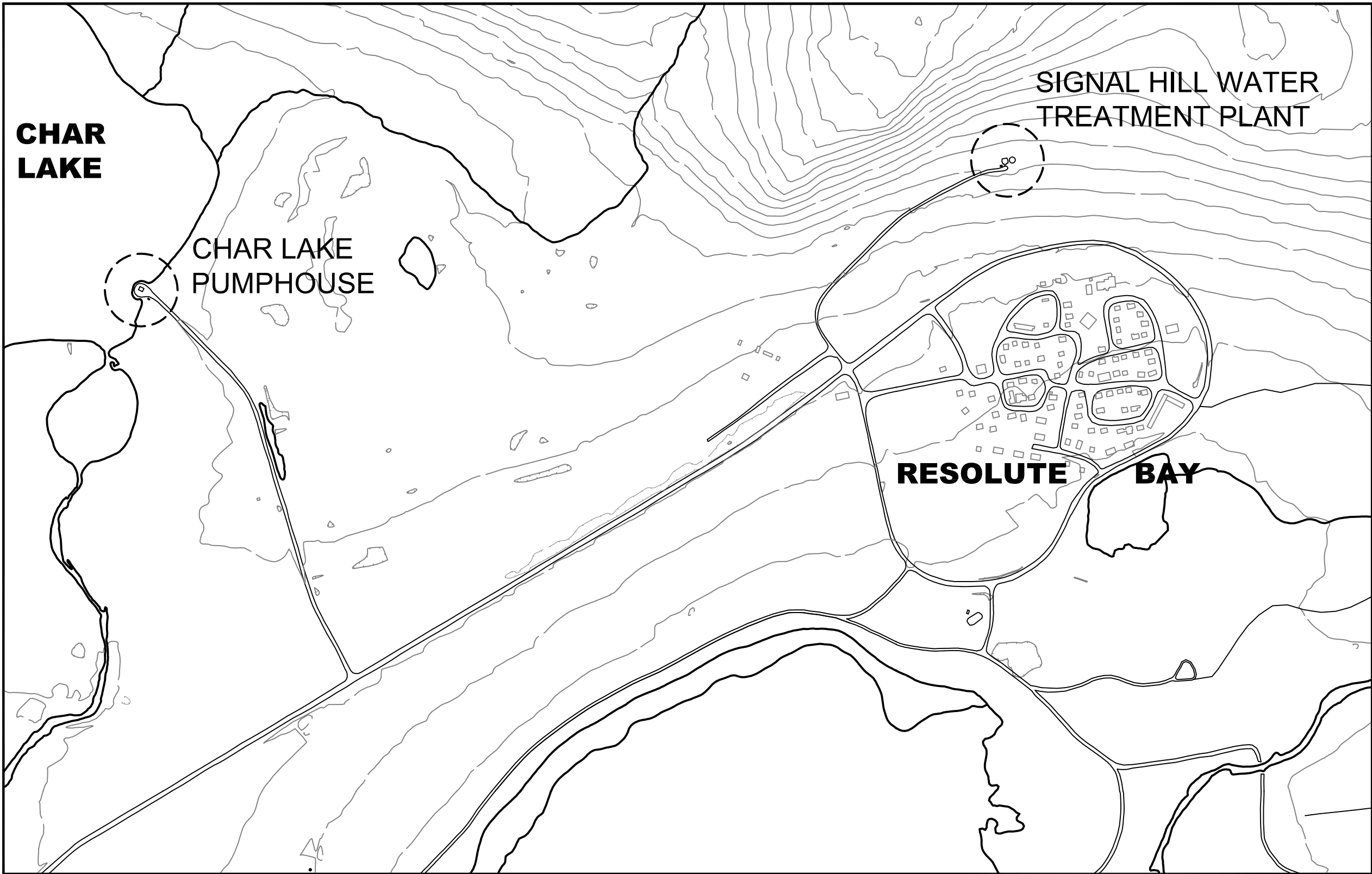


GOVERNMENT OF NUNAVUT



INDEX OF INCLUDED DRAWINGS

DRAWING NO.	REVISION	DESCRIPTION
		COVER SHEET
S1	REV 1	FUEL STORAGE TANK CONCRETE PAD
S2	REV 1	FUEL SYSTEM GEN-SET
M1	REV 0	MECHANICAL LEGEND AND DRAWING LIST
M2	REV 0	CHAR LAKE – WATER SYSTEM
M3	REV 0	SIGNAL HILL – WATER SYSTEM
M4	REV 0	WATER SYSTEM PIPING SCHEMATIC
M5	REV 0	CHAR LAKE – FUEL SYSTEM
M6	REV 0	SIGNAL HILL – FUEL SYSTEM
M7	REV 0	SIGNAL HILL – FUEL SYSTEM
M8	REV 0	CHAR LAKE – FUEL SYSTEM SCHEMATIC
M9	REV 0	SIGNAL HILL – FUEL SYSTEM SCHEMATIC
M10	REV 0	CHAR LAKE – VENTILATION
M11	REV 0	SIGNAL HILL – VENTILATION
M13	REV 0	CONTROL SCHEMATICS
E1	REV 0	SIGNAL HILL ELEC. DISTRIBUTION AND SINGLE LINE
E2	REV 0	CHAR LAKE ELEC. DISTRIBUTION AND SINGLE LINE
E3	REV 0	CHAR LAKE AND SIGNAL HILL LIGHTING PLANS

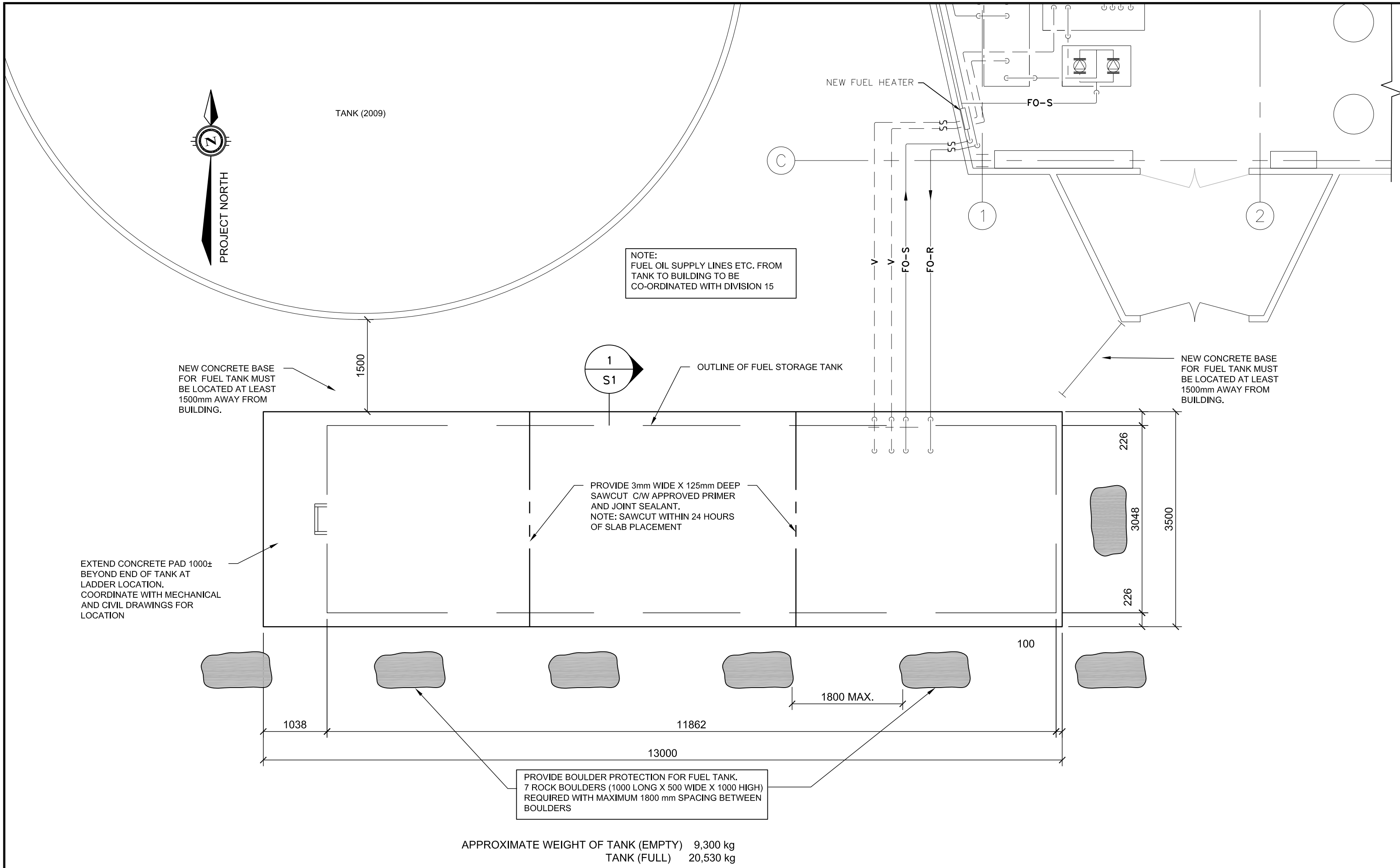
**ISSUED FOR TENDER
PURPOSES ONLY**
DATE: MAY 6, 2011

RESOLUTE BAY CHAR LAKE / SIGNAL HILL REHABILITATION PROJECT 11-2008

exp Services Inc.
t: +1.613.688.1899 | f: +1.613.225.7337
2650 Queensview Drive, Suite 100
Ottawa, ON K2B 6H6
Canada
www.exp.com

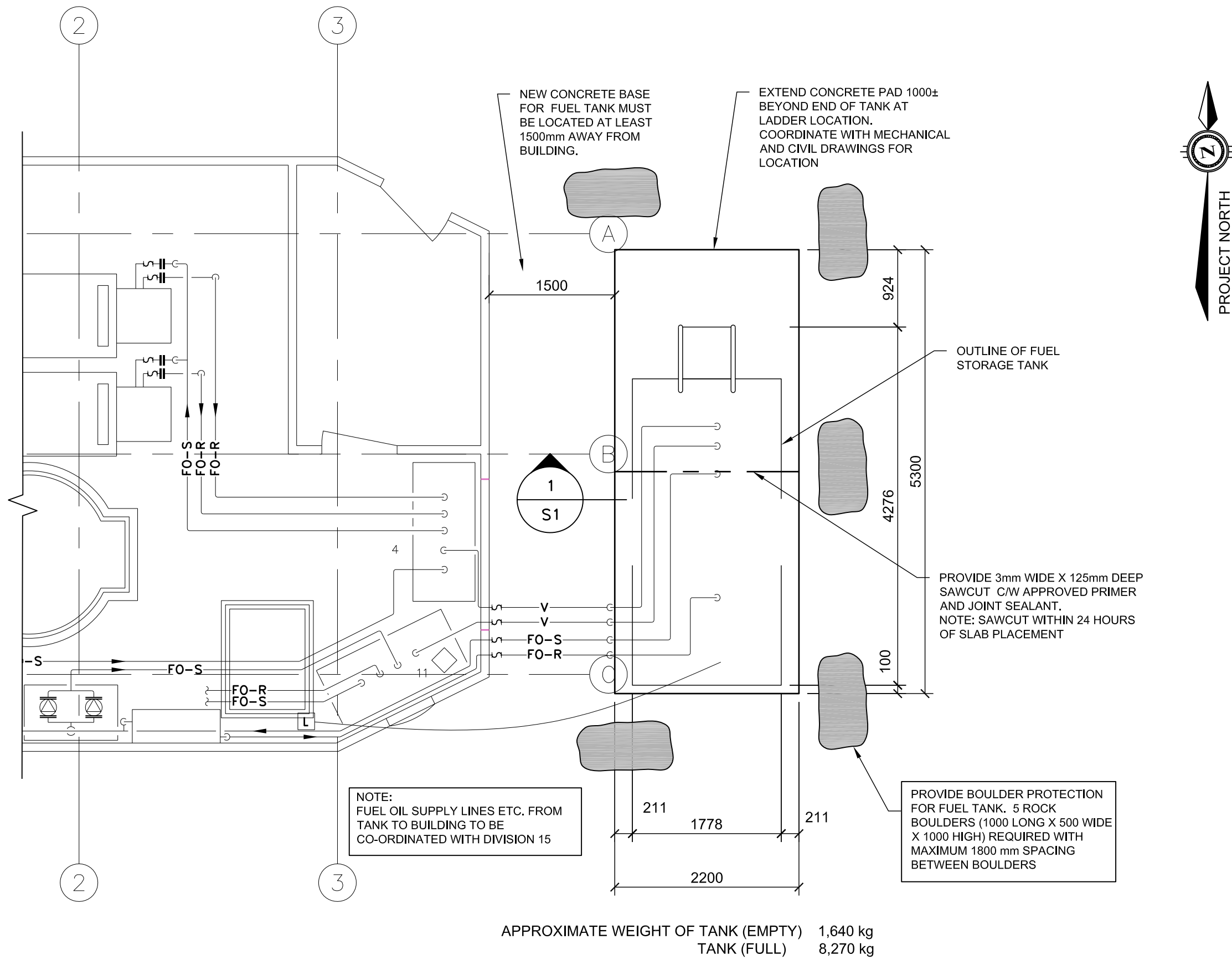


• BUILDINGS • EARTH & ENVIRONMENT • ENERGY •
• INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •



SIGNAL HILL - 50,000 LITRES (13,129 U.S. GALLONS) FUEL OIL STORAGE CONCRETE PAD PLAN

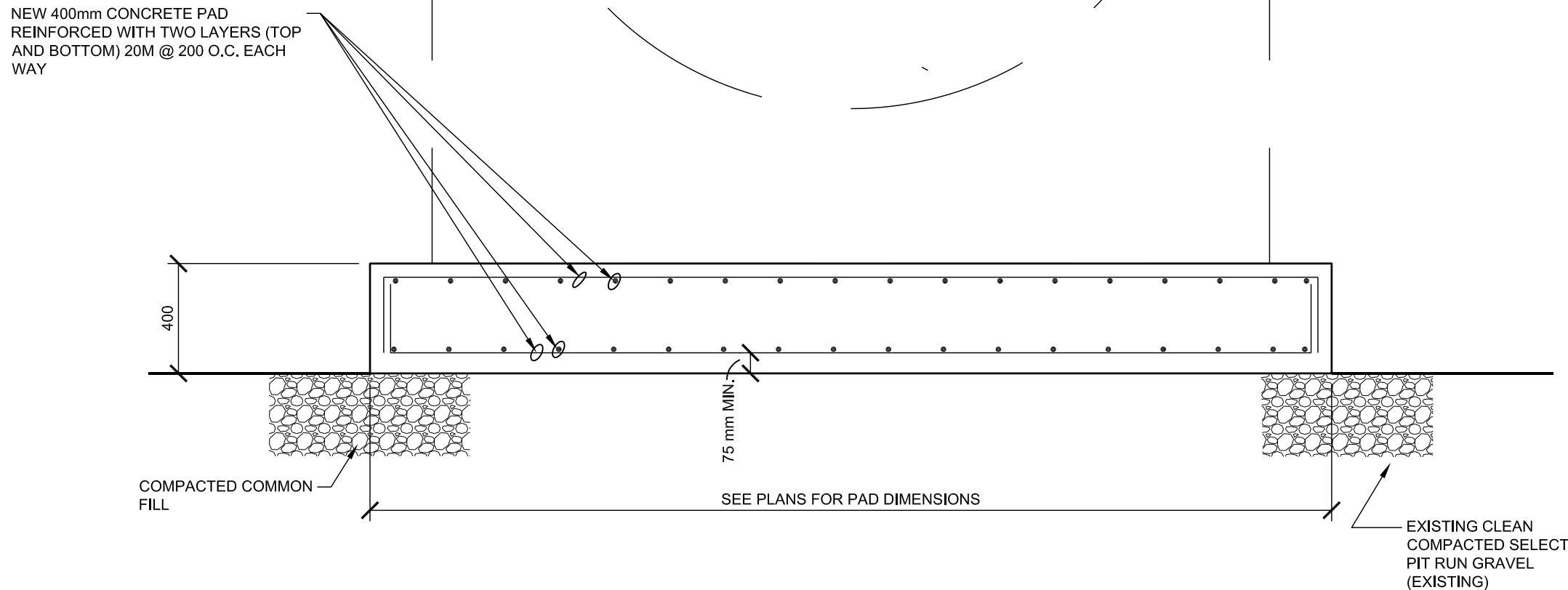
SCALE 1 : 50



CHAR LAKE - 9176 LITRES (2424 U.S. GALLONS) FUEL OIL STORAGE CONCRETE PAD PLAN

SCALE 1 : 50

- NOTES:
- CONTRACTOR RESPONSIBLE FOR DIGGING AN EXPLORATORY TEST PIT AT EACH LOCATION TO CONFIRM EXISTING DEPTH AND TYPE OF GRANULAR BASE. INFORMATION TO BE PROVIDED TO ENGINEER PRIOR TO COMPACTION AND LEVELING OF SURFACE
 - COMPACT AND LEVEL SURFACE WITH HEAVY VIBRATORY ROLLER PRIOR TO CONSTRUCTION OF CONCRETE PAD.
 - CONTRACTOR TO VERIFY BEARING CAPACITY AND REPORT TO ENGINEER PRIOR TO CONSTRUCTION OF CONCRETE PAD.



SECTION 1 S1

SCALE 1 : 20

GENERAL NOTES

- Check all dimensions on structural drawings with other drawings. Report any inconsistencies before proceeding with the work. DO NOT SCALE THESE DRAWINGS.
- All work shall comply with current provisions of the National Building Code, the Workplace Safety and Insurance Board and best trade practices. Work shall comply with all local and provincial regulations and with applicable C.S.A. standards. In all cases, the latest editions of codes and standards shall apply.
- Structural design complies with the minimum standards of Part 9 of the National Building Code 2005.
- Before submitting tenders contractors shall carefully examine existing conditions to establish the extent of the work.
- Locate all buried services prior to excavation. The contractor shall be responsible for all temporary bracing, shoring and dewatering necessary to undertake the work.
- The contractor is responsible for removing excess materials and cleaning up on completion of the work.
- The contractor shall verify dimensions before construction and report discrepancies before proceeding with the work.

MATERIALS SPECIFICATIONS

- Concrete - materials to CSA-A23.1-09. Compressive strength minimum 35 MPa, Exposure Class C1. Maximum water to cement ratio 0.40. 6% +/- 1% entrained air for exterior concrete. Slump 70 +/- 20mm. Maximum aggregate size 20 mm. Type 10 cement.
- Formwork - to CSA-A23.1-09. Use only new forming materials for architecturally exposed surfaces. Form release agent shall be nonstaining, compatible with finishes where applicable.
- Rebar - deformed billet steel bars to CAN/CSA G30.18-M, Grade 400. Type W for welded rebar.
- Mesh - welded wire fabric to CSA-G30.5-M.

REINFORCEMENT PLACEMENT

- Minimum clear cover
 - For concrete placed against earth.....75 mm
 - For concrete placed in forms but in contact with earth or weather.....50 mm
- Laps
 - lap all bars 36 bar diameters or 450 mm minimum, whichever is greater, unless otherwise indicated.
- Chairs for support of slab reinforcing spaced at maximum of 1.0 m in either direction. Supply support bars, chairs and carriers as necessary.

NOTES

THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS. AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

REV	ISSUED FOR TENDER	09/05/11	MN	KAB
REV	REVISION DESCRIPTION	DATE	BY	APPRO

SCALE

DESIGNED BY

REVIEWED BY

CLIENT

DEPARTMENT OF COMMUNITY AND GOVERNMENT SERVICES
NUNAVUT



exp. SERVICES INC.
c: (1-877-338-3199) f: (1-877-338-7337)
2600 Queenstown Drive, Suite 100
Ottawa, ON K2B 8P6
Canada
www.exp.com
• BUILDINGS • EARTH & ENVIRONMENT • ENERGY •
• INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

BASE PLAN

TROW

DESIGN

K.A. BAKER

CHECKED

K.A. BAKER

CAD

M. NUGENT

PROJ. MAN

S. BURDEN

APPROVED

PROJECT

RESOLUTE BAY
CHAR LAKE / SIGNAL HILL
PROJECT 11-2008

CHAR LAKE AND SIGNAL HILL
FUEL STORAGE TANK CONCRETE PAD
PLANS AND DETAILS

PROJ. NO.

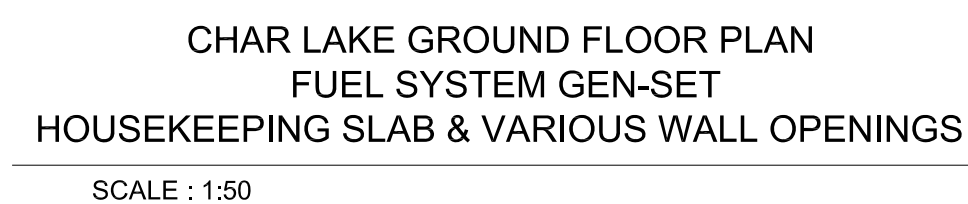
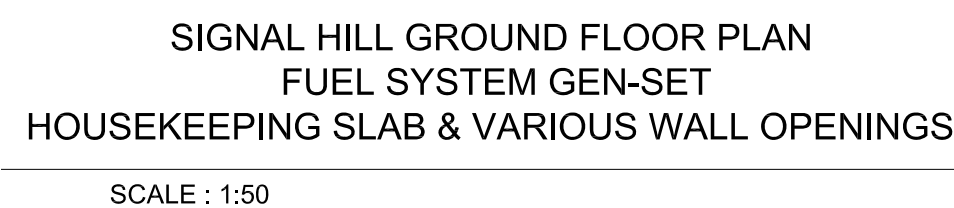
OTCD00020430A

SURVEY

DATE

DRAWING NO.

S1



THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

1	ISSUED FOR TENDER		09/05/11	MN	KAB
REV	REVISION	DESCRIPTION	DATE	BY	APPD

SCALE

DESIGNED BY

REVIEWED BY	
-------------	--

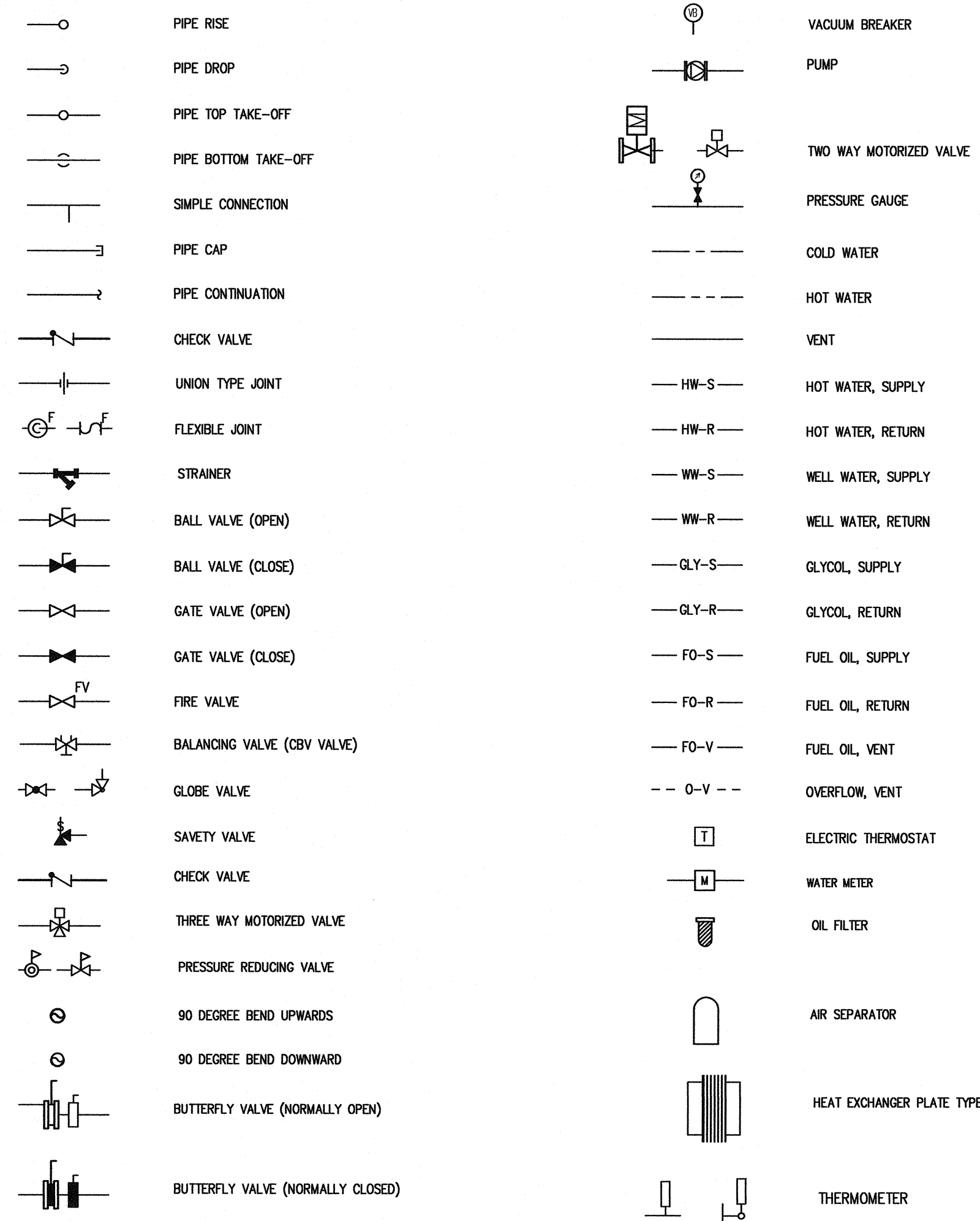
CLIENT	<p>DEPARTMENT OF COMMUNITY AND GOVERNMENT SERVICES NUNAVUT</p> <p> exp. Services Inc. C +1 (613) 688,1099 / C +1 (613) 225,7337 2050 Commissioner Drive, Suite 100 Ottawa, ON K2B 0H6 Canada</p> <p>www.exp.ca</p> <p>• BUILDINGS • EARTH & ENVIRONMENT • ENERGY • INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •</p> <p><i>The new identity of Trave / DME</i></p>
--------	--

BASEPLAN
DESIGN K.A. BAKER
CHECKED K.A. BAKER
CAD M. NUGENT
PROJ. MAN S. BURDEN
APPROVED

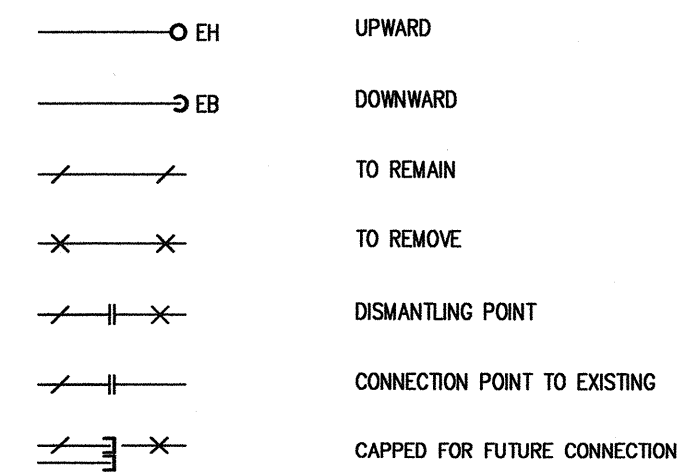
PROJECT	RESOLUTE BAY CHAR LAKE / SIGNAL HILL PROJECT 11-2008
TITLE	CHAR LAKE AND SIGNAL HILL FUEL SYSTEM GEN-SET PLANS AND SECTION

PROJ. NO.	OTCD00020430A
SURVEY	
DATE	MAY 2011
DRAWING NO.	S2

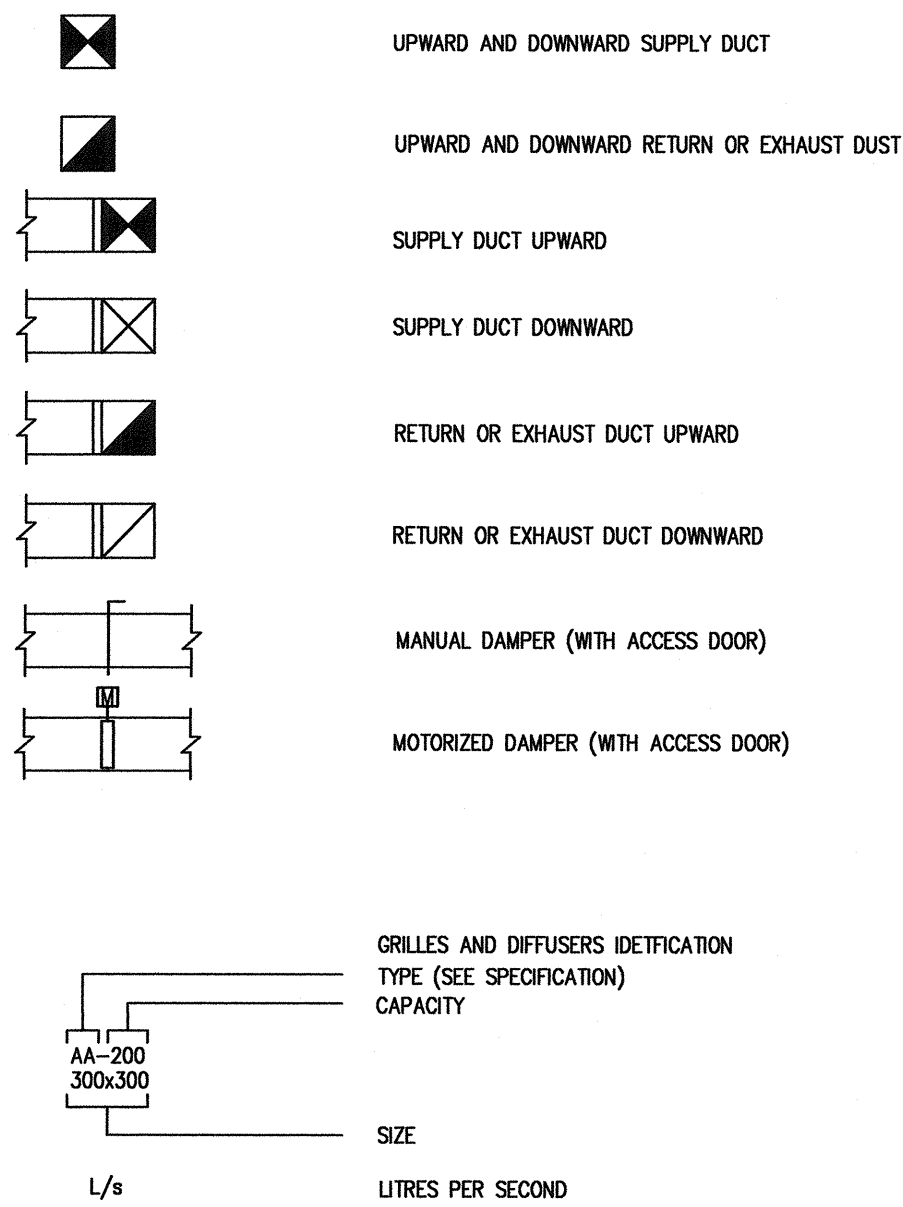
PLUMBING AND HEATING



GENERAL

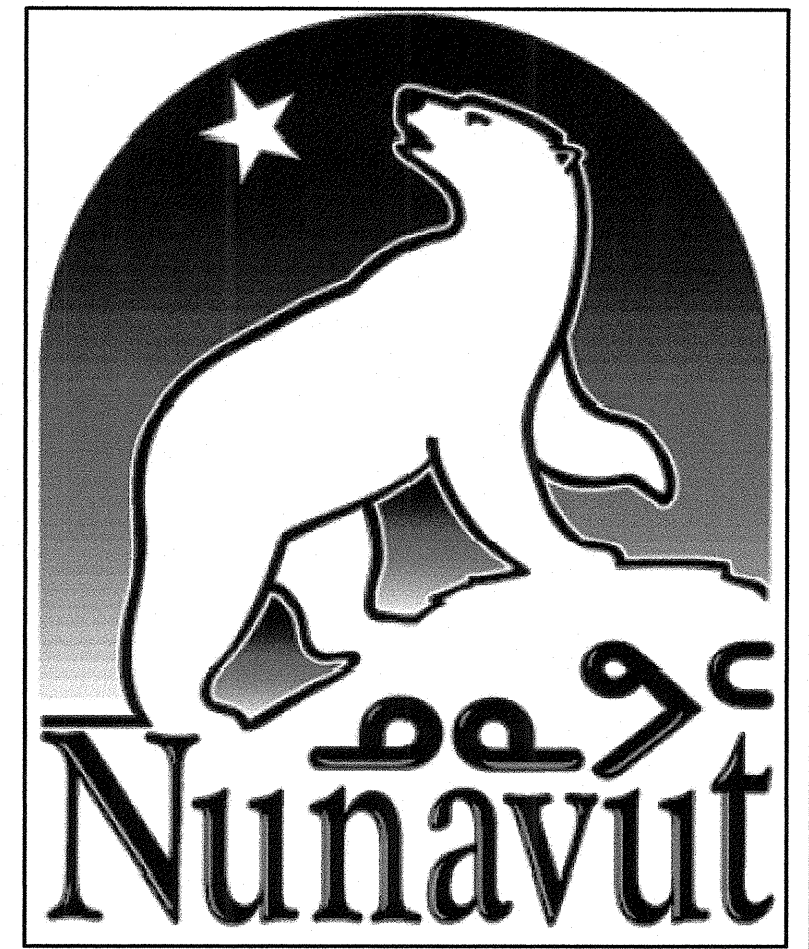


HVAC



DRAWING LIST

M1	MECHANICAL - LEGEND AND DRAWING LIST
M2	MECHANICAL - CHAR LAKE WATER SYSTEM
M3	MECHANICAL - SIGNAL HILL WATER SYSTEM
M4	MECHANICAL - WATER SYSTEM PIPING SCHEMATIC
M5	MECHANICAL - CHAR LAKE FUEL SYSTEM
M6	MECHANICAL - SIGNAL HILL FUEL SYSTEM
M7	MECHANICAL - SIGNAL HILL FUEL SYSTEM
M8	MECHANICAL - CHAR LAKE FUEL SYSTEM SCHEMATIC
M9	MECHANICAL - SIGNAL HILL FUEL SYSTEMS SCHEMATIC
M10	MECHANICAL - CHAR LAKE VENTILATION
M11	MECHANICAL - SIGNAL HILL VENTILATION
M12	MECHANICAL - SIGNAL HILL VENTILATION
M13	MECHANICAL - CONTROL SCHEMATIC



PERMIT TO PRACTICE
WOOD BARNAN BOUTHELLETTE PARIZEAU INC.
Signature: *[Signature]*
Date: 07-SEP-2010
PERMIT NUMBER: P657
The Association of Professional Engineers,
Geologists and Geophysicists of the NWT/NU

NORTH

STAMP
THE STAMP COLOUR IS RED FOR

REGISTERED PROFESSIONAL ENGINEER
P. R. ST-ONGE
LICENSEE
07-07-01
NWT/NU
THE ORIGINAL SIGNED DRAWING

NOTES: GENERAL CONTRACTOR TO VERIFY ALL DIMENSIONS WITH FINAL ARCHITECTURAL AND MECHANICAL DRAWINGS. NOTIFY THE ENGINEERS OF ANY ERRORS AND / OR OMISSIONS PRIOR TO CONSTRUCTION FOR DIRECTION. DO NOT SCALE THIS DRAWING.

0	ISSUED FOR TENDER	08/07/2010	C.B.	P.S.O.	
No.	DESCRIPTION	DATE	BY	APP'D	
R E V I S I O N S					

Ottawa :
3740 Richmond Road, Suite 100, K2H 5B9
T.(613) 596.6454 F.(613) 596.3346
www.WBPengineering.com

Gatineau :
430 de l'hôpital bld, suite 210, J8V 1T7
T.(819) 778.2448 F.(819) 778.5031
Consulting Engineers

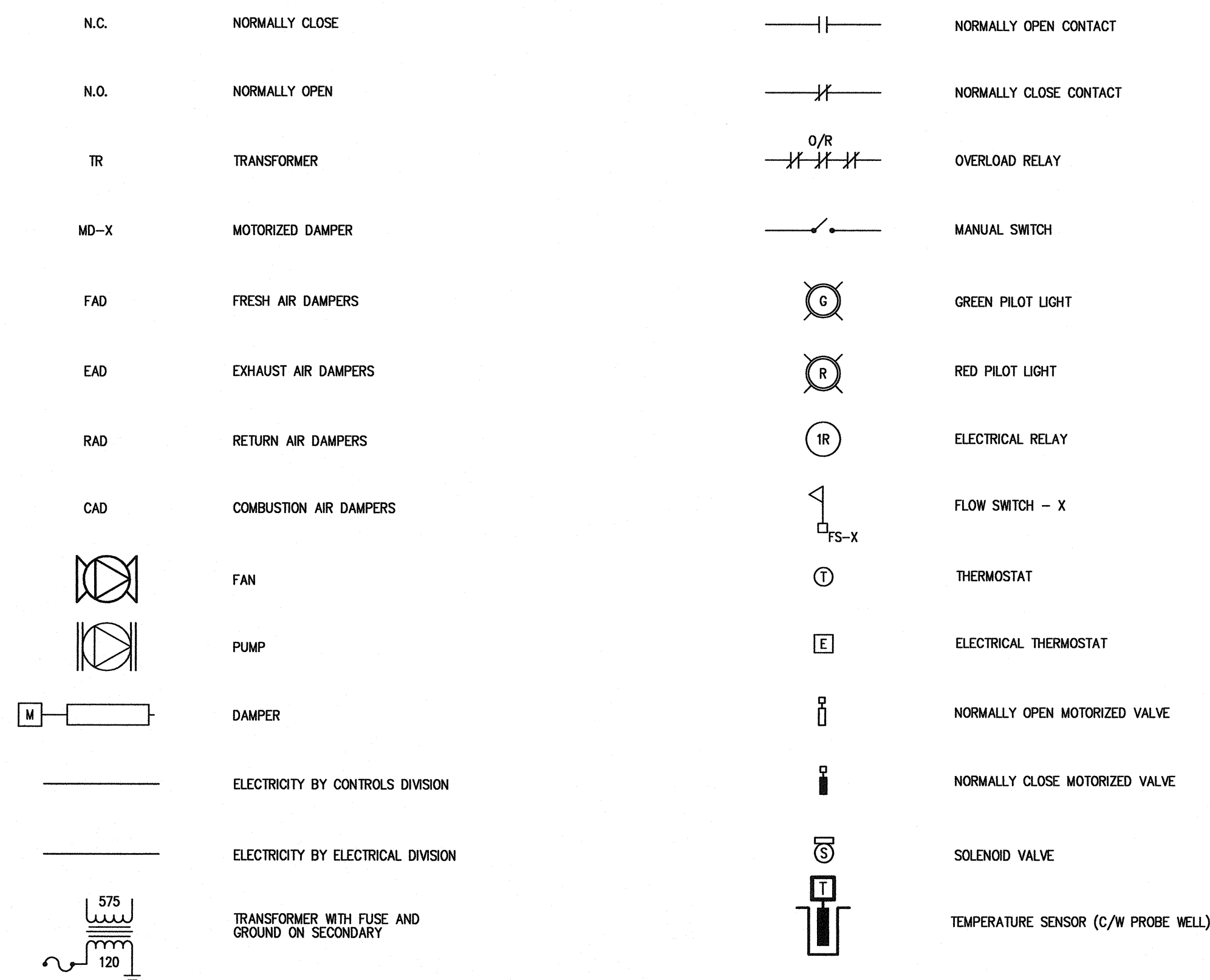
Trow Associates Inc.
154 Colonnade Road South
Ottawa, Ont. K2E 7J5
Tel:(613)225-9940
Fax:(613)225-7337

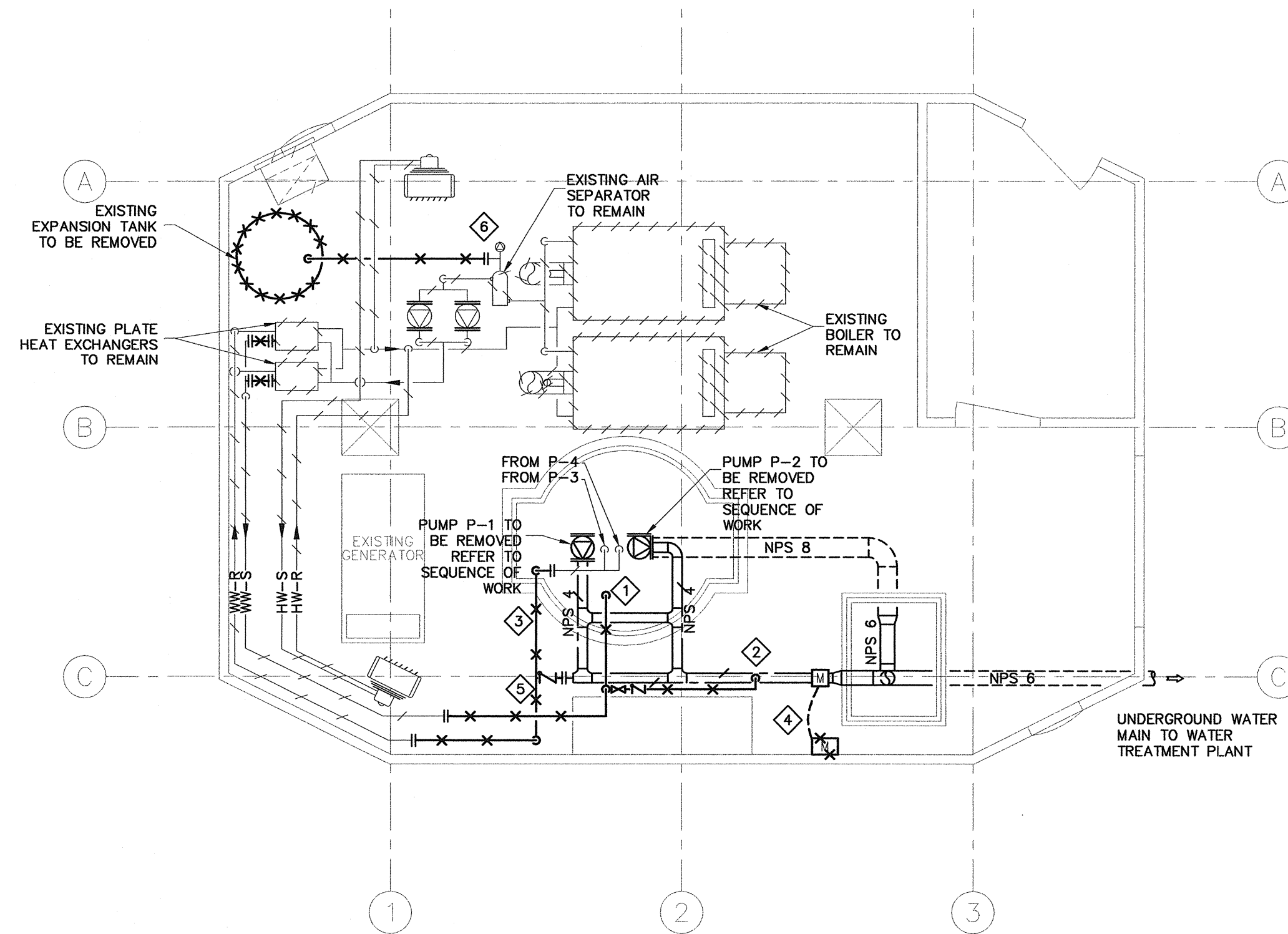
CLIENT
**GOVERNMENT OF NUNAVUT
DEPARTMENT OF COMMUNITY
AND GOVERNMENT SERVICES**

PROJECT
**RESOLUTE BAY, NUNAVUT
PUMP HOUSE AND TREATMENT PLANT
MECHANICAL & ELECTRICAL DISTRIBUTION UPGRADES**

TITLE MECHANICAL LEGEND AND DRAWING LIST	
design: by C.BOURGOGNE	project no.
drawn: by C.BOURGOGNE	drawing no.
checked: by P.ST-ONGE	M1
date MAY 2010	
scale AS SHOWN	

CONTROLS LEGEND

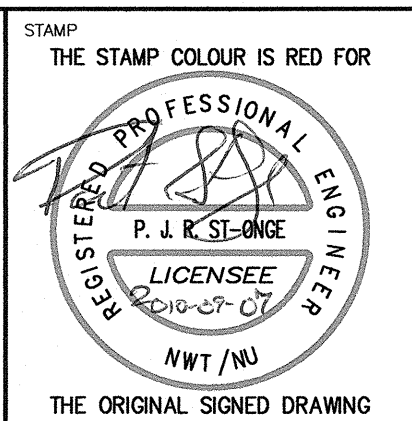
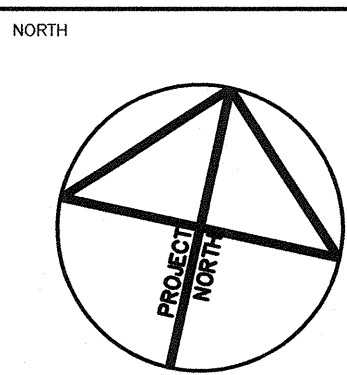
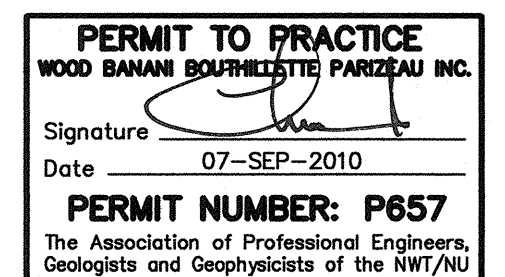




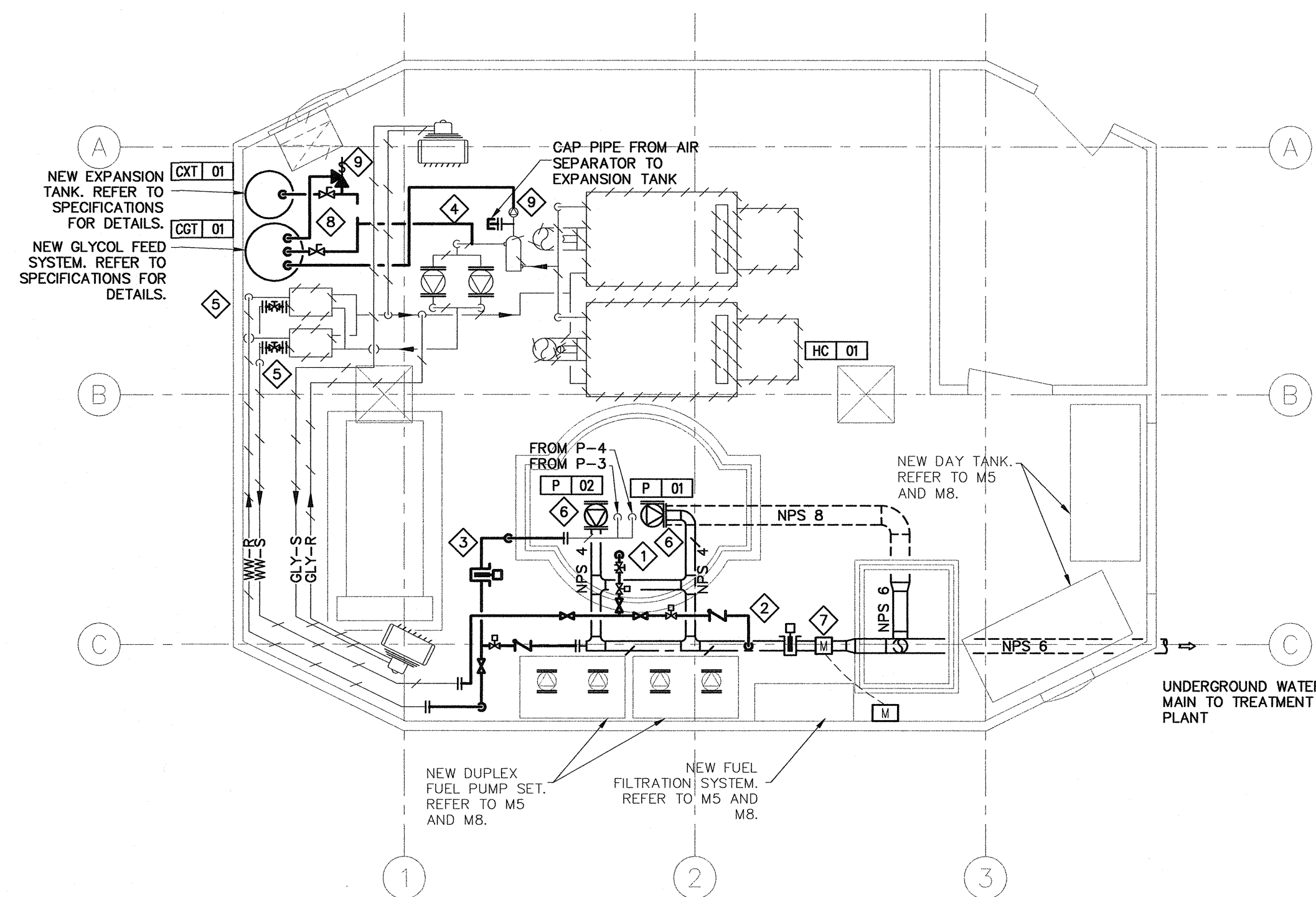
1 CHAR LAKE - WATER SYSTEM - EXISTING AND DEMOLITION LAYOUT
M2
SCALE 1/50

DRAWING NOTES:

- 1 HOT WATER SUPPLY PIPE DOWN TO WET WELL TO BE REMOVED.
- 2 HOT WATER SUPPLY PIPE TO WATER TREATMENT PLANT TO BE REMOVED.
- 3 MODIFY EXISTING HOT WATER RETURN PIPING FROM WET WELL TO HEAT EXCHANGERS TO SUIT NEW FUEL EQUIPMENT INSTALLATION. COORDINATE ON SITE WITH FUEL SYSTEMS CONTRACTOR.
- 4 EXISTING MAGNETIC WATER METER TO BE REMOVED ALONG WITH WALL DISPLAY UNIT AND ALL CABLES.
- 5 REMOVE EXISTING CHECK VALVE.
- 6 DISCONNECT EXPANSION TANK FROM AIR SEPARATOR AIR VENT



NOTES: GENERAL CONTRACTOR TO VERIFY ALL DIMENSIONS WITH FINAL ARCHITECTURAL AND MECHANICAL DRAWINGS. NOTIFY THE ENGINEERS OF ANY ERRORS AND/OR OMISSIONS PRIOR TO CONSTRUCTION FOR DIRECTION. DO NOT SCALE THIS DRAWING.



2 CHAR LAKE - WATER SYSTEM - NEW LAYOUT
M2
SCALE 1/50

GENERAL NOTES:

1. REFER TO WATER PIPING SCHEMATIC 1/M4 FOR PIPE SIZES.
2. FILL HOT WATER SYSTEM WITH 50% GLYCOL SOLUTION. TEST FOR GLYCOL CONCENTRATION AND SUBMIT RESULTS TO ENGINEER WITHIN 1 WEEK OF FILL.

DRAWING NOTES:

- 1 PROVIDE NEW WELL WATER SUPPLY PIPE DOWN TO WET WELL.
- 2 CONNECT NEW HOT WATER SUPPLY PIPE TO MAIN WATER PIPE UPSTREAM OF NEW WATER FLOW METER.
- 3 MODIFY EXISTING WELL WATER RETURN PIPING FROM WET WELL TO HEAT EXCHANGERS TO SUIT NEW FUEL EQUIPMENT INSTALLATION. COORDINATE ON SITE WITH FUEL SYSTEMS CONTRACTOR.
- 4 CONNECT NEW EXPANSION TANK AND GLYCOL FEED SYSTEM TO HOT WATER RETURN PIPE, DOWNSTREAM OF AIR SEPARATOR.
- 5 PROVIDE NEW BALANCING VALVE ON OUTLET OF COLD SIDE OF HEAT EXCHANGERS.
- 6 NEW WATER PUMP SUPPLIED BY OTHER, INSTALLED BY MECHANICAL CONTRACTOR. REFER TO SPECIFICATION FOR DETAILS AND INSTALLATION SEQUENCE.
- 7 PROVIDE NEW WATER METER. REFER TO SPECIFICATIONS FOR DETAILS.
- 8 LOCK VALVE HANDLES AFTER INSTALLATION AND TESTING.
- 9 CONNECT RELIEF VALVE TO NEW GLYCOL TANK.

No.	DESCRIPTION	DATE	BY	APP'D
0	ISSUED FOR TENDER	09/07/2010	C.B.	P.S.O.
REVISIONS				

WOOD BARNAN BOURGOGNE PARIZEAU INC.
3740 Richmond Road, Suite 100, K2H 5B9
T.(613) 596.6454 F.(613) 596.3346
www.WBBPengineering.com
Gatineau : 430 de l'hôpital bld, suite 210, J8V 1T7
T.(819) 778.2448 F.(819) 778.5031
Consulting Engineers

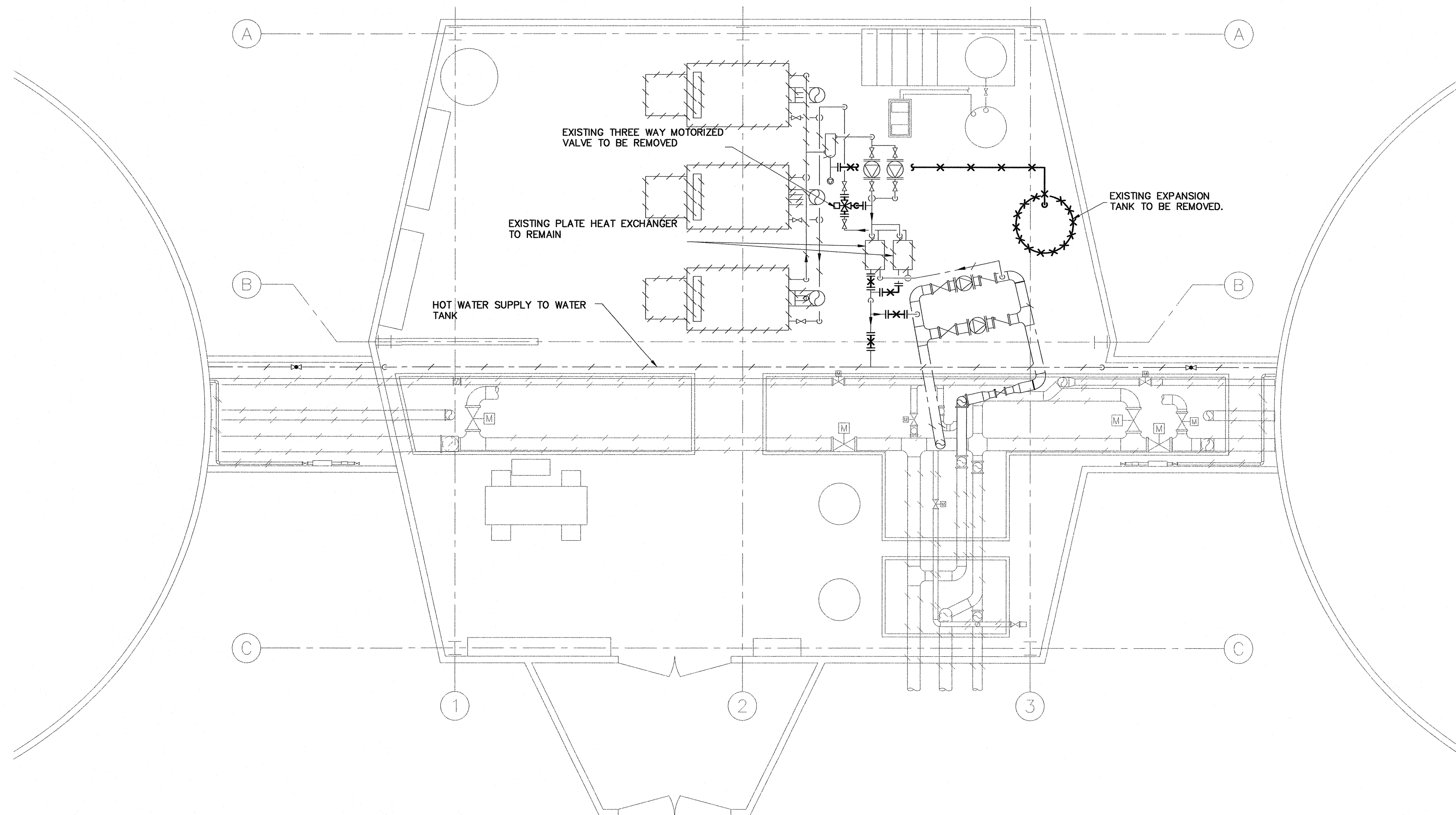
Trow Associates Inc.
154 Colonnade Road South Tel:(613)225-9940
Ottawa, Ont. K2E 7J5 Fax:(613)225-7337

CLIENT: **GOVERNMENT OF NUNAVUT
DEPARTMENT OF COMMUNITY
AND GOVERNMENT SERVICES**

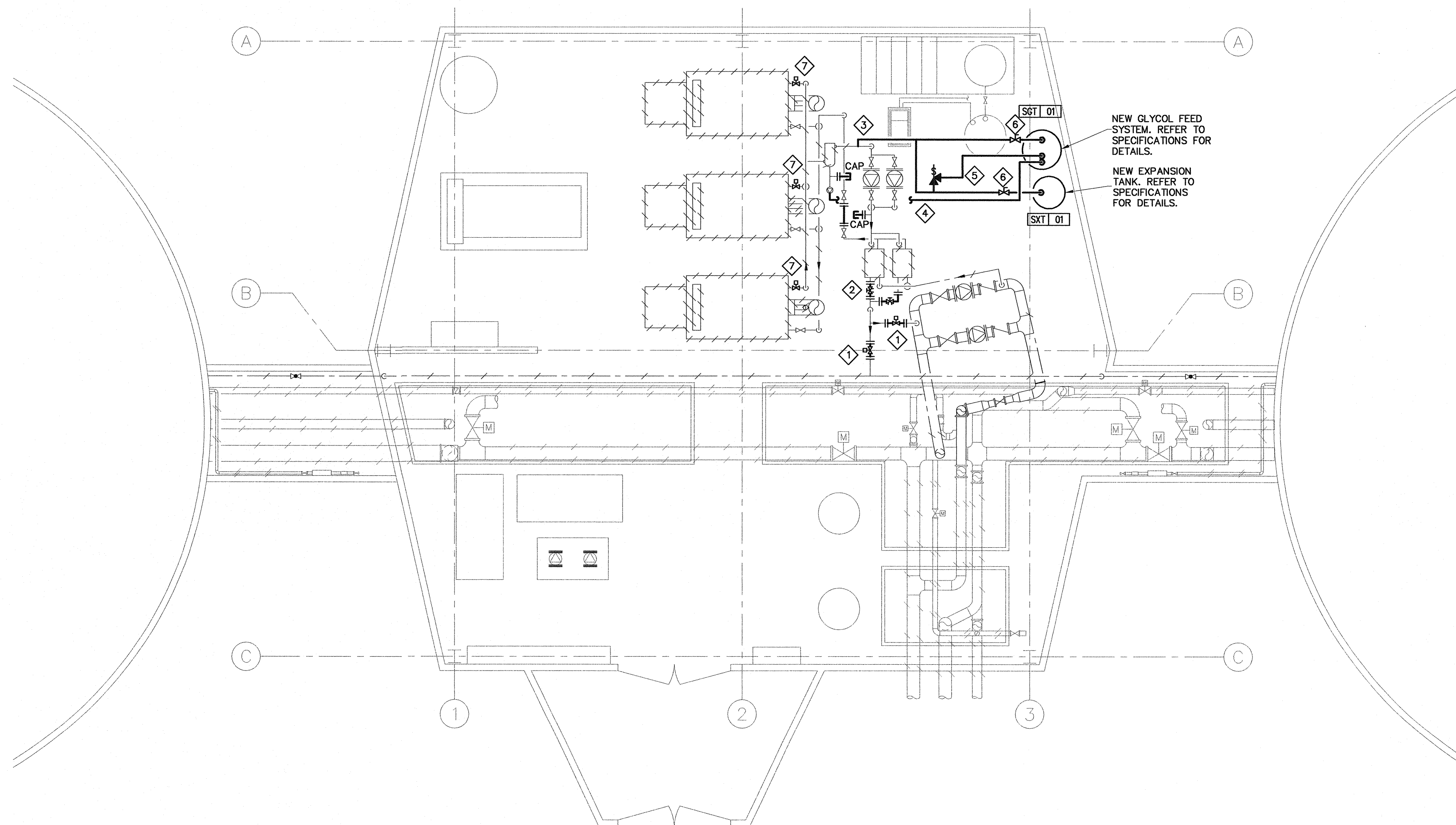
PROJECT: **RESOLUTE BAY, NUNAVUT
PUMP HOUSE AND TREATMENT PLANT
MECHANICAL & ELECTRICAL DISTRIBUTION UPGRADES**

TITLE: **MECHANICAL
CHAR LAKE - WATER SYSTEM**

design by	C.BOURGOGNE	project no.	
drawn by	C.BOURGOGNE	drawing no.	M2
checked by	P.ST-ONGE		
date	MAY 2010		
scale	AS SHOWN		



1
M3 SIGNAL HILL – WATER SYSTEM – EXISTING AND DEMOLITION LAYOUT
SCALE 1:50



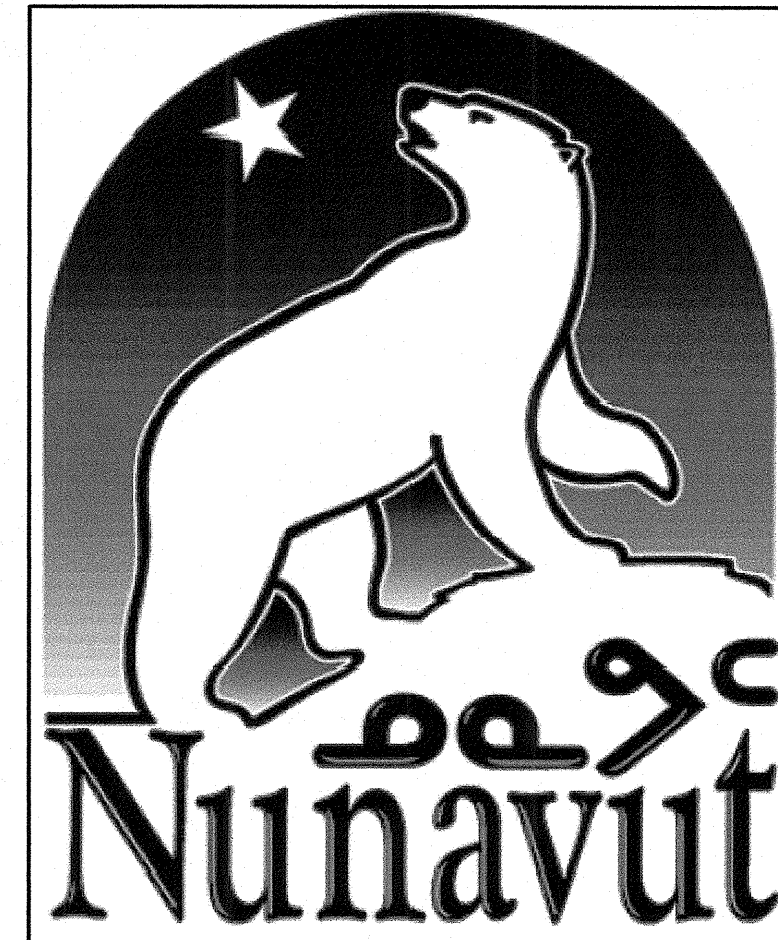
2
M3 SIGNAL HILL – WATER SYSTEM – NEW LAYOUT
SCALE 1:50

GENERAL NOTES:

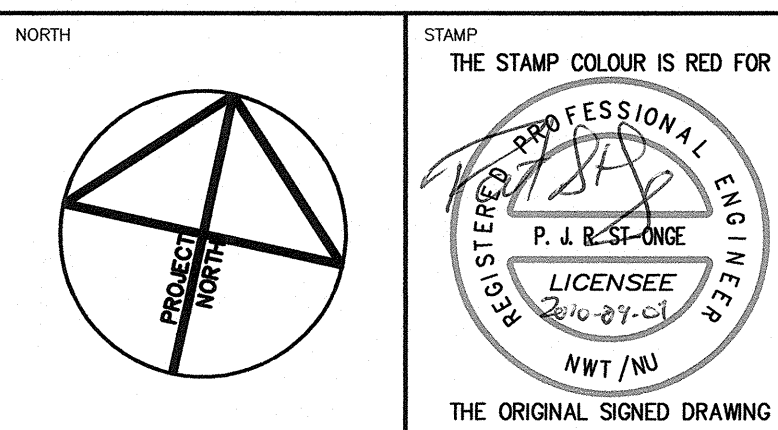
1. REFER TO WATER PIPING SCHEMATIC 2/M4 FOR PIPE SIZES.
2. FILL HOT WATER SYSTEM WITH 50% GLYCOL SOLUTION. TEST FOR GLYCOL CONCENTRATION AND SUBMIT RESULTS TO ENGINEER WITHIN 1 WEEK OF FILL.

DRAWING NOTES:

1. INSTALL NEW MOTORIZED VALVE. VALVE SUPPLIED BY OTHER. REFER TO SPECIFICATIONS AND WATER PIPING SCHEMATIC ON M4 FOR DETAILS.
2. PROVIDE NEW BALANCING VALVE ON DISCHARGE PIPE COLD SIDE OF EACH HEAT EXCHANGER. REFER TO SPECIFICATIONS AND WATER PIPING SCHEMATIC ON M4 FOR DETAILS.
3. CONNECT NEW EXPANSION TANK AND NEW GLYCOL FEED SYSTEM TO HOT WATER RETURN PIPE DOWNSTREAM OF THE AIR SEPARATOR.
4. CONNECT AIR SEPARATOR AIR VENT TO NEW GLYCOL TANK.
5. CONNECT SAFETY VALVE TO NEW GLYCOL MAKE UP TANK.
6. LOCK VALVE HANDLE AFTER INSTALLATION AND TESTING.
7. PROVIDE NEW MOTORIZED VALVE.



PERMIT TO PRACTICE
WOOD BAWAN BOUTELLETS PARIZEN INC.
Signature: [Signature]
Date: 07-SEP-2010
PERMIT NUMBER: P657
The Association of Professional Engineers,
Geologists and Geophysicists of the NWT/NU



NOTES: GENERAL CONTRACTOR TO VERIFY ALL DIMENSIONS WITH FINAL ARCHITECTURAL AND MECHANICAL DRAWINGS. NOTIFY THE ENGINEERS OF ANY ERRORS AND / OR OMISSIONS PRIOR TO CONSTRUCTION FOR DIRECTION. DO NOT SCALE THIS DRAWING.

No.	DESCRIPTION	DATE	BY	APP'D
0	ISSUED FOR TENDER	09/07/2010	C.B.	P.S.O.
R E V I S I O N S				

WOOD BAWAN BOUTELLETS PARIZEN INC.
Ottawa : 3740 Richmond Road, Suite 100, K2H 5B9
T.(613) 596.6454 F.(613) 596.3346
www.WBBPengineering.com
Gatineau : 430 de l'hôpital bid, suite 210, J8V 1T7
T.(819) 778.2448 F.(819) 778.5031
Consulting Engineers

Trow Associates Inc.
154 Colonnade Road South Tel:(613)225-9940
Ottawa, Ont. K2E 7J5 Fax:(613)225-7337

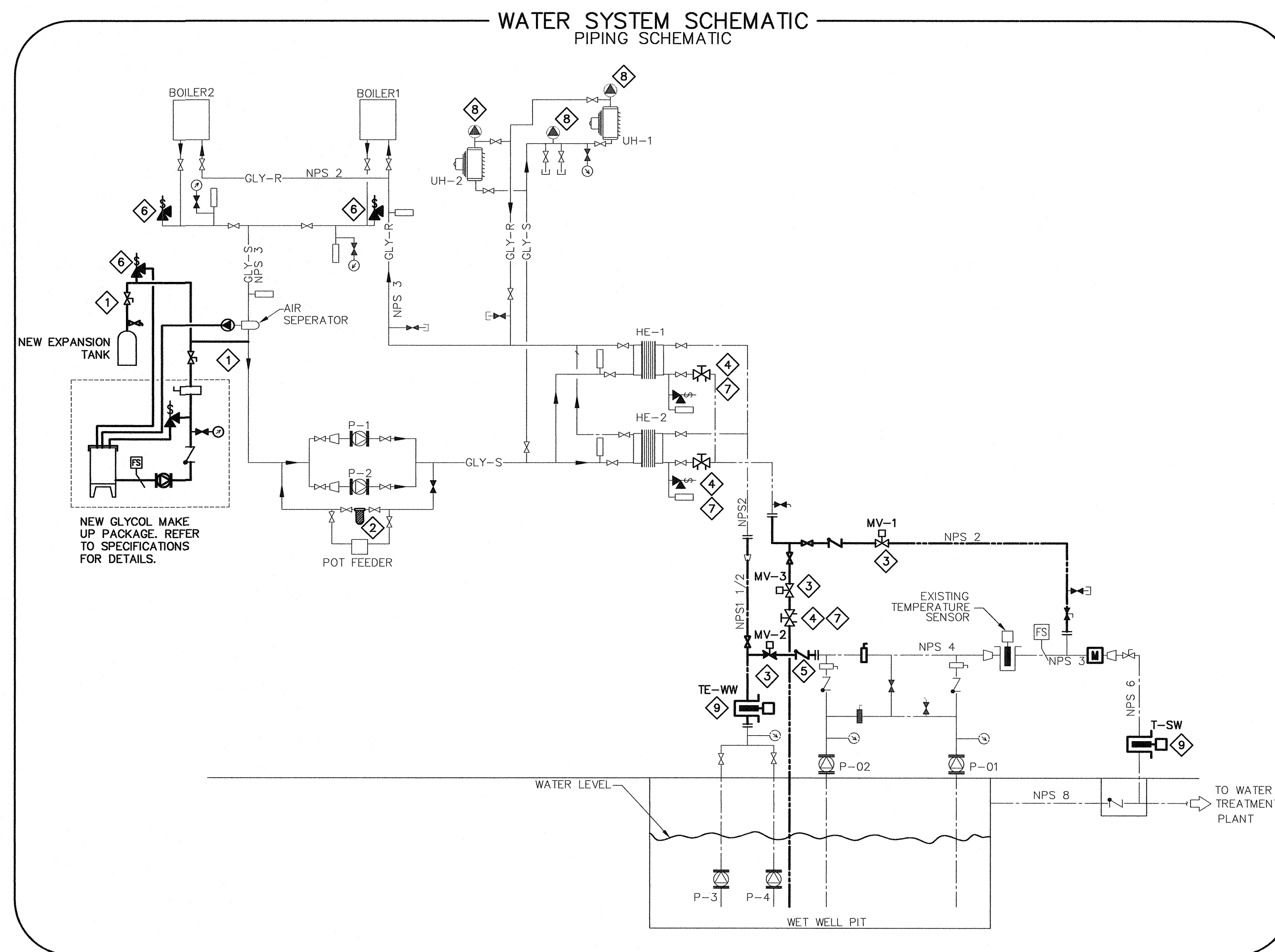
CLIENT: **GOVERNMENT OF NUNAVUT
DEPARTMENT OF COMMUNITY
AND GOVERNMENT SERVICES**

PROJECT: **RESOLUTE BAY, NUNAVUT
PUMP HOUSE AND TREATMENT PLANT
MECHANICAL & ELECTRICAL DISTRIBUTION UPGRADES**

TITLE: **MECHANICAL
SIGNAL HILL – WATER SYSTEM**

design by: C.BOURGOGNE	project no.
drawn by: C.BOURGOGNE	drawing no.
checked by: P.ST-ONGE	
date: MAY 2010	
scale: AS SHOWN	

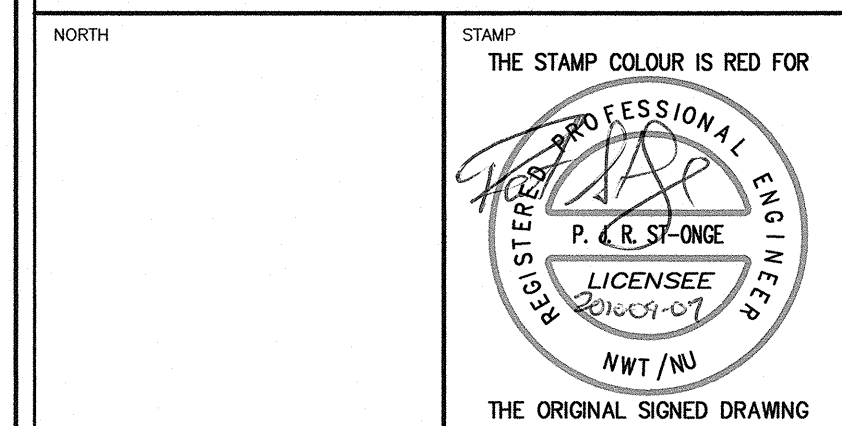
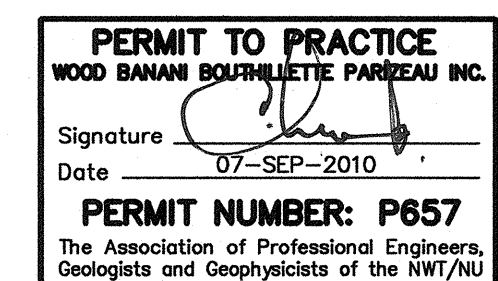
M3



1 CHAR LAKE – WATER SYSTEM PIPING SCHEMATIC
M4 NTS

DRAWING NOTES:

- 1 LOCK VALVE HANDLE AFTER INSTALLATION AND TESTING.
- 2 REINSTALL FILTER IN DIRECTION OF FLOW.
- 3 INSTALL NEW MOTORIZED VALVE, SUPPLIED BY OTHER.
- 4 PROVIDE NEW BALANCING VALVE.
- 5 PROVIDE NEW CHECK VALVE.
- 6 CONNECT SAFETY VALVE TO NEW GLYCOL TANK. SET AT 551.6kPa (80 PSI).
- 7 BALANCE TO 431.9 L/min (114.1 USGPM).
- 8 CONNECT RELIEF VALVE TO NEW GLYCOL TANK.
- 9 INSTALL NEW TEMPERATURE SENSOR, SUPPLIED BY OTHER.



NOTES: GENERAL CONTRACTOR TO VERIFY ALL DIMENSIONS WITH FINAL ARCHITECTURAL AND MECHANICAL DRAWINGS. NOTIFY THE ENGINEERS OF ANY ERRORS AND/OR OMISSIONS PRIOR TO CONSTRUCTION FOR DIRECTION. DO NOT SCALE THIS DRAWING.

No.	DESCRIPTION	DATE	BY	APP'D
0	ISSUED FOR TENDER	09/03/2010	C.B.	P.S.O.
REVISIONS				

WOOD BARNI BOURQUETTE PARREAU
Consulting Engineers

Ottawa :
3740 Richmond Road, Suite 100, K2H 5B9
T.(613) 596.6454 F.(613) 596.3346
www.WBBPengineering.com

Gatineau :
430 de l'hôpital bld, suite 210, J8V 1T7
T.(819) 778.2448 F.(819) 778.5031

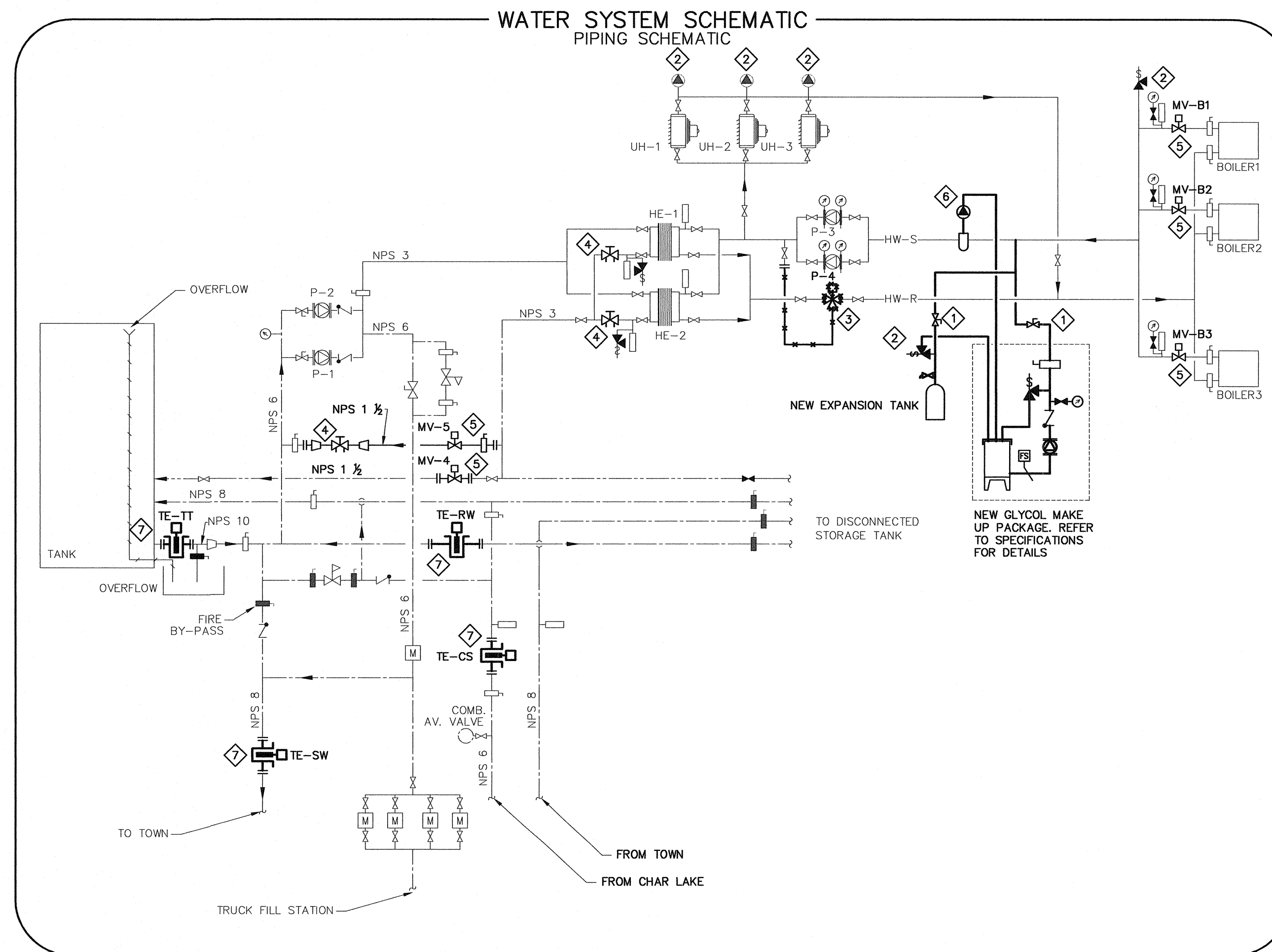
Trow Associates Inc.
154 Colonnade Road South
Ottawa, Ont. K2E 7J5
Tel:(613)225-9940
Fax:(613)225-7337

CLIENT
**GOVERNMENT OF NUNAVUT
DEPARTMENT OF COMMUNITY
AND GOVERNMENT SERVICES**

PROJECT
**RESOLUTE BAY, NUNAVUT
PUMP HOUSE AND TREATMENT PLANT
MECHANICAL & ELECTRICAL DISTRIBUTION UPGRADES**

TITLE	
MECHANICAL WATER SYSTEM PIPING SCHEMATIC	
design by C.BOURGOGNE	project no.
drawn by C.BOURGOGNE	drawing no.
checked by P.ST-ONGE	
date MAY 2010	
scale AS SHOWN	

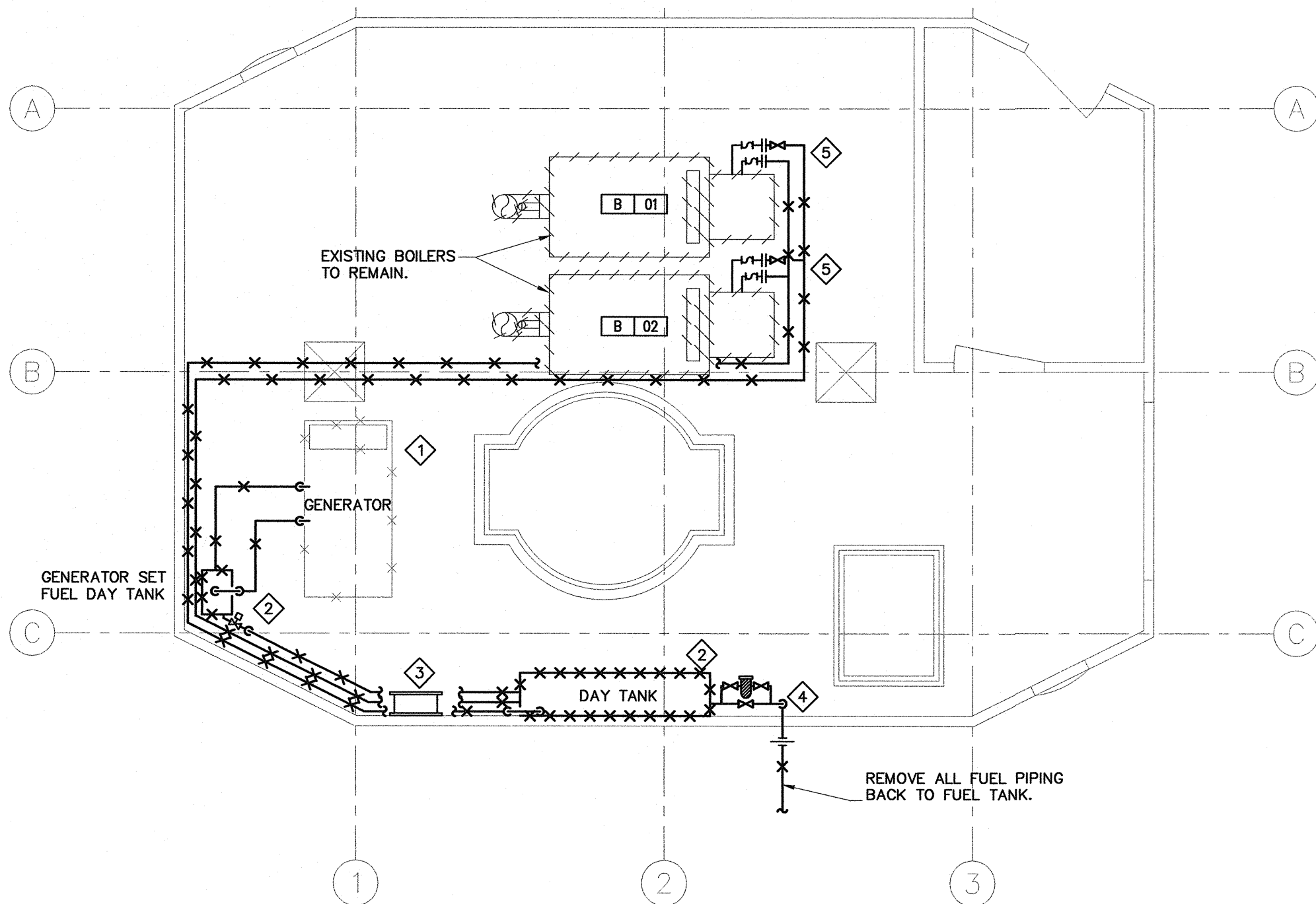
M4



2 SIGNAL HILL – WATER SYSTEM PIPING SCHEMATIC
M4 NTS

DRAWING NOTES:

- 1 LOCK VALVE HANDLE AFTER INSTALLATION AND TESTING.
- 2 CONNECT AIR VENT/RELIEF VALVE TO NEW GLYCOL TANK. SET AT 551.6kPa (80 PSI).
- 3 REMOVE EXISTING 3-WAY MOTORIZED VALVE AND CAP BYPASS PIPE.
- 4 PROVIDE NEW BALANCING VALVE AND BALANCE TO 431.9 L/min (114.1 USGPM).
- 5 INSTALL NEW MOTORIZED VALVE, SUPPLIED BY OTHER.
- 6 DISCONNECT AIR SEPARATOR FROM EXPANSION TANK.
- 7 INSTALL NEW TEMPERATURE SENSOR, SUPPLIED BY OTHER.



- GENERAL NOTES:**
1. DRAIN ALL FUEL IN SYSTEM PRIOR TO REMOVING ANY FUEL EQUIPMENT.
 2. REMOVE ALL EXISTING FUEL DISTRIBUTION SYSTEMS.
 3. REFER TO SPECIFICATION SECTION 33 56 13 FOR INSTRUCTIONS ON FUEL EQUIPMENT REMOVAL.
 4. REFER TO SPECIFICATION SECTION 21 05 01 FOR INSTRUCTIONS ON SYSTEM SHUT DOWNS.

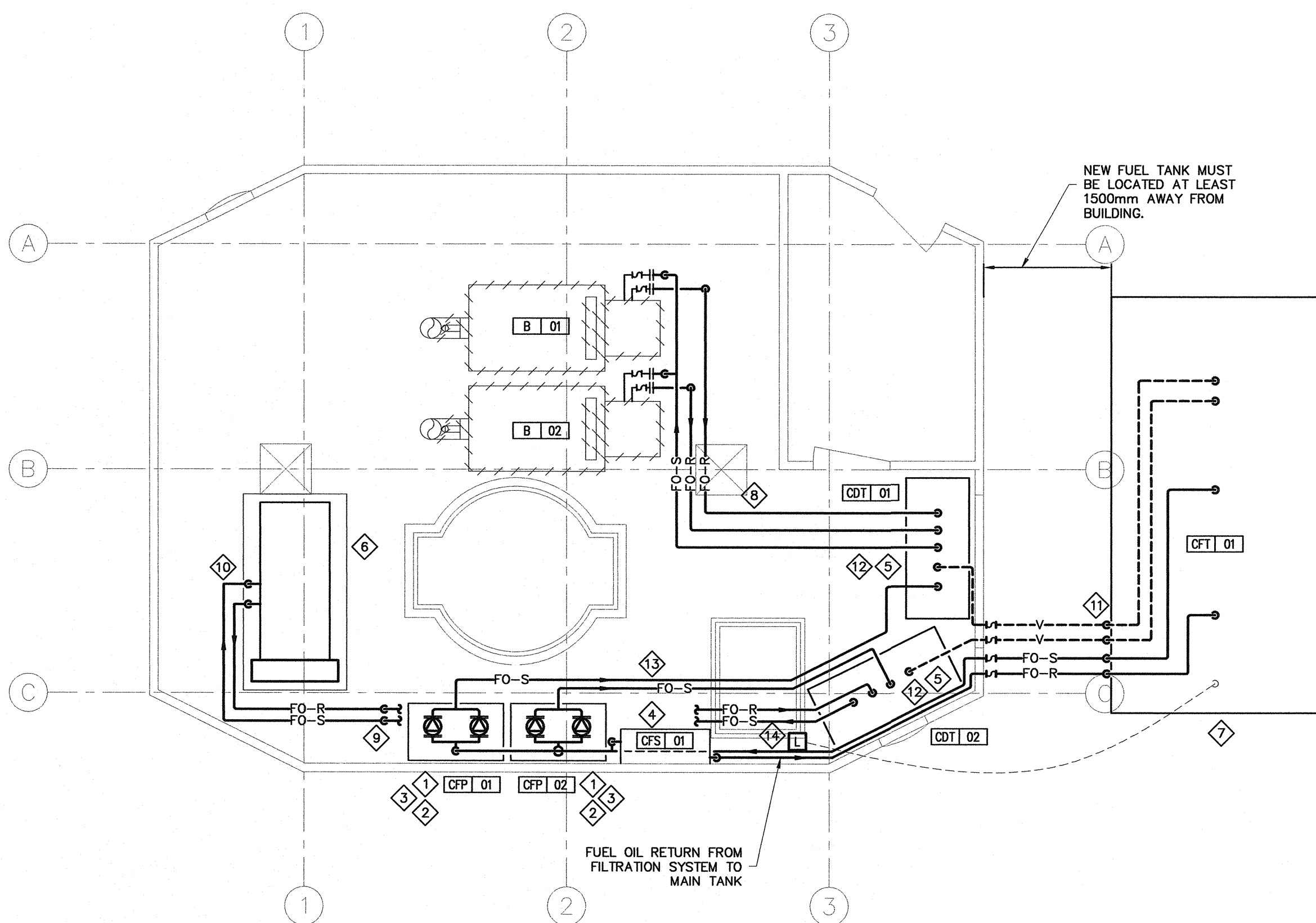
DRAWING NOTES:

- 1 EXISTING GENERATOR TO BE REMOVED BY OTHERS.
- 2 REMOVE EXISTING DAY TANK ALONG WITH ALL CONNECTED PIPING AND ACCESSORIES.
- 3 REMOVE EXISTING HOSE RACK AND SUPPORT.
- 4 PATCH AND MAKE GOOD ALL WALL OPENINGS TO MATCH EXISTING.
- 5 DISCONNECT FUEL SUPPLY AND RETURN PIPE FROM BOILER.

EXISTING OUTDOOR FUEL TANK TO BE REMOVED ALONG WITH UNDERGROUND PIPING AND ACCESSORIES. REFER TO SPECIFICATION SECTION 33 56 13 FOR SPECIFIC INSTRUCTIONS.

EXISTING FUEL SUPPLY PIPE BURIED UNDERGROUND

1 CHAR LAKE - FUEL SYSTEM - EXISTING AND DEMOLITION LAYOUT
M5
SCALE 1:50



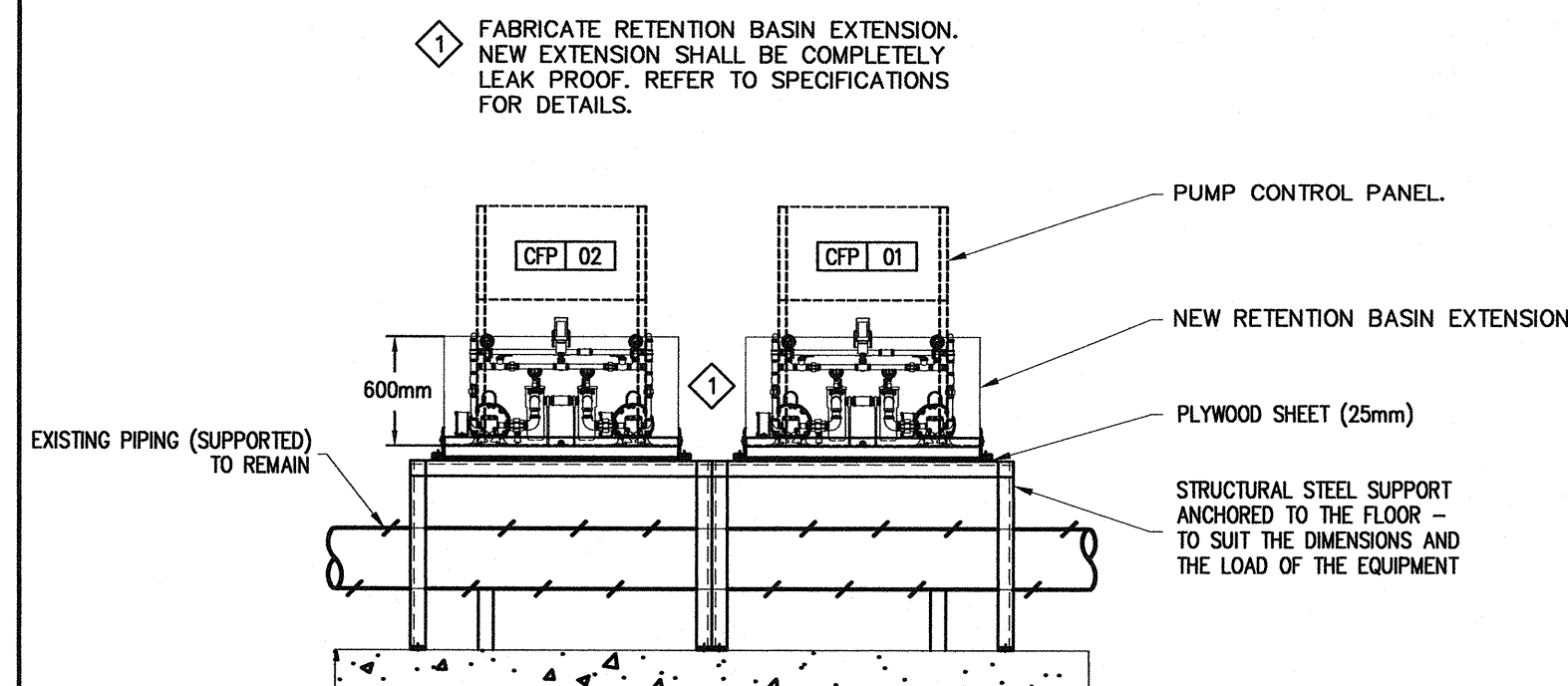
GENERAL NOTES:

1. REFER TO FUEL PIPING SCHEMATIC ON M5 FOR DETAILS ON EQUIPMENT CONNECTIONS, PIPE DIMENSIONS, FITTINGS AND COMPONENTS.
2. REFER TO SECTION 21 05 01 FOR INSTRUCTIONS ON SYSTEM SHUT DOWNS.

DRAWING NOTES:

- 1 FABRICATE SUPPORT TO ALLOW THE INSTALLATION OF NEW DUPLEX FUEL PUMP (CFP) SETS 01 AND 02 ABOVE EXISTING WATER PIPE. REFER TO 3/M5 FOR DETAILS.
- 2 NEW CFP-01 AND CFP-02 SUPPLIED BY OTHERS. INSTALLED BY MECHANICAL CONTRACTOR. REFER TO SPECIFICATIONS FOR DETAILS.
- 3 FABRICATE RETENTION BASIN EXTENSION, 600mm HIGH. REFER TO 3/M5 AND SECTION 23 11 13 FOR DETAILS.
- 4 NEW AUTOMATIC FUEL OIL FILTRATION SYSTEM SUPPLIED BY OTHER, INSTALLED BY MECHANICAL CONTRACTOR.
- 5 NEW DAY TANK SUPPLIED BY OTHER, INSTALLED BY MECHANICAL CONTRACTOR.
- 6 NEW GENERATOR.
- 7 OUTDOOR FUEL TANK SUPPLIED BY OTHERS. INSTALLED BY MECHANICAL CONTRACTOR. REFER TO SPECIFICATIONS FOR DETAILS.
- 8 INSTALL FUEL SUPPLY AND RETURN PIPING TO BOILERS SUSPENDED FROM CEILING.
- 9 LAYOUT SHOWN FOR CLARITY. INSTALL FUEL SUPPLY AND RETURN PIPING TO GENERATOR ALONG THE WALL.
- 10 CONNECT FUEL SUPPLY AND RETURN PIPES TO GENERATOR SUPPLY AND RETURN LINES.
- 11 INSTALL OVERFLOW PIPES FROM DAY TANKS TO MAIN TANK WITHOUT ANY TRAPS OR SAGS.
- 12 PLUG ALL UNUSED PORTS ON DAY TANK.
- 13 LAYOUT SHOWN FOR CLARITY. INSTALL FUEL SUPPLY PIPES FROM CFP-01 AND CFP-02 ALONG THE WALL.
- 14 TANK LEVEL METER DISPLAY PANEL. CONNECT TO CFT-01. CONDUIT BY DIV. 26.

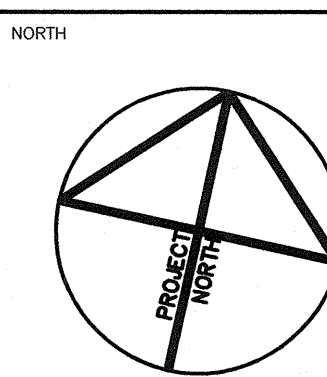
2 CHAR LAKE - FUEL SYSTEM - NEW LAYOUT
M5
SCALE 1:50



3 CHAR LAKE - FUEL PUMP INSTALLATION DETAIL
M5
N.T.S.



PERMIT TO PRACTICE
WOOD BARNY BOUTILLETTE PARIZEAU INC.
Signature: [Signature]
Date: 07-SEP-2010
PERMIT NUMBER: P657
The Association of Professional Engineers, Geologists and Geophysicists of the NWT/NU



STAMP
THE STAMP COLOUR IS RED FOR
REGISTERED PROFESSIONAL ENGINEER
P. J. R. ST-ONGE
LICENSEE
2006-07-07
NWT / NU
THE ORIGINAL SIGNED DRAWING

NOTES: GENERAL CONTRACTOR TO VERIFY ALL DIMENSIONS WITH FINAL ARCHITECTURAL AND MECHANICAL DRAWINGS. NOTIFY THE ENGINEERS OF ANY ERRORS AND/OR OMISSIONS PRIOR TO CONSTRUCTION FOR DIRECTION. DO NOT SCALE THIS DRAWING.

No.	DESCRIPTION	DATE	BY	APP'D
0	ISSUED FOR TENDER	09/07/2010	C.B.	P.S.O.
REVISIONS				

WOOD BARNY BOUTILLETTE PARIZEAU INC.
Ottawa : 3740 Richmond Road, Suite 100, K2H 5B9
T.(613) 596.6454 F.(613) 596.3346
www.WBBPengineering.com
Gatineau : 430 de l'hôpital bld, suite 210, J8V 1T7
T.(819) 778.2448 F.(819) 778.5031
Consulting Engineers

Trow Associates Inc.
154 Colonnade Road South
Ottawa, Ont. K2E 7J5
Tel:(613)225-9940
Fax:(613)225-7337

CLIENT
**GOVERNMENT OF NUNAVUT
DEPARTMENT OF COMMUNITY
AND GOVERNMENT SERVICES**

PROJECT
**RESOLUTE BAY, NUNAVUT
PUMP HOUSE AND TREATMENT PLANT
MECHANICAL & ELECTRICAL DISTRIBUTION UPGRADES**

TITLE
**MECHANICAL
CHAR LAKE - FUEL SYSTEM**

design by	C.BOURGOGNE	project no.	
drawn by	C.BOURGOGNE	drawing no.	
checked by	P.ST-ONGE		
date	MAY 2010		
scale	AS SHOWN		

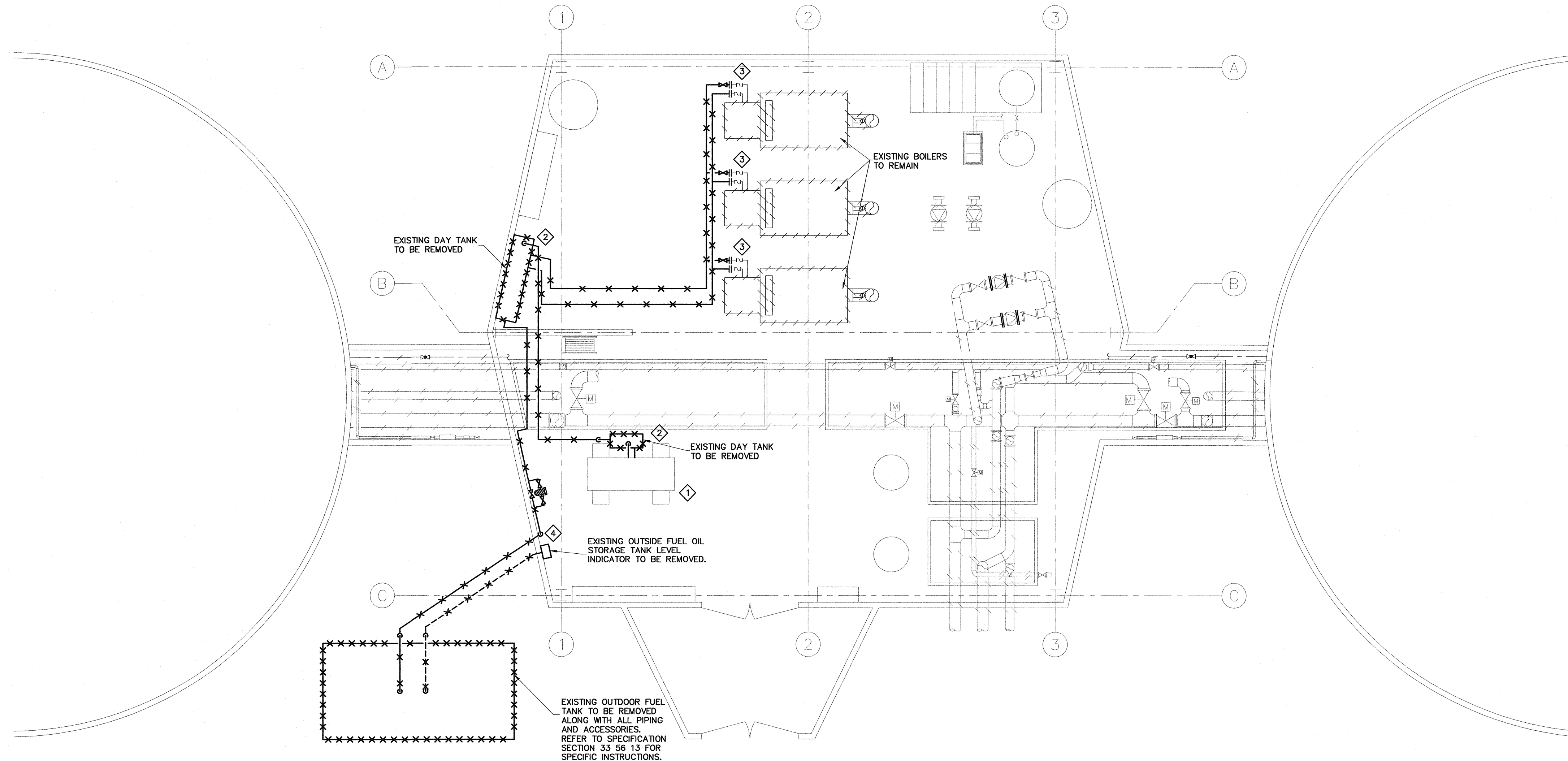
M5

GENERAL NOTES:

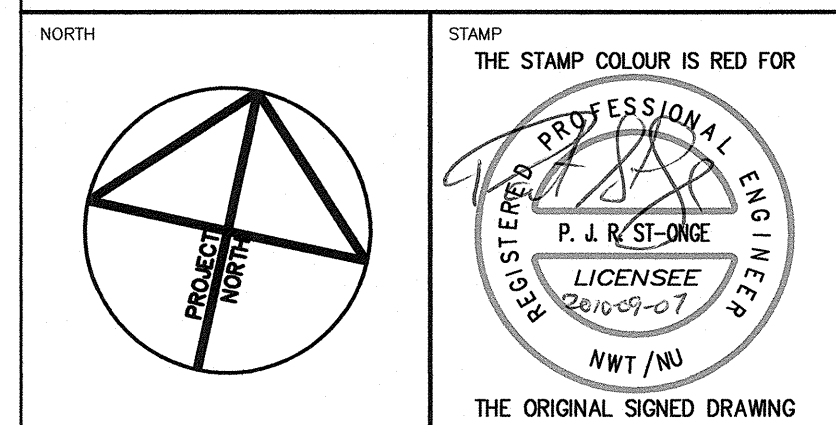
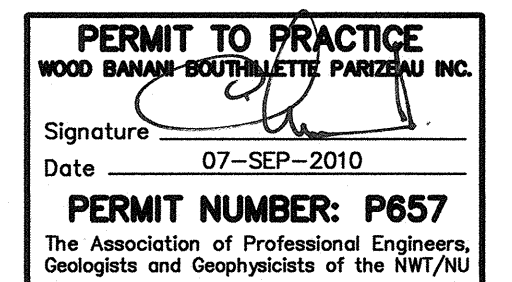
1. DRAIN ALL FUEL IN SYSTEM PRIOR TO REMOVING ANY FUEL EQUIPMENT.
2. REMOVE ALL EXISTING FUEL DISTRIBUTION SYSTEMS.
3. REFER TO SPECIFICATION SECTION 33 56 13 FOR INSTRUCTIONS ON FUEL EQUIPMENT REMOVAL.
4. REFER TO SPECIFICATION SECTION 21 05 01 FOR INSTRUCTIONS ON SYSTEM SHUT DOWNS.

DRAWING NOTES:

- ◇ EXISTING GENERATOR TO BE REMOVED BY OTHERS.
- ◇ REMOVE EXISTING DAY TANK ALONG WITH ALL CONNECTED PIPING AND ACCESSORIES.
- ◇ DISCONNECT FUEL SUPPLY AND RETURN PIPES FROM BOILER.
- ◇ PATCH AND MAKE GOOD WALL OPENINGS.



1
M6
SIGNAL HILL – FUEL SYSTEM – EXISTING AND DEMOLITION LAYOUT
SCALE 1:50



NOTES: GENERAL CONTRACTOR TO VERIFY ALL DIMENSIONS WITH FINAL ARCHITECTURAL AND MECHANICAL DRAWINGS. NOTIFY THE ENGINEERS OF ANY ERRORS AND/OR OMISSIONS PRIOR TO CONSTRUCTION FOR DIRECTION. DO NOT SCALE THIS DRAWING.

No.	DESCRIPTION	DATE	BY	APP'D
0	ISSUED FOR TENDER	09/07/2010	C.B.	P.S.O.
REVISIONS				

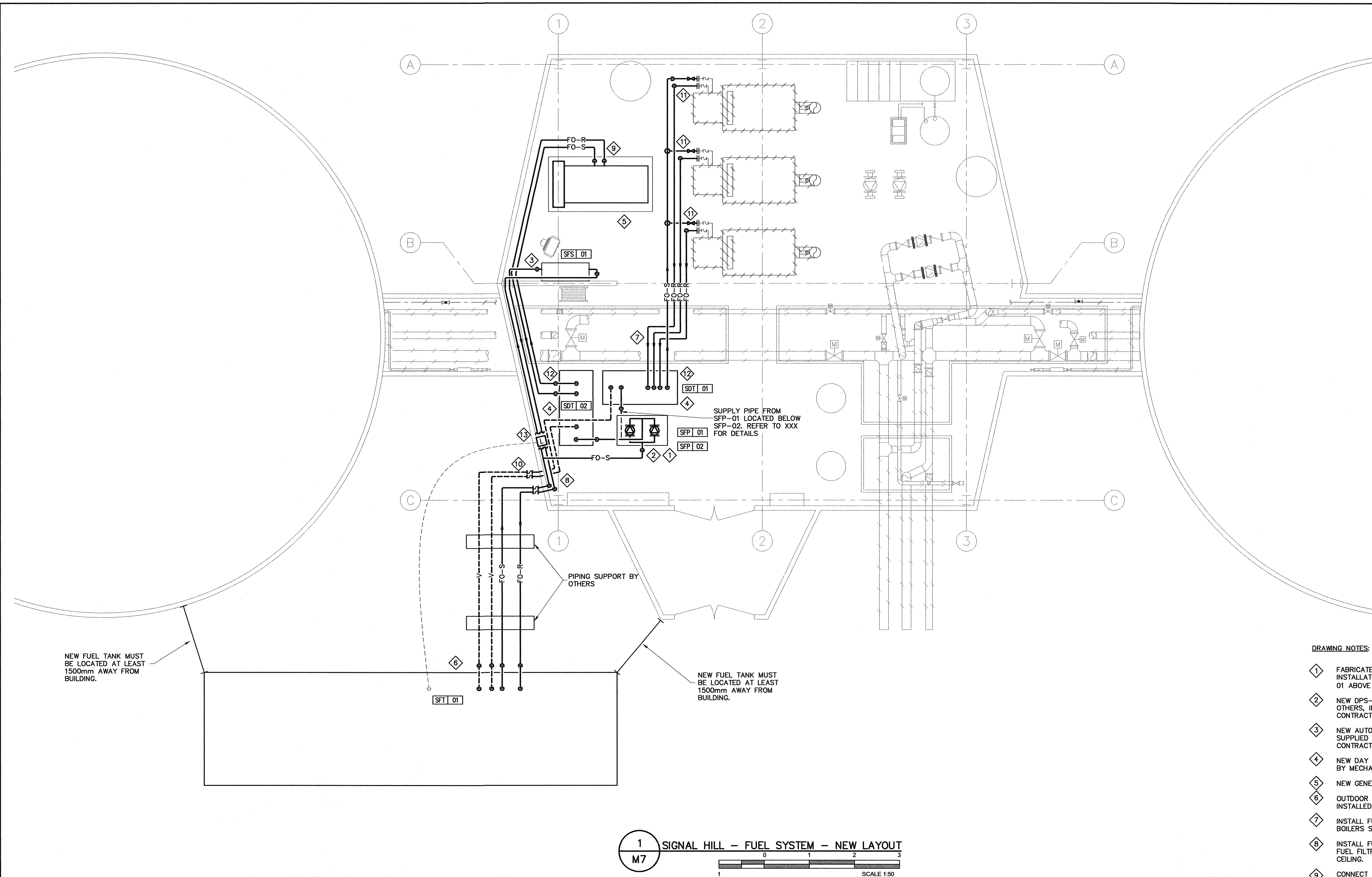
WOOD BAWAN BOUTRIELETTE PARIZEAU INC.
 Ottawa : 3740 Richmond Road, Suite 100, K2H 5B9
 T.(613) 596.6454 F.(613) 596.3346
 www.WBBPengineering.com
 Gatineau : 430 de l'hôpital bld, suite 210, J8V 1T7
 T.(819) 778.2448 F.(819) 778.5031
 Consulting Engineers

Trow Associates Inc.
 154 Colonnade Road South
 Ottawa, Ont. K2E 7J5
 Tel:(613)225-9940
 Fax:(613)225-7337

CLIENT
**GOVERNMENT OF NUNAVUT
 DEPARTMENT OF COMMUNITY
 AND GOVERNMENT SERVICES**

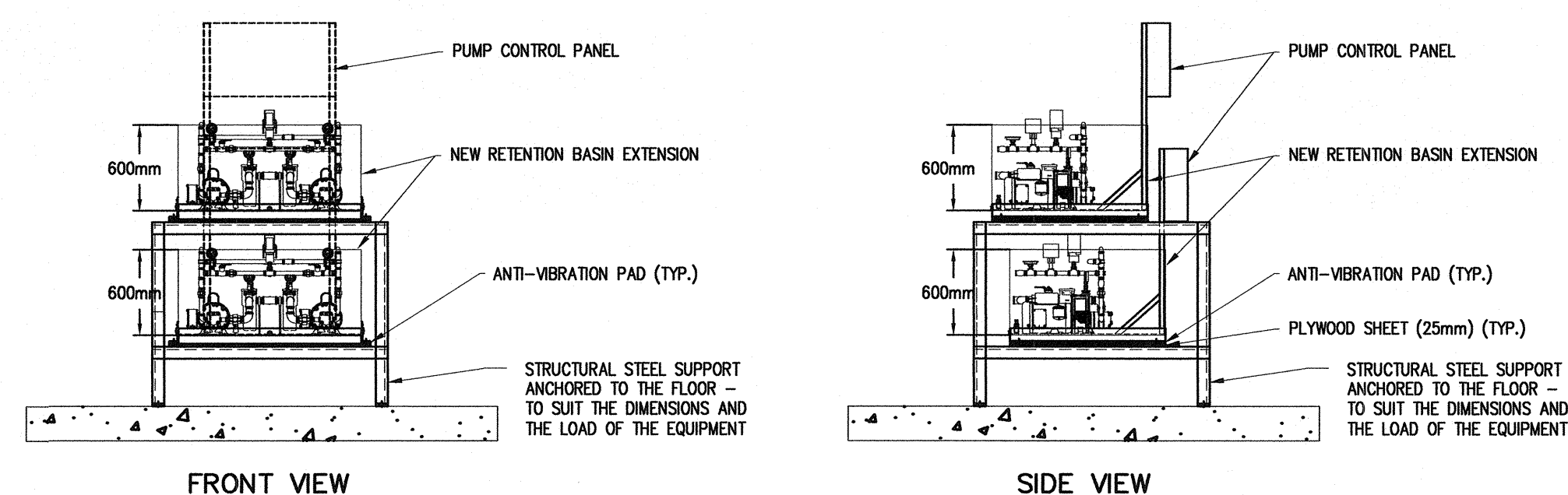
PROJECT
**RESOLUTE BAY, NUNAVUT
 PUMP HOUSE AND TREATMENT PLANT
 MECHANICAL & ELECTRICAL DISTRIBUTION UPGRADES**

TITLE	
MECHANICAL SIGNAL HILL – FUEL SYSTEM	
design by C.BOURGOGNE	project no.
drawn by C.BOURGOGNE	drawing no. M6
checked by P.ST-ONGE	
date MAY 2010	
scale AS SHOWN	

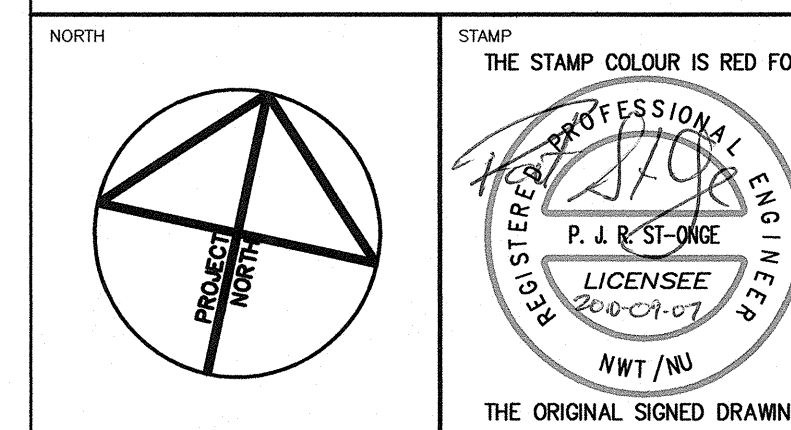
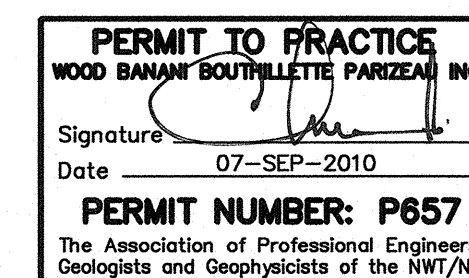


DRAWING NOTES:

- 1 FABRICATE SUPPORT TO ALLOW THE INSTALLATION OF NEW DUPLEX FUEL PUMP SET 01 ABOVE 02. REFER TO 2/M7 FOR DETAILS.
- 2 NEW DPS-01 AND DPS-02 SUPPLIED BY OTHERS, INSTALLED BY MECHANICAL CONTRACTOR.
- 3 NEW AUTOMATIC FUEL OIL FILTRATION SYSTEM SUPPLIED BY OTHER, INSTALLED BY MECHANICAL CONTRACTOR.
- 4 NEW DAY TANK SUPPLIED BY OTHER, INSTALLED BY MECHANICAL CONTRACTOR.
- 5 NEW GENERATOR.
- 6 OUTDOOR FUEL TANK SUPPLIED BY OTHERS, INSTALLED BY MECHANICAL CONTRACTOR.
- 7 INSTALL FUEL SUPPLY AND RETURN PIPING TO BOILERS SUSPENDED FROM CEILING.
- 8 INSTALL FUEL SUPPLY AND RETURN PIPING TO FUEL FILTRATION SYSTEM SUSPENDED FROM CEILING.
- 9 CONNECT FUEL SUPPLY AND RETURN PIPES TO GENERATOR SUPPLY AND RETURN LINES.
- 10 INSTALL OVERFLOW PIPES FROM DAY TANKS TO MAIN TANK WITHOUT ANY TRAPS OR SAGS.
- 11 PROVIDE SEPARATE FUEL RETURN PIPE TO DAY TANK FOR BOILER.
- 12 PLUG ALL UNUSED PORTS ON DAY TANK.
- 13 TANK LEVEL METER DISPLAY PANEL. CONNECT TO GFT-01, CONDUIT BY DIV. 26.



2 SIGNAL HILL - FUEL PUMP INSTALLATION DETAIL
M7 N.T.S.



NOTES: GENERAL CONTRACTOR TO VERIFY ALL DIMENSIONS WITH FINAL ARCHITECTURAL AND MECHANICAL DRAWINGS. NOTIFY THE ENGINEERS OF ANY ERRORS AND/OR OMISSIONS PRIOR TO CONSTRUCTION FOR DIRECTION. DO NOT SCALE THIS DRAWING.

0	ISSUED FOR TENDER	09/07/2010	C.B.	P.S.O.
No.	DESCRIPTION	DATE	BY	APP'D
REVISIONS				



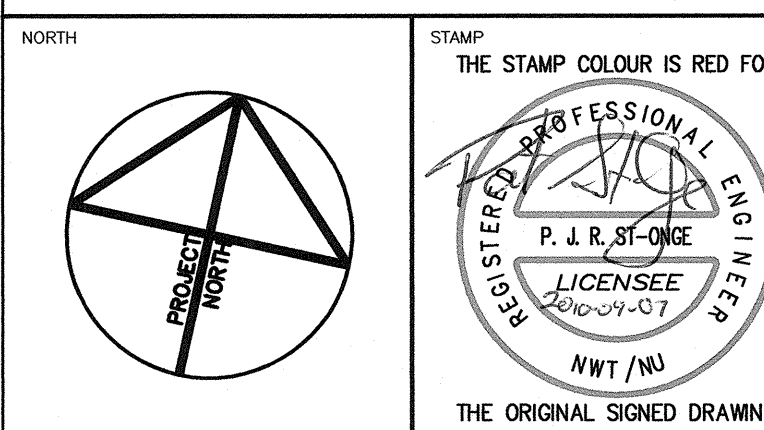
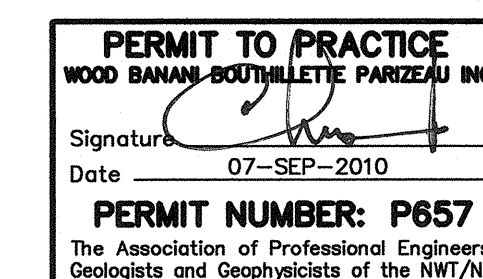
CLIENT: GOVERNMENT OF NUNAVUT
DEPARTMENT OF COMMUNITY
AND GOVERNMENT SERVICES

PROJECT: RESOLUTE BAY, NUNAVUT
PUMP HOUSE AND TREATMENT PLANT
MECHANICAL & ELECTRICAL DISTRIBUTION UPGRADES

TITLE: MECHANICAL
SIGNAL HILL - FUEL SYSTEM

design by	C.BOURGOGNE	project no.	
drawn by	C.BOURGOGNE	drawing no.	
checked by	P.ST-ONGE		
date	MAY 2010		
scale	AS SHOWN		

M7



NOTES: GENERAL CONTRACTOR TO VERIFY ALL DIMENSIONS WITH FINAL ARCHITECTURAL AND MECHANICAL DRAWINGS. NOTIFY THE ENGINEERS OF ANY ERRORS AND/OR OMISSIONS PRIOR TO CONSTRUCTION FOR DIRECTION. DO NOT SCALE THIS DRAWING.

REVISIONS				
No.	DESCRIPTION	DATE	BY	APP'D
0	ISSUED FOR TENDER	09/07/2010	C.B.	P.S.O.

C. BOURGOGNE
 3740 Richmond Road, Suite 100, K2H 5B9
 T: (613) 596.6454 F: (613) 596.3346
 www.WBBPengineering.com
 430 de l'hôpital bid, suite 210, J8V 1T7
 T: (819) 778.2448 F: (819) 778.5031
 Consulting Engineers

Trow Associates Inc.
 154 Colonnade Road South
 Ottawa, Ont. K2E 7J5
 Tel: (613) 225-9940
 Fax: (613) 225-7337

CLIENT: **GOVERNMENT OF NUNAVUT
 DEPARTMENT OF COMMUNITY
 AND GOVERNMENT SERVICES**

PROJECT: **RESOLUTE BAY, NUNAVUT
 PUMP HOUSE AND TREATMENT PLANT
 MECHANICAL & ELECTRICAL DISTRIBUTION UPGRADES**

TITLE: **MECHANICAL
 CHAR LAKE - FUEL SYSTEM
 SCHEMATIC**

design by	C.BOURGOGNE	project no.	
drawn by	C.BOURGOGNE	drawing no.	M8
checked by	P.ST-ONGE		
date	MAY 2010		
scale	AS SHOWN		

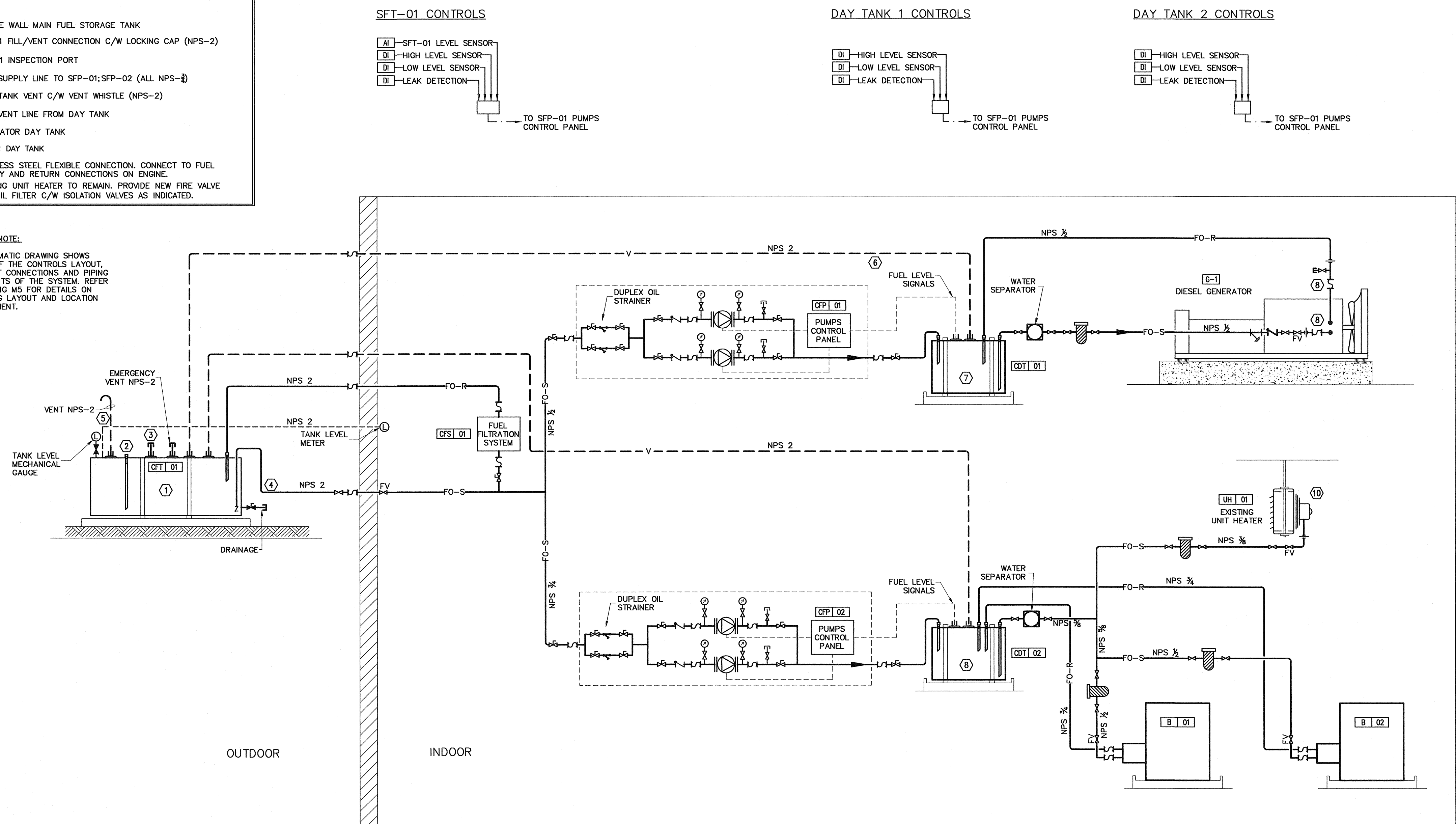
FUEL SYSTEM SCHEMATICS PIPING AND CONTROLS SCHEMATICS

NOTES:

- DOUBLE WALL MAIN FUEL STORAGE TANK
- SFT-01 FILL/VENT CONNECTION C/W LOOKING CAP (NPS-2)
- SFT-01 INSPECTION PORT
- FUEL SUPPLY LINE TO SFP-01; SFP-02 (ALL NPS-2)
- FUEL TANK VENT C/W VENT WHISTLE (NPS-2)
- FUEL VENT LINE FROM DAY TANK
- GENERATOR DAY TANK
- BOILER DAY TANK
- STAINLESS STEEL FLEXIBLE CONNECTION. CONNECT TO FUEL SUPPLY AND RETURN CONNECTIONS ON ENGINE.
- EXISTING UNIT HEATER TO REMAIN. PROVIDE NEW FIRE VALVE AND OIL FILTER C/W ISOLATION VALVES AS INDICATED.

GENERAL NOTE:

THE SCHEMATIC DRAWING SHOWS DETAILS OF THE CONTROLS LAYOUT, EQUIPMENT CONNECTIONS AND PIPING COMPONENTS OF THE SYSTEM. REFER TO DRAWING M5 FOR DETAILS ON THE PIPING LAYOUT AND LOCATION OF EQUIPMENT.



1 CHAR LAKE - FUEL SYSTEM SCHEMATIC
 M8 NTS

FUEL SYSTEM SCHEMATICS PIPING AND CONTROLS SCHEMATICS

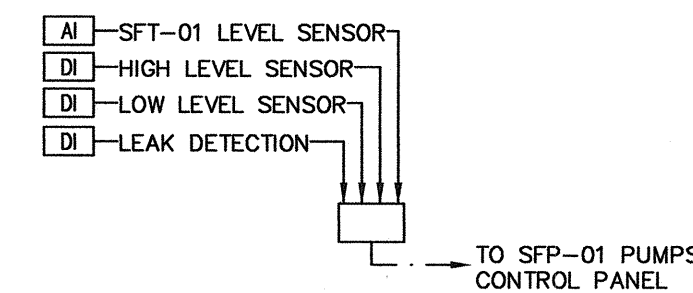
NOTES:

- ① DOUBLE WALL MAIN FUEL STORAGE TANK
- ② SFT-01 FILL/VENT CONNECTION C/W LOCKING CAP (NPS-2)
- ③ SFT-01 INSPECTION PORT
- ④ FUEL SUPPLY LINE TO SFO-01; SFP-02 (ALL NPS-2)
- ⑤ FUEL TANK VENT C/W VENT WHISTLE (NPS-2)
- ⑥ FUEL VENT LINE FROM DAY TANK
- ⑦ GENERATOR DAY TANK
- ⑧ BOILER DAY TANK
- ⑨ STAINLESS STEEL FLEXIBLE CONNECTION, CONNECT TO FUEL SUPPLY AND RETURN CONNECTIONS ON ENGINE.

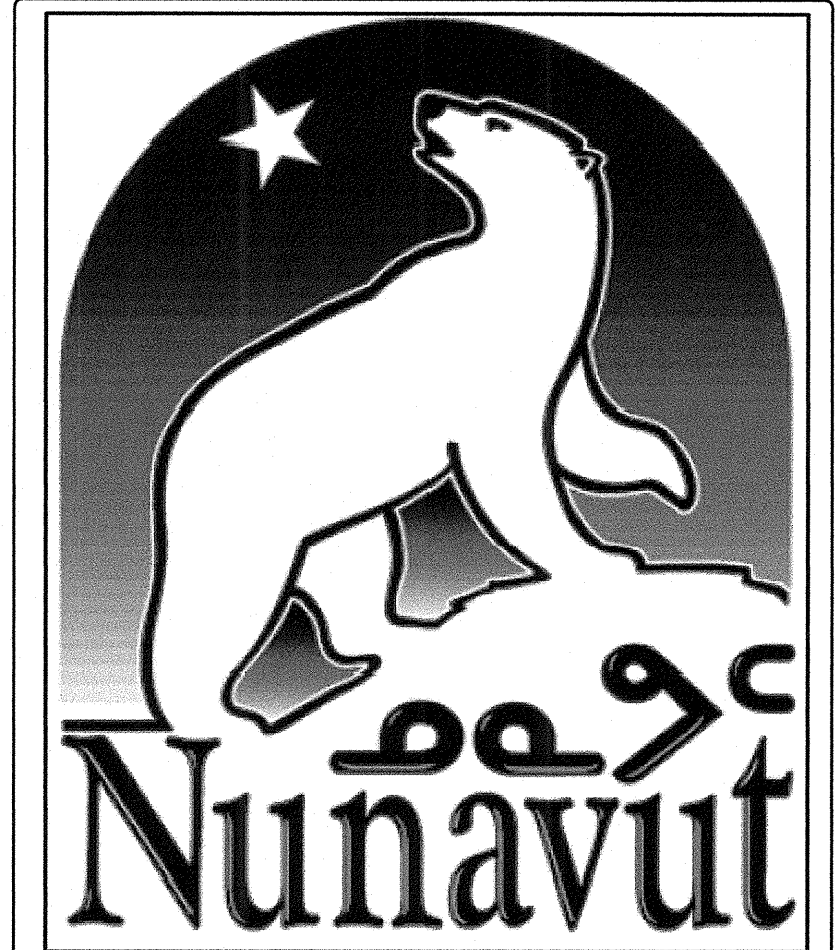
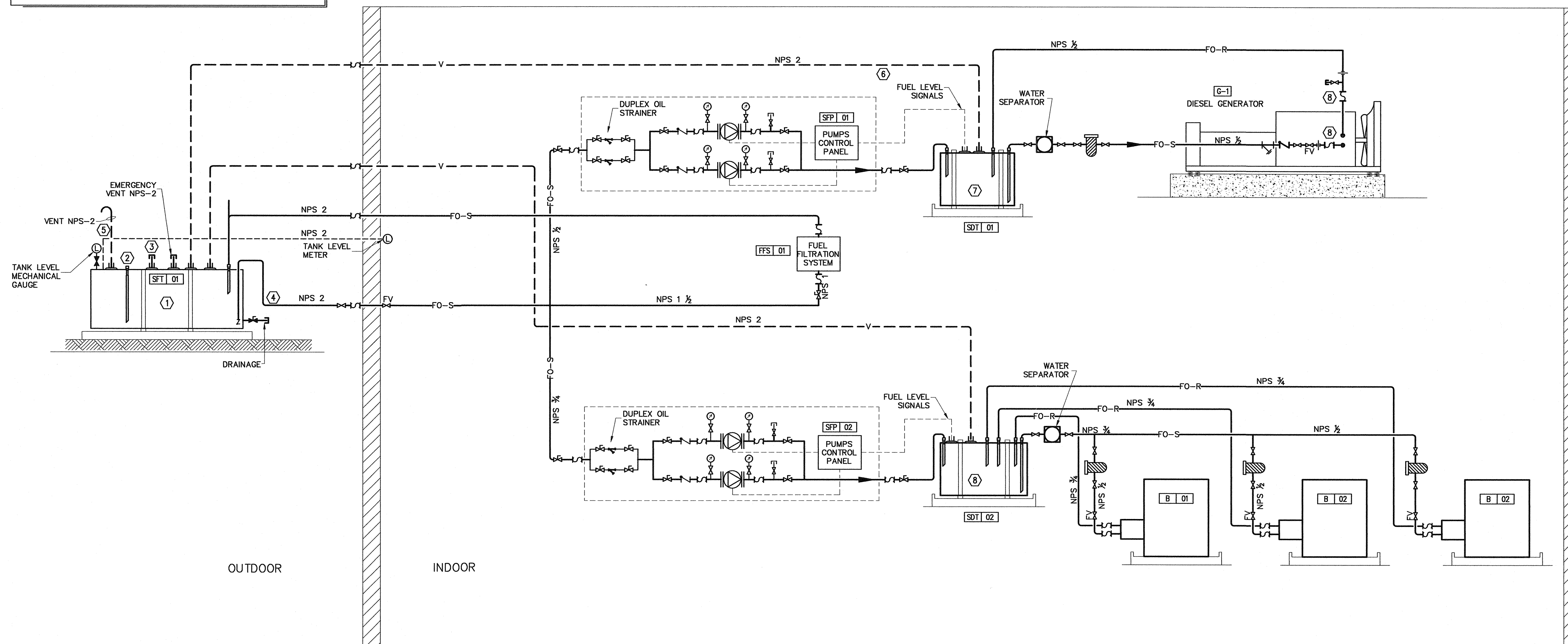
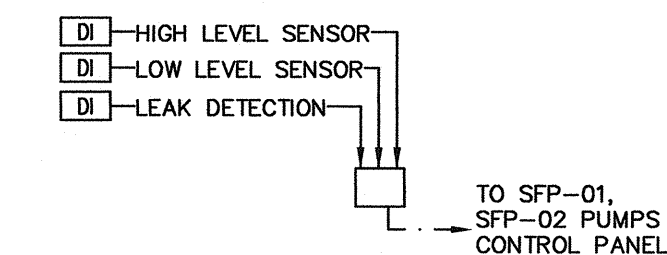
GENERAL NOTE:

THE SCHEMATIC DRAWING SHOWS DETAILS OF THE CONTROLS LAYOUT, EQUIPMENT CONNECTIONS AND PIPING COMPONENTS OF THE SYSTEM. REFER TO DRAWING M7 FOR DETAILS ON THE PIPING LAYOUT AND LOCATION OF EQUIPMENT.

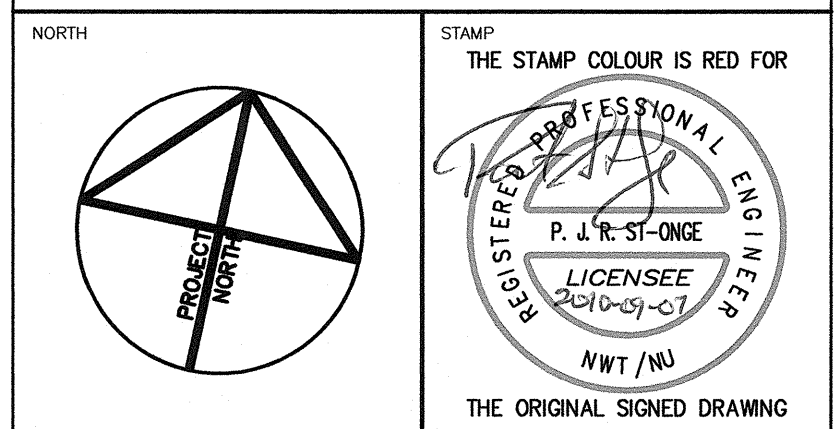
SFT-01 CONTROLS



DAY TANK CONTROLS



PERMIT TO PRACTICE
WOOD BAWAN BOUTILLETTE PARIZEAU INC.
Signature: [Signature]
Date: 07-SEP-2010
PERMIT NUMBER: P657
The Association of Professional Engineers,
Geologists and Geophysicists of the NWT/NJ



NOTES: GENERAL CONTRACTOR TO VERIFY ALL DIMENSIONS WITH FINAL ARCHITECTURAL AND MECHANICAL DRAWINGS. NOTIFY THE ENGINEERS OF ANY ERRORS AND/OR OMISSIONS PRIOR TO CONSTRUCTION FOR DIRECTION. DO NOT SCALE THIS DRAWING.

REVISIONS				
No.	DESCRIPTION	DATE	BY	APP'D
0	ISSUED FOR TENDER	09/07/2010	C.B.	P.S.O.

WOOD BAWAN BOUTILLETTE PARIZEAU
Ottawa : 3740 Richmond Road, Suite 100, K2H 5B9
T.(613) 596.6454 F.(613) 596.3346
www.WBBPEngineering.com
Gatineau : 430 de l'hôpital bld, suite 210, J8V 1T7
T.(819) 778.2448 F.(819) 778.5031
Consulting Engineers

Trow Associates Inc.
154 Colonnade Road South Tel:(613)225-9940
Ottawa, Ont. K2E 7J5 Fax:(613)225-7337

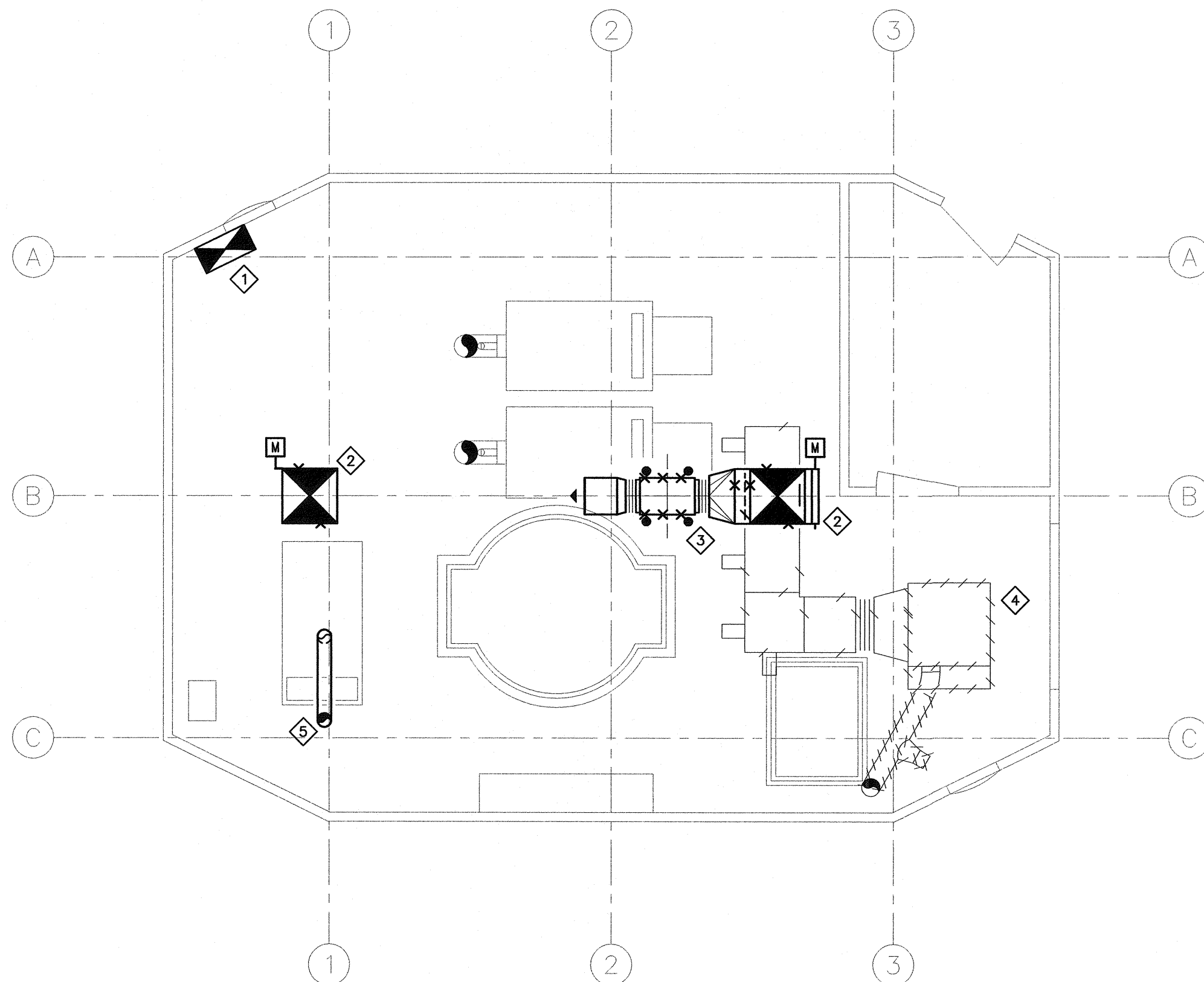
CLIENT: **GOVERNMENT OF NUNAVUT
DEPARTMENT OF COMMUNITY
AND GOVERNMENT SERVICES**

PROJECT: **RESOLUTE BAY, NUNAVUT
PUMP HOUSE AND TREATMENT PLANT
MECHANICAL & ELECTRICAL DISTRIBUTION UPGRADES**

TITLE: **MECHANICAL
SIGNAL HILL - FUEL SYSTEM
SCHEMATIC**

design by	C.BOURGOGNE	project no.	
drawn by	C.BOURGOGNE	drawing no.	M9
checked by	P.ST-ONGE		
date	MAY 2010		
scale	AS SHOWN		

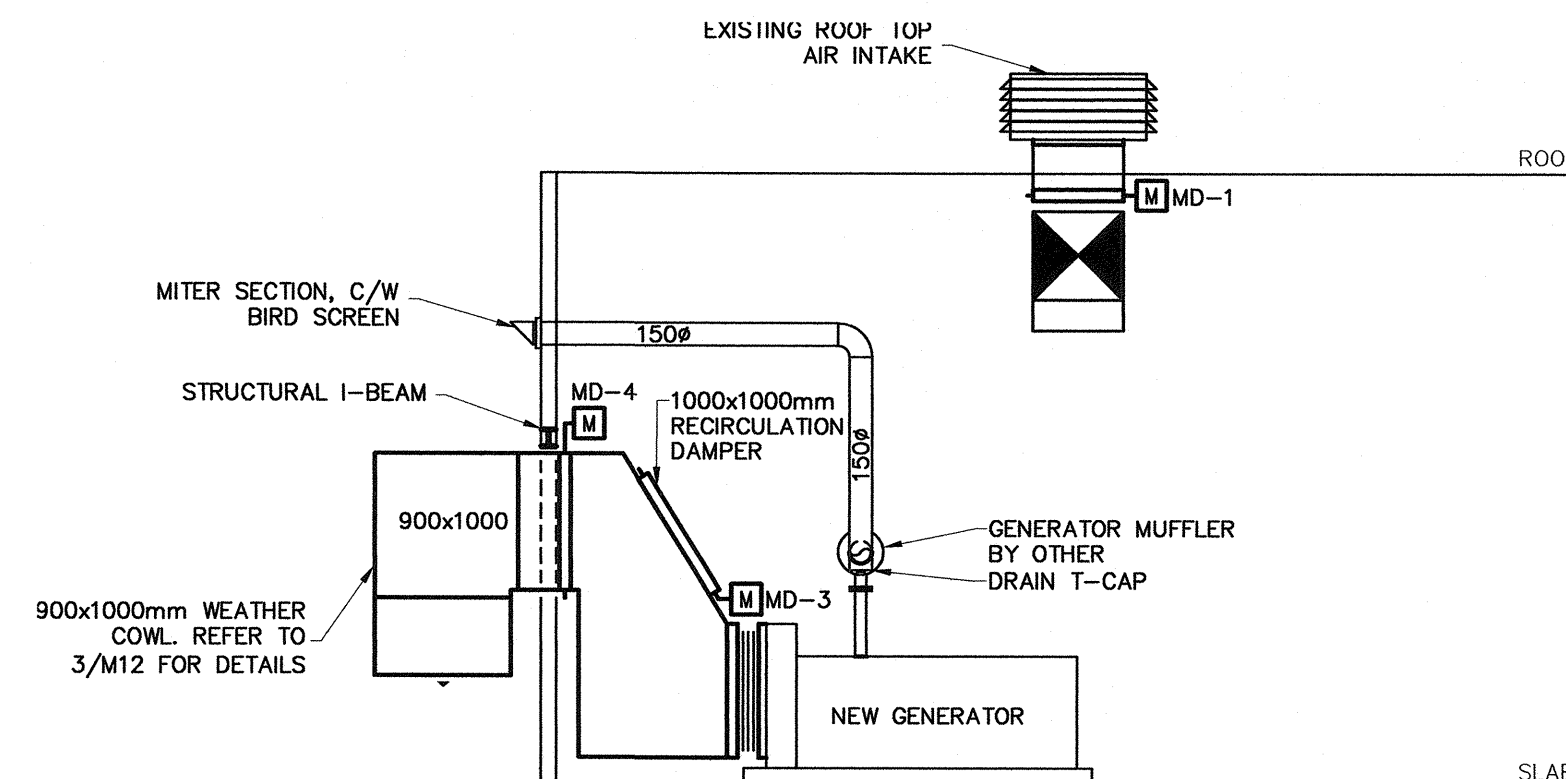
1
M9
SIGNAL HILL - FUEL SYSTEM SCHEMATIC
NTS



1 CHAR LAKE - VENTILATION - EXISTING AND DEMOLITION LAYOUT
M10
SCALE 1:50

DRAWING NOTES:

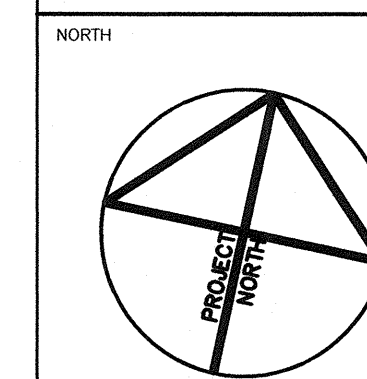
- 1 EXISTING BOILER COMBUSTION AIR SUPPLY TO REMAIN.
- 2 EXISTING MOTORIZED DAMPER TO BE REMOVED. VERTICAL DUCTWORK AND ROOF OPENING TO REMAIN.
- 3 EXISTING SUPPLY FAN TO BE REMOVED.
- 4 EXISTING UNIT HEATER TO REMAIN.
- 5 EXISTING GENERATOR EXHAUST CHIMNEY TO BE REMOVED. PATCH AND MAKE GOOD ROOF OPENING TO MATCH EXISTING.



3 CHAR LAKE - VENTILATION - GENERATOR ELEVATION VIEW
M10
SCALE 1:50



PERMIT TO PRACTICE
WOOD BARNI BOURHLETTE PARIZEAU INC.
Signature: [Signature]
Date: 07-SEP-2010
PERMIT NUMBER: P657
The Association of Professional Engineers
Geologists and Geophysicists of the NWT/NU



STAMP
THE STAMP COLOUR IS RED FOR
REGISTERED PROFESSIONAL ENGINEER
P. J. R. ST-ONGE
LICENSEE
000-09-01
NWT / NU
THE ORIGINAL SIGNED DRAWING

NOTES: GENERAL CONTRACTOR TO VERIFY ALL DIMENSIONS WITH FINAL ARCHITECTURAL AND MECHANICAL DRAWINGS. NOTIFY THE ENGINEERS OF ANY ERRORS AND/OR OMISSIONS PRIOR TO CONSTRUCTION FOR DIRECTION. DO NOT SCALE THIS DRAWING.

0	ISSUED FOR TENDER	07/09/2010	C.B.	P.S.O.
No.	DESCRIPTION	DATE	BY	APP'D
R E V I S I O N S				

Ottawa :
3740 Richmond Road, Suite 100, K2H 5B9
T.(613) 596.6454 F.(613) 596.3346
www.WBBPengineering.com
Gatineau :
430 de l'hôpital bld, suite 210, J8V 1T7
T.(819) 778.2448 F.(819) 778.5031
Consulting Engineers

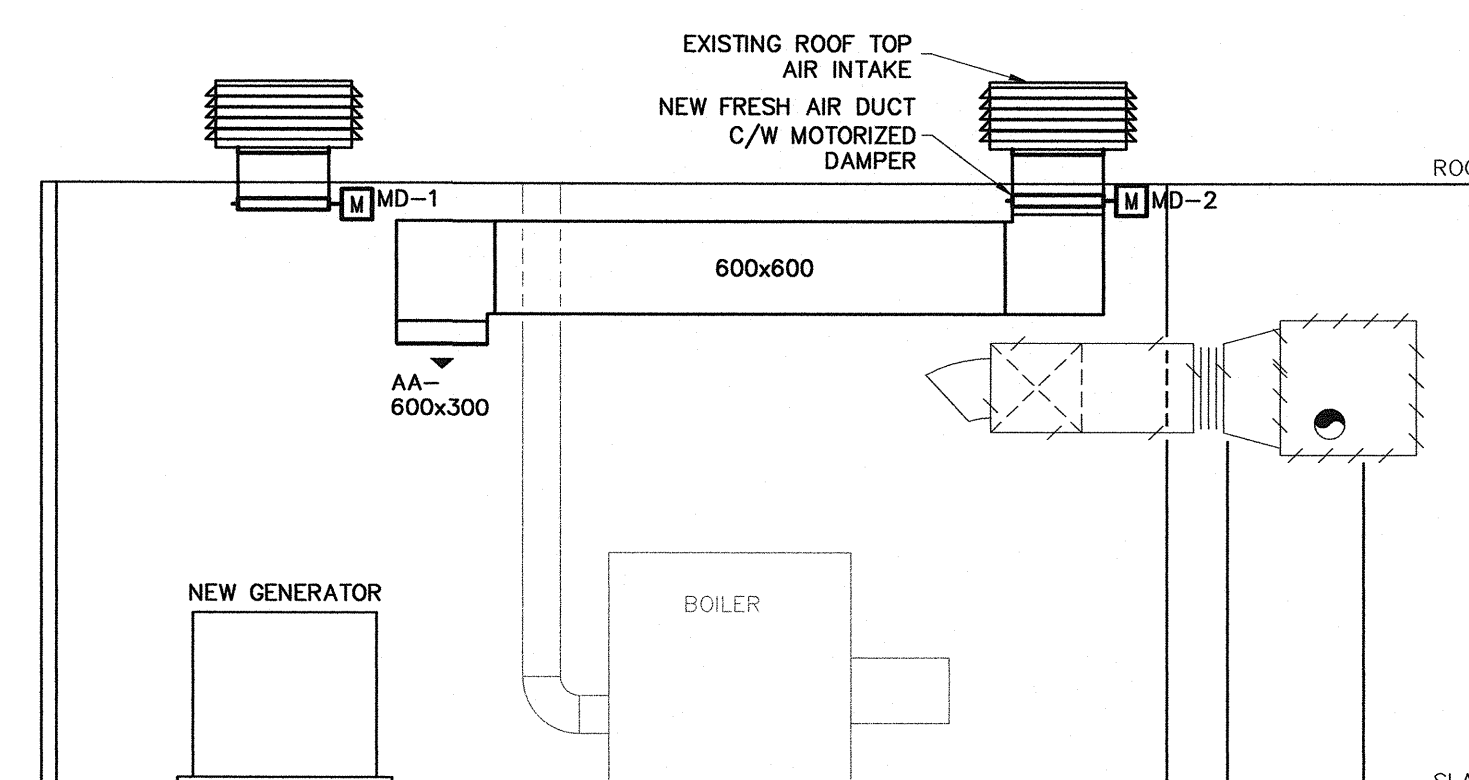
Trow Associates Inc.
154 Colonade Road South
Ottawa, Ont. K2E 7J5
Tel:(613)225-9940
Fax:(613)225-7337

CLIENT
**GOVERNMENT OF NUNAVUT
DEPARTMENT OF COMMUNITY
AND GOVERNMENT SERVICES**

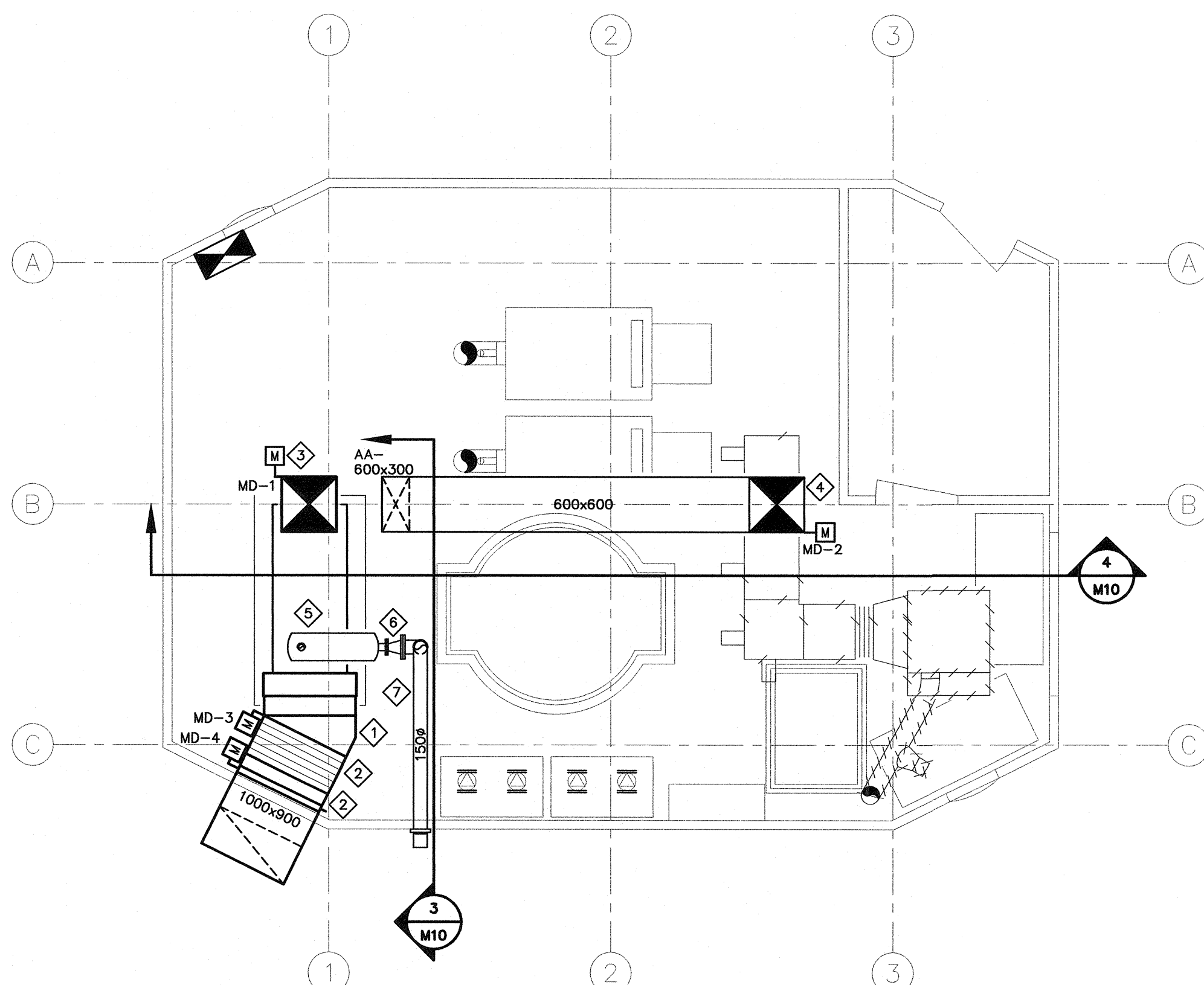
PROJECT
**RESOLUTE BAY, NUNAVUT
PUMP HOUSE AND TREATMENT PLANT
MECHANICAL & ELECTRICAL DISTRIBUTION UPGRADES**

TITLE
**MECHANICAL
CHAR LAKE - VENTILATION**

design by	C.BOURGOGNE	project no.	
drawn by	C.BOURGOGNE	drawing no.	M10
checked by	P.ST-ONGE		
date	MAY 2010		
scale	AS SHOWN		



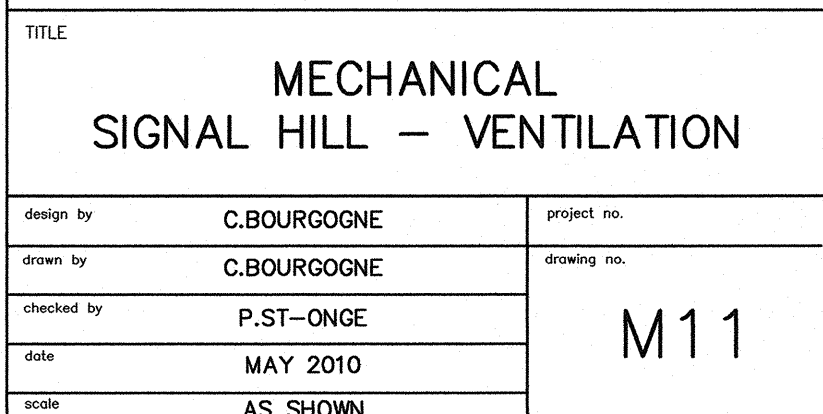
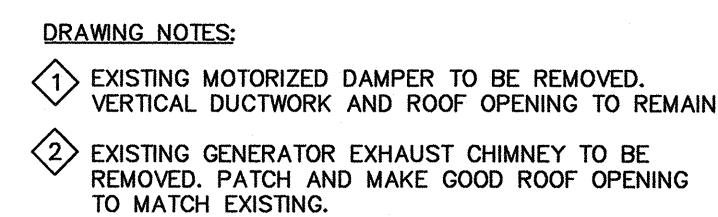
4 CHAR LAKE - VENTILATION - FRESH AIR INLET ELEVATION VIEW
M10
SCALE 1:50

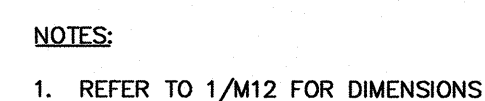
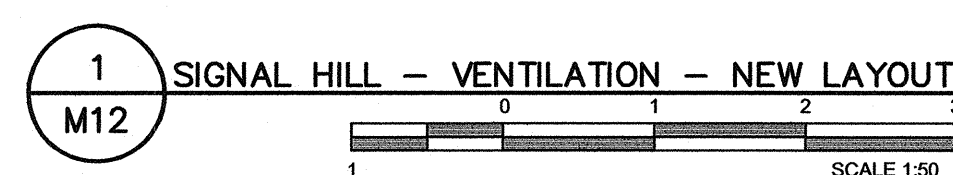


2 CHAR LAKE - VENTILATION - NEW LAYOUT
M10
SCALE 1:50

DRAWING NOTES:

- 1 FABRICATE NEW DUCT ELBOW TO SUIT.
- 2 PROVIDE NEW 1000x450mm DAMPER. REFER TO SPECIFICATIONS AND 3/M10 FOR DETAILS.
- 3 PROVIDE NEW 600x600mm DAMPER. CONNECT TO EXISTING DUCT UP TO ROOF.
- 4 PROVIDE NEW 800x600mm DAMPER C/W NEW DUCTWORK. CONNECT TO EXISTING DUCT UP TO ROOFTOP AIR INTAKE.
- 5 NEW GENERATOR MUFFLER BY OTHER.
- 6 PROVIDE CONCENTRIC INCREASER FROM 750 TO 1500.
- 7 PROVIDE NEW PRE-FABRICATED ENGINE EXHAUST SYSTEM C/W ALL ACCESSORIES. REFER TO 23 35 16 FOR DETAILS.

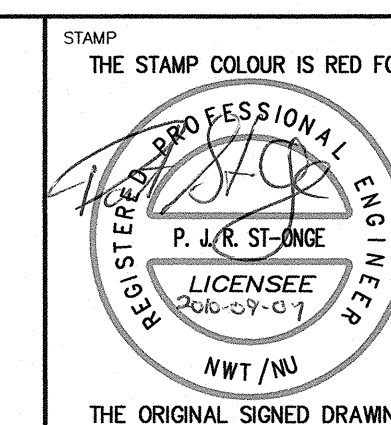




2 TYPICAL COMBUSTION AIR INLET DETAIL
M12 NTS



3 TYPICAL WEATHER COWL DETAIL
M12 NTS



NOTES: GENERAL CONTRACTOR TO VERIFY ALL DIMENSIONS
WITH FINAL ARCHITECTURAL AND MECHANICAL DRAWINGS.
NOTIFY THE ENGINEERS OF ANY ERRORS AND/OR
OMISSIONS PRIOR TO CONSTRUCTION FOR DIRECTION.
DO NOT SCALE THIS DRAWING.


0	ISSUED FOR TENDER	07/09/2010	C.B.	P:
No.	DESCRIPTION	DATE	BY	AF
R E V I S I O N S				

**WOOD
BRIDGE
ENGINEERING
PARTEAU**

Ottawa :
3740 Richmond Road, Suite 100, K2H 5B9
T.(613) 596.6454 F.(613) 596.3346
www.WBBPengineering.com

Gatineau :
430 de l'hôpital bld, suite 210, J8V 1T7
T.(819) 778.2448 F.(819) 778.5031

Consulting Engineers

 **Trow Associates Inc.**
154 Colonnade Road South Tel: (613) 225-9940
Ottawa, Ont. K2E 7J5 Fax: (613) 225-7337

CLIENT
GOVERNMENT OF NUNAVUT
DEPARTMENT OF COMMUNITY
AND GOVERNMENT SERVICES

PROJECT

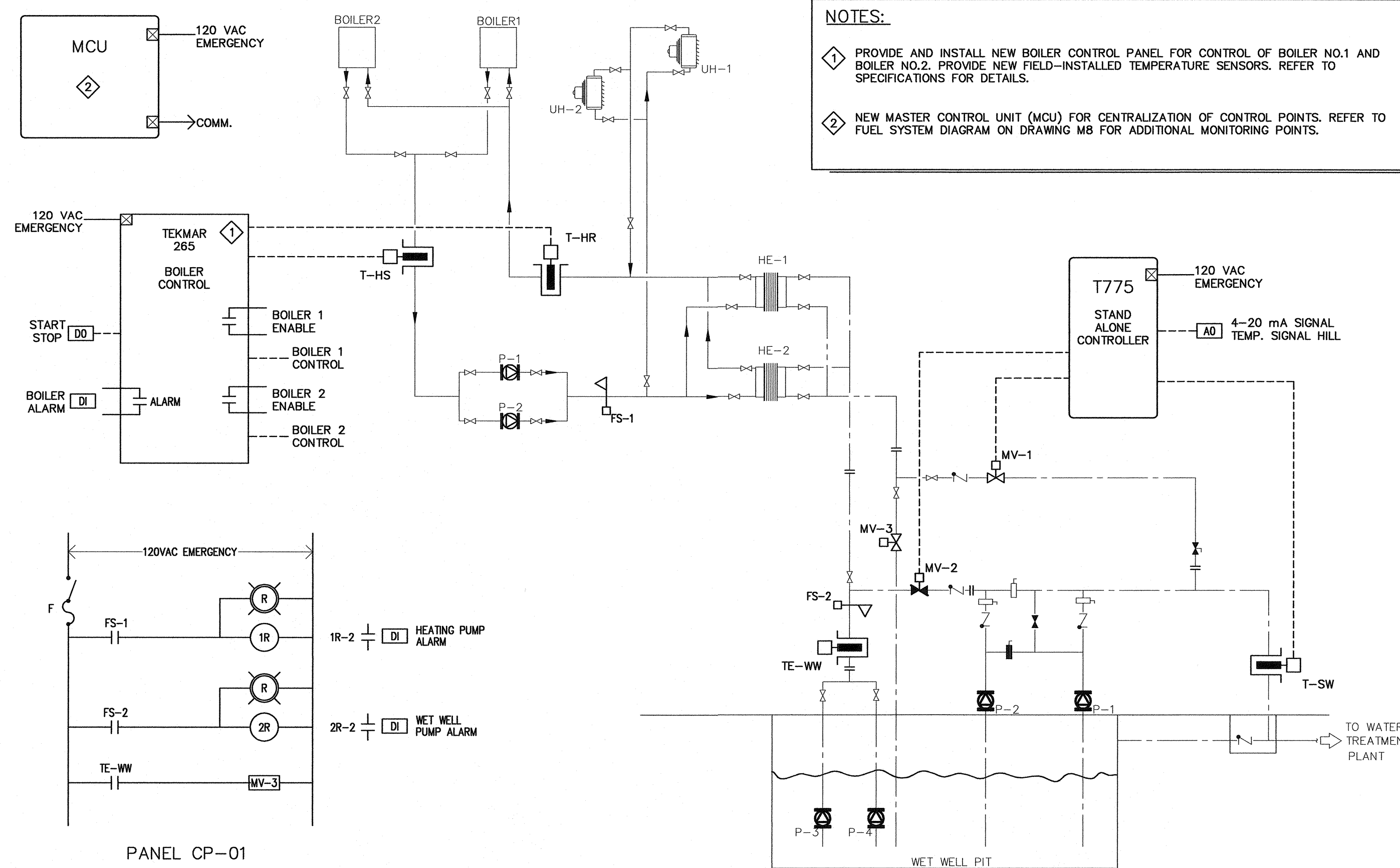
RESOLUTE BAY, NUNAVUT
PUMP HOUSE AND TREATMENT PLANT
MECHANICAL & ELECTRICAL DISTRIBUTION UPGRADES

TITLE

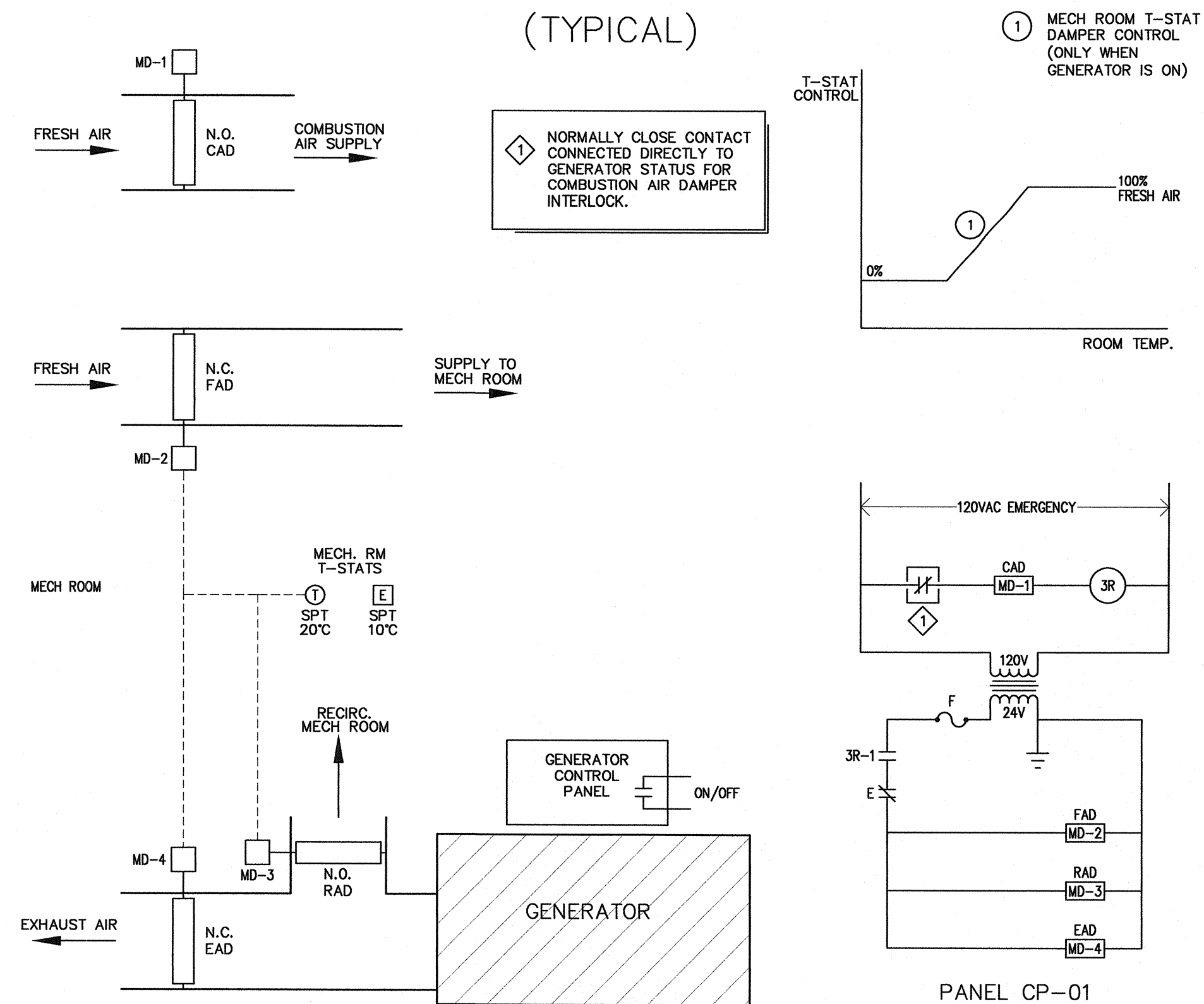
MECHANICAL
SIGNAL HILL - VENTILATION

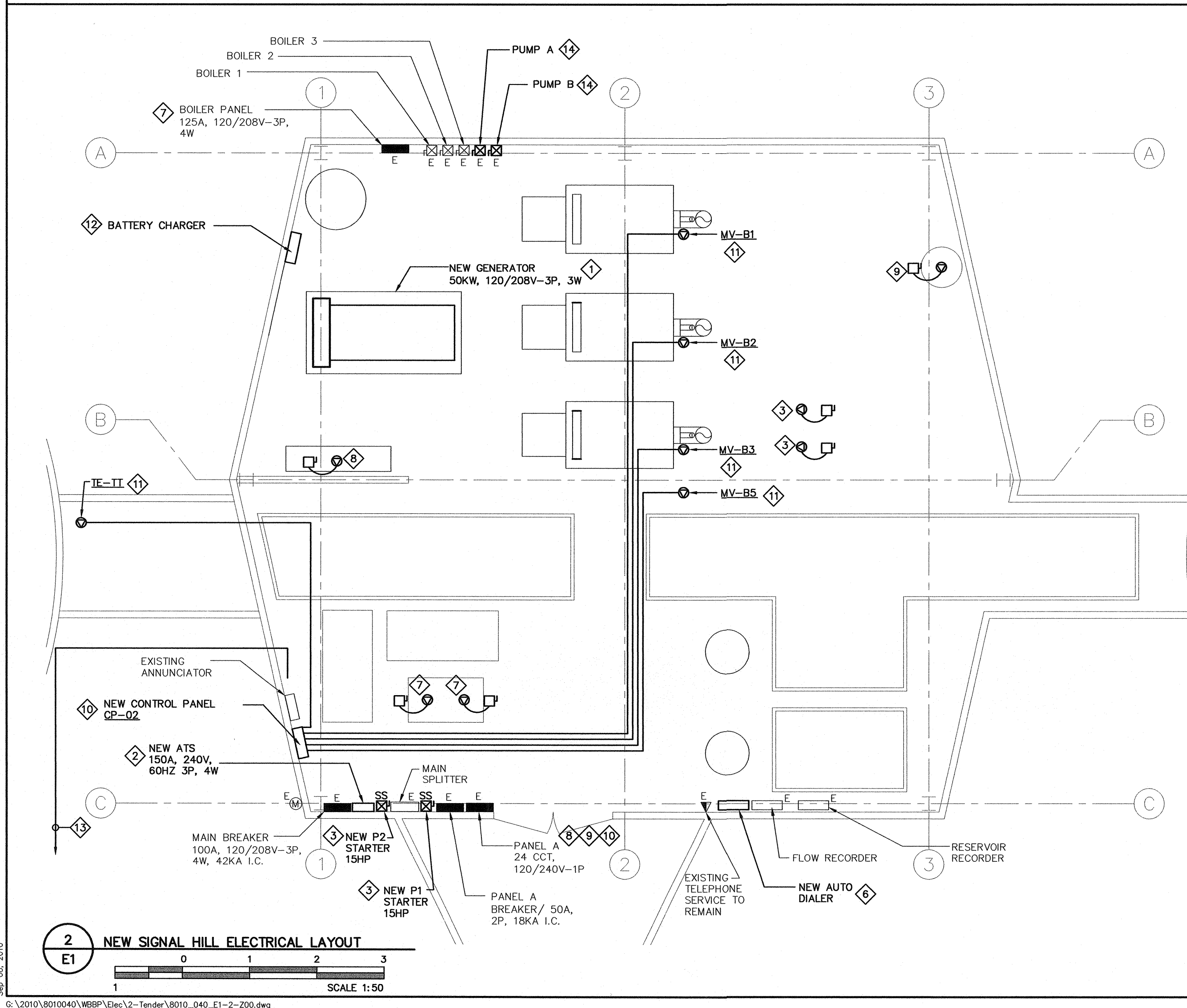
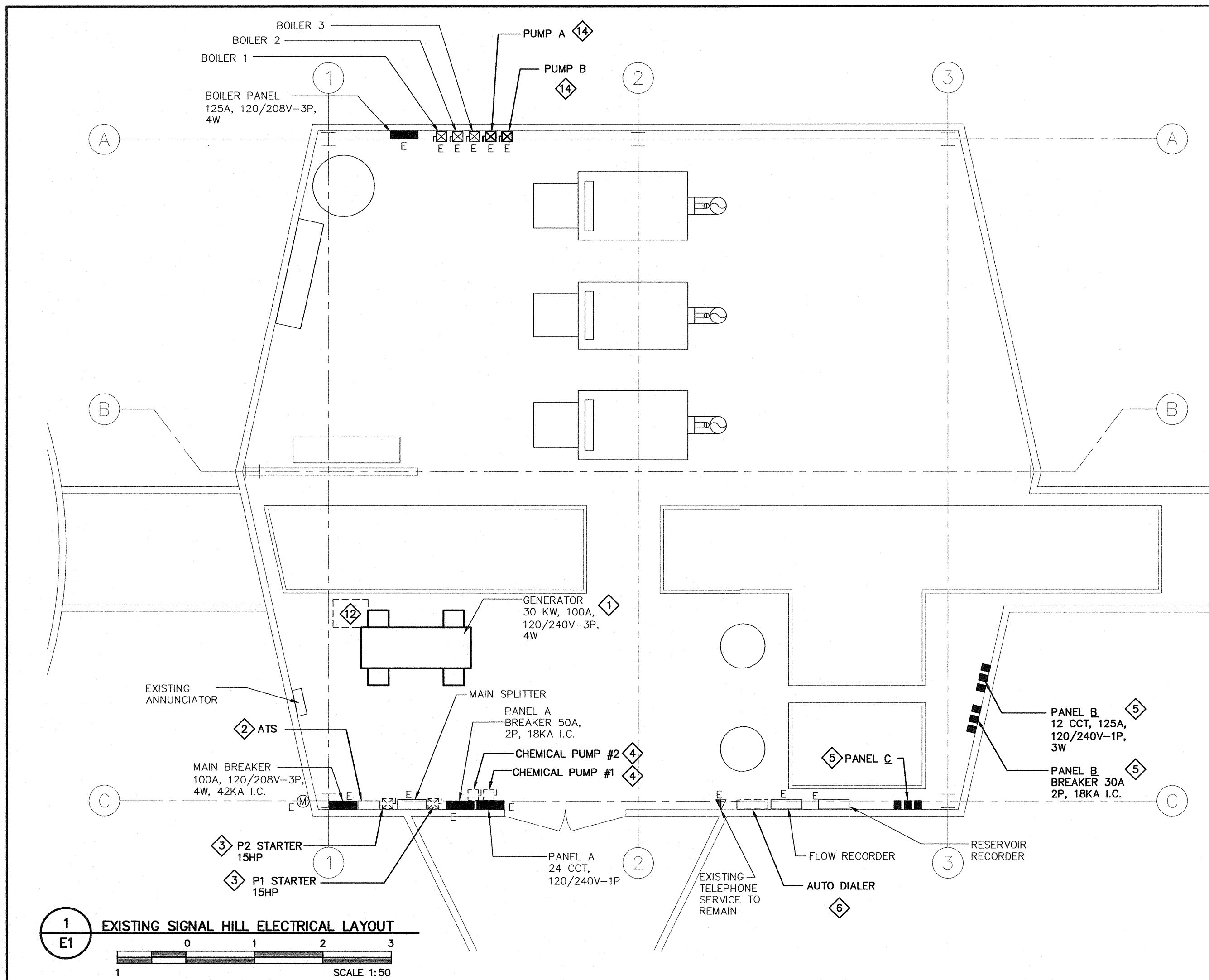
design by	C.BOURGOGNE	project no.
drawn by	C.BOURGOGNE	drawing no.
checked by	P.ST-ONGE	M12
date	MAY 2010	
scale	AS SHOWN	

WATER SYSTEM — CHAR LAKE CONTROLS SCHEMATICS

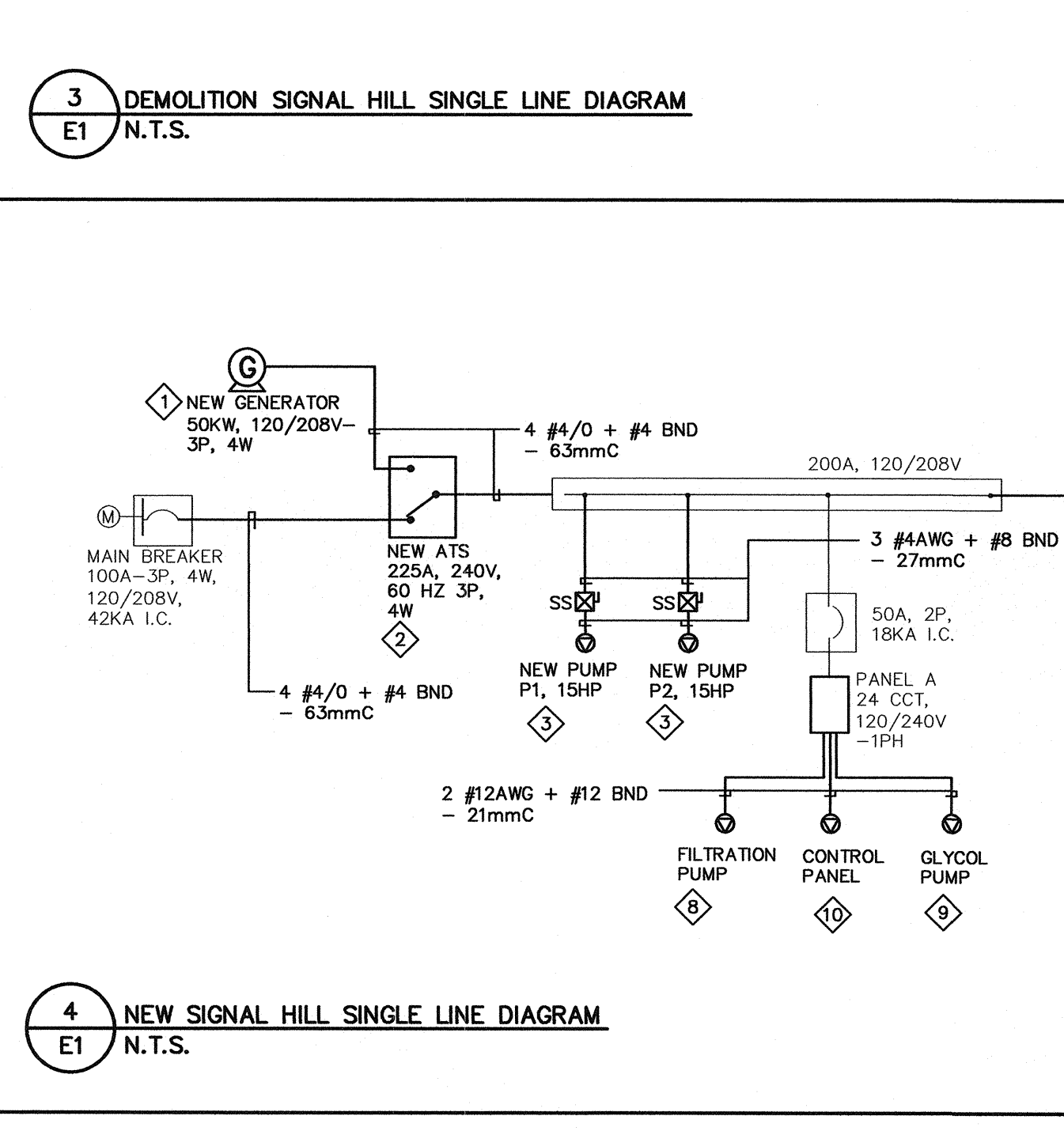
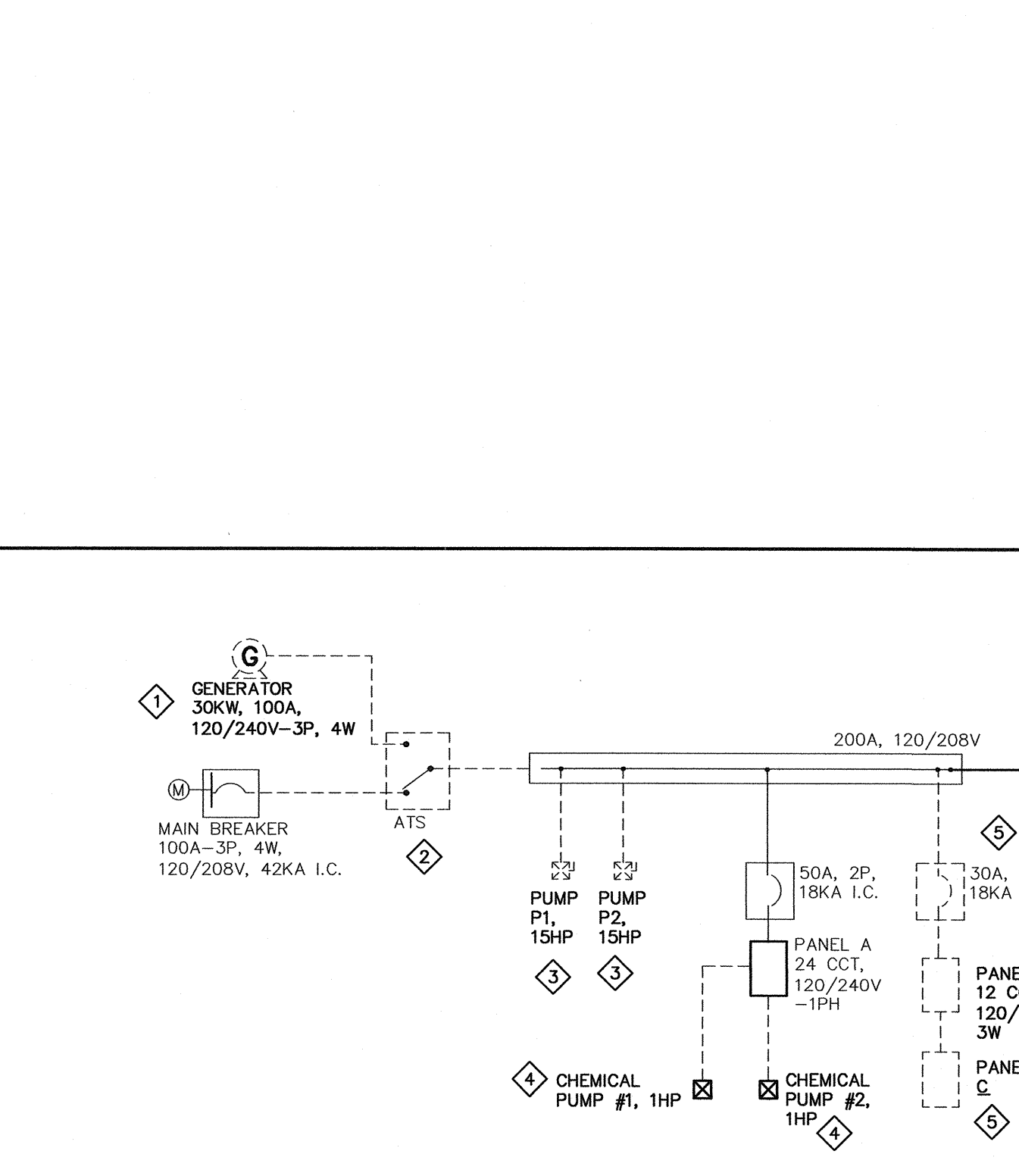


GENERATOR VENTILATION—TYPICAL CHAR LAKE STATION GENERATOR SIGNAL HILL STATION GENERATOR





- GENERAL NOTES:**
- THE MAXIMUM ALLOWED SHUTDOWN PERIOD IS 2 HOURS PER DAY, CONTRACTOR TO PROVIDE SHUTDOWN SCHEDULE FOR ENGINEER APPROVAL PRIOR TO PERFORMING ANY SHUTDOWNS.
- NOTES:**
- CONTRACTOR TO INSTALL NEW 50KW GENERATOR, TO BE SUPPLIED BY GOVERNMENT OF NUNAVUT. CONTRACTOR TO REMOVE AND RECYCLE EXISTING GENERATOR.
 - CONTRACTOR TO INSTALL NEW 225A ATS, TO BE SUPPLIED BY GOVERNMENT OF NUNAVUT. CONTRACTOR TO REMOVE AND RECYCLE EXISTING ATS, CONNECT GENERATOR NEUTRAL WITH NORMAL POWER SYSTEM NEUTRAL.
 - CONTRACTOR TO PROVIDE NEW 15HP, 3Ø, 208V, SOFT START MAGNETIC STARTER. CONTRACTOR TO REMOVE AND RECYCLE EXISTING MAGNETIC STARTERS. PROVIDE CONDUIT AND WIRING CONNECTION TO EXISTING 15 HP PUMPS.
 - CONTRACTOR TO REMOVE AND RECYCLE EXISTING UNUSED CHEMICAL PUMP DISCONNECTS.
 - CONTRACTOR TO REMOVE AND RECYCLE EXISTING UNUSED PANEL B, BREAKER PANEL B, PANEL C AND METER BOX.
 - PROVIDE NEW AUTO-DIALER TO MONITOR 8 INPUTS AND POWER STATUS. UNIT MUST BE EQUIPPED WITH 24 HOUR BATTERY BACKUP. COORDINATE INPUTS WITH MECHANICAL CONTRACTOR, CONNECT TO EXISTING TELEPHONE SERVICE. CONTRACTOR TO REMOVE AND RECYCLE EXISTING AUTO-DIALER. REUSE EXISTING CIRCUIT.
 - PROVIDE NEW 15A, 1P, 10KA I.C. SQUARE D BREAKER IN PANEL A. PROVIDE 2 #12 + #12 BND SINGLE PHASE CONNECTION TO FILTRATION PUMP.
 - PROVIDE NEW 15A, 1P, 10KA I.C. SQUARE D BREAKER IN PANEL A. PROVIDE 2 #12 + #12 BND SINGLE PHASE CONNECTION TO GLYCOL PUMP.
 - PROVIDE NEW 15A, 1P, 10KA I.C. SQUARE D BREAKER IN PANEL A. PROVIDE 2 #12 + #12 BND SINGLE PHASE CONNECTION TO CONTROL PANEL.
 - PROVIDE 2 #12 + #12 BND IN 21mm CONDUIT, DIRECT CONNECTION TO MV-B1, MV-B2, MV-B3, MV-B5 AND TE-II.
 - CONTRACTOR TO INSTALL NEW BATTERY CHARGER. CONTRACTOR TO REMOVE AND RECYCLE EXISTING BATTERY CHARGER. REUSE EXISTING CIRCUIT.
 - PROVIDE 53mm GRC CONDUIT FROM LEVEL METER TO EXTERIOR FUEL STORAGE TANK. COORDINATE EXACT LOCATION WITH DIVISION 23, ALLOW FOR 23 METERS.
 - REWIRE EXISTING 3HP PUMP A AND PUMP B AS INDICATED. EXTEND CONDUIT AND WIRING TO SUIT.



SYMBOL	DESCRIPTION
	300mm x 1200mm FLUORESCENT FIXTURE
	SOFT START STARTER
	DISCONNECT SWITCH
	MAGNETIC STARTER
	DIRECT CONNECTION
	CONTACTOR
	SPLITTER
	TRANSFORMER
	BREAKER PANEL
	QUAD RECEPTACLE
	DOUBLE GANG SWITCH
	SINGLE GANG SWITCH
	DIRECT CONNECTION
	AUTOMATIC TRANSFER SWITCH
	CIRCUIT BREAKER
	HYDRO METER
	TRANSFORMER
	EMERGENCY DIESEL GENERATOR
	REFER TO NOTE 1
	FIXTURE TYPE 'A'
	DENOTES EXISTING TO REMAIN
	DENOTES EXISTING TO BE REMOVED
	BONDING CONDUCTOR

PERMIT TO PRACTICE
WOOD BARNAN BOUTHALETTE PAREAU INC.
Signature: [Signature]
Date: 07-SEP-2010
PERMIT NUMBER: P657
The Association of Professional Engineers, Geologists and Geophysicists of the NWT/NU

NOTES: GENERAL CONTRACTOR TO VERIFY ALL DIMENSIONS WITH FINAL ARCHITECTURAL AND MECHANICAL DRAWINGS. NOTIFY THE ENGINEERS OF ANY ERRORS AND/OR OMISSIONS PRIOR TO CONSTRUCTION FOR DIRECTION. DO NOT SCALE THIS DRAWING.

ISSUED FOR TENDER	09/07/10	C.L.W./C.L.W.
DESCRIPTION	DATE	BY
REVISIONS		
0		
No.		

WOOD BARNAN BOUTHALETTE PAREAU INC.
Ottawa : 3740 Richmond Road, Suite 100, K2H 5B9
T.(613) 596.6454 F.(613) 596.3346
www.WBBPengineering.com
Gatineau : 430 de l'hôpital bld, suite 210, J8V 1T7
T.(819) 778.2448 F.(819) 778.5031
Consulting Engineers

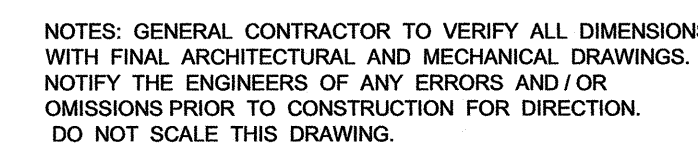
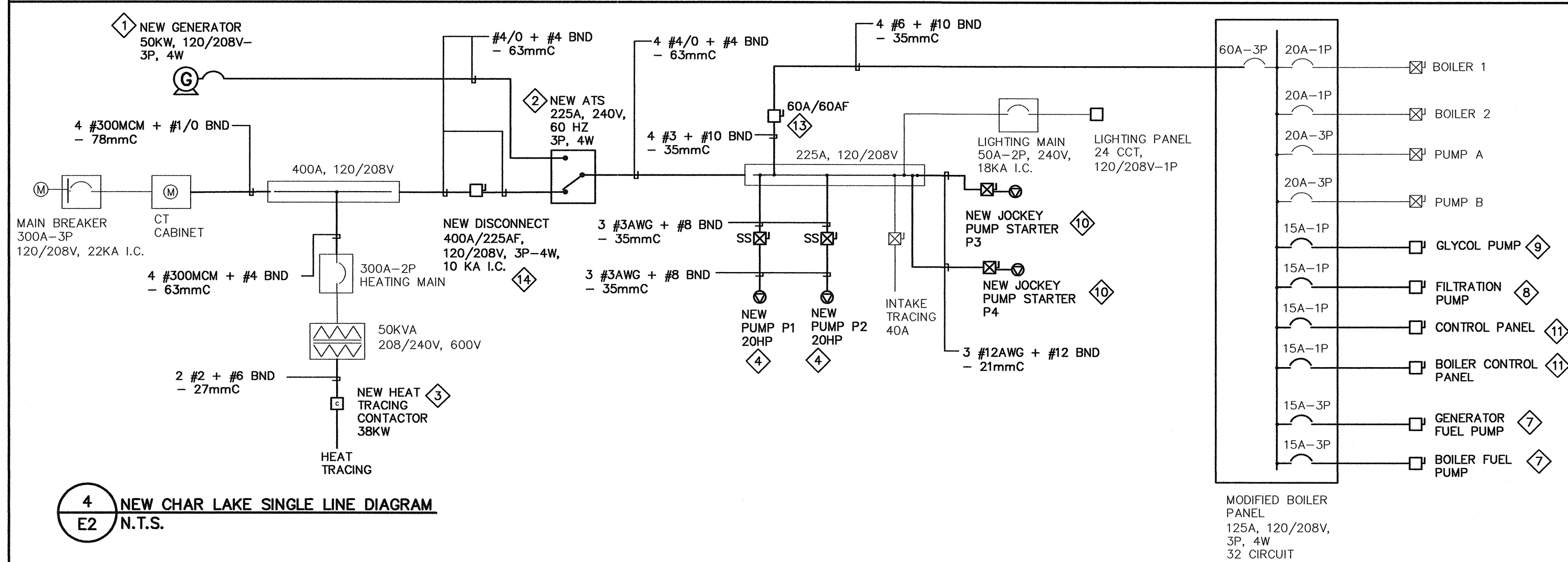
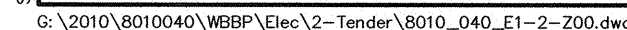
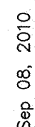
Trow Associates Inc.
154 Colonnade Road South
Ottawa, Ont. K2E 7J5
Tel:(613)225-9940
Fax:(613)225-7337

CLIENT
GOVERNMENT OF NUNAVUT
DEPARTMENT OF COMMUNITY
AND GOVERNMENT SERVICES

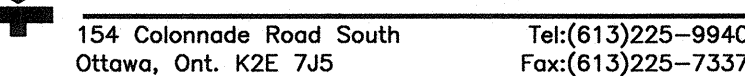
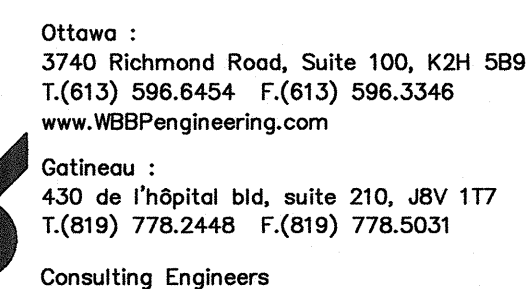
PROJECT
RESOLUTE BAY, NUNAVUT
PUMP HOUSE AND TREATMENT PLANT
MECHANICAL & ELECTRICAL DISTRIBUTION UPGRADES

TITLE
SIGNAL HILL ELECTRICAL
DISTRIBUTION AND SINGLE LINE

design by	A.WADDELL	project no.	
drawn by	A.MIKHAIEL	drawing no.	E1
checked by	C.WOOD		
date	MAY 2010		
scale	AS SHOWN		



O	ISSUED FOR TENDER	08/07/10	C.L.W.	C.L.
No.	DESCRIPTION	DATE	BY	APPROVED
	R E V I S I O N S			



CLIENT
GOVERNMENT OF NUNAVUT
DEPARTMENT OF COMMUNITY
AND GOVERNMENT SERVICES

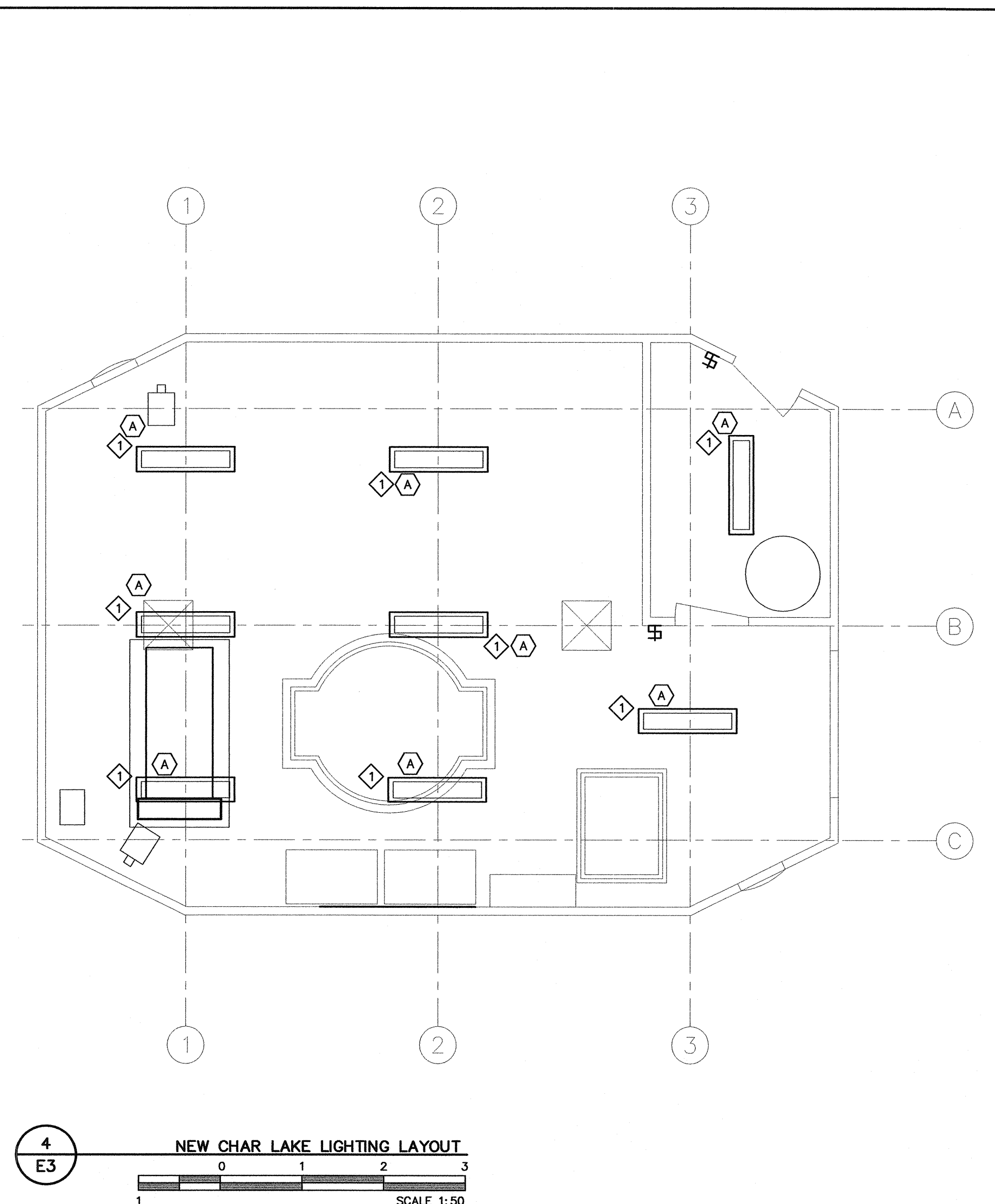
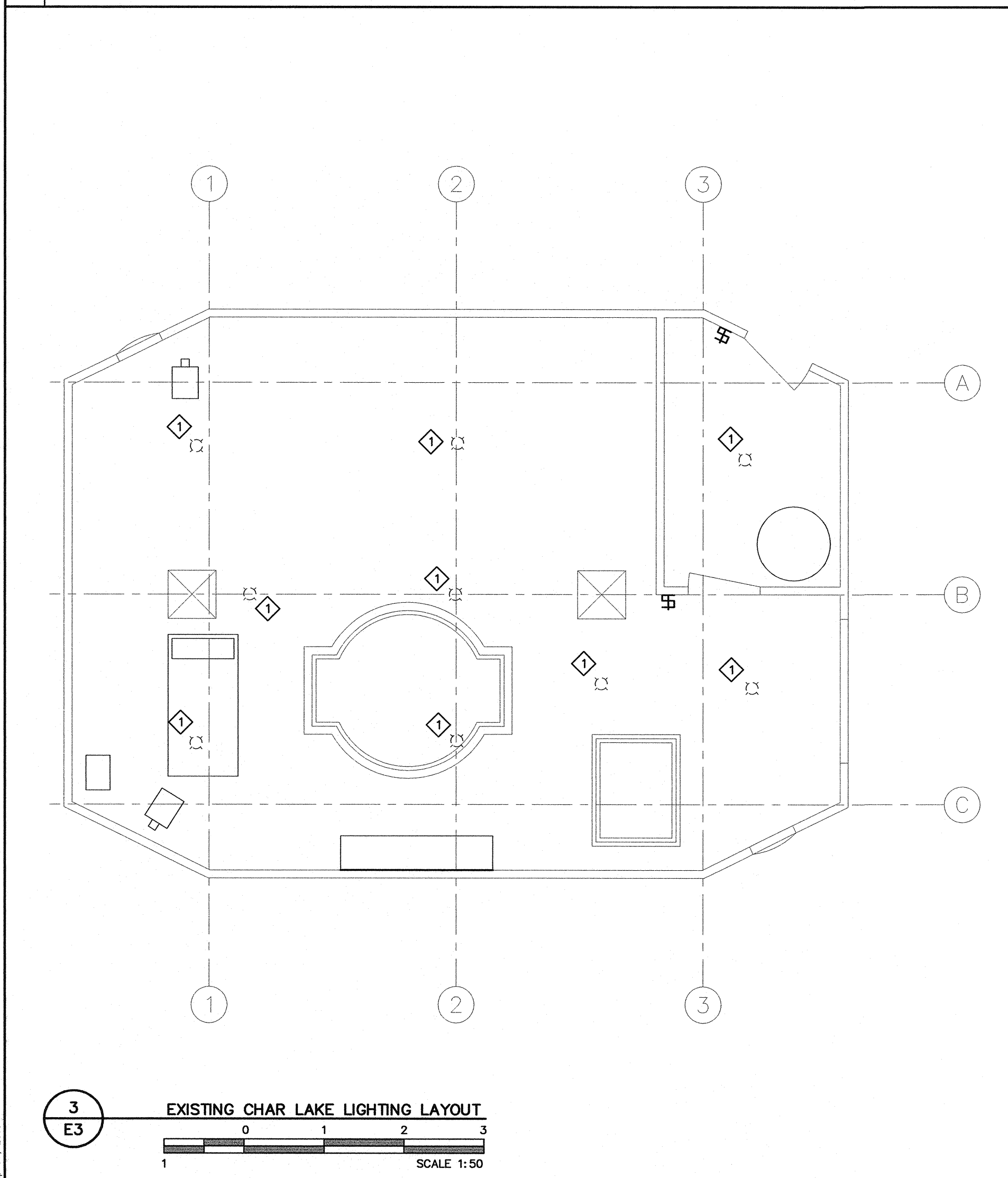
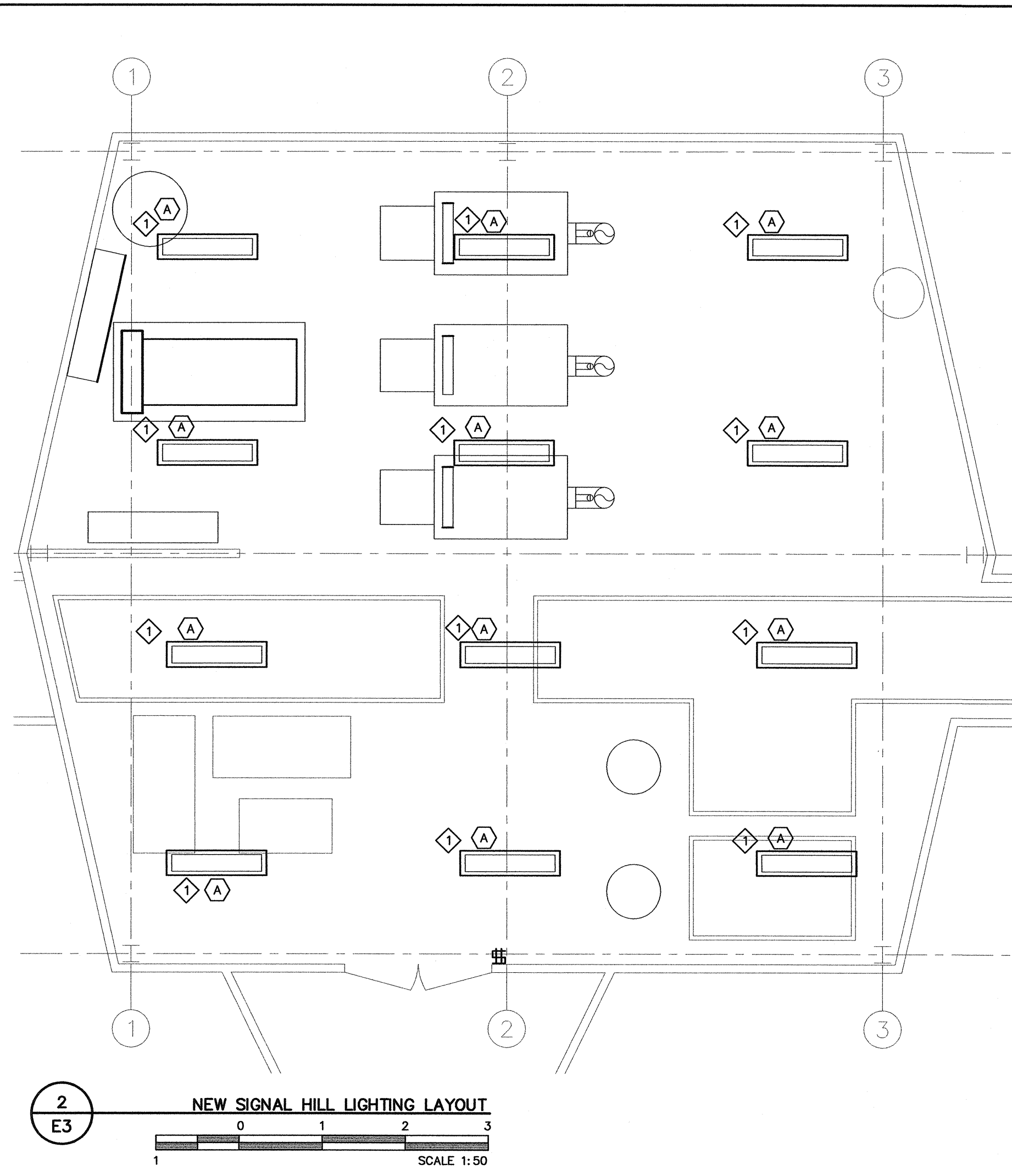
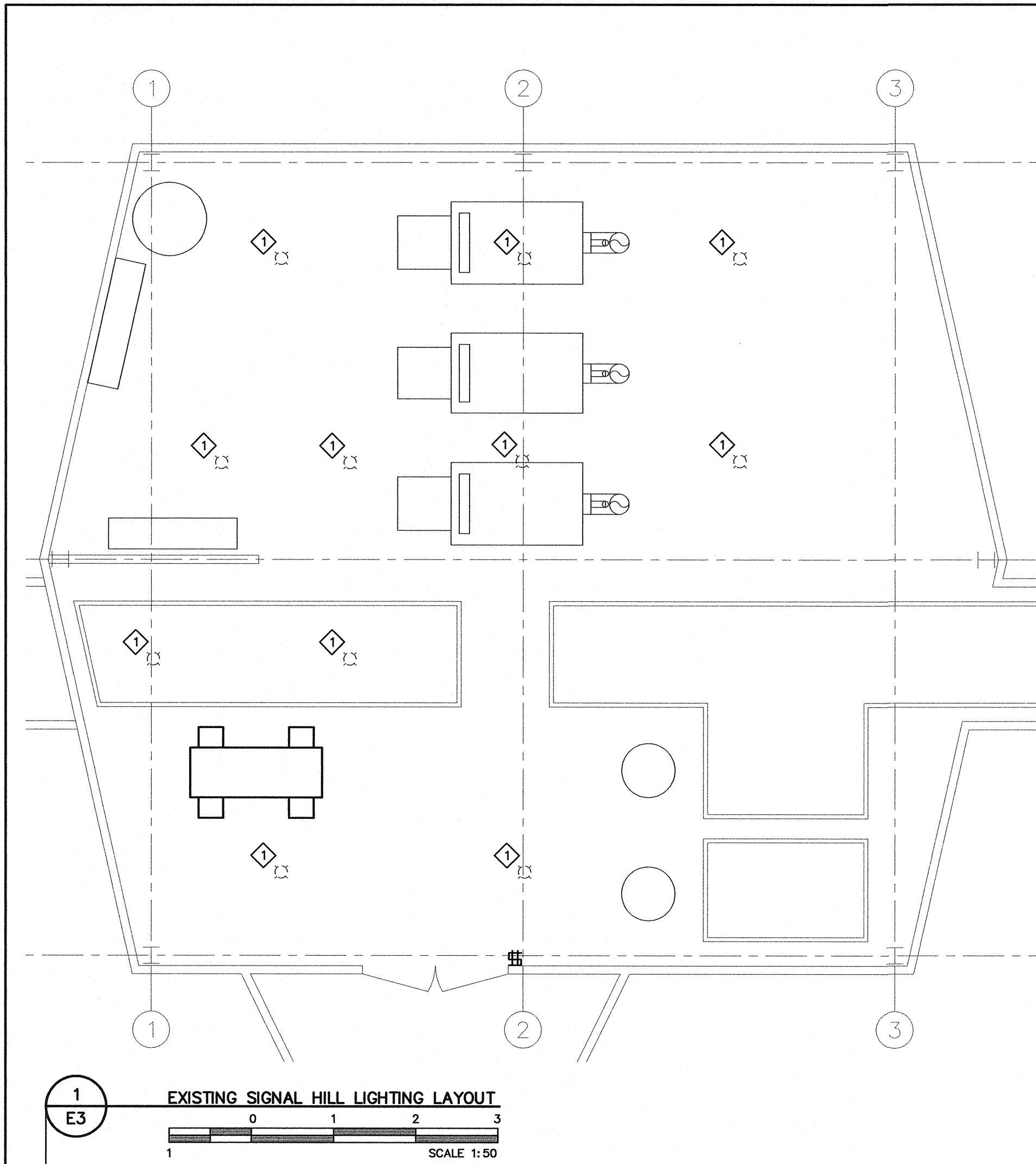
PROJECT

RESOLUTE BAY, NUNAVUT
PUMP HOUSE AND TREATMENT PLANT
MECHANICAL & ELECTRICAL DISTRIBUTION UPGRADES

CHAR LAKE ELECTRICAL
DISTRIBUTION AND SINGLE LINE

design by	A. WADDELL	project no.
drawn by	A. MIKHAIEL	drawing no.
checked by	C. WOOD	E2
date	MAY 2010	
scale	AS SHOWN	

E2



LEGEND	
SYMBOL	DESCRIPTION
	300mm x 1200mm FLUORESCENT FIXTURE
	INCANDESCENT FIXTURE
	SOFT START STARTER
	DISCONNECT SWITCH
	MAGNETIC STARTER
	DIRECT CONNECTION
	SPLITTER
	TRANSFORMER
	BREAKER PANEL
	QUAD RECEPTACLE
	DOUBLE GANG SWITCH
	SINGLE GANG SWITCH
	DIRECT CONNECTION
	AUTOMATIC TRANSFER SWITCH
	CIRCUIT BREAKER
	TRANSFORMER
	EMERGENCY DIESEL GENERATOR
	REFER TO NOTE 1
	DENOTES EXISTING TO REMAIN
	DENOTES EXISTING TO BE REMOVED
	FIXTURE TYPE 'A'

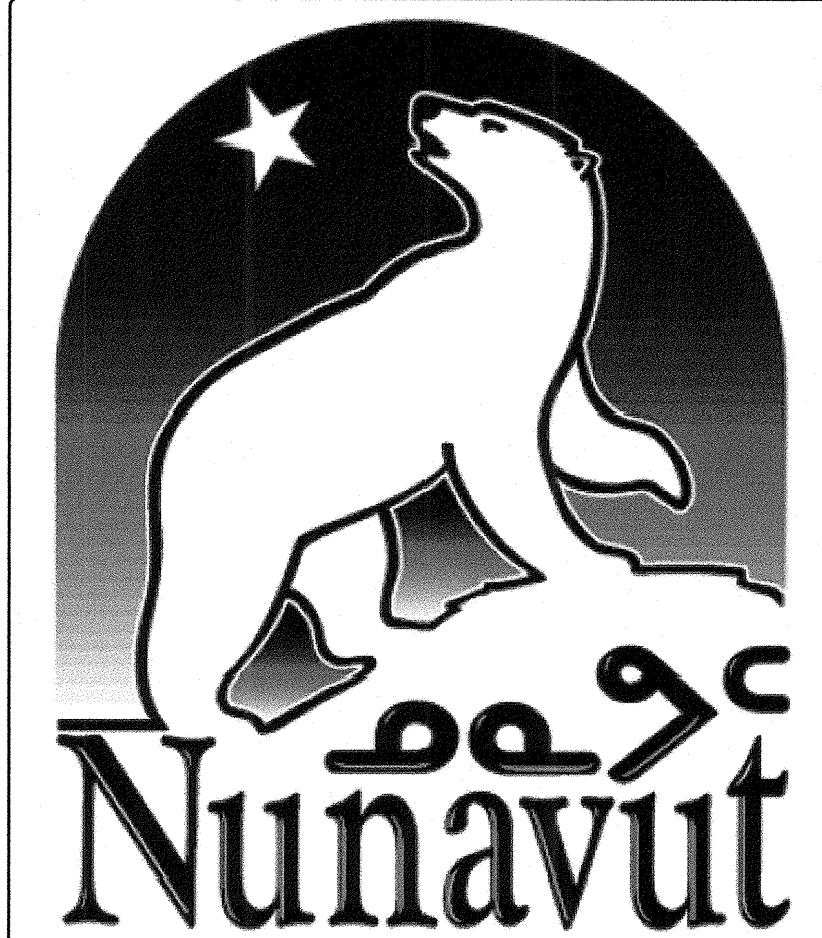
FIXTURE SCHEDULE		
SYMBOL	TYPE	DESCRIPTION
	A	1321mm x 194mm VAPOUR PROOF FLUORESCENT - 2 x 32W T-8 LAMPS - FIBREGLASS REINFORCED POLYESTER HOUSING - SMOOTH VIRGIN ACRYLIC LENS WITH MOLDED CAM ACTION LATCHES AND SILICONE GASKETS - 120V ELECTRONIC BALLAST - SURFACE MOUNTED - WIRE GUARD AND CHAIN SUPPORTS

GENERAL NOTES:

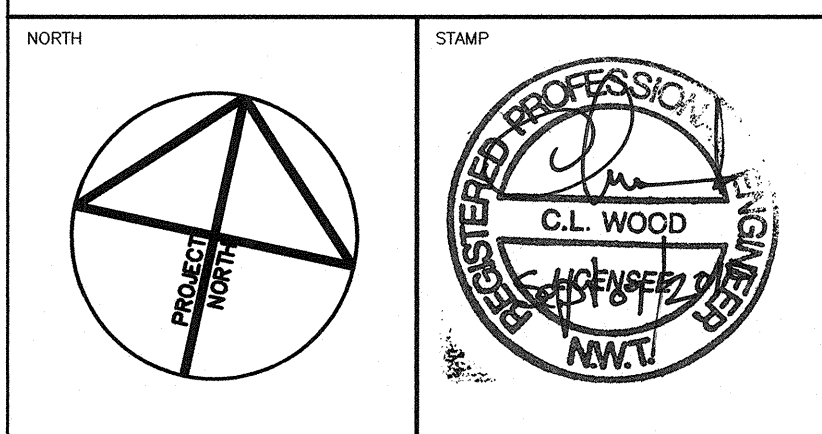
1. ALIGN LUMINAIRES MOUNTED IN CONTINUOUS ROWS TO FORM STRAIGHTS UNINTERRUPTED LINES
2. ALIGN LUMINAIRES MOUNTED INDIVIDUALLY.

NOTES:

- ◆ PROVIDE NEW INDUSTRIAL FLUORESCENT LIGHTING FIXTURES, LOCATIONS TO BE DETERMINED ON SITE. FIXTURES TO BE OF TYPE A, WITH 800mm SUSPENSION CABLES. RECONNECT LIGHTING TO EXISTING CIRCUIT. CONTRACTOR TO REMOVE AND RECYCLE EXISTING INCANDESCENTS.



PERMIT TO PRACTICE
WOOD BARNI BOUTILLETTE PARIZAU INC.
Signature _____
Date 07-SEP-2010
PERMIT NUMBER: P857
The Association of Professional Engineers,
Geologists and Geophysicists of the NWT/NU



NOTES: GENERAL CONTRACTOR TO VERIFY ALL DIMENSIONS WITH FINAL ARCHITECTURAL AND MECHANICAL DRAWINGS. NOTIFY THE ENGINEERS OF ANY ERRORS AND/OR OMISSIONS PRIOR TO CONSTRUCTION FOR DIRECTION. DO NOT SCALE THIS DRAWING.

REVISIONS				
No.	DESCRIPTION	DATE	BY	APP'D
0	ISSUED FOR TENDER	09/07/10	C.L.W./C.L.W.	

Ottawa :
3740 Richmond Road, Suite 100, K2H 5B9
T.(613) 596.6454 F.(613) 596.3346
www.WBPEngineering.com
Gatineau :
430 de l'hôpital bid, suite 210, J8V 1T7
T.(819) 778.2448 F.(819) 778.5031
Consulting Engineers

Trow Associates Inc.
154 Colonnade Road South
Ottawa, Ont. K2E 7J5
Tel:(613)225-9940
Fax:(613)225-7337

CLIENT
**GOVERNMENT OF NUNAVUT
DEPARTMENT OF COMMUNITY
AND GOVERNMENT SERVICES**

PROJECT
**RESOLUTE BAY, NUNAVUT
PUMP HOUSE AND TREATMENT PLANT
MECHANICAL & ELECTRICAL DISTRIBUTION UPGRADES**

TITLE
**CHAR LAKE AND SIGNAL HILL
LIGHTING PLANS**

design by	A.WADDELL	project no.	
drawn by	A.MIKHAIEL	drawing no.	E3
checked by	C.WOOD		
date	MAY 2010		
scale	AS SHOWN		