

SOLAR WALLS MODIFICATION

PRESCOTT, ONTARIO
MECHANICAL/ELECTRICAL

GENERAL LEGEND

SYMBOL	DESCRIPTION
	EXISTING PIPING/DUCTWORK/EQUIPMENT
	EXISTING PIPING/DUCTWORK/EQUIPMENT TO BE REMOVED/RELOCATED
	NEW/RELOCATED PIPING/DUCTWORK/EQUIPMENT
(E)	DENOTES EXISTING EQUIPMENT
(N)	DENOTES NEW EQUIPMENT
(X)	DENOTES EQUIPMENT TO BE REMOVED

MECHANICAL LEGEND

SYMBOL	DESCRIPTION
—NG—	NATURAL GAS PIPING
	PIPING OFFSET
	BRANCH PIPING DOWN
	PIPING DOWN
	PIPING UP
	REDUCER
	FLOW
	CAP
	DRIP LEG
	ISOLATION VALVES
	UNION
	RECTANGULAR DUCTWORK
	ROUND DUCTWORK
	ACOUSTICALLY LINED DUCTWORK (RETURN OR SUPPLY)
	RECTANGULAR TO ROUND TRANSITION
	FLEXIBLE CONNECTION

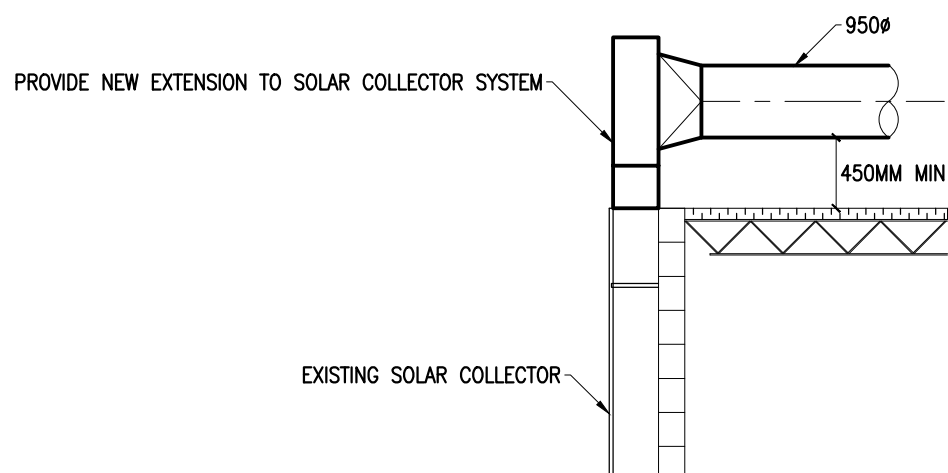


1 KEY PLAN
ME1 SCALE = N.T.S.

MAKEUP AIR UNIT SCHEDULE

TAG	LOCATION	AREA SERVED	FAN DATA			GAS HEATING SECTION		ELECTRICAL DATA		BASIS OF DESIGN
			AIR FLOW (L/s)	EXTERNAL STATIC PRESSURE (Pa)	MOTOR SIZE (HP)	TYPE	INPUT (kW)	FLA/MCA/MOC	V/PH/Hz	
MAU2	BUOY BUILDING ROOF	BUOY BUILDING	5660	370	15	NATURAL GAS	410	-/-/-	575/3/60	ENGINEERED AIR HE131, BOUSQUET, ICE WESTERN
MAU3	WELDING SHOP CEILING	WELDING EXHAUST	705	370	2	NATURAL GAS	52	-/-/-	575/3/60	ENGINEERED AIR HE20, BOUSQUET, ICE WESTERN
MAU4	WELDING SHOP CEILING	WELDING EXHAUST	705	370	2	NATURAL GAS	52	-/-/-	575/3/60	ENGINEERED AIR HE20, BOUSQUET, ICE WESTERN
MAU5	WELDING SHOP CEILING	WELDING EXHAUST	705	370	2	NATURAL GAS	52	-/-/-	575/3/60	ENGINEERED AIR HE20, BOUSQUET, ICE WESTERN
MAU6	WELDING SHOP CEILING	WELDING EXHAUST	705	370	2	NATURAL GAS	52	-/-/-	575/3/60	ENGINEERED AIR HE20, BOUSQUET, ICE WESTERN

NOTES: 1. FOR DETAILS REFER TO SPECIFICATIONS.
2. MANUFACTURER NAME & MODEL NUMBER REPRESENTS ACCEPTABLE QUALITY STANDARD ONLY.



A SECTION A-A
M1 SCALE = N.T.S.

DESCRIPTION OF MECHANICAL WORK -- BUOY BUILDING:

- REMOVE EXISTING MAKE-UP AIR UNIT ON BUOY BUILDING ROOF. GAS PIPING AND ROOF CURB TO REMAIN.
- REPAIR EXISTING SOLAR WALL COLLECTOR ON BUOY BUILDING. PROVIDE NEW PANEL FOR DAMAGED SECTION.
- PROVIDE NEW EXTENSION TO BUOY BUILDING COLLECTOR SYSTEM, EXTENDING SYSTEM ABOVE THE ROOF.
- PROVIDE NEW MAKE-UP AIR UNIT (MAU2). INSTALL ON EXISTING CURB AND CONNECT TO EXISTING NATURAL GAS SERVICES. PROVIDE NEW ELECTRICAL FEED AND BREAKER IN PANEL.
- PROVIDE A MANUAL ON SWITCH FOR MAU NEAR OVERHEAD DOOR. UNIT TO OPERATE TO MAINTAIN 18°C AIR TEMPERATURE, CONTROLLED BY ROOM MOUNTED TEMPERATURE SENSOR & CONTROLLER.

DESCRIPTION OF ELECTRICAL WORK -- BUOY BUILDING:

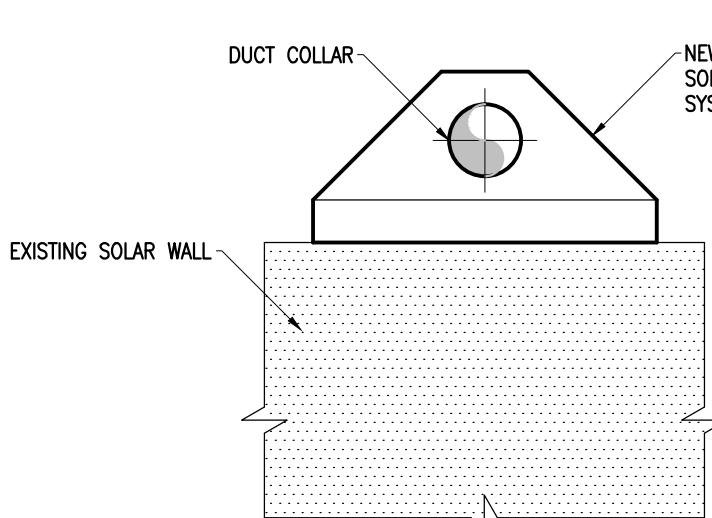
- REMOVE EXISTING 20A 600V MAKE-UP AIR UNIT CONNECTION ON BUOY BUILDING COMPLETE WITH EXISTING BREAKER, CONDUITS AND WIRING TO POINT OF SUPPLY.
- REMOVE EXISTING 20A 600V 3P BREAKER FEEDING MAKE-UP AIR UNIT AND PROVIDE NEW 30A 3P 600V BREAKER TO MATCH EXISTING SYSTEM MANUFACTURER AND INTERRUPTING CAPACITY. FEED NEW MAKE-UP AIR UNIT MAU2 WITH 3#10 WIRING IN 21MM EMT CONDUITS. SUPPLY AND INSTALL NEW CONDUITS CONCEALED IN CEILING SPACE FROM MECHANICAL ROOM TO EXISTING PANEL. APPROXIMATE DISTANCE 45 METERS. ALL WORK IN OCCUPIED AREAS TO BE COMPLETED AFTER BUILDING OPERATING HOURS. PROVIDE NEW BREAKER IDENTIFICATION. ALL POWER INTERRUPTIONS TO BE COMPLETED AFTER BUILDING OPERATING HOURS. CONTROLS SUPPLIED BY MECHANICAL CONTRACTOR, INSTALLED BY ELECTRICAL.

DESCRIPTION OF MECHANICAL WORK -- MAIN BUILDING:

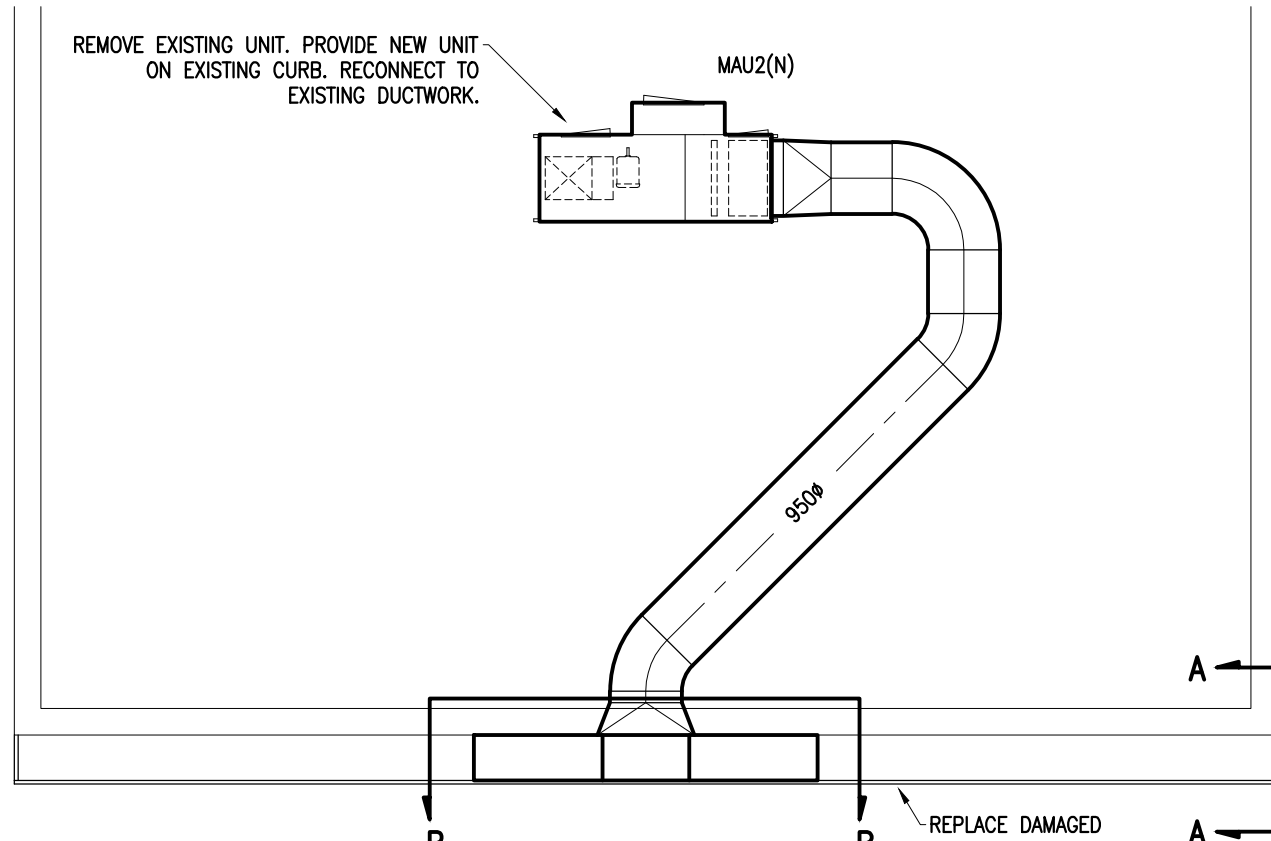
- REMOVE EXISTING FANS AND DUCTWORK CONNECTED TO SOLAR COLLECTOR. REMOVE ELECTRICAL SYSTEMS BACK TO PANEL AND MAKE SAFE.
- PROVIDE NEW MAKE-UP AIR UNITS IN CEILING AND SUSPEND FROM STRUCTURE. CONNECT TO NEW SOLAR COLLECTORS.
- PROVIDE NEW NATURAL GAS CONNECTIONS TO MAUs AND CONNECT TO EXISTING GAS METER ASSEMBLY.
- PROVIDE NEW ELECTRICAL INFRASTRUCTURE FOR EACH MAU. INTERCONNECT NEW MAUs WITH WELDING SYSTEM EXHAUST FANS.
- UNITS TO MODULATE TO MAINTAIN ROOM TEMPERATURE OF 18°C (USER ADJUSTABLE) BY CONTRACTOR INSTALLED MANUFACTURER PROVIDED THERMOSTAT.

DESCRIPTION OF ELECTRICAL WORK -- MAIN BUILDING:

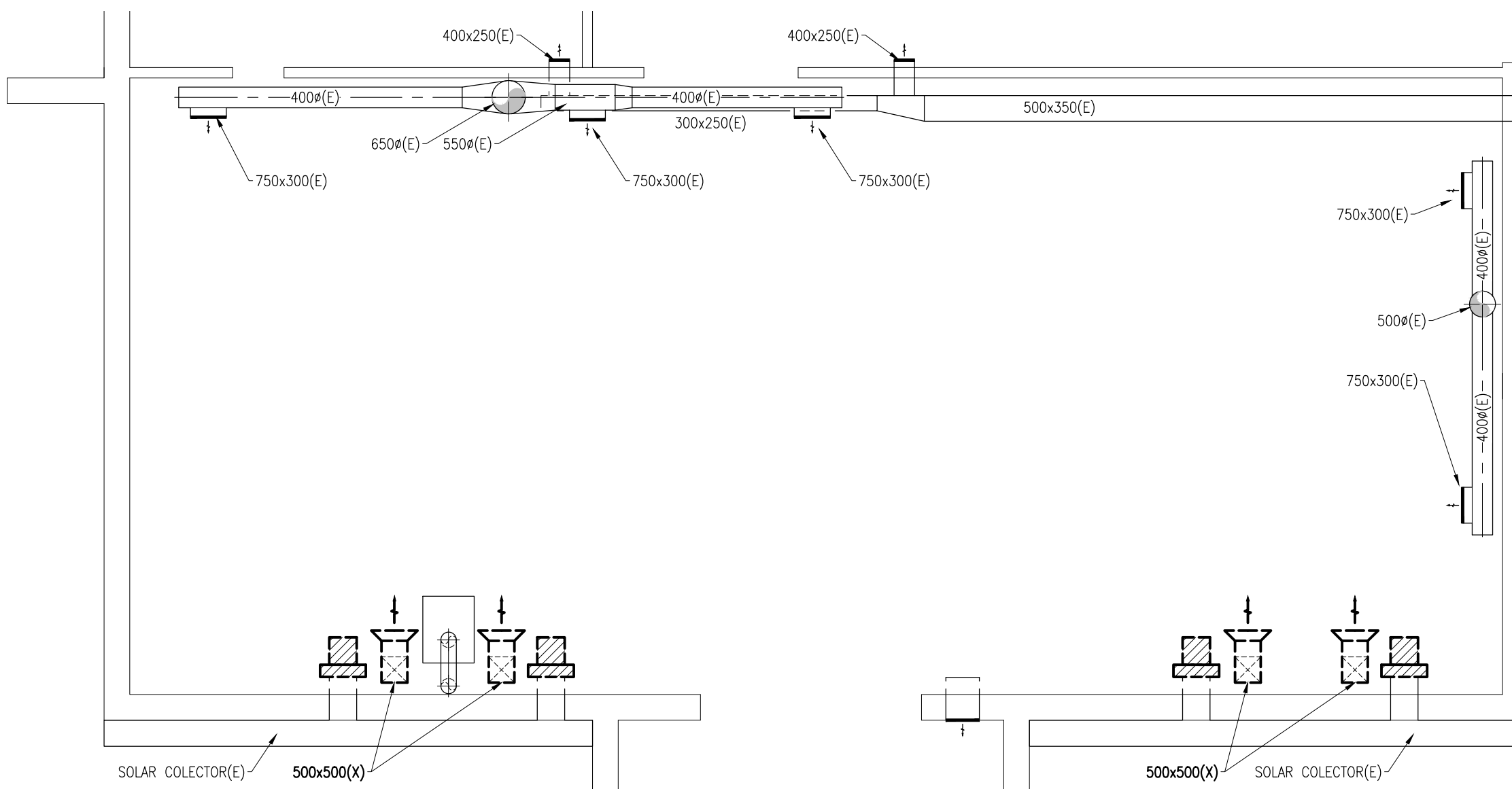
- PROVIDE CONNECTIONS TO 3.7A, 600V, 3PHASE MAKE-UP AIR UNITS MAU3, MAU4, MAU5 & MAU6 COMPLETE WITH 3 #12 WIRING IN 21MM CONDUITS. SUPPLY AND INSTALL NEW CONDUITS CONCEALED IN CEILING SPACE FROM MECHANICAL ROOM TO MAIN ELECTRICAL ROOM EXISTING PANEL A, APPROXIMATE DISTANCE 65 METERS. ALL WORK IN OCCUPIED AREAS TO BE COMPLETED AFTER BUILDING OPERATING HOURS. CONTROLS SUPPLIED BY MECHANICAL CONTRACTOR, INSTALLED BY ELECTRICAL.
- PROVIDE 2 x 15A 600V 3P BREAKERS IN EXISTING 600V PANEL A FOR NEW MAKE UP AIR UNITS MAU3, MAU4, MAU5 & MAU6. NEW BREAKER TO MATCH EXISTING SYSTEM MANUFACTURER AND INTERRUPTING CAPACITY. FEED TWO MAKE-UP AIR UNITS FOR EACH 15A 3P BREAKER. PROVIDE NEW BREAKER IDENTIFICATION. ALL POWER INTERRUPTIONS TO BE COMPLETED AFTER BUILDING OPERATING HOURS.



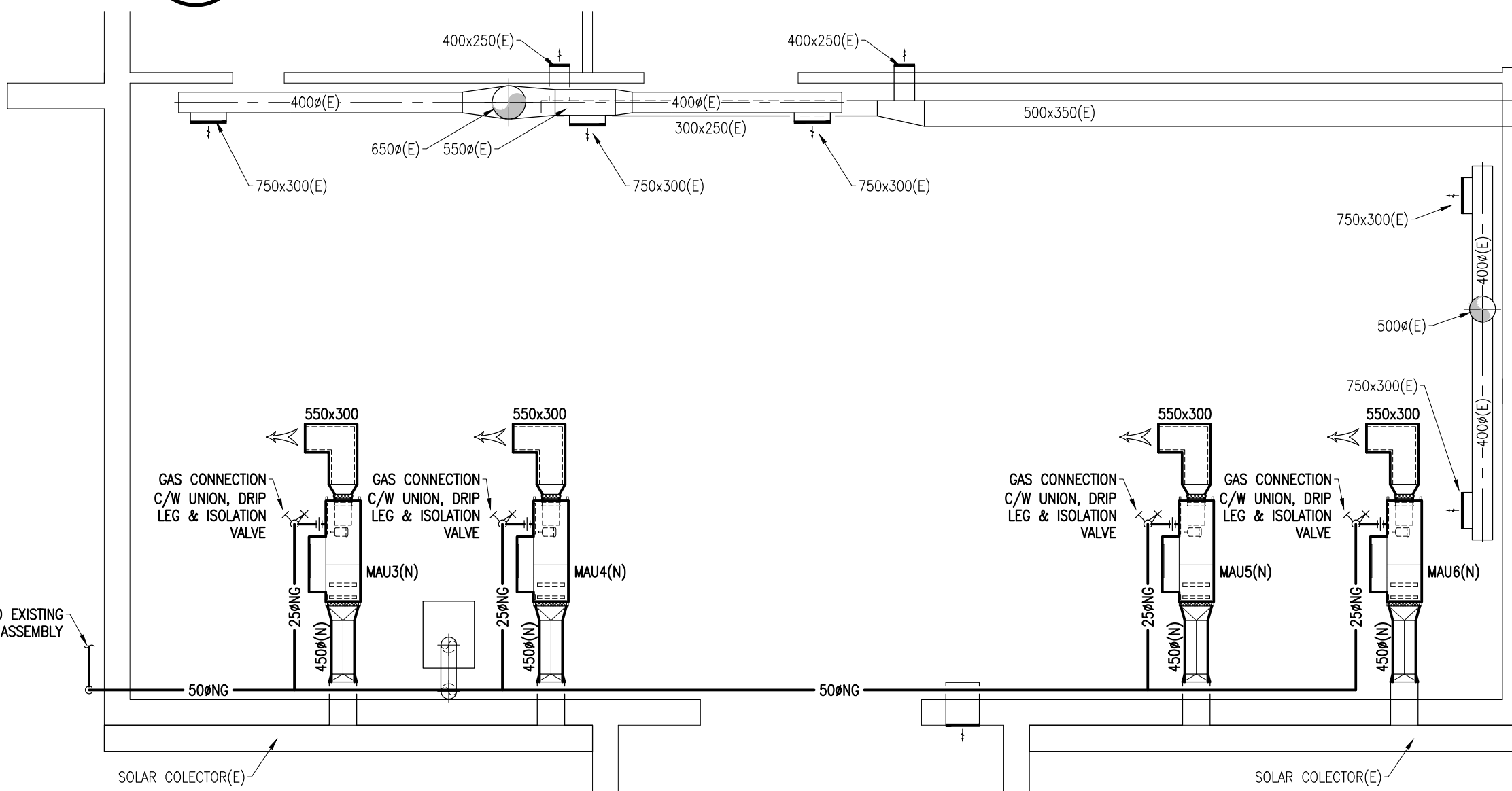
B SECTION B-B
M1 SCALE = N.T.S.



2 BUOY BUILDING - NEW WORK
ME1 SCALE = 1:100



3 MAIN BUILDING - REMOVALS
ME1 SCALE = 1:100



4 MAIN BUILDING - NEW WORK
ME1 SCALE = 1:100

Canada

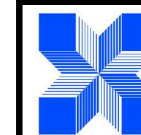


Public Works and
Government Services
Canada

Travaux publics et
services gouvernementaux
Canada

Real Property
Branch

Direction générale
des biens immobiliers



Goodkey Weedmark
Consulting Engineers

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GWA JOB: 2017-239-1



Contractor to verify all dimensions & conditions on site and immediately notify the Departmental Representative of all discrepancies.

revisions	description	date
2	ISSUED FOR TENDER	2017-12-14
1	ISSUED FOR 100% REVIEW	2017-12-07
0	ISSUED FOR 99% REVIEW	2017-11-21

revisions	description	date
A	A detail no. du detail	A
B	B location drawing no. sur dessin no.	B
C	C drawing no. dessin no.	C

project project

SOLAR WALLS MODIFICATION

PRESCOTT, ONTARIO

drawing dessin

MECHANICAL/ELECTRICAL
LEGENDS, SCHEDULES, BUOY
BUILDING & MAIN BUILDING WORK

Designed By	J.GORDON	Conçu par
Date	2017/11/21	(yyyy/mm/dd)
Drawn By	J.HANSEN	Dessiné par
Date	2017/11/21	(yyyy/mm/dd)
Reviewed By	J.GORDON	Examiné par
Date	2017/11/21	(yyyy/mm/dd)
Approved By	J.GORDON	Approuvé par
Date	2017/11/21	(yyyy/mm/dd)
Bid	TENDER	Soumission
Project Manager	NANG QUACH	Administrateur de projets
Project no.		No. du projet

R.087682.002

Drawing no. No. du dessin

ME1