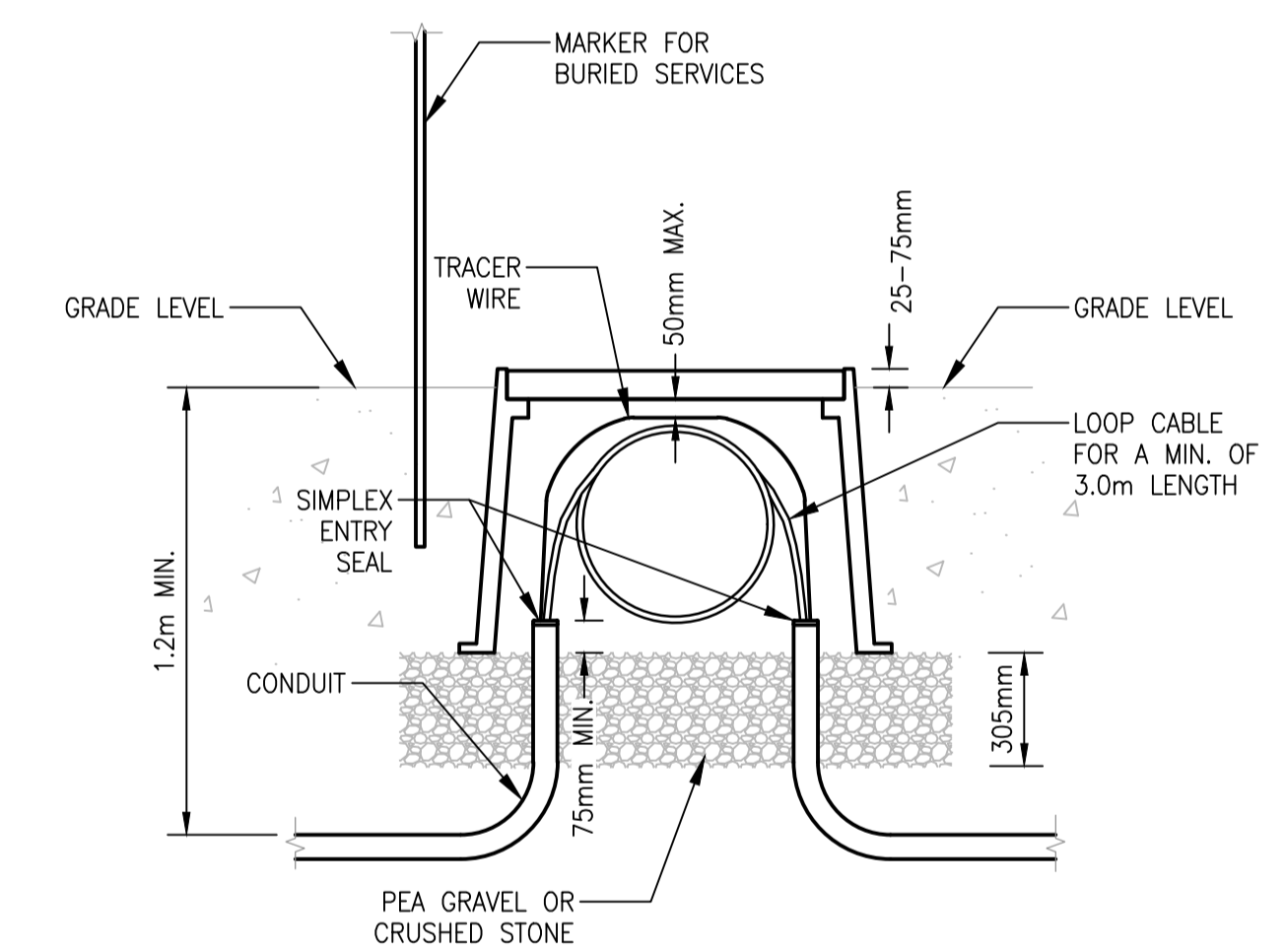


SEE RECORD DRAWING 1-0103A-E0022 FOR FIBRE ROUTE



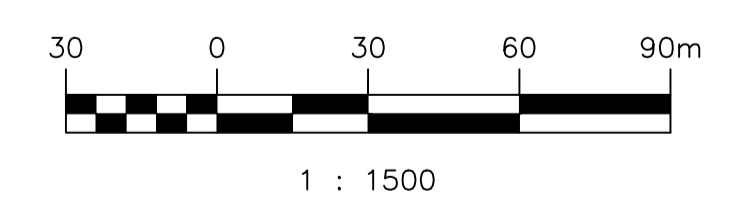
A HANDHOLE DETAIL
SCALE: NTS

LEGEND:
□ EXISTING HANDHOLE

- SPECIFIC NOTES:**
- PROVIDE FIBRE CABLE IN CONDUIT AND HANDHOLES (SEE DETAIL A) AS REQUIRED BETWEEN THE WWPCC ADMIN BUILDING AND THE PERIMETER ROAD PUMPING STATION. PROVIDE MINIMUM COVER OF 1.2m AND MARKING TAPE ALONG NON-VEHICULAR AREAS. PROVIDE 12AWG HMWPE TRACER WIRE ALONG ENTIRE LENGTH OF UNDERGROUND CONDUIT. RETURN ANY DISTURBED LANDSCAPING TO ITS ORIGINAL CONDITION. IDENTIFY AND LOCATE ALL UNDERGROUND SERVICES PRIOR TO INSTALLATION AND ADJUST ROUTING TO AVOID SERVICES AS REQUIRED BY MINIMUM CLEARANCE REQUIREMENTS.
 - EXISTING SHAW HANDHOLES ON CITY PROPERTY CANNOT BE USED FOR INSTALLATION OF NEW FIBRE CABLE. LOCATE NEW HANDHOLE NEXT TO WWPCC ADMIN BUILDING ON NORTH SIDE OF BUILDING EAST OF THE MAIN DOOR.
 - DETERMINE FIBRE CABLE ROUTE BETWEEN WWPCC ADMIN BUILDING AND PRPS. SUBMIT PROPOSED ROUTE TO CONTRACT ADMINISTRATOR PRIOR TO BEGINNING WORK. PROVIDE ALL EASEMENTS, PROPERTY REQUESTS, PERMITS AND CROSSING PERMISSIONS REQUIRED. PROVIDE SURVEY OF ENTIRE ROUTE AND MARK ROUTE AND HANDHOLE LOCATIONS WITH UTM COORDINATES ON AS-BUILT DRAWINGS.
 - DUE TO THE NUMBER OF UNDERGROUND SERVICES AND STRUCTURES PRESENT, SOFT DIG CITY PROPERTY ON WHICH PERIMETER ROAD PUMPING STATION IS LOCATED FOR INSTALLATION OF BURIED CONDUIT. SEE REFERENCE DRAWINGS FOR DETAILS OF EXISTING UNDERGROUND INSTALLATIONS.
 - FIBRE CABLE ROUTE CANNOT PASS THROUGH SNOW DUMP AREA.

OVERALL SITE
SCALE: 1:1500

- GENERAL NOTES:**
- RECORD DRAWING FOR PROJECT IS 1-0103A-E0022.
 - THIS DRAWING IS BASED ON EXISTING DOCUMENTATION AND THE ACCURACY OF LOCATIONS HAS NOT BEEN SITE VERIFIED. IF ACTUAL LOCATIONS DIFFER FROM WHAT IS SHOWN, CONTACT THE CONTRACT ADMINISTRATOR BEFORE PROCEEDING WITH THE WORK.
 - FIBRE CABLE SPLICES ARE NOT ACCEPTABLE EXCEPT AS APPROVED BY THE CONTRACT ADMINISTRATOR.
 - INSTALL FIBRE CABLE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
 - PROVIDE HORIZONTAL DIRECTIONAL DRILLING FOR ALL ROAD CROSSINGS.



LAST SAVE: 2019/11/14 - 11:06am
PATH: M:\650612\MENG\7TELE\DD - General DWG\1-0103A-E0021.dwg

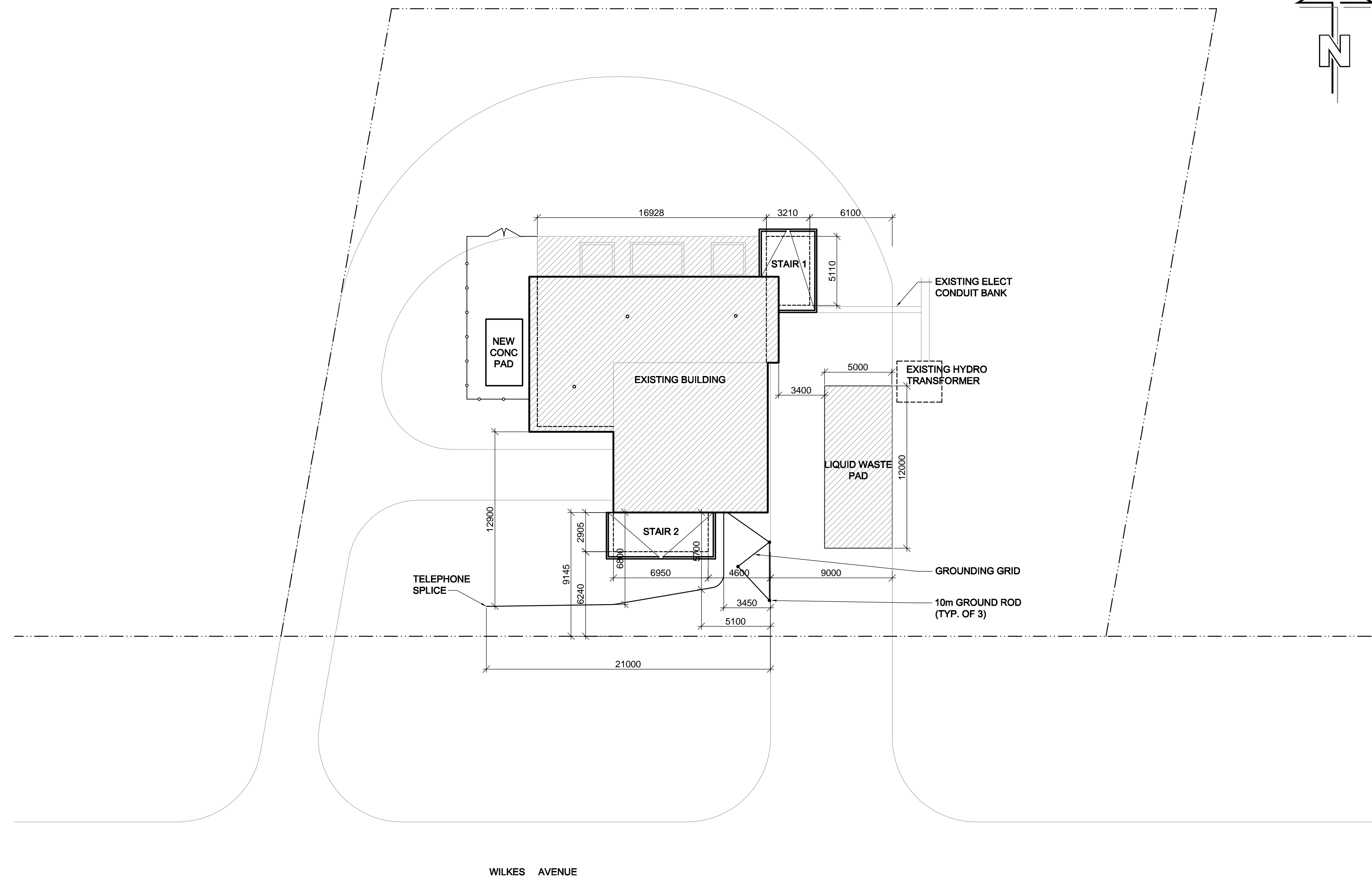
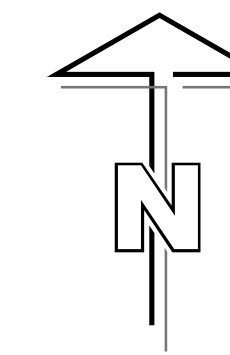
1-0103A-A0001	FACILITY FIBRE ALLOCATION
DRAWING NUMBER	REFERENCE DRAWINGS

NO.	REVISIONS	DATE	DESIGN	CHECK
04	AS-BUILT - REVISED BASED ON WWD COMMENTS	2019/11/12	BD	TMC
03	AS-BUILT	2019/06/18	BD	TMC
02	RE-ISSUED FOR CONSTRUCTION	2018/02/27	BD	TMC
01	RE-ISSUED FOR CONSTRUCTION	2018/02/22	BD	TMC
00	ISSUED FOR CONSTRUCTION	2018/01/26	BD	TMC

DESIGNED BY: B. DE GUZMAN	CHECKED BY: T. CHURCH
DRAWN BY: B. DE GUZMAN	APPROVED BY: T. CHURCH
SCALE: AS SHOWN	ISSUED FOR CONSTRUCTION BY: A. WOLFE
DATE: 2017/10/27	DATE: 2018/01/26
CONSULTANT NO.:	

ENGINEER'S SEAL
ORIGINAL DRAWING SEALED BY: T. CHURCH
SNC-Lavalin Inc. MEMBER # 32682
2018-01-29 REV. 00

WEST END WATER POLLUTION CONTROL CENTRE WWPCC TO PERIMETER ROAD PUMPING STATION (PRPS) FIBRE PROJECT FIBRE ROUTE		
CITY DRAWING NUMBER 1-0103A-E0021	SHEET 001 04	REV. SIZE A1



1 SITE PLAN
A01 SCALE: 1:200

REFERENCE DWG No.	DRAWING No.
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A2	1-0111L-B0002-001
A3	1-0111L-B0003-001
A4	1-0111L-B0004-001
A5	1-0111L-B0005-001
A6	1-0111L-B0006-001
A7	1-0111L-B0007-001
A8	1-0111L-B0008-001
A9	1-0111L-B0009-001
A10	1-0111L-B0010-001
A11	1-0111L-B0011-001
A12	1-0111L-B0012-001
A13	1-0111L-B0013-001
A14	1-0111L-B0014-001
A15	1-0111L-B0015-001

AS-CONSTRUCTED

B.M. ELEV.	FIELD BOOK #:	Neil Cooper Architect Inc. 10-395 Berry Street, Winnipeg, Manitoba R3J 1N6 Phone (204) 885-3855 Fax (204) 831-7148	
POSTED TO LBIS		DESIGNED BY: NC	CHECKED BY: -
		DRAWN BY: AL	APPROVED BY: -
		HOR. SCALE: AS NOTED	RELEASED FOR CONSTRUCTION
		VERTICAL: AS NOTED	
2	DWG WAS 1-0111L-A0001-001	11/03/31	SW
1	AS - CONSTRUCTED	09/10/28	ALS
0	ISSUED FOR CONSTRUCTION	08/04/03	AL
NO.	REVISIONS	DATE	BY
FILENAME: 1-0111L-B0001-001.dwg		DATE: 07/06/14	DATE:

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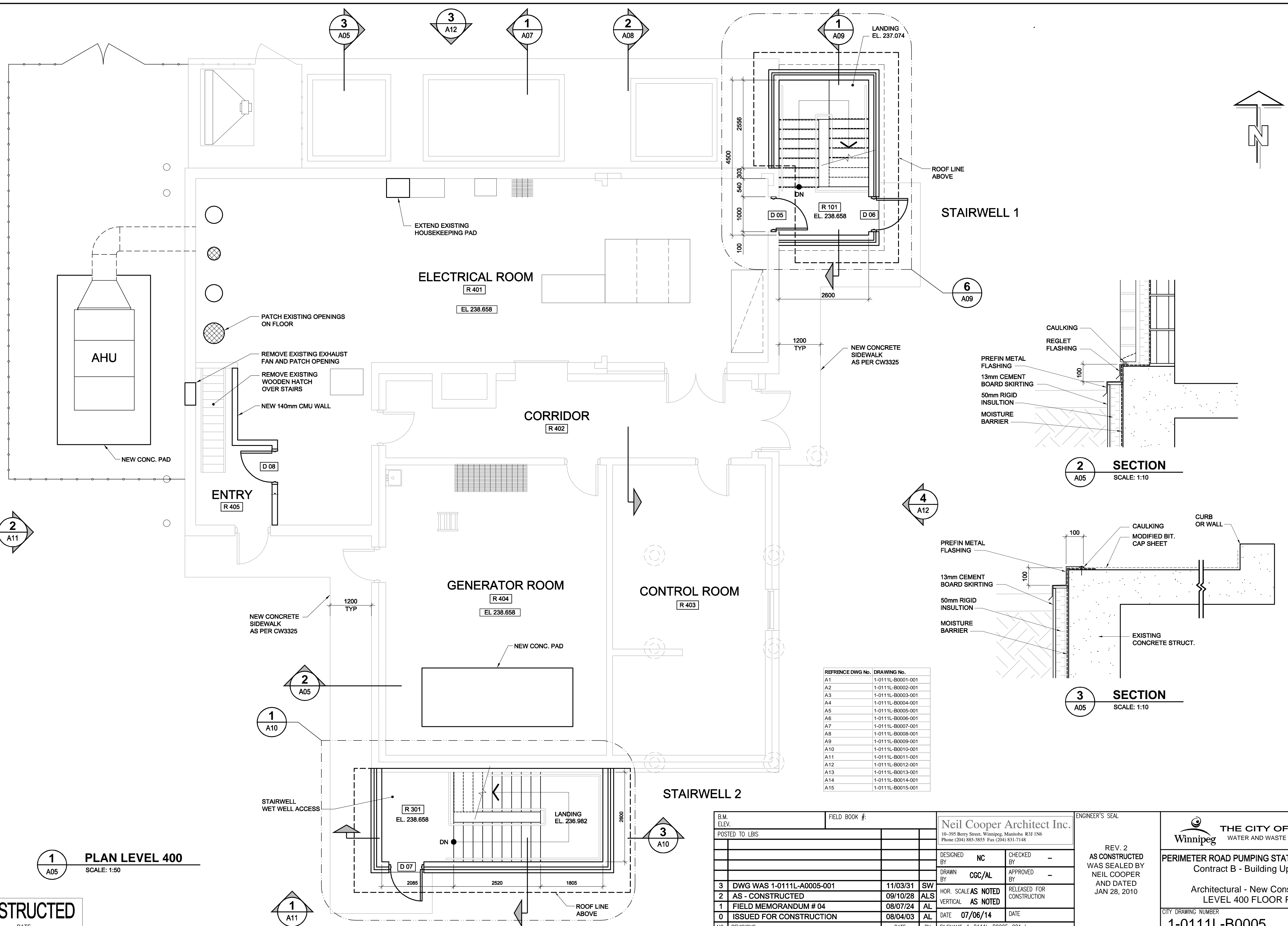
REV. 1
AS CONSTRUCTED
WAS SEALED BY
NEIL COOPER
AND DATED
JAN 28, 2010

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

PERIMETER ROAD PUMPING STATION UPGRADES
Contract B - Building Upgrades

Architectural - New Construction
SITE PLAN

CITY DRAWING NUMBER: **1-0111L-B0001** SHEET: **001** REV: **2** SIZE: **D**



1 PLAN LEVEL 400
SCALE: 1:50

2 SECTION
SCALE: 1:10

3 SECTION
SCALE: 1:10

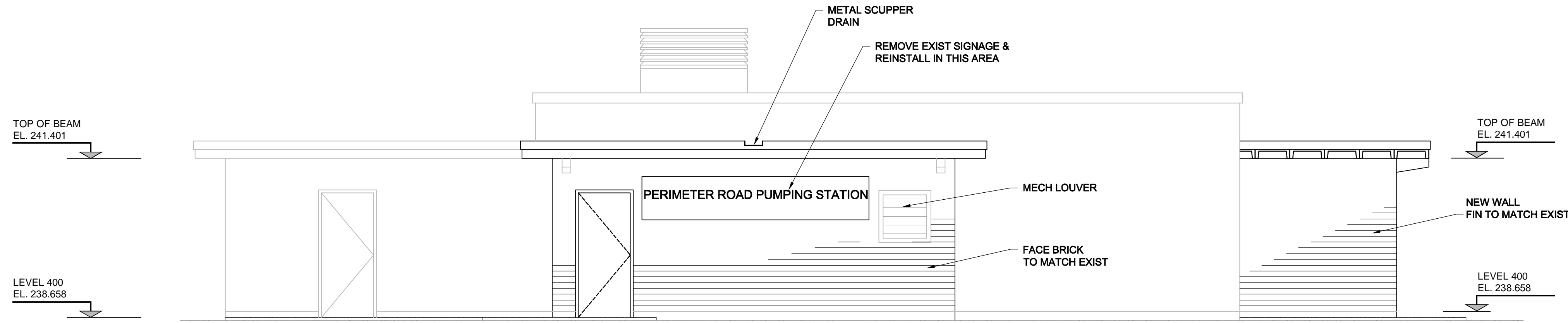
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A5	1-0111L-B0005-001
A6	1-0111L-B0006-001
A7	1-0111L-B0007-001
A8	1-0111L-B0008-001
A9	1-0111L-B0009-001
A10	1-0111L-B0010-001
A11	1-0111L-B0011-001
A12	1-0111L-B0012-001
A13	1-0111L-B0013-001
A14	1-0111L-B0014-001
A15	1-0111L-B0015-001

B.M. ELEV.	FIELD BOOK #:	DESIGNED BY	CHECKED BY
		NC	-
		DRAWN BY	APPROVED BY
		CGC/AL	-
3	DWG WAS 1-0111L-A0005-001	11/03/31	SW
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NO.	REVISIONS	DATE	BY

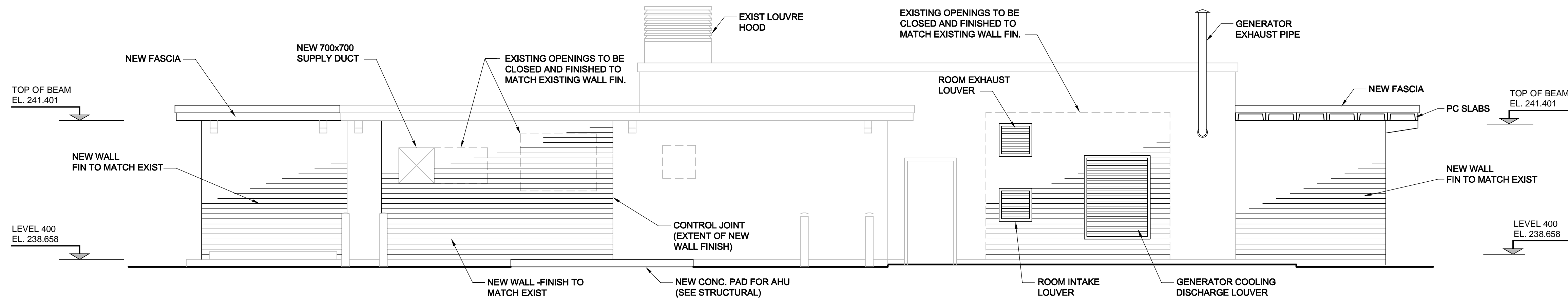
Neil Cooper Architect Inc. 10-395 Berry Street, Winnipeg, Manitoba R3J 1N6 Phone (204) 885-3855 Fax (204) 831-7148		ENGINEER'S SEAL REV. 2 AS CONSTRUCTED WAS SEALED BY NEIL COOPER AND DATED JAN 28, 2010
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THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT
PERIMETER ROAD PUMPING STATION UPGRADES
 Contract B - Building Upgrades
 Architectural - New Construction
 LEVEL 400 FLOOR PLAN
 CITY DRAWING NUMBER: 1-0111L-B0005 SHEET REV. SIZE: 001 3 D

AS-CONSTRUCTED



1 SOUTH ELEVATION
SCALE: 1:50



2 WEST ELEVATION
SCALE: 1:50

REFERENCE DWG No.	DRAWING No.
A1	1-0111L-B0001-001
A2	1-0111L-B0002-001
A3	1-0111L-B0003-001
A4	1-0111L-B0004-001
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A7	1-0111L-B0007-001
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A11	1-0111L-B0011-001
A12	1-0111L-B0012-001
A13	1-0111L-B0013-001
A14	1-0111L-B0014-001
A15	1-0111L-B0015-001

AS-CONSTRUCTED

B.M. ELEV.	FIELD BOOK #:	Neil Cooper Architect Inc. 10-395 Berry Street, Winnipeg, Manitoba R3J 1N6 Phone (204) 885-3855 Fax (204) 831-7148	
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1 AS - CONSTRUCTED	09/10/28	ALS	
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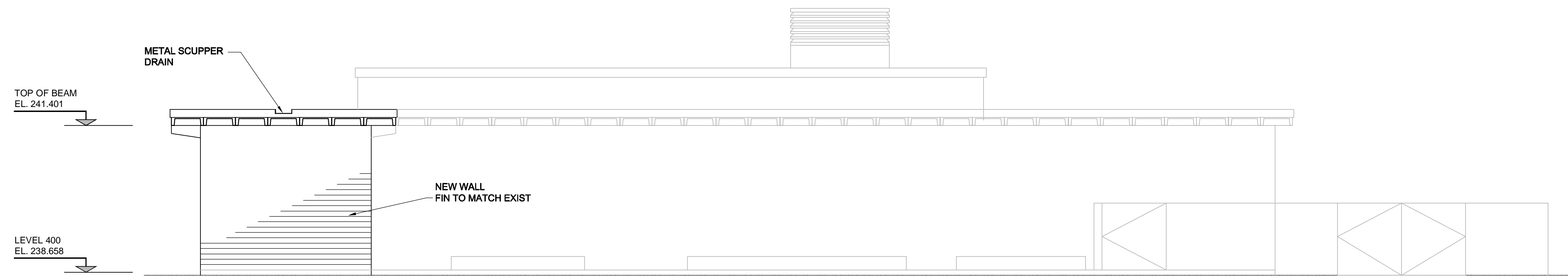
REV. 1
AS CONSTRUCTED
WAS SEALED BY
NEIL COOPER
AND DATED
JAN 28, 2010

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

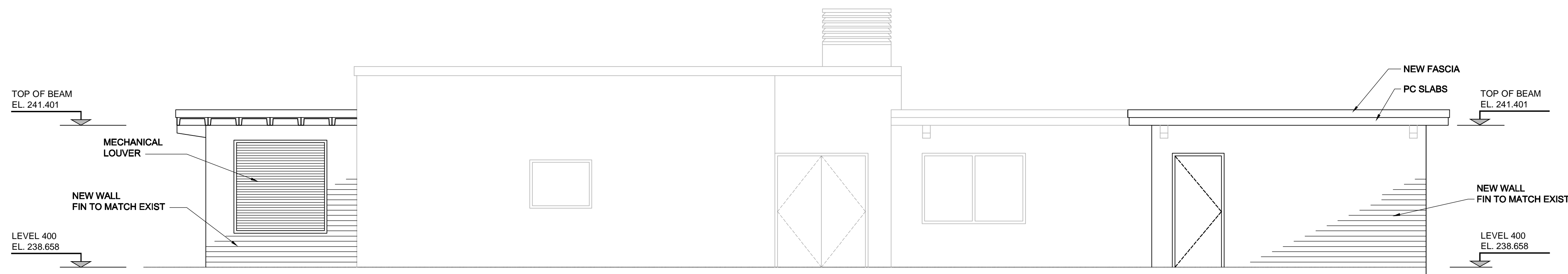
PERIMETER ROAD PUMPING STATION UPGRADES
Contract B - Building Upgrades

Architectural - New Construction
BUILDING ELEVATIONS

CITY DRAWING NUMBER: **1-0111L-B0011** SHEET REV. SIZE: **001 2 D**



3 NORTH ELEVATION
SCALE: 1:50



4 EAST ELEVATION
SCALE: 1:50

REFERENCE DWG No.	DRAWING No.
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A2	1-0111L-A0002-001
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A4	1-0111L-A0004-001
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A7	1-0111L-A0007-001
A8	1-0111L-A0008-001
A9	1-0111L-A0009-001
A10	1-0111L-A0010-001
A11	1-0111L-A0011-001
A12	1-0111L-A0012-001
A13	1-0111L-A0013-001
A14	1-0111L-A0014-001
A15	1-0111L-A0015-001

AS-CONSTRUCTED

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POSTED TO LBIS		DESIGNED BY NC	CHECKED BY -
		DRAWN BY CGC/AL	APPROVED BY -
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2 DWG WAS 1-0111L-A0012-001	2011/04/01	SW	
1 AS - CONSTRUCTED	09/10/28	ALS	
0 ISSUED FOR CONSTRUCTION	08/04/03	AL	
NO. REVISIONS	DATE	BY	FILENAME: 1-0111L-B0012-001.dwg

ENGINEER'S SEAL

REV. 1
AS CONSTRUCTED
WAS SEALED BY
NEIL COOPER
AND DATED
JAN 28, 2010

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

PERIMETER ROAD PUMPING STATION UPGRADES
Contract B - Building Upgrades

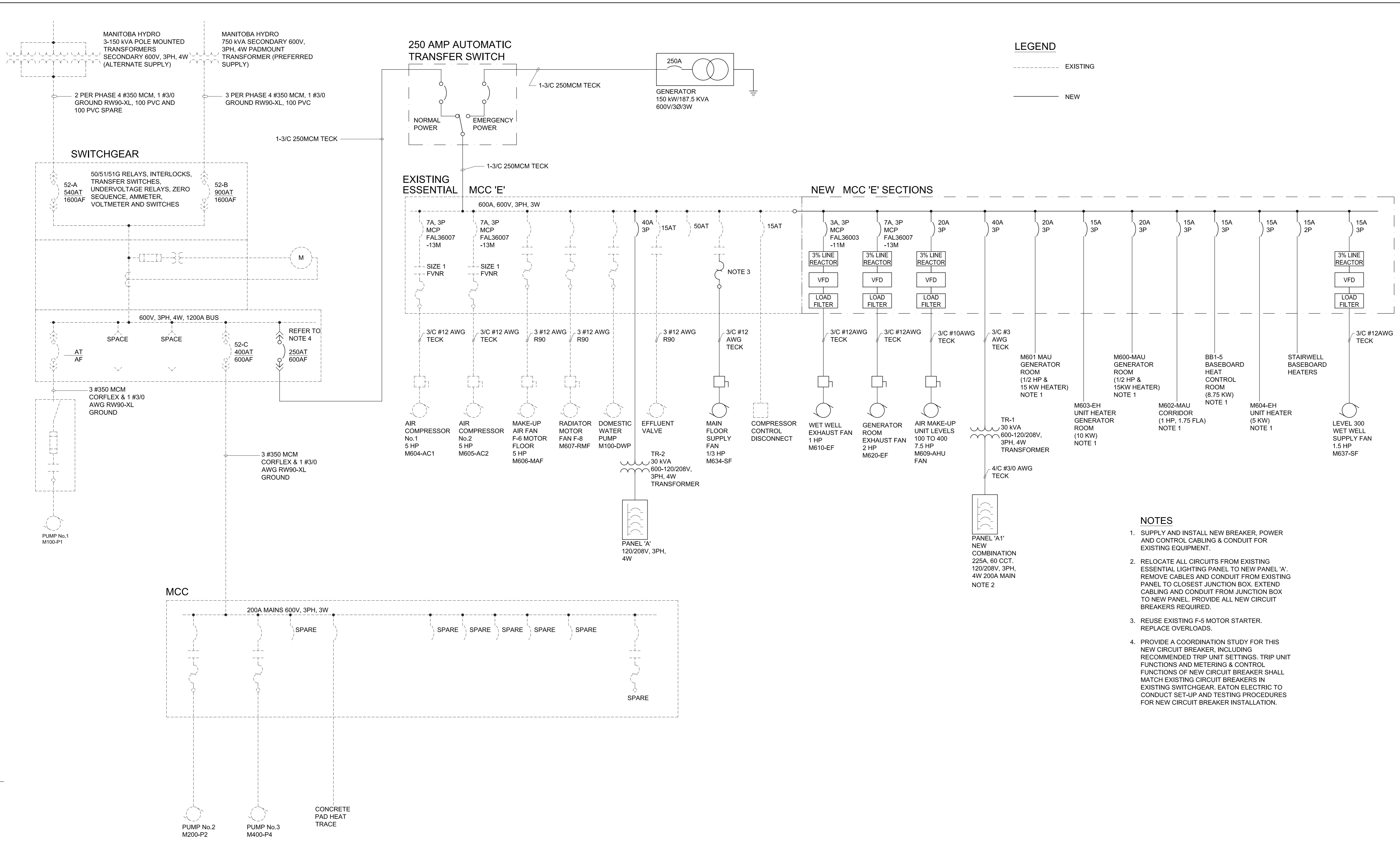
Architectural - New Construction
BUILDING ELEVATIONS

CITY DRAWING NUMBER	SHEET	REV.	SIZE
1-0111L-B0012	001	2	D

D SIZE 22" x 34" (559mm x 864mm)

PLOT: 8/24/2017 2:28:21 PM

UMA FILE NAME: I:\0111L-E0002-001.dwg Saved By: tvellenth



SINGLE LINE DIAGRAM

SCALE: N.T.S.

AECOM

As of January 3, 2009, UMA Engineering Ltd. became AECOM Canada Ltd.

AECOM AS-CONSTRUCTED
 SIG..... DATE.....



B.M. ELEV.	FIELD BOOK #:	UMA	AECOM
POSTED TO LBIS		© 2008 UMA ENGINEERING LTD. ALL RIGHTS RESERVED.	
		DESIGNED BY: BLM	CHECKED BY: -----
		DRAWN BY: QL	APPROVED BY: -
2 AS - CONSTRUCTED	09/10/28	ALS	HOR. SCALE AS NOTED
1 ISSUED FOR PCN #20	09/06/23	RS	VERTICAL AS NOTED
0 ISSUED FOR CONSTRUCTION	08/04/03	QL	DATE 07/04/23
NO. REVISIONS	DATE	BY	FILENAME: 1-0111L-E0002-001.dwg

ENGINEER'S SEAL

REV. 2
 AS CONSTRUCTED
 WAS SEALED BY
 B. L. MOORE
 AND DATED
 JAN 29, 2010

THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT

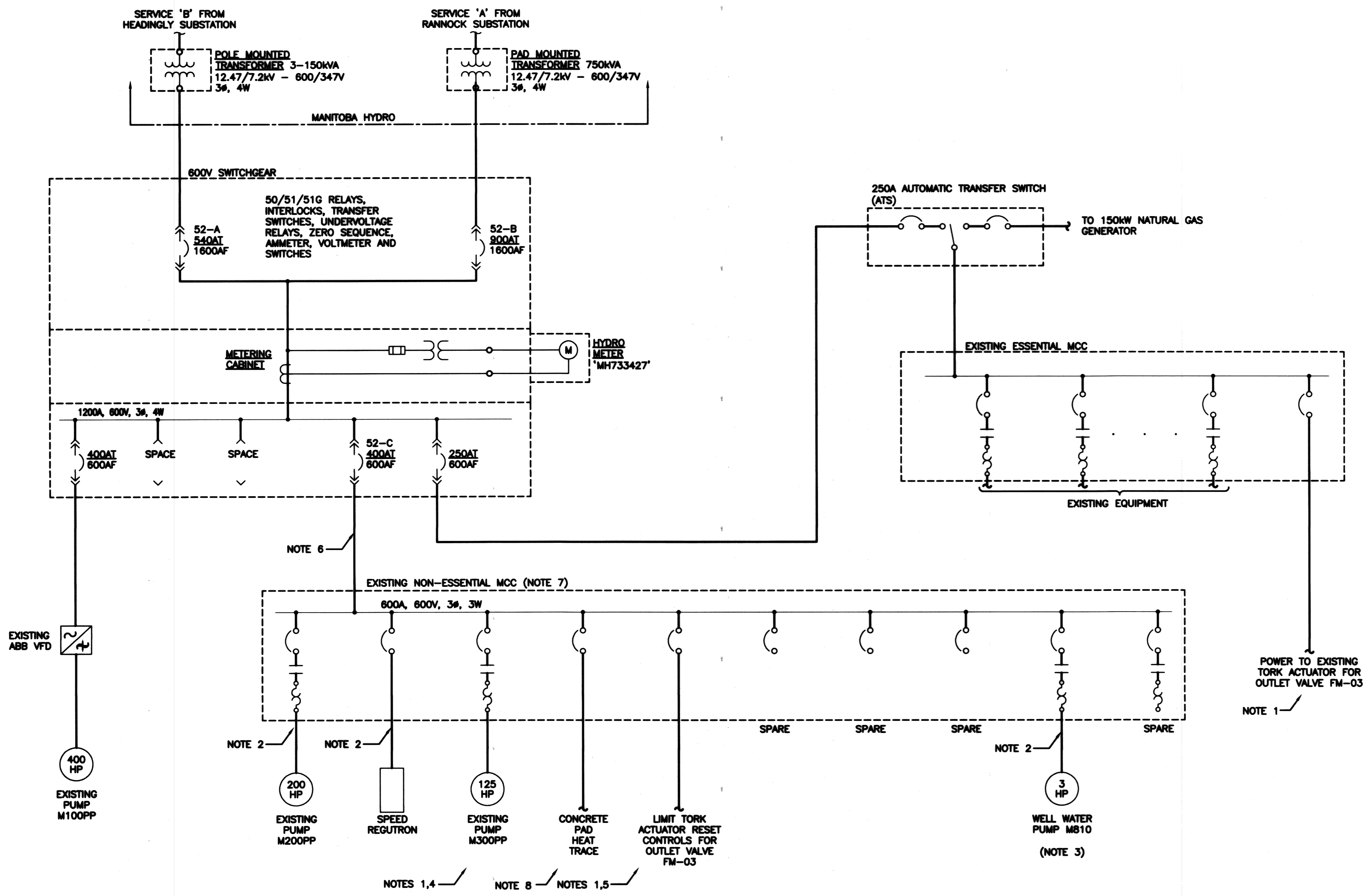
PERIMETER ROAD PUMPING STATION UPGRADES
 Contract B - Building Upgrades

Electrical
 SINGLE LINE DIAGRAM

CITY DRAWING NUMBER: **1-0111L-E0002** SHEET: **001** REV: **2** SIZE: **D**

NOTES:

1. REMOVE ALL POWER AND CONTROL WIRING, CONTROL PANELS AND JUNCTION BOXES ASSOCIATED WITH EQUIPMENT BEING REMOVED.
2. DISCONNECT CABLING FOR EQUIPMENT FROM EXISTING MCC AND RECONNECT TO NEW MCC.
3. ALL EXISTING LABELLING ASSOCIATED WITH THE WELL WATER PUMP THAT IS LABELLED AS FLUSHING WATER PUMP SHALL BE CHANGED TO WELL WATER PUMP.
4. CONTRACTOR SHALL LABEL ALL EXISTING CONDUCTORS WHEN COMPLETING THE DEMOLITION WORK OF THE EXISTING NON-ESSENTIAL MCC. CONTRACTOR SHALL TRACE ALL EXISTING WIRING AND PROVIDE AN AS-BUILT FOR REVIEW BY THE ENGINEER.
5. EXISTING CONTROL WIRING TO BE RELOCATED FROM THE EXISTING NON-ESSENTIAL MCC (FOR THE INTERLOCKS OF VALVE FM-03) TO THE NEW FV-M801 & FV-M851 CONTROL PANEL. REFER TO EXISTING CITY DRAWING WEP-680 FOR EXISTING EQUIPMENT DETAILS.
6. EXISTING FEEDER TO BE REMOVED AND REPLACED WITH NEW.
7. CONTRACTOR SHALL REFER TO THE CONSTRUCTION PLAN UNDER APPENDIX A OF THE BOOK SPECIFICATIONS. ALL SHUT DOWNS SHALL BE COORDINATED UNDER THIS PLAN AND SCHEDULING.
8. EXISTING HEAT TRACE SYSTEM IS NO LONGER IN SERVICE AND HAS BEEN REMOVED. THE ONLY REMAINING EQUIPMENT TO REMOVE UNDER THIS PROJECT SCOPE IS THE FEEDER CABLE AND THE BREAKER WITH THE MCC.



1 SINGLE LINE DIAGRAM
SCALE: N.T.S.

RECORD DRAWING
WATER & WASTE DEPARTMENT
PROJECT COMPLETION DATE : 27 MAR 2013
CONTRACTOR : T&D ENTERPRISES LTD.
O/H WESCAN ELECTRICAL SERVICES

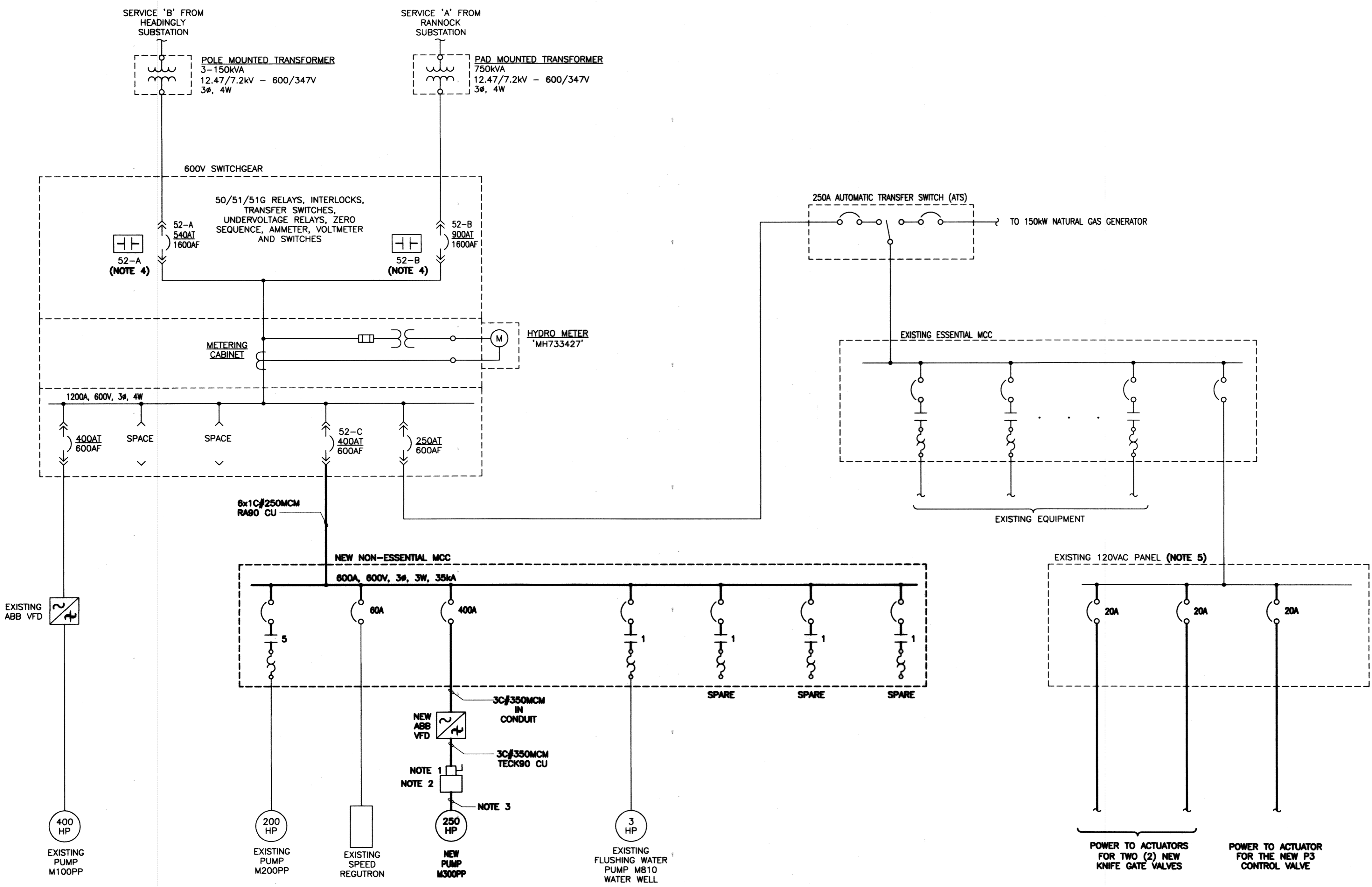
MAPEGN
Certificate of Authorization
KGS Group
No. 245

NO.	REVISIONS	DATE	BY	DATE	2011 06 22
1	RECORD DRAWING	2013-08-03	DDW		
0	ISSUED FOR TENDER	2011-11-07	JLL		

ENGINEER'S SEAL
FRANÇOISE
Member
32345
SEPT 13, 2013
E01

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
REPLACEMENT OF RAW SEWAGE PUMP P-3
PERIMETER ROAD PUMPING STATION
ELECTRICAL
EXISTING
SINGLE LINE DIAGRAM

SHEET 1 OF 1
CITY DRAWING NUMBER
1-0111L-E0017-001



1 NEW SINGLE LINE DIAGRAM
SCALE: N.T.S.

- NOTES:**
- AUXILIARY CONTACT ON DISCONNECT SWITCH SHALL BREAK BEFORE DISCONNECT OPENS CONTACTS TO BE WIRED BACK TO THE VFD TO ENSURE POWER IS DE-ENERGIZED BEFORE THE DISCONNECT SWITCH IS OPENED.
 - NEW TERMINATION ENCLOSURE MOUNTED ON LEVEL 300. REFER TO DRAWING E04 AND E32 FOR DETAILS.
 - NEW PREFORMED PUMP CABLES:
2 POWER CABLES
1 CONTROL CABLE
CABLES ARE SUPPLIED BY THE PUMP SUPPLIER. CONTRACTOR TO EXTEND TO THE TERMINATION ENCLOSURE VIA THE NEW CABLE TRAY.
 - CONTRACTOR TO REWIRE THE EXISTING MAIN SERVICE BREAKER CONTACTS AS SHOWN ON DRAWING E24.
 - CONTRACTOR TO EXTEND TO THE NEAREST AVAILABLE POWER PANEL. PROVIDE THREE 20A SINGLE POLE BREAKERS WITHIN THE PANEL.

RECORD DRAWING
WATER & WASTE DEPARTMENT
PROJECT COMPLETION DATE : 27 MAR 2013
CONTRACTOR : T&D ENTERPRISES LTD.
O/H WESCAN ELECTRICAL SERVICES

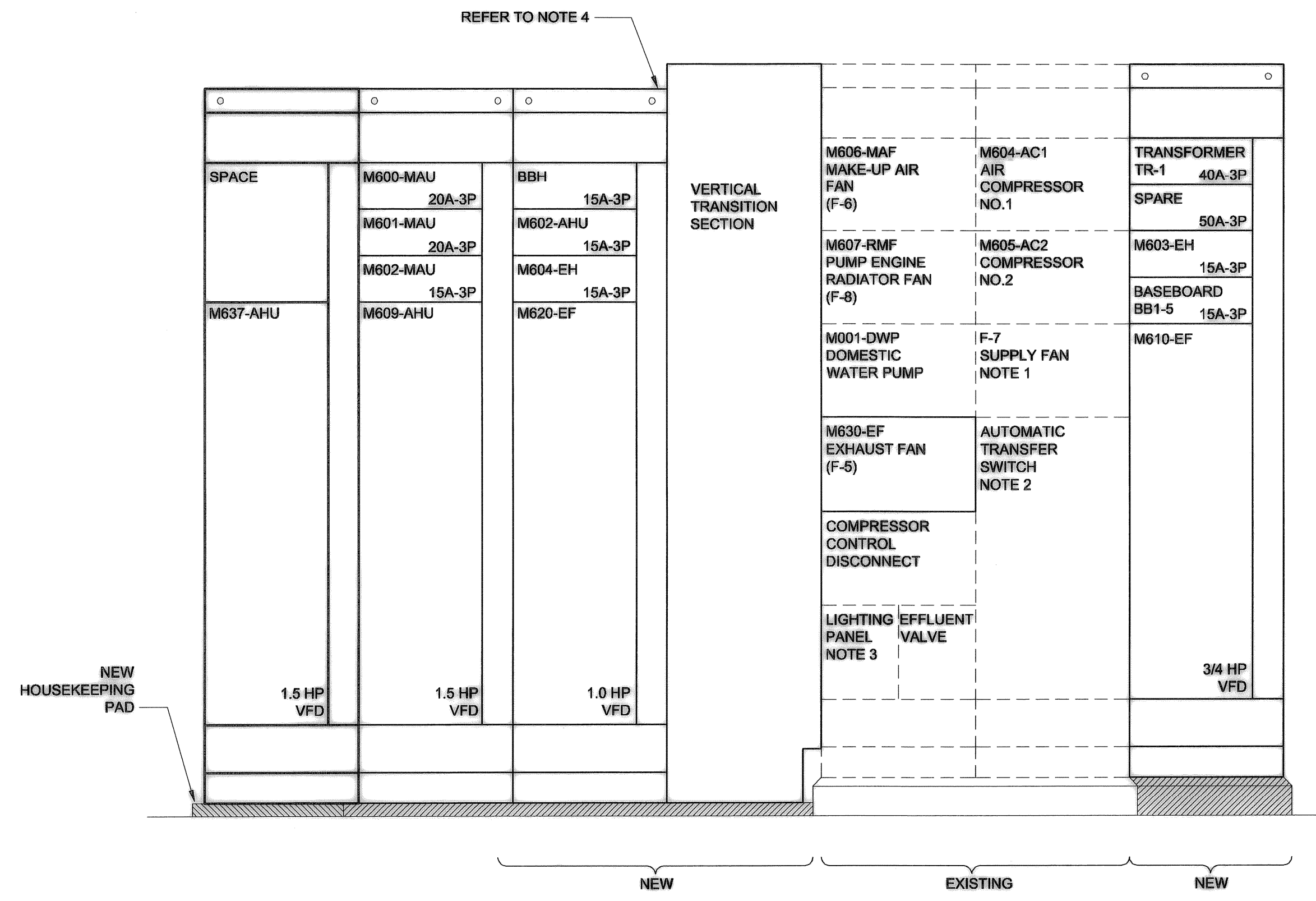
MAPEGN
Certificate of Authorization
KGS Group
No. 245

FIELD BOOK #:		KGS GROUP CONSULTING ENGINEERS	
DESIGNED BY	DDW	CHECKED BY	JLL
DRAWN BY	GCN	APPROVED BY	RED
HDR. SCALE	N.T.S.	RELEASED FOR CONSTRUCTION	
VERTICAL	N.T.S.		
DATE	2011 06 23	DATE	
NO. REVISIONS	DATE	BY	
1	RECORD DRAWING	2013-08-01	DDW
0	ISSUED FOR TENDER	2011-11-07	JLL

ENGINEER'S SEAL
J. ALLEN
Professional Engineer
SEP 13, 2013
E02

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
REPLACEMENT OF RAW SEWAGE PUMP P-3
PERIMETER ROAD PUMPING STATION
ELECTRICAL
NEW SINGLE LINE DIAGRAM

SHEET 1 OF 1
CITY DRAWING NUMBER
1-0111L-E0018-001



ESSENTIAL MCC 'E' FRONT ELEVATION
SCALE: N.T.S.

NOTES

- DISCONNECT AND REMOVE CABLING FOR SUPPLY FAN. RELABEL STARTER AS SPARE.
- DISCONNECT AND REMOVE EXISTING AUTOMATIC TRANSFER SWITCH. INSTALL NEW BLANK DOOR.
- DISCONNECT AND REMOVE EXISTING CABLING TO ESSENTIAL LIGHTING PANEL / TRANSFORMER. LABEL BREAKER AS SPARE.
- CONFIRM CLEARANCES UNDER CONCRETE BEAM FOR NEW MCC SECTIONS AND TRANSITION SECTION. NEW HOUSEKEEPING PAD HEIGHT TO ACCOMMODATE NEW MCC SECTIONS.

PANEL A											
CCT NO	DESCRIPTION	LOAD	TRIP AMPS	TRIP AMPS	TRIP AMPS	LOAD	DESCRIPTION	CCT NO	TRIP AMPS	TRIP AMPS	TRIP AMPS
* 01	LIGHTS LEVEL 100		15	15	15		LIGHTS LEVEL 200	02			
* 03	BAILEY		15	15	15		FIELD DEVICE PANEL	04			
* 05	BAILEY CRT		15	15	15		FIELD DEVICE PANEL	06			
* 07	LEL GAS ANALYZER		15	15	15		LIGHTS LEVEL 400	08			
* 09	RECEPTACLES CONTROL ROOM		15	15	15		CAMERA	10			
* 11	GAS DETECTOR CONTROL PANEL		15	15	15		RECEPTACLES LEVEL 400	12			
* 13	RECEPTACLES LEVEL 400		15	15	15		LIGHTS LEVEL 400	14			
* 15	220V CONTROL ROOM		20	15	15		EXTERIOR LIGHTS	16			
* 17	RECEPTACLE			20			220V RECEPTACLE	18			
* 19	SPARE		15				H202 ROOM	20			
* 21	LIGHTS, NIGHT LIGHTS LEVEL 400		15	20			M600 FT/FG/FE	22			
* 23	TELEPHONE BOARD		15	15			CAT ENGINE BATTERY CHARGER	24			
* 25	SPARE		15	15			SUMP PUMP RECEPTACLE	26			
* 27	LIGHTS LEVEL 300		15	15			RECEPTACLE / SUMP PANEL EL 41	28			
* 29	SPARE		15	15			PRE-LUBE PUMP (CAT ENGINE)	30			
31	RECEPTACLES LEVEL 200 DRYWELL		15	15			LIGHTING EAST STAIRWELL	32			
33	RECEPT. LEVEL 300 WETWELL & DRYWELL		15	15			LIGHTING EXTERIOR	34			
35	RECEPTACLES GENERATOR ROOM		15	15			LIGHTING SOUTH STAIRWELL	36			
37	BATTERY BANK BB-1		15	15			VAV 615, 616, 617	38			
39	BATTERY BANK BB-2		15	15			M609-AHU	40			
41	BATTERY BANK BB-3		15	15			SPARE	42			
43	BATTERY BANK BB-4		15	15			SPARE	44			
45	FIRE ALARM PANEL		15	15			SPACE	46			
47	GENERATOR		20				SPACE	48			
49	BLOCK HEATER		2P				SPACE	50			
51	EXIT SIGNS		15				SPACE	52			
53	RECEPTACLES LEVEL 100 DRYWELL		15				SPACE	54			
55	GENERATOR ROOM BATTERY CHARGER		15				SPACE	56			
57	SPACE						SPACE	58			
59	SPACE						SPACE	60			

VOLTAGE: 120/208 PHASE: 3Ø WIRE: 4 BREAKER I.C.: 10KA
 MAIN BREAKER: 200 AMP MAINS: 225 AMP FEEDER: 4/C #3 TECK
 MOUNTING: SURFACE LOCATION: LEVEL 400
 FED FROM: MCC 'E' VIA TR-1

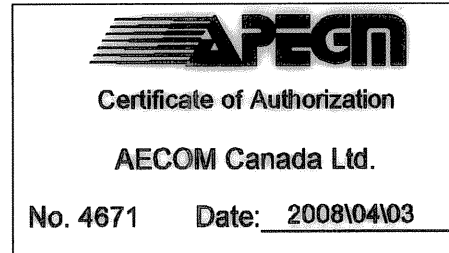
NOTES: * TRANSFER AND EXTEND EXISTING LOADS FROM PANEL A CCT #1 THROUGH #30 TO NEW PANEL A
 1. SUPPLY LOCK DOG FOR FIRE ALARM CONTROL PANEL BREAKER.

NOTE 1



As of January 3, 2009, UMA Engineering Ltd. became AECOM Canada Ltd.

AECOM AS-CONSTRUCTED
SIG. _____ DATE _____



B.M. ELEV.	FIELD BOOK #:	UMA AECOM		ENGINEER'S SEAL	
POSTED TO LBIS		DESIGNED BY BLM	CHECKED BY		
		DRAWN BY QL	APPROVED BY		
2 AS - CONSTRUCTED	09/10/28	ALS			
1 ISSUED FOR PCN #20	09/06/23	RS			
0 ISSUED FOR CONSTRUCTION	08/04/03	QL		HOR. SCALE AS NOTED	RELEASED FOR CONSTRUCTION
NO. REVISIONS	DATE	BY	FILENAME: 1-0111L-E0003-001.dwg	DATE 07/04/23	DATE

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

PERIMETER ROAD PUMPING STATION UPGRADES
Contract B - Building Upgrades

Electrical
PANEL SCHEDULE AND MCC ELEVATION

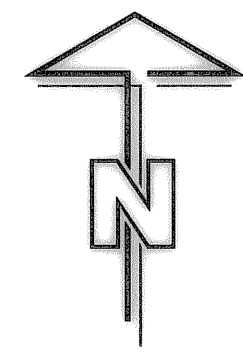
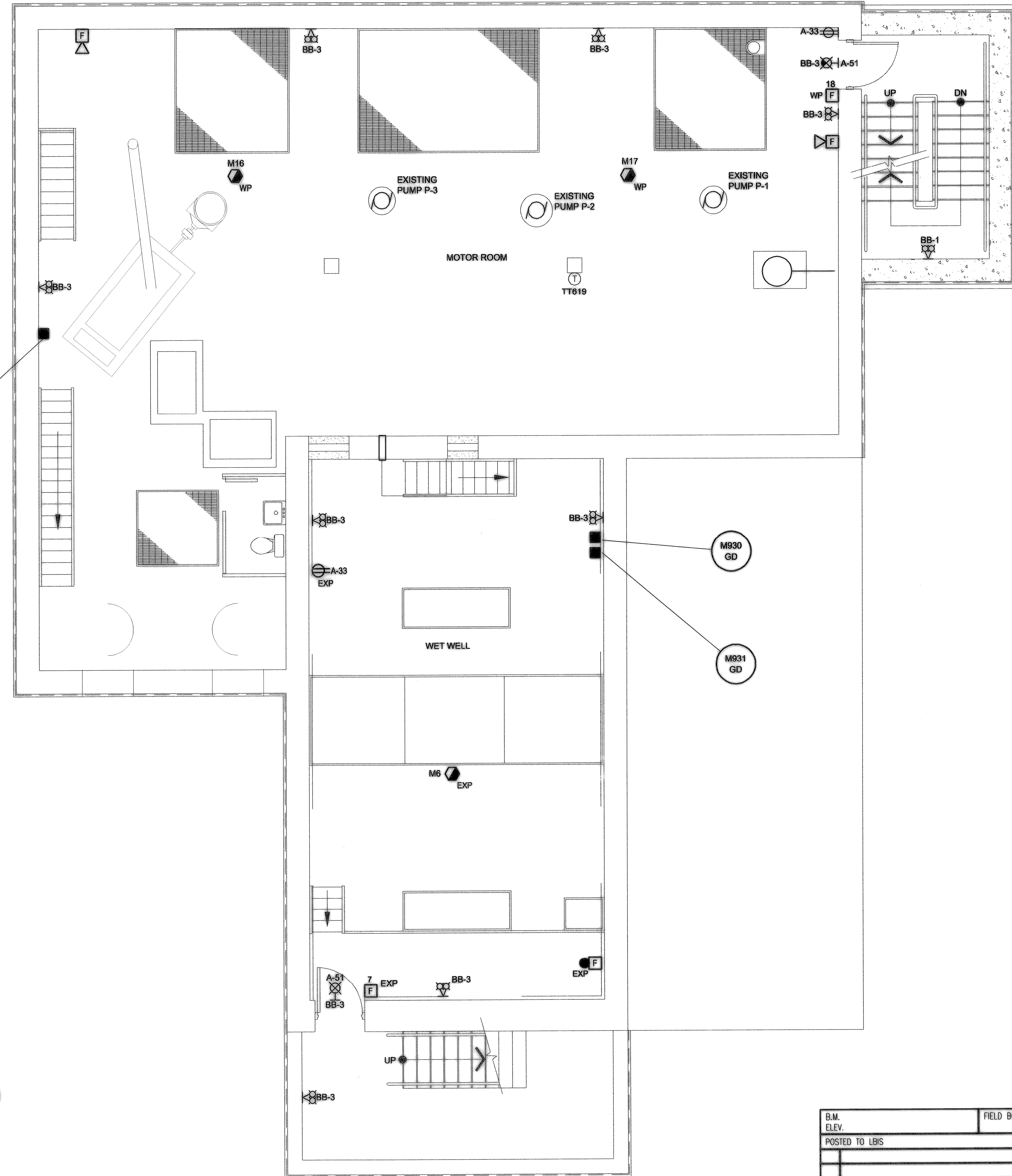
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SHEET: 001 REV: 2 SIZE: D

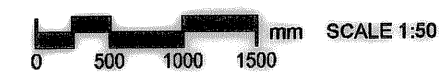
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PLOT: 10/01/28 4:04:40 PM

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PLAN LEVEL 300



1
E0014

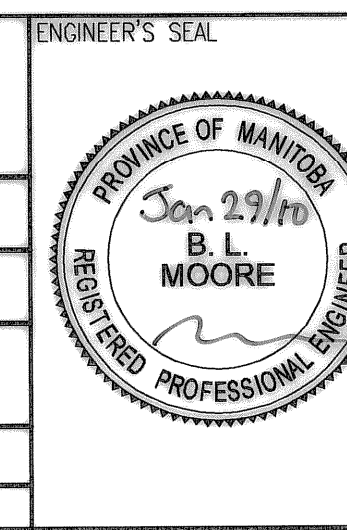
AECOM

As of January 3, 2009,
UMA Engineering Ltd.
became AECOM Canada Ltd.

AECOM AS-CONSTRUCTED
SIG. _____ DATE _____

APECM
Certificate of Authorization
AECOM Canada Ltd.
Original dated on:
No. 4671 Date: 2008/04/03

B.M. ELEV.	FIELD BOOK #:	UMA AECOM	
POSTED TO LBS		DESIGNED BY BM/LK	CHECKED BY _____
		DRAWN BY SCK	APPROVED BY _____
		HOR. SCALE AS NOTED	RELEASED FOR CONSTRUCTION
		VERTICAL AS NOTED	
1 AS - CONSTRUCTED	09/10/28	ALS	DATE 07/05/09
0 ISSUED FOR CONSTRUCTION	08/04/03	QL	DATE
NO. REVISIONS	DATE	BY	FILENAME: 1-0111L-E0013-001.dwg



THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

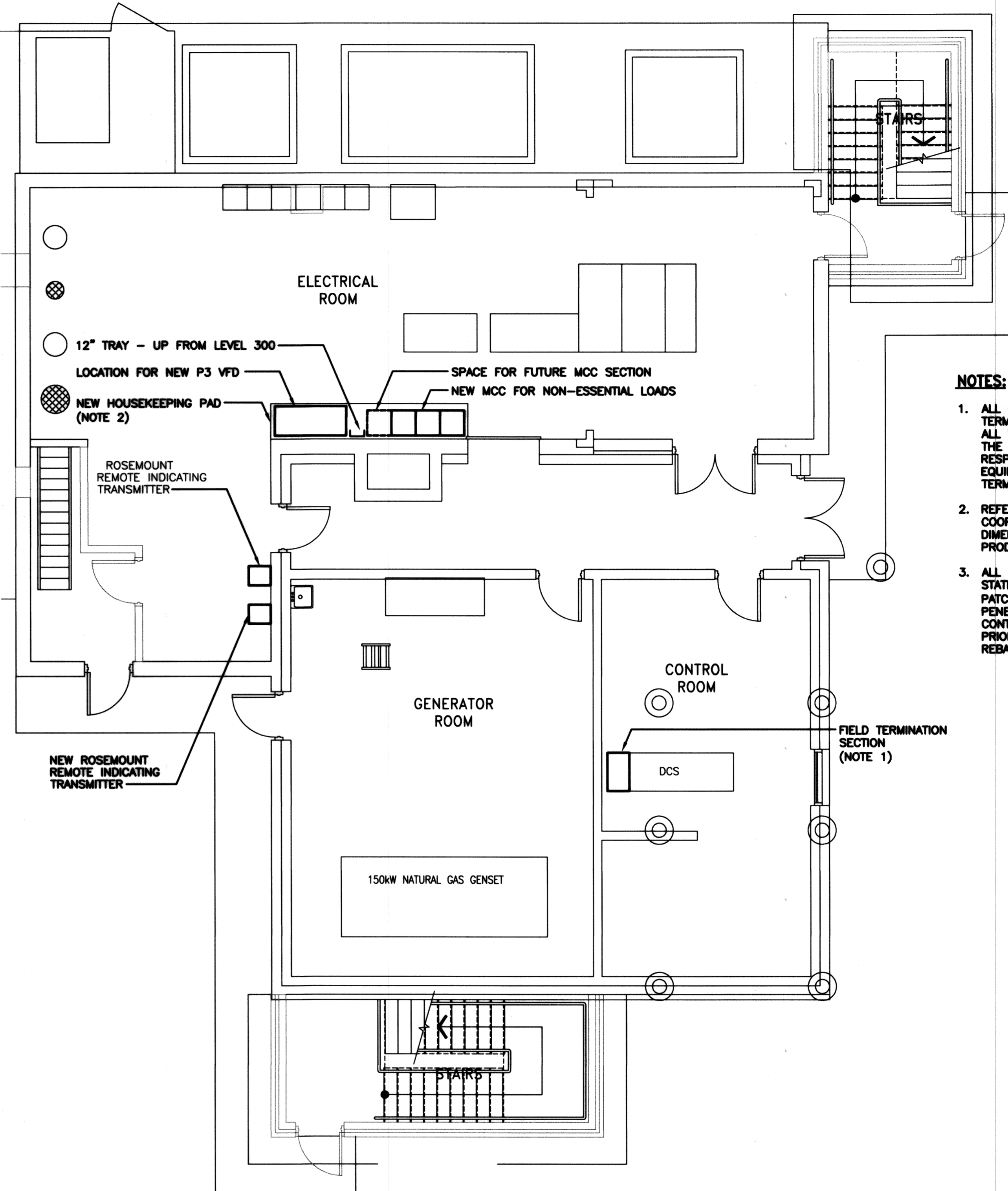
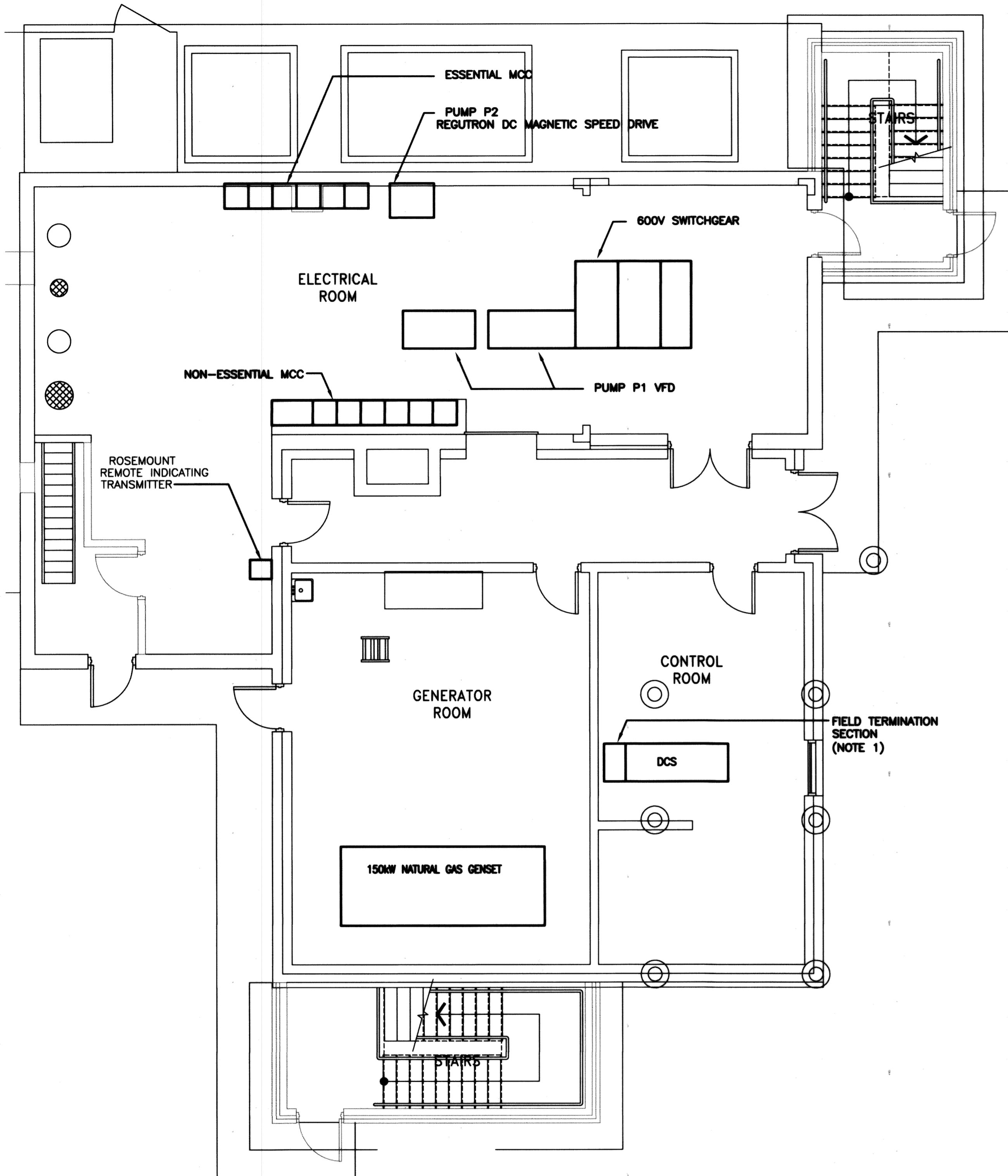
Winnipeg

PERIMETER ROAD PUMPING STATION UPGRADES
Contract B - Building Upgrades

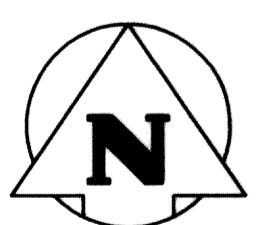
Electrical - Emergency Systems
LEVEL 300 FLOOR PLAN

CITY DRAWING NUMBER: **1-0111L-E0013** SHEET REV. SIZE: **001 1 D**

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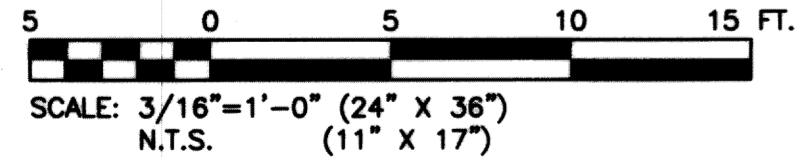


- NOTES:**
1. ALL CONTROL CABLING TO DCS CABINET SHALL BE TERMINATED WITHIN THE FIELD TERMINATION SECTION. ALL WIRING FROM THE FIELD TERMINATION SECTION TO THE DCS IS BY OTHER. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL WIRING FROM THE EQUIPMENT TO THE TERMINALS WITHIN THIS TERMINATION SECTION PRIOR TO COMMISSIONING.
 2. REFER TO THE STRUCTURAL DRAWING S01 FOR COORDINATION OF THE HOUSEKEEPING PAD. EXACT DIMENSIONS TO BE CONFIRMED ON SITE WITH PRODUCT SHOP DRAWINGS.
 3. ALL FIELD WIRING SHALL BE WITHIN CONDUIT UNLESS STATED OTHERWISE. CONTRACTOR IS RESPONSIBLE FOR PATCHING AND/OR FIRE STOPPING ALL FLOOR/WALL PENETRATIONS AS A RESULT OF THE NEW WORK. CONTRACTOR TO ALLOW FOR SCANNING THE CONCRETE PRIOR TO ANY CONDUIT PENETRATIONS TO ENSURE REBAR AND EMBEDDED SERVICES ARE MISSED.



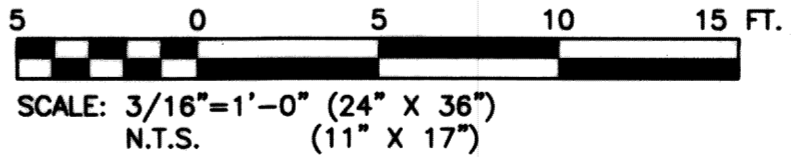
1

LEVEL 400 EQUIPMENT PLAN



2

LEVEL 400 NEW EQUIPMENT PLAN



RECORD DRAWING
 WATER & WASTE DEPARTMENT
 PROJECT COMPLETION DATE : 27 MAR 2013
 CONTRACTOR : T&D ENTERPRISES LTD.
 O/H WESCAN ELECTRICAL SERVICES

Certificate of Authorization
 KGS Group
 No. 245

NO.	REVISIONS	DATE	BY
2	RECORD DRAWING	2013-08-03	DWW
1	ISSUED FOR ADDENDUM #1	2011-12-05	JLL
0	ISSUED FOR TENDER	2011-11-07	JLL

DESIGNED BY	CHECKED BY
DDW	JLL
DRAWN BY	APPROVED BY
GCN	RED
DATE	DATE
2011 06 24	

ENGINEER'S SEAL

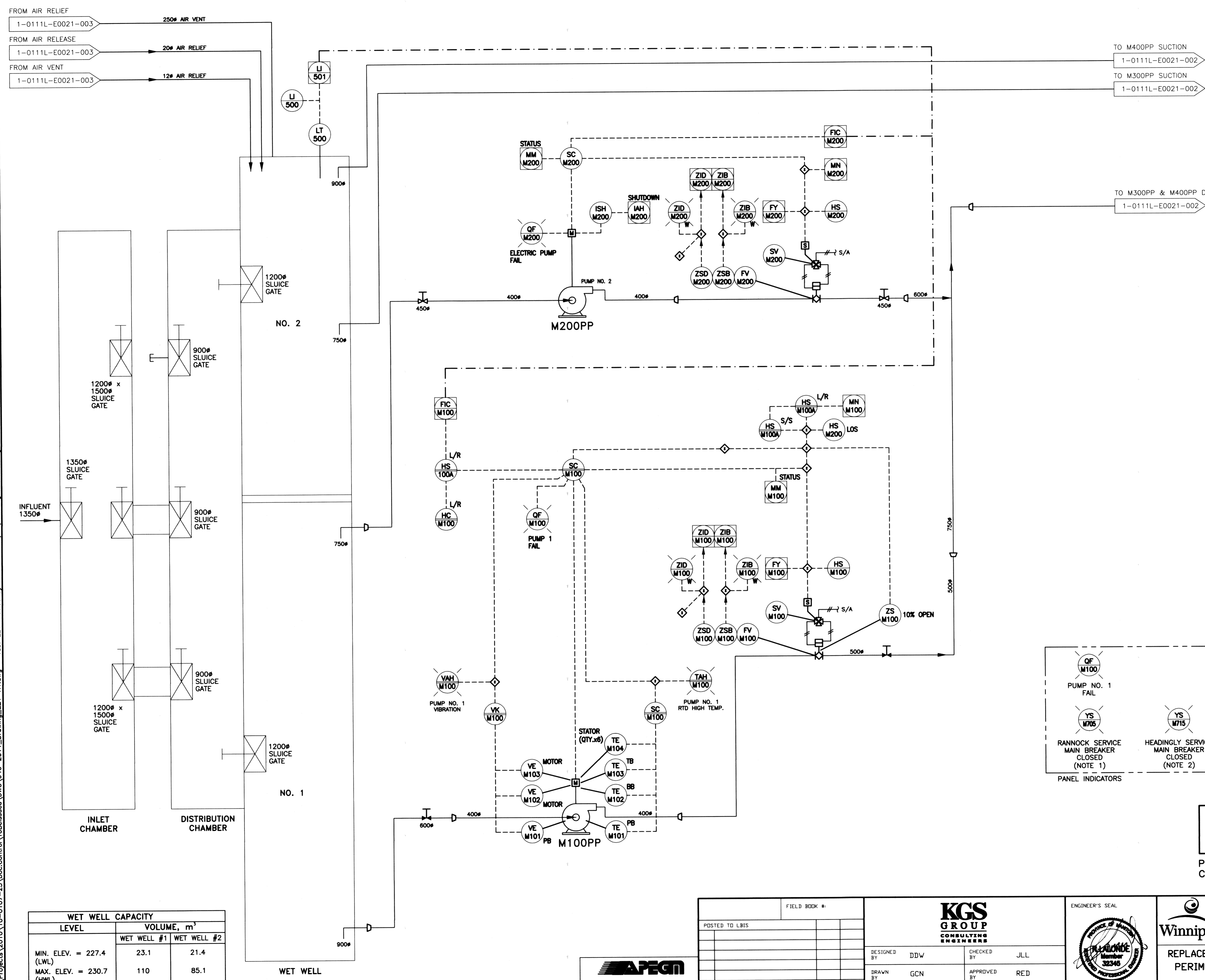
 SEPT 13, 2013
 E03

THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT

SHEET 1 OF 1
 CITY DRAWING NUMBER
1-0111L-E0019-001

REPLACEMENT OF RAW SEWAGE PUMP P-3
 PERIMETER ROAD PUMPING STATION
ELECTRICAL
 EXISTING AND NEW
 LEVEL 400 PLANS

File Name: P:\Projects\2010\10-0107-23\Doc.Control\ToBeIssued\DWG\940-2011_Drawing_E21-R1.dwg - Tab: E21 Plotted By: D.Dereche 09/24/2013 [Tue 10:55am]

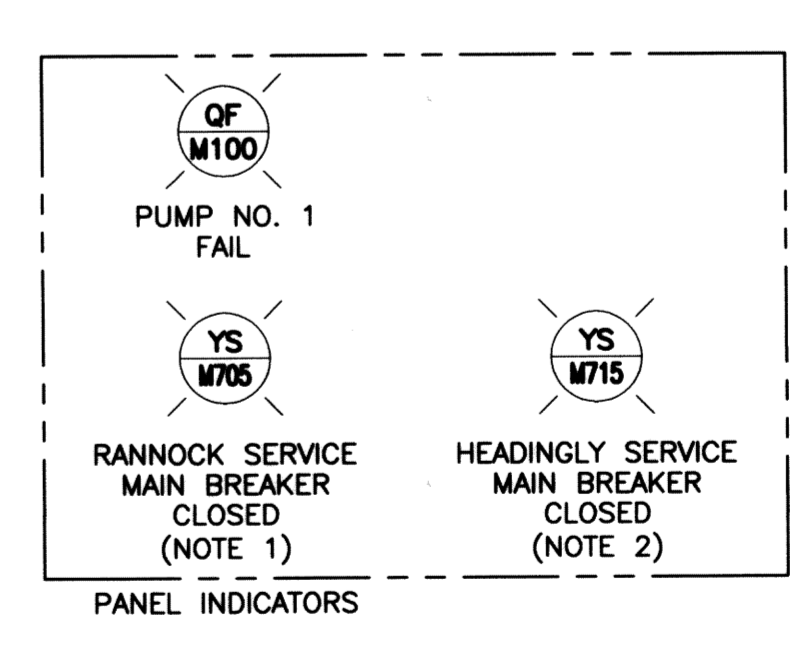


- NOTES:**
- EXISTING INDICATOR TO BE RELABELLED.
 - NEW INDICATOR TO BE INSTALLED AND LABELED.

- LEGEND:**
- TB TOP BEARING
 - BB BOTTOM BEARING
 - PB PUMP BEARING
 - LOS LOCK - OFF - STOP
 - L/R LOCAL / REMOTE
 - S/S START / STOP

PUMP M100PP	
KW CAPACITY	298
SPEED REG.	VFD

PUMP M200PP	
KW CAPACITY	473 L/S
SPEED REG.	MAG COUPLING



WET WELL CAPACITY		
LEVEL	VOLUME, m ³	
	WET WELL #1	WET WELL #2
MIN. ELEV. = 227.4 (LWL)	23.1	21.4
MAX. ELEV. = 230.7 (HWL)	110	85.1

APEGN
 Certificate of Authorization
 KGS Group
 No. 245

NO.	REVISIONS	DATE	BY
1	RECORD DRAWING	2013-09-03	DDW
0	ISSUED FOR TENDER	2011-11-07	JLL

DESIGNED BY		CHECKED BY	
DDW	JLL	JLL	
DRAWN BY		APPROVED BY	
GCN	RED	RED	
HOR. SCALE		RELEASED FOR CONSTRUCTION	
N.T.S.			
VERTICAL		DATE	
N.T.S.	2011 05 20		

ENGINEER'S SEAL

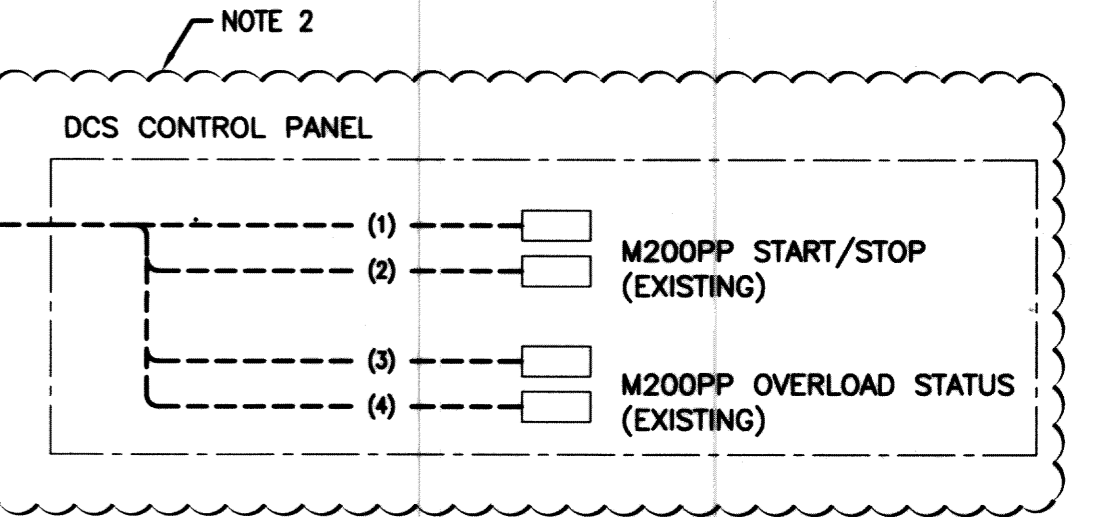
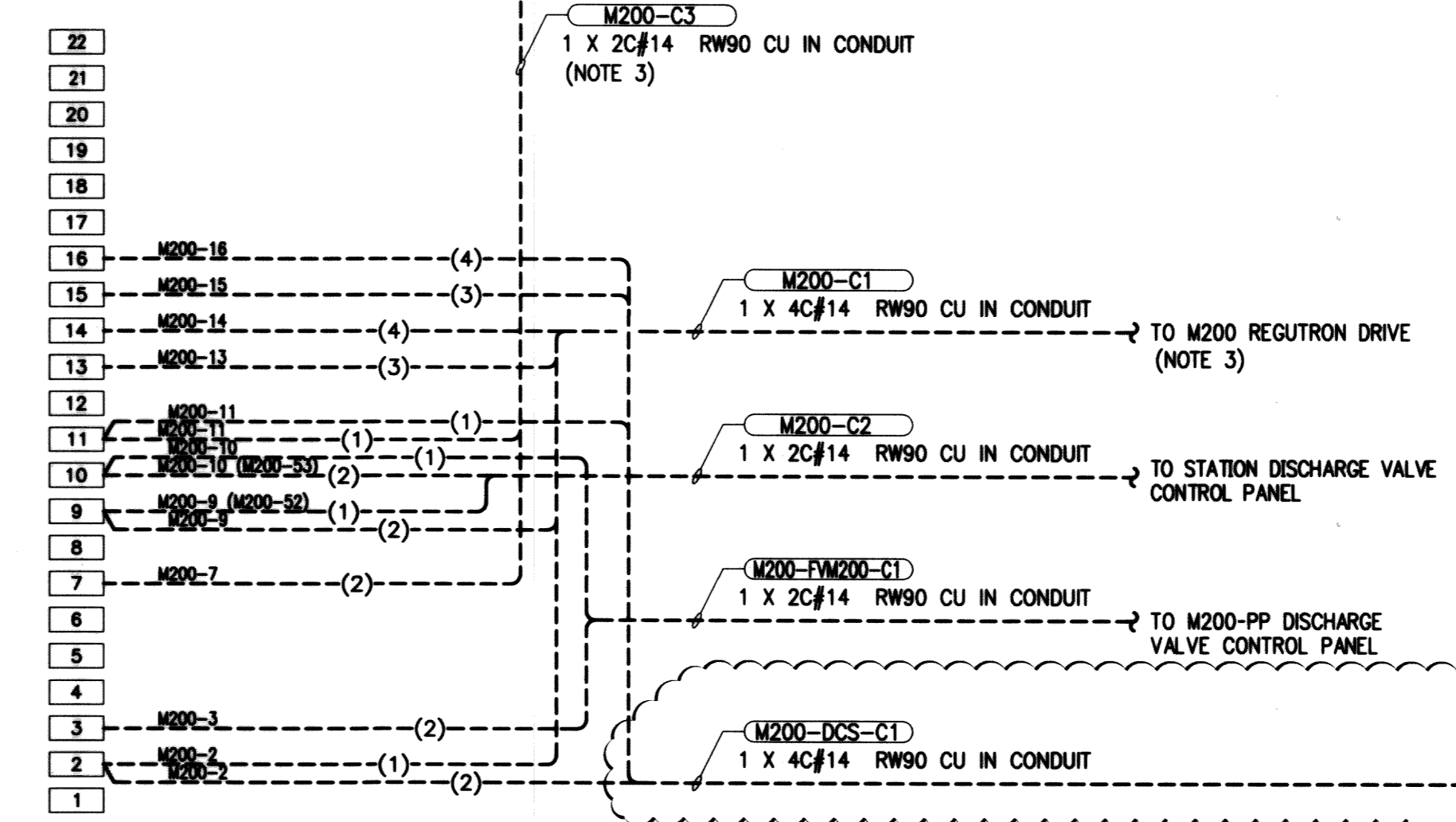
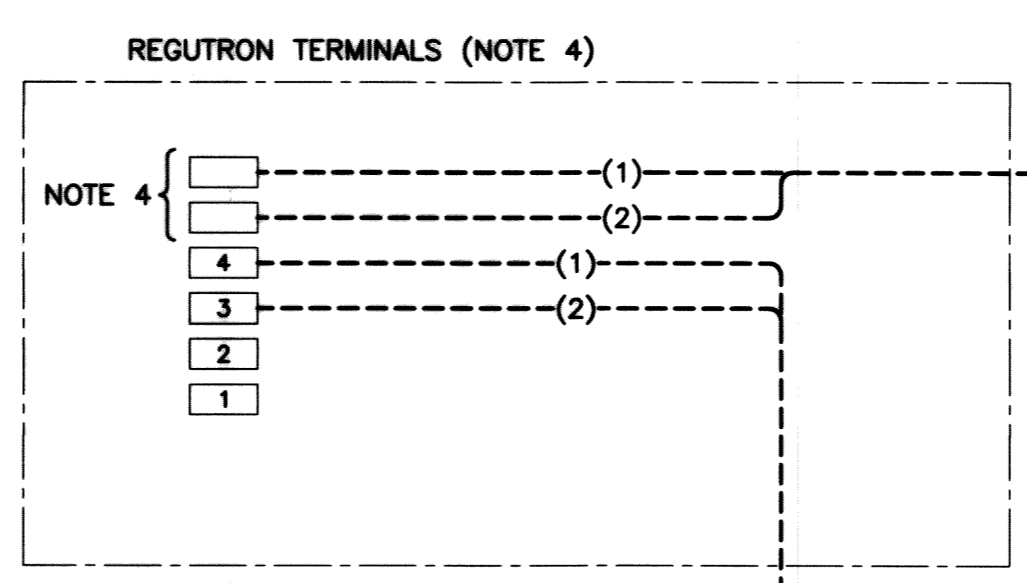
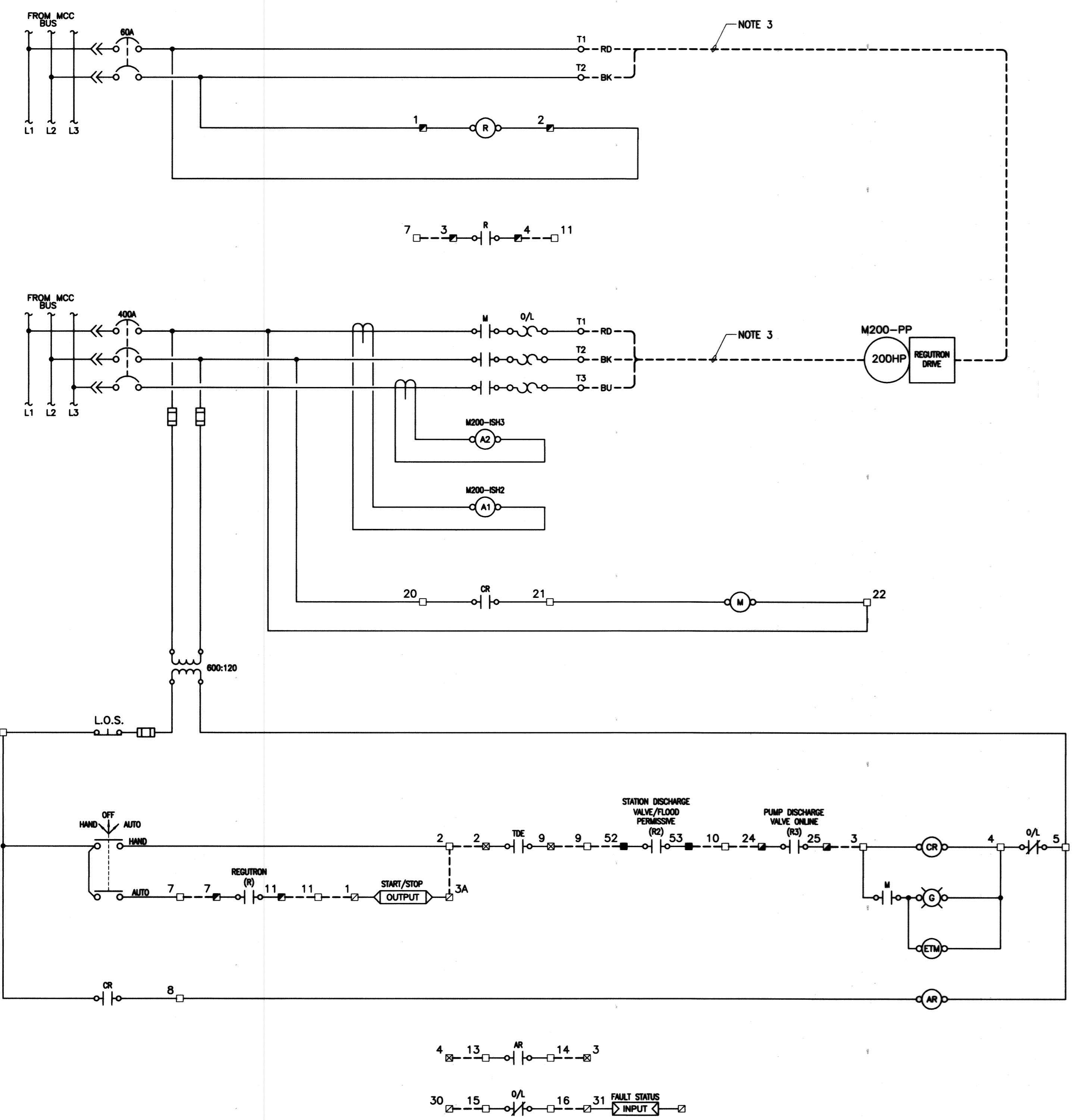
 E21

THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT
 REPLACEMENT OF RAW SEWAGE PUMP P-3
 PERIMETER ROAD PUMPING STATION
ELECTRICAL
 PROCESS & INSTRUMENTATION DIAGRAM
 (NEW MODIFICATIONS)

PROJECT COMPLETION DATE : 27 MAR 2013
 CONTRACTOR : T&D ENTERPRISES LTD.
 O/H WESCAN ELECTRICAL SERVICES

SHEET 1 OF 3
 CITY DRAWING NUMBER
 1-0111L-E0021-001

RECORD DRAWING
 WATER & WASTE DEPARTMENT



- NOTES:**
- CONTRACTOR SHALL LABEL ALL EXISTING CONDUCTORS WHEN COMPLETING THE DEMOLITION WORK OF THE EXISTING NON-ESSENTIAL MCC. CONTRACTOR SHALL TRACE ALL EXISTING WIRING AND PROVIDE AN AS-BUILT FOR REVIEW BY THE ENGINEER.
 - EXISTING CABLE TO BE TERMINATED WITHIN THE EXISTING MCC AS REQUIRED.
 - EXISTING CABLE TO BE DISCONNECTED ON THE EXISTING MCC AND RECONNECTED WITHIN THE NEW MCC.
 - EXISTING TERMINALS WITHIN THE REGUTRON TO PROVIDE A SIGNAL TO OPEN THE VALVE WHEN PUMP REACHES MINIMUM SPEED. CONTRACTOR TO INCLUDE AS-BUILT OF THE REGUTRON TERMINALS.

- LEGEND**
- MCC TERMINALS
 - STATION DISCHARGE VALVE CONTROL PANEL TERMINALS
 - ▣ DCS TERMINALS
 - ▤ M200PP DISCHARGE VALVE CONTROL PANEL TERMINALS
 - ▥ REGUTRON TERMINALS
 - ▧ REGUTRON MCC DISCONNECT TERMINALS
 - FIELD WIRING
 - PANEL WIRING
 - () CONDUCTOR IDENTIFICATION
 - WIRE CONNECTION
 - ⊙ PILOT LIGHT
 - OUTPUT PLC OUTPUT
 - INPUT PLC INPUT

RECORD DRAWING
 WATER & WASTE DEPARTMENT
 PROJECT COMPLETION DATE : 27 MAR 2013
 CONTRACTOR : T&D ENTERPRISES LTD.
 O/H WESCAN ELECTRICAL SERVICES

MAPEGN
 Certificate of Authorization
 KGS Group
 No. 245

NO.	REVISIONS	DATE	BY	DATE	2011 07 13
2	RECORD DRAWING	2013-09-01	DOW		
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0	ISSUED FOR TENDER	2011-11-07	JLL		

ENGINEER'S SEAL

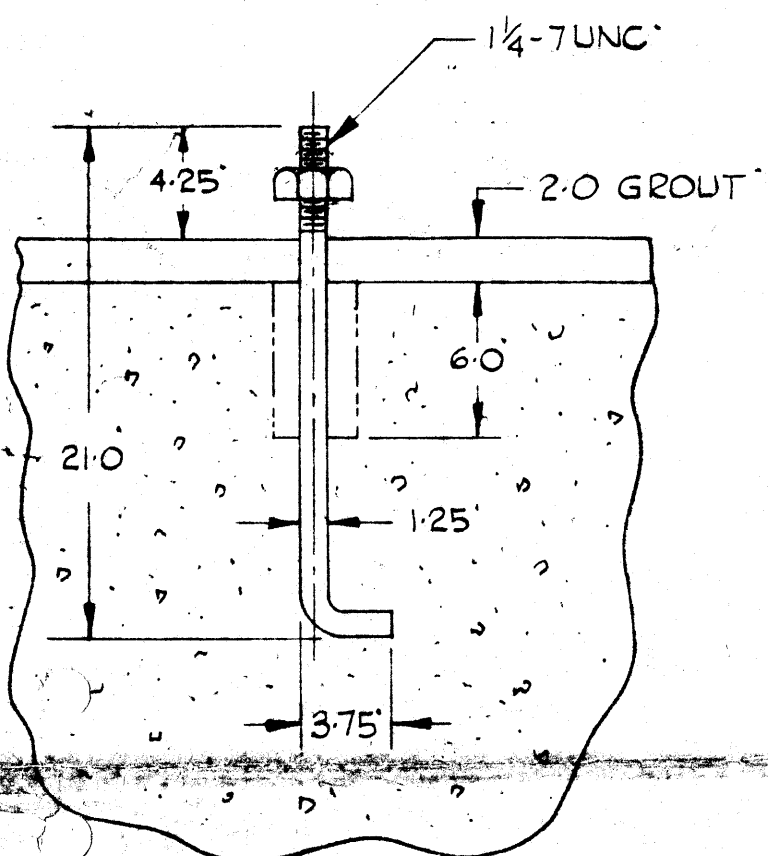
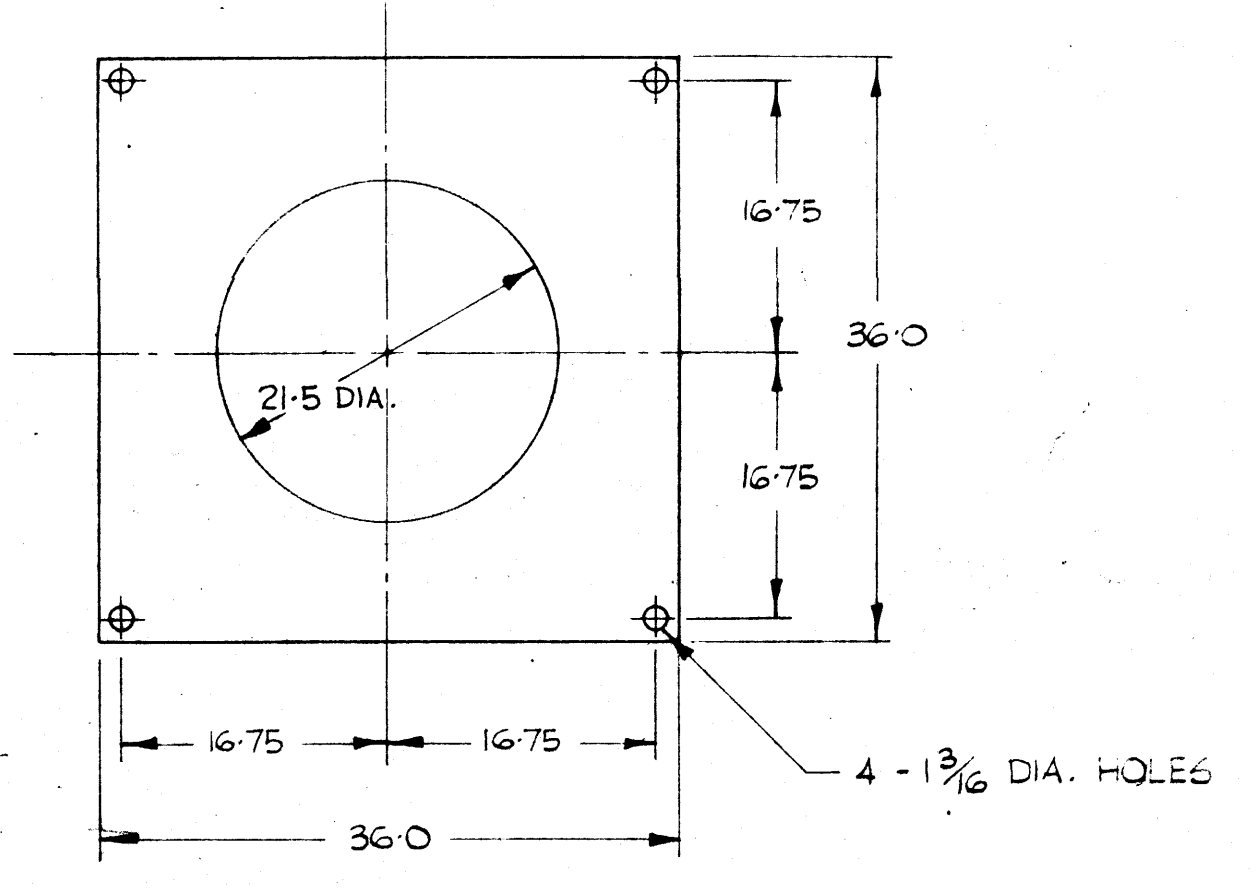
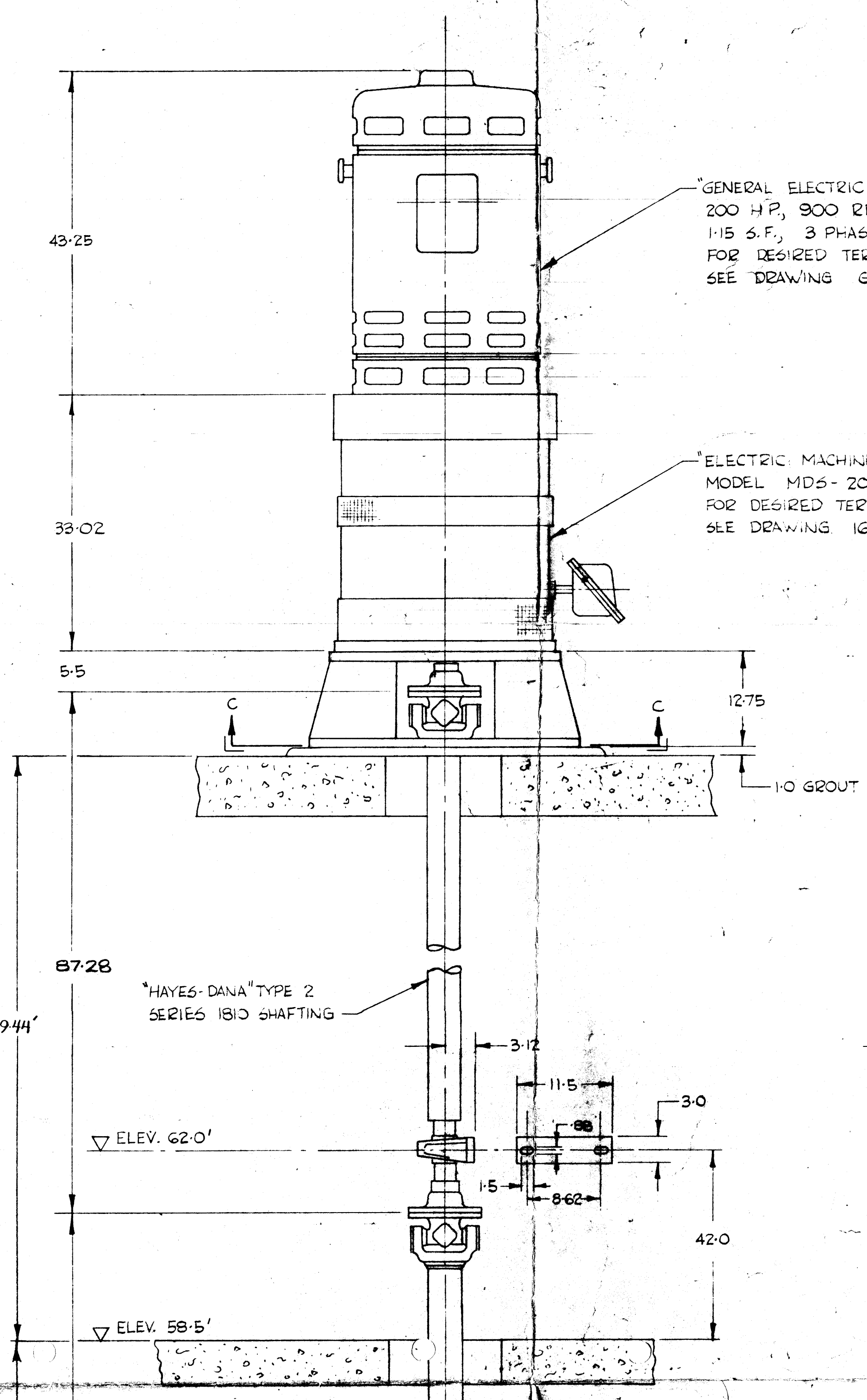
 E35

THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT

REPLACEMENT OF RAW SEWAGE PUMP P-3
 PERIMETER ROAD PUMPING STATION
ELECTRICAL
 PUMP M200PP MCC STARTER
 SCHEMATIC & WIRING DIAGRAM

SHEET 1 OF 1
 CITY DRAWING NUMBER
 1-0111L-E0028-001

CERTIFIED CORRECT FOR CUST. ORDER: 49571
 CUSTOMER: THE CITY OF WINNIPEG
 D.O. ORDER: 5-1-75 CONTRACT: B0154021
 CERTIFIED BY: [Signature] DATE: 9 JUNE 1975
 DIMENSIONS ARE FROM DRAWINGS. CASTINGS MAY VARY SLIGHTLY. FOUNDATION BOLTS MUST NOT BE FIXED RIGIDLY UNTIL MACHINE IS IN PLACE. THIS PRINT SUBJECT TO RETURN ON DEMAND AND UNDER CONDITION IT IS NOT USED IN ANY WAY DETRIMENTAL TO OUR INTEREST.



STANDARD DRAWING NOTES

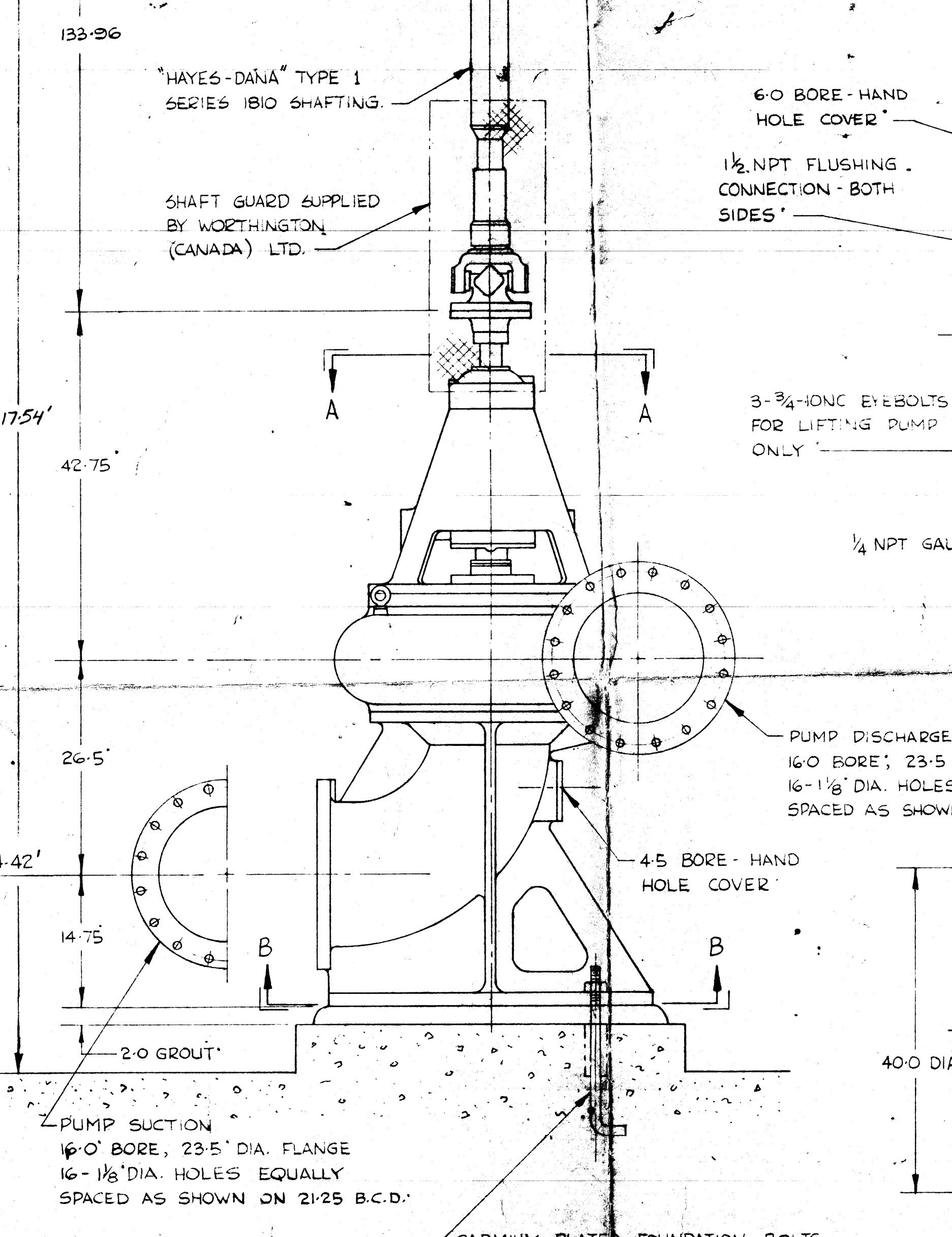
1. ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE IN MILLIMETERS.
2. DIMENSIONS ARE TO BE TAKEN FROM THE UNFINISHED SURFACE UNLESS OTHERWISE SPECIFIED.
3. DIMENSIONS ARE TO BE TAKEN FROM THE FINISHED SURFACE UNLESS OTHERWISE SPECIFIED.
4. DIMENSIONS ARE TO BE TAKEN FROM THE CENTERLINE UNLESS OTHERWISE SPECIFIED.
5. DIMENSIONS ARE TO BE TAKEN FROM THE SURFACE UNLESS OTHERWISE SPECIFIED.
6. DIMENSIONS ARE TO BE TAKEN FROM THE CENTERLINE UNLESS OTHERWISE SPECIFIED.
7. DIMENSIONS ARE TO BE TAKEN FROM THE SURFACE UNLESS OTHERWISE SPECIFIED.
8. DIMENSIONS ARE TO BE TAKEN FROM THE CENTERLINE UNLESS OTHERWISE SPECIFIED.
9. DIMENSIONS ARE TO BE TAKEN FROM THE SURFACE UNLESS OTHERWISE SPECIFIED.
10. DIMENSIONS ARE TO BE TAKEN FROM THE CENTERLINE UNLESS OTHERWISE SPECIFIED.

REV.	DESCRIPTION	DATE	BY	CHKD.	APP'D.
01	ISSUED FOR CONSTRUCTION	12/1/74	W.C.	W.C.	W.C.
02	REVISION	1/2/75	W.C.	W.C.	W.C.
03	REVISION	3/2/75	W.C.	W.C.	W.C.
04	REVISION	5/1/75	W.C.	W.C.	W.C.
05	REVISION	6/9/75	W.C.	W.C.	W.C.

WORTHINGTON (CANADA) LTD.
 BRANTFORD, ONTARIO

COMPOSITE ELEVATION 16 CFC-1

211331



NOTE
 4 1/2" ASHCROFT GAUGES SUPPLIED FOR
 SUCTION & DISCHARGE PIPING.

CADMIUM-PLATED FOUNDATION BOLTS
 SUPPLIED BY WORTHINGTON (CANADA)
 LTD. (SEE DETAIL)
 STEEL FOUNDATION BOLT SLEEVES
 & WASHERS SUPPLIED BY WORTHINGTON
 (CANADA) LTD.

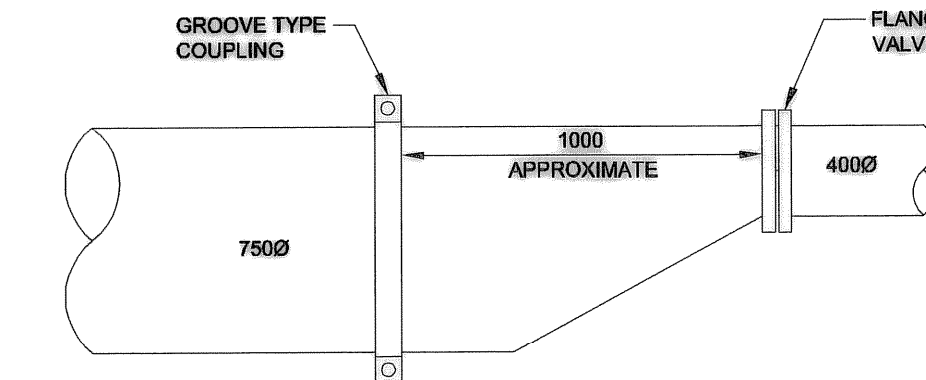
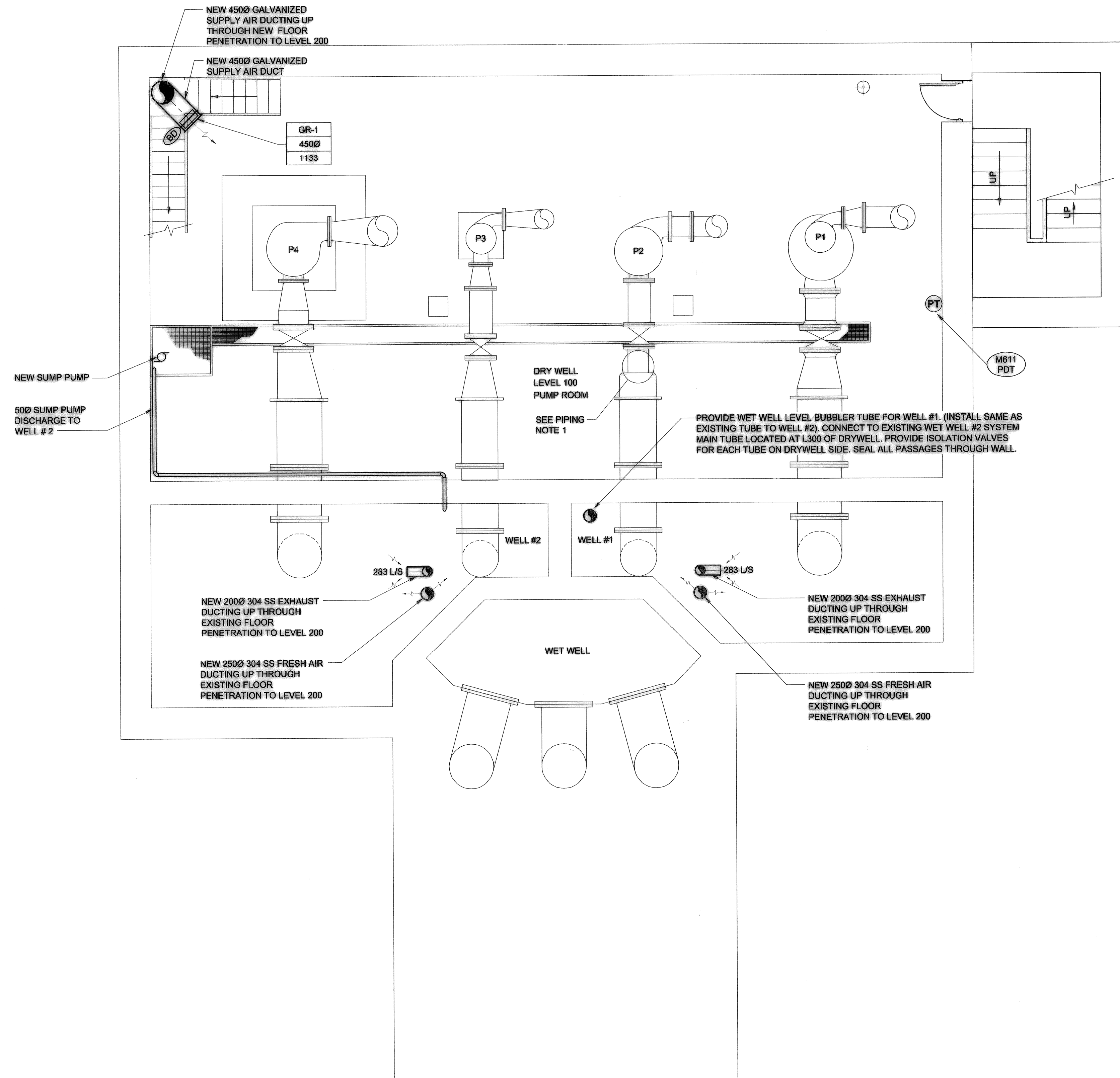
≡ PUMP BASE VIEW ON B-B ≡

DESIGNED BY	W.C.
CHECKED BY	W.C.
DATE	6/9/75
SCALE	AS SHOWN
PROJECT NO.	B0154021
DRAWING NO.	16 CFC-1

D SIZE 22" x 34" (559mm x 864mm)

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DETAIL

SCALE: N.T.S.

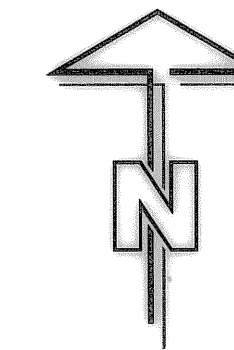
P2 SUCTION REDUCER REPLACEMENT
PAINT AS PER PIPING NOTES
(ALL DIMENSIONS ARE APPROXIMATE)

PIPING NOTES:

- P2 SUCTION REDUCER TO BE REPLACED WITH SINGLE ECCENTRIC REDUCER, AND SPOOL AS REQUIRED.
- ALL LEVEL 100, 200 AND 300 SUCTION AND DISCHARGE PIPING TO BE CLEANED AND RECOATED AS FOLLOWS:
 - REMOVE ALL LOOSE RUST, DIRT, MOISTURE AND OTHER CONTAMINANTS.
 - PRESSURE WASH ALL SURFACES WITH CLEAN WATER.
 - POWER TOOL AND HAND TOOL CLEAN TO SSPC-SP3 AND SP2 RESPECTIVELY.
 - REMAINING COATING MUST BE STRONGLY ADHERED TO SUBSTRATE.
 - PROVIDE VENTILATION AND HEAT AS REQUIRED TO KEEP PIPING MOISTURE FREE AND WITHIN MANUFACTURER'S RECOMMENDED APPLICATION TEMPERATURE AND HUMIDITY RANGE DURING COATING AND CURING.
 - APPLY 3 COATS (1.5 TO 2.5 MILS DFT PER COAT) USING BRUSH OR ROLLER APPLICATION.
 - COATING TO BE AMERON AMERLOCK 400. COLOUR TO BE APPROVED BY CONTRACT ADMINISTRATOR FROM STANDARD PRODUCT LIST. PREPARE AND APPLY PRODUCT AS PER COATING MANUFACTURER'S RECOMMENDATIONS.

NOTE:

- ALL NEW STEEL WORK, BRACKETS, ETC., TO BE GALVANIZED UNLESS OTHERWISE NOTED.
- APPLY 304 SS . 25mm OPENING WIRE MESH TO ALL DUCT OPENINGS IN WET WELL AREA.



PLAN LEVEL 100

1



AECOM

As of January 3, 2009,
UMA Engineering Ltd.
became AECOM Canada Ltd.

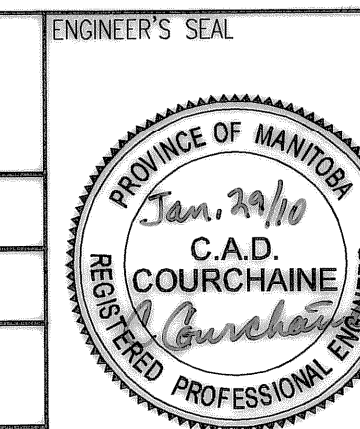
AECOM

AS-CONSTRUCTED

SIG..... DATE.....

APECM
Certificate of Authorization
AECOM Canada Ltd.
Original dated on:
No. 4671 Date: 2008/04/03

B.M. ELEV.	FIELD BOOK #:	UMA AECOM	
POSTED TO LBS		© 2008 UMA ENGINEERING LTD. ALL RIGHTS RESERVED.	
		DESIGNED BY CAC	CHECKED BY -----
		DRAWN BY RJP	APPROVED BY -----
		HOR. SCALE AS NOTED	RELEASED FOR CONSTRUCTION
		VERTICAL AS NOTED	DATE 07/05/09
1 AS - CONSTRUCTED	09/10/28	ALS	DATE
0 ISSUED FOR CONSTRUCTION	08/04/03	RS	DATE
NO. REVISIONS	DATE	BY	FILENAME: 1-0111L-M0007-001.dwg



THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

PERIMETER ROAD PUMPING STATION UPGRADES
Contract B - Building Upgrades

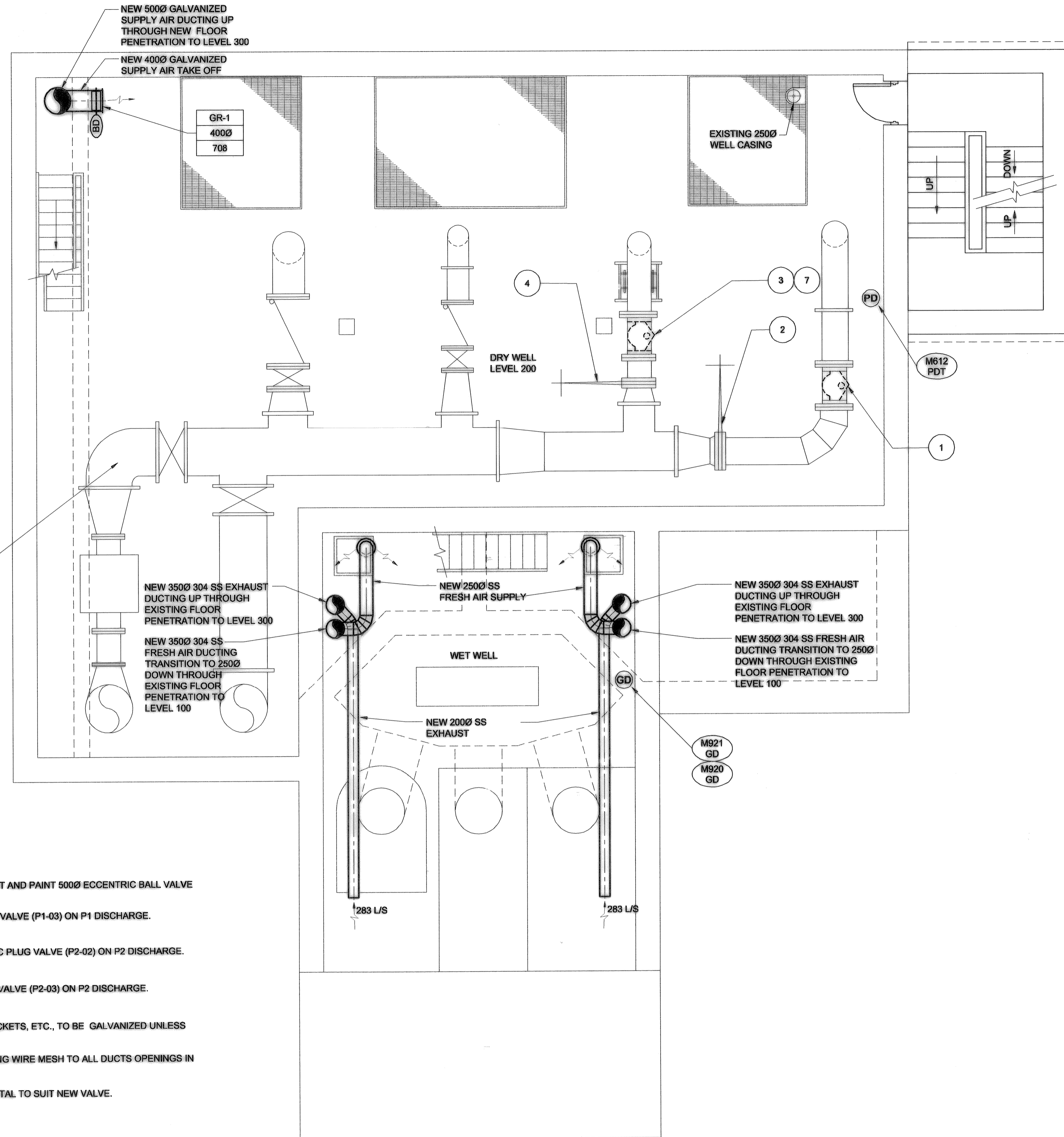
Mechanical - New Construction
LEVEL 100 FLOOR PLAN

CITY DRAWING NUMBER: **1-0111L-M0007** SHEET REV. SIZE: **001 1 D**

D SIZE 22" x 34" (559mm x 864mm)

PLOT: 10/01/29 8:28:01 AM

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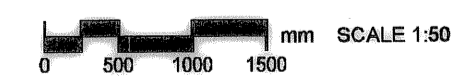


CLEAN AND RECOAT. REFER M0007 PIPING NOTES.

DRAWING NOTES

- 1 REPLACE BOLTS, SANDBLAST AND PAINT 5000 ECCENTRIC BALL VALVE (P1-02) ON P1 DISCHARGE.
- 2 REPLACE 5000 KNIFE GATE VALVE (P1-03) ON P1 DISCHARGE.
- 3 REPLACE 4500 BALLCENTRIC PLUG VALVE (P2-02) ON P2 DISCHARGE.
- 4 REPLACE 4500 KNIFE GATE VALVE (P2-03) ON P2 DISCHARGE.
- 5 ALL NEW STEEL WORK, BRACKETS, ETC., TO BE GALVANIZED UNLESS OTHERWISE NOTED.
- 6 APPLY 304 SS, 25mm OPENING WIRE MESH TO ALL DUCTS OPENINGS IN WET WELL AREA.
- 7 MODIFY OR REPLACE PEDESTAL TO SUIT NEW VALVE.

PLAN LEVEL 200



NOTE: ALL AREAS CLASS 1 GROUP D DIV 1 ELECT. RATING INLESS O/W NOTED

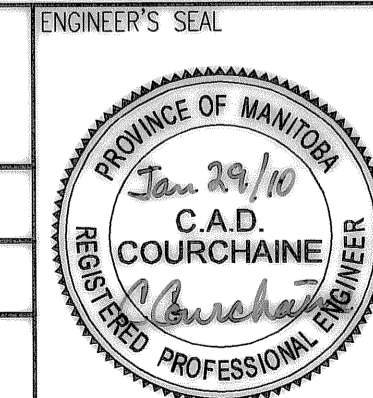
AECOM

As of January 3, 2009, UMA Engineering Ltd. became AECOM Canada Ltd.

AECOM AS-CONSTRUCTED



B.M. ELEV.	FIELD BOOK #:	UMA AECOM	
POSTED TO LBS		DESIGNED BY CAC	CHECKED BY
		DRAWN BY RJP	APPROVED BY
		HOR. SCALE AS NOTED	RELEASED FOR CONSTRUCTION
		VERTICAL AS NOTED	DATE
1 AS - CONSTRUCTED	09/10/28	ALS	
0 ISSUED FOR CONSTRUCTION	08/04/03	RS	DATE 07/05/09
NO. REVISIONS	DATE	BY	FILENAME: 1-0111L-M0008-001.dwg



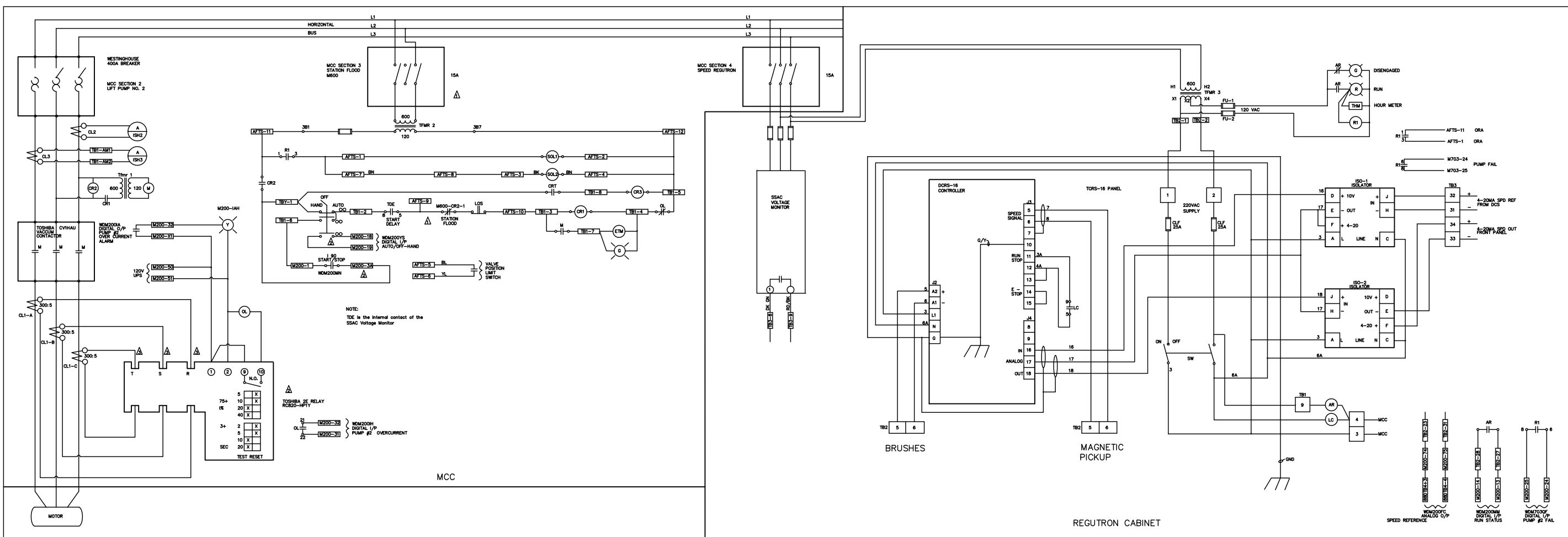
THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

PERIMETER ROAD PUMPING STATION UPGRADES
Contract B - Building Upgrades

Mechanical - New Construction
LEVEL 200 FLOOR PLAN

CITY DRAWING NUMBER: 1-0111L-M0008

SHEET: 001 REV: 1 SIZE: D



3B1 & 3B7	POINTS OFF TERMINAL STRIP	120 V	BOTTOM OF MCC SECTION 3
AFTS	AUX. FIELD TERMINAL STRIP		M.C.C.
AR	AUXILIARY RELAY	240V COIL	R.C.
CL#	COIL#		MCC
CR1	START RELAY	120V COIL	MCC
CR2	MCC BREAKER ON	600V COIL	MCC
CR3	REGUTRON START	120V COIL	MCC
ETM	ELAPSE TIME METER	120V	MCC
I/A	4-20ma TO 0-20ma CONVERTER	WITH USE OF RES	R.C.

LC	LINE CONTACTOR	240V COIL	R.C.	ENERGIZED = RUN DE-ENERGIZED = STOP
M	MOTOR CONTACTOR	120V COIL	MCC	ENERGIZED = RUN DE-ENERGIZED = STOP
OL	OVERLOAD RELAY	120V COIL (UPS)	MCC	ENERGIZED = FAIL DE-ENERGIZED = NORMAL
SOL1	FAIL SAFE CLOSE (2-WAY N.O.)	120V	PUMP FLOOR	ENERGIZED = VALVE CAN OPEN DE-ENERGIZED = CLOSE
SOL2	OPEN/CLOSE VALVE (4-WAY)	120V	PUMP FLOOR	ENERGIZED = OPEN VALVE DE-ENERGIZED = CLOSE VALVE
TB1	TERMINAL BLOCK 1		MCC	
TB2	TERMINAL BLOCK 2		R.C.	
TB3	TERMINAL BLOCK 3		R.C.	
TDE	POWER REGUTRON START DELAY	120V COIL	R.C.	OPEN = NON PERMISSIVE CLOSED = TIMED READY
Ttm #	TRANSFORMER #	VARIOUS	MCC & RC	
THM	TIME HOUR METER	120V		

NOTES:
 ▲ REFER TO DWS. WEP-680
 ▲ REFER TO DWS. WEP-656
 ▲ HAS TWO (2) TURNS
 ▲ REFER TO ELECTRIC MACHINERY DWGS.
 375C182
 382C259N
 382C257N
 382C734N

COLORS
 BK = BLACK
 BL = BLUE
 BN = BROWN
 DK GN = DARK GREEN
 GN = GREEN
 OR = ORANGE
 RD = RED
 RD/BLK = RED/BLACK
 YL = YELLOW
 YL/BLK = YELLOW/BLACK

DESIGNED BY	19/04/11	SPH	CHECKED BY	M. JEGUES
DRAWN BY	12/96	MBD	APPROVED BY	
REVISOR	05-96	CSN	RELEASED FOR CONSTRUCTION	
REVISION	04-94	MBD	DATE	
REVISION	09/92	MBD	DATE	
REVISION	08/90	MBD	DATE	
NO.	REVISIONS	DATE	BY	DATE

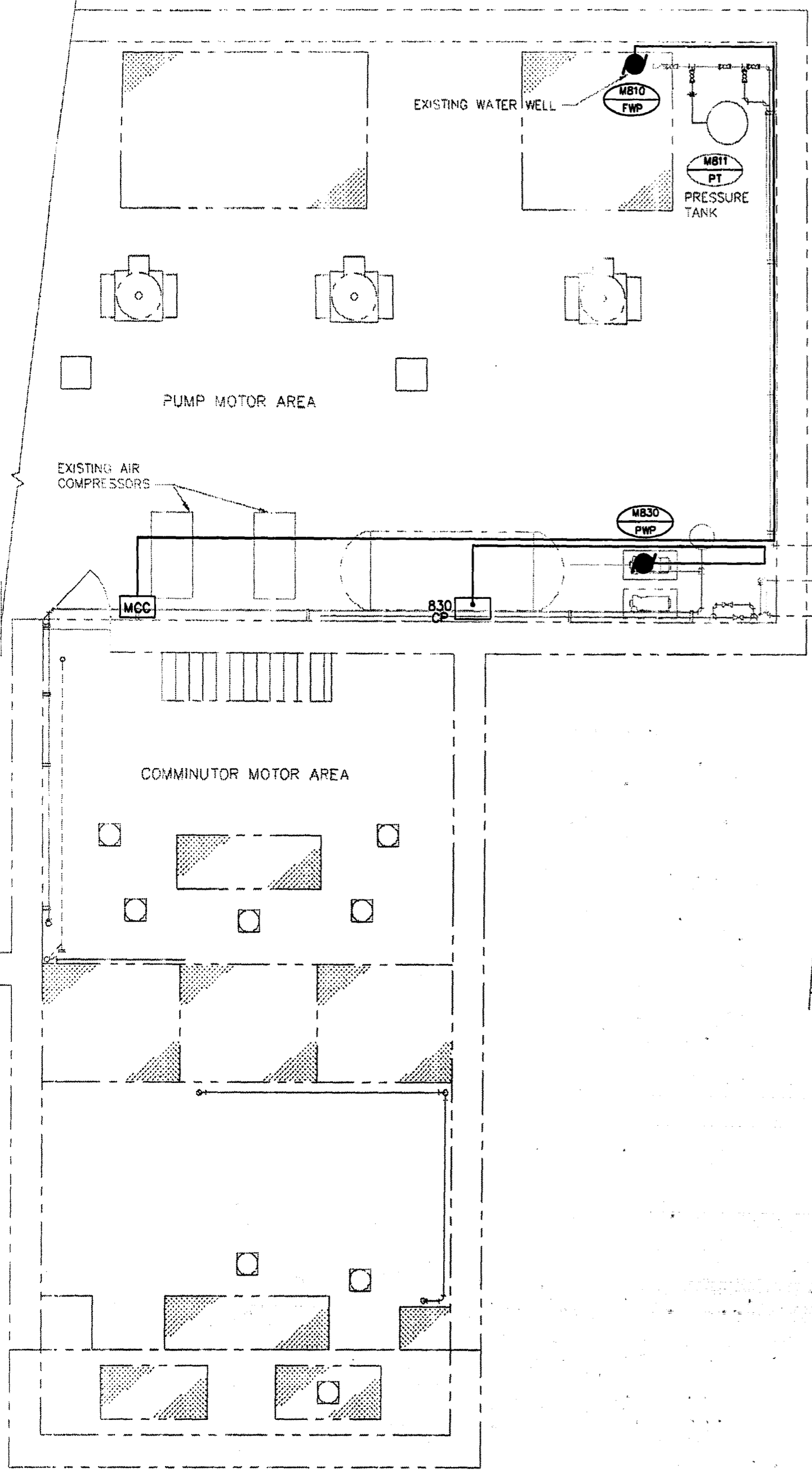
THE CITY OF WINNIPEG
 WORKS AND OPERATIONS DIVISION
 WATER AND WASTE DEPARTMENT

PERIMETER ROAD
 PUMP STATION

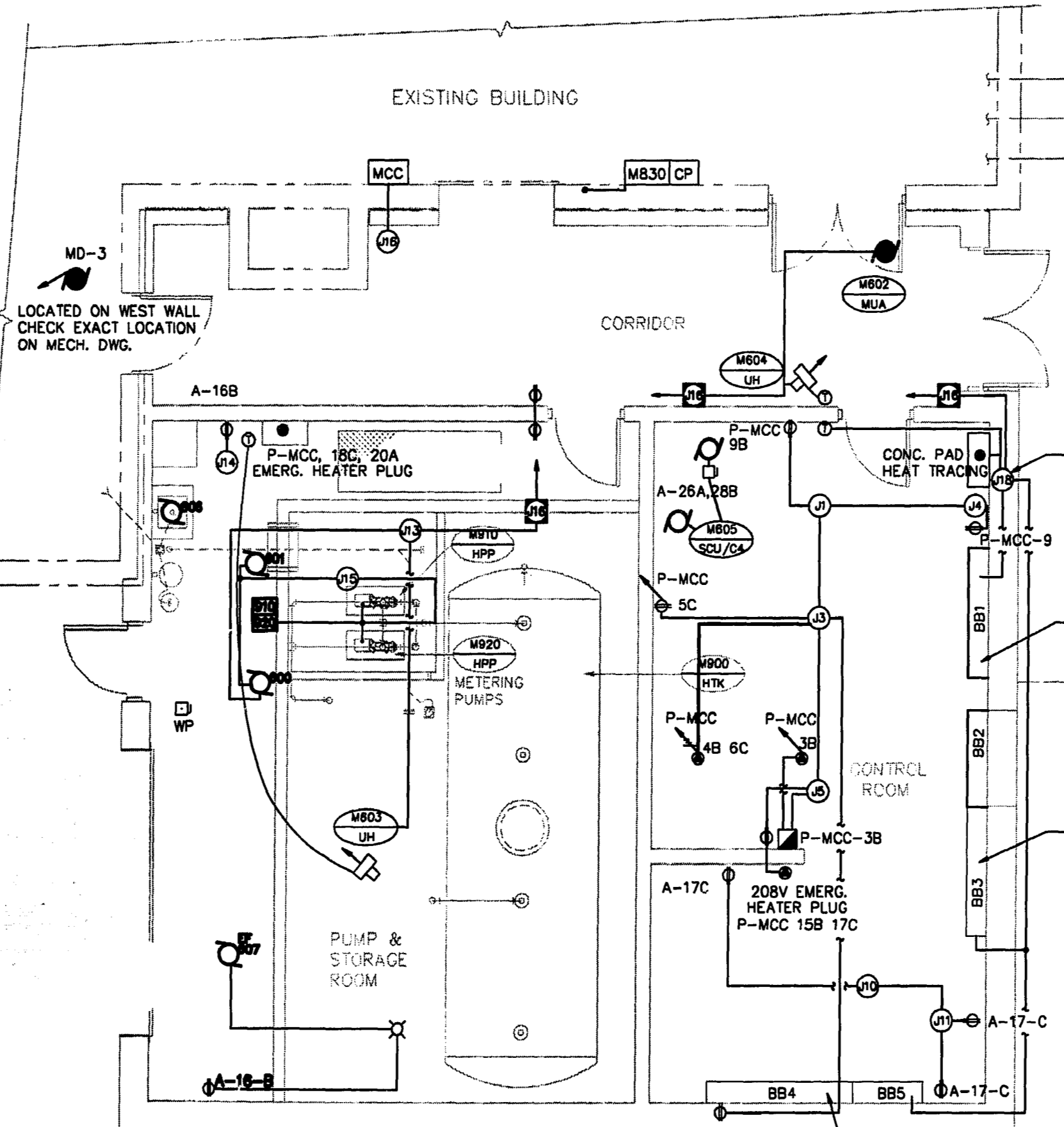
M200-PP CONTROL

SHEET OF
 CITY DRAWING NUMBER
 PRS-31

PLOT DATE:
 JANUARY 31, 1997



COMMUNOTOR MOTOR AREA FLOOR PLAN
ELEVATION 234.086



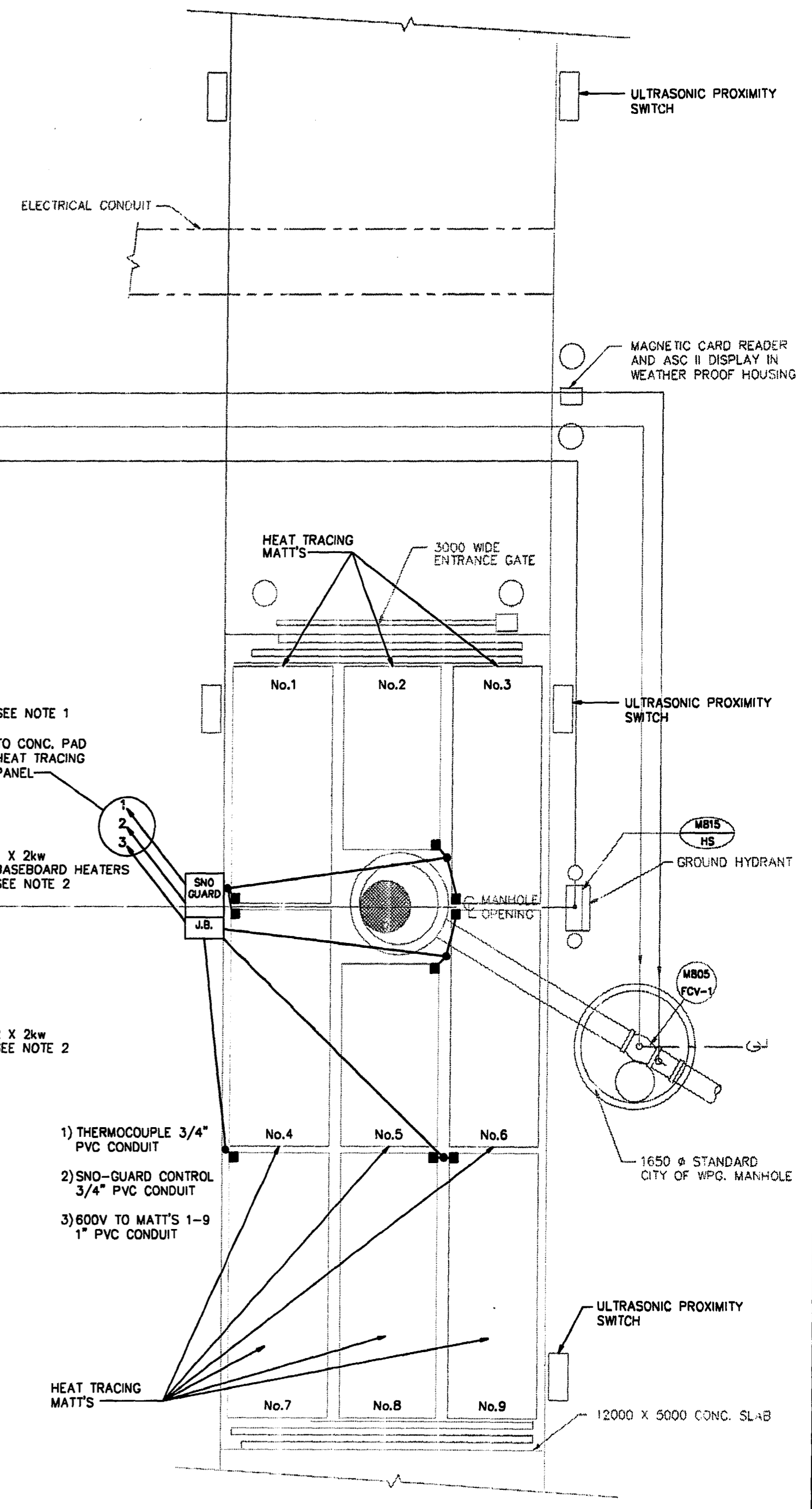
MAIN FLOOR PLAN
REID, CROWTHER & PARTNERS LIMITED
WINNIPEG
AS CONSTRUCTED
SIG. *[Signature]* DATE: 6/21/94

THE ENGINEER THAT SEALED THIS DRAWING IS RESPONSIBLE FOR ONLY THE AS-CONSTRUCTED CHANGES ON THIS DRAWING.
THE ORIGINAL DESIGN WAS THE RESPONSIBILITY OF THE DESIGN ENGINEER WHO SEALED THE ISSUED FOR TENDER DRAWINGS IN 1991.

- NOTES**
- J.B 18 HOUSES CONTROL TRANSFORMER 600/120 FOR THERMOSTAT TO BASEBOARD FOR CONTROL ROOM
 - BASEBOARD HEATERS ARE 1Ø HEATERS WITH 3Ø SUPPLY FROM MCC. CURRENT DIVIDED AS FOLLOWS:
BB1 A-B Ø
BB2;3 B-C Ø
BB4;5 C-A Ø

detail symbol

A detail number
B drawing where detail shown
C cross reference to drawing where detail taken



- THERMOCOUPLE 3/4" PVC CONDUIT
- SNO-GUARD CONTROL 3/4" PVC CONDUIT
- 600V TO MATT'S 1-9 1" PVC CONDUIT

B.M. 69-006	ELEV. 237.636 m
DESIGNED BY: WMM	CHECKED BY: DT
DRAWN BY: GGB	APPROVED BY:
HOR. SCALE: 1:50	RELEASED FOR CONSTRUCTION:
VERTICAL:	DATE:
NO. REVISIONS	DATE BY
1 AS BUILT	93/11 DE
DATE	91-05-24

Reid Crowther

DESIGNED BY: WMM
DRAWN BY: GGB
HOR. SCALE: 1:50
VERTICAL:

ENGINEER'S SEAL
PROF. OF MANITOBA
P. STRYK
REGISTERED PROFESSIONAL ENGINEER

THE CITY OF WINNIPEG
WORKS AND OPERATIONS DIVISION
WATERWORKS WASTE AND DISPOSAL DEPT.

WEST END WATER POLLUTION CONTROL CENTRE EXPANSION
AREA M - PERIMETER ROAD PUMPING STATION

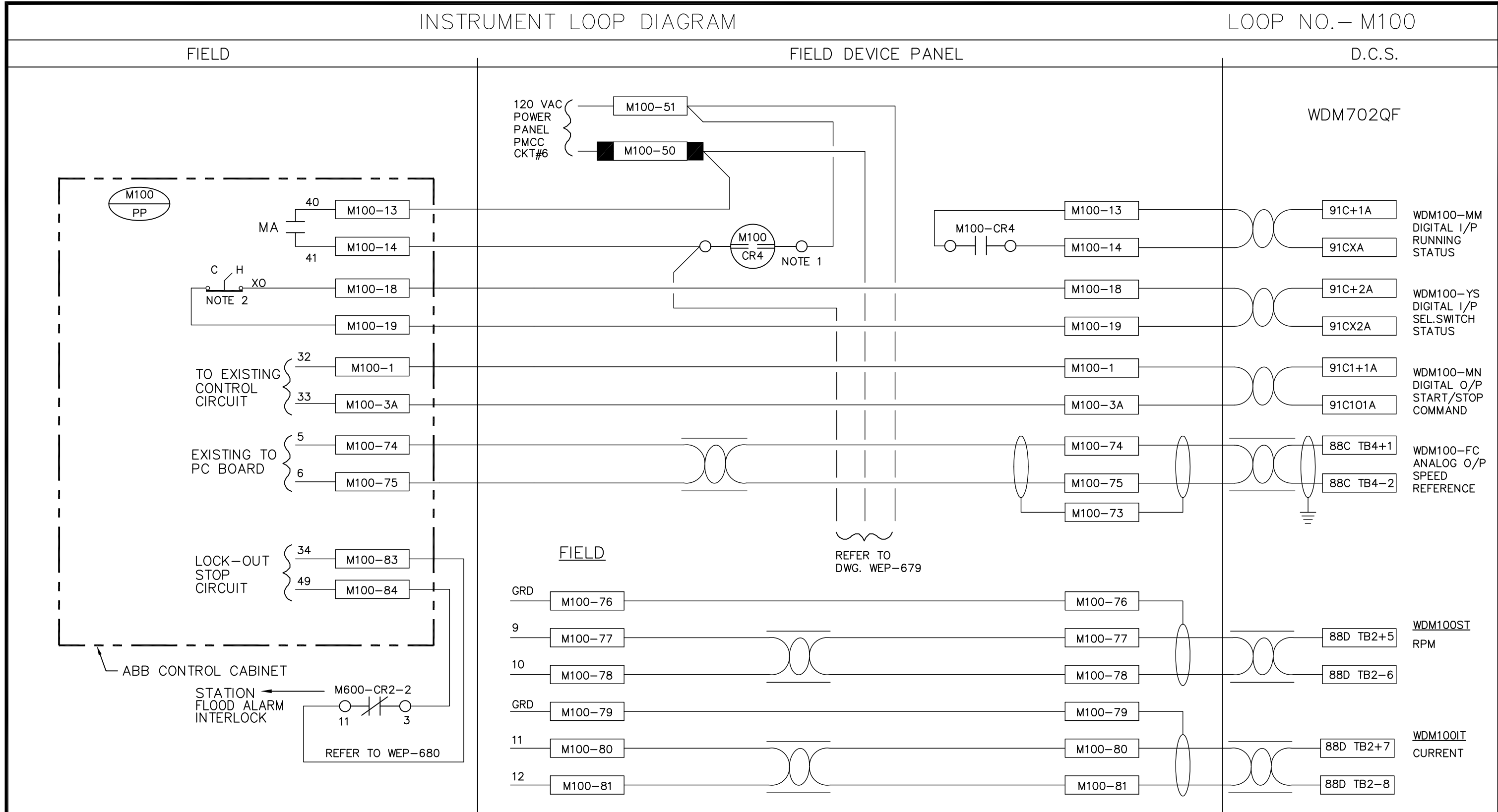
ELECTRICAL POWER LAYOUT

CITY DRAWING NUMBER
SHEET OF
WEP-340

File # WS10395

INSTRUMENT LOOP DIAGRAM

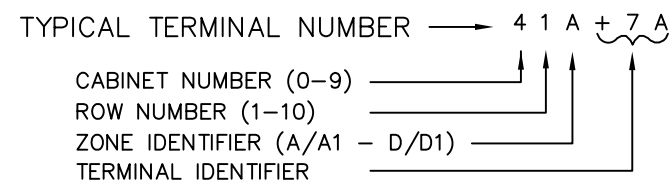
LOOP NO.— M100



NOTES

1. RELOCATED FROM EXISTING PANEL. OLD TAG WAS AR4.
2. MULTIPOLE SWITCH

BAILEY TERMINAL NUMBERING



Reid Crowther

06.11.09	C.O.W. REVISION	SPH
01.04.09	C.O.W. REVISION	GMZ
JAN./94	AS BUILT	
DATE	REVISION	APP.



THE CITY OF WINNIPEG
 WORKS AND OPERATIONS DIVISION
 WATERWORKS, WASTE AND DISPOSAL DEPT.
 WEST END WATER POLLUTION CONTROL CENTRE

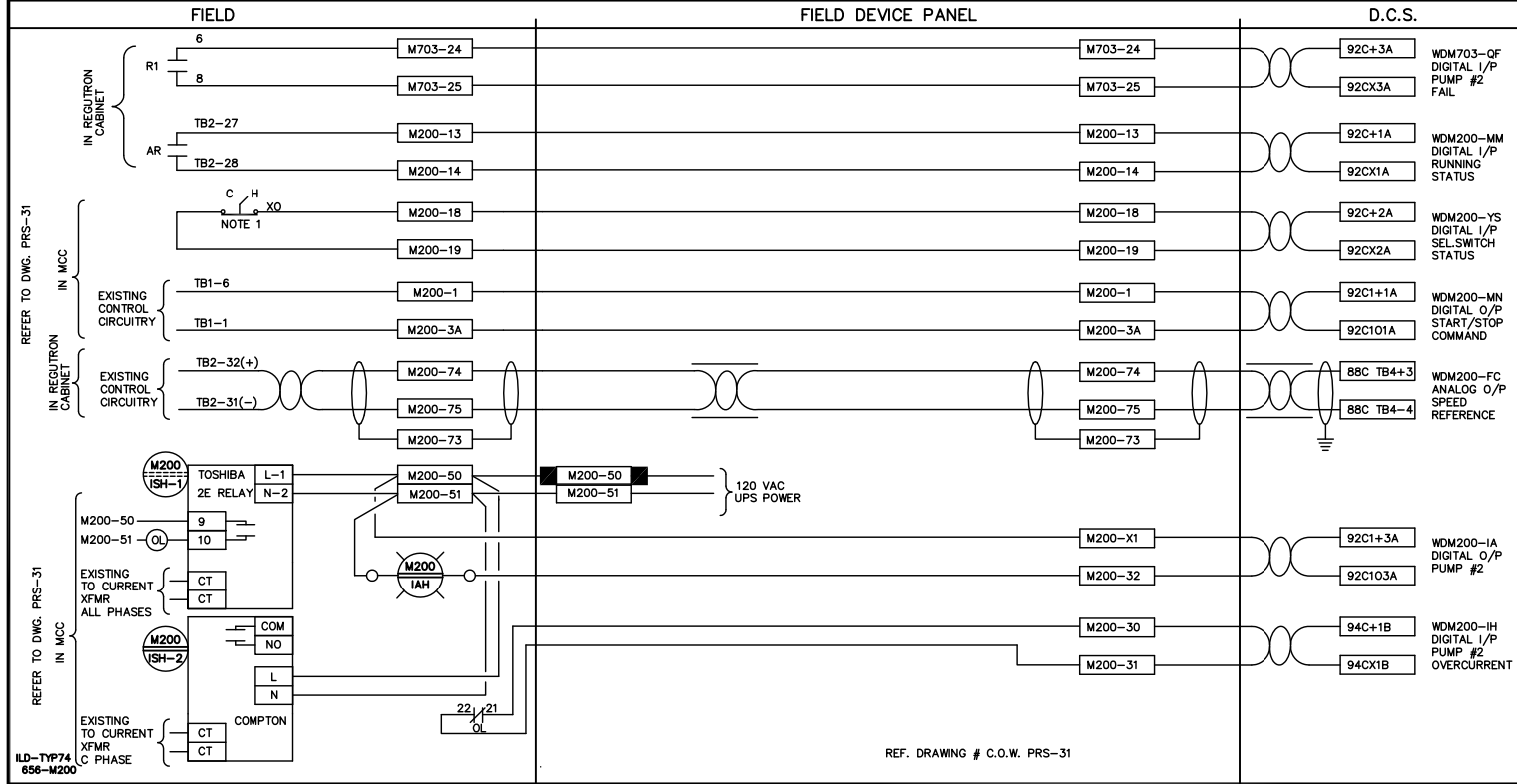
PERIMETER ROAD PUMPING STATION
 RAW PUMP No. 1 SHEET WDM 100

SCALE N.T.S.
 DATE MAY 1991
 DES BL DWN DED
 CKD GRG APP

DRAWING NO.
 WEP-0655

INSTRUMENT LOOP DIAGRAM

LOOP NO. - M200



REF. DRAWING # C.O.W. PRS-31

NOTES
1. MULTIPOLE SWITCH.

BAILEY TERMINAL NUMBERING
TYPICAL TERMINAL NUMBER → 4 1 A + 7 A
CABINET NUMBER (0-9) →
ROW NUMBER (1-10) →
ZONE IDENTIFIER (A/A1 - D/D1) →
TERMINAL IDENTIFIER →

NOV./09	REVISED	SPH	JAN./94	REVISED	MBD
DATE	REVISION	APP.	DATE	REVISION	APP.

Reid Crowther

THE CITY OF WINNIPEG
WORKS AND OPERATIONS DIVISION
WATERWORKS, WASTE AND DISPOSAL DEPT.
WEST END WATER POLLUTION CONTROL CENTRE

SCALE: N.T.S.
DATE: MAY 1991
DES: BL DWN DED
CKD: BL APP

PERIMETER ROAD PUMPING STATION
RAW PUMP No.2
WDM 200

DRAWING NO.
WEP-656

PLOT DATE: DECEMBER 30, 1996