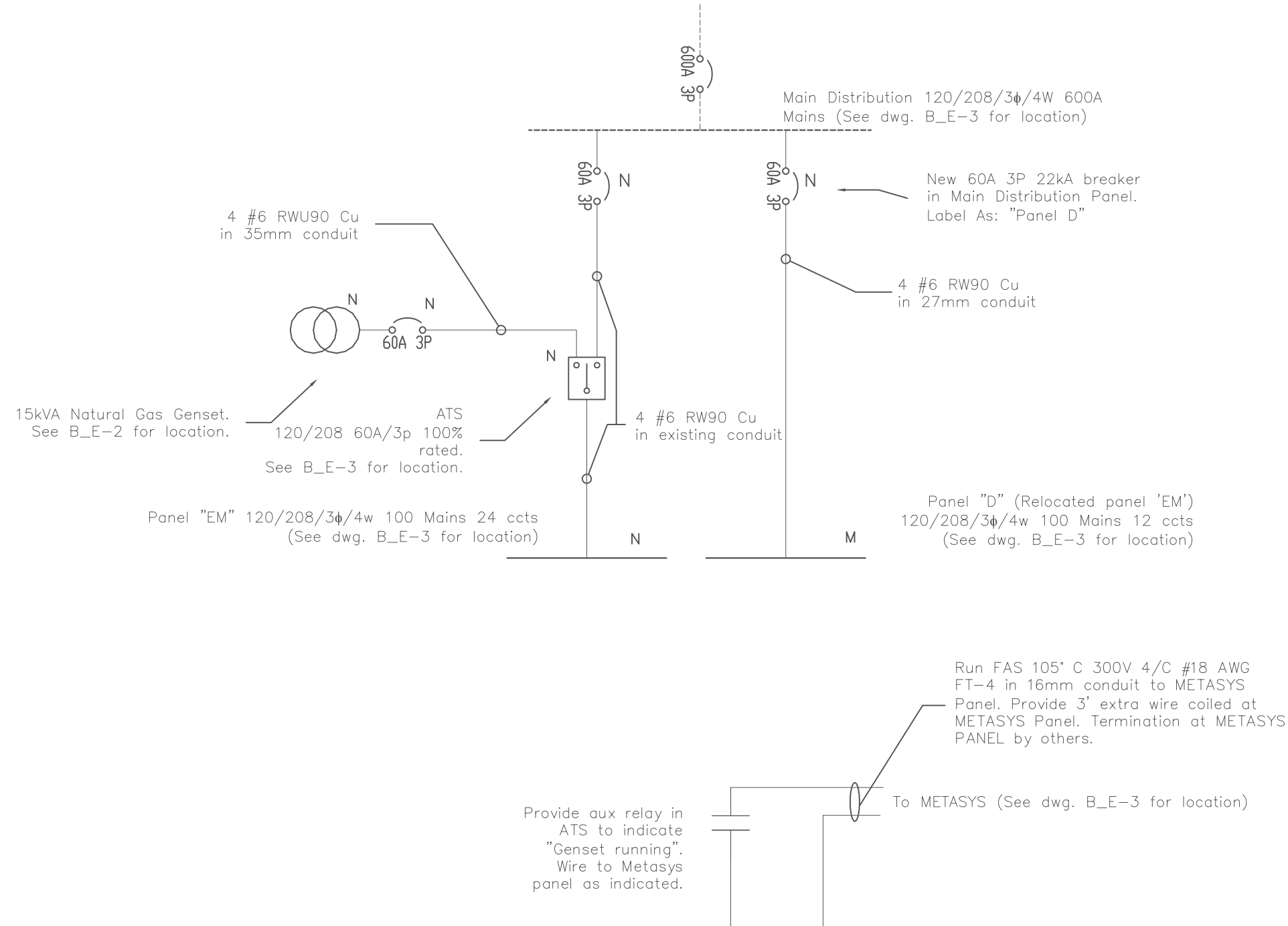


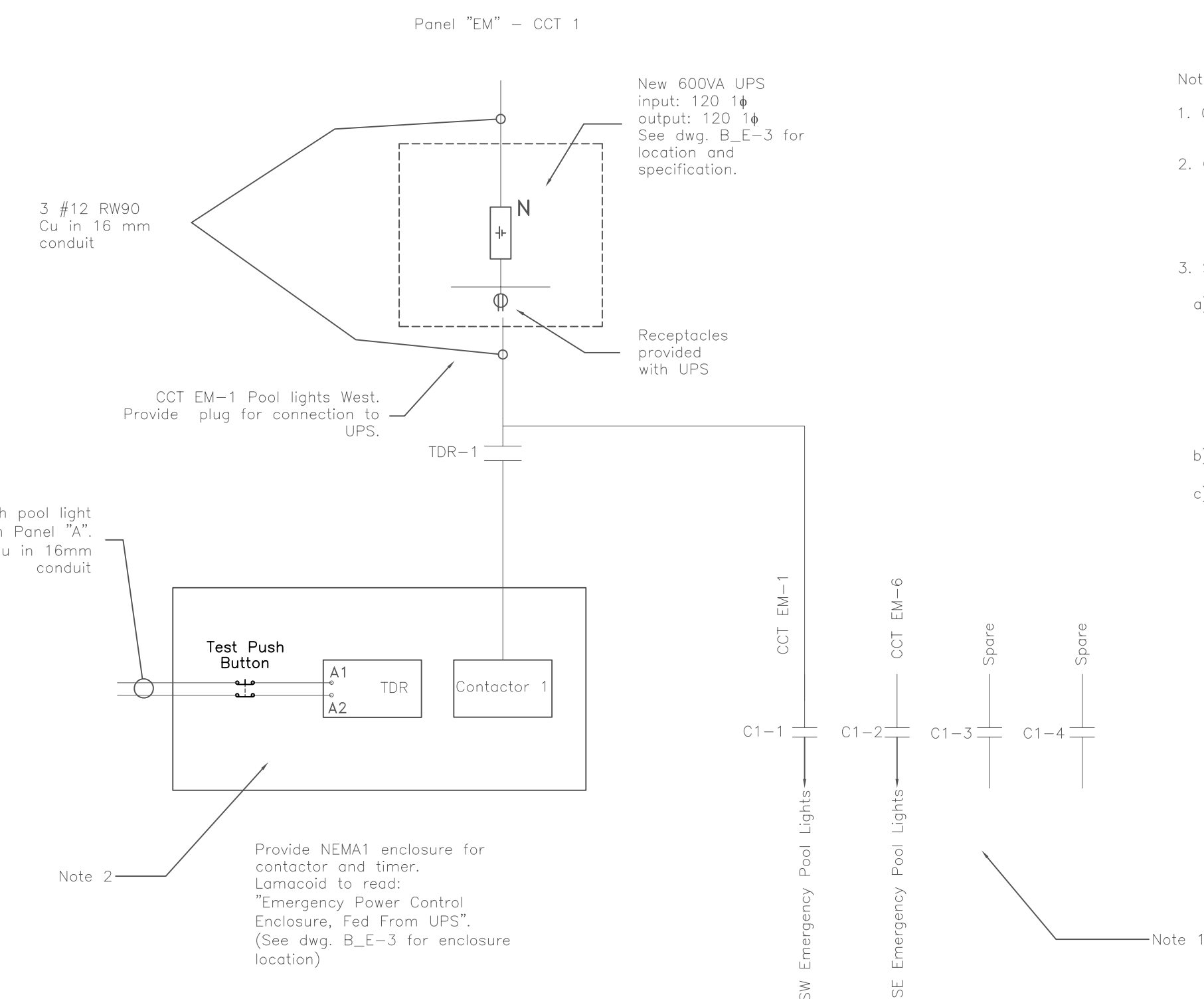
- Notes:
- 8 single pole and 1 double pole ccts to be reconnected to new panel "EM" 120/208/34/4w 24ccts.
  - Transfer 11 single pole ccts from Panel "E" to new Panel "EM". Extend wiring/conduits as required.
  - Old Panel "EM" to be reused as Panel "D". Transfer 4 ccts from deleted Panel "E". Extend wiring/conduit as required.
  - All Panelboard directories to be typewritten and updated as required.

1 Existing Partial Single Line  
E-4 SCALE: N.T.S.



2 New Partial Single Line  
E-4 SCALE: N.T.S.

SYMBOL SCHEDULE	
[Symbol]	Panelboard Surface Mounted
[Symbol]	Panelboard flush mounted
[Symbol]	Generator
[Symbol]	Automatic Transfer Switch
[Symbol]	Luminaire Wall Mounted
[Symbol]	Receptacle 120V
[Symbol]	Receptacle 208V
[Symbol]	Surface Luminaire 1x4
[Symbol]	Circuit Breaker
[Symbol]	Switch
[Symbol]	Existing to Remain
[Symbol]	New
[Symbol]	Deleted
[Symbol]	Existing to be relocated
[Symbol]	Relocated device/equipment



- Notes:
- Only cct EM-1 to be connected to UPS. Cct EM-6 will be fed directly from emergency panel.
  - On power outage, TDR contact will close energizing Contactor Relay and turning on Emergency Pool Lights. On restoration of power, TDR contact will "delay-on" for preset time allowing metal halide lamps to re-strike.
  - Supply and install:
    - Timer "Delay on make" ("ON-Delay") to monitor voltage of Pool Lighting Panel "A" (See dwg. B\_E-2 for location). Timer initially set to 15 min. To be mounted in "Power Control Enclosure". Timer to be "1 SVR 430 100 R1100" - manufactured by ABB, or approved equal. Label as "Timer for Pool Emergency Lights".
    - Contact to be lighting contactor 20A, 4p and mounted in "Power Control Enclosure". Test push button with 2 N/C contacts, for pool emergency lights testing, to be mounted on "Power Control Enclosure". When pressed to open contacts and simulate power outage. Lamacoid to read: "Test of Pool Emergency Lights".
    - Test push button with 2 N/C contacts, for pool emergency lights testing, to be mounted on "Power Control Enclosure". When pressed to open contacts and simulate power outage. Lamacoid to read: "Test of Pool Emergency Lights".

3 Pool Emergency Lights Power Supply  
E-4 SCALE: N.T.S.

New Emergency Panel EM 120/208/34/4w 100A Mains 18kA												
Note 1	Description	CCT	Pwr. (W)	Brk. A	A	B	C	Brk. A	Pwr. (W)	CCT	Description	Note 1
E-4 (Note 2)	Pool emergency lights West Side	1	350	15				15	20	13	Emergency water make-up for boilers	EM-4A
E-2	Women's changeroom/shower emergency lights	2	250	15				15	1250	14	Condensate pump "P2"	EM-6
E-5	Men's showers and stairs emergency lights	3	290	15				15	1250	15	Condensate pump "P3"	EM-11
E-6	Lobby and observation rooms emergency lights	4	290	15				15	1020	16	Compressor "Pg"	EM-12
E-8	Lifeguard and first aid room emergency lights	5	240	15				15	110	17	Power supply boiler 1	EM-8
E-1 (Note 2)	Pool emergency lights East Side	6	250	15				15	110	18	Power supply boiler 2	EM-7
E-12	Chlorine room exhaust fan "F5"	7	270	15				15	160	19	METASYS	EM-5A
E-3	Exit lights	8	60	15				15-2p	750	20	Air Intake Fan in electrical room "F11"	EM-9/10
E-11	Power supply-relay transformer & Clock south pool wall	9	40	15				15	750	21		
EM-4B	Basement emergency lights	10	290	15				15	22		Spare	
E-10	Power supply pneumatic panel	11	150	15				15	23		Spare	
	Spare	12		15				15	24		Spare	

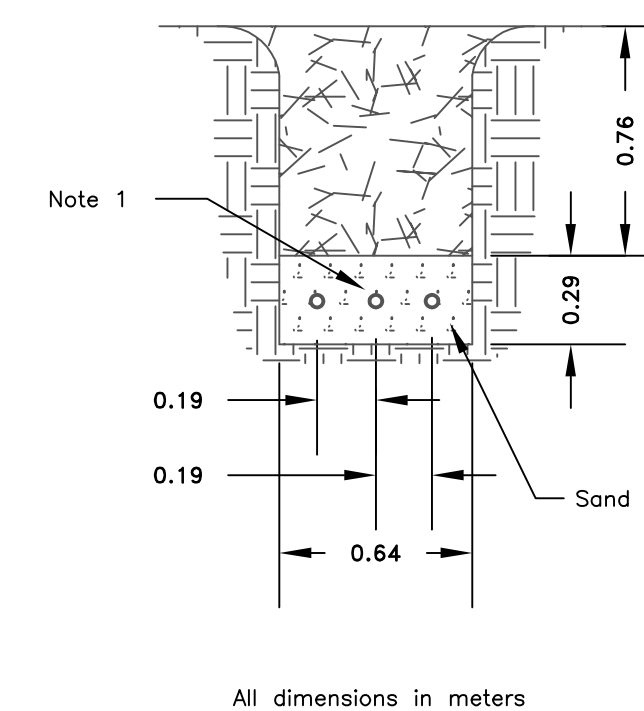
Power (W)				
A	B	C		
2400	2810	2590		

Panel D (Relocated panel "EM") 120/208/34/4w 100A Mains												
Note 1	Description	CCT	Pwr. (W)	Brk. A	A	B	C	Brk. A	Pwr. (W)	CCT	Description	Note 1
E-15/16/17	Test Receptacle 208V	1	1800					15	500	7	Genset space heater	NEW
		2	1800	30-3p				15	1100	8	Genset receptacles and Motor dampers	NEW
		3	1800					15-2p	1100	9	Test Receptacle 208V	E-18/19
E-14	Receptacles lobby front desk	4	500	15				20	0	11	Spare	
E-7	Photocopier receptacle lifeguard room	5	950	15				20	0	11	Spare	
NEW	Genset block heater	6	1100	15				20	0	12	Spare	

Power (W)				
A	B	C		
3900	3850	2900		

4 Panelboard Schedule  
E-4 SCALE: N.T.S.

- Note:
- Designation denotes existing panel/cct that cct has been transferred from. Panel locations shown on dwg. B\_E-3.
  - See dwg. B\_E-4/3.



5 Trench Detail  
E-4 SCALE: N.T.S.

- Note 1:
- 27mm PVC conduit and 3 ccts from panel "D" to Genset for block heater, space heater and receptacles. Wiring to be #12 RW90 Cu.
  - 35mm PVC conduit with 4#6 RWU 90 Cu for emergency power from generator.
  - 16mm PVC conduit with 2#12 RWU 90 Cu from ATS to generator control panel (Generator start signal).

Rev.	By	DATE
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<b>THE CITY OF WINNIPEG</b> PUBLIC WORKS DEPARTMENT BUILDING SERVICES DIVISION 100 MAIN STREET, MAIN FLOOR <b>Winnipeg</b> WPG, MB, R3C 1A4 (204) 986-7266		
PROJECT: Emergency System Upgrade		
SHEET TITLE: Bonivital Pool, 1215 Archibald St.		
DETAILS		
ENG. STAMP:	PROJECT NO. 663-2006	APPROVED BY: GWA
	DRAWN BY: VC	CHECKED BY: GWA
	SCALE:	DATE: 24 October, 2006
DWG. NO. B_E-4	REV. 0	