

FEEDER TAG LEGEND

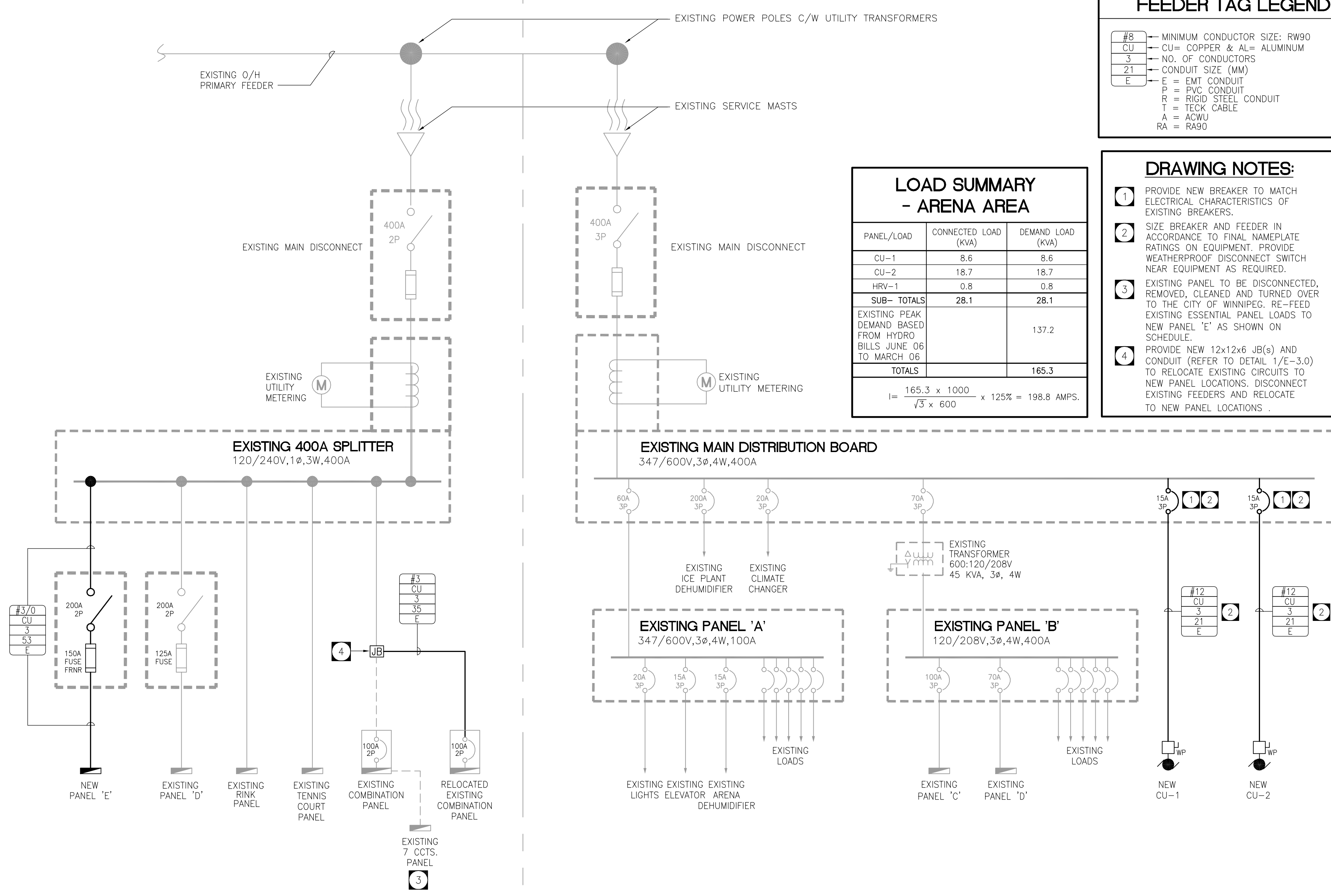
#8	MINIMUM CONDUCTOR SIZE: RW90
CU	CU= COPPER & AL= ALUMINUM
3	NO. OF CONDUCTORS
21	CONDUIT SIZE (MM)
E	E = EMT CONDUIT
P	P = PVC CONDUIT
R	R = RIGID STEEL CONDUIT
T	T = TECK CABLE
A	A = ACWU
RA	RA = RAG0

- ### DRAWING NOTES:
- 1 PROVIDE NEW BREAKER TO MATCH ELECTRICAL CHARACTERISTICS OF EXISTING BREAKERS.
 - 2 SIZE BREAKER AND FEEDER IN ACCORDANCE TO FINAL NAMEPLATE RATINGS ON EQUIPMENT. PROVIDE WEATHERPROOF DISCONNECT SWITCH NEAR EQUIPMENT AS REQUIRED.
 - 3 EXISTING PANEL TO BE DISCONNECTED, REMOVED, CLEANED AND TURNED OVER TO THE CITY OF WINNIPEG. RE-FEED EXISTING ESSENTIAL PANEL LOADS TO NEW PANEL 'E' AS SHOWN ON SCHEDULE.
 - 4 PROVIDE NEW 12x12x6 JB(S) AND CONDUIT (REFER TO DETAIL 1/E-3.0) TO RELOCATE EXISTING CIRCUITS TO NEW PANEL LOCATIONS. DISCONNECT EXISTING FEEDERS AND RELOCATE TO NEW PANEL LOCATIONS.

LOAD SUMMARY - ARENA AREA

PANEL/LOAD	CONNECTED LOAD (KVA)	DEMAND LOAD (KVA)
CU-1	8.6	8.6
CU-2	18.7	18.7
HRV-1	0.8	0.8
SUB-TOTALS	28.1	28.1
EXISTING PEAK DEMAND BASED FROM HYDRO BILLS JUNE 06 TO MARCH 06		137.2
TOTALS		165.3

$I = \frac{165.3 \times 1000}{\sqrt{3} \times 600} \times 125\% = 198.8 \text{ AMPS.}$



COMMUNITY CENTRE
SINGLE LINE DIAGRAM
NTS

ARENA
SINGLE LINE DIAGRAM
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LUMINAIRE SCHEDULE

TYPE	MANUFACTURER	CATALOGUE NO.	LAMPS		VOLTS	MOUNTING	REMARKS
			NO.	TYPE			
A	LITHONIA	2G78-432-A12-120-GE10IS	4	32W18 WARM WHITE	120	R/TB	2X4 TROFFER C/W 2 BALLASTS FOR SEPARATE SWITCHING
B	LITHONIA	GT8-232-A12-120-GE10IS	2	32W18	120	R/TB	C/W TRIM KIT
D	LITHONIA	CSW-148-120SOVB	1	32W18	120	S/W	WALL MOUNTED CUBE LIGHT
E	LITHONIA	2UC-32-120-GE10IS	1	32W18	120	V	UNDER CABINET LIGHTING
F	LITHONIA	1102-1176CL	1	75WPAR38	120	R/TB	DIMMING POTLIGHTS
H	LITHONIA	TWR1C-70M-120-LPI-CSA	1	70MH	120	S/W	WALLPACK (VANDALPROOF)
J	LITHONIA	TWR2C-250M-120-LPI-CSA	1	250MH	120	S/W	WALLPACK (VANDALPROOF)
K	LITHONIA	TFM-175M-TA-120-LPI-CSA	1	175MH	120	S/W	C/W PARAPET ARM BRACKET
DESCRIPTION							
EX	EXISTING FIXTURE TO REMAIN						
ER	EXISTING FIXTURE TO REMOVED AND/OR RELOCATED						
R	RELOCATED EXISTING FIXTURE (SHOWN IN NEW LOCATION)						
NOTES: 1. ALL FLOURESCENT LAMP ARE TO BE 3500°K AND A MINIMUM 82 CRI UNLESS NOTED OTHERWISE.							
				S = SURFACE	W = WALL	TB = T-BAR	
				R = RECESSED	V = VALANCE	DW = DRYWALL	
				C = CEILING	P = PENDANT	CH = CHAIN	

PANEL: E

VOLTAGE: 120/208 BUS: 225A PHASE: 1 WIRE: 3

DESCRIPTION	LOAD WATTS	BKR SIZE	CIRCUIT	BKR SIZE	LOAD WATTS	DESCRIPTION	
LIGHTING-COMMON AREAS	1340	20	1	20	1000	GFI RECEPTACLES -COUNTER	
LIGHTING-MULTI RM	1000	15	3	4	20	1000 GFI RECEPTACLES -COUNTER	
LIGHTING-MULTI RM	1130	15	5	6	15	500 RECEPTACLES	
LIGHTING-MULTI RM POTS	980	15	7	8	15	500 RECEPTACLES	
LIGHTING-MULTI RM POTS	600	15	9	10	15	500 RECEPTACLES	
LIGHTING-EXTERIOR	500	15	11	12	15	500 RECEPTACLES	
LIGHTING-EXTERIOR	400	15	13	14		EXISTING CIRCUITS NOT DELETED FROM	
LIGHTING-EXTERIOR	900	15	15	16		EXISTING 7 CCTS. PANEL	
LIGHTING-EXTERIOR	700	15	17	18			
LIGHTING-EXTERIOR SIGNAGE	600	15	19	20			
BASEBOARD HEATER - WASHROOM	1000	15	21	22			
BASEBOARD HEATER - WASHROOM	1000	15	23	24			
BASEBOARD HEATER - MULTI-PURPOSE	1500	15	25	26			
BASEBOARD HEATER - MULTI-PURPOSE	1500	15	27	28			
BASEBOARD HEATER - CORRIDOR	1500	15	29	30			
FORCEFLOW HEATER - VESTIBULE	4000	20	31	32			
		2P	33	34			
HRV-1	800	15	35	37			
MECHANICAL CONTROLS	100	15	37	39			
EXTERIOR LIGHTING CONTROL	100	15	39	40			
FIRE ALARM PANEL	100	15	41	42	15	660 LIGHTING-EMERGENCY/NIGHT LIGHTS	
HTG.	10.5KW	LTG.	8.3KW	MTR.	0.9KW	MISC.	4.1KW
TOTAL 23.8KW							

EMERGENCY BATTERY BANK SCHEDULE

No.	MANUFACTURER	CATALOGUE NO.	INPUT VOLTS	OUTPUT VOLTS	SOURCE CIRCUIT	QUANTITIES	MINIMUM WATTAGE
EBB-1	LUMACELL	RG24S 350 2 MT9W AT TD	120	24	E-11	2 5	255 W
EBB-2	LUMACELL	RG24S 350 2 MT9W AT TD	120	24	E-11	2 5	255 W

NOTES: [E-1] LUMACELL LMCE-C860U SINGLE/DOUBLE UNIVERSAL MOUNTING
[E-2] LUMACELL MQ-2-8W QUARTZ 12VDC/24VDC

MOTOR/EQUIPMENT SCHEDULE

ITEM	DESCRIPTION	EQUIPMENT LOCATION	KW/HP/AMPS	VOLTS/PH	PKG UNIT	STARTER				CONTROLS				FIRE ALARM SHUT-DOWN	
						TYPE	FUNC	PL	HOA	SUPPLY BY	TYPE	SUPPLY BY	INSTALL BY		WIRE BY
HRV-1	HEAT RECOVERY VENTILATOR	ROOF	6.3 AMPS	120/1	Y										
CU-1	CONDENSING UNIT	ROOF	9.8 MCA	600/3	Y										
CU-2	CONDENSING UNIT	ROOF	9.8 MCA	600/3	Y										
FF-1	FORCEFLOW HEATER	VESTIBULE	4.0 KW	240/1											
	BASEBOARD HEATER	VARIES	1.0/1.5 KW	120/1											

GENERAL NOTES:
A. MANUAL MOTOR STARTER TO BE C/W PILOT LIGHT AND OVERCURRENT PROTECTION.
B. ALL STARTERS TO BE SUPPLIED & INSTALLED BY THE ELECTRICAL SUBCONTRACTOR UNLESS OTHERWISE NOTED.
C. DISCONNECT SWITCHES TO BE SUPPLIED & INSTALLED BY THE ELECTRICAL SUBCONTRACTOR.
D. ELECTRICAL CONTRACTOR TO PROVIDE CIRCUIT BREAKERS AND WIRING ACCORDING TO THE FINAL NAMEPLATES OF THE MECHANICAL EQUIPMENT AT NO COST.
E. ELEC REFERS TO ELECTRICAL SUBCONTRACTOR; MECH REFERS MECHANICAL SUBCONTRACTOR.

MAG = MAGNETIC
MAN = MANUAL
VFD = VARIABLE FREQUENCY DRIVE
TOG = MOTOR RATED TOGGLE SWITCH

BIT = BUILT IN THERMOSTAT
S = SPEED CONTROL
T = THERMOSTAT

NO.	REVISION	DATE	BY
3	RE-ISSUED FOR BID OPPORTUNITY	12/05/07	TT
2	ISSUED FOR BID OPPORTUNITY	11/27/07	TT
1	ISSUED FOR FINAL REVIEW	10/12/07	TT
0	ISSUED FOR REVIEW	04/30/07	TT

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THE CONTRACTOR SHALL SATISFY HIMSELF THAT ALL DIMENSIONS AND INFORMATION SHOWN ARE CORRECT.

PRIOR TO COMMENCEMENT OF WORK REPORT ANY DISCREPANCIES TO THE CONTRACT ADMINISTRATOR.

VARIATIONS AND MODIFICATIONS TO WORK SHOWN WILL NOT BE ALLOWED WITHOUT WRITTEN PERMISSION OF THE CONTRACT ADMINISTRATOR.

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APEGM
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Tower Engineering Group
No. 1918 Expiry: April 30, 2008

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PROJECT TITLE: **NOTRE DAME COMMUNITY CENTRE**
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SHEET TITLE: **ELECTRICAL SINGLE LINE DIAGRAM**

DRAWN BY: NF
CHECKED BY: ES
PROJECT NUMBER: 06-012

SCALE: AS NOTED
DATE: 11/27/07
REVISION: 3

SHEET NUMBER: **E-4.0**