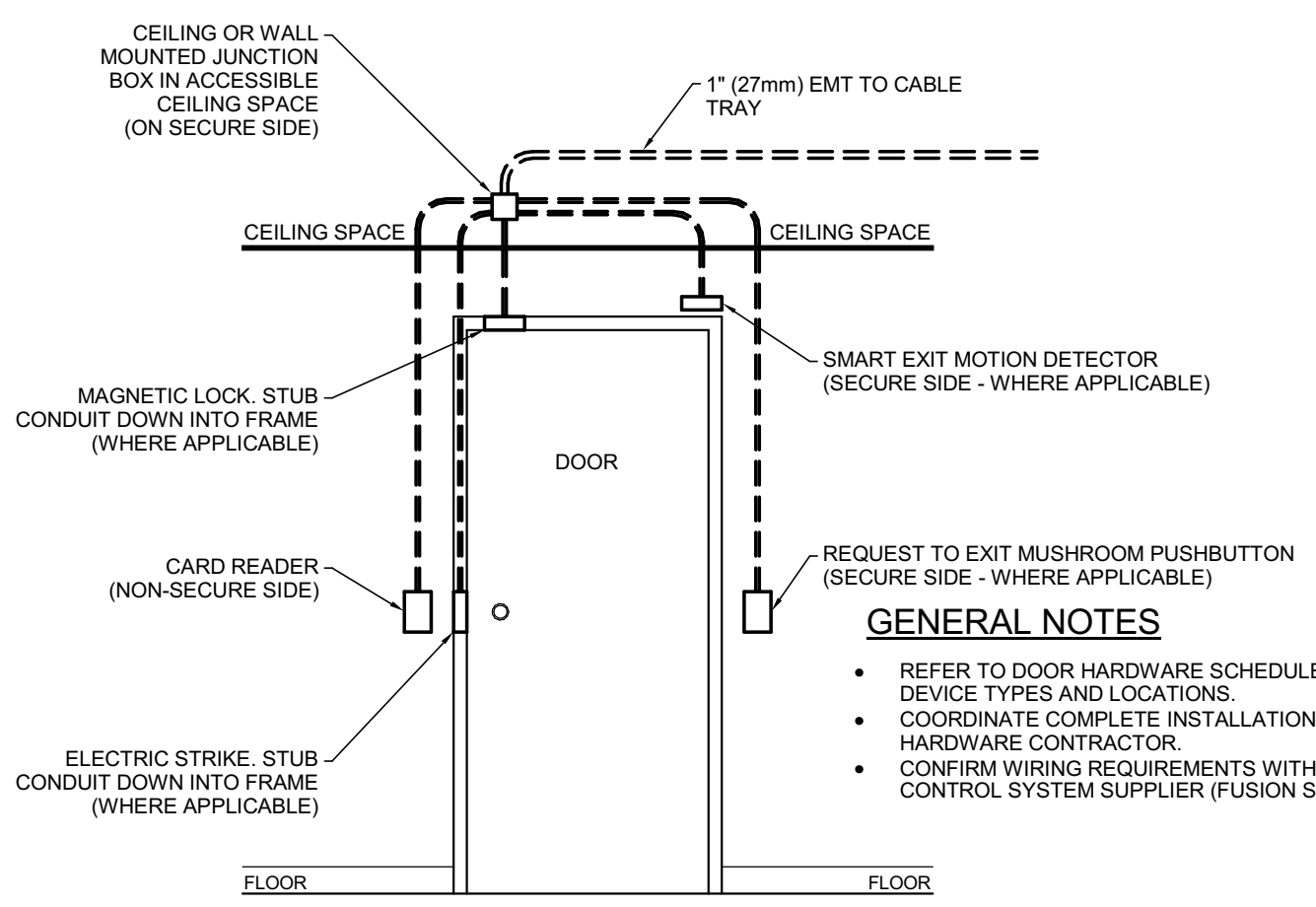


1 SECOND FLOOR PLAN - POWER & SYSTEMS
EP2.1 SCALE: 1 : 100



SECURED DOOR ROUGH-IN DETAIL

KEY NOTES

- 1 PROVIDE JUNCTION BOX ROUGH-IN C/W 21MMC STUB-UP TO CEILING SPACE FOR SECURITY SYSTEM CONTROL PANEL BY OTHERS. CONFIRM MOUNTING HEIGHT ON-SITE.
- 2 PROVIDE OVER FLOOR DIVIDED 2 CHANNEL RACEWAY. MAXIMUM DIMENSION OF OVER FLOOR RACEWAY SHALL BE 175MM WIDE AND 12.7MM HIGH.
- 3 DEVICE BOX SHALL BE 4 GANG DEVICE BOX C/W CROSSOVER KIT AS REQUIRED TO ALLOW POWER, DATA & HDMI ACCESS AS SHOWN. DEVICE BOX SHALL BE COMPATIBLE WITH OVER FLOOR RACEWAY SYSTEM. INCLUDE COVER PLATE FOR RJ45 JACKS AND HDMI TYPE A JACKS AS REQUIRED.
- 4 PROVIDE JUNCTION BOX ROUGH-IN C/W 21MMC STUB-UP TO CEILING SPACE FOR DURESS SYSTEM CONTROL PANEL BY OTHERS. CONFIRM MOUNTING HEIGHT ON-SITE.
- 5 PROVIDE 53MM EMT CONDUITS FROM 300MM ABOVE FLOOR SLAB STUB DOWN INTO THE SSC LAN ROOM 300MM BELOW CEILING SLAB. TYPICAL OF 4.
- 6 PROVIDE A 2 GANG MUDRING BEHIND TV AT 1220 AFF WITH 35MM EMT CONDUIT (C/W NYLON BUSHING) STUB-UP INTO CEILING SPACE FOR CAT6 CABLING BY OTHERS. PROVIDE 35MM EMT CONDUIT STUB DOWN TO OVER FLOOR RACEWAY DATA CHANNEL FOR HDMI CABLES. PROVIDE 2 RUNS OF HDMI CABLE TO THE FLOOR BOX AND CONNECT BOTH ENDS WITH LEVITON 40834-W C/W QUICKPORT HOUSING & PLATE.
- 7 MOUNT AT 1220MM AFF.
- 8 TELECOM GROUND BAR, EXTEND EXISTING TELECOM GROUND WIRE AS APPLICABLE, SOURCE NEW GROUND WIRE FROM THE SSC LAN ROOM BELOW AS REQUIRED.
- 9 CEILING MOUNTED SECURITY DEVICES SHOWN FOR REFERENCE ONLY. DEVICE TO BE PROVIDED BY OTHERS.
- 10 PROVIDE JUNCTION BOX ROUGH-IN C/W 21MMC STUB-UP TO CEILING SPACE FOR DURESS BUTTON BY OTHERS. CONFIRM MOUNTING HEIGHT ON-SITE.
- 11 PROVIDE LOAD RATED LOCAL DISCONNECT SWITCH.
- 12 PROVIDE NEW SMOKE DETECTORS. WIRE AND CONNECT TO NEW DETECTION ZONE BACK TO FIRE ALARM PANEL.
- 13 PROVIDE NEW FIRE ALARM HORN-STROBE WIRED AND CONNECTED TO EXISTING NOTIFICATION ZONE.
- 14 NEW SOUND MASKING CONTROL PANEL.
- 15 WORKSTATION - RECEPTACLES AND DATA OUTLET NOTED IN SYSTEMS FURNITURE ARE SHOWN FOR CIRCUITING AND COORDINATION PURPOSES ONLY AND IS TYPICAL FOR ALL WORKSTATIONS. ELECTRICAL CONTRACTOR SHALL WIRE AND CONNECT FURNITURE SUPPLIED AND INSTALLED POWER POLE AND WHIP C/W JUNCTION BOX IN CEILING SPACE.
- 16 POWER & DATA OUTLET IN THIS ROOM TO BE MOUNTED AT 914MM AFF. COORDINATE EXACT LOCATION WITH USER'S SECURITY VENDOR ON-SITE.
- 17 CONFIRM MOTORIZED PROJECTOR RECEPTACLE & ROCKER SWITCH LOCATIONS WITH OWNER ON-SITE.
- 18 PROVIDE RE-ENTERABLE SMOKE & ACOUSTICAL PATHWAYS TO MAINTAIN THE ACOUSTICAL RATING. MINIMUM VOLUME RATED FOR 300 CAT6 CABLES.
- 19 PROVIDE RE-ENTERABLE FIRE STOP PATHWAYS TO MAINTAIN THE FIRE RATING. MINIMUM VOLUME RATED FOR 300 CAT6 CABLES.
- 20 PROVIDE 1 RUN OF HDMI CABLE TO EACH OF THE 2 FLOOR BOXES AND CONNECT BOTH ENDS WITH LEVITON 40834-W C/W QUICKPORT HOUSING & PLATE.
- 21 PROVIDE A 2 GANG MUDRING BEHIND TV AT 1220 AFF WITH 35MM EMT CONDUIT (C/W NYLON BUSHING) STUB-UP INTO CEILING SPACE FOR CAT6 CABLING BY OTHERS. PROVIDE 35MM EMT CONDUIT STUB DOWN TO OVER FLOOR RACEWAY DATA CHANNEL FOR HDMI CABLES. PROVIDE 1 RUN OF HDMI CABLE TO EACH OF THE 2 FLOOR BOXES AND CONNECT BOTH ENDS WITH LEVITON 40834-W C/W QUICKPORT HOUSING & PLATE.

GENERAL NOTES

- A. FINAL CONNECTION TO ALL MECHANICAL EQUIPMENT SHALL BE FLEXIBLE. CONFIRM FINAL CIRCUIT BREAKER AND WIRE SIZE WITH MECHANICAL EQUIPMENT SHOP DRAWINGS. ADJUST CIRCUIT BREAKER AND WIRE SIZE AS REQUIRED WITHOUT ADDITIONAL COST TO OWNER.
- B. COORDINATE ALL WORK REQUIRING SHUT-DOWN OF EXISTING SYSTEMS THAT COULD AFFECT EXISTING TENANTS WITH THE BUILDING OWNER AT A TIME AND MANNER SUITABLE TO THEM.
- C. REUSE EXISTING CIRCUITS FOR RELOCATED OR REMOVED POWER LOADS WITHIN THE SPACE. PROVIDE NEW BREAKERS AS REQUIRED. PROVIDE TYPEWRITTEN PANEL DIRECTORIES INDICATING UPDATED CIRCUITING.
- D. CONTRACTOR SHALL SECURE ALL EXISTING UN-SUPPORTED WIRING, CONDUIT AND JUNCTION BOXES TO MEET MINIMUM CODE REQUIREMENTS.
- E. PROVIDE RECEPTACLES AND COMMUNICATION OUTLETS TO SUIT NEW LAYOUT.
- F. COMMUNICATIONS OUTLETS SHOWN FOR COORDINATION ONLY. ALL DATA RACKS, CABLING AND TERMINATION BY SSC (NIC). ELECTRICAL CONTRACTOR SHALL PROVIDE ALL PATHWAY AND ROUGH-IN REQUIRED FOR COMMUNICATION OUTLETS.
- G. PROVIDE NEW FIRE ALARM HORN-STROBE TO SUIT NEW LAYOUT. HORN-STROBE SHALL BE WIRED AND CONNECTED TO EXISTING NOTIFICATION ZONE. PROVIDE RE-VERIFICATION OF FIRE ALARM SYSTEM FOR ALL NEW AND MODIFIED DEVICES.
- H. PROVIDE NEW SMOKE DETECTORS. WIRE AND CONNECT TO EXISTING DETECTION ZONE.
- I. PROVIDE NEW SOUND MASKING SYSTEM COMPLETE WITH SOUND MASKING CONTROLLER AND SOUND MASKING SPEAKER ABOVE SUSPENDED CEILING.
- J. POWER POLES SUPPLIED WITH SYSTEMS FURNITURE. ELECTRICAL CONTRACTOR SHALL PROVIDE THE WIRING AND CONNECTION TO WHIP CONNECTIONS FOR SYSTEMS FURNITURE.
- K. ALL COMMUNICATIONS CABLES SHALL BE INSTALLED IN CONDUIT, CABLE TRAY, OR SUPPORTED BY CABLE HOOKS. PROVIDE BUSHINGS AT THE ENDS OF ALL CONDUIT WHERE STUBBED ABOVE ACCESSIBLE CEILINGS OR WHERE DROPPED INTO CABLE TRAY. PROVIDE CABLE HOOKS ABOVE ACCESSIBLE CEILINGS FOR CABLE INSTALLATION WHERE NOT INSTALLED IN CONDUIT OR CABLE TRAY.
- L. EXISTING FIRE ALARM PANEL IS LOCATED IN MAIN FLOOR AND MAKE/MODEL IS NOTIFIER AM2020.

PANELBOARD: 2IG

LOCATION:			VOLTAGE: 120/208 V, 3 ø 4 W.										
MOUNTING: SURFACE NEMA1			A.I.C. RATING: 10,000 AMPS SYMMETRICAL										
MAIN DEVICE: 100 A MLO			SPECIAL:										
BUS AMPS: 100 AMPS													
LOAD DESCRIPTION	BKR	P	CKT	A		B		C		CKT	P	BKR	LOAD DESCRIPTION
-20R	20 A	1	2IG-1	0.5	0.4					2IG-2	1	20 A	217B 5-20R
-20R	20 A	1	2IG-3			0.4	0.5			2IG-4	1	15 A	218 REC
-20R	20 A	1	2IG-5					1.2	0.0	2IG-6	1	15 A	MTR
			2IG-7							2IG-8			
			2IG-9							2IG-10			
EC	15 A	1	2IG-11					0.6		2IG-12	1	15 A	229 REC
			2IG-13							2IG-14			
			2IG-15							2IG-16			
			2IG-17							2IG-18			
EC	15 A	1	2IG-19	0.5	0.7					2IG-20	1	15 A	215 REC
EC	15 A	1	2IG-21			0.7	0.7			2IG-22	1	15 A	215 REC
EC	15 A	1	2IG-23					0.7	0.7	2IG-24	1	15 A	215 REC
EC	15 A	1	2IG-25	0.7	0.7					2IG-26	1	15 A	215 REC
EC	15 A	1	2IG-27			0.7	0.7			2IG-28	1	15 A	215 REC
EC	15 A	1	2IG-29					0.7	0.7	2IG-30	1	15 A	215 REC
TOTAL LOAD:				4 kVA		4 kVA		5 kVA					
TOTAL AMPS:				30 A		35 A		40 A					
CLASSIFICATION	CONNECTED		DEMAND		ESTIMATED		PANEL TOTALS						
	12300 VA		90.65%		11150 VA		CONNECTED LOAD: 12300 VA						
	0 VA		0.00%		0 VA		ESTIMATED DEMAND: 11150 VA						
							CONNECTED CURRENT: 34 A						
							EST. DEMAND CURRENT: 31 A						
NOTES: UTILIZE EXISTING BREAKERS, PROVIDE NEW AS REQUIRED.													

PANELBOARD: 2IGC

LOCATION: MOUNTING: SURFACE NEMA1 MAIN DEVICE: 225 A MLO BUS AMPS: 225 AMPS				VOLTAGE: 120/208 V, 3 ø 4 W. A.I.C. RATING: 10,000 AMPS SYMMETRICAL SPECIAL:							
LOAD DESCRIPTION	BKR	P	CKT	A	B	C	CKT	P	BKR	LOAD DESCRIPTION	
219 REC	15 A	1	2IGC-1	0.7	0.7		2IGC-2	1	15 A	219 REC	
219 REC	15 A	1	2IGC-3		0.7	0.7	2IGC-4	1	15 A	219 REC	
219 REC	15 A	1	2IGC-5				2IGC-6	1	15 A	219 REC	
219 REC	15 A	1	2IGC-7	0.5	1.2		2IGC-8	1	15 A	FRIDGE	
220 5-20R GFCI	20 A	1	2IGC-9		0.6		2IGC-10				
220 5-20R GFCI	20 A	1	2IGC-11			0.6	1.2	2IGC-12	1	15 A	220 MICROWAVE
219 REC	15 A	1	2IGC-13	1.0	0.4		2IGC-14	1	15 A	227 REC	
216 REC	15 A	1	2IGC-15		0.4	0.5	2IGC-16	1	15 A	219 REC	
219 REC	15 A	1	2IGC-17				2IGC-18	1	15 A	220 REC	
219 REC	15 A	1	2IGC-19	0.4	0.7		2IGC-20	1	15 A	224 REC	
224 REC	15 A	1	2IGC-21		1.6	1.5	2IGC-22	1	15 A	222 REC	
221 REC	15 A	1	2IGC-23				2IGC-24	1	15 A	215 LIGHTING	
219 LIGHTING	15 A	1	2IGC-25	0.5	0.5		2IGC-26	1	15 A	219 LIGHTING	
216, 215, 214, 217B, 218...	15 A	1	2IGC-27		0.3	0.2	2IGC-28	1	15 A	222 LIGHTING	
224 LIGHTING	15 A	1	2IGC-29				2IGC-30	1	15 A	220 LIGHTING	
VAV	15 A	1	2IGC-31	0.0	0.0		2IGC-32	1	15 A	EF-1, EF-2, EF-3	
SECURITY PANEL	15 A	1	2IGC-33		0.0	0.0	2IGC-34	1	15 A	DURESS PANEL	
219 5-20R	20 A	1	2IGC-35				2IGC-36	1	20 A	219 5-20R	
219 5-20R	15 A	1	2IGC-37	0.2	0.4		2IGC-38	1	15 A	224 REC	
225 REC	15 A	1	2IGC-39		0.2	0.1	2IGC-40	1	15 A	226 REC	
SOUND MASKING PANEL	15 A	1	2IGC-41				0.0				
			2IGC-43					2IGC-44			
			2IGC-45					2IGC-46			
			2IGC-47					2IGC-48	1	15 A	Spare
			2IGC-49		0.0			2IGC-50	1	15 A	Spare
			2IGC-51			0.0		2IGC-52	1	15 A	Spare
			2IGC-53					2IGC-54	1	15 A	Spare
			2IGC-55		0.0			2IGC-56	1	15 A	Spare
			2IGC-57			0.0		2IGC-58	1	15 A	Spare
			2IGC-59					2IGC-60	1	15 A	Spare
TOTAL LOAD:				7 kVA	7 kVA	6 kVA					
TOTAL AMPS:				60 A	58 A	52 A					
LOAD CLASSIFICATION	CONNECTED		DEMAND		ESTIMATED		PANEL TOTALS				
RCPT	17638 VA		78.35%		13819 VA		CONNECTED LOAD: 20224 VA				
LITES	2679 VA		100.00%		2679 VA		ESTIMATED DEMAND: 16408 VA				
MTR	0 VA		0.00%		0 VA		CONNECTED CURRENT: 56 A				
SPEC	0 VA		0.00%		0 VA		EST. DEMAND CURRENT: 46 A				
NOTES:											
UTILIZE EXISTING BREAKERS, PROVIDE NEW AS REQUIRED.											

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400 - 136 Market Avenue
Winnipeg, MB R3B 0P4
T 204 453 1080

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1600 BUFFALO PLACE
WINNIPEG MANITOBA CANADA R3T 6B8
TEL: 204-477-1260 | FAX: 204-477-6346 | www.architecture49.com

KEY PLAN
NTS

O	Issued for Construction	18-02-16
Revision	Description	Date
Client		client

SUITE 201

Project title

Project

GOCB OFFICE FIT-UP
SASKATOON, SASKATCHEWAN

Designed by
JF

Concu par

Drawn by
JF

Dessine par

Approved by
JF

Approuve par

PM/SCS Project Manager

Administrateur de Projets TPSGC

AR

Drawing title

Titre du dessin

SECOND FLOOR - POWER & SYSTEMS PLAN

Project no./No. du projet

Drawing no./No. du dessin

Revision no.

R.055494.001

EP2.1

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4 OF 4