

POWER AND SYSTEMS DEMOLITION NOTES: "("x")

ALSO SEE NOTES & SPECIFICATIONS.

REFER TO APPLICABLE RENOVATION DRAWING FOR RELOCATED COMPONENTS. ALL ABANDONED CABLES TO BE REMOVED AS REQUIRED BY LATEST CANADIAN ELECTRICAL CODE. DO NOT DISTURB OR DISCONNECT ANY WIRING & CABLING IN AREA OF WORK REQUIRED FOR OTHER AREAS.

1. REMOVE ALL EXISTING DOOR MOUNTED ELECTRICAL DEVICES/WIRING BACK TO SOURCE. RETURN DEVICES TO THE CITY FOR SPARE PARTS.

2. ALL EXISTING DOOR OPERATORS (DO) TO BE REUSED, RECONNECTED TO EXISTING CIRCUIT & RECONFIGURED TO WORK WITH NEW CARD ACCESS SYSTEM & LOCK-DOWN. SEE RENOVATION NOTES.

### ELECTRICAL POWER & SYSTEMS RENOVATION NOTES: " """

ALSO SEE NOTES & SPECIFICATIONS. ALL WIRING & CABLING SHALL BE CONCEALED IN DOOR/TRANSOM FRAMES &/OR IN WALL CAVITY FOR FINISH SPACE (EG. OFFICES, CORRIDORS...). ALL HOLES DRILLED IN STONE WALLS MUST BE DRILLED THROUGH MORTAR NOT STONE. ALL NEW WIRING & CABLING IN CEILING SPACE SHALL BE IN EMT AS PER LATEST CEC. PROGRAMMING OF CONTROLLERS NETWORK IPs & CARD ACCESS SERVER BY CITY OF WINNIPEG - FST SECTION. SUPPLY & PROGRAMMING OF KEY CARDS BY THE CITY. COMMISSION CARD ACCESS SYSTEM TO FULLY OPERATE.

#### DOOR OPERATOR (DO)

- 1.1. REINSTALL ALL (4) DOOR OPERATORS (DO) WITH EXISTING BRANCH CIRCUITS & RECONFIGURE WIRING/ CONTROLS TO OPERATE WITH NEW CARD ACCESS & LOCKDOWN SYSTEM. PROVIDE CAMDEN DOOR INTERFACE RELAY CX-12 PLUS TO ELIMINATE BINDING OF LOCKED EXTERIOR DOORS. BY DELAYING EXTERIOR (DO) UNTIL (ES-1) DEACTIVATES FIRST.
- 1.1. THE (2) INTERIOR (DO) SHALL NOT BE CONNECTED TO THE NEW LOCKDOWN SYSTEM.
- 1.2. PROVIDE (MD-1) FOR EACH (DO), LOCATION TBD.
- 1.3. LABEL ALL (DO) WITH BRANCH CIRCUIT & DOOR DESIGNATION.
- 2. PROVIDE PRESENCE SENSORS (PS-1) & INSTALL ON THE TOP RAIL ON BOTH SIDES OF THE DOOR LEAF AS CLOSE AS POSSIBLE TO THE CLOSING LEAF, 3/4". THE (PS-1) TRANSMITTER SHALL BE PLACED NEXT TO THE DOOR EDGE, TURN THE (PS) MODULE IF NECESSARY. WIRE ONE (PS-1) MODULE TO THE THE DOOR CONTROLLER AS MASTER & PLUG-IN SLAVE CABLE BETWEEN BOTH (PS-1) MODULES FOR INTENDED DOOR SWING ACT. EACH (PS) HAS TWO RELAYS; SET TO FUNCTION. CALIBRATE EACH (PS-1) & PERFORM DOOR SAFETY CHECK. PROVIDE S/ST POWER TRANSFER LOOPS.
- 3. PROVIDE EXTRA (DC-1) FOR EACH EXTERIOR (DO) TO FUNCTION WITH EXISTING INTRUSION SYSTEM. INSTALL IN FACTORY PREP 1" DIA. TOP DOOR FRAME OPENINGS.

#### 4. CARD ACCESS

- 4.1. NOTE: COUNCIL BUILDING FRONT DOORS ARE CONTROLLED BY EXISTING CONTROLLER (010-510MAIN COUNCIL EAST CB60) & SHALL BE USED FOR NEW CARD ACCESS.
- 4.2. PROVIDE (ES-1) & (DC-1), AS SHOWN. MOUNT (ES-1) ONTO VERTICAL DOOR FRAME WITH (ES-1) & (DC-1) WIRING CONCEALED IN DOOR FRAMES. CEILING SPACES & WALL CAVITIES. IF SURFACE-MOUNTED WIRING IS REQUIRED. USE LEGRAND RACEWAY COMPONENTS/COLOUR TO BLEND IN & MINIMUM PATHWAY OPTIC. MAXIMUM LATCH PROJECTION ON RIM EXIT DEVICE IS ESSENTIAL TO OBTAINING FULL HOLDING FORCE ON (ES-1)
- 4.3. PROVIDE (CA-1) AS SHOWN, MOUNT AT DOOR LATCH CENTERLINE HEIGHT ON LATCH SIDE OF DOOR FRAME OR AS
- 4.4. PROVIDE HOME RUN HONEYWELL PROFUSION ACCESS CONTROL CABLE 2195 (RISER RATED, FT4) IN EMT FROM EXISTING CARD ACCESS CONTROL PANEL TO THE FURTHEST CARD ACCESS DEVICE CONNECTION. TERMINATE ALL DEVICES TO CARD ACCESS CONTROLLER & MODULE(S), ASSOCIATED COMPONENTS & CONFIGURE TO FUNCTION. LABEL ACCESS CONTROL CABLES WITH DOOR DESIGNATIONS AT DOOR LOCATIONS & AT CONTROL PANEL. ALL (4) HONEYWELL PROFUSION ACCESS CONTROL JACKETED CABLES TO BE TERMINATED PER FOLLOWING:
- 4.4.1. ALL WIRE CONNECTORS SHALL BE:
- 4.4.1.1.B-WIRE GEL FILLED CONNECTORS FOR EXTERIOR OR INTERIOR USE.
- 4.4.1. DOOR ELECTRIC STRIKE (ES-1) 18/4 STR (SETUP FOR FAIL-SECURE) INSTALL WITH STRIKE SURGE PROTECTION
- 4.4.2. CARD ACCESS READER (CA-1) 22/6 STR OAS
- 4.4.3. DOOR CONTACT (DC-1) 22/2 STR
- 4.4.3.1.DOOR CONTACTS (DC-1) WIRED WITH A 4-STATE, DOUBLE END-OF-LINE 1k RESISTORS IN THE N/C STATE. (DC-1) IN DOOR FRAME HEADER.
- 4.4.3.2.PROVIDE MAGNET & INSTALL ONTO DOOR TOP CHANNEL TO ALIGN WITH (DC-1).
- 4.4.4. REQUEST TO EXIT (RTE) 22/4 STR.; NOT REQUIRED BUT COIL-UP IN CEILING SPACE OR ELECTRICAL BOX SUFFICIENT LENGTH FOR FUTURE INSTALL & LABEL.

### 5. LOCKDOWN (SUPERVISED & MONITORED)

## 5.1. SEQUENCE OF OPERATION

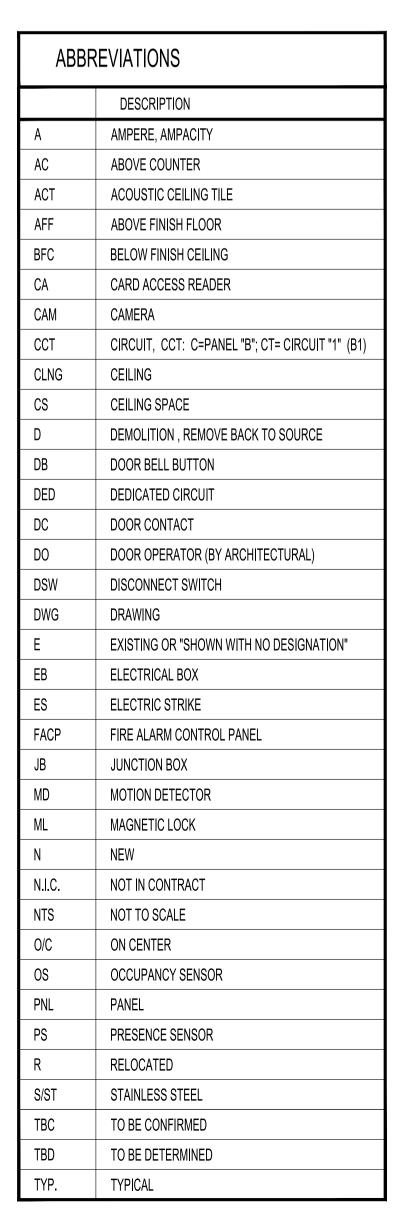
- 5.1.1. WHEN LOCKDOWN "RED" BUTTON IS PUSHED
- 5.1.1.1. ALL (6) EXTERIOR VESTIBULE DOORS WILL BE LOCKED VIA (ES-1), EGRESS IS VIA RIM EXIT DEVICES (BY ARCHITECTURAL). INGRESS DOORS HAVE RIM EXIT DEVICE WITH THUMB KEY LOCK LATCH. EGRESS DOORS HAVE RIM EXIT DEVICE WITH PULL.
- 5.1.1.2. EXTERIOR DOORS & (CA-1) WILL BE PLACED INTO "LOCKED MODE" INCLUDING DISABLING (DO) & (MD-1). VALID ACCESS CARDS CANNOT UNLOCK THE CARD READER (CA-1).
- 5.1.1.3. A SILENT ALARM IS SENT TO CENTRAL CONTROLS.
- 5.2. PROVIDE (LD-1) WITH DUAL E.O.L RESISTORS. INSTALL UNDER SECURITY FRONT COUNTER (EXACT LOCATION TBD) 5.2.1. WIRE (LD-1) TO EXISTING BOSCH INTRUSION PANEL ZONE, PUSHING (LD-1) RED BUTTON ACTUATES CONTACT CLOSURE & TRIGGERS INTRUSION PANEL RELAY OUTPUT; CONFIGURE TO NOTIFYING COW CENTRAL
- 5.2.2. PROVIDE COW CENTRAL CONTROLS WITH SIMILAR (LD-1) IN THEIR SPACE (LOCATION TBC) TO ALLOW REMOTE LOCKDOWN & RESET.
- 5.2.3. CONFIGURE THE INTRUSION ALARM OUTPUT CONTACT IN THE EXISTING CARD ACCESS POWER SUPPLY WITH FACP CUTOFF TO DISABLE POWER TO THE FAIL-SECURE (ES-1) TO LOCK ALL (6) EXTERIOR VESTIBULE DOORS INCLUDING DISABLING (DO) & (MD-1).

### 6. CCTV

6.1. REINSTALL, RECONNECT & TEST (CAM).

### 7. INTERCOM/VIDEO

7.1. PROVIDE INTERCOM/BUZZER/VIDEO CAMERA (INT/VID), VIDEO MASTER STATION & INCLUDED AIPHONE POWER SUPPLY AT SECURITY DESK. MOUNT DOOR STATION ON DOOR LATCH SIDE DOOR JAMB OR BESIDE AT 47" AFF TO PROVIDE A FACIAL VIEW. WIRE WITH 18/2 SOLID CONDUCTOR UNSHIELDED GREY FT-6 CABLE, PLENUM RATED OR NON-PLENUM RATED IN EMT TO VIDEO MASTER STATION. WIRE 18/4 STRANDED, UNTWISTED, UNSHIELDED GREY FT-6 CABLE, PLENUM RATED OR NON-PLENUM RATED IN EMT FROM VIDEO MASTER STATION TO EXISTING CARD ACCESS PANEL (LEAVE EXTRA 4 FEET COILED LENGTH IN PANEL FOR CITY TO TERMINATE & PROGRAM). MOUNT (INT/VID) ON DOOR LATCH MULLION, EXACT LOCATION TBD.



VIATIO	NS
DESCRI	PTION
AMPERE,	AMPACITY
ABOVE CO	DUNTER
ACOUSTIC	C CEILING TILE
ABOVE FI	NISH FLOOR
BELOW FI	NISH CEILING
CARD ACC	CESS READER
CAMERA	
CIRCUIT,	CCT: C=PANEL "B"; CT= CIRCUIT "1" (B1)
CEILING	
CEILING S	PACE
DEMOLITI	ON , REMOVE BACK TO SOURCE
DOOR BEI	LL BUTTON
DEDICATE	ED CIRCUIT
DOOR CO	NTACT
DOOR OP	ERATOR (BY ARCHITECTURAL)
DISCONNE	ECT SWITCH
DRAWING	
EXISTING	OR "SHOWN WITH NO DESIGNATION"
ELECTRIC	AL BOX
ELECTRIC	STRIKE
FIRE ALAF	RM CONTROL PANEL
JUNCTION	N BOX
MOTION D	DETECTOR
MAGNETIC	CLOCK
NEW	
NOT IN CO	ONTRACT
NOT TO S	CALE
ON CENTE	ER
OCCUPAN	ICY SENSOR
PANEL	
PRESENC	E SENSOR
RELOCAT	ED
STAINLES	S STEEL
TO BE CO	NFIRMED
TO BE DE	TERMINED
TYPICAL	

JAMES AVENUE	
ADMINISTRATION BULDING  COUNCIL BUILDING  WILLIAM AVENUE	
KEY PLAN SCALE: N.T.S.	

**ELECTRICAL LEGEND** 

7" TOUCHSCREEN VIDEO INTERCOM SET, AIPHONE JPS-4AEDV, EACH SET

CONTAINS: (1) DOOR STATION, JP-DV; (1) VIDEO MASTER STATION, JP-4MED;

PRESENCE SENSOR; ASSA ABLOY DITEC REM OR EQUAL. ACTIVE INFRARED

WITH BACKGROUND SUPPRESSION, 12-24V SUPPLY, REACTION TIME 64ms.

MAX. PRESENCE TIME: INFINITE, OUTPUT: 2 RELAYS (FREE OF POTENTIAL CONTACT), INPUT: 1 OPTOCOUPLER (FREE OF POTENTIAL CONTACT), MAX.

ELECTRIC STRIKE, 9600-630-24VDC-FSE, FAIL-SECURE, HES (SUPPLIED BY ARCHITECTURAL)

DOOR CONTACT WITH MAGNET - GRI 199-12-W, 1" STEEL DOOR RECESSED SWITCH SET, STANDARD GAP, 5W, 175VDC, 0.25A, DPDT, X 2, WHITE; DOOR

LOCKDOWN BUTTON (ILLUMINATED) WITH LIFT COVER: TURN-TO-RESET BUTTON, CURVED DESIGN, LOCKDOWN LABEL, (2) FORM C CONTACTS,DPDT, RATED 10A @ 125/250VAC, 6A @30VDC, LED COLOUR OPTIONS; RED, GREEN & WHITE, UL/CUL LISTED, ADA COMPLIANT, STI SS2429LD-EN, BLUE.

CAM-1 NETWORK REMOTE HEAD CAMERA & LENS IN DOOR MULLION HOUSING.

SHD-46VDB(BLACK-DOOR JAMB HOUSING). TO BE CONFIRMED

HANWHA XNB-6001 (HEAD CAMERA), SLA-T4680V (LENS),

NUMBER OF MODULES:4, PROTECTION: IP54 MIN

CARD ACCESS, READER, MULLION SIZE, IP65

HID SIGNO MODEL 20 NKS 00-00000, BLACK

CHANNEL MÁGNET, GRI MC-180

DESCRIPTION

(1) POWER SUPPLY, PS-2420UL.

AREA OF WORK

AT CENTRAL

CONTROLS

(BASEMENT)

AREA OF WORK

ON BASEMENT & MAIN FLOOR

# NOTES:

- 1. THESE DRAWINGS SHALL NOT BE SCALED.
- 2. THE WORD "PROVIDE" IS DEFINED AS SUPPLY & INSTALL.

3. ALSO REFER TO ARCHITECTURAL, ELECTRICAL DRAWINGS & SPECIFICATIONS.

- 4. SUBMISSION OF SITE MARK-UPS, AS-BUILTS, OPERATING & MAINTENANCE MANUALS AND OTHER SUPPORTING DOCUMENTS TO CLIENT ARE MANDATORY AT THE COMPLETION OF
- . THE CONTRACTOR SHALL VISIT THE SITE AND ENSURE ALL DIMENSIONS, DATUM, AND DETAILED INFORMATION SHOWN ARE CORRECT.
- 6. THE CONTRACTOR IS TO REVIEW AND COORDINATE ALL ARCHITECTURAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL OPENINGS THROUGH FLOORS, WALLS, AND CEILINGS FOR DUCTS, PIPES & ELECTRICAL RISERS AND ALL OPENINGS NOT SHOWN ON DRAWINGS.
- ALL OPENINGS THROUGH FIRE ASSEMBLIES INCLUDING FLOORS AND CEILINGS ARE TO BE FIRE STOPPED AND SEALED WITH ULC APPROVED FIRE STOPPING TO MAINTAIN THE INTEGRITY OF THE FIRE SEPARATION, AND PROVIDE A SMOKE-TIGHT BARRIER.
- B. ALL PRODUCTS AND MATERIALS TO BE USED AND INSTALLED SHALL CONFORM WITH MANUFACTURER'S SPECIFICATIONS, APPLICABLE CODES AND AUTHORITY HAVING
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE TO PATCH AND MAKE GOOD ALL EXISTING
- CONSTRUCTION AFFECTED BY THE REMOVAL OF ALL ITEMS FORMING PART OF THE 10. PROVIDE DYNA LABELS ON ALL & EXISTING SWITCHES, PORTS & RECEPTACLES. PANEL
- SCHEDULE SHALL BE RETYPED TO REFLECT AS-BUILT CONDITIONS & INSERTED TO INSIDE OF ASSOCIATED PANEL DOOR SLEEVE PROTECTOR. ALSO REFER TO ELECTRICAL
- 11. ALL ABANDONED ELECTRICAL FIXTURES, COMPONENTS, RECEPTACLES & DATA CABLING SHALL BE REMOVED BACK TO SOURCE & TERMINATED AS PER APPLICABLE CODES.
- 12. IF FIRE PULLS ARE DISCONNECTED, RECONNECT & TEST ALL FIRE PREVENTION
- INSTALLATION SHALL BE IN CONFORMANCE WITH CAN/ULC-S524-M, STANDARD FOR INSTALLATION OF FIRE ALARM SYSTEMS. NOTIFY BUILDING OWNER PRIOR TO PERFORMING A MANDATORY FIRE ALARM VERIFICATION REPORT IN CONFORMANCE WITH CAN/ULC-S537 STANDARD FOR VERIFICATION OF FIRE ALARM SYSTEMS FOR ZONES AFFECTED.

ASBESTOS MAYBE PRESENT BEHIND WALLS, CEILING SPACE & FLOORS. IF ASBESTOS & ANY HAZARDOUS MATERIAL IS FOUND, STOP WORK IMMEDIATELY & CONTACT CITY OF WINNIPEG CENTRAL CONTROL PH: 204-986-2351.

<b>ELECTRICAL DRAWING LISTS</b>				
SHEET No:	SHEET TITLE  ADMINISTRATION BUILDING, PARTIAL MAIN FLO PLAN, ELECTRICAL POWER AND SYSTEMS			
E1				
E2	COUNCIL BUILDING, PARTIAL MAIN FLOOR PLA	PLAN,		
E3	ELECTRICAL SPECIFICATIONS			
1		ı		

DESIGNED APPROVED **DATE** 2024.06.13 APPROVAL

THE CITY OF WINNIPEG

REVISION/DESCRIPTION



SEAL

ASSETS AND PROJECT MANAGEMENT DEPARTMENT MUNICIPAL ACCOMMODATIONS DIVISION 3-65 GARRY STREET, R3C 4K4

D.AU

**PROJECT** 

ADMINISTRATION AND COUNCIL BUILDINGS DESIGN AND CONSTRUCTION OF EXTERIOR DOOR REPLACEMENT

510 MAIN STREET SHEET TITLE

> ADMINISTRATION BUILDING PARTIAL MAIN FLOOR PLAN

**ELECTRICAL - POWER AND SYSTEMS** SCALE

2021-111 AS SHOWN

DRAWING SHEET SIZE: A1 (841mm x 594mm) PLOT 1:1