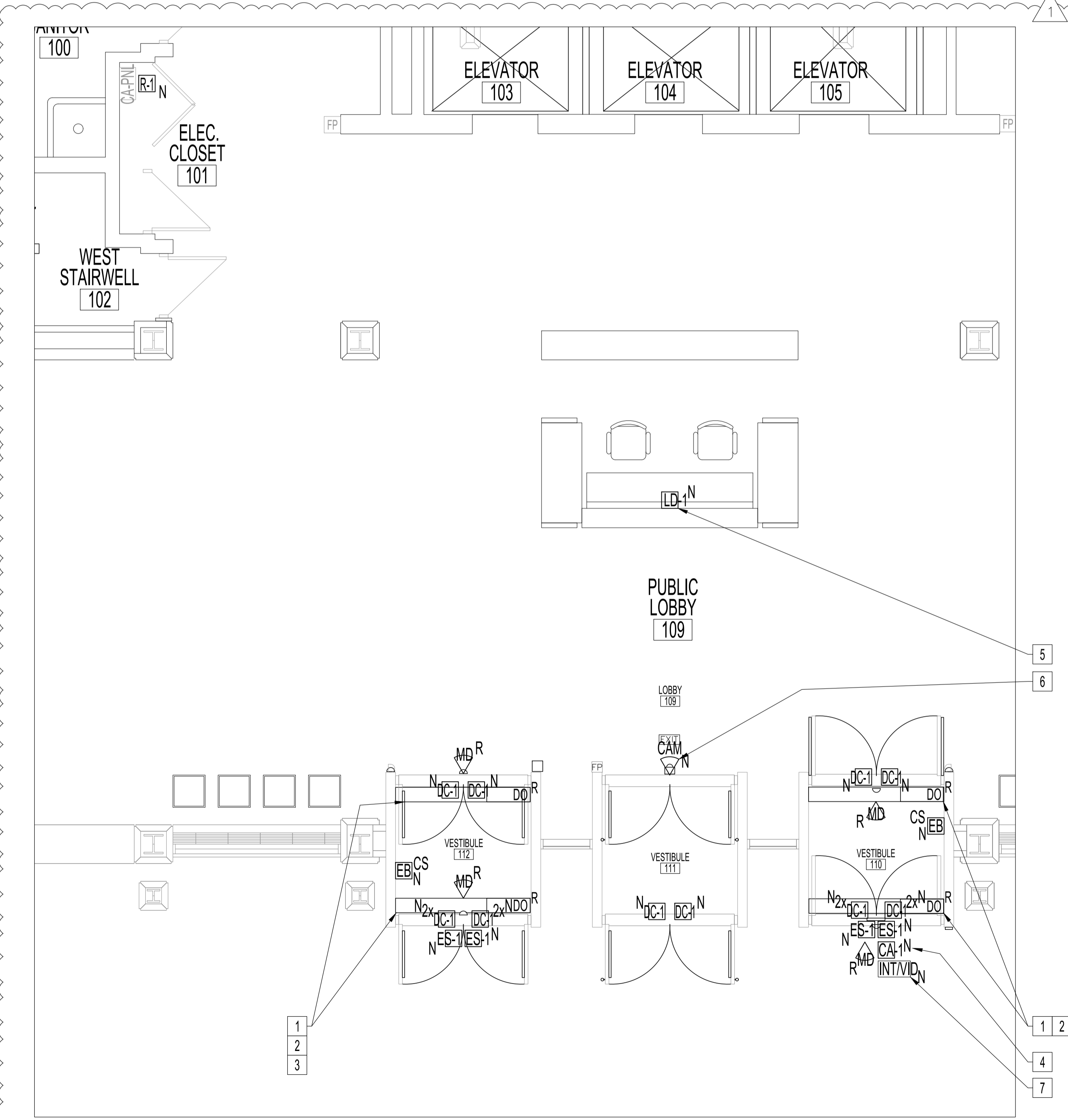


MAIN FLOOR PLAN - ADMIN DEMO  
 SCALE: 1/16"=1'-0"



MAIN FLOOR PLAN - ADMIN RENO  
 SCALE: 1/16"=1'-0"

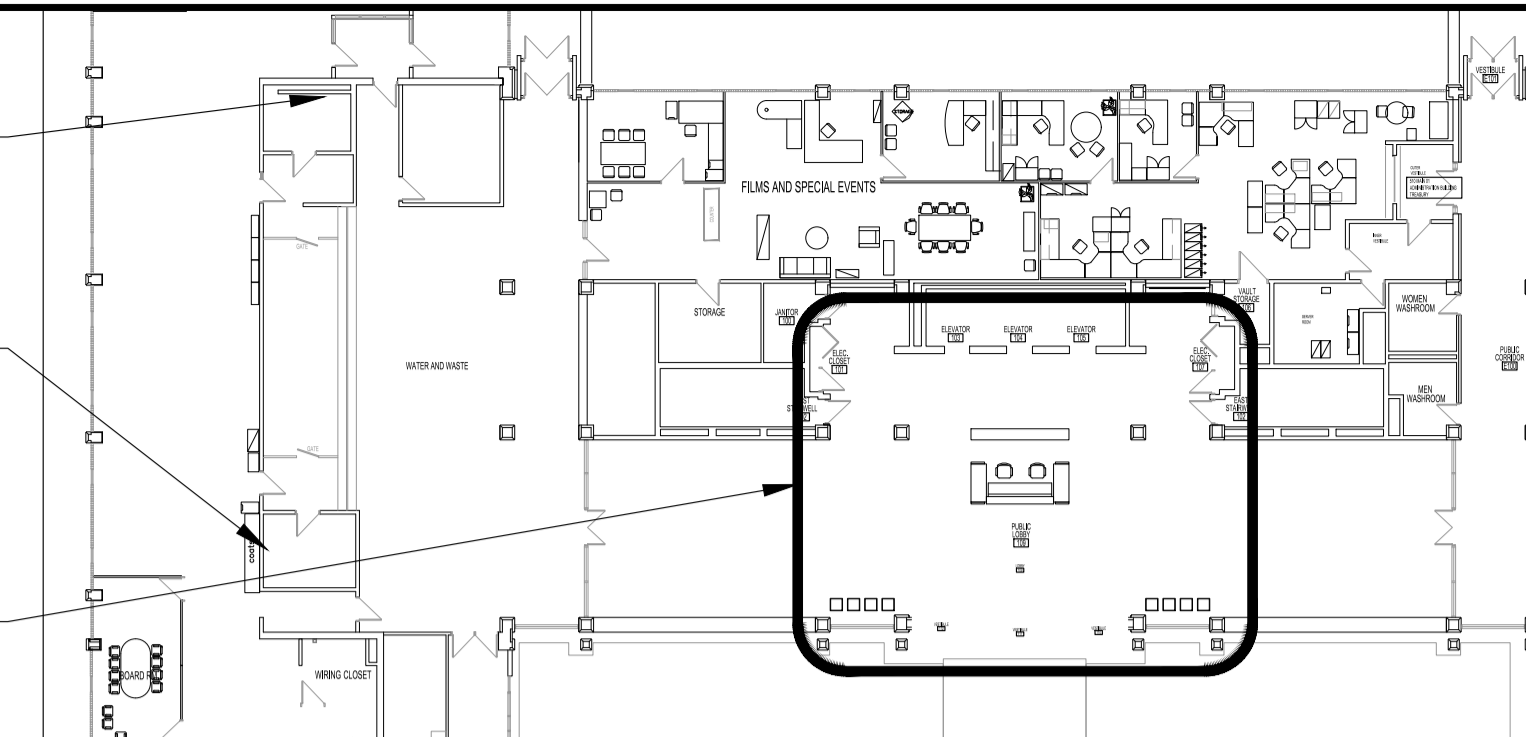
**POWER AND SYSTEMS DEMOLITION NOTES: "X"**

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. EXISTING WIRING & COMPONENTS (E.G., IR CURTAIN SENSORS...) MOUNTED ON EXISTING DOOR FRAMES SHALL BE REINSTALLED & TESTED AT COMPLETION.

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

AREA OF WORK AT CENTRAL CONTROLS (BASEMENT)  
 AREA OF WORK 311 LUNCHROOM (MAIN FLOOR)  
 AREA OF WORK ON BASEMENT & MAIN FLOOR



PARTIAL KEY PLAN - ADMINISTRATION BUILDING  
 SCALE: N.T.S.

**ELECTRICAL POWER & SYSTEMS RENOVATION NOTES: "X"**

ALSO SEE NOTES & SPECIFICATIONS.  
 ALL WIRING & CABLING SHALL BE CONCEALED IN DOOR/TRANSOM FRAMES &/OR IN WALL CAVITIES FOR FINISH SPACE (E.G. 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.

1. DOOR OPERATOR (DO)  
 1.1. REINSTALL ALL (4) DOOR OPERATORS (DO) TO EXISTING CIRCUITS. RECONFIGURE EXTERIOR DOOR OPERATORS WIRING/ CONTROLS TO OPERATE WITH NEW CARD ACCESS SYSTEM & NEW LOCKDOWN SYSTEM. PROVIDE DOOR INTERFACE RELAYS (CAMDEN MODEL CX-12 PLUS) TO INTERFACE WITH NEW CARD ACCESS & NEW LOCKDOWN.  
 1.2. REINSTALL ALL (MD), WIRE POWER FOR EXTERIOR DOORS (MD) FROM EXISTING CARD ACCESS SYSTEM POWER SUPPLY.  
 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 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 S1ST 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: ADMIN BUILDING FRONT DOORS ARE CURRENTLY CONTROLLED BY EXISTING METASYS IN SUB-BASEMENT & WILL BE REWORKED TO EXISTING CARD ACCESS PANEL IN MAIN FLOOR ELECTRICAL CLOSET 101. NEW ACCESS CONTROL CABLES TO TERMINATE THERE (TBC).

4.2. PROVIDE (ES-1) & (DC-1), AS SHOWN. (ES-1) SHALL BE POWERED BY CARD ACCESS SYSTEM NOT (DO). MOUNT (ES-1) & (DC-1) ONTO DOOR FRAME WITH WIRING CONCEALED IN DOOR FRAMES, CEILING SPACES & WALL CAVITIES. IF SURFACE-MOUNTED WIRING ON FINISHED WALLS ARE REQUIRED. USE LEGRAND RACEWAY COMPONENTS/COLOR TO BLEND IN & MINIMUM PATHWAY OPTIC. MAXIMUM LATCH PROJECTION ON DOOR HARDWARE DEVICE IS ESSENTIAL TO OBTAINING FULL HOLDING FORCE ON (ES-1).

4.3. PROVIDE (CA-1) AS SHOWN. MOUNT APPROXIMATELY AT DOOR LATCH CENTERLINE HEIGHT ON LATCH SIDE OF DOOR FRAME (TBC).  
 4.4. PROVIDE HOME RUN HONEYWELL PROFUSION MULTI-CONDUCTOR ACCESS CONTROL CABLE 3195 (FT6) IN EMT FROM EXISTING CARD ACCESS PANEL IN ELECTRICAL CLOSET 101 TO THE FURTHEST NEW CARD ACCESS DEVICE CONNECTION. TERMINATE ALL DEVICES TO NEW (R-1) (SUPPLY & INSTALL IN EXISTING CARD ACCESS PANEL). 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.
  - 4.4.1.2. DOOR ELECTRIC STRIKE (ES-1) 184 STR (SETUP FOR FAIL-SECURE) INSTALL WITH STRIKE SURGE PROTECTION AT DEVICE END.
  - 4.4.2. CARD ACCESS READER (CA-1) 226 STR OAS
  - 4.4.3. DOOR CONTACT (DC-1) 222 STR
    - 4.4.3.1. DOOR CONTACTS (DC-1) WIRED WITH A 4-STATE, DOUBLE END-OF-LINE 1k RESISTORS IN THE NIC 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) 224 STR. (RTE) NOT REQUIRED BUT USE CABLE TO CONNECT (MD) TO CARD ACCESS CONTROL TO ACTIVATE (ES-1) THROUGH NEW CAMDEN CX-12 PLUS. COIL-UP EXCESS WIRING FOR FUTURE USE.

5. LOCKDOWN SYSTEM (SUPERVISED & MONITORED)  
 5.1. SEQUENCE OF OPERATION  
 5.1.1. WHEN LOCKDOWN "RED" BUTTON IS PUSHED  
 5.1.1.1. EXTERIOR INGRESS (ENTRANCE) DOOR & EGRESS (EXIT) DOOR WILL BE PLACED INTO "LOCKED MODE" INCLUDING DISABLING ALL (DO), (MD) & (CA-1). VALID ACCESS CARDS CANNOT UNLOCK THE CARD READER (CA-1).  
 5.1.1.2. A SILENT ALARM IS SENT TO CENTRAL CONTROLS.  
 5.1.1.3. DOUBLE EGRESS (EXIT) DOORS CAN BE READILY OPENED FROM INSIDE VIA RIM EXIT DEVICES (BY ARCHITECTURAL).

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 IN 311 LUNCHROOM VIA BELOW MAIN FLOOR. PUSHING (LD-1) RED BUTTON ACTUATES CONTACT CLOSURE & TRIGGERS INTRUSION PANEL RELAY OUTPUT. CONFIGURE TO NOTIFYING COW CENTRAL CONTROLS.  
 5.2.2. PROVIDE COW CENTRAL CONTROLS WITH SIMILAR (LD-1) & WIRING IN THEIR SPACE (LOCATION TBC) TO ALLOW REMOTE LOCKDOWN & RESET.  
 5.2.3. CONFIGURE (SUPPLY ALL WIRING & COMPONENTS) THE INTRUSION ALARM OUTPUT CONTACT IN THE EXISTING CARD ACCESS POWER SUPPLY WITH FACP CUTOFF TO DISABLE POWER TO FAIL-SECURE (ES-1) TO LOCK INGRESS EXTERIOR VESTIBULE DOOR INCLUDING DISABLING ALL (DO), (MD) & (CA-1).  
 5.2.4. PROVIDE ADDITIONAL 2-WIRE RS-485 IN 3/4" EMT TO CONNECT THE NEW MR-52 (R-1) TO COMMUNICATE TO THE CONTROLLER IN THE 311 LUNCHROOM.

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. CONCEAL ALL WIRING IN DOOR FRAME INCLUDING 18/2 SOLID CONDUCTOR UNSHIELDED GREY (FT6) CABLE TO VIDEO MASTER STATION. ALL WIRING IN CEILING SPACES & UNDER DESK SHALL BE IN 3/4" EMT.  
 7.2. MOUNT DOOR STATION ON EXTERIOR RIGHT DOOR JAMB OR BESIDE AT APPROXIMATELY 47" AFF (TBC) TO PROVIDE A FULL FACIAL TO WAIST VIEW. CONCEAL ALL WIRING IN DOOR FRAME WITH 18/4 STRANDED, UNTWISTED, UNSHIELDED GREY (FT6) CABLE & CAT6 (FT6). FROM VIDEO MASTER STATION TO EXISTING CARD ACCESS PANEL (LEAVE EXTRA 6 FEET COILED LENGTH IN PANEL FOR CITY TO COORDINATE TERMINATION & PROGRAMMING). ALL WIRING IN CEILING SPACES & UNDER DESK SHALL BE IN 3/4" EMT.

TYPE	DESCRIPTION
INT/VID	7" TOUCHSCREEN VIDEO INTERCOM SET, AIPHONE JPS-4EDV, EACH SET CONTAINS: (1) DOOR STATION, JP-DV; (1) VIDEO MASTER STATION, JP-DM; (1) POWER SUPPLY, PS-242DUL.
CAM-1	NETWORK REMOTE HEAD CAMERA & LENS IN DOOR MULLION HOUSING. HANWHA XNB-6001 (HEAD CAMERA), SLA-T4680V (LENS), SHD-46VDB (BLACK-DOOR JAMB HOUSING), TO BE CONFIRMED
PS-1	PRESENCE SENSOR: ASSA ABLQY 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. NUMBER OF MODULES: 4. PROTECTION: IP54 MIN
ES-1 ES-2 ES-3	ELECTRIC STRIKES. 24VDC, FAIL-SECURE. (SUPPLIED BY ARCHITECTURAL)
CA-1	CARD ACCESS READER. MULLION SIZE. IP65. HID SIGNO MULTI CLASS READER, MODEL 20 NKS 00-00000. BLACK DOOR CONTACT WITH MAGNET - GRI 189-12-W, DPDT X 2, 1" STEEL DOOR RECESSED SWITCH SET, STANDARD GAP. 9W, 175VDC, 0.25A, WHITE; WITH DOOR CHANNEL MAGNET, GRI MC-180
DC-1	
R-1	MODULE, READER INTERFACE BOARD, MERCURY SECURITY MR-52.
LD	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/ULC LISTED, ADA COMPLIANT, STI S2429LD-EN-BLUE.

**ABBREVIATIONS**

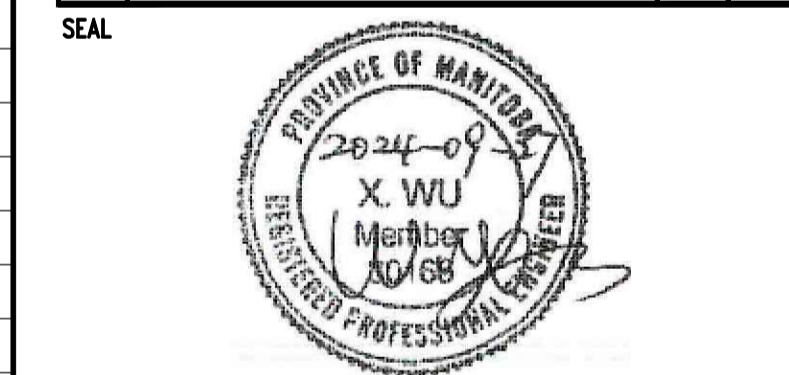
	DESCRIPTION
ACT	ACOUSTIC CEILING TILE
AFF	ABOVE FINISH FLOOR
BFC	BELOW FINISH CEILING
CA	CARD ACCESS READER
CAM	CAMERA
CCT	CIRCUIT, CCT: C= PANEL "B"; CT= CIRCUIT "1" (B1)
CLNG	CEILING
CS	CEILING SPACE
D	DEMOLITION, REMOVE BACK TO SOURCE
DB	DOOR BELL BUTTON
DED	DEDICATED CIRCUIT
DC	DOOR CONTACT
DO	DOOR OPERATOR (BY ARCHITECTURAL)
DSW	DISCONNECT SWITCH
DWG	DRAWING
E	EXISTING OR "SHOWN WITH NO DESIGNATION"
EB	ELECTRICAL BOX
ES	ELECTRIC STRIKE
FACP	FIRE ALARM CONTROL PANEL
JB	JUNCTION BOX
MD	MOTION DETECTOR
ML	MAGNETIC LOCK
N	NEW
N.I.C.	NOT IN CONTRACT
NTS	NOT TO SCALE
OIC	ON CENTER
OS	OCCUPANCY SENSOR
PNL	PANEL
PS	PRESENCE SENSOR
R	RELOCATED
S1ST	STAINLESS STEEL
TBC	TO BE CONFIRMED
TBD	TO BE DETERMINED
TYP.	TYPICAL

- NOTES:**
- THESE DRAWINGS SHALL NOT BE SCALED.
  - THE WORD "PROVIDE" IS DEFINED AS SUPPLY & INSTALL.
  - ALSO REFER TO ARCHITECTURAL ELECTRICAL DRAWINGS & SPECIFICATIONS.
  - SUBMISSION OF SITE MARK-UPS AS-BUILTS, OPERATING & MAINTENANCE MANUALS AND OTHER SUPPORTING DOCUMENTS TO CLIENT ARE MANDATORY AT THE COMPLETION OF THIS PROJECT.
  - THE CONTRACTOR SHALL VISIT THE SITE AND ENSURE ALL DIMENSIONS, DATUM, AND DETAILED INFORMATION SHOWN ARE CORRECT.
  - 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.
  - ALL PRODUCTS AND MATERIALS TO BE USED AND INSTALLED SHALL CONFORM WITH MANUFACTURER'S SPECIFICATIONS, APPLICABLE CODES AND AUTHORITY HAVING JURISDICTION.
  - THE CONTRACTOR SHALL BE RESPONSIBLE TO PATCH AND MAKE GOOD ALL EXISTING CONSTRUCTION AFFECTED BY THE REMOVAL OF ALL ITEMS FORMING PART OF THE RENOVATION WORK.
  - 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 SPECIFICATIONS.
  - ALL ABANDONED ELECTRICAL FIXTURES, COMPONENTS, RECEPTACLES & DATA CABLING SHALL BE REMOVED BACK TO SOURCE & TERMINATED AS PER APPLICABLE CODES.
  - IF FIRE PULLS ARE DISCONNECTED, RECONNECT & TEST ALL FIRE PREVENTION EQUIPMENT. INSTALLATION SHALL BE IN CONFORMANCE WITH CANULC-5524-M, STANDARD FOR INSTALLATION OF FIRE ALARM SYSTEMS. NOTIFY BUILDING OWNER PRIOR TO PERFORMING A MANDATORY FIRE ALARM VERIFICATION REPORT IN CONFORMANCE WITH CANULC-5537, STANDARD FOR VERIFICATION OF FIRE ALARM SYSTEMS FOR ZONES AFFECTED.

**WARNING:**  
 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.

ELECTRICAL DRAWING LISTS	
SHEET No:	SHEET TITLE
E1	ADMINISTRATION BUILDING, PARTIAL MAIN FLOOR PLAN, ELECTRICAL POWER AND SYSTEMS
E2	COUNCIL BUILDING, PARTIAL MAIN FLOOR PLAN, ELECTRICAL POWER AND SYSTEMS
E3	ELECTRICAL SPECIFICATIONS

No.	REVISION/DESCRIPTION	BY	DATE
1	ISSUED FOR ADDENDUM 2	D.A.U.	2024.06.13
0	ISSUED FOR CONSTRUCTION	D.A.U.	2024.06.27



DRAWN	CHECKED	DESIGNED	APPROVED
D.A.U.		D.A.U.	
DATE: 2024.06.13	USER APPROVAL		

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

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	PROJECT No:	SHEET No:
AS SHOWN	2021-111	E1-R1