

Public Works and
Government Services Canada
Architectural and Engineering Services
Ontario Region

Travaux publics et
Services gouvernementaux Canada
Services d'architecture et de génie
Région de l'Ontario

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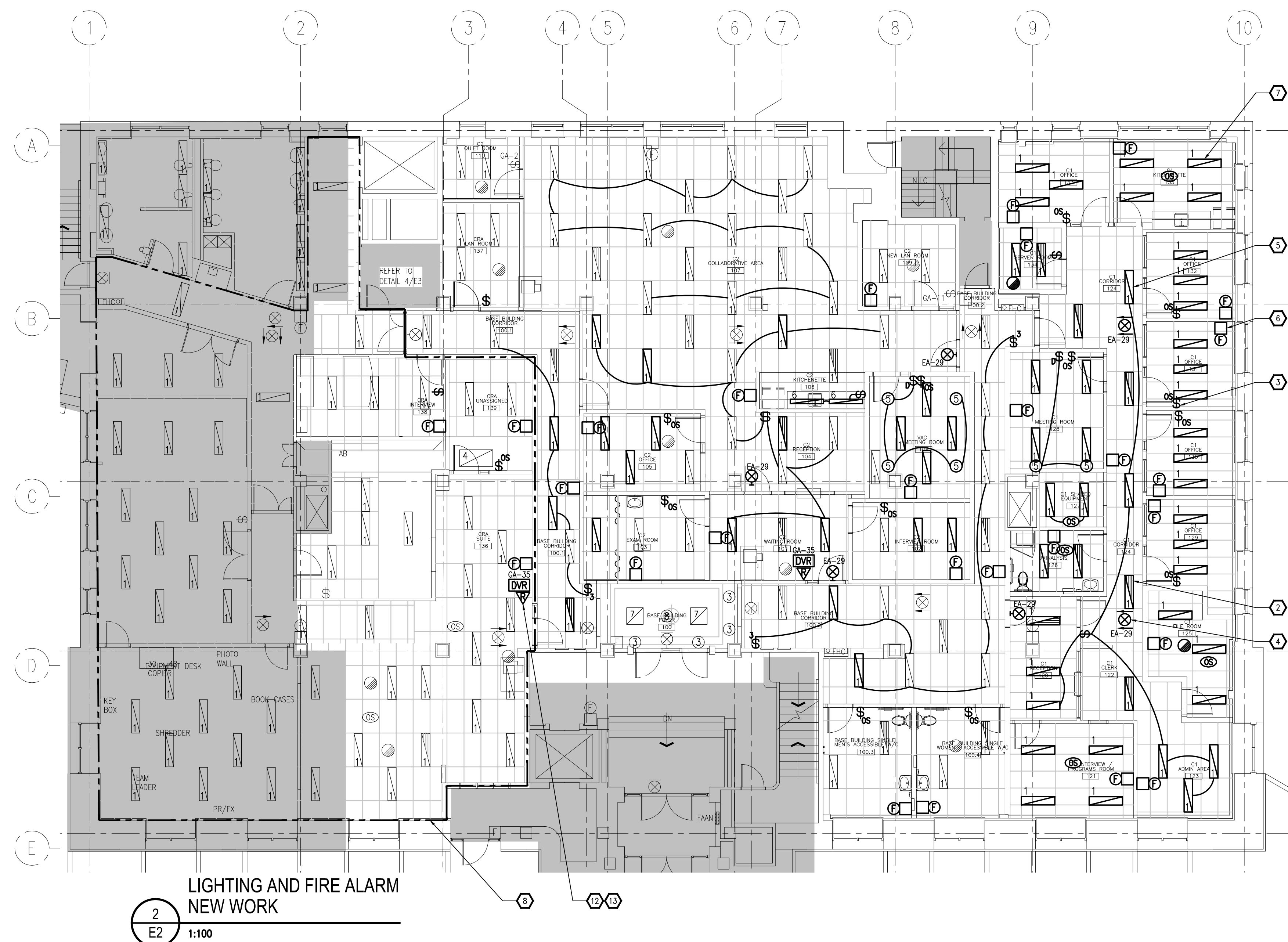
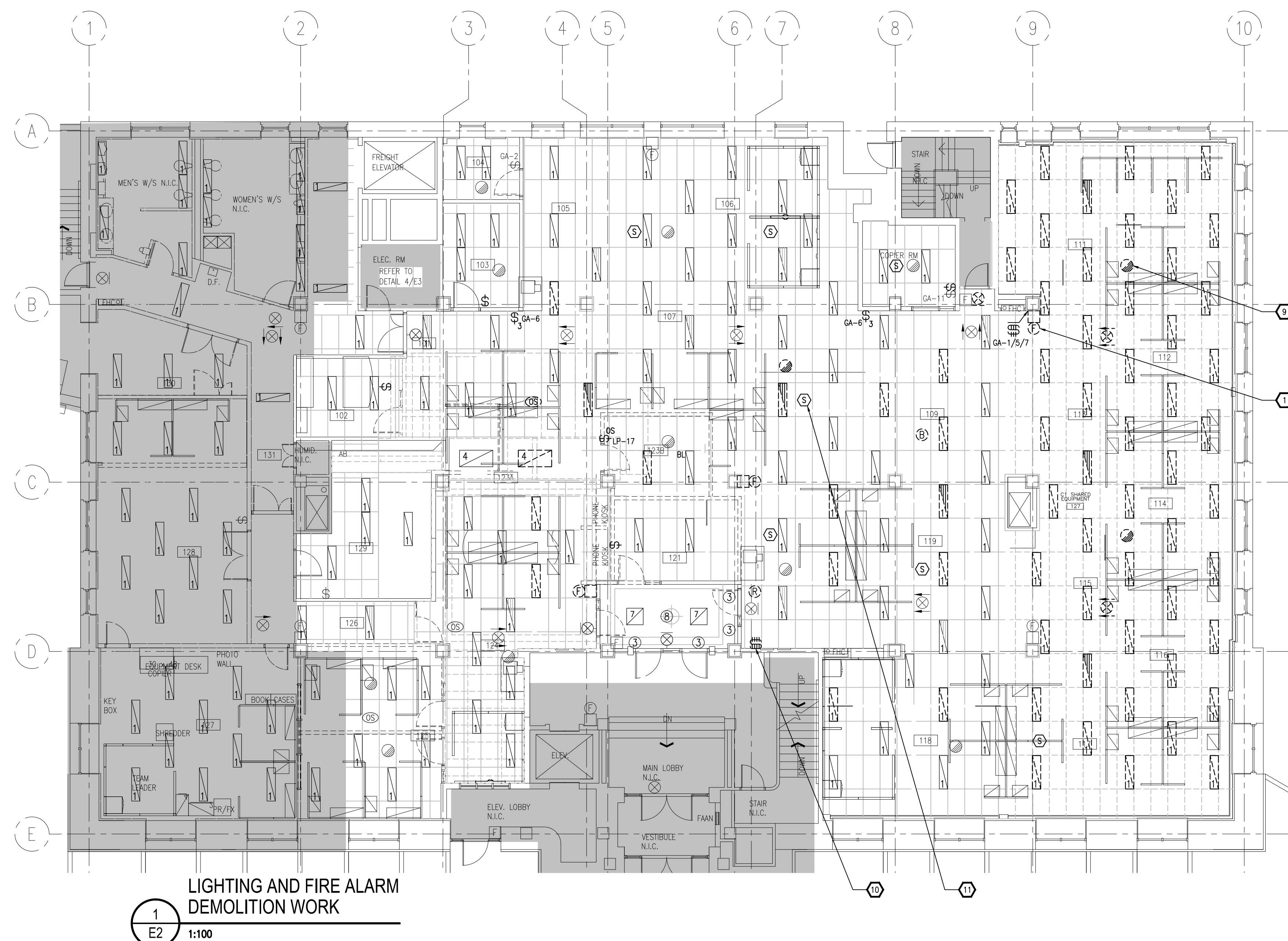
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DRAWING NOTES

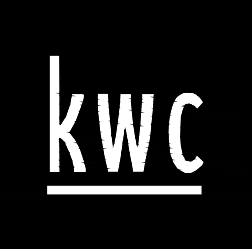
1. TYPICAL: RELOCATE EXISTING FIRE ALARM BELL.
2. TYPICAL: CONNECT ALL EMERGENCY POWER LIGHTING TO PANEL LP-EA, C/W NEW 20A-1P BREAKERS, OR UTILIZE EXISTING CIRCUITS AND BREAKERS IN AREA FROM PANEL LP-EA. DO NOT LOAD ANY LIGHTING CIRCUIT MORE THAN 80% OF BREAKER RATING.
3. TYPICAL: PROVIDE NEW WALL MOUNTED DUAL TECHNOLOGY WALL SWITCH OCCUPANCY SENSOR, C/W MANUAL PUSH BUTTON. SWITCH SHALL HAVE HIGHLIGHT PRE-SENSITIVITY ADJUSTMENT AND FULLY ADJUSTABLE ULTRASONIC ADJUSTMENTS.
4. TYPICAL: PROVIDE NEW PICTOGRAM "RUNNING MAN" EXIT SIGN AND CONNECT TO CIRCUIT AS INDICATED.
5. TYPICAL: TYPE 1 FIXTURES UTILIZE MODULAR WIRING SYSTEM. RELOCATE EXISTING AND MODULAR WIRING TO SUIT REVERSED LAYOUT. PROVIDE NEW MODULAR WIRING COMPONENTS, WHIPS AND HOME RUN FEEDS AS REQUIRED BY NEW LAYOUT. CONNECT TO LOCAL SWITCHES AS INDICATED.
6. TYPICAL: PROVIDE NEW OR RELOCATED FIRE ALARM BELL C/W WIRING AND CONDUIT AND CONNECT TO EXISTING FIRE ALARM CIRCUIT. PROVIDE 150mm NOTIFIED STEEL BELL, PRODUCING SOUND LEVEL OF 85dB AT 3.0m, IN ENCLOSED ROOMS INCLUDING, BUT NOT LIMITED TO, OFFICES, SERVER ROOMS, MEETING ROOMS, EXAMINATION ROOMS AND WASHROOMS.
7. TYPICAL: CONNECT ALL NORMAL POWER LIGHTING TO PANEL LP-CA, C/W NEW 20A-1P BREAKERS, OR UTILIZE EXISTING CIRCUITS AND BREAKERS IN AREA FROM PANEL LP-CA. DO NOT LOAD ANY LIGHTING CIRCUIT MORE THAN 80% OF BREAKER RATING.
8. TYPICAL: MOODY/ISOLATE LIGHTING CIRCUITS TO CRA SUITE TO SEPARATE FROM REMAINDER OF GROUND FLOOR LIGHTING CIRCUITS.
9. TYPICAL: DISCONNECT AND REMOVE EXISTING FIRE ALARM DEVICE C/W WIRE AND CONDUIT BACK TO SOURCE AND MAKE SAFE.
10. TYPICAL: DISCONNECT AND REMOVE SWITCH C/W WIRE AND CONDUIT BACK TO SOURCE AND MAKE SAFE.
11. TYPICAL: RELOCATE SPOKER SYSTEM. DISCONNECT AND REMOVE SPOKER C/W WIRE AND CONDUIT.
12. TYPICAL: PROVIDE NEW DUAL VOLTAGE RELAY FOR NEW BARRIER FREE DOOR OPERATOR C/W 15A/100V CONTROL CIRCUIT. PROVIDE INTERCONNECTION WITH NEW FIRE ALARM RELAY AND NEW CIRCUIT TO BARRIER FREE OPERATOR TO DISCONNECT POWER TO OPERATOR ON GENERAL FIRE ALARM. BARRIER FREE OPERATOR SHALL NOT RE-ENERGIZE UNTIL THE ALARM PANEL HAS BEEN RESET.
13. TYPICAL: PROVIDE NEW FIRE ALARM RELAY AND CONNECT TO LOCAL INITIATING LOOP SERVING AREA.

LIGHTING FIXTURE SCHEDULE									
TYPE	DESCRIPTION	CATALOG NUMBER	LAMPS PER FIXTURE			VOLT	MOUNTING	REMARKS	
			QTY	TYPE	WATTS				
1	EXISTING 304mmx1220mm RECESSED FLUORESCENT COVERED TROFFER	COOPER METALUX EPS6W-XU-232518WWS-UNV-EB81-U	2	T8	32W	4100K	RECESSED	EXISTING TO REMAIN OR RELOCATE. PROVIDE NEW WHERE REQUIRED.	
2	NOT USED	-	-	-	-	-	-	C/W MODULAR WIRING CONNECTORS.	
3	EXISTING 152mm RECESSED FLUORESCENT DOWNLIGHT	-	2	CFL	-	120V	RECESSED	-	
4	EXISTING 1220mm SURFACE MOUNTED STRIP FIXTURE	-	1	T8	32W	120V	RECESSED	-	
5	NEW 101mm RECESSED LED DOWNLIGHT C/W INTEGRAL LED DIMMABLE DRIVER. LED CONNECTOR IS NON-SCREW BASE CONN FOR QUICK INSTALLATION.	-	1	LED	22W	4100K	RECESSED	C/W HAZE REFLECTOR, DIFFUSE POLYMER DOME LENS, WHITE RING, SHOWER RATED, DRIVER: HIGH PF (>0.90) AND THD (<25%) WITH INTEGRAL THERMAL PROTECTION.	
6	NEW 1220mm UNDER-CABINET VALENCE LED FIXTURE, C/W INTEGRATED DRIVER, HEAVY GAUGE ALUMINUM HOUSING AND COLOUR MATCHED END CAPS WITH 21mm OVERALL HEIGHT	-	1	LED	32W	4000K	UNDER CABINET	DESIGNED FOR TASK OR UNDERCABINET LIGHTING. MINIMUM 900K. AVAILABLE IN MULTIPLE FIXTURE LENGTHS.	
7	EXISTING 610mmx810mm RECESSED FLUORESCENT ACRYLIC TROFFER	-	-	-	-	-	-	-	
8	CHANDLER FIXTURE	-	-	-	-	-	-	-	

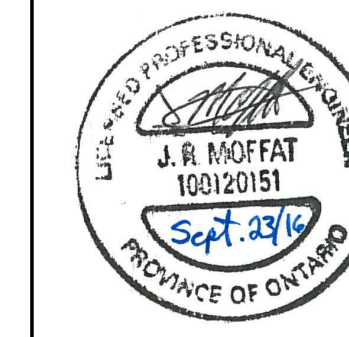
NOTES:
1. ALL ACRYLIC LENSES SHALL BE MINIMUM 0.125" THICK.
2. ALL FLUORESCENT LAMPS SHALL HAVE COLOUR TEMPERATURE TO MATCH EXISTING BASEBUILDING STANDARDS.

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03	ISSUED FOR TENDER	2016/09/23
02	ISSUED FOR 95% REVIEW	2016/07/22
01	ISSUED FOR 66% REVIEW	2016/06/30
revision		date

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	Detail No.
B	No. du détail
C	drawing no. - where detail required desin no. - où détail exigé drawing no. - where detailed desin no. - où détaillé

project title
titre du projet
THUNDER BAY Ontario
130 SYNDICATE
THUNDER BAY
C1 / C2 INTERIOR RENOVATIONS
GROUND FLOOR - FEDERAL BUILDING

drawing title
titre du dessin
**ELECTRICAL
LIGHTING AND FIRE ALARM**

drawn by
dessiné par
T.HOPKIN

designed by
conc par
T.HOPKIN

approved by
approuvé par
J.MOFFAT

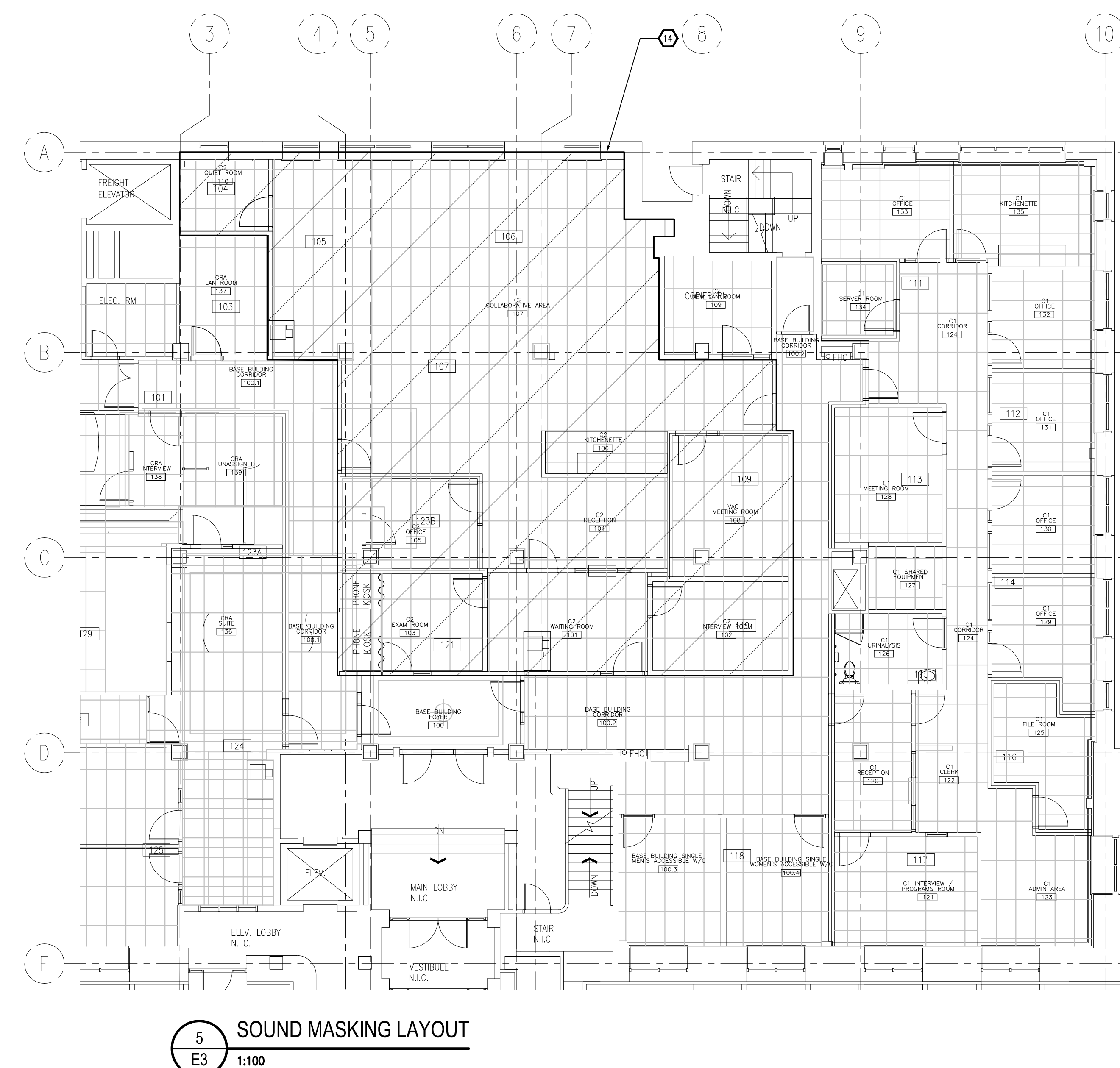
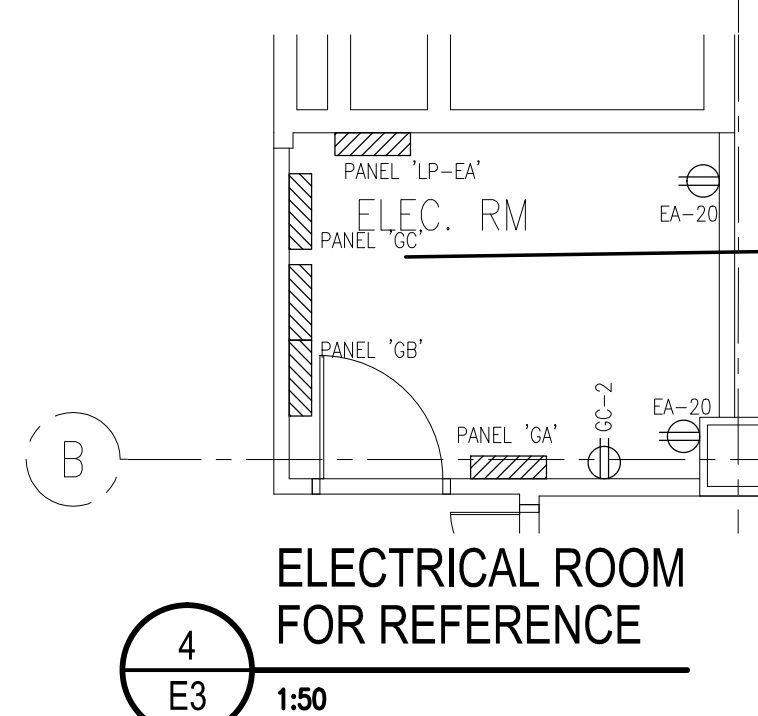
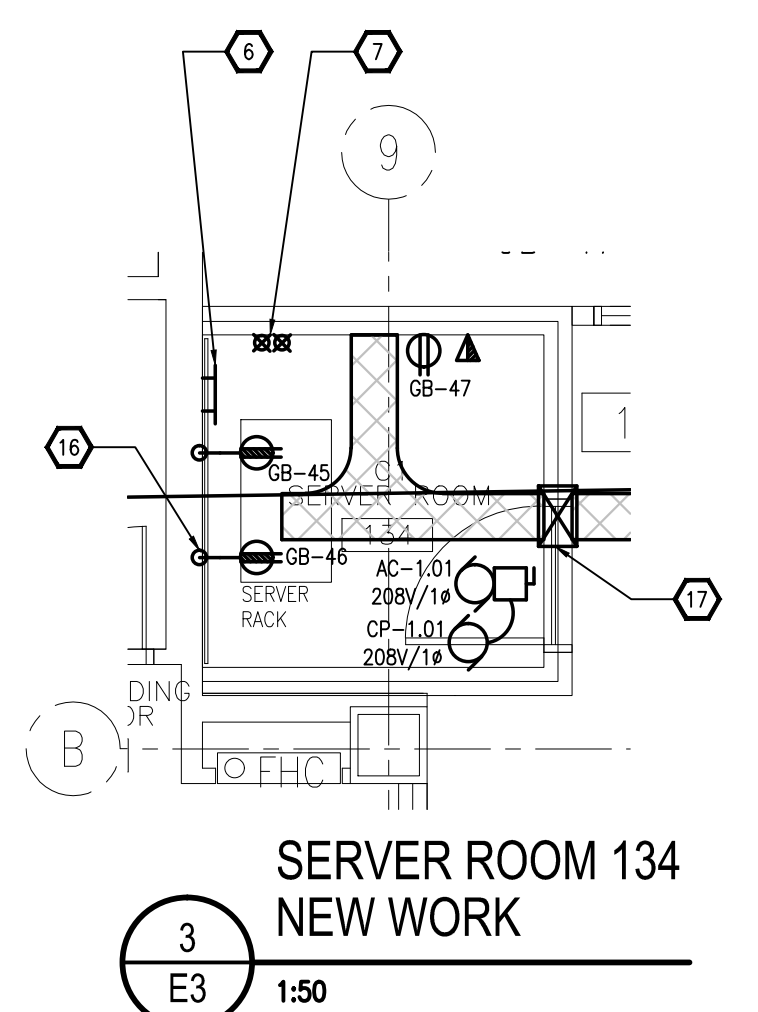
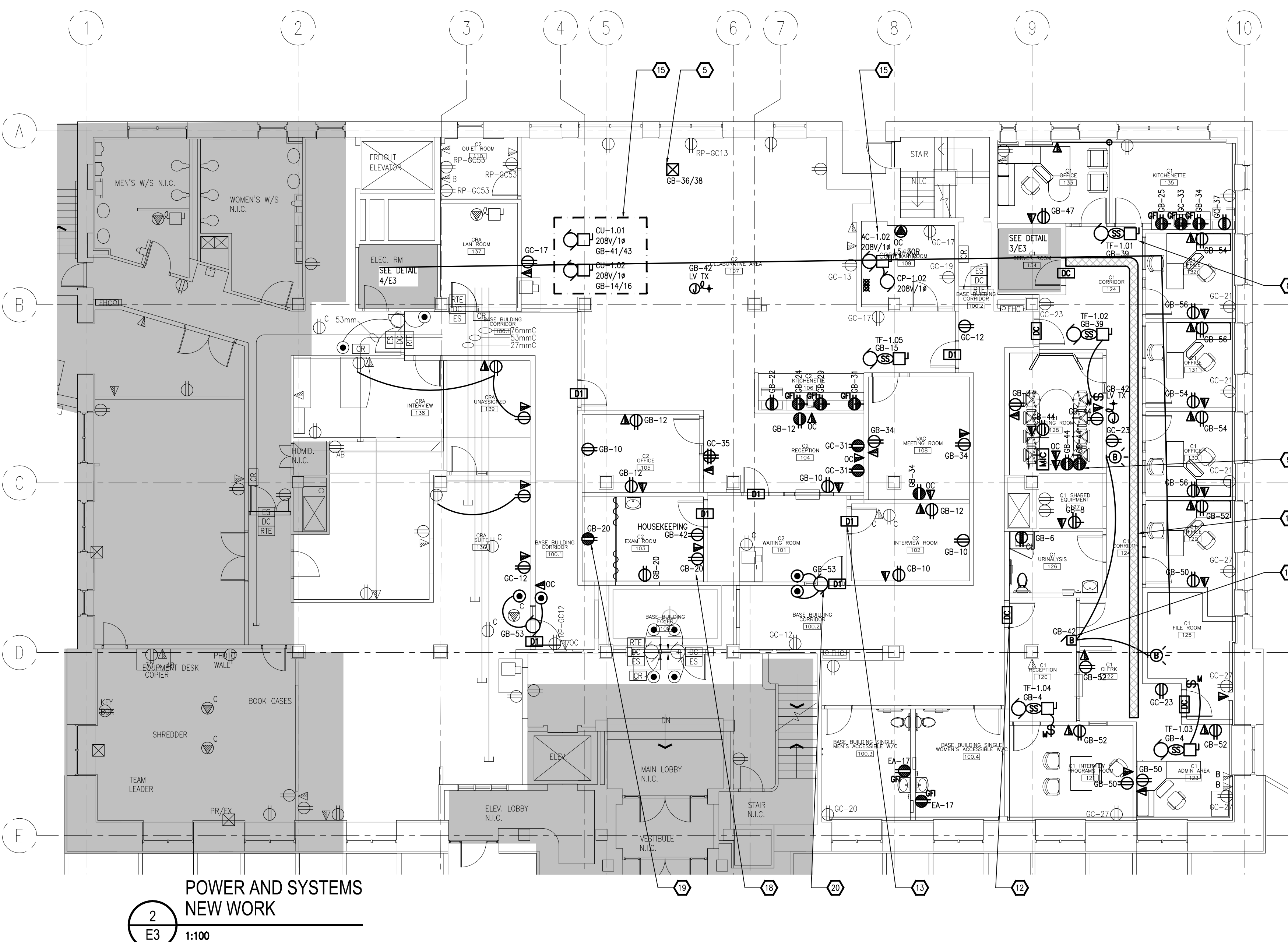
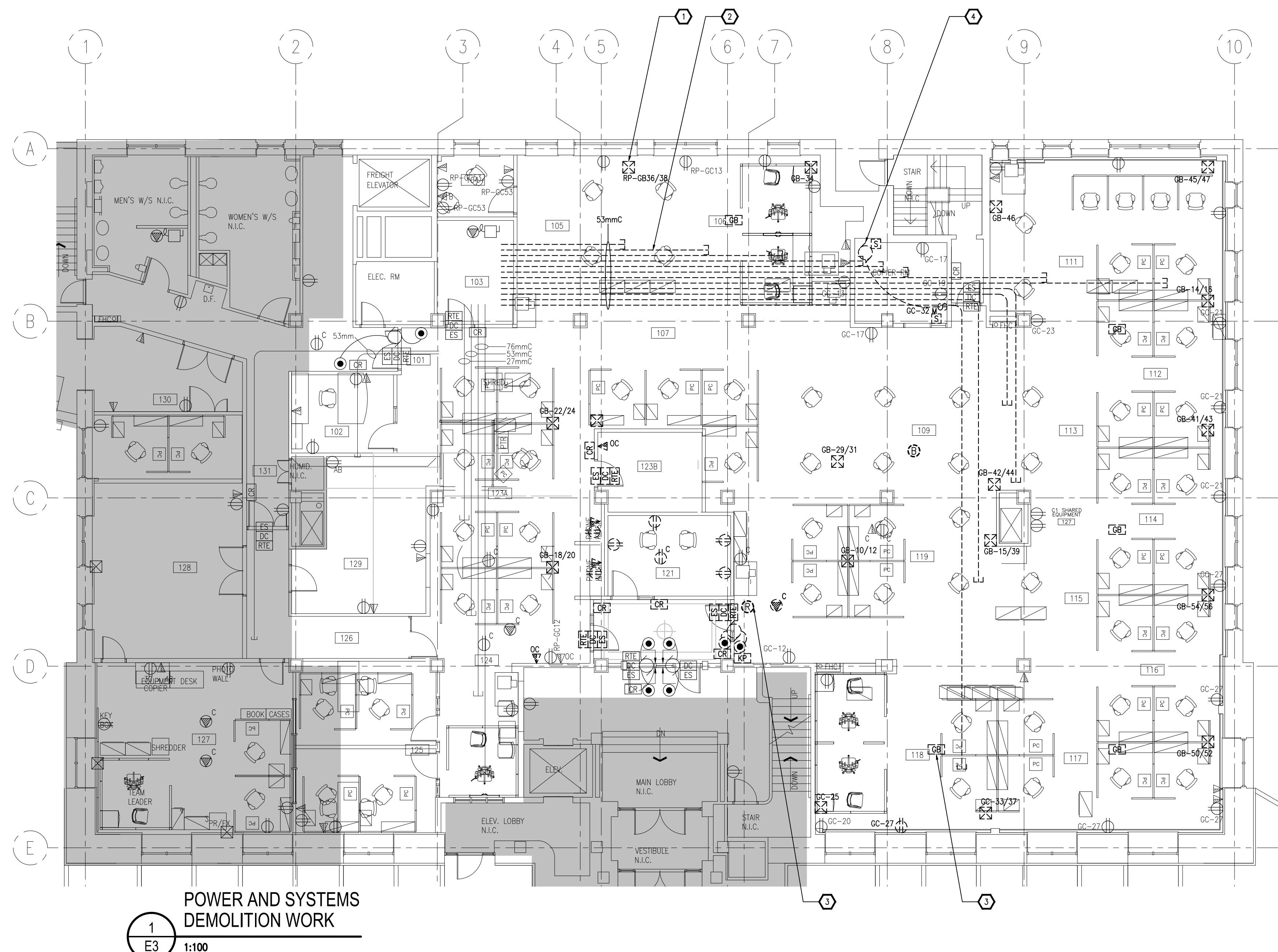
tender
soumission
D. AGUSTIN

project manager
administrateur
de projets

project date
date du projet
2015/09/10

project no.
no. du projet
R.079363.042

drawing no.
dessiné no.
E2 of 3



GENERAL NOTES

1. LOCATE AND PROVIDE NEW CIRCUIT (120V/15A UNLESS OTHERWISE INDICATED) FROM PANEL(S) SERVICING THE AREA OF WORK IN THIS CONTRACT. PROVIDE NEW BREAKERS AND REPLACE EXISTING BREAKERS TO MEET CIRCUITING REQUIREMENTS. EACH LETTER REPRESENTS A SINGLE CIRCUIT (FOR EXAMPLE, WHERE A LETTER IS USED MULTIPLE TIMES, IT INDICATES A GROUP OF DEVICES ON THE SAME CIRCUIT). UPDATE PANEL SCHEDULE(S) AND IDENTIFY CIRCUIT NUMBERS ON AS-BUILT DRAWINGS. PROVIDE NEW BREAKERS TO MEET CIRCUITING REQUIREMENTS INDICATED. PROVIDE DEDICATED NEUTRAL FOR ALL CIRCUITS NEWLY SUPPLIED DIRECTLY FROM PANEL.
2. CONTRACTOR IS TO TRACE ALL EXISTING CIRCUITS WITHIN AREA OF WORK AND PROVIDE LABELLING IN ACCORDANCE WITH SPECIFICATIONS. PROVIDE UPDATED TYPED PANEL SCHEDULES.
3. CONTRACTOR TO RE-USE CIRCUITS FREED-UP FROM DEMOLITION TO SUIT NEW LAYOUT PROVIDED WIRE AND CONDUIT MEETS SPECIFICATION AND CODE REQUIREMENTS.
4. REVIEW AND CONFIRM ALL SPACES WITHIN ELECTRICAL PANELS AND PROVIDE UPDATED PANEL SCHEDULES TO ENGINEER PRIOR TO START OF WORK.

DRAWING NOTES

1. TYPICAL: FURNITURE REMOVED OR RELOCATED BY CLIENT. DISCONNECT FURNITURE WHIP AND PULL BACK WIRING AND CONDUIT TO SOURCE AND MAKE SAFE.
2. TYPICAL: TELECOMMUNICATIONS CABLEING REMOVED BY CLIENT. DISCONNECT AND REMOVE REDUNDANT CONDUIT SYSTEM.
3. TYPICAL: SECURITY DEVICE AND WIRING REMOVED BY CLIENT, SHOWN FOR REFERENCE.
4. TYPICAL: TRANSFER FAN REMOVED BY MECHANICAL CONTRACTOR. DISCONNECT AND REMOVE LOCK, SWITCH, PULL BACK CONDUIT AND WIRE TO SOURCE AND MAKE SAFE.
5. TYPICAL: NEW WIRED SYSTEMS FURNITURE SUPPLIED BY CLIENT. PROVIDE NEW 15A/120V CIRCUITS TO NEW FURNITURE POLE AND PROVIDE FINAL TERMINATION TO SYSTEMS FURNITURE.
6. PROVIDE NEW GROUND BAR WITHIN TELECOMMUNICATIONS ROOM C/W #1/5AWG GROUND TO BUILDING GROUND IN BASEMENT MAIN ELECTRICAL ROOM, FOR USE BY TELECOMMUNICATIONS CONTRACTOR. PROVIDE BONDING STRAP FOR CONDUITS. REFER TO DETAIL 5/E1 FOR BASEMENT ROUTING DETAILS.
7. TYPICAL: PROVIDE TWO (2) 76mm² FROM PLYWOOD BACKING IN GROUND FLOOR C1 SERVER ROOM 134 AND C2 SERVER ROOM 128 THROUGH BASEMENT SERVICE ROOMS TO BASE-BUILDING MAIN DEMARICATION BOARD, FOR USE BY TELECOMMUNICATIONS CONTRACTOR. PROVIDE BONDING STRAP FOR CONDUITS. REFER TO DETAIL 5/E1 FOR BASEMENT ROUTING DETAILS.
8. TYPICAL: NEW TRANSFER FAN SUPPLIED C/W SPEED SWITCH AND DISCONNECT SWITCH, AND INSTALLED BY MECHANICAL CONTRACTOR. PROVIDE NEW 15A/120V CIRCUIT, INSTALL DISCONNECT AND SPEED SWITCH AND PROVIDE FINAL CONNECTIONS.
9. TYPICAL: AUDIO/VISUAL DEVICES IN MEETING ROOM 128 SUPPLIED AND INSTALLED BY AV CONTRACTOR. PROVIDE NEW RECEPTACLES AND T/W ROUGH-INS AS INDICATED. PROVIDE APPROXIMATELY 1.5m OF 103mm² SURFACE MOUNTED ALUMINUM RACEWAY FROM TV TO STANDARD HEIGHT UNLESS AS INDICATED IN AV DRAWINGS. REFER TO AUDIO/VISUAL DRAWINGS AND SPECIFICATIONS FOR MOUNTING LOCATIONS AND HEIGHTS.
10. PROVIDE NEW HARDWIRED LOW VOLTAGE DOOR BELLS C/W PUSH BUTTON AT SUITE ENTRANCE. PROVIDE NEW 15A/120V CIRCUIT, REQUIRED POWER SUPPLY/TRANSFORMER AND FINAL TERMINATION.
11. PROVIDE NEW 101mm² X 304mm² WIRE BASKET STYLE CABLE TRAY ABOVE CEILING, EQUAL TO LEOPARD CARLOTTI, C/W REQUIRED SUPPORTS AND FITTINGS FOR FUTURE USE BY TELECOMMUNICATIONS CONTRACTOR. PROVIDE BONDING OF CABLE TRAY IN ACCORDANCE WITH DESG.
12. TYPICAL: NEW DOOR CONTACT SUPPLIED AND INSTALLED BY SECURITY CONTRACTOR. PROVIDE 21MM CONDUIT STUB AT DOOR FRAME HEADER FOR USE BY SECURITY CONTRACTOR.
13. TYPICAL: NEW DOOR SECURITY INFRASTRUCTURE SUPPLIED AND INSTALLED BY SECURITY CONTRACTOR. PROVIDE NEW ROUGH-INS AND CONDUITS AT IDENTIFIED DOOR AS INDICATED IN DETAIL 1/E1.
14. PROVIDE COMPLETE SOUND MASKING SYSTEM FOR CORRECTIONAL SERVICES AND VETERANS AFFAIRS CANADA, INDICATED BY HATCHING. COORDINATE AND INCLUDE ALL NECESSARY COSTS AND ACCESSORIES FOR A COMPLETE WORKING SYSTEM. PROVIDE TWO (2) 60A RECEPTACLES C/W TWO (2) 15A/120V DEDICATED CIRCUITS FOR SOUND MASKING SYSTEM AND INSTALL MAIN DRIVER WITHIN ELECTRICAL ROOM.
15. TYPICAL: NEW ROOFTOP CONDENSER UNITS SUPPLIED AND INSTALLED ON ROOFTOP BY MECHANICAL CONTRACTOR. PROVIDE NEW 15A/208V/1 ϕ CIRCUIT, NEW WEATHERPROOF DISCONNECT SWITCH AT EQUIPMENT AND EXTEND WIRING FROM SECONDARY SIDE OF ROOFTOP CONDENSER TO RESPECTIVE AC UNIT ON GROUND FLOOR. COORDINATE CONDUIT ROUTING FROM GROUND FLOOR ELECTRICAL ROOM TO ROOFTOP WITH MECHANICAL. PIPING, INDOOR AC UNIT SUPPLIED, C/W DISCONNECT SWITCH, AND INSTALLED BY MECHANICAL CONTRACTOR. INSTALL DISCONNECT, TERMINATE WIRING FROM ROOFTOP EQUIPMENT AND EXTEND WIRING TO LOCK CONDENSATE PUMP. REFER TO WIRING DETAIL 2/E1.
16. TYPICAL: NEW SERVER RACKS SUPPLIED AND INSTALLED BY SSC. PROVIDE NEW 15A/120V DEDICATED RECEPTACLES WITHIN SERVER RACK, COORDINATE MOUNTING LOCATION WITH SSC. RUN CONDUIT SURFACE MOUNTED, SECURED TO FLOOR, FOR NEW RECEPTACLES.
17. PROVIDE PRE-RATED CABLE TRAY PATHWAY FOR FIRE RATED SEPARATIONS. PATHWAY SHALL BE DESIGNED TO ALLOW CABLES TO PENETRATE PRE-RATED WALL WHICH USES A BUILT-IN FIRE AND SMOKE SEALING SYSTEM THAT AUTOMATICALLY ADJUSTS TO THE AMOUNT OF CABLES INSTALLED. CABLES SHALL BE PERMITTED TO BE INSTALLED OR REMOVED AT ANY TIME WITHOUT THE NEED TO REMOVE DEVICES FROM WALL. PROVIDE MATCH-PAIR FOR CABLE TRAY WITHIN SERVER ROOM AT NEW SERVER RACK LOCATION.
18. TYPICAL OF RECEPTACLES IN C2 EXAM ROOM 103: PROVIDE CONDUCTOR INSULATION INTEGRITY TESTING AND INSPECTION AND TESTING OF RECEPTACLES. BRANCH CIRCUIT BREAKERS AND RELATED SYSTEMS IN ACCORDANCE WITH CSA 232-09, ELECTRICAL SAFETY AND ESSENTIAL ELECTRICAL SYSTEMS IN HEALTH CARE FACILITIES. EXAM ROOM C2-103 IS CLASSIFIED AS A BASIC CARE AREA. HOUSEKEEPING RECEPTACLES SHALL BE CLEARLY LABELED AS INDICATED. ALL RECEPTACLES WITHIN PATIENT CARE AREA SHALL BE HOSPITAL GRADE. PROVIDE DEDICATED GROUND(S) AND NEUTRA(L)S FOR ALL CIRCUITS TO THIS ROOM.
19. MEDICAL INSTRUMENTATION BOARD SUPPLIED, C/W CORD, BY CLIENT. ELECTRICAL CONTRACTOR TO INSTALL MEDICAL INSTRUMENTATION BOARD ADJACENT TO NEW O.C. RECEPTACLE AND CONNECT EQUIPMENT.
20. TYPICAL: NEW BARBER FREE OPERATOR SUPPLIED AND INSTALLED BY GENERAL CONTRACTOR. PROVIDE NEW 15A/120V CIRCUIT AND TERMINATE AT OPERATOR. PROVIDE NEW CONDUIT AND ROUGH-IN'S FOR PUSH-OPERATORS. REFER TO DETAIL 1/E1 FOR DETAILS.