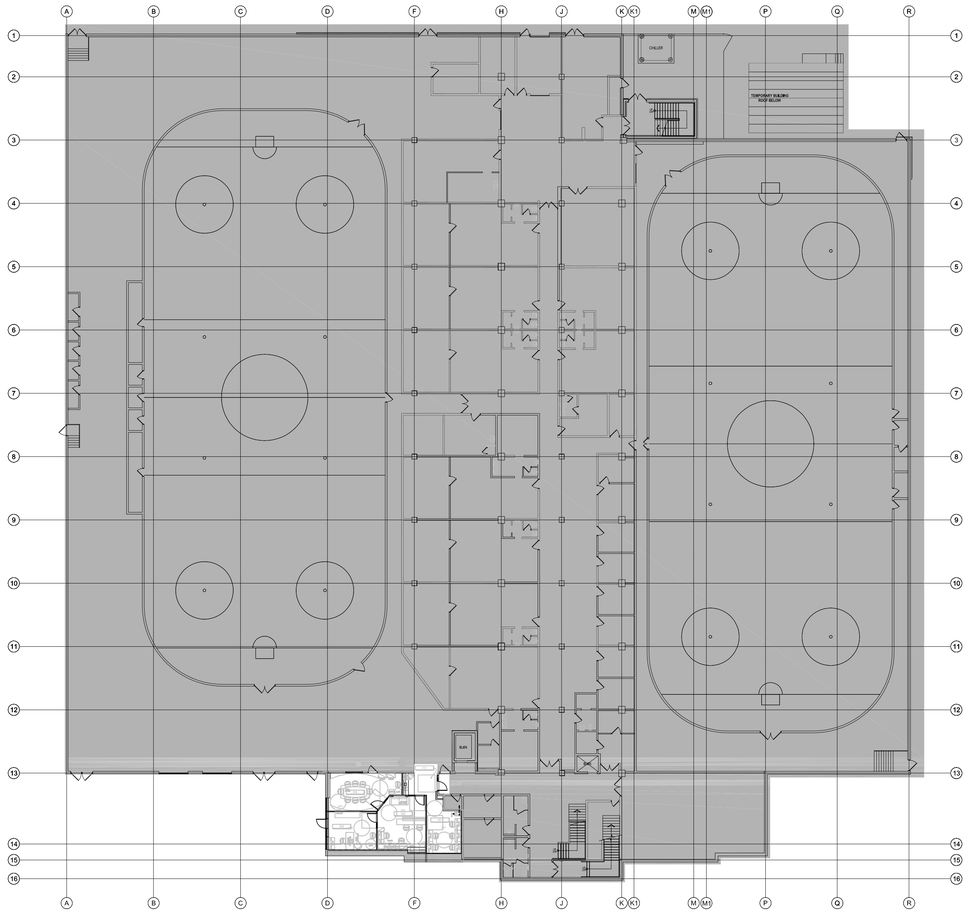
COUNCILLORS OFFICE
100 CHARLIE RODGERS PLACE BASEMENT,
OTTAWA, ONTARIO



2 TE00.00 KEY PLAN

ELECTRICAL DRAWING LIST

Drawing No.	Description	Scale
TE00.00	COVER PAGE, DRAWING LIST AND KEY PLAN	(N.T.S.)
TE00.01	ELECTRICAL SPECIFICATIONS	(N.T.S.)
TE00.02	ELECTRICAL LEGENDS	(N.T.S.)
TE00.03	ELECTRICAL LEGENDS	(N.T.S.)
TE00.04	ELECTRICAL DETAILS	(N.T.S.)
TE00.05	ELECTRICAL LAYOUTS	AS NOTED
TE00.06	ELECTRICAL SCHEDULES	(N.T.S.)

1 TE00.00 DRAWING LIST

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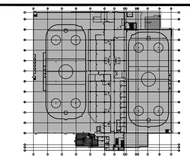

Key Plan

NUMBER / NUMÉRO	MILESTONE / FAIT SAILLANT	DATE: (Y/M/D) (A/M/J)	INITIALS INITIALES
04	Issued for Tender	2018-01-18	
03	Issued for Permit and Tender	2018-01-03	
02	Issued for 90% Client Review	2017-12-19	
01	Issued for 66% Client Review	2017-12-06	

DESIGNED BY / CONCU PAR: GLH	CHECKED BY / VERIFIÉ PAR: AD
DRAWN BY / DESSINÉ PAR: GLH	SCALE / ÉCHELLE: AS SHOWN

1 DETAIL NUMBER
A1.1 SHEET NUMBER
DRAWING TITLE
SCALE:

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CE DESSIN CONSTITUE LA PROPRIÉTÉ DE LA VILLE D'OTTAWA ET TOUT DROIT D'AUTEUR EST RÉSERVÉ. LES DIMENSIONS UTILISÉES LE SONT À DES FINS D'ESTIMATION SEULEMENT. IL INCOMBE À CHAQUE ENTREPRENEUR, SOUS-CONTRACTANT OU CONSULTANT DE VÉRIFIER TOUTES LES DIMENSIONS ET LES CONDITIONS SUR LE CHANTIER. VEUILLEZ INFORMER LE PROPRIÉTAIRE DE TOUTE ERREUR OU OMISSION AVANT D'ENTAMER LES TRAVAUX. NE DRESSEZ PAS LES PLANS À L'ÉCHELLE.

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DRAWING / DESSIN

COVER PAGE, DRAWING LIST AND KEY PLAN

FACILITY NO. / NO. DE INSTALLTIONS: XXXX

PROJECT NO. / PROJET NO.: 17516.001

SHEET NO. / FEUILLE No.: **TE00.00**

ELECTRICAL SPECIFICATIONS

1. GENERAL REQUIREMENTS

1.1. COMPLY WITH THE REQUIREMENTS OF THE LATEST EDITION OF ALL APPLICABLE CODES, THE REQUIREMENTS OF FEDERAL, PROVINCIAL AND MUNICIPAL CODES, LOCAL BY–LAWS, THE APPLICABLE STANDARDS OF THE UNDERWRITERS' ASSOCIATION AND ALL AUTHORITIES HAVING JURISDICTION. ALSO, COMPLY WITH THE STANDARDS FOR THE BUILDING(S) IN WHICH THE WORK IS TO TAKE PLACE.

1.2. THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS SHALL BE READ IN CONJUNCTION WITH AND FORM PART OF THIS CONTRACT.

1.3. THE WORK SHALL INCLUDE ALL LABOUR, MATERIALS, EQUIPMENT AND TOOLS REQUIRED FOR A COMPLETE AND WORKING INSTALLATION AS DESCRIBED, BUT NOT NECESSARILY LIMITED TO ITEMS LISTED IN THE SPECIFICATIONS AND SHOWN ON THE DRAWINGS. IN BRIEF, THIS WORK INCLUDES BUT IS NOT LIMITED TO:

- .1 SUPPLY AND INSTALLATION OF ALL LUMINAIRES AND EXIT LIGHTS
- .2 SUPPLY AND INSTALLATION OF ALL ELECTRICAL EQUIPMENT, SWITCH DISCONNECTS, MOTOR STARTERS, ETC...
- .3 SUPPLY AND INSTALLATION OF ALL CONDUIT, WIRING AND CABLES FOR A COMPLETE ELECTRICAL INSTALLATION.
- .4 SUPPLY AND INSTALLATION OF ALL POWER OUTLETS AND WIRING DEVICES
- .5 SUPPLY AND INSTALLATION OF ALL FIRE ALARM DEVICES, CONDUIT, WIRING & CABLES FOR A COMPLETE & WORKING FIRE ALARM SYSTEM.
- .6 SUPPLY AND INSTALLATION OF ALL EMPTY CONDUITS FOR SECURITY SYSTEM C/W 3.175mm NYLON PULL CORD, AND BACK BOXES.
- .7 SUPPLY AND INSTALLATION OF ALL EMPTY CONDUITS FOR DATA/VOICE C/W 3.175mm NYLON PULL CORD BACK BOXES AND JUNCTION BOXES.

1.4. APPLY FOR, OBTAIN, AND PAY FOR ALL PERMITS, LICENCES, INSPECTIONS, EXAMINATIONS AND FEES REQUIRED FOR WORK OF DIVISION 26. THE ELECTRICAL CONTRACTOR SHALL PROVIDE THE OWNER WITH CERTIFICATES THAT THE WORK HAS BEEN COMPLETED IN ACCORDANCE WITH ALL CODES, BUILDING STANDARDS, AND ALL AUTHORITIES HAVING JURISDICTION.

1.5. ARRANGE FOR INSPECTION OF ALL WORK BY THE AUTHORITIES HAVING JURISDICTION OVER THE WORK. ON COMPLETION OF THE PROJECT, PRESENT TO THE CONSULTANT THE FINAL UNCONDITIONAL CERTIFICATE OF APPROVAL FROM THE INSPECTING AUTHORITIES.

1.6. ONCE THE WORK IS COMPLETED, PROVIDE THE OWNER WITH A WRITTEN WARRANTY FOR ONE YEAR. THE WARRANTY SHALL COVER THE WORK AND MATERIALS. REPAIR AND REPLACE ANY DEFECTS IN MATERIAL OR WORKMANSHIP AT NO EXTRA COST TO THE OWNER.

1.7. BEFORE STARTING ANY WORK, SUBMIT THE REQUIRED NUMBER OF COPIES OF SHOP DRAWINGS AND SPECIFICATIONS TO THE ELECTRICAL CONSULTANTS FOR THEIR APPROVAL AND COMMENTS. COMPLY WITH ANY CHANGES REQUESTED AS PART OF THE CONTRACT, BUT NOTIFY THE CONSULTANT IMMEDIATELY OF SUCH CHANGES, PREPARE AND FURNISH ANY ADDITIONAL DRAWINGS, DETAILS OR INFORMATION AS MAY BE REQUIRED.

1.8. INCLUDE IN THE TENDER THE TOTAL SCOPE OF WORK WHICH IS TO INCLUDE BUT NOT LIMITED TO CUTTING, PATCHING, REMOVING, RE–ROUTING OF EXISTING ELECTRICAL EQUIPMENT AND WIRING, REMOVING, RELOCATING AND MODIFICATION OF LUMINAIRES, AS REQUIRED TO SUCCESSFULLY EXECUTE ALL WORK DESCRIBED. PRIOR TO SUBMITTING PRICE THE CONTACTOR IS TO REVIEW ANY DISCREPANCIES WITH THE CONSULTANT AND REPORT ANY AMBIGUITIES, OMISSIONS, CONFLICTS OR DEPARTURES FROM BUILDING CODES OR BY–LAWS. NO CLAIMS FOR EXTRA PAYMENT WILL BE CONSIDERED BECAUSE OF FAILURE TO FULFILL THIS CONDITION.

1.9. NO MODIFICATIONS ARE TO BE MADE TO THE ELECTRICAL DESIGN AS OUTLINED ON THE ISSUED DRAWINGS WITHOUT WRITTEN APPROVAL FROM THE CONSULTANT.

1.10. SUBMIT SHOP DRAWINGS, FOR ALL MAJOR EQUIPMENT (PANEL BOARDS, LUMINAIRES, ETC.). SHOP DRAWINGS SHALL BE REVIEWED AND STAMPED FOR ACCEPTANCE BY THE APPROPRIATE TRADE PRIOR TO SUBMISSION TO THE CONSULTANT. EQUIPMENT SHALL NOT BE ORDERED OR INSTALLED UNTIL SHOP DRAWINGS HAVE BEEN STAMPED "REVIEWED" BY THE ELECTRICAL CONSULTANT. SHOP DRAWINGS SUBMITTALS SHALL BE ELECTRONIC FORMAT.

1.11. INCLUDE IN THE TENDER PRICE ALL COSTS FOR PREMIUM TIME, FOR WEEKEND WORK AND SHIFT WORK TO TIE–IN SERVICES AT A TIME SUITABLE TO THE LANDLORD, OR TO MAINTAIN EXISTING SYSTEMS IN OPERATIONS DURING SHUTDOWNS.

1.12. NO ALTERNATES TO THE SPECIFIED LUMINAIRES IN THE LUMINAIRE SCHEDULE OR OTHER SPECIFIED EQUIPMENT ARE TO BE INCLUDED IN THE TENDER PRICE.

1.13. THE DRAWINGS ARE DIAGRAMMATIC AND INTENDED TO SHOW THE SCOPE OF THE WORK, GENERAL ARRANGEMENT AND LOCATION OF THE EQUIPMENT AND OUTLETS. THEY ARE NOT INTENDED TO SHOW THE DETAILS OF THE INSTALLATION. OBTAIN ALL DIMENSIONS FROM ARCHITECTURAL DRAWINGS AND DETAILS. VERIFY EXACT LOCATION AND MOUNTING HEIGHT OF ALL WIRING DEVICES WITH ARCHITECTURAL CONSULTANT PRIOR TO INSTALLATION.

1.14. THE CONSULTANT OR ARCHITECTURAL CONSULTANT SHALL HAVE THE RIGHT TO CHANGE THE LOCATION OF ANY OUTLET WITHIN 3 METERS OF THE LOCATION SHOWN ON THE DRAWINGS, WITHOUT EXTRA COST TO THE OWNER, IF THE REQUEST FOR SUCH CHANGES IS ISSUED PRIOR TO THE INSTALLATION OF THE OUTLET.

1.15. EXAMINE THE ARCHITECTURAL, STRUCTURAL AND MECHANICAL DRAWINGS TO ENSURE THAT THE WORK OF THIS DIVISION CAN BE SUCCESSFULLY COMPLETED. REPORT TO THE CONSULTANT ANY DISCREPANCIES BETWEEN DRAWINGS AND/OR SPECIFICATIONS AND ARCHITECTURAL CONSULTANT, DRAWINGS, SPECIFICATIONS AND DETAILS PRIOR TO INSTALLATION, REPORT TO THE CONSULTANT ANY OMISSIONS, CONFLICTS OR DEPARTURES FROM BUILDING CODES AND BY–LAWS, PRIOR TO INSTALLATION.

1.16. ELECTRICAL DRAWINGS SHALL NOT BE SCALED FOR MEASUREMENTS, EQUIPMENT DIMENSIONS OR DIMENSIONED LOCATIONS. REFER TO THE ARCHITECTURAL DRAWINGS FOR DIMENSIONS AND CONFIRM ALL MEASUREMENTS ON SITE WITH THE ARCHITECTURAL CONSULTANT. CONTRACTOR IS TO MAKE ARRANGEMENT TO GET A COPY OF ARCHITECTURAL DRAWINGS AND ALL OTHER CONSULTANT DRAWINGS AFFECTING ELECTRICAL WORK. THE ELECTRICAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE ARCHITECTURAL AND MECHANICAL DRAWINGS.

1.17. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION SCHEDULE AND ALL SPECIFIED INTERIM SCHEDULES. CONTRACTOR MUST COMPLY WITH THE GENERAL CONTRACTOR'S CONSTRUCTION SCHEDULE AND SPECIFIED INTERIM SCHEDULES.

1.18. LOCATIONS OF ALL FLOOR PENETRATIONS, INCLUDING CORE DRILLING, SAW CUTTING AND X–RAYING SHALL BE APPROVED ON SITE BY THE ARCHITECTURAL CONSULTANT, BUILDING OWNER, AND STRUCTURAL ENGINEER. OBTAIN NECESSARY APPROVALS PRIOR TO X–RAY AND DRILLING. INCLUDE FOR ALL COSTS IN THIS CONTRACT.

1.19. REQUEST IN WRITING FOR A COMPLETED ROUGH–IN AND FINAL INSPECTION OF THE ELECTRICAL SYSTEMS. WHEN THE FINAL INSPECTION REQUEST IS MADE, CONTRACTOR IS TO ENSURE THAT ALL DEFICIENCIES ARE COMPLETE; THAT SYSTEMS ARE READY FOR OPERATION; THAT EQUIPMENT HAS BEEN COMMISSIONED; ALL TAGS AND NAMEPLATES ARE INSTALLED; DRAWINGS AND CHARTS ARE COMPLETE; ALL FIXTURES AND EQUIPMENT HAVE BEEN CLEANED; SPARE PARTS HAVE BEEN PROVIDED; CONTROL SYSTEMS OPERATIONAL AND THE LANDLORD'S STAFF INSTRUCTED IN ALL PHASES OF THE SYSTEM OPERATION.

1.20. PROVIDE ALL ACCESS DOORS WHERE REQUIRED TO SERVICE ALL NEW AND EXISTING EQUIPMENT. ACCESS DOORS SHALL BE OR EQUAL TO LEPAGE AND SHALL BE COMPATIBLE WITH CEILING/WALL TYPE AND FINISH. ACCESS DOORS LOCATED IN DRYWALL CEILING SHALL BE RECESSED TYPE WITH AN INFILL PANEL AND SHALL BE FLUSH WITH THE SURROUNDING FINISHES. ELECTRICAL SERVICES ARE TO BE COORDINATED WITH OTHER TRADES TO MINIMIZE THE NUMBER OF ACCESS POINTS. CO–ORDINATE LOCATION AND SIZES WITH THE CONSULTANT SUBMIT DRAWING(S) TO THE CONSULTANT FOR REVIEW INDICATING SIZE AND LOCATION OF ALL DOORS PRIOR TO PROCEEDING WITH THE INSTALLATION.

1.21. ALL LUMINAIRES, EQUIPMENT AND MATERIALS SHALL BE C.S.A. APPROVED.

1.22. PROVIDE FIREPROOF SEALS IN ACCORDANCE WITH THE LOCAL CODES AND STANDARDS AND THE ONTARIO BUILDING CODE.

1.23. DO NOT USE CONCRETE FOR FIRE STOPPING ON CABLE TRAYS, WIRE WAYS, OR CONDUIT. CONTRACTORS, WHO USE THIS METHOD, WILL BE REQUIRED TO REPLACE THE CONCRETE WITH APPROVED FIRE STOP AND REPLACE AND TEST CABLES AFFECTED.

1.24. AT THE TIME OF FINAL CLEANING, CLEAN ELECTRICAL EQUIPMENT, LIGHTING REFLECTORS, LENSES AND OTHER LIGHTING SURFACES THAT HAVE BEEN EXPOSED TO CONSTRUCTION DUST AND DIRT. REMOVE DEBRIS AND EXCESS MATERIALS FROM ELECTRICAL ROOMS AND SWEEP ELECTRICAL ROOMS CLEAN.

1.25. DAMAGE BY THIS CONTRACTOR TO ANY SYSTEM OCCURRING DURING EXECUTION OF THE WORK SHALL BE RECTIFIED AT THE CONTRACTOR'S EXPENSE.

1.26. ALL PENETRATIONS THROUGH FLOORS AND FIRE RATED WALLS SHALL BE PACKED WITH AN APPROVED FIRE MATERIAL INSULATION AND SHALL BE SEALED IN ACCORDANCE WITH ITEM 1.22. ABOVE BY ELECTRICAL CONTRACTOR.

1.27. AS–BUILT DRAWINGS ARE TO CONSIST OF TWO PRINTED COPIES AND ONE AUTOCAD COPY OF UPDATED DRAWINGS. THE DRAWINGS ARE TO INCLUDE ALL POWER AND LIGHTING CIRCUITS AND INCLUDE ALL CONDUIT RUNS 21mm AND LARGER. IDENTIFY APPROXIMATE LOCATION OF ALL JUNCTION BOXES. ALSO INCLUDE ALL COMMUNICATIONS CONDUITS AND CABLE TRAY IF THEY FORM PART OF THE CONTRACT DOCUMENTS. AUTOCAD DRAWINGS ARE AVAILABLE FROM SMITH + ANDERSEN.

1.28. COORDINATE ELECTRICAL INSTALLATION WORK WITH THE WORK OF OTHER TRADES ON SITE, AND REPORT TO THE CONSULTANT/ARCHITECTURAL CONSULTANT ANY INTERFERENCE OF OTHER TRADES' WORK THAT MAY AFFECT THE WORK OF THIS DIVISION.

1.29. PROVIDE TEMPORARY LIGHTING AND ELECTRICAL SERVICES FOR THE WORK OF THIS TRADE AND OTHER TRADES FOR THE DURATION OF THE PROJECT OR AS DIRECTED BY THE GENERAL CONTRACTOR.

1.30. PROVIDE A COMPLETE ITEMIZED COST BREAKDOWN OF ALL MATERIAL, EQUIPMENT AND LABOUR COST ASSOCIATED WITH EACH SUBMISSION FOR ELECTRICAL CHANGE NOTICE IN THE FOLLOWING FORMAT: ALL MATERIAL USED IN THE CHANGE(S) MUST BE IDENTIFIED BY THE FOLLOWING:

QUANTITY	AMOUNT OF PRODUCT
PRICE PER UNIT	PRICE PER UNIT BASED ON NECA LATEST ELECTRICAL PRICE GUIDE
HOURS PER UNIT	HOURS BASED ON NECA NORMAL RATE (COLUMN 1)
MATERIAL COST	TOTAL COST OF MATERIAL
TOTAL HOURS	PER ITEM.

MATERIAL DISCOUNTS: MATERIALS WILL BE PRICED AT NATIONAL PRICE SERVICE LESS THE FOLLOWING:

ALL CONDUITS : LESS 30%
ALL CONDUIT FITTINGS, CONDULETS, CONDUIT SUPPORTS:LESS 25%
BUILDING WIRE: LESS 30%
FASTENERS AND SUPPORTS: LESS: 25%

WHERE REQUESTED, PROVIDE PROPER SUPPLIERS OR DISTRIBUTORS QUOTATIONS AND BACKUP.

SUMMARY TO INCLUDE:
TOTAL MATERIAL VALUE
ITEMIZE PST
JOURNEY MAN RATE AS PER CONTRACT OR INDUSTRY GUIDELINES
OVERHEAD
MARK–UP

CHANGE NOTICE(S) ARE TO INCLUDE AT NO EXTRA COST:
ELECTRICAL INSPECTOR PERMIT
AS BUILT DRAWINGS
MATERIAL DELIVERY
SAFETY
GUARANTEE
CLEAN UP
TOOL CHARGES
ENGINEERING AND DRAFTING
ESTIMATING AND MATERIAL EXPEDITING
PARKING

FOREMAN CHARGES SHOULD NOT EXCEED 10%
NO PROJECT MANAGEMENT FEES WILL BE ACCEPTED.

WHERE DISPUTES ARE UNAVOIDABLE, WE RESERVE THE RIGHT TO ACQUIRE THE SERVICES OF A 3RD PARTY COST CONSULTANT TO REVIEW ALL QUOTATIONS AND WHERE NECESSARY COMPLETE A DETAILED SITE SURVEY TO REVIEW THE INSTALLATION.

1.31. ALL PROFIT AND OVERHEAD FEES ARE TO BE FIXED AT 10% & 5% UNLESS AGREED TO BY THE OWNER/CONSULTANT PRIOR TO INSTALLATION.

1.32. INVOICES FOR PROGRESS DRAWS MUST BE SUBMITTED IN A FORMAT ACCEPTABLE TO OWNER/CONSULTANT.

1.33. PROVIDE TWO (2) SETS OF 'OPERATIONS AND MAINTENANCE MANUALS' WITH THE FOLLOWING INFORMATION:

- .1 NAME AND ADDRESS OF LOCAL SUPPLIERS
- .2 TECHNICAL DATA OF LUMINAIRES AND EQUIPMENT WITH PARTS LIST
- .3 SHOP DRAWINGS AS REVIEWED BY CONSULTANT
- .4 ONE YEAR WARRANTY
- .5 VERIFICATION REPORTS AND CERTIFICATES FOR ANY NEW FIRE ALARM COMPONENTS OR TIE–INS, AND BASE BUILDING TIE–INS FOR LIGHTING CONTROL, DIGITAL METERING, SECURITY SYSTEM, ETC.
- .6 LOCAL HYDRO CERTIFICATE
- .7 AS BUILT DRAWINGS IN ACCORDANCE WITH 1.27.

2. DEMOLITION AND WORK IN EXISTING BUILDING

2.1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISCONNECTING AND REMOVING ALL ELECTRICAL EQUIPMENT INCLUDING LUMINAIRES, RECEPTACLES AND WIRING, INCLUDING VOICE/DATA, FROM AREAS BEING ALTERED OR DEMOLISHED. WIRING, CONDUIT AND EQUIPMENT REQUIRED TO MAINTAIN SERVICES IN OTHER PARTS OF THE BUILDING SHALL BE TEMPORARILY SUPPORTED, REROUTED, SERVICED OR RELOCATED AS REQUIRED. OBSOLETE CONDUITS AND CABLES SHALL BE DISCONNECTED FROM THEIR SOURCE OF SUPPLY AND REMOVED. ALL EXISTING WIRING NOT REMOVED SHALL BE DISCONNECTED, MADE SAFE, IDENTIFIED AND BLANKED–OFF.

2.2. ALL SHUTDOWNS OF EXISTING BASE BUILDING SYSTEMS SHALL BE COORDINATED WITH THE LANDLORD OR HIS REPRESENTATIVE AT LEAST 3 WORKING DAYS IN ADVANCE. LONGER NOTICES MAY BE REQUIRED, VERIFY BUILDING STANDARDS AND PROTOCOL.

2.3. NEW CONDUITS AND OTHER NEW SERVICES SHALL BE CAREFULLY ROUTED SO THAT THEY DO NOT INTERFERE WITH ANY EXISTING INSTALLATIONS. ANY EXISTING CONDUITS, CABLES, CABLE TRAYS, BUS DUCTS OR OTHER SERVICES THAT INTERFERE WITH THE NEW INSTALLATION SHALL BE RELOCATED UNDER THIS CONTRACT AT NO EXTRA COST TO OWNER.

2.4. PROVIDE ALL CLEANUP, LIFTING, STORAGE, CUTTING, PATCHING AND FLASHING AS REQUIRED. REMOVE ALL EXCESS DEBRIS, MATERIAL AND EQUIPMENT FROM SITE.

2.5. PATCH AND SEAL ALL OPENINGS IN FLOORS, WALLS AND PARTITIONS. IF FLOORS, WALLS OR PARTITIONS ARE FIRE RATED, PATCH AND SEAL PENETRATIONS WITH FIRE RESISTANT INSULATION AND APPROVED FIRE STOP SYSTEMS.

2.6. THE EXISTING BUILDING MUST BE KEPT IN OPERATION AT ALL TIMES. ASSUME FULL RESPONSIBILITY FOR ANY DISRUPTION TO EXISTING SERVICES. ARRANGE WORK IN SUCH A MANNER THAT INTERRUPTIONS IN SERVICES OCCUR ONLY AT PRE–SCHEDULED TIMES.

3. INSTALLATION REQUIREMENTS

3.1. ALL EQUIPMENT MATERIAL, DEVICES AND WIRING SHALL CONFORM TO THE CANADIAN ELECTRICAL CODE OR CODE HAVING JURISDICTION FOR THE PURPOSE FOR WHICH THEY ARE TO BE USED AND SHALL BEAR THE APPROVAL OF THE CSA AND/OR ULC OR HAVE SPECIAL APPROVAL OF THE INSPECTION AUTHORITY.

3.2. MAINTAIN AT THE JOB SITE, AT ALL TIMES, QUALIFIED PERSONNEL AND SUPPORTING STAFF, WITH PROVEN EXPERIENCE IN SUPERVISION, TESTING AND ADJUSTING PROJECTS OF COMPATIBLE NATURE AND COMPLEXITY.

3.3. ALL MATERIAL AND EQUIPMENT SHALL BE NEW. WHERE MANUFACTURER IS NOT SPECIFIED, MATERIAL AND EQUIPMENT SHALL BE OF HIGH COMMERCIAL QUALITY AND CONSISTENT WITH BASE BUILDING STANDARDS.

3.4. VERIFY ON SITE EXISTING CIRCUITS USED, SPARE BREAKERS AND SPACES AVAILABLE IN EXISTING PANEL BOARDS. COMPARE NUMBER OF CIRCUITS ON SITE WITH NUMBER OF CIRCUITS SHOWN ON ELECTRICAL DRAWINGS AND REPORT ANY DISCREPANCIES TO THE CONSULTANT.

3.5. REPLACE ALL EXISTING CIRCUIT BREAKERS WITH NEW AS IDENTIFIED ON ISSUED DRAWINGS AND PANEL SCHEDULES.

3.6. PROVIDE TYPED CIRCUIT DIRECTORIES SHOWING CONNECTED LOADS TO ALL NEW PANEL BOARDS AND EXISTING PANEL BOARDS WITHOUT DIRECTORIES. EXISTING PANEL BOARD'S DIRECTORIES SHALL BE REPLACED WITH NEW TYPE – WRITTEN DIRECTORIES REFLECTING THE LATEST REVISIONS.

3.7. PROVIDE LAMACOID NAMEPLATES C/W IDENTIFYING NAME, VOLTAGE, CURRENT RATING FED FROM, ETC. WITH BLACK LETTERS ON A WHITE BACKGROUND TO ALL. PANEL BOARDS AND ELECTRICAL EQUIPMENT. MINIMUM SIZE OF LETTERING, 6.35mm HIGH

3.8. DISCONNECT SWITCHES SHALL BE OF QUICK – MAKE/QUICK – BREAK TYPE, OF SAME MANUFACTURER AS BASE BUILDING EQUIPMENT. MOULDED CASE CIRCUIT BREAKERS TO BE BOLT–ON AND THE SAME MANUFACTURER AS BASE BUILDING EQUIPMENT. PROVIDE LOCK–OFF DEVICES FOR EXIT/EMERGENCY LIGHTS.

3.9. FUSES FOR PROTECTION OF THE PRIMARY SIDE OF DRY TRANSFORMERS AND ELECTRICAL MOTORS, SHALL BE TIME DELAY, "HRC FROM 1" TYPE.

3.10. PRIOR TO INSTALLATION OF MECHANICAL BRANCH CIRCUITS, CO–ORDINATE WITH DIV.15 TO ENSURE SITE DELIVERED EQUIPMENT MATCHES SPECIFIED SERVICE. WHERE DISCREPANCY EXISTS, CONTACT THE ELECTRICAL CONSULTANT FOR DIRECTION.

3.11. MAKE FINAL CONNECTION TO ALL MECHANICAL EQUIPMENT AS IDENTIFIED AND INSTALL SUPPLIED SPEED CONTROL SWITCHES ON ALL FANS. LOCATIONS OF SWITCHES ARE TO BE DETERMINED ON SITE. PROVIDE NEW STARTERS AS REQUIRED.

3.12. ALL WIRING SHALL BE IN CONCEALED EMT CONDUIT UNLESS OTHERWISE NOTED. SECURE CONDUIT TO UNDERSIDE OF FLOOR SLAB ABOVE. DO NOT CLIP TO CEILING HANGERS IN ANY MANNER, OR FASTEN TO SPRINKLER PIPE SYSTEM. MINIMUM SIZE OF CONDUIT SHALL BE 21mm UNLESS NOTED OTHERWISE.

3.13. NO SECTION OF CONDUIT SHALL BE LONGER THAN 30 METERS (100 FEET) OR CONTAIN MORE THAN TWO 90–DEGREE BENDS BETWEEN PULL BOXES. PROVIDE PULL BOXES AS REQUIRED.

3.14. FINAL POWER CONNECTIONS TO NOISE AND/OR VIBRATIONS PRODUCING EQUIPMENT (TRANSFORMERS, MOTORS, DIMMING RACK, ETC.) SHALL BE MADE WITH FLEXIBLE CONDUIT OR FLEXIBLE CABLE, LENGTH OF FLEX OR CABLE NOT TO EXCEED 3 FEET.

3.15. AC90 (BX) ARMORED CABLE CAN BE USED IN WALL PARTITIONS. WHERE THE ARMORED CABLE LEAVES PARTITION, A MAXIMUM OF 3 METERS IS ALLOWABLE INTO CEILING SPACE JUNCTION BOX. DO NOT RUN ARMORED CABLE IN EXPOSED AREAS OR INTO PANEL BOARDS.

3.16. ALL WIRING SHALL BE COPPER, TYPE RW–90 XLPE INSULATION. MINIMUM WIRE SIZE FOR 120V BRANCH WIRING SHALL BE NO. 12 AWG COPPER. IF DISTANCE BETWEEN ELECTRICAL PANEL AND FIRST OUTLET EXCEEDS 80 FEET, A NO. 10 AWG COPPER SHALL BE USED (UP TO 120 FEET). VOLTAGE DROP IN ANY CIRCUIT SHALL NOT EXCEED 3%.

3.17. PROVIDE A DEDICATED NEUTRAL AND GROUND WIRE OF THE SAME AWG AS THE CIRCUIT CONDUCTOR FOR ALL CIRCUITS IDENTIFIED ON THE DRAWINGS.

3.18. IN SYSTEM FURNITURE CONNECTION, A MINIMUM OF #10 AWG MUST BE USED FOR THE NEUTRAL FROM THE ELECTRICAL PANEL TO THE CLOSEST JUNCTION BOX TO THE CIRCUIT TERMINATION.

3.19. IN SYSTEM FURNITURE, THE #10 AWG NEUTRAL IS TO EXTEND TO THE SYSTEM FURNITURE CONNECTION POINT.

3.23. PROVIDE GROUNDING TO EQUIPMENT AS REQUIRED BY THE CANADIAN ELECTRICAL CODE OR CODE HAVING JURISDICTION.

3.24. GROUNDING OF CONDUIT SYSTEMS: ALL CONDUIT SYSTEMS ARE TO BE INDEPENDENTLY GROUNDED WITH THE USE OF A DEDICATED GROUND WIRE. CONDUIT IS NOT TO BE USED AS GROUNDING OR BONDING METHOD.

3.25. CONVENIENCE DUPLEX RECEPTACLES SHALL BE SPECIFICATION GRADE WITH STAINLESS STEEL COVER PLATES.

3.26. DEDICATED CIRCUIT DUPLEX RECEPTACLES SHALL BE SPECIFICATION GRADE WITH STAINLESS STEEL COVER PLATES.

3.27. ISOLATED GROUND DUPLEX RECEPTACLES SHALL BE SPECIFICATION GRADE WITH STAINLESS STEEL COVER PLATES.

3.28. ELECTRICAL CONTRACTOR TO SUPPLY AND INSTALL SUITABLE LABELS ON ALL RECEPTACLES AND SYSTEMS FURNITURE FEEDS. LABELS TO INCLUDE BOTH PANEL AND CIRCUIT DESIGNATION. REVIEW LABEL SIZE AND TYPE WITH CONSULTANT PRIOR TO INSTALLATION.

3.29. 120V LIGHT SWITCHES SHALL BE RATED FOR 20 AMP. REFER TO ARCHITECTURAL CONSULTANT'S DRAWINGS FOR COLOUR.

3.30. ALL GANGED SWITCH COVERPLATES ARE TO BE STAINLESS STEEL COVER PLATES. PROVIDE GANGED COVER PLATES WHERE EVER POSSIBLE.

3.31. DIMMER SWITCHES SHALL BE COMPLETE WITH ON/OFF FUNCTION, RATED IN ACCORDANCE WITH LIGHTING LOADS INDICATED ON DRAWINGS. CONTRACTOR TO REVIEW DRAWINGS AND CROSS REFERENCE LIGHTING LOAD AND TYPE WITH THE APPROPRIATE MODEL OF DIMMER. DO NOT LOAD BEYOND 80% OF MANUFACTURER'S RATING FOR DIMMER. CONTRACTOR TO INCLUDE FOR POWER EXTENDERS AND/OR SUPPLEMENTARY BOOSTERS TO ACHIEVE DESIGN INTENT.

3.32. REVIEW GANGING AND DERATING TABLES FOR DIMMING SWITCHES. WHERE REMOVAL OF METAL FINS ARE REQUIRED, ENSURE RATING IS IN COMPLIANCE WITH MANUFACTURES RECOMMENDATIONS.

3.33. REFER TO DRAWINGS FOR ALL WALL MOUNTED 120V OCCUPANCY SENSORS. FOR CEILING MOUNTED SOLUTIONS SEE ISSUED DRAWINGS.

3.34. VERIFY EXACT LOCATION AND MOUNTING HEIGHT OF ALL WIRING DEVICES WITH ARCHITECTURAL CONSULTANT PRIOR TO INSTALLATION.

3.35. ALL LIGHTING FIXTURES SHALL BE AS SPECIFIED IN THE LUMINAIRE SCHEDULE OR ON LIGHTING DRAWINGS, AND COMPLETE WITH LAMPS AND ACCESSORIES FOR A FULL FUNCTIONING SYSTEM.

3.36. ALL EXISTING RELOCATED AND NEW LUMINAIRES SHALL BE INDEPENDENTLY SUPPORTED FROM CEILING STRUCTURE BY MEANS OF CHAINS SECURED TO BOTH ENDS OF LUMINAIRE. DO NOT SECURE TO THE T–BAR CEILING ANCHORS.

3.37. ALL BASE BUILDING FIXTURES ON EMERGENCY POWER SHALL BE HARDWIRED.

3.38. CO–ORDINATE ALL EQUIPMENT SUPPLIED BY OTHER TRADES TO ENSURE VOLTAGE AND AMPERAGE ARE COMPATIBLE WITH ELECTRICAL DESIGN DOCUMENTS PRIOR TO EQUIPMENT BEING ORDERED.

4. FIRE ALARM

4.1. THE FIRE ALARM SYSTEM AND DEVICES SHALL BE INSTALLED ACCORDING TO CAN–CSA LATEST EDITION AND THE REQUIREMENTS OF THE LOCAL AUTHORITIES HAVING JURISDICTION.

4.2. ALL WIRING SHALL BE INSTALLED IN CONDUIT AND TO CONFORM TO THE REQUIREMENT OF THE ONTARIO ELECTRICAL SAFETY CODE, 23RD EDITION OR LOCAL CODE HAVING JURISDICTION. PROVIDE A GROUND WIRE IN ALL CONDUITS.

4.3. CONFIRM THE EXACT LOCATION OF ALL SYSTEM COMPONENTS WITH THE ARCHITECTURAL CONSULTANT PRIOR TO ROUGHING–IN.

4.4. CONTRACT BASE BUILDING FIRE ALARM CONTRACTOR TO INSTALL ALL DEVICES AND MAKE FINAL CONNECTIONS TO FIRE ALARM PANEL.

4.5. ENSURE THAT THE NOMENCLATURE OF ANNUNCIATOR'S IDENTIFICATION NAMEPLATES, ARE VERIFIED WITH THE OWNER AND AUTHORITIES PRIOR TO ORDERING.

4.6. ALL WORK ON THE FIRE ALARM SYSTEM TO BE PERFORMED BY A CERTIFIED FIRE ALARM TECHNICIAN.

4.7. WHEN THE FIRE ALARM SYSTEM IS COMPLETE, OBTAIN THE SERVICES OF BASE BUILDING FIRE ALARM MANUFACTURER TO MAKE A COMPLETE INSPECTION AND VERIFICATION OF ALL INSTALLED FIRE ALARM EQUIPMENT AND DEVICES.

4.8. PERFORM ANY CHANGES NECESSARY AS A RESULT OF THE ABOVE VERIFICATION AND INSPECTION IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS.

4.9. ON COMPLETION OF THE VERIFICATION, INSPECTION AND TESTING OBTAIN THE VERIFICATION CERTIFICATE AND INSPECTION REPORTS FROM THE MANUFACTURER AND FORWARD TO THE OWNER AND CONSULTANT.

4.10. ENSURE THAT ALL COSTS FOR THE ABOVE TESTING, VERIFICATION, INSPECTION ARE INCLUDED IN THE TENDER PRICE.

4.11. WHERE THE INTEGRITY OF THE EXISTING LIFE SAFETY INPUT AND OUTPUT DEVICES ARE AFFECTED DUE TO RELOCATIONS, CEILING DEMOLITIONS AND/OR RE–INSTALLATIONS ONTO NEW SUSPENDED CEILING, ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN THE SYSTEM OPERATION AT ALL TIMES. ALL SUSPENSION ACCESSORIES REQUIRED FOR THE INSTALLATION (E.G., MOUNTING CHANNELS AND FRAMES, ETC.) AND VERIFICATION OF THE SYSTEM SHALL BE INCLUDED IN THE TENDER PRICES.

4.12. CONTRACTOR TO PROVIDE ALL DEVICES NECESSARY TO PROVIDE A COMPLETE AND WORKING SYSTEM AS INTENDED BY THE CONTRACT DOCUMENTS, INCLUDING BUT NOT LIMITED TO BOOSTER EQUIPMENT FOR SPEAKER/HORN CIRCUITS IF REQUIRED.

5. GENERAL NOTES

5.1. OUTLETS SHALL NOT BE INSTALLED BACK TO BACK IN PARTITIONS. STAGGER TO PREVENT SOUND TRANSFER.

5.2. COORDINATE SCHEDULING OF ALL WORK WITH PROJECT MANAGER.

5.3. REFER TO MECHANICAL DRAWINGS AND/OR COORDINATE WITH MECHANICAL CONTRACTOR FOR EXACT LOCATION OF EXHAUST FANS AND OTHER EQUIPMENT TO BE INSTALLED BY THE MECHANICAL CONTRACTOR.

5.4. ANY PROPOSED CHANGES AND/OR MODIFICATIONS DUE TO SITE CONDITIONS MUST RECEIVE APPROVAL FROM THE ARCHITECT AND CONSULTANTS.

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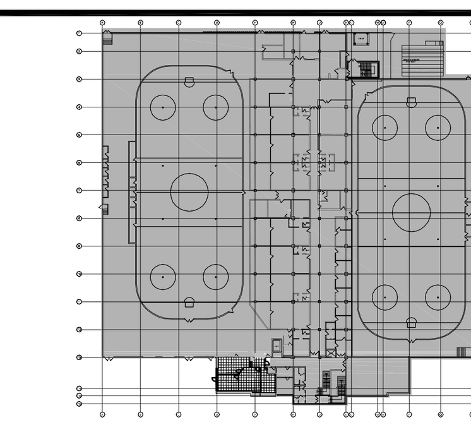

Key Plan

NUMBER/ NUMÉRO	MILESTONE / FAIT SAILLANT	DATE: (Y/M/D) (A/M/J)	INITIALS INITIALES
04	Issued for Tender	2018-01-18	
03	Issued for Permit and Tender	2018-01-03	
02	Issued for 90% Client Review	2017-12-19	
01	Issued for 66% Client Review	2017-12-06	

DESIGNED BY / CONCU PAR: GLH	CHECKED BY / VERIFIE PAR: AD
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DRAWING / DESSIN
ELECTRICAL SPECIFICATIONS

FACILITY NO. / NO. DE INSTALLTIONS: XXXX

PROJECT NO. / PROJET NO.: 17516.001

SHEET NO. / FEUILLE No.: TE00.01

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
$	SINGLE POLE LINE VOLTAGE LIGHT SWITCH		
$	2 GANG – LINE VOLTAGE LIGHT SWITCH		
$	3 GANG – LINE VOLTAGE LIGHT SWITCH		
$3	3 WAY – LINE VOLTAGE LIGHT SWITCH		
$4	4 WAY – LINE VOLTAGE LIGHT SWITCH		
$LV	LOW VOLTAGE LIGHT SWITCH		
$K	KEY OPERATED LINE VOLTAGE SWITCH		
$MS	MASTER SWITCH		
$AO	ALL–OFF SWITCH		
$	SINGLE POLE 347V SWITCH		
D	DIMMER TYPE TO SUIT LOAD		
PC	CEILING MOUNTED PHOTO CELL SWITCH	LAP	LIGHTING ACCESS POINT – 2 CONDUITS (POWER AND COMMS) USED FOR WIRELESS LIGHTING CONTROLS.
PC	WALL MOUNTED PHOTO CELL SWITCH		
DL	DAY LIGHT PHOTO SENSOR		
	TIME SWITCH		
OS'X'	CEILING MOUNTED OCCUPANCY SENSOR. TYPE DENOTED BY 'X'. REFER TO OCCUPANCY SENSOR SCHEDULE.		
OS'X'	WALL MOUNTED OCCUPANCY SENSOR. TYPE DENOTED BY 'X'. REFER TO OCCUPANCY SENSOR SCHEDULE.		
LC	LIGHTING CONTROL MODULE		
DIM	MULTI–ZONE LIGHTING CONTROL PANEL		
RS	REMOTE STATION WITH PRESET SCENE SELECTION BUTTON		
IR	PARTITION POSITION INFRARED SENSOR FOR LIGHTING CONTROL		

NOTE: NOT ALL SYMBOLS APPLY, REFER TO FLOOR PLANS AND DRAWINGS

5 TE00.02 LIGHTING LEGEND 2 OF 2
N.T.S

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	CEILING MOUNTED LINEAR LUMINAIRE. DIMENSIONS AS SHOWN. REFER TO SCHEDULE FOR TYPE.		CEILING MOUNTED WALL WASHER LUMINAIRE. ILLUMINATION DIRECTION DENOTED BY HATCHED SIDE.
	DENOTES FIXTURE ON EMERGENCY/NIGHT LIGHT CIRCUIT.		CEILING MOUNTED TRACK LIGHTING C/W NUMBER OF FIXTURES.
	WALL MOUNTED LINEAR LUMINAIRE. DIMENSIONS AS SHOWN. REFER TO SCHEDULE FOR TYPE.		WALL MOUNTED LUMINAIRE
	CEILING MTD. LUMINAIRE OR BASKET LUMINAIRE. LAMP ORIENTATION AS SHOWN. REFER TO SCHEDULE FOR TYPE.		PENDANT FIXTURE
	EXISTING LUMINAIRE TO BE REMOVED		CEILING MOUNTED LUMINAIRE
	EXISTING LUMINAIRE TO REMAIN		FLOOR MOUNTED LUMINAIRE
	POLE MOUNTED LUMINAIRE. NUMBER OF HEADS SHOWN. REFER TO SCHEDULE FOR FIXTURE AND POLE TYPE.		TRACK LIGHT WITH PENDANT LUMINAIRE AS INDICATED
	CEILING MOUNTED LUMINAIRE WITH GIMBALLED HEADS. REFER TO SCHEDULE FOR TYPE AND NUMBER OF HEADS.		BOLLARD LUMINAIRE
	VERTICAL WALL MOUNTED FLUORESCENT LUMINAIRE		
	CONTINUOUS STRIP LIGHT. REFER TO SCHEDULE FOR FIXTURE TYPE.		
	STAGGERED COVE LIGHT. DIMENSIONS AND NUMBER OF FIXTURES SHOWN. REFER TO SCHEDULE FOR FIXTURE TYPE.		
	RECESSED CEILING MOUNTED REMOTE ADJUSTABLE LUMINAIRE CONNECTED TO EMERGENCY LIGHTING BATTERY UNIT.	B	EMERGENCY LIGHTING BATTERY UNIT C/W NUMBER OF HEADS SHOWN
	WALL MOUNTED EMERGENCY SINGLE REMOTE HEAD	B	EMERGENCY LIGHTING BATTERY UNIT
	WALL MOUNTED EMERGENCY DOUBLE REMOTE HEAD	B	EMERGENCY LIGHTING BATTERY + EXIT LIGHT COMBINATION UNIT C/W NUMBER OF HEADS SHOWN
	CEILING MOUNTED EMERGENCY SINGLE REMOTE HEAD		EXIT LIGHT CEILING MOUNTED C/W FACES AND ARROWS AS INDICATED
	CEILING MOUNTED EMERGENCY DOUBLE REMOTE HEAD		EXIT LIGHT WALL MOUNTED C/W FACES AND ARROWS AS INDICATED

NOTE: NOT ALL SYMBOLS APPLY, REFER TO FLOOR PLANS AND DRAWINGS

3 TE00.02 LIGHTING LEGEND 1 OF 2
N.T.S

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
6 / E–01	DETAIL NUMBER / DRAWING NUMBER	12 / E–01	SECTION NUMBER / DRAWING NUMBER
4	REVISION NUMBER		REVISION BUBBLE
A	AMPS	N	NEW
AD	ACCESS DOOR	NC	NORMALLY CLOSED
AFCI	ARC FAULT CIRCUIT INTERRUPTER	NO	NORMALLY OPEN
AFF	ABOVE FINISHED FLOOR	NIC	NOT IN CONTRACT
CS	CHARGING STATION	OL	OBSTRUCTION LIGHT
C	CONDUIT	P	PRINTER
CD	LAUNDRY DRYER	PL	PATIENT LIFT
CF	COFFEE MACHINE	RH	RANGE HOOD
CL	CEILING MOUNTED	RA	RANGE
CV	CONVENTIONAL STYLE DEVICE	R	EXISTING TO BE REMOVED
CW	CLOTHES WASHER	RIO	ROUGH IN ONLY
D	DEDICATED	RIC	ROUGH IN AND CONNECT
DG	DEDICATED GROUND	RR	RATE OF RISE
DNC	DEDICATED NEUTRAL + BOND	SP	SUITE ALARM PANEL
DW	DISHWASHER	SC	SEPARATE CIRCUIT
E	EXISTING TO REMAIN	SF	SYSTEM FURNITURE
ER	EXISTING IN RELOCATED POSITION	SSP	SLAVE SUITE ALARM PANEL
EP	ELECTRICAL SUITE PANEL	TYP	TYPICAL
EM	EMERGENCY CIRCUIT	UC	UNDER CABINET MOUNTED
F	REFRIGERATOR	U	UPS CIRCUIT
FL	FLOOR MOUNTED	V	VOLTS
FF	FLOOR FEED	W	WATTS
GND	GROUND	WA	LAUNDRY WASHER
GFI	GROUND FAULT INTERRUPTER	WP	WEATHERPROOF
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	WF	WINE COOLER FRIDGE
HMT	HARMONIC MITIGATING TRANSFORMER	WAP	WIRELESS ACCESS POINT
HK	HOUSE KEEPING	X	EXPLOSION PROOF DEVICE + BACK BOX
IG	ISOLATED GROUND	ZSCT	ZERO SEQUENCE CURRENT TRANSFORMER
ICE	ICE MACHINE		
JB	JUNCTION BOX		
KW	KILOWATTS		
LV	LOW VOLTAGE		
MO	MOTOR OPERATED		
MOD	MOTOR OPERATED DAMPER		
MW	MICROWAVE		

NOTE: NOT ALL SYMBOLS APPLY, REFER TO FLOOR PLANS AND DRAWINGS

1 TE00.02 GENERAL LEGEND AND ABBREVIATIONS
N.T.S

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
ALARM INITIATING DEVICES			
	CEILING MOUNTED PHOTO–ELECTRIC SMOKE DETECTOR		AIR SAMPLING SYSTEM C/W SUPERVISORY AND ALARM ZONE
	WALL MOUNTED PHOTO–ELECTRIC SMOKE DETECTOR		MANUAL PULL STATION
	CEILING MOUNTED PHOTO–ELECTRIC SMOKE DETECTOR C/W RELAY BASE	FS	ALARM FLOW SWITCH (SUPPLIED BY OTHERS)
	CEILING MOUNTED RATE–OF–RISE HEAT DETECTOR	PS	ALARM PRESSURE SWITCH (SUPPLIED BY OTHERS)
	WALL MOUNTED RATE–OF–RISE HEAT DETECTOR	ACV	ALARM CHECK VALVE (SUPPLIED BY OTHERS)
	CEILING MOUNTED FIXED TEMPERATURE HEAT DETECTOR	DPV	ALARM DRY PIPE VALVE (SUPPLIED BY OTHERS)
	WALL MOUNTED FIXED TEMPERATURE HEAT DETECTOR	BDTX	BEAM SMOKE DETECTOR (TRANSMITTER)
	DUCT TYPE PHOTO–ELECTRIC SMOKE DETECTOR	BDRX	BEAM SMOKE DETECTOR (RECEIVER)
	CEILING MOUNTED COMBINATION HEAT + SMOKE DETECTOR	F	FLAME DETECTOR
SA	LOCAL 120V SMOKE ALARM		NETWORKED ASPIRATION DETECTOR
CO/SA	LOCAL 120V COMBINATION CARBON MONOXIDE AND SMOKE ALARM		
CO	LOCAL 120V CARBON MONOXIDE DETECTOR		
SUPERVISORY INITIATING DEVICES			
LP	LOW PRESSURE SUPERVISED SWITCH (SUPPLIED BY OTHERS)		
SV	SPRINKLER SUPERVISED VALVE (SUPPLIED BY OTHERS)		

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6 TE00.02 FIRE ALARM LEGEND 1 OF 2
N.T.S

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	POTENTIAL TRANSFORMER	K K	KEY INTERLOCK SYSTEM – ONE KEY
ZSCT	ZERO SEQUENCE TRANSFORMER	K K K	KEY INTERLOCK SYSTEM – N LOCKS, N–1 KEYS UNLESS NOTED OTHERWISE
	UPS DIODE	E E E	ELECTRONIC INTERLOCK SYSTEM – N LOCKS
	VOLTAGE INDICATOR		MEDIUM VOLTAGE CABLE TERMINATION POINT WITH STRESS CONE
195KW	DENOTES CONNECT LOAD APPLIED TO DESIGNATED APPARATUS.	TR	ELECTRONIC TRANSFORMER TEMPERATURE RELAY
PFC –KVAR	AUTOMATIC POWER FACTOR CORRECTION, SIZE AS SHOWN. UNIT TO COME COMPLETE WITH TUNED INPUT FILTER.	PM	POWER METER
	HIGH RESISTANCE GROUNDING RESISTOR – MAXIMUM CONTINUOUS AMPS AS SHOWN	DTU	DIGITAL TRIP UNIT WITH METERING FUNCTION
50/51	RELAY FUNCTION NUMBER	ST	SHUNT TRIP
		GW	IP BASED GATEWAY FOR POWER MONITORING

NOTE: NOT ALL SYMBOLS APPLY, REFER TO FLOOR PLANS AND DRAWINGS

4 TE00.02 SINGLE LINE DIAGRAM LEGEND 2 OF 2
N.T.S

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	ISOLATION TRANSFORMER – DELTA–WYE UNLESS OTHERWISE NOTED.	DSP	GROUND FAULT ALARM RELAY
	ISOLATION TRANSFORMER WITH ELECTROSTATIC SHIELD – DELTA–WYE UNLESS OTHERWISE NOTED.	DMS	IP BASED POWER QUALITY DIGITAL METER. PROVIDE 21mm(3/4") CONDUIT TO NEAREST TELECOM ROOM.
	MOLDED CASE CIRCUIT BREAKER, SIZE AS SHOWN		EMERGENCY GENERATOR
	LOW VOLTAGE INSULATED CASE DRAW–OUT AIR CIRCUIT BREAKER, TRIP PLUG AND FRAME SIZE AS SHOWN		GROUND CONNECTION POINT
	DRAW–OUT VACUUM CIRCUIT BREAKER, TRIP PLUG AND FRAME SIZE AS SHOWN.	GF	ELECTRONIC TRIP SETTING CONTROL (GROUND FAULT)
	FUSIBLE LOAD BREAK ISOLATION SWITCH. VOLTAGE, FUSE AND FRAME SIZE AS SHOWN.		GROUND LOOP
	FUSE	HRG	HIGH RESISTANCE GROUND FAULT SYSTEM
	INSULATED CASE CIRCUIT BREAKER		LIGHTNING SURGE ARRESTOR
	INTEGRAL BREAKER AND STARTER UNIT, BREAKER AND FRAME SIZE AS SHOWN		LOAD BANK
	INTEGRAL SWITCH AND FUSE UNIT, FUSE AND FRAME SIZE AS SHOWN	LS	ELECTRONIC TRIP SETTING CONTROL (LONG, SHORT)
	LOAD BREAK ISOLATION SWITCH. VOLTAGE AND FRAME SIZE AS SHOWN.	LSI	ELECTRONIC TRIP SETTING CONTROL (LONG, SHORT, INSTANTANEOUS)
	AUTOMATIC TRANSFER SWITCH WITH BY–PASS	LSIG	ELECTRONIC TRIP SETTING CONTROL (LONG, SHORT, INSTANTANEOUS, GROUND FAULT)
	AUTOMATIC TRANSFER SWITCH WITHOUT BY–PASS	M	METERING SOCKET
	FIRE PUMP AUTOMATIC TRANSFER SWITCH AND STARTER UNIT (BY OTHERS)	M	METERING CABINET
	MANUAL TRANSFER SWITCH OR DOUBLE THROW SWITCH	EM	DIGITAL ELECTRONIC METER
A	AMMETER	SPD	SURGE PROTECTION DEVICE
	AUTO–TRANSFORMER		
	BATTERY		
C	CONTACTOR		
	CURRENT TRANSFORMER		
	CURRENT TRANSFORMER (Z.S. – DENOTES ZERO SEQUENCE)		

NOTE: NOT ALL SYMBOLS APPLY, REFER TO FLOOR PLANS AND DRAWINGS

2 TE00.02 SINGLE LINE DIAGRAM LEGEND 1 OF 2
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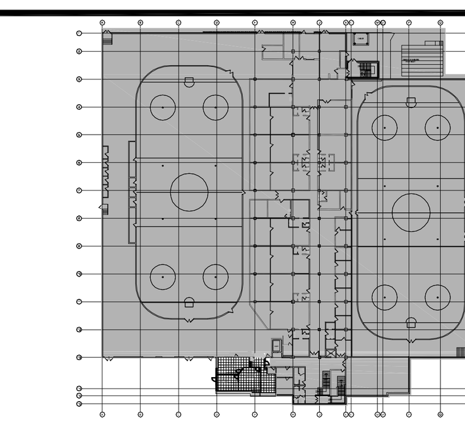

Key Plan

NUMBER/ NUMÉRO	MILESTONE / FAIT SAILLANT	DATE: (Y/M/D) (A/M/J)	INITIALS INITIALES
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SCALE / ECHELLE: AS SHOWN

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SCALE:
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DRAWING / DESSIN

ELECTRICAL LEGENDS

FACILITY NO. / NO. DE INSTALLTIONS: XXXX

PROJECT NO. / PROJET NO.: 17516.001

SHEET NO. / FEUILLE No.: TE00.02

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
ADO	AUTOMATIC DOOR OPENER	RDU	REMOTE DISPLAY UNIT
BG	CEILING MOUNTED BREAK GLASS SENSOR	RR	REMOTE RELEASE
CR	CARD READER	REX	REQUEST TO EXIT
CM	CCTV DISPLAY MONITOR	RFER	RF ETHERNET READER
DA	DOOR ALARM	RFR	RF READER
DL	DOOR LOCK	RFRM	RF READER MASTER
DC	DOOR CONTACT	SHS	SECURITY HANDSET
DAS	DURESS ALARM	SK	SECURITY KEYPAD
EL	ELECTRIFIED LOCK (ELECTRIC STRIKE, ELECTRIC LATCH RETRACTION, ELECTRIC MORTISE LOCK AND MAGNETIC LOCK)	PR	SECURITY PROXIMITY READER
ES	ELECTRIC STRIKE	SRP	SECURITY REMOTE PANEL
ENT	ENTRY PHONE DISPLAY PANEL	SPA	STAFF PANIC ALARM STATION
ED	EXIT DEVICE PUSH BUTTON	BG	WALL MOUNTED BREAK GLASS SENSOR
IC	INTERCOM	SSP	SUITE SECURITY PANEL
K	KEYPAD	MIC	MASTER INTERCOM
LFE	LOW FREQUENCY EXCITER	EPS	EMERGENCY PHONE STATION
LFM	LOW FREQUENCY EXCITER MASTER	EAP	EMERGENCY ASSISTANCE PHONE
MKR	MAGLOCK KEY RESET SWITCH	LAR	LOCAL AREA RECEIVER
ML	MAGLOCK	SI	SIREN
MS	MOTION SENSOR	KS	KEY SWITCH
PA	PANIC ALARM	DAS	DURESS/EMERGENCY CALL BUTTON
PPA	PUBLIC PANIC ALARM STATION		WALL MOUNTED CORRIDOR DOME DURESS LIGHT/AUDIBLE ALARM

NOTE: NOT ALL SYMBOLS APPLY, REFER TO FLOOR PLANS AND DRAWINGS

5 TE00.03 SECURITY LEGENDS 1 OF 2
N.T.S

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
SW	WALL MOUNTED DUPLEX RECEPTACLE 120 VOLT, 15 AMP, CSA 5–15R 'SW' INDICATES SWITCHED RECEPTACLE		CEILING MOUNTED DUPLEX RECEPTACLE 120 VOLT, 15 AMP, CSA 5–15R
	WALL MOUNTED ABOVE COUNTER (OR HEIGHT INDICATED) DUPLEX RECEPTACLE 120 VOLT, 15 AMP, CSA 5–15R		CEILING MOUNTED SIMPLEX RECEPTACLE 120 VOLT, 15 AMP, CSA 5–15R
	WALL MOUNTED DUPLEX RECEPTACLE 120 VOLT, 20 AMP, CSA 5–20R (T–SLOT)		CEILING MOUNTED QUADPLEX RECEPTACLE 120 VOLT, 15 AMP, CSA 5–15R
	WALL MOUNTED ABOVE COUNTER (OR HEIGHT INDICATED) DUPLEX RECEPTACLE 120 VOLT, 20 AMP, CSA 5–20R (T–SLOT)		FLOOR MOUNTED DUPLEX RECEPTACLE 120 VOLT, 15 AMP, CSA 5–15R
	WALL MOUNTED DUPLEX RECEPTACLE 120 VOLT, 15 AMP, CSA 5–15R, DEDICATED CIRCUIT		FLOOR MOUNTED QUADPLEX RECEPTACLE 120 VOLT, 15 AMP, CSA 5–15R
	WALL MOUNTED DUPLEX RECEPTACLE 120 VOLT, 20 AMP, CSA 5–20R, DEDICATED CIRCUIT		RACEWAY RECEPTACLE, TYPE AS SPECIFIED C/W QUANTITY OF DEVICES INDICATED
	WALL MOUNTED, SPLIT SWITCH CONTROLLED DUPLEX RECEPTACLE 120 VOLT, 15 AMP, CSA 5–15R		SERVICE POLE, TYPE AS SPECIFIED C/W QUANTITY OF DEVICES INDICATED
	WALL MOUNTED DUPLEX GROUND FAULT RECEPTACLE 120 VOLT, 15 AMP, CSA 5–15R		WALL MOUNTED COMBINATION COMMUNICATION / QUADPLEX RECEPTACLE 120 VOLT, 15 AMP, CSA 5–15R. REFER TO CORRESPONDING DETAIL.
	WALL MOUNTED ABOVE COUNTER DUPLEX (OR HEIGHT INDICATED) GROUND FAULT RECEPTACLE 120 VOLT,15AMP,CSA 5–15R		
	WALL MOUNTED DUPLEX GROUND FAULT RECEPTACLE 120 VOLT, 20 AMP CSA 5–20R		FLOOR OR CEILING MOUNTED (AS SHOWN) COMBINATION COMMUNICATION / QUADPLEX RECEPTACLE 120 VOLT, 15 AMP, CSA 5–15R. REFER TO CORRESPONDING DETAIL.
	WALL MOUNTED ABOVE COUNTER (OR HEIGHT INDICATED) DUPLEX GROUND FAULT RECEPTACLE 120 VOLT,20AMP CSA 5–20R		
	WALL MOUNTED QUADPLEX RECEPTACLE 120 VOLT, 15 AMP, CSA 5–15R		FLOOR POKE THROUGH COMBINATION COMMUNICATION / QUADPLEX RECEPTACLE 120 VOLT, 15 AMP, CSA 5–15R. REFER TO CORRESPONDING DETAIL.
	WALL MOUNTED DUPLEX RECEPTACLE 120 VOLT, 15 AMP, 2 POLE, SPLIT CIRCUIT		
	WALL MOUNTED ABOVE COUNTER (OR HEIGHT INDICATED) DUPLEX RECEPTACLE 120 VOLT,15 AMP,2 POLE,SPLIT CIRCUIT		WALL MOUNTED COMBINATION COMMUNICATION / DUPLEX RECEPTACLE 120 VOLT, 15 AMP, CSA 5–15R. REFER TO CORRESPONDING DETAIL.
	WALL MOUNTED SIMPLEX RECEPTACLE 250 VOLT, 15 AMP, 3ø CSA 15–15R		
	SPECIAL RECEPTACLE. TYPE AND DETAILS AS NOTED ON DRAWING.		FLOOR OR CEILING MOUNTED (AS SHOWN) COMBINATION COMMUNICATION / DUPLEX RECEPTACLE 120 VOLT, 15 AMP, CSA 5–15R. REFER TO CORRESPONDING DETAIL.
	WALL MOUNTED ABOVE COUNTER (OR HEIGHT INDICATED) SIMPLEX RECEPTACLE 120 VOLT, 15 AMP, CSA 5–15R		
	WALL MOUNTED SIMPLEX RECEPTACLE 120 VOLT, 20 AMP, CSA 5–20R		FLOOR POKE THROUGH COMBINATION COMMUNICATION / DUPLEX RECEPTACLE 120 VOLT, 15 AMP, CSA 5–15R. REFER TO CORRESPONDING DETAIL.
	WALL MOUNTED SIMPLEX RECEPTACLE 250 VOLT, 30 AMP, CSA 14–30R		
	WALL MOUNTED SIMPLEX RECEPTACLE 120 VOLT, 30 AMP, CSA 5–30R	⬢	FEED POINT FOR POWER AND COMMUNICATIONS CABLING. LETTER DENOTES FEED LOCATION: W= WALL, F= FLOOR, P= PAC POLE, WM = WIREMOLD
	WALL MOUNTED SIMPLEX RECEPTACLE 250 VOLT, 50 AMP, CSA 14–50R		

NOTE: NOT ALL SYMBOLS APPLY, REFER TO FLOOR PLANS AND DRAWINGS

3 TE00.03 POWER LEGENDS 1 OF 2
N.T.S

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
SIGNALING DEVICES			
	HORN	S	CEILING MOUNTED EMERGENCY EVACUATION SPEAKER
	DOUBLE SIDED HORN	S	WALL MOUNTED EMERGENCY EVACUATION SPEAKER
	HORN+STROBE COMBINATION	S	CEILING MOUNTED EMERGENCY EVACUATION SPEAKER + STROBE COMBINATION
	DOUBLE SIDED HORN+STROBE COMBINATION	S	WALL MOUNTED EMERGENCY EVACUATION SPEAKER + STROBE COMBINATION
	MINI HORN		CEILING MOUNTED FIRE ALARM STROBE
	SPEAKER HORN		WALL MOUNTED FIRE ALARM STROBE
	FIRE ALARM BELL. 103mm(4") UNLESS OTHERWISE NOTED.		
SS	10 MINUTES SILENCE SWITCH FOR SPEAKERS IN SUITES		
ANCILLARY DEVICES			
ISO	ISOLATION MODULE		FLOOR MOUNTED DOOR HOLD OPEN DEVICE
CTL	FIELD INSTALLED ADDRESSABLE CONTROL POINT		WALL MOUNTED DOOR HOLD OPEN DEVICE
FIRE	"FIRE, DO NOT ENTER" SIGN		FIRE ALARM PANEL. CONTROL, DGP OR ANNUNCIATOR AS NOTED.
FPG	FIRE ALARM PASSIVE GRAPHIC		END–OF–LINE RESISTOR TERMINATION
VDT	VIDEO DISPLAY TERMINAL, FOR BUILDING OPERATIONS PERSONNEL		SMOKE DAMPER, USED IN CONJUNCTION WITH MONITORING DEVICE FOR POSITION ANNUNCIATION AND CONTROL DEVICE
HS	SUPERVISED FIRE FIGHTERS HAND SET		
FASD	FIRE ALARM SHUT DOWN		
FASU	FIRE ALARM START UP		
RT	REMOTE TESTING STATION FOR DUCT SMOKE DETECTORS		
MON	FIELD INSTALLED MONITORING MODULE FOR ALARM OR SUPERVISORY		
PACP	TROUBLE AND ALARM CONNECTION TO PRE–ACTION CONTROL PANEL		

NOTE: NOT ALL SYMBOLS APPLY, REFER TO FLOOR PLANS AND DRAWINGS

1 TE00.03 FIRE ALARM LEGENDS 2 OF 2
N.T.S

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
BR	BIOMETRIC READER		PANIC BUTTON, TO BE TIED INTO SECURITY PANEL WITH CONDUIT
ELR	ELECTRIC LATCH RETRACTION		SECURITY CAMERA
EML	ELECTRIC MORTISE LOCK	PTZ	PAN–TILT–ZOOM CAMERA
LRX	LATCH BOLT MONITOR REQUEST TO EXIT	IRR	INFRARED READER
MRX	MOTION REQUEST TO EXIT		WALL MOUNTED SECURITY MOTION SENSOR
PRX	PUSH BUTTON REQUEST TO EXIT		CEILING MOUNTED SECURITY 360° MOTION SENSOR
LBM	LATCH BOLT MONITOR		PUSH BUTTON
CMS	CENTRAL MANAGEMENT STATION		PERSONAL COMPUTER
PAR	PANIC ALARM RECEIVER		COMPUTER MONITOR
MHO	MAGNETIC DOOR HOLD/OPEN DEVICE	IDP	INTRUSION DETECTION SYSTEM PANEL
EHO	ELECTRIC DOOR HOLD/OPEN DEVICE	ACP	ACCESS CONTROL SYSTEM PANEL
IDC	IP DOOR CONTROLLER		
RFR	RF RECEIVER		
DVR	DIGITAL VIDEO RECORDER		
NVR	NETWORK VIDEO RECORDER		
PI	POWER INJECTOR		
VM	VIDEO MONITOR		

NOTE: NOT ALL SYMBOLS APPLY, REFER TO FLOOR PLANS AND DRAWINGS

6 TE00.03 SECURITY LEGENDS 2 OF 2
N.T.S

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	FLUSH MOUNTED SINGLE TUB PANEL. RATING AS NOTED ON SINGLE LINE/PANEL SCHEDULE.	C	CONTACTOR
	FLUSH MOUNTED DOUBLE TUB PANEL RATING AS NOTED ON SINGLE LINE/PANEL SCHEDULE.		GROUND ROD
	SURFACE MOUNTED SINGLE TUB PANEL. RATING AS NOTED ON SINGLE LINE/PANEL SCHEDULE.	T	THERMOSTAT–1/2" CONDUIT TO ACCESSIBLE CEILING SPACE
	SURFACE MOUNTED DOUBLE TUB PANEL. RATING AS NOTED ON SINGLE LINE/PANEL SCHEDULE.	JB	JUNCTION BOX
	TRANSFORMER (SIZE NOTED ON DRAWING)		ELECTRIC UNIT HEATER
	DISCONNECT	X	ELECTRIC BASEBOARD HEATER. 'X' DENOTES TYPE. REFER TO BASEBOARD HEATER SCHEDULE.
	COMBINATION MANUAL STARTER WITH INTEGRAL DISCONNECT		GROUND BAR
	COMBINATION STARTER WITH INTEGRAL DISCONNECT	HD	HAND DRYER HARD WIRED CONNECTION
	SINGLE PHASE DIRECT CONNECTION	M	METER
	THREE PHASE DIRECT CONNECTION	R	RELAY
	SINGLE PHASE DIRECT CONNECTION C/W DISCONNECT	VFD	VARIABLE FREQUENCY DRIVE (SUPPLIED BY OTHERS)
	THREE PHASE DIRECT CONNECTION C/W DISCONNECT	PB	PULL BOX
	SINGLE PHASE MOTOR C/W DISCONNECT		GROUND BUS
R	SINGLE PHASE MOTOR C/W RELAY DISCONNECT	1	DENOTES RECEPTACLE TYPE. REFER TO RECEPTACLE SCHEDULE
	SINGLE PHASE MOTOR C/W COMBINATION STARTER WITH INTEGRAL DISCONNECT		UTILITY METERING CABINET
	SINGLE PHASE MOTOR		
	THREE PHASE MOTOR		

NOTE: NOT ALL SYMBOLS APPLY, REFER TO FLOOR PLANS AND DRAWINGS

4 TE00.03 POWER LEGENDS 2 OF 2
N.T.S

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	WALL MOUNTED VOICE AND DATA OUTLET(S). CABLE TYPE AS PER SPECIFICATION	EPS	WALL MOUNTED VOICE OUTLET FOR EMERGENCY PHONE STATION. CABLE TYPE AS PER SPECIFICATION
	WALL MOUNTED DATA OUTLET(S). CABLE TYPE AS PER SPECIFICATION.		DTV OUTLET
	WALL MOUNTED VOICE OUTLET(S).CABLE TYPE AS PER SPECIFICATION.		AV CONNECTION PLATE
	FLOOR MOUNTED VOICE AND DATA OUTLET(S). CABLE TYPE AS PER SPECIFICATION.	M	MICROPHONE
	FLOOR MOUNTED VOICE OUTLET(S). CABLE TYPE AS PER SPECIFICATION.	IC	COMMUNICATIONS INTERCOM
	FLOOR MOUNTED DATA OUTLET(S). CABLE TYPE AS PER SPECIFICATION.	AVR	AUDIO/VISUAL EQUIPMENT RACK
	FURNITURE MOUNTED VOICE AND DATA OUTLET(S). CABLE TYPE AS PER SPECIFICATION.	H	HEADPHONE JACK FOR THE VISUALLY IMPAIRED
	FURNITURE MOUNTED VOICE OUTLET(S). CABLE TYPE AS PER SPECIFICATION.		
	FURNITURE MOUNTED DATA OUTLET(S). CABLE TYPE AS PER SPECIFICATION.		
	CEILING MOUNTED VOICE AND DATA OUTLET(S). CABLE TYPE AS PER SPECIFICATION.		
	CEILING MOUNTED DATA OUTLET(S). CABLE TYPE AS PER SPECIFICATION.		
	SERVICE POLE MOUNTED VOICE AND DATA OUTLET(S). CABLE TYPE AS PER SPECIFICATION.		
	RACEWAY MOUNTED VOICE AND DATA OUTLET(S). CABLE TYPE AS PER SPECIFICATION.		
	VGA CABLE OUTLET		
	COAXIL CATV OUTLET		
S	WALL MOUNTED SPEAKER		
S X	CEILING MOUNTED SPEAKER. 'X' DENOTES SPEAKER TYPE. REFER TO SPEAKER SCHEDULE.		
–J–J–J–J–	MAIN CABLE SUPPORT ROUTE FOR COMMUNICATIONS CABLING		
CB	COMMUNICATIONS BOX		
P	POWER ZONE BOX		
T	TELEPHONE ZONE BOX		

NOTE: NOT ALL SYMBOLS APPLY, REFER TO FLOOR PLANS AND DRAWINGS

2 TE00.03 A/V AND DATA/COMMUNICATIONS
N.T.S

Ottawa
Corporate Services / Services généraux
Corporate Real Estate Office / Bureau biens immobiliers municipal
Accommodation Branch / Direction Aménagement

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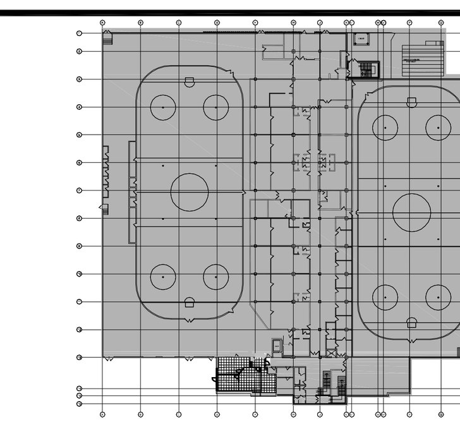
211-2141 Thurston Drive T 613-739-3699
Ottawa ON K1G 6C9 F 613-739-3965
info@LWG-ai.com LWG-ai.com


Key Plan

NUMBER/ NUMÉRO	MILESTONE / FAIT SAILLANT	DATE: (Y/M/D) (A/M/J)	INITIALS INITIALES
04	Issued for Tender	2018-01-18	
03	Issued for Permit and Tender	2018-01-03	
02	Issued for 90% Client Review	2017-12-19	
01	Issued for 66% Client Review	2017-12-06	

DESIGNED BY / CONCU PAR: GLH
CHECKED BY / VERIFIE PAR: AD
DRAWN BY / DESSINE PAR: GLH
SCALE / ECHELLE: AS SHOWN

1 A1.1 DRAWING TITLE — DETAIL NUMBER, SCALE:, SHEET NUMBER

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CONSULTANT / EXPERT-CONSEIL

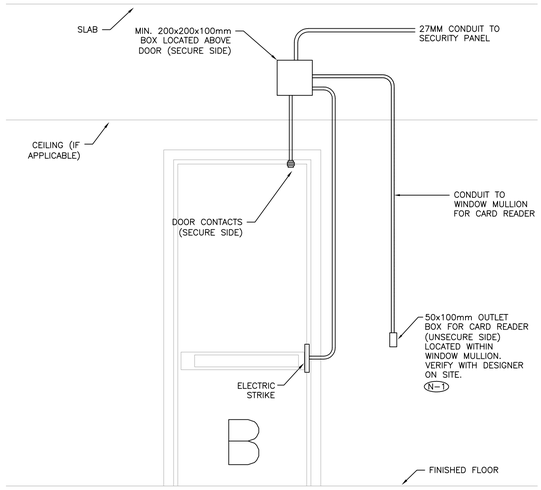
PROJECT / LOCATION / PROJET / ENDROIT
Councillors Office
100 Charlie Rodgers Place, Basement
OTTAWA, ONTARIO

DRAWING / DESSIN
ELECTRICAL LEGENDS

FACILITY NO. / NO. DE INSTALLTIONS: XXXX
PROJECT NO. / PROJET NO.: 17516.001
SHEET NO. / FEUILLE No.: TE00.03

4 TE00.04 NOT USED
NTS

5 TE00.04 NOT USED
NTS



GENERAL NOTES:

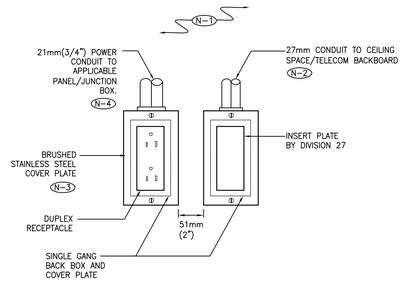
1. PROVIDE OUTLET BOXES, BLANK COVERPLATES, CONDUIT AND PULLSTRING FOR SECURITY SYSTEMS. DOOR HARDWARE/SECURITY DEVICES AND LOW VOLTAGE WIRING BY OTHERS.
2. CO-ORDINATE AND VERIFY EXACT REQUIREMENTS WITH SECURITY CONTRACTOR AND DOOR HARDWARE PROVIDER PRIOR TO ROUGH-IN.
3. ALL CONDUIT SHALL BE 21mmC UNLESS OTHERWISE NOTED.
4. PROVIDE PULLSTRING IN ALL EMPTY CONDUIT.
5. CONCEAL CONDUITS BELOW CEILING.
6. JUNCTION BOX ABOVE CEILING MUST BE ACCESSIBLE.

DRAWING SYMBOL: B

NOTES:

N-1 COORDINATE WORK WITH DOOR HARDWARE/SECURITY PROVIDERS AND CONFIRM LOCATIONS, CONDUIT TO WINDOW MULLION AND CUT-OUTS ON SITE PRIOR TO ROUGH-IN.

3 TE00.04 SECURITY DOOR-SINGLE DOOR C/W ELECTRIC STRIKE AND CARD READER (TYPE B)
NTS



NOTES:

N-1 PROVIDE CONNECTOR, C/W NYLON BUSHINGS FOR CONDUIT TERMINATIONS WITHIN ACCESSIBLE CEILING SPACE.

N-2 PROVIDE PULL STRINGS IN ALL EMPTY CONDUIT.

N-3 COVER PLATES BY DIVISION 26.

N-4 MULTI-CONDUCTOR AC-90 CABLE TO CEILING SPACE IS ACCEPTABLE FOR AREAS WITH ACCESSIBLE CEILING. AS PER ELECTRICAL SPECIFICATIONS.

DRAWING SYMBOLS: ΦV

1 TE00.04 POWER AND COMMUNICATION OUTLETS
NTS

Ottawa
Corporate Services / Services généraux
Corporate Real Estate Office / Bureau biens immobiliers municipal
Accommodation Branch / Direction Aménagement

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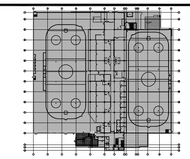

Key Plan

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DESIGNED BY / CONÇU PAR	CHECKED BY / VÉRIFIÉ PAR
GLH	AD
DRAWN BY / DESSINÉ PAR	SCALE / ÉCHELLE
GLH	AS SHOWN

DETAIL NUMBER / 1 / A1.1 / SCALE: / SHEET NUMBER
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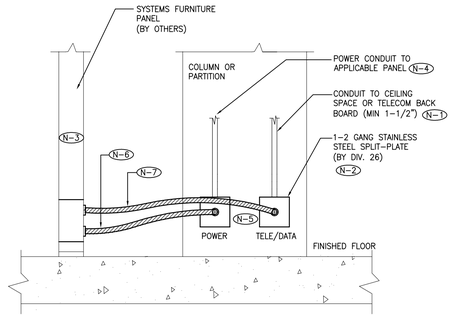
DRAWING / DESSIN

ELECTRICAL DETAILS

FACILITY NO. / NO. DE INSTALLTIONS: XXXX

PROJECT NO. / PROJET NO.: 17516.001

SHEET NO. / FEUILLE No.: TE00.04



DRAWING SYMBOLS: W

NOTES:

N-1 PROVIDE CONNECTOR, C/W NYLON BUSHINGS FOR CONDUIT TERMINATIONS WITHIN ACCESSIBLE CEILING SPACE.

N-2 PROVIDE PULL STRINGS IN ALL EMPTY CONDUIT.

N-3 CO-OORDINATE EXACT REQUIREMENTS WITH FURNITURE SUPPLIER AND INSTALLER PRIOR ROUGH-IN.

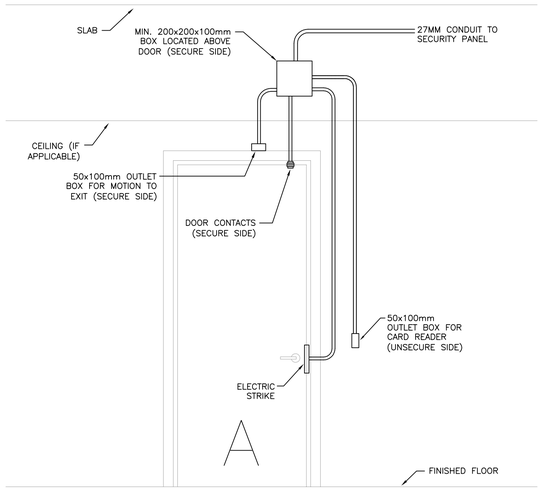
N-4 MINIMUM SIZE OF POWER CONDUITS IS 3/4"(21MM).

N-5 CO-ORDINATE EXACT LOCATIONS WITH INTERIOR CONSULTANT ON SITE PRIOR TO ROUGH IN.

N-6 FURNITURE MANUFACTURER SUPPLIED WIRING HARNESS. ELECTRICAL CONTRACTOR TO TERMINATE USING 90° FLEX CONNECTOR SIZED TO MATCH HARNESS.

N-7 COMMUNICATION CONTRACTOR TO PROVIDE ALL COMMUNICATION/WIRING AND COMPONENTS.

4 TE00.04 FURNITURE SYSTEM CONNECTION - WALL FEED
NTS

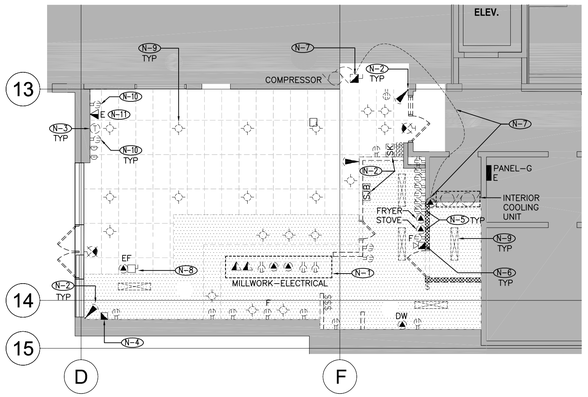


GENERAL NOTES:

1. PROVIDE OUTLET BOXES, BLANK COVERPLATES, CONDUIT AND PULLSTRING FOR SECURITY SYSTEMS. DOOR HARDWARE/SECURITY DEVICES AND LOW VOLTAGE WIRING BY OTHERS.
2. CO-ORDINATE AND VERIFY EXACT REQUIREMENTS WITH SECURITY CONTRACTOR AND DOOR HARDWARE PROVIDER PRIOR TO ROUGH-IN.
3. ALL CONDUIT SHALL BE 21mmC UNLESS OTHERWISE NOTED.
4. PROVIDE PULLSTRING IN ALL EMPTY CONDUIT.
5. CONCEAL CONDUITS BELOW CEILING.
6. JUNCTION BOX ABOVE CEILING MUST BE ACCESSIBLE.

DRAWING SYMBOL: A

2 TE00.04 SECURITY DOOR-SINGLE DOOR C/W ELECTRIC STRIKE AND CARD READER (TYPE A)
NTS



DRAWING NOTES:

(N-1) REMOVE ALL WIRING DEVICES AND POWER CONNECTIONS TO KITCHEN EQUIPMENT ON MILLWORK AND MAKE SAFE. RETAIN CIRCUITS IN CEILING SPACE FOR NEW LAYOUT. PROVIDE JUNCTION BOXES AS REQUIRED AND IDENTIFY CIRCUITS FOR USE DURING NEW CONSTRUCTION.

(N-2) SECURITY DEVICES AND ASSOCIATED WIRING TO BE REMOVED BY OTHERS. ELECTRICAL CONTRACTOR TO REMOVE ASSOCIATED CONDUIT INFRASTRUCTURE BACK TO SOURCE.

(N-3) THERMOSTAT AND ASSOCIATED CONTROL WIRING TO BE REMOVED BY OTHERS. ELECTRICAL CONTRACTOR TO REMOVE ASSOCIATED CONDUIT INFRASTRUCTURE BACK TO SOURCE.

(N-4) REMOVE EXISTING FIRE ALARM PULL STATION. RETAIN FIRE ALARM INITIATING CIRCUIT FOR NEW LAYOUT. PROTECT EXISTING FIRE ALARM WIRING DURING DEMOLITION WORK.

(N-5) REMOVE ALL WIRING DEVICES AND POWER CONNECTIONS TO KITCHEN EQUIPMENT AND MAKE SAFE. RETAIN EXISTING CIRCUITS IN CEILING SPACE FOR WIRING DEVICES ON NEW LAYOUT. PROVIDE JUNCTION BOXES AS REQUIRED. IDENTIFY CIRCUITS FOR USE DURING NEW CONSTRUCTION.

(N-6) REMOVE EXISTING FIRE ALARM HORN. RETAIN FIRE ALARM SIGNALING CIRCUIT FOR FIRE ALARM DEVICES ON NEW LAYOUT. PROTECT EXISTING FIRE ALARM WIRING DURING DEMOLITION WORK.

(N-7) REMOVE POWER CONNECTION TO EXISTING COMPRESSOR AND INTERIOR COOLING UNITS COMPLETE WITH ASSOCIATED DISCONNECTING MEANS, AND WIRING BACK TO SOURCE AND MAKE SAFE. MECHANICAL UNITS TO BE REMOVED BY OTHERS. COORDINATE WORK WITH MECHANICAL CONTRACTOR.

(N-8) REMOVE POWER CONNECTION TO EXHAUST FAN COMPLETE WITH ASSOCIATED ISOLATION SWITCH/STARTER, WIRING AND CONDUIT BACK TO SOURCE AND MAKE SAFE. MECHANICAL UNIT AND ANY ASSOCIATED THERMOSTAT OR LOW VOLTAGE CONTROL WIRING TO BE REMOVED BY OTHERS. COORDINATE WITH MECHANICAL CONTRACTOR.

(N-9) REMOVE EXISTING LIGHTING FIXTURES. RETAIN CIRCUITS IN CEILING SPACE TO BE USED DURING NEW CONSTRUCTION FOR NEW LUMINAIRES. PROTECT EXISTING WIRING, PROVIDE JUNCTION BOXES AND IDENTIFY CIRCUITS FOR RE-USE DURING NEW WORK. ALL REMOVED BASE BUILDING LIGHTING FIXTURES SHALL BE TURNED OVER TO THE LANDLORD FOR SELECTION AT A PLACE DESIGNATED BY THE LANDLORD. ALL LUMINAIRES THAT ARE REJECTED BY THE LANDLORD SHALL BE REMOVED FROM THE SITE.

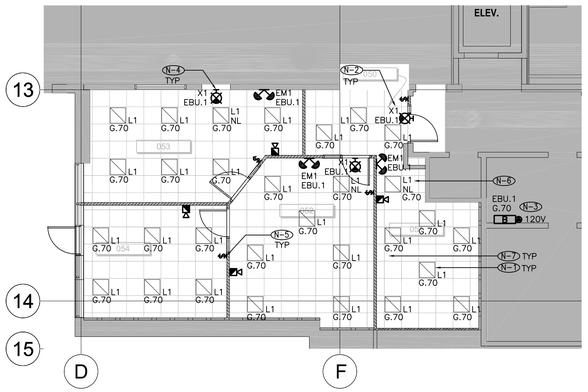
(N-10) REMOVE EXISTING POWER OUTLET AND COVER PLATE. RETAIN EXISTING SINGLE GANG BACK BOX AND CIRCUIT FOR INSTALLATION OF NEW RECEPTACLE.

(N-11) EXISTING VOICE/DATA OUTLET TO REMAIN. CONTRACTOR TO REMOVE EXISTING COVER PLATE AND REPLACE WITH NEW. COORDINATE NEW COVER PLATE WITH CLIENT'S TELECOM PROVIDER.

GENERAL NOTES

1. THE COMPLETE EXTENT OF DEMOLITION IS NOT SHOWN. REFER TO THE INTERIOR DESIGNER'S DRAWINGS TO DETERMINE THE COMPLETE EXTENT OF DEMOLITION. ALLOW FOR ALL COSTS.
2. AS PART OF THE DEMOLITION CONTRACT, THE ELECTRICAL CONTRACTOR SHALL REMOVE ALL FLOOR, COLUMN, CEILING, AND WALL MOUNTED POWER, TELEPHONE/DATA OUTLETS, CABLING AND CONDUIT NOT REQUIRED, TO SUIT THE NEW LAYOUT AND MAKE SAFE. VISIT SITE TO DETERMINE THE EXACT REQUIREMENTS AND REFER TO DEMOLITION DRAWINGS.
3. THE ELECTRICAL CONTRACTOR IS TO MAKE GOOD ALL CORE HOLES FROM ELECTRICAL EQUIPMENT AND DEVICES DISCONNECTED, RELOCATED AND OR REMOVED IN THIS PROJECT.
4. PATCH AND SEAL ALL OPENINGS IN FLOORS, WALLS AND PARTITIONS. IF FLOORS, WALLS OR PARTITIONS ARE FIRE RATED, PATCH AND SEAL PENETRATIONS WITH FIRE RESISTANT INSULATION AND APPROVED FIRE STOP SYSTEMS.
5. ALL EXISTING ELECTRICAL WIRING DEVICES, EQUIPMENT, FIRE ALARM DEVICES AND LIGHTING WITHIN BASE BUILDING ROOMS, STAIRWELLS AND AREAS DEEMED NOT IN SCOPE SHALL REMAIN LIVE AND OPERATIONAL. ELECTRICAL CONTRACTOR TO ENSURE SERVICES TO THESE AREAS ARE ISOLATED AND PROTECTED DURING THE COURSE OF DEMOLITION AND CONSTRUCTION.
6. DEVICES LABELED AS "E" DENOTES EXISTING DEVICES TO REMAIN. DEVICES LABELED AS "RR" DENOTES EXISTING DEVICES TO BE REMOVED AND REINSTALLED OR RELOCATED. REFER TO NEW ELECTRICAL LAYOUTS FOR NEW LOCATIONS.
7. COORDINATE DISRUPTION OF EXISTING SERVICES DURING DEMOLITION AND NEW WORK WITH OWNER. ALL EXISTING ELECTRICAL DEVICES, EQUIPMENT AND LIGHTING WITHIN BASE BUILDING ROOMS, STAIRWELLS AND AREAS DEEMED NOT IN SCOPE SHALL REMAIN LIVE AND OPERATIONAL. ELECTRICAL CONTRACTOR TO ENSURE SERVICES TO THESE AREAS ARE ISOLATED AND PROTECTED DURING THE COURSE OF DEMOLITION AND CONSTRUCTION.

1 TE00.05 ELECTRICAL DEMOLITION LAYOUT
1:100



DRAWING NOTES:

(N-1) PROVIDE NEW LUMINAIRE, TYPE AS INDICATED. REFER TO LIGHTING SCHEDULE FOR SPECIFICATIONS. ALL NEW LUMINAIRES SHALL BE CHAIN HUNG AND SUPPORTED FROM THE SLAB ABOVE.

(N-2) PROVIDE EXIT SIGN, TYPE AS INDICATED. EXIT SIGNS SHALL BE PICTOGRAM (RUNNING MAN) TYPE. REFER TO LIGHTING SCHEDULE FOR SPECIFICATIONS. CONNECT DC PORTION TO EMERGENCY BATTERY UNIT INDICATED. CONNECT AC PORTION TO 120V EXIT SIGN CIRCUIT. REFER TO PANEL SCHEDULE FOR CIRCUIT INFORMATION.

(N-3) PROVIDE EMERGENCY BATTERY UNIT. CONNECT TO UN-SWITCHED PORTION OF THE LIGHTING CIRCUIT INDICATED.

(N-4) PROVIDE EMERGENCY REMOTE HEAD AND CONNECT TO BATTERY UNIT INDICATED. REFER TO LIGHTING SCHEDULE FOR SPECIFICATIONS.

(N-5) LIGHT SWITCH TO CONTROL FIXTURES IN ASSOCIATED ROOM UNLESS OTHERWISE NOTED.

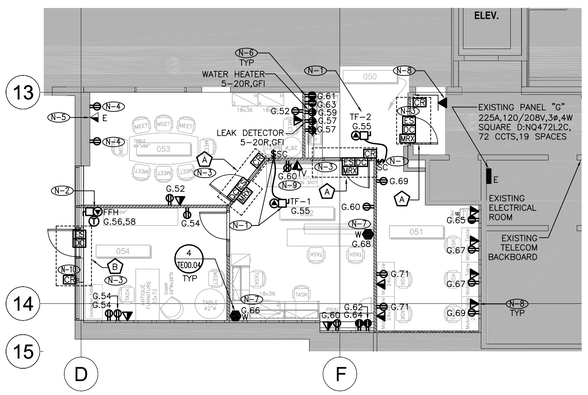
(N-6) LUMINAIRES LABELED "NL" DENOTE NIGHT LIGHT FIXTURES. NIGHT LIGHT FIXTURE TO BE CONNECTED TO UN-SWITCHED PORTION OF THE LIGHTING CIRCUIT INDICATED AND BE CONTROLLED BY CIRCUIT BREAKER IN ASSOCIATED ELECTRICAL PANEL.

(N-7) PROVIDE NEW FIRE ALARM EVAC HORN. CONNECT TO EXISTING SIGNALING CIRCUIT OBTAINED FROM DEMOLITION. NEW FIRE ALARM HORN TO MATCH EXISTING. PROVIDE NEW FIRE ALARM WIRING AND MODULES AS REQUIRED TO SUIT NEW LAYOUT AND TIE-IN TO BASE BUILDING SIGNALING LOOP.

GENERAL NOTES

1. ALL MODIFICATIONS TO FIRE ALARM SYSTEM AND DEVICES TO BE COMPLETED BY THE BASE BUILDING FIRE ALARM CONTRACTOR (STAR LIFE FIRE AND SAFETY INC.) AND VENDOR/MANUFACTURER (CHUBB EDWARDS). THE BASE BUILDING FIRE ALARM CONTRACTOR/VENDOR/MANUFACTURER IS RESPONSIBLE TO ENSURE THAT ALL ADDITIONAL COMPONENTS (MATERIAL, SOFTWARE, INCLUDING ANY LABOUR TO INSTALL OR MODIFY THE FIRE ALARM DEVICES) ARE INCLUDED FOR BASED ON THE ISSUED DRAWINGS. ELECTRICAL CONTRACTOR TO ALLOW FOR ALL ASSOCIATED COSTS. NEW FIRE ALARM EVAC HORNS SHALL MATCH EXISTING. THE CONTRACTOR SHALL CONNECT NEW EVAC HORNS TO EXISTING SIGNALING CIRCUIT, WHERE THERE IS SPARE CAPACITY ON THE RESPECTIVE CIRCUITS. IF THERE IS NO CAPACITY ON THE EXISTING SIGNALING CIRCUITS, THE CONTRACTOR SHALL PROVIDE NEW FIRE ALARM POWER BOOSTER AND 120V CIRCUIT. THE VENDOR WILL RELOCATE AND MODIFY THE TAPS ON FIRE ALARM HORNS AS NECESSARY TO ENSURE A COMPLIANCE WITH CODE. ALLOW FOR ALL ASSOCIATED COSTS INCLUDING BUT NOT LIMITED TO; ASSOCIATED EQUIPMENT, AMPLIFIERS, EVAC HORNS, PROGRAMMING, TESTING AND VERIFICATION TO MAKE THE SYSTEM OPERATIONAL AND CODE COMPLIANT. ALL FIRE ALARM VERIFICATION SHALL CONFORM TO CAN/ULC-S537 LATEST EDITION. THE FIRE ALARM SYSTEM SHALL BE INSTALLED IN CONFORMANCE WITH CAN/ULC-S524 LATEST EDITION.
2. THE CIRCUITING IN PART IS DIAGRAMMATIC INTENDED TO SHOW GENERAL CIRCUIT ARRANGEMENT AND PANEL DESIGNATION. REUSE EXISTING CIRCUITS OBTAINED FROM DEMOLITION FOR ALL NEW LIGHTING FIXTURES. PROVIDE ADDITIONAL CIRCUITS WHERE REQUIRED TO SUIT NEW LAYOUT AND CIRCUITING ARRANGEMENT. REFER TO NEW ELECTRICAL LAYOUTS AND PANEL SCHEDULE FOR ADDITIONAL CIRCUIT INFORMATION. ALLOW FOR ALL COSTS.
5. ALL EXISTING ELECTRICAL WIRING DEVICES, EQUIPMENT, FIRE ALARM DEVICES AND LIGHTING WITHIN BASE BUILDING ROOMS, STAIRWELLS AND AREAS DEEMED NOT IN SCOPE SHALL REMAIN LIVE AND OPERATIONAL. RE-CONECT ANY BASE BUILDING SERVICES INTERRUPTED DURING DEMOLITION AND NEW WORK. REPLACE ANY DAMAGED WIRING OR DEVICES.

2 TE00.05 LIGHTING AND FIRE ALARM
1:100



DRAWING NOTES:

(N-1) PROVIDE 15A-120V CONNECTION TO TRANSFER FAN. PROVIDE HP RATED SWITCH AT TRANSFER FAN FOR DISCONNECTING MEANS. INSTALL AND CONNECT SPEED SWITCH (PROVIDED BY DIV. 23, WIRED BY DIV 26). COORDINATE WORK AND EXACT LOCATION OF SPEED CONTROLLER WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.

(N-2) PROVIDE AND INSTALL COMMERCIAL WALL FAN HEATER COMPLETE WITH ISOLATION SWITCH. PROVIDE 24V REMOTE ELECTRONIC THERMOSTAT. CONNECT REMOTE THERMOSTAT TO HEATER CONTROL TERMINAL BLOCK AS PER MANUFACTURE INSTALLATION REQUIREMENTS. FORCE FLOW HEATER TO BE SURFACE MOUNT, 208V/1ø, 2000W, SINGLE UNIT COMPLETE WITH FACTORY INSTALLED 24V CONTROL RELAY AND LOW VOLTAGE TRANSFORMER (OUELLETE: OAC SERIES OR APPROVED EQUIVALENT). CONFIRM FINISH WITH INTERIOR DESIGNER.

(N-3) PROVIDE ROUGH-IN FOR DOOR HARDWARE/SECURITY DEVICES. REFER TO DOOR ELEVATION DETAIL FOR ADDITIONAL INFORMATION. SECURITY DEVICES AND CABLING BY OTHERS. COORDINATE WORK WITH SECURITY CONTRACTOR AND DOOR HARDWARE PROVIDER PRIOR TO ROUGH-IN.

(N-4) PROVIDE NEW 5-15R RECEPTACLE COMPLETE WITH STAINLESS STEEL COVER PLATE. INSTALL ON EXISTING SINGLE GANG BACK BOX AND CONNECT TO EXISTING CIRCUIT OBTAINED FROM DEMOLITION. ADJUST LOCATION OF SINGLE GANG BACK BOX TO SUIT NEW LAMINATED FINISH. COORDINATE WITH INTERIOR DESIGNER'S DRAWINGS.

(N-5) EXISTING VOICE/DATA OUTLET TO REMAIN. REPLACE EXISTING COVER PLATE WITH NEW. COORDINATE NEW COVER PLATE WITH CLIENT'S TELECOM PROVIDER.

(N-6) COORDINATE MOUNTING HEIGHT OF RECEPTACLES AND FINISHES WITH INTERIOR DESIGNER'S DRAWINGS AND MILLWORK ELEVATION DETAILS.

(N-7) PROVIDE WALL FEEDS TO FURNITURE SYSTEM FOR POWER AND VOICE/DATA CABLING. CONNECT POWER FEED TO CIRCUIT INDICATED. REFER TO ELECTRICAL DETAIL FOR ADDITIONAL INFORMATION. COORDINATE WORK WITH FURNITURE SYSTEM PROVIDER.

(N-8) FOR ALL NEW VOICE/DATA/TV OUTLETS PROVIDE MINIMUM 27MM EMT CONDUIT COMPLETE WITH PULLSTRING IN WALL STUBBED UP TO ACCESSIBLE CEILING SPACE OR TELECOM BACK BOARD IN ELECTRICAL ROOM. IF ACCESSIBLE CEILING PATHWAY TO BASE BUILDING TELECOM BACKBOARD DOES NOT EXIST PROVIDE CONDUIT PATHWAY. CONSOLIDATE RUNS WITH JUNCTION BOXES WHERE CONVENIENT. PROVIDE PULLBOXES AFTER TWO 90° BENDS AND/OR 30M STRAIGHT RUNS. SIZE PULLBOXES AS PER TIA/EIA 569. PROVIDE OUTLET BOXES AND COVER PLATES. COORDINATE COVER PLATE REQUIREMENTS WITH TELECOM CABLING PROVIDER. TELECOMMUNICATION DEVICES AND CABLING BY OTHERS. REFER TO ELECTRICAL DETAILS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

(N-9) PROVIDE 5-15R, RECESSED (CLOCK TYPE) POWER RECEPTACLE FOR WALL MOUNT TV SCREEN. COORDINATE MOUNTING HEIGHT WITH INTERIOR DESIGNER'S DRAWINGS.

(N-10) CARD READER TO BE MOUNTED ON WINDOW MULLION. COORDINATE CONDUIT INFRASTRUCTURE WITH DOOR HARDWARE/SECURITY PROVIDERS PRIOR TO ROUGH-IN.

GENERAL NOTES

1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE INTERIOR DESIGNER'S DRAWINGS FOR DIMENSIONS, MOUNTING HEIGHTS, CONSTRUCTION DETAILING, FINISHES AND COLOURS.
2. THE CIRCUITING IN PART IS DIAGRAMMATIC INTENDED TO SHOW GENERAL CIRCUIT ARRANGEMENT AND PANEL DESIGNATION. REUSE EXISTING CIRCUITS OBTAINED FROM DEMOLITION. PROVIDE ADDITIONAL CIRCUITS WHERE REQUIRED TO SUIT NEW LAYOUT AND CIRCUITING REQUIREMENTS. REFER TO NEW ELECTRICAL LAYOUT AND PANEL SCHEDULE FOR ADDITIONAL CIRCUIT INFORMATION. MARK-UP CIRCUIT NUMBER AND PANEL DESIGNATION FOR AS-BUILT DRAWINGS. UPDATE BASE BUILDING PANEL SCHEDULES ACCORDINGLY. ALLOW FOR ALL COSTS.
3. SUPPLY AND INSTALL SUITABLE LABELS ON ALL RECEPTACLES. LABELS TO INCLUDE BOTH PANEL AND CIRCUIT DESIGNATION. REVIEW LABEL SIZE AND TYPE WITH CONSULTANT PRIOR TO INSTALLATION.
4. ANY RECEPTACLE WITHIN 1.5M OF A SINK MUST BE CLASS A, GFCI TYPE.

3 TE00.05 POWER AND SYSTEMS
1:100

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Key Plan

NUMBER / NUMÉRO	MILESTONE / FAIT SAILLANT	DATE: (Y/M/D) (A/M/J)	INITIALS / INITIALES
04	Issued for Tender	2018-01-18	
03	Issued for Permit and Tender	2018-01-03	
02	Issued for 90% Client Review	2017-12-19	
01	Issued for 66% Client Review	2017-12-06	

DESIGNED BY / CONÇU PAR	CHECKED BY / VÉRIFIÉ PAR
GLH	AD
DRAWN BY / DESSINÉ PAR	SCALE / ÉCHELLE
GLH	AS SHOWN

1 DETAIL NUMBER
A1.1 SCALE:
SHEET NUMBER
DRAWING TITLE

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CONSULTANT / EXPERT-CONSEIL

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PROJECT / LOCATION / PROJET / ENDROIT

Councillors Office

100 Charlie Rodgers Place, Basement
OTTAWA, ONTARIO

DRAWING / DESSIN

ELECTRICAL LAYOUTS

FACILITY NO. / NO. DE INSTALLTIONS	SHEET NO. / FEUILLE No.
XXXX	TE00.05
PROJECT NO. / PROJET NO.	
17516.001	

PANEL: G (EXISTING)				LOCATION: BASEMENT ELECTRICAL ROOM									
PROJECT NAME: COUNCILLORS OFFICE													
PROJECT #: 17516.001				FED FROM: 45KVA TR.-BASEMENT ELEC.RM									
TYPE/ INFO	DESCRIPTION	D.F [%]	CONN. LOAD [W]	DEMAND LOAD [W]	BKR [A]	CCT NO.	Φ	CCT NO.	BKR [A]	DEMAND LOAD [W]	CONN. LOAD [W]	D.F [%]	DESCRIPTION	TYPE/ INFO
	EXISTING	100				1	A	2				100	*EXISTING*	
	EXISTING	100				3	B	4				100	*EXISTING*	
	EXISTING	100				5	C	6				100	*EXISTING*	
	EXISTING	100				7	A	8				100	*EXISTING*	
	EXISTING	100				9	B	10				100	*EXISTING*	
	EXISTING	100				11	C	12				100	*EXISTING*	
	EXISTING	100				13	A	14				100	*EXISTING*	
	EXISTING	100				15	B	16				100	*EXISTING*	
	EXISTING	100				17	C	18				100	*EXISTING*	
	EXISTING	100				19	A	20				100	*EXISTING*	
	EXISTING	100				21	B	22				100	*EXISTING*	
	EXISTING	100				23	C	24				100	*EXISTING*	
	EXISTING	100				25	A	26				100	*EXISTING*	
	EXISTING	100				27	B	28				100	*EXISTING*	
	EXISTING	100				29	C	30				100	*EXISTING*	
	EXISTING	100				31	A	32				100	*EXISTING*	
	EXISTING	100				33	B	34				100	*EXISTING*	
	EXISTING	100				35	C	36				100	*EXISTING*	
	EXISTING	100				37	A	38				100	*EXISTING*	
	EXISTING	100				39	B	40				100	*EXISTING*	
	EXISTING	100				41	C	42				100	*EXISTING*	
	EXISTING	100				43	A	44				100	*EXISTING*	
	EXISTING	100				45	B	46				100	*EXISTING*	
	EXISTING	100				47	C	48				100	**SPACE**	
	EXISTING	100				49	A	50				100	**SPACE**	
	SPACE	100				51	B	52	15	360	450	80	**ROOM 053-REC.**	REC
	SPACE	100				53	C	54	15	360	450	80	**ROOM 054-REC.**	REC
M	**TRANSFER FANS (TF-1 AND TF-2)**	100	200	200	15	55	A	56	15	1000	1000	100	**FORCE FLOW HEATER (FFH)-ROOM 054**	M
REC	**O/C REC./LEAK DETECTOR RM.050**	100	600	600	20	57	B	58	2P	1000	1000	100		
REC	**WATER HEATER(WH-1)/KITCHENNETE 50**	100	1440	1440	20	59	C	60	15	520	650	80	**ROOM 052-REC.**	REC
REC	**KITCHENETTE 050 DED. REC**	80	500	400	15	61	A	62	15	400	500	80	**ROOM 052 DED.REC.-FRIDGE**	REC
REC	**KITCHENETTE 050 DED. REC**	80	500	400	15	63	B	64	15	400	500	80	**ROOM 052 DED.REC.**	REC
REC	**ROOM 051-FLOOR PRINTER.**	80	700	560	15	65	C	66	15	480	600	80	**ROOM 052 FURNITURE SYSTEM**	D.C
REC	**ROOM 051-WORKSTATIONS**	80	600	480	15	67	A	68	15	480	600	80	**ROOM 052 FURNITURE SYSTEM**	D.C
REC	**ROOM 051-WORKSTATIONS**	80	600	480	15	69	B	70	20	1014	1014	100	**EBU.1, LTG ROOMS 50,51,52,53,54**	LTS
REC	**ROOM 051-WORKSTATIONS**	80	600	480	15	71	C	72	15	10	10	100	**EXIT SIGNS**	LTS

PANEL OPTIONS:				LOAD A [KW]:	3	PHASE VOLTAGE [V]:	120
2	CSA ENCLOSURE RATING		FLUSH	LOAD B [KW]:	4.3	LINE VOLTAGE [V]:	208
	FEED THROUGH	X	SURFACE	LOAD C [KW]:	3.9	PHASE:	3Φ
	SUB-FEED	X	BOLT-ON BREAKER	TOTAL [KW]:	11	WIRE:	4
	MAIN BREAKER		SPD			MAINS [A]:	225
	200% RATED NEUTRAL BUS			CURRENT A [A]:	25	MAIN BREAKER [A]:	
	ISOLATED GROUND BUS			CURRENT B [A]:	35	I.C. [kA]:	10
				CURRENT C [A]:	32		

LEGEND:			NOTES:
BAS-Building Automation System	R.C-Relay Controlled	LTS-Lighting	1
GFCI-Ground Fault Circuit Interrupter	M-Motor	HID-High Intensity Discharge Lighting Breaker	2
AFCI-Arc Fault Circuit Interrupter	D.F-Demand Factor		3
SPD - Surge Protection Device	REC-Receptacle	D.C-Direct Connection	
BLO-Breaker Lock-On Device			4

2. PANEL "G" SCHEDULE (TE00.06) NTS

LUMINAIRE SCHEDULE
Project Name: Councillors Office
Project number: 17516.001

Smith + Andersen
1500 Carling Ave., Suite 530
Ottawa, Ontario K1Z 1G3

TYPE	VOLT.	LAMP(S)	DIMENSIONS (LxWxH)	DESCRIPTION	DRIVER	MANUFACTURER/ CATALOGUE NUMBER	MINIMUM PERFORMANCE REQUIRED	LOCATED
LED								
L1	120V	24W LED 	23 3/4"X23 3/4"X4"	**2'X2' (610X610mm) Recessed LED luminaire** - Die formed code gauge cold rolled steel, extruded acrylic enclosed lens with custom frost for high efficacy. Removable lens for easy access to LED module and electrical components. Five years warranty. Provde complete with mounting accesories for 610mmX610mm T-Bar ceiling-acoustical tiles. Coordinate finish with interior designer.	• Integral 0-10V Driver	Hubbell Lighting (Columbia Lighting) : LTGR22-35-LW-G-ED-U.	• 3500K • 3,000 lumens delivered • L80 - 60,000h • CRI > 80 • High Efficiency Acrylic Lens • 0-10V Dimming •THD<20%	**Throughout**
EMERGENCY LIGHTING								
X1	120VAC 24VDC	LED-2.5W 		Architectural Edge-lit Pictogram Exit Sign, slim-profile extruded aluminum housing, high-output LED. Universal surface mounting - wall, ceiling, or end mount. Extruded acrylic panel with pictogram legend. Refer to drawings for mounting, number of faces and direction of arrows. AC/Universal DC backup selectable. Confirm finish with interior designer.		Stanpro: RMEA-0-UDC	• Edgelit • Universal Mounting • LED 120V AC, Universal DC backup voltage 6,12,24VDC selectable	**Required Exits**
EM1	24VDC	LED - 6W Each 		Remote Heads - 6W LEDs fully adjustable with friction lock tilt and swivel that can be locked in place with a rear mounted set screw. Canopy mounts directly to typical electrical junction boxes. Low glare LED lamps.		Stanpro: S-Series	• LED • Compact Suface mount • Die cast metal housing	**Throughout**
EBU	120VAC 24VDC			Battery Units - 24VDC, 144W minimum (30 minutes), no heads. Hardwire connection. Steel housing. Momentary push button test switch. Solid state design and construction. Maintenance free, sealed lead acid battery.		Stanpro: SLC Series	• 144W, 30 minutes emergency • Momentary test switch • Maintenance free, sealed lead acid battery.	**Electrical Room**

NOTES:-
1. All luminaires need to be consistent on technology and must match reference standard description regardless of catalogue number. Where finishes are not indicated, allcw for special finish. Manufacturer/Catalogue number not listed will not be considered.

2. LED's are to be latest technology to proved maximum lumens, binned, best colour and longest life at time of purchase. Drivers are to be the latest technology at time of purchase.

3. All LED luminaires that present signs of failure on site, within the warranty period, must be replaced at no cost to the owner. If temporary luminaires are required to replace any failed LED luminaires, during the waiting time for parts (i.e. drivers, boards, heat sinks, etc.), the labour cost including installation, temporary luminaire supply, temporary luminaire removal and reinstallation of the LED fixture must be provided at no cost of the owner. Additional electrical costs, associated with higher Wattage temporary luminaires, must be reimbursed with interest to the owner by the manufacturer.

4. In case of failure of a LED luminaire complete or part there of the luminaire failure, a independent third party testing Laboratory (approved by Smith + Andersen) shall be commissioned by the manufacturer or vendor to perform tests on samples taken from the failed luminaires installed on corresponding site. All reporting including the test results must be submitted to Smith + Andersen for evaluation and final approval.

5. Any additional time (related to luminaire manufacturing issues) involved by Smith + Andersen will be billed at our hourly rates to the manufacturer or vendor.

7. All LED parts and accessories must be replaceable on site without removal of the luminaire.

8. Luminaire circuits are to have dedicated neutrals (do not share neutrals between circuits).

1. LIGHTING SCHEDULE (TE00.06) NTS

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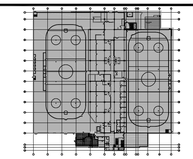
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NUMBER/ NUMÉRO	MILESTONE / FAIT SAILLANT	DATE: (Y/M/D) (A/M/J)	INITIALS INITIALES

DESIGNED BY / CONÇU PAR: GLH | CHECKED BY / VÉRIFIÉ PAR: AD
DRAWN BY / DESSINÉ PAR: GLH | SCALE / ÉCHELLE: AS SHOWN

DETAIL NUMBER 1 / A1.1 SHEET NUMBER — DRAWING TITLE / SCALE:

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DRAWING / DESSIN
ELECTRICAL SCHEDULES

FACILITY NO. / NO. DE INSTALLTIONS: XXXX
PROJECT NO. / PROJET NO.: 17516.001
SHEET NO. / FEUILLE No.: **TE00.06**