

DIV.26 - ELECTRICAL SPECIFICATIONS

1.0 GENERAL PROVISIONS
1.01 THE DRAWINGS, GENERAL CONDITIONS AND GENERAL PROVISIONS OF THE CONTRACT SHALL FORM AN INTEGRAL PART OF THE SPECIFICATIONS. WHERE CONFLICTS ARISE BETWEEN THESE DOCUMENTS, THE MORE STRINGENT PROVISION WILL BE APPLICABLE, SUBJECT TO THE INTERPRETATION OF THE CONTRACT ADMINISTRATOR.
1.02 FURNISH ALL LABOR, MATERIAL, SERVICES, AND SKILLED SUPERVISION NECESSARY FOR THE CONSTRUCTION, ERECTION, INSTALLATION, CONNECTIONS, TESTING, AND ADJUSTMENT OF ALL MATERIALS AND ELECTRICAL EQUIPMENT NECESSARY FOR COMPLETE AND OPERATING SYSTEMS AS INDICATED ON THE DRAWINGS OR SPECIFIED HEREIN, AND ITS DELIVERY TO THE CITY, COMPLETE IN ALL RESPECTS AND READY FOR USE.
1.03 ALL ELECTRICAL WORK AND MATERIAL SHALL CONFORM WITH THE CURRENT RELEVANT AND/OR APPLICABLE BUILDING CODE, ELECTRICAL CANADIAN CODE AND TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION AND THE DESIGN PROFESSIONAL. FOR THE PURPOSE OF THIS SPECIFICATION INTERPRETATION OF THE WORD "CODE" SHALL MEAN ALL CODES, REGULATIONS AND REQUIREMENTS AS STATED ABOVE.
1.04 THE CONTRACT INCLUDES THE FURNISHING OF LABOUR, MATERIAL, EQUIPMENT, AND SERVICES NECESSARY FOR A COMPLETE ELECTRICAL SYSTEM AS SHOWN ON THE DRAWINGS AND OPERATING TO THE COMPLETE SATISFACTION OF THE CONTRACTOR ADMINISTRATOR.
1.05 THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE WHERE THE CONTRACT DOCUMENTS EXCEED CODE, UTILITY OR RECOGNIZED STANDARDS REQUIREMENTS
1.06 EXAMINE THE SITE, BUILDING AND LOCAL CONDITIONS AFFECTING WORK OF THIS CONTRACT. EXAMINE ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL CONDITIONS TO ENSURE WORK CAN BE PERFORMED WITHOUT CHANGES. AS SHOWN ON CONTRACT DRAWINGS, NO ALLOWANCE WILL BE MADE LATER FOR NECESSARY CHANGES, UNLESS IT HAS BEEN BROUGHT TO CONTRACT ADMINISTRATOR'S ATTENTION IN WRITING, PRIOR TO CLOSING OF BIDS. BY SIGNING THE CONTRACT, THE CONTRACTOR ACKNOWLEDGES THE SITE VISIT HAS BEEN COMPLETED AND THE EXISTING CONDITIONS WERE ACCEPTED.
1.07 APPLY FOR ALL PERMITS, SERVICES, FEES AND INSPECTIONS AND PAY FOR ALL FEES TO THE AUTHORITIES HAVING JURISDICTION. INCLUDE ALL COST IN BID QUOTE.
1.08 OBTAIN APPROVALS FROM THE ELECTRICAL INSPECTION AUTHORITY AND NOTIFY THE CONTRACT ADMINISTRATOR OF ANY CHANGES REQUESTED BY THE INSPECTION AUTHORITY PRIOR TO THE EXECUTION OF THE REQUEST.
1.09 CONTRACTOR SHALL COMPLY WITH ALL DEPARTMENT OF LABOUR, WORKPLACE AND HEALTH REQUIREMENTS AT ALL TIMES
1.10 WHERE DOUBT EXISTS AS TO THE MEANING OF THE DRAWINGS OR SPECIFICATIONS, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN CLARIFICATION PRIOR TO BID.
1.11 NOT APPLICABLE.
1.12 THE CONTRACTOR IS RESPONSIBLE TO PROVIDE A TEMPORARY ELECTRICAL SERVICE AS REQUIRED BY ALL TRADES. COORDINATE POWER REQUIREMENTS FOR THE TEMPORARY SERVICE WITH THE GENERAL CONTRACTOR.
1.13 ALL MATERIALS USED SHALL BE NEW, OF THE TYPE SPECIFIED, AND APPROVED BY CERTIFICATION AGENCY RECOGNIZED BY AUTHORITY BARING JURISDICTION, AND FREE FROM DEFECTS.
1.14 ALL ELECTRICAL EQUIPMENT INSTALLED OR CONNECTED SHALL BE IDENTIFIED BY MEANS OF BLACK LAMWOOD LABELS C/W MINIMUM 3/8" WHITE LETTERING. THIS INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING:
• SWITCHBOARDS,
• PANEL BOARDS,
• DISCONNECT SWITCHES,
• TRANSFORMERS,
• STARTERS/VFDs,
• ETC.
1.15 CLEAN ALL EQUIPMENT DURING CONSTRUCTION AND AGAIN ON COMPLETION OF THE CONTRACT.
1.16 REMOVE ALL SURPLUS MATERIALS, CUTTINGS, PACKAGING AND DEBRIS FROM THE SITE DURING THE PROGRESS AND AT FINAL COMPLETION OF THE WORK.
1.17 EXECUTE WORK IN A FIRST-CLASS AND WORKMANLIKE MANNER, TO PRESENT A NEAT AND MECHANICAL APPEARANCE.
1.18 BUILDING ENVELOPE PENETRATION OF ANY ELECTRICAL COMPONENT (I.E. CONDUIT, BOXES, CABLES, ETC.) SHALL BE EXECUTED SO INTEGRITY OF ASSEMBLY IS NOT COMPROMISED. PROVIDE FOR ADEQUATE SEALING, COVERS, GASKETS, CAPS, ETC. COORDINATE WORK AND REQUIREMENTS WITH ALL OTHER RELEVANT CONTRACTORS, ARCHITECT, ENVELOPE CONTRACT ADMINISTRATOR AND OTHER RELEVANT CONTRACT ADMINISTRATORS AND CONTRACTORS.
1.19 THE ELECTRICAL SERIES DRAWINGS, SPECIFICATIONS AND OTHER DOCUMENTS PERTAIN TO THE ELECTRICAL SCOPE OF WORK ONLY. TASKS WHICH ARE NOT PART OF THE ELECTRICAL SCOPE OF WORK EVEN IF MENTIONED IN THESE DOCUMENTS ARE INDICATED PURELY FOR REFERENCE AND COORDINATION PURPOSES ONLY.
1.20 THE DRAWINGS ARE DIAGRAMMATIC ONLY, AND DOES NOT SHOW ALL DETAILS. INFORMATION INVOLVING ACCURATE MEASUREMENTS OF THE BUILDING, STRUCTURAL STEEL, EXISTING WALLS, ETC. ARE TO BE TAKEN IN THE FIELD. THE CONTRACTOR SHALL MAKE, WITHOUT ADDITIONAL EXPENSE TO CONTRACT ADMINISTRATOR NECESSARY CHANGES OR ADDITIONS TO RUNS TO ACCOMMODATE STRUCTURAL CONDITIONS.
1.21 LOCATION OF DEVICES MAY BE ALTERED WITHOUT CHARGE TO CONTRACT ADMINISTRATOR, PROVIDED THE CHANGE IS MADE BEFORE FINAL INSTALLATION, IT DOES NOT NECESSITATE ADDITIONAL MATERIALS, AND ALL SUCH CHANGES ARE RATIFIED BY CONTRACT ADMINISTRATORS REPRESENTATIVE. RECORD CHANGES ON RECORD SET OF DRAWINGS.
1.22 DRAWING SHOWS GENERAL LOCATION FOR EQUIPMENT AND CIRCUITS; INSTALL THEM IN SUCH A WAY AS TO CONSERVE HEADROOM AND INTERFERE AS LITTLE AS POSSIBLE WITH THE FREE USE OF SPACE THROUGH WHICH THEY PASS.
1.23 ALL MATERIALS, TOOLS, APPLIANCES, SCAFFOLDING, APPARATUS AND LABOUR NECESSARY FOR THE EXECUTION, ERECTION AND COMPLETION OF SPECIFIED SYSTEMS SHALL BE FURNISHED
1.24 ALL PAINTING AND PATCHING SHALL BE DONE BY QUALIFIED LABOURERS.
1.25 1M SHALL BE KEPT CLEAR IN FRONT OF ALL PANELBOARDS AS PER CEC
1.26 INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURERS' INSTRUCTIONS, THE CANADIAN ELECTRICAL CODE AND ALL OTHER AUTHORITIES HAVING JURISDICTION. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES TO ENSURE PROPER INSTALLATION.
1.27 CONTRACTOR SHALL KEEP AN ONGOING SET OF RECORD DRAWINGS ON SITE FOR REVIEW BY CONTRACT ADMINISTRATOR AT ANY TIME. DRAWINGS TO BE TURNED OVER UPON COMPLETION OF PROJECT.
1.28 CONDUITS SHALL NOT HAVE MORE THAN ONE VOLTAGE LEVEL OF WIRING RUNNING WITHIN THEM.
2.0 DEFINITIONS
2.01 THE FOLLOWING ARE DEFINITIONS OF TERMS AND EXPRESSIONS USED IN THE ELECTRICAL SPECIFICATION AND DRAWINGS:
• INSPECTION AUTHORITY - MEANS AGENT OF ANY AUTHORITY HAVING JURISDICTION OVER CONSTRUCTION STANDARDS ASSOCIATED WITH ANY PART OF ELECTRICAL WORK ON SITE.
• SUPPLY AUTHORITY - MEANS ELECTRICAL POWER UTILITY COMPANY RESPONSIBLE FOR DELIVERY OF ELECTRICAL POWER TO PROJECT (MANITOBA HYDRO).
• ELECTRICAL CODE - MEANS CANADIAN ELECTRICAL CODE OR LOCAL CODE IN FORCE AT

PROJECT LOCATION.
• PROVIDE - MEANS TO SUPPLY, INSTALL AND LEAVE IN WORKING ORDER ALL MATERIALS AND NECESSARY WIRING, SUPPORTS, ACCESS PANELS, ETC., AS NECESSARY FOR EQUIPMENT INDICATED.
• CONCEALED - MEANS HIDDEN FROM NORMAL SIGHT IN FURRED SPACES, SHAFTS, CEILING SPACES, WALLS AND PARTITIONS;
• EXPOSED - MEANS WORK NORMALLY VISIBLE, INCLUDING WORK IN EQUIPMENT ROOMS, TUNNELS, AND SIMILAR SPACES;
• FINISHED - MEANS WHEN IN DESCRIPTION OF ANY AREA OR PART OF AN AREA OR A PRODUCT WHICH RECEIVES A FINISH SUCH AS PAINT, OR IN CASE OF A PRODUCT MAY BE FACTORY FINISHED;
• INSTALL (AND TENSES OF "INSTALL") - MEANS SECURE IN POSITION, CONNECT COMPLETE, TEST, ADJUST AND VERIFY.
• CONNECT - TO BRING SERVICE TO THE EQUIPMENT AND MAKE FINAL ATTACHMENT INCLUDING NECESSARY SWITCHES, OUTLETS, BOXES, TERMINATIONS, ETC.;
• SUPPLY - MEANS TO PROCURE, ARRANGE FOR DELIVERY TO SITE, DISTRIBUTE TO FLOORS, INSPECT, ACCEPT DELIVERY AND ADMINISTER SUPPLY OF MANUFACTURER'S PRODUCTS AND/OR SYSTEMS, AND INCLUDES MANUFACTURER'S SUPPLY OF ANY SPECIAL CABLES, STANDARD ON SITE TESTING, INITIAL START-UP, PROGRAMMING, BASIC COMMISSIONING, WARRANTIES AND ASSISTANCE TO CONTRACTOR;
• DELETE OR REMOVE (AND TENSES OF "DELETE" OR "REMOVE") - MEANS TO DISCONNECT, MAKE SAFE, REMOVE INCLUDING ANY BACK BOX AND EXPOSED CONDUITS, PATCH AND REPAIR/FINISH SURFACES TO MATCH ADJOINING SIMILAR CONSTRUCTION, INCLUDE FOR ASSOCIATED RE-PROGRAMMING OF SYSTEMS AND/OR CHANGE OF DOCUMENTATION IDENTIFICATIONS TO SUIT DELETIONS, AND PROPERLY DISPOSE OF DELETED PRODUCTS OFF SITE UNLESS OTHERWISE INSTRUCTED BY CONTRACT ADMINISTRATOR;
• BAS - MEANS BUILDING AUTOMATION SYSTEM; "BMS" - MEANS BUILDING MANAGEMENT SYSTEM; "FMS" - MEANS FACILITY MANAGEMENT SYSTEM; AND "DDC" MEANS DIRECT DIGITAL CONTROLS; REFERENCES TO "BAS", "BMS", "FMS" AND "DDC" GENERALLY MEAN SAME;
• ELECTRICAL DIVISIONS - REFERS TO DIVISIONS 26, 27, 28 AND OTHER DIVISIONS AS SPECIFICALLY NOTED, AND WHICH WORK AS DEFINED IN SPECIFICATIONS AND/OR ON DRAWINGS IS RESPONSIBILITY OF ELECTRICAL CONTRACTOR, UNLESS OTHERWISE NOTED;
• MECHANICAL DIVISIONS - REFERS TO DIVISIONS 20, 21, 22, 23, 25 AND OTHER DIVISIONS AS SPECIFICALLY NOTED, AND WHICH WORK AS DEFINED IN SPECIFICATIONS AND/OR ON DRAWINGS IS RESPONSIBILITY OF MECHANICAL CONTRACTOR, UNLESS OTHERWISE NOTED;
3.0 SUBMITTALS
3.01 SUBMIT PRODUCT DATA FOR ALL EQUIPMENT. ACCEPTABLE MATERIALS SHALL BE AS SPECIFIED, CODE APPROVED OR CITY APPROVED. ALL MATERIAL SHALL BE NEW, UNLESS SPECIFIED OTHERWISE.
3.02 SHOP DRAWINGS FOR ELECTRICAL EQUIPMENT MATERIALS SHALL BE SUBMITTED FOR REVIEW BY THE CONTRACT ADMINISTRATOR BEFORE MANUFACTURING AND INSTALLATION CAN PROCEED.
3.04 SUBMIT TO THE CONTRACT ADMINISTRATOR UPON COMPLETION OF THE CONTRACT, TWO MARKED UP SETS OF RECORD DRAWINGS AND THREE SETS OF MAINTENANCE MANUALS FOR SERVICE, DISTRIBUTION, PANELS.
3.05 AFTER WORK IS COMPLETED, FURNISH TO CITY A WRITTEN GUARANTEE THAT FOR ONE YEAR FROM DATE OF ACCEPTANCE, ANY DEFECTS IN MATERIALS OR WORKMANSHIP WILL BE CORRECTED AT NO COST TO THE CITY. SUBMIT COPY OF GUARANTEE TO CONTRACT ADMINISTRATOR.
4.0 COORDINATION
4.01 THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE SCOPE OF THE WORK REQUIRED FOR EACH TRADE. WORK SHALL BE DONE BY THE APPROPRIATE SKILLED TRADE. ALL TRADES MUST COORDINATE WORK TO ENSURE THAT THE ENTIRE SCOPE OF THE PROJECT IS COVERED. THERE SHALL BE NO ALLOWANCES GIVEN FOR ITEMS WHICH RESULT AS A FAILURE OF CO-ORDINATION. THE CONTRACTOR WILL REVIEW THE DRAWINGS WITH ALL TRADES PRIOR TO BID SUBMISSION TO RESOLVE ALL COORDINATION ISSUES.
4.02 COORDINATE WITH ALL TRADES AND ARRANGE EQUIPMENT IN PROPER RELATION WITH OTHER APPARATUS, DUCTS, PIPES, ETC. AND WITH BUILDING CONSTRUCTION AND ARCHITECTURAL FINISHES.
4.03 RESPONSIBILITY TO DETERMINE WHICH DIVISION OR SECTION PROVIDES VARIOUS PRODUCTS AND WORK, RESTS WITH THE CONTRACTOR. ADDITIONAL COMPENSATION WILL NOT BE CONSIDERED BECAUSE OF DIFFERENCES IN INTERPRETATION OF TECHNICAL PROVISIONS.
4.04 THE CONTRACTOR SHALL COORDINATE WITH THE CONTRACT ADMINISTRATOR DURING THE DEMOLITION AND CONSTRUCTION PHASES OF THE WORK FOR ALL TEMPORARY ELECTRICAL CONNECTIONS REQUIRED AND FOR THE REMOVAL OF EXISTING POWER SERVICES AND THE INSTALLATION OF NEW SERVICES. CONTRACTOR SHALL COMPLETE ALL PRELIMINARY WORK PRIOR TO ANY POWER OUTAGES.
4.05 CONTRACTOR SHALL COORDINATE, NOTIFY AND ARRANGE WITH THE CONTRACT ADMINISTRATOR, GENERAL CONTRACTOR AND CONTRACT ADMINISTRATOR ALL STAGING REQUIREMENTS TO MINIMIZE ALL POWER DISRUPTIONS AND ANY POWER OUTAGES NECESSARY TO COMPLETE THE WORK AT NO ADDITIONAL COST.
5.0 DISTRIBUTION EQUIPMENT
5.01 MAIN DISTRIBUTION CENTERS SHALL BE AS DETAILED ON THE DRAWINGS.
5.02 ALL ELEMENTS OF ELECTRIC POWER DISTRIBUTION SYSTEM SHALL BE RATED FOR PROPER VOLTAGE AND AVAILABLE FAULT LEVELS. OVER CURRENT PROTECTION DEVICES SHALL BE APPROVED AND MARKED AS BREAKERS OR BREAKER/FUSES COMBINATION IN SERIES. SHOP DRAWINGS SHALL CLEARLY IDENTIFY THE COMPLIANCE WITH THIS REQUIREMENT.
5.03 ENSURE THAT THE SERVICE EQUIPMENT BEARS EVIDENCE OF "SUITABLE FOR SERVICE ENTRANCE"
6.0 PANELBOARDS
6.01 LIGHTING AND POWER PANELS TO BE CIRCUIT BREAKER TYPE AND AS SHOWN ON DRAWINGS. PANELS SHALL CONTAIN THE FOLLOWING:
• PLUG-IN MOLDED CASE CIRCUIT BREAKERS QUICK-MAKE, QUICK-BREAK TYPE, FOR MANUAL AND AUTOMATIC OPERATION WITH TEMPERATURE COMPENSATION FOR 40C AMBIENT,
• MULTI-POLE BREAKERS TO HAVE COMMON TRIP (NO TIE HANDLE WILL BE ACCEPTED),
• BREAKERS USED FOR LIGHTS SHALL BE RATED FOR SWITCHING THAT DUTY,
• PANEL AND BREAKERS TO BE OF ONE MANUFACTURER. CIRCUIT BREAKERS SHALL BE INSTALLED IN PANELBOARDS BEFORE SHIPMENT,
• COPPER BUS WITH NEUTRAL OF SAME AMPERE RATING AS MAINS,
• DEAD FRONT TYPE,
• CODE GAUGE STEEL ENCLOSURE,
• TRIM WITH CONCEALED FRONT BOLTS AND HINGES AND DOOR,
• FINISHED FACTORY PAINT CSA GRAY 61 ENAMEL,
• FIT WITH PLASTIC COVERED TYPED DIRECTORY IN FRAME ON INSIDE OF DOOR COVER,
• DIRECTORY TO INDICATE CIRCUITS SERVED AS PER FINAL WIRING CONNECTIONS,
• IN ADDITION TO CSA REQUIREMENTS MANUFACTURERS NAMEPLATE SHALL SHOW FAULT CURRENT THAT THE PANEL INCLUDING BREAKERS HAVE BEEN BUILT TO WITHSTAND,
• DRIP SHIELDS TO ADEQUATELY DEFLECT WATER,
• PANELS SHALL MOUNT FLUSH IN STANDARD DEPTH WALL,
• TWO KEYS SHALL BE PROVIDED FOR EACH PANELBOARD AND ALL PANELBOARDS SHALL BE KEYED ALIKE FOR THE ENTIRE SITE.
6.02 PROVIDE LOCK-ON DEVICES ON BREAKERS FOR THE FOLLOWING SYSTEMS:
• FIRE ALARM SYSTEM
• INTRUSION ALARM SYSTEM
• EXIT LIGHTS
• NIGHT LIGHTS
ACCEPTABLE MANUFACTURER: SQUARE D OR CUTLER HAMMER.

7.0 CONDUIT, WIRE AND CONNECTIONS
7.01 DRAWINGS ARE SCHEMATIC ONLY.
7.01 TEST SYSTEM AND RECORD SAME FOR THE CONTRACT ADMINISTRATOR'S APPROVAL:
• VOLTAGE DROP
• PHASE BALANCE
• INSULATION RESISTANCE
• GROUND RESISTANCE
7.02 ALL WIRE AND CABLES SHALL BE COPPER, 98% CONDUCTIVITY, COLOUR CODED, NEW AND MARKED AS PER CODE REQUIREMENTS AND INSTALLED IN RACEWAYS. WIRES SHALL BE RATED MINIMUM 600V TYPE THW OR R90X-LINK. RW90 SHALL BE USED FOR UNDERGROUND RACEWAY INSTALLATIONS.
7.03 ALL WIRING SHALL BE SIZED AS PER CODE MINIMUM ALLOWABLE WIRE SIZE IS #12 AWG. USE MINIMUM #14 GTF FOR LIGHT FIXTURE CONNECTIONS. CONDUCTORS #6 AND LARGER TO BE STRANDED. ALL WIRES INSTALLED IN CONDUIT SHALL BE PULLED IN AT THE SAME TIME. ONLY APPROVED PULLING LUBRICANT SHALL BE USED. COLOUR CODE CONDUCTORS WITH DIFFERENT COLOURS FOR EACH PHASE, NEUTRAL, GROUND AND BOND WIRES AS REQUIRED BY CODE.
7.04 MAXIMUM VOLTAGE DROP SHALL BE AS PER CODE REQUIREMENTS.
7.05 ALL CONDUITS, CABLES AND WIRES, ETC., TO BE RATED EITHER FT1 FOR COMBUSTIBLE BUILDINGS, FT4 FOR NON COMBUSTIBLE BUILDINGS AND FT6 FOR FLENUM AND AS REQUIRED BY THE CODE.
7.06 ALL WIRE CONNECTIONS TO BE SECURELY FASTENED BY MEANS OF APPROVED CONNECTORS.
7.07 ALL NON-CURRENT CARRYING METAL PARTS SHALL BE GROUNDED AND/OR BONDED IN ACCORDANCE WITH THE CODE.
7.08 OPENINGS IN ALL ELECTRICAL METAL BOXES SHALL BE PUNCHED OR CUT. BURNING OF HOLES IS NOT PERMITTED.
7.09 INSTALL ALL CONDUITS, ETC. TO ACCOUNT FOR EXPANSION AND INSTALL APPROVED EXPANSION JOINTS WHERE REQUIRED.
7.10 RACEWAYS SHALL BE RIGID METAL CONDUITS, EMT OR FLEXIBLE CONDUIT AS SHOWN ON THE DRAWINGS. ALL CONDUIT INSTALLED IN CONCRETE FLOOR SHALL BE RIGID P.V.C. OR RIGID GALVANIZED STEEL CONDUIT C/W BOND CONDUCTOR.
7.11 EMT COUPLINGS AND CONNECTORS TO BE T & B STEEL, TAPE ALL JOINTS FOR ALL IN-SLAB INSTALLATIONS. STEEL SHALL BE USED ABOVE GRADE.
7.12 ALL CONDUITS MUST BE SECURELY FASTENED WITH APPROVED CLIPS AND SCREWS IN PARTITIONS AND CADDY CLIPS IN CEILING. NAILS ARE NOT ACCEPTED.
7.13 EXPOSED CONDUITS SHALL NOT BE ACCEPTED UNLESS OTHERWISE NOTED ON THE DRAWINGS WHERE CONDUITS ARE RUN EXPOSED ON EXISTING SURFACES PAINT TO MATCH WALL FINISH.
7.14 PROVIDE OUTLET BOXES FOR CONNECTING TO DEVICES AND EQUIPMENT AS REQUIRED OR AS INDICATED ON DRAWINGS. LOCATIONS OF OUTLETS MAY BE CHANGED UP TO 15-4" WITHOUT EXTRA CHARGE PROVIDED THAT INSTRUCTIONS FOR CHANGE ARE ISSUED BEFORE INSTALLATION OF THE OUTLET.
7.15 ALL CONDUIT, CONDUCTORS, WIRES, ETC. TO BE LABELED IN INDELIBLE INK AT PANEL AND JUNCTION BOXES INDICATING DEVICE FED, PANEL NAME AND CIRCUIT NUMBER.
8.0 FIRE STOPPING
8.01 ALL ELECTRICAL WIRES, CABLES, NONCOMBUSTIBLE RACEWAYS, OUTLET BOXES AND OTHER SIMILAR SERVICES THAT PENETRATE FIRE WALL, FIRE SEPARATION OR ASSEMBLY REQUIRED TO HAVE A FIRE RESISTANCE RATING OR FIRE SEPARATION, SHALL BE SEALED BY FIRE STOP SYSTEM WHICH HAS AN "F" AND/OR "FT" RATING NOT LESS THAN REQUIRED FIRE PROTECTION RATING OF FIRE SEPARATION.
8.02 CONTRACTOR SHALL ONLY USE LISTED MATERIALS AND METHODS.
8.03 SERVICE PENETRATION AND FIRE STOPPING OF SERVICE PENETRATION IN FIRE SEPARATION AND FIRE RATED ASSEMBLIES SHALL COMPLY WITH THE CURRENT BUILDING CODE.
8.04 PROVIDE FOR FIRE STOPS IN CONCEALED SPACES AS REQUIRED BY THE CURRENT BUILDING CODE.
8.05 ALL FIRE RESISTANCE RATED ASSEMBLIES (I.E. WALLS, CEILINGS, ETC.) WHICH CONTAIN PANEL BOARDS, BACK BOXES, RECESSED LIGHTING FIXTURES, ETC. SHALL BE C/W FIRE RATED BACKING TO MAINTAIN THE INTEGRITY OF THE FIRE RESISTANCE.
9.0 FINAL ACCEPTANCE
9.01 AS KGS GROUP IS REQUIRED TO GIVE PROFESSIONAL ASSURANCE THAT ALL ELECTRICAL SYSTEMS HAVE BEEN INSTALLED, TESTED AND VERIFIED IN ACCORDANCE WITH THE MANITOBA BUILDING CODE AND THE CANADIAN ELECTRICAL CODE, KGS REQUIRES THE FOLLOWING ITEMS FROM THE CONTRACTOR PRIOR TO ISSUANCE OF "LETTER OF PROFESSIONAL ASSURANCE" FOR BUILDING OCCUPANCY:
1. FINAL ELECTRICAL INSPECTION CERTIFICATE SIGNED BY THE ELECTRICAL INSPECTOR FOR THE PROJECT. A DECLARATION FORM SIGNED BY THE ELECTRICAL CONTRACTOR IS NOT ACCEPTABLE.

NOTES:

Table with 4 columns: No., REVISION/DESCRIPTION, BY, DATE. Row 0: ISSUED FOR CONSTRUCTION, 16/04/29.

Professional Engineer seal for C.L. SARARAS, Member 32618, dated APRIL 29, 2016. Includes fields for DRAWN, CHECKED, DESIGNED, APPROVED.

THE CITY OF WINNIPEG PLANNING, PROPERTY AND DEVELOPMENT DEPARTMENT MUNICIPAL ACCOMMODATIONS DIVISION 3-65 GARRY STREET, R3C 4K4

PROJECT: PROVENCHER OUTDOOR POOL POOL REHABILITATION

590 RUE LANGEVIN SHEET TITLE

ELECTRICAL SPECIFICATIONS

Table with 3 columns: SCALE (N.T.S.), PROJECT No: 15-0107-018, SHEET No: E02

