# DIV.26 - ELECTRICAL SPECIFICATIONS

## 1.0 SCOPE OF WORK

.01 REPLACE ALL EXISTING FLUORESCENT LUMINIARES IDENTIFIED ON THE PLANS WITH NEW LED LUMINAIRES AND EXTEND WIRING AS REQUIRED. EXISTING LIGHTING CONTROLS TO REMAIN.

.02 DISCONNECTED LUMINAIRES SHALL BE LEGALLY DISPOSED OF OFF-SITE.

.03 PROVIDE DAYLIGHT HARVESTING CONTROLS FOR THE FOURTH FLOOR SKYLIGHT LUMINAIRES.

.04 COORDINATE EXACT PHASING WITH CITY, CONTRACT ADMINISTRATOR AND FLOORING CONTRACTOR. SHELVING WILL BE MOVED BY OTHERS.

.05 PROVIDE WIRING AND CONNECTIONS AS REQUIRED TO SUIT SITE CONDITIONS.

.06 PAINT ALL NEW EXPOSED WIRING AND CONDUIT TO MATCH EXISTING SURFACES. ACW90 MAY BE USED IN LIEU OF PAINTING WHERE THE CEILING IS BLACK.

## 2.0 GENERAL PROVISIONS

.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. THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE WHERE THE CONTRACT DOCUMENTS EXCEED CODE, UTILITY OR RECOGNIZED STANDARDS REQUIREMENTS.

.02 THE CONTRACT SHALL INCLUDE FURNISHING 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 A COMPLETE AND OPERATING SYSTEM AS INDICATED ON THE DRAWINGS OR SPECIFIED HEREIN. AND ITS DELIVERY TO THE CITY COMPLETE IN ALL RESPECTS AND READY FOR USE.

.03 ALL ELECTRICAL WORK AND MATERIAL SHALL CONFORM WITH THE CURRENT RELEVANT NBC, CEC, LOCAL BY-LAWS AND TO THE SATISFACTION OF THE AHJ AND CONTRACT ADMINISTRATOR.

.04 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 EC ACKNOWLEDGES A SITE WALK-THROUGH HAS BEEN COMPLETED AND THE EXISTING CONDITIONS WERE ACCEPTED.

.05 APPLY FOR AND INCLUDE THE ASSOCIATED COSTS FOR ALL PERMITS, SERVICES, FEES AND INSPECTIONS IN THE BID QUOTE.

.06 OBTAIN APPROVALS FROM THE AHJ AND NOTIFY THE CONTRACT ADMINISTRATOR OF ANY CHANGES REQUESTED BY THE AHJ PRIOR TO THE EXECUTION OF THE REQUEST.

.07 COMPLY WITH ALL DEPARTMENT OF LABOUR, WORKPLACE AND HEALTH REQUIREMENTS AT ALL TIMES.

.08 WHERE DOUBT EXISTS AS TO THE MEANING OF THE DRAWINGS OR SPECIFICATIONS. IT IS THE RESPONSIBILITY OF THE EC TO OBTAIN CLARIFICATION PRIOR TO THE BID.

.09 ALL MATERIALS USED SHALL BE NEW, OF THE TYPE SPECIFIED, AND APPROVED BY CERTIFICATION AGENCY RECOGNIZED BY THE AHJ, AND FREE FROM DEFECTS.

.10 EXECUTE WORK IN A FIRST-CLASS AND WORKMANLIKE MANNER, TO PRESENT A NEAT APPEARANCE.

.11 CLEAN ALL EQUIPMENT DURING CONSTRUCTION AND AGAIN ON COMPLETION OF THE CONTRACT. ALL SURPLUS MATERIALS, CUTTINGS, PACKAGING AND DEBRIS SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED.

.12 BUILDING ENVELOPE PENETRATIONS FOR ANY ELECTRICAL COMPONENTS (I.E. CONDUIT, BOXES, CABLES, ETC.) SHALL BE EXECUTED SO INTEGRITY OF ASSEMBLY IS NOT COMPROMISED. PROVIDE ADEQUATE SEALING, COVERS, GASKETS, CAPS, ETC. COORDINATE WORK AND REQUIREMENTS WITH ALL OTHER RELEVANT CONTRACTORS. ARCHITECT, ENVELOPE CONSULTANT AND OTHER RELEVANT CONSULTANTS AND CONTRACTORS.

.13 LOCATION OF DEVICES MAY BE ALTERED BY THE CONTRACT ADMINISTRATOR WITHOUT CHARGE TO CITY, PROVIDED THE CHANGE IS MADE BEFORE FINAL INSTALLATION AND DOES NOT NECESSITATE ADDITIONAL MATERIALS. RECORD CHANGES ON RECORD DRAWINGS.

.14 INSTALL ALL EQUIPMENT IN ACCORDANCE WITH THE AHJ, CEC AND MANUFACTURER'S INSTRUCTIONS. EC SHALL COORDINATE WITH OTHER TRADES TO ENSURE PROPER INSTALLATION.

.15 THE EC SHALL KEEP A SET OF FULL SIZED RECORD DRAWINGS ON WHICH THE EC SHALL RECORD ALL ADDITIONS OR DEVIATIONS FROM THE CONTRACT DOCUMENTS INCLUDING ALL CHANGES COVERED BY ADDENDA, CHANGE ORDERS, FIELD CHANGES, SITE CONDITIONS, ETC. A SET OF DRAWINGS SHALL BE UTILIZED FOR EACH SYSTEM AND THE EC SHALL OBTAIN PRINTS AS REQUIRED. DRAWINGS TO INCLUDE LOCATIONS OF ALL JUNCTION AND PULL BOXES, ROUTING OF FEEDERS AND CONDUITS, AND CHANGES TO CIRCUIT NUMBERS.

ALL PCN COSTING SHALL BE REVIEWED BY THE CONTRACT ADMINISTRATOR USING PRICING STANDARDS BASED ON THE CURRENT EDITION OF RSMEANS "ELECTRICAL CHANGE ORDER COST DATA" PRICING GUIDE. THIS GUIDE SHALL BE THE MAXIMUM COST ALLOWED. .17 FINAL ACCEPTANCE

AS KGS GROUP IS REQUIRED TO GIVE PROFESSIONAL ASSURANCE THAT ALL ELECTRICAL SYSTEMS HAVE BEEN INSTALLED. TESTED AND VERIFIED IN ACCORDANCE WITH THE NBC AND THE CEC, KGS REQUIRES THE FOLLOWING ITEMS FROM THE EC PRIOR TO ISSUANCE OF "LETTER OF PROFESSIONAL ASSURANCE" FOR BUILDING OCCUPANCY:

 FINAL ELECTRICAL INSPECTION CERTIFICATE SIGNED BY THE ELECTRICAL INSPECTOR FOR THE PROJECT. A DECLARATION FORM SIGNED BY THE EC IS NOT ACCEPTABLE.

## 3.0 DEFINITIONS

THE FOLLOWING ARE DEFINITIONS OF TERMS AND EXPRESSIONS USED IN THE 01 ELECTRICAL SPECIFICATION AND DRAWINGS:

- AHJ AUTHORITY HAVING JURISDICTION
- EC ELECTRICAL SUB-CONTRACTOR
- 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).
- CEC MEANS CANADIAN ELECTRICAL CODE OR LOCAL CODE IN FORCE AT PROJECT LOCATION.
- NBC MEANS NATIONAL BUILDING CODE OR LOCAL CODE IN FORCE AT PROJECT LOCATION.
- CODE MEANS ALL CODES, REGULATIONS AND REQUIREMENTS INCLUDING BUT NOT LIMITED TO THE CURRENT RELEVANT NBC, CEC AND LOCAL BY-LAWS.
- 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 LEGALLY DISPOSE OF DELETED PRODUCTS OFF-SITE UNLESS OTHERWISE INSTRUCTED BY THE CONTRACT ADMINISTRATOR OR CITY, HOWEVER THE CITY RESERVES FIRST RIGHTS TO SALVAGE;
- 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 EC. UNLESS OTHERWISE NOTED:

## 4.0 SUBMITTALS

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.

.02 MATERIALS AND EQUIPMENT LISTED ARE PREFERRED. THE EC MAY, HOWEVER, SUBMIT ALTERNATES TO THE CONTRACT ADMINISTRATOR TO BE APPROVED AS EQUALS AT LEAST FIVE (5) BUSINESS DAYS PRIOR TO CLOSING OF THE BID.

.03 ALL REQUEST FOR LUMINAIRE EQUALS SHALL BE C/W CUTSHEETS. ONLY ONE REQUEST WILL BE CONSIDERED FROM EACH SUPPLIER. IF REJECTED, FOR ANY REASON, NO SUBSTITUTES FROM THE SAME SUPPLIER WILL BE REVIEWED.

.04 SHOP DRAWINGS SHALL BE SUBMITTED TO THE CONTRACT ADMINISTRATOR FOR REVIEW AND APPROVAL BEFORE MANUFACTURING AND INSTALLATION CAN PROCEED.

.05 SUBMIT THE FOLLOWING CLOSE-OUT SUBMITTALS TO THE CONTRACT ADMINISTRATOR UPON COMPLETION OF THE CONTRACT:

- ONE (1) O&M MANUAL HARDCOPY AND ONE (1) DIGITAL COPY IN DVD FORMAT. O&M MANUALS SHALL CONTAIN COPIES OF ALL FINAL SHOP DRAWINGS, WARRANTY LETTER, AS-BUILTS AND THE CLOSED ELECTRICAL PERMIT. THE HARDCOPY SHALL BE SUBMITTED IN A D-RING BINDER C/W COVERPAGE, TABLE OF CONTENTS, DVD SLEEVE AND LABELED TABBED DIVIDERS FOR ALL SECTIONS. THE DIGITAL COPY SHALL BE LABELED AND ORGANIZED TO MATCH THE HARDCOPY. THE FILES IN THE DIGITAL COPY SHALL BE ORGANIZED WITHIN SUBFOLDERS SIMILAR TO THE HARDCOPY.
- A COPY OF THE 1 YEAR GUARANTEE LETTER.

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.

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(PST & RST).

## 5.0 COORDINATION

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COORDINATE AS REQUIRED WITH THE CITY DURING THE DEMOLITION AND CONSTRUCTION PHASES OF THE WORK.

COORDINATE, NOTIFY AND ARRANGE WITH THE CITY, GC AND CONTRACT ADMINISTRATOR ALL STAGING REQUIREMENTS TO MINIMIZE THE DISRUPTION OF NORMAL OPERATIONS.

#### 6.0 CONDUIT, WIRE, AND CONNECTIONS

.01 PROVIDE ALL CONDUIT, WIRING AND CONNECTIONS FOR A CODE COMPLIANT, COMPLETE AND OPERATIONAL SYSTEM.

.02 ALL WIRING SHALL BE INSTALLED IN EMT CONDUIT (MIN. 21MMØ) UNLESS OTHERWISE NOTED ON THE DRAWINGS OR SPECIFICATION.

.03 ALL WIRE AND CABLE SHALL BE COPPER, 98% CONDUCTIVITY, COLOUR CODED, NEW AND MARKED AS PER CEC REQUIREMENTS. WIRES SHALL BE RW90 TYPE RATED MINIMUM 600V. RWU90 SHALL BE USED FOR UNDERGROUND RACEWAY INSTALLATIONS.

.04 ALL WIRING SHALL BE SIZED AS PER CODE. MINIMUM ALLOWABLE WIRE SIZE IS #12 AWG. CONDUCTORS #8 AND LARGER SHALL BE STRANDED. ALL WIRING INSTALLED IN CONDUIT SHALL BE PULLED IN AT THE SAME TIME WITH APPROVED PULLING LUBRICANT

.05 AC90 TYPE ARMORED CABLE WITH SCREW TYPE CONNECTORS SHALL BE USED FOR CONNECTIONS FROM CONDUIT SYSTEMS TO LUMINAIRES IN ACCESSIBLE CEILINGS.

.06 ALL CABLES AND WIRES, ETC., FT4 FOR NON-COMBUSTIBLE BUILDINGS AND FT6 FOR PLENUM AND AS REQUIRED BY THE CODE.

WIRING DEVICES IN FINISHED AREAS SHALL BE RECESSED MOUNTED AND FOR ALL UNFINISHED AREAS MAY BE SURFACE MOUNTED. EXPOSED CONDUITS SHALL NOT BE ACCEPTED UNLESS OTHERWISE NOTED ON THE DRAWINGS. WHERE CONDUITS RUN EXPOSED ON EXISTING SURFACES PAINT TO MATCH WALL FINISH.

.08 ALL CONDUITS AND ARMORED CABLES SHALL BE SECURELY FASTENED WITH APPROVED CLIPS. SCREWS IN PARTITIONS AND CADDY CLIPS IN CEILING. NAILS ARE NOT ACCEPTED.

.09 SURFACE MOUNTED CONDUITS AND/OR 1J2R2NG IN FINISHED AREAS SHALL BE PAINTED OUT TO MATCH THE EXISTING SURFACE.

#### 7.0 WIRING DEVICES

PROVIDE LINE VOLTAGE CONTROLS C/W SUITABLE DEVICE BOXES AND COVER PLATES WHERE INDICATED ON THE PLANS.

#### 8.0 LUMINAIRES, LAMPS AND DRIVERS

SUPPLY LUMINAIRES AS DETAILED IN LUMINAIRE SCHEDULE AND INSTALL LUMINAIRES AS INDICATED ON THE PLANS AND SPECIFICATIONS. LUMINAIRES SHALL BE C/W LAMPS, DRIVERS, DIFFUSERS, HANGERS, GASKETS, END CAPS CONNECTORS, CANOPIES AND SUPPORTS FOR A COMPLETE AND OPERATIONAL SYSTEM. FINAL LAYOUT OF LUMINAIRES SHALL BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS AND BE MADE AFTER DUCTING, PIPING, AND MILLWORK LAYOUTS ARE COMPLETE. ALL LUMINAIRES TO BE ADEQUATELY ATTACHED DIRECTLY TO THE BUILDING STRUCTURE.

.02 ALL FIRE RESISTANCE RATED ASSEMBLIES (I.E. WALLS, CEILINGS, ETC.) WHICH CONTAIN RECESSED LIGHTING FIXTURES SHALL BE C/W FIRE RATED BACKING TO MAINTAIN THE INTEGRITY OF THE FIRE RESISTANCE.

### 9.0 LIGHTING CONTROLS

.01 REFER TO DRAWINGS. ALL 0-10V DC WIRING SHALL BE #16AWG CU. MINIMUM AND NOT EXCEED 300'

#### **10.0 SUPPLEMENTARY COMPONENTS**

SUPPLY, INSTALL, WIRE, CONNECT, AND COMMISSION THE SUPPLEMENTARY COMPONENTS (SPARE PARTS) LISTED BELOW AS DIRECTED BY THE ENGINEER. SUPPLEMENTARY COMPONENTS MAY BE USED DURING CONSTRUCTION FOR DESIGN CHANGES TO CONTRACT DOCUMENTS. THE EC SHALL INCLUDE ALL COSTS FOR THE SUPPLEMENTARY COMPONENTS IN THE BASE CONTRACT AND ALLOW FOR THE INSTALLATION OF SUPPLEMENTARY COMPONENTS AT THE COMPLETION STAGE OF THE PROJECT, I.E.:

- AFTER THE CEILING TILES HAVE BEEN INSTALLED.
- AFTER THE WALLS HAVE BEEN PAINTED.
- AFTER THE FLOOR FINISHES HAVE BEEN COMPLETED.
- ALLOW FOR RESTORATION OF FINISHES AS MAY BE NECESSARY, ETC.

.02 ALL SUPPLEMENTARY COMPONENTS SHALL INCLUDE ALL WIRING, CONDUIT, CONNECTORS, MATERIAL, ETC. AS REQUIRED TO INSTALL EACH ITEM. THE INSTALLED COST ALLOWANCE FOR SUPPLEMENTARY COMPONENTS SHALL INCLUDE, BUT NOT BE LIMITED TO COSTS SUCH AS:

 BOTH DIRECT AND INDIRECT LABOUR INCLUDING JOURNEYMAN, APPRENTICE (1ST, 2ND & 3RD YEAR), FOREMAN, PROJECT SUPERVISOR, ESTIMATOR.

INCIDENTAL LABOUR INCLUDING JOB SETUP, MANAGEMENT, INSTALLATION DRAWINGS, JOB SCHEDULING, MATERIAL PURCHASING, TESTING/COMMISSIONING, O & M MANUALS. AS-BUILT DRAWINGS.

SUBCONTRACTORS AS REQUIRED INCLUDING FIRE STOPPING, CORING, DRILLING & X-RAY. GENERAL EXPENSES INCLUDING CONSUMABLES & TOOLS.

FEES/LEGAL INCLUDING BONDING, INSURANCE, PERMITS, OVERHEAD, MARKUP AND TAXES

THE EC SHALL INCLUDE THE FOLLOWING SUPPLEMENTARY CONDITIONS IN THEIR

#### BASE BID:

- QUANTITY OF EIGHT (8) LUMINAIRES OF TYPE A.
- QUANTITY OF FOUR (4) LUMINAIRES OF TYPE B.

.04 TURN OVER ALL UNUSED SUPPLEMENTARY COMPONENTS TO THE CITY UPON SUBSTANTIAL PERFORMANCE AND OBTAIN A SIGNED RECEIPT. NO CREDIT FOR UNUSED LABOUR WILL BE REQUESTED.

#### NOTES:

THESE DRAWINGS SHALL NOT BE SCALED.

THE CONTRACTOR SHALL VISIT THE SITE AND SATISFY ONESELF ALL DIMENSIONS, DATUM, AND DETAILED INFORMATION SHOWN ARE CORRECT.

THE CONTRACTOR IS TO REVIEW AND COORDINATE ALL ARCHITECTURAL, MECHANICAL, ELECTRICAL AND STRUCTURAL DRAWINGS FOR ADDITIONAL OPENINGS THROUGH FLOORS WALLS, AND CEILINGS FOR DUCT, PIPE & ELECTRICAL RISERS AND ALL OPENINGS NOT SHOW ON DRAWINGS.

ALL OPENINGS THROUGH FIRE ASSEMBLIES ARE TO BE FIRE STOPPED AND SEALED WITH ULC APPROVED FIRE STOPPING TO MAINTAIN THE INTEGRITY OF THE FIRE SEPARATION, AND PROVIDE A SMOKE-TIGHT BARRIER.

ALL PRODUCTS AND MATERIALS TO BE USED AND INSTALLED SHALL CONFORM WITH MANUFACTURER'S SPECIFICATIONS & APPLICABLE CODES.

THE CONTRACTOR SHALL BE RESPONSIBLE TO PATCH AND MAKE GOOD ALL EXISTING CONSTRUCTION AFFECTED BY THE REMOVAL OF ALL ITEMS FORMING THE PART OF THE **RENOVATION WORK** 

WHERE NEW FLOORING AND BASE IS TO BE INSTALLED IN EXISTING AREAS (REFER TO FLOOF PLAN AND ROOM SCHEDULE) THE EXISTING FLOORING SURFACE AND BASE MUST BE REMOVE UNLESS OTHERWISE NOTED. ALL FLOOR SURFACES SHALL BE PREPARED IN ACCORDANCE TO MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION OF NEW FLOOR.

WHERE PAINTING OF EXISTING WALLS IS INDICATED ON THE ROOM SCHEDULE. THESE WALLS MUST BE CLEANED OF ANY EXISTING WALL COVERING, PATCHED & PREPARED TO ACCEPT NE MATERIAL, UNLESS OTHERWISE NOTED.

> ENGINEERS GEOSCIENTISTS MANITOBA Certificate of Authorization KGS Group No. 245

DATE
22.01.04
22.02.16

DRA	RAH <b>WN</b>	CHECKED	DAL	DESIGNED	CLS	APPROVED			
DATI	DATE 2021.09.08 USER APPROVAL								
	CITY OF WINNIPEG ASSETS & PROJECT MANAGEMENT DEPARTMENT MUNICIPAL ACCOMMODATIONS DIVISION 4TH FLOOR, 185 KING STREET WINNIPEG, MANITOBA R3B 1J1								
	TENDER 139-2022								
	INTERIOR RENOVATIONS FOR MILLENNIUM LIBRARY 251 DONALD ST., WINNIPEG, MB								
SHE	ET TITLE								
	SPECIFICATIONS								
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DRAWING SHEET SIZE: A1 (841mm x 594mm) PLOT 1:1