## BASE BUILDING CORE DRILLING REQUIREMENTS

1. CHECK WITH BUILDING MANAGEMENT PRIOR TO CORE DRILLING AND CUTTING OF FLOOR SLAB TO CONFIRM BUILDING REQUIREMENTS AND POLICIES.
2. PERFORM CORE DRILLING AFTER REGULAR WORKING HOURS.
3. NO REINFORCING STEEL SHALL BE CUT OR DISTURBED IN ANY WAY BY THE CORING OPERATION.
4. DO NOT CORE DRILL OR CUT THROUGH COLUMN CAPITALS.
5. ALL REINFORCING, CONDUITS AND OTHER EMBEDMENTS IN THE SLAB SHALL BE LOCATED BY GROUND PENETRATING RADAR AND RADIO DETECTION SCANNING PRIOR TO DRILLING OR CUTTING.
6. ALL CORE DRILLS THROUGH SLABS MUST BE EFFECTIVELY SEALED TO MAINTAIN THE FIRE RATED SEPARATION.
7. ALL COSTS FOR DRILLING, SCANNING AND FIRE STOPPING SHALL BE INCLUDED IN THE ELECTRICAL TENDER.
8. ALL CORE DRILLING IS AT THE CONTRACTOR'S RISK WITH RESPECT TO REPAIR OF ANY IMBEDED SERVICES THAT MAY BE CUT.

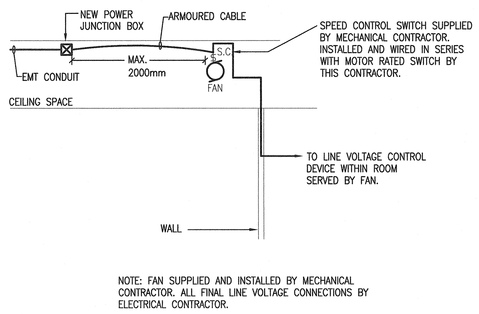
REVISE TYPE "A" AND DELETE TYPE "G3", "Q", "P" AND "H"

### LIGHTING FIXTURE SCHEDULE

| TYPE | DESCRIPTION | LAMPS | LED DIMMING DRIVER | DIMMING RANGE | VOLT | MOUNTING | REMARKS |
|---|---|---|---|---|---|---|---|
| A | 1220mm x 305mm BASE BUILDING FLUORESCENT FIXTURE | 1-32W T8 | ---------- | ---------- | 347 | RECESSED T-BAR | - ACRYLIC LENS<br>- PROVIDE NEW TO MATCH EXISTING |
| B | 1220mm GEOMETRIC LIGHTING DIRECT/INDIRECT LED FIXTURE, EXTRUDED ALUMINUM HOUSING, DIE CAST ALUMINUM END CAPS AND HANGERS. WHITE POWDER COATED SHEET STEEL REFLECTORS, EXTRUDED ACRYLIC LENS. | 24W LED PER 305mm | 0-10V | 5-100% | 347 | SUSPENDED T-BAR | - 750 LUMENS UP PER 305mm, 300 LUMENS DOWN PER 305mm, 3500°K, FLUSH LENS<br>- 90 CRI, WHITE FINISH, MAX FIXTURE HEIGHT OF 76mm |
| B1 | 1830mm GEOMETRIC LIGHTING DIRECT/INDIRECT LED FIXTURE, EXTRUDED ALUMINUM HOUSING, DIE CAST ALUMINUM END CAPS AND HANGERS. WHITE POWDER COATED SHEET STEEL REFLECTORS, EXTRUDED ACRYLIC LENS. | 12W LED PER 305mm | 0-10V | 5-100% | 347 | SUSPENDED T-BAR | - 750 LUMENS UP PER 305mm, 300 LUMENS DOWN PER 305mm, 3500°K, FLUSH LENS<br>- 90 CRI, WHITE FINISH, MAX FIXTURE HEIGHT OF 76mm |
| B2 | 3660mm GEOMETRIC LIGHTING DIRECT/INDIRECT LED FIXTURE, EXTRUDED ALUMINUM HOUSING, DIE CAST ALUMINUM END CAPS AND HANGERS. WHITE POWDER COATED SHEET STEEL REFLECTORS, EXTRUDED ACRYLIC LENS. | 12W LED PER 305mm | 0-10V | 5-100% | 347 | SUSPENDED T-BAR | - 750 LUMENS UP PER 305mm, 300 LUMENS DOWN PER 305mm, 3500°K, FLUSH LENS<br>- 90 CRI, WHITE FINISH, MAX FIXTURE HEIGHT OF 76mm |
| C | LED COVE FIXTURE, EXTRUDED ALUMINUM HOUSING, STEEL CONTRUCTION MOUNTING CLIPS. PROVIDE LENGTH AS SHOWN ON DRAWINGS. | 24W LED PER 305mm | ---------- | ---------- | 347 | SURFACE COVE | - FROSTED LENS, 84+ CRI, "PRO-PLUS" LED STYLE,<br>- 3500°K, 318 LUMENS PER 305mm, WHITE FINISH<br>- MAX FIXTURE HEIGHT OF 19mm |
| D | 103mm SPECIFICATION GRADE LED LENSED DOWNLIGHT C/W REMOTE PHOSPHOR TECHNOLOGY, ONE-PIECE 22 GUAGE NON-CORROSIVE STEEL PLAFIORM, ALUMINUM REFLECTOR. | 19W LED | ---------- | ---------- | 120 | RECESSED T-BAR | - 1500 LUMENS, 3500°K, DIFFUSE LENS, 90 CRI, WHITE FINISH<br>- C/W 347-120 STEPDOWN TRANSFORMER AND ALL REQUIRED POWER PACKS FOR DIMMING CONTROLS SHOWN ON PLANS<br>- MAX FIXTURE HEIGHT OF 152mm |
| F | 634mm LED INDIRECT PENDANT, EXTRUDED ALUMINUM HOUSING, DIE CAST ALUMINUM END CAPS AND HANGERS. EXTRUDED ACRYLIC LENSES AND REFLECTORS. | 42W LED | 0-10V | 2-100% | 120 | SUSPENDED T-BAR | - 700 LUMENS PER 305mm, 3500°K, MICRO LENS<br>- 80 CRI, WHITE FINISH<br>- MAX FIXTURE HEIGHT OF 50mm |
| F1 | 942mm LED INDIRECT PENDANT, EXTRUDED ALUMINUM HOUSING, DIE CAST ALUMINUM END CAPS AND HANGERS. EXTRUDED ACRYLIC LENSES AND REFLECTORS. | 63W LED | 0-10V | 2-100% | 120 | SUSPENDED T-BAR | - 700 LUMENS PER 305mm, 3500°K, MICRO LENS<br>- 80 CRI, WHITE FINISH<br>- MAX FIXTURE HEIGHT OF 50mm |
| G1 | LARGE RECESSED LED TRIANGLE FIXTURE, EXTRUDED ALUMINUM HOUSING, DIE CAST ALUMINUM END CAPS AND HANGERS. EXTRUDED ACRYLIC LENSES AND REFLECTORS. | 7W LED PER 305mm | 0-10V | 2-100% | 120 | SUSPENDED DRYWALL | - 700 LUMENS PER 305mm, 3500°K, MICRO LENS<br>- 80 CRI, WHITE FINISH<br>- MAX FIXTURE HEIGHT OF 50mm |
| G2 | MEDIUM RECESSED LED TRIANGLE FIXTURE, EXTRUDED ALUMINUM HOUSING, DIE CAST ALUMINUM END CAPS AND HANGERS. EXTRUDED ACRYLIC LENSES AND REFLECTORS. | 7W LED PER 305mm | 0-10V | 2-100% | 120 | SUSPENDED DRYWALL | - 700 LUMENS PER 305mm, 3500°K, MICRO LENS<br>- 80 CRI, WHITE FINISH<br>- MAX FIXTURE HEIGHT OF 50mm |
| J | 86mm LED DOWNLIGHT, CAST ALUMINUM CONSTRUCTION C/W POWDER COATED FINISH AND GALVANIZED STEEL HOUSING. | 7W LED | 0-10V | 1-100% | 120 | RECESSED T-BAR | - 1000 LUMENS, 3500°K, 60° REFLECTOR<br>- 83+ CRI, WHITE FINISH, MAX FIXTURE HEIGHT OF 216mm |
| K | 154mm LED RETROFIT DOWNLIGHT, HIGH GRADE SPUN ALUMINUM REFLECTOR AND EXTRUDED ALUMINUM HEAT SINK. | 23W LED | ---------- | ---------- | 347 | RECESSED DRYWALL | - 1348 LUMENS, 3500°K, WIDE BEAM ANGLE, SEMI-SPECULAR REFLECTOR,<br>- 85 CRI, WHITE FINISH, MAX FIXTURE HEIGHT OF 125mm |
| R | DOWNLIGHT FIXTURE | 1-28W CFL | ---------- | ---------- | 347 | RECESSED T-BAR | - TO BE REMOVED |
| S | 610mm X 610mm LAY-IN FLUORESCENT FIXTURE | 1 - 28W T8U | ---------- | ---------- | 347 | RECESSED DRYWALL | - TO BE REMOVED |
| T | TRACK LIGHT FIXTURE | 1-35W MR16 | ---------- | ---------- | 120 | SURFACE T-BAR | - TO BE REMOVED |
| U | 1220mm FLUORESCENT STRIP LIGHT FIXTURE | 1-32W T8 | ---------- | ---------- | 347 | SURFACE | - TO BE REMOVED |
| V | FLUORESCENT COVE LIGHT FIXTURE | 1-32W T8 | ---------- | ---------- | 347 | SURFACE COVE | - TO BE REMOVED |
| W | WALL MOUNTED FIXTURE | 1-35W MR16 | ---------- | ---------- | 120 | SURFACE WALL | - TO BE REMOVED |
| | | | | | | | |

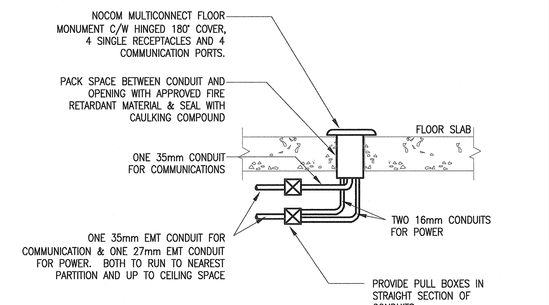
NOTES:
1. 0-10V DENOTES 0-10V DIMMING CONTROL

REVISE

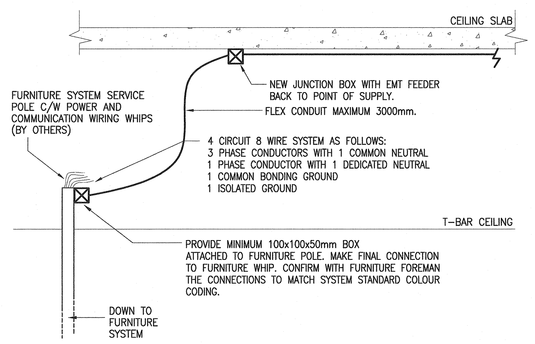



NOTE: FAN SUPPLIED AND INSTALLED BY MECHANICAL CONTRACTOR. ALL FINAL LINE VOLTAGE CONNECTIONS BY ELECTRICAL CONTRACTOR.

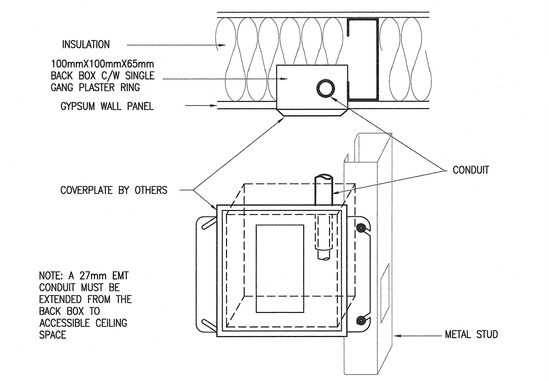
1 / E-1 FAN CONNECTION DETAIL
N.T.S.



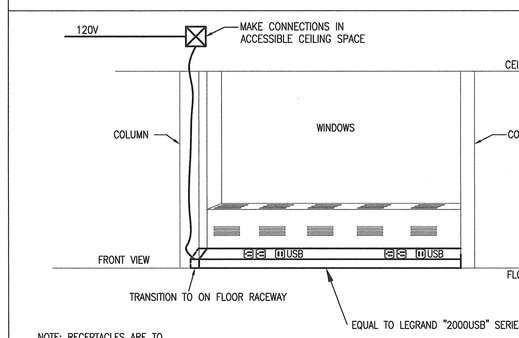

2 / E-1 NOCOM MULTICONNECT INSTALLATION
N.T.S.




3 / E-1 FURNITURE POLE CONNECTION DETAIL
N.T.S.



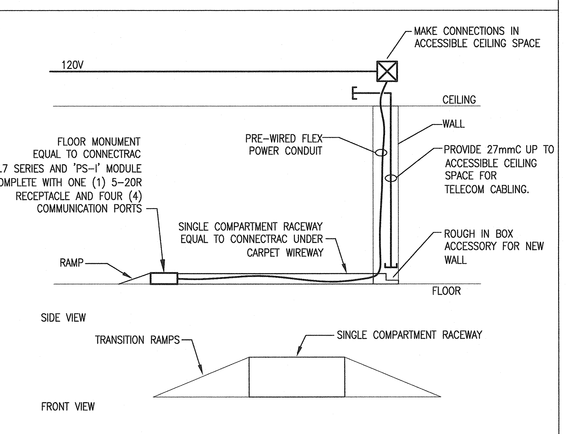

4 / E-1 TELEPHONE, AND DATA CONDUITS IN STUD WALL
N.T.S.




NOTE: RECEPTACLES ARE TO BE INSTALLED FACING UP.

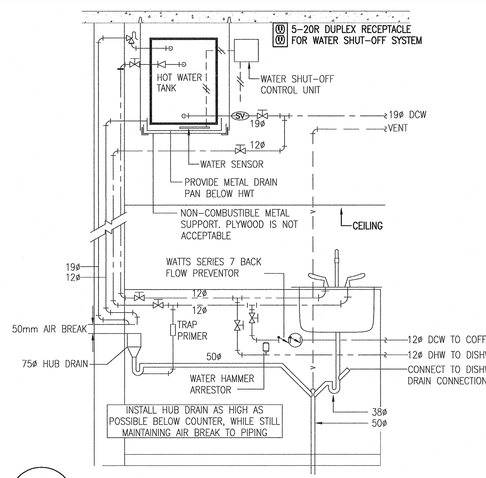
DENOTED BY: ON PLANS

5 / E-1 SINGLE CHANNEL RACEWAY ON FLOOR IN FRONT OF INDUCTION UNITS
NTS

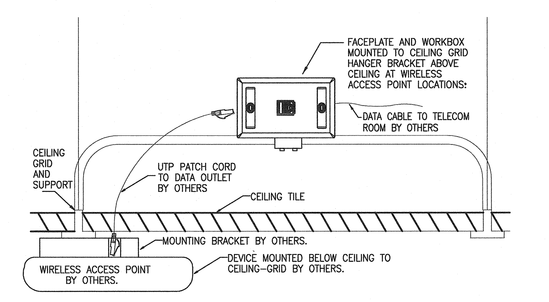



DENOTED BY: ON PLANS

6 / E-1 CONNECTRAC RACEWAY – COLLABORATION AREA
N.T.S.




7 / E-1 DOMESTIC HOT WATER TANK PIPING DETAIL – CEILING MOUNTED
N.T.S.




DENOTED BY: WAP

8 / E-1 WIRELESS ACCESS POINT MOUNTING
NTS

| REMOVE | EXISTING TO REMAIN | NEW AND/OR RELOCATED | ELECTRICAL LEGEND |
|---|---|---|---|
| | | A | 610mm x 610mm FLUORESCENT FIXTURE. LETTER DENOTES TYPE. |
| | | B | 305mm x 1220mm LIGHT FIXTURE. LETTER DENOTES TYPE. |
| | | C | 305mm x 1220mm LIGHT FIXTURE ON UNSWITCHED EMERGENCY LIGHTING CIRCUIT. LETTER DENOTES TYPE. |
| | | D | STRIP FIXTURE. LENGTH AS SHOWN. LETTER DENOTES TYPE. |
| | | E | COVE FIXTURE. LENGTH AS SHOWN. LETTER DENOTES TYPE. |
| | | F | SUSPENDED LED FIXTURE. LETTER DENOTES TYPE. |
| | | G | LED FIXTURE. SIZE AS SHOWN. LETTER DENOTES TYPE. |
| | | H | TRACK LIGHT FIXTURE, LETTER DENOTES TYPE. |
| | | J | DOWNLIGHT FIXTURE, LETTER DENOTES TYPE. |
| | | J | DOWNLIGHT FIXTURE ON UNSWITCHED EMERGENCY LIGHTING CIRCUIT, LETTER DENOTES TYPE. |
| | | Q | WALL MOUNTED FIXTURE, LETTER DENOTES TYPE. |
| | | | EXIT LIGHT, CEILING MOUNTED, C/W DIRECTIONAL ARROWS AS NOTED. |
| | | | DIMMER SWITCH (OS = OCCUPANCY SENSOR). |
| | | | LOW VOLTAGE OCCUPANCY SENSOR. ADD |
| | | | 20A, 1P, 347V LIGHT SWITCH. (3 = 3-WAY) |
| | | | 20A, 1P, 120V LIGHT SWITCH. |
| | | | LOW VOLTAGE DUAL TECHNOLOGY OCCUPANCY SENSOR, CEILING MOUNTED. |
| | | | LIGHTING RELAY PANEL. |
| | | | FIRE ALARM PULL STATION. |
| | | | FIRE ALARM SPEAKER. CEILING MOUNTED TYPE. |
| | | | COMBINATION FIRE ALARM SPEAKER/STROBE. CEILING MOUNTED TYPE. |
| | | | 15A, 120V, DUPLEX RECEPTACLE. LINE ACROSS INDICATES ELEVATED HEIGHT. |
| | | | 15A, 120V, DUPLEX RECEPTACLE ON DEDICATED CIRCUIT. LINE ACROSS INDICATES ELEVATED HEIGHT. |
| | | | SPECIAL RECEPTACLE AS NOTED. LINE ACROSS INDICATES ELEVATED HEIGHT. |
| | | | QUADPLEX, 15A, 120V, TWO (2) DUPLEX RECEPTACLES UNDER COMMON COVER PLATE. |
| | | | 15A, 120V, CEILING MOUNTED DUPLEX RECEPTACLE. |
| | | PF | FURNITURE POLE FEED CONNECTION. |
| | | | ALUMINUM TWO (2) COMPARTMENT POWER AND COMMUNICATION SERVICE POLE C/W TWO (2) DUPLEX RECEPTACLES. |
| | | | HARD WIRED CONNECTION TO EQUIPMENT. |
| | | | 15A, 120V, FLOOR MOUNTED DUPLEX RECEPTACLE. |
| | | | COMBINATION FLOOR BOX. |
| | | | SURFACE MOUNTED ELECTRICAL PANEL. |
| | | | TRANSFORMER (RATED AS SHOWN). |
| | | | JUNCTION BOX. |
| | | MP | MOTOR CONNECTION. |
| | | $UVD | UP/DOWN 'ROCKER' STYLE SWITCH. |
| | | $SC | SPEED CONTROL. |
| | | $M | MOTOR RATED SWITCH. |
| | | | COMBINATION TELEPHONE/DATA OUTLET. |
| | | | TV OUTLET. |
| | | CA | CARD ACCESS (CONDUIT/BACK BOX ONLY, DEVICES AND WIRING BY OTHERS). |
| | | DC | DOOR CONTACT (CONDUIT/BACK BOX ONLY, DEVICES AND WIRING BY OTHERS). |
| | | ES | ELECTRIC STRIKE (CONDUIT/BACK BOX ONLY, DEVICES AND WIRING BY OTHERS). |
| | | RX | REQUEST TO EXIT (CONDUIT/BACK BOX ONLY, DEVICES AND WIRING BY OTHERS). |
| | | WAP | WIRELESS ACCESS POINT (BACK BOX ONLY, DEVICES AND WIRING BY COMMUNICATION CONTRACTOR). |
| | | | PUSH BUTTON (CONDUIT/BACK BOX ONLY, DEVICES AND WIRING BY OTHERS). |

ABBREVIATIONS:
GFI – GROUND FAULT INTERRUPTER
AFF – ABOVE FINISHED FLOOR
U.O.N. – UNLESS OTHERWISE NOTED
WG – WIRE GUARD
C – CEILING MOUNTED
N.T.S. – NOT TO SCALE
N.I.C. – NOT IN CONTRACT
U/S – UNDERSIDE
C/W – COMPLETE WITH
RL – DENOTES EXISTING ITEM TO BE RELOCATED IN NEW POSITION

## ELECTRICAL DRAWING LIST


| DWG. # | DESCRIPTION |
|---|---|
| ED-1 | ELECTRICAL: 17TH FLOOR – DEMOLITION |
| ED-2 | ELECTRICAL: 19TH FLOOR – DEMOLITION |
| ED-3 | ELECTRICAL: 20TH FLOOR – DEMOLITION |
| ED-4 | ELECTRICAL: 21ST FLOOR – DEMOLITION |
| E-1 | ELECTRICAL: LEGEND, DRAWING LIST AND DETAILS |
| E-2 | ELECTRICAL: 17TH FLOOR – LIGHTING AND FIRE ALARM |
| E-3 | ELECTRICAL: 17TH FLOOR – POWER AND SYSTEMS |
| E-4 | ELECTRICAL: 19TH FLOOR – LIGHTING AND FIRE ALARM |
| E-5 | ELECTRICAL: 19TH FLOOR – POWER AND SYSTEMS |
| E-6 | ELECTRICAL: 20TH FLOOR – LIGHTING AND FIRE ALARM |
| E-7 | ELECTRICAL: 20TH FLOOR – POWER AND SYSTEMS |
| E-8 | ELECTRICAL: 21ST FLOOR – LIGHTING AND FIRE ALARM |
| E-9 | ELECTRICAL: 21ST FLOOR – POWER AND SYSTEMS |
| E-10 | ELECTRICAL: PARTIAL SINGLE LINE DIAGRAM |



Publics Works and Government Services Canada / Travaux publics et services gouvernementaux Canada
Canada
McKEE ENGINEERING
MK #18018
R.I. McKEE ENGINEERING LTD.
1785 Woodward Drive
Ottawa, ON K2C 0P9
CANADA
Tel.:(613) 723-9585
Fax.:(613) 723-9584
www.mckeeottawa.ca


Project North

B.C. THORNHILL

Contractor to verify all dimensions & conditions on site and immediately notify the engineer of all discrepancies.

| révisions | description | date |
|---|---|---|
| 04 | Issued for Addendum E001 | 2018-05-31 |
| 03 | Issued for Tender | 2018-05-15 |
| 02 | Issued for 99% Client Review | 2018-03-09 |
| 01 | Issued for 66% Client Review | 2018-02-16 |

A detail no. n° du détail
B location drawing no. sur dessin n°
C drawing no. dessin n°

project / projet
Generic Swing Space at LEL West Tower
300 Laurier West, Ottawa, ON

drawing / dessin
ELECTRICAL: LEGEND, DRAWING LIST AND DETAILS

| | | |
|---|---|---|
| Designed By | C.J. | Conçu par |
| Date | 2018-02-09 | (aaaa/mm/jj) |
| Drawn By | C.J. | Dessiné par |
| Date | 2018-02-09 | (aaaa/mm/jj) |
| Reviewed By | B.T. | Examiné par |
| Date | 2018-02-09 | (aaaa/mm/jj) |
| Approved By | B.T. | Approuvé par |
| Date | 2018-02-09 | (aaaa/mm/jj) |
| Tender | | Soumission |
| Project Manager | Brent Cheff | Administrateur de projets |
| Project no. | R.088901.013 | N° du projet |
| Drawing no. | E-1 | N° du dessin |

PWGSC A0 (1189x841)

C
0 10 20mm 40 60 80 100 120 140 160 180 200mm