

ELECTRICAL LEGEND

- LINE VOLTAGE WIRING AS PER SPECIFICATIONS.
- L.V. — LOW VOLTAGE WIRING AS PER SPECIFICATIONS.
- LPA-2
2
RELAY#1
- FLUORESCENT FIXTURE ON CIRCUIT "2" FROM PANEL "LPA" AND SWITCHED WITH RELAY 5. FIXTURE CONTROLLED FROM LOW VOLTAGE SWITCH "a". FIXTURE TYPE "2" AS PER SPECIFICATIONS.
- \$\$\$ 3W4W
- LOW VOLTAGE LIGHTING CONTROLS, 1, 2, 3, AND 4 BUTTON RESPECTIVELY, FLUSH WALL MOUNTED AT 1220mm A.F.F., UNLESS INDICATED OTHERWISE. 3W INDICATES THREE WAY AND 4W INDICATES FOUR WAY.
- \$TOL
- MANUAL STARTER WITH THERMAL OVERLOAD PROTECTION AND PILOT LIGHT, FLUSH WALL MOUNTED, UNLESS INDICATED OTHERWISE.
- EXIT LIGHT CEILING MOUNTED OR WALL MOUNTED 2230mm A.F.F., SINGLE OR DOUBLE FACED, WITH ARROWS AS INDICATED.
- EXISTING EMERGENCY LIGHTING UNIT REMOTE HEAD, WALL MOUNTED 2230mm A.F.F.
- FIRE ALARM HORN, WALL MOUNTED 2290mm A.F.F. UNLESS OTHERWISE NOTED
- STROBE LIGHT, CEILING MOUNTED 2290mm A.F.F. UNLESS INDICATED OTHERWISE.
- ADDRESSABLE FIRE ALARM PULL STATION MOUNTED 1220mm A.F.F.
- ADDRESSABLE CEILING MOUNTED IONIZATION-TYPE PRODUCT-OF-COMBUSTION DETECTOR
- TYPE "A" DISCONNECT SWITCH OF DETAIL AS INDICATED ON THE DRAWINGS.
- SYSTEM FURNITURE JUNCTION BOX IN CEILING SPACE, OR EQUIPMENT AS INDICATED ON THE DRAWINGS.
- DIRECT CONNECTION
- 347/600V AND 120/208V PANELS, SURFACE MOUNTED.
- 347/600V AND 120/208V PANELS, FLUSH MOUNTED.
- VAV
- VARIABLE AIR VOLUME. SUPPLIED / INSTALLED BY MECHANICAL AND WIRED BY ELECTRICAL.
- CSA 5-15R DUPLEX U-GROUND RECEPTACLE FLUSH WALL MOUNTED 450mm A.F.F. WITH STAINLESS STEEL COVERPLATE, UNLESS INDICATED OTHERWISE.
- TWO CSA 5-15R DUPLEX U-GROUND RECEPTACLES MOUNTED WITHIN A COMMON BACKBOX 450mm A.F.F. WITH A COMMON STAINLESS STEEL COVERPLATE, UNLESS INDICATED OTHERWISE.
- CSA 5-15R DUPLEX U-GROUND RECEPTACLE PROTECTED BY GFCI CIRCUIT BREAKER, FLUSH WALL MOUNTED 150mm ABOVE COUNTER BACKSPLASH, OR 1170mm A.F.F., UNLESS INDICATED OTHERWISE.
- ISOLATED GROUND RECEPTACLE, FLUSH WALL MOUNTED WITH STAINLESS STEEL COVERPLATE, UNLESS INDICATED OTHERWISE.
- DUAL LAN/SINGLE VOICE OUTLET, FLUSH WALL MOUNTED 450mm A.F.F, UNLESS INDICATED OTHERWISE.
- SINGLE LAN OUTLET, FLUSH WALL MOUNTED 450mm A.F.F, UNLESS INDICATED OTHERWISE.
- FIRE ALARM, FLUSH CEILING MOUNTED UNLESS INDICATED OTHERWISE.
- PUSHBUTTONS, AS INDICATED ON DRAWINGS.

DEFINITIONS:

- G.F.C.I. — INDICATES GROUND FAULT CIRCUIT INTERRUPTER.
- W.P. — INDICATES WEATHER PROOF GASKETED COVER OR ENCLOSURE.
- A.F.F. — ABOVE THE FINISHED FLOOR.
- RM — DEVICE/LUMINAIRE TO BE REMOVED.
- RL — DEVICE/LUMINAIRE HAS BEEN RELOCATED.
- M — DEVICE/LUMINAIRE TO BE MOVED.
- S — SURFACE MOUNTED.
- PF — INDICATES FURNITURE POWER FEED WALL MOUNTED CONNECTION.
- CF — INDICATES FURNITURE COMMUNICATION FEED WALL MOUNTED CONNECTION.

GENERAL NOTES:

- NOTE 1: NOT ALL EXISTING INFORMATION IS SHOWN. VERIFY EXISTING INSTALLATION PRIOR TO ANY DEMOLITION, RELOCATION OR NEW INSTALLATION.
- NOTE 2: EXISTING INFORMATION IS TAKEN FROM AS-BUILT DRAWINGS PROVIDED BY THE OWNER. ALL EXISTING INFORMATION SHALL BE CONFIRMED ON SITE BEFORE STARTING.
- NOTE 3: COORDINATE THE ELECTRICAL INSTALLATION WITH DEPARTMENTAL REPRESENTATIVE PRIOR TO START THE PROJECT.
- NOTE 4: PROVIDE ALL REQUIRED CUTTING, PATCHING, AND PAINTING TO MATCH EXISTING CONDITION.
- NOTE 5: REMOVE ALL DEMOLISHED MATERIALS AND ELECTRICAL EQUIPMENT MADE REDUNDANT FROM SITE UNLESS NOTED OTHERWISE.
- NOTE 6: REMOVE AND REINSTATE EXISTING CEILING AS REQUIRED TO ALLOW FOR THE NEW ADDITION.
- NOTE 7: REFER TO ARCHITECTURAL DRAWINGS FOR LEVEL 3 AND 4 AREAS TO REMAIN OCCUPIED DURING CONSTRUCTION.
- NOTE 8: EXISTING LIGHTING CONTROL RELAY PANELS FROM GE "ARE RTLC-INTER". INCLUDE IN THE PRICE THE COST OF REPROGRAMMING AND MODIFICATION OF EXISTING LIGHTING CONTROL SYSTEM TO INTEGRATE THE NEW ADDITION.
- NOTE 9: NEW T-BAR CEILING AND NEW CEILING TILES WILL BE ADDED IN AREAS SHOWN ON ARCHITECTURAL DRAWINGS (A-2, A-4, A-6 AND A-8). ALLOW TO TEMPORARILY DISCONNECT, RELOCATE OR REMOVE EXISTING ELECTRICAL DEVICES, FIXTURES AND EQUIPMENT CURRENTLY MOUNTED ON / IN THE CEILING WITHIN THIS AREA. REINSTATE TO MATCH EXISTING OR AS INDICATED ON ELECTRICAL DRAWINGS AFTER NEW CEILING HAS BEEN INSTALLED.
- NOTE 10: THE INTENT IS TO INSTALL NEW T-BAR CEILING AND NEW CEILING TILES WITHOUT THE NEED TO TEMPORARY DISCONNECT ANY EXISTING FIRE ALARM CEILING MOUNTED DEVICE. IT WILL BE CONTRACTOR'S RESPONSIBILITY TO RECERTIFY THE FIRE ALARM SYSTEM IF ANY TEMPORARY DISCONNECTION IS REQUIRED.
- NOTE 11: LEVEL 1, 2, 3 AND 4 CEILING SPACE ARE PLENUM RATED. INSTALL ALL WIRING IN CONDUIT.

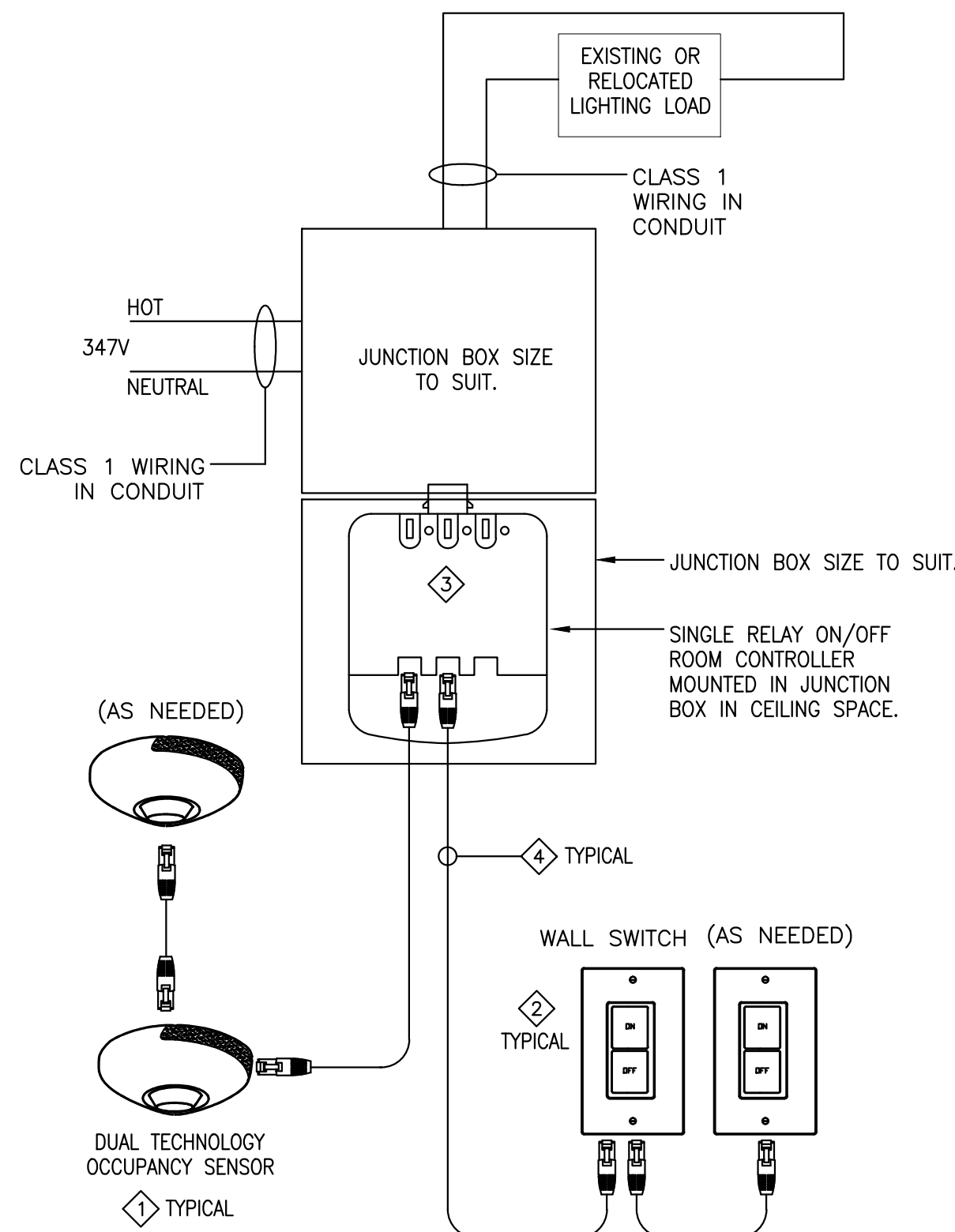




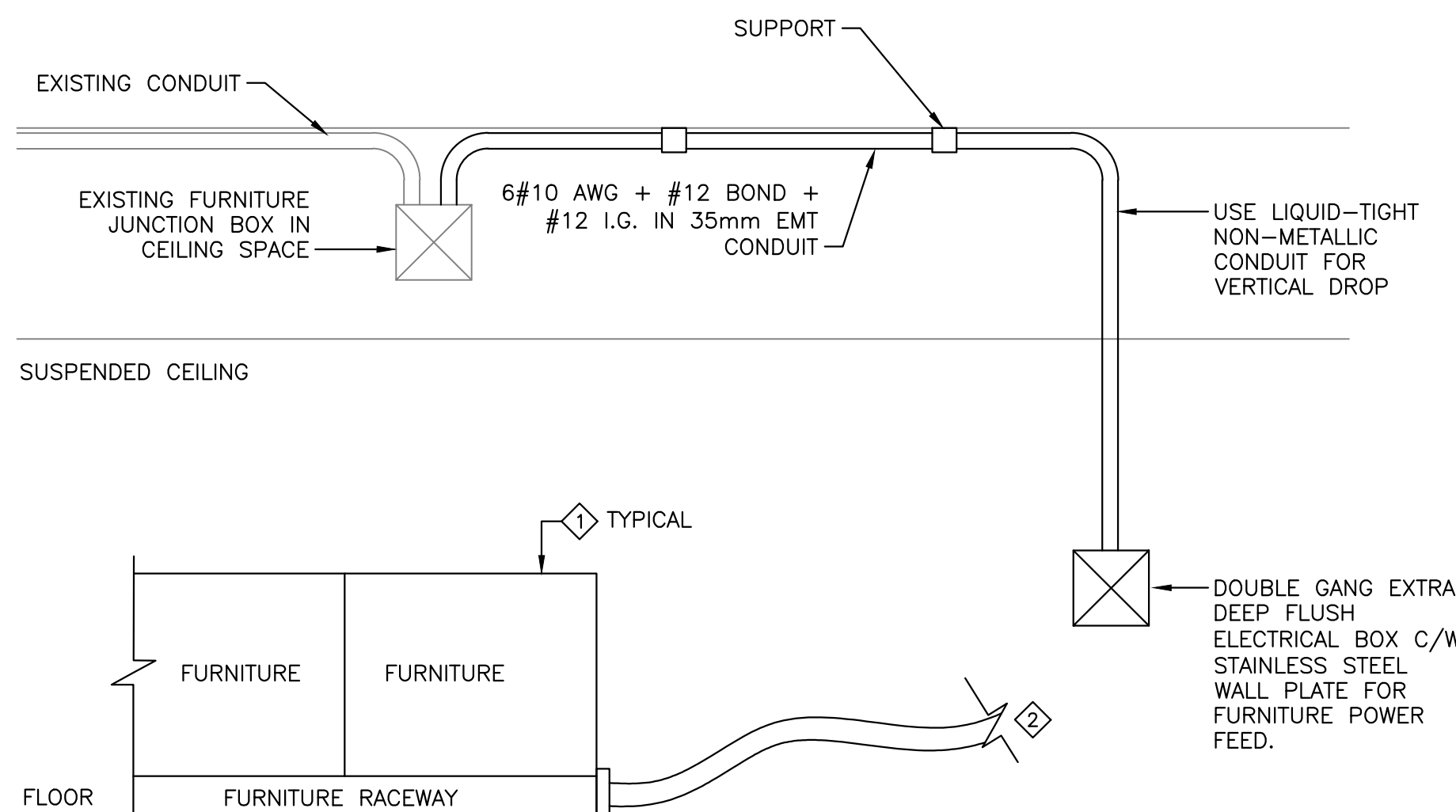
DIAGRAM — LIGHTING CONTROL

SCALE: N.T.S.

1
E1

LIGHTING CONTROL SYSTEM NOTES:

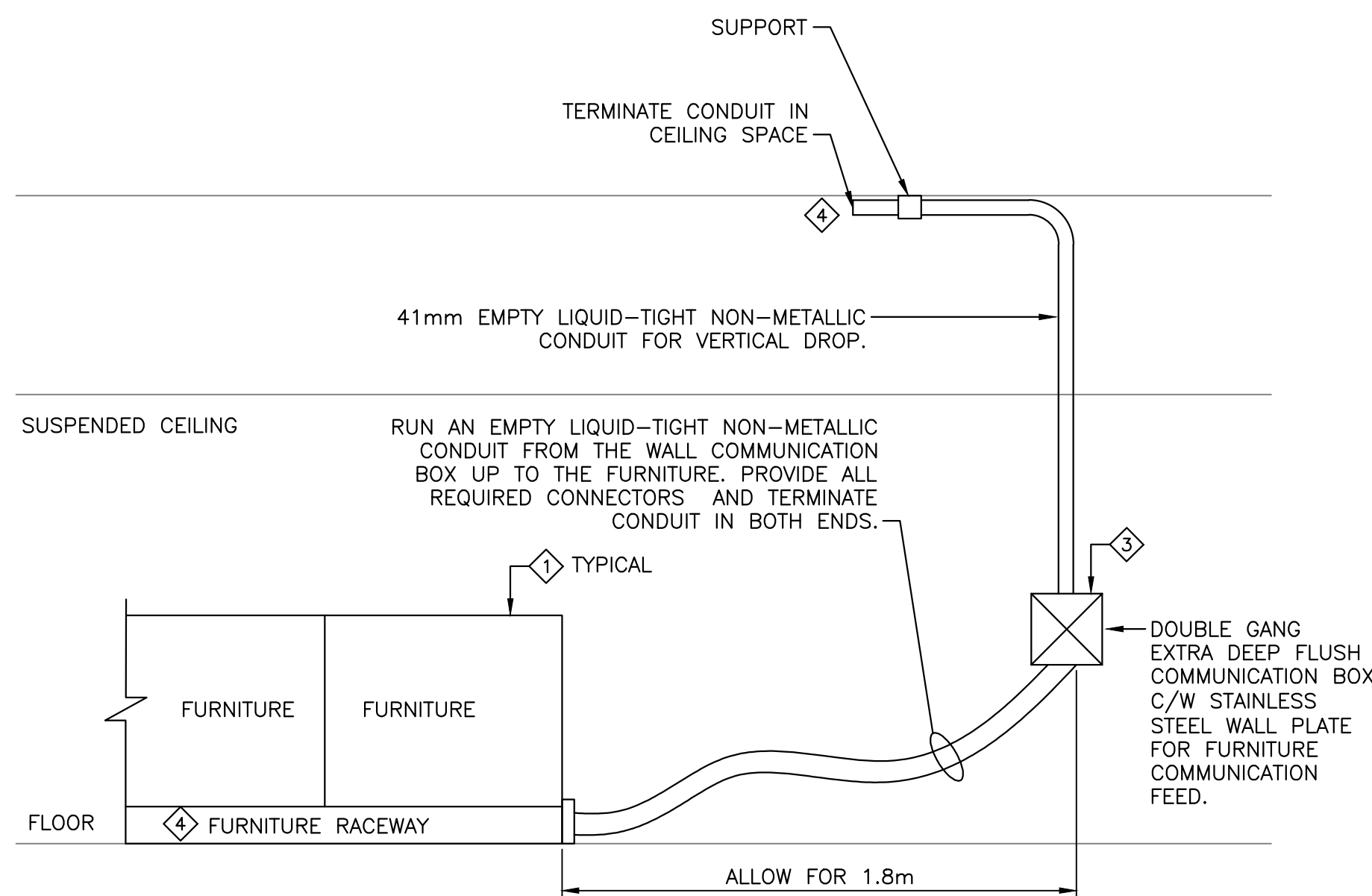
- INDICATED BY THE  SYMBOL ON THE DRAWINGS. (I.E.  INDICATES NOTE 1)
- NOTE 1: DUAL TECHNOLOGY (PIR AND ULTRASONIC) OCCUPANCY SENSOR WITH 360 DEGREE COVERAGE, MINIMUM 93 m² AREA OF DETECTION WHEN MOUNTED AT 3m, INCLUDE TWO PORTS. OCCUPANCY SENSOR SHALL BE WIRED FOR MANUAL ON / AUTOMATIC OFF AND SET TO SHUT OFF LIGHTS AFTER 30 MINUTES OF ACTIVITY.
- NOTE 2: DIGITAL WALL SWITCH, MANUAL ON/OFF CONTROL, PLUG AND GO TYPE, SINGLE GANG C/W DECORATIVE WALLPLATES AND 1/2/3/4/6/8 BUTTON MODELS. PROVIDE A SEPARATE CONTROL BUTTON FOR EACH CONTROL ZONE.
- NOTE 3: PLENUM RATED POWER PACK (ROOM CONTROLLER), ONE RELAY RATED 347V 20A, PLUG AND GO CONFIGURATION. ROOM CONTROLLER SHALL BE RATED FOR BALLAST LOAD AND ABLE TO CONTROL EXISTING FLUORESCENT LIGHTING FIXTURES WHICH OPERATE AT 347V SYSTEM.
- NOTE 4: PRE-TERMINATED CAT5E CABLE IN CONDUIT (FREE TOPOLOGY) OR LOW VOLTAGE DATA CABLE C/W PR-TERMINATED CONNECTORS IN CONDUIT. CABLING MAY BE FT6 RATED IN LIEU OF WIRE IN CONDUIT FOR THE FINAL CONNECTION TO DEVICE. DAISY CHAIN MULTIPLE DEVICES COVERING SAME ZONE. TYPICAL FOR ALL CLASS 2 INTERCONNECTION WIRING.
- NOTE 5: WIRING DIAGRAM TYPICAL FOR ONE ZONE BASED ON WATTSTOPPER SYSTEM. DIAGRAM FOR MULTI ZONE IS NOT SHOWN. EXACT TOPOLOGY FOR SINGLE ZONE AND MULTI-ZONE SHALL BE AS PER LIGHTING CONTROL MANUFACTURE RECOMMENDATION.
- NOTE 6: APPROVED MANUFACTURE: WATTSTOPPER, nLIGHT AND GREENGATE. ALL EQUIPMENT SHALL BE FROM SAME MANUFACTURE.
- NOTE 7: CONTRACTOR SHALL INCLUDE IN THE PRICE THE COST OF ALL PROGRAMMING AND COMMISSIONING, INCLUDING FACTORY TECHNICIAN SITE VISITS AS REQUIRED TO COMPLETE THE INSTALLATION.



DETAIL — POWER FURNITURE FEED INSTALLATION

SCALE: N.T.S.

2
E1





DETAIL — COMMUNICATION FURNITURE FEED INSTALLATION

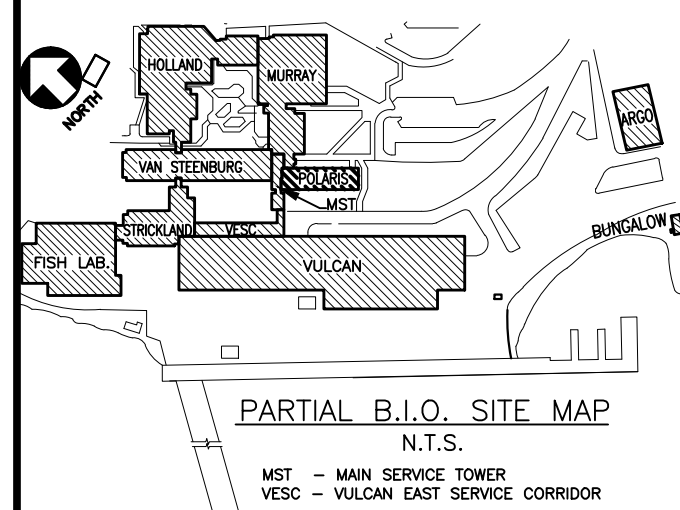
SCALE: N.T.S.

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E1

POWER AND COMMUNICATION FURNITURE FEED NOTES:

- INDICATED BY THE  SYMBOL ON THE DRAWINGS. (I.E.  INDICATES NOTE 1)
- NOTE 1: FURNITURE C/W 1.2m POWER WHIP CABLE AND NO COMMUNICATION WHIP CONDUIT PROVIDED BY OTHERS. CONFIRM EXACT LAYOUT AND LOCATION OF FURNITURE PRIOR TO INSTALL ANY POWER OR COMMUNICATION FEED AND RECEIVE THE DEPARTMENTAL REPRESENTATIVE OFFICIAL APPROVAL IN ORDER TO PROCEED WITH INSTALLATION.
- NOTE 2: TERMINATE POWER WHIP CABLE TO FURNITURE POWER FEED BOX AND PROVIDE ALL REQUIRED CONNECTIONS AND FITTINGS.
- NOTE 3: COMMUNICATION BOX SHALL BE SUITABLE TO ACCOMMODATE THE TERMINATION OF 41mm TRADE SIZE LIQUID-TIGHT NON-METALLIC CONDUIT.
- NOTE 4: COMMUNICATION CABLING PROVIDED BY OTHERS INSTALLED AND TERMINATED BY ELECTRICAL CONTRACTOR. ROUTE COMMUNICATION CABLING FROM THE CEILING SPACE UP TO EACH FURNITURE DATA / VOICE OUTLET.

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B	ISSUE FOR TENDER	01/18/2016
A	ISSUED FOR 100% REVIEW	01/14/2016
revisions		date

project

POLARIS BUILDING
FLOOR PLAN UPGRADES

BEDFORD INSTITUTE OCEANOGRAPHY
DARTMOUTH — NS

drawing

DETAILS, DIAGRAM,
LEGEND & NOTES

designed	AL	conçu
date	DEC 2015	
drawn	AL	dessiné
date	DEC 2015	
approved	H.B.	approuvé
date	JAN 2016	
Tender		Soumission
PWGSC Project Manager	Administrateur de projets TPSGC	
project number	no. du projet	
F5654-150080		
drawing no.	no. du dessin	

E1