SENSOR DEVICE REQUIREMENTS	LIGHTING FIXTURE NOTES
 THE LIGHTING CONTROL SYSTEM VENDOR SHALL DESIGN THE OCCUPANCY SENSOR DEVICE LAYOUTS TO PROVIDE A COMPLETE VOLUMETRIC COVERAGE OF THE SPACES IN WHICH THEY ARE LOCATED. PROVIDE PROPER NUMBER OF SENSORS AND ASSOCIATED POWER PACKS AS REQUIRED TO PROVIDE FULL COVERAGE. 	 FURNISH ALL LIGHTING FIXTURES COMPLETE WITH MOUNTING ACCESSORIES TO MEET JOB REQUIRE VERIFY FIXTURE MOUNTING AND LOCATION AGAINST ARCHITECTS PLANS, ELEVATIONS AND DETAIL I EXACT LOCATION OF ALL FIXTURES SHALL BE CONFIRMED WITH THE ARCHITECT PRIOR TO ROUGHIN REFER TO ARCHITECT \ LIGHTING DESIGNER DRAWINGS AND/OR SPECIFICATIONS FOR ADDITIONAL F REQUIREMENTS NOT SHOWN IN ELECTRICAL LIGHTING FIXTURE SCHEDULE.
2. SUBMIT VENDOR DESIGNED AND APPROVED LAYOUT DRAWINGS OF OCCUPANCY AND DAYLIGHT PHOTO SENSORS AS PART OF THE LIGHTING CONTROL SYSTEM SUBMITTAL PACKAGE. LOCATIONS OF SENSORS SHOWN ON THESE DRAWINGS IS GENERIC AND MAY REQUIRE MODIFICATION TO MEET VENDOR-SPECIFIC REQUIREMENTS OR LIMITATIONS. SENSOR QUANTITIES SHOWN ON DRAWINGS ARE MINIMUM QUANTITIES; PROVIDE ADDITIONAL SENSORS AS REQUIRED TO ENSURE ADEQUATE COVERAGE. DEVIATIONS FROM SENSOR LOCATIONS INDICATED	2. FIXTURE SUBMITTAL PACKAGE SHALL BE IN ELECTRONIC SEARCHABLE FORMAT (NOT SCANNED) AND THE FOLLOWING INFORMATION:
ON DRAWINGS MUST BE APPROVED BY THE ARCHITECT.	(A). SUMMARY SHEET LISTING ALL THE LIGHT FIXTURES TYPES, THE CATALOG NUMBER FOR EACH, T QUANTITY OF EACH FIXTURE THE LAMP TYPE AND MANUFACTURER, THE BALLAST AND THE VOLTAGE
3. LIGHTING CONTROL SYSTEM VENDOR IS RESPONSIBLE FOR SELECTING THE APPROPRIATE OCCUPANCY SENSING TECHNOLOGY (OR TECHNOLOGIES), BASED ON THEIR AVAILABLE PRODUCT OFFERING, FOR EACH ASSOCIATED SPACE TYPE AND APPLICATION. SENSING TECHNOLOGY (OR TECHNOLOGIES IF USING DUAL-TECH TYPE SENSORS) MUST PROVIDE OPTIMUM COVERAGE WITHIN ASSOCIATED COVERAGE ZONES, WHILE MINIMIZING SENSING OF OCCUPANTS OUTSIDE OF INTENDED COVERAGE ZONES. SELECT APPROPRIATE OCCUPANCY SENSOR TYPES AND ENSURE THEY ARE LOCATED TO ELIMINATE POSSIBILITY OF INTERFERENCE WITH EQUIPMENT (SUCH AS SMART WHITE BOARDS), OR ANIMALS (IN THE CASE OF VIVARIUMS FOR EXAMPLE.)	 (B). EACH FIXTURE TYPE SHALL HAVE AN INDIVIDUAL SUMMARY SHEET THAT IDENTIFIES THE FOLLOW FIXTURE TYPE FIXTURE MANUFACTURER FIXTURE CATALOG NUMBER VOLTAGE SYSTEM WATTAGE (LAMP AND DRIVER / BALLAST) LAMP MANUFACTURER / CATALOG NUMBER
4. IN GENERAL, SPACES WITH WINDOWS TO THE EXTERIOR SHALL BE EQUIPPED WITH DAYLIGHT PHOTO SENSORS THAT ARE TIED INTO THE ASSOCIATED ROOM/SPACE CONTROLLER(S) AND CONFIGURED TO ACHIEVE DIMMING CONTROL OF LIGHTS WITHIN EACH DAYLIGHTING ZONE. CALIBRATE SYSTEM SO THAT THE PROGRAMMABLE SET-POINT VALUE IS 50 FOOT-CANDLES AT THE WORK SURFACE UNLESS OTHERWISE NOTED.	- MAP TYPE AND QUANTITY PER FIXTURE - DRIVER / BALLAST MANUFACTURER / CATALOG NUMBER - CONTRACTORS COMMENTS
5. FIELD ADJUST OCCUPANCY SENSOR SENSITIVITIES PER MANUFACTURER'S CALIBRATION PROCEDURES TO	(C). EACH FIXTURE TYPE SHALL HAVE A FIXTURE SPEC SHEET THAT INCLUDES PHOTOMETRIC DATA, BY A CUT-SHEET OF THE LAMP WHICH IS FOLLOWED BY A CUT-SHEET OF THE BALLAST (WHEN APPLI
PREVENT SENSING OCCUPANTS OUTSIDE OF INTENDED COVERAGE ZONES.	(D). PRODUCT DATA SHALL INCLUDE PHYSICAL DIMENSIONS, AND ANY SPECIAL MOUNTING DETAILS.
	3. THE SPECIFIED FIXTURES HAVE BEEN SELECTED FOR PERFORMANCE AND/OR AESTHETIC REASONS "ALTERNATE MANUFACTURER" AND "OR APPROVED EQUAL' MEANS EQUIVALENT OR SUPERIOR IN PERFORMANCE, MATERIALS, WORKMANSHIP AND APPEARANCE TO THE SPECIFIED EQUIPMENT. FIX SUBSTITUTIONS SHALL ONLY BE CONSIDERED IF:
 PROVIDE A COMPLETE LIGHTING CONTROL SYSTEM THAT PERFORMS THE LIGHTING CONTROL OPERATIONS INFORMATED IN THE LIGHTING CONTROL SOLUTION CONTROL OPERATIONS 	(A). THE SUBMITTING AGENT MUST SUBMIT IN WRITING THE REASONS THAT THIS FIXTURE SHOULD B CONSIDERED AN EQUAL, TO BE CONSIDERED. THE ACCEPTANCE OF REJECTION OF ANY FIXTURE SU SHALL BE SOLE DETERMINATION OF THE DESIGN TEAM AND BASED ON, BUT NOT LIMITED TO: OPTICA PERFORMANCE, CONSTRUCTION QUALITY, AESTHETICS, SHAPE, SIZE, LAMPING, FUNCTIONALITY, AC
INDICATED IN THE LIGHTING CONTROL SCHEDULE. CONTROL SYSTEM COMPONENTS SHALL BE COMPATIBLE WITH THE BALLASTS AND DRIVERS PROVIDED AS PART OF THE ASSOCIATED LIGHTING FIXTURES. PROVIDE ALL NECESSARY EQUIPMENT, WIRING AND RACEWAYS FOR PROPER OPERATION OF LIGHTING CONTROLS.	LEAD TIMES, COSTS AND FEATURES. (B). THE SUBSTITUTED FIXTURE SHALL BE ACCOMPANIED BY A CUT SHEET OF THE BASIS OF DESIGN FOR A SIDE BY SIDE COMPARISON.
2. PROVIDE DIGITAL ROOM CONTROLLER (DRC) -BASED LIGHTING CONTROL SYSTEM FROM THE FOLLOWING, OR AN APPROVED EQUIVALENT:	(C). IF REQUESTED BY THE DESIGN TEAM, A WORKING SAMPLE OF THE SUBSTITUTION FIXTURE MUST PROVIDED TO THE ARCHITECT WITHIN 10 WORKING DAYS UPON REQUEST.
a. HUBBELL NX	4. SERIES FIXTURES SHALL SATISFY LENGTHS AS SHOWN ON THE DRAWINGS. FIXTURE LETTERS SHOW
 INTERCONNECT LIGHTING CONTROL SYSTEM COMPONENTS, INCLUDING ROOM CONTROLLERS, SWITCHES, OCCUPANCY SENSORS, ETC. VIA HARD-WIRE CONNECTIONS; WIRELESS DEVICES ARE NOT ACCEPTABLE. 	 A CONTINUOUS ROW OF FIXTURES SHALL BE TYPICAL FOR THAT ROW UNLESS OTHERWISE NOTED. 5. FOR COVE MOUNTED LED FIXTURES PROVIDE DETAILED SHOP DRAWINGS FOR EACH COVE DENOTIN
 PROVIDE ALL NECESSARY ROOM CONTROLLERS, DEVICES, POWER PACKS, CABLING, RACEWAYS, SOFTWARE, SYSTEM INTERCONNECTIONS AND PROGRAMMING REQUIRED OR RECOMMENDED BY THE MANUFACTURER FOR A COMPLETE LIGHTING CONTROL SYSTEM. 	 LAYOUT. COVE DIMENSIONS SHALL BE OBTAINED FROM ARCHITECTURAL DRAWINGS. 6. ALL FIXTURES SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE, INDEPENDENT OF HUNG CEI ROD OR JACK CHAIN SUPPORT. STEM LENGTHS, STEM FINISHES AND STEM LOCATIONS OF ALL PEND
5. PROVIDE UL924 LISTED EMERGENCY BYPASS RELAYS/MODULES FOR CONTROLLED EMERGENCY LIGHTING CIRCUITS TO RAISE CONTROLLED EMERGENCY LIGHTS TO FULL BRIGHTNESS DURING A POWER FAILURE.	FIXTURES TO BE VERIFIED AND CONFIRMED BY OWNER, ARCHITECT AND ENGINEER PRIOR TO ORDE
6. PROVIDE A CONTACT CLOSURE INTERFACE WITH THE FIRE ALARM SYSTEM TO RAISE CONTROLLED EMERGENCY LIGHTS TO FULL BRIGHTNESS DURING A FIRE ALARM CONDITION. COORDINATE WITH FIRE ALARM VENDOR / SUB-CONTRACTOR.	7. ELECTRICAL SUBCONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE COORDINATION OF ALL EQUIPMENT AND CONTROL DEVICES WITH CEILING AND WALL TYPES SPECIFIED PRIOR TO ORDERING EQUIPMENT.
7. PROVIDE ALL NECESSARY POWER AND SLAVE PACKS REQUIRED TO CONTROL LIGHTING FIXTURES PER INDICATED CONTROL ZONES.	8. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL TRANSFORMERS AND/OR DRIVERS REC OPERATE ALL FIXTURES SPECIFIED, INCLUDING REMOTE DRIVERS, BALLASTS AND/OR TRANSFORME ENCLOSURES FOR SAME. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF
8. INSTALL DEVICES IN ACCORDANCE WITH MANUFACTURERS INSTALLATION AND WIRING INSTRUCTIONS.	COMPATIBILITY BETWEEN LAMPS SPECIFIED, DRIVERS BALLAST'S AND/OR TRANSFORMERS SPECIFIE DIMMING AND OTHER CONTROL DEVICES SPECIFIED. NOTIFY ARCHITECT AND ENGINEER CONSULTAI INCOMPATIBILITY PRIOR TO ORDERING EQUIPMENT.
 COORDINATE FINAL ZONING, PRESET SCENES, PARTIAL LIGHT LEVELS AND OPERATING HOURS WITH OWNER. PROVIDE INDEPENDENT-PARTY FUNCTIONAL TESTING ON ENTIRE LIGHTING CONTROL SYSTEM IN ACCORDANCE WITH 2013 ASHRAE-90.1 SECTION 9.4.3. 	9. PRELIMINARY AIMING OF ALL ADJUSTABLE LIGHTING EQUIPMENT SHALL BE DONE DURING INSTALLATE ELECTRICAL CONTRACTOR AS INDICATED ON THE LIGHTING PLANS / AIMING DIAGRAM, WHERE SUCH IS INCLUDE DIN CONTRACT DOCUMENTS OR AS AN ADDENDUM. FINAL AIMING OF ALL ADJUSTABLE LI EQUIPMENT SHALL BE DONE BY THE ELECTRICAL CONTRACTOR AS DIRECTED BY THE ARCHITECT.
	10. IN ALL FIXTURES WITH ADJUSTABLE SOCKETS, SET SOCKETS DURING INSTALLATION TO LOCATE SPE LAMP IN CORRECT RELATIONSHIP TO REFLECTOR AS RECOMMENDED BY FIXTURE MANUFACTURER.
	11. INSTALL CONES IN WALL WASHERS WITH CUTOUT(S) IN INNER REFLECTOR FACING WALL(S) TO BE LI
LIGHTING SYSTEM LEGEND	12. UNLESS NOTED TO THE CONTRARY, PROVIDE WHITE CEILING TRIMS FOR ALL RECESSED LUMINAIRES
a Fn a ao a Fn LIGHT FIXTURE, "Fn" INDICATES TYPE, REFER TO LIGHTING FIXTURE SCHEDULE	13. WHERE CONTROL DEVICES WITH FINNED HEAT SINKS, SUCH AS LUTRON 'NOVA' SERIES, ARE SPECIF SHALL NOT BE REMOVED TO MAKE DEVICES FIT BOXES MORE CONVENIENTLY. REFER TO MANUFAC SPECIFICATIONS FOR THE NUMBER OF GANG BOXES REQUIRED TO ACCOMMODATE THE SPECIFIED I WITHOUT BREAKING OFF FINS.
A E CONTROLLED EMERGENCY LIGHT FIXTURE, PROVIDE EMERGENCY SHUNT RELAYS AS REQUIRED	14. RELAYS USED FOR CONTROL OF LIGHTING (IF ANY) SHALL BE LOCATED AND THE LOCATION SOUNDP AS TO BE INAUDIBLE FROM NORMALLY OCCUPIED AREAS WHEN ACTIVATED.
• •	15. TO ASSURE THE MINIMIZATION OF NOISE, FIXTURES MUST BE MOUNTED SECURELY TO THE SUPPOR STRUCTURE, AND ALL LOOSE INTERNAL PARTS MUST BE SECURELY TIGHTENED BEFORE ACTIVATING WHERE TRANSFORMERS HAVE SELECTOR SWITCHES TO ALLOW USE OF VARIOUS WATTAGE LAMPS, SWITCHES MUST BE SET TO THE WATTAGE OF THE SPECIFIED LAMP.
	16. PROVIDE CONTINUOUS RUNS OF JOINED FIXTURES TO CREATE LONGER CONTINUOUS RUN LENGTHS

E	LOCATE TEST SWITCH IN NEAREST ELECTRICAL ROOM AND LABEL APPROPRIATELY.						
EN BEN EN BEN	UNSWITCHED EMERGENCY / NIGHT LIGHT FIXTURE						
î⊗î ↓⊗↓	ILLUMINATED "EXIT" SIGN LIGHTING FIXTURE; MOUNTING, DIRECTIONAL ARROWS AND FACES AS INDICATED ON FLOOR PLANS; SHADED AREA INDICATES SIDE WITH FACE.						
F	LIGHTING CONTROL SCHEME DESIGNATION, REFER TO LIGHTING CONTROL SCHEDULE						
$S_b S_b^3 S_b^4$	SINGLE-POLE SNAP SWITCH, 120/277V, NUMBER OF SWITCH WAYS AS INDICATED						
Şb	PROGRAMMABLE LINE-VOLTAGE PUSH-BUTTON DIGITAL TIMER WALL SWITCH WITH INTERVAL RANGE FROM 5 MINUTES TO 12 HOURS, POWER FAILURE MEMORY AND TIME-OUT WARNING FLASH. WATTSTOPPER TS-400 OR APPROVED EQUAL. PROVIDE TIMER-CONTROLLED CONTACTOR AND ASSOCIATED WIRING WHEN CONTROLLED LOAD EXCEEDS 3 AMPS.						
	PROGRAMMABLE LOW-VOLTAGE PUSH-BUTTON DIGITAL TIMER WALL SWITCH WITH INTERVAL RANGE FROM 5 MINUTES TO 12 HOURS, POWER FAILURE MEMORY AND TIME-OUT WARNING FLASH. WATTSTOPPER TS-400-24 OR APPROVED EQUAL. PROVIDE POWER PACKS AS REQUIRED.						
Ю́н	OUTDOOR PHOTOCELL, TORK 2001 SERIES OR APPROVED EQUAL.						
DEVICE SUBSCRIPT/SUPERSCRIPT DESIGNATIONS:							
"a" INDICATES CONTROL DEVICE CONTROLLING FIXTURE							

* NOTE: IF NO DEVICE CONTROL ZONE INDICATED, DEVICE CONTROLS ALL FIXTURES WITHIN SPACE "3" INDICATES 3-WAY SWITCHING CONFIGURATION "4" INDICATES 4-WAY SWITCHING CONFIGURATION

DRC-BASED LIGHTING CONTROL SYSTEM LEGEND						
S ^{Bn} a	MANUAL LOW-VOLTAGE LIGHTING CONTROL SWITCH, ON/OFF					
D _a ^{Bn}	MANUAL LOW-VOLTAGE LIGHTING CONTROL SWITCH, ON/OFF AND DIMMING					
©3₀	CEILING-MOUNTED LOW-VOLTAGE OCCUPANCY SENSOR					
PSb	CEILING-MOUNTED LOW-VOLTAGE DAYLIGHT PHOTOSENSOR					
DEVICE SUBSCRIPT/SUPERSCRIPT DESIGNATIONS:						
	"Pp" DENOTES MULTIPLE RANKED SWITCHES/DIMMERS: "p" DENOTES OLIANTITY					

"Bn" DENOTES MULTIPLE BANKED SWITCHES/DIMMERS; "n" DENOTES QUANTITY "a" INDICATES ASSOCIATED MANUAL SWITCH/DIMMER CONTROL ZONE *

"b" INDICATES ASSOCIATED OCCUPANCY/PHOTO SENSOR CONTROL ZONE * * NOTE: IF NO DEVICE CONTROL ZONE INDICATED, DEVICE CONTROLS ALL FIXTURES WITHIN SPACE "m" INDICATES ASSOCIATED PARTITION SWITCH CONTROL AREA / SPACE

LIGHTING FIXTURE NOTES

ITING FIXTURES COMPLETE WITH MOUNTING ACCESSORIES TO MEET JOB REQUIREMENTS. MOUNTING AND LOCATION AGAINST ARCHITECTS PLANS, ELEVATIONS AND DETAIL DRAWINGS. OF ALL FIXTURES SHALL BE CONFIRMED WITH THE ARCHITECT PRIOR TO ROUGHING IN. FECT \ LIGHTING DESIGNER DRAWINGS AND/OR SPECIFICATIONS FOR ADDITIONAL FIXTURES OR NOT SHOWN IN ELECTRICAL LIGHTING FIXTURE SCHEDULE. AL PACKAGE SHALL BE IN ELECTRONIC SEARCHABLE FORMAT (NOT SCANNED) AND INCLUDE INFORMATION: EET LISTING ALL THE LIGHT FIXTURES TYPES, THE CATALOG NUMBER FOR EACH, THE CH FIXTURE THE LAMP TYPE AND MANUFACTURER, THE BALLAST AND THE VOLTAGE.

E TYPE SHALL HAVE AN INDIVIDUAL SUMMARY SHEET THAT IDENTIFIES THE FOLLOWING: YPF

ANUFACTURER CATALOG NUMBER

E TYPE SHALL HAVE A FIXTURE SPEC SHEET THAT INCLUDES PHOTOMETRIC DATA, FOLLOWED OF THE LAMP WHICH IS FOLLOWED BY A CUT-SHEET OF THE BALLAST (WHEN APPLICABLE).

XTURES HAVE BEEN SELECTED FOR PERFORMANCE AND/OR AESTHETIC REASONS. JUFACTURER" AND "OR APPROVED EQUAL' MEANS EQUIVALENT OR SUPERIOR IN IATERIALS, WORKMANSHIP AND APPEARANCE TO THE SPECIFIED EQUIPMENT. FIXTURE HALL ONLY BE CONSIDERED IF:

NG AGENT MUST SUBMIT IN WRITING THE REASONS THAT THIS FIXTURE SHOULD BE EQUAL, TO BE CONSIDERED. THE ACCEPTANCE OF REJECTION OF ANY FIXTURE SUBSTITUTION ETERMINATION OF THE DESIGN TEAM AND BASED ON, BUT NOT LIMITED TO: OPTICAL CONSTRUCTION QUALITY, AESTHETICS, SHAPE, SIZE, LAMPING, FUNCTIONALITY, ACCESSORIES, TS AND FEATURES.

JTED FIXTURE SHALL BE ACCOMPANIED BY A CUT SHEET OF THE BASIS OF DESIGN FIXTURE DE COMPARISON.

D BY THE DESIGN TEAM, A WORKING SAMPLE OF THE SUBSTITUTION FIXTURE MUST BE E ARCHITECT WITHIN 10 WORKING DAYS UPON REQUEST.

SHALL SATISFY LENGTHS AS SHOWN ON THE DRAWINGS. FIXTURE LETTERS SHOWN ONCE ON OW OF FIXTURES SHALL BE TYPICAL FOR THAT ROW UNLESS OTHERWISE NOTED. TED LED FIXTURES PROVIDE DETAILED SHOP DRAWINGS FOR EACH COVE DENOTING FIXTURE

MENSIONS SHALL BE OBTAINED FROM ARCHITECTURAL DRAWINGS. ALL BE SUPPORTED FROM THE BUILDING STRUCTURE, INDEPENDENT OF HUNG CEILING WITH AIN SUPPORT. STEM LENGTHS. STEM FINISHES AND STEM LOCATIONS OF ALL PENDANT VERIFIED AND CONFIRMED BY OWNER, ARCHITECT AND ENGINEER PRIOR TO ORDERING STEMS.

CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE COORDINATION OF ALL LIGHTING CONTROL DEVICES WITH CEILING AND WALL TYPES SPECIFIED PRIOR TO ORDERING LIGHTING

TRACTOR SHALL PROVIDE AND INSTALL ALL TRANSFORMERS AND/OR DRIVERS REQUIRED TO TURES SPECIFIED, INCLUDING REMOTE DRIVERS, BALLASTS AND/OR TRANSFORMERS AND THE SAME. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ETWEEN LAMPS SPECIFIED, DRIVERS BALLAST'S AND/OR TRANSFORMERS SPECIFIED, AND HER CONTROL DEVICES SPECIFIED. NOTIFY ARCHITECT AND ENGINEER CONSULTANT OF ANY PRIOR TO ORDERING EQUIPMENT.

ING OF ALL ADJUSTABLE LIGHTING EQUIPMENT SHALL BE DONE DURING INSTALLATION BY THE TRACTOR AS INDICATED ON THE LIGHTING PLANS / AIMING DIAGRAM, WHERE SUCH A DIAGRAM ONTRACT DOCUMENTS OR AS AN ADDENDUM. FINAL AIMING OF ALL ADJUSTABLE LIGHTING L BE DONE BY THE ELECTRICAL CONTRACTOR AS DIRECTED BY THE ARCHITECT.

WITH ADJUSTABLE SOCKETS, SET SOCKETS DURING INSTALLATION TO LOCATE SPECIFIED T RELATIONSHIP TO REFLECTOR AS RECOMMENDED BY FIXTURE MANUFACTURER.

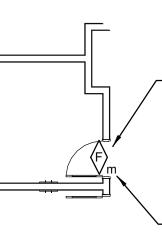
DEVICES WITH FINNED HEAT SINKS, SUCH AS LUTRON 'NOVA' SERIES, ARE SPECIFIED, FINS EMOVED TO MAKE DEVICES FIT BOXES MORE CONVENIENTLY. REFER TO MANUFACTURERS FOR THE NUMBER OF GANG BOXES REQUIRED TO ACCOMMODATE THE SPECIFIED EQUIPMENT NG OFF FINS.

R CONTROL OF LIGHTING (IF ANY) SHALL BE LOCATED AND THE LOCATION SOUNDPROOFED SO BLE FROM NORMALLY OCCUPIED AREAS WHEN ACTIVATED.

INIMIZATION OF NOISE, FIXTURES MUST BE MOUNTED SECURELY TO THE SUPPORTING ALL LOOSE INTERNAL PARTS MUST BE SECURELY TIGHTENED BEFORE ACTIVATING CIRCUITS. RMERS HAVE SELECTOR SWITCHES TO ALLOW USE OF VARIOUS WATTAGE LAMPS, THESE BE SET TO THE WATTAGE OF THE SPECIFIED LAMP.

UOUS RUNS OF JOINED FIXTURES TO CREATE LONGER CONTINUOUS RUN LENGTHS FOR A VIRTUALLY SEAMLESS CONNECTION TO MATCH THE TOTAL FIXTURE LENGTHS INDICATED ON THE FLOOR PLANS. DETAILED SHOP DRAWINGS SHALL BE PROVIDED FOR EACH CONTINUOUS RUN THAT INDICATES EACH FIXTURE SECTION AS WELL AS EACH PENDANT DROP LOCATION AND POWER DROP LOCATION.

LIGHTING CONTROL KEYNOTE LEGEND

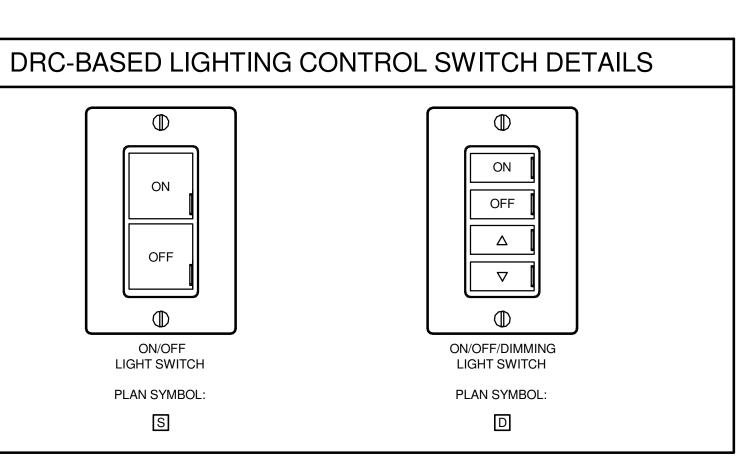


PLAN

DESIGNATION

LETTERED KEYNOTE IN ROOM DENOTES LIGHTING CONTROL SCHEME; REFER TO LIGHTING CONTROL SCHEDULE FOR DETAILED REQUIREMENTS

- "m" INDICATES ROOM / SPACE CONTROL OPERATION TO BE MODIFIED BY ASSOCIATED ROOM DIVIDER PARTITION SWITCH. WHEN PARTITION IS CLOSED, DIVIDED ROOMS / SPACES WILL ACT INDEPENDENTLY; WHEN PARTITION IS OPEN, CONJOINED ROOMS / SPACES WILL ACT AS A SINGLE COMBINED AREA.



LIGHTING FIXTURE SCHEDULE												
TYPE	DESCRIPTION	MOUNTING	MANUFACTURER CATALOG NUMBER		APPROVED EQUAL MANUFACTURERS	LAMPS	VOLT.	INPUT WATTS (W)	COLOR TEMP (K)	DIMMING	DRIVER LOCATION	DEDICATED DRIVER
A	LED RECESSED CONICAL SPOT LIGHT FIXTURE WITH DUAL ADJUSTABLE HEADS.	RECESSED	USAI LIGHTING	ISAI LIGHTING 31312-AC1-S-01-LMSTA4-2-8424-C3-35-NC-120V-DIML2-AL55F		LED	120V	24	3500K	YES	INTEGRAL	YES
В	LED RECESSED SQUARE DOWNLIGHT FIXTURE WITH NON-ADJUSTABLE HEAD.	RECESSED	USAI LIGHTING	6111-AC1-S-01-LSTD6-9040-C2-35KS-50-NC1-120V-DIML6E	DELTA LIGHTING TECH LIGHTING	LED	UNV	40	3500K	YES	INTEGRAL	YES
С	RECESSED 'FLEXLED' TAPE LIGHT IN SLIM-PROFILE HOUSING. PROVIDE STEPDOWN VOLTAGE TRANSFOMER AS REQUIRED TO POWER FIXTURE FROM SUPPLY VOLTAGE INDICATED.	RECESSED	DELTA LIGHT	PROFILE: SHL20-6-398-01-00 CONTROLLER #1: 300-90-60 (MULTI-POWER) CONTROLLER #2 (DIMMING 0-10V): 300-90-24-ED2 FLEXLED: 300-92-53-94		LED	120V	5W/FT	3500K	YES	REMOTE	YES
D	6' LED RECESSED LINEAR SLOT FIXTURE	RECESSED	PINNACLE LIGHTING	E4-A-840-6-X-U-OL1-M-0-W-X-X		LED	UNV	10W/FT	4000K	YES	INTEGRAL	YES
X1	EDGELIT LED CEILING SINGLE FACE RECESSED HOUSING. GREEN LETTERING.	RECESSED	LITHONIA	EDGR-1-G	EMERGI-LITE	LED	277V	2				
X2	EDGELIT LED CEILING DOUBLE FACE RECESSED HOUSING. GREEN LETTERING.	RECESSED	LITHONIA	EDGR-2-G	EMERGI-LITE	LED	277V	2				

ASSOCIATED SPACE TYPES	CONTROL SCHEME	DEVICES					
CAFE	Ø	- ROOM CONTROLLER - DIMMER SWITCH - OCCUPANCY SENSOR - DAYLIGHT SENSOR *					
UTILITY SPACES	B	- DIGITAL TIMER SWITCH					
CAFE SIGNAGE	Ø	- ROOM CONTROLLER - ON/OFF SWITCH					
NOTES:							
 PROVIDE ROOMS / SPACES INDICATED ABOVE AS BEING EQUIPPED WITH ALL OTHER ASSOCIATED COMPONENTS INDICATED OR REQUIRED. ROOM ROOM CONTROLLERS, EMERGENCY SHUNT RELAY MODULES, POWER PA MAY NOT) BE EXPLICITLY SHOWN ON THE LIGHTING PLAN DRAWINGS, BU 							
3. CONTROLLED EMERGE	,						

ALARM SYSTEM VENDOR / SUB-CONTRACTOR. 4. REFER TO LIGHTING PLANS FOR LIGHTING CONTROL DEVICE (SWITCH/DIMMER/OCCUPANCY SENSOR/DAYLIGHT SENSOR/PARTITION SWITCH) QUANTITIES AND LOCATIONS, AND FOR NUMBER AND LAYOUT OF CONTROL ZONES FOR EACH SPACE. SET-POINT VALUE IS 50 FOOT-CANDLES AT THE WORK SURFACE UNLESS OTHERWISE NOTED.

ACHIEVE INDICATED FUNCTIONALITY.

9. LOCATE DIMMING ROOM CONTROLLERS SO THEY ARE NO FURTHER THAN 200FT FROM FURTHEST CONTROLLED FIXTURE; PROVIDE ADDITIONAL (MULTIPLE) INTERCONNECTED ROOM CONTROLLERS AS REQUIRED TO ENSURE DIMMED FIXTURES ARE NO FURTHER THAN 200FT FROM ASSOCIATED ROOM CONTROLLER. 10. CONNECT CAFE LIGHTING CONTROL COMPONENTS TO EXISTING BUILDING-WIDE LIGHTING CONTROL NETWORK. INTEGRATE COMPONENTS INTO EXISTING BUILDING NETWORK ARCHITECTURE VIA NEAREST EXISTING LIGHTING CONTROLLER. COORDINATE SYSTEM REQUIREMENTS AND LOCAL FUNCTIONALITY WITH LIGHTING CONTROL VENDOR AS NECESSARY.

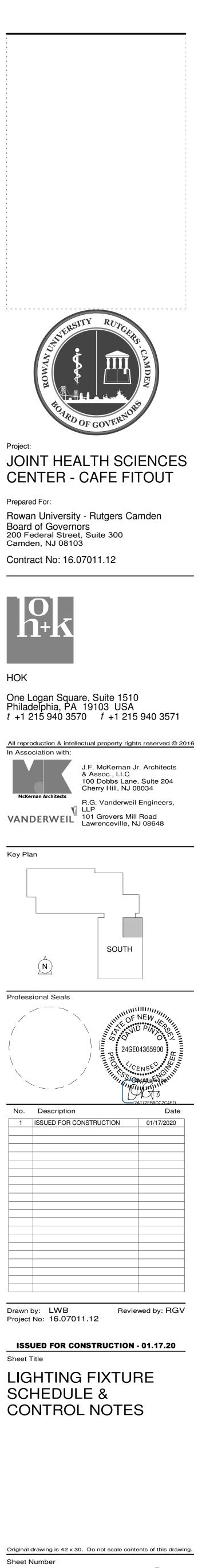
DAYLIGHTING CONTROLS INDICATED IN LIGHTING CONTROL SCHEDULE ARE ONLY REQUIRED IN SPACES WHERE INCOMING DAYLIGHT IS AVAILABLE.

LIGHTING CONTROL SCHEDULE

DESCRIPTION OF OPERATION - LIGHT LEVEL TO REMAIN AT 30% WHEN SPACE IS UNOCCUPIED MANUAL ON ONLY; NO AUTO ON MANUAL DIM (TO NO LESS THAN 30%) VIA DIMMER SWITCH AUTO OFF AFTER SPACE IS UNOCCUPIED FOR 20 MINUTES DURING NON-OPERATING HOURS - AUTO DIM BASED ON AVAILABLE DAYLIGHT* MANUAL ON / OFF VIA TIMER SWITCH - AUTO OFF UPON EXPIRATION OF TIME-OUT SETTING ADJUSTABLE TIME-OUT SETTING VIA SWITCH MANUAL ON / OFF AUTO OFF BETWEEN 12AM AND 6AM H A "ROOM CONTROLLER" WITH A DIGITAL ROOM CONTROLLER-BASED (DRC-BASED) LIGHTING CONTROL SYSTEM CONSISTING OF ONE OR MORE DIGITAL ROOM CONTROLLERS AND

I CONTROLLERS SHALL BE DEDICATED TO THE SPACE CONTROLLED; EACH DRC-CONTROLLED SPACE SHALL BE EQUIPPED WITH AT LEAST ONE DEDICATED ROOM CONTROLLER. PACK MODULES AND OTHER ACCESSORY DEVICES SHALL BE INSTALLED ABOVE ACCESSIBLE CEILING AT MAIN ENTRY DOOR OF SPACES CONTROLLED; THESE DEVICES ARE NOT (OR BUT ARE REQUIRED FOR THE SYSTEM TO FUNCTION PROPERLY AND SHALL BE PROVIDED AS PART OF THIS WORK. GENCY SHUNT RELAYS AND DIMMER BYPASS HARDWARE TO AUTOMATICALLY BYPASS CONTROL CIRCUITRY AND FULLY ILLUMINATE EMERGENCY LIGHTS WHEN NORMAL POWER FAILS. RELAYS SHALL MONITOR LOCAL UNSWITCHED NORMAL POWER LIGHTING CIRCUIT. SHUNT RELAYS AND DIMMER BYPASS SHALL ALSO FULLY ILLUMINATE CONTROLLED EMERGENCY LIGHTS UPON ACTIVATION OF THE FIRE ALARM SYSTEM OR EMERGENCY LIGHTING TEST SWITCH. LOCATE EMERGENCY LIGHTING TEST SWITCHES IN NEAREST ELECTRICAL ROOM. LABEL EMERGENCY TEST SWITCHES APPROPRIATELY. COORDINATE REQUIRED FIRE ALARM INTERFACE WORK WITH THE FIRE

5. IN GENERAL, SPACES WITH WINDOWS (GREATER THAN 20sf) TO THE EXTERIOR SHALL UTILIZE DAYLIGHTING CONTROL SENSORS FOR FULL-RANGE DIMMING DAYLIGHT HARVESTING. DAYLIGHT SENSORS SHALL BE CALIBRATED SO THE PROGRAMMABLE PARTIAL LIGHT LEVELS INDICATED IN LIGHTING CONTROL SCHEDULE ARE APPROXIMATE AND SHALL BE FIELD ADJUSTED TO ENSURE APPROPRIATE LIGHT LEVELS ARE ACHIEVED IN EACH SPACE. ALTHOUGH DEVICES IN LIGHTING CONTROL SCHEDULE ARE GENERALLY REFERRED TO IN SINGULAR NUMBER, MORE THAN ONE DEVICE MAY BE REQUIRED. PROVIDE QUANTITY OF DEVICES AS INDICATED ON LIGHTING PLANS OR AS REQUIRED TO 8. PROVIDE ADDITIONAL (MULTIPLE) ROOM CONTROLLERS TO ENSURE THAT ASSOCIATED CONTROLLED LOAD DOES NOT EXCEED 80% OF THE LOAD-HANDLING CAPACITY OF THE ROOM CONTROLLERS CONTROLLING THE LOAD.



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