MINOR REVISION

Modify *Division 26, 26 50 00 Lighting* per the following (deletions are shown struck through and additions are double underlined). Remainder of section is unchanged.

26 50 00 LIGHTING

.01 General

- A. Design shall follow PSU AD64 Energy Conservation Policy.
- B. All interior and exterior lighting controls shall be designed, deployed and commissioned in accordance with the PSU Lighting Control Matrix. Areas not specifically addressed in the matrix shall be coordinated with PSU Engineering Services.

Document Versio Date		<u>Description</u>		
265000 – Lighting – PSU Lighting Control Matrix.docx	July 2016	University's required interior and exterior lighting control standards; to be used by the Design Professional		

END of revision

Update Commentary:

Section was updated primarily for the following reasons:

1) A University lighting matrix was added to the standards for clarity.

PENN STATE UNIVERSITY - LIGHTING CONTROLS MATRIX - JULY, 2016 - REV 1.0										
SPACE TYPE	TARGET FC LEVELS	MANUAL CONTROLS *	AUTOMATED CONTROL TYPE **	DAYLIGHT HARVESTING ***	SENSOR: OCCUPIED TIMEOUT DELAY TO OFF (MINUTES)		REMARKS			
INTERIOR APPLICATIONS										
VESTIBULE	(DETERMINED BY PROFESSIONAL)	N/A	OCCUPANCY SENSOR	CONFIRM WITH PSU ENG SVCS	(HOLD ON)	(10)				
CORRIDOR	(DETERMINED BY PROFESSIONAL)	N/A	OCCUPANCY SENSOR	CONFIRM WITH PSU ENG SVCS	(HOLD ON) OR (30)/(60)	(10)	(OH) HOLD-ON; OR AFTER 30 MIN, DIM TO 50%; AFTER 60 MIN, DIM TO OFF (N/E FIXTURES REMAIN ON 24X7). PROVIDE MIN EGRESS ILLUMINATION			
STAIRWELLS	(DETERMINED BY PROFESSIONAL)	N/A	OCCUPANCY SENSOR	CONFIRM WITH PSU ENG SVCS	(2)	(2)	FIXTURES SHALL REMAIN ILLUMINATED AT A REDUCED OUTPUT WHEN SPACE IS DECLARED UNOCCUPIED; (10 SECOND FADE FROM 100% TO 10%), PROVIDE MIN EGRESS ILLUMINATION			
RESTROOMS	(DETERMINED BY PROFESSIONAL)	N/A	OCCUPANCY SENSOR	N/A	(30)	(10)	PROVIDE N/E LIGHTING WITHIN SPACE.			
GENERAL PUBLIC AREAS	(DETERMINED BY PROFESSIONAL)	CONFIRM WITH PSU ENG SVCS	OCCUPANCY SENSOR	CONFIRM WITH PSU ENG SVCS	(HOLD ON) OR(30)/(60)	(10)	(OH) HOLD-ON; OR AFTER 30 MIN, DIM TO 50%; AFTER 60 MIN, DIM TO OFF (N/E FIXTURES REMAIN ON). PROVIDE MIN EGRESS ILLUMINATION			
DORM ROOM/HOUSING	(DETERMINED BY PROFESSIONAL)	WALLBOX DEVICES FOR MANUAL-ON, AND/OR DIMMING	OCCUPANCY SENSOR	N/A	(30)	(30)				
STORAGE ROOM	(DETERMINED BY PROFESSIONAL)	N/A	OCCUPANCY SENSOR	N/A	(5)	(5)				
JANITOR CLOSET	(DETERMINED BY PROFESSIONAL)	WALLBOX TIMER SWITCH	N/A	N/A	(30) MINUTES WITH (5) AND (1) MINUTE REMAIN FLASH					
MECHANICAL SPACE	(DETERMINED BY PROFESSIONAL)	WALLBOX TIMER SWITCH	N/A	N/A	(4 HRS) WITH (5) AND (1) MINUTE REMAIN FLASH					
ELEVATOR PIT	(DETERMINED BY PROFESSIONAL)	LINE-VOLTAGE TOGGLE	N/A	N/A	N/A		NO CONTROL OTHER THAN TOGGLE SWITCH			
ELEVATOR HOISTWAY	(DETERMINED BY PROFESSIONAL)	LINE-VOLTAGE TOGGLE	N/A	N/A	N/A		NO CONTROL OTHER THAN TOGGLE SWITCH			
ELEVATOR MACHINE ROOM	(DETERMINED BY PROFESSIONAL)	LINE-VOLTAGE TOGGLE	N/A	N/A	N/A		NO CONTROL OTHER THAN TOGGLE SWITCH			
ELEVATOR CAB THRESHOLD (CORRIDOR SIDE)	10FC (MIN)		CONNECT TO UNSWITCHED N/E CIRCUIT							
ELECTRICAL ROOM	(DETERMINED BY PROFESSIONAL)	LINE-VOLTAGE TOGGLE	N/A	N/A	N/A		NO CONTROL OTHER THAN TOGGLE SWITCH. CONNECT ALL FIXTURES TO N/E SOURCE.			
BATTERY ROOM (UPS/INVERTER)	(DETERMINED BY PROFESSIONAL)	LINE-VOLTAGE TOGGLE N/A		N/A	N/A		NO CONTROL OTHER THAN TOGGLE SWITCH			
TELECOM CLOSET	(DETERMINED BY PROFESSIONAL)	WALLBOX TIMER SWITCH	N/A	N/A	(4 HRS) WITH (5) AND (1) MINUTE REMAIN FLASH		PROVIDE N/E LIGHTING WITHIN SPACE.			
OFFICES	(DETERMINED BY PROFESSIONAL)	WALLBOX DEVICES FOR MANUAL-ON, AND/OR DIMMING	OCCUPANCY SENSOR	REVIEW WITH PSU	(15)	(15)				
CONFERENCE ROOM	(DETERMINED BY PROFESSIONAL)	WALLBOX DEVICES FOR MANUAL-ON, AND/OR DIMMING	OCCUPANCY SENSOR	REVIEW WITH PSU	(15)	(15)				
LAB SPACES	(DETERMINED BY PROFESSIONAL)	WALLBOX DEVICES FOR MANUAL-ON, AND/OR DIMMING	OCCUPANCY SENSOR	REVIEW WITH PSU	(30)	(20)				
LECTURE HALLS	(DETERMINED BY PROFESSIONAL)	WALLBOX DEVICES FOR MANUAL-ON, AND/OR DIMMING	OCCUPANCY SENSOR	REVIEW WITH PSU	(15)	(15)				
AUDITORIUM SPACES	(DETERMINED BY PROFESSIONAL)	DISCUSS APPLICATION WITH PSU ENG SVCS								
GENERAL PURPOSE CLASSROOM	(DETERMINED BY	WALLBOX DEVICES FOR MANUAL-ON, AND/OR DIMMING	OCCUPANCY SENSOR	REVIEW WITH PSU	(15)	(15)				
COMPUTER LAB	(DETERMINED BY PROFESSIONAL)	WALLBOX DEVICES FOR MANUAL-ON, AND/OR DIMMING	OCCUPANCY SENSOR	REVIEW WITH PSU	(15)	(15)				
DATA CENTER WHITE SPACE	(DETERMINED BY PROFESSIONAL)	COORDINATE WITH PSU ENG SVCS	OCCUPANCY SENSOR	N/A	(15)	(15)	USE AS OCCUPANCY SENSING AND NOT VACANCY FOR WHITESPACE			
INDOOR BASKETBALL COURT (RECREATIONAL)	(DETERMINED BY PROFESSIONAL)	COORDINATE WITH PSU ENG SVCS	OCCUPANCY SENSOR	REVIEW WITH PSU	(30)	(10)	TON WHITEST ACE			
INDOOR RAQUETBALL COURT (RECREATIONAL)	(DETERMINED BY PROFESSIONAL)	COORDINATE WITH PSU ENG SVCS	OCCUPANCY SENSOR	N/A	(30)	(10)				
INDOOR RECREATIONAL ATHLETIC AREA	(DETERMINED BY PROFESSIONAL)	COORDINATE WITH PSU ENG SVCS	OCCUPANCY SENSOR	REVIEW WITH PSU	(30)	(10)				
EXERCISE SPACE	(DETERMINED BY PROFESSIONAL)	COORDINATE WITH PSU ENG SVCS	OCCUPANCY SENSOR	REVIEW WITH PSU	(30)	(10)				
LOADING DOCKS (INTERIOR)	(DETERMINED BY	COORDINATE WITH PSU ENG SVCS	OCCUPANCY SENSOR (TYPE/RATINGS AS REQD)	N/A	(15)	(15)	CONFIRM SENSOR TYPES AND RATINGS BASED ON AMBIENT CONDITIONS			
	PROFESSIONAL)		EXTERIOR APPLIC	CATIONS			ON AIVIBLENT CONDITIONS			
COVERED PARKING DECKS	REFER TO DC STANDARDS	N/A	OCCUPANCY SENSOR	PERIMETER OF DECK	DISCUSS WIT	H PSU ENG SVCS	DEPLOY DIGITAL NETWORKED TECHNOLOGY			
EXTERIOR BUILDING MOUNTED	REFER TO DC	N/A	CENTRAL CONTROL SYSTEM (BAS)	LEVELS			DEPLOY RELAY/CONTACTOR BASED SOLUTION.			
EXTERIOR PARKING AREAS	STANDARDS REFER TO DC	N/A	CENTRAL CONTROL SYSTEM (BAS)				COORDINATE WITH PSU ENG SVCS DEPLOY RELAY/CONTACTOR BASED SOLUTION.			
EXTERIOR SIDEWALKS	STANDARDS REFER TO DC	N/A	CENTRAL CONTROL SYSTEM (BAS)				COORDINATE WITH PSU ENG SVCS DEPLOY RELAY/CONTACTOR BASED SOLUTION.			
	STANDARDS REFER TO DC						COORDINATE WITH PSU ENG SVCS DEPLOY RELAY/CONTACTOR BASED SOLUTION.			
EXTERIOR ROADWAYS	STANDARDS	N/A	CENTRAL CONTROL SYSTEM (BAS)				COORDINATE WITH PSU ENG SVCS			
						J.				