

CMGT 235 – Electrical and Mechanical Systems

Homework #30 – 06 FIXTURE Take Off

Due: 12/6/2022

Points: 20

Name: Solution

Procedure

1. Using the prepared takeoff sheet for E-2 FLOOR PLAN – LIGHTS and EQUIPMENT ROOM PLAN – LIGHT the following systems will be counted:

06 Fixtures

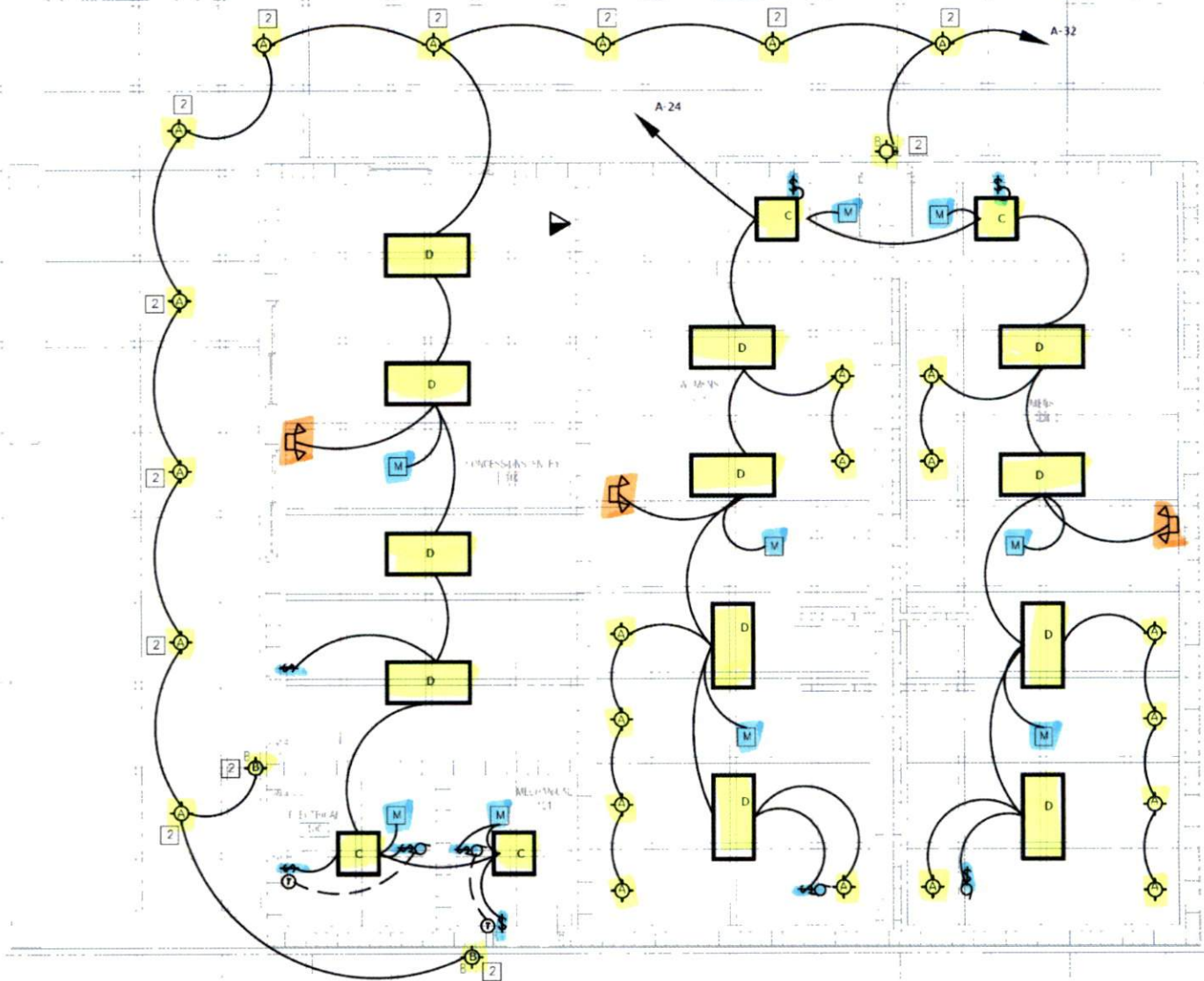
08 Devices – Lighting

06 Fixtures

1. Using the prepared Take Off Sheet for the Drawing E-2 FLOOR PLAN – LIGHTS and EQUIPMENT ROOM PLAN – LIGHT:
 - a. COLOR and COUNT the fixtures shown on the drawing using the Take Off Color Codes provided. Record the count in the appropriate location on the Take Off Sheet.

08 Devices – Lighting

1. Using the prepared Take Off Sheet for the Drawing E-2 FLOOR PLAN – LIGHTS and EQUIPMENT ROOM PLAN - LIGHT:
 - a. COLOR and COUNT the switches shown on the drawing using the Take Off Color Codes provided. Record the count in the appropriate location on the Take Off Sheet.
 - b. COLOR and COUNT the Motion Sensors shown on the drawing using the Take Off Color Codes provided. Record the count in the appropriate location on the Take Off Sheet.
2. Turn in the colored plans and completed take off sheet.



- 1 RUN 1/2" CONDUIT FROM THIS LOCATION TO ELECTRICAL ROOM. (COORDINATE EXACT LOCATION WITH PA SYSTEM)
- M MOTION DETECTOR-OPERATE LIGHT AND TOILET EXHAUST FAN
- 2 LIGHT OPERATE FROM TIMER AND PHOTOCELL (SERIES CONNECTION)



FLOOR PLAN-LIGHT EMERGENCY LIGHT NOTES:

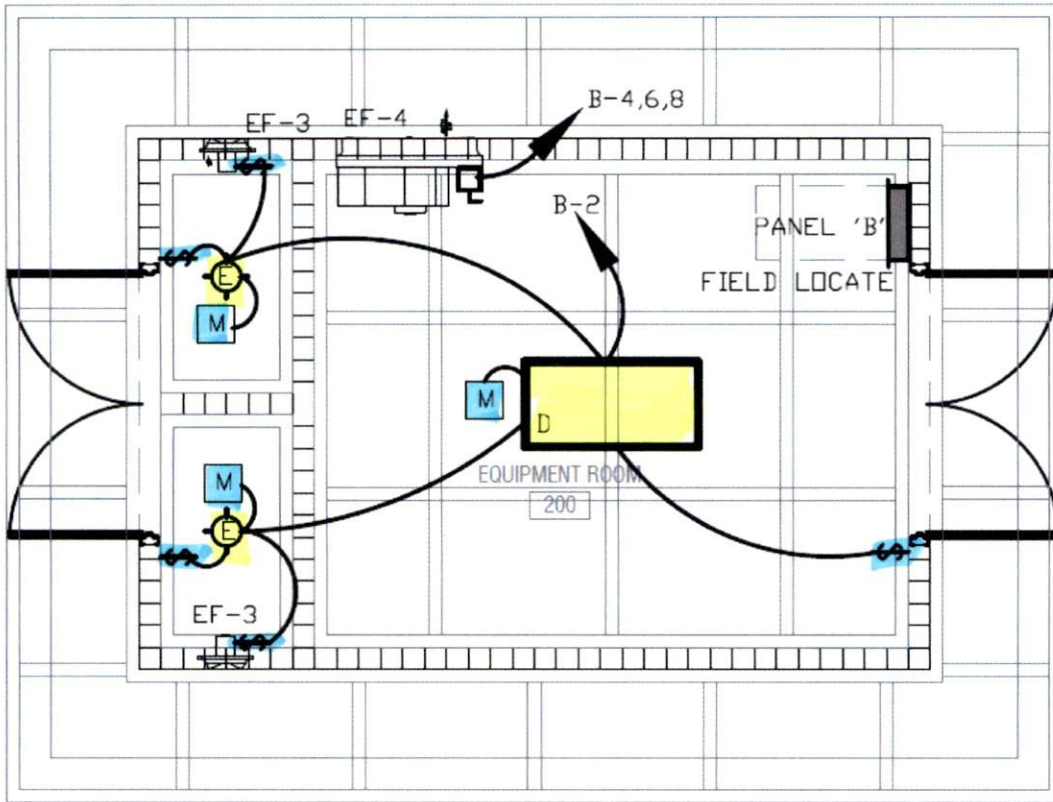
1/4"=1'-0"

1. THE BRANCH CIRCUIT FEEDING THE EMERGENCY LIGHT AND EXIT LIGHT SHALL BE THE SAME BRANCH CIRCUIT AS THAT SERVING THE NORMAL LIGHTING IN THE AREA AND CONNECTED AHEAD OF ANY LOCAL SWITCHES AS PER NEC CODE 700-12(E)
- a. EMERGENCY AND EXIT LIGHTS CONNECTED TO CIRCUITS CONTROLLED BY TIME CLOCK, OR PHOTOCELL SHALL HAVE BYPASS MEANS TO BE CONTINUOUSLY ENERGIZED WHEN CIRCUIT IS ACTIVE.
- b. CIRCUIT WITH EMERGENCY AND EXIT LIGHTS WITH NO SWITCH, TIME CLOCK OR PHOTOCELL SHALL BE PROGRAMMED TO OPERATE CONTINUOUSLY

**WALTON COUNTY
SPLASH PARK
BETWEEN, GEORGIA**

SHEET TITLE:
FLOOR PLAN -LIGHTS
FIXTURES SCHEDULE, SPEC.
PRINTED: 09/27/19

NUMBER:
E-2



EQUIPMENT ROOM PLAN-LIGHT

1/4"=1'-0"

SEE VORTEX DRAWINGS FOR THE EQUIPMENT

LIGHT FIXTURE SCHEDULE								
Symbol	Label	Manufacturer	Catalog Number	DESCRIPTION	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage
⊕	A	Cree Inc TECHNOLED	S-DL4-11L-40K	4-Inch Downlight, 11L CXB1512 Lumen Package, 4000K, Medium Distribution WET LOCATION	1	9618757	0.95	11.18
			w_S-DL4T-M-SS-C			1245		15
⊙	B	TECHNOLED	C-WM-A-WLHR-12L-40K-MB	CREE-LED EXTERIOR LIGHT WET LOCATION WITH PHOTOCELL		1200		22
			TL-MWP1-20W-H-50K			2200		20
□	C	Cortolux TECHNOLED	CRS-3555-2x2-LED-8-50K	2X4 LED SURFACE MOUNTED 4000K, DOOR/HOUSING APPROVED BY THE OWNER. WET LOCATION	1	5200	0.95	47
			052L-UNV-P56-X8			4400		40
▭	D	Cortolux TECHNOLED	CRS-3555-2x4-LED-8-50K	2X4 LED SURFACE MOUNTED 4000K, DOOR/HOUSING APPROVED BY THE OWNER. WET LOCATION	1	7800	0.95	75
			078L-UNV-P56-X8			4400		75
⊕	E	LARSON	VPLED-CRNM-LED10W			1050		
⚡		EXITRONIX	LED-52-WH-G2	Medium Distribution EXITRONIX LED-52 SERIES EMERGENCY LIGHT				1.1
⚡		EXITRONIX	VLED-EL90-G2	EXITRONIX VLED SERIES COMBINATION EXIT AND EMERGENCY LIGHT				
⊗		EXITRONIX	902E/903/E-U-WB-RM-G2	EXITRONIX 900 SERIES EXIT LIGHT				



NORTH STATE ELECTRIC

TAKE-OFF COLOR CODES

SYSTEM

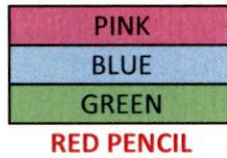
HIGHLIGHTER

LIGHTING FIXTURES
EMERGENCY FIXTURES



DEVICES

POWER
LIGHTING
TELE/DATA
FIRE ALARM

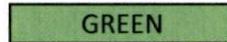


DISTRIBUTION EQUIP

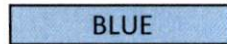
REGULAR POWER
EMERGENCY POWER



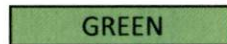
DUCTS AND TRAYS



MOTORS & CONN



GROUNDING



MISC SYSTEMS



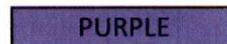
DARK BLUE OR ANY UNUSED COLOR
WITH NOTATION ON DRAWING

PENCIL COLORS

FEEDERS
BRANCH

EMT	NM Cable MC CABLE	PVC	GRC/IMC
RED	PINK	GREEN	BROWN

EXISTING / FBO



REMINDER: If it is not colored, then it is not counted!