

GENERAL LIGHTING NOTES

- 1) ALL WORK SHALL CONFORM SHALL COMPLY WITH CITY REQUIREMENTS AND THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE.
- 2) ELECTRICAL CONTRACTOR (E C) SHALL COORDINATE WITH ALL OTHER TRADES TO AVOID CONFLICTS
- 3) THE LOCATION OF ALL DEVICES, EQUIPMENT, PIPING, AND ETC INDICATED ON THE PLANS ARE DIAGRAMMATIC AND ARE SUBJECT TO RELOCATION AS REQUIRED TO ACCOMMODATE FINISH CONDITIONS INDICATED. DEVIATIONS IN ROUTING OR PLACEMENT OF SUCH FROM THE PLANS IS PERMISSABLE PROVIDED CODE COMPLIANCE IS NOT ALTERED.
- 4) WIRE FIXTURES WITH BATTERY PACKS IN SWITCHED CONFIGURATION UNLESS OTHERWISE NOTED.
- 5) EXIT AND EMERGENCY LIGHT FIXTURES (INTERIOR AND EXTERIOR) SHALL BE CONNECTED TO NEAREST UN-SWITCHED RECEPTACLE.
- 6) E C SHALL PROVIDE PHOTOCELL AND LIGHTING RELAY/CONTACTOR AS REQUIRED
- 7) LIGHTING ALL ARTIFICIAL LIGHT SOURCES.
- 8) OCCUPANCY SENSORS ARE TO BE COMMERCIAL GRADE, PROVIDE QUANTITY OF SENSORS AND POWER PACKS TO PROVIDE COMPLETE COVERAGE IN AREA SERVED. SWITCHING INDICATED IS TO BE DOWNSTREAM OF SENSORS
- 9) DIMMER SWITCHES SHALL BE SUPPLIED BY SAME VENDOR AS LIGHT FIXTURE AND DIMMING BALLAST. DIMMER AND BALLAST MUST BE COMPATIBLE.

GENERAL POWER NOTES

- 1) ALL WORK SHALL CONFORM AND SHALL COMPLY WITH CITY REQUIREMENTS AND THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE.
- 2) ELECTRICAL CONTRACTOR (E C) SHALL COORDINATE WITH ALL OTHER TRADES TO AVOID CONFLICTS. THE E C SHALL PAY FOR ALL MATERIALS, LABOR, FEES, AND ETC FOR A COMPLETE INSTALLATION.
- 3) ALL CONDUCTORS TO BE COPPER, 600V, THHN OR THWN-2, MC CABLE NOT ACCEPTABLE.
- 4) ALL CONDUCTORS ABOVE GRADE TO BE INSTALLED IN METALLIC CONDUIT, BELOW GRADE IMPLEMENT PVC SCHED 80 CONDUIT.
- 5) EACH CIRCUIT TO BE PROVIDED WITH AN INDEPENDENT NEUTRAL
- 6) ALL DISCONNECTS TO BE RATED FOR ENVIRONMENT INSTALLED AND H D
- 7) CONDUITS ABOVE GRADE, MIN SIZE OF 3/4", 2" AND GREATER TO BE RGC, 1-1/2" AND SMALLER MAY BE EMT WITH COMPRESION FITTINGS.
- 8) ALL CONDUITS BELOW GRADE TO BE PVC SCHEDULE 80 WITH LONG SWEEP ELBOWS
- 9) MOUNTING HEIGHTS FOR ELECTRICAL RECEPTACLES, MECHANICAL DEVICES AND OPERATING DEVICES SHALL COMPLY WITH THE TEXAS ACCESSIBILITY STANDARDS (TAS) REACH HEIGHTS UNLESS OTHERWISE INDICATED.
- 10) ALL WORK TO BE PERFORMED AND INSTALLED IN A COMPLETE WORKMAN LIKE MANNER.
- 11) THE LOCATION OF ALL DEVICES, EQUIPMENT, PIPING, AND ETC INDICATED ON THE PLANS ARE DIAGRAMMATIC AND ARE SUBJECT TO RELOCATION AS REQUIRED TO ACCOMMODATE FINISH CONDITIONS INDICATED. DEVIATIONS IN ROUTING OR PLACEMENT OF SUCH FROM THE PLANS IS PERMISSABLE PROVIDED CODE COMPLIANCE IS NOT ALTERED.
- 12) FOR ALL REQUIRED EQUIPMENT PROVIDE ARC-FLASH WARNING LABEL PER NEC 110-16
- 13) TELEPHONE/DATA OUTLETS; EC SHALL PROVIDE DOUBLE GANG BOX AND BLANK COVER PLATE. EXTEND 1" CONDUIT FROM BOX IN WALL TO ABOVE ACCESSIBLE CEILING, REFER TO DETAIL
- 14) EACH AC UNIT TO BE PROVIDED WITH AN ELECTRONIC PROGRAMMABLE THERMOSTAT OR BUILDING CONTROL SYSTEM. EC TO PROVIDE JUNCTION BOXES AND 1/2" CONDUIT RISER TO APPROX 18" ABOVE CEILING. MECHANICAL CONTRACTOR (OR CONTROLS CONTRACTOR) SHALL PROVIDE CONTROL WIRING

FAULT CURRENT CALCULATION SUMMARY:

BUS NAME	UPSTREAM FAULT CURRENT	BUS VOLTAGE	CONDUCTOR TYPE	CONDUCTOR SIZE	# CONDUCTORS PER PHASE	CONDUCTOR LENGTH (FEET)	AVAILABLE FAULT CURRENT
UTILITY TO MAIN	34639 ***	240	COPPER	3/0	2	20	28282
MAIN TO PANEL A	28282	240	COPPER	3/0	2	15	24861

*** NOTE THE ACTUAL AVAILABLE FAULT CURRENT WAS NOT KNOWN AT THE TIME OF DESIGN AND THE VALUE STATED WAS BASED UPON A 75 KVA TRANSFORMER WITH AN IMPEDANCE OF 1.5%. ONCE THE ACTUAL AVAILABLE FAULT CURRENT IS OBTAINED ADJUSTMENTS TO THE PANEL RATINGS WILL HAVE TO BE MADE. NOTIFY ENGINEER OF THE ACTUAL AVAILABLE FAULT CURRENT.

ELECTRICAL SERVICE NOTES

- 1) ALL WORK SHALL CONFORM SHALL COMPLY WITH UTILITY REQUIREMENTS AND THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE, AND CITY REQUIREMENTS.
- 2) ELECTRICAL CONTRACTOR (E C) SHALL COORDINATE WITH ALL OTHER TRADES TO AVOID CONFLICTS
- 3) THE ELECTRICAL CONTRACTOR SHALL PAY FOR ALL MATERIALS, LABOR, UTILITY FEES FOR A COMPLETE INSTALLATION INCLUDING BUT NOT LIMITED TO PURCHASING ELECTRIC METER, INSTALLATION OF TRANSFORMER, CONSTRUCTING TRANSFORMER PAD, OPENING AND CLOSING TRENCHES, AND PROVIDING CONDUCTORS AND CONDUIT, UNLESS INSTRUCTED OTHERWISE BY THE UTILITY COMPANY.
- 4) ELECTRICAL SERVICE VOLTAGE TO BE 240/120 V, 1 - Φ , 3 - W.

FIRE ALARM SYSTEM NOTES

- 1) A FIRE ALARM SYSTEM FOR THE PROTECTION OF THE BUILDING AND OCCUPANTS IS TO BE PROVIDED.
- 2) ALL WORK SHALL CONFORM SHALL COMPLY WITH ALL LOCAL REQUIREMENTS, TAS, THE LATEST EDITION OF NFPA 72, AND TDLR REQUIREMENTS
- 3) THE CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES TO AVOID CONFLICTS
- 4) THE SYSTEM IS TO BE DESIGNED AND INSTALLED BY A CERTIFIED FIRE ALARM CONTRACTOR.
- 5) THE SYSTEM IS TO BE DESIGNED TO PROVIDE COMPLETE COVERAGE OF THE FACILITY
- 6) ALL CONDUCTORS TO BE INSTALLED IN METALLIC CONDUIT

COMcheck Software Version COMcheckWeb
Interior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: RANGER COLLEGE MULTI-PURPOSE FACILITY
Project Type: New Construction

Construction Site: 609 COOPER ST RANGER, Texas 76470
Owner/Agent: RANGER COLLEGE
Designer/Contractor: SAMUEL ENGINEERING

Additional Efficiency Package(s)
Credits: 1.0 Required 0.0 Proposed

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts
1-MULTI-PURPOSE FACILITY (School/University)	2420	0.81	1960
Total Allowed Watts = 1960			

Proposed Interior Lighting Power

Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	A Lamps/ Fixture	B # of Fixture	C D E (C X D) Watt.
1-MULTI-PURPOSE FACILITY (School/University)			
LED: LED Panel 54W:	1	21	54
LED: LED Panel 19W:	1	1	26
LED: Other:	1	3	59
LED: Other:	1	1	67
LED: LED A Lamp 25W:	1	2	23
Total Proposed Watts = 1450			

Interior Lighting PASSES: Design 26% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2018 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title _____ Signature _____ Date _____

Project Title: RANGER COLLEGE MULTI-PURPOSE FACILITY Report date: 01/17/24
Data filename: _____ Page 1 of 5

COMcheck Software Version COMcheckWeb
Exterior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: RANGER COLLEGE MULTI-PURPOSE FACILITY
Project Type: New Construction
Exterior Lighting Zone: 3 (Other (LZ3))

Construction Site: 609 COOPER ST RANGER, Texas 76470
Owner/Agent: RANGER COLLEGE
Designer/Contractor: SAMUEL ENGINEERING

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts /	D Tradable Wattage	E Allowed Watts (B X C)
Entry canopy	75 ft2	0.4	Yes	30
Outdoor sales area/lot	797 ft2	0.35	Yes	279
Illuminated area of facade wall or surface	1200 ft2	0.11	No	136
Free standing/attached sales canopy	828 ft2	0.6	Yes	497
Total Tradable Watts (a) =				806
Total Allowed Watts =				941
Total Allowed Supplemental Watts (b) =				500

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.
(b) A supplemental allowance equal to 500 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

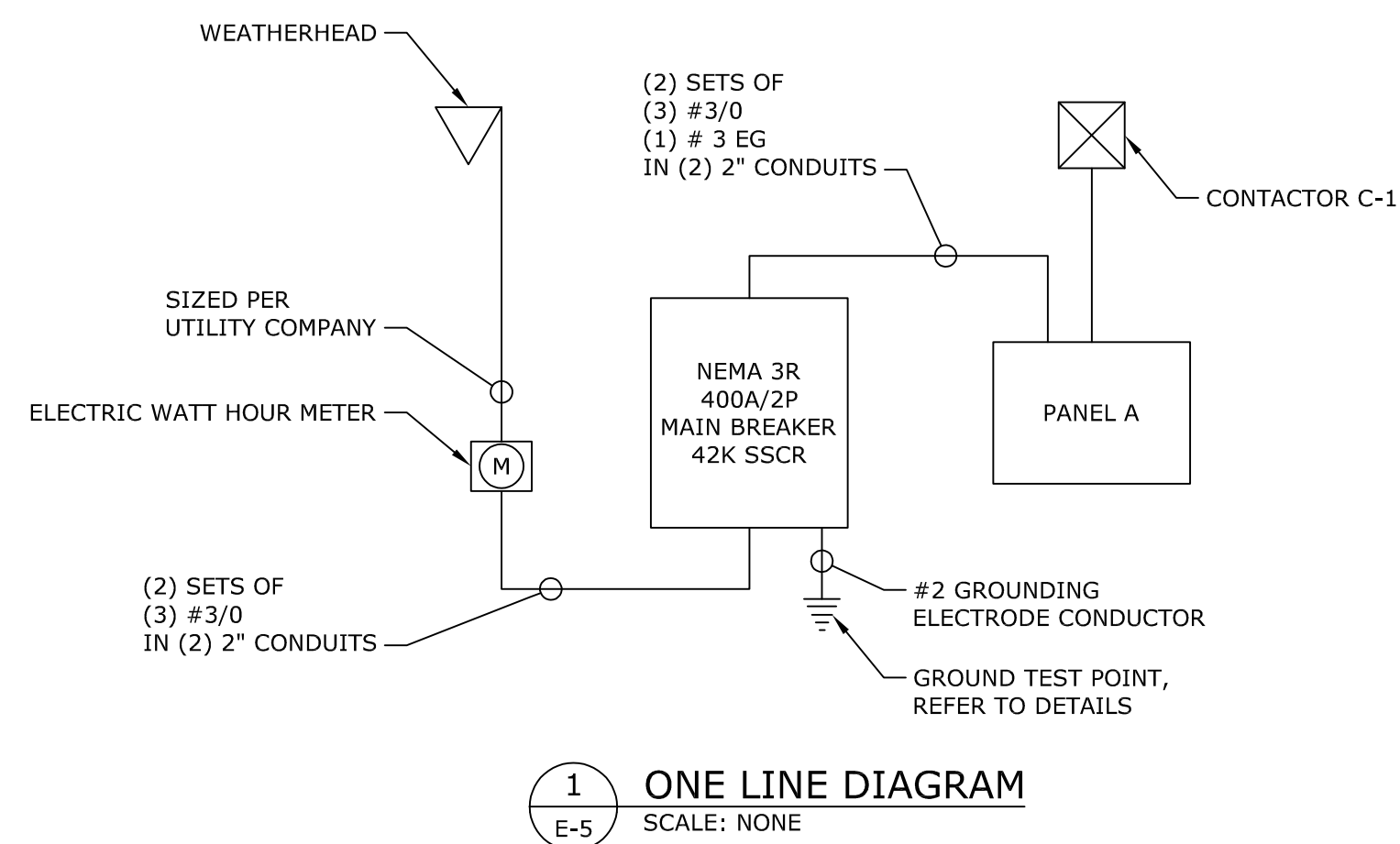
Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	A Lamps/ Fixture	B C # of Fixture	D E (C X D) Watt.	
Entry canopy (75 ft2): Tradable Wattage				
LED: LED PAR 20W:	1	2	17	
Outdoor sales area/lot (797 ft2): Tradable Wattage				
LED: Other:	1	4	67	
Illuminated area of facade wall or surface (1200 ft2): Non-tradable Wattage				
LED: Other:	1	2	74	
Free standing/attached sales canopy (828 ft2): Tradable Wattage				
LED: Other:	1	5	67	
Total Tradable Proposed Watts =				636

Exterior Lighting PASSES: Design 51% better than code

Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2018 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Project Title: RANGER COLLEGE MULTI-PURPOSE FACILITY Report date: 01/17/24
Data filename: _____ Page 1 of 5



SE PROJECT NUMBER: 23415

PREPARED BY:

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 ARCHITECTS & PLANNERS

DETAIL AND NOTES
 MULTI-PURPOSE FACILITY FOR
 RANGER COLLEGE
 609 Cooper St. Ranger Tx. 76470

DATE OF REVISIONS:
 REV 0 IFC 01/22/24

JOB NO.
 23CO9RAN

DRAWN BY:
 PL

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