

Electrical Coded Notes

1.

Light Fixture to be replaced in existing location. Demo Existing fixture and maintain circuit & control. (See floor plans)

2.

New light fixture in new location, Connect back to existing lighting circuit. (see floor plans)

3.

New 30' Utility pole, coordinate with utility company on new pole and utility line changes. Provide new area light and bracket to mount to pole. Coordinate exact requirements in field.

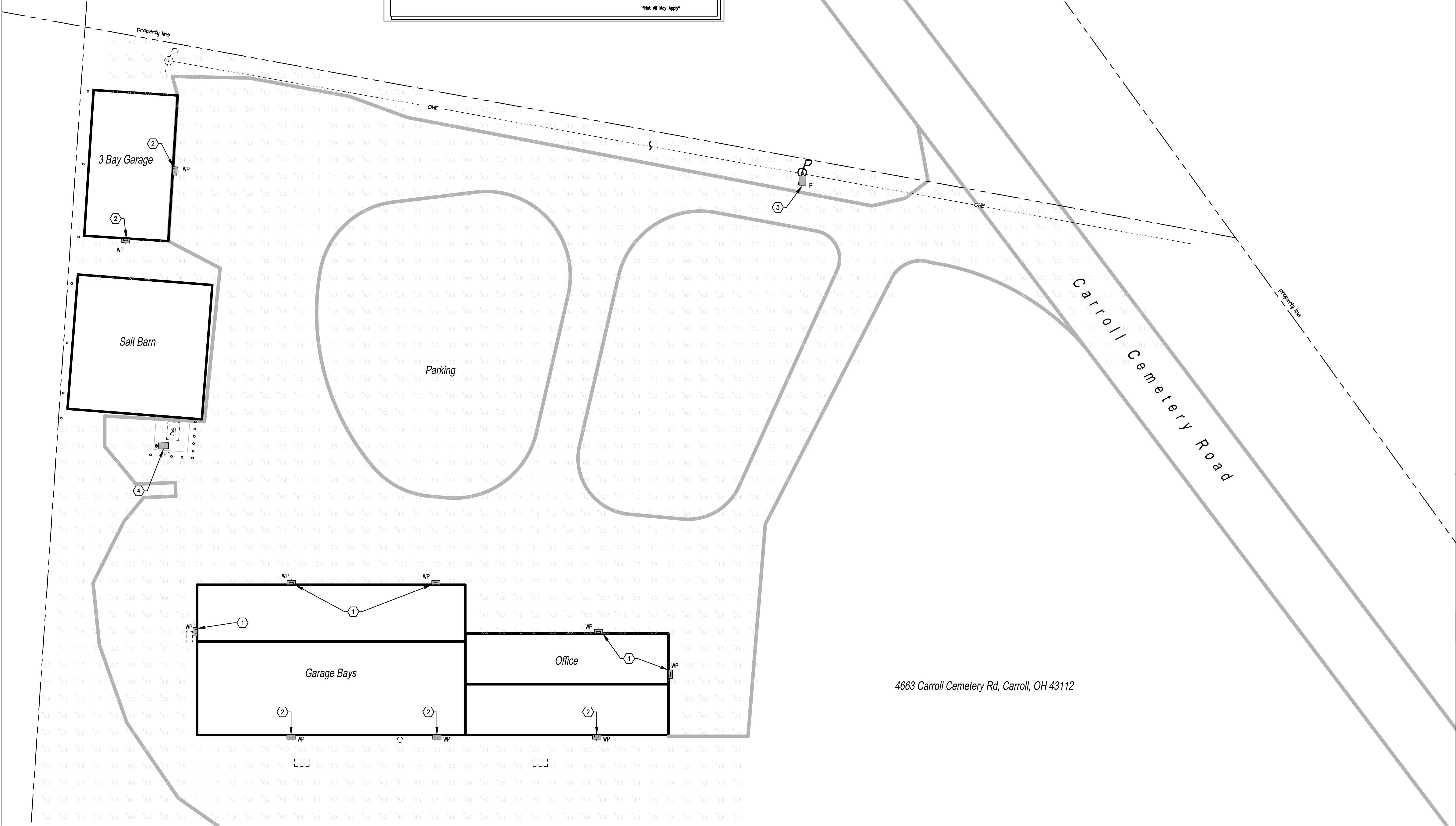
4.

Provide new area light and bracket to mount to pole. Coordinate exact requirements in field.

Not All May Apply

Equipment Notes

Contractor to include 10% minimum bench stock for all fixtures, or a minimum of two(2) where 10% of fixtures is less than 2.



PROJECT PHASE

☐ PRELIMINARY

☐ PRICING

☒ CONTRACT DOCUMENTS

☐ OWNER'S APPROVAL

☐ PLAN APPROVAL

☐ CONSTRUCTION

DESIGNED

AA

DRAWN

AA

CHECKED

LJD

REVISIONS

NO.	DATE	DESCRIPTION

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Lighting Upgrade

4663 Carroll Cemetery Road,

Carroll, Ohio 43112

Prepared For:

Greenfield Township

4663 Carroll Cemetery Road,

Carroll Ohio 43112

STATE OF OHIO

LANCE J. DEBENEDICTIS

E-63937

REGISTERED PROFESSIONAL ENGINEER

xpert engineering

1857 Northwest Blvd., Columbus, Ohio 43212

614.764.5000

www.xpert-eng.com

Electrical Site Plan

Project No.

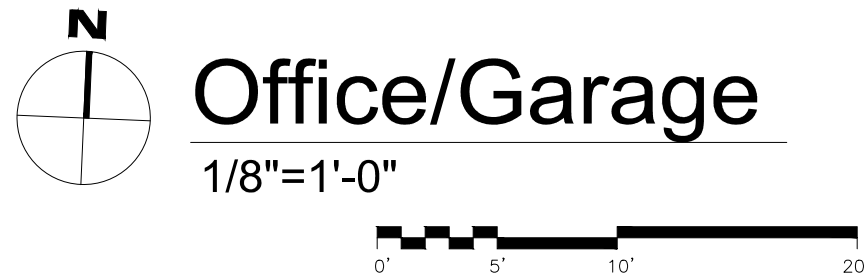
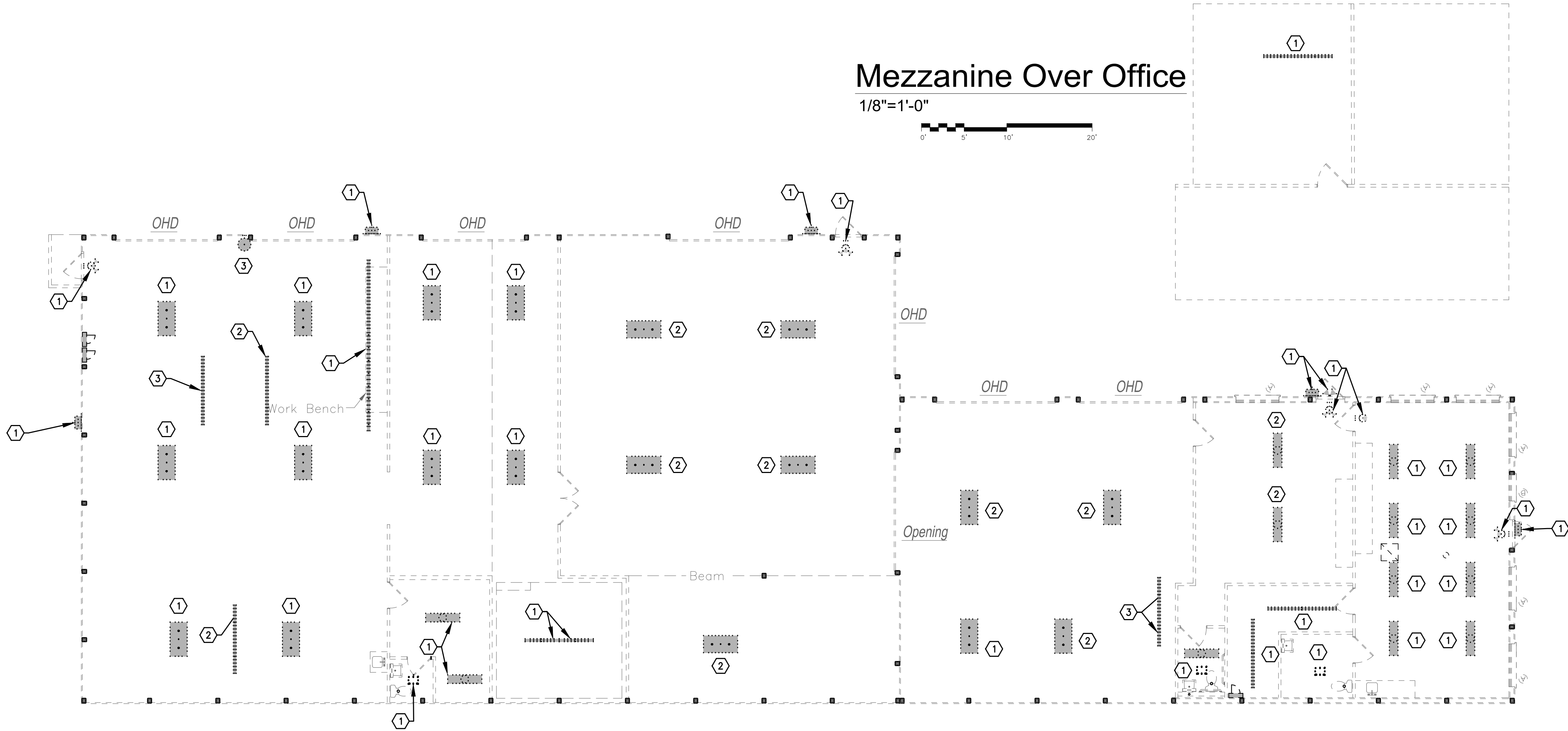
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Date

05/18/2022

ES101

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Electrical Coded Notes

1. Light Fixture to be replaced in existing location. Demo Existing fixture and maintain circuit & switching.

2. Light fixture to be demolished see new work plan for new light layout. Provide junction box, feeder, conduit and extend to new fixture location.

3. Light fixture to be demolished. Demo device and maintain existing devices on circuit.

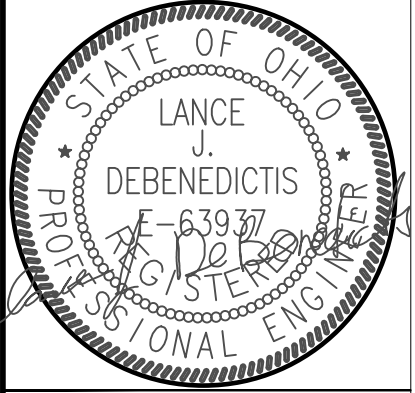
Not All May Apply

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<input type="checkbox"/> PLAN APPROVAL		
<input type="checkbox"/> CONSTRUCTION		
DESIGNED	AA	
DRAWN	AA	
CHECKED	LJD	
REVISIONS		
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Prepared For:
Greenfield Township
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Electrical First Floor
Demo Work Plan

Project No.

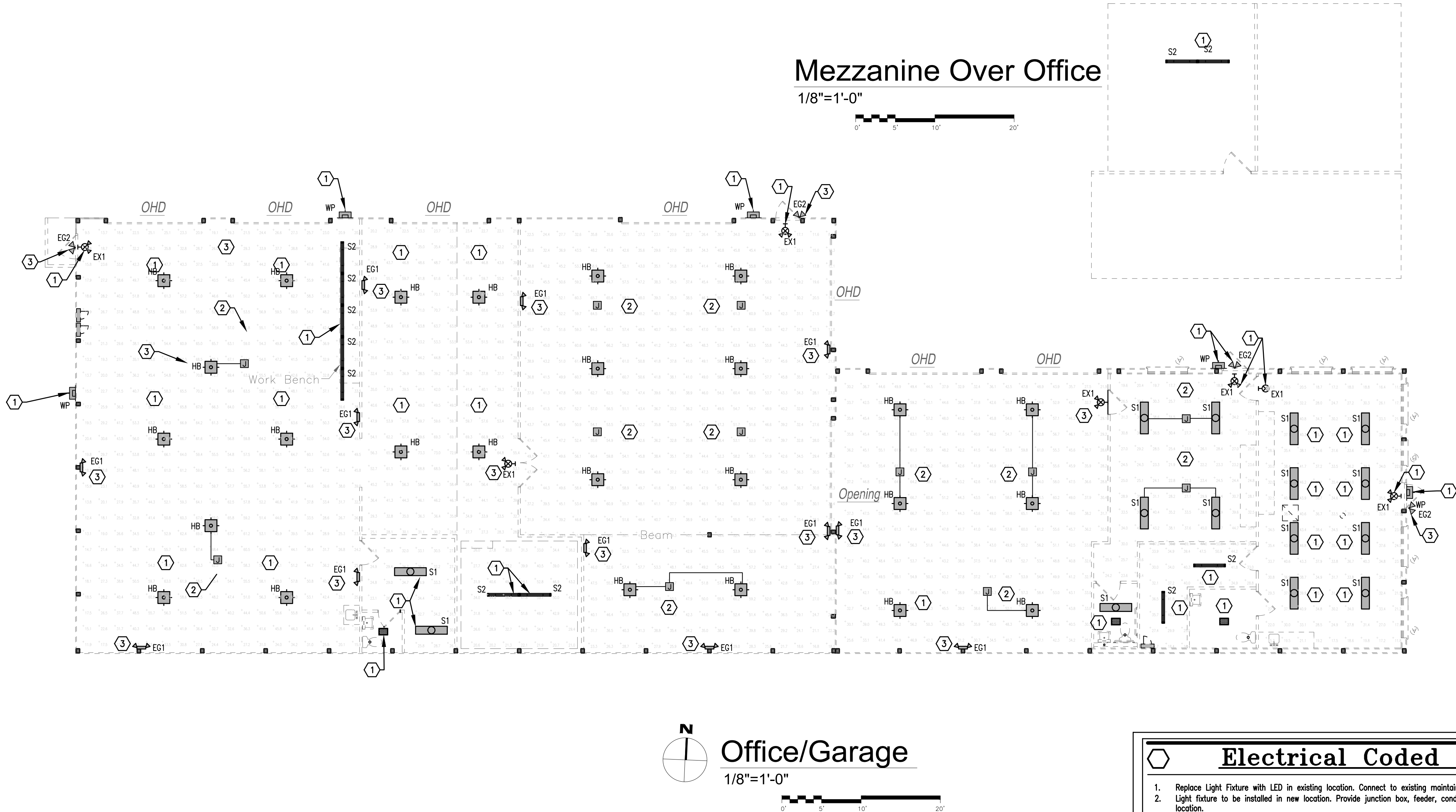
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Date

05/18/2022

E101D

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Equipment Notes	
• Contractor to include 10% minimum bench stock for all fixtures, or a minimum of two(2) where 10% of fixtures is less than 2.	

Electrical Coded Notes	
1. Replace Light Fixture with LED in existing location. Connect to existing maintain circuit & switching.	
2. Light fixture to be installed in new location. Provide junction box, feeder, conduit and extend to new fixture location.	
3. New Light fixture. Connect to existing light circuit & switching.	
Not All May Apply	

PROJECT PHASE		
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Carroll, Ohio 43112

Prepared For:
Greenfield Township
4663 Carroll Cemetery Road,
Carroll Ohio 43112



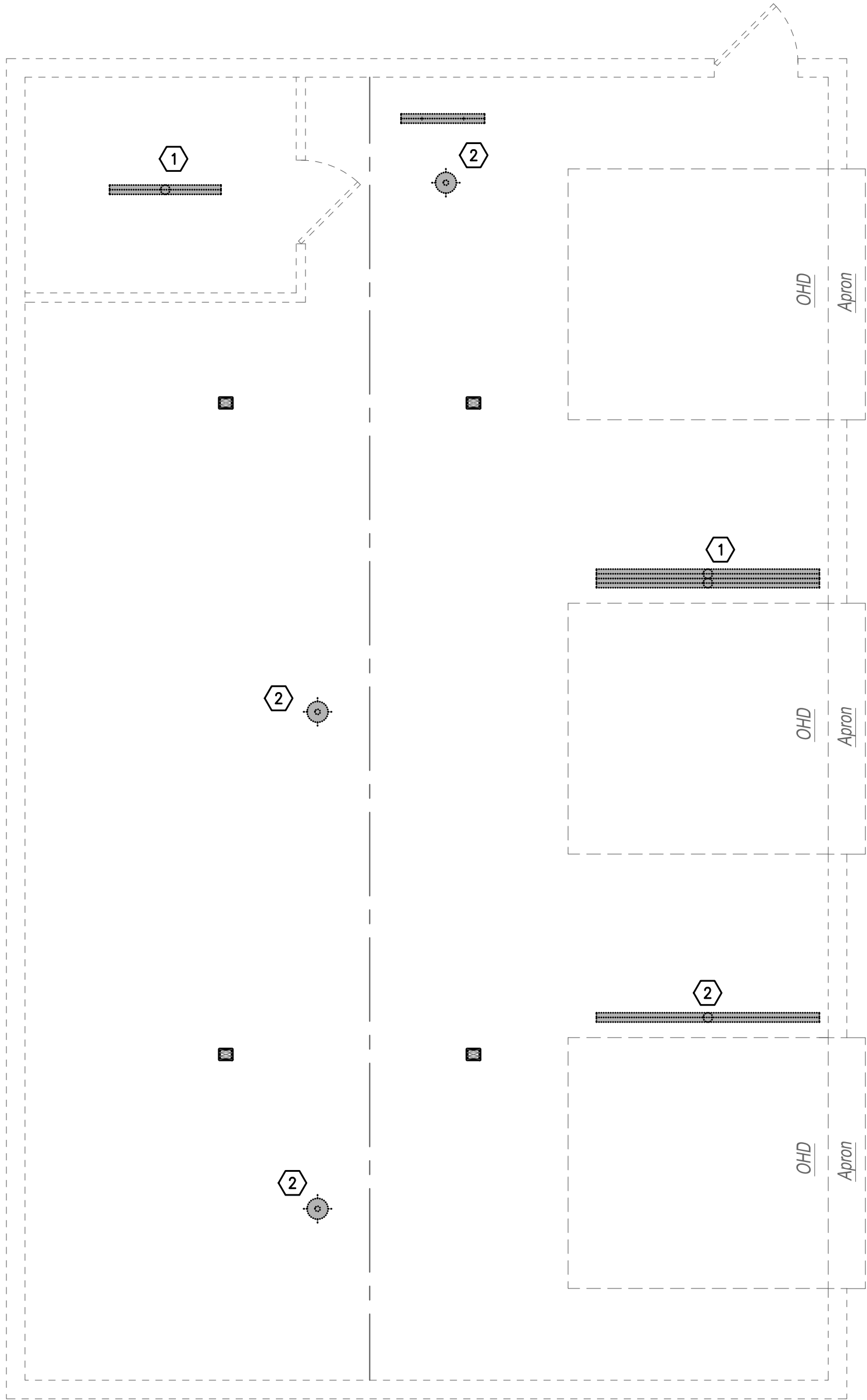
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Electrical First Floor New Work Plan	
Project No.	23038
Date	05/18/2022

E101N

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Electrical Coded Notes

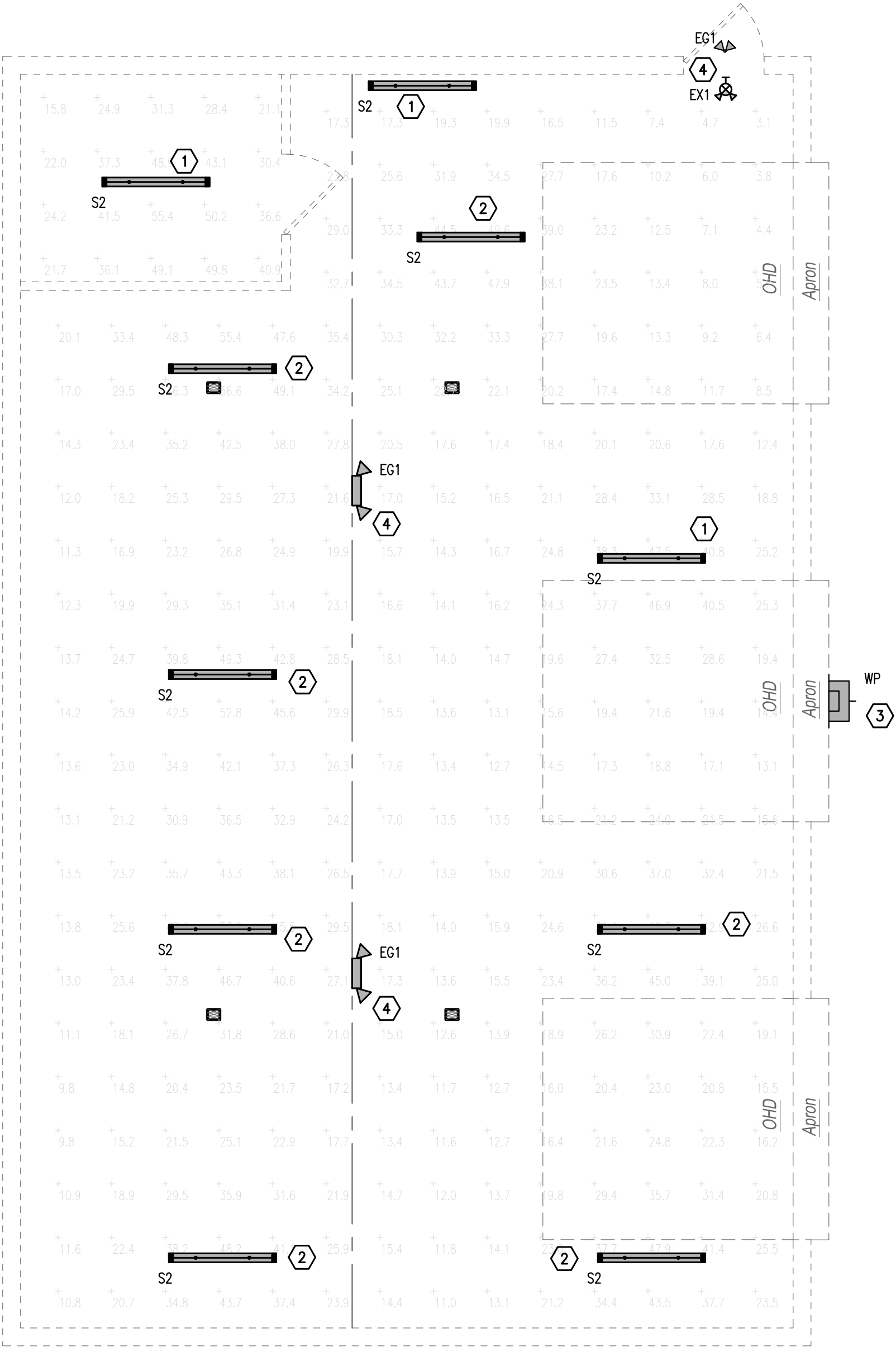
1. Light Fixture to be replaced in existing location. Demo Existing fixture and maintain circuit & switching.

2. Light fixtures to be demolished. New lighting layout in new work.

Not All May Apply

Equipment Notes

Contractor to include 10% minimum bench stock for all fixtures, or a minimum of two(2) where 10% of fixtures is less than 2.



Electrical Coded Notes

1. Replace Light Fixture with LED in existing location. Connect to existing maintain circuit & switching.

2. Light fixture to be installed in new location. Provide junction box, feeder, conduit and extend to new fixture location. Mount strip light surface on bottom of roof trusses. Coordinate exact location in field. Provide new switch at door.

3. Light fixture to be installed in new location. Provide junction box, feeder, conduit and extend to new fixture location. Wall Pack to have integrated photocell.

4. New exit and egress lighting, connect to existing circuit.

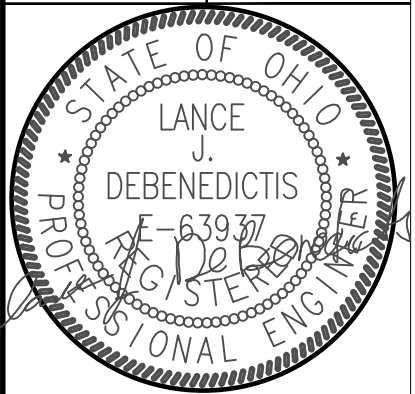
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DRAWN		AA
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REVISIONS		
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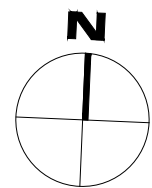
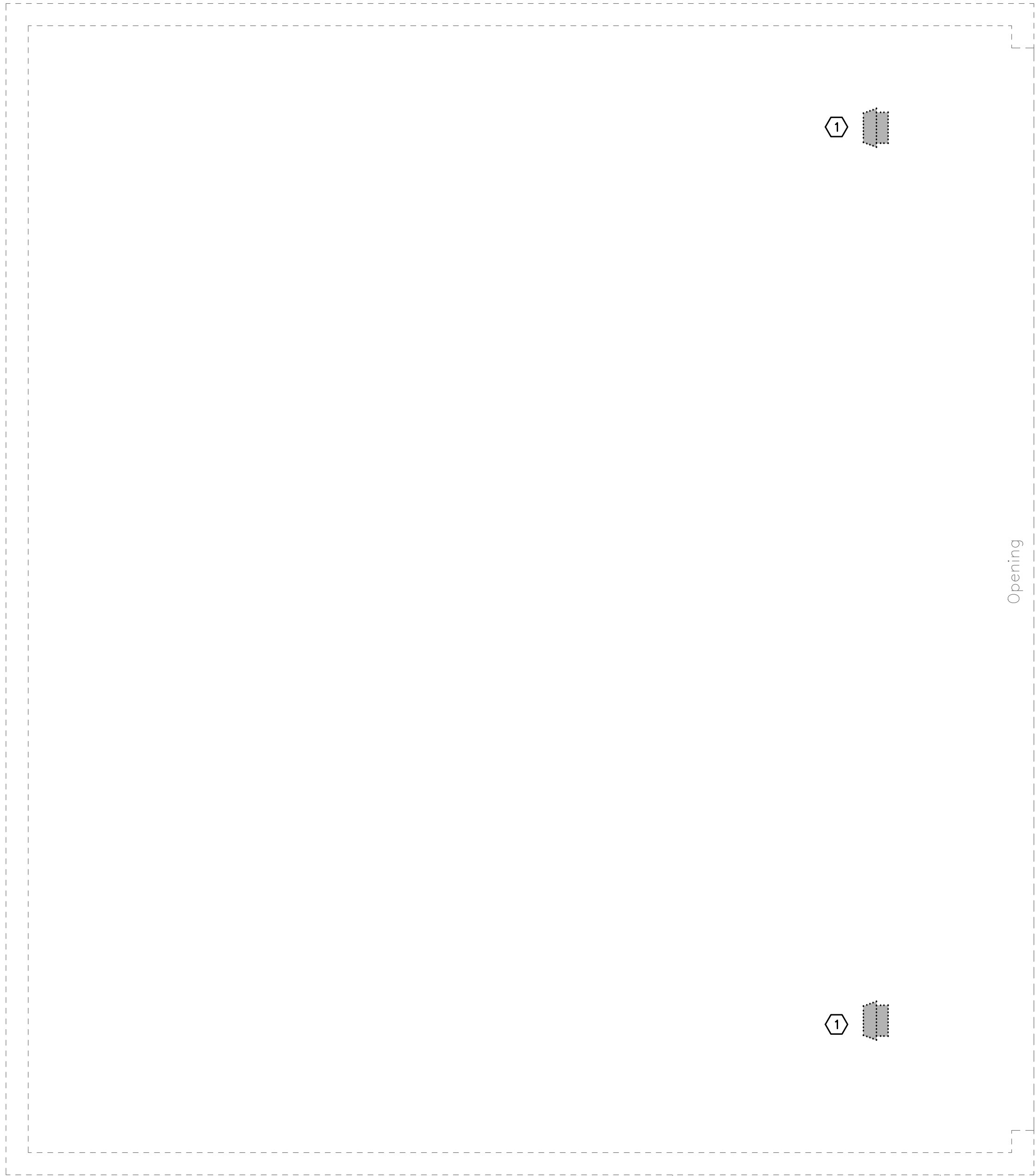
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Electrical First Floor Demo & New Work Plan	
Project No.	23038
Date	05/18/2022

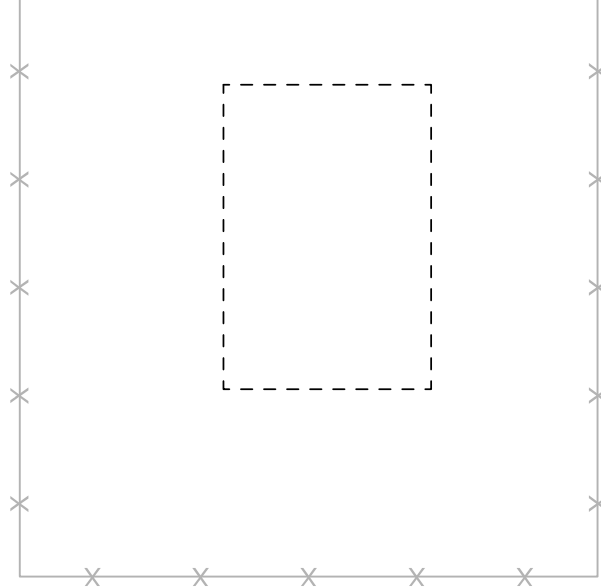
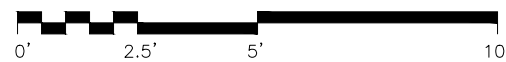
E102

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Salt Barn

1/4"=1'-0"



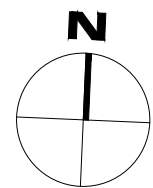
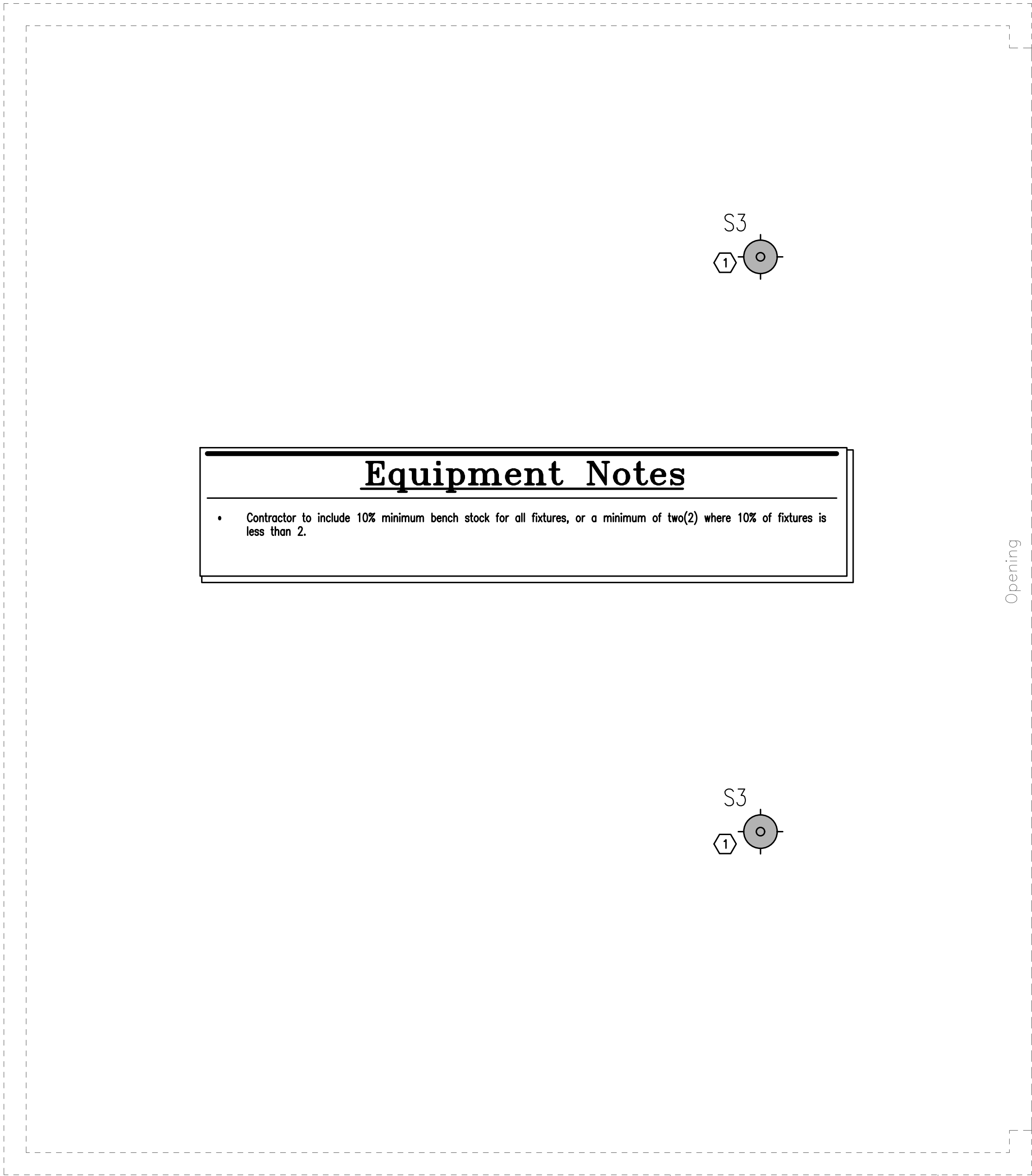
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Electrical Coded Notes

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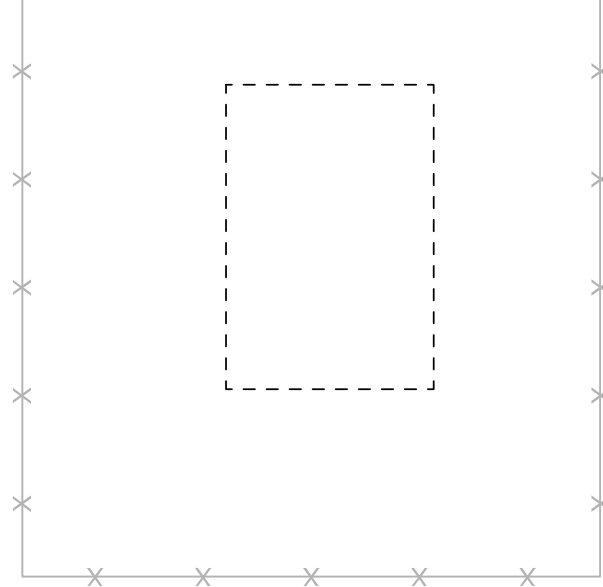
1. Light fixtures to be demolished. New lighting layout in new work.

Not All May Apply



Salt Barn

1/4"=1'-0"



⬡

Electrical Coded Notes

⬡

1. Light fixture to be installed in new location. Provide junction box, feeder, conduit and extend to new fixture location. Mount hazardous environment light on bottom of roof trusses, rotate away from drivers approach so light is aimed towards back of barn towards salt pile. Coordinate exact location in field. Provide new switch at door.

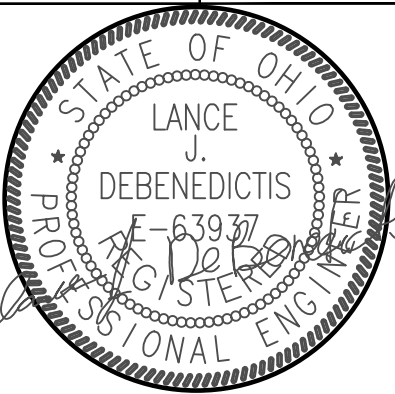
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<input type="checkbox"/> OWNER'S APPROVAL		
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<input type="checkbox"/> CONSTRUCTION		
DESIGNED	AA	
DRAWN	AA	
CHECKED	LJD	
REVISIONS		
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Carroll, Ohio 43112

Prepared For:
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xpert engineering

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www.xpert-eng.com

Electrical First Floor Demo & New Work Plan	
Project No.	23038
Date	05/18/2022

E103

S1

RAB

GUSJR4-27-835WU

The S1 Series GUJR4-27-835WU is designed to deliver bright, even lighting for surface mount applications. It features a modern, rectangular design with a sleek, brushed metal finish. The luminaire is designed for easy installation and maintenance.

Color White **Weight: 9.5 lbs**

Technical Specifications

Compliance

UL Listed:
Suitable for damp locations
IESNA LM-79 & LM-80 Testing:
RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.
DLC Listed:
This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities.
DLC Product Code: PTKT1CPZ

Electrical

Driver:
Constant Current, Class 2, 120-277V, 50/60 Hz, 120V: 0.22A, 208V: 0.16A, 240V: 0.11A, 277V-0.10A
Dimming Driver:
Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dimm down to 10%.

THD:

2.42% at 120V, 5.25% at 277V

Power Factor:

99.6% at 120V, 93.5% at 277V

Performance

Lifespan:
50,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations
Wattage Equivalency:
Equivalent to (2) F32T8W
LED Characteristics
LEDs:
Long-life, high-efficiency, surface-mount LEDs

Color Uniformity:

RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Construction

Cold Weather Starting:
The minimum starting temperature is -20°C (-4°F)
Maximum Ambient Temperature:
Suitable for use in up to 40°C (104°F)
Housing:
Sheet metal stamping 24 gauge, cold-rolled steel

Project:		Type:
<input type="text"/>		<input type="text"/>

Prepared By:		Date:
<input type="text"/>		<input type="text"/>

Driver Info		LED Info	
Type	Constant Current	Watts	27W
120V	0.22A	Color Temp	3500K (Warm Neutral)
208V	0.16A	Color Accuracy	83 CRI
240V	0.11A	L70 Lifespan	50,000 Hours
277V	0.10A	Lumens	3,368 lm
Input Watts	26.7W	Efficiency	126.1 lm/W

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NuTone

SPECIFICATION SHEET

MODEL HB80RL FAN/LIGHT

Quiet heavy duty ventilators built with high performance blowers.

FEATURES

GRILLE:

- Matte white polymeric - blends well with any decor
- Sturdy light-diffusing lens accepts up to 100W incandescent lamp. Bulb not included.

BLOWER:

- Plug-in, permanently lubricated, totally enclosed motor
- Centrifugal blower wheel for quiet, efficient performance
- Long life motor bearings
- Designed for continuous operation

HOUSING:

- Rugged, 26-gage galvanized steel construction
- Integral key-holed mounting brackets for easy, secure installation directly to joist
- Provision for wire suspension when installed in a drop ceiling
- Tapered, polymeric duct fitting with built-in backdraft damper for easy, positive duct connection and no metallic clatter

NOTE: For installation in ceilings up to 12/12 pitch

- U.L. Listed for use in insulated ceilings (Type I.C.)
- U.L. Listed for use over bathtubs and showers when connected to a GFCI protected branch circuit
- Use supply wiring rated for at least 90°C

TYPICAL SPECIFICATION

Fan/Light unit shall be NuTone Model HB80RL.

Unit shall have galvanized steel housing with integral mounting brackets. Unit shall have built-in backdraft damper and shall be ducted to a roof or wall cap.

Motor to be totally enclosed, permanently lubricated, and have long-life bearings designed for continuous operation. Blower assembly shall have a centrifugal blower wheel and be removable from housing.

Air delivery shall be no less and sound level no greater than values listed in the "Performance Ratings" charts on this sheet. All air and sound ratings shall be certified by HVI.

Unit shall be U.L. Listed for use over bathtubs and showers when connected to GFCI protected branch circuit.

Unit shall be U.L. Listed for use in insulated ceilings (Type I.C.).

Broan Hartford, Wisconsin www.nutone.com 888-336-3948

REFERENCE	QTY.	REMARKS	Project
			Location
			Architect
			Engineer
			Contractor
			Submitted by Date

91C 1100699B

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GUSJR4-27-835WU				S1		RAB			
Technical Specifications (continued)									
Construction				Trade Agreements Act Compliant:					
Reflector:				This product is a product of Cambodia and a "designated country" end product that complies with the Trade Agreements Act					
Sheet metal forming 24 gauge, cold-rolled steel with white powder coat				Buy American Act Compliance:					
Lens:				RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.					
Prismatic Acrylic Lens									
Mounting:									
Surface mount. Can be mounted with v-hooks (ordered separately).									

PERFORMANCE RATINGS - MODEL HB80RL

EF

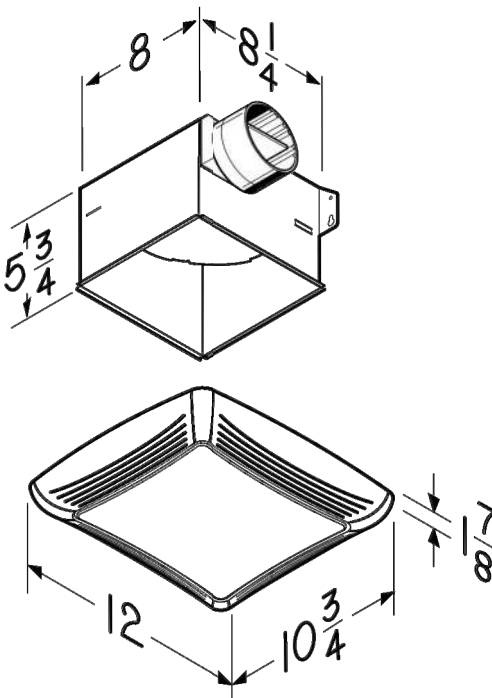
HVI PERFORMANCE


Model	Static Pressure (Pa)	CFM	Sones
HB80RL	0.10	80	2.5

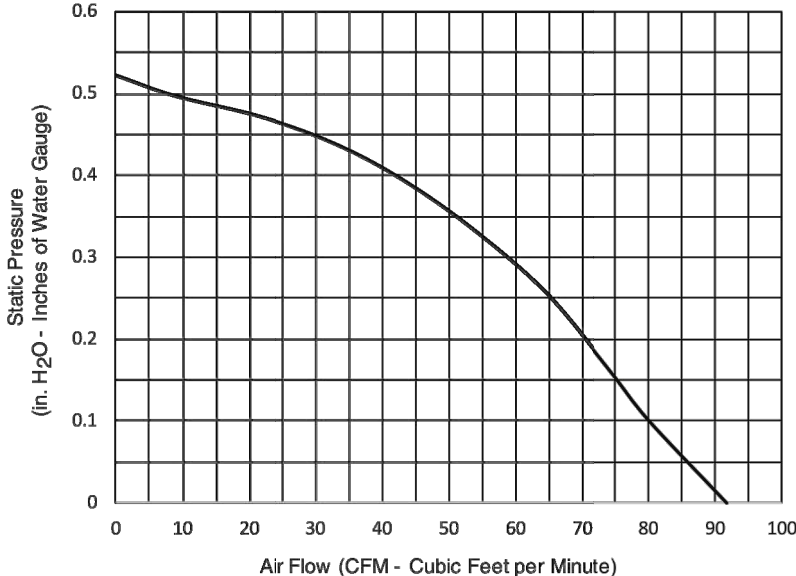


HVI
CERTIFIED

HVI-2100 CERTIFIED RATINGS comply with new testing technologies and procedures prescribed by the Home Ventilating Institute, for off-the-shelf products, as they are available to consumers. Product performance is rated at 0.1 in. static pressure, based on tests conducted in a state-of-the-art test laboratory. Sones are a measure of humanly-perceived loudness, based on laboratory measurements.







Air Flow (CFM)	Static Pressure (in. H ₂ O)
0	0.50
10	0.48
20	0.45
30	0.41
40	0.36
50	0.29
60	0.20
70	0.10
80	0.02
90	0.00

WEIGHT

MODEL NO.	SHIPPING WT.
HB80RL	6.7 lbs.

NuTone

Broom Hartford, Wisconsin www.nutone.com 888-336-3948

Product Information

RAIL90N

HB

Premium, linear high bay available in five sizes/wattages. Ultra-high efficacy. Designed to be ecofriendly.

Color: White/aluminum

Weight: 8.5 lbs

Project:

Type:

Prepared By:

Date:

Driver Info

Type	Constant Current
120V	0.80A
208V	0.46A
240V	0.40A
277V	0.35A
Input Watts	89W

LED Info

Watts	90W
Color Temp	4000K (Neutral)
Color Accuracy	84 CRI
L70 Lifespan	100,000 Hours
Lumens	12,185 lm
Efficacy	136.9

Technical Specifications

Compliance

UL Listed:

Suitable for damp locations

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80

DLC Listed:

This product is listed by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities. Designed to meet DLC S.1 requirements.
DLC Product Code: S-F7ELAI

Performance

Lifespan:

100,000-Hour LED lifespan based on ES LM-80 results and TM-21 calculations

Wattage Equivalency:

Equivalent to ESNM Metal Halide

LED Characteristics

LEDs:

Long-life, high-efficiency, surface-mount LEDs

Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Color Stability:

LED Color temperature is warranted to shift no more than 200K in color temperature over a 5-year period

Color Uniformity:

RAB's range of Correlated Color Temperature follows the guidelines for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Electrical

Drive:

Constant Current, Class 2, 120-277V, 50/60Hz, 120V: 0.80A, 208V: 0.46A, 240V: 0.40A, 277V 0.35A

THD:

1.63% at 120V, 5.61% at 277V

Power Factor:

99.9% at 120V, 97% at 277V

Surge Protection:

6kV

Construction

Cold Weather Starting:

The minimum starting temperature is -20°C (-4°F)

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Page 1 of 2

RAB

SR4

S2

Project:	Type:
<input type="text"/>	<input type="text"/>
Prepared By:	Date:
<input type="text"/>	<input type="text"/>

Driver Info

Type	Constant Current
120V	0.33A/0.25A/0.17A
208V	0.19A/0.14A/0.10A
240V	0.17A/0.13A/0.08A
277V	0.14A/0.11A/0.07A
Input Watts	20.1-42.6W

LED Info

Watts	40/50/20W
Color Temp	3500K/4000K/5000K
Color Accuracy	83-84 CRI
L70LifeSpan	50,000 Hours
Lumens	3,155-6,174 lm
Efficacy	140.2-163.7 lm/W

Technical Specifications

Field Adjustability

Field Adjustable:

Field Adjustable Light Output:
40W/50W/20W (factory default: 40W)
Color temperature selectable by 5000K, 4000K and
3500K (factory default 4000K)

Compliance

UL Listed:

Suitable for damp locations.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities. Designed to meet DLC S.1 requirements.
DLC Product Code: S-CUUVBW

LED Characteristics

LEDE:

Long-life, high-efficacy, discrete, surface-mount LEDs

Color Uniformity:

RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Color Consistency:

4-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Performance

LifeSpan:

50,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

Wattage Equivalency:

- 40W: (E) F32T8
- 50W: (C) F32T8
- 20W: (I) F32T8

Electrical

Dimming Driver:

Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims down to 10%.

THD:

6.22% at 120V, 14.88% at 277V

Power Factor:

99.99% at 120V, 98.26% at 277V

Surge Protection:

L-N 1KV, L/N-G 2KV

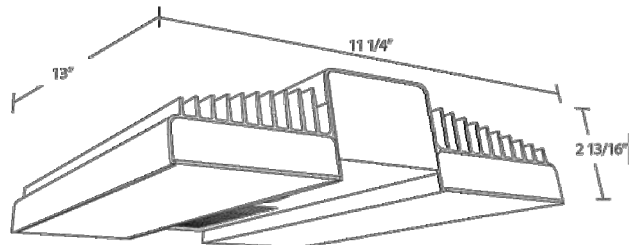
Construction

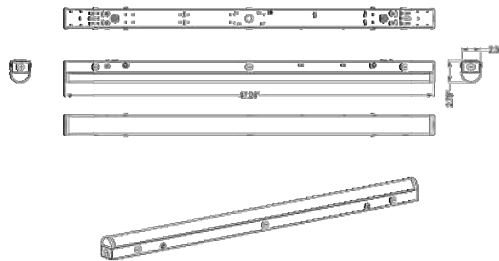
Cold Weather Starting:

The minimum starting temperature is 0°C (32°F)

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Page 1 of 3

RAIL90N	HB	RAB										
<div> <div> <h3>Technical Specifications (continued)</h3> <div> <div>Construction</div> <div> <p>Maximum Ambient Temperature: Suitable for use in up to 50°C (122°F)</p> <p>Housing: Extruded aluminum</p> <p>Lens: Polycarbonate lens</p> </div> </div> <div> <div>Reflector:</div> <div> <p>Polyethylene Terephthalate (PET)</p> <p>Mounting: Hooks (chain by others)</p> <p>Other Warranty: RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.</p> </div> </div> <div> <div>Trade Agreements Act Compliant:</div> <div> <p>This product is a product of Cambodia and a "designated country" end product that complies with the Trade Agreements Act</p> <p>Buy American Act Compliant: RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.</p> </div> </div> </div> </div>												
<div> <div>Dimensions</div>  </div>	<div> <div>Features</div> <div> <p>100,000-Hour LED lifespan</p> <p>DLC Premium Listed</p> <p>0-10W dimming, standard</p> <p>5-Year, No-Compromise Warranty</p> </div> </div>											
<div> <div>Ordering Matrix</div> <table> <tr> <th>Family</th><th>Wattage (Length)</th><th>Color Temp</th><th>Voltage</th><th>Options</th></tr> <tr> <td>RAIL</td><td>90</td><td>N</td><td></td><td></td></tr> </table> <div> <div> <p>90 = 90W (13")</p> <p>150 = 150W (20")</p> <p>175 = 175W (23")</p> <p>225 = 225W (31")</p> <p>400 = 400W (46")</p> </div> <div> <p>Blank = 5000K</p> <p>N = 4000K</p> </div> <div> <p>Blank = 120-277V, 0-10V Dimming</p> <p>/480 = 480V, 0-10V Dimming</p> </div> </div> <div> <p>Blank = No Option</p> <p>/LC = Lightcloud® Controller, 120-480V</p> <p>/ACS = Lightcloud® Sensor, 120-277V</p> <p>/PIR = Passive Infrared Sensor, 120-277V</p> <p> R = Battery Backup, 120-277V</p> <p>/PIR/E = Passive Infrared Sensor w/ Battery Backup, 120-277V</p> <p>/MSE/E = Microwave Occupancy Sensor w/ Battery Backup, 120-277V</p> <p>/MXE = Microwave Occupancy Sensor, 120-277V</p> </div> </div>			Family	Wattage (Length)	Color Temp	Voltage	Options	RAIL	90	N		
Family	Wattage (Length)	Color Temp	Voltage	Options								
RAIL	90	N										
<div> <div> <p>¹ Available in 150W, 175W, 225W and 400W only</p> </div> <div> <p>Need help? Tech help line: (888) 722-1000 Email: sales@rablighting.com Website: www.rablighting.com</p> <p>Copyright © 2023 RAB Lighting All Rights Reserved Note: Specifications are subject to change at any time without notice</p> </div> </div>												

SR4	<h1>S2</h1>	RAB
<p>Technical Specifications (continued)</p> <p>Construction</p> <p>Maximum Ambient Temperature: Suitable for use in up to 50°C (122°F)</p> <p>Lens: Polycarbonate lens</p> <p>Housing: Iron</p> <p>Mounting: Surface mounting standard, V-Hooks and Chain mounting available (ordered separately, SR VHOOK KIT).</p>	<p>Green Technology: Mercury and UV free, RoHS-compliant components.</p> <p>Finish: Formulated for high durability and long-lasting color</p> <p>Other</p> <p>5 Yr Limited Warranty: The RAB 5-year, limited warranty covers light output, driver performance and paint finish, RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.</p> <p>Accessories: Suspended Mounting Kit: SR VHOOK KIT Surface Mount Kit: SR JOIN KIT</p>	<p>Note: All values are typical (tolerance +/- 10%)</p> <p>Buy American Act Compliance: RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.</p>
<p>Dimensions</p> 		<p>Features</p> <ul style="list-style-type: none"> 50,000-Hour LED lifespan 120-277V standard 0-10V dimming, standard DLC Premium Listed 5-Year, limited warranty
<p>Need help? Tech help line: (888) 722-1000 Email: sales@rablighting.com Website: www.rablighting.com Copyright © 2023 RAB Lighting All Rights Reserved Note: Specifications are subject to change at any time without notice</p>		<p>Page 2 of 3</p>

<div>PROJECT PHASE</div> <div><input type="checkbox"/> PRELIMINARY <input type="checkbox"/> PRICING <input checked="" type="checkbox"/> CONTRACT DOCUMENTS <input type="checkbox"/> OWNER'S APPROVAL <input type="checkbox"/> PLAN APPROVAL <input type="checkbox"/> CONSTRUCTION</div>																																
DESIGNED	AA																															
DRAWN	AA																															
CHECKED	LJD																															
<div>REVISIONS</div> <table><thead><tr><th>NO.</th><th>DATE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></tbody></table>			NO.	DATE	DESCRIPTION																											
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<div>The Drawings prepared by the Engineer for this Project are instruments of the Engineer's service for use solely with respect to this Project and, the Engineer shall be deemed the author of these documents and shall retain all common law, statutory, and other reserved rights, including the copyright. Copyright 2023</div>																																
<div>Lighting Upgrade 4663 Carroll Cemetery Road, Carroll, Ohio 43112</div> <div>Prepared For: Greenfield Township 4663 Carroll Cemetery Road, Carroll Ohio 43112</div>																																
<div></div>																																
<div>xpert engineering</div> <div>1857 Northwest Blvd., Columbus, Ohio 43212 614.764.5000 www.xpert-eng.com</div>																																
<div>Light Fixture Details Interior</div> <table><tr><td>Project No.</td><td>23038</td></tr><tr><td>Date</td><td>05/18/2022</td></tr></table> <div>E301</div>			Project No.	23038	Date	05/18/2022																										
Project No.	23038																															
Date	05/18/2022																															

WP3XFU150



Color: Bronze

Weight: 11.5 lbs

WP

RAB

Project:Type:

Prepared By:Date:

Driver Info

LED Info

Type

Constant Current

Watts

100W

120V

1.60A

Color Temp

3000K/4000K/5000K

208V

1.00A

Color

80 CRI

240V

0.80A

L70 Lifespan

100,000 Hours

277V

0.60A

Lumens

14595-23223 lm

Input Watts

100-156.7W

Efficacy

137.3-158.8 lm/W

Technical Specifications

Field Adjustability

Field Adjustable:

Field Adjustable Light Output: 150W/130W/100W (factory default: 150W)

Color temperature (selectable by 3000K, 4000K and 5000K)

Compliance

UL Listed:

Suitable for wet locations

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80

IP Rating:

Ingress protection rating of IP65 for dust and water

DLC Listed:

This product is listed by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities. Designed to meet DLC S.1 requirements.

DLC Product Code: PL0AIV8QASV

Performance

Lifespan:

100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

Wattage Equivalency:

150W: 750W Metal Halide

130W: 650W Metal Halide

100W: 400W Metal Halide

LED Characteristics

LEDs:

Long life, high-efficiency, surface-mount LEDs

Electrical

Driver:

Constant Current, Class 2, 120-277V, 50/60 Hz, 120V: 1.60A, 208V: 1.00A, 240V: 0.80A, 277V: 0.60A

Dimming Driver:

Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims down to 10%.

Photocell:

120-277V selectable photocell that can be turned on and off.

Construction

Cold Weather Starting:

The minimum starting temperature is -40°C (-40°F)

Maximum Ambient Temperature:

Suitable for use in up to 50°C (122°F)

Housing:

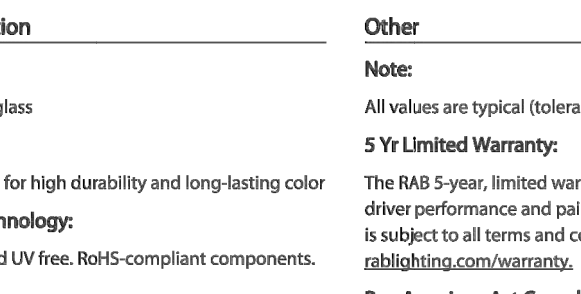
Die-cast aluminum

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Page 1 of 2

WP3XFU150



Color: Bronze

Weight: 11.5 lbs

WP

RAB

Project:Type:

Prepared By:Date:

Driver Info

LED Info

Type

Constant Current

Watts

100W

120V

1.60A

Color Temp

3000K/4000K/5000K

208V

1.00A

Color

80 CRI

240V

0.80A

L70 Lifespan

100,000 Hours

277V

0.60A

Lumens

14595-23223 lm

Input Watts

100-156.7W

Efficacy

137.3-158.8 lm/W

Technical Specifications (continued)

Construction

Lens:

Tempered glass

Finish:

Formulated for high durability and long-lasting color

Green Technology:

Mercury and UV free. RoHS-compliant components.

Other

Note:

All values are typical (tolerance +/- 10%)

5 Yr Limited Warranty:

The RAB 5-year, limited warranty covers light output, driver performance and paint finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Buy American Act Compliance:

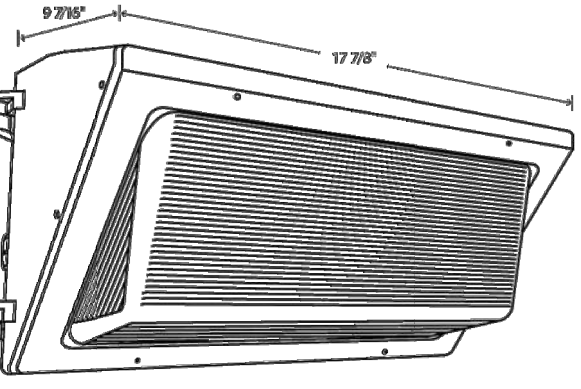
RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Installation

Mounting:

Wall mount

Dimensions



9.78" 17.78" 9"

Features

IP65 Rated

100,000-Hour LED Lifespan

5-Year, limited warranty

Ordering Matrix


Family	Wattage	Color Temp	Finish	Voltage/Driver	Options
WP3XFU	150				
	50 = 50/40/30W	Blank = 3000K/4000K/5000K	Blank = Bronze	Blank = 120-277V, 0-10V Dimming	Blank = Selectable Photocell
	120 = 120/100/80W				ALC = Lightcloud® Controller
	150 = 150/130/100W				

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Page 2 of 2

A17-4T150N+A17-ADJ-KIT+R-3P-PCT



Color: Bronze

Weight: 13.2 lbs

P1

RAB

Project:Type:

Prepared By:Date:

Driver Info

LED Info

Type

Constant Current

Watts

150W

120V

1.50A

Color Temp

4000K (Neutral)

208V

0.80A

Color Accuracy

70 CRI

240V

0.70A

L70 Lifespan

100,000 Hours

277V

0.06A

Lumens

21,204 lm

Input Watts

149.2W

Efficacy

142.1 lm/W

Technical Specifications

Compliance

UL Listed:

Suitable for wet locations

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

IP Rating:

Ingress protection rating of IP65 for dust and water

DLC Listed:

This product is listed by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities. Designed to meet DLC S.1 requirements.

DLC Product Code: PL7C2E0SFQ0M

Electrical

Driver:

Constant Current, Class 2, 120-277V, 50/60Hz, 120V: 1.50A, 208V: 0.70A, 240V: 0.70A, 277V: 0.60A

Dimming Driver:

Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims down to 10%.

THD:

3.85% at 120V, 9.26% at 277V

Power Factor:

99.8% at 120V, 93.2% at 277V

Surge Protection:

10kV

Performance

Lifespan:

100,000-Hour LED Lifespan based on IES LM-80 results and TM-21 calculations

Construction

IES Classification:

The Type IV distribution (also known as a Forward Throw) is especially suited for mounting on the sides of buildings and walls, and for illuminating the perimeter of parking areas. It produces a semicircular distribution with essentially the same candlepower at lateral angles from 90° to 270°.

Cold Weather Starting:

The minimum starting temperature is -40°C (-40°F)

Maximum Ambient Temperature:

Suitable for use in up to 40°C (104°F)

Lens:

Polycarbonate lens

Housing:

Die-cast aluminum housing, lens frame and mounting arm

Vibration Rating:

3G vibration rating per ANSI C136.31

EPA:

1 Fixture: 0.46

2 Fixtures at 90°: 0.60

2 Fixtures at 180°: 0.93

3 Fixtures at 90°: 0.93

4 Fixtures at 90°: 0.93

EPA with Splitter & Adjustable Arm Mounting Accessories (Sold Separately)

1 Fixture: 0.66

2 Fixtures at 90°: 0.80

2 Fixtures at 180°: 1.32

3 Fixtures at 90°: 1.32

4 Fixtures at 90°: 1.32

Mounting:

Universal mounting arm compatible for hole spacing patterns from 1" to 5.12" center to center. Round Pole Adaptor plate included as a standard. Easy slide and lock to mount fixture with ease. Round pole diameter must be >4" to mount features at 90° orientation.

Finish:

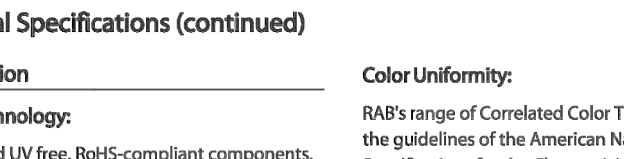
Formulated for high durability and long-lasting color

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Page 1 of 3

A17-4T150N+A17-ADJ-KIT+R-3P-PCT



Color: Bronze

Weight: 13.2 lbs

P1

RAB

Project:Type:

Prepared By:Date:

Driver Info

LED Info

Type

Constant Current

Watts

150W

120V

1.50A

Color Temp

4000K (Neutral)

208V

0.80A

Color Accuracy

70 CRI

240V

0.70A

L70 Lifespan

100,000 Hours

277V

0.06A

Lumens

21,204 lm

Input Watts

149.2W

Efficacy

142.1 lm/W

Technical Specifications (continued)

Construction

Green Technology:

Mercury and UV free. RoHS-compliant components.

LED Characteristics

LEDs:

Long-life, high-efficiency, surface-mount LEDs

Color Uniformity:

RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Buy American Act Compliance:

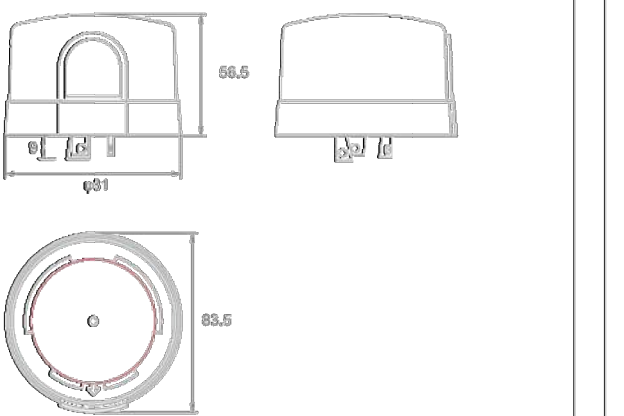
RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Other

5 Yr Limited Warranty:

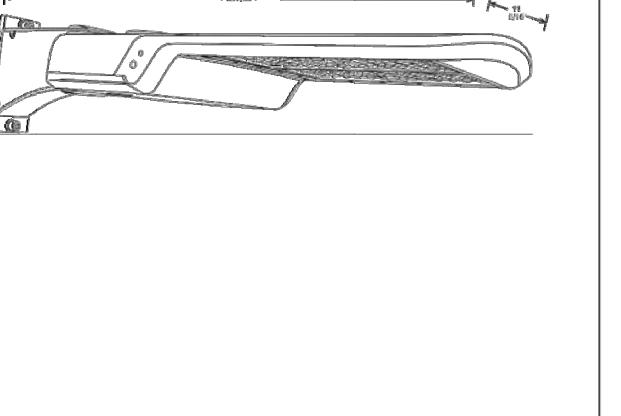
The RAB 5-year, limited warranty covers light output, driver performance and paint finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Dimensions: R-3P-PCT



68.5" 68.5" 68.5"

Dimensions: A17-4T150N



17.78" 17.78" 17.78"

Features

0-10V Dimming, standard

100,000-hour LED lifespan


5-Year, limited warranty

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Page 2 of 3

HAZBAYLED104NW



Color: White

Weight: 26.3 lb

S3

RAB

Project:Type:

Prepared By:Date:

Driver Info

LED Info

Type

Constant Current

Watts

104W

120V

1.03A

Color Temp

4000K (Neutral)

208V

0.65A

Color Accuracy

71 CRI

240V

0.56A

L70 Lifespan

100,000 Hours

277V

0.49A

Lumens

15,049 lm

Input Watts

122W

Efficacy

123.4 lm/W

Technical Specifications

Hazardous Location Classifications

UL 844:

Electric lighting fixtures for use in hazardous (classified) locations

UL 1598:

Electric lighting fixtures for use in non-hazardous locations

Hazardous Location Classifications:

Class A: A hazardous location in which flammable gases or vapors may be present in the air in sufficient quantities to be explosive or ignitable, such as petroleum refineries, aircraft hangars, dry cleaning plants, utility gas plants or storage areas for liquified petroleum or natural gas, and spray finishing areas.

Division 2: Abnormal condition, where ignitable concentrations of flammable gases, vapors or liquids are not likely to exist under normal operating conditions, for example:

Closed storage drums containing flammable liquids in an inside storage room would not normal allow the hazardous vapors to escape into the atmosphere. But if one of the containers is leaking, you've got an abnormal condition.

Groups A - D: The gases and vapors of Class 1 locations are broken into four groups by the Code: A,B,C, and D. These materials are grouped according to the ignition temperature of the substance, its explosion pressure, and other flammable

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

LED Characteristics

LEDs:

Multi-chip, high-output, long-life LEDs

Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Color Stability:

LED color temperature is warranted to shift no more than 200K in color temperature over a 5-year period

Color Uniformity:

RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Performance

Lifespan:

100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

Construction

Ambient Temperature:

Suitable for use in up to 40°C (104°F).

Suitable for use in up to 55°C (131°F).

Thermal Management:

Superior heat sinking with external Air-Flow fins

Housing:

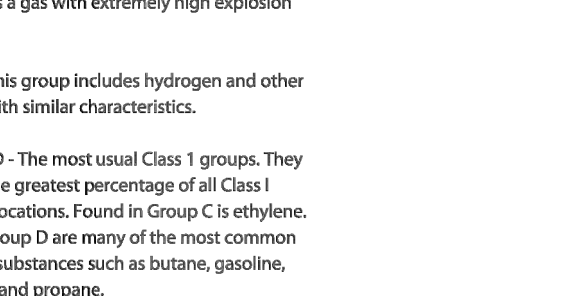
Precision die-cast aluminum housing and door frame with 3-foot 600V power cord

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Page 1 of 3

HAZBAYLED104NW



Color: White

Weight: 26.3 lb

S3

RAB

Project:Type:

Prepared By:Date:

Driver Info

LED Info

Type

Constant Current

Watts

104W

120V

1.03A

Color Temp

4000K (Neutral)

208V

0.65A

Color Accuracy

71 CRI

240V

0.56A

L70 Lifespan

100,000 Hours

277V

0.49A

Lumens

15,049 lm

Input Watts

122W

Efficacy

123.4 lm/W

Technical Specifications

Characteristics:

Group A - The only substance in group A is acetylene because it is a gas with extremely high explosion pressures.

Group B - This group includes hydrogen and other materials with similar characteristics.

Group C & D - The most usual Class 1 groups. They comprise the greatest percentage of all Class 1 hazardous locations. Found in Group C is ethylene. Found in Group D are many of the most common flammable substances such as butane, gasoline, natural gas and propane.

T Ratings:

HAZBAYLED™ model is T3A rated

Compliance

UL Listed:

Suitable for wet locations with 3/4" pendant stem

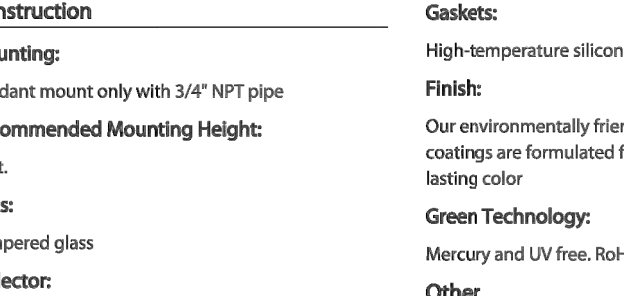
Covered ceiling mount only

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Page 2 of 3

HAZBAYLED104NW



Color: White

Weight: 26.3 lb

S3

RAB

Project:Type:

Prepared By:Date:

Driver Info

LED Info

Type

Constant Current

Watts

104W

120V

1.03A

Color Temp

4000K (Neutral)

208V

0.65A

Color Accuracy

71 CRI

240V

0.56A

L70 Lifespan

100,000 Hours

277V

0.49A

Lumens

15,049 lm

Input Watts

122W

Efficacy

123.4 lm/W

Technical Specifications (continued)

Construction

Mounting:

Pendant mount only with 3/4" NPT pipe

Recommended Mounting Height:

30 ft.

Lens:

Tempered glass

Reflector:

Specular vacuum metallized polycarbonate

Gaskets:

High-temperature silicone

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color

Green Technology:

Mercury and UV free. RoHS-compliant components.

Other

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Electrical

Drivers:

Constant Current, 800mA, Class 2 with 6 kV surge protection, 100-277VAC, 50/60 Hz

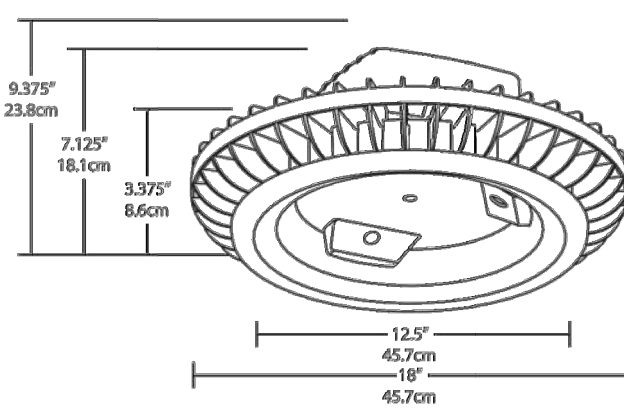
THD:

8.21% at 120V, 9.75% at 277V

Power Factor:

99.5% at 120V, 93.8% at 277V

Dimensions



9.37" 23.8cm 7.12" 18.1cm 3.35" 8.6cm 12.5" 45.7cm 45.7cm

Features

Class 1, Division 2, Groups A, B, C, D

IP66, UL1958, UL8750 and UL 844 ratings

Resistant to shock and vibration

Rugged construction ensures long-life and safe operation

100,000-Hour LED Lifespan

5-Year, no-compromise warranty

Ordering Matrix

Family	Wattage	Color Temp	Finish	Options
HAZBAYLED	104	N	W	
	78 = 78W	Blank = 5000K Cool	Blank = Gray	Blank = No Option
	104 = 104W	N = 4000K Neutral	W = White	/BL = Bi-Level
		Y = 3000K Warm		/D10 = 0-10V Dimming

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PROJECT PHASE

☐ PRELIMINARY
☐ PRICING
☒ CONTRACT DOCUMENTS
☐ OWNER'S APPROVAL
☐ PLAN APPROVAL
☐ CONSTRUCTION

DESIGNED AA
DRAWN AA
CHECKED LJD

REVISIONS

NO.	DATE	DESCRIPTION

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Lighting Upgrade
4663 Carroll Cemetery Road,
Carroll, Ohio 43112

Prepared For:
Greenfield Township
4663 Carroll Cemetery Road,
Carroll Ohio 43112

xpert engineering
1857 Northwest Blvd., Columbus, Ohio 43212
614.764.5000 www.xpert-eng.com

Light Fixture Details
Exterior

Project No. 23038
Date 05/18/2022

E302

FEATURES & SPECIFICATIONS

INTENDED USE — Provides a minimum of 90 minutes illumination for the rated wattage upon loss of AC power to meet and exceed code required emergency lighting. Ideal for applications where host housing emergency lighting is required.

CONSTRUCTION — 20 gauge steel housing, finished with corrosion-resistant instrument enamel. The backplate contains a universal B non-mounting pattern to facilitate ease of installation on a wide variety of B bases.

OPTICS — The T550L features two high performance LED lampheads rated at 1.6 watts each and delivers a total of 371 lumens.

The T550L features two high performance LED lampheads rated at 3.5 watts each and delivers a total of 775 lumens.

ELECTRICAL — UL924 (120 thru 347V, 50/60Hz). Current-limiting charger maximizes battery life and minimizes energy consumption to provide low operating costs. Small battery chargers certified in the CA Title 20 Appliance Efficiency Database.

Short-circuit protection — current-limiting charger circuitry protects printed circuit board from shorts. Regulated charge voltage maintains a stable charge voltage over a wide range of line voltages. Prevents over-undersharing that shortens battery life and reduces capacity. Filtered charge input minimizes charge voltage ripple and extends battery life.

Brownout protection is automatically switched to emergency mode when supply voltage drops below approximately 65 VAC.

AC fuse and Low Voltage Disconnect allow battery connection before AC power is applied and prevents battery damage from deep discharge.

BATTERY: Nickel Metal Hydride battery, 9.6V. The T550L and T550L HD provide remote capacity or extended run time.

INSTALLATION — Back mount only. Side and top egress knockouts available.

LISTINGS — UL damp location listed at 23-1047 (0-40°C). Meets or exceeds all applicable requirements for UL 924, NFPA 101 (current Life Safety code), NFPA 70 (NEC), California Energy Commission Title 20 section 1605.3 (WVQ), FCC Title 47, Part 15, Subpart B and OSHA. List and labeled to comply with Canadian Standards (C22.2 No. 141-10, IEEE City of Chicago Code).

WARRANTY — 5-year limited warranty (Battery is pro-rated). This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.aqualite.com/support/warranty/title-and-conditions

NOTE: Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.

† Small Battery Chargers Certified in the CA Title 20 Appliance Efficiency Database.

Catalog
Number

Notes

Type

EG1

TCU

Titan® Commercial Emergency Unit

Specifications
Length: 12.59 (31.9)
Depth: 2.5 (6.3)
Height: 9.58 (24.33)
Weight: 3.91 (1.8kg) T550L/T550L HD
4.41 (2.0kg) T550L HD

All dimensions are inches (centimeters) unless otherwise indicated.

Catalog Number	Description	Housing Color	Input Voltage	Lumen:	Remote Capacity
TCU 350L MA	Steel Emergency Light	White	120-347V, 50-60Hz	371	2.4W
TCU 350L MA				775	6.6W
TCU 750L HD MA					

Accessory Remotes^{1,2} Order as separate catalog number.

ELMRW SP64G DWXW10 SGL	Single LED Wet Location remote head, white, 320 lumens
ELMRW SP64G DWXW10 T	Twinn LED Wet Location remote head, white, 640 lumens
ELMRW 1P224B DWXW10 SGL	Single LED Wet Location remote head, white, 110 lumens
ELMRW 1P224B DWXW10 T	Twinn LED Wet Location remote head, white, 220 lumens
ERE W SGL SQ M12	Single, LED indoor remote head, square, ivory white, TW, 3.6V-12V voltage sensing
ERE W T SQ M12	Twinn, LED indoor remote head, square, ivory white, TW, 3.6V-12V voltage sensing
ERE QY SGL WPF SQ M12	Single, LED weather-proof remote head, square, gray, TW, 3.6V-12V voltage sensing
ERE QY T WPF SQ M12	Twinn, LED weather-proof remote head, square, gray, TW, 3.6V-12V voltage sensing


Notes

1 Compatible with T550L and T550L HD only. Refer to remote compatibility table.

2 Refer to ERE and ELMRWE spec sheets for more information. ERE BD (brown) remote is not compatible with TCU.

EMERGENCY

TCU Emergency Lighting Unit
Pg. 1 of 4



LITHONIA LIGHTING®

Catalog Number

 Notes

 Type

FEATURES & SPECIFICATIONS

INTENDED USE

To be powered by Quantum™ LED series unit or combo with high-output option as part of an emergency lighting system providing light for the path of egress. Remote lamp head matches the appearance of the Quantum LED series family units. **Certain airborne contaminants can diminish integrity of acrylic and/or polycarbonate.** Click here for [Acrylic/Polycarbonate Compatibility table](#) for available uses.

CONSTRUCTION

Single or twin head available. Fully adjustable lamp heads to meet all aiming requirements. Strong, compact and corrosion-resistant with a UL94V-0 flame rating. Constructed of UV-stabilized thermoplastic that resists discoloration by natural or artificial sunlight.

Outdoor remote (QWP) are standard gray cast aluminum, sealed and gasketed. For use in damp and wet location areas.

Lamp housing snaps off for easy lamp replacement.

OPTICS

Lamps: 12 series parallel, 1.5W white LEDs per head. The typical life of the LED lamp is 10 years.

INSTALLATION

Mounting base for use with single- or twin-head applications. Mounts to a single-gang switch box.



LISTINGS

UL Listed. Damp location listed (ELA Q) 50°F to 104°F (10°C to 40°C). Wet location listed (ELA QWP) 14°F to 122°F (-10°C to 50 °C).

WARRANTY


5-year limited warranty. Complete warranty terms located at: www.acluhybrands.com/resource/terms-and-conditions

NOTE: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25°C. Specifications subject to change without notice.

ELA Q

Remote Fixture
Adjustable LED Lamp Head



Specifications

Q single:	6-5/8" W x 6-3/4" H
Q twin:	8-1/4" W x 6-1/4" H
QWP single:	4-1/2" W x 5-3/4" H
QWP twin:	8-1/2" W x 5-3/4" H

ORDERING INFORMATION

Lead time may vary depending on options selected. Consult with your sales representative.

Example: ELA Q L0309 SD

ELA	Housing	Number of heads	Fixture	Lamp type	Options
ELA	(blank)	(blank)	Q	L0309	SD
ELA	(blank) White/gray	(blank) Single	Q	Quantum I LED series adjustable lamp head	For use with self-diagnostic fixtures ¹
	B Black	T Twin	QWP	Quantum I LED series adjustable lamp-head, weather-proof, cast aluminum	

Accessories: Order as separate item.

ELA WG1	Wireguard, 15" W x 13-1/2" H x 6" D
---------	-------------------------------------

Notes

1. White standard for Q, gray standard for QWP.
2. For use with L10N LED and L10M LED. ELAM, (DP)2 LEP only. Not available with ELAM, EPD2 LEP SD8C.
3. SD must be ordered in combination with L10N LED fixtures. Not available with ELAM2, ELM2, ELAM, ELAM.

EMERGENCY

ELA-Q-LED

TCU Titan® Commercial Emergency Unit

SPACING GUIDELINES

TCU 750L Spacing Guidelines						
Mounting Height	Illumination Level ¹	Single Luminaire		Multiple Luminaire		Application Notes
		3' Path of Egress	6' Path of Egress	3' Path of Egress	6' Path of Egress	
7.5'	1FC Avg	50"	48"	71"	67"	100' Corridor, 8' wide, 12" high with 80/50/20 reflectances
10'	1FC Avg	54"	44"	70"	64"	
7.5'	1FC Avg	54"	50"	65"	62"	
10'	1FC Avg	56"	50"	68"	61"	
12'	1FC Avg	59"	48"	54"	54"	Retail Open Area: 200' x 15' x 30" with 80/50/20 reflectances
16'	1FC Avg	44"	42"	54"	50"	
20'	1FC Avg	37"	36"	44"	44"	
24'	1FC Avg	26"	26"	36"	33"	

TCU 350L Spacing Guidelines						
Mounting Height	Illumination Level ¹	Single Luminaire		Multiple Luminaire		Application Notes
		3' Path of Egress	6' Path of Egress	3' Path of Egress	6' Path of Egress	
7.5'	1FC Avg	30"	28"	39"	38"	100' Corridor, 8' wide, 12" high with 80/50/20 reflectances
10'	1FC Avg	28"	26"	38"	34"	

Notes:

- Also alerts the additional illumination requirements of NFPA 101: average 1FC minimum and max/min ratio of 40:1.

Remote Compatibility						
Fixture	Remote Capacity	ELMRW LP220L Single	ELMRW LP220L Twin	ELMRW SP640L Single	ELMRW SP640L Twin	ERE SQ Single
TCU 350L	2.4W	2	1	NA	NA	2
TCU 750L HD	6.6W	4	2	2	1	6

EXTENDED RUN-TIME FOR HIGH-OUTPUT

TCU 350L (no remote): up to 3 hours
TCU 750L HD (no remote): up to 4.5 hours

SPACING GUIDELINES

*Note: To see complete photometric report or download the .ies file for this product, visit Lithonia Lighting TCU home page.

Example of multiple TCU 750L luminaires illuminating a 3' path of egress.

Example of single TCU 750L illuminating a 3' path of egress.

* Corridor application image.

SPECIFICATIONS

ELECTRICAL			
Primary Circuit			
	Volts	Input amps	Watts
TCU 350L	120V	0.08	5
	347V	0.08	5
	120V	0.08	5
TCU 750L	347V	0.08	5
	120V	0.08	5
TCU 750L HD	120V	0.08	5
	347V	0.08	5

BATTERY			
Battery (Nickel Metal Hydride, 9.6V)			
Typical Shelf Life ¹	Typical Life ²	Maintenance ³	Temperature Range ^{1,4}
3 year	6-8 years	none	32°-104°F (0°-40°C)

Notes:

- At 77°F (25°C) ambient temperature, charge/discharge cycles and prolonged full discharge may reduce useful life.
- All life safety equipment, including emergency lighting for path of egress must be tested in accordance with all National Fire Protection Association (NFPA) and local codes. Failure to perform the required testing could jeopardize the safety of occupants and void all warranties.
- Temperature range where unit will provide capacity for 90 minutes. Higher and lower temperatures affect life and capacity.
- Battery life is negatively impacted by many variables including temperature, charging rates, number of cycles and deep discharges due to long periods of time without AC power.

LITHONIA LIGHTING

EMERGENCY: One Lithonia Way, Cumers, GA 30012 Phone: 1-800-755-5571 (7557) techsupport-emergency@lithonia.com www.lithonia.com

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TCU Emergency Lighting

ELA Q LED QUANTUM® Thermoplastic Emergency Light					
<p>The following information is provided to assist in planning layouts for emergency lighting systems. The National Electrical Code limits voltage drop to a maximum of 3% of nominal. Thus, circuit runs must be of sufficient size to maintain operating voltage when remote fixtures and/or exit signs are connected to the emergency lighting equipment. The table below shows the length of wire run based on system voltage, wire gauge and total wattage on the run.</p>					
<p>**ELA_L0309 configurations for use with LHQM LED, ELM2LF, ELM2L, ELM4L</p>					
AWG	18	14	14	12	10
DC Resistance (ohms/ft)	0.0078	0.0049	0.0031	0.0019	0.0012

EG2

Watts	Length of Run				
1.5	188	298	475	756	1206
3	94	149	238	378	603
4.5	63	99	158	252	402
6	47	75	119	189	301
7.5	38	60	95	151	241
9	31	50	79	126	201
10.5	27	43	68	108	172
12	23	37	59	95	151

**Not available with ELA6L UVOLT LFP SORT

**SD remote not compatible with ELA2LF ELM2L, ELA4L SORT units

LITHONIA LIGHTING

EMERGENCY:

One Lithonia Way Cary, GA 30012


Phone: 800-705-SERV (7378)


www.lithonia.com

techsupport-emergency@acuitybrands.com

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Rev. 06/01/21





EX1

Catalog Number
Notes
Type






Contractor Select™
LHQM LED Quantum® LED
Emergency Light/Exit Combo

The Lithonia Lighting® LHQM LED Quantum® LED Exit/Unit Combo, is a combination of exit and emergency lighting. It's high quality design with high output dual lamp heads makes the LHQM LED ideal for safely illuminating the path of egress above the door while providing 90 minutes of emergency power. Available in red and green letters.

FEATURES:

- Test switch and status indicator
- UL Indoor damp location 50°F to 104°F (10°C to 40°C) listed standard
- For use with dual voltage 120/277VAC, 60Hz

† Exit Signs Certified in the CA Title 20 Appliance Efficiency Database.

Catalog Number	UPC	Description	Supply Voltage	Input Wattage	Input Amps	Pallet Qty	Carton Qty
LHQM LED R M6	745996254438	LED Exit/Unit Combo Red letters, White	120/277, 60Hz	120 277 4.3W 4.3W	120 277 .05 .05	144	6
LHQM LED R HO M6	745997254432	LED Exit/Unit Combo Red letters, White, with 3W of remote capacity	120/277, 60Hz	4.3W 4.3W	.05 .05	144	6
LHQM LED G M6	745996253950	LED Exit/Unit Combo Green letters, White	120/277, 60Hz	4.3W 4.3W	.05 .05	144	6

Accessories: Order as separate catalog number.


<p>ELMBE LP220L SGL Single LED Indoor remote head, white, 1.2W, 110 lumens¹</p> <p>ELMBE LP220L T Twin LED Indoor remote head, white, 1.2W, 110 lumens¹</p> <p>ELMBE LP220L DWH90 SGL Single LED Wet Location remote head, white, 1.2W, 110 lumens¹</p> <p>ELMBE LP220L DWH90 T Twin LED Wet Location remote head, white, 1.2W, 220 lumens¹</p> <p>ELA W63 Wireguard, 30"W x 13-1/2"H x 6"D²</p> <p>ELA LQMS12 12" white stem kit³</p>	<p>ERE W SGL SQ M12 Single LED Indoor remote head, square, ivory white, 7.5W, 3.6V-12V voltage sensing¹</p> <p>ERE CY SGL WP SQ M12 Single LED weather-proof remote head, square, gray, 1W, 3.6V-12V voltage sensing¹</p>
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NOTES

1. Only compatible with HO option. When operating ELMBE T, ELMBE T or ERE SQ T remote sets of HO battery, temperature range of LHQM LED is limited to 65°-104°F (20°-40°C), with a 48-hour battery recharge time. See spec sheet ELMBE, ELMBE T or spec sheet ERE.
2. See spec sheet ELA W63.
3. See spec sheet ELA LQMS12.

CONTRACTOR SELECT LHQM LED

Page 1 of 2





EX1

Specifications

INTENDED USE:
 Suitable for applications requiring both exit sign and unit equipment. Attractive, 8" tall, streamlined design is great for above the door applications and other tight fits. Optional high-output version with remotes are ideal for emergency lighting.

CONSTRUCTION:
 Engineering grade thermoplastic housing is impact resistant, scratch-resistant and corrosion-proof. UL94V-0 flame rating. UV-stable resin resists discoloration from natural and man-made light sources. Rugged unibody housing snaps together with no additional fasteners. Faceplate and back cover are interchangeable on housing. Positive snap-fit tabs hold faceplate securely, yet are easily removable for lamp compartment access. Universal, directional chevron inserts are easily removed and reinserted.

OPTICS:
 The typical life of the LED is 10 years. One, 1.5W white LED per lamp head.

ELECTRICAL:
 Dual-voltage 120/277, 60Hz standard.
 Bi-color LED status indicator for battery condition. (Green-normal, Red-check battery).
 Three watts of remote capacity with the LHQM LED R HO M6.
 BATTERY: 9.6V maintenance-free, rechargeable, nickel-cadmium.

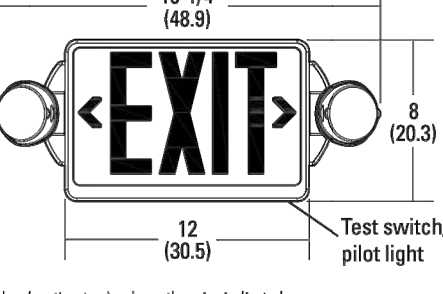
INSTALLATION:
 Universal mounting canopy for top or end mount. Back mount standard for single face only. Mounting pattern on canopy (top and side mount) and back plate (back mount) fits most standard size junction boxes.

LISTINGS:
 UL Listed: Meets all applicable requirements for UL 924, NFPA 101 (current Life Safety Code), NFPA 70 (NEC) and OSHA. Meets all applicable FCC Title 47, Part 15, Subpart B requirements. UL damp location 50°F to 104°F (10°C to 40°C) listed.

WARRANTY:
 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:
www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

Dimensions



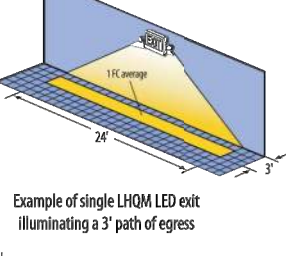
All dimensions are inches (centimeters) unless otherwise indicated.

Spacing guidelines

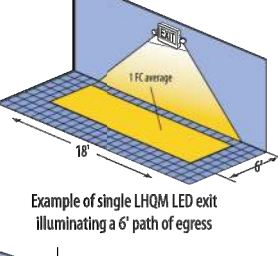
Maximum Spacing Guidelines - LHQM LED ¹					
Mounting Height	Illumination Level	Single Luminaire 3' Path of Egress	Multiple Luminaires 6' Path of Egress	Multiple Luminaires 3' Path of Egress	Application Notes
7.5'	1FC Avg	24"	16"	25"	20"

Notes:

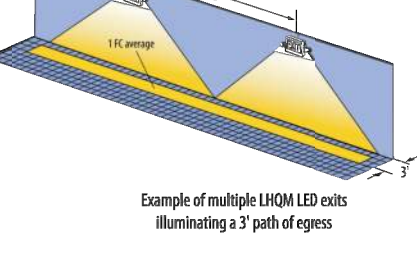
1. Also meets the additional illumination requirements of NFPA 101: 1FC minimum and maximum ratio of 40:1.



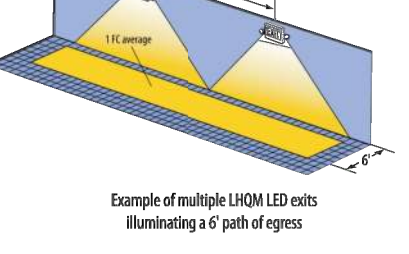
Example of single LHQM LED exit
illuminating a 3' path of egress



Example of single LHQM LED exit
illuminating a 6' path of egress



Example of multiple LHQM LED exits
illuminating a 3' path of egress



Example of multiple LHQM LED exits
illuminating a 6' path of egress

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CONTRACTOR SELECT LHQM LED
Page 2 of 2

PROJECT PHASE

- ☐ PRELIMINARY
☐ PRICING
☒ CONTRACT DOCUMENTS
☐ OWNER'S APPROVAL
☐ PLAN APPROVAL
☐ CONSTRUCTION

DESIGNED	AA
DRAWN	AA
CHECKED	LJD

REVISIONS

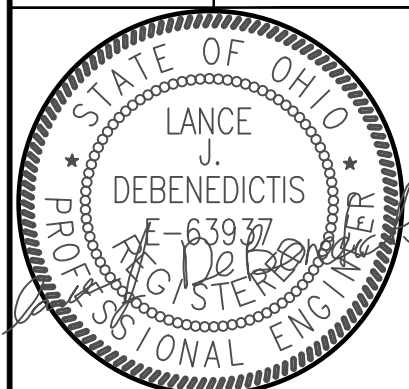
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Lighting Upgrade
44663 Carroll Cemetery Road,
Carroll, Ohio 43112

Prepared For:
Greenfield Township
4663 Carroll Cemetery Road,
Carroll Ohio 43112



xpert
engineering

1857 Northwest Blvd., Columbus, Ohio 43212
614.764.5000
www.xpert-eng.com

Light Fixture Details

Exit & Egress

Project No.	23038
Date	05/18/2022

E303