

ADDENDUM NO. 2-R

CITY BID NUMBER: 274-ES-FO-FY24-KEETERRENOVATIONS – R (REBID)

Date: July 24, 2024

Project: Keeter Training Center - Renovations

Owner: City of Raleigh, North Carolina, Engineering Services Department,
222 W. Hargett Street Suite 605
Raleigh, NC 27602
Contact: Steven Chelini; steven.chelini@raleighnc.gov

Architect: Redline Design Group, PA

Engineer: Peak Engineering

The following revisions shall be incorporated in the bid documents for this project and be included in the contractor's bid:

GENERAL:

1. Bid submittal time has been extended to 3 pm Wednesday July 31. Location remains the same: 222 W Hargett Street Suite 605, Raleigh, NC 27601.
2. Architect will apply for the building permit for this project, including paying for the plan review fees. General Contractor shall be responsible for paying for all final permit fees and costs.
3. The existing building does not currently have a fire alarm system, so the entire system will be new for this project. Since this is a single-prime project, the install of the fire alarm system including all devices and infrastructure will be by the sub-contractor selected and hired by the GC. Testing of the fire alarm system will be required per NFPA 101 and other pertinent codes. Refer to sheets FA000, FA111 and FA112 for system requirements. Commissioning of the fire alarm system will not be required.
4. This project is not exempt from sales tax. The sales tax amount does not need to be listed on the bid form, however GC shall include all applicable sales tax in their bid.
5. Physical copies of the addendum do not need to be signed and included in the bid package. GC's shall instead acknowledge receipt of all addenda and list on the bid form where noted.
6. Delete the requirement in the Supplementary Conditions Section SC-7.07.N to general contractor self-performed work percentages of 50%. This will not be required.
7. Owner's security contractor will provide and install all security devices including card readers, electric strikes, security cameras, intercom, speakers and all associated cabling and low voltage wiring. GC shall provide all new junction boxes, conduit and pull strings, including saw-cutting holes through existing exterior brick walls, insulation and

sheathing. Provide 1" conduit with pull string stubbed 5 feet into building above ceiling. Seal penetration around brick opening with continuous backer rod and sealant. Verify final locations with owner/architect prior to proceeding with work - ten locations total.

8. REVISE the notes in previous Addendum referencing the moving of furniture to read as follows: "General Contractor will be responsible for temporarily moving, storing, relocating and re-installing all loose furniture, file cabinets, lockers, benches, kitchen appliances, vending machines and weight room equipment on both levels. Owner will provide a 40' Con-Ex container on-site for GC to temporarily store moved items. Owner will be responsible for moving and relocating all personal items and RFD training items including computers, office files, artwork, plaques, markerboards, TV's, electronics and all items in Storage Room 112 prior to the contractor commencing work.
9. Existing water and electrical connections on the property will be free to use by the general contractor. Metering/use fees will be not be required to be paid by the General Contractor.

DRAWINGS:

10. Architectural Drawings "LIST OF ALTERATES - Add Alternate A-3":

ADD the following note: "Use job-mixed detergent solution for cleaning of brick surfaces. Clean areas of existing efflorescence in accordance with NCMA Tek 8-3A. Infill all holes and voids in existing mortar and brick with new colored mortar matching existing"

11. Architectural Drawings "LIST OF ALTERATES - Add Alternate A-5":

ADD the following notes: "Window Types H and N do not receive roller shades. Provide additional roller shade approximately 4' high x 5' wide at interior window in Office 208 as part of Add Alternate A-5. For all new roller shades, provide manufacturer's 3 1/2" high prefinished aluminum fascia with matching end caps. Color to be selected by architect."

12. Architectural Drawings "LIST OF ALTERATES - Add Alternate E-1":

REVISE Add Alternate E-1 to read as follows: "Replace existing electrical panels B and C with new panels to match existing size, rating and quantity of circuit breakers. Disconnect and re-connect all wiring to match existing configuration."

13. Architectural Drawing 1/A1.1 Floor Plan:

ADD the following note referencing the new flag pole: "Provide four new 1" nominal diameter by 16" long galvanized threaded rods and four pairs of 1" nuts and washers to anchor new flag pole to existing concrete pier. Drill into existing concrete pier to 8" depth and set threaded rods with epoxy grout. Remove existing and provide new 3" nominal height grout levelling bed to set base of new flag pole."

14. Architectural Drawing 1/A1.1 Floor Plan:

REVISE the note referencing the car charger conduit to read as follows: "GC shall trench underground and provide conduit with sealed penetration through existing brick/cmu wall on east side of building where shown on electrical drawing E111. Car charger shall be connected to circuit in MPD panel in Elec. Room 109 as shown on sheet E700."

15. Architectural Drawing 1/A1.1 Floor Plan:
ADD the following note referencing the exterior car charger and site light fixtures: "GC shall backfill all trenching and disturbed lawn areas and repair lawn with new sod to match existing adjacent lawn."
16. Architectural Drawing 1/A1.1 Partition Type 2:
REVISE the note referencing the drywall/GWB to read as follows: "Provide 5/8" painted GWB full height to bottom of metal deck."
17. Architectural Drawing A4.1:
ADD the following note referencing the wall mounted awning: "Frame for awning shall be 2"x2" nominal galvanized steel tubing anchored to existing brick veneer with stainless steel masonry screws at 24" o.c.. Standing seam roofing shall be 24 gage galvalume steel finished with Kynar 30 year painted finish. Color to be selected by architect."
18. Architectural Drawing A4.2:
DELETE the notes referencing the alternates for the overhead doors. These doors are part of the base bid.
19. Architectural Drawing A5.2 Door Type G:
REVISE the note referencing the glass lite for door type G (Vestibule 200B and 200C doors) to be "1/4 thick wire glass lite with painted hollow metal stop."
20. Electrical Drawings ED112 and E112:
ADD the following notes: "Owner's security contractor will provide and install all security devices including card readers, electric strikes, security cameras, intercom, speakers and all associated cabling and low voltage wiring. At each location, GC shall provide all new junction boxes, conduit and pull strings, including saw-cutting holes through existing brick walls, insulation and sheathing. Provide 1" conduit with pull string stubbed 5 feet into building above ceiling. Seal penetration with continuous backer rod and sealant."
21. Electrical Drawings E111, E121, E122, E123 and E500 :
REPLACE previously issued sheets with attached revised sheets E111, E121, E122, E123 and E500 noted with Revision 1. See sheet E500 for updates to light fixture model numbers."
22. Fire Alarm Drawings FA000 :
DELETE the reference to Commissioning of the fire alarm system.

END OF DOCUMENT

BID FORM

PROJECT: Keeter Training Center - Renovations

CITY BID NO.: 274-ES-FO-FY24-KeeterRenovations-R

BID FROM: _____

TABLE OF CONTENTS

	Page
Article 1 – Bid Recipient	1
Article 2 – Bidder’s Acknowledgements	1
Article 3 – Bidder’s Representations	2
Article 4 – Bidder’s Certification.....	3
Article 5 – Basis of Bid.....	3
Article 6 – Time of Completion	6
Article 7 – Attachments to This Bid.....	7
Article 8 – Defined Terms	8
Article 9 – Bid Submittal	8

ARTICLE 1 – BID RECIPIENT

- 1.01 This Bid is submitted to:
Steven Chelini
City of Raleigh, Engineering Services Department
222 W. Hargett Street Suite 605
Raleigh, North Carolina 27601
- 1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 – BIDDER’S ACKNOWLEDGEMENTS

- 2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 120 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 – BIDDER’S REPRESENTATIONS

3.01 In submitting this bid, bidder represents that:

- A. Bidder has examined and carefully studied the Bidding Documents, other related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged:

No. _____, dated _____

No. _____, dated _____

No. _____, dated _____

No. _____, dated _____

No. _____, dated _____

- B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) that have been identified in Supplemental Conditions - 5.02 as containing reliable Technical Data, and (2) reports and drawings of Hazardous Environmental Conditions, if any, at the Site that have been identified in SC-5.06 as containing reliable Technical Data.
- E. Bidder has considered the information known to Bidder; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific sequences of construction expressly required by the Bidding Documents; and (3) Bidder’s safety precautions and programs.
- F. Based on the information and observations referred to in Paragraph 3.01.E above, Bidder does not consider that further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.

ARTICLE 4 – BIDDER’S CERTIFICATION

4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
 - 1. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
 - 2. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
 - 3. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.A:
 - a. “corrupt practice” means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;
 - b. “fraudulent practice” means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 - c. “collusive practice” means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
 - d. coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

ARTICLE 5 – BASIS OF BID

5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

- A. For all Work, **other than Unit Price Work**, a Lump Sum of:

_____ Dollars
(\$ _____)

- B. All specified cash allowances are included in the price(s) set forth above, and have been computed in accordance with Paragraph 13.02 of the General Conditions.

- C. Lump Sum for the following Work Items:

1.	\$
2.	\$
The Total Contract for the Lump Sum Price of:	\$

D. For the following Alternates in priority order as selected by the Owner for inclusion in the Project as follows:

A-1. Replace casework in Kitchen 111. \$ _____

A-2. Replace casework in Men 222. \$ _____

A-3. Exterior cleaning and painting. \$ _____

A-4. Epoxy flooring on lower level. \$ _____

A-5. New roller shades. \$ _____

M-1. Provide 10-ton mechanical unit in lieu of 7.5 unit. \$ _____

M-2. Provide new interior split-system mechanical unit in lieu of existing unit to remain.
\$ _____

M-3. Provide gas re-heat in new exterior ground-mounted mechanical unit.
\$ _____

E-1. Replace existing electric panels B & C with new panels per electric drawings.
\$ _____

E. For Unit Price Work, an amount equal to the sum of the established unit price for each separately identified item of Unit Price Work times the estimated quantity of that item as indicated in the Bid Schedule below.

THIS AREA INTENTIONALLY LEFT BLANK

UNIT PRICE BID SCHEDULE

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Extended Bid Price
1.					
2.					
3.					
4.					
5.					

TOTAL BID PRICE (Sum of Items 1 through __) \$_____

- 5.02 Bidders are hereby notified that GS 143-128(d), requires all bidders on single prime projects to identify on their Bid form the contractors they have selected for the subdivisions for branches of work for (1) HVAC, (2) Plumbing, (3) Electrical, and (4) General. Accordingly, bidder shall list below applicable selected contractors for the following branches of work (write "N/A" if not applicable or self-performed).

HVAC _____	_____
Name	License No.
Plumbing _____	_____
Name	License No.
Electrical _____	_____
Name	License No.
General _____	_____
Name	License No.

- A. Unit Prices have been computed in accordance with Paragraph 13.03.B of the General Conditions.
- B. Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.
- C. Bidder acknowledges that the rights of the Owner and the recommendations of the Engineer are not to be questioned in the Award of Contracts.
- D. Bidder acknowledges that it is the intention of the Mayor and City Council to let contracts on a basis of the Bids received in accordance with GS 143-129 and in such manner as they deem to be for the best interests of the Owner.
- E. Bidder acknowledges that the Owner reserves the right to accept or reject any or all bids and to waive any informalities in the bidding.

- F. Bidder acknowledges that should the total bid exceed the funds available to construct the project, the Owner reserves the right to reduce the scope of work from the project by deleting certain lump sum or unit price bid items prior to awarding the contract to bring the project within the funds available.
- G. Bidder acknowledges that if this contract is awarded, Bidder must, with every pay request, furnish to the Public Utilities Director of the City of Raleigh an accurate itemized statement of North Carolina Sales Taxes paid on materials, supplies, equipment, and other items charged to this contract, and otherwise fully comply with the "Procedure for Reporting North Carolina Sales Tax Expenditures.". A sales tax form must be submitted even if there is no sales tax incurred.
- H. Bidder agrees to begin work within 10 days from the date of the Notice to Proceed.
- I. Bidder agrees that should the Owner reduce the scope of work by 25% or less of the Total Bid price prior to award of the contract, the lump sum and the unit price on all bid items shall remain unchanged.
- J. Bidder agrees that in the case of failure on his part to execute the said Contract and the Bonds within 15 consecutive calendar days after written notice being given of the award of the Contract, the check, cash or Bid Bond accompanying this Bid shall be paid into the funds of the Owner's Account set aside for this Project, as liquidated damages for such failure; otherwise the check, cash or Bid Bond accompanying this Bid shall be returned to the Bidder.
- K. Bidder agrees to provide all necessary tools, machinery, equipment, apparatus, and all other means necessary to do all the work and will furnish all labor, materials and all else required to complete such Contract as may be entered into, in the manner prescribed in and in accordance with the terms of the Specifications and Contract and in accordance with the true intent and meaning thereof, and in accordance with the Plans and/or Drawings and the requirements of the Engineers under them, in a first class manner.

ARTICLE 6 – TIME OF COMPLETION

- 6.01 Bidder agrees that the Base Bid Work will be substantially complete within two hundred and forty (240) calendar days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions, and will be completed and ready for final payment in accordance with Paragraph 15.06.B of the General Conditions within one hundred and twenty (120 days) calendar days after the date when the Contract Times commence to run.
- 6.02 Bidder accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work within the Contract Times. This amount is agreed upon as the proper measure of liquidated damages the Owner will sustain, per day, by the failure of the undersigned to complete the work, within the stipulated time, and it is not to be construed, in any sense, as a penalty.
- 6.03 Milestone Dates
 - A. The following principal events shall be completed and ready for final payment in accordance with paragraph 15.06 of the General Conditions within days indicated below after the date when the Contract Time commences to run. In accordance with paragraph 6.02 above as liquidated damages for delay (but not as penalty) Contractor shall pay Owner the amounts indicated below for each day that expires after the time specified below for completion and readiness for final payment.

Milestone Event	Calendar Days
-----------------	---------------

N/A	N/A
N/A	N/A
N/A	N/A

ARTICLE 7 – ATTACHMENTS TO THIS BID

- 7.01 The following documents are submitted with and made a condition of this Bid:
- A. Required Bid security in the form of a Bid Bond or Certified Check (Section 00430);
 - B. In accordance with GS 143-128.2(c), Bidder shall identify on its bid the minority businesses that it will use on the project and the total dollar value of the bid that will be performed by the minority businesses and list the good faith efforts (Affidavit A) made to solicit participation. A Bidder that will perform all of the work with its own workforce may submit an Affidavit B to that effect in lieu of the affidavit A required above.
 - 1. Nondiscrimination Agreement (Section 00440);
 - 2. Use of MWBE Businesses (Section 00440);
 - 3. Identification of Minority Business Participation (Section 00440), and;
 - 4. Affidavit A, Listing of Good Faith Effort, or Affidavit B, Intent to Perform Contract with Own Workforce (Section 00440).
 - C. Contractor's Certificates, Affidavit of Organization and Authority of Sworn Statement (Section 00441);
 - D. City of Raleigh – Contractor's Poor Performance Policy (Section 00442);
 - E. Non-Collusive Affidavit (Section 00443);
 - F. Notice to Contractor Regarding Intrusions Beyond Project Limits (Section 00444);
 - G. Evidence of authority to do business in the state of the Project (i.e., copy of contractor's license);
- 7.02 Submit the Bidder's Checklist as provided in the bidding documents with the bid submittal. The Checklist shall be completed and included as the first page of the submittal.
- 7.03 After the bid opening the Owner will consider all bids and alternates and determine the lowest responsible, responsive bidder. Upon notification of being the apparent low Bidder, the Bidder shall then file within 72 hours of the notification of being the apparent lowest bidder, the following:
- A. An Affidavit (C) that includes a description of the portion of work to be executed by minority businesses, expressed as a percentage of the total contract price, which is equal to or more than the goal established by the Owner and indicated in the Instruction to Bidders, paragraph Minority Participation Goals. This affidavit shall give rise to the presumption that the bidder has made the required good faith effort; or,
 - B. Affidavit (D) of its good faith effort to meet the goal. The document must include evidence of all good faith efforts that were implemented, including any advertisements, solicitations and other specific actions demonstrating recruitment and selection of minority businesses for participation in the contract.
- 7.04 Bidder understands that if this Bid is accepted by the Owner, Bidder shall not substitute for the subcontractors named in the Bid Documents except as allowed in the Supplementary Conditions.

ARTICLE 8 – DEFINED TERMS

8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 9 – BID SUBMITTAL

9.01 Bidder's License

- A. Number: _____
- B. Classification: _____
- C. Limitation: _____
- D. Employer's Tax ID No.: _____
- E. Business Address: _____
- F. Phone No.: _____ Fax No.: _____
- G. Contact Person: _____ E-mail Address: _____
- H. Phone No. w/ Ext.: _____

9.02 This Bid is submitted by:

If Bidder is:

An Individual

Name (typed or printed): _____

By: _____

(Individual's signature)

Doing business as: _____

A Partnership

Partnership Name: _____

The Organization and Internal Affairs of the Partnership are governed by the laws of the State of: _____

By: _____

(Signature of general partner -- attach evidence of authority to sign)

Name (typed or printed): _____

Title (typed or printed): _____

Attest: _____

(Signature of Corporate Secretary)

A Corporation

Corporation Name: _____ (SEAL)

State of Incorporation: _____

Type (General Business, Professional, Service, Limited Liability): _____

By: _____

(Signature -- attach evidence of authority to sign)

Name (typed or printed): _____

Title (typed or printed): _____

(CORPORATE SEAL)

Attest: _____

(Signature of Corporate Secretary)

Date of Qualification to do business in North Carolina is ____/____/____.

Limited Liability Company - LLC

Name of LLC: _____

Name of State under whose Laws the Limited Liability Company was formed:

By: _____

(Signature of Manager)

Name (typed or printed): _____

Title (typed or printed): _____

ADD. ALTERNATE PRICING NOTES

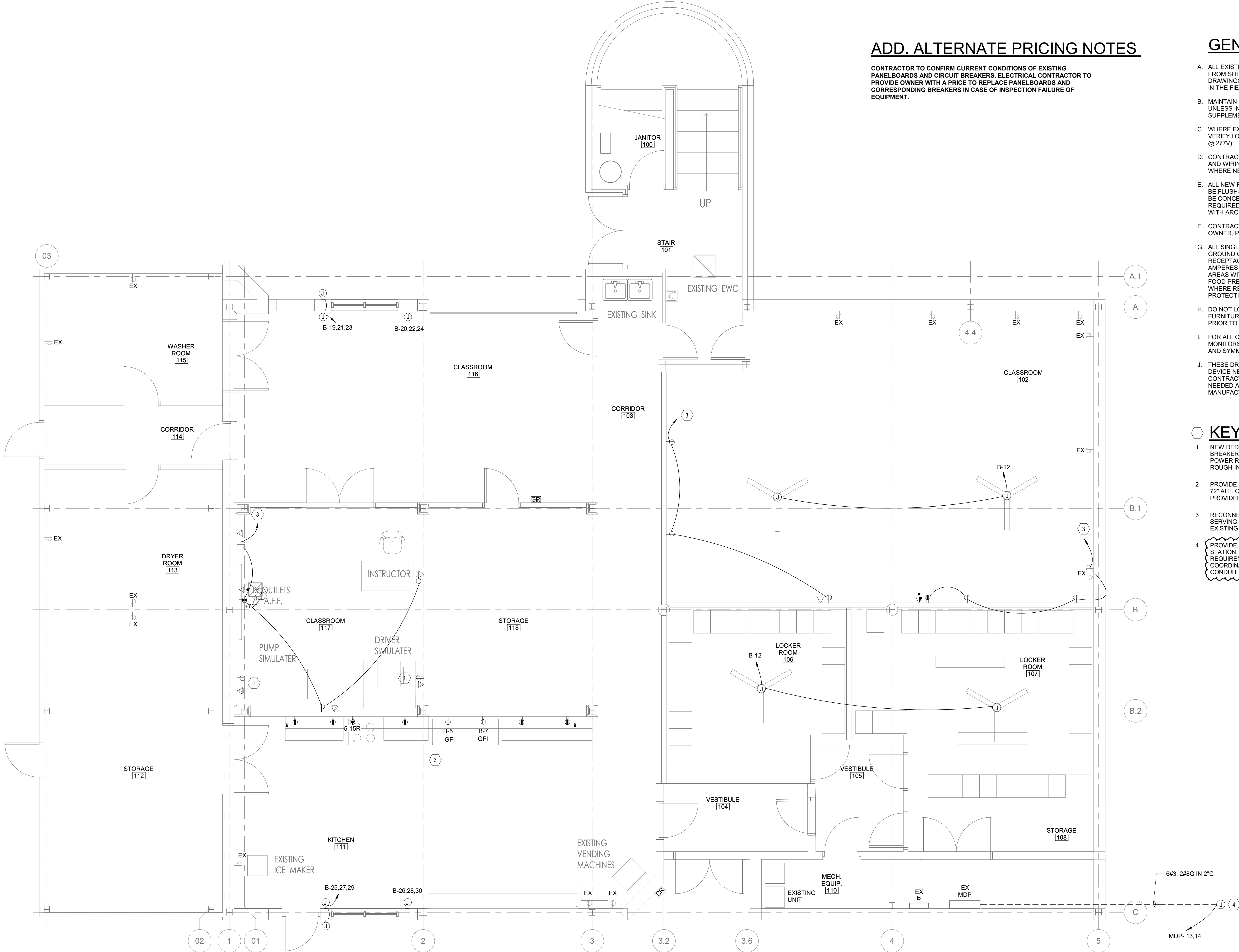
CONTRACTOR TO CONFIRM CURRENT CONDITIONS OF EXISTING PANELBOARDS AND CIRCUIT BREAKERS. ELECTRICAL CONTRACTOR TO PROVIDE OWNER WITH A PRICE TO REPLACE PANELBOARDS AND CORRESPONDING BREAKERS IN CASE OF INSPECTION FAILURE OF EQUIPMENT.

GENERAL NOTES

- ALL EXISTING CONDITIONS NOTED ON THESE PLANS ARE TAKEN FROM SITE OBSERVATIONS AND AVAILABLE AS-BUILT / RECORD DRAWINGS. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN THE FIELD AND NOTIFY DESIGN TEAM OF DISCREPANCIES.
- MAINTAIN CIRCUITRY OF ALL EXISTING OUTLETS TO REMAIN, UNLESS INDICATED OTHERWISE. PROVIDE ALL NECESSARY SUPPLEMENTAL WIRING AND CONDUIT AS REQUIRED.
- WHERE EXISTING CIRCUITRY IS REUSED, CONTRACTOR SHALL VERIFY LOAD DOES NOT EXCEED 1,920 VA @ 120V (OR 4,432 VA @ 277V).
- CONTRACTOR SHALL REUSE EXISTING BACKBOXES, CONDUIT AND WIRING TO FURTHEST EXTENT PRACTICAL. SUPPLEMENT WHERE NEEDED.
- ALL NEW RECEPTACLES AND TELEPHONE/DATA OUTLETS SHALL BE FLUSH-MOUNTED. ALL NEW CONDUIT AND RACEWAY SHALL BE CONCEALED. PROVIDE CUTTING AND PATCHING AS REQUIRED. VERIFY EXTENT OF NEW AND EXISTING PARTITIONS WITH ARCHITECTURAL DRAWINGS.
- CONTRACTOR TO VERIFY ALL TELE/DATA LOCATIONS WITH OWNER, PRIOR TO ROUGH-IN.
- ALL SINGLE-PHASE RECEPTACLES RATED 150 VOLTS TO GROUND OR LESS, 50 AMPERES OR LESS AND ALL THREE-PHASE RECEPTACLES RATED 150 VOLTS TO GROUND OR LESS, 100 AMPERES OR LESS LOCATED IN KITCHEN, SERVARY AREAS, AND AREAS WITH A SINK AND PERMANENT PROVISIONS FOR EITHER FOOD PREPARATION OR COOKING SHALL BE GFCI PROTECTED. WHERE RECEPTACLES ARE NOT ACCESSIBLE, PROVIDE PROTECTION THROUGH GFCI TYPE CIRCUIT BREAKER IN PANEL.
- DO NOT LOCATE FURNITURE FLOOR CONNECTIONS UNDER FURNITURE SPLINE. VERIFY EXACT LOCATIONS WITH ARCHITECT PRIOR TO ROUGH-IN. DO NOT SCALE ELECTRICAL DRAWINGS.
- FOR ALL CONFERENCE ROOMS WITH WALL MOUNTED TV MONITORS: DO NOT SCALE PLANS. LOCATE OUTLETS CENTERED AND SYMMETRICALLY ALONG WALLS.
- THESE DRAWINGS MAY NOT SHOW EVERY BOX, CONDUIT, DEVICE NEEDED FOR A COMPLETE, FUNCTION POWER SYSTEM. CONTRACTOR SHALL PROVIDE ALL REQUIRED COMPONENTS NEEDED AS REQUIRED FOR MEANS & METHODS AND AS PER MANUFACTURER'S RECOMMENDATIONS.

KEYED NOTES

- NEW DEDICATED 120V/20A CIRCUIT FOR EQUIPMENT VIA SPARE BREAKER MADE AVAILABLE DURING DEMOLITION. CONFIRM EXACT POWER REQUIREMENTS WITH MANUFACTURER PRIOR TO ROUGH-IN.
- PROVIDE NEW POWER AND DATA RECESSED BEHIND DISPLAY AT 72" AFF. CONFIRM HEIGHT PRIOR TO ROUGH-IN WITH DISPLAY PROVIDER.
- RECONNECT ALL NEW GENERAL OUTLETS TO EXISTING CIRCUIT(S) SERVING THIS AREA. OUTLETS IN THIS AREA ARE FED FROM EXISTING PANEL 'B'.
- PROVIDE JUNCTION BOX FOR CONNECTION TO EV CHARGING STATION. PROVIDE CONCRETE BASE FOR STATION. COORDINATE REQUIREMENTS WITH CHARGING STATION MANUFACTURER. COORDINATE LOCATION OF CHARGER WITH OWNER. E.C. TO VERIFY CONDUIT ROUTING UNDERGROUND THROUGH EXTERIOR WALL.



6601 Six Forks Road
Suite 130
Raleigh, NC 27615
919.878.1660

PROJECT NO. 23-022
DRAWN BY: Author
CHECKED BY: Checker



NCSBC 2018

KEETER TRAINING CENTER - RENOVATIONS
105 Keeter Center Drive
Raleigh, NC 27603

Client:
City of Raleigh
Engineering Services Dept.
1027A N. West St.
Raleigh, NC 27601
Steve Chelini, P.E.
C: 919.369.7604
Steven.Chelini@raleighnc.gov

Architect:
REDLINE Design Group, PA
6601 Six Forks Rd. Ste. 130
Raleigh, NC 27615
O: 919.878.1660
Jon Steindorf
jsteindorf@redlinedg.com

PME Engineers:
Peak Systems Engineering
200 Mackenand Drive, Suite 100
Cary, NC 27511
O: 919.495.4774
Alex Ammons
mammons@peaksystemseng.com

DATE: 01.12.2024
REVISIONS:
1 Revision 1 Date 1

DRAWING TITLE:

POWER PLAN
- LOWER

SHEET NO.

E111

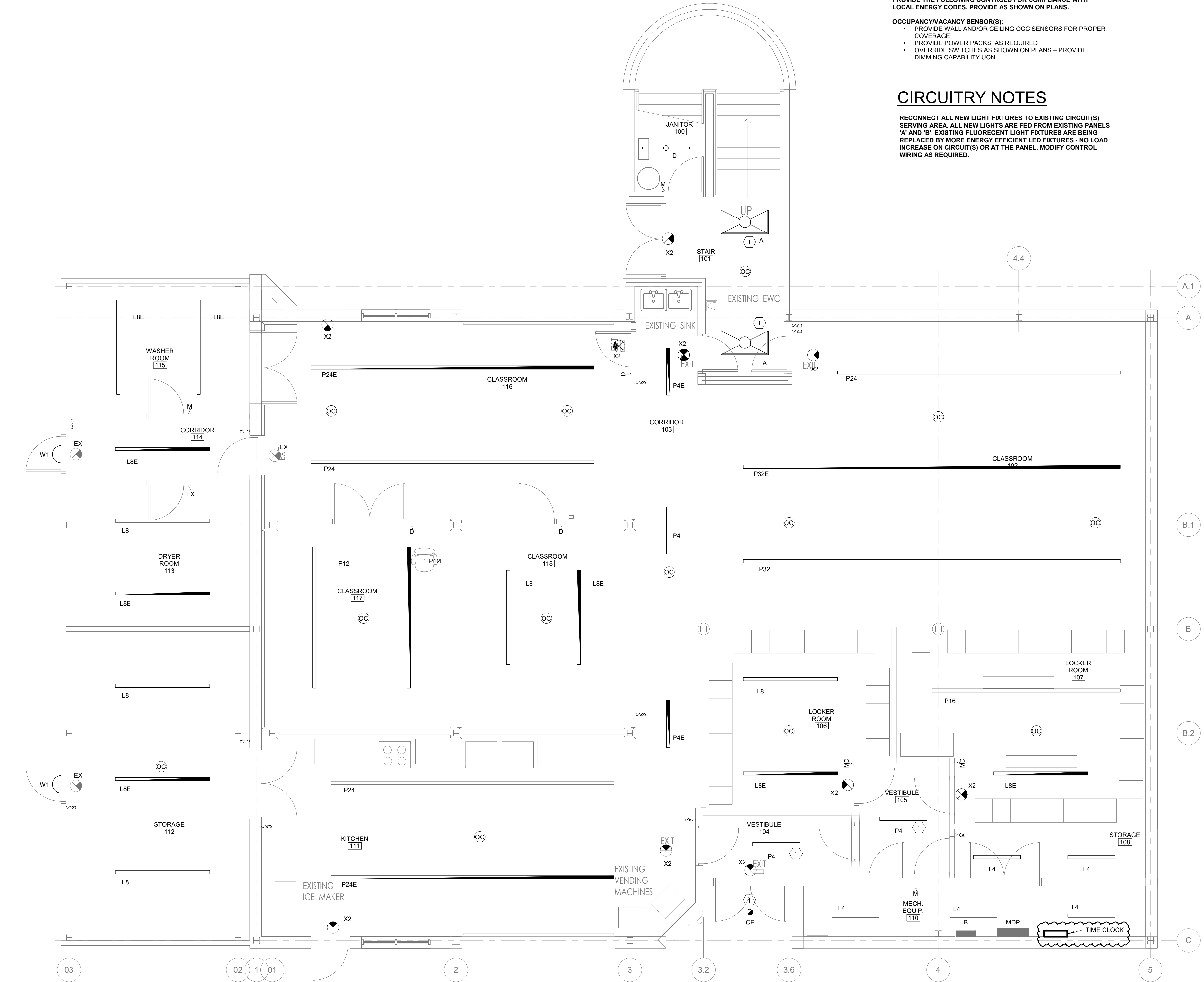
peak
systems
engineering

200 MCKENAN DR.
SUITE 100
CARY, NC 27511
LICENSE NO: C-4704
PROJECT NO: 123.080

THIS DOCUMENT IS THE SOLE PROPERTY OF PEAK SYSTEMS ENGINEERING AND MAY NOT BE USED FOR ANY PURPOSE OTHER THAN ORIGINALLY INTENDED WITHOUT THE EXPRESSED WRITTEN PERMISSION OF THE ENGINEER OF RECORD.

7/19/2024 4:59:04 PM

© THIS DRAWING IS A COPYRIGHT OF REDLINE DESIGN GROUP, PA. 2022



LIGHTING CONTROL NOTES

PROVIDE THE FOLLOWING CONTROLS FOR COMPLIANCE WITH LOCAL ENERGY CODES. PROVIDE AS SHOWN ON PLANS.

OCCUPANCY/VACANCY SENSOR(S):

- PROVIDE WALL AND/OR CEILING OCC SENSORS FOR PROPER COVERAGE
- PROVIDE POWER PACKS, AS REQUIRED
- OVERRIDE SWITCHES AS SHOWN ON PLANS - PROVIDE DIMMING CAPABILITY UON

CIRCUITRY NOTES

RECONNECT ALL NEW LIGHT FIXTURES TO EXISTING CIRCUIT(S) SERVING AREA. ALL NEW LIGHTS ARE FED FROM EXISTING PANELS 'A' AND 'B'. EXISTING FLUORESCENT LIGHT FIXTURES ARE BEING REPLACED BY MORE ENERGY EFFICIENT LED FIXTURES - NO LOAD INCREASE ON CIRCUIT(S) OR AT THE PANEL. MODIFY CONTROL WIRING AS REQUIRED.

GENERAL NOTES

- LIGHTING INSTALLATIONS SHALL MEET THE REQUIREMENTS OF NEC ARTICLES 410 AND 700.
- CONTRACTOR SHALL REUSE EXISTING CONDUIT AND WIRING TO FURTHEST EXTENT PRACTICAL. SUPPLEMENT WHERE NEEDED.
- WHERE EXISTING CIRCUITRY IS REUSED, CONTRACTOR SHALL VERIFY EXISTING LOAD DOES NOT EXCEED 1,920 VA @ 120V (OR 4,432 VA @ 277V). FOR LED LIGHTING LOADS, DO NOT EXCEED 1,440 VA @ 120V OR 3,324 VA @ 277V.
- ALL LIGHT SWITCHES SHOWN ARE NEW, UNLESS NOTED OTHERWISE. REUSE EXISTING BACKBOXES, CONDUIT, AND WIRING WHERE PRACTICAL.
- ALL NEW WIRING DEVICES SHALL BE RECESSED IN NEW OR EXISTING WALLS AS INDICATED. ALL CONDUIT SHALL BE CONCEALED. PROVIDE CUTTING AND PATCHING AS REQUIRED. VERIFY EXTENT OF NEW AND EXISTING PARTITIONS WITH ARCHITECTURAL DRAWINGS.
- DO NOT LOCATE SWITCHES BEHIND DOOR SWINGS, TV SCREENS, OR ANY WALLS WITH BRANDING OR SPECIAL WALL COVERINGS. CONTRACTOR SHALL COORDINATE IN THE FIELD AND WITH ARCHITECTURAL DRAWINGS.
- ALL EMERGENCY BATTERY PACK FIXTURES SHALL BE ON UNSWITCHED "HOT" LEG SERVING THE AREA. CONNECTED AHEAD OF SWITCH SERVING THE AREA/ROOM. ALL FIXTURES WITH INTEGRAL BATTERY PACKS SHALL OPERATE THE SAME AS NORMAL LIGHTING IN AREA. EMERGENCY UNITS SHALL SENSE A LOSS OF POWER AND AUTOMATICALLY TURN ON TO MEET IBC 1008.2 FOR AVERAGE LIGHTING LEVELS ALONG PATH OF EGRESS. ALL CIRCUITS SERVING EMERGENCY FIXTURES SHALL BE IDENTIFIED AT THE PANEL PER NEC.
- ALL EXIT SIGNS SHALL BE INSTALLED AS PER NFPA. WALL MOUNTED EXIT SIGNS SHALL BE MOUNTED SO THAT THE BOTTOM EDGE OF THE SIGN IS 2" CLEAR OF THE DOOR LINTEL OR FINISHED DOOR TRIM. WHERE WALL MOUNTING AFFECTS FIRE RATING OF THE AREA (SUCH AS STAIR ENCLOSURES), EXIT SIGN SHALL BE CEILING MOUNTED. THE BOTTOM OF THE SIGN MUST BE OUT OF THE EGRESS PATH OR ABOVE THE MINIMUM HEADROOM HEIGHT.
- CONTRACTOR SHALL COORDINATE NUMBER AND LOCATION OF OCCUPANCY SENSORS AS PER MANUFACTURER RECOMMENDATIONS TO ASSURE COVERAGE IN ALL OCCUPIABLE AREAS OF ROOMS COVERED. CONNECT LINE VOLTAGE SENSORS AND POWER PACKS TO ADJACENT LIGHT FIXTURE CIRCUIT. PROVIDE POWER PACKS AS REQUIRED. PROVIDE 4"x4" JUNCTION BOX AS REQUIRED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. CONTRACTOR SHALL COORDINATE FINAL LOCATIONS WITH ACTUAL INSTALLATION OF OTHER CEILING DEVICES (INCLUDING DIFFUSERS). LOCATE TO ENSURE ADEQUATE FUNCTIONALITY AND OPERATION.
- COORDINATE AND ADJUST ALL LIGHTING FIXTURES IN MECHANICAL ROOMS AND OTHER OPEN CEILING ROOMS (TYPICAL), WITH ACTUAL INSTALLATION OF PIPING, DUCTS, SPECIAL EQUIPMENT, ETC. COORDINATE PRIOR TO ROUGH-IN.

KEYED NOTES

- 1 NEW FIXTURE CONNECTED & CONTROLLED VIA TIME CLOCK.

**peak
systems
engineering**

200 MCKENAN DR.
SUITE 100
CARY, NC 27511
LICENSE NO: C-4704
PROJECT NO: 123.080

THIS DOCUMENT IS THE SOLE PROPERTY OF PEAK SYSTEMS ENGINEERING AND MAY NOT BE USED FOR ANY PURPOSE OTHER THAN ORIGINALLY INTENDED WITHOUT THE EXPRESSED WRITTEN PERMISSION OF THE ENGINEER OF RECORD.

REDLINE

6601 Six Forks Road
Suite 130
Raleigh, NC 27615
919.878.1660

PROJECT NO: 23-022
DRAWN BY: Author
CHECKED BY: Checker



NCSBC 2018

KEETER TRAINING CENTER - RENOVATIONS
105 Keeter Center Drive
Raleigh, NC 27603

Client:
City of Raleigh
Engineering Services Dept.
1027A N. West St.
Raleigh, NC 27601
Steve Chelini, P.E.
C: 919.369.7604
Steven.Chelini@raleighnc.gov

Architect:
REDLINE Design Group, PA
6601 Six Forks Rd. Ste. 130
Raleigh, NC 27615
O: 919.878.1660
Jon Steindorf
jsteindorf@redlinedg.com

PME Engineers:
Peak Systems Engineering
200 Mackenan Drive, Suite 100
Cary, NC 27511
O: 919.495.4774
Alex Ammons
mammons@peaksystemseng.com

DATE: 01.12.2024

REVISIONS:
1 Revision 1 Date 1

DRAWING TITLE:

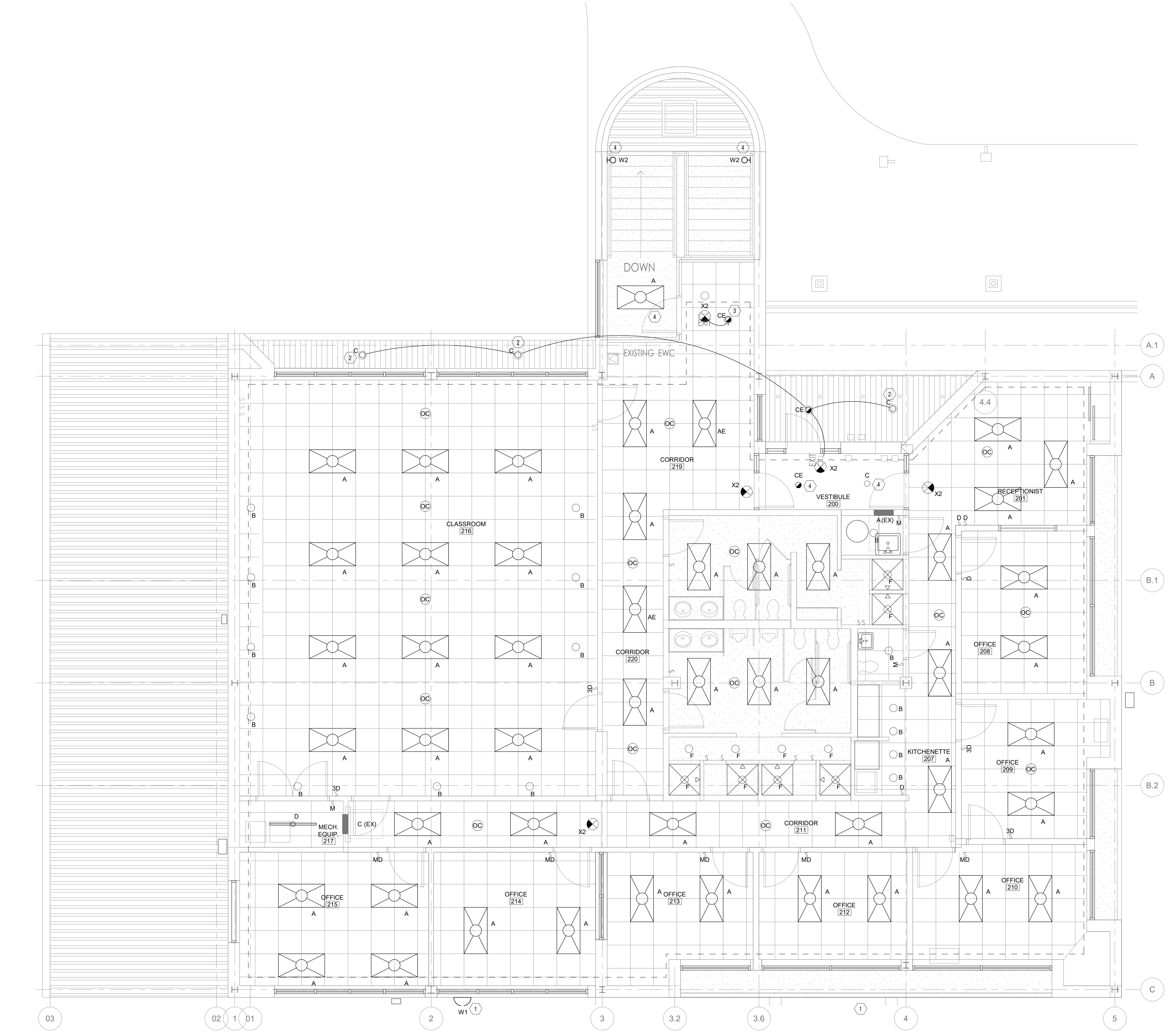
LIGHTING
PLAN - LOWER

SHEET NO:

E121

1 LIGHTING PLAN - LEVEL 01

E121 1/4" = 1'-0"



1 LIGHTING PLAN - LEVEL 02
1/4" = 1'-0"

GENERAL NOTES


- LIGHTING INSTALLATIONS SHALL MEET THE REQUIREMENTS OF NEC ARTICLES 410 AND 700.
- CONTRACTOR SHALL REUSE EXISTING CONDUIT AND WIRING TO FURTHEST EXTENT PRACTICAL. SUPPLEMENT WHERE NEEDED.
- WHERE EXISTING CIRCUITRY IS REUSED, CONTRACTOR SHALL VERIFY EXISTING LOAD DOES NOT EXCEED 1,920 VA @ 120V (OR 4,432 VA @ 277V). FOR LED LIGHTING LOADS, DO NOT EXCEED 1,440 VA @ 120V OR 3,324 VA @ 277V.
- ALL LIGHT SWITCHES SHOWN ARE NEW, UNLESS NOTED OTHERWISE. REUSE EXISTING BACKBOXES, CONDUIT, AND WIRING WHERE PRACTICAL.
- ALL NEW WIRING DEVICES SHALL BE RECESSED IN NEW OR EXISTING WALLS AS INDICATED. ALL CONDUIT SHALL BE CONCEALED. PROVIDE CUTTING AND PATCHING AS REQUIRED. VERIFY EXTENT OF NEW AND EXISTING PARTITIONS WITH ARCHITECTURAL DRAWINGS.
- DO NOT LOCATE SWITCHES BEHIND DOOR SWINGS, TV SCREENS, OR ANY WALLS WITH BRANDING OR SPECIAL WALL COVERINGS. CONTRACTOR SHALL COORDINATE IN THE FIELD AND WITH ARCHITECTURAL DRAWINGS.
- ALL EMERGENCY BATTERY PACK FIXTURES SHALL BE ON UNSWITCHED "HOT" LEG SERVING THE AREA, CONNECTED AHEAD OF SWITCH SERVING THE AREA/ROOM. ALL FIXTURES WITH INTEGRAL BATTERY PACKS SHALL OPERATE THE SAME AS NORMAL LIGHTING IN AREA. EMERGENCY UNITS SHALL SENSE A LOSS OF POWER AND AUTOMATICALLY TURN ON TO MEET IBC 1009.2 FOR AVERAGE LIGHTING LEVELS ALONG PATH OF EGRESS. ALL CIRCUITS SERVING EMERGENCY FIXTURES SHALL BE IDENTIFIED AT THE PANEL PER NEC.
- ALL EXIT SIGNS SHALL BE INSTALLED AS PER NFPA. WALL MOUNTED EXIT SIGNS SHALL BE MOUNTED SO THAT THE BOTTOM EDGE OF THE SIGN IS 2' CLEAR OF THE DOOR LINTEL OR FINISHED DOOR TRIM. WHERE WALL MOUNTING AFFECTS FIRE RATING OF THE AREA (SUCH AS STAIR ENCLOSURES), EXIT SIGN SHALL BE CEILING MOUNTED. THE BOTTOM OF THE SIGN MUST BE OUT OF THE EGRESS PATH OR ABOVE THE MINIMUM HEADROOM HEIGHT.
- CONTRACTOR SHALL COORDINATE NUMBER AND LOCATION OF OCCUPANCY SENSORS AS PER MANUFACTURER RECOMMENDATIONS TO ASSURE COVERAGE IN ALL OCCUPIABLE AREAS OF ROOMS COVERED. CONNECT LINE VOLTAGE SENSORS AND POWER PACKS TO ADJACENT LIGHT FIXTURE CIRCUIT. PROVIDE POWER PACKS AS REQUIRED. PROVIDE 4"x4" JUNCTION BOX AS REQUIRED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. CONTRACTOR SHALL COORDINATE FINAL LOCATIONS WITH ACTUAL INSTALLATION OF OTHER CEILING DEVICES (INCLUDING DIFFUSERS). LOCATE TO ENSURE ADEQUATE FUNCTIONALITY AND OPERATION.
- COORDINATE AND ADJUST ALL LIGHTING FIXTURES IN MECHANICAL ROOMS AND OTHER OPEN CEILING ROOMS (TYPICAL), WITH ACTUAL INSTALLATION OF PIPING, DUCTS, SPECIAL EQUIPMENT, ETC. COORDINATE PRIOR TO ROUGH-IN.

KEYED NOTES

- CONNECT NEW WALL MOUNT FIXTURE TO CIRCUIT BREAKER SERVING LIGHTING IN THIS AREA. SEE GENERAL NOTE C.
- NEW CANOPY DOWNLIGHTS TO BE TIED TO EXISTING BRANCH CIRCUIT OF INTERIOR FIXTURE AS SHOWN. NEW FIXTURES TO BE TIED TO NEW TIMECLOCK.
- NEW EGRESS LIGHT TO BE CONNECTED TO EXISTING BRANCH CIRCUIT OF ADJACENT EXIT SIGN. VERIFY EXACT REQUIREMENTS PRIOR TO INSTALLATION.
- NEW FIXTURE CONNECTED & CONTROLLED VIA TIME CLOCK.

CIRCUITRY NOTES

RECONNECT ALL NEW LIGHT FIXTURES TO EXISTING CIRCUIT(S) SERVING AREA. ALL NEW LIGHTS ARE FED FROM EXISTING PANELS 'A' AND 'B'. EXISTING FLUORESCENT LIGHT FIXTURES ARE BEING REPLACED BY MORE ENERGY EFFICIENT LED FIXTURES - NO LOAD INCREASE ON CIRCUIT(S) OR AT THE PANEL. MODIFY CONTROL WIRING AS REQUIRED.



200 MCKENAN DR.
SUITE 100
CARY, NC 27511
LICENSE NO: C-4704
PROJECT NO: 123.080

THIS DOCUMENT IS THE SOLE PROPERTY OF PEAK SYSTEMS ENGINEERING AND MAY NOT BE USED FOR ANY PURPOSE OTHER THAN ORIGINALLY INTENDED WITHOUT THE EXPRESSED WRITTEN PERMISSION OF THE ENGINEER OF RECORD.



6601 Six Forks Road
Suite 130
Raleigh, NC 27615
919.878.1660

PROJECT NO: 23-022
DRAWN BY: Author
CHECKED BY: Checker



NCSBC 2018

KEETER TRAINING CENTER - RENOVATIONS
105 Keeter Center Drive
Raleigh, NC 27603

Client:
City of Raleigh
Engineering Services Dept.
1027A N. West St.
Raleigh, NC 27601
Steve Chelini, P.E.
C: 919.369.7604
Steven.Chelini@raleighnc.gov

Architect:
REDLINE Design Group, PA
6601 Six Forks Rd. Ste. 130
Raleigh, NC 27615
O: 919.878.1660
Jon Steindorf
jsteindorf@redlinedg.com

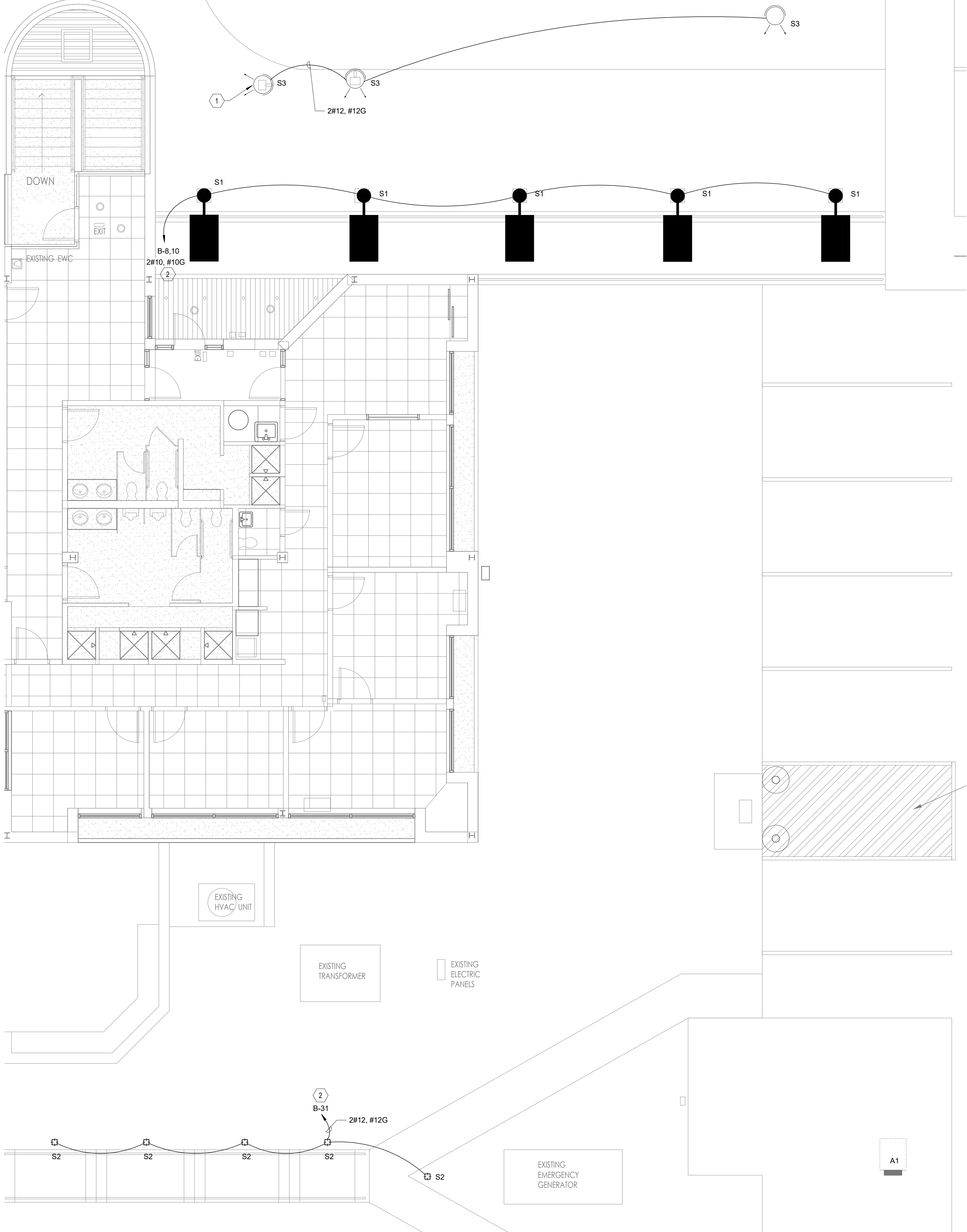
PME Engineers:
Peak Systems Engineering
200 Mackenank Drive, Suite 100
Cary, NC 27511
O: 919.495.4774
Alex Ammons
mammons@peaksystemseng.com

DATE: 01.12.2024
REVISIONS:
1 REVISION

DRAWING TITLE:
LIGHTING
PLAN - UPPER

SHEET NO.

E122



1 LIGHTING PLAN - EXTERIOR PLAN
E123 3/16" = 1'-0"

LIGHTING CONTROL NOTES

PROVIDE THE FOLLOWING CONTROLS FOR COMPLIANCE WITH LOCAL ENERGY CODES. PROVIDE AS SHOWN ON PLANS.

- DIGITAL TIMECLOCK:**
- PROVIDE DIGITAL TIMECLOCK(S) AND 0-10V, 10A RATED ROOM CONTROLLERS AND ASSOCIATED PROGRAMMING
 - PROVIDE CAT5E CABLES FOR OVERRIDE SWITCHES

GENERAL NOTES - SITE

- A. ALL UNDERGROUND EXTERIOR LIGHTING CIRCUIT CONDUIT SHALL BE ROUTED IN MINIMUM 1" CONDUIT.
- B. ALL JUNCTION BOXES AND OUTLETS SHALL BE WEATHER-RESISTANT. ALL EXTERIOR OUTLETS SHALL BE GFI PROTECTED.
- C. THE DESIGN INTENT IS FOR ALL EXTERNAL LIGHTING TO BE LOCATED ON AND BE DIRECTED ON TO THE PROPERTY ONLY. CONTRACTOR'S INSTALLATION SHALL ENSURE NO LIGHT TRESPASS PAST PROPERTY LINES.
- D. ALL FIXTURES ARE TO BE CONTROLLED BY PROGRAMMABLE TIMER WITH A MAXIMUM OF 1-HOUR MANUAL OVERRIDE WITH AN AUTOMATIC TURN OFF.
- E. COORDINATE DEPTH OF TRENCHING AND CONDUITS INSTALLATION WITH EXISTING UTILITY LOCATIONS. INSTALL CONDUITS BELOW WATER PIPING WHERE CROSSINGS OCCUR. CONDUITS NOT TO RISE ABOVE MINIMUM DEPTH OF 18" BELOW GRADE. CONTRACTOR SHALL CONTACT NORTH CAROLINA ONE CALL (1-800-632-4949) 48 HOURS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO VERIFY LOCATION OF AND PREVENT DISTURBANCE OF ANY EXISTING UTILITES IN WORK AREA AND PROVIDE IMMEDIATE TEMPORARY SERVICE TO ANY DAMAGED UTILITIES.

KEYED NOTES

- 1 RECONNECT NEW FIXTURES TO EXISTING CIRCUIT(S) SERVING AREA. EXISTING FLUORESCENT LIGHT FIXTURES ARE BEING REPLACED BY MORE ENERGY EFFICIENT LED FIXTURES - NO LOAD INCREASE ON CIRCUIT(S) OR AT THE PANEL. MODIFY CONTROL WIRING AS REQUIRED.
- 2 NEW FIXTURES CONNECTED & CONTROLLED VIA TIME CLOCK.

**peak
systems
engineering**

200 MCKENAN DR.
SUITE 100
CARY, NC 27511
LICENSE NO: C-4704
PROJECT NO: 123.080

THIS DOCUMENT IS THE SOLE PROPERTY OF PEAK SYSTEMS ENGINEERING AND MAY NOT BE USED FOR ANY PURPOSE OTHER THAN ORIGINALLY INTENDED WITHOUT THE EXPRESSED WRITTEN PERMISSION OF THE ENGINEER OF RECORD.



6601 Six Forks Road
Suite 130
Raleigh, NC 27615
919.878.1660

PROJECT NO: 23-022
DRAWN BY: Author
CHECKED BY: Checker



NCSBC 2018

KEETER TRAINING CENTER - RENOVATIONS
105 Keeter Center Drive
Raleigh, NC 27603

Client:
City of Raleigh
Engineering Services Dept.
1027A N. West St.
Raleigh, NC 27601
Steve Chelini, P.E.
C: 919.369.7604
Steven.Chelini@raleighnc.gov

Architect:
REDLINE Design Group, PA
6601 Six Forks Rd. Ste. 130
Raleigh, NC 27615
O: 919.878.1660
Jon Steindorf
jsteindorf@redlinedg.com

PME Engineers:
Peak Systems Engineering
200 Mackenan Drive, Suite 100
Cary, NC 27511
O: 919.495.4774
Max Ammons
mcammons@peaksystemseng.com

DATE: 01.12.2024
REVISIONS:
1 Revision 1 Date 1

DRAWING TITLE:

EXTERIOR
LIGHTING
PLAN

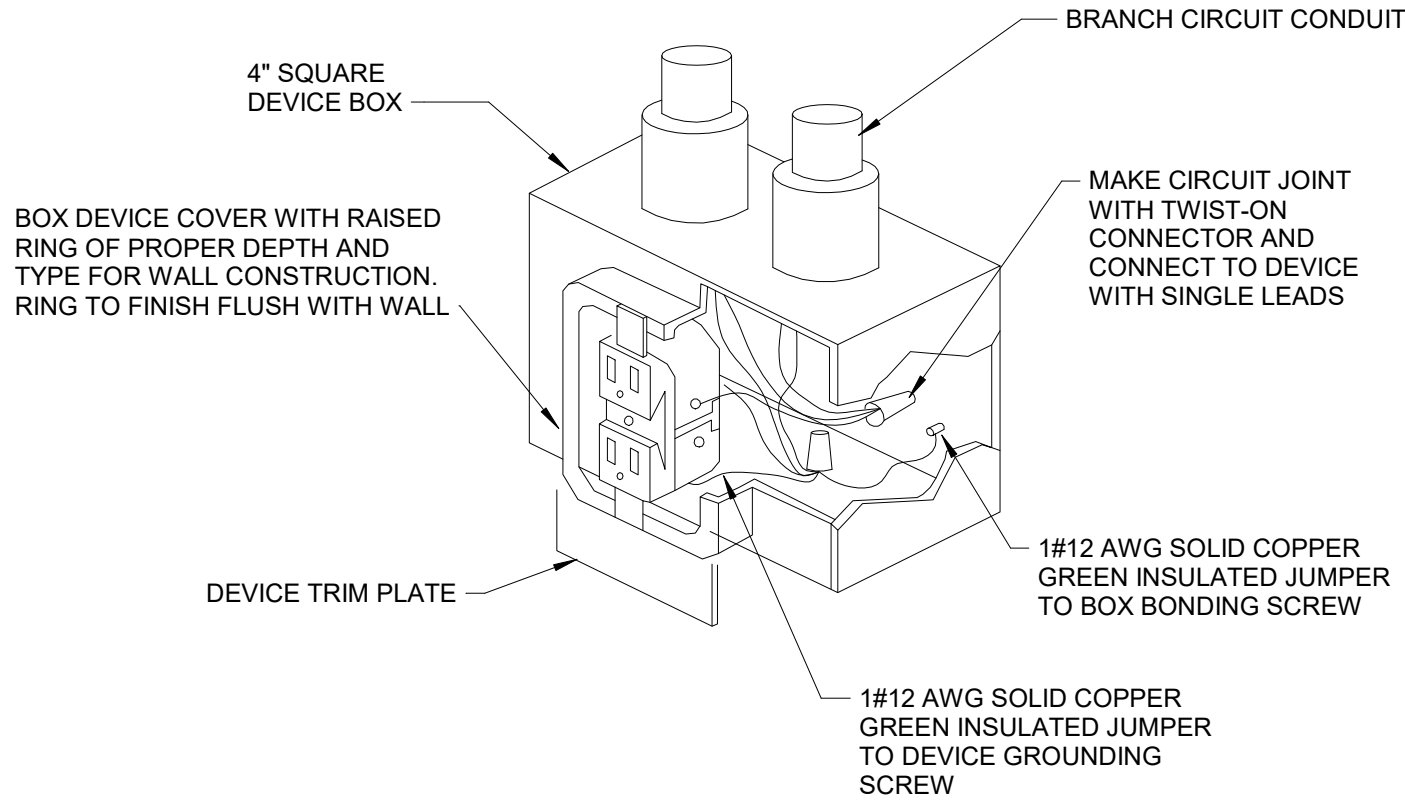
SHEET NO.

E123

LIGHTING FIXTURE SCHEDULE									
TYPE	DESCRIPTION	BASIS OF DESIGN - MANUFACTURER	BASIS OF DESIGN - MODEL	LAMP	VOLTAGE	APPARENT LOAD	MOUNTING	NOTES	
A	2X4 RECESSED LED TROFFER	HE WILLIAMS	AP 2 4 L50 8 35 DIM UNV	LED	120 V	30 VA	RECESSED		
AE	2X4 RECESSED LED TROFFER W/ BATTERY BACKUP	HE WILLIAMS	AP 2 4 L50 8 35 DIM EM*10W UNV	LED	120 V	30 VA	RECESSED		
B	8" RECESSED LED DOWNLIGHT	COOPER LIGHTING	LD88 30 D010 2050	LED	120 V	26 VA	RECESSED		
C	6" RECESSED LED DOWNLIGHT	COOPER LIGHTING	LDC6 20 90 35 D010 W 1 LI	LED	120 V	30 VA	RECESSED		
CE	6" RECESSED LED DOWNLIGHT WITH BATTERY BACKUP	COOPER LIGHTING	LDC6 20 90 35 D010 W 1 LI EMBOD	LED	120 V	30 VA	RECESSED		
D	4" LED STRIP LIGHT	CREE	LS4-50L-35K-10V	LED	120 V	50 VA	SURFACE		
F	6" RECESSED LED DOWNLIGHT	LITHONIA	LDN6-35-30-L06-MVOLT-GZ10 WET LOCATION LISTED	LED	120 V	26 VA	RECESSED		
L4	4" LED STRIP LIGHT	COOPER LIGHTING	4TSNLED-LD5-64SL-LW-UNV-CD1-U-AY C	LED	120 V	38 VA	SURFACE MTD		
L8	8" LED STRIP LIGHT	COOPER LIGHTING	8TSNLED-LD5-67SL-SNL-UNV-CD1-U 3500K	LED	120 V	32 VA	SURFACE MTD		
L8E	8" LED STRIP LIGHT W/ BATTERY BACKUP	COOPER LIGHTING	8TSNLED-LD5-67SL-SNL-UNV-EL14W-CD1-U 3500K	LED	120 V	32 VA	SURFACE MTD		
P4	4" SUSPENDED LINEAR UP/DOWN FIXTURE	CORONET	LS2 UPDN-4-35-MED MED-UNV-DB-W-AC-AVI-BAT FL-NA-NA	LED	120 V	40 VA	SUSPENDED		
P4E	4" SUSPENDED LINEAR UP/DOWN FIXTURE W/ BATTERY BACKUP	CORONET	LS2 UPDN-4-35-MED MED-UNV-DB-W-AC-AVI-BAT FL-NA-EMPC	LED	120 V	40 VA	SUSPENDED		
P12	12" SUSPENDED LINEAR UP/DOWN FIXTURE	CORONET	LS2 UPDN-12-35-MED MED-UNV-DB-W-AC-AVI-BAT-NA-NA	LED	120 V	42 VA	SUSPENDED		
P12E	12" SUSPENDED LINEAR UP/DOWN FIXTURE W/ BATTERY BACKUP	CORONET	LS2 UPDN-12-35-MED MED-UNV-DB-W-AC-AVI-BAT-NA-EMPC K	LED	120 V	42 VA	SUSPENDED		
P16	16" SUSPENDED LINEAR UP/DOWN FIXTURE	CORONET	LS2 UPDN-16-35-MED MED-UNV-DB-W-AC-AVI-BAT-NA-NA	LED	120 V	32 VA	SUSPENDED		
P24	24" SUSPENDED LINEAR UP/DOWN FIXTURE	CORONET	LS2 UPDN-24-35-MED MED-UNV-DB-W-AC-AVI-BAT-NA-NA	LED	120 V	60 VA	SUSPENDED		
P24E	24" SUSPENDED LINEAR UP/DOWN FIXTURE W/ BATTERY BACKUP	CORONET	LS2 UPDN-24-35-MED MED-UNV-DB-W-AC-AVI-BAT-NA-EMPC K	LED	120 V	60 VA	SUSPENDED		
P32	32" SUSPENDED LINEAR UP/DOWN FIXTURE	CORONET	LS2 UPDN-32-35-MED MED-UNV-DB-W-AC-AVI-BAT FL-NA-NA	LED	120 V	60 VA	SUSPENDED		
P32E	32" SUSPENDED LINEAR UP/DOWN FIXTURE W/ BATTERY BACKUP	CORONET	LS2 UPDN-32-35-MED MED-UNV-DB-W-AC-AVI-BAT FL-NA-EMPC K	LED	120 V	60 VA	SUSPENDED		
S1	SINGLE LUMINAIRE, POLE MOUNTED	ARCHIPELAGO	LSBX100-40P2-UD3-RD	LED	208 V	100 VA	POLE	PROVIDE 20" POLE. PROVIDE INTEGRAL 360 DEGREE SHIELDS -CUSTOM	
S2	EXTERIOR BOLLARD LIGHT	HINKLEY	TAPER BOLLARD 15288BK 2800LM 80CRI	LED	120 V	28 VA	BOLLARD		
S3	LANDSCAPE FLOOD LIGHT	VOLT LIGHTING	BDL-VFL-4514-ABZ	LED		60 VA		PROVIDE A LOW-VOLTAGE TRANSFORMER	
W1	WALL MOUNTED LIGHT FIXTURE	ULINE	H-996-76-7700LM-50K	LED	120 V	60 VA	WALL		
W2	DECORATIVE WALL SCONCE FIXTURE	LUMINIS	SY302 L2L10 R30 120V BKT SWK 2K35	LED	120 V	25 VA	WALL		
X2	EXIT SIGN - CEILING MOUNTED W/ SELF-DIAGNOSTICS	COOPER LIGHTING	EUX7-G-WH-SD	LED	120 V	5 VA	CEILING	PROVIDE NUMBER OF DIRECTIONAL ARROWS AND FACES AS SHOWN ON PLANS.	

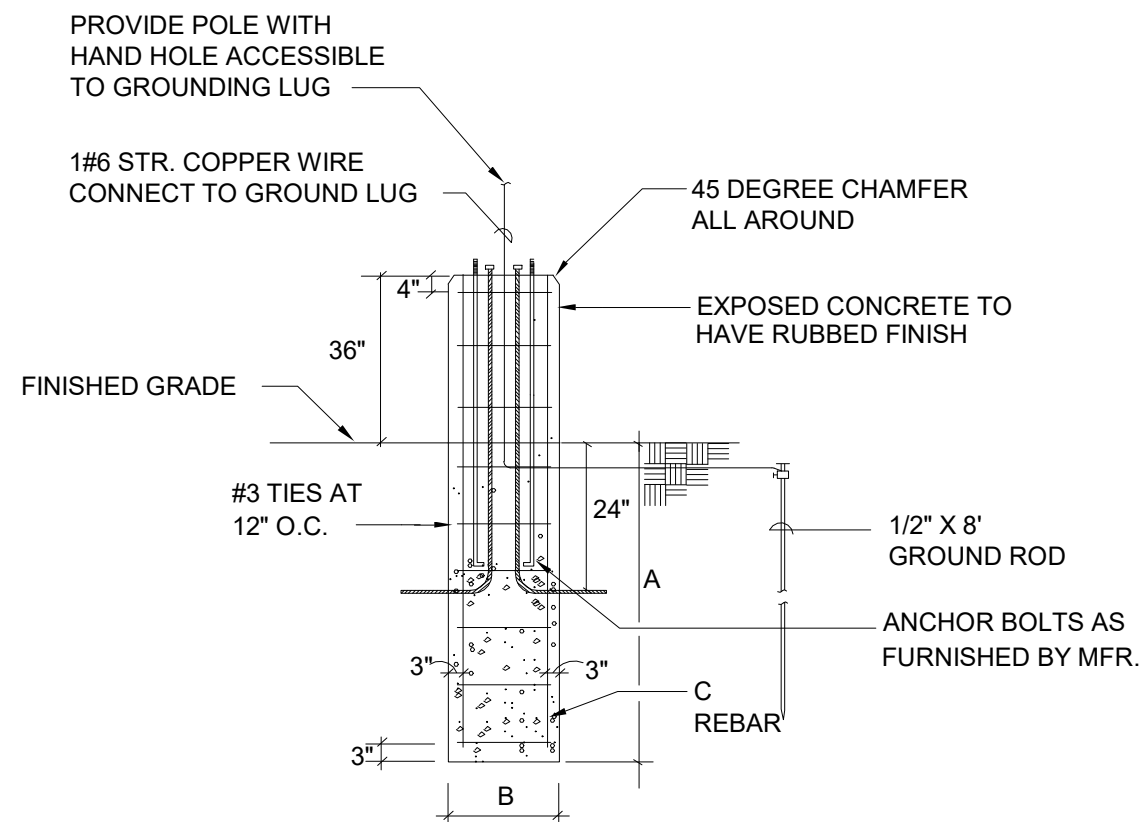
LUMINAIRE SCHEDULE NOTES

- A. FOR ALL SUSPENDED AND PENDANT FIXTURES IN ACT CEILINGS, PROVIDE MANUFACTURER'S SPACERS FOR REGULAR GRID MOUNTING AS REQUIRED.
- B. FOR ALL SUSPENDED AND PENDANT FIXTURES MOUNTED IN OPEN CEILING AT STRUCTURE ABOVE, PROVIDE SHALLOW, ROUND JUNCTION BOXES FOR LIGHT FIXTURE CANOPIES TO MOUNT TO. MOUNT ALL EXPOSED CONDUIT AS INCONSPICUOUS AS POSSIBLE. ALL CONDUIT TO BE RUN PARALLEL AND PERPENDICULAR TO BUILDING LINES. MINIMIZE LENGTH OF CONDUIT AS MUCH AS POSSIBLE. 1/2" CONDUIT IS ACCEPTABLE BETWEEN FIXTURES. GROUP CONDUITS TOGETHER AS MUCH AS POSSIBLE AND COORDINATE ROUTING WITH OTHER SYSTEMS.
- C. DO NOT CUT ADJUSTABLE AIR CRAFT CABLES UNTIL MOUNTING HEIGHTS HAVE BEEN REVIEWED AND APPROVED IN THE FIELD BY A/E DESIGN TEAM.
- D. FOR ALL RECESSED DOWNLIGHTS, THE DRIVER SHALL BE ACCESSIBLE FROM BELOW THE CEILING WITHOUT THE USE OF A SCREWDRIVER. INSTALLATION SHALL ALLOW FOR THE DRIVER TO BE REMOVED AND LOWERED BELOW THE CEILING FOR FUTURE REPLACEMENT. CONTRACTOR SHALL PROVIDE LENGTH OF LEADS AS REQUIRED.
- E. SUBSTITUTIONS ARE ALLOWED. SUBMIT ALTERNATES TO A/E DESIGN TEAM FOR REVIEW AND APPROVAL PRIOR TO ORDERING.
- F. CONTRACTOR SHALL CONFIRM VOLTAGE REQUIREMENTS OF ALL FIXTURES AND PROVIDE REQUIRED STEP-DOWN TRANSFORMERS TO ACCOMMODATE CIRCUITRY AND CONTROLS REQUIREMENTS.
- G. ALL EXTERIOR LIGHT FIXTURES SHALL BE UL DAMP LOCATION LISTED WHERE MOUNTED BELOW OVERHANG OR CANOPY. ALL OTHER EXTERIOR LIGHT FIXTURES SHALL BE WET LOCATION LISTED.
- H. FOR EXIT SIGNS, PROVIDE NUMBER OF DIRECTIONAL ARROWS AND NUMBER FACES AS SHOWN ON PLANS.



1 RECEPTACLE GROUNDING DETAIL

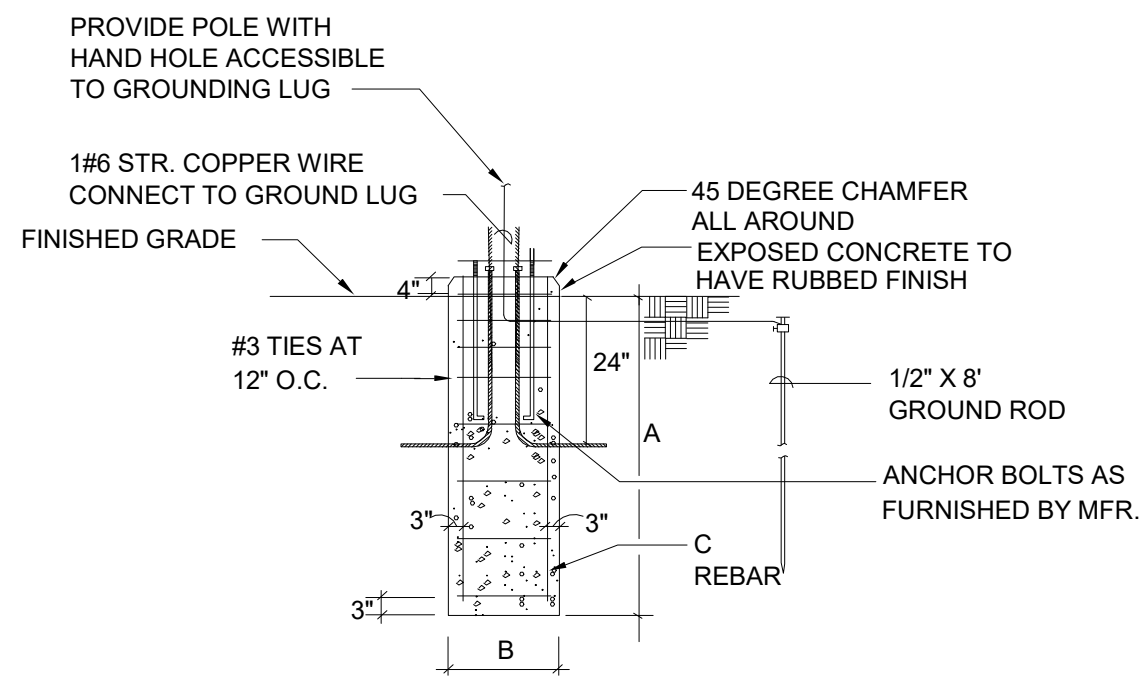
E500 NOT TO SCALE



SCHEDULE			
HT.	A	B	C
15'	3'-0"	1'-6"	4#5
20'	4'-0"	2'-0"	4#5
30'	6'-0"	2'-6"	8#7
40'	7'-0"	2'-6"	8#8
50'	8'-0"	3'-0"	8#9

2 ELEVATED POLE BASE DETAIL

E500 NOT TO SCALE



SCHEDULE			
HT.	A	B	C
15'	3'-0"	1'-6"	4#5
20'	4'-0"	2'-0"	4#5
30'	6'-0"	2'-6"	8#7
40'	7'-0"	2'-6"	8#8
50'	8'-0"	3'-0"	8#9

3 FLUSH POLE BASE DETAIL

E500 NOT TO SCALE

peak systems engineering

200 MCKENAN DR.
SUITE 100
CARY, NC 27511
LICENSE NO: C-4704
PROJECT NO: 123.080

THIS DOCUMENT IS THE SOLE PROPERTY OF PEAK SYSTEMS ENGINEERING AND MAY NOT BE USED FOR ANY PURPOSE OTHER THAN ORIGINALLY INTENDED WITHOUT THE EXPRESSED WRITTEN PERMISSION OF THE ENGINEER OF RECORD.



REDLINE

6601 Six Forks Road
Suite 130
Raleigh, NC 27615
919.878.1660

PROJECT NO: 23-022
DRAWN BY: Author
CHECKED BY: Checker



NCSBC 2018

KEETER TRAINING CENTER - RENOVATIONS
105 Keeter Center Drive
Raleigh, NC 27603

Client:
City of Raleigh
Engineering Services Dept.
1027A N. West St.
Raleigh, NC 27601
Steve Chelini, P.E.
C: 919.369.7404
Steven.Chelini@raleighnc.gov

Architect:
REDLINE Design Group, PA
6601 Six Forks Rd. Ste. 130
Raleigh, NC 27615
O: 919.878.1660
Jon Steindorf
jsteindorf@redlinedg.com

PME Engineers:
Peak Systems Engineering
200 Mackenan Drive, Suite 100
Cary, NC 27511
O: 919.495.4774
Alex Ammons
mcammons@peaksystemseng.com

DATE: 01.12.2024

REVISIONS:
1 Revision 1 Date 1

DRAWING TITLE:

ELECTRICAL
DETAILS

SHEET NO:

E500