

purchasing@bouldercounty.org

INVITATION TO BID COVER PAGE

BID Number:	7067-19
BID Title:	Boulder County Detention Center Phase 1 Administration – Addition – Lighting and Lighting Controls
Pre-Bid Meeting:	A Pre-Bid Conference will <u>not</u> be held.
BID Questions Due:	October 1, 2019
Submittal Due Date:	October 8, 2019 10:00 am
Email Address:	purchasing@bouldercounty.org
Documents included in this package:	Bid Instructions Terms and Conditions Specifications Insurance and W-9 Requirements Submittal Checklist Bid Tab Section

Signature Page Sample Contract

Lighting Plans

Detention Center Luminaire Schedule and

Detention Center Phase 1 Lighting Controls



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INSTRUCTIONS

1. Purpose/Background

Boulder County Building Services is seeking proposals to provide material and equipment delivery to furnish Lighting and Lighting Controls for the Detention Center Addition located at 3200 Airport Road in Boulder.

2. Summary of Work:

Provide lump sum prices for Lighting, and for Lighting Controls, as detailed on the attached Luminaire Schedule and Plans.

3. Written Inquiries

All inquiries regarding this BID will be submitted via email to the Boulder County Purchasing Office at purchasing@bouldercounty.org on or before **2:00 p.m. October 1, 2019**. A response from the county to all inquiries will be posted and sent via email no later than **October 3, 2019**.

Please do not contact any other county department or personnel with questions or for information regarding this solicitation.

4. Submittal Instructions

BIDs are due at the Administrative Services Information Desk or email box (preferred) listed below, for time and date recording on or before **10:00 a.m. Mountain Time on October 8, 2019**. A bid opening will be conducted at 11:00 a.m. Mountain Time at county offices.

Your response can be submitted in the following ways. <u>Please note that email responses</u> to this solicitation are preferred, but are limited to a maximum of 50MB capacity. <u>NO ZIP FILES ALLOWED</u>. <u>Electronic submittals must be received in the email box listed below.</u>

Submittals sent to any other box will NOT be forwarded or accepted. This email box is only accessed on the due date of your questions or proposals. Please use the Delivery Receipt option to verify receipt of your email. It is the sole responsibility of the proposer to ensure their documents are received before the deadline specified above. Boulder County does not accept responsibility under any circumstance for delayed or failed email or mailed submittals.

Email purchasing@bouldercounty.org; identified as **BID** # **7067-19** in the subject line.

-OR-

US Mail
One (1) unbound copy of your submittal, printed double-sided, 11 point, on at least 50% post-consumer, recycled paper must be submitted in a sealed envelope, clearly marked as BID # 7067-19, to the Administrative Services Information Desk located at 1325 Pearl Street, Boulder, CO 80302.

All BIDs must be received and time and date recorded by authorized county staff by the above due date and time. Sole responsibility rests with the bidder to see that their BID response is received on time at the stated location(s). Any BIDs received after due date and time will be returned to the bidder.

The Board of County Commissioners reserves the right to reject any and all BIDs, to waive any informalities or irregularities therein, and to accept the proposal that, in the opinion of the Board, is in the best interest of the Board and of the County of Boulder, State of Colorado.

Americans with Disabilities Act (ADA): If you need special services provided for under the Americans with Disabilities Act, contact the ADA Coordinator or the Human Resources office at (303) 441-3525 at least 48 hours before the scheduled event.



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TERMS AND CONDITIONS

- 1. Bidders are expected to examine the drawing, specifications, schedule of delivery, and all instructions. Failure to do so will be at the bidder's risk.
- 2. Each bidder will furnish the information required in the Invitation to Bid.
- 3. The Contract/Purchase Order will be awarded to that responsible bidder whose submittal, conforming to the Invitation to Bid, will be most advantageous to the County of Boulder, based on best value not only price.
- 4. The County of Boulder reserves the right to reject any or all bids and to waive informalities and minor irregularities in bids received, and to accept any portion of or all items proposed if deemed in the best interest of the County of Boulder to do so.
- 5. No submittal will be withdrawn for a period of thirty (30) days subsequent to the opening of bids without the consent of the County Purchasing Agent or delegated representative.
- 6. A signed purchase order or contract furnished to the successful bidder results in a binding contract without further action by either party.
- 7. Late or unsigned bids will not be accepted or considered. It is the responsibility of bidders to ensure that the bid arrives at the Administrative Services Information Desk prior to the time indicated in the "Invitation to Bid."
- 8. The proposed price will be exclusive of any Federal or State taxes from which the County of Boulder is exempt by law.
- 9. Any interpretation, correction or change of the bid documents will be made by Addendum. Interpretations, corrections and changes of the bid documents made in any other manner will not be binding, and bidder will not rely upon such interpretations, corrections and changes. The County's Representative will not be responsible for oral clarification.
- 10. Confidential/Proprietary Information: Bids submitted in response to this "Invitation to Bid" and any resulting contract are subject to the provisions of the Colorado Public (Open) Records Act, 24-72-201 et.seq., C.R.S., as amended. Any restrictions on the use or inspection of material

contained within the bid and any resulting contract will be clearly stated in the bid itself. Confidential/proprietary information must be readily identified, marked and separated/packaged from the rest of the bid. Co-mingling of confidential/proprietary and other information is NOT acceptable. Neither a bid, in its entirety, nor bid price information will be considered confidential/proprietary. Any information that will be included in any resulting contract cannot be considered confidential.

The Boulder County Attorney's Office retains sole authority for determining whether the Colorado Open Records Act requires or permits Boulder County to disclose proposal or bid documents, or any information contained therein, pursuant to an open records request.

- 11. Boulder County promotes the purchase/leasing of energy efficient, materials efficient and reduced toxic level products where availability, quality and budget constraints allow. Bidders are expected whenever possible to provide products that earn the ENERGY STAR and meet the ENERGY STAR specifications for energy efficiency with power management features enabled. Bidders are encouraged to offer products and equipment with post-consumer recycled-content materials. Products should be packaged and delivered with a minimum amount of recycled packaging that adequately protects the product, but is not excessive.
- 12. Pursuant to Colorado law (House Bill 1292), in any bidding process for public works in which a bid is received from a non-resident bidder who is from a state that provides a percentage bidding preference, a comparable percentage disadvantage will be applied to the bid of that bidder. Bidders may obtain additional information from the Department of Personnel's website: http://www.colorado.gov/dpa/.

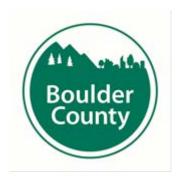


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SPECIFICATIONS

Refer to

BCJ A EXP -ELEC - RFI066 Full Set
Boulder County - Jail Phase 1 Lighting Controls



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INSURANCE AND W-9 REQUIREMENTS

PAYMENT & PERFORMANCE BONDS

Both a payment and a performance bond are required for this project if the amount of work exceeds \$50,000 and must each equal 100% of the proposed cost. Please include the cost of this bonding into the total proposed cost.

INSURANCE REQUIREMENTS

General Liability \$1,000,000 Each Occurrence

\$2,000,000 General Aggregate

\$2,000,000 Products Completed Operations Aggregate

3 years Products/Completed Operations

Automobile Liability \$1,000,000 Each Accident

*Including Hired & Non-Owned Auto

Worker's Compensation and Employer's Liability

Statutory limits

Note that the above insurance amounts are the minimum required for this project. **Proof of current insurance must be provided with your proposal in the form of a sample certificate or your proposal will be deemed non-responsive.** If you require a waiver of insurance requirements (e.g. Workers' Compensation and sole proprietorships) you may request one in your response with an explanation.

New certificates will be requested if the contract process takes more than 30 days after an award.

W-9 REQUIREMENT

Provide a copy of your business's W-9 with your proposal.

SAM.gov REGISTRATION

Please provide a copy of your business' registration in sam.gov with your proposal.



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SUBMITTAL SECTION

The bidder's attention is especially called to the items listed below, which must be submitted in full as part of the BID. Failure to submit any of the documents listed below as a part of your BID, or failure to acknowledge any addendum in writing with your BID, or submitting a bid on any condition, limitation or provision not officially invited in this Invitation to Bid (BID) may be cause for rejection of the BID.

THIS CHECKLIST MUST BE SUBMITTED AS PART OF YOUR BID PACKAGE: Bidder will check each box indicating compliance:

INCLUDED	ITEM
	Name and Address of the Partners and Subcontractors if applicable
	A detailed project schedule with an all-inclusive total cost
	Information on the relevant experience of key personnel
	State your compliance with the Terms and Conditions in the Sample Contract contained in this BID. Specifically list any deviations and provide justification for each deviation.
	Submit three references for similar projects your company has completed within the last three years and contact information
	Insurance Certificate
	W-9
	SAM.gov Registration
	Signature Page
	Addendum Acknowledgement(s) (If Applicable)



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BID TAB

<u>LUMINAIRE SCHEDULE</u> <u>LUMP SUM =</u>

<u>LIGHTING CONTROLS off the plans</u> <u>LUMP SUM =</u>

No substitutions.



Contact Information

Company Name including DBA

Boulder County Purchasing 1325 Pearl Street Boulder, CO 80302

purchasing@bouldercounty.org

SIGNATURE PAGE

Response

Signature of Person Authorized to Bid on Company's Behalf	Date
By signing below I certify that: I am authorized to bid on my company' I am not currently an employee of Boule None of my employees or agents is curr I am not related to any Boulder County (Sole Proprietorships Only) I am not a P	der County. rently an employee of Boulder County.
Company Website	
Company Phone Number	
Company Address	
Name, Title, and Email Address of Person Authorized to Contract with Boulder County	
List Type of Organization (Corporation, Partnership, etc.)	

Note: If you cannot certify the above statements, please explain in a statement of explanation.

BOULDER COUNTY SAMPLE CONTRACT

THIS CONTRACT ("Contract") is entered into by and between the County of Boulder, State of Colorado, a body corporate and politic, acting by and through its Board of County Commissioners for the benefit of the [Department] ("County") and [Supplier] ("Contractor"). County and Contractor are each a "Party," and collectively the "Parties."

In consideration of the mutual covenants contained in this Contract, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

- 1. <u>Incorporation into Contract</u>: The **Details Summary** is incorporated into this Contract. The **Contract Documents** are incorporated into this Contract by reference, except to the extent that the Proposal, if any is incorporated, contains any obligations placed upon County and not otherwise contained in this Contract.
- 2. <u>Work to be Performed</u>: Contractor will provide all labor and equipment and do all tasks necessary and incidental to performing the work as described in the **Details Summary** and **Contract Documents** (the "Work"). Contractor will perform the Work (a) in a good and workmanlike manner, (b) at its own cost and expense, (c) in accordance with recognized industry standards of care, skill and diligence for the type of work being performed, and (d) in strict accordance with the Contract.
- 3. <u>Term of Contract</u>: The **Contract Term** begins on the **Start Date** and expires on the **Expiration Date**, unless terminated sooner. All the Work must be performed during the **Contract Term**.
- 4. <u>Payment for Work Performed:</u> In consideration of the Work performed by Contractor, and subject to conditions contained in this Contract, County will pay an amount not to exceed the **Contract Amount** to Contractor in accordance with the **Contract Documents**.
- 5. <u>Invoicing</u>: Contractor will promptly provide a copy of its Form W-9 and invoice template to County upon request. Contractor must submit an invoice to the County by the fifteenth (15th) day of the month following completion of the Work. All invoices submitted require the following components: Contractor's name and address (submitted W-9 address must match remit address), detailed description of services, dates of services, itemization of labor and materials costs, "Bill to: Boulder County" language, payment remittance address, payer, name and address, date of invoice, unique invoice number, and total amount due. Contractor must send all completed invoices to the **Invoice Contact** in the **Details Summary**. Email delivery is preferred by the County; County may require delivery of invoices by email. Failure to submit invoices in a timely manner and in accordance with the terms of this Contract may cause a delay in payment. County may recoup any damages incurred because of Contractor's failure to submit invoices pursuant to the terms of this paragraph. County's acceptance or payment of an invoice will not constitute acceptance of any Work performed under this Contract.
- 6. Extra Time to Complete the Work: If Contractor cannot complete the Work by the Expiration Date, Contractor may request extra time to complete the Work. County, in its sole discretion, may grant Contractor additional time to complete the Work and, if so, will provide Contractor with written notice of the amount of extra time granted. County granting extra time to complete the Work will not entitle Contractor to additional compensation from County. This Contract will remain in full force and effect during any time period that Contractor is permitted to finish completing the Work.
- 7. <u>Extension of Contract Term (Additional Work)</u>: Upon mutual agreement of the Parties, this Contract may be extended until the **Final End Date**. During any extended **Contract Term**, the terms of this Contract will remain in full force and effect, unless otherwise amended in writing by the Parties. Where the Contractor will provide additional services for additional compensation beyond the initial **Contract Amount**, the Parties must execute a written amendment before the then-current **Expiration Date**. If necessary, the written amendment will incorporate an updated Scope of Work and updated Fee Schedule as exhibits. Contractor must provide a current Certificate of Insurance to the County that complies with the **Insurance Requirements** of this Contract, if any, prior to any extended **Contract Term**.

- 8. <u>Schedule of Work:</u> County may designate the hours (on a daily or weekly basis) during which Contractor can perform the Work, strictly for the purposes of minimizing inconvenience to the County and interference with County operations. Contractor will otherwise set its own work schedule.
- 9. <u>Indemnity:</u> Contractor will be liable for any damages to persons or property caused by or arising out of the actions, obligations, or omissions of Contractor, its employees, agents, representatives or other persons acting under Contractor's direction or control in performing or failing to perform the Work under this Contract. Contractor will indemnify and hold harmless County, its elected and appointed officials, and its employees, agents and representatives (the "indemnified parties"), from any and all liability, claims, demands, actions, damages, losses, judgments, costs or expenses, including attorneys' fees, which may be made or brought or which may result against any of the indemnified parties as a result or on account of the actions or omissions of Contractor, its employees, agents or representatives, or other persons acting under Contractor's direction or control. This indemnification obligation will extend to claims based on Contractor's unauthorized use or disclosure of confidential information and intellectual property infringement. County will not be obligated to indemnify or defend Contractor under any circumstances. Contractor's obligations under this provision shall survive expiration or termination of this Contract.
- 10. <u>Nondiscrimination</u>: Contractor will comply with the letter and spirit of the Colorado Anti-Discrimination Act, C.R.S. § 24-34-401, <u>et seq.</u>, as amended, and all applicable local, State and Federal laws concerning discrimination and unfair employment practices. County prohibits unlawful discrimination on the basis of race, color, religion, gender, gender identity, national origin, age 40 and over, disability, socio-economic status, sexual orientation, genetic information, or any other status protected by applicable Federal, State or local law. Contractor must require that its subcontractors, if any, similarly comply with all applicable laws concerning discrimination and unfair employment practices.
- 11. <u>Information and Reports</u>: Contractor will provide to authorized County, State, and Federal government representatives all information and reports that may be required for any purpose authorized by law. Contractor will permit access to such representatives to Contractor's facilities, books, records, accounts, and any other relevant sources of information. Where information required by a representative is in the exclusive possession of a person or entity other than Contractor, Contractor must so certify to the County and explain what efforts it has made to obtain the information.
- 12. <u>Independent Contractor</u>: Contractor is an independent contractor for all purposes in performing the Work. Contractor is not an employee of the County for any purpose, including the Federal Insurance Contribution Act, the Social Security Act, the Federal Unemployment Tax Act, the provisions of the Internal Revenue Code, the Colorado Workers' Compensation Act, the Colorado Unemployment Insurance Act, and the Public Employees Retirement Association. Accordingly, County will not withhold or pay any income tax, payroll tax, or retirement contribution of any kind on behalf of Contractor or Contractor's employees. As an independent contractor, Contractor is responsible for employing and directing such personnel and agents as it requires to perform the Work. Contractor will exercise complete authority over its personnel and agents and will be fully responsible for their actions.
- 13. <u>Termination for Non-Appropriation</u>: The other provisions of this Contract notwithstanding, the County is prohibited by law from making commitments beyond the current fiscal year. Payment to Contractor beyond the current fiscal year is contingent on the appropriation and continuing availability of funding in any subsequent year. County has reason to believe that sufficient funds will be available for the full **Contract Term**. Where, however, funds are not allocated for any fiscal period beyond the current fiscal year, County may terminate this Contract without penalty by providing seven (7) days' written notice to Contractor.
- 14. <u>Termination for Breach</u>: Either Party's failure to perform any of its material obligations under this Contract, in whole or in part or in a timely or satisfactory manner, will be a breach. The institution of proceedings under any bankruptcy, insolvency, reorganization or similar law, by or against Contractor, or the appointment of a receiver or similar officer for Contractor or any of its property, which is not vacated or fully stayed within thirty (30) days after the institution of such proceeding, will also constitute a breach. In the event of a breach, the non-breaching Party may provide written notice of the breach to the other Party. If the notified Party does not cure the breach, at its sole expense, within thirty (30) days after delivery of notice, the non-breaching Party may exercise any of its remedies provided under this Contract or at law, including immediate termination of this Contract.

- 15. <u>Termination for Convenience</u>: County may terminate this Contract, in whole or in part, for any reason, upon seven (7) days' advance written notice to Contractor.
- 16. <u>Remedies for Non-Performance</u>: If Contractor fails to perform any of its obligations under this Contract, County may, at its sole discretion, exercise one or more of the following remedies, which shall survive expiration or termination of this Contract:
- a. <u>Suspend Performance</u>: County may require that Contractor suspend performance of all or any portion of the Work pending necessary corrective action specified by the County and without entitling Contractor to an increase in compensation or extension of the performance schedule. Contractor must promptly stop performance and incurring costs upon delivery of a notice of suspension by the County.
- b. <u>Withhold Payment Pending Corrections</u>: County may permit Contractor to correct any rejected Work at the County 's discretion. Upon County 's request, Contractor must correct rejected work at Contractor's sole expense within the time frame established by the County. Upon completion of the corrections satisfactory to the County, County will remit payment to Contractor.
- c. <u>Deny Payment</u>: County may deny payment for any Work that does not comply with the requirements of the Contract or that Contractor otherwise fails to provide or complete, as determined by the County in its sole discretion. Upon County request, Contractor will promptly refund any amounts prepaid by the County with respect to such non-compliant Work.
- d. <u>Removal</u>: Upon County 's request, Contractor will remove any of its employees or agents from performance of the Work, if County, in its sole discretion, deems any such person to be incompetent, careless, unsuitable, or otherwise unacceptable.
- 17. <u>Binding Arbitration Prohibited</u>: County does not agree to binding arbitration by any extra-judicial body or person.
- 18. <u>Conflicts of Interest</u>: Contractor must not engage in any business or personal activities or practices or maintain any relationships that conflict in any way with the full performance of Contractor's obligations.
- 19. <u>Notices</u>: All notices provided under this Contract must be in writing and sent by Certified U.S. Mail (Return Receipt Requested), electronic mail, or hand-delivery to the other Party's **Contact** at the address specified in the **Details Summary**. For certified mailings, notice periods will begin to run on the day after the postmarked date of mailing. For electronic mail or hand-delivery, notice periods will begin to run on the date of delivery.
- 20. <u>Statutory Requirements</u>: This Contract is subject to all statutory requirements that are or may become applicable to counties or political subdivisions of the State of Colorado generally, including but not limited to: C.R.S. § 38-26-107, which requires withholding funds where the County receives a claim for payment from a supplier or subcontractor of Contractor upon notice of final settlement (required for public works contracts that exceed \$150,000); C.R.S. § 8-17-101 <u>et seq.</u>; C.R.S. § 18-8-301, <u>et seq.</u>; and C.R.S. § 18-8-401, <u>et seq.</u>;
- Public Contracts for Services (C.R.S. §§ 8-17.5-101, et seq.): Contractor hereby certifies, warrants, 21. and agrees that it does not knowingly employ or contract with an illegal alien who will perform work under this Contract and further certifies that it will confirm the employment eligibility of all employees who are newly hired for employment to perform work under this Contract by participating in the E-Verify Program established under Pub. L. 104-28 or the department verification program established under C.R.S. § 8-17.5-102(5)(c). Contractor (i) shall not knowingly employ or contract with an illegal alien to perform work under this Contract; (ii) shall not enter into a contract with a subcontractor that fails to certify to the contractor that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this Contract; (iii) has confirmed the employment eligibility of all employees who are newly hired for employment to perform work under this Contract through participation in the E-Verify program or department program; (iv) is prohibited from using either the E-Verify program or department program procedures to undertake preemployment screening of job applicants while this Contract is being performed; and (v) shall comply with any reasonable request by the department made in the course of an investigation that the Colorado Department of Labor and Employment is undertaking pursuant to the authority established in C.R.S. § 8-17.5-102(5). If Contractor obtains actual knowledge that a subcontractor performing work under this

Contract knowingly employs or contracts with an illegal alien, Contractor shall (a) notify the subcontractor and County within three (3) days that Contractor has actual knowledge that subcontractor is employing or contracting with an illegal alien; and (b) terminate the subcontract if, within three (3) days of receiving notice hereunder, subcontractor does not stop employing or contracting with the illegal alien; except that Contractor shall not terminate the contract with the subcontractor if during such three (3) days the subcontractor provides information to establish that the subcontractor has not knowingly employed or contracted with an illegal alien. Contractor's violation of this provision will constitute a material breach of this Contract, entitling the County to terminate the contract for breach. If this Contract is so terminated, Contractor shall be liable for actual and consequential damages to the County.

- 22. <u>Entire Agreement/Binding Effect/Amendments</u>: This Contract represents the complete agreement between the Parties and is fully binding upon them and their successors, heirs, and assigns, if any. This Contract terminates any prior agreements, whether written or oral in whole or in part, between the Parties relating to the Work. This Contract may be amended only by a written agreement signed by both Parties.
- 23. <u>Assignment/Subcontractors</u>: This Contract may not be assigned or subcontracted by Contractor without the prior written consent of the County. If Contractor subcontracts any of its obligations under this Contract, Contractor will remain liable to the County for those obligations and will also be responsible for subcontractor's performance under, and compliance with, this Contract.
- 24. <u>Governing Law/Venue</u>: The laws of the State of Colorado govern the construction, interpretation, performance, and enforcement of this Contract. Any claim relating to this Contract or breach thereof may only be brought exclusively in the Courts of the 20th Judicial District of the State of Colorado and the applicable Colorado Appellate Courts.
- 25. <u>Breach</u>: The failure of either Party to exercise any of its rights under this Contract will not be deemed to be a waiver of such rights or a waiver of any breach of the Contract. All remedies available to a Party in this Contract are cumulative and in addition to every other remedy provided by law.
- 26. <u>Severability</u>: If any provision of this Contract becomes inoperable for any reason but the fundamental terms and conditions continue to be legal and enforceable, then the remainder of the Contract will continue to be operative and binding on the Parties.
- 27. <u>Third-Party Beneficiary</u>: Enforcement of the terms and conditions and all rights and obligations of this Contract are reserved to the Parties. Any other person receiving services or benefits under this Contract is an incidental beneficiary only and has no rights under this Contract. Notwithstanding, where the beneficiary **Department** is led by an Elected Official, such Elected Official shall be considered a third-party beneficiary.
- 28. <u>Colorado Open Records Act</u>: County may disclose any records that are subject to public release under the Colorado Open Records Act, C.R.S. § 24-72-101, <u>et seq</u>.
- 29. <u>Conflict of Provisions</u>: If there is any conflict between the terms of the main body of this Contract and the terms of any of the **Contract Documents**, the terms of the main body of the Contract will control.
- 30. <u>Governmental Immunity</u>: Nothing in this Contract shall be construed in any way to be a waiver of the County's immunity protection under the Colorado Governmental Immunity Act, C.R.S. § 24-10-101, <u>et seq.</u>, as amended.
- 31. <u>Representations and Warranties:</u> Contractor represents and warrants the following:
 - a. Execution of this Contract and performance thereof is within Contractor's duly authorized powers:
 - b. The individual executing this Contract is authorized to do so by Contractor;
 - c. Contractor is authorized to do business in the State of Colorado and is properly licensed by all necessary governmental and public and quasi-public authorities having jurisdiction over the Work and the Contractor; and
 - d. Contractor and its subcontractors, if any, are financially solvent, able to pay all debts as they mature, and have sufficient working capital to complete the Work and perform all obligations under the Contract.

- 32. <u>Legal Compliance</u>: Contractor assumes full responsibility for obtaining and maintaining any permits and licenses required to perform the Work. Contractor's performance under this Contract and the Work itself will comply with all Federal, State, and local laws, regulations, ordinances and codes.
- 33. <u>Litigation Reporting</u>: Contractor is not currently involved in any action before a court or other administrative decision-making body that could affect Contractor's ability to perform the Work. Contractor will promptly notify the County if Contractor is served with a pleading or other document in connection with any such action.
- 34. <u>Tax Exemption</u>: County is exempt from payment of Federal, State, and local government taxes. Contractor shall collect no tax from the County, and the County shall not be liable to pay any taxes imposed on Contractor. County shall provide its tax exemption status information to Contractor upon request.
- 35. <u>Delegation of Authority</u>: The Parties acknowledge that the Board of County Commissioners has delegated authority to the Department Head or Elected Official that leads the beneficiary **Department** and their designees to act on behalf of the County under the terms of this Contract, including but not limited to the authority to terminate this Contract.
- 36. Ownership of Work Product: All work product, property, data, documentation, information or materials conceived, discovered, developed or created by Contractor pursuant to this Contract ("Work Product") will be owned exclusively by the County. To the extent possible, any Work Product will be deemed to be a work made for hire. Contractor unconditionally and irrevocably transfers and assigns to the County all right, title and interest in and to any Work Product.
- 37. <u>Publicity Releases</u>: Contractor will not refer to this Contract or the County in commercial advertising without prior written consent of the County. This provision shall survive expiration or termination of this Contract.
- 38. <u>Execution by Counterparts; Electronic Signatures</u>: This Contract may be executed in multiple counterparts, each of which will be deemed an original, but all of which will constitute one agreement. The Parties approve the use of electronic signatures, governed by the Uniform Electronic Transactions Act, C.R.S. §§ 24 71.3 101 to 121. The Parties will not deny the legal effect or enforceability of this Contract solely because it is in electronic form or because an electronic record was used in its creation. The Parties will not object to the admissibility of this Contract in the form of electronic record, or paper copy of an electronic document, or paper copy of a document bearing an electronic signature, because it is not in its original form or is not an original.
- 39. <u>Limitation on Public Statements and Lobbying Activity</u>. During the term of this Contract, Contractor may receive from the County its confidential data, work product, or other privileged or confidential information that is protected by law. To maintain the fact and appearance of absolute objectively, Contractor shall not, without the prior written consent of the County, which shall not be unreasonably withheld, do any of the following: (a) disclose information obtained because of this contractual relationship to any third party; (b) lobby any State or Federal agency on any pending matter while this Contract is effective; or (c) make any public statements or appear at any time to give testimony at any public meeting on the subject matters regarding which Contractor is or was retained by the County. County may set reasonable conditions on any disclosure authorized by the County under this provision. Notwithstanding, Contractor may make disclosures as required by law, and to law enforcement officials in connection with any criminal justice investigation.
- 40. <u>Sustainability</u>: County encourages Contractor to consider the procurement and use of environmentally preferable products and services while performing services under this Contract. "Environmentally preferable purchasing" means making purchasing choices for products and services that have a lesser or reduced adverse effect on human health and the environment when compared with competing products and services that serve the same purpose. Environmentally preferable purchasing is consistent with the County's commitment to protecting our air, water, soil, and climate for current and future generations. County encourages Contractor to incorporate the following actions into Contractor's performance of the Work: environmentally preferable supplies and services; conservation of water; efficient energy use; waste prevention; reuse and recycle construction and de-construction materials in a manner that maximizes reuse of materials; sustainable transportation choices, including consideration to business communication software such as Skype alternative to air travel and public transit or carpooling for in-person

meetings; pollution prevention; low toxicity for public health & safety; and reduced emissions to address climate change.

- 41. <u>Insurance Requirements:</u> Prior to commencing the Work, Contractor will provide a Certificate of Insurance to the County demonstrating adequate insurance coverage as required by this paragraph. All policies evidencing coverage required by the Contract will be issued by insurance companies satisfactory to the County. Contractor will forward Certificates of Insurance directly to the **County Department** and **Contact** listed in the **Details Summary**.
- a. For the entire duration of this Contract including any extended or renewed terms, and longer as may be required by this Contract, Contractor shall procure and maintain at its own expense, and without cost to the County, the following kinds and minimum amounts of insurance to insure the liability risks that Contractor has assumed under this Contract:

i. Commercial General Liability

Non-Construction contracts use the following language:

This coverage should be provided on an Occurrence Form, ISO CG001 or equivalent, with Minimum limits of \$1,000,000 Each Occurrence, \$2,000,000 General Aggregate and \$2,000,000 Products Completed Operations Aggregate.

Construction Contracts only – include the following paragraph:

Coverage should be provided on an Occurrence form, ISO CG0001 or equivalent. The policy shall be endorsed to include Additional Insured Owners, Lessees or Contractors endorsements CG 2038 (or equivalent), Designated Construction Project(s) General Aggregate Endorsement CG2503 (or equivalent) and Additional Insured Completed Operations for Owners, Lessees or Contractors CG 2037 (or equivalent). Minimum limits required of \$1,000,000 Each Occurrence, \$2,000,000 General Aggregate and \$2,000,000 Products/Completed Operations Aggregate. The County requires the Products/Completed Operations coverage to be provided 3 years after completion of construction. An endorsement must be included with the certificate.

ii. Automobile Liability

Bodily Injury and Property Damage for any owned, hired, and non-owned vehicles used in the performance of the Contract. Minimum limits \$1,000,000 Each Accident.

This coverage may not be required if Contractor is not using a vehicle as part of its performance under the contract. Contact Risk Management with any questions.

iii. Workers' Compensation and Employer's Liability

Workers' Compensation must be maintained with the statutory limits. Employer's Liability is required for minimum limits of \$100,000 Each Accident/\$500,000 Disease-Policy Limit/\$100,000 Disease-Each Employee.

This coverage may not be required if contractor is not mandated under State law to maintain this coverage. A waiver is available on the contracts routing website.

iv. Umbrella / Excess Insurance

Umbrella/Excess Liability insurance in the amount \$[X],000,000.00, following form.

This insurance is a broad, high-limit policy, which acts more than the underlying primary insurance policy. This coverage is designed to provide additional liability limits beyond the primary insurance limits and is triggered upon the underlying limits becoming exhausted. Umbrella / Excess insurance is most commonly required when an exposure to the County could potentially create liabilities in excess of the basic insurance limits. The most common limits for these policies range from \$2,000,000 to \$5,000,000.

Please consult with Risk Management if you feel this coverage should be required.

IN ADDITION TO THE ABOVE, ONE OR MORE OF THE FOLLOWING FOUR (4) INSURANCE COVERAGES MAY BE REQUIRED. CONTACT RISK MANAGEMENT IF YOU HAVE QUESTIONS ABOUT WHICH INSURANCE COVERAGE TO INCLUDE. DELETE THIS INSTRUCTION (AND ANY INAPPLICABLE INSURANCE PARAGRAPHS) WHEN FINALIZING THE CONTRACT:

v. Professional Liability (Errors and Omissions)

All contractors required to be professionally certified by the State of Colorado (i.e., architects, engineers, doctors, nurses, etc.) and/or any consultants whose errors in judgment, planning, design, etc. could result in economic loss to the County must provide proof of professional liability coverage. This also applies to anyone managing or overseeing construction.

Professional liability coverage with minimum limits of \$1,000,000 Per Loss and \$1,000,000 Aggregate. Professional Liability provisions indemnifying for loss and expense resulting from errors, omission, mistakes or malpractice is acceptable and may be written on a claims-made basis. The contractor warrants that any retroactive date under the policy shall precede the effective date of this Contract; and that either continuous coverage will be maintained or an extended discovery period will be exercised for a period of two (2) years beginning at the time work under this Contract is completed.

vi. **Pollution Liability**

This coverage is required whenever work under the contract involves pollution risk to the environment or losses caused by pollution conditions (including asbestos) that may arise from the operations of the Contractor described in the Contractor's scope of services.

Coverage pay for those sums the Contractor becomes legally obligated to pay as damages because of Bodily Injury, Property Damage or environmental Damage arising out of a pollution incident caused by the Contractor's work including Completed Operations. Coverage shall include emergency response expenses, pollution liability during transportation (if applicable) and at Non-Owned Waste Disposal Site (if applicable). The Minimum limits required are \$1,000,000 Per Occurrence/Loss and \$1,000,000 Policy Aggregate. If the coverage is written on a claims-made basis, the Contractor warrants that any retroactive date applicable to coverage under the policy precedes the effective date of this Contract; and that continuous coverage will be maintained or an extended discovery period will be exercised for a period of three (3) years beginning from the time that work under this contract is completed. County shall be named as an additional insured for ongoing operations and completed operations.

vii. Third Party Commercial Crime Insurance / Third Party Fidelity Bond

Crime / Third Party Fidelity covers the contractor and the contractor's employees when engaged in work for a client on behalf of the County. This coverage is for employee dishonesty, theft, embezzlement, forgery and alteration. Coverage is required when the contractor will be handling money or collecting fees on behalf of the County or when the contractor has access to client's personal property and/or documentation

The Crime limit shall be \$1,000,000 Per Loss and include an endorsement for "Employee Theft of Client Property". In order to provide coverage to County during the course of this contract, Commercial Crime policies must be endorsed to cover Third Party Fidelity. Third party fidelity covers the vendor's employees when engaged in work for a client. In addition, the County will be listed as loss payee on the commercial crime coverage. This third-party coverage can also be provided by obtaining a third-party fidelity bond.

viii. Privacy / Cyber Liability Insurance

As a provider of a service which *may* require the knowledge and retention of personal identifiable information including but not limited to, names, dates of birth, social security numbers, usernames,

and passwords, and/or HIPAA sensitive personal information of clients served, the following minimum insurance limits are required:

Contractors with 10 or fewer County clients: \$50,000
Contractors with 11 – 15 County clients: \$500,000
Contractors with more than 25 County clients: \$1,000,000

Contractors with more than 25 County clients: \$1,000,000

If the scope does not pertain to clients directly, contact Risk Management for appropriate language.

ix. Sexual Abuse and Molestation Coverage

As a provider of a service which has contact with individuals that are part of a sensitive population and are in a position of trust the following minimum insurance limits are required:

Contractors with 5 or fewer County clients: \$100,000

Contractors with 6-10 County clients: \$250,000 Contractors with 11-15 County clients: \$500,000

Contractors with 16 or more County clients: \$1,000,000

If the number of clients increases during the contract period, the required coverage limit will increase to correspond accordingly.

If the scope does not pertain to clients directly, contact Risk Management for appropriate language.

THE STATED INSURANCE LIMITS FOR ALL COVERAGES ARE <u>MINIMUM</u> AMOUNTS; DEPENDING ON THE CONTRACT, HIGHER LIMITS MAY BE REQUIRED OR ADVISABLE. CONTACT RISK MANAGEMENT IF YOU HAVE ANY QUESTIONS ABOUT MINIMUM LIMITS. DELETE THIS PARAGRAPH WHEN FINALIZING THE CONTRACT.

b. <u>Boulder County as Additional Insured</u>: Boulder County shall be named as an additional insured for General Liability, Umbrella/Excess Liability, and Pollution Liability, as designated in this Contract. Additional insured shall be endorsed to the policy.

THE ADDITIONAL INSURED WORDING SHOULD BE AS FOLLOWS: County of Boulder, State of Colorado, a body corporate and politic, is named as Additional Insured.

- c. <u>Notice of Cancellation</u>: Each insurance policy required by this Contract shall provide the required coverage and shall not be suspended, voided or canceled except after thirty (30) days' prior written notice has been given to the County except when cancellation is for non-payment of premium, then ten (10) days' prior notice may be given. If any insurance company refuses to provide the required notice, Contractor or its insurance broker shall notify the County any cancellation, suspension, or nonrenewal of any insurance policy within seven (7) days of receipt of insurers' notification to that effect.
- d. <u>Insurance Obligations of County</u>: County is not required to maintain or procure any insurance coverage beyond the coverage maintained by the County in its standard course of business. Any insurance obligations placed on the County in any of the **Contract Documents** shall be null and void.
- e. <u>Deductible</u>: Any and all deductibles contained in any insurance policy shall be assumed by and at the sole risk of Contractor.
- f. <u>Primacy of Coverage</u>: Coverage required of Contractor and its subcontractors, if any, shall be primary over any insurance or self-insurance program carried by the County.
- g. <u>Subrogation Waiver</u>: All insurance policies in any way related to this Contract secured or maintained by Contractor as required herein shall include clauses stating that each carrier shall waive all rights of recovery, under subrogation or otherwise, against County, its organizations, officers, agents, employees, and volunteers.

[Signature Page to Follow]

IN WITNESS WHEREOF, the Parties have executed and entered into this Contract as of the latter day and year indicated below.

SIGNED for and on behalf of Boulder Co	ounty	SIGNED for and on behalf of Contractor
Signature:		Signature:
Name:		Name:
Title:		Title:
Date:		Date:
↓↓For Board-signed documents only↓↓		
Attest:	Initials	
Attestor Name:		
Attestor Title:		

CONTRACTOR'S CERTIFICATION OF COMPLIANCE

Pursuant to Colorado Revised Statutes, § 8-17.5-101, et seq., as amended, as a prerequisite to entering into a contract for services with Boulder County, Colorado, the undersigned Contractor hereby certifies that at the time of this certification, Contractor does not knowingly employ or contract with an illegal alien who will perform work under the attached contract for services and that the Contractor will participate in the E-Verify Program or Department program, as those terms are defined in C.R.S. § 8-17.5-101, et seq., in order to confirm the employment eligibility of all employees who are newly hired for employment to perform work under the attached contract for services.

CONTRACTOR:	
Company Name	Date
Name (Print or Type)	
Signature	
Title	

Note: Registration for the E-Verify Program can be completed at: https://e-verify.uscis.gov/enroll/.

INSERT ATTACHMENT A Boulder County BCJ A EXP – ELEC – RFI066 Full Set

INSERT ATTACHMENT B Boulder County – Jail Phase 1 Lighting Controls

ELECTRICAL LEGEND											
			ALL SYMB	OLS IN LEG			Y BE USED ON THIS	PROJECT			
					ABBREVIATIONS A	AND DESCRI	PTIONS				
			DEDICATED		000000000000000000000000000000000000000			2711	2005 702 1007	VP.	Vol. 70 DVD507 0VDD5V7
+4'-6" A	MOUNTING HEIGHT AFF AMPS	(D) DP	DEDICATED DISTRIBUTION PANEL	GFCI	GROUND FAULT CIRCUIT INTERRUPTER	MH	MANHOLE	RTU	ROOF TOP UNIT SHORT CIRCUIT	VDC VFD	VOLTS DIRECT CURRENT VARIABLE FREQUENCY DRIVE
AC	ALTERNATING CURRENT	(E)	EXISTING	GRC	GALVANIZED RIGID CONDUIT	MTD	MOUNTED	SCA	CURRENT AVAILABLE	WHM	WATTHOUR METER
ac	ABOVE COUNTER	EC	ELECTRICAL CONTRACTOR	Н	PREFIX DENOTING 277/480 PANEL	MTS N	MANUAL TRANSFER SWITCH	SPD	SURGE PROTECTIVE DEVICE	WP	WEATHERPROOF
AFCI	ARC FAULT CIRCUIT INTERRUPTER	EF	EXHAUST FAN	HP	HORSE POWER	NC NC	NEUTRAL NORMALLY CLOSED	SRG	SIGNAL REFERENCE GRID	WR	WEATHER RESISTANT
AFF	ABOVE FINISHED FLOOR	EOL	END OF LINE RESISTOR	IG	ISOLATED GROUND	NL NL	NIGHT LIGHT	ST	SHUNT TRIP	9 (4WG100)	NUMBER REFERS TO FEEDER
AFG	ABOVE FINISHED GRADE	EM	EMERGENCY	KV	KILOVOLT	NIC	NOT IN CONTRACT	SW	SWITCH		SCHEDULE 1 REFERS TO
AHU	AIR HANDLING UNIT	EMT	ELEC. METALLIC TUBING	KVA	KILO VOLT-AMPERE	NO	NORMALLY OPEN	TR	TAMPER RESISTANT	2 AHU-1	EQUIPMENT SCHEDULE
AIC	AMPERE INTERRUPTING CAPACITY	EPO	EMERGENCY POWER OFF	KVAR	KILOVAR	PA	PREACTION SYSTEM	TS	TEST SWITCH TELEPHONE	9	WORK NOTE SYMBOL
AF	AMP FRAME	EWC	ELECTRIC WATER COOLER	KW	KILOWATT	PDU	POWER DISTRIBUTION UNIT	TTB	TERMINAL BOARD TELEPHONE	1	NUMBER DESIGNATES DETAIL SHEET ON WHICH
AT	AMP TRIP	EX	EXPLOSION-PROOF	L	PREFIX DENOTING 120/208V PANEL	PF	POWER FACTOR	TTC	TERMINAL CABINET UNDERCABINET		DETAIL IS LOCATED
ATS	AUTO. TRANSFER SWITCH	F	FUSE OR FIRE	LV	LOW VOLTAGE	ø OR PH	PHASE	UC UF	UNDERFLOOR	2	REVISION SYMBOL
В	BATTERY	FA	FIRE ALARM	М	MONITOR	PT	POTENTIAL TRANSFORMER	UG	UNDERGROUND	220	ROOM NUMBER
BKR	BREAKER	FCU	FAN COIL UNIT	MC	MECHANICAL CONTRACTOR	PVC	POLYVINYL CHLORIDE	UNO	UNLESS NOTED OTHERWISE	(1)	DASHED SYMBOLS
С	CONDUIT	FDR	FEEDER	MCC	MOTOR CONTROL CENTER	(R)	RELOCATED	UPS	UNINTERRUPTIBLE	17	DENOTE REMOVAL WORK
CKT	CIRCUIT	FI	FILM ILLUMINATOR	MDP	MAIN DISTRIBUTION PANEL	(RR)	REMOVE & RELOCATE	V	POWER SUPPLY	(RR)	LIGHT LINE WEIGHT SYMBOLS DENOTE EXISTING (REMOVE &
CP	CONTROL PANEL	FS	FIRE SUPPRESSION	MDS	MAIN DIST. SWITCHBOARD	RM	ROOM	V	VOLTS VOLTS ALTERNATING		RELOCATÈ)
СТ	CURRENT TRANSFORMER	G	GROUND	MG	MOTOR GENERATOR UNIT	RT	RAINTIGHT	VAC	CURRENT	(R)	(RELOCATED)
					LIGH	ITING					
\sim	CEILING FIVE PE		POLE MOUNTED FIXTURE		DEGESSES	S	SINGLE-POLE SWITCH	٢	LOWED 2:27:	[c]	LIGHTING CONTACTOR
	CEILING FIXTURE				RECESSED FIXTURES	3 S ₂	2 = DOUBLE-POLE SWITCH	$S_{\rm b} \sim S_{\rm b}$	LOWER CASE LETTER INDICATES SWITCHING	1	W/ NO OF POLES
— <u> </u>	WALL MOUNTED FIXTURE		WALL WASH STRIP LIGHT		LIQUE 77		3 = THREE-WAY SWITCH 4 = FOUR-WAY SWITCH	SSS	SWITCHES GANGED	-O _A	LETTER REFERS TO FIXTURE SCHEDULE
⊗t ⊸⊡∕	EXIT SIGN W/ARROW		S LOIH		LIGHT TRACK WITH FIXTURE HEADS		P = SWITCH AND PILOT LIGHT K = KEY OPERATED SWITCH D = DIMMER SWITCH		IN SAME BOX	_	ALL FIXTURES IN ROOM
	BATTERY PACK		LIGHT FIXTURES					os	OS = OCCUPANCY SENSOR MD = MOTION DETECTOR TC = TIME CLOCK	A	ARE THIS TYPE UNLESS NOTED OTHERWISE
(L)	LANDSCAPE FIXTURE				FIXTURE(S) ON EMERGENCY CIRCUIT	(P)-	PHOTOCELL	<	LOW VOLTAGE SWITCH		
<u> </u>	KEYLESS FIXTURE										
					PO	WER					
\ominus	SINGLE RECEPTACLE		FLOOR MOUNTED	M	METER	S _{to}	THERMAL OVERLOAD SWITCH		BRANCH CIRCUIT		SEAL OFF
$\stackrel{\smile}{\leftarrow}$	DUPLEX RECEPTACLE		DUPLEX RECEPTACLE	S _M	TOGGLE DISCONNECT	T-	THERMOSTAT (LINE VOLTAGE)		PANELBOARD		EXTENSION WHIP
	GROUND FAULT CIRCUIT	J 6M12	MULTI-OUTLET ASSEMBLY (NO. INDICATES RECEPTACLES AND SPACING IN INCHES O.C.)		SWITCH 30 AMP	R	RELAY (LOW VOLTAGE)		MAIN DISTRIBUTION PANEL OR SWITCHBOARD		ES NUMBER OF CIRCUITS,
_	INTERRUPTER RECEPTACLE ISOLATED GROUND		,	СВ	CIRCUIT BREAKER DISCONNECT W/SIZE	s	SOLENOID (LOW VOLTAGE)	СР	CONTROL PANEL	WIRES AND CONDUIT	T SIZE UNLESS OTHERWISE
IG DE	RECEPTACLE DOUBLE DUPLEX	PB	PULL BOX		NON-FUSED DISCONNECT SWITCH W/SIZE	TC-	TIME CLOCK	MCC	MOTOR CONTROL CENTER		(2#12 & 1#12G)3/4"C.
$\overset{)}{\oplus}$	RECEPTACLE DUPLEX RECEPTACLE		JUNCTION BOX	30/3			PUSH BUTTON	95	FEEDER BUS DUCT		(4#12 & 1#12G)3/4"C.
	SPLIT WIRED COMBINATION SWITCH		FLOOR MOUNTED JUNCTION BOX	30/3	FUSED DISCONNECT SWITCH W/SIZE		HORN	6(C)18	CABLE TRAY WITH DEPTH/LOAD/WIDTH		(6#12 & 1#12G)3/4"C.
\$	AND DUPLEX RECEPTACLE	Ū _P	POWER JUNCTION BOX	30A	MOTOR STARTER OR CONTACTOR	□	BELL		CONCEALED RACEWAY		(8#12 & 1#12G)3/4"C.
\(\rightarrow\) -	SPECIAL PURPOSE OUTLET	⊙ _c	COMMUNICATION JUNCTION BOX		COMBINATION MOTOR		BUZZER	—— S ——	S = SURFACE UF = UNDERFLOOR	│	RACEWAY TURNED UP
	CEILING SPECIAL			. 12711			•	0.	OI ONDERN EOOK		
	PURPOSE OUTLET	B—	BLANKED OUTLET	_	STARTER/DISCONNECT SWITCH		BASEBOARD HEATING STRIP (ELECTRICAL)	— UG — — W—	UG = UNDERGROUND W = WIREWAY		RACEWAY TURNED DOWN
	PURPOSE OUTLET CEILING DUPLEX	B <u></u> T2	BLANKED OUTLET TRANSFORMER (SEE TRANSFORMER SCHEDULE)	<u>M</u>	STARTER/DISCONNECT SWITCH MOTOR	<u> </u>		—UG—— ——W——	UG = UNDERGROUND		RACEWAY TURNED DOWN
	PURPOSE OUTLET		TRANSFORMER (SEE	_		 → B →	STRIP (ELECTRICAL)	— ug — w——	UG = UNDERGROUND W = WIREWAY	•	RACEWAY TURNED DOWN
	PURPOSE OUTLET CEILING DUPLEX		TRANSFORMER (SEE	<u>M</u>	MOTOR ELECTRIC DAMPER	<u> </u>	STRIP (ELECTRICAL)	—ug— —w— ———]	UG = UNDERGROUND W = WIREWAY	•	RACEWAY TURNED DOWN
	PURPOSE OUTLET CEILING DUPLEX		TRANSFORMER (SEE	<u>M</u>	MOTOR ELECTRIC DAMPER		STRIP (ELECTRICAL)	— UG — W————————————————————————————————	UG = UNDERGROUND W = WIREWAY		RACEWAY TURNED DOWN WEATHER HEAD
0	PURPOSE OUTLET CEILING DUPLEX RECEPTACLE		TRANSFORMER (SEE TRANSFORMER SCHEDULE)	(M) (D)	MOTOR ELECTRIC DAMPER ONE-LINE		STRIP (ELECTRICAL) POWER/TELEPHONE POLE	—-w—-	UG = UNDERGROUND W = WIREWAY CAP	~ ~	
^	PURPOSE OUTLET CEILING DUPLEX RECEPTACLE CIRCUIT BREAKER < 600V BREAKER WITH DRAWOUT	T2	TRANSFORMER (SEE TRANSFORMER SCHEDULE) CABLE TERMINATION	(M) (D)	MOTOR ELECTRIC DAMPER ONE-LINE AMMETER SELECTOR SWITCH	DIAGRAMS R O O O	STRIP (ELECTRICAL) POWER/TELEPHONE POLE END OF LINE RESISTOR (EOL)	w	UG = UNDERGROUND W = WIREWAY CAP TIME OVER CURRENT RELAY		WEATHER HEAD SERVICE ENTRANCE SINGLE PHASE
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□	PURPOSE OUTLET CEILING DUPLEX RECEPTACLE CIRCUIT BREAKER < 600V BREAKER WITH DRAWOUT FEATURE < 600V FUSE < 600V FUSE AND SWITCH < 600V BREAKER WITH DRAWOUT	T2	TRANSFORMER (SEE TRANSFORMER SCHEDULE) CABLE TERMINATION CAPACITOR CIRCUIT BREAKER WITH	(M) (D)	MOTOR ELECTRIC DAMPER ONE-LINE AMMETER SELECTOR SWITCH AUTOMATIC TRANSFER SWITCH	DIAGRAMS R O O O O O O O O O O O O O O O O O O	END OF LINE RESISTOR (EOL) RED AND GREEN PILOT LIGHTS PUSH-BUTTON-NORMALLY OPEN NORMALLY CLOSED	51 52 59	UG = UNDERGROUND W = WIREWAY CAP TIME OVER CURRENT RELAY AC CIRCUIT BREAKER OVER VOLTAGE RELAY	~	WEATHER HEAD SERVICE ENTRANCE SINGLE PHASE TRANSFORMER: NUMERAL
□	PURPOSE OUTLET CEILING DUPLEX RECEPTACLE CIRCUIT BREAKER < 600V BREAKER WITH DRAWOUT FEATURE < 600V FUSE < 600V FUSE AND SWITCH < 600V BREAKER WITH DRAWOUT FEATURE > 600V	T2	TRANSFORMER (SEE TRANSFORMER SCHEDULE) CABLE TERMINATION CAPACITOR CIRCUIT BREAKER WITH GROUND FAULT PROTECTION	AS O	MOTOR ELECTRIC DAMPER ONE-LINE AMMETER SELECTOR SWITCH AUTOMATIC TRANSFER SWITCH MANUAL TRANSFER SWITCH TRANSFORMER (SEE	DIAGRAMS R O O O O O O O O O O O O O O O O O O	STRIP (ELECTRICAL) POWER/TELEPHONE POLE END OF LINE RESISTOR (EOL) RED AND GREEN PILOT LIGHTS PUSH-BUTTON-NORMALLY OPEN PUSH-BUTTON-NORMALLY CLOSED CONTACT NORMALLY OPEN (N.O.)	51 52 59 63	UG = UNDERGROUND W = WIREWAY CAP TIME OVER CURRENT RELAY AC CIRCUIT BREAKER OVER VOLTAGE RELAY PRESSURE SWITCH	≜ 25	WEATHER HEAD SERVICE ENTRANCE SINGLE PHASE TRANSFORMER: NUMERAL INDICATES RATING IN KVA
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	PURPOSE OUTLET CEILING DUPLEX RECEPTACLE CIRCUIT BREAKER < 600V BREAKER WITH DRAWOUT FEATURE < 600V FUSE AND SWITCH < 600V BREAKER WITH DRAWOUT FEATURE > 600V FUSE > 600V FUSE > 600V	GFP T	TRANSFORMER (SEE TRANSFORMER SCHEDULE) CABLE TERMINATION CAPACITOR CIRCUIT BREAKER WITH GROUND FAULT PROTECTION BATTERY PAD MOUNTED TRANSFORMER CURRENT TRANSFORMER	AS O	MOTOR ELECTRIC DAMPER ONE-LINE AMMETER SELECTOR SWITCH AUTOMATIC TRANSFER SWITCH MANUAL TRANSFER SWITCH TRANSFORMER (SEE TRANFORMER SCHEDULE)	DIAGRAMS R O O O O O O O O O O O O O O O O O O	STRIP (ELECTRICAL) POWER/TELEPHONE POLE END OF LINE RESISTOR (EOL) RED AND GREEN PILOT LIGHTS PUSH-BUTTON-NORMALLY OPEN PUSH-BUTTON-NORMALLY COSED CONTACT NORMALLY OPEN (N.O.) CONTACT NORMALLY CLOSED (N.C.) OPERATING COIL (LADDER DIAGRAM) OPERATING COIL	51 52 59 63 86	UG = UNDERGROUND W = WIREWAY CAP TIME OVER CURRENT RELAY AC CIRCUIT BREAKER OVER VOLTAGE RELAY PRESSURE SWITCH LOCKOUT RELAY DIFFERENTIAL RELAY DOWN GUY AND ANCHOR MANHOLE: NUMERAL INDICATES THE ASSIGNED NUMBER AND THE LETTER	OH	WEATHER HEAD SERVICE ENTRANCE SINGLE PHASE TRANSFORMER: NUMERAL INDICATES RATING IN KVA OVERHEAD LINE OVERHEAD GUY PRIMARY FUSE
	PURPOSE OUTLET CEILING DUPLEX RECEPTACLE CIRCUIT BREAKER < 600V BREAKER WITH DRAWOUT FEATURE < 600V FUSE < 600V BREAKER WITH DRAWOUT FEATURE > 600V FUSE > 600V FUSE > 600V FUSE > 600V FUSE > 600V PUSE D DISCONNECT SWITCH > 600V PRIMARY FUSE CUTOUT	T2 T2 T2 T2 T2	TRANSFORMER (SEE TRANSFORMER SCHEDULE) CABLE TERMINATION CAPACITOR CIRCUIT BREAKER WITH GROUND FAULT PROTECTION BATTERY PAD MOUNTED TRANSFORMER CURRENT TRANSFORMER W/RATIO POTENTIAL	M) (D) AS (O) (O) (T1) (E) (T1) (E) (E) (E) (E) (E) (E) (E) (E) (E) (E	MOTOR ELECTRIC DAMPER ONE-LINE AMMETER SELECTOR SWITCH AUTOMATIC TRANSFER SWITCH MANUAL TRANSFER SWITCH TRANSFORMER (SEE TRANFORMER SCHEDULE) ENGINE-GENERATOR UNIT PANEL BOARD	DIAGRAMS RO O D D D D D D D D D D D D D D D D D D	END OF LINE RESISTOR (EOL) RED AND GREEN PILOT LIGHTS PUSH-BUTTON-NORMALLY OPEN PUSH-BUTTON-NORMALLY CLOSED CONTACT NORMALLY OPEN (N.O.) CONTACT NORMALLY CLOSED (N.C.) OPERATING COIL (LADDER DIAGRAM) OPERATING COIL (SCHEMATIC DIAGRAM)	51 52 59 63 86	UG = UNDERGROUND W = WIREWAY CAP TIME OVER CURRENT RELAY AC CIRCUIT BREAKER OVER VOLTAGE RELAY PRESSURE SWITCH LOCKOUT RELAY DIFFERENTIAL RELAY DOWN GUY AND ANCHOR MANHOLE: NUMERAL INDICATES THE ASSIGNED NUMBER AND THE LETTER INDICATES THE TYPE	OH	WEATHER HEAD SERVICE ENTRANCE SINGLE PHASE TRANSFORMER: NUMERAL INDICATES RATING IN KVA OVERHEAD LINE OVERHEAD GUY PRIMARY FUSE CUTOUT AIR TYPE SWITCH AIR BREAK,
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	PURPOSE OUTLET CEILING DUPLEX RECEPTACLE CIRCUIT BREAKER < 600V BREAKER WITH DRAWOUT FEATURE < 600V FUSE < 600V FUSE AND SWITCH < 600V BREAKER WITH DRAWOUT FEATURE > 600V FUSE > 600V FUSE > 600V FUSE D DISCONNECT SWITCH > 600V PRIMARY FUSE CUTOUT OIL TYPE SWITCH AIR BREAK CIRCUIT BREAKER WITH: ST = SHUNT TRIP K = KEY INTERLOCKED	T2 T2 T2 T2 T3 T 100/5 C00/100 A V	TRANSFORMER (SEE TRANSFORMER SCHEDULE) CABLE TERMINATION CAPACITOR CIRCUIT BREAKER WITH GROUND FAULT PROTECTION BATTERY PAD MOUNTED TRANSFORMER CURRENT TRANSFORMER W/RATIO POTENTIAL TRANSFORMER W/RATIO VOLTMETER VOLTMETER SELECTOR SWITCH	M D AS O O T1 = G O O O O O O O O O O O O O O O O O O	MOTOR ELECTRIC DAMPER ONE-LINE AMMETER SELECTOR SWITCH AUTOMATIC TRANSFER SWITCH MANUAL TRANSFER SWITCH TRANSFORMER (SEE TRANFORMER SCHEDULE) ENGINE-GENERATOR UNIT PANEL BOARD DESIGNATION INSIDE LOAD BREAK ELBOW SEPARABLE CONNECTION	BIAGRAMS R G G G G G G G G G G G G G G G G G G	END OF LINE RESISTOR (EOL) RED AND GREEN PILOT LIGHTS PUSH-BUTTON-NORMALLY OPEN PUSH-BUTTON-NORMALLY OPEN PUSH-BUTTON-NORMALLY OPEN CONTACT NORMALLY OPEN (N.O.) CONTACT NORMALLY CLOSED CONTACT NORMALLY CLOSED (N.C.) OPERATING COIL (LADDER DIAGRAM) OPERATING COIL (SCHEMATIC DIAGRAM) UNDER VOLTAGE RELAY MANUAL SELECTOR SWITCH INSTANTANEOUS OVER CURRENT RELAY	51 52 59 63 86	UG = UNDERGROUND W = WIREWAY CAP TIME OVER CURRENT RELAY AC CIRCUIT BREAKER OVER VOLTAGE RELAY PRESSURE SWITCH LOCKOUT RELAY DIFFERENTIAL RELAY DOWN GUY AND ANCHOR MANHOLE: NUMERAL INDICATES THE ASSIGNED NUMBER AND THE LETTER INDICATES THE TYPE UNDERGROUND DUCTS: NUMERAL INDICATES QUANTITY OF DUCTS LETTER INDICATES LETTER INDICATES LETTER INDICATES LETTER INDICATES	OH	WEATHER HEAD SERVICE ENTRANCE SINGLE PHASE TRANSFORMER: NUMERAL INDICATES RATING IN KVA OVERHEAD LINE OVERHEAD GUY PRIMARY FUSE CUTOUT AIR TYPE SWITCH AIR BREAK,
	PURPOSE OUTLET CEILING DUPLEX RECEPTACLE CIRCUIT BREAKER < 600V BREAKER WITH DRAWOUT FEATURE < 600V FUSE < 600V FUSE AND SWITCH < 600V BREAKER WITH DRAWOUT FEATURE > 600V FUSE > 600V FUSE > 600V FUSE D DISCONNECT SWITCH > 600V PRIMARY FUSE CUTOUT OIL TYPE SWITCH AIR BREAK CIRCUIT BREAKER WITH: ST = SHUNT TRIP K = KEY INTERLOCKED	T2 T2 T2 T2 T3 T4 T00/5 C00/100 A VS	TRANSFORMER (SEE TRANSFORMER SCHEDULE) CABLE TERMINATION CAPACITOR CIRCUIT BREAKER WITH GROUND FAULT PROTECTION BATTERY PAD MOUNTED TRANSFORMER CURRENT TRANSFORMER W/RATIO POTENTIAL TRANSFORMER W/RATIO VOLTMETER VOLTMETER SELECTOR SWITCH	M D AS O O T1 = G O O O O O O O O O O O O O O O O O O	MOTOR ELECTRIC DAMPER ONE-LINE AMMETER SELECTOR SWITCH AUTOMATIC TRANSFER SWITCH MANUAL TRANSFER SWITCH TRANSFORMER (SEE TRANFORMER SCHEDULE) ENGINE-GENERATOR UNIT PANEL BOARD DESIGNATION INSIDE LOAD BREAK ELBOW	BIAGRAMS R G G G G G G G G G G G G G G G G G G	END OF LINE RESISTOR (EOL) RED AND GREEN PILOT LIGHTS PUSH-BUTTON-NORMALLY OPEN PUSH-BUTTON-NORMALLY OPEN PUSH-BUTTON-NORMALLY OPEN CONTACT NORMALLY OPEN (N.O.) CONTACT NORMALLY CLOSED CONTACT NORMALLY CLOSED (N.C.) OPERATING COIL (LADDER DIAGRAM) OPERATING COIL (SCHEMATIC DIAGRAM) UNDER VOLTAGE RELAY MANUAL SELECTOR SWITCH INSTANTANEOUS OVER CURRENT RELAY	51 52 59 63 86	UG = UNDERGROUND W = WIREWAY CAP TIME OVER CURRENT RELAY AC CIRCUIT BREAKER OVER VOLTAGE RELAY PRESSURE SWITCH LOCKOUT RELAY DIFFERENTIAL RELAY DOWN GUY AND ANCHOR MANHOLE: NUMERAL INDICATES THE ASSIGNED NUMBER AND THE LETTER INDICATES THE TYPE UNDERGROUND DUCTS: NUMERAL INDICATES QUANTITY OF DUCTS LETTER INDICATES LETTER INDICATES LETTER INDICATES LETTER INDICATES	OH	WEATHER HEAD SERVICE ENTRANCE SINGLE PHASE TRANSFORMER: NUMERAL INDICATES RATING IN KVA OVERHEAD LINE OVERHEAD GUY PRIMARY FUSE CUTOUT AIR TYPE SWITCH AIR BREAK, GANG OPERATED
	PURPOSE OUTLET CEILING DUPLEX RECEPTACLE CIRCUIT BREAKER < 600V BREAKER WITH DRAWOUT FEATURE < 600V FUSE < 600V FUSE AND SWITCH < 600V BREAKER WITH DRAWOUT FEATURE > 600V FUSE > 600V FUSE > 600V FUSE D DISCONNECT SWITCH > 600V PRIMARY FUSE CUTOUT OIL TYPE SWITCH AIR BREAK CIRCUIT BREAKER WITH: ST = SHUNT TRIP K = KEY INTERLOCKED	T2 T2 T2 T2 T3 T	TRANSFORMER (SEE TRANSFORMER SCHEDULE) CABLE TERMINATION CAPACITOR CIRCUIT BREAKER WITH GROUND FAULT PROTECTION BATTERY PAD MOUNTED TRANSFORMER CURRENT TRANSFORMER W/RATIO POTENTIAL TRANSFORMER W/RATIO VOLTMETER VOLTMETER SELECTOR SWITCH	M D AS O O T1 = G O O O O O O O O O O O O O O O O O O	MOTOR ELECTRIC DAMPER ONE-LINE AMMETER SELECTOR SWITCH AUTOMATIC TRANSFER SWITCH MANUAL TRANSFER SWITCH TRANSFORMER (SEE TRANFORMER SCHEDULE) ENGINE-GENERATOR UNIT PANEL BOARD DESIGNATION INSIDE LOAD BREAK ELBOW SEPARABLE CONNECTION	BIAGRAMS R G G G G G G G G G G G G G G G G G G	STRIP (ELECTRICAL) POWER/TELEPHONE POLE END OF LINE RESISTOR (EOL) RED AND GREEN PILOT LIGHTS PUSH-BUTTON-NORMALLY OPEN PUSH-BUTTON-NORMALLY OPEN CONTACT NORMALLY OPEN (N.O.) CONTACT NORMALLY CLOSED (N.C.) OPERATING COIL (LADDER DIAGRAM) OPERATING COIL (SCHEMATIC DIAGRAM) UNDER VOLTAGE RELAY MANUAL SELECTOR SWITCH INSTANTANEOUS OVER CURRENT RELAY LIGHTNING	51 52 59 63 86	UG = UNDERGROUND W = WIREWAY CAP TIME OVER CURRENT RELAY AC CIRCUIT BREAKER OVER VOLTAGE RELAY PRESSURE SWITCH LOCKOUT RELAY DIFFERENTIAL RELAY DOWN GUY AND ANCHOR MANHOLE: NUMERAL INDICATES THE ASSIGNED NUMBER AND THE LETTER INDICATES THE TYPE UNDERGROUND DUCTS: NUMERAL INDICATES QUANTITY OF DUCTS LETTER INDICATES SYSTEM SURGE ARRESTER	OH	WEATHER HEAD SERVICE ENTRANCE SINGLE PHASE TRANSFORMER: NUMERAL INDICATES RATING IN KVA OVERHEAD LINE OVERHEAD GUY PRIMARY FUSE CUTOUT AIR TYPE SWITCH AIR BREAK, GANG OPERATED
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	PURPOSE OUTLET CEILING DUPLEX RECEPTACLE CIRCUIT BREAKER < 600V BREAKER WITH DRAWOUT FEATURE < 600V FUSE < 600V FUSE AND SWITCH < 600V BREAKER WITH DRAWOUT FEATURE > 600V FUSE > 600V FUSE > 600V FUSE D DISCONNECT SWITCH > 600V PRIMARY FUSE CUTOUT OIL TYPE SWITCH AIR BREAK CIRCUIT BREAKER WITH: ST = SHUNT TRIP K = KEY INTERLOCKED E = ELECTRIC OPERATED GROUND	T2 T2 T2 T2 T2 T3 T4 T4 T5 T600/100 A VS VS	TRANSFORMER (SEE TRANSFORMER SCHEDULE) CABLE TERMINATION CAPACITOR CIRCUIT BREAKER WITH GROUND FAULT PROTECTION BATTERY PAD MOUNTED TRANSFORMER CURRENT TRANSFORMER W/RATIO POTENTIAL TRANSFORMER W/RATIO VOLTMETER VOLTMETER VOLTMETER GROUND ROD WITH INSPECTION WELL	M D AS O O O T1 = G — G — G — G — G — G — G — G — G —	MOTOR ELECTRIC DAMPER ONE-LINE AMMETER SELECTOR SWITCH AUTOMATIC TRANSFER SWITCH MANUAL TRANSFER SWITCH TRANSFORMER (SEE TRANFORMER SCHEDULE) ENGINE-GENERATOR UNIT PANEL BOARD DESIGNATION INSIDE LOAD BREAK ELBOW SEPARABLE CONNECTION GROUNDING GROUNDING CONDUCTOR PATIENT GROUNDING POINT	DIAGRAMS R G G O O O O O O O O O O O O O O O O O	STRIP (ELECTRICAL) POWER/TELEPHONE POLE END OF LINE RESISTOR (EOL) RED AND GREEN PILOT LIGHTS PUSH-BUTTON-NORMALLY OPEN PUSH-BUTTON-NORMALLY OPEN CONTACT NORMALLY OPEN (N.O.) CONTACT NORMALLY CLOSED (N.C.) OPERATING COIL (LADDER DIAGRAM) OPERATING COIL (SCHEMATIC DIAGRAM) UNDER VOLTAGE RELAY MANUAL SELECTOR SWITCH INSTANTANEOUS OVER CURRENT RELAY LIGHTNING PROTECTION AIR	51 52 59 63 86 87 ————————————————————————————————	UG = UNDERGROUND W = WIREWAY CAP TIME OVER CURRENT RELAY AC CIRCUIT BREAKER OVER VOLTAGE RELAY PRESSURE SWITCH LOCKOUT RELAY DIFFERENTIAL RELAY DOWN GUY AND ANCHOR MANHOLE: NUMERAL INDICATES THE ASSIGNED NUMBER AND THE LETTER INDICATES THE TYPE UNDERGROUND DUCTS: NUMERAL INDICATES QUANTITY OF DUCTS LETTER INDICATES SYSTEM SURGE ARRESTER	OH	WEATHER HEAD SERVICE ENTRANCE SINGLE PHASE TRANSFORMER: NUMERAL INDICATES RATING IN KVA OVERHEAD LINE OVERHEAD GUY PRIMARY FUSE CUTOUT AIR TYPE SWITCH AIR BREAK, GANG OPERATED EXOTHERMIC CONNECTION LIGHTNING PROTECTION BARE
	PURPOSE OUTLET CEILING DUPLEX RECEPTACLE CIRCUIT BREAKER < 600V BREAKER WITH DRAWOUT FEATURE < 600V FUSE < 600V FUSE AND SWITCH < 600V BREAKER WITH DRAWOUT FEATURE > 600V FUSE > 600V FUSE > 600V FUSE D DISCONNECT SWITCH > 600V PRIMARY FUSE CUTOUT OIL TYPE SWITCH AIR BREAK CIRCUIT BREAKER WITH: ST = SHUNT TRIP K = KEY INTERLOCKED E = ELECTRIC OPERATED GROUND	T2 T2 T2 T2 T2 T3 T4 T4 T5 T600/100 A VS VS	TRANSFORMER (SEE TRANSFORMER SCHEDULE) CABLE TERMINATION CAPACITOR CIRCUIT BREAKER WITH GROUND FAULT PROTECTION BATTERY PAD MOUNTED TRANSFORMER CURRENT TRANSFORMER W/RATIO POTENTIAL TRANSFORMER W/RATIO VOLTMETER VOLTMETER VOLTMETER GROUND ROD WITH INSPECTION WELL		MOTOR ELECTRIC DAMPER ONE-LINE AMMETER SELECTOR SWITCH AUTOMATIC TRANSFER SWITCH MANUAL TRANSFER SWITCH TRANSFORMER (SEE TRANFORMER SCHEDULE) ENGINE-GENERATOR UNIT PANEL BOARD DESIGNATION INSIDE LOAD BREAK ELBOW SEPARABLE CONNECTION GROUNDING GROUNDING CONDUCTOR PATIENT GROUNDING POINT	DIAGRAMS R G G O O O O O O O O O O O O O O O O O	STRIP (ELECTRICAL) POWER/TELEPHONE POLE END OF LINE RESISTOR (EOL) RED AND GREEN PILOT LIGHTS PUSH-BUTTON-NORMALLY OPEN PUSH-BUTTON-NORMALLY OPEN CONTACT NORMALLY OPEN (N.O.) CONTACT NORMALLY CLOSED (N.C.) OPERATING COIL (LADDER DIAGRAM) OPERATING COIL (SCHEMATIC DIAGRAM) UNDER VOLTAGE RELAY MANUAL SELECTOR SWITCH INSTANTANEOUS OVER CURRENT RELAY LIGHTNING PROTECTION AIR	51 52 59 63 86 87 ————————————————————————————————	UG = UNDERGROUND W = WIREWAY CAP TIME OVER CURRENT RELAY AC CIRCUIT BREAKER OVER VOLTAGE RELAY PRESSURE SWITCH LOCKOUT RELAY DIFFERENTIAL RELAY DOWN GUY AND ANCHOR MANHOLE: NUMERAL INDICATES THE ASSIGNED NUMBER AND THE LETTER INDICATES THE TYPE UNDERGROUND DUCTS: NUMERAL INDICATES QUANTITY OF DUCTS LETTER INDICATES SYSTEM SURGE ARRESTER	25 —OH— —OHG— — — — — — — — — — — — — — — — — — —	WEATHER HEAD SERVICE ENTRANCE SINGLE PHASE TRANSFORMER: NUMERAL INDICATES RATING IN KVA OVERHEAD LINE OVERHEAD GUY PRIMARY FUSE CUTOUT AIR TYPE SWITCH AIR BREAK, GANG OPERATED EXOTHERMIC CONNECTION LIGHTNING PROTECTION BARE
	PURPOSE OUTLET CEILING DUPLEX RECEPTACLE CIRCUIT BREAKER < 600V BREAKER WITH DRAWOUT FEATURE < 600V FUSE < 600V FUSE AND SWITCH < 600V BREAKER WITH DRAWOUT FEATURE > 600V FUSED DISCONNECT SWITCH > 600V PRIMARY FUSE CUTOUT OIL TYPE SWITCH AIR BREAK CIRCUIT BREAKER WITH: ST = SHUNT TRIP K = KEY INTERLOCKED E = ELECTRIC OPERATED GROUND GROUND GROUND ROD	T2 T2 T2 T2 T3 T4 T5 T600/100 A VS VS	TRANSFORMER (SEE TRANSFORMER SCHEDULE) CABLE TERMINATION CAPACITOR CIRCUIT BREAKER WITH GROUND FAULT PROTECTION BATTERY PAD MOUNTED TRANSFORMER CURRENT TRANSFORMER W/RATIO POTENTIAL TRANSFORMER W/RATIO VOLTMETER VOLTMETER VOLTMETER GROUND ROD WITH INSPECTION WELL GROUND BUS ON WALL		MOTOR ELECTRIC DAMPER ONE-LINE AMMETER SELECTOR SWITCH AUTOMATIC TRANSFER SWITCH MANUAL TRANSFER SWITCH TRANSFORMER (SEE TRANFORMER SCHEDULE) ENGINE-GENERATOR UNIT PANEL BOARD DESIGNATION INSIDE LOAD BREAK ELBOW SEPARABLE CONNECTION GROUNDING CONDUCTOR PATIENT GROUNDING POINT SYST HORN/SPEAKER/STROBE (RE: SPEC)	DIAGRAMS R G G O O O O O O O O O O O O O O O O O	END OF LINE RESISTOR (EOL) RED AND GREEN PILOT LIGHTS PUSH-BUTTON-NORMALLY OPEN PUSH-BUTTON-NORMALLY OPEN PUSH-BUTTON-NORMALLY OPEN CONTACT NORMALLY OPEN (N.O.) CONTACT NORMALLY CLOSED CONTACT NORMALLY OPEN (N.O.) OPERATING COIL (LADDER DIAGRAM) UNDER VOLTAGE RELAY MANUAL SELECTOR SWITCH INSTANTANEOUS OVER CURRENT RELAY LIGHTNING PROTECTION AIR TERMINAL R/C = RATE COMPENSATION HEAT DETECTOR -	51 52 59 63 86 87 ————————————————————————————————	UG = UNDERGROUND W = WIREWAY CAP TIME OVER CURRENT RELAY AC CIRCUIT BREAKER OVER VOLTAGE RELAY PRESSURE SWITCH LOCKOUT RELAY DIFFERENTIAL RELAY DOWN GUY AND ANCHOR MANHOLE: NUMERAL INDICATES THE ASSIGNED NUMBER AND THE LETTER INDICATES THE TYPE UNDERGROUND DUCTS: NUMERAL INDICATES QUANTITY OF DUCTS LETTER INDICATES SYSTEM SURGE ARRESTER PLUS GROUND PRESSURE SWITCH	25 — OH— — OHG— — X — LP—	WEATHER HEAD SERVICE ENTRANCE SINGLE PHASE TRANSFORMER: NUMERAL INDICATES RATING IN KVA OVERHEAD LINE OVERHEAD GUY PRIMARY FUSE CUTOUT AIR TYPE SWITCH AIR BREAK, GANG OPERATED EXOTHERMIC CONNECTION LIGHTNING PROTECTION BARE CONDUCTOR EMERGENCY STATION S = SHOWER T = TOILET DOME LIGHT
	PURPOSE OUTLET CEILING DUPLEX RECEPTACLE CIRCUIT BREAKER < 600V BREAKER WITH DRAWOUT FEATURE < 600V FUSE < 600V FUSE AND SWITCH < 600V BREAKER WITH DRAWOUT FEATURE > 600V FUSE > 600V FUSED DISCONNECT SWITCH > 600V PRIMARY FUSE CUTOUT OIL TYPE SWITCH AIR BREAK CIRCUIT BREAKER WITH: ST = SHUNT TRIP K = KEY INTERLOCKED E = ELECTRIC OPERATED GROUND GROUND TELEPHONE TERMINAL CABINET "TTC" TELEPHONE	T2 T2 T2 T2 T2 T2 T3 T4 T4 T5 T5 T7 T6 T7 T7 T6 T7 T7 T7 T7 T7	TRANSFORMER (SEE TRANSFORMER SCHEDULE) CABLE TERMINATION CAPACITOR CIRCUIT BREAKER WITH GROUND FAULT PROTECTION BATTERY PAD MOUNTED TRANSFORMER CURRENT TRANSFORMER W/RATIO POTENTIAL TRANSFORMER W/RATIO VOLTMETER VOLTMETER VOLTMETER GROUND ROD WITH INSPECTION WELL GROUND BUS ON WALL TELEVISION OUTLET		MOTOR ELECTRIC DAMPER ONE-LINE AMMETER SELECTOR SWITCH AUTOMATIC TRANSFER SWITCH MANUAL TRANSFER SWITCH TRANSFORMER (SEE TRANFORMER SCHEDULE) ENGINE-GENERATOR UNIT PANEL BOARD DESIGNATION INSIDE LOAD BREAK ELBOW SEPARABLE CONNECTION GROUNDING GROUNDING CONDUCTOR PATIENT GROUNDING POINT SYST HORN/SPEAKER/STROBE	DIAGRAMS R G O O O O O O O O O O O O O O O O O O	END OF LINE RESISTOR (EOL) RED AND GREEN PILOT LIGHTS PUSH-BUTTON-NORMALLY OPEN PUSH-BUTTON-NORMALLY OPEN PUSH-BUTTON-NORMALLY OPEN PUSH-BUTTON-NORMALLY OPEN CONTACT NORMALLY OPEN (N.O.) CONTACT NORMALLY CLOSED (N.C.) OPERATING COIL (LADDER DIAGRAM) UNDER VOLTAGE RELAY MANUAL SELECTOR SWITCH INSTANTANEOUS OVER CURRENT RELAY LIGHTNING PROTECTION AIR TERMINAL R/C = RATE COMPENSATION HEAT DETECTOR - LINE TYPE (CABLE)	51 52 59 63 86 87 A A A A A A A A A A A A A A A A A A	UG = UNDERGROUND W = WIREWAY CAP TIME OVER CURRENT RELAY AC CIRCUIT BREAKER OVER VOLTAGE RELAY PRESSURE SWITCH LOCKOUT RELAY DIFFERENTIAL RELAY DOWN GUY AND ANCHOR MANHOLE: NUMERAL INDICATES THE ASSIGNED NUMBER AND THE LETTER INDICATES THE TYPE UNDERGROUND DUCTS: NUMERAL INDICATES QUANTITY OF DUCTS LETTER INDICATES SYSTEM SURGE ARRESTER PLUS GROUND	25 —OH— —OHG— — — — — — — — — — — — — —	WEATHER HEAD SERVICE ENTRANCE SINGLE PHASE TRANSFORMER: NUMERAL INDICATES RATING IN KVA OVERHEAD LINE OVERHEAD GUY PRIMARY FUSE CUTOUT AIR TYPE SWITCH AIR BREAK, GANG OPERATED EXOTHERMIC CONNECTION LIGHTNING PROTECTION BARE CONDUCTOR EMERGENCY STATION S = SHOWER
	PURPOSE OUTLET CEILING DUPLEX RECEPTACLE CIRCUIT BREAKER < 600V BREAKER WITH DRAWOUT FEATURE < 600V FUSE < 600V FUSE AND SWITCH < 600V BREAKER WITH DRAWOUT FEATURE > 600V FUSED DISCONNECT SWITCH > 600V PRIMARY FUSE CUTOUT OIL TYPE SWITCH AIR BREAK CIRCUIT BREAKER WITH: ST = SHUNT TRIP K = KEY INTERLOCKED E = ELECTRIC OPERATED GROUND GROUND GROUND ROD TELEPHONE TERMINAL CABINET "TTC" TELEPHONE TERMINAL BACKBOARD TELEPHONE OUTLET	T2 T2 T2 T2 T2 T2 T2 T3 T4 T4 T5 T5 T5 T5 T5 T5 T5 T5	TRANSFORMER (SEE TRANSFORMER SCHEDULE) CABLE TERMINATION CAPACITOR CIRCUIT BREAKER WITH GROUND FAULT PROTECTION BATTERY PAD MOUNTED TRANSFORMER CURRENT TRANSFORMER W/RATIO POTENTIAL TRANSFORMER W/RATIO VOLTMETER VOLTMETER VOLTMETER SELECTOR SWITCH AMMETER GROUND ROD WITH INSPECTION WELL GROUND BUS ON WALL TELEVISION OUTLET CCTV		MOTOR ELECTRIC DAMPER ONE-LINE AMMETER SELECTOR SWITCH AUTOMATIC TRANSFER SWITCH MANUAL TRANSFER SWITCH TRANSFORMER (SEE TRANFORMER SCHEDULE) ENGINE-GENERATOR UNIT PANEL BOARD DESIGNATION INSIDE LOAD BREAK ELBOW SEPARABLE CONNECTION GROUNDING CONDUCTOR PATIENT GROUNDING POINT SYST HORN/SPEAKER/STROBE (RE: SPEC) MINI HORN V = BELL VS = BELL/STROBE C = CHIME	DIAGRAMS R G G O O O O O O O O O O O O O O O O O	END OF LINE RESISTOR (EOL) RED AND GREEN PILOT LIGHTS PUSH-BUTTON-NORMALLY OPEN PUSH-BUTTON-NORMALLY OPEN PUSH-BUTTON-NORMALLY OPEN PUSH-BUTTON-NORMALLY OPEN (N.O.) CONTACT NORMALLY OPEN (N.O.) CONTACT NORMALLY CLOSED (N.C.) OPERATING COIL (LADDER DIAGRAM) UNDER VOLTAGE RELAY MANUAL SELECTOR SWITCH INSTANTANEOUS OVER CURRENT RELAY LIGHTNING PROTECTION AIR TERMINAL R/C = RATE COMPENSATION HEAT DETECTOR - LINE TYPE (CABLE) SMOKE DETECTOR	51 52 59 63 86 87 A A FS AA FS	UG = UNDERGROUND W = WIREWAY CAP TIME OVER CURRENT RELAY AC CIRCUIT BREAKER OVER VOLTAGE RELAY PRESSURE SWITCH LOCKOUT RELAY DIFFERENTIAL RELAY DOWN GUY AND ANCHOR MANHOLE: NUMERAL INDICATES THE ASSIGNED NUMBER AND THE LETTER INDICATES THE TYPE UNDERGROUND DUCTS: NUMERAL INDICATES QUANTITY OF DUCTS LETTER INDICATES SYSTEM SURGE ARRESTER PLUS GROUND PRESSURE SWITCH LOW AIR PRESSURE ALARM FIRE/SMOKE DAMPER	25 — OH— — OHG— — X — LP—	WEATHER HEAD SERVICE ENTRANCE SINGLE PHASE TRANSFORMER: NUMERAL INDICATES RATING IN KVA OVERHEAD LINE OVERHEAD GUY PRIMARY FUSE CUTOUT AIR TYPE SWITCH AIR BREAK, GANG OPERATED EXOTHERMIC CONNECTION LIGHTNING PROTECTION BARE CONDUCTOR EMERGENCY STATION S = SHOWER T = TOILET DOME LIGHT NUMBER INDICATES
	PURPOSE OUTLET CEILING DUPLEX RECEPTACLE CIRCUIT BREAKER < 600V BREAKER WITH DRAWOUT FEATURE < 600V FUSE < 600V FUSE AND SWITCH < 600V BREAKER WITH DRAWOUT FEATURE > 600V FUSE > 600V FUSE D DISCONNECT SWITCH > 600V PRIMARY FUSE CUTOUT OIL TYPE SWITCH AIR BREAK CIRCUIT BREAKER WITH: ST = SHUNT TRIP K = KEY INTERLOCKED E = ELECTRIC OPERATED GROUND GROUND GROUND TELEPHONE TERMINAL CABINET "TTC" TELEPHONE TERMINAL BACKBOARD TELEPHONE OUTLET FLOOR MOUNTED TELEPHONE OUTLET W = WALL MOUNTED P = PAY PHONE	T2 T2 T2 T3 T4 T5 T600/100 A VS FACP	TRANSFORMER (SEE TRANSFORMER SCHEDULE) CABLE TERMINATION CAPACITOR CIRCUIT BREAKER WITH GROUND FAULT PROTECTION BATTERY PAD MOUNTED TRANSFORMER CURRENT TRANSFORMER W/RATIO POTENTIAL TRANSFORMER W/RATIO VOLTMETER VOLTMETER VOLTMETER GROUND ROD WITH INSPECTION WELL GROUND BUS ON WALL TELEVISION OUTLET CCTV FIRE ALARM CONTROL PANEL		MOTOR ELECTRIC DAMPER ONE-LINE AMMETER SELECTOR SWITCH AUTOMATIC TRANSFER SWITCH MANUAL TRANSFER SWITCH TRANSFORMER (SEE TRANFORMER SCHEDULE) ENGINE-GENERATOR UNIT PANEL BOARD DESIGNATION INSIDE LOAD BREAK ELBOW SEPARABLE CONNECTION GROUNDING CONDUCTOR PATIENT GROUNDING POINT **SYS** HORN/SPEAKER/STROBE (RE: SPEC) MINI HORN V = BELL VS = BELL/STROBE C = CHIME CS = CHIME/STROBE	DIAGRAMS R G O O O O O O O O O O O O O O O O O O	STRIP (ELECTRICAL) POWER/TELEPHONE POLE END OF LINE RESISTOR (EOL) RED AND GREEN PILOT LIGHTS PUSH-BUTTON-NORMALLY OPEN PUSH-BUTTON-NORMALLY OPEN PUSH-BUTTON-NORMALLY OPEN (N.O.) CONTACT NORMALLY OPEN (N.O.) CONTACT NORMALLY CLOSED (N.C.) OPERATING COIL (LADDER DIAGRAM) UNDER VOLTAGE RELAY MANUAL SELECTOR SWITCH INSTANTANEOUS OVER CURRENT RELAY LIGHTNING PROTECTION AIR TERMINAL R/C = RATE COMPENSATION HEAT DETECTOR - LINE TYPE (CABLE) SMOKE DETECTOR C = COMBINATION SMOKE/HEAT DETECTOR P = PHOTOELECTRIC	51 52 59 63 86 87 ————————————————————————————————	UG = UNDERGROUND W = WIREWAY CAP TIME OVER CURRENT RELAY AC CIRCUIT BREAKER OVER VOLTAGE RELAY PRESSURE SWITCH LOCKOUT RELAY DIFFERENTIAL RELAY DOWN GUY AND ANCHOR MANHOLE: NUMERAL INDICATES THE ASSIGNED NUMBER AND THE LETTER INDICATES THE TYPE UNDERGROUND DUCTS: NUMERAL INDICATES QUANTITY OF DUCTS LETTER INDICATES SYSTEM SURGE ARRESTER PLUS GROUND PRESSURE SWITCH LOW AIR PRESSURE ALARM	25 —OH— —OHG— — — LP— s	WEATHER HEAD SERVICE ENTRANCE SINGLE PHASE TRANSFORMER: NUMERAL INDICATES RATING IN KVA OVERHEAD LINE OVERHEAD GUY PRIMARY FUSE CUTOUT AIR TYPE SWITCH AIR BREAK, GANG OPERATED EXOTHERMIC CONNECTION LIGHTNING PROTECTION BARE CONDUCTOR EMERGENCY STATION S = SHOWER T = TOILET DOME LIGHT NUMBER INDICATES LAMPS
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	PURPOSE OUTLET CEILING DUPLEX RECEPTACLE CIRCUIT BREAKER < 600V BREAKER WITH DRAWOUT FEATURE < 600V FUSE < 600V FUSE AND SWITCH < 600V BREAKER WITH DRAWOUT FEATURE > 600V FUSE > 600V FUSE D DISCONNECT SWITCH > 600V PRIMARY FUSE CUTOUT OIL TYPE SWITCH AIR BREAK CIRCUIT BREAKER WITH: ST = SHUNT TRIP K = KEY INTERLOCKED E = ELECTRIC OPERATED GROUND GROUND GROUND TELEPHONE TERMINAL CABINET "TTC" TELEPHONE TERMINAL BACKBOARD TELEPHONE OUTLET FLOOR MOUNTED TELEPHONE OUTLET W = WALL MOUNTED P = PAY PHONE	T2 T2 T2 T2 T2 T3 T4 T600/100 A VS FACP FAA FABP	TRANSFORMER (SEE TRANSFORMER SCHEDULE) CABLE TERMINATION CAPACITOR CIRCUIT BREAKER WITH GROUND FAULT PROTECTION BATTERY PAD MOUNTED TRANSFORMER CURRENT TRANSFORMER W/RATIO POTENTIAL TRANSFORMER W/RATIO VOLTMETER VOLTMETER VOLTMETER SELECTOR SWITCH AMMETER GROUND ROD WITH INSPECTION WELL GROUND BUS ON WALL TELEVISION OUTLET CCTV FIRE ALARM CONTROL PANEL FIRE ALARM BOOSTER PANEL FIRE ALARM RELEASE PANEL FIRE ALARM RELEASE PANEL FIREFIGHTER SMOKE		MOTOR ELECTRIC DAMPER ONE-LINE AMMETER SELECTOR SWITCH AUTOMATIC TRANSFER SWITCH MANUAL TRANSFER SWITCH TRANSFORMER (SEE TRANFORMER SCHEDULE) ENGINE-GENERATOR UNIT PANEL BOARD DESIGNATION INSIDE LOAD BREAK ELBOW SEPARABLE CONNECTION GROUNDING CONDUCTOR PATIENT GROUNDING POINT SYS: HORN/SPEAKER/STROBE (RE: SPEC) MINI HORN V = BELL VS = BELL/STROBE C = CHIME CS = CHIME/STROBE MAGNETIC DOOR HOLD REMOTE LIGHT/TEST SWITCH	DIAGRAMS R G O O O O O O O O O O O O O O O O O O	STRIP (ELECTRICAL) POWER/TELEPHONE POLE END OF LINE RESISTOR (EOL) RED AND GREEN PILOT LIGHTS PUSH-BUTTON-NORMALLY OPEN PUSH-BUTTON-NORMALLY OPEN PUSH-BUTTON-NORMALLY OPEN (N.O.) CONTACT NORMALLY OPEN (N.O.) CONTACT NORMALLY CLOSED CONTACT NORMALLY (LOSED (N.C.) OPERATING COIL (LADDER DIAGRAM) UNDER VOLTAGE RELAY MANUAL SELECTOR SWITCH INSTANTANEOUS OVER CURRENT RELAY LIGHTNING PROTECTION AIR TERMINAL R/C = RATE COMPENSATION HEAT DETECTOR - LINE TYPE (CABLE) SMOKE DETECTOR C = COMBINATION SMOKE/HEAT DETECTOR P = PHOTOELECTRIC I = IONIZATION	51 52 59 63 86 87 ————————————————————————————————	UG = UNDERGROUND W = WIREWAY CAP TIME OVER CURRENT RELAY AC CIRCUIT BREAKER OVER VOLTAGE RELAY PRESSURE SWITCH LOCKOUT RELAY DIFFERENTIAL RELAY DOWN GUY AND ANCHOR MANHOLE: NUMERAL INDICATES THE ASSIGNED NUMBER AND THE LETTER INDICATES THE TYPE UNDERGROUND DUCTS: NUMERAL INDICATES QUANTITY OF DUCTS LETTER INDICATES SYSTEM SURGE ARRESTER PLUS GROUND PRESSURE SWITCH LOW AIR PRESSURE ALARM FIRE/SMOKE DAMPER CARBON MONOXIDE DETECTOR AUDIBLE ALARM	25 —OH— —OHG— — S LP— S B LP— C B C C C C C C C C C C C	WEATHER HEAD SERVICE ENTRANCE SINGLE PHASE TRANSFORMER: NUMERAL INDICATES RATING IN KVA OVERHEAD LINE OVERHEAD GUY PRIMARY FUSE CUTOUT AIR TYPE SWITCH AIR BREAK, GANG OPERATED EXOTHERMIC CONNECTION LIGHTNING PROTECTION BARE CONDUCTOR EMERGENCY STATION S = SHOWER T = TOILET DOME LIGHT NUMBER INDICATES LAMPS DOME LIGHT WITH BUZZER
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ELECTRICAL GENERAL NOTES

- 1. ALL NEW WORK IS SHOWN BY SOLID BOLD LINES; ALL EXISTING WORK IS SHOWN AS LIGHT LINES. DASHED LINES INDICATES REMOVAL.
- 2. DRAWINGS AND SPECIFICATIONS ARE COMPLIMENTARY. WHATEVER IS CALLED FOR IN EITHER IS BINDING AS THOUGH CALLED FOR IN BOTH.
- 3. THE EQUIPMENT SPECIFIED ON THE DRAWINGS HAVE BEEN SELECTED AS THE BASIS OF DESIGN. THE USE OF REVIEWED OR SPECIFIED EQUALS SHALL BE COORDINATED BY THE CONTRACTOR AS TO SPACE REQUIREMENTS, EQUIPMENT DIMENSIONS AND PERFORMANCE. ANY ADDITIONAL COSTS EITHER DIRECTLY OR INDIRECTLY CAUSED BY EQUALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 4. COORDINATE ALL LUMINAIRE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLAN, FIRE PROTECTION, AND ELECTRICAL DRAWINGS.
- 5. DRAWINGS ARE DIAGRAMMATIC AND SHOW THE GENERAL DESIGN INTENT, ARRANGEMENT AND EXTENT OF SYSTEMS. DO NOT SCALE DRAWINGS NOR USE AS SHOP DRAWINGS. WHERE ALTERNATE ROUTING, OFFSETS AND TRANSITIONS ARE REQUIRED FOR FIELD COORDINATION OF ALL TRADES, THIS CONTRACTOR SHALL MAKE CHANGES WITHOUT ADDITIONAL COSTS.
- 6. CONTRACTOR SHALL NOT SHUT-OFF/PUT OUT OF SERVICE ANY SYSTEMS/SERVICES WITHOUT FIRST COORDINATING ALL DOWNTIME WITH OWNER'S PERSONNEL. CONTRACTOR SHALL PROVIDE A DETAILED M.O.P. AS REQUIRED. DO NOT BEGIN WORK WITHOUT WRITTEN APPROVAL.
- ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY DIRECTED OTHERWISE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION AND INSTALLING SLEEVES, INSERTS AND SUPPORTS AS REQUIRED FOR THIS SCOPE OF WORK AND/OR CORE DRILL REQUIREMENTS. COORDINATE WITH G.C. AND STRUCTURAL ENGINEER AS REQUIRED.
- CONTRACTOR SHALL CLOSELY COORDINATE NEW ELECTRICAL WITH ALL NEW AND EXISTING MECHANICAL, PLUMBING, ELECTRICAL, FIRE PROTECTION, ARCHITECTURAL AND STRUCTURAL MEMBERS. REFER TO DIVISION 26 FOR CEILING SPACE ALLOCATION PRIORITIES.
- O. CONTRACTOR SHALL FIELD VERIFY ALL ELECTRICAL ITEMS PRIOR TO (COMMENCING NEW WORK) (SUBMITTING A BID). NO ADDITIONAL COST WILL BE ALLOWED FOR CONTRACTOR'S FAILURE TO BECOME FAMILIAR WITH ALL EXISTING CONDITIONS.
- 11. ALL ELECTRICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT VERSION OF NATIONAL ELECTRIC CODE, INTERNATIONAL BUILDING CODE, INTERNATIONAL FIRE CODE OR NFPA, INTERNATIONAL MECHANICAL CODE, AND INTERNATIONAL PLUMBING CODE; INCLUDING LOCAL BOULDER AMENDMENTS. REFER TO ARCHITECTURAL CODE PLAN.
- 12. CONTRACTOR SHALL PROVIDE SUBMITTALS ON ITEMS LISTED IN THE ELECTRICAL SCHEDULES AND AS REQUIRED IN EACH SECTION OF SPECIFICATION TO THE ENGINEER FOR REVIEW PRIOR TO THE ORDER, PURCHASE OR INSTALLATION OF THESE SAME ITEMS.
- DELETED OR ADDED.

3. CONTRACTOR TO UPDATE PANELBOARD DIRECTORIES WHERE CIRCUITS HAVE BEEN

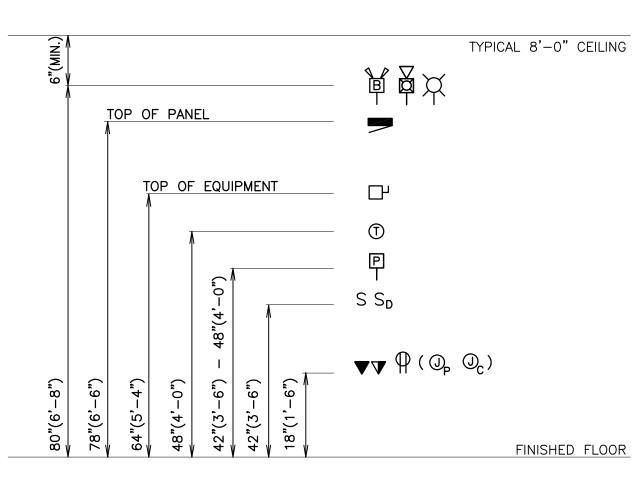
- 4. PANEL SCHEDULE INFORMATION AND EXISTING CIRCUITRY WAS TAKEN FROM EXISTING PANEL DIRECTORIES AND PLANS. ACTUAL CONDITIONS MAY VARY. FIELD VERIFY.
- CONTRACTOR TO VISIT THE JOB SITE TO SURVEY EXISTING CONDITIONS PRIOR TO BID.
 EXISTING ELECTRICAL OUTLET, DEVICE, EQUIPMENT ITEM, LUMINAIRE, ETC., (SHOWN AS DASHED) SHALL BE REMOVED TO THE NEAREST REMAINING OUTLET OR BRANCH CIRCUIT OVER—CURRENT DEVICE. MAKE MODIFICATIONS TO EXISTING REMAINING SYSTEM AS REQUIRED TO MAINTAIN CONTINUITY.
- 17. SUPPORT ALL CONDUITS, CABLES, BOXES AND LUMINAIRES FROM STRUCTURE PER NEC 300.11. LAY-IN FIXTURES SHALL BE SUPPORTED WITH TWO #12AWG WIRES FROM OPPOSITE ENDS UNLESS OTHERWISE NOTED.
- 18. DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW EXACT LOCATIONS OF DEVICES AND EQUIPMENT. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS.
- 19. ALL RECEPTACLES WITHIN 6 FEET OF A SINK ARE TO BE GFCI TYPE AND GFCI RECEPTACLES SHALL BE IN AN ACCESSIBLE LOCATION PER NEC. WHERE RECEPTACLE IS INACCESSIBLE, PROVIDE A REMOTE GFCI RESET BUTTON IN AN ACCESSIBLE LOCATION.
- 20. IDENTIFY JUNCTION BOXES WITH PANEL AND CIRCUIT NUMBER.
- 21. ALL EXTERIOR RECEPTACLES TO HAVE IN-USE COVERS.
- 22. RECEPTACLES MOUNTED BACK-TO-BACK IN FIRE RATED WALLS SHALL BE PROVIDED WITH A THROUGH-PENETRATION FIRESTOP SYSTEM.
- 23. PROTECT FIXTURES THROUGHOUT CONSTRUCTION.

INSPECTOR (AHJ).

- 24. CONNECT ALL EXIT AND EMERGENCY EGRESS LUMINAIRES (DENOTED BY SHADING) TO EXISTING 277-VOLT EMERGENCY EGRESS CIRCUIT SERVING THE AREA.
- 25. PROVIDE UNIT PRICE FOR ADDITIONAL EXIT SIGN(S) AND INSTALLATION AS REQUIRED BY
- 26. PROVIDE DESIGN-BUILD FIRE ALARM SYSTEM TO MATCH EXISTING BUILDING SYSTEM BY APPROVED VENDOR.
- 27. PROVIDE INDIVIDUAL NEUTRALS AS REQUIRED BY NEC ON ALL NEW AND AFFECTED EXISTING CIRCUITS.

COMMISSIONING NOTES

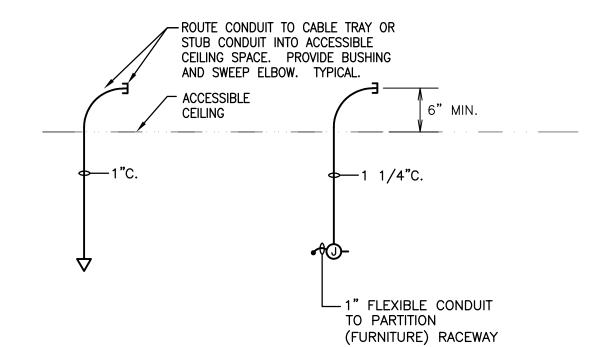
- 1. THIS PROJECT IS UNDER THE 2017 COBECC AND SHALL INCLUDE COMMISSIONING OF THE ELECTRICAL AND LIGHTING SYSTEMS AS REQUIRED BY SECTION C407 OF THE 2017 COBECC.
- THE ELECTRICAL CONTRACTOR SHALL INCLUDE ALLOWANCE IN THEIR BID ASSOCIATED WITH THE COMMISSIONING PROCESS.
- 3. THE COMMISSIONING SCOPE SHALL INCLUDE, BUT IS NOT LIMITED TO, ATTENDING COMMISSIONING MEETINGS, COMPLETING PREFUNCTIONAL CHECKLISTS. DEMONSTRATING SYSTEM PERFORMANCE AND ADDRESSING COMMISSIONING AUTHORITY REVIEW COMMENTS.
- 4. A FINAL COMMISSIONING REPORT SHALL BE PROVIDED PRIOR TO BUILDING TURNOVER WHICH INCLUDES DOCUMENTATION OF ALL TESTS, RESULTS, CORRECTIVE MEASURES TAKEN, ETC. COMMISSIONING REPORT SHALL BE IN COMPLIANCE WITH THE REFERENCED CODES ABOVE.



TYPICAL DEVICE MOUNTING HEIGHTS

NOT TO SCALE

- 1. HEIGHTS SHOWN ARE TYPICAL TO CENTERLINE OF BOX UNLESS NOTED OTHERWISE.
- 2. DEVICES ABOVE DOORS SHALL BE CENTERED BETWEEN TOP OF DOOR TRIM AND CEILING LINE.
- 3. MOUNTING HEIGHTS SHOWN ON ARCHITECTURAL ELEVATIONS SHALL GOVERN OVER THOSE SHOWN
- 4. FOR CEILING HEIGHTS HIGHER THAN 7'-2", INSTALL FIRE ALARM NOTIFICATION AUDIO AND VISUAL APPLIANCES SO THAT BOTTOM OF STROBE LENS IS NOT LESS THAN 80" A.F.F., OTHERWISE INSTALL WITHIN 6" BELOW CEILING.



TELEPHONE (VOICE)/DATA DIAGRAM

NOT TO SCALE

- NOTES:
- CONDUIT AND BACK BOXES PROVIDED BY ELECTRICAL CONTRACTOR. INSTALL PULL CORD/TAPE IN ALL CONDUITS.
- 2. COMMUNICATION CABLING SHALL BE SELF SUPPORTED INDEPENDENTLY FROM STRUCTURE. DO NOT REST ON CEILING TILES, OR CEILING SUSPENSION WIRES.
- COMMUNICATIONS CABLES AND OUTLETS SUPPLIED BY OTHERS.
- 4. ALL BACK BOXES SHALL BE A 4-11/16" SQUARE BY 2-1/8" DEEP.

Sheet Number Sheet Title E0.0 ELECTRICAL GENERAL INFORMATION E0.2 ELECTRICAL ONE-LINE DIAGRAM E0.3 ENERGY CONSERVATION CODE E1.0 ELECTRICAL SITE PLAN E1.1 ELECTRICAL SITE PHOTOMETRIC E2.0 POWER DEMOLITION PLAN E2.1 FIRST FLOOR POWER-SYSTEMS PLAN E2.2 SECOND FLOOR POWER-SYSTEMS PLAN E3.0 LIGHTING DEMOLITION PLAN E3.1 FIRST FLOOR LIGHTING PLAN E3.2 SECOND FLOOR LIGHTING PLAN

PROJECT NARRATIVE PROVIDE POWER TO NEWLY CONSTRUCTED ADDITION TO BOULDER COUNTY JAIL BETWEEN AREAS A AND B.

CONTACT LIST										
ARVADA OFFICE 5420 WARD ROAD SUITE 200 ARVADA, CO 80002 303.422.7400	COLORADO SPRINGS OFFICE 10807 NEW ALLEGIANCE DRIVE SUITE 400 COLORADO SPRINGS, CO 80921 719.533.1112	TAMPA OFFICE 12450 ROOSEVELT BLVD. N. SUITE 305 ST. PETERSBURG, FL 33716 727.685.0458								
PROJECT ENGINEER HAL RIGLEY 303.422.7400 X229 HRIGLEY@BCER.COM	SHANE NE 303.422.74									

OWNERSHIP OF DOCUMENTS:
ALL DRAWINGS, SPECIFICATIONS AND OTHER WORK PRODUCT OF THE ENGINEER FOR THIS PROJECT ARE INSTRUMENTS OF SERVICE FOR THIS PROJECT ONLY A
SHALL REMAIN THE PROPERTY OF THE ENGINEER WHETHER THE PROJECT IS COMPLETED OR NOT. REUSE OF ANY OF THE INSTRUMENTS OF SERVICE OF THE
ENGINEER BY THE OWNER OF EXTENSIONS OF THIS PROJECT WITHOUT WRITTEN PERMISSION OF THE ENGINEER SHALL BE AT THE OWNER'S RISK AND THE OWN
AGREES TO DEFEND, INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, AND EXPENSES INCLUDING ATTORNEYS' FEES ARISING OUT

BUILDING PERMIT DOCUMENTS

BOULDE COUNT

COUNIY

DETENTION
CENTER
PHASE 1 -

ADMINISTRATION ADDITION

BOULDER, COLORADO

ARCHITECTURE

REILLY JOHNSON ARCHITECTURE

1775 SHERMAN STREET, SUITE 2550

DENVER, CO 80203

(303) 832-9111

FAX (303) 832-9135

STRUCTURAL ENGINEER MARTIN/ MARTIN

- MARTIN/ MARTIN
 CONSULTING ENGINEERS
 12499 WEST COLFAX AV.
- 12499 WEST COLFAX AV. LAKEWOOD, CO 80215 (303) 431-6100
- (303) 431-6100 FAX (303) 431-6866

MECHANICAL/ ELECTRICAL/ PLUMBING ENGINEER BCER ENGINEERING, INC. 5420 WARD ROAD, STE, 200

- 5420 WARD ROAD, STE. 200 ARVADA, CO 80002 (303) 422-7400
- CIVIL ENGINEER

 DREXEL, BARRELL, & CO.

 1800 38TH ST.

 BOULDER, CO 80301

 (303) 442-4338
- FAX (303) 442-4373

 No. Revision Description Date

 ADDENDUM 1 9/18/18

 MINOR MOD/ TECH DOC 1/4/19

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HTR SCS

DRAWING TITLE

ELECTRICAL GENERAL

INFORMATION

DATE: JANUARY 4, 2019
SCALE: NO SCALE

E0.0

0 0 0 0

ELECTRICAL ONE-LINE DIAGRAM NO SCALE

WORK NOTES

- 1> NEW 277/480V PANEL TO BE INSTALLED.
- NEW TRANSFORMER TO BE INSTALLED. SEE DRY TYPE TRANSFORMER SCHEDULE FOR MORE INFORMATION.
- NEW 120/208V PANEL TO BE INSTALLED.
- (4) INTERLOCK SHUNT TRIP CIRCUIT BREAKER WITH FIRE ALARM SYSTEM AS REQUIRED FOR ELEVATOR RECALL.
- (5) EXTEND EXISTING UL MASTER LABEL LIGHTNING PROTECTION GROUNDING ELECTRODE SYSTEM TO ADDITION.

LOAD SUMMARY										
EXISTING MEASURED LOAD *1.25 (PER XCEL DOCUMENTATION)	= 474 kVA									
TOTAL LOAD ADDED	= <u>191.39 kVA</u>									
TOTAL LOAD ON 'MSB'	= 665.39 kVA									
TOTAL AMPERAGE ON 'MSB' @ 480V,3Ø	= 800.34A									

CONDUCTOR SIZES BASED ON COPPER.

480 VOLT, 3 PHASE — PRIMARY						208Y/120 VOLT, 3 PHASE, 4W - SECONDARY						
KEY	KVA	AMPS	O.C. PROTECTION	FEEDER P	AMPS 0.C. PROTECTION		FEEDER S	GRD. ELECTRODE				
T1	15	18	25	(3#10 & 1#10G)3/4°C.	42	50	(4#6 & 1#8G)1"C.	#8				
T2	30	36	45	(3#6 & 1#10G)1"C.	84	100	(4#3 & 1#8G)1-1/4°C.	#8				
T3	45	54	70	(3#4 & 1#8G)1"C.	125	150	(4#1/0 & 1#6G)2"C.	#6				
T4	75	90	125	(3#1 & 1#6G)1-1/4°C.	200	225	(4#4/0 & 1#2G)3"C.	#2				
T5	112.5	135	175	(3#2/0 & 1#6G)2°C.	312	350	(4#500KCMIL & 1#1/0G)3-1/2°C.	#1/0				
T6	150	180	225	(3#4/0 & 1#4G)2-1/2°C.	415	450	2[(4#4/0 & 1#1/0G)3"C.]	#1/0				
T7	225	270	350	(3#500KCMIL & 1#3G)3"C.	625	700	2[(4#500KCMIL & 1#2/0G)3-1/2°C.]	#2/0				
T8	300	360	450	2[(3#4/0 & 1#2G)2°C.]	831	900	3[(4#350KCMIL & 1#3/0G)3-1/2°C.]	#3/0				
Т9	500	600	750	2[(3#500KCMIL & 1#1/0G)3"C.]	1385	1600	5[(4#400KCMIL & 1#250KCMIL-G)4"C.]	#3/0				

							FAULT CU	RRENT	SCHEDULE							
Node ID	Node Description	NodeType	Line Voltage	From	То	Utility Avail MVA	Xfrmr Size		Feeder Information	1 114	ConductorType	Conduit Type	Sym.RMS Fault	Per Unit R	Per Unit jX	X/R Ratio
	·		voitage					Runs	Size	Length			Current	Value	Value	<u> </u>
0	Xcel Energy	Utility		151	0										1	1
1	Utility Xfmr	Xfmr	480	0	1		500						36,750	0.00824	0.01414	1.72
2	MSB	Panel	480	1	2			7	#500KCMIL	30	Cu	Non-Mag.	35,959	0.00841	0.01446	1.72
3	HAE	Panel	480	2	3			2	#500KCMIL	600	Cu	Mag.	11,297	0.02729	0.04571	1.68
4	XFMR (P)	Panel	480	3	4			1	# 1	20	Cu	Mag.	10,175	0.03423	0.04818	1.41
5	XFMR (S)	Xfmr	208	4	5		75.0						3,604	0.26556	0.27885	1.05
6	LAE1	Panel	208	5	6			1	#4/0	10	Cu	Mag.	3,519	0.27285	0.28474	1.04
7	XFMR (P)	Panel	480	3	7			1	# 1	20	Cu	Mag.	10,175	0.03423	0.04818	1.41
8	XFMR (S)	Xfmr	208	7	8		75.0						3,604	0.26556	0.27885	1.05
9	LAE2	Panel	208	8	9			1	#4/0	10	Cu	Mag.	3,519	0.27285	0.28474	1.04
10	ELEV	Motor	480	3	10			1	# 1	20	Cu	Mag.	10,175	0.03423	0.04818	1.41
11																
150				1												

							EQI	JIPMÉ	NT SCHEDULE				
MECH. DESIGNATION	EQUIPMENT DESCRIPTION	VOLTS	PH	HP	MCA	KW	KVA	DISC. SIZE	PANEL DESIGNATION	CB SIZE	MFS	FEEDER SIZE	REMARKS
AHU-3A	AIR HANDLING UNIT	480	3		53.0		44.1	60/3	HAE-(1,3,5)	60		(3#6 & 1#10G)1" C.	
CUH-1	CABINET UNIT HEATER	120	1	1/4			0.7		LAE1-2	20		(2#12 & 1#12G)3/4" C.	
CUH-2	CABINET UNIT HEATER	120	1	1/4			0.7		LAE1-4	20		(2#12 & 1#12G)3/4" C.	
ELEV	ELEVATOR	480	3	30			33.3	60/3	HAE-(14,16,18)	80		(3#6 & 1#8G)3/4" C.	
FCU-1	FAN COIL UNIT	120	1	1/10			0.4		LAE1-6	20		(2#12 & 1#12G)3/4" C.	POWER SUPPLIED FROM CU-1 UNIT ON ROOF
FCU-2	FAN COIL UNIT	120	1	1/10			0.4		LAE1-8	20		(2#12 & 1#12G)3/4" C.	
FCU-3	FAN COIL UNIT	120	1	1/6			0.5		LAE1-17	20		(2#12 & 1#12G)3/4" C.	
FCU-4	FAN COIL UNIT	120	1	1/10			0.4		LAE2-38	20		(2#12 & 1#12G)3/4" C.	POWER SUPPLIED FROM CU-2 UNIT ON ROOF
FCU-5	FAN COIL UNIT	120	1	1/6			0.5		LAE2-40	20		(2#12 & 1#12G)3/4" C.	
P-3A	PUMP	120	1	1/2			1.2		LAE1-64	20		(2#12 & 1#12G)3/4" C.	
CU-1	CONDENSING UNIT	208	3		18.0		6.5	30/3	LAE2-(1,3,5)	30		(3#12 & 1#12G)3/4" C.	
CU-2	CONDENSING UNIT	208	3		25.0		9.0	30/3	LAE1-(2,4,6)	30		(3#10 & 1#10G)3/4" C.	
SP-1	SUMP PUMP	480	3	1 1/2			2.5	30/3	HAE-(13,15,17)	20		(3#12 & 1#12G)3/4" C.	
	ROLL-UP DOOR	120	1	1/2			1.2		LAE1-67	20		(2#12 & 1#12G)3/4" C.	

VERIFY ALL LUMINAIRE REQUIREMENTS WITH ARCHITECT PRIOR TO ORDERING.

					LUMINA	AIRE SCHE	DULE					
KEY	QTY.	LAMPS TYPE	BALLAST QTY.	DESCRIPTION	VOLT	FINISH	MOUNTII TYPE	NG DEPTH	MANUFACTURER	MODEL	VA	NOTES
В	1	LED	-	2'X2' 3500K RECESSED TROFFER W/ INTEGRATED SENSOR	UNV	WHITE	RECESSED	3-1/4"		2X2 19W-4000K/D10	20.2	NOTES
С	1	LED	-	1'X4' 3500K RECESSED TROFFER	UNV	WHITE	RECESSED	5-3/8"	METALUX	14ALNG-LD5-26-UNV-L835-CD1	23.5	
D	1	LED	-	6" DOWNLIGHT	120–277	WHITE	RECESSED	5-7/8"	PORTFOLIO	LD6B-30-D010-3050-80-35-M-0-MW	27.6	2
DE	1	LED	-	6" DOWNLIGHT - EMERGENCY	120–277	WHITE	RECESSED	5-7/8"	PORTFOLIO	LD6B-30-D010-EM7-3050-80-35-M-0-MW	27.6	2
F	1	LED	1	VANDALPROOF RECESSED TROFFER	UNV	WHITE	RECESSED	5"	EATON	FMR-S-12-4-LD4-STD-35-UNV-80/84-EDC-1	73.2	
G	1	LED	1	1'X4' LED STRIP LIGHT	UNV	WHITE	SURFACE	-	COLUMBIA	LR0-4-35-ML-ED-U	53	
Н	1	LED	-	50' STRING LIGHTS, DIMMABLE	120	BLACK	SUSPENDED		LIGHTS FOR ALL OCCASSIONS	SV-CGBL54SSUS-GL50LED9WW	12	
X1	1	LED	_	COMBINATION EXIT/EMERGENCY LIGHT WITH GREEN LETTERS	UNV	WHITE	SURFACE	-	COMPASS	CCG	3.2	1
Х2	1	LED	-	SURFACE MOUNT DOUBLE FACE LED EMERGENCY LIGHT	UNV	WHITE	SURFACE	-	COMPASS	CELS2GNE	3.2	1
		ARROW DIRECTION DICATION LISTED.										

AIC R	PACITY = 400 AMPS RATING = 14,000 AMPS LTAGE = 277/480 VOLT, 3 PH		AMPS							X X X	GROUND MAIN CB SIZE:		400 AMP	
ΤΥP	VA	DESC	RIPTION	Р	СВ	СКТ	PH	CKT	СВ	Р	DESCRIP	TION	VA	TYP
М	44063	AHU-3A		3	60	1	Α	2	125	3	PANEL LAE1		58276	Р
						3	В	4						
						5	С	6						
L	2609	1ST FLR LTG		1	20	7	A	8	125	3	PANEL LAE2		44825	P
L	2041	1ST FLR LTG		1	20	9	В	10						
L	2858	2ND FLR LTG		1	20	11	C	12						
М	2494	SP-1		3	20	13	Α	14	80	3	ELEVATOR (30HP)		33255	М
						15	В	16						
						17	С	18						
L	2914	OUTDOOR LTG		1	20	19	Α	20	-	_	SHUNT TRIP			-
		SPACE				21	В	22			SPACE			
		SPACE				23	С	24			SPACE			
		SPACE				25	Α	26			SPACE			
		SPACE				27	В	28			SPACE			
		SPACE				29	С	30			SPACE			
		SPACE				31	A	32			SPACE			
		SPACE				33	В	34			SPACE			
		SPACE				35	C	36			SPACE			
		SPACE				37	Ā	38			SPACE			
		SPACE				39	В	40			SPACE			
		SPACE				41	С	42			SPACE			
LOAD T	YPE		CONNECTED LOAD	(VA)	DEMAN				DEMAN	ND LC		EC	DERATED DEMAND I (VA)	LOAD
LIGHT			10422				00				10422	1.25	130	28
REC	1st 10						00					1.0		
LADOE	REMAIN		44007				00			_	44007	0.5	550	70
	est M otof Ining M ot		44063 35750				00 00				44063 35750	1.25 1.0	550 357	
EQUIP		<u> </u>	33730	-			00			-	33730	1.0	337	50
HEATII		=					00					1.25		-
PANEL	_	_	103101				00				103101	1.0	1031	101
	SFORMER				00					1.0				
KITCH						1.	00			-		1.0		
TOTAL		E LOADING	193335.8594	-		-				-	193336		2069	357
B=	66494 63012	VA VA VA	DERATED DEMA SPARE CAPACIT TOTAL		OAD						= 1 = 38% =	249 151 400	AMPS AMPS AMPS	

P CB CKT PH CKT CB P DESCRIPTION

1 20 43 A 44 20 1 MICROWAVE

1 20 45 B 46 20 1 MICROWAVE

1 20 47 C 48 20 1 TRNG UNDERFLOOR

1 20 49 A 50 20 1 TRNG UNDERFLOOR

1 20 51 B 52 20 1 TRAINING TV

1 20 53 C 54 20 1 TRNG UNDERFLOOR

1 20 55 A 56 20 1 TRNG UNDERFLOOR

1 20 55 A 56 20 1 TRNG UNDERFLOOR

 1
 20
 57
 B
 58
 20
 1
 TRNG UNDERFLOOR

 1
 20
 59
 C
 60
 20
 1
 TRAINING REC

 1
 20
 61
 A
 62
 20
 1
 TRAINING REC

 1
 20
 61
 A
 62
 20
 1
 TRAINING REC

 1
 20
 63
 B
 64
 20
 1
 TRNG S WALL REC

 1
 20
 65
 C
 66
 20
 1
 SPARE

 1
 20
 67
 A
 68
 20
 1
 SPARE

 1
 20
 69
 B
 70
 20
 1
 SPARE

 1
 20
 71
 C
 72
 20
 1
 SPARE

 1
 20
 73
 A
 74
 SPACE

 1
 20
 75
 B
 76
 SPACE

 1
 20
 77
 C
 78
 SPACE

 1
 20
 79
 A
 80
 SPACE

 1
 20
 81
 B
 82
 SPACE

 1
 20
 83
 C
 84
 SPACE

VA TYP

1200 K

1200 K

1080 R 1080 R

800 E 1080 R 1080 R

1080 R 1080 R 1080 R

1080 R

TYP VA DESCRIPTION

E 500 TEMPERATURE CONTROL
E 500 TEMPERATURE CONTROL

R 1080 MENS LOCKER CABINET
R 1080 MENS LOCKER CABINET
R 1080 MENS LOCKER CABINET

R 1080 MEN/WOMEN LOCK CABINETS

R 1080 WOMENS LOCKER CABINET

R 900 ISLAND RCPTS
R 1176 TELE/W WALL TRNG RCPTS
L 60 PATIO STRING LTG
SPARE
SPARE

E 1200 HAND DRYER

E 1200 HAND DRYER

E 1920 SPECIAL RCPT

SPARE
SPARE
SPARE
SPARE
SPARE
SPARE
SPARE
SPARE
SPARE

PAN	EL:	LAE2			-	=			=	X	100% NEUTRAL GROUND	-		
AMPA			AMPS							X	MLO			
AIC R	ATING: IGE:	10,000 120/208 VOLT, 3								<u> </u>	SURFACE			
TYP	VA	DESCR	IPTION	Р	СВ	СКТ	PH	СКТ	СВ	Р	DESCR	IPTION	VA	TYP
М	528	CU-1	=	3	30	1	Α	2	20	1	MENS LOCKER CAB	INET	1080	R
						3	В	4	20	1	MENS LOCKER CAB	BINET	1080	R
						5	С	6	20	1	MENS LOCKER CAB	INET	1080	R
R	3000	IT RM-APC UPS		1	30	7	Α	8	20	1	MENS LOCKER CAB	INET	1080	R
R	3000	IT RM-APC UPS		1	30	9	В	10	20	1	MENS LOCKER CAB	INET	1080	R
R	1080	IT ROOM		1	20	11	С	12	20	1	MENS LOCKER CAB	INET	1080	R
R	1200	VENDING MACHINE		1	20	13	Α	14	20	1	MENS LOCKER CAB	INET	1080	R
R	1080	BREAK ROOM/EXTE	RIOR RCPT	1	20	15	В	16	20	1	MENS LOCKER CAB	INET	1080	R
R	1080	BRK RM/CORR		1	20	17	С	18	20	1	MENS LOCKER CAB	INET	1080	R
R	1176	GARBAGE DISPOSAL	-	1	20	19	Α	20	20	1	WOMENS LOCKER F	ROOM	900	R
R	800	DISHWASHER		1	20	21	В	22	20	1	WOMENS LOCKER (CABINET	1080	R
R	1500	ICE MACHINE		1	20	23	С	24	20	1	WOMENS LOCKER (CABINET	1080	R
R	1176	REFRIGERATOR		1	20	25	Α	26	20	1	WOMENS LOCKER (CABINET	1080	R
R	1176	REFRIGERATOR		1	20	27	В	28	20	1	WOMENS LOCKER CABINET		1080	R
R	1080	TRNG UNDERFLOOR		1	20	29	С	30	20	1	STO/CORR/WOMENS VEST		1080	R
R	1080	N WALLS TRNG/BR	IEFING RMS	1	20	31	Α	32	20	1	ELEV/CORR/BRIEF		600	R
R	860	S WALL TRNG/BRIE	FING RMS	1	20	33	В	34	20	1	CORR/ADA LOCKER		720	R
R	1080	TRNG S WALL REC		1	20	35	С	36	20	1	EWC-1 (2ND FLR)		260	R
R	1920	BRIEFING PROJECTO	OR .	1	20	37	Α	38	20	1	FCU-4		360	М
R	1080	BRIEF/MENS/ELEC	RCPT	1	20	39	В	40	20	1	FCU-5		528	М
R	1080	MENS LOCKER ROC)M	1	20	41	С	42	20	1	VENDING MACHINE		1200	R
.OAD 1	YPE		CONNECTED LOAD	(VA)	DEMAN	ID FAC	TOR		DEMAN	ID LC	OAD (VA)	NEC	DERATED DEMAND ((VA)	LOAD
LIGHT	ING		60				.00				60	1.25	75	5
REC			10000				.00				10000	1.0	100	_
LABO	REMAIN		49364				.00				49364	0.5	246	
	est m oto Ining m o		528 888				.00				528 888	1.25 1.0	66 88	
EQUIF		101.3	6120				.00				6120	1.0	612	
HEATI			3,23				.00					1.25		
PANE							.00					1.0		
	FORMER		2422		<u> </u>		.00				0400	1.0	1	
KITCH			2400				.00			-	2400	1.0	240	
TOTAL		SE LOADING	69360	-		-			<u> </u>		69360		448	23
	25108 23240	VA VA	DERATED DEMA SPARE CAPACI		OAD						= = 45%	12 4 101	AMPS AMPS	
	21012	VA	TOTAL	•							=	225	AMPS	

PANI		LAE1 = 225	AMPS							X X	100% NEUTRAL GROUND MAIN CB SIZE:		225 AMP	
	RATING	= 10,000								X	SURFACE			
VOLT/	NGE	= 120/208 VOLT, 3	PH								•			
TYP	VA	DESCR	IPTION	Р	СВ	СКТ	PH	СКТ	СВ	Р	DESCRIPTION	1	VA	TYP
Ε	1500	EXERCISE-TREADMIL	L	1	20	1	Α	2	20	1	CUH-1		696	Н
Ε	1500	EXERCISE-TREADMII	L	1	20	3	В	4	20	1	CUH-2		696	Н
Ε	1500	EXERCISE-TREADMII	L	1	20	5	С	6	20	1	FCU-1		360	М
Ε	1500	EXERCISE-TREADMII	L	1	20	7	Α	8	20	1	FCU-2		360	М
Ε	1500	EXERCISE-TREADMII	L	1	20	9	В	10	20	1	EWC-1-CORR 112		260	R
Ε	1500	EXERCISE-TREADMIL	T	1	20	11	С	12	20	1	EWC-1-LOBBY		260	R
R	1080	EXER/JAN/N VEST/	CORR	1	20	13	Α	14	20	1	MAIL/COPY RECPT / TV		500	R
R	720	RR'S/OFFICE SUITE		1	20	15	В	16	20	1	MAIL/SCAN/RR		1080	R
М	528	FCU-3		1	20	17	С	18	20	1	DRING VENDING		1500	R
R	1176	TELE/W WALL TRNO	RCPTS	1	20	19	Α	20	20	1	MAIL/COPY/SUPPLIES		1920	R
R	720	LACTATION/JANITOR		1	20	21	В	22	20	1	MAIL/COPY/SUPPLIES		1920	R
R	1080	EXERCISE/ADJ OFF	CE	1	20	23	С	24	20	1	MAIL/COPY/SUPPLIES		1920	R
R	1080	OPS CC/ADMIN CC	OFF SUITE	1	20	25	Α	26	20	1	ELEC/CORR/WOMEN 105	i	1080	R
R	1080	OPS CC/W WALL C	ONF/UF	1	20	27	В	28	20	1	ELEVATOR RECPT		180	R
R	1080	CONFERENCE RM		1	20	29	С	30	20	1	CORR/LOBBY/RECEPTION		1080	R
R	1080	OFFICE SUITE		1	20	31	Α	32	20	1	LOBBY/SEC SCREEN/S \	/EST	720	R
R	1080	WARRANT OFFICE/C	ORR	1	20	33	В	34	20	1	CORR/SALLYPT/INMATE \	/IS	1080	R
R	1080	TRNG SGTS/OFFICE	SUITE	1	20	35	С	36	20	1	PUB-INMATE VIS/LOBBY,	/SEC	1080	R
R	1080	CORR/OFFICE SUITI	<u> </u>	1	20	37	Α	38	20	1	WAITING/EXTERIOR RCPT		1080	R
R	1080	DIV CHIEF/E WALL	CONF/OFF SUITE	1	20	39	В	40	20	1	SECURITY SCREENING		1920	R
R	1080	DIV CHIEF/LET SUF	PERVISOR	1	20	41	С	42	20	1	SECURITY SCREENING		1920	R
OAD 1	TYPE		CONNECTED LOAD	(VA)	DEMAN	ND FAC	TOR		DEMAN	ID LO	OAD (VA) NEC		DERATED DEMAND L (VA)	.OAD
LIGHT			400				00				400	1.25	500	
REC	•		10000		<u> </u>		00				10000	1.0	1000	
LARCI	REMAIN EST M OTO		29756 9006.664063		1		00				29756 9007	0.5 1.25	1487	
	INING MOT		6000		1		00			-	6000	1.0	600	
	PMENT		13900				00				13900	1.0	1390	
HEATI			1392				00				1392	1.25	174	0
PANE				_	ļ		00					1.0		
KITCH	SFORMER IFN						00			-	-	1.0		
TOTAL			70454.66406							-	70455	1.0	582	76
		SE LOADING VA	DERATED DEMA		OAD						=	162	AMPS	
	23154	VA VA	SPARE CAPACIT								= 28%	63	AMPS	
	23170	VA VA	TOTAL	• •							= 20%	225	AMPS	

TYP	VA	DESCRIPTION	Р	СВ	СКТ	PH	СКТ	СВ	Р	DESCRIPTION	VA	TYP
Ε	500	TEMPERATURE CONTROL	1	20	43	Α	44	30	3	CU-2	9007	М
Е	500	TEMPERATURE CONTROL	1	20	45	В	46					
М	1200	ADA DOOR MOTOR	1	20	47	С	48					
М	1200	ADA DOOR MOTOR	1	20	49	Α	50	20	1	ELEV CAB LTG	400	L
R	540	LOBBY RECPT	1	20	51	В	52	20	1	HALL/STO/OPEN OFFICE	1080	R
		SPARE	1	20	53	С	54	20	1	S OPEN OFFICE QUADS	1080	R
		SPARE	1	20	55	Α	56	20	1	CONF RM RCPTS	900	R
		SPARE	1	20	57	В	58	20	1	CONF RM UF RCPTS	540	R
		SPARE	1	20	59	С	60	20	1	OPEN OFFICE WEST RCPTS	720	R
		SPARE	1	20	61	Α	62	20	1	N OPEN OFFICE QUADS	900	R
		SPARE	1	20	63	В	64	20	1	P-3A	1176	М
		SPARE	1	20	65	С	66	20	1	HAND DRYER	1200	Ε
М	1176	ROLL-UP DOOR	1	20	67	Α	68	20	1	HAND DRYER	1200	Ε
E	1500	EXERCISE	1	20	69	В	70	20	1	SPARE		
		SPARE	1	20	71	С	72	20	1	SPARE		
		SPARE	1	20	73	Α	74	20	1	SPARE		
		SPARE	1	20	75	В	76	20	1	SPARE		
		SPARE	1	20	77	С	78	20	1	SPARE		
		SPARE	1	20	79	Α	80			SPACE		
		SPARE	1	20	81	В	82			SPACE		
		SPARE	1	20	83	С	84			SPACE		

BOULDER COUNTY CENTER PHASE 1 -ADMINISTRATION ADDITION 0 0 0 0 0 BOULDER, COLORADO ARCHITECTURE ° REILLY JOHNSON ARCHITECTURE ° 1775 SHERMAN STREET, SUITE 2550 DENVER, CO 80203 (303) 832-9111 FAX (303) 832-9135 STRUCTURAL ENGINEER 12499 WEST COLFAX AV. LAKEWOOD, CO 80215 (303) 431-6100 FAX (303) 431-6866 0 0 0 0 MECHANICAL/ ELECTRICAL/
PLUMBING ENGINEER

BEER ENGINEERING, INC. 5420 WARD ROAD, STE. 200 ARVADA, CO 80002 0 0 0 0 CIVIL ENGINEER DREXEL, BARRELL, & CO. __AEL, br... 1800 38TH ST. ... BOULDER, CO 80301 (303) 442-4338 FAX (303) 442-4373 o o o o o o No. Revision Description Date 1 ADDENDUM 1 9/18/18 0 0 0 0 0 0 0 0 0 0 0 0 ENGINEERING | TECHNOLOGY | LIFE SAFETY 0 REILLY JOHNSON ARCHITECTURE COPYRIGHT© 2017 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 DRAWING TITLE 0 0 0 0 **ELECTRICAL** 。ONE-LINE DIAGRAM 。

DATE: JANUARY 4, 2019

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SCALE: NO SCALE

[°]BUILDING PERMIT

DOCUMENTS

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City of Boulder **Energy Conservation Code**

8/17/2018

Applies to: New Buildings and Additions with a construction valuation of <\$500,000; Alterations and Repairs are determined by construction valuations and should refer to Table C401.2.2.

Project Address: BOULDER COUNTY DETENTION CENTER - ENTRY LOBBY ADMINISTRATION ADDITION BOULDER, COLORADO 80301

DIRECTIONS: Compliance with these measures is required if the project uses the Prescriptive Compliance Path. Please complete this checklist and include it on an "Energy Conservation Code" sheet within the plans being submitted for permit application. Projects complying prescriptively also must meet Mandatory Measures and should include the Mandatory Measures Checklist as well.

ode Section	Focus Area		Code	Description		Plan Drawing or Reference # to demonstrate compliance (N/A if not applicable)	Submitter Notes (e.g. If "N/A" Please explain apply or is not demonstrate	n why requirement does not ed on plans/specs)	Plans Examiner Notes (in office	use)
		Total connected lighting power calcul no greater than the interior lighting p								☐ Field Verify
		ROOM NAME	COBECC Space Description	Space SQ FT	COBECC Allowed LPD	Fixture Type	Number of Fixtures	Watts per Fixture	Total Watts per Room	Designed LPD (W/SF)
		Lobby	Lobby	400	0.9	В	6	20.2	121.2	0.303
		Vestibule	Lobby	312	0.9	D	8	27.6	220.8	0.707692308
		Corridor/Hall/Waiting	Corridor/Transition	2658	0.56	В	36	20.2	727.2	0.273589165
		Corridor/Hall/Waiting	Corridor/Transition	336	0.56	D	7	27.6	193.2	0.575
		Sallyport	Corridor/Transition	117	0.56	F	2	73.2	146.4	1.251282051
		Mail/Copy/Supplies/Storage	Storage	279	0.63	В	5	20.2	101	0.362007168
		Janitor Rooms	Storage	116	0.63	С	2	23.5	47	0.405172414
		Storage	Storage	150	0.63	D	3	27.6	82.8	0.552
		Exercise	Fitness Area	591	0.61	В	12	20.2	242.4	0.410152284
	Interior Lighting	Reception/Scan	Office - Enclosed	138	1.05	В	3	20.2	60.6	0.439130435
C405.5	Power	Conference/Meeting/Multipurpose	Conference/Meeting/	373	1.11	С	5	23.5	117.5	0.315013405
	rowei	Lactation	Nursery	64	0.75	В	1	20.2	20.2	0.315625
		Restrooms	Restrooms	476	0.98	D	14	27.6	386.4	0.811764706
		Public/Inmate Visiting Rooms	Public-Staff Lounge	733		F	14	73.2	1024.8	1.398090041
		Offices - Open	Office - Open Plan	736			17	20.2	343.4	0.466576087
		Offices - Enclosed	Office - Enclosed	1117	1.05		16	20.2	323.2	0.289346464
		IT	Office - Enclosed	55			1	27.6	27.6	0.501818182
		Electrical Room	Electrical/Mechanical	56		-	2	23.5	47	0.839285714
		Elevator	Electrical/Mechanical	110	0.42		2	53	106	0.963636364
		Stair	Stair	194		D	4	27.6	110.4	0.569072165
		Atrium	Atrium		0.03 per ft. ht.	D	16	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	441.6	0.630857143
		Break Room	Dining-Bar/Lounge/Le	950			12	20.2	242.4	0.255157895
		Training/Briefing	Classroom-Training	1185	1.05		30	20.2	606	0.511392405
		Training/Briefing	Classroom-Training	23	7.000		1	27.6	27.6	1.2
		Locker Rooms	Locker Room	1099			20	20.2	404	0.367606915
		Locker Rooms	Locker Room	387	0.75	r	18	27.6	496.8	1.28372093

Commercial (Lighting ONLY)

landatory Measures Checklist Applies to: All New Buildings, Additions, Alterations and Repairs which require a permit from the City.



Date: 8/17/2018

City of Boulder **Energy Conservation Code**

XTOR6B

Project Address: Boulder County Detention Center - Entry Lobby Administration Addition,

Boulder, CO 80301 DIRECTIONS: Compliance with these Mandatory Measures is required whether the project is demonstrating compliance through the Performance or Prescriptive Path. Please complete this checklist and include it on an "Energy Conservation Code" sheet within the plans being submitted for permit application.

Code Section	Focus Area	Code Description	Plan Drawing or Reference # to demonstrate compliance (N/A if not applicable)	Submitter Notes (e.g. If "N/A" Please explain why requirement does not apply or is not demonstrated on plans/specs)	Plans Examiner Notes (in office use)
LIGHTING					
C405.2., C405.2.1.1	Lighting Control	Controls shall meet the provisions of C405.2.1-C405.2.4. Manual lighting controls are required for interior spaces and must be located within the area served by the controls or be a remote switch that identifies the lights served and indicates their status.	E3.1, E3.2	OPEN OFFICE AREA LIGHTING CONTROL LAYOUT COMPLIES WITH C405.2.1-C405.2.4.	□ Field Verify
C405.2.1.2		Each area that is required to have a manual control shall also allow the occupant to reduce the connected lighting load in a reasonably uniform illumination pattern by at least 50 percent. Lighting reduction shall be achieved by one of the following or other approved method: 1) Controlling all lamps or luminaires; 2) Dual switching of alternate rows of luminaires, alternate luminaires or alternate lamps; 3) Switching the middle lamp luminaires independently of the outer lamps; or 4) Switching each luminaire or each lamp.	E3.1, E3.2	GENERAL NOTE 5 CALLS FOR DIMMING CAPACITY ON LOW VOLTAGE SWITCHES SERVING OPEN OFFICE AREAS. SMALLER OFFICES AND CONFERENCE ROOMS ARE EXCEPTED FOR USE OF OCCUPANCY SENSOR WITHIN ROOM.	 □ Field Verify
C405.2.2.1	Shutoff	Automatic time switch controls shall be installed to control lighting in all areas of the building. The automatic time switch control device shall include an override switching device that complies with the following: 1. The override switch shall be in a readily accessible location; 2. The override switch shall be located where the lights controlled by the switch are visible; or the switch shall provide a mechanism which announces the area controlled by the switch; 3. The override switch shall permit manual operation; 4. The override switch, when initiated, shall permit the controlled lighting to remain on for a maximum of 2 hours; and 5. Any individual override switch shall control the lighting for a maximum area of 5,000 square feet	E3.1, E3.2	LOW VOLTAGE SWITCHES AND OCCUPANCY SENSORS FUNCTION IN A SYSTEM TO MEET REQUIREMENT.	□ Field Verify
CA405.2.2.2	Space Control	Occupancy sensors shall be installed in all classrooms, conference/meeting rooms, employee lunch and break rooms, private offices, restrooms, storage rooms and janitorial closets, and other spaces 300 square feet or less enclosed by floor-to-ceiling height partitions. These automatic control devices shall be installed to automatically turn off lights within 30 minutes of all occupants leaving the space, and shall either be manual on or shall be controlled to automatically turn the lighting on to not more than 50 percent power.	E3.1, E3.2	OCCUPANCY SENSORS INSTALLED IN ALL ROOM TYPES LISTED.	
LIGHTING Conti	inued				☐ Field Verify
C405.2.2.3	Daylight Zone Control	Daylight zones shall be designed such that lights in the daylight zone are controlled independently of general area lighting and are controlled in accordance with C405.2.2.3.1 or C405.2.2.3.2.	E3.1, E3.2	DAYLIGHT ZONE CONTROL ADDED VIA PHOTOCELL TO FENESTRATION ZONES BY BOTH WINDOWS AND SKYLIGHT.	□ Field Verify
C405.2.2.3.3	Multi-level Control	Where multi-level controls are required, the general lighting in the daylight zone shall be separately controlled by at least one multi-level lgihting control to reduce power to no greater than 35% of it's rated power.	N/A		□ Field Verify

Code Section	Focus Area		Plan Drawing or Reference # to demonstrate compliance (N/A if not applicable)	Submitter Notes (e.g. If "N/A" Please explain why requirement does not apply or is not demonstrated on plans/specs)	Plans Examiner Notes (in office use)
C405.2.3	Additional Control	Display, accent lighting and Display case lighting shall be controlled by a dedicated control. Hotel and motel sleeping units shall have a master control device at the main room entry. Supplemental task lighting shall have a control device integral to the luminaires or be controlled by a wall mounted device. Lighting for nonvisual applications, such as plant growth and food warming shall be controlled by a dedicated control. Lighting equipment for sale or demo shall be controlled by a dedicated control.	N/A		□ Field Veri
C405.2.4	Exterior Lighting Control	Lighting not designed for dusk to dawn operation shall be controlled by a combo of photosensor and time switch or an astronomical time switch. Dusk to dawn lighting shall be controlled by an astronomical time switch or photosensor.	E3.1, E3.2	EXTERIOR LIGHTING TO BE CONTROLLED VIA PHOTOCELL OR EXISTING COMPLIANT LIGHTING CONTROL SYSTEM.	□ Field Ver
C405.3	Tandem Wiring	Fluorescent luminaires equipped with one, three or odd numbered lamp configurations, that are recess mounted within 10 ft center to center or that are pendant or surface mounted within 1 ft edge to edge must be tandem wired.	N/A		□ Field Ve
C405.4	Exit Signs	Internally illuminated exit signs shall not exceed 5 W per side.	E0.2	SPECIFIED EXIT SIGN RATED FOR 5W.	☐ Field Ve
	Exterior Building Grounds Lighting	All exterior building grounds luminaires that operate at greater than 100 watts shall contain lamps having a minimum efficacy of 60 lumens per watt unless the luminaire is controlled by a motion sensor or qualifies for one of the exceptions under Section C405.6.2.	N/A		
C405.6.2	Exterior Building Lighting Power	Total exterior lighting power allowance for all exterior applications is the sum of the base site allowance plus the individual allowances for areas that are to be illuminated per Table C405.6.2(2). Tradeoffs are allowed only among exterior lighting applications listed in the Table.	E1.0	EXTERIOR AREA DESIGNATED AS ZONE 2 ALLOWS FOR 400W BASE ALLOWANCE PLUS ABOUT 3000W FOR PLAZA AREA OF 30,000 SQUARE FEET. TOTAL OUTDOOR LIGHTING LOAD IS 2362W.	□ Field Ver

SYSTEM COMMISSIONING												
C407.3	Lighting System	Controls for automatic lighting systems shall comply with Section C407.3	E0.0	COMMISSIONING NOTES CALL OUT FOR COMPLIANCE								
	Functional Testing			WITH COBECC STANDARDS.	☐ Field Verify							
POWER												
POWER C405.7	Electrical energy	In buildings having individual dwelling units, provisions shall be made to	N/A									
	Electrical energy consumption	In buildings having individual dwelling units, provisions shall be made to determine the electrical energy consumed by each tenant by separately	N/A									

Commercial Mandatory Measures Checklist Page 2 of 2

BOULDER COUNTY

CENTER PHASE 1 -

ADMINISTRATION ADDITION 0 0 0 0 0

BOULDER, COLORADO

ARCHITECTURE REILLY JOHNSON ARCHITECTURE 1775 SHERMAN STREET, SUITE 2550 DENVER, CO 80203

ن (303) 832-9111 ° (303) 832-9135

STRUCTURAL ENGINEER MARTIN/ MARTIN CONSULTING ENGINEERS

(303) 431-6100 FAX (303) 431-6866

0 0 0 0

MECHANICAL/ ELECTRICAL/
PLUMBING ENGINEER

BEER ENGINEERING, INC. 5420 WARD ROAD, STE. 200 ARVADA, CO 80002

(303) 422-7400

CIVIL ENGINEER DREXEL, BARRELL, & CO. 1800 38TH ST.

BOULDER, CO 80301

(303) 442-4338 FAX (303) 442-4373

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ENERGY CONSERVATION CODE

DATE: JANUARY 4, 2019 SCALE: 3/16" = 1'-0" 0 0 0 0

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- 1. WHEN POLE BASE TOP IS AT THE GROUND LEVEL, BASE DEPTH TO BE EQUAL TO "D" + 2".
- 2. BASE DIMENSIONS ARE CALCULATED FOR LUMINAIRE(S) WITH AN EPA OF 6.0.
- 3. REFER TO FIXTURE SCHEDULE FOR POLE HEIGHT.

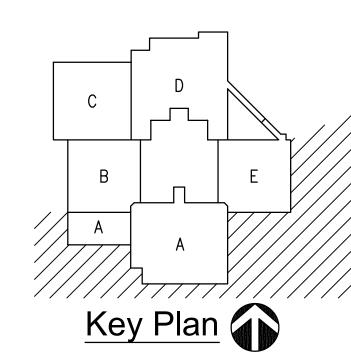
	F	POLE DIMENSI	ON TABLE							
PO	LE		BASE							
HEIGHT	SIZE	ABOVE GROUND	BELOW	DIAMETER						
Α	В	С	D	E						
20'	5"x5"	3'-0"	7'-0"	2'-0"						

GENERAL NOTES LIGHT TEXT AND LIGHT LINES INDICATE EXISTING. DARK TEXT AND SOLID LINES INDICATE NEW WORK.

1 ALL NEW EXTERIOR LIGHTING TO BE CONTROLLED BY PHOTOCELL MOUNTED ON ROOF OR EXISTING COBECC-COMPLIANT EXTERIOR LIGHTING CONTROL SYSTEM. COORDINATE EXACT PHOTOCELL LOCATION WITH MANUFACTURER'S RECOMMENDATIONS.

WORK NOTES

				EXT	ERIOR L	UMINAIRE S	CHEDULE					
KEY	QTY.	LAMPS TYPE	BALLAST QTY.	DESCRIPTION	VOLT	FINISH	MOUNTII TYPE	NG DEPTH	MANUFACTURER	MODEL	VA	NOTES
AA	1	LED	ı	EXTERIOR BOLLARD	277	BLACK	GROUND	1	RAB	BDLEDR12-4000K-277	12	
88	1	LED	-	EXTERIOR POLE LIGHT	277	BLACK	POLE	20'	BEACON LIGHTING BY HUBBELL	VP-L-64NB-135-3K-T5R-UNV	138	
СС	1	LED	-	EXTERIOR ACCENT LIGHT	277	BLACK	SURFACE	-	EATON	XTOR6B	58	
NOTES:	VERIFY	ALL LUMINAIRE REQ	UIREMENTS	S WITH ARCHITECT PRIOR TO ORDERING.								



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BUILDING PERMIT DOCUMENTS

BOULDER
COUNTY

DETENTION
CENTER
PHASE 1ADMINISTRATION
ADDITION

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BOULDER, COLORADO ARCHITECTURE REILLY JOHNSON ARCHITECTURE 1775 SHERMAN STREET, SUITE 2550 DENVER, CO 80203

(303) 832-9111 FAX (303) 832-9135

STRUCTURAL ENGINEER

MARTIN/ MARTIN CONSULTING ENGINEERS 12499 WEST COLFAX AV. LAKEWOOD, CO 80215

(303) 431-6100 FAX (303) 431-6866

0 0 0 0 0 MECHANICAL/ ELECTRICAL/ PLUMBING ENGINEER BEER ENGINEERING, INC.

5420 WARD ROAD, STE. 200 ARVADA, CO 80002

CIVIL ENGINEER DREXEL, BARRELL, & CO. 1800 38TH ST.

BOULDER, CO 80301

(303) 442-4338 FAX (303) 442-4373

No. Revision Description Date 1 ADDENDUM 1 9/18/18

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REILLY JOHNSON ARCHITECTURE

HTR SCS

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DRAWING TITLE ELECTRICAL SITE

。 。 PLAN 。 。 DATE: JANUARY 4, 2019

SCALE: NO SCALE 0 0 0 0

ADMINISTRATION ADDITION

MECHANICAL/ ELECTRICAL/ PLUMBING ENGINEER

BCER ENGINEERING, INC.

5420 WARD ROAD, STE. 200

ARVADA, CO 80002

CIVIL ENGINEER

DREXEL, BARRELL, & CO.

1800 38TH ST.

BOULDER, CO 80301

(303) 442-4338

FAX (303) 442-4373

No. Revision Description Date
1 ADDENDUM 1 9/18/18
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DRAWING TITLE

POWER DEMOLITION

PLAN

DATE: JANUARY 4, 2019

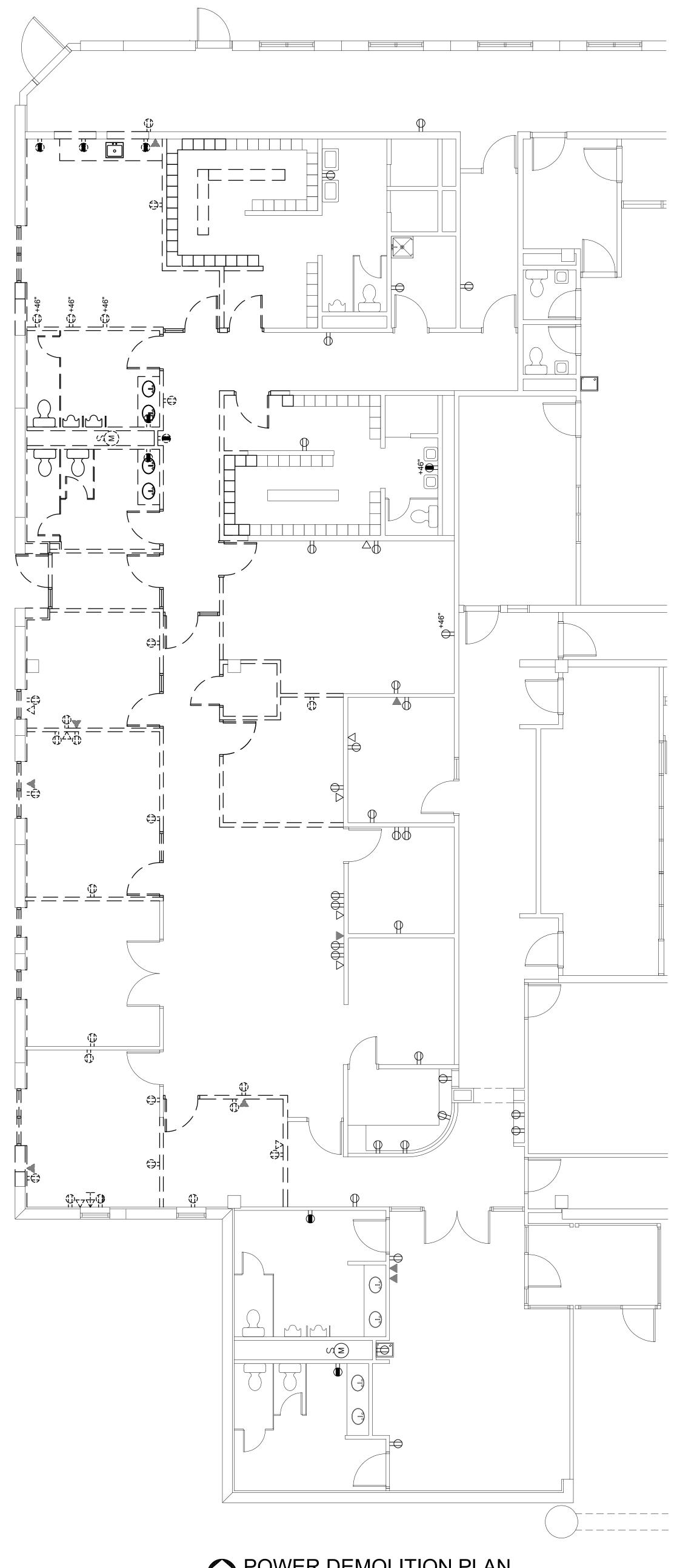
SCALE: 3/16" = 1'-0"

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Key Plan



PROVIDE ELECTRICAL REMOVAL OF ALL EQUIPMENT, GEAR, DEVICES, CONDUIT, AND WIRING WITHIN THE SCOPE OF WORK. ALL CONDUIT AND WIRING TO BE REMOVED BACK TO SOURCE.

THE OWNER SHALL BE GIVEN THE OPPORTUNITY TO MAINTAIN POSSESSION OF ANY ELECTRICAL GEAR, DEVICES, PARTS, OR LUMINAIRES. ANYTHING REJECTED BY THE OWNER SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND

DISPOSED OF IN A LEGAL MANNER.

POWER DEMOLITION PLAN

SCALE: 3/16" = 1'-0"

2' 0 4' 10'

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FIRST FLOOR POWER-SYSTEMS PLAN SCALE: 3/16" = 1'-0"

LOCATIONS.

GENERAL NOTES

LIGHT TEXT AND LIGHT LINES INDICATE EXISTING. DARK TEXT AND SOLID LINES INDICATE NEW WORK.

- EACH BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL. SHARED NEUTRALS ARE NOT PERMITTED IN MULTIPLE CIRCUIT HOMERUNS.
- REFER TO ARCHITECTURAL ELEVATIONS FOR DEVICE MOUNTING HEIGHTS AND

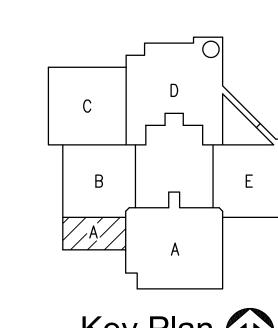
WORK NOTES

- 1> NEW PANEL HAE TO BE FED FROM SPARE SWITCH FROM DISTRIBUTION PANEL "MSB", LOCATED IN AREA D ROOM D153. APPROXIMATE LOCATION OF D153 IS DENOTED BY A CIRCLE ON THE KEY PLAN BELOW. NEW PANEL LAE1 TO BE FED FROM PANEL HAE VIA CEILING-MOUNTED TRANSFORMER.
- 2 PROVIDE JUNCTION BOX FOR TEMPERATURE CONTROLS.
- COORDINATE ELEVATOR MACHINE ROOM EQUIPMENT LAYOUT WITH THYSSENKRUPP SHOP DRAWING, JOB 1511-7-01A, SHEET 6 OF 7.
- COORDINATE WITH INTERCOM SUPPLIER FOR EXACT BACKBOX REQUIREMENTS.
- PROVIDE ON A SEPARATE MONITORING SYSTEM NOT ON ACCESS CONTROL USE FOR SECURITY CAMERAS WITHIN CORRIDOR. VERIFY WITH ARCHITECT SPECIFIC MOUNTING HEIGHTS AND EXACT LOCATIONS.
- 6 PROVIDE FACELESS GFCI RECEPTACLE AT JUNCTION BOX. FACELESS GFCI TO SERVE VENDING MACHINE/REFRIGERATOR IN BREAK ROOM.

7 PROVIDE WIREMOLD RFB9 SERIES FLOOR BOX (12 5/8" L x 14 3/4" W) OR SIMILAR.

- 8 PROVIDE A WALL BOX FOR A SINGLE GANG WALLBOX FOR (FUTURE) DATA, A
- SINGLE GANG WALLBOX FOR (FUTURE) AV, AND DUPLEX RECEPTACLE. MOUNT AT
- 9 PROVIDE (4) JUNCTION BOXES WITH 1" CONDUIT FEEDING EACH BOX FOR
- (FUTURE) LOW VOLTAGE DEVICES. COORDINATE EXACT REQUIREMENTS WITH OWNER Í.T. TEAM.
- (10) PROVIDE JUNCTION BOX FOR ADA DOOR OPERATOR.
- $\langle 11 \rangle$ PROVIDE JUNCTION BOX FOR PUSHBUTTON.
- 12> PROVIDE JUNCTION BOX FOR DOOR RELEASE HARDWARE.
- 13> PROVIDE LOW VOLTAGE CABLING IN 3/4"C.

PROVIDE (4) DATA PORTS AT EACH FLOOR BOX.



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BUILDING PERMIT DOCUMENTS

COUNTY

ADMINISTRATION ADDITION

BOULDER, COLORADO

ARCHITECTURE REILLY JOHNSON ARCHITECTURE

1775 SHERMAN STREET, SUITE 2550 DENVER, CO 80203

(303) 832-9111 FAX (303) 832-9135

STRUCTURAL ENGINEER

12499 WEST COLFAX AV. CAKEWOOD, CO 80215

5420 WARD ROAD, STE. 200 ARVADA, CO 80002

CIVIL ENGINEER DREXEL, BARRELL, & CO.

o o o o o o o No. Revision Description Date

1 ADDENDUM 1 9/18/18

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ENGINEERING | TECHNOLOGY | LIFE SAFETY

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BOULDER, CO 80301

(303) 442-4338 FAX (303) 442-4373

(303) 431-6100 FAX (303) 431-6866

. DETENTION

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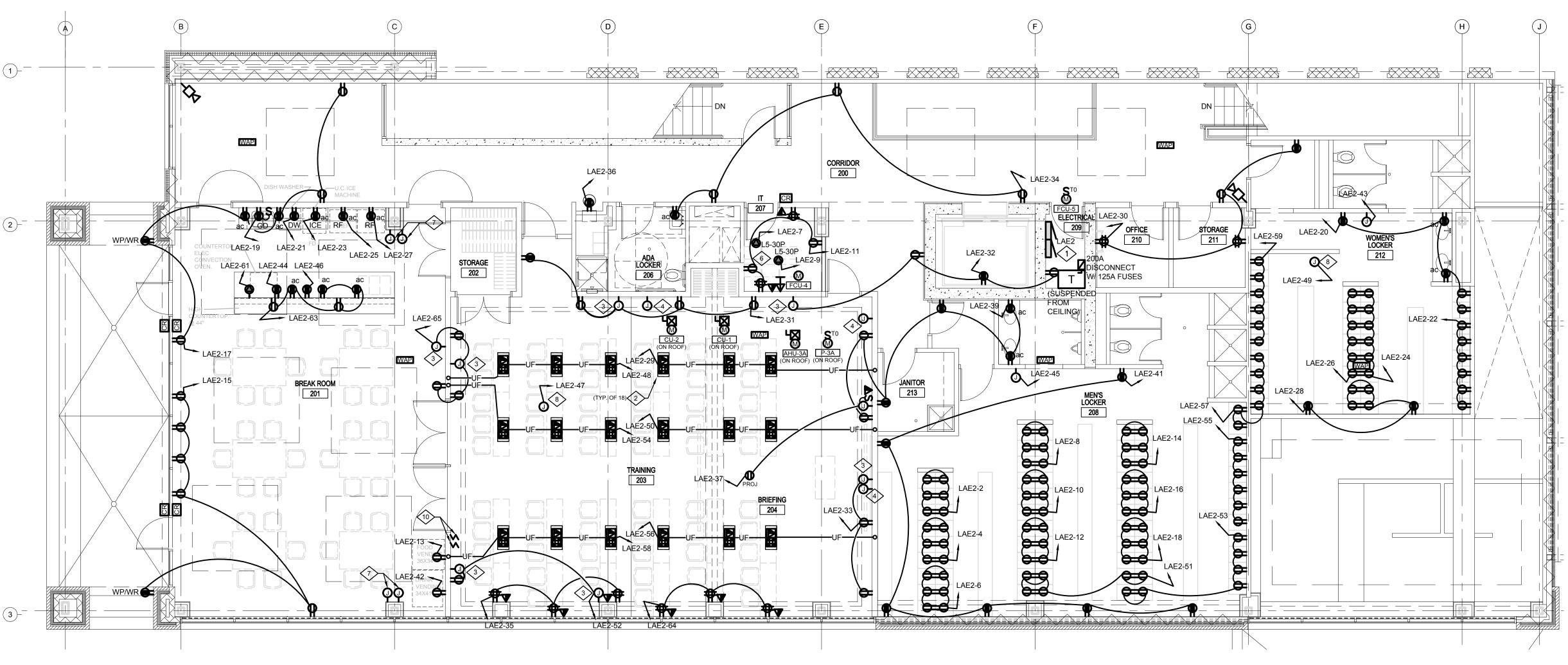
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FIRST FLOOR 。 POWER-ŞYSTEMS 。 PLAN DATE: JANUARY 4, 2019

SCALE: 3/16" = 1'-0" 0 0 0 0

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GENERAL NOTES

LIGHT TEXT AND LIGHT LINES INDICATE EXISTING. DARK TEXT AND SOLID LINES INDICATE NEW WORK.

- EACH BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL. SHARED NEUTRALS ARE NOT PERMITTED IN MULTIPLE CIRCUIT HOMERUNS.
- REFER TO ARCHITECTURAL ELEVATIONS FOR DEVICE MOUNTING HEIGHTS AND LOCATIONS.
- IF ROOF-MOUNTED MECHANICAL EQUIPMENT DOES NOT CONTAIN INTEGRAL CONVENIENCE RECEPTACLE, INSTALL ROOF-MOUNTED WP/WR RECEPTACLE WITHIN 25' OF NEWLY INSTALLED MECHANICAL EQUIPMENT. POWER VIA SPARE 20A CIRCUIT ON PANEL LAE2.

WORK NOTES

- (1) NEW PANEL LAE2 TO BE FED FROM PANEL HAE (LOCATED IN ELECTRICAL ROOM 110 BELOW) VIA CEILING-MOUNTED TRANSFORMER.
- PROVIDE WIREMOLD RFB9 SERIES FLOOR BOX (12 5/8" L x 14 3/4" W) OR SIMILAR. PROVIDE (4) DATA PORTS AT EACH FLOOR BOX.
- 3> PROVIDE A WALL BOX FOR A SINGLE GANG WALLBOX FOR (FUTURE) DATA, A SINGLE GANG WALLBOX FOR (FUTURE) AV, AND DUPLEX RECEPTACLE. MOUNT AT
- PROVIDE A 2-GANG WALLBOX FOR (FUTURE) AV.
- 5> PROVIDE A SINGLE GANG WALLBOX BEHIND TV FOR LOW-VOLTAGE CABLING.
- (6) ELECTRICAL CONTRACTOR TO MATCH EXACT NEMA CONFIGURATION SPECIFIED BY OWNER'S I.T. TEAM. PROPOSED CONFIGURATION WITHIN I.T. ROOM IS CONFIGURED FOR (2) TWO RACKS SUPPORTED BY (2) TWO APC UPS WITH CEILING MOUNTED TWIST LOCK RECEPTACLES.
- PROVIDE FACELESS GFCI RECEPTACLE AT JUNCTION BOX. FACELESS GFCI TO SERVE VENDING MACHINE/REFRIGERATOR IN BREAK ROOM.
- 8 PROVIDE JUNCTION BOX FOR TEMPERATURE CONTROLS.
- 9 PROVIDE JUNCTION BOXES FOR MOTORIZED SHADES.
- (10) PROVIDE TOGGLE SWITCH FOR CONTROL OF MOTORIZED SHADES.

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BUILDING PERMIT DOCUMENTS

BOULDER COUNTY DETENTION

CENTER PHASE 1 -

ADMINISTRATION ADDITION

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BOULDER, COLORADO

ARCHITECTURE

REILLY JOHNSON ARCHITECTURE

1775 SHERMAN STREET, SUITE 2550 DENVER, CO 80203

JENVE. 5, _ (303) 832-9111 ○ FAX (303) 832-9135

STRUCTURAL ENGINEER

MARTIN/ MARTIN
CONSULTING ENGINEERS

(303) 431-6100 FAX (303) 431-6866

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MECHANICAL/ ELECTRICAL/ PLUMBING ENGINEER BČER ENGINEERING, INC.

5420 WARD ROAD, STE. 200 ARVADA, CO 80002

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CIVIL ENGINEER DREXEL, BARRELL, & CO.

BOULDER, CO 80301

(303) 442-4338 FAX (303) 442-4373

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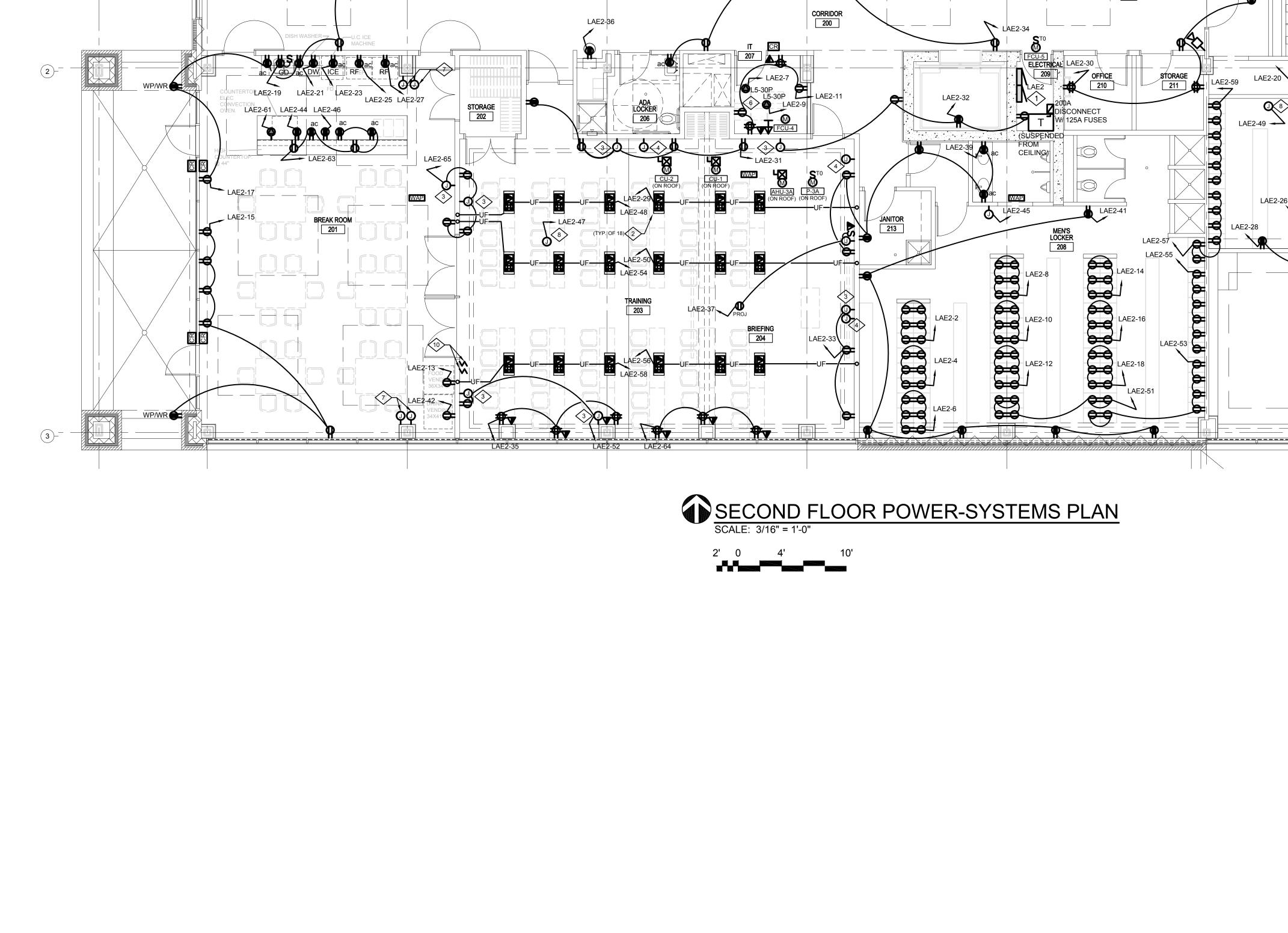
POWER-SYSTEMS PLAN DATE: JANUARY 4, 2019

SCALE: 3/16" = 1'-0" 0 0 0 0

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Key Plan



BOULDER, COLORADO

MECHANICAL/ ELECTRICAL/ PLUMBING ENGINEER

BCER ENGINEERING, INC.

5420 WARD ROAD, STE. 200

ARVADA, CO 80002

(303) 422-7400

CIVIL ENGINEER

DREXEL, BARRELL, & CO.

1800 38TH ST.

BOULDER, CO 80301

(303) 442-4338

FAX (303) 442-4373

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No. Revision Description Date

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3 MINOR MOD/TECH DOC MODIFICATIONS 1/4/19

BCER NGINEERING | TECHNOLOGY | LIFE SAFETY

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REILLY JOHNSON ARCHITECTURE

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DEMOLITION PLAN .

DATE: JANUARY 4, 2019

DATE: JANUARY 4, 2019

SCALE: 3/16" = 1'-0"

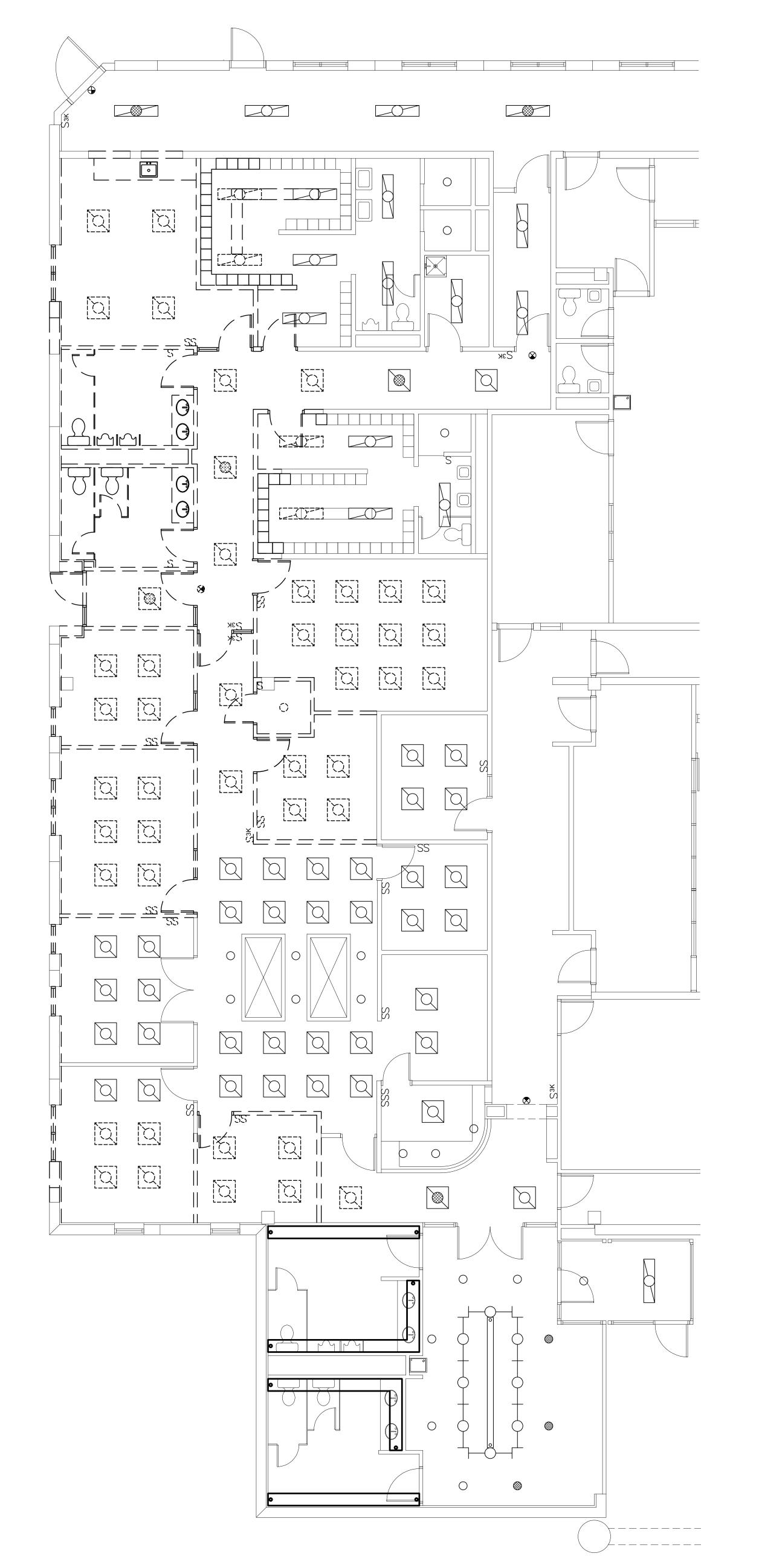
Key Plan

OWNERSHIP OF DOCUMENTS:
ALL DRAWINGS, SPECIFICATIONS AND OTHER WORK PRODUCT OF THE ENGINEER FOR THIS PROJECT ARE INSTRUMENTS OF SERVICE FOR THIS PROJECT ONLY AND SHALL REMAIN THE PROPERTY OF THE ENGINEER WHETHER THE PROJECT IS COMPLETED OR NOT. REUSE OF ANY OF THE INSTRUMENTS OF SERVICE OF THE ENGINEER BY THE OWNER OF EXTENSIONS OF THIS PROJECT WITHOUT WRITTEN PERMISSION OF THE ENGINEER SHALL BE AT THE OWNER'S RISK AND THE OWNER AGREES TO DEFEND, INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, AND EXPENSES INCLUDING ATTORNEYS' FEES ARISING OUT OF UNAUTHORIZED REUSE OF THE ENGINEER'S INSTRUMENTS OF SERVICE BY THE OWNER OR BY OTHERS ACTING THROUGH THE OWNER.

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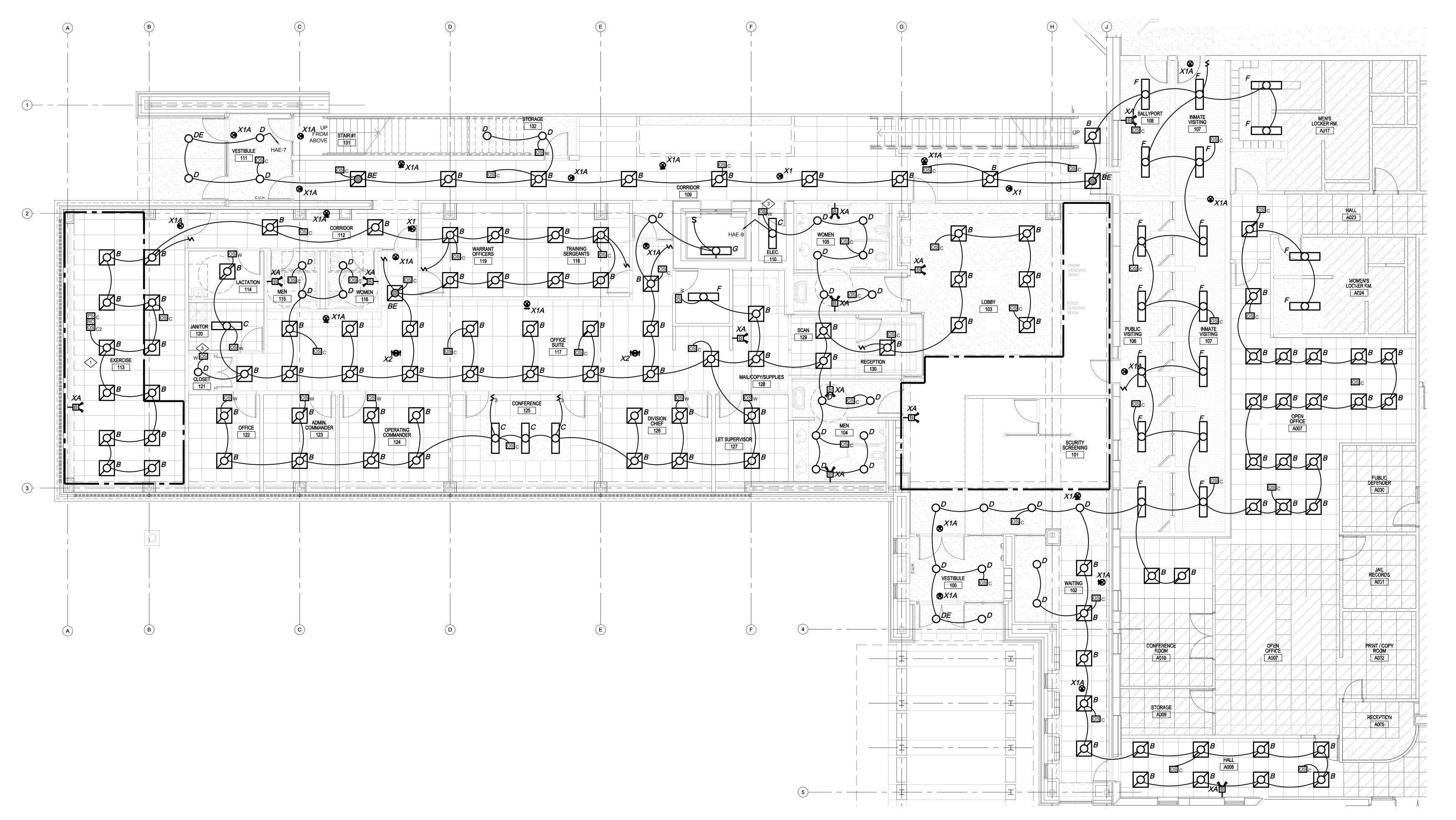


PROVIDE ELECTRICAL REMOVAL OF ALL EQUIPMENT, GEAR, DEVICES, CONDUIT, AND WIRING WITHIN THE SCOPE OF WORK. ALL CONDUIT AND WIRING TO BE REMOVED BACK TO SOURCE.

THE OWNER SHALL BE GIVEN THE OPPORTUNITY TO MAINTAIN POSSESSION OF ANY ELECTRICAL GEAR, DEVICES, PARTS, OR LUMINAIRES. ANYTHING REJECTED BY THE OWNER SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND DISPOSED OF IN A LEGAL MANNER.

LIGHTING DEMOLITION PLAN
SCALE: 3/16" = 1'-0"

2' 0 4' 10'



FIRST FLOOR LIGHTING PLAN
SCALE: 3/16" = 1'-0"

GENERAL NOTES

LIGHT TEXT AND LIGHT LINES INDICATE EXISTING. DARK TEXT AND SOLID LINES INDICATE NEW WORK.

- EACH BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL. SHARED NEUTRALS ARE NOT PERMITTED IN MULTIPLE CIRCUIT HOMERUNS.
- REFER TO ARCHITECTURAL ELEVATIONS FOR DEVICE MOUNTING HEIGHTS AND LOCATIONS.
- CONNECT EXIT SIGNS, DUAL-HEADED EM LIGHTS, AND EMERGENCY DOWNLIGHTS TO AREA LIGHTING CIRCUIT AHEAD OF SWITCH LEG, UNLESS OTHERWISE NOTED.
- ALL LOW VOLTAGE SWITCHES TO INCLUDE DIMMING CAPABILITIES. COMPLY WITH COBECC C405.2.1.2.
- ALL EXIT SIGNS LABELED 'X1A' OR 'X2A' SHALL BE 'X1' AND 'X2' LUMINAIRES WITH
- ADDITIONAL EMERGENCY FROG-EYES INCLUDED IN FIXTURE.
- . ALL 'XA' LUMINAIRES TO BE COMPASS CU2 LED EMERGENCY LIGHT OR APPROVED

WORK NOTES

- 1> PHOTOSENSOR TO CONTROL LIGHTING WITHIN FENESTRATION ZONE (INSIDE DASHED LINES) VIA ROOM CONTROLLER. ONE LOW VOLTAGE SWITCH TO CONTROL FENESTRATION ZONE LIGHTING, ONE LOW VOLTAGE SWITCH TO CONTROL ALL OTHER LIGHTING WITHIN ROOM.
- LIGHTING WITHIN DASHED LINE INDICATED ON DRAWING E3.2 SECOND FLOOR LIGHTING PLAN.
- 3 VACANCY SENSOR REQUIRING MANUAL ON/AUTO OFF ACTIVATION.

LIGHTING CONTROL LEGEND WATT STOPPER DSW-301-W DUAL TECHNOLOGY WALL

OCCUPANCY SENSOR.

WATT STOPPER DT-300-W DUAL TECHNOLOGY CEILING OCCUPANCY SENSOR WITH BZ-150 POWER

WATT STOPPER LMDC-100 DUAL TECHNOLOGY CEILING OCCUPANCY SENSOR.

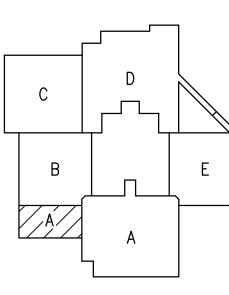
WATT STOPPER LMLS-400 SINGLE ZONE SWITCHING AND DIMMING CLOSED LOOP DIGITAL PHOTOSENSOR.

WATT STOPPER LMRC-212 DOUBLE RELAY 0-10V DIMMING ROOM CONTROLLER.

\$ WATT STOPPER LMDM-101 WALL-MOUNTED SINGLE

RELAY 0-10V DIMMER. NOTE: CONTRACTOR SHALL PROGRAM SENSORS TO BE

CONTROLLED MANUAL ON/AUTO OFF AND TIMED PER OWNER'S REQUIREMENTS AND 2017 COBECC REQUIREMENTS. RESTROOMS, PUBLIC CORRIDORS, STAIRWAYS, AND PRIMARY BUILDING ENTRANCE AREAS AND LOBBIES SHALL BE CONTROLLED AUTO ON/AUTO OFF.



OWNERSHIP OF DOCUMENTS:
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BUILDING PERMIT DOCUMENTS

COUNTY
DETENTION

BOULDER, COLORAD

DENVER, CO 80203 (303) 832-9111 FAX (303) 832-9135

> 12499 WEST COLFAX AV. CAKEWOOD, CO 80215 (303) 431-6100 FAX (303) 431-6866

0 0 0 0 °ARVADA, CO 80002

(303) 422-7400 1800 38TH ST. BOULDER, CO 80301

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FAX (303) 442-4373

ENGINEERING | TECHNOLOGY | LIFE SAFETY

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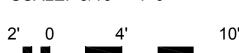
FIRST FLOOR 。 LĮGHTING PLĄN 。

DATE: JANUARY 4, 2019 SCALE: 3/16" = 1'-0"

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SECOND FLOOR LIGHTING PLAN



GENERAL NOTES

LIGHT TEXT AND LIGHT LINES INDICATE EXISTING. DARK TEXT AND SOLID LINES INDICATE NEW WORK.

- EACH BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL. SHARED NEUTRALS ARE NOT PERMITTED IN MULTIPLE CIRCUIT HOMERUNS.
- REFER TO ARCHITECTURAL ELEVATIONS FOR DEVICE MOUNTING HEIGHTS AND LOCATIONS.
- CONNECT EXIT SIGNS, DUAL-HEADED EM LIGHTS, AND EMERGENCY DOWNLIGHTS TO AREA LIGHTING CIRCUIT AHEAD OF SWITCH LEG, UNLESS OTHERWISE NOTED.
- ALL LOW VOLTAGE SWITCHES TO INCLUDE DIMMING CAPABILITIES. COMPLY WITH COBECC C405.2.1.2. ALL EXIT SIGNS LABELED 'X1A' OR 'X2A' SHALL BE 'X1' AND 'X2' LUMINAIRES WITH
- ADDITIONAL EMERGENCY FROG-EYES INCLUDED IN FIXTURE. ALL 'XA' LUMINAIRES TO BE COMPASS CU2 LED EMERGENCY LIGHT OR APPROVED

WORK NOTES

- PHOTOSENSOR TO CONTROL LIGHTING WITHIN FENESTRATION ZONE (INSIDE) DASHED LINES) VIA ROOM CONTROLLER. ONE LOW VOLTAGE SWITCH TO CONTROL FENESTRATION ZONE LIGHTING, ONE LOW VOLTAGE SWITCH TO CONTROL ALL OTHER LIGHTING WITHIN ROOM.
- 2 LIGHTING WITHIN DASHED LINE SERVES SPACE BELOW. CONTROL VIA TIMECLOCK IN ELECTRICAL ROOM, 209.
- (3) FESTOON LIGHTING (TYPE L ON LUMINAIRE SCHEDULE). INSTALL STRING LIGHTS AND HANG ALONG EDGES OF SAILS (SEE ARCHITECTURAL PLANS FOR MORE INFORMATION). ALL FESTOON LIGHTING CONTROLLED VIA DIMMER INSIDE PATIO
- 4> VACANCY SENSOR REQUIRING MANUAL ON/AUTO OFF ACTIVATION.

LIGHTING CONTROL LEGEND

WATT STOPPER DSW-301-W DUAL TECHNOLOGY WALL OCCUPANCY SENSOR.

WATT STOPPER DT-300-W DUAL TECHNOLOGY CEILING OCCUPANCY SENSOR WITH BZ-150 POWER

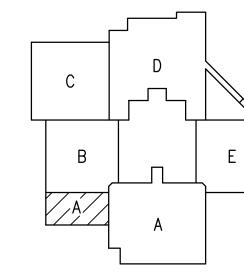
WATT STOPPER LMDC-100 DUAL TECHNOLOGY CEILING OCCUPANCY SENSOR.

WATT STOPPER LMLS-400 SINGLE ZONE SWITCHING AND DIMMING CLOSED LOOP DIGITAL PHOTOSENSOR. WATT STOPPER LMRC-212 DOUBLE RELAY 0-10V

DIMMING ROOM CONTROLLER.

WATT STOPPER LMDM-101 WALL-MOUNTED SINGLE RELAY 0-10V DIMMER.

NOTE: CONTRACTOR SHALL PROGRAM SENSORS TO BE CONTROLLED MANUAL ON/AUTO OFF AND TIMED PER OWNER'S REQUIREMENTS AND 2017 COBECC REQUIREMENTS. RESTROOMS, PUBLIC CORRIDORS, STAIRWAYS, AND PRIMARY BUILDING ENTRANCE AREAS AND LOBBIES SHALL BE CONTROLLED AUTO ON/AUTO OFF.



Key Plan

BUILDING PERMIT DOCUMENTS

BOULDER COUNTY DETENTION

CENTER PHASE 1 -

ADMINISTRATION ADDITION

BOULDER, COLORADO

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ARCHITECTURE
REILLY JOHNSON ARCHITECTURE 1775 SHERMAN STREET, SUITE 2550

DENVER, CO 80203 (303) 832-9111 FAX (303) 832-9135

STRUCTURAL ENGINEER

MARTIN/ MARTIN CONSULTING ENGINEERS

(303) 431-6100 FAX (303) 431-6866

0 0 0 0 MECHANICAL/ ELECTRICAL/ PLUMBING ENGINEER BEER ENGINEERING, ÎNC.

5420 WARD ROAD, STE. 200 ARVADA, CO 80002 (303) 422-7400

0 0 0 0 CIVIL ENGINEER DREXEL, BARRELL, & CO.

BOULDER, CO 80301 (303) 442-4338 FAX (303) 442-4373

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SECOND FLOOR 。 LIGHTING PLAN 。

DATE: JANUARY 4, 2019 SCALE: 3/16" = 1'-0"

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	Analog Devices											
	Manufacturer Part #	Туре	Quantity	Voltage	Mounting							
PP ₅	BZ-50	Power Pack	1	120/277VAC	J-Box							
S _{D1}	DSW-301-W	Dual Tech. Wallbox Sensor, 1-Relay	11	120/277VAC	Wallbox							
S _{D3}	DW-311-W	Dual Tech. Wallbox Sensor, 1-Relay 0-10V Dimming	5	120/277VAC	Wallbox							
TS	TS-400-W	Digital Time Switch	1	120/277VAC	Wallbox							

	Digital Lighting Management Manufacturer Part # Type Quantity Voltage Mounting								
	Manufacturer Part #	Туре	Quantity	Voltage	Mounting				
BC	LMBC-300	DLM Network Bridge	1	24VDC	Din Rail				
S	LMDC-100	DLM Dual Tech. Ceiling Sensor	63	24VDC	Ceiling				
LVD	LMDM-101-W	DLM Low Voltage Dimming Switch, 1-Button/Paddle	21	24VDC	Wallbox				
DS ₁	LMLS-400-L	DLM Single Zone Closed Loop Photocell	8	24VDC	Ceiling				
M ₁	LMLS-MB1	LMLS Photocell mounting bracket, J-Box Mount	1	UNIV.	J-Box				
LV	LMPS-104-W-U	DLM Low Voltage Partition Switch, 4-Button	1	24VDC	Wallbox				
LCM _{S1}	LMRC-101	DLM Room Controller, 1-Zone, Switching	12	120/277VAC	J-Box				
LCM _{C1}	LMRC-111	DLM Room Controller, 1-Zone, Dimming, Compact 10A	6	120/277VAC	J-Box				
LCM _{C2}	LMRC-112	DLM Room Controller, 2-Zone, Dimming, Compact 10A	6	120/277VAC	J-Box				
LCM _{D1}	LMRC-211	DLM Room Controller, 1-Zone, Dimming	2	120/277VAC	J-Box				
(LV) ₁	LMSW-101-W	DLM Low Voltage Momentary Switch, 1-Button	15	24VDC	Wallbox				

FIRST FLOOR LIGHTING PLAN
SCALE: 3/16" = 1'-0"

2' 0 4' 10

1.	LIGHT TEXT AND LIGHT LINES INDICATE EXISTING. DARK TEXT AND SOLID LIINDICATE NEW WORK.

2. EACH BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL. SHARED NEUTRALS ARE NOT PERMITTED IN MULTIPLE CIRCUIT HOMERUNS.

REFER TO ARCHITECTURAL ELEVATIONS FOR DEVICE MOUNTING HEIGHTS AND LOCATIONS.

CONNECT EXIT SIGNS, DUAL-HEADED EM LIGHTS, AND EMERGENCY DOWNLIGHTS TO AREA LIGHTING CIRCUIT AHEAD OF SWITCH LEG, UNLESS OTHERWISE NOTED.

ALL LOW VOLTAGE SWITCHES TO INCLUDE DIMMING CAPABILITIES. COMPLY WITH COBECC C405.2.1.2.

WORK NOTES

PHOTOSENSOR TO CONTROL LIGHTING WITHIN FENESTRATION ZONE (INSIDE DASHED LINES) VIA ROOM CONTROLLER. ONE LOW VOLTAGE SWITCH TO CONTROL FENESTRATION ZONE LIGHTING, ONE LOW VOLTAGE SWITCH TO CONTROL ALL OTHER LIGHTING WITHIN ROOM.

LIGHTING WITHIN DASHED LINE INDICATED ON DRAWING E3.2 SECOND FLOOR LIGHTING PLAN.

3 VACANCY SENSOR REQUIRING MANUAL ON/AUTO OFF ACTIVATION.

LIGHTING CONTROL LEGEND

WATT STOPPER DSW-301-W DUAL TECHNOLOGY WALL OCCUPANCY SENSOR.

C CEILING OCCUPANCY SENSOR WITH BZ-150 POWER

OS WATT STOPPER LMDC-100 DUAL TECHNOLOGY CEILING OCCUPANCY SENSOR.

AND DIMMING CLOSED LOOP DIGITAL PHOTOSENSOR.

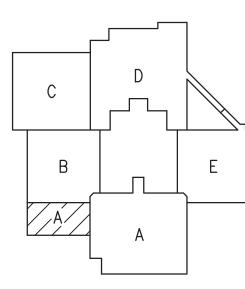
WATT STOPPER LMLS-400 SINGLE ZONE SWITCHING

WATT STOPPER LMRC-212 DOUBLE RELAY 0-10V DIMMING ROOM CONTROLLER.

BE CONTROLLED AUTO ON/AUTO OFF.

WATT STOPPER LMDM-101 WALL-MOUNTED SINGLE RELAY 0-10V DIMMER.

NOTE: CONTRACTOR SHALL PROGRAM SENSORS TO BE
CONTROLLED MANUAL ON/AUTO OFF AND TIMED
PER OWNER'S REQUIREMENTS AND 2017
COBECC REQUIREMENTS. RESTROOMS, PUBLIC
CORRIDORS, STAIRWAYS, AND PRIMARY
BUILDING ENTRANCE AREAS AND LOBBIES SHALL



Not in this scope

Key Plan

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BUILDING PERMIT

BOULDER
COUNTY

DETENTION
CENTER
PHASE 1-

BOULDER, COLOR

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ARCHITECTURE
REILLY JOHNSON ARCHITECTURE

1775 SHERMAN STREET, SUITE 2550
DENVER, CO 80203
(303) 832-9111
FAX (303) 832-9135

STRUCTURAL ENGINEER

MARTIN/ MARTIN

CONSULTING ENGINEERS

12499 WEST COLFAX AV.

LAKEWOOD, CO 80215

(303) 431-6100

FAX (303) 431-6866

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ARVADA, CO 80002

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DREXEL, BARRELL, & CO.

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BOULDER, CO 80301

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No. Revision Description Date
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BCER

ENGINEERING | TECHNOLOGY | LIFE SAFETY



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FIRST FLOOR
LIGHTING PLAN

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DATE: JANUARY 4, 2019

SCALE: 3/16" = 1'-0"

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	Analog Devices											
	Manufacturer Part #	Туре	Quantity	Voltage	Mounting							
PP ₅	BZ-50	Power Pack	1	120/277VAC	J-Box							
S _{D1}	DSW-301-W	Dual Tech. Wallbox Sensor, 1-Relay	11	120/277VAC	Wallbox							
S _{D3}	DW-311-W	Dual Tech. Wallbox Sensor, 1-Relay 0-10V Dimming	5	120/277VAC	Wallbox							
TS	TS-400-W	Digital Time Switch	1	120/277VAC	Wallbox							

Digital Lighting Management									
	Manufacturer Part #		Quantity	Voltage	Mounting				
BC	LMBC-300	DLM Network Bridge	1	24VDC	Din Rail				
SDC	LMDC-100	DLM Dual Tech. Ceiling Sensor	63	24VDC	Ceiling				
LV _D	LMDM-101-W	DLM Low Voltage Dimming Switch, 1-Button/Paddle	21	24VDC	Wallbox				
DS ₁	LMLS-400-L	DLM Single Zone Closed Loop Photocell	8	24VDC	Ceiling				
M ₁	LMLS-MB1	LMLS Photocell mounting bracket, J-Box Mount	1	UNIV.	J-Box				
LV _P	LMPS-104-W-U	DLM Low Voltage Partition Switch, 4-Button	1	24VDC	Wallbox				
LCM _{S1}	LMRC-101	DLM Room Controller, 1-Zone, Switching	12	120/277VAC	J-Box				
CM _{C1}	LMRC-111	DLM Room Controller, 1-Zone, Dimming, Compact 10A	6	120/277VAC	J-Box				
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LCM _{D1}	LMRC-211	DLM Room Controller, 1-Zone, Dimming	2	120/277VAC	J-Box				
(LV)	LMSW-101-W	DLM Low Voltage Momentary Switch, 1-Button	15	24VDC	Wallbox				

SECOND FLOOR LIGHTING PLAN SCALE: 3/16" = 1'-0"



GENERAL NOTES

LIGHT TEXT AND LIGHT LINES INDICATE EXISTING. DARK TEXT AND SOLID LINES INDICATE NEW WORK.

EACH BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL. SHARED NEUTRALS

REFER TO ARCHITECTURAL ELEVATIONS FOR DEVICE MOUNTING HEIGHTS AND

LOCATIONS.

WORK NOTES

CONTROL ALL OTHER LIGHTING WITHIN ROOM.

4> VACANCY SENSOR REQUIRING MANUAL ON/AUTO OFF ACTIVATION.

LIGHTING CONTROL LEGEND

OCCUPANCY SENSOR.

WATT STOPPER LMDC-100 DUAL TECHNOLOGY CEILING OCCUPANCY SENSOR.

AND DIMMING CLOSED LOOP DIGITAL PHOTOSENSOR.

WATT STOPPER LMDM-101 WALL-MOUNTED SINGLE RELAY 0-10V DIMMER.

DIMMING ROOM CONTROLLER.

CONTROLLED MANUAL ON/AUTO OFF AND TIMED PER OWNER'S REQUIREMENTS AND 2017 COBECC REQUIREMENTS. RESTROOMS, PUBLIC CORRIDORS, STAIRWAYS, AND PRIMARY BUILDING ENTRANCE AREAS AND LOBBIES SHALL

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(1) PHOTOSENSOR TO CONTROL LIGHTING WITHIN FENESTRATION ZONE (INSIDE DASHED LINES) VIA ROOM CONTROLLER. ONE LOW VOLTAGE SWITCH TO CONTROL FENESTRATION ZONE LIGHTING, ONE LOW VOLTAGE SWITCH TO

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2 LIGHTING WITHIN DASHED LINE SERVES SPACE BELOW. CONTROL VIA TIMECLOCK IN ELECTRICAL ROOM, 209.

(3) FESTOON LIGHTING (TYPE L ON LUMINAIRE SCHEDULE). INSTALL STRING LIGHTS AND HANG ALONG EDGES OF SAILS (SEE ARCHITECTURAL PLANS FOR MORE INFORMATION). ALL FESTOON LIGHTING CONTROLLED VIA DIMMER INSIDE PATIO

WATT STOPPER DSW-301-W DUAL TECHNOLOGY WALL

WATT STOPPER DT-300-W DUAL TECHNOLOGY CEILING OCCUPANCY SENSOR WITH BZ-150 POWER

WATT STOPPER LMLS-400 SINGLE ZONE SWITCHING

WATT STOPPER LMRC-212 DOUBLE RELAY 0-10V

NOTE: CONTRACTOR SHALL PROGRAM SENSORS TO BE BE CONTROLLED AUTO ON/AUTO OFF.

BOULDER
COUNTY
DETENTION

BUILDING PERMIT

DOCUMENTS

CENTER PHASE 1 -

ADMINISTRATION ADDITION

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BOULDER, COLORADO

ARCHITECTURE

REILLÝ JOHNSON ARCHITECTURE

1775 SHERMAN STREET, SUITE 2550 DENVER, CO 80203

(303) 832-9111 • FAX (303) 832-9135

0 0 0 0 0

STRUCTURAL ENGINEER

12499 WEST COLFAX AV.

LAKEWOOD, CO 80215

(303) 431-6100 FAX (303) 431-6866

0 0 0 0 MECHANICAL/ ELECTRICAL/

PLUMBING ENGINEER

BEER ENGINEERING, INC.

5420 WARD ROAD, STE. 200 ARVADA, CO 80002 (303) 422-7400

0 0 0 0 CIVIL ENGINEER

DREXEL, BARRELL, & CO.

1800 38TH ST. BOULDER, CO 80301

(303) 442-4338 • FAX (303) 442-4373 o o o o o o o No. Revision Description Date

1 ADDENDUM 1 9/18/18

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DRAWING TITLE 0 0 0 0 SECOND FLOOR

。 LĮGHTIŊG PLĄN 。 DATE: JANUARY 4, 2019

SCALE: 3/16" = 1'-0" 0 0 0 0

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Quick Start Guide for Entities Interested in Being Eligible for Grants

How to register your entity to be eligible for GRANTS in SAM:

Before you register, you need to know the following:



What is an Entity?

In SAM, your company/business/organization is now referred to as an "Entity."

- REGISTERING IN SAM IS FREE.
- If you were registered in CCR, your company's information is already in SAM. You just need to set up a SAM account. See the "Migrating Roles" Quick Start Guide.



Your Entity's DUNS Number

You need a DUNS to register your entity in SAM.

- If you do not have a DUNS number, you can request a DUNS number for free by visiting D&B at http://fedgov.dnb.com/webform
- It takes 1-2 business days to obtain a DUNS.



Your Entity's Taxpayer Identification Number (TIN)

You need your entity's Tax ID Number (TIN) and taxpayer name (as it appears on your last tax return). Foreign entities that do not pay employees within the U.S. do not need to provide a TIN.

- A TIN is an Employer Identification Number (EIN) assigned by the Internal Revenue Service (IRS).
- Sole proprietors may use their Social Security Number (SSN)
 assigned by the Social Security Administration (SSA) if they do not
 have a TIN, but please be advised it will not be treated as privacy act
 data in SAM.
- To obtain an EIN visit: <u>www.irs.gov/businesses/small/article/0,,id=102767,00.html</u>
- Activating a new EIN with the IRS takes 2-5 weeks.

Steps For Registering Your Entity in SAM

- 1. Go to www.sam.gov
- Create a Personal Account and Login
- Click "Register New Entity" under "Manage Entity" on your "My SAM" page
- 4. Select your type of Entity
- 5. Select "No" to "Do you wish to bid on contracts?"
- 6. Select "Yes" to "Do you want to be eligible for grants and other federal assistance?"
- 7. Complete "Core Data"
 - ✓ Validate your DUNS information
 - Enter Business Information (TIN, etc.)
 - Enter CAGE code if you have one. If not, one will be assigned to you after your registration is completed. Foreign registrants must enter NCAGE code.
 - Enter General Information (business types, organization structure, etc)
 - ✓ Financial Information (Electronic Funds Transfer (EFT)Information)
 - ✓ Executive Compensation
 - ✓ Proceedings Details
- 8. Complete "Points of Contact"
- 9. Your entity registration will become active after 3-5 days when the IRS validates your TIN information.

How do I get more information? Take a look at the SAM User Guide. <



Go to Our Website: www.sam.gov



Contact the SAM Help Desk: www.fsd.gov

