



ETC Engineers & Architects, Inc.

ENGINEERS ■ ARCHITECTS ■ PLANNERS

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ADDENDUM NO.1 TO CONSTRUCTION DOCUMENTS

FARMERS MARKET
CITY OF PARAGOULD

September 8, 2021

Notice is hereby given to bidders that this addendum is issued to make changes to the contract documents, construction drawings, and construction specifications. The following changes shall be made to the contract documents, construction drawings, and construction specifications by the Contractor.

1. PROJECT MANUAL:

- A. Add Specification 00 73 00 – SUPPLEMENTARY CONDITIONS (ATTACH. A)
- B. Add Specification 08700 – HARDWARE SCHEDULE (ATTACH. B)

2. DRAWINGS:

- A. Building Code Data Notes Added. (ATTACH. C).
- B. FILLER WALL DETAIL ADD. 1 – See attached detail for filler wall section at Women's Restroom 102 and Men's Restroom 103. (ATTACH D).
- C. ELECTRICAL:
 - 1. Refer to drawing sheet E1.01 (ATTACH E):
 - a. Added PLWC transformer and secondary location.
 - 2. Refer to drawing sheet E1.02 (ATTACH F):
 - a. Market Section - Delete fixtures T2 and T3 on the lower truss chords.
 - b. The Tape Light - T1, T4 and T5 should be on the same circuit at the security lights "H".

BUILDING A BETTER WORLD

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- c. Make every effort to hide conduits. Run conduits on top of truss members whenever possible. At the "A" type fixtures, install a small junction box at the end of the fixture to minimize the length of yellow cord that is exposed. Then run a small conduit up to a box on the top of the truss member.
- d. Add 0-10V dimming to "A" fixtures.
- e. See specifications for "T" fixtures in "Notes" at the end of the fixture schedule.
3. See revisions to the fixture table.
4. Add occupancy sensors to the three (3) restrooms - Leviton ODC04-IDW.

END OF ADDENDUM 1

BUILDING A BETTER WORLD

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SECTION 00 73 00

SUPPLEMENTARY CONDITIONS

PART 1 - GENERAL

1.01 REFERENCE DOCUMENT

- A. These Supplementary Conditions are included as a part of the contract documents for this project to amend the provisions of the "General Conditions of the Contract for Construction", Document A201 of the American Institute of Architects, 2017 Edition, as required for this project. Reference herein to articles of the General Conditions refer to said Document A201.

1.02 PARAGRAPH 3.3 SUPERVISION AND CONSTRUCTION PROCEDURES

- A. Add subparagraph 3.3.4 as follows:

3.3.4 Contractor (1) shall review any specified construction or installation procedure (including those recommended by manufacturers); (2) shall advise the Architect (a) if the specified procedure deviates from good construction practice, (b) if following the procedure will affect any warranties, including the Contractor's general warranty, or (c) of any objections the contractor may have to the procedure; and (3) to propose any alternative procedure which the Contractor will warrant."

1.03 PARAGRAPH 3.4 LABOR AND MATERIALS

- A. Add Subparagraphs 3.4.4 and 3.4.5 as follows:

3.4.4 All contractors and subcontractors engaged in the Owner/Contractor Agreement shall conform to the labor laws of the State in which Work is to be performed and the various acts amendatory and supplementary thereto; and to all other laws, ordinances and legal requirements applicable thereto."

1.04 PARAGRAPH 3.5 WARRANTY

- A. Add subparagraph 3.5.3 as follows:

3.5.3 The Contractor shall guarantee and warrant his and his subcontractor's work and materials (including the materials and work of suppliers of the Contract and his subcontractors) for a period of one year from the date of Substantial Completion. This Warranty shall be for a longer period on certain items if so designated in the Specifications. The foregoing one-year guaranty and warranty shall not in any way limit, restrict or affect the liability of the Contractor, or his subcontractors, for indemnity as provided for in this Contract, nor shall it in any way shorten the period of limitation fixed by law for the filing of any action against the Contractor for enforcement of the or breach of any provision of the contract documents. Should the Contractor elect to use any of the equipment in the building during the construction period, he shall make arrangements with the subcontractor or supplier of the equipment for any

extension of warranty of that equipment made necessary by such use. The Warranty period for such equipment to the Owner shall not be reduced by the use of equipment by the Contractor".

1.05 PARAGRAPH 3.12 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

- A. Add the following to subparagraph 3.12.5.1:

3.12.5.1 Incomplete or poorly prepared shop drawings or other submittals will be returned to the Contractor to be revised or redrawn prior to resubmittal. The Contractor will hold the Architect and Owner harmless against claims for losses or injury caused by errors or omissions in the shop drawings or other submittals for the Work made by the Contractor, a subcontractor, any lower tier subcontractor, manufacturer, supplier or distributor."

- B. Delete subparagraph 3.12.8 and substitute the following:

3.12.8 The Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples or similar submittals unless the Contractor has specifically informed the Architect of such deviations in a separate writing or by submitting a separate written request for change at the time of submittal and the Architect has given written approval to the specific deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples or similar submittals by the Architect's approval thereof."

1.06 PARAGRAPH 4.2 ARCHITECT'S ADMINISTRATION OF THE CONTRACT

- A. Add sub-subparagraph 4.2.4.1 as follows:

4.2.4.1 Any direct communications between the Owner and the Contractor; or between the Contractor or Sub-contractors and the Architect's Consulting Engineers that affect the performance or administration of the Contract shall be made or confirmed in writing, with copies to the Architect, and any such communications that represent a modification of the Contract requirements will be documented appropriately. Any communications among the Architect and Subcontractors shall be confirmed in writing to the Contractor."

1.07 PARAGRAPH 7.2 CHANGE ORDERS

- A. Delete subparagraph 7.2.1 and substitute the following:

7.2.1 All requests for changes, additions or deductions, shall be submitted in a complete itemized breakdown acceptable to the Architect.

7.2.2 Wherein unit prices are stated in the contract, submit itemized break down showing each unit price and it quantities.

7.2.3 The contractor shall present an itemized accounting together with appropriate supporting data for the purposes of considering additions or deductions. Supporting data shall include but is not limited to the following:

- .1 costs of labor, including social security, old age and unemployment insurance, fringe benefits required by agreement or custom, and worker or workmen's compensation insurance;
- .2 costs of materials, supplies and equipment, including cost of transportation, whether incorporated or consumed;
- .3 rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others;
- .4 costs of premiums for all bonds and insurance, permit fees, and sales, use or similar taxes related to the Work; and
- .5 additional costs of supervision and field office personnel directly attributable to the change.
- .6 the value of all such additions and deductions shall then be computed as set forth in Paragraph 7.2.5.

7.2.4 The burden of proof of cost rests upon the Contractor. Contractor agrees that Owner or Owner's Representative shall have the right, at reasonable times, to inspect and audit the books and records of Contractor to verify the propriety and granting of such cost.

7.2.5 Compute requests for changes be they additions or deductions as follows:

- .1 For work performed by the Contractor:

Net cost of material and delivery	a
State Sales Tax	b
Net Placing cost	c
W.C. Insurance Premium and FICA Tax	d
	a+b+c+d
Overhead and Profit, shall not exceed	e
12% x (a+b+c+d)	
Allowable Bond Premium	f
TOTAL COST	a+b+c+d)+e+f
- .2 Credit for work omitted shall be computed as outlined in 7.2.5.1 "a through e" except the contractor's share of overhead and profit is 7%.
- .3 For work performed by Subcontractors:
Subcontractors shall compute their work as outlined in 7.2.5.1 "a through e".

To the cost of that portion of the work (change) that is performed by the subcontractor, the general contractor shall add an overhead and profit change of five (5%) percent plus the allowable bond premium.

1.08 PARAGRAPH 9.3 APPLICATIONS FOR PAYMENT

A. Delete subparagraph 9.3.1 and substitute the following:

9.3.1 The Contractor shall present to the Architect an application for payment on or before the twenty-fifth day of each calendar month. These periodical estimates for partial payment shall be submitted on forms, prepared at the Contractor's expense and conforming to AIA Document G702. An original and a requested number of copies of such estimate shall be tendered to the Architect."

1. Each application for payment shall be accompanied by a revised Construction Schedule. Failure to provide the revised Construction Schedule may cause a delay in processing payment applications. Any areas of the Construction Schedule that are delayed from the previous schedule shall be highlighted for the Architects attention and a detailed explanation of the reason for the delay shall accompany the revised schedule.
1. The contractor and each subcontractor shall keep an accurate record showing the names, addresses, social security numbers, occupations or work classifications, and hours worked of all workers employed by them in connection with the public works, and showing the actual wages paid to each of the workers.
2. Certified copies of these records shall be submitted with each and every Application for Payment.

1.09 PARAGRAPH 9.6 PROGRESS PAYMENTS

EDIT IF CMAR INVOLVED (Retainage references may conflict with Owner/CM Agreement and sub retainages as may be stated in Trade Packages)

A. Delete subparagraph 9.6.1 and substitute the following:

9.6.1 Retainage: No later than the 10th day of each calendar month, the Owner will make partial payment to the Contractor, but the Owner will retain 10% of the amount of each payment. Retaining 10% of each payment will continue until final completion and acceptance of all work covered by the contract. However, the Architect may upon approval by the Owner, at any time after 50% of the Contract Work has been completed and based on satisfactory workmanship, and progress has been attained, including written consent of surety, recommend that any of the remaining partial payments be stopped. The retainage will be paid to the Contractor after completion of the Contract for Construction and after the Contractor has submitted all Project Record Documents, Maintenance Manuals, Warranties and Guarantees (Close-Out Documents). No retainage shall be held on materials properly stored at the site or in the Contractor's bonded or insured warehouse if certificates of insurance or bond and invoices are provided."

9.6.1.1 Progress payments will be made for work completed or for materials delivered and properly stored, in accordance with subparagraph 9.6.1, through the Contracted Construction Period. No payments will be made after the Contracted Construction Period has expired until Final Payment,

unless an extension of the Contract Time has been granted. in which case, an additional progress payment will be made for work performed during the extension time period only."

1.10 PARAGRAPH 9.8 SUBSTANTIAL COMPLETION

A. Add the following sub-subparagraphs 9.8.3.1 thru 9.8.3.3 as follows:

- 9.8.3.1 If the Architect or any of the Architect's Consultants determines that the Work has still not reached Substantial Completion a second list of deficiencies will be issued to the Contractor.
- 9.8.3.2 Any additional inspections by the Architect or the Architect's Consultants to determine Substantial Completion will be considered additional services and will be billed directly to the Owner.
- 9.8.3.3 The Contractor will reimburse the Owner for expenses related to these additional services, or, the Owner may choose to withhold money from Progress Payment(s) or from retainage as reimbursement for additional services."

1.11 PARAGRAPH 9.10 FINAL COMPLETION AND FINAL PAYMENT

A. Add sub-subparagraphs 9.10.1.1 thru 9.10.1.4 as follows:

- 9.10.1.1 If the Architect or any of the Architect's Consultants determines that the Work has not reached Final Completion a list of deficiencies will be issued to the Contractor.
- 9.10.1.2 Any additional inspections by the Architect or the Architect's Consultants to determine Final Completion will be considered additional services and will be billed directly to the Owner.
- 9.10.1.3 The Contractor will reimburse the Owner for expenses related to these additional services, or, the Owner may choose to withhold money from Final Payment or from retainage as reimbursement for additional services.
- 9.10.1.4 Before issuance of the final certificate, the Contractor shall obtain in writing from the bonding company approval of such payment. No certificate issued nor payment made to the Contractor, nor partial or entire use or occupancy of the Contract Work by the Owner, shall be an acceptance of any work or materials not in accordance with this contract."
- 9.10.1.5 Final payment will not be made until all project closeout documents are received from the Contractor and a release from the Contractor's Surety Company is received.

1.12 PARAGRAPH 11.1 CONTRACTOR'S INSURANCE AND BONDS

A. Delete subparagraph 11.1.2 and substitute the following:

- 11.1.2 Coverages, whether written on an occurrence or claims-made basis, shall be maintained without interruption from date of commencement of the work until date of final payment and termination of any coverage required to be maintained after final payment. The insurance required shall be written for not less than the following, or greater if required by law:

- .1 Workers' Compensation:
 - (a) State: Statutory
 - (b) Applicable Federal: Statutory
 - (c) Employer's Liability: \$100,000 per accident; \$500,000 disease limit, policy; \$100,000 disease limit, individual
- .2 Commercial General Liability (including premises-operations); independent contractors protective; products and completed operations) as follows:

- (a) Coverage should apply at each work site. Limits required as follows:

- (1) General Aggregate \$2,000,000
- Products/Completed Operations
- Aggregate \$1,000,000
- Personal Injury & Advertising
- Injury \$1,000,000
- Each Occurrence \$1,000,000

FOLLOW TWO HIGHLIGHTED ITEMS NEED TO BE VERIFIED - DBA DOES NOT IDENTIFY

- Fire Damage-Legal Liability
- (any one fire) \$50,000
- \$1,000,000
- Medical Payments (any one person) \$10,000
- \$1,000,000

- (2) Products and Completed Operations to be maintained for one year after final payment.
- (3) Property Damage Liability Insurance will provide X, C, or U coverage as applicable.
- (b) Comprehensive General Liability. Coverage provided will be on the Comprehensive General Liability form with the Broad Form General Liability Endorsement. Limits provided as follows:

- (1) Combined Single Limit: \$1,000,000 each occurrence and aggregate
- (2) Products and Completed Operations to be maintained for one year after final payment.
- (3) Property Damage Liability Insurance will provide X, C, or U coverage as applicable.
- (4) Contractual Liability:
 - Bodily Injury: Combined Single Limit
 - Property Damage: \$1,000,000 Each Occurrence
- (5) Personal Injury, with Employment Exclusion deleted:
 - Combined Single Limit \$1,000,000 Each Occurrence
- (6) Bodily Injury and Property Damage (Combined Single Limit) (any auto, including Owned, Hired and Non-Owned Autos):
 - Bodily Injury: Combined Single Limit
 - Property Damage: \$1,000,000 Each Occurrence"

B. Add sub-subparagraph 11.1.2.1 as follows:

11.1.2.1 The performance-payment bond shall be in compliance

with the laws of the State in which the Work is to be performed and as stipulated in Document 00 61 13, Performance and Payment Bond, of these specifications."

- C. Add sub-subparagraphs 11.1.3.1 and 11.1.3.2 as follows:

11.1.3.1 The Contractor shall furnish one copy of each certificate of insurance herein required for each copy of the agreement which shall specifically set forth evidence of all coverage required by subparagraphs 11.1.1 and 11.1.2. Furnish to the Owner copies of any endorsements that are subsequently issued amending coverage of limits."

11.1.3.2 The Contractor shall not commence work under this contract until he has obtained all insurance with responsible insurance companies satisfactory to the Owner required under this article, and such insurance has been accepted by the Owner. Nothing in this article shall create any obligation on the part of the Architect to see that the specified insurance is maintained."

- D. Add subparagraph 11.1.5 as follows:

11.1.5 All Subcontractors shall be required to maintain contractors liability insurance the same as required to be maintained by the Prime Contractor as specified in 11.1.1 and the limits of liability shall be not less than those required to be maintained by the Prime Contractor unless their operations are covered to the specified limits by the insurance maintained by the Prime Contractor."

1.13 PARAGRAPH 11.2 OWNER'S INSURANCE

- A. Delete subparagraph 11.2.1 and substitute the following:

11.2.1 The Contractor shall procure and maintain during the term of this contract, Owner's Protective Liability Insurance with an endorsement to the policy to include as additional insured, the Architect, with limits not less than \$1,000,000 each occurrence and \$1,000,000 in the aggregate for property damage liability."

1.14 PARAGRAPH 11.2.3 PROPERTY INSURANCE

- A. In subparagraph 11.3.1, in the first line, change the word "Owner" to "Contractor".
B. In subparagraph 11.3.2, in the first line, change the word "Owner" to "Contractor".

1.15 PARAGRAPH 15.1 CLAIMS

- A. Refer to sub-paragraph 15.1.5, Claims for Additional Time and add the following sub-subparagraph 15.1.6.3 as follows:

15.1.6.3 In order for a claim for additional time due to adverse weather conditions to be considered valid, the Contractor must show that adverse weather conditions beyond those normally expected have occurred. For

claims related specifically to "Rain Days" the following table of normal rain days will be employed to determine if the Contractor is entitled to a time extension. A "Rain Day" is defined as a 24 hour period in which 1/100" (.01) of rain or more falls and is recorded by the National Weather Service or other official reporting service in the immediate vicinity of the project. Extensions of time will be granted if the number of officially reported "Rain Days" is greater than normal during a given month. Claims for additional time must be submitted with the Contractor's monthly payment application for review. Failure to make timely and proper request for additional time will result in no time extension being allowed.

Average Days with 1/100" of Precipitation or More: Central Arkansas

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
9	9	10	10	10	9	8	7	7	7	8	9

Average Days with 1/100" of Precipitation or More: Northwest Arkansas

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
8	8	9	10	11	9	7	7	7	7	7	7

Average Days with 1/100" of Precipitation or More: Northeast Arkansas

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
9	8	11	11	11	9	9	8	8	8	9	9

Average Days with 1/100" of Precipitation or More: Southern Arkansas

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
9	8	9	7	8	9	12	11	9	6	8	9

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF DOCUMENT 00 73 00

Farmers Market
Paragould, Arkansas

SECTION 08 71 00 – DOOR HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes:

- 1. Mechanical and electrified door hardware for:
 - a. Swinging doors.
 - b. Sliding doors.
 - c. Gates.
- 2. Electronic access control system components, including:
 - a. Biometric access control reader.
 - b. Electronic access control devices.
- 3. Field verification, preparation and modification of existing doors and frames to receive new door hardware.
- 4. Lead-lining door hardware items required for radiation protection at door openings.

B. Exclusions: Unless specifically listed in hardware sets, hardware is not specified in this section for:

- 1. Windows
- 2. Cabinets (casework), including locks in cabinets
- 3. Signage
- 4. Toilet accessories
- 5. Overhead doors

C. Related Sections:

- 1. Division 01 Section "Alternates" for alternates affecting this section.
- 2. Division 07 Section "Joint Sealants" for sealant requirements applicable to threshold installation specified in this section.
- 3. Division 09 sections for touchup finishing or refinishing of existing openings modified by this section.
- 4. Division 13 Section "Radiation Protection" for requirements for lead-lining for door hardware at openings indicated to receive radiation protection.
- 5. Division 26 sections for connections to electrical power system and for low-voltage wiring.
- 6. Division 28 sections for coordination with other components of electronic access control system.

1.3 REFERENCES

A. UL - Underwriters Laboratories

1. UL 10B - Fire Test of Door Assemblies
2. UL 10C - Positive Pressure Test of Fire Door Assemblies
3. UL 1784 - Air Leakage Tests of Door Assemblies
4. UL 305 - Panic Hardware

B. DHI - Door and Hardware Institute

1. Sequence and Format for the Hardware Schedule
2. Recommended Locations for Builders Hardware
3. Key Systems and Nomenclature

C. ANSI - American National Standards Institute

1. ANSI/BHMA A156.1 - A156.29, and ANSI/BHMA A156.31 - Standards for Hardware and Specialties

1.4 SUBMITTALS

A. General:

1. Submit in accordance with Conditions of Contract and Division 01 requirements.
2. Highlight, encircle, or otherwise specifically identify on submittals deviations from Contract Documents, issues of incompatibility or other issues which may detrimentally affect the Work.
3. Prior to forwarding submittal, comply with procedures for verifying existing door and frame compatibility for new hardware, as specified in PART 3, "EXAMINATION" article, herein.

B. Action Submittals:

1. Product Data: Product data including manufacturers' technical product data for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.
2. Riser and Wiring Diagrams: After final approval of hardware schedule, submit details of electrified door hardware, indicating:
 - a. Wiring Diagrams: For power, signal, and control wiring and including:
 - 1) Details of interface of electrified door hardware and building safety and security systems.
 - 2) Schematic diagram of systems that interface with electrified door hardware.
 - 3) Point-to-point wiring.
 - 4) Risers.
3. Samples for Verification: If requested by Architect, submit production sample or sample installations of each type of exposed hardware unit in finish indicated, and tagged with full description for coordination with schedule.
 - a. Samples will be returned to supplier in like-new condition. Units that are acceptable to Architect may, after final check of operations, be incorporated into Work, within limitations of key coordination requirements.

4. Door Hardware Schedule: Submit schedule with hardware sets in vertical format as illustrated by Sequence of Format for the Hardware Schedule as published by the Door and Hardware Institute. Indicate complete designations of each item required for each door or opening, include:
 - a. Door Index; include door number, heading number, and Architects hardware set number.
 - b. Opening Lock Function Spreadsheet: List locking device and function for each opening.
 - c. Type, style, function, size, and finish of each hardware item.
 - d. Name and manufacturer of each item.
 - e. Fastenings and other pertinent information.
 - f. Location of each hardware set cross-referenced to indications on Drawings.
 - g. Explanation of all abbreviations, symbols, and codes contained in schedule.
 - h. Mounting locations for hardware.
 - i. Door and frame sizes and materials.
 - j. Name and phone number for local manufacturer's representative for each product.
 - k. Operational Description of openings with any electrified hardware (locks, exits, electromagnetic locks, electric strikes, automatic operators, door position switches, magnetic holders or closer/holder units, and access control components). Operational description should include how door will operate on egress, ingress, and fire and smoke alarm connection.
 - 1) Submittal Sequence: Submit door hardware schedule concurrent with submissions of Product Data, Samples, and Shop Drawings. Coordinate submission of door hardware schedule with scheduling requirements of other work to facilitate fabrication of other work that is critical in Project construction schedule.
5. Key Schedule:
 - a. After Keying Conference, provide keying schedule listing levels of keying as well as explanation of key system's function, key symbols used and door numbers controlled.
 - b. Use ANSI/BHMA A156.28 "Recommended Practices for Keying Systems" as guideline for nomenclature, definitions, and approach for selecting optimal keying system.
 - c. Provide 3 copies of keying schedule for review prepared and detailed in accordance with referenced DHI publication. Include schematic keying diagram and index each key to unique door designations.
 - d. Index keying schedule by door number, keyset, hardware heading number, cross keying instructions, and special key stamping instructions.
 - e. Provide one complete bitting list of key cuts and one key system schematic illustrating system usage and expansion.
 - 1) Forward bitting list, key cuts and key system schematic directly to Owner, by means as directed by Owner.
 - f. Prepare key schedule by or under supervision of supplier, detailing Owner's final keying instructions for locks.
6. Templates: After final approval of hardware schedule, provide templates for doors, frames and other work specified to be factory prepared for door hardware installation.

C. Informational Submittals:

1. Qualification Data: For Supplier, Installer and Architectural Hardware Consultant.
2. Product Certificates for electrified door hardware, signed by manufacturer:

- a. Certify that door hardware approved for use on types and sizes of labeled fire-rated doors complies with listed fire-rated door assemblies.
3. Certificates of Compliance:
 - a. Certificates of compliance for fire-rated hardware and installation instructions if requested by Architect or Authority Having Jurisdiction.
 - b. Installer Training Meeting Certification: Letter of compliance, signed by Contractor, attesting to completion of installer training meeting specified in "QUALITY ASSURANCE" article, herein.
 - c. Electrified Hardware Coordination Conference Certification: Letter of compliance, signed by Contractor, attesting to completion of electrified hardware coordination conference, specified in "QUALITY ASSURANCE" article, herein.
4. Product Test Reports: For compliance with accessibility requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by qualified testing agency, for door hardware on doors located in accessible routes.
5. Warranty: Special warranty specified in this Section.

D. Closeout Submittals:

1. Operations and Maintenance Data : Provide in accordance with Division 01 and include:
 - a. Complete information on care, maintenance, and adjustment; data on repair and replacement parts, and information on preservation of finishes.
 - b. Catalog pages for each product.
 - c. Name, address, and phone number of local representative for each manufacturer.
 - d. Parts list for each product.
 - e. Final approved hardware schedule, edited to reflect conditions as-installed.
 - f. Final keying schedule
 - g. Copies of floor plans with keying nomenclature
 - h. As-installed wiring diagrams for each opening connected to power, both low voltage and 110 volts.
 - i. Copy of warranties including appropriate reference numbers for manufacturers to identify project.

1.5 QUALITY ASSURANCE

- A. Product Substitutions: Comply with product requirements stated in Division 01 and as specified herein.
 1. Where specific manufacturer's product is named and accompanied by "No Substitute," including make or model number or other designation, provide product specified. (Note: Certain products have been selected for their unique characteristics and particular project suitability.)
 - a. Where no additional products or manufacturers are listed in product category, requirements for "No Substitute" govern product selection.
 2. Where products indicate "acceptable manufacturers" or "acceptable manufacturers and products", provide product from specified manufacturers, subject to compliance with specified requirements and "Single Source Responsibility" requirements stated herein.
- B. Supplier Qualifications and Responsibilities: Recognized architectural hardware supplier with record of successful in-service performance for supplying door hardware similar in quantity, type, and quality to that indicated for this Project and that provides certified Architectural

Hardware Consultant (AHC) available to Owner, Architect, and Contractor, at reasonable times during the Work for consultation.

1. Warehousing Facilities: In Project's vicinity.
 2. Scheduling Responsibility: Preparation of door hardware and keying schedules.
 3. Engineering Responsibility: Preparation of data for electrified door hardware, including Shop Drawings, based on testing and engineering analysis of manufacturer's standard units in assemblies similar to those indicated for this Project.
 4. Coordination Responsibility: Coordinate installation of electronic security hardware with Architect and electrical engineers and provide installation and technical data to Architect and other related subcontractors.
 - a. Upon completion of electronic security hardware installation, inspect and verify that all components are working properly.
- C. Installer Qualifications: Qualified tradesmen, skilled in application of commercial grade hardware with record of successful in-service performance for installing door hardware similar in quantity, type, and quality to that indicated for this Project.
- D. Architectural Hardware Consultant Qualifications: Person who is experienced in providing consulting services for door hardware installations that are comparable in material, design, and extent to that indicated for this Project and meets these requirements:
1. For door hardware, DHI-certified, Architectural Hardware Consultant (AHC).
 2. Can provide installation and technical data to Architect and other related subcontractors.
 3. Can inspect and verify components are in working order upon completion of installation.
 4. Capable of producing wiring diagrams.
 5. Capable of coordinating installation of electrified hardware with Architect and electrical engineers.
- E. Single Source Responsibility: Obtain each type of door hardware from single manufacturer.
1. Provide electrified door hardware from same manufacturer as mechanical door hardware, unless otherwise indicated.
 2. Manufacturers that perform electrical modifications and that are listed by testing and inspecting agency acceptable to authorities having jurisdiction are acceptable.
- F. Fire-Rated Door Openings: Provide door hardware for fire-rated openings that complies with NFPA 80 and requirements of authorities having jurisdiction. Provide only items of door hardware that are listed and are identical to products tested by Underwriters Laboratories, Intertek Testing Services, or other testing and inspecting organizations acceptable to authorities having jurisdiction for use on types and sizes of doors indicated, based on testing at positive pressure and according to NFPA 252 or UL 10C and in compliance with requirements of fire-rated door and door frame labels.
- G. Smoke- and Draft-Control Door Assemblies: Where smoke- and draft-control door assemblies are required, provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105.
1. Air Leakage Rate: Maximum air leakage of 0.3 cfm/sq. ft. (3 cu. m per minute/sq. m) at tested pressure differential of 0.3-inch wg (75 Pa) of water.
- H. Electrified Door Hardware: Listed and labeled as defined in NFPA 70, Article 100, by testing agency acceptable to authorities having jurisdiction.

- I. Means of Egress Doors: Latches do not require more than 15 lbf (67 N) to release latch. Locks do not require use of key, tool, or special knowledge for operation.
- J. Accessibility Requirements: For door hardware on doors in an accessible route, comply with governing accessibility regulations cited in "REFERENCES" article, herein.
 - 1. Provide operating devices that do not require tight grasping, pinching, or twisting of wrist and that operate with force of not more than 5 lbf (22.2 N).
 - 2. Maximum opening-force requirements:
 - a. Interior, Non-Fire-Rated Hinged Doors: 5 lbf (22.2 N) applied perpendicular to door.
 - b. Sliding or Folding Doors: 5 lbf (22.2 N) applied parallel to door at latch.
 - c. Fire Doors: Minimum opening force allowable by authorities having jurisdiction.
 - 3. Bevel raised thresholds with slope of not more than 1:2. Provide thresholds not more than 1/2 inch (13 mm) high.
 - 4. Adjust door closer sweep periods so that, from open position of 70 degrees, door will take at least 3 seconds to move to 3 inches (75 mm) from latch, measured to leading edge of door.
- K. Keying Conference: Conduct conference at Project site to comply with requirements in Division 01.
 - 1. Attendees: Owner, Contractor, Architect, Installer, Owner's security consultant, and Supplier's Architectural Hardware Consultant.
 - 2. Incorporate keying conference decisions into final keying schedule after reviewing door hardware keying system including:
 - a. Function of building, flow of traffic, purpose of each area, degree of security required, and plans for future expansion.
 - b. Preliminary key system schematic diagram.
 - c. Requirements for key control system.
 - d. Requirements for access control.
 - e. Address for delivery of keys.
- L. Pre-installation Conference: Conduct conference at Project site.
 - 1. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - 2. Inspect and discuss preparatory work performed by other trades.
 - 3. Inspect and discuss electrical roughing-in for electrified door hardware.
 - 4. Review sequence of operation for each type of electrified door hardware.
 - 5. Review required testing, inspecting, and certifying procedures.
- M. Coordination Conferences:
 - 1. Installation Coordination Conference: Prior to hardware installation, schedule and hold meeting to review questions or concerns related to proper installation and adjustment of door hardware.
 - a. Attendees: Door hardware supplier, door hardware installer, Contractor.
 - b. After meeting, provide letter of compliance to Architect, indicating when meeting was held and who was in attendance.
 - 2. Electrified Hardware Coordination Conference: Prior to ordering electrified hardware, schedule and hold meeting to coordinate door hardware with security, electrical, doors and frames, and other related suppliers.

- a. Attendees: electrified door hardware supplier, doors and frames supplier, electrified door hardware installer, electrical subcontractor, Owner, Owner's security consultant, Architect and Contractor.
- b. After meeting, provide letter of compliance to Architect, indicating when coordination conference was held and who was in attendance.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up for hardware delivered to Project site.
- B. Tag each item or package separately with identification coordinated with final door hardware schedule, and include installation instructions, templates, and necessary fasteners with each item or package.
 1. Deliver each article of hardware in manufacturer's original packaging.
- C. Project Conditions:
 1. Maintain manufacturer-recommended environmental conditions throughout storage and installation periods.
 2. Provide secure lock-up for door hardware delivered to Project, but not yet installed. Control handling and installation of hardware items so that completion of Work will not be delayed by hardware losses both before and after installation.
- D. Protection and Damage:
 1. Promptly replace products damaged during shipping.
 2. Handle hardware in manner to avoid damage, marring, or scratching. Correct, replace or repair products damaged during Work.
 3. Protect products against malfunction due to paint, solvent, cleanser, or any chemical agent.
- E. Deliver keys to manufacturer of key control system for subsequent delivery to Owner.
- F. Deliver keys to Owner by registered mail or overnight package service.

1.7 COORDINATION

- A. Coordinate layout and installation of floor-recessed door hardware with floor construction. Cast anchoring inserts into concrete. Concrete, reinforcement, and formwork requirements are specified in Division 03.
- B. Installation Templates: Distribute for doors, frames, and other work specified to be factory prepared. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.
- C. Security: Coordinate installation of door hardware, keying, and access control with Owner's security consultant.
- D. Electrical System Roughing-In: Coordinate layout and installation of electrified door hardware with connections to power supplies and building safety and security systems.

- E. Existing Openings: Where hardware components are scheduled for application to existing construction or where modifications to existing door hardware are required, field verify existing conditions and coordinate installation of door hardware to suit opening conditions and to provide proper door operation.
- F. Direct shipments not permitted, unless approved by Contractor.

1.8 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within specified warranty period.
 - 1. Warranty Period: Years from date of Substantial Completion, for durations indicated.
 - a. Closers:
 - 1) Mechanical: 30 years.
 - b. Automatic Operators: 2 year.
 - c. Exit Devices:
 - 1) Mechanical: 3 years.
 - 2) Electrified: 1 year.
 - d. Locksets:
 - 1) Mechanical: 3 years.
 - 2) Electrified: 1 year.
 - e. Key Blanks: Lifetime
 - 2. Warranty does not cover damage or faulty operation due to improper installation, improper use or abuse.

1.9 MAINTENANCE

- A. Maintenance Tools:
 - 1. Furnish complete set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. The Owner requires use of certain products for their unique characteristics and particular project suitability to insure continuity of existing and future performance and maintenance standards. After investigating available product offerings, the Awarding Authority has elected to prepare proprietary specifications. These products are specified with the notation: "No Substitute."
 - 1. Where "No Substitute" is noted, submittals and substitution requests for other products will not be considered.

- B. Approval of manufacturers and/or products other than those listed as "Scheduled Manufacturer " or "Acceptable Manufacturers" in the individual article for the product category shall be in accordance with QUALITY ASSURANCE article, herein.
- C. Approval of products from manufacturers indicated in "Acceptable Manufacturers" is contingent upon those products providing all functions and features and meeting all requirements of scheduled manufacturer's product.
- D. Hand of Door: Drawings show direction of slide, swing, or hand of each door leaf. Furnish each item of hardware for proper installation and operation of door movement as shown.
- E. Where specified hardware is not adaptable to finished shape or size of members requiring hardware, furnish suitable types having same operation and quality as type specified, subject to Architect's approval.

2.2 MATERIALS

A. Fasteners

- 1. Provide hardware manufactured to conform to published templates, generally prepared for machine screw installation.
 - 2. Furnish screws for installation with each hardware item. Finish exposed (exposed under any condition) screws to match hardware finish, or, if exposed in surfaces of other work, to match finish of this other work including prepared for paint surfaces to receive painted finish.
 - 3. Provide concealed fasteners for hardware units exposed when door is closed except when no standard units of type specified are available with concealed fasteners. Do not use thru-bolts for installation where bolt head or nut on opposite face is exposed in other work unless thru-bolts are required to fasten hardware securely. Review door specification and advise Architect if thru-bolts are required.
 - 4. Install hardware with fasteners provided by hardware manufacturer.
- B. Provide screws, bolts, expansion shields, drop plates and other devices necessary for hardware installation.
- 1. Where fasteners are exposed to view: Finish to match adjacent door hardware material.

C. Cable and Connectors: Hardwired Electronic Access Control Lockset and Exit Device Trim:

- 1. Data: 24AWG, 4 conductor shielded, Belden 9843, 9841 or comparable.
- 2. DC Power: 18 AWG, 2 conductor, Belden 8760 or comparable.
- 3. Provide type of data and DC power cabling required by access control device manufacturer for this installation.
- 4. Where scheduled in the hardware sets, provide each item of electrified hardware and wire harnesses with sufficient number and wire gauge with standardized Molex plug connectors to accommodate electric function of specified hardware. Provide Molex connectors that plug directly into connectors from harnesses, electric locking and power transfer devices. Provide through-door wire harness for each electrified locking device installed in a door and wire harness for each electrified hinge, electrified continuous hinge, electrified pivot, and electric power transfer for connection to power supplies.

2.3 HINGES

A. Manufacturers and Products:

DOOR HARDWARE

1. Scheduled Manufacturer and Product: Ives 5BB series
2. Acceptable Manufacturers and Products: Hager, ABH

B. Requirements:

1. Provide five-knuckle, ball bearing hinges conforming to ANSI/BHMA A156.1.
2. 1-3/4 inch (44 mm) thick doors, up to and including 36 inches (914 mm) wide:
 - a. Exterior: Standard weight, bronze or stainless steel, 4-1/2 inches (114 mm) high
 - b. Interior: Standard weight, steel, 4-1/2 inches (114 mm) high
3. 1-3/4 inch (44 mm) thick doors over 36 inches (914 mm) wide:
 - a. Exterior: Heavy weight, bronze/stainless steel, 5 inches (127 mm) high
 - b. Interior: Heavy weight, steel, 5 inches (127 mm) high
4. 2 inches or thicker doors:
 - a. Exterior: Heavy weight, bronze or stainless steel, 5 inches (127 mm) high
 - b. Interior: Heavy weight, steel, 5 inches (127 mm) high
5. Provide three hinges per door leaf for doors 90 inches (2286 mm) or less in height, and one additional hinge for each 30 inches (762 mm) of additional door height.
6. Where new hinges are specified for existing doors or existing frames, provide new hinges of identical size to hinge preparation present in existing door or existing frame.
7. Hinge Pins: Except as otherwise indicated, provide hinge pins as follows:
 - a. Steel Hinges: Steel pins
 - b. Non-Ferrous Hinges: Stainless steel pins
 - c. Out-Swinging Exterior Doors: Non-removable pins
 - d. Out-Swinging Interior Lockable Doors: Non-removable pins
 - e. Interior Non-lockable Doors: Non-rising pins
8. Width of hinges: 4-1/2 inches (114 mm) at 1-3/4 inch (44 mm) thick doors, and 5 inches (127 mm) at 2 inches (51 mm) or thicker doors. Adjust hinge width as required for door, frame, and wall conditions to allow proper degree of opening.
9. Doors 36 inches (914 mm) wide or less furnish hinges 4-1/2 inches (114 mm) high; doors greater than 36 inches (914 mm) wide furnish hinges 5 inches (127 mm) high, heavy weight or standard weight as specified.
10. Provide hinges with electrified options as scheduled in the hardware sets. Provide with sufficient number and wire gage to accommodate electric function of specified hardware. Locate electric hinge at second hinge from bottom or nearest to electrified locking component.
11. Provide mortar guard for each electrified hinge specified.
12. Provide spring hinges where specified. Provide two spring hinges and one bearing hinge per door leaf for doors 90 inches (2286 mm) or less in height. Provide one additional bearing hinge for each 30 inches (762 mm) of additional door height.
13. Provide continuous hinges where specified.

2.4 CYLINDRICAL LOCKS – GRADE 1

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product: Schlage ND series
2. Acceptable Manufacturers and Products: none

B. Requirements:

1. Provide cylindrical locks conforming to the following standards and requirements:
 - a. ANSI/BHMA A156.2 Series 4000, Grade 1.
 - b. UL 10C for 4'-0" x 10'-0" 3-hour fire door.
 - c. Florida Building Code (ASTM E330, E1886, E1996) and Miami Dade (TAS 201, 202, 203) requirements for hurricanes.
2. Cylinders: Refer to "KEYING" article, herein.
3. Provide cylindrical locksets exceeding the ANSI/BHMA A156.2 Grade 1 performance standards for strength, security, and durability in the categories below:
 - a. Abusive Locked Lever Torque Test – minimum 3,100 inch-pounds without gaining access
 - b. Cycle life - tested to minimum 10 million cycles per ANSI/BHMA A156.2 Cycle Test with no visible lever sag or use of performance aids such as set screws or spacers.
4. Provide locks with standard 2-3/4 inches (70 mm) backset, unless noted otherwise, with 1/2 inch latch throw. Provide proper latch throw for UL listing at pairs.
5. Provide locksets with separate anti-rotation thru-bolts, and no exposed screws.
6. Provide independently operating levers with two external return spring cassettes mounted under roses to prevent lever sag.
7. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim.
8. Provide electrified options as scheduled in the hardware sets.
9. Lever Trim: Solid cast levers without plastic inserts, and wrought roses on both sides.
 - a. Lever Design: Dane.
 - b. Knurled finishes at openings serving rooms considered to be hazardous.

2.5 EXIT DEVICES

LOW PROFILE PUSH BAR EXIT DEVICES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product: Von Duprin
2. Acceptable Manufacturers and Products: Precision

B. The maximum exit device projection shall be a maximum of 3-1/16" when activated. The exit device bar shall have an average minimum thickness of .201". The push pad surface shall be constructed of stainless steel; push pads with plastic or Lexan coatings shall not be acceptable. Nylon bearings and stainless steel springs shall be used for long life and durability. Only torsion or compression springs are acceptable. Extension type springs are not acceptable. All device covers shall be of cast brass, deep drawn steel or stainless steel. Latchbolts shall be of stainless steel and shall have a deadlocking latch for extra security, except at full-glass or two-light glass doors requiring narrow stile device. Mounting screws shall be concealed to deter tampering. All ferrous parts shall be zinc coated to prevent rusting.

C. Single point, one quarter turn hex dogging shall be standard on panic listed devices. Optional key cylinder dogging shall be available, and furnished if so indicated in the hardware

- sets, on panic listed devices. Devices with hex key dogging shall be easily field converted to cylinder dogging.
- D. All devices shall be listed by Underwriters Laboratories for safety as panic hardware. Fire rated devices shall be UL listed for A label and lesser class doors, 4' x 8' single and 8 x 8' pair. The model number shall be located on the end cap; devices having the model number located other than on the end cap shall not be acceptable.
 - E. All exit devices shall have a unitized installation feature and may be cut in the field to size. Devices shall be closed on all sides with no pinch points. The push pad shall be designed to prevent pinching of the fingers when depressed.
 - F. Exit Device trim to be through-bolted. Lever trim to be heavy duty forged escutcheon with free-wheeling levers.
 - G. All exit devices shall conform to Federal Specification FF-H-1820, and be certified as meeting ANSI A156.3, Grade 1 requirements.

2.6 CYLINDERS

- A. Manufacturers:
 - 1. Scheduled Manufacturer: Schlage
 - 2. Acceptable Manufacturers:
- B. Requirements:
 - 1. Provide permanent cylinders/cores to match Owner's existing key system, compliant with ANSI/BHMA A156.5; latest revision, Section 12, Grade 1; permanent cylinders; cylinder face finished to match lockset, manufacturer's series as indicated. Refer to "KEYING" article, herein.
 - 2. Replaceable Construction Cores.
 - a. Provide temporary construction cores replaceable by permanent cores, furnished in accordance with the following requirements.
 - 1) 3 construction control keys
 - 2) 12 construction change (day) keys.
 - b. Owner or Owner's Representative will replace temporary construction cores with permanent cores.

2.7 KEYING

- A. Provide a factory registered keying system, complying with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference.
- B. Provide cylinders/cores keyed into Owner's existing factory registered keying system, complying with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference.
- C. Requirements:
 - 1. Provide permanent cylinders/cores keyed by the manufacturer according to the following key system.

- a. Master Keying system as directed by the Owner.
2. Forward biting list and keys separately from cylinders, by means as directed by Owner. Failure to comply with forwarding requirements shall be cause for replacement of cylinders/cores involved at no additional cost to Owner.
3. Provide keys with the following features:
 - a. Material: Nickel silver; minimum thickness of .107-inch (2.3mm)
 - b. Patent Protection: Keys and blanks protected by one or more utility patent(s).
4. Identification:
 - a. Mark permanent cylinders/cores and keys with applicable blind code per DHI publication "Keying Systems and Nomenclature" for identification. Blind code marks shall not include actual key cuts.
 - b. Identification stamping provisions must be approved by the Architect and Owner.
 - c. Stamp cylinders/cores and keys with Owner's unique key system facility code as established by the manufacturer; key symbol and embossed or stamped with "DO NOT DUPLICATE" along with the "PATENTED" or patent number to enforce the patent protection.
 - d. Failure to comply with stamping requirements shall be cause for replacement of keys involved at no additional cost to Owner.
 - e. Forward permanent cylinders/cores to Owner, separately from keys, by means as directed by Owner.
5. Quantity: Furnish in the following quantities.
 - a. Change (Day) Keys: 3 per cylinder/core.
 - b. Master Keys: 6.

2.8 KEY CONTROL SYSTEM

A. Manufacturers:

1. Scheduled Manufacturer: Telkee
2. Acceptable Manufacturers: HPC, Lund

B. Requirements:

1. Provide key control system, including envelopes, labels, tags with self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet, all as recommended by system manufacturer, with capacity for 150% of number of locks required for Project.
 - a. Provide complete cross index system set up by hardware supplier, and place keys on markers and hooks in cabinet as determined by final key schedule.
 - b. Provide hinged-panel type cabinet for wall mounting.

2.9 DOOR CLOSERS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product: LCN 4040XP series
2. Acceptable Manufacturers: None

B. Requirements:

1. Provide door closers conforming to ANSI/BHMA A156.4 Grade 1 requirements by BHMA certified independent testing laboratory.
2. Provide door closers with fully hydraulic, full rack and pinion action cast iron cylinder.
3. Closer Body: 1-1/4 inch (32 mm) diameter, with 5/8 inch (16 mm) diameter heat-treated pinion journal.
4. Hydraulic Fluid: Fireproof, passing requirements of UL10C, and requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.
5. Spring Power: Continuously adjustable over full range of closer sizes, and providing reduced opening force as required by accessibility codes and standards. Cylinder body to have "FAST" power adjust speed dial to visually indicate spring power.
6. Hydraulic Regulation: By tamper-proof, non-critical valves, with separate adjustment for latch speed, general speed, and backcheck.
7. Pressure Relief Valve (PRV) Technology: not permitted.
8. Provide special templates, drop plates, mounting brackets, or adapters for arms as required for details, overhead stops, and other door hardware items interfering with closer mounting.

2.10 DOOR TRIM

A. Manufacturers:

1. Scheduled Manufacturer: Ives
2. Acceptable Manufacturers: Burns, Trimco

B. Requirements:

1. Provide push plates 4 inches (102 mm) wide by 16 inches (406 mm) high by 0.050 inch (1 mm) thick and beveled 4 edges. Where width of door stile prevents use of 4 inches (102 mm) wide plate, adjust width to fit.
2. Provide push bars of solid bar stock, diameter and length as scheduled. Provide push bars of sufficient length to span from center to center of each stile. Where required, mount back to back with pull.
3. Provide offset pulls of solid bar stock, diameter and length as scheduled. Where required, mount back to back with push bar.
4. Provide flush pulls as scheduled. Where required, provide back-to-back mounted model.
5. Provide pulls of solid bar stock, diameter and length as scheduled. Where required, mount back to back with push bar.
6. Provide pull plates 4 inches (102 mm) wide by 16 inches (406 mm) high by 0.050 inch (1 mm) thick, beveled 4 edges, and prepped for pull. Where width of door stile prevents use of 4 inches (102 mm) wide plate, adjust width to fit.
7. Provide wire pulls of solid bar stock, diameter and length as scheduled.
8. Provide decorative pulls as scheduled. Where required, mount back to back with pull.

2.11 PROTECTION PLATES

A. Manufacturers:

1. Scheduled Manufacturer: Ives
2. Acceptable Manufacturers: Burns, Trimco

B. Requirements:

1. Provide kick plates, mop plates, and armor plates minimum of 0.050 inch (1 mm) thick, beveled four edges as scheduled. Furnish with sheet metal or wood screws, finished to match plates.
2. Sizes of plates:
 - a. Kick Plates: 10 inches (254 mm) high by 2 inches (51 mm) less width of door on single doors, 1 inch (25 mm) less width of door on pairs
 - b. Mop Plates: 4 inches (102 mm) high by 2 inches (51 mm) less width of door on single doors, 1 inch (25 mm) less width of door on pairs
 - c. Armor Plates: 36 inches (914 mm) high by 2 inches (51 mm) less width of door on single doors, 1 inch (25 mm) less width of door on pairs

2.12 OVERHEAD STOPS AND OVERHEAD STOP/HOLDERS

A. Manufacturers:

1. Scheduled Manufacturers: Glynn-Johnson

B. Requirements:

1. Provide heavy duty concealed mounted overhead stop or holder as specified for exterior and interior vestibule single acting doors.
2. Provide heavy duty concealed mounted overhead stop or holder as specified for double acting doors.
3. Provide heavy or medium duty and concealed or surface mounted overhead stop or holder for interior doors as specified. Provide medium duty surface mounted overhead stop for interior doors and at any door that swings more than 140 degrees before striking wall, open against equipment, casework, sidelights, and where conditions do not allow wall stop or floor stop presents tripping hazard.
4. Where overhead holders are specified provide friction type at doors without closer and positive type at doors with closer.

2.13 DOOR STOPS AND HOLDERS

A. Manufacturers:

1. Scheduled Manufacturer: Ives
2. Acceptable Manufacturers: Burns, Trimco

B. Provide door stops at each door leaf:

1. Provide wall stops wherever possible. Provide convex type where mortise type locks are used and concave type where cylindrical type locks are used.
2. Where a wall stop cannot be used, provide universal floor stops for low or high rise options.
3. Where wall or floor stop cannot be used, provide medium duty surface mounted overhead stop.

2.14 THRESHOLDS, SEALS, DOOR SWEEPS, AUTOMATIC DOOR BOTTOMS, AND GASKETING

A. Manufacturers:

1. Scheduled Manufacturer: Zero International

2. Acceptable Manufacturers: National Guard, Reese

B. Requirements:

1. Provide thresholds, weather-stripping (including door sweeps, seals, and astragals) and gasketing systems (including smoke, sound, and light) as specified and per architectural details. Match finish of other items.
2. Size of thresholds:
 - a. Saddle Thresholds: 1/2 inch (13 mm) high by jamb width by door width
 - b. Bumper Seal Thresholds: 1/2 inch (13 mm) high by 5 inches (127 mm) wide by door width
3. Provide door sweeps, seals, astragals, and auto door bottoms only of type where resilient or flexible seal strip is easily replaceable and readily available.

2.15 SILENCERS

A. Manufacturers:

1. Scheduled Manufacturer: Ives
2. Acceptable Manufacturers: Burns, Trimco

B. Requirements:

1. Provide "push-in" type silencers for hollow metal or wood frames.
2. Provide one silencer per 30 inches (762 mm) of height on each single frame, and two for each pair frame.
3. Omit where gasketing is specified.

2.16 FINISHES

A. Finish: BHMA 626/652 (US26D); except:

1. Hinges at Exterior Doors: BHMA 630 (US32D)
2. Continuous Hinges: BHMA 630 (US32D)
3. Continuous Hinges: BHMA 628 (US28)
4. Push Plates, Pulls, and Push Bars: BHMA 630 (US32D)
5. Protection Plates: BHMA 630 (US32D)
6. Overhead Stops and Holders: BHMA 630 (US32D)
7. Door Closers: Powder Coat to Match
8. Wall Stops: BHMA 630 (US32D)
9. Latch Protectors: BHMA 630 (US32D)
10. Weatherstripping: Clear Anodized Aluminum
11. Thresholds: Mill Finish Aluminum

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Prior to installation of hardware, examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire-rated door assembly construction, wall and floor construction, and other conditions affecting performance.
- B. Existing Door and Frame Compatibility: Field verify existing doors and frames receiving new hardware and existing conditions receiving new openings. Verify that new hardware is compatible with existing door and frame preparation and existing conditions.
- C. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Where on-site modification of doors and frames is required:
 - 1. Carefully remove existing door hardware and components being reused. Clean, protect, tag, and store in accordance with storage and handling requirements specified herein.
 - 2. Field modify and prepare existing door and frame for new hardware being installed.
 - 3. When modifications are exposed to view, use concealed fasteners, when possible.
 - 4. Prepare hardware locations and reinstall in accordance with installation requirements for new door hardware and with:
 - a. Steel Doors and Frames: For surface applied door hardware, drill and tap doors and frames according to ANSI/SDI A250.6.
 - b. Wood Doors: DHI WDHS.5 "Recommended Hardware Reinforcement Locations for Mineral Core Wood Flush Doors."
 - c. Doors in rated assemblies: NFPA 80 for restrictions on on-site door hardware preparation.

3.3 INSTALLATION

- A. Mounting Heights: Mount door hardware units at heights to comply with the following, unless otherwise indicated or required to comply with governing regulations.
 - 1. Standard Steel Doors and Frames: ANSI/SDI A250.8.
 - 2. Custom Steel Doors and Frames: HMMA 831.
 - 3. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."
- B. Install each hardware item in compliance with manufacturer's instructions and recommendations, using only fasteners provided by manufacturer.
- C. Do not install surface mounted items until finishes have been completed on substrate. Protect all installed hardware during painting.
- D. Set units level, plumb and true to line and location. Adjust and reinforce attachment substrate as necessary for proper installation and operation.

- E. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
- F. Install operating parts so they move freely and smoothly without binding, sticking, or excessive clearance.
- G. Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than quantity recommended by manufacturer for application indicated or one hinge for every 30 inches (750 mm) of door height, whichever is more stringent, unless other equivalent means of support for door, such as spring hinges or pivots, are provided.
- H. Intermediate Offset Pivots: Where offset pivots are indicated, provide intermediate offset pivots in quantities indicated in door hardware schedule but not fewer than one intermediate offset pivot per door and one additional intermediate offset pivot for every 30 inches (750 mm) of door height greater than 90 inches (2286 mm).
- I. Lock Cylinders: Install construction cores to secure building and areas during construction period.
 - 1. Replace construction cores with permanent cores as indicated in keying section.
- J. Lead Protection: Lead wrap hardware penetrating lead-lined doors. Levers and roses to be lead lined. Apply kick and armor plates on lead-lined doors with adhesive as recommended by manufacturer.
- K. Wiring: Coordinate with Division 26, ELECTRICAL sections for:
 - 1. Conduit, junction boxes and wire pulls.
 - 2. Connections to and from power supplies to electrified hardware.
 - 3. Connections to fire/smoke alarm system and smoke evacuation system.
 - 4. Connection of wire to door position switches and wire runs to central room or area, as directed by Architect.
 - 5. Testing and labeling wires with Architect's opening number.
- L. Key Control System: Tag keys and place them on markers and hooks in key control system cabinet, as determined by final keying schedule.
- M. Door Closers: Mount closers on room side of corridor doors, inside of exterior doors, and stair side of stairway doors from corridors. Closers shall not be visible in corridors, lobbies and other public spaces unless approved by Architect.
- N. Closer/Holders: Mount closer/holders on room side of corridor doors, inside of exterior doors, and stair side of stairway doors.
- O. Power Supplies: Locate power supplies as indicated or, if not indicated, above accessible ceilings or in equipment room, or alternate location as directed by Architect.
 - 1. Configuration: Provide least number of power supplies required to adequately serve doors with electrified door hardware.
- P. Thresholds: Set thresholds in full bed of sealant complying with requirements specified in Division 07 Section "Joint Sealants."
- Q. Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they may impede traffic or present tripping hazard.

- R. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.
- S. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.
- T. Door Bottoms: Apply to bottom of door, forming seal with threshold when door is closed.

3.4 FIELD QUALITY CONTROL

- A. Architectural Hardware Consultant: Engage qualified independent Architectural Hardware Consultant to perform inspections and to prepare inspection reports.
 - 1. Architectural Hardware Consultant will inspect door hardware and state in each report whether installed work complies with or deviates from requirements, including whether door hardware is properly installed and adjusted.

3.5 ADJUSTING

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.
 - 1. Spring Hinges: Adjust to achieve positive latching when door is allowed to close freely from an open position of 30 degrees.
 - 2. Electric Strikes: Adjust horizontal and vertical alignment of keeper to properly engage lock bolt.
 - 3. Door Closers: Adjust sweep period to comply with accessibility requirements and requirements of authorities having jurisdiction.
- B. Occupancy Adjustment: Approximately three months after date of Substantial Completion, Installer's Architectural Hardware Consultant shall examine and readjust each item of door hardware, including adjusting operating forces, as necessary to ensure function of doors, door hardware, and electrified door hardware.

3.6 CLEANING AND PROTECTION

- A. Clean adjacent surfaces soiled by door hardware installation.
- B. Clean operating items as necessary to restore proper function and finish.
- C. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of Substantial Completion.

3.7 DEMONSTRATION

- A. Provide training for Owner's maintenance personnel to adjust, operate, and maintain door hardware and door hardware finishes. Refer to Division 01 Section "Demonstration and Training."

Farmers Market
Paragould, Arkansas

3.8 DOOR HARDWARE SCHEDULE

- A. Locksets, exit devices, and other hardware items are referenced in the following hardware sets for series, type and function. Refer to the above-specifications for special features, options, cylinders/keying, and other requirements.

B. Hardware Sets:

OPT0229257

Date: September 7, 2021

HARDWARE GROUP NO. 001
FOR USE ON DOOR #(S):

101.1

EACH TO HAVE:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	MORTISE CYLINDER	20-061 ICX W/CONST. CORE	626	SCH
1	EA	FSIC CORE	23-030	626	SCH
1	EA	NOTE	REMAINDER OF HARDWARE BY DOOR MFR.		

-COORDINATE HARDWARE WITH DOOR MFR.

HARDWARE GROUP NO. 205I
FOR USE ON DOOR #(S):

105

EACH TO HAVE:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5	630	IVE
1	EA	STOREROOM LOCK	ND80TD SPA	626	SCH
1	EA	FSIC CORE	23-030	626	SCH
1	EA	SURFACE CLOSER	4040XP RW/PA X MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406/407CCV	630	IVE
1	EA	GASKETING	328AA H & J	AA	ZER
1	EA	THRESHOLD	655A-223	A	ZER

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HARDWARE GROUP NO. 214
FOR USE ON DOOR #(S):

104.1

EACH TO HAVE:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1HW 4.5 X 4.5 NRP	630	IVE
2	EA	MANUAL FLUSH BOLT	FB458-12"	626	IVE
1	EA	DUST PROOF STRIKE	DP2	626	IVE
1	EA	STOREROOM LOCK	ND80TD SPA	626	SCH
1	EA	FSIC CORE	23-030	626	SCH
1	EA	OH STOP	900S SERIES X SIZE & MOUNTING AS REQ (INACTIVE LEAF)	630	GLY
1	EA	SURFACE CLOSER	4040XP SHCUSH X MTG BRKT, SPCR & PLATE AS REQ	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	EA	RAIN DRIP	142A	AA	ZER
1	EA	GASKETING	328AA H & J	AA	ZER
1	EA	ASTRAGAL	43SP (PAINT TO MATCH DOOR)	SP	ZER
1	EA	THRESHOLD	65A	A	ZER

-PROVIDE 7/8" LTC STRIKE.

HARDWARE GROUP NO. 214.1
FOR USE ON DOOR #(S):

101.0

EACH TO HAVE:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1HW 4.5 X 4.5 NRP	630	IVE
2	EA	MANUAL FLUSH BOLT	FB458-12"	626	IVE
1	EA	DUST PROOF STRIKE	DP2	626	IVE
1	EA	STOREROOM LOCK	ND80TD SPA	626	SCH
1	EA	FSIC CORE	23-030	626	SCH
1	EA	OH STOP	900S SERIES X SIZE & MOUNTING AS REQ (INACTIVE LEAF)	630	GLY
1	EA	SURFACE CLOSER	4040XP SHCUSH X MTG BRKT, SPCR & PLATE AS REQ	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	EA	GASKETING	328AA H & J	AA	ZER
1	EA	ASTRAGAL	43SP (PAINT TO MATCH DOOR)	SP	ZER
1	EA	THRESHOLD	655A-223	A	ZER

-PROVIDE 7/8" LTC STRIKE.

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HARDWARE GROUP NO. 345I
FOR USE ON DOOR #(S):

106

EACH TO HAVE:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	630	IVE
1	EA	CORRIDOR LOCK	L9456P6 17A L583-363 L283-722	626	SCH
1	EA	SURFACE CLOSER	4040XP RW/PA X MTG BRKT, SPCR & PLATE AS REQ (MOUNT ON INT.)	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406/407CCV	630	IVE
1	EA	GASKETING	328AA H & J	AA	ZER
1	EA	THRESHOLD	655A-223	A	ZER

HARDWARE GROUP NO. 501
FOR USE ON DOOR #(S):

104.0

EACH TO HAVE:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	CLASSROOM LOCK	ND70TD SPA	626	SCH
1	EA	FSIC CORE	23-030	626	SCH
1	EA	SURFACE CLOSER	4040XP RW/PA X MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406/407CCV	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 714A
FOR USE ON DOOR #(S):

107

EACH TO HAVE:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	112XY	628	IVE
1	EA	PANIC HARDWARE	3347A-EO	626	VON
1	EA	PANIC HARDWARE	3347A-NL-OP	626	VON
1	EA	RIM CYLINDER	20-057 ICX W/CONST. CORE	626	SCH
1	EA	FSIC CORE	23-030	626	SCH
2	EA	90 DEG OFFSET PULL	8190EZHD 10" O	630	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH X MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	SEALS	BY FRAME SUPPLIER		
1	EA	THRESHOLD	655A-223	A	ZER
1	SET	MEETING STILE	BY DOOR SUPPLIER		

Farmers Market
Paragould, Arkansas

HARDWARE GROUP NO. 805IL

FOR USE ON DOOR #(S):

102 103

EACH TO HAVE:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5	652	IVE
1	EA	CLASSROOM DEAD LOCK	L463T XB11-720	626	SCH
1	EA	PUSH PLATE	8200 4" X 16"	630	IVE
1	EA	PULL PLATE	8303 10" 4" X 16" F	630	IVE
1	EA	SURFACE CLOSER	4040XP RW/PA X MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406/407CCV	630	IVE
1	EA	GASKETING	328AA H & J	AA	ZER
1	EA	THRESHOLD	655A-223	A	ZER

END OF SECTION

DOOR HARDWARE

087100-23
9/7/2021

PARAGOULD FARMERS MARKET**BUILDING CODE DATA****APPLICABLE CODES:**

2012 INTERNATIONAL BUILDING CODE
2006 ARKANSAS STATE PLUMBING CODE
2010 ARKANSAS STATE MECHANICAL CODE
2014 NATIONAL ELECTRIC CODES
2010 ADA STANDARDS
2014 AR STATE ENERGY CODE

PRIMARY OCCUPANCY TYPE: GROUP M- MERCANTILE

OTHER OCCUPANCY TYPES: GROUP A-3 COMMUNITY ROOM
GROUP S-2 STORAGE

NEW BUILDING AREA: 10,587 SQ. FT.

NUMBER OF STORIES: ONE

CONSTRUCTION TYPE: TYPE 2B PER TABLE 601

TOTAL TRAVEL DISTANCE TO EXITS: TABLE 1016.2

GROUP M-MERCANTILE – 200 FT. W/O SPRINKLER SYSTEM

GROUP A-3 COMMUNITY ROOM – 200 FT. W/O SPRINKLER

ALLOWABLE HEIGHT: 55 FEET

ALLOWABLE AREA PER FLOOR : 12,500 SQ. FT.

SPRINKLER SYSTEM: NONE REQUIRED. THE GROUP M-MERCANTILE SQUARE FOOTAGE AREA IS 7,560SF, WELL UNDER THE 12,00 SF REQUIRED FOR SPRINKLERING.

STATEMENT:

I HEREBY CERTIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED BY ME, OR UNDER MY SUPERVISION. I FURTHER CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE THESE PLANS AND SPECIFICATIONS ARE AS REQUIRED BY LAW AND IN COMPLIANCE WITH THE ARKANSAS FIRE PREVENTION CODE FOR THE STATE OF ARKANSAS.

Carl M. [Signature] 9/7/21
#1007

NOTE 1:

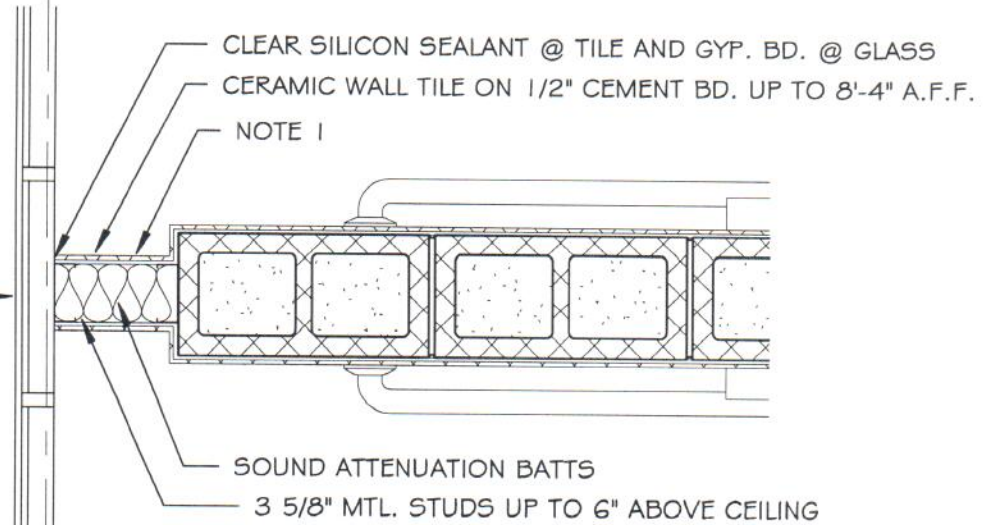
RUN STUDS OF FILLER WALL UP TO 6"
ABOVE CEILING. PROVIDE 5/8" GYP. BD.
FROM TOP OF TILE UP THRU CEILING.
PAINT TO MATCH WALL ABOVE WALL TILE

A

WOMENS

102

1" INSUL. GLASS @
WINDOW, INNER
LITE TO BE OPAQUE



MENS

103

FILLER WALL SECTION

1" = 1'-0"

ETC Engineers &
Architects, Inc.

FARMERS
MARKET

FILLER WALL SECTION

Project number 200301PAG

Date 09/08/21


Drawn by DH

Checked by CM

ADD. 1

Scale 1" = 1'-0"

ETC ENGINEERS &
ARCHITECTS, INC.



**Environmental Technical Consultants, Inc.
ENGINEERING & ARCHITECTURAL CONSULTANTS, CONSTRUCTION MANAGERS**

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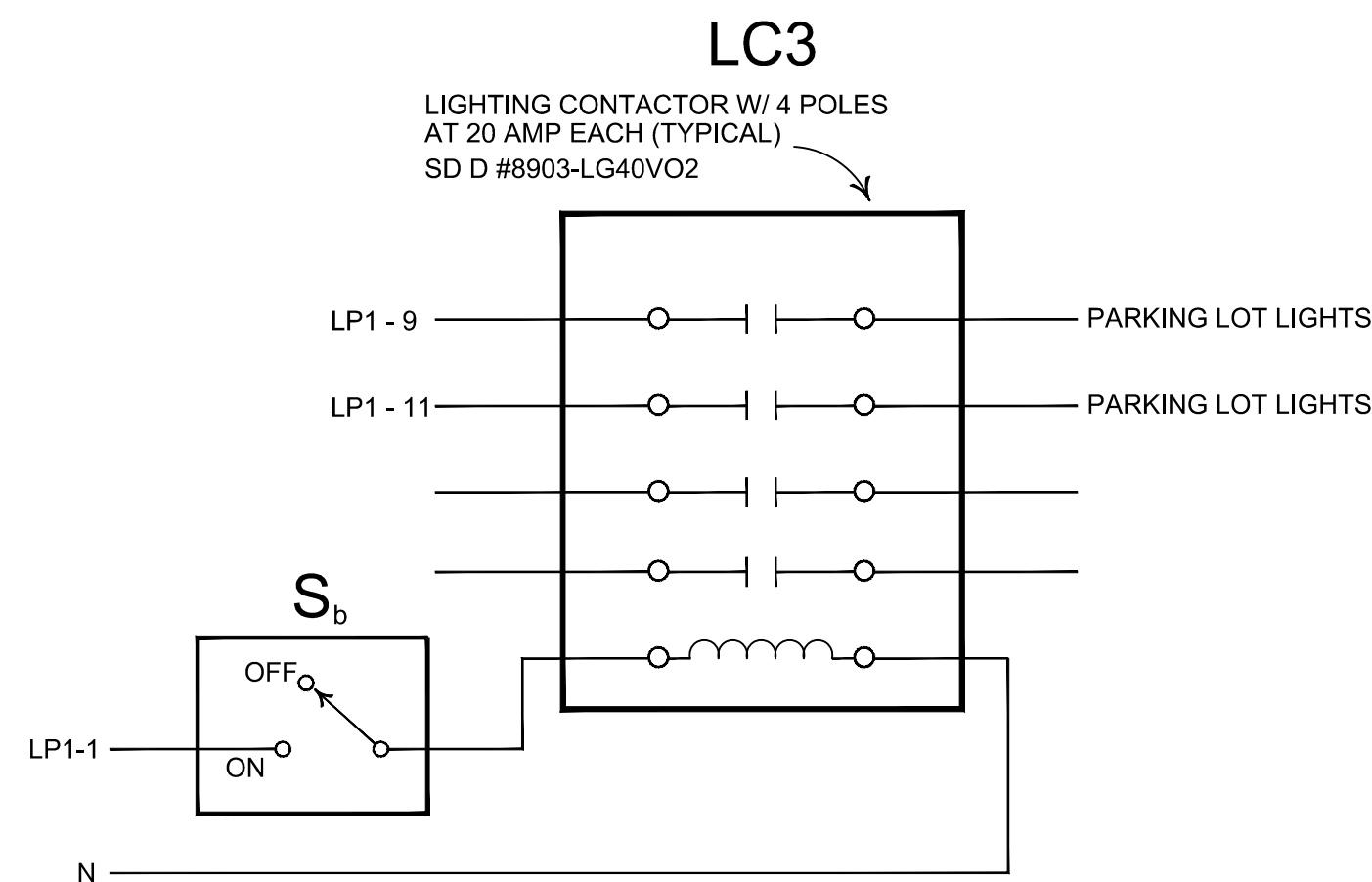
CITY OF PARAGOULD

FARMERS MARKET

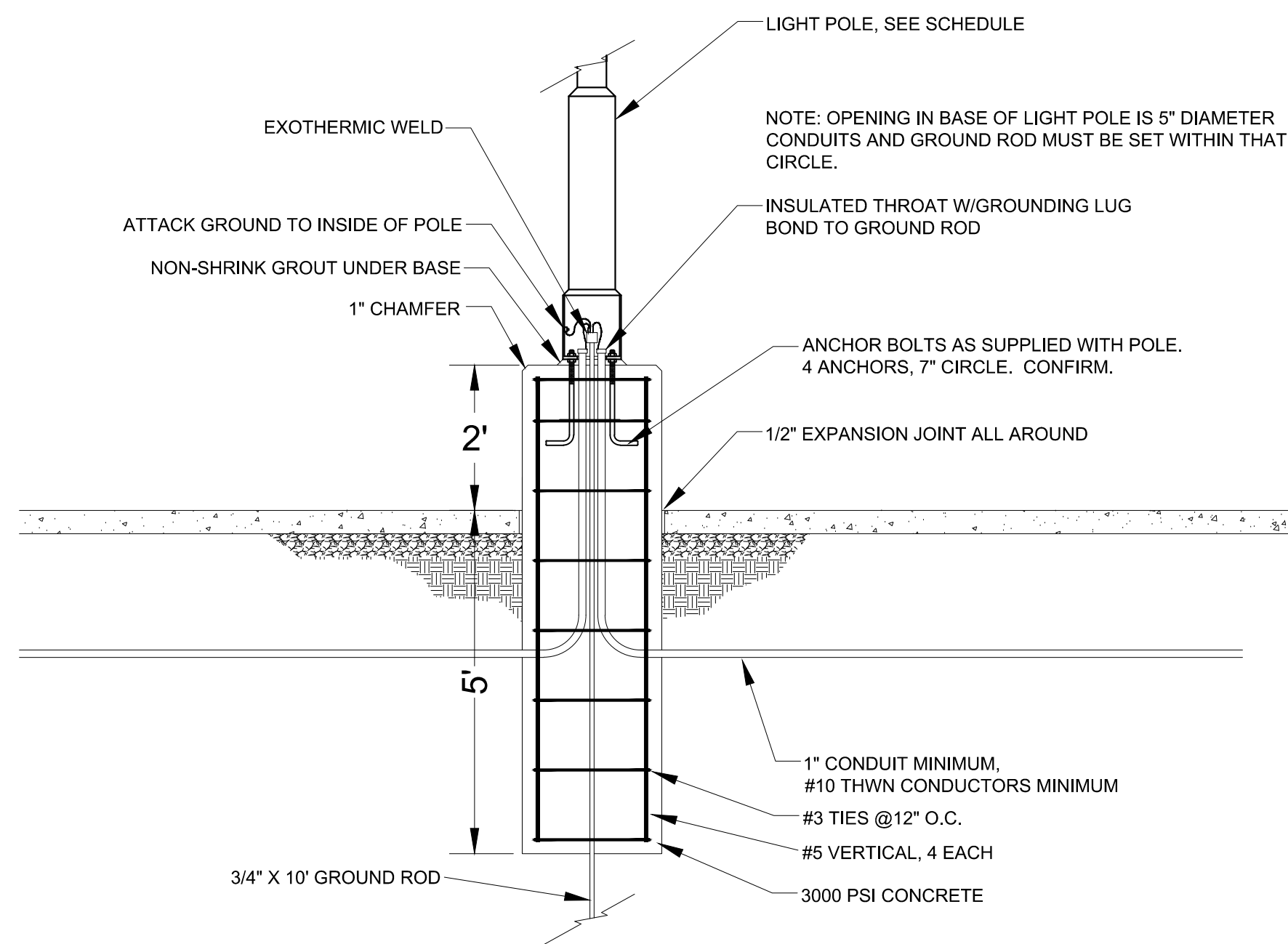
SITE ELECTRICAL PLAN

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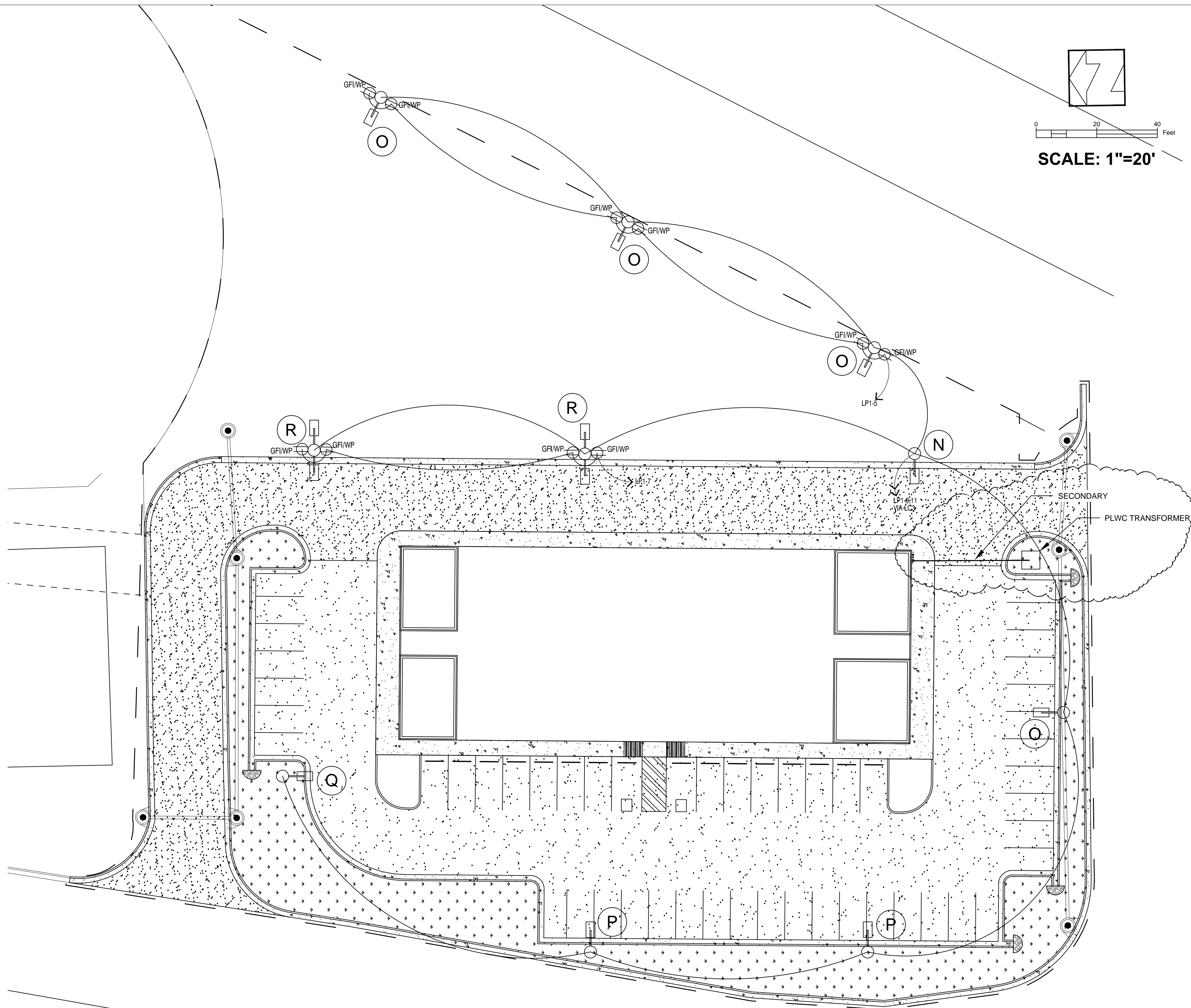
E1.01



LIGHTING CONTACTOR DETAIL



LIGHT POLE DETAIL



SITE ELECTRICAL PLAN

SCALE: 1" = 20'

MARK	MANUFACTURER MODEL	DESCRIPTION	POWER	LAMPS	MOUNTING	COMMENTS
A	FINTRONX LLC PSN8F160WUNV40KCH	8 FT LINEAR	160W	LED	BEAM SURFACE 	PROVIDE "WM" WALL MOUNT BRACKETS AND "MIN-3FP-6" 3 CONDUCTOR FEMALE 6" CABLE TO PIGTAILS. DRILL AND TAP STEEL BEAM FOR BRACKET ATTACHMENT. 
B	--- NOT USED ---					
C	ELITE HH4-LED-3000L-DIM10-MVOLT-MD-40K-80-HH4-4501-CL-WH	4 IN DOWNLIGHT	32W	LED	CEILING - RECESSED	PROVIDE A LEVITON ODC04-IDW OR EQUAL CEILING MOUNTED OCCUPANCY SENSOR IN THE RESTROOM 
D	ELITE 22-FPL1-LED-4000-MVOLT-40K-85	2' X 2' FLAT PANEL	42W	LED	CEILING - LAY-IN	
E	ELITE 4-OC4-LED-4000L-MVOLT-40K-85-WH	4' LINEAR	30W	LED	PENDANT	
F	ELITE 22-OVHP-LED-3400L-DIM10-MVOLT-40K-85 	2' X 2' LED TROFFER	39W	LED	CEILING - LAY-IN / RECESSED	PROVIDE A LEVITON ODC04-IDW OR EQUAL CEILING MOUNTED OCCUPANCY SENSOR IN THE RESTROOMS. PROVIDE #22-FK FLANGE KIT AT RESTROOMS. 
G	SUNLITE LPX/BAR/20W/SCT/19IN/CH/ACRYL/RND	-			WALL - SURFACE	
H	BASELITE CORP DCS16/41/FRA/WM14X/41/LED25W/4K 	RLM SHADE - SCONCE	25W	LED	EXTERIOR WALL	
T1	BLUEVIEW ELEC-OPTIC TECH CO., LTD B1718-A-FC-RGBW-1530-24-72-SS-72-IP67 	6 FT TAPE LIGHT	28W	LED	SURFACE - TOP OF TRUSS MEMBER	PROVIDE TRANSFORMERS AS NECESSARY. DRILLING AND TAPING OF STEEL TRUSS MEMBERS MAY BE REQUIRED FOR A CLEAN INSTALLATION. 
T2						
T3						
T4	BLUEVIEW ELEC-OPTIC TECH CO., LTD B1718-A-FC-RGBW-1530-24-60-SS-72-IP67 	10 FT TAPE LIGHT	23W	LED	SURFACE - TOP OF TRUSS MEMBER	PROVIDE TRANSFORMERS AS NECESSARY
T5	BLUEVIEW ELEC-OPTIC TECH CO., LTD B1718-A-FC-RGBW-1530-24-60-SS-72-IP67 	10 FT TAPE LIGHT	23W	LED	SURFACE - TOP OF TRUSS MEMBER	PROVIDE TRANSFORMERS AS NECESSARY
N	U.S. ARCHITECTURAL LIGHTING RZR-M-PLED-II-48LED-700mA-NW	POLE LIGHT	105W	LED	SNTS 184-11-*.*. 	OPTIONS VARY, SEE DRAWINGS FOR DOUBLE DUPLEX RECEPTACLES, ETC. STANDARD COLOR TO BE SELECTED BY ARCHITECT. 
O	U.S. ARCHITECTURAL LIGHTING RZR-PLED-III-M-48LED-700mA-NW-HS	POLE LIGHT	105W	LED	SNTS 184-11-*.*. 	OPTIONS VARY, SEE DRAWINGS FOR DOUBLE DUPLEX RECEPTACLES, ETC. STANDARD COLOR TO BE SELECTED BY ARCHITECT. 
P	U.S. ARCHITECTURAL LIGHTING RZR-M-PLED-IV-FT-48LED-700mA-NW-HS	POLE LIGHT	105W	LED	SNTS 184-11-*.*. 	OPTIONS VARY, SEE DRAWINGS FOR DOUBLE DUPLEX RECEPTACLES, ETC. STANDARD COLOR TO BE SELECTED BY ARCHITECT. 
Q	U.S. ARCHITECTURAL LIGHTING RZR-M-PLED-VSQ-M-48LED-700mA-NW	POLE LIGHT	105W	LED	SNTS 184-11-*.*. 	OPTIONS VARY, SEE DRAWINGS FOR DOUBLE DUPLEX RECEPTACLES, ETC. STANDARD COLOR TO BE SELECTED BY ARCHITECT. 
R	U.S. ARCHITECTURAL LIGHTING RZR-M-PLED-II-48LED-700mA-NW	POLE LIGHT, TWO HEADS	105W	LED	SNTS 184-11-*.*. 	OPTIONS VARY, SEE DRAWINGS FOR DOUBLE DUPLEX RECEPTACLES, ETC. STANDARD COLOR TO BE SELECTED BY ARCHITECT. 

△ NOTES:

1. PROVIDE 0-10V DIMMING FOR "A" FIXTURES. THE DIMMER TO CONTROL LC1 AND PROVIDE A 0-10V SIGNAL.
2. PROVIDE THE FOLLOWING FOR ALL "T" FIXTURES:
 - 2.1. ALUMINUM EXTRUDED HOUSINGS FOR ALL FIXTURES
 - 2.2. CERTIFIED HS FROSTED COVERS, END CAPS AND MOUNTING BRACKETS
 - 2.3. PROVIDE CONTROL WIRE AS REQUIRED
 - 2.4. PROVIDE WMP-RGBW DMX WALL MOUNTED TUBE PANEL
DMX512-5 PWM OUTPUT CHANNEL, R/G/B/5 XLR PIN TERMINAL BLOCK INPUTS AS REQUIRED FOR ALL DRIVERS
 - 2.5. 30 WATT, UL LISTED NON-DIMMABLE DRIVER W/JUNCTION BOX, 24V OUTPUT / 120-277VAC INPUT FOR EACH "T1"
 - 2.6. 60 WATT, UL LISTED NON-DIMMABLE DRIVER W/JUNCTION BOX, 24V OUTPUT / 120-277VAC INPUT FOR EACH "T4" AND "T5"

