INVITATION FOR BID (IFB)

IFB Number	Scope Number	Closing Date	Closing Time	Return IFB Submittal
GC2018092565-7079	4980	2/26/2020	4:00pm EST	bids@synergynds.com

IFB Reference Information:	**Plumbing Installation**
Insured Property Owner:	**Town of Greenwood**
Property Location Name:	**Warehouse**
Address Line 1:	5167 Fort Road
Address Line 2:	Enter Text Here
City:	**Greenwood** State: Florida Zip Code: **32443**

DESCRIPTION: Furnish all required labor, materials and equipment necessary to provide Scope-of-Work at the above described location. Work is being authorized under the elected FMIT TurnKey Recovery Program℠ administered by Synergy NDS, Inc. (SynergyNDS) on behalf of the Insured Property Owner, a Member of the Florida Municipal Insurance Trust (FMIT).

SUBMITTAL INSTRUCTIONS: In support of Procurement Guidelines, the IFB Packet includes specifications and terms & conditions associated with the above referenced project information.

1. Bids shall be received no later than the Closing Date & Time indicated above. Bids received after above deadline or that are not submitted in accordance to Submittal Instructions may be rejected without further explanation or contractor notification.
2. Bid shall be completed and submitted using **ONLY** the **Contractor Submittal Form** (provided at the end of the IFB Packet).
3. Contractor is responsible to validate all Quantities and Units of Measurements specific to the following scope items &/or products. The information and descriptions provided in the IFB are intended for general guidance purposes only. Contractor may not change or alter any material &/or specifications identified in the IFB for submission purposes without prior written/email notification to: bids@synergynds.com.
4. Contractor has the sole responsibility to ensure that all services and material for BID Submittal (whether stated correctly in the IFB or not) satisfactorily meet all required Codes & Standards, OSHA Guidelines and The Americans with Disabilities Act (ADA).
5. Contractor should also consider the approach (if necessary) in which to stock/store material at the jobsite in a safe and secure manner. SynergyNDS will not be responsible for lost or stolen material, supplies or equipment stocked at the jobsite.
6. Bid award will be made based on best overall LUMP SUM project value as determined by SynergyNDS in accordance to market valuation, project demands, critical path scheduling – as well as overall Insured Member's WorkForce Participation Goals. Contributing factors, in addition to price, may be considered as necessary to help determine bid award based on any additional criteria set forth by the specific FMIT Insured Member.

INVITATION FOR BID (IFB)

7. SynergyNDS reserves the right to modify the IFB Specifications and Terms & Conditions at any time during the bid solicitation process. Timely notice to all bidders will be given via an electronically distributed Addendum.
8. All registered HUB & HUB Zone Contractors, as well as DBEs are encouraged to participate. Additional Contractor Financial Assistance is available to help support daily HUB/DBE Contractor's operations under the terms and condition of a successful contract award.
9. SynergyNDS is an equal opportunity employer and administers all Contracts & Contractor Agreements in accordance to the requirements of 41 CFR §§ 60-1.4(a), 60-300.5(a) and 60-741.5(a).
10. Contractor is strongly encouraged to schedule a Site Visit of the property as necessary to support the IFB Submittal. All scheduled site visits can be requested at bids@synergynds.com.
11. When a mandatory Pre-BID Meeting is identified and scheduled in a specific IFB, Contractor Attendance is a requirement as part of the Solicitation. Contractors who fail to attend the Pre-BID Meeting will not be eligible to participate in the IFB and subsequent submittal process.
12. Contractor can submit all questions &/or concerns specific to the IFB by email to: bids@synergynds.com.

SCOPE-OF-WORK SUMMARY

Refer to **EXHIBIT A** and any subsequent **ATTACHMENTS** for scope-of-work description that will be included after the IFB Contractor Submittal Form on Page #9.

*This IFB is part of a potential Federally Funded Project.
*This IFB does not require a Contractor Payment or Performance Bond.
*This Project is Sales Tax Exempt through the specific Florida Public Entity.
*This IFB does not require a Pre-BID Meeting
*This IFB supports workforce participation goals.

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INVITATION FOR BID (IFB)

GENERAL TERMS & CONDITIONS

1. Contractor shall be responsible for field verifying all conditions, dimensions & quantities prior to IFB Submittal and the implementation of this scope of work. Any Exhibits, Plans, Drawing &/or Other Supporting Documents have been included for general reference purposes only.
2. Contractor is responsible to identify and satisfactorily address all applicable regulatory requirements, including but not limited to Codes & Standards, HUD/DBE Participation Goals & Guidelines and ADA/FHA Specifications.
3. Contractor shall indicate in writing and be responsible to submit to SynergyNDS via email distribution to projects@synergynds.com any request or need for additional 3rd Party Assignment as necessary to further identify required codes & standards, scope specifications or public health safety concerns outside of Contractor's professional competence &/or licenses.
4. Contractor is to obtain their own permits and schedule all applicable inspections. Permits can be obtained by contacting the Building Department or other administering entity. Permit Fees are reimbursable direct from SynergyNDS (in addition to contractor's Lump Sum Proposal) if incurred and submitted with proper documentation.
5. Contractor shall prohibit discrimination against staff &/or available workforce based on their status as protected veterans or individuals with disabilities and prohibit discrimination against all individuals based on their race, color, religion, sex, sexual orientation, gender identity or national origin. Moreover, these regulations require that Contractor and its subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, protected veteran status or disability.
6. Contractor is to abide by all applicable OSHA and project safety requirements and standards. Contractor shall require all employees to utilize proper PPE when applicable, including but not limited to: fall protection harnesses, hard hats, safety glasses, safety foot wear, gloves and etc.
7. Contractor is responsible for submitting applicable project and associated contract documents as defined by Architectural Drawings Specifications, Engineering Requirements, Certificates of Insurance, Change Order Requests and any written or documented deviations from approved scopes-of-work or Contract.
8. Contractor may be asked to provide Material Safety Data Sheets (MSDS) to the Industrial Hygienist of record (for the project) for chemical-based products that will be used including, but not limited to, glues, cleaners, solvents, anti-microbial products, sanitizing agents, etc. The Industrial Hygienist of record retains the right to not allow the use of any of the products selected.
9. Contractor shall be responsible under terms of the Agreement for supplying any and all necessary labor, equipment, tools, materials and travel expense to complete the scope of work unless directed otherwise in the IFB. This includes but is not limited to: Rental Equipment, Dumpsters, Storage Containers, Jobsite Trailer, General Conditions, Associated Expenses, Travel Cost and Overhead & Profit which are to be included in the IFB Contractor Lump Sum Proposal.
10. Contractor shall protect all property from new and supplemental damage during the performance of work. This includes, but necessarily limited to: wall finishes, floor finishes, windows, electrical systems, mechanical systems, communication systems, life safety systems, security systems, HVAC control

systems, plumbing systems, lighting systems, structurally related components, exterior elements, vegetation, property-of-others, and etc.

11. Contractor shall be responsible for any breakage &/or cleaning of unintended damage, debris, coatings, coverings, overspray and residual caulking from the aforementioned property described above. If affected property can't be successfully cleaned &/or restored to pre-existing condition, SynergyNDS will seek reimbursement from Contractor &/or deduct the appropriate replacement cost from outstanding Invoice Payment (Contract Value).
12. Contractor is EXPECTED to maintain a Clean & Safe Work Environment throughout the lifecycle of the awarded scope-of-work. This includes daily clean-up and organization of the Contractor's work area specific to all material waste, debris, tools &/or equipment. Failure to do so (after 3 documented warnings) can result in back charges to Contractor in the amount of $25.50 hourly rate with a minimum $150.00 per day clean-up rate (as determined by the SynergyNDS or the Insured Property Owner).
13. Contractor shall be responsible for securing work area(s) from access by non-authorized building occupants, including all persons not directly part of the restoration, repair and/or rebuild efforts. This includes securing work area(s) as identified in the IFB Scope-of-Work &/or under Contractors control.
14. Contractor shall provide and implement a site-specific health and safety plan to include hazard communication and related OSHA requirements to protect workers as well as the general public with access to the work area.
15. If the Contractor determines that deviations, modifications (change order or supplemental costs) from the initial scope-or-work are required, the Contractor shall submit a written request to SynergyNDS for review and approval prior to start of any additional work not otherwise included in initial BID. The written request will contain, at a minimum:
    a. Reason for deviation or modification
    b. Description of deviation or modification
    c. Project cost addition or subtraction for deviation or modification
    d. Estimated time required for deviation or modification.
16. Contractor is NOT responsible for any conditions or activities the building owner or employees implemented prior to their arrival to the job site. This includes removal of contents, equipment or personnel from the affected areas to the non-affected areas of the building.
17. During the performance of Contractor's scope-of-work, pre-existing damage to the building, structure, system failures or other anomalies may be found. If this occurs, the Contractor has the responsibility to identify, document and report these deficiencies immediately to SynergyNDS by email notification to projects@synergynds.com. Verbal notification &/or discussion only with the Onsite Project Manager is encouraged but not binding. Written documentation must be provided in efforts to comply with the required transparent approach.
18. Contractor is responsible to ensure that their employees &/or its sub-contractors comply with the provisions and terms of the IFB and Contract Agreement.

INVITATION FOR BID (IFB)

PAYMENT: Project is managed by SynergyNDS, Inc., under the FMIT Turnkey Recovery Program. Payments will be made directly to the contractor(s) in accordance with described terms & conditions. Qualified contractors may be eligible for an upfront material deposit or progress payments as determined prior to BID AWARD. **Contractor must be registered in the MVP (Managed Vendor Program) whereby required contractor documents must be uploaded to the database. There is annual $49.95 processing fee as part of the initial contractor vetting and background check.**

PAYMENT TERMS: Payments will be made after inspection and approval of work by SynergyNDS, City Building Official &/or Insurance Adjuster. Accurate invoices and required project documentation must be submitted to SynergyNDS for project audit prior to payment. *Material Deposits &/or Advanced Payments require Contractor to complete online registration in the Managed Vendor Program (MVP). MVP has an annual $49.99 Registration Fee to be part of the Contractor Direct Repair Program. Material Deposits &/or Advanced Payments will require a 2% Invoice Payment Discount.

HOLD HARMLESS: To the fullest extent permitted by law, the Contractor/Vendor shall indemnify, defend, and hold harmless SynergyNDS, Inc & FMIT, their officers, agents, employees, elected, and appointed officials, Insurance Representatives and volunteers from and against any and all claims, losses or liability, including attorney's fees, arising from injury or death to persons or damage to property occasioned by any act, omission, or failure of the Contractor/Vendor and any of its officers, agents, employees, and volunteers in satisfying the terms required by this contract.

RIGHT TO ACCEPT, REJECT AND WAIVE DEFECTS: SynergyNDS &/or Contracting Agent reserves the right to: reject all quotations; waive formalities, technical defects, and minor irregularities; accept the quotation (if any) deemed most advantageous to and in the best interests of Insured Members of FMIT. Award will be based on price, contractor's daily performance capabilities, availability to provide the specified services when required &/or in accordance to critical path scheduling.

DAMAGES: Contractor will be held liable for any damage caused to the building and ancillary structure, and/or injury to the occupants resulting from the execution of the work or from not exercising proper precautionary protective measures. Any cost of repair/replacement resulting from damages shall be at the Contractor's expense.

WORK-SITE PRACTICES: Contractor's workers, as well as the various trade contractors entering or leaving the work area, will all attend a site-specific safety meeting as well as daily safety meetings prior the scheduled workday. Contractor's workers entering or leaving the work area will don or remove personal protective equipment and clothing in the staging area outside of each work area. All debris & trash in the work area will be removed and disposed.

WORKER PERSONAL PROTECTION EQUIPMENT: The National Institute for Occupational Safety and Health (NIOSH) provides the following interim guidelines and warnings to restoration workers.

a) Steel toed leather boots should be worn. Tennis shoes or sneakers should *not* be worn because they will transfer contamination and will not prevent punctures, bites, or crush injuries.

b) Goggles, safety glasses with side shields or full-face shields shall be used when performing restoration related activities that involve demolition, cutting or the use of ANY power tools. Sun/glare-protective

lenses may be needed in some work settings. The use of goggles or protective eyewear should also be worn during the application of any cleaners, sanitizers or disinfectants.

c) Soft hat or another protective head cover. Wear an American National Standards Institute (ANSI) rated hardhat if there is any danger of falling debris or electrical hazards.

d) Hearing protection (when working in an environment with any noise that you must shout over to be heard).

e) Comfortable, form fitting, light weight clothing including long pants and a long-sleeved shirt or coveralls. Additional PPE, respiratory protection, or clothing may be required when specific exposure hazards are identified or expected at the work site. In some instances, the protective ensemble components (garment, boots and gloves) may need to be impervious to contaminated flood or other site-specific chemical, physical, or biological hazards. In all instances, workers are advised to wash their hands with soap and clean water, especially before eating or drinking. Protect any cuts or abrasions with waterproof gloves and dressings. The use of insect repellant, sun block and lip balm may also be required for some work environments. Drink plenty of bottled water and take frequent rest breaks to avoid overexertion.

THERMAL STRESSES: HEAT: Workers are at serious risk for developing heat stress. Excessive exposure to hot environments can cause a variety of heat-related problems, including heat stroke, heat exhaustion, heat cramps, and fainting. To reduce the potential for heat stress, drink a glass of fluid every 15 to 20 minutes and wear loose- fitting clothing. Additionally, incorporate work-rest cycles into work routines and when possible distribute the workload evenly throughout the day.

*****Temporary cooling to the work areas shall only be authorized by the owner's representative based on the actual need for the work being performed. Where the conditions allow for the operation of part or all of the ventilation systems serving the work area then the need for temporary cooling is NOT necessary. The work area should be maintained at conditions that meet OSHA requirements for health and safety.*****

WORKING IN CONFINED SPACES: If you are required to work in a boiler, furnace, pipeline, pit, pumping station, septic tank, sewage digester, storage tank, utility vault, well, or similar enclosure, you should be aware of the hazards of working in confined spaces. A confined space has one or more of the following characteristics:

a) limited openings for entry or exit;
b) unfavorable natural ventilation; or
c) Is not designed for continuous worker occupancy.

Toxic gases, a lack of oxygen, or explosive conditions may exist in the confined area, resulting in a potentially deadly atmosphere. Because many toxic gases and vapors cannot be seen or smelled, never trust your senses to determine if safe entry is possible. **Never** enter a confined space unless you have been properly trained, even to rescue a fellow worker! If you need to enter a confined space and do not have the proper training and equipment, contact your local fire department for assistance.

INVITATION FOR BID (IFB)

CONTRACT IMPLEMENTATION: Contract will be awarded upon review of all bids and proposals received by SynergyNDS. Initiation of intent-to-contract with Contractor will be engaged upon email notification and signed/returned Contractor Agreement Form. Contract-in-full will occur upon SynergyNDS receipt of all required documentation including but not limited to:

a) Performance Bond &/or Payment Bond (If Required)
b) Certificate of General Liability Insurance
c) Certificate of Auto Insurance
d) Certificate of Worker's Compensation or Letter of Exemption
e) Contractor's W-9
f) State Licenses

Further description of insurance requirements is listed in "Insurance & Licensing Requirements." No material deposits &/or payments will be made to Contractor until all required documentation has been received.

ASSIGNMENT OF CONTRACT: Contractor shall not assign the contract or any part thereof to any person, firm, corporation or company unless such assignment is approved in writing by SynergyNDS. Such acceptance shall be at the sole discretion of the SynergyNDS upon request of the Contractor. Upon approved and executed Transfer-of-Contract-Agreement, Contractor will be responsible for the coordination and hand-off of work/trades with the newly Assigned Contractor. Failure to coordinate this work will not relieve original Contractor of their obligations and shall not constitute additional cost as governed by the Lump Sum Contract Award.

ASSIGNMENT OF CONTRACTOR: Contractor is responsible for supplying all required Personal Protective Equipment (PPE), including but not limited to the furnishing and appropriate use of: hard hat(s), safety glasses, face shields, ear plugs, gloves, boots, fall protection (where required), breathing protection (where required), tie off ropes/apparatuses/points (where required), fire extinguishers, first aid kits, etc. Contractor is required to be familiar with and follow all OSHA and State of Florida's safety requirements.

a) Contractor is to hold daily jobsite safety meetings that review the work to be performed, the hazards involved and the methods for reducing and eliminating such hazards, as well as maintain meeting records, - including attendance lists, which shall be kept onsite and available for SynergyNDS review at all times. Contractor shall be solely liable for any and all OSHA violations associated with his/her employees.
b) SynergyNDS reserves the right to hold weekly progress meetings for which the Subcontractor shall attend. Contractor shall be responsible for daily cleanup of the work performed herein. Failure to cleanup daily after trade will result in cleanup supplementation at Contractor's cost. Twenty-Four (24) hour notice will be given prior to supplementation. Contractor shall be responsible for delivery, loading, unloading, storage, protection, etc. of all work provided herein.

ENERGY EFFICIENCY: The Contractor shall comply with all mandatory standards and policies relating to energy efficiency which are contained in the energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub.L. 94-163) for the State in which the work under this contract is performed.

INVITATION FOR BID (IFB)

PROCUREMENT OF RECOVERED MATERIALS: In accordance with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, the Contractor shall procure items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition. The Contractor should procure items designated in the EPA Guidelines that contain the highest percentage of recovered materials practical unless the Contractor determines that such items:

a) are not reasonably available in a reasonable period of time;

b) fail to meet reasonable performance standards, which shall be determined on the basis of the guidelines of the National Institute of Standards and Technology;

FAILURE TO COMPLY: For failure to deliver in accordance with specifications, SynergyNDS may cancel the contract or any part thereof and purchase services on the open market, charging any additional cost to the Contractor. Contractor shall comply with all applicable state, federal and local codes, and pay all permits, licenses and certificates, and other fees as required by the work.

INSURANCE & LICENSING REQUIREMENTS: Before starting work, the Contractor will provide SynergyNDS proof of Worker's Compensation and Commercial and Public Liability Insurance. The Contractor must be licensed to do business in the State of Florida and SynergyNDS must be named as an additional insured on general liability insurance certificate. Contractor will need to go to www.syngerynds.com and complete the initial registration for the Managed Vendor Program (MVP). Contractor will be required to upload the following information (when applicable) prior to contract award and eligible material deposits.

a) The Contractor will carry Worker's Compensation Insurance for all employees engaged in work at the site, in accordance with State or Territorial Worker's Compensation Laws.

b) Commercial and Public Liability with bodily injury and property damage limits will be at a combined single limit of at least $500,000 to protect the contractor and each subcontractor against claims for injury to or death of one or more persons.

c) Automobile Liability on owned and non-owned motor vehicles used on the site(s), or in connection with the sites, for a combined single limit for bodily injury and property damages of not less than $500,000.00 per occurrence.

d) Builder's Work Insurance limit of at least $5,000.00 per occurrence and $10,000.00 aggregate.

e) Professional Liability $1,000,000 per occurrence (if applicable).

Contractor will not allow insurance coverage to lapse and will provide SynergyNDS with updated Certificates of Insurance as necessary. All policies must provide that at least thirty (30) days' notice of cancellation will be given to SynergyNDS . All Contractor employees &/or subcontractors are bound by the Insurance Requirement. Contractor is the sole responsible party for all its Employee &/or SubContractor infractions, accidents, damages and all general liability concerns that occur, whether directly or indirectly, as related to Contracted Scope-of-Work.

The certificate holder(s) must be noted as:

Synergy NDS, Inc.
1400 Sarno Rd
Melbourne, FL 3293

INVITATION FOR BID (IFB)

FEDERAL CONTRACT REQUIREMENTS ONLY (In a Declared Event)

If stated in the IFB, the Contractor and its subcontractors must follow the provisions, as applicable, as set forth in 2 C.F.R. §200.326 Contract provisions and Appendix II to 2 C.F.R. Part 200, as amended, including but not limited to:

9.29.1 Davis-Bacon Act, as amended (40 U.S.C. §§3141-3148). When required by Federal program legislation, which includes emergency Management Preparedness Grant Program, Homeland Security Grant Program, Nonprofit Security Grant Program, Tribal Homeland Security Grant Program, Port Security Grant Program and Transit Security Grant Program, all prime construction contracts in excess of $2,000 awarded by non-Federal entities must comply with the Davis-Bacon Act (40 U.S.C. §§3141-3144, and §§3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. If applicable, SynergyNDS must place a current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. SynergyNDS must report all suspected or reported violations to the Federal awarding agency. When required by Federal program legislation, which includes emergency Management Preparedness Grant Program, Homeland Security Grant Program, Nonprofit Security Grant Program, Tribal Homeland Security Grant Program, Port Security Grant Program and Transit Security Grant Program (it does not apply to other FEMA grant and cooperative agreement programs, including the Public Assistance Program), the contractors must also comply with the Copeland "Anti-Kickback" Act (40 U.S.C. § 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). As required by the Act, each contractor or subrecipient is prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. SynergyNDS must report all suspected or reported violations to the Federal awarding agency.

1. Contractor. The contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this contract.
2. Subcontracts. The Contractor or subcontractor shall insert in any subcontracts the clause above and such other clauses as the FEMA may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.
3. Breach. A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. § 5.12.

9.29.2 Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708). Where applicable, which includes all FEMA grant and cooperative agreement programs, all contracts awarded by SynergyNDS in excess of

$100,000 that involve the employment of mechanics or laborers must comply with 40 U.S.C.§§ 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. §3702 of the Act, each contractor must compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

9.29.3 Rights to Inventions Made Under a Contract or Agreement. If the Federal award meets the definition of "funding agreement" under 37 CFR §401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

9.29.4 Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387). Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. §§7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. §§1251-1387) and will report violations to FEMA and the Regional Office of the Environmental Protection Agency (EPA). The Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended—applies to Contracts and subgrants of amounts in excess of $150,000.

9.29.5 Debarment and Suspension (Executive Orders 12549 and 12689)—A contract award (see 2 CFR 180.220) must not be made to parties listed on the governmentwide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689(3 CFR part 1989 Comp., p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

9.29.6 Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)—Contractors that apply or bid for an award exceeding $100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non- Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

9.29.7 Compliance with Procurement of recovered materials as set forth in 2 CFR § 200.322. CONTRACTOR must comply with section 6002 of the Solid Waste disposal Act, as amended, by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered

materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds $10,000 or the value of the quantity acquired during the preceding fiscal year exceeded $10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

OTHER FEDERAL REQUIREMENTS (In a Declared Event)

9.29.9 Americans with Disabilities Act of 1990, as amended (ADA) – The CONTRACTOR will comply with all the requirements as imposed by the ADA, the regulations of the Federal government issued thereunder, and the assurance by the CONTRACTOR pursuant thereto.

9.29.10 Disadvantaged Business Enterprise (DBE) Policy and Obligation - It is the policy of SynergyNDS that DBE's, as defined in 49 C.F.R. Part 26, as amended, shall have the opportunity to participate in the performance of contracts financed in whole or in part with SYNERGYNDS funds under this Agreement. The DBE requirements of applicable federal and state laws and regulations apply to this Agreement. SynergyNDS and its CONTRACTOR agree to ensure that DBE's have the opportunity to participate in the performance of this Agreement. In this regard, all recipients and contractors shall take all necessary and reasonable steps in accordance with 2 C.F.R. § 200.321(as set forth in detail below), applicable federal and state laws and regulations to ensure that the DBE's have the opportunity to compete for and perform contracts. SynergyNDS and the CONTRACTOR and subcontractors shall not discriminate on the basis of race, color, national origin or sex in the award and performance of contracts, entered pursuant to this Agreement. 2 C.F.R. § 200.321 CONTRACTING WITH SMALL AND MINORITY BUSINESSES, WOMEN'S BUSINESS ENTERPRISES, AND LABOR SURPLUS AREA FIRMS

a) If the CONTRACTOR, with the funds authorized by this Agreement, seeks to subcontract goods or services, then, in accordance with 2 C.F.R. §200.321, the CONTRACTOR shall take the following affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used whenever possible.

b) Affirmative steps must include:

   I. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

   II. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;

   III. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;

   IV. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;

   V. Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

VI. Requiring the Prime contractor, if subcontractor are to be let, to take the affirmative steps listed in paragraph (1) through (5) of this section.

9.30 The Contractor shall utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the Contractor during the term of the Contract and shall expressly require any subcontractors performing work or providing services pursuant to the Contract to likewise utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the Contract term.

9.31 If attached, the CONTRACTOR is bound by the terms and conditions of the Federally-Funded Subaward and Grant Agreement between SYNERGYNDS and the Florida Division of Emergency Management (Division).

9.32 The CONTRACTOR shall hold the Division and SYNERGYNDS harmless against all claims of whatever nature arising out of the CONTRACTOR's performance of work under this Agreement, to the extent allowed and required by law.

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IFB – CONTRACTOR SUBMITTAL FORM

IFB Number	Scope Number	Closing Date	Closing Time	Return IFB Submittal
GC2018092565-7079	4980	2/26/2020	4:00pm EST	bids@synergynds.com

Company Name: _____

Address Line 1: _____

Address Line 2: _____

City: _____

State: _____ Zip Code: _____

Contractor Certification: ☐ DBE ☐ WBE/WOSB ☐ HUB ☐ SDVOSB/VOSB

CONTRACTOR LUMP SUM PROPOSAL:

IFB TITLE	Plumbing Installation	**PROPOSAL:**	$
IFB TITLE	Click or tap here to enter text.	**PROPOSAL:**	$
IFB TITLE	Click or tap here to enter text.	**PROPOSAL:**	$
IFB TITLE	Click or tap here to enter text.	**PROPOSAL:**	$

Material Deposit | ☐Required | ☐Requested | in the amount of $ _____

I, having the legal authorization to represent the "Company" (the undersigned) have read and understood all previous 1-9 pages and the subsequent Attached Exhibits in accordance to the applicable Terms & Conditions as described in the IFB Packet preceding the attached Contractor Submittal Form:

_____ _____

Company Contact Name (Please Print) **Company Title (Please Print)**

_____ _____

Signature **Date**

*Material Deposits &/or Advanced Payments require Contractor to complete online registration in the Managed Vendor Program (MVP). MVP has an annual $49.99 Registration Fee to be part of the Contractor Direct Repair Program. Material Deposits &/or Advanced Payments will require a 2% Invoice Payment Discount.

INVITATION FOR BID (IFB)
GC2018092565-007001-Exhibit A

Project Summary: The location the remnants of a warehouse building which was a complete loss as a result of Hurricane Michael. The invitation for bid is to complete the required plumbing work. The drain and supply lines have been roughed in under the slab. The slab of the new building has been poured and has cured. The skeleton of the building has been completed and current contractor will be on site installing insulation and exterior wall panels. Anticipate work beginning March 2020. Contractor is expected to work in conjunction with other trades. Scheduling will be important to ensure limited delays amongst other trades.

Bidding Information:
Bids are to be returned to:
bids@synergynds.com

Bid is to be provided in a lump sum total.

Bid packets shall include the following:
1) Completed IFB Form.
2) Copy of Florida License.
3) All proposed materials to be used with manufacture warranty information (Where applicable).
4) Florida Product Approval Sheet for all proposed materials to be used.
5) Proposed timeline for project from beginning of project to completion.

Location:
Warehouse
5167 Fort Road
Greenwood, FL 32443

Work Scope:
- Contractor is to reference the attached drawings for all specifications of work to be completed. Reference to pages P-1, P-1.1, and P-2 specifically.
- Drain and supply lines have been installed in the slab already and all items are to connect to these lines.
- Contractor is to rough in all plumbing lines as required.
- Fixtures to be provided in accordance with the plumbing fixture schedule.
    - Fixtures include:
        - 42” x 42” handicap accessible shower with shower head and mixing valves.
        - Adult handicap toilet with all accessories.
        - Sink for bathroom to be mounted at ADA required height with faucet.
            - Pipe wraps are required for all exposed plumbing lines.
        - Double bowl sink for breakroom with faucet.
        - Service sink for warehouse area.

        - Emergency eye wash/shower in the identified area of the warehouse.
        - Wall mounter, electric water cooler in the warehouse.
        - Electric water heater.
        - Exterior hose bibs in identified areas.
- Contractor is to hook sewer line into the septic tank which is already in place.
- Contractor is to tie water lines for building into the municipal water supply system.
- Contractor is to work in conjunction with HVAC contractor for installation of required condensate lines.
- Contractor is to leave all lines full of water and under pressure during construction phase.
    - Purpose is to allow for quick identification of water lines being penetrated during installation of drywall.
- All penetrations through walls or ceiling shall be fire caulked.
- Any vent penetrations through roof shall be coordinated with Emerald Coast Constructors to ensure proper installation of required boots.
- General Notes:
    - Contractor is required to keep site clean and tidy at all times.
    - Contractor is required to clean all areas at the end of the project. (Construction clean)
    - Contractor shall review attached drawings. Any information contained in the drawings and not in the Invitation for Bid shall be brought to the attention of SynergyNDS for review. Consideration of these items shall be considered when providing the lump sum bid.
    - Any specifications of manufacture specific is for reference only and not an indication that the manufacture must be used.

Reminder Notes:

1. Contractor is responsible to validate all quantities and units of measurements specific to the scope items above. Information above is intended as a general guidance purpose only.
2. Contractor has the sole responsibility to ensure that all services and materials for bid submittal meet all codes and standards. This include that all work must be completed in order to meet all codes and standards.
3. Contractor should also consider method to stock/store materials at the jobsite in a safe and secure manner. SynergyNDS will not be responsible for lost or stolen materials, supplies, or equipment from the location.
4. Contractor is strongly encouraged to schedule a site visit of the property as necessary to support the IFB submittal.
5. Contractor can submit request for site visit, all questions &/or concerns to the specific IFB by emailing: bids@synergynds.com

NEW MUNICIPAL WAREHOUSE
FOR:
THE TOWN OF GREENWOOD
5167 FORT ROAD, HIGHWAY 69, GREENWOOD FLORIDA

CITY OFFICIALS

MAYOR	■ PHYLLIS BOWMAN
TOWN CLERK	■ ALICIA L. CORDER
CITY COUNCIL	■ BRYAN JOHNSON
	■ MAMIE VANN
	■ THOMAS ANDREASEN

PROJECT INFORMATION

OCCUPANCY CLASSIFICATION — MODERATE HAZZARD STORAGE * GROUP S-1

CONSTRUCTION TYPE — TYPE (V) FIVE B

BUILDING SQUARE FOOTAGE — FIRST FLOOR: 3,200 S.F.
MEZZANINE: 800 S.F.
TOTAL: 4,000 S.F.

OCCUPANT LOAD — OFFICE – 2 PERSONS
BREAK ROOM – 4 PERSONS
WAREHOUSE – 5 PERSONS
TOTAL – 11 PERSONS

MIN. # OF EXITS — (1) / 2 PROVIDED

AUTOMATIC FIRE PROTECTION SPRINKLER SYSTEM — NOT REQUIRED / NOT PROVIDED

PORTABLE FIRE EXTINGUISHERS — REUIRED / PROVIDED

PROJECT DESIGN LOADS

ROOF LIVE LOAD — 20 P.S.F.

MEZZANINE FLOOR LIVE LOAD — 100 P.S.F.

WIND LOAD CRITERIA — BUILDING RISK CATEGORY – II
BASIC WIND SPEED – 120 MPH (V) ULT.
EXPOSURE CATEGORY – EXPOSURE (C)
INTERNAL PRESSURE COEFFICIENT – 0.18 (GPCI)

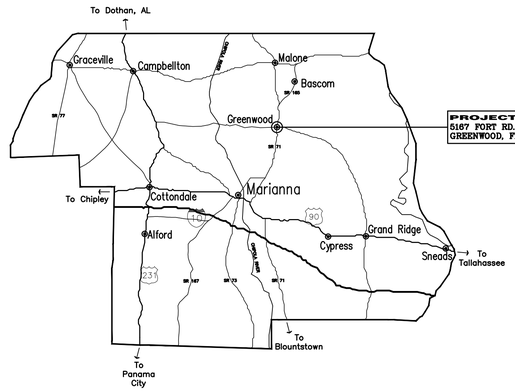
P.E.M.B. SUPPLEMENTAL DESIGN CRITERIA

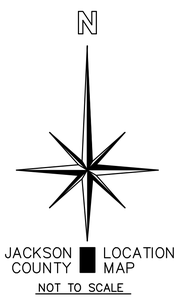
ROOF LIVE LOAD – 20 PSF (REDUCABLE @ R.F. RAFTERS & COLUMNS ONLY)
DEAD LOAD – WEIGHT OF STRUCTURE
COLLATERAL LOAD – 5 PSF
CONCENTRATED LOADS – MECHANICAL EQUIPMENT
LATERAL FRAME DRIFT – H/100
WALL GIRT DEFLECTION – L/240 OR 1-1/2" MAX
COLUMN SHAFT DEFLECTION – L/240

PROJECT DIRECTORY

OWNER	■ TOWN OF GREENWOOD 4207 BRYAN ST. GREENWOOD, FLORIDA (850) 594-1216
OWNER'S REPRESENTATIVE	■ SYNERGY NDS KEITH BASSETT (407) 454-9195
DESIGN ARCHITECT	■ DONOFRO ARCHITECTS 2910 CALEDONIA ST. MARIANNA, FLORIDA (850) 482-5261
ARCHITECT OF RECORD	■ DONOFRO ARCHITECTS 2910 CALEDONIA ST. MARIANNA, FLORIDA (850) 482-5261
CIVIL ENGINEERING	■ PROVIDED UNDER SEPARATE CONTRACT BY OWNER
STRUCTURAL ENGINEER	■ JOHNSON ENGINEERING ASSOCIATES DOTHAN, ALABAMA (850) 671-7221
MECHANICAL ENGINEER	■ WATFORD ENGINEERING INC. 4471 CLINTON ST. MARIANNA, FLORIDA (850) 526-3447
ELECTRICAL ENGINEER	■ HUMBER-GARICK CONSULTING ENGINEERS 142 EGLIN PARKWAY SE, FORT WALTON BEACH, FLORIDA (850) 526-3447

INDEX TO DRAWINGS



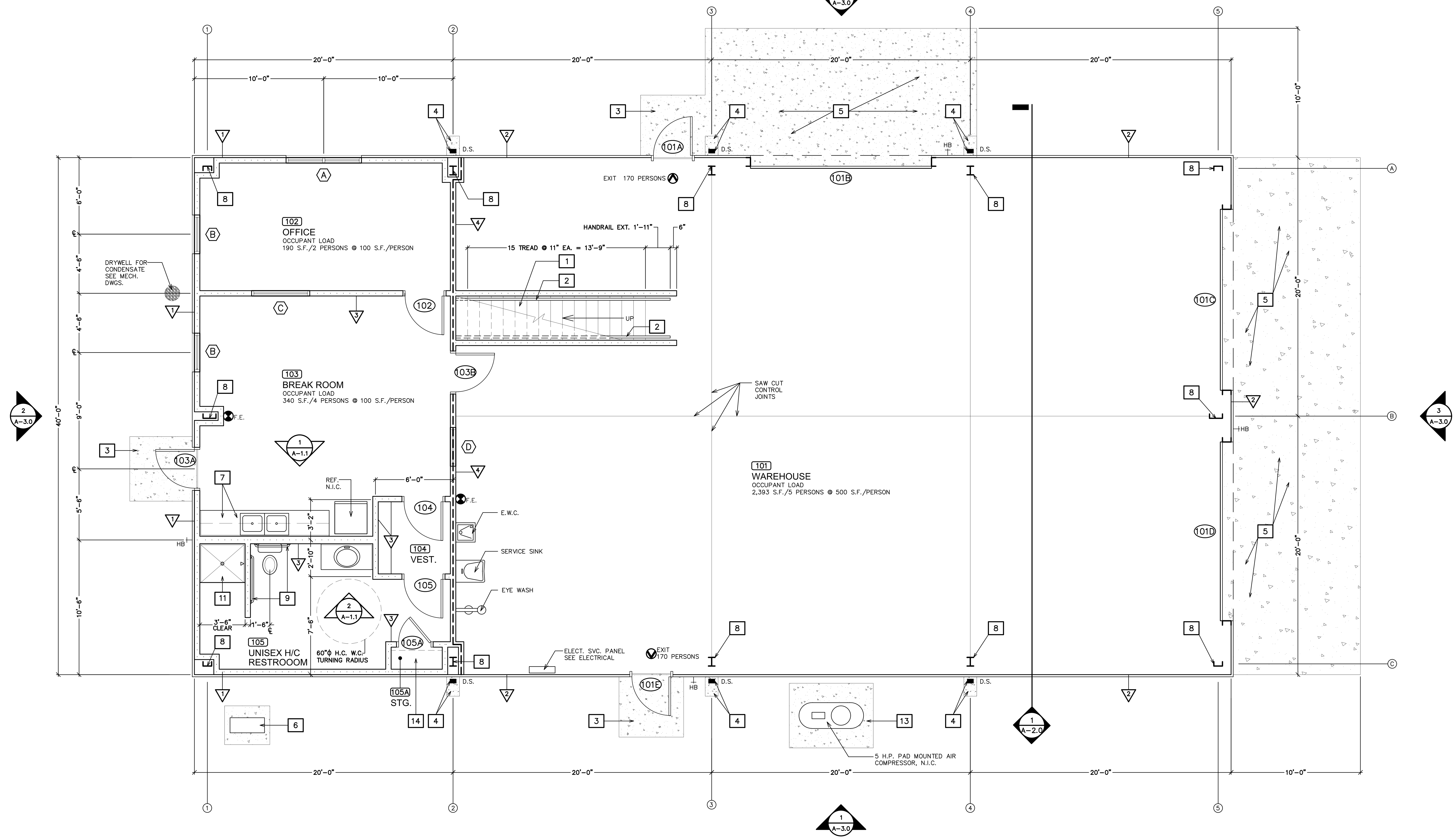


PROJECT ABBREVIATIONS

A/C	AIR CONDITIONING	ELEV	ELEVATION
AFF	ABOVE FINISH FLOOR	ELEC	ELECTRICAL
ALUM	ALUMINUM	EOR	EDGE OF ROOF
CONC	CONCRETE	GALV	GALVANIZED
COND	CONDENSING	HVAC	HEATING, VENTILATION, & A/C
CONN	CONNECTION	MTD.	MOUNTED
CONT	CONTINUOUS	N.I.C.	NOT IN CONTRACT
CORR	CORRIDOR	RD	ROOF DRAIN
DET	DETAIL	SCHED	SCHEDULE
DWG	DRAWING	SHT	SHEET
EF	EXHAUST FAN	SIM	SIMILAR
		TYP	TYPICAL
		UNO	UNLESS NOTED OTHERWISE

DONOFRO ARCHITECTS ■
2910 CALEDONIA MARIANNA, FLORIDA (850) 482-5261

JOB NUMBER: M-2019-03
DATE: AUGUST 3, 2019
CONSTRUCTION SET # _____



FIRST FLOOR PLAN

1/4"=1'-0"

WALL SCHEDULE

MARK	SYMBOL	WALL TYPE	DISCRIPTION
1		EXTERIOR WALL	PRE-FINISHED METAL WALL PANELS / 2 X 4 WOOD STUD FRAMING @ 16" O.C. W/ R=11 FIBERGLASS BATT INSULATION @ CAVITY, MOISTURE & AIR BARRIER @ EXTERIOR & 5/8" GYP. BOARD INTERIOR WALL
2		EXTERIOR WALL	PRE-FINISHED METAL WALL PANELS OVER 3-1/2" VINYL FACED BLANKET INSULATION OVER P.E.M.B. SECONDARY FRAMING MEMBERS
3		INTERIOR WALL	2 X 4 WOOD STUD FRAMING @ 16" O.C. W/ 3-1/2" FIBERGLASS SOUND BATTS @ CAVITY & 5/8" GYP. WALL BOARD EA. SIDE
4		INTERIOR 1HR RATED WALL	2 X 4 WOOD STUD FRAMING @ 16" O.C. W/ R=11 FIBERGLASS BATT INSULATION @ STUD CAVITY & 1 LAYER OF 5/8" TYPE X F.C. GYP WALL BOARD EACH SIDE

NOTE!
CONTRACTORS OPTION TO USE STEEL STUD FRAMING AS OPTION TO WOOD STUD FRAMING. NOMINAL SIZE & SPACING SHALL BE THE SAME FOR STEEL AS FOR WOOD & GA. SHALL BE 20 GA. FOR NOT LOAD BEARING INTERIOR WALLS & 18 GA. FOR LOAD BEARING & EXTERIOR WALL ASSEMBLY

FLOOR PLAN LEGEND

- ROOM FINISH SCHEDULE REFERENCE SYMBOL
- WINDOW SCHEDULE REFERENCE SYMBOL
- DOOR SCHEDULE REFERENCE SYMBOL
- GENERAL CONSTRUCTION NOTE REFERENCE SYMBOL SEE SHEET A-1.1
- STEEL COLUMN LOCATION REFERENCE SYMBOL
- F.E. WALL MTD. 10 LB. CAPACITY FIRE EXTINGUISHER
- WALL TYPE SCHEDULE REFERENCE SYMBOL
- EXTERIOR ELEVATION REFERENCE SYMBOL
- INTERIOR ELEVATION REFERENCE SYMBOL
- NEW REINFORCED CONC. PAD, STAIRS, RAMP, OR WALK
- NEW EXTERIOR WALL CONSTRUCTION SEE TRANSVERSE SECTION
- NEW INTERIOR WALL CONSTRUCTION SEE INTERIOR WALL SECTIONS SHEET A-5.0
- NEW 1HR. RATED WALL CONSTRUCTION

DONOFRO ARCHITECTS
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MARIANNA, FL 32446
OFFICE: (850) 482-5261
P.O. BOX 861
MARIANNA, FL 32447
FAX: (850) 482-8609

SHEET TITLE: FIRST FLOOR PLAN * FLOOR PLAN LEGEND * WALL SCHEDULE

NEW MUNICIPAL WAREHOUSE
FOR:
TOWN OF GREENWOOD
GREENWOOD, FLORIDA

JOB NUMBER: M-2019-03
DATE: AUG 3, 2019
DRAWN BY: C.L.D.
CHECKED BY: P.A.D., JR.

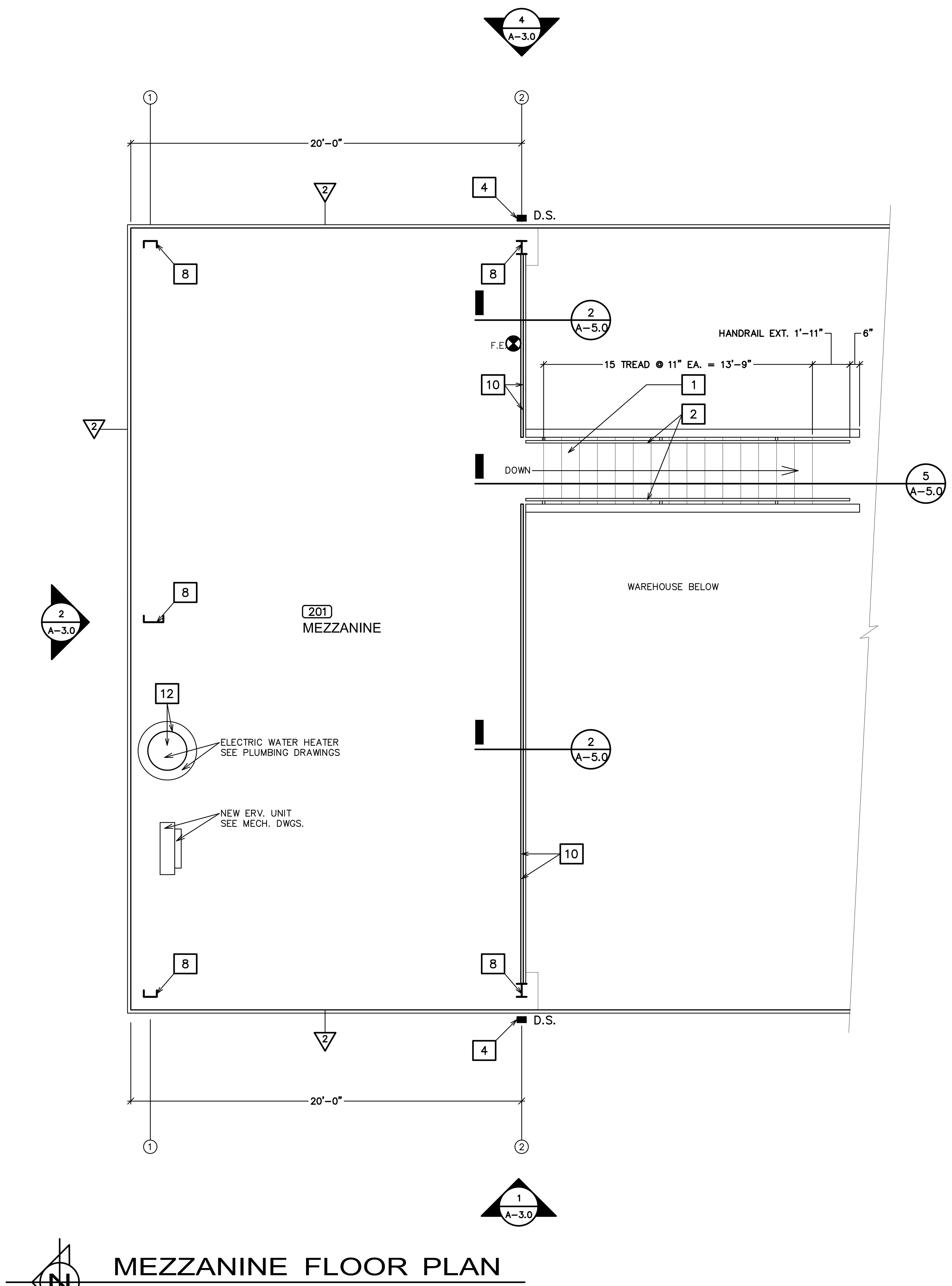
SHEET No.
A-1.0

FLOOR PLAN LEGEND

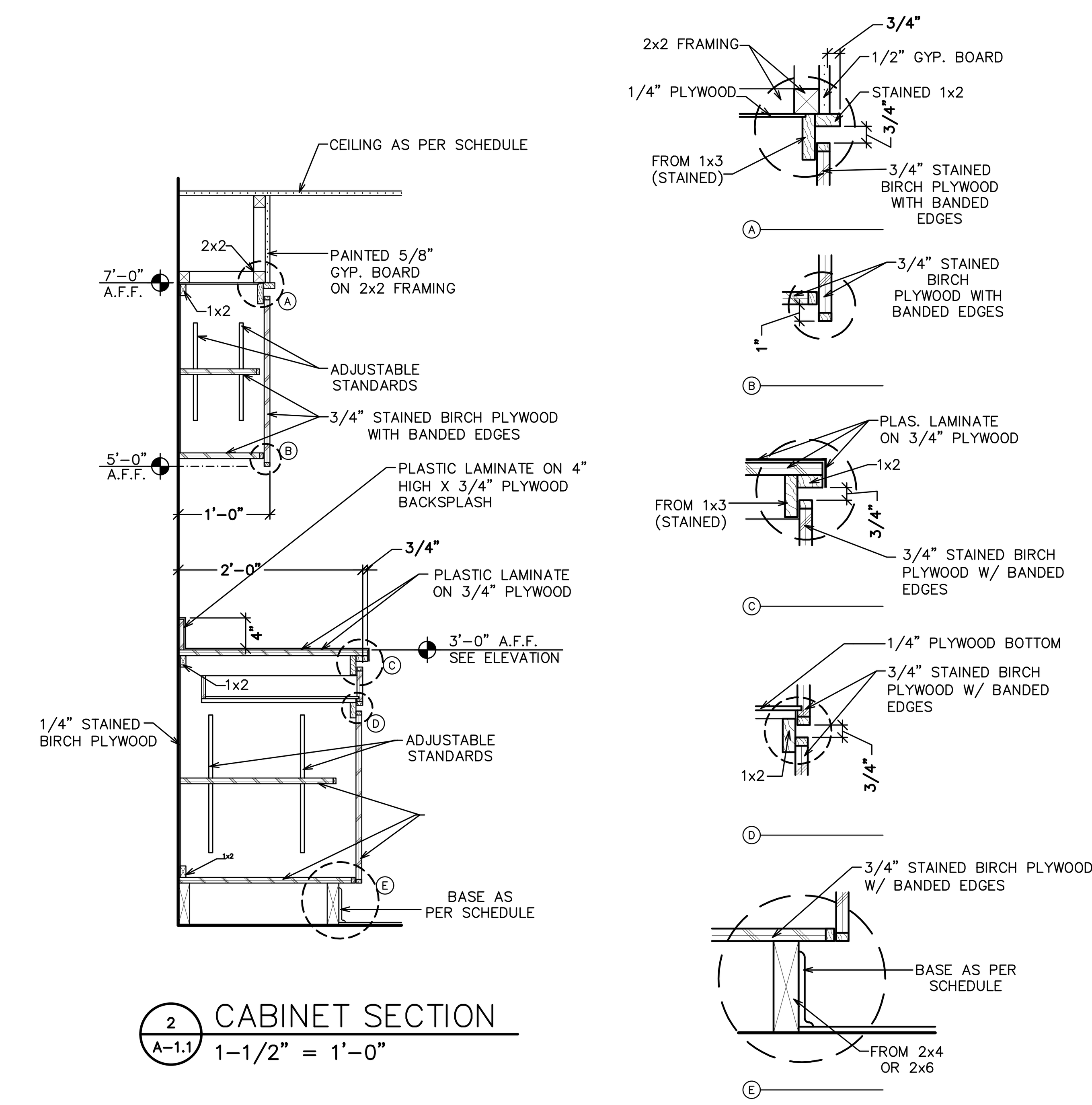
- ROOM FINISH SCHEDULE REFERENCE SYMBOL
- WINDOW SCHEDULE REFERENCE SYMBOL
- DOOR SCHEDULE REFERENCE SYMBOL
- GENERAL CONSTRUCTION NOTE REFERENCE SYMBOL
- STEEL COLUMN LOCATION REFERENCE SYMBOL
- F.E. WALL MTD. 10 LB. CAPACITY FIRE EXTINGUISHER
- EXTERIOR ELEVATION REFERENCE SYMBOL
- INTERIOR ELEVATION REFERENCE SYMBOL
- NEW EXTERIOR WALL CONSTRUCTION

CONSTRUCTION NOTES

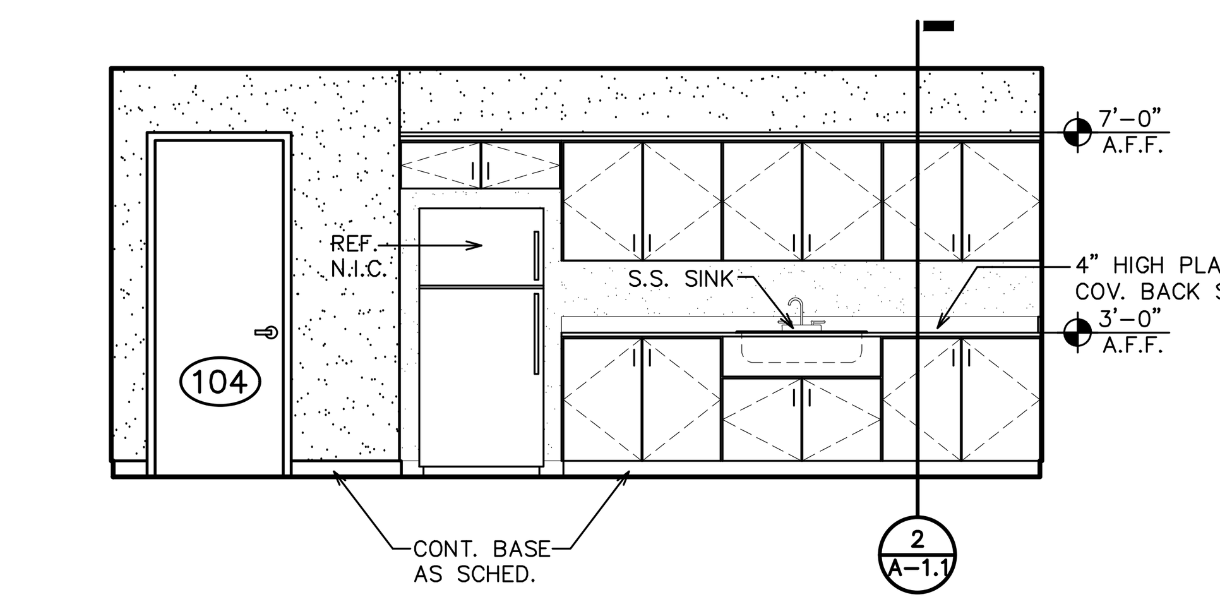
1. CONSTRUCT WOOD 2ND FLOOR ACCESS STAIRS. SEE INTERIOR ELEVATION & CONSTRUCTION SECTION
2. PROVIDE AND INSTALL 1/4" DIA. PAINTED STL. PIPE HANDRAILS @ EA. SIDE OF STAIRS. SEE INTERIOR ELEVATION & CONSTRUCTION SECTION.
3. CONSTRUCT 6" THICK CONC. PAD @ ENTRANCE DOOR. REINFORCE W/ 6 X 6 10/10 W.1.4 X 1.4 W.W.M. & TURN DOWN EDGES 8" X 8" SLOPE TOP OF SLAB MIN. 1/4" / FOOT AWAY FROM BUILDING & PROVIDE LIGHT BROOM FINISH
4. PROVIDE/CONSTRUCT 12" X 16" CONC. SPLASH PAD @ EA. MTL. DOWNSPOUT LEADER.
5. CONSTRUCT 10'-0" X 40'-0" X 6" THICK CONC. APRON REINF. W/ 6X6 W4.0X4.0 W.W.M. TURN DOWN SLAB EDGES AS PER STRUCTURAL DRAWINGS. SLOPE TOP OF APRON MIN. OF 1/4" / FOOT AWAY FROM BUILDING & PROVIDE LIGHT BROOM FINISH.
6. CONSTRUCT CONC. PAD FOR MINI-SPLIT CONDENSER UNIT. COORDINATE EXACT SIZE & LOCATION W/ MECH. SUB-CONTRACTOR.
7. CONSTRUCT STAINED WOOD BASE & WALL CABINETS. SEE INTERIOR ELEVATIONS & CONSTRUCTION SECTION FOR DETAILS.
8. DENOTES PRE-ENGINEERED METAL BUILDING SYSTEM RIGID FRAME & END WALL COLUMNS. EXACT SIZE AS PER P.E.M.B. SEE STRUCTURAL DRAWINGS FOR FOUNDATION FOOTINGS.
9. INDICATES ALUMINUM GRAB BARS. SEE GRAB BAR SCHEDULE THIS SHEET & SPECIFICATIONS. PROVIDE DEAD WOOD/BLOCKING AS REQ. FOR MOUNTING TO WALLS.
10. CONSTRUCT 2ND FLOOR STORAGE GUARDRAIL. SEE INTERIOR ELEVATION & SECTION.
11. PROVIDE & INSTALL 42" X 42" FIBERGLASS SHOWER ENCLOSURE. SEE PLUMBING DWGS. FOR WATER & WASTE CONNECTIONS.
12. PROVIDE & INSTALL NEW ELECTRIC WATER HEATER. SEE PLUMBING & ELECTRICAL DRAWINGS.
13. CONSTRUCT C.I.P. 4" THICK CONC. PAD FOR FOR OWNER PROVIDED 5 H.P. AIR COMPRESSOR. REINF. CONC. PAD W/ 6 X 6 W4.0 X 4.0 W.W.M. & PROVIDE ;IGHT BROOM FINISH. COORDINATE EXACT EXACT SIZE & LOCATION OF PAD WITH OWNER.
14. CONSTRUCT (3) 12" WIDE PAINTED WOOD FRAMED SHELVES @ 18" O.C. W/ SHELVES 4'-0", 5'-6", & 7'-0" A.F.F.



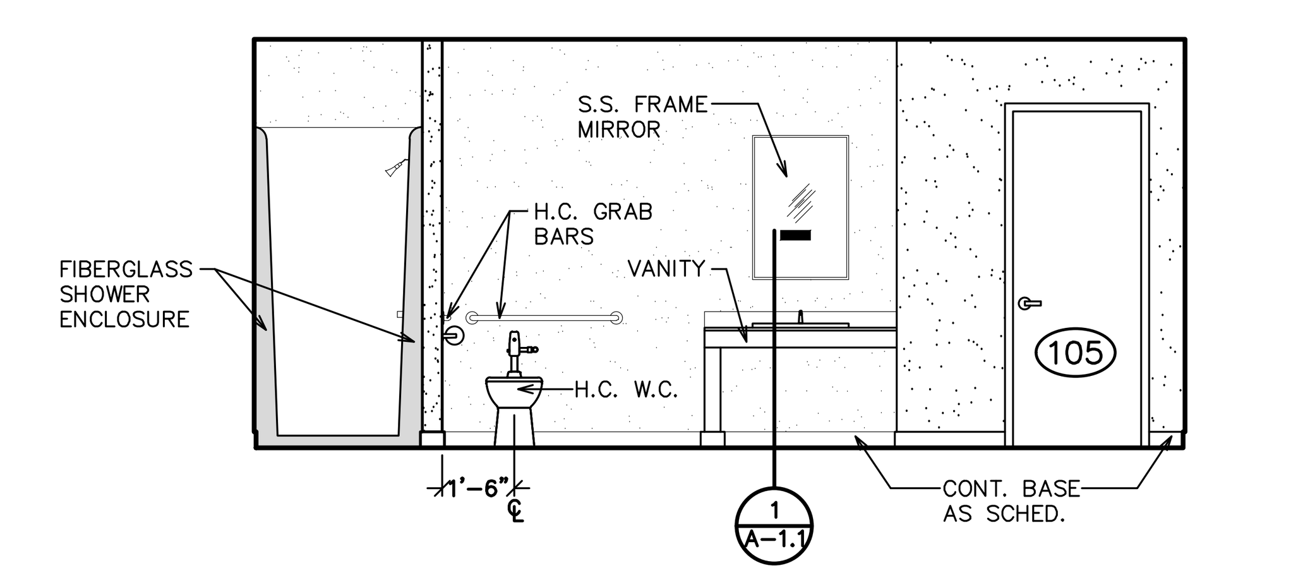
MEZZANINE FLOOR PLAN
1/4"=1'-0"



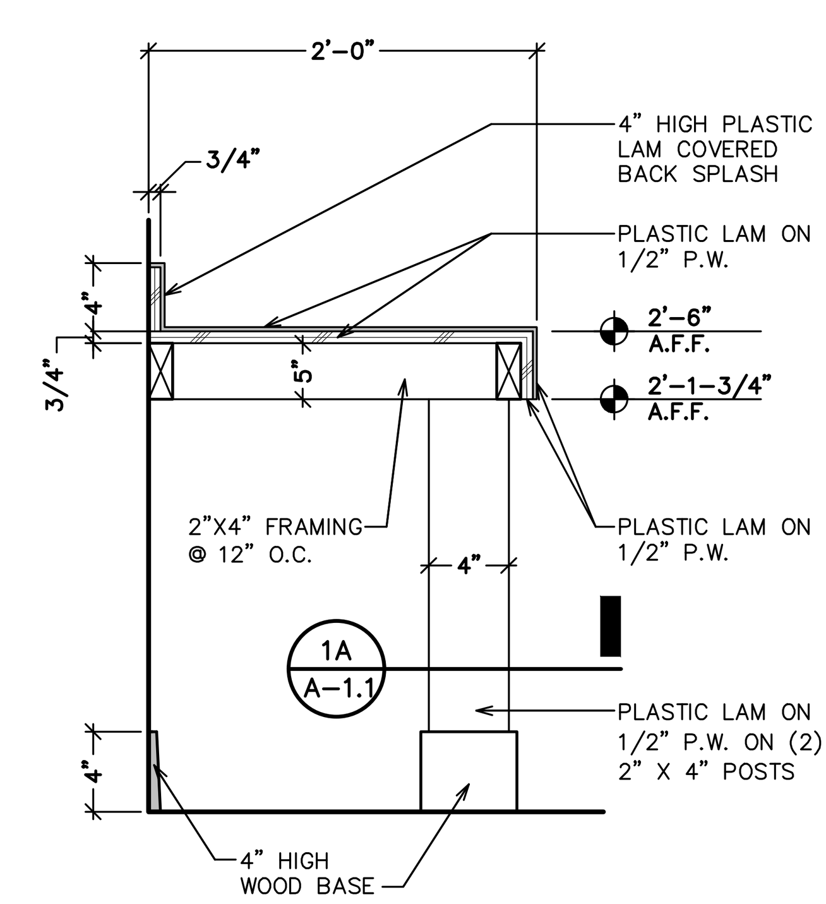
CABINET SECTION
1-1/2" = 1'-0"



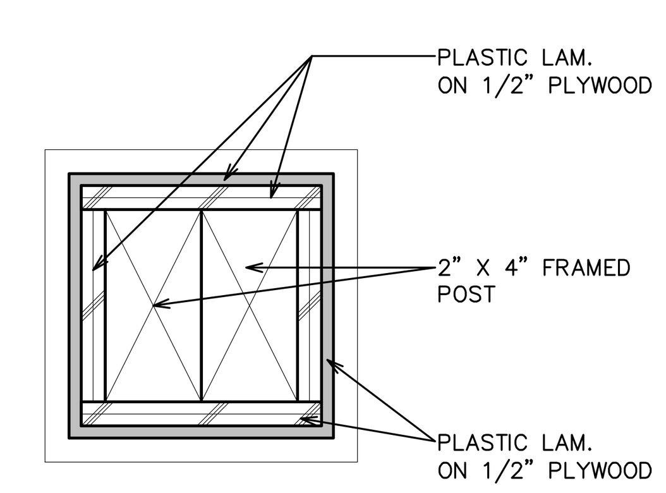
INTERIOR ELEVATION
1/4" = 1'-0"



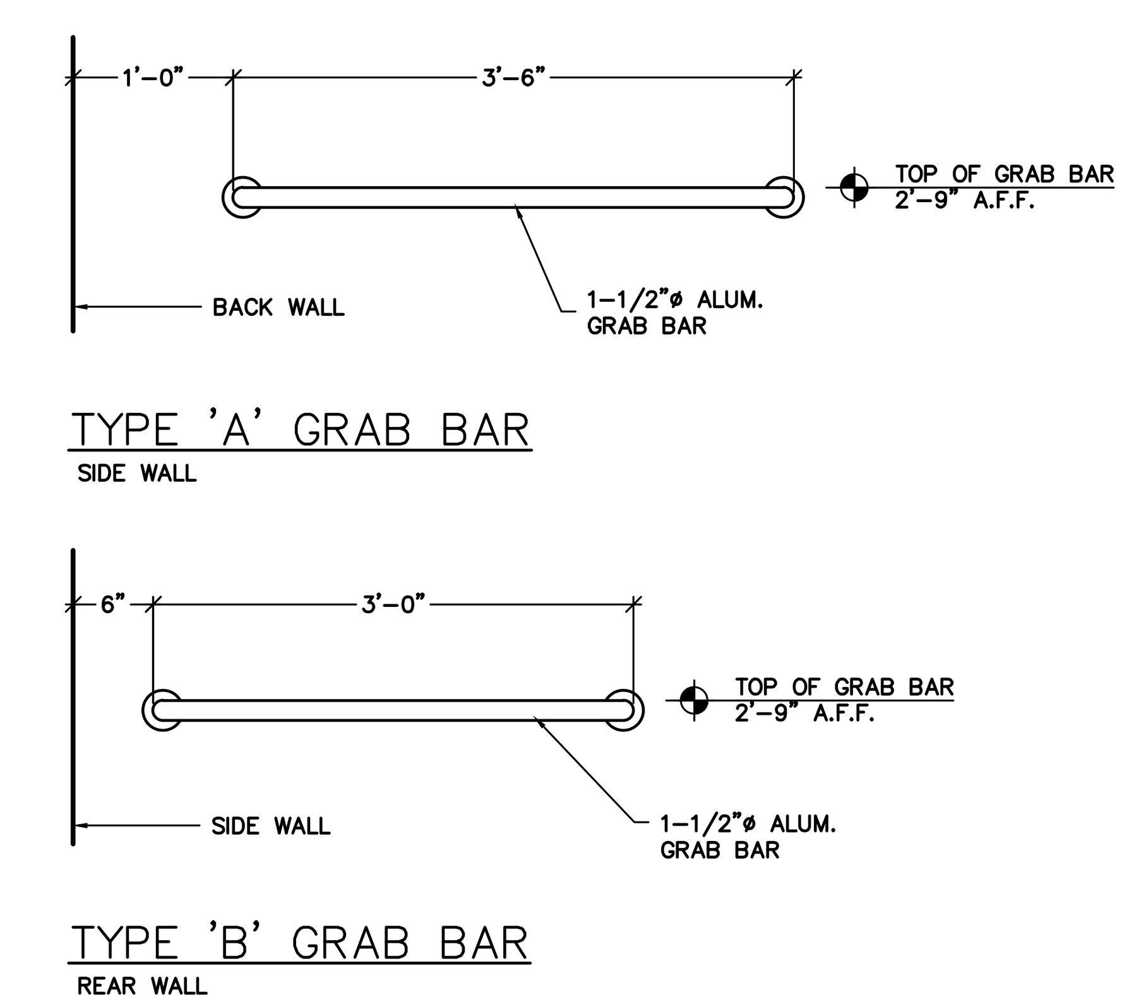
INTERIOR ELEVATION
1/4" = 1'-0"



VANITY DETAIL
1" = 1'-0"



POST DETAIL
3"=1'-0"



GRAB BAR SCHEDULE
SCALE

DONOFRO ARCHITECTS
2910 CALEDONIA ST.
MARIANNA, FL 32446
OFFICE: (850) 482-5261
P.O. BOX 861
MARIANNA, FL 32447
FAX: (850) 482-8609

SHEET TITLE: MEZZANINE FLOOR PLAN * CONSTRUCT. NOTES * INTERIOR ELEVATIONS * DETAILS * LEGEND

NEW MUNICIPAL WAREHOUSE
FOR:
TOWN OF GREENWOOD
GREENWOOD, FLORIDA

JOB NUMBER: M-2019-03
DATE: AUG. 3, 2019
DRAWN BY: C.L.D.
CHECKED BY: P.A.D., JR.

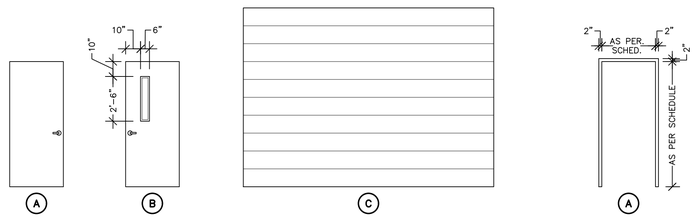
SHEET No.
A-1.1

ROOM FINISH SCHEDULE

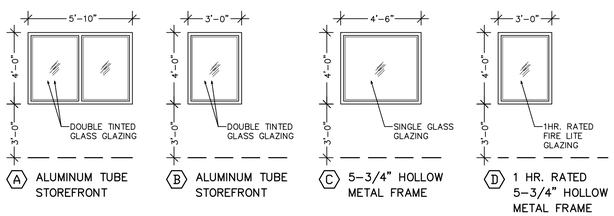
ROOM NUMBER	ROOM NAME	FLOORING: CERAMIC TILE	FLOORING: SOLID VINYL PLANK TILE	FLOORING: CARPET TILE	FLOORING: NONE OR EXPOSED PLYWOOD	FLOORING: SEALED CONC.	BASE: CERAMIC TILE	BASE: WOOD	BASE: RUBBER	BASE: NONE	WALLS: PAINTED PLYWOOD	WALLS: PAINTED CONC. BLOCK	WALLS: PAINTED GYPSUM BOARD	WALLS: NONE	CEILING: SUSPENDED ACOUSTICAL TILE	CEILING: SUSPENDED VINYL CLAD TILE	CEILING: PAINTED GYP. BOARD	CEILING: NONE	CHAIR RAIL	CROWN MOLDING	CEILING HEIGHT	REMARKS	ROOM NUMBER
101	WAREHOUSE					●				●	●			●				●				PAINTED PLYWOOD WALL @ NORTHSIDE ONLY	101
102	OFFICE					●			●				●				●				8'-0"		102
103	BREAKROOM					●			●				●				●				8'-0"		103
104	VESTIBULE					●			●				●				●				8'-0"		104
105	UNISEX H.C. RESTROOM					●			●				●				●				8'-0"		105
105A	STORAGE					●			●				●				●				8'-0"		105A
201	STORAGE				●					●				●				●					201

DOOR SCHEDULE

DOOR NUMBER	DOOR SIZE: WIDTH	DOOR SIZE: HEIGHT	DOOR SIZE: THICKNESS	DOOR DESCRIPTION	DOOR TYPE	FRAME DESCRIPTION	FRAME TYPE	HARDWARE: SET. NUMBER	HARDWARE: CLOSER	HARDWARE: WEATHERSTRIPPING	REMARKS	SIGNAGE	DOOR NUMBER
101A	3'-0"	7'-0"	1-3/4"	HOLLOW METAL FLUSH PANEL	A	5-3/4" HOLLOW METAL	A	1		●			101A
101B	14'-0"	10'-0"		STEEL ROLL UP DOOR	C								101B
101C	14'-0"	10'-0"		STEEL ROLL UP DOOR	C								101C
101D	14'-0"	10'-0"		STEEL ROLL UP DOOR	C								101D
101E	3'-0"	7'-0"	1-3/4"	HOLLOW METAL FLUSH PANEL	A	5-3/4" HOLLOW METAL	A	1		●			101E
102	3'-0"	7'-0"	1-3/4"	WOOD SOLID CORE FLUSH PANEL	A	5-3/4" HOLLOW METAL	A	3				OFFICE	102
103A	3'-0"	7'-0"	1-3/4"	HOLLOW METAL FLUSH PANEL	A	5-3/4" HOLLOW METAL	A	1	●	●			103A
103B	3'-0"	7'-0"	1-3/4"	WOOD SOLID CORE FLUSH PANEL	B	5-3/4" HOLLOW METAL	A	4	●		1HR. RATED DOOR & FRAME	BREAK-ROOM	103B
104	3'-0"	7'-0"	1-3/4"	WOOD SOLID CORE FLUSH PANEL	A	5-3/4" HOLLOW METAL	A	5	●			H/C ACCESS SYS.	104
105	3'-0"	7'-0"	1-3/4"	WOOD SOLID CORE FLUSH PANEL	A	5-3/4" HOLLOW METAL	A	6	●			H/C ACCESS SYS.	105
105A	2'-6"	7'-0"	1-3/4"	WOOD SOLID CORE FLUSH PANEL	A	5-3/4" HOLLOW METAL	A	2				STORAGE	105A



DOOR TYPES
1/4" = 1'-0"



FOOR FRAME TYPES
1/4" = 1'-0"

WINDOW TYPES
1/4" = 1'-0"

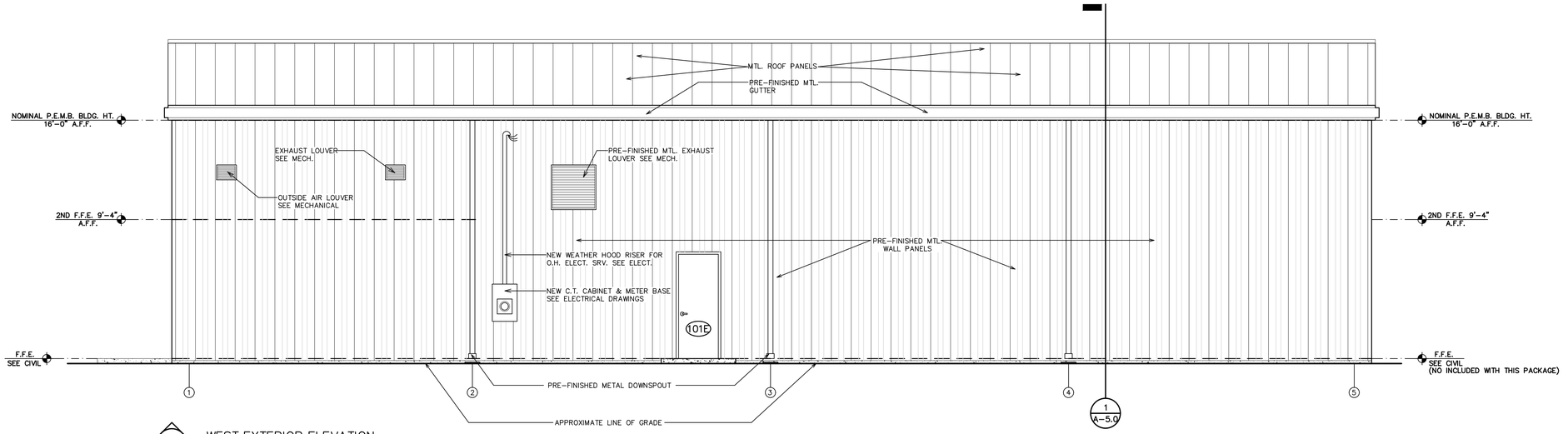
DONOFRO ARCHITECTS
2910 CALEDONIA ST. P.O. BOX 861
MARIANNA, FL 32446 MARIANNA, FL 32447
OFFICE: (850) 482-5261 FAX: (850) 482-8609

SHEET TITLE: ROOM FINISH & DOOR SCHEDULES * WINDOW & DOOR TYPES * DOOR FRAME TYPES

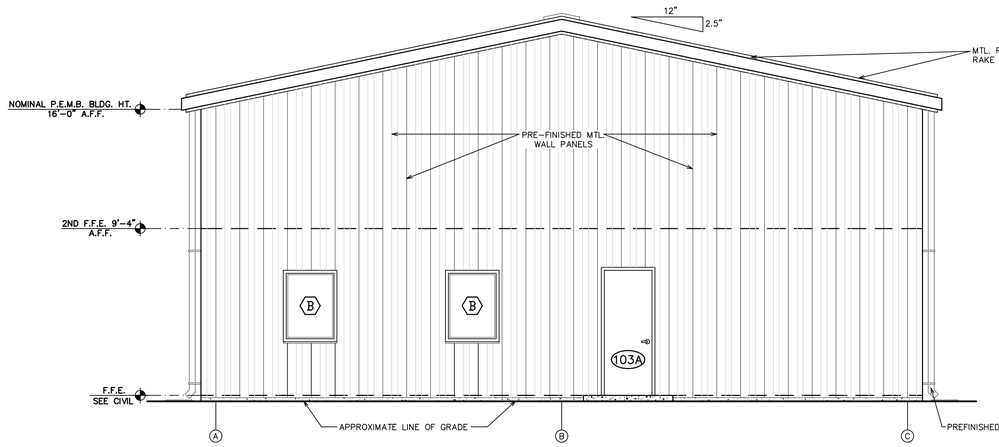
NEW MUNICIPAL WAREHOUSE
FOR:
TOWN OF GREENWOOD
GREENWOOD, FLORIDA

JOB NUMBER: M-2019-03
DATE: AUG. 3, 2019
DRAWN BY: C.L.D.
CHECKED BY: P.A.D., JR.

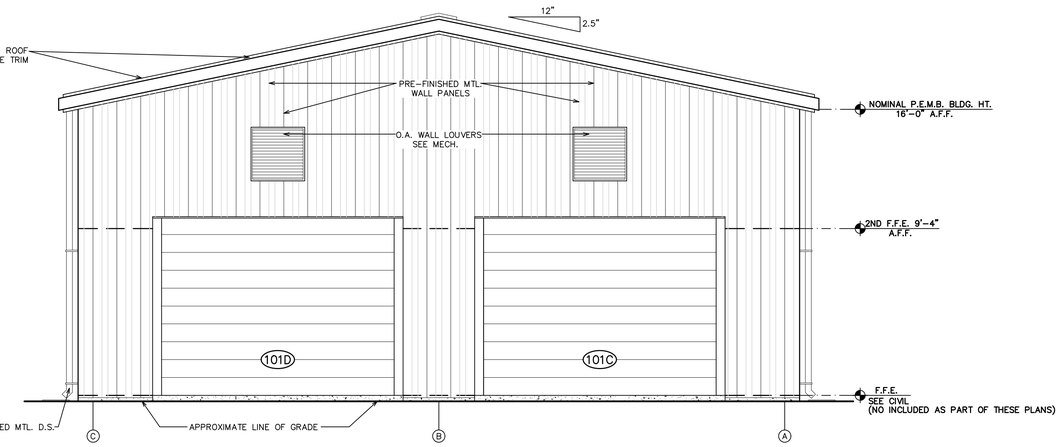
SHEET No.
A-2.0



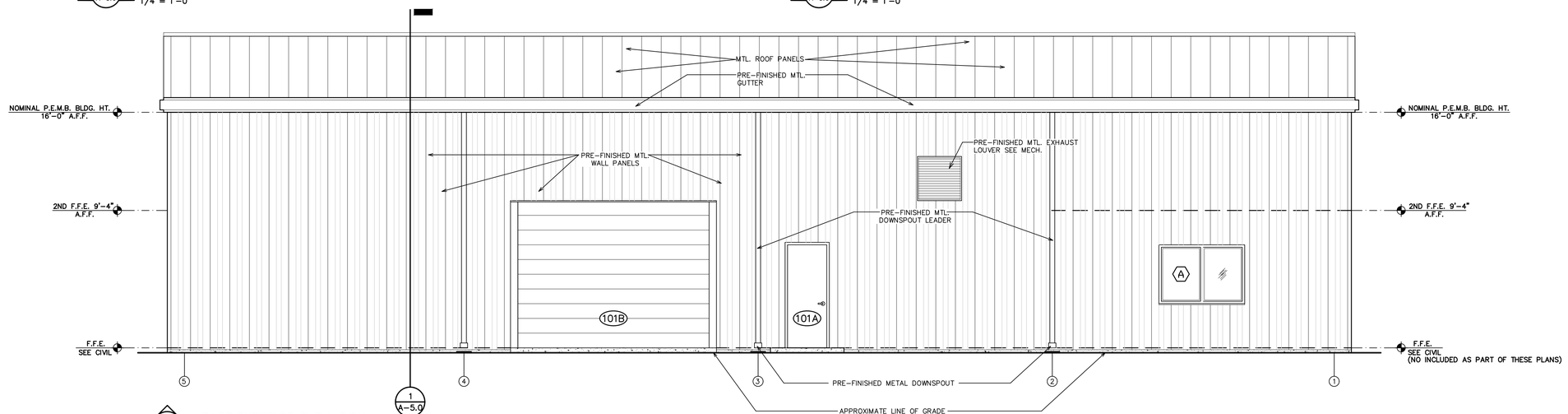
1 A-3.0 WEST EXTERIOR ELEVATION
1/4" = 1'-0"



2 A-3.0 NORTH EXTERIOR ELEVATION
1/4" = 1'-0"



3 A-3.0 SOUTH EXTERIOR ELEVATION
1/4" = 1'-0"



4 A-3.0 EAST EXTERIOR ELEVATION
1/4" = 1'-0"

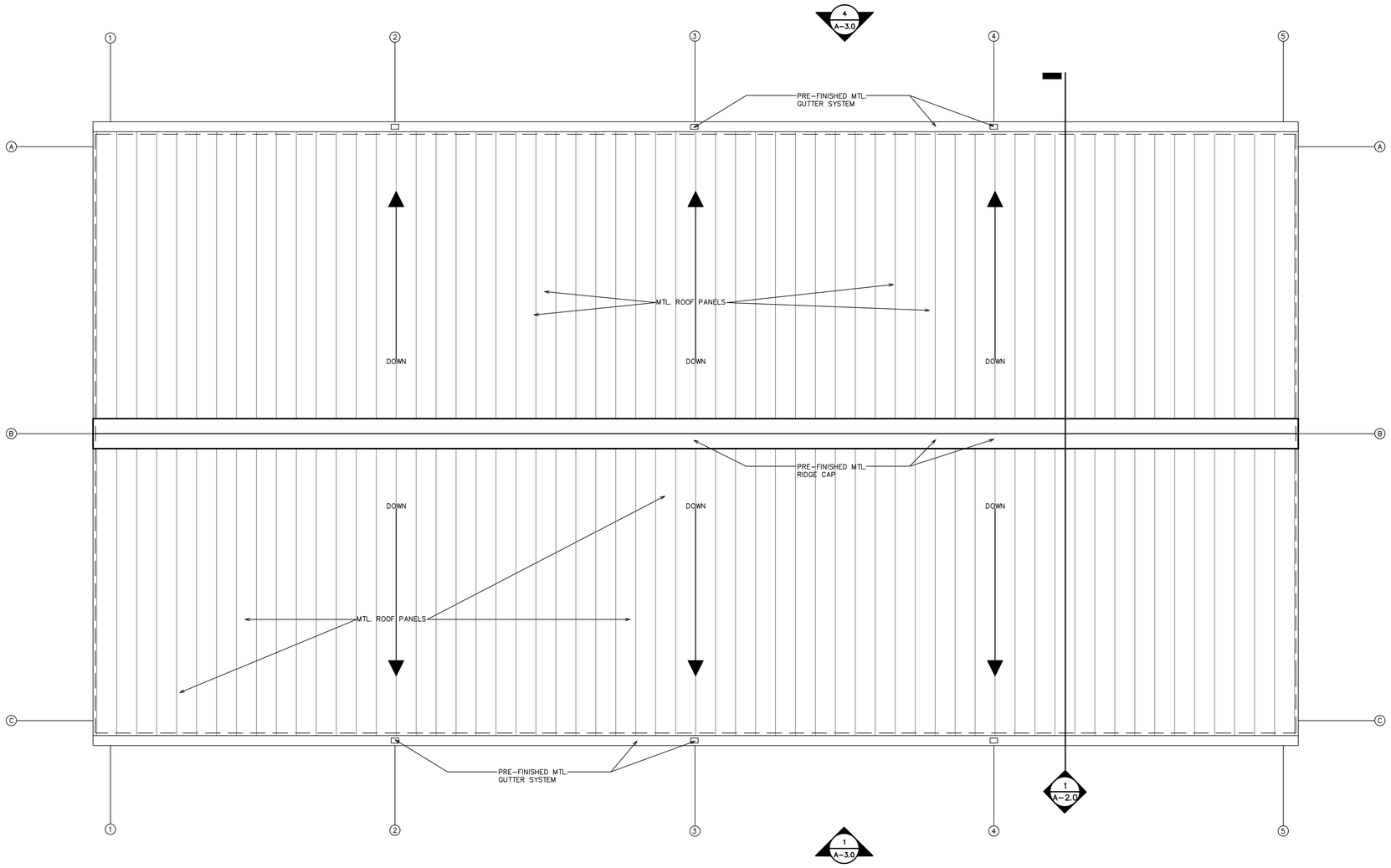
DONOFRO ARCHITECTS
2910 CALEDONIA ST. P.O. BOX 861
MARIANNA, FL 32446 MARIANNA, FL 32447
OFFICE: (850) 482-5261 FAX: (850) 482-8609

SHEET TITLE: EXTERIOR ELEVATIONS

NEW MUNICIPAL WAREHOUSE
FOR:
TOWN OF GREENWOOD
GREENWOOD, FLORIDA

JOB NUMBER: M-2019-03
DATE: AUG. 3, 2019
DRAWN BY: C.L.D.
CHECKED BY: P.A.D., JR.

SHEET No.
A-3.0



ROOF PLAN

1/4"=1'-0"

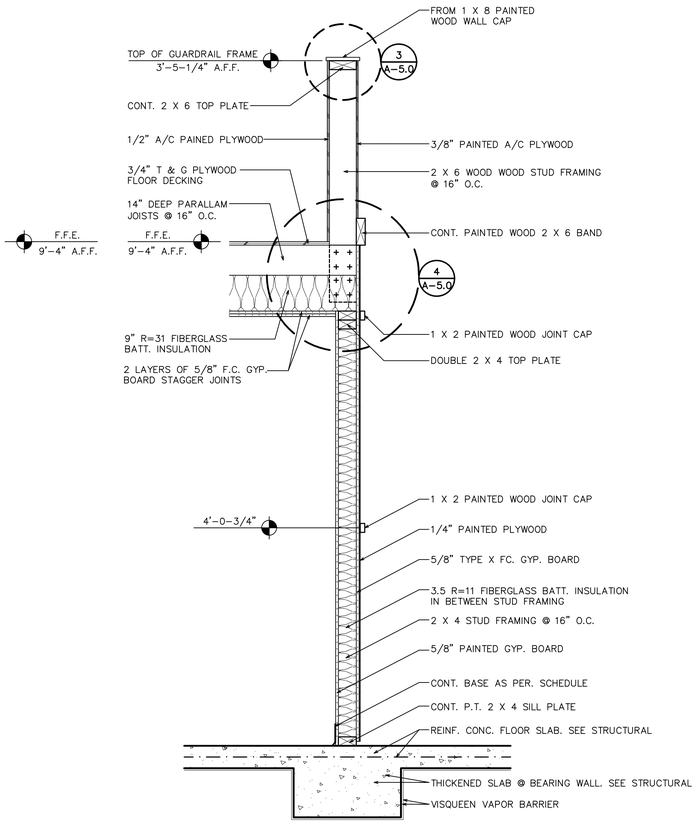
DONOFRO ARCHITECTS
P.O. BOX 861
2910 CALEDONIA ST. MARIANNA, FL 32447
MARIANNA, FL 32446 FAX: (850) 482-8609
OFFICE: (850) 482-5261

SHEET TITLE: ROOF PLAN

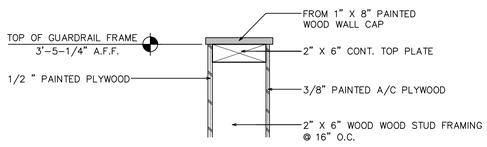
NEW MUNICIPAL WAREHOUSE
FOR:
TOWN OF GREENWOOD
GREENWOOD, FLORIDA

JOB NUMBER: M-2019-03
DATE: AUG. 3, 2019
DRAWN BY: C.L.D.
CHECKED BY: P.A.D., JR.

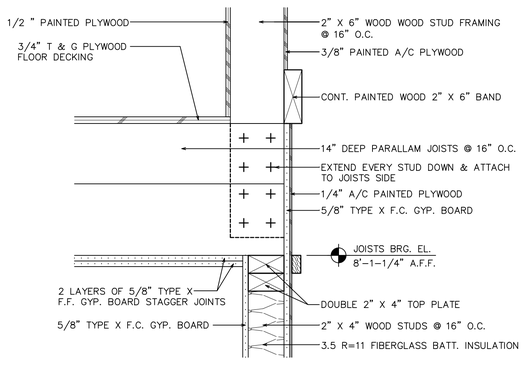
SHEET No.
A-4.0



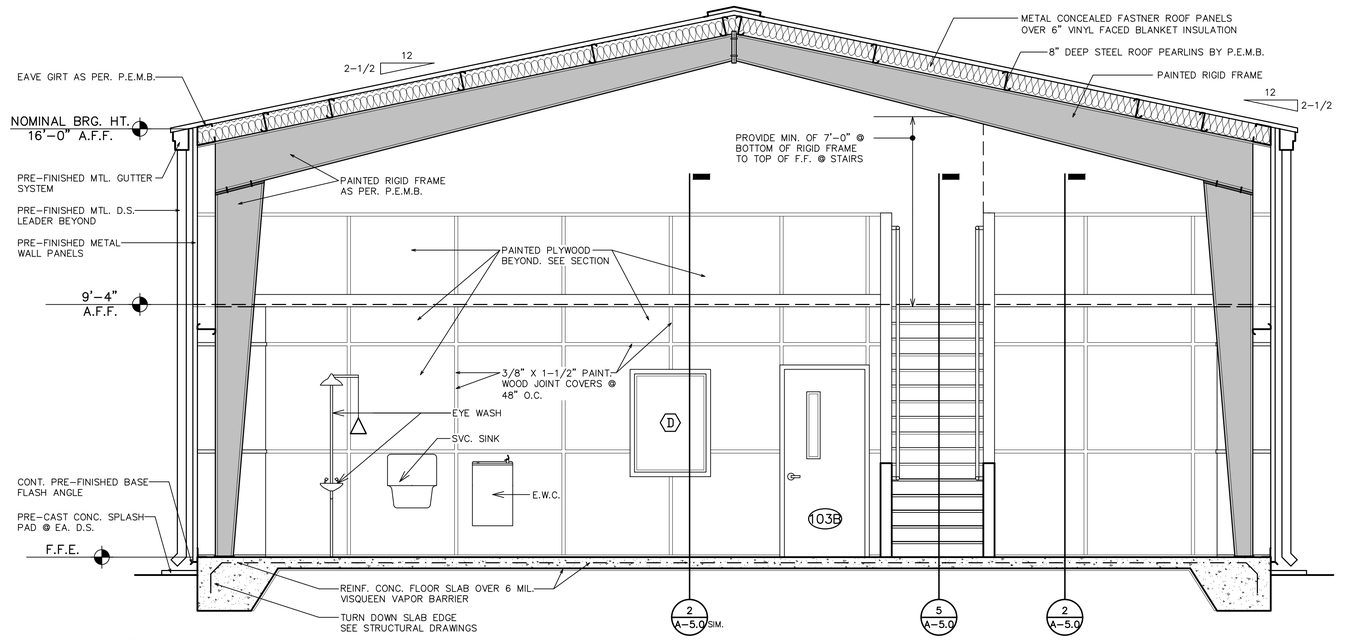
2 A-5.0 CONSTRUCTION SECTION
3/4" = 1'-0"



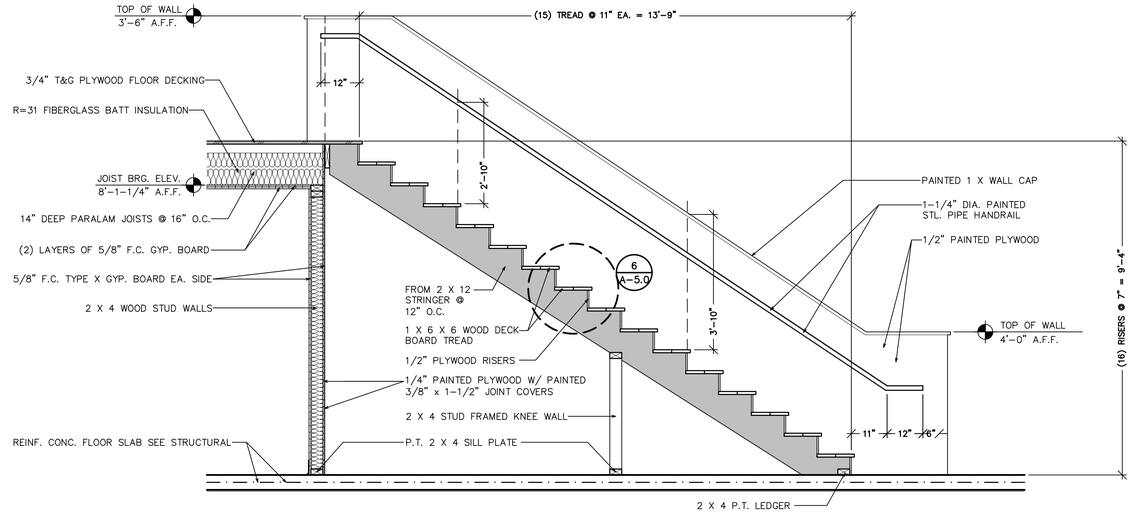
3 A-5.0 CONSTRUCTION DETAIL
1-1/2" = 1'-0"



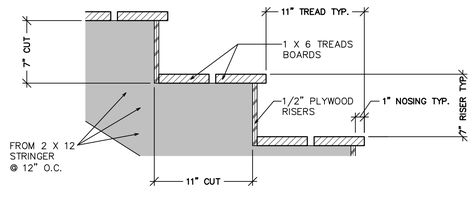
4 A-5.0 CONSTRUCTION DETAIL
1-1/2" = 1'-0"



1 A-5.0 TRANSVERSE BUILDING SECTION
3/8" = 1'-0"



5 A-5.0 STAIR SECTION
1/2" = 1'-0"



6 A-5.0 STAIR DETAIL
1-1/2" = 1'-0"

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SHEET TITLE: TRANSVERSE BUILDING SECTIONS & DETAILS

NEW MUNICIPAL WAREHOUSE
FOR:
TOWN OF GREENWOOD
GREENWOOD, FLORIDA

JOB NUMBER: M-2019-03
DATE: AUG 3, 2019
DRAWN BY: C.L.D.
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SHEET No.
A-5.0

GENERAL STRUCTURAL NOTES

GENERAL

1. NO PROVISION OF ANY REFERENCED STANDARD SPECIFICATION, MANUAL OR CODE (WHETHER OR NOT SPECIFICALLY INCORPORATED BY REFERENCE IN THE CONTRACT DOCUMENTS) SHALL BE EFFECTIVE TO CHANGE THE DUTIES AND RESPONSIBILITIES OF OWNER, CONTRACTOR, ENGINEER OR SUPPLIER OR ANY OF THEIR CONSULTANTS, AGENTS OR EMPLOYEES FROM THOSE SET FORTH IN THE CONTRACT DOCUMENTS, NOR SHALL IT BE EFFECTIVE TO ASSIGN TO THE STRUCTURAL ENGINEER OF RECORD OR ANY OF THE STRUCTURAL ENGINEER OF RECORD'S CONSULTANTS, AGENTS, OR EMPLOYEES ANY DUTY OR AUTHORITY TO SUPERVISE OR DIRECT THE FURNISHING OR PERFORMANCE OF THE WORK OR AUTHORITY TO UNDERTAKE RESPONSIBILITIES CONTRARY TO THE PROVISIONS OF THE CONTRACT DOCUMENTS.

2. THE GENERAL CONTRACTOR SHALL VERIFY THE DIMENSIONS AND SITE CONDITIONS BEFORE STARTING WORK. THE ARCHITECT/STRUCTURAL ENGINEER OF RECORD SHALL BE NOTIFIED OF ANY DISCREPANCY.

3. MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE SIXTH EDITION (2017) FLORIDA BUILDING CODE.

4. THE CONTRACTOR SHALL COORDINATE THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND CIVIL WORKS WITH THE STRUCTURAL CONTRACT DOCUMENTS. ARCHITECT/STRUCTURAL ENGINEER OF RECORD SHALL BE NOTIFIED OF ANY DISCREPANCIES OR OMISSIONS.

5. THE CONTRACTOR SHALL VERIFY THE FLOOR AND ROOF MOUNTED MECHANICAL EQUIPMENTS WEIGHTS, FLOOR AND/OR ROOF OPENING SIZES AND LOCATIONS WITH ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DRAWINGS.

6. THE CONTRACTOR SHALL NOTIFY IN WRITING THE STRUCTURAL ENGINEER OF RECORD OF CONDITIONS ENCOUNTERED IN THE FIELD CONTRADICTORY TO THOSE SHOWN ON THE STRUCTURAL CONTRACT DOCUMENTS.

7. FOR DIMENSIONS NOT SHOWN ON THE STRUCTURAL CONTRACT DOCUMENTS SEE THE ARCHITECTURAL.

8. STRUCTURAL CONTRACT DRAWINGS SHALL NOT INCLUDE SHOP DRAWINGS, VENDOR DRAWINGS, OR ANY MATERIAL PREPARED AND SUBMITTED BY THE CONTRACTOR OR SUBCONTRACTOR.

9. REFERENCE TO STANDARD SPECIFICATIONS OF ANY TECHNICAL SOCIETY, ORGANIZATION OR ASSOCIATION TO CODES OF LOCAL OR STATE AUTHORITIES, SHALL MEAN THE EDITION OF THE REFERENCED CODE INDICATED IN THE BUILDING CODE NOTED ABOVE.

10. ANY CONTRACTOR INTENDING TO SUPPORT EQUIPMENT, PIPING, DUCT WORK, CRANES OR OTHER ITEMS WHICH SUBJECT THE ROOF OR FLOOR SYSTEMS TO CONCENTRATED LOADINGS NOT SPECIFICALLY INDICATED ON THESE STRUCTURAL DRAWINGS, MUST SUBMIT SHOP DRAWINGS, WEIGHTS, AND PROPOSED SUPPORT LOCATIONS TO THE ENGINEER FOR APPROVAL PRIOR TO ERECTION. ANY CONTRACTOR WHO ERECTS EQUIPMENT WITHOUT OBTAINING SUCH APPROVAL WILL BE REQUIRED EITHER TO REMOVE IT AND SUBMIT SHOP DRAWINGS OR STAND THE COST OF REQUIRED REINFORCEMENT OF MEMBERS.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE PERFORMANCE OF THE CONTRACT. THE CONTRACTOR SHALL GIVE NOTICES AND COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDER OF PUBLIC AUTHORITIES (ESPECIALLY OSHA) BEARING ON SAFETY OF PERSONS OR PROPERTY OR THEIR PROTECTION FROM DAMAGE, INJURY OR LOSS. THE CONTRACTOR SHALL NOT LOAD OR PERMIT ANY PART OF THE CONSTRUCTION SITE TO BE LOADED SO AS TO ENDANGER ITS SAFETY.

12. IN NO CASE SHALL STRUCTURAL ALTERATIONS OR WORK AFFECTING A STRUCTURAL MEMBER BE MADE, UNLESS APPROVED BY JOHNSON AND ASSOCIATES ENGINEERING IN WRITING.

13. THIS BUILDING IS DESIGNED AS AN ENCLOSED STRUCTURE. ALL EXTERIOR COMPONENTS (DOORS, WINDOWS, ETC.) MUST BE DESIGNED TO WITHSTAND THE WIND LOADINGS SPECIFIED FOR THE DESIGN OF COMPONENTS AND CLADDING IN THE APPLICABLE BUILDING CODE.

14. THE CONTRACT DOCUMENT DRAWINGS, GENERAL NOTES, AND SPECIFICATIONS SHALL GOVERN IN THE EVENT OF A CONFLICT WITH THE SPECIFICATIONS AND/OR CODE OF PRACTICE FOR AISC, ACI, SJI, OR OTHER STANDARDS.

15. JOHNSON & ASSOCIATES ENGINEERING (JAE) HAS A LIMITED SCOPE OF SERVICES AND RESPONSIBILITY ON THIS PROJECT. JAE IS THE STRUCTURAL ENGINEER OF RECORD FOR THE DESIGN OF THE FOUNDATION SYSTEM AND THE MEZZANINE ONLY. THE DESIGN OF THE STEEL BUILDING SYSTEM, INCLUDING PRIMARY AND SECONDARY FRAMING, CONNECTIONS, ETC IS THE SOLE RESPONSIBILITY OF THE STEEL BUILDING MANUFACTURER AND HIS DULY LICENSED FLORIDA ENGINEER.

PRE-ENGINEERED METAL BUILDING DESIGN CRITERIA

1. ALL COLUMNS SHALL BE ANALYZED AND DESIGNED AS HAVING PINNED BASES. NO MOMENT SHALL BE TRANSFERRED TO THE FOUNDATIONS.

2. DESIGN LOADS SHALL BE AS SPECIFIED IN THE DESIGN LOADS SECTION.

3. ROOF PURLINS MUST BE CAPABLE OF RESISTING NET WIND PRESSURES (IN OR OUT) ASSUMING INTERIOR FLANGE UNBRACED EXCEPT WHERE FLANGE BRACING IS PROVIDED.

4. THE METAL BUILDING SYSTEM MANUFACTURER WILL BE RESPONSIBLE FOR COMPLETE DESIGN OF THE BUILDING STRUCTURAL FRAME (INCLUDING LATERAL LOADS) DOWN TO THE FOUNDATION. COMPLETE DESIGN REACTIONS SHALL BE FURNISHED TO THE FOUNDATION DESIGN ENGINEER.

5. ALL METAL BUILDING SYSTEM SHOP DRAWINGS AND ERECTION DRAWINGS SHALL BE SIGNED AND SEALED BY THE MANUFACTURER'S ENGINEER DULY LICENSED IN THE PROJECT STATE.

6. METAL BUILDING CALCULATIONS COVER SHEET SHALL BE SIGNED AND SEALED BY THE MANUFACTURER'S ENGINEER, IN RESPONSIBLE CHARGE OF THEIR DEVELOPMENT, LICENSED IN THE PROJECT STATE.

7. DEFLECTION LIMITS FOR ROOF MEMBERS SHALL BE AS FOLLOWS:

   MANUFACTURER'S STANDARD DEFLECTION LIMITS, UNLESS SPECIFICALLY NOTED OTHERWISE BY THE ARCHITECT.

8. EXCEPT AS OTHERWISE APPROVED BY ARCHITECT, STRUCTURAL CLEARANCES SHALL BE MAINTAINED AS CURRENTLY INDICATED IN THE CONTRACT DOCUMENTS.

9. STANDING SEAM DECKING SHALL NOT BE CONSIDERED AS PROVIDING DIAPHRAGM RESISTANCE FOR LATERAL LOADS.

10. RIGID FRAME COLUMNS SHALL HAVE A MINIMUM BASE PLATE THICKNESS OF AT LEAST 1/2 INCH.

11. ALL DEVIATIONS FROM THE CONTRACT DOCUMENTS (REQUESTED FOR THE CONVENIENCE OF THE PRE-ENGINEERED BUILDING SYSTEM MANUFACTURER) ARE SUBJECT TO APPROVAL BY THE ARCHITECT/ENGINEER OF RECORD. ALL DEVIATIONS SHALL BE EXPRESSLY LISTED AND DEFINED IN THE SHOP DRAWING SUBMITTAL. ARCHITECT/ENGINEER IS NOT RESPONSIBLE FOR DISCOVERY OF DEVIATIONS NOT LISTED, AND APPROVAL OF UNLISTED DEVIATIONS SHALL NOT BE IMPLIED.

12. A QUALIFIED REPRESENTATIVE OF THE METAL BUILDING SYSTEM SUPPLIER'S CONSTRUCTION SERVICES DEPARTMENT SHALL MAKE AN ON-SITE REVIEW OF THE ERECTED BUILDING. REVIEWER SHALL NOTIFY THE GENERAL CONTRACTOR AND ARCHITECT OF ANY AND ALL NOTED DISCREPANCIES FROM THE ERECTION AND DESIGN DRAWINGS.

    CONTRACTOR/ERECTOR SHALL CORRECT ALL DISCREPANCIES TO THE SATISFACTION OF THE REVIEWER AND THE ARCHITECT.

    UPON COMPLETION OF SERVICES THE REVIEWER SHALL SIGN AND NOTARIZE THE FOLLOWING STATEMENT UNDER THE METAL BUILDING SYSTEM SUPPLIER'S LETTERHEAD:

    TO THE BEST OF MY KNOWLEDGE AND BELIEF THE ABOVE DESCRIBED STRUCTURE HAS BEEN ERECTED IN SUBSTANTIAL CONFORMANCE WITH THE SUPPLIER'S ERECTION DRAWINGS AND DETAILS.

PRE-ENGINEERED METAL BUILDING DESIGN CRITERIA (CONT.)

13. CONCRETE PEDESTALS/FOOTINGS SHALL BE OF SUFFICIENT SIZE TO PROVIDE FULL CONTACT BEARING AREA FOR COLUMN BASE PLATES. IF P.E.M.B.M. SELECTS BASE PLATES/COLUMNS LARGER THAN INDICATED PEDESTAL/FOOTING SIZES, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN APPROVAL OF SAME FROM THE PROJECT ARCHITECT AND STRUCTURAL ENGINEER OF RECORD. UPON RECEIPT OF SUCH APPROVAL CONTRACTOR SHALL FURNISH PEDESTALS/FOOTINGS OF SUFFICIENT SIZE TO ALLOW FULL CONTACT BEARING AREA FOR BASE PLATES AND TO MAINTAIN A MINIMUM OF 4" FROM THE CENTERLINE OF THE EXTREME ANCHOR BOLTS, TO THE PEDESTAL EDGE. PEDESTALS OF SUFFICIENT SIZE SHALL BE FURNISHED WITHOUT ADDITIONAL COST TO THE OWNER. CONTRACTOR SHALL PAY STRUCTURAL ENGINEER OF RECORD FOR SERVICES IN RE-SIZING PEDESTALS FOR CONTRACTOR'S CONVENIENCE. IF ARCHITECT/ENGINEER CANNOT APPROVE LARGER COLUMNS AND BASE PLATES, CONTRACTOR SHALL INSTRUCT P.E.M.B. MANUFACTURER TO FURNISH COLUMNS AND BASE PLATES THAT WILL HAVE FULL BEARING ON THE PEDESTALS/FOOTINGS INDICATED ON THE CONTRACT DRAWINGS.

14. CENTER ALL FOOTINGS ON METAL BUILDING SYSTEM COLUMN BASE PLATE, U.N.O. NOTE, CENTERLINE OF METAL BUILDING COLUMN AND FOOTING MAY NOT ALIGN WITH CENTERLINE OF COLUMN PEDESTAL.

15. SEE ANCHOR BOLT LAYOUT PLAN, PROVIDED BY THE METAL BUILDING SYSTEM MANUFACTURER, FOR EXACT ANCHOR BOLT SIZE AND LOCATION. DESIGN OF REQUIRED ANCHOR BOLT DIAMETER IS THE RESPONSIBILITY OF THE METAL BUILDING SYSTEM DESIGNER. SEE ANCHOR BOLT DETAILS FOR REQUIRED ANCHOR BOLT LENGTH AND CONFIGURATION.

FOUNDATION

1. THE FOUNDATION IS DESIGNED AS A SHALLOW SPREAD FOUNDATION SYSTEM WITH AN ASSUMED ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF. THE STRUCTURAL ENGINEER OF RECORD IS NOT RESPONSIBLE FOR SUBSURFACE CONDITIONS ENCOUNTERED IN THE FIELD CONTRARY TO THOSE ASSUMED FOR DESIGN.

2. THE CONTRACTOR SHALL VERIFY THE AVAILABLE SOIL BEARING CAPACITY AT FOOTING SUBGRADE ELEVATION, PRIOR TO COMMENCEMENT OF FOOTING CONCRETE OPERATIONS, BY PERFORMING HAND PENETROMETER TESTS. THE HAND PENETROMETER TESTS SHALL BE PERFORMED BY A PRIOR APPROVED TESTING LABORATORY AT EACH ISOLATED COLUMN FOOTING AND ALONG ALL CONTINUOUS FOOTINGS AT THE RATE OF ONE TEST PER 25 LINEAR FEET. THE ENGINEER OF RECORD SHALL BE NOTIFIED IMMEDIATELY OF ALL SOIL BEARING TEST RESULTS. IF THE SUBGRADE SOIL IS DETERMINED TO BE INADEQUATE TO SUPPORT THE ASSUMED BEARING CAPACITY, THE CONTRACTOR SHALL IMMEDIATELY SUSPEND CONSTRUCTION OPERATIONS AND CONTACT THE STRUCTURAL ENGINEER OF RECORD SO THAT THE FOUNDATION SYSTEM CAN BE RE-DESIGNED TO SUIT FIELD CONDITIONS. THE STRUCTURAL ENGINEER OF RECORD IS NOT RESPONSIBLE FOR SUBSURFACE CONDITIONS ENCOUNTERED IN THE FIELD CONTRARY TO THOSE ASSUMED FOR DESIGN.

3. FOOTING SUBGRADE SHALL BE COMPACTED TO A MINIMUM OF 95% MODIFIED PROCTOR DENSITY (ASTM D-1557) TO A DEPTH OF 12" BELOW BOTTOM OF FOOTING.

CONCRETE

1. CONCRETE WORK SHALL CONFORM TO THE ACI 318-11 AND CRSI STANDARDS.

2. PIPES OR DUCTS EXCEEDING ONE-THIRD THE SLAB OR WALL THICKNESS SHALL NOT BE PLACED WITHIN THE THICKNESS OF CONCRETE WALLS UNLESS SPECIFICALLY DETAILED. SEE MECHANICAL AND/OR ELECTRICAL DRAWINGS FOR LOCATION OF SLEEVES.

3. REFER TO ARCHITECTURAL DRAWINGS FOR MOLDS, GROOVES, ORNAMENTS, CLIPS, OR GROUNDS REQUIRED TO BE ENCASED IN CONCRETE AND FOR LOCATION AND DETAILS OF FLOOR FINISHES AND SLAB DEPRESSIONS.

4. CONSTRUCTION JOINTS IN CONCRETE BEAMS AND FRAMED SLABS SHALL BE PLACED AT MIDSPAN. ALL CONSTRUCTION JOINTS MUST BE KEYED WITH REINFORCING RUN CONTINUOUS THROUGH JOINTS.

5. AT COLUMN FOOTINGS, COLUMN ANCHOR RODS WITH TEMPLATE SHALL BE INSTALLED IN PROPER LOCATION PRIOR TO POURING THE FOOTING.

6. CONCRETE SHALL HAVE THE FOLLOWING MINIMUM 28 DAY COMPRESSIVE STRENGTH UTILIZING TYPE I CEMENT:

   FOUNDATIONS AND SLABS ON GRADE 3000 PSI

REINFORCING STEEL

1. REINFORCING STEEL SHALL CONFORM TO ASTM A615-GRADE 60.

2. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 AND HAVE A MINIMUM SIDE LAP OF 8 INCHES.

3. REINFORCEMENT SHALL BE SPLICED ONLY AS SHOWN OR NOTED IN THE STRUCTURAL CONTRACT DOCUMENTS.

4. ALL REINFORCING LAP SPLICES SHALL BE A MINIMUM OF 36 BAR DIAMETERS IN LENGTH FOR REINFORCED CONCRETE. LAP SPLICES FOR REINFORCED MASONRY SHALL BE A MINIMUM OF 48 BAR DIAMETERS.

5. ALL REINFORCING STEEL AND ACCESSORIES SHALL BE DETAILED, FABRICATED, AND PLACED IN ACCORDANCE WITH THE LATEST EDITION OF THE ACI MANUAL AND MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES.

6. MINIMUM CONCRETE COVER FOR REINFORCING BARS SHALL BE IN CONFORMANCE WITH CHAPTER 7 OF ACI 318-11 EXCEPT AS OTHERWISE NOTED.

7. REINFORCING IN ALL CONCRETE FOOTINGS SHALL BE CONTINUOUS AT INTERSECTIONS AND CORNERS. WHERE WALL FOOTINGS STEP, REINFORCING SHALL BE CONTINUOUS IN STEP.

8. PROVIDE 2-#5 EXTRA DIAGONAL REINFORCING BARS AT CORNERS OF ALL OPENINGS IN FRAMED SLABS AND CONCRETE WALLS. EXTEND BARS 2'-0" BEYOND EACH EDGE OF OPENING.

9. AT POURED CONCRETE WALLS, PIERS AND COLUMNS, DOWELS FOR VERTICAL REINFORCING BARS SHALL BE INSTALLED IN THEIR PROPER LOCATION PRIOR TO CONCRETE POUR OF THE FOOTINGS.

WOOD FRAMING

1. ALL WOOD FRAMING INCLUDING TRUSSES SHALL BE DESIGNED, DETAILED AND FABRICATED IN ACCORDANCE WITH THE LATEST EDITION OF THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION".

2. FOR STRUCTURAL LUMBER, PROVIDE THE FOLLOWING GRADE AND SPECIES:

   ALL STRUCTURAL LUMBER SHALL BE SOUTHERN YELLOW PINE NO. 2 GRADE OR BETTER (NO. 3 LUMBER WILL NOT BE ACCEPTED).

   PARALLAM LUMBER
   FB = 2900 PSI
   FV = 290 PSI
   E = 2,000,000 PSI

   LAMINATED VENEER LUMBER (LVL)
   FB = 2925 PSI
   FV = 285 PSI
   E = 2,000,000 PSI

3. PROVIDE GALVANIZED METAL HANGERS AND FRAMING ANCHORS OF THE SIZE AND TYPE RECOMMENDED BY THE MANUFACTURER FOR EACH USE INCLUDING RECOMMENDED NAILS AND/OR BOLTING.

4. ALL BOLTS USED FOR WOOD CONSTRUCTION SHALL BE A MINIMUM OF 5/8" DIAMETER (ASTM A307). PROVIDE FLAT WASHERS UNDER ALL HEADS AND NUTS WHICH ARE DRAWN UP AGAINST WOOD SURFACE.

STRUCTURAL SUBMITTALS

1. FURNISH FIVE COPIES OF SHOP DRAWINGS. FURNISH THREE COPIES OF OTHER STRUCTURAL SUBMITTALS.

STRUCTURAL SUBMITTALS (CONT.)

2. SEE CONTRACT SPECIFICATIONS FOR ADDITIONAL SUBMITTAL REQUIREMENTS AND PROCEDURES.

3. REPRODUCTION OF CONTRACT DOCUMENTS FOR ERECTION AND/OR SHOP DRAWINGS WILL NOT BE PERMITTED.

4. REVIEW OF SUBMITTALS AND/OR SHOP DRAWINGS BY THE STRUCTURAL ENGINEER OF RECORD DOES NOT RELIEVE THE CONTRACTOR OF THE SOLE RESPONSIBILITY TO REVIEW AND CHECK SHOP DRAWINGS PRIOR TO SUBMITTAL TO THE STRUCTURAL ENGINEER OF RECORD. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS, AND DIMENSIONS SPECIFIED IN THE CONTRACT DOCUMENTS. CONTRACTOR ALSO SHALL BE RESPONSIBLE FOR MEANS, METHOD, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION. SEE SPECIFIC PROVISIONS IN THE CONTRACT DOCUMENTS DEALING WITH THE APPROPRIATE DESIGN RESPONSIBILITIES OF CONTRACTORS, SUBCONTRACTORS, AND SUPPLIERS.

5. IN THE EVENT THAT JOHNSON & ASSOCIATES ENGINEERING REVIEWS SUBMITTALS (AS A COURTESY TO THE CONTRACTOR TO REDUCE THE TIME PRIOR TO THE START OF FABRICATION) WHICH HAVE NOT FIRST BEEN REVIEWED AND APPROVED BY THE CONTRACTOR, SUCH REVIEW SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PERFORM REVIEW AND APPROVE ALL SUCH SUBMITTALS, NOR WILL IT CREATE RESPONSIBILITY OR LIABILITY ON THE PART OF JOHNSON & ASSOCIATES ENGINEERING AS TO THE CONTENTS, ACCURACY OR COMPLETENESS OF SUCH SHOP DRAWINGS EXCEPT AS MAY BE SPECIFICALLY DESCRIBED IN THESE GENERAL NOTES. CONTRACTOR IS SOLELY RESPONSIBLE FOR REVIEW AND APPROVAL OF SHOP DRAWINGS AND OTHER SUBMITTALS, AND CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL REQUIREMENTS OF THE WORK OF THE CONTRACTOR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS

6. THE SER REVIEW OF SUBMITTALS WILL BE MADE FOR LIMITED PURPOSES AND IS SUBJECT TO THE LIMITATIONS AND DISCLAIMERS SET FORTH IN THESE GENERAL NOTES. THE JOHNSON AND ASSOCIATES ENGINEERING REVIEW DOES NOT INVOLVE OR INCLUDE:

   A. REVIEW OF SUBMITTAL DIMENSIONS AND QUANTITIES.

   B. ACCEPTANCE OR ASSUMPTION OF ANY RESPONSIBILITY TO REVIEW, ANALYZE OR EVALUATE ANY SUBMITTALS INCLUDING SHOP DRAWINGS PROVIDED TO JOHNSON AND ASSOCIATES ENGINEERING OR ACCEPTANCE OR ASSUMPTION OF ANY PART OF CONTRACTOR'S RESPONSIBILITIES (WHICH INCLUDE THE CONTRACTOR'S RESPONSIBILITY TO REVIEW AND APPROVE SUBMITTAL), WHETHER OR NOT THE JOHNSON AND ASSOCIATES ENGINEERING REVIEW WAS MADE PRIOR TO THE REVIEW AND APPROVAL OF THE CONTRACTOR.

   C. ANALYSIS, VERIFICATION OR SUBSTANTIATION OF EQUIPMENT OR SYSTEM INSTALLATION OR PERFORMANCE OF EQUIPMENT OR SYSTEMS.

   D. REVIEW, EVALUATION OR APPROVAL OF PROJECT SAFETY PRECAUTIONS OR SAFETY TRAINING.

   E. REVIEW, EVALUATION OR APPROVAL OF CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES OR SEQUENCES.

   JOHNSON AND ASSOCIATES ENGINEERING REVIEW OF A SPECIFIC ITEM DOES NOT INCLUDE OR INDICATE OR CONSTITUTE REVIEW OF A GROUP OR AN ASSEMBLY OF WHICH THE ITEM IS A COMPONENT.

   THE CONTRACTOR MUST NOTIFY JOHNSON AND ASSOCIATES ENGINEERING, IN WRITING, RELATIVE TO ANY DEVIATION FROM THE CONTRACT DOCUMENTS, WHICH APPEARS IN THE SHOP DRAWINGS, SAMPLES, AND PRODUCT DATA. APPROVAL OF THE SUBMITTAL CONTAINING SUCH DEVIATION DOES NOT CONSTITUTE APPROVAL OF THE DEVIATION. APPROVAL OR REJECTION OF THE DEVIATION WILL ONLY BE PROVIDED BY JOHNSON AND ASSOCIATES ENGINEERING IN A SEPARATE WRITTEN COMMUNICATION TO THE CONTRACTOR. JOHNSON AND ASSOCIATES ENGINEERING IS NOT RESPONSIBLE FOR DISCOVERY OF DEVIATIONS NOT COMMUNICATED BY THE CONTRACTOR.

STRUCTURAL SUBMITTALS: METAL BUILDING SYSTEM, CONCRETE REINFORCING BARS, ANCHOR RODS AND CONCRETE MIX DESIGNS

1. THE FOLLOWING SUBMITTALS MUST BE MADE TO THE STRUCTURAL ENGINEER OF RECORD:

   A. ERECTION DRAWINGS, FABRICATION DRAWINGS, COMPONENT DETAILS, AND CONNECTION DETAILS.

   B. CALCULATIONS FOR ALL COMPONENTS SIZED BY THE FABRICATOR'S SPECIALTY DESIGN ENGINEER.

2. THE STRUCTURAL SUBMITTALS FOR THE METAL BUILDING SYSTEM SHALL BEAR THE IMPRESSED SEAL AND SIGNATURE OF THE SPECIALTY DESIGN ENGINEER LICENSED IN THE PROJECT STATE.

3. THE PROJECT STRUCTURAL ENGINEER OF RECORD WILL REVIEW THE SUBMITTALS FOR INDICATION THAT HIS INTENT HAS BEEN UNDERSTOOD AND THAT THE SPECIFIED CRITERIA HAVE BEEN USED.

DESIGN LOADS

1. ROOF LIVE LOAD = 20 PSF

2. MEZZANINE DESIGN LIVE LOAD = 100 PSF

3. WIND LOADING CRITERIA (PER ASCE 7-10)

BUILDING RISK CATEGORY		= II
BASIC WIND SPEED:	V(ULT)	= 120 MPH
EXPOSURE CATEGORY:		= C
INTERNAL PRESSURE COEFF.:	GCPI	= ±0.18

4. METAL BUILDING SUPPLEMENTAL DESIGN CRITERIA

ROOF LIVE LOAD:	= 20 PSF (REDUCIBLE AT RIGID FRAME RAFTERS AND COLUMNS ONLY)
DEAD LOAD:	= WEIGHT OF STRUCTURE
COLLATERAL LOAD:	= 5 PSF
CONCENTRATED LOADS	= (MECH EQUIP, ETC)
LATERAL FRAME DRIFT:	= H/100
WALL GIRT DEFLECTION	= L/240 (OR 1-1/2" MAX)
COLUMN SHAFT DEFLECTION	= L/240

PREENGINEERED SYSTEMS

1. THE DESIGN OF PREENGINEERED SYSTEMS SPECIFIED IN THE CONTRACT DOCUMENTS WHICH ARE DESIGNED/ENGINEERED BY OTHERS IS THE SOLE RESPONSIBILITY OF THE SUPPLIER AND ITS DESIGN ENGINEER, LICENSED IN THE PROJECT STATE. SUBMITTALS OF SUCH SYSTEMS TO THE STRUCTURAL ENGINEER OF RECORD SHALL BE REVIEWED FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS WITH REGARD TO THE ARRANGEMENT, AND/OR SIZES OF MEMBERS SHOWN ON THE CONTRACT DOCUMENTS AND TO INSURE CORRECT INTERPRETATION OF THE DESIGN INFORMATION INCLUDED IN THE CONTRACT DOCUMENTS. SUCH REVIEW BY THE STRUCTURAL ENGINEER OF RECORD SHALL NOT IMPLY ANY RESPONSIBILITY FOR THE ACTUAL DESIGN OF SUCH SYSTEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DIMENSIONAL ACCURACY AND CONFORMANCE WITH THE INFORMATION CONTAINED IN THE CONTRACT DOCUMENTS.

2. SEE SPECIFIC SECTIONS OF GENERAL NOTES ABOVE AND SPECIFICATIONS FOR THE APPROPRIATE DESIGN RESPONSIBILITIES OF THE SUPPLIER AND ITS LICENSED ENGINEER.

3. THE CONTRACT DOCUMENT DRAWINGS, GENERAL NOTES, AND SPECIFICATIONS SHALL GOVERN IN THE EVENT OF A CONFLICT WITH THE SPECIFICATIONS AND/OR CODE OF PRACTICE FOR AISC, ACI, SJI OR OTHER STANDARDS.

ERECTION, BRACING AND FORMWORK

1. THE DESIGN, ADEQUACY AND SAFETY OF ERECTION BRACING, FORMWORK, SHORING, AND TEMPORARY SUPPORTS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

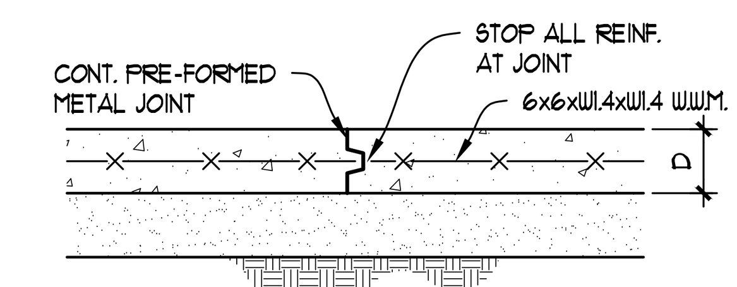
ERECTION, BRACING AND FORMWORK (CONT.)

2. ANCHOR BOLTS AND FOUNDATIONS HAVE NOT BEEN DESIGNED FOR ANY CONDITION OF LOADING OTHER THAN THAT OF THE COMPLETED STRUCTURE. VERIFICATION OF ADEQUACY OF ANCHOR BOLT AND FOUNDATIONS TO RESIST ERECTION INDUCED FORCES IS SOLELY THE RESPONSIBILITY OF THE STEEL ERECTOR AND CONTRACTOR.

3. UNLESS OTHERWISE NOTED STEEL FRAMEWORKS FOR THIS PROJECT ARE CLASSIFIED PER AISC CODE OF STANDARD PRACTICE AS A "NON-SELF-SUPPORTING STEEL FRAME". PROVIDE TEMPORARY SUPPORT SYSTEMS NECESSARY TO SECURE ANY ELEMENT OR ELEMENTS OF THE STEEL FRAMING UNTIL ALL PERMANENT STEEL BRACING, DECKING AND/OR MASONRY WALLS ARE IN-PLACE AND CONNECTED TO THE STEEL FRAMEWORKS.

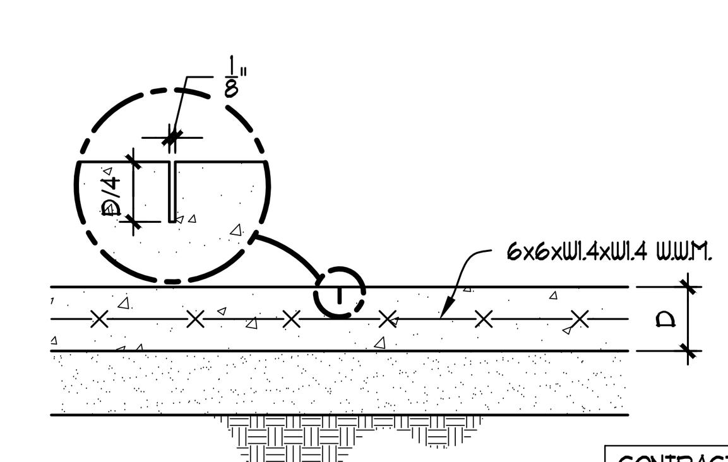
JOB SITE SAFETY

THE GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY AND FOR CONFORMANCE WITH THE HEALTH AND SAFETY PROVISIONS REQUIRED BY ANY REGULATORY AGENCIES. THE STRUCTURAL ENGINEER OF RECORD HAS NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR, OR THEIR EMPLOYEES WITH THEIR WORK OR ANY HEALTH OR SAFETY PRECAUTIONS.



TYP. SLAB CONSTRUCTION JOINT DETAIL

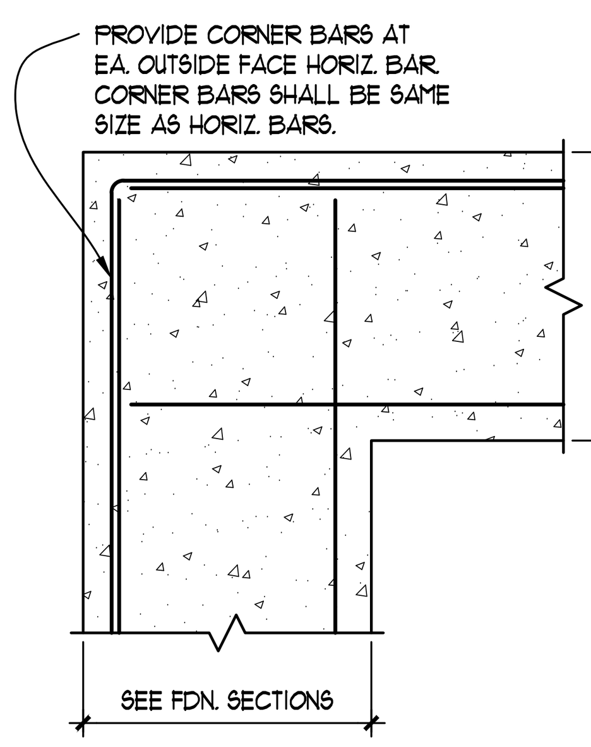
DETAIL A/S0.1
SCALE: 1"=1'-0"



TYP. SLAB SAW JOINT DETAIL

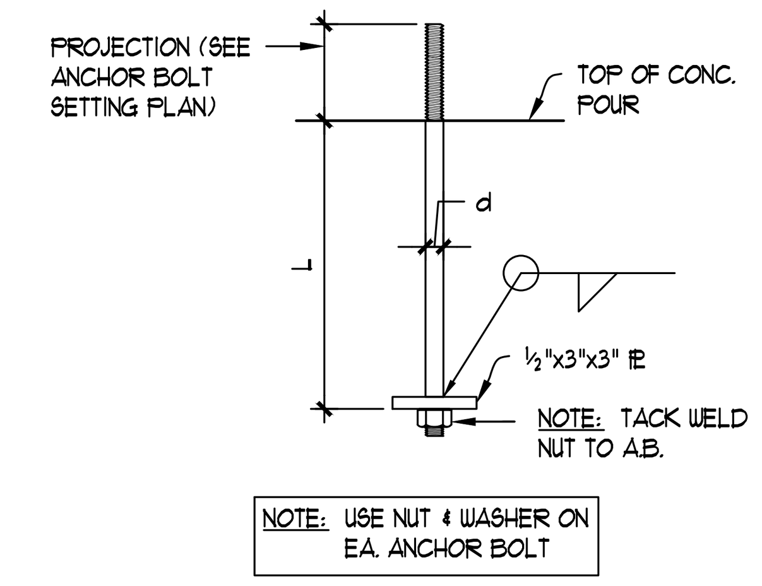
CONTRACTOR NOTE: SAW JOINTS MUST BE SAWN WITHIN 1 HOUR OF CONCRETE INITIAL SET.

DETAIL B/S0.1
SCALE: 1"=1'-0"



TYP. FOOTING CORNER DETAIL

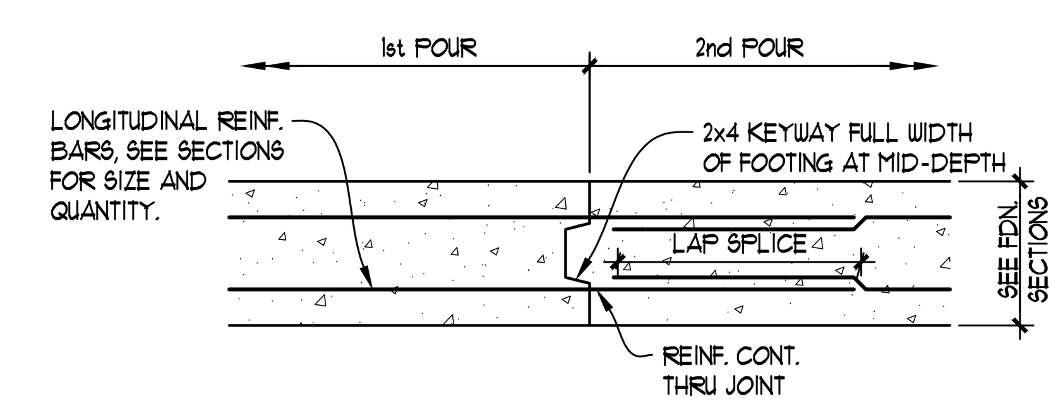
DETAIL C/S0.1
SCALE: 3/4"=1'-0"



ANCHOR BOLT SCHEDULE	
d (IN)	L (IN)
5/8"	1'-0"
3/4"	1'-0"

TYP. ANCHOR BOLT DETAILS

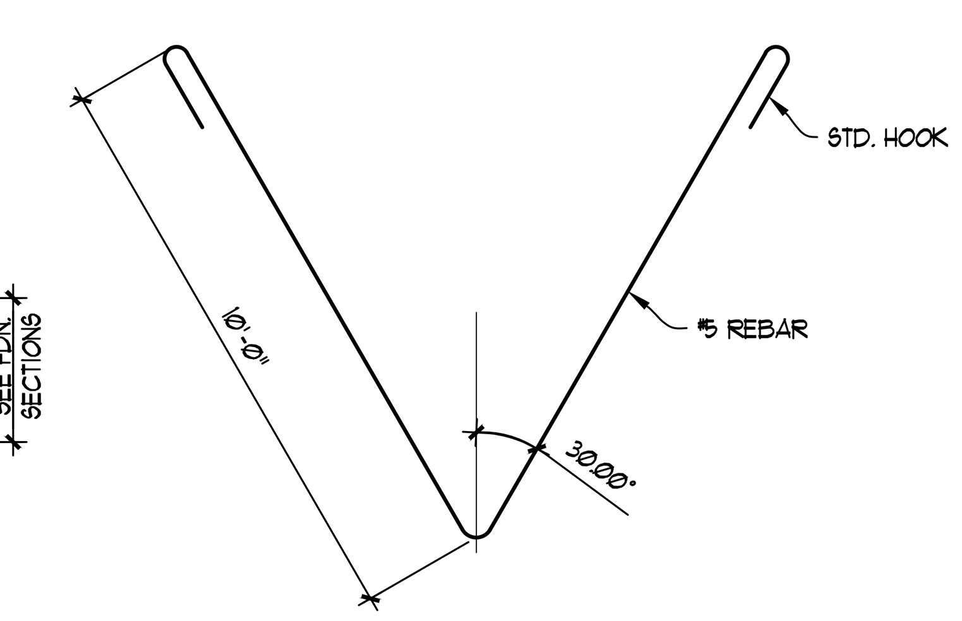
DETAIL D/S0.1
NOT TO SCALE



ELEVATION VIEW

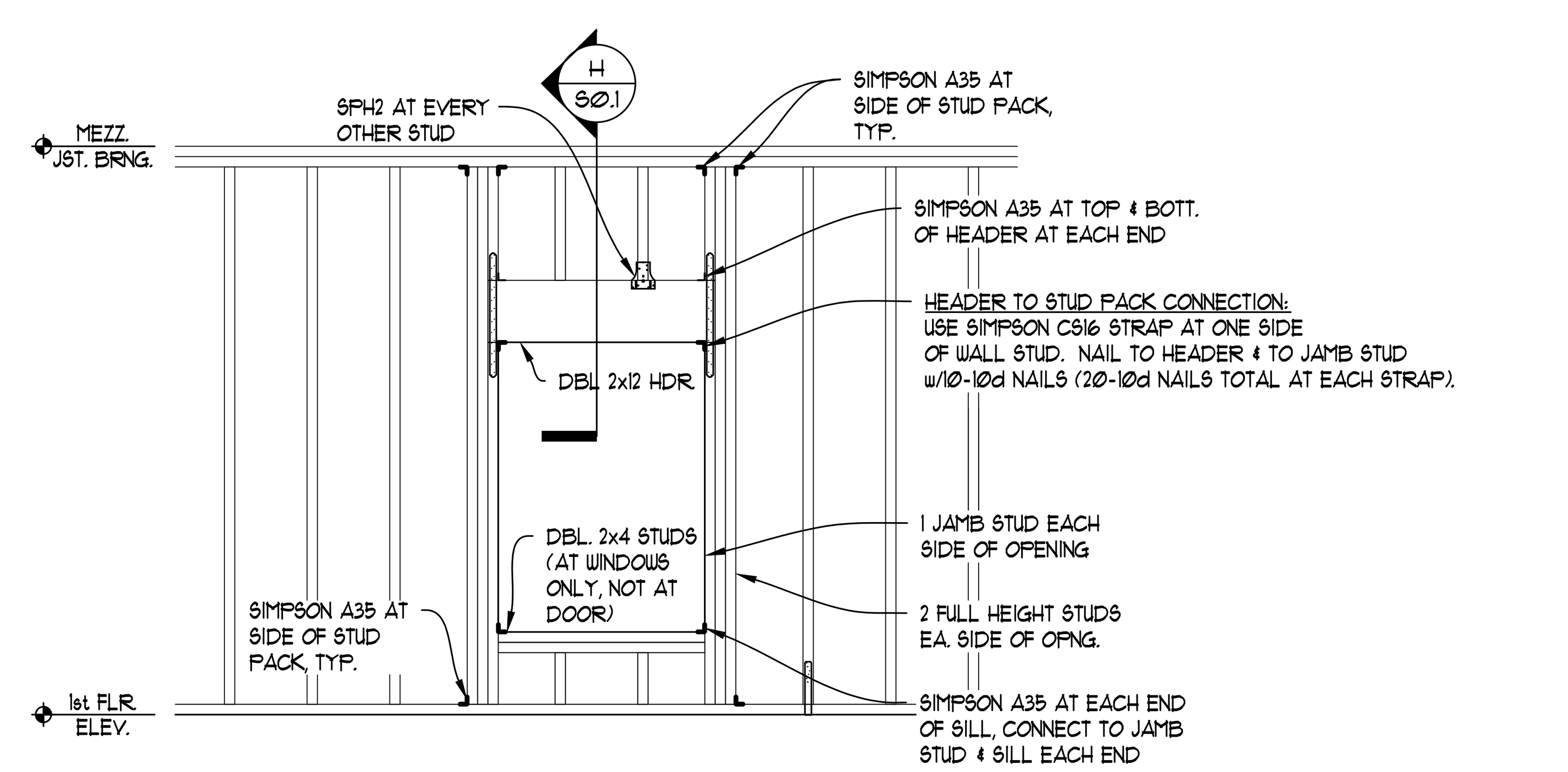
TYP. FOOTING CONSTRUCTION JOINT

DETAIL E/S0.1
SCALE: 3/4"=1'-0"



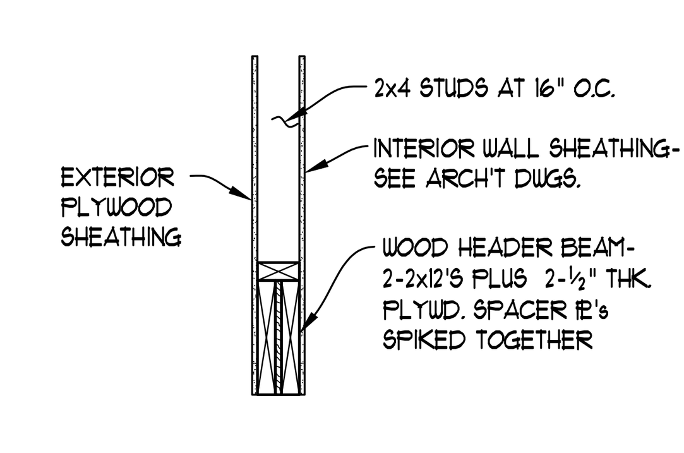
HAIRPIN ANCHOR DETAIL

DETAIL F/S0.1
NOT TO SCALE



TYPICAL OPENING IN EXTERIOR WALLS (OPENINGS UP TO 3'-4" WIDE)

DETAIL G/S0.1
NOT TO SCALE



WOOD HEADER BEAM OVER WALL OPENINGS

DETAIL H/S0.1
SCALE: 3/4"=1'-0"

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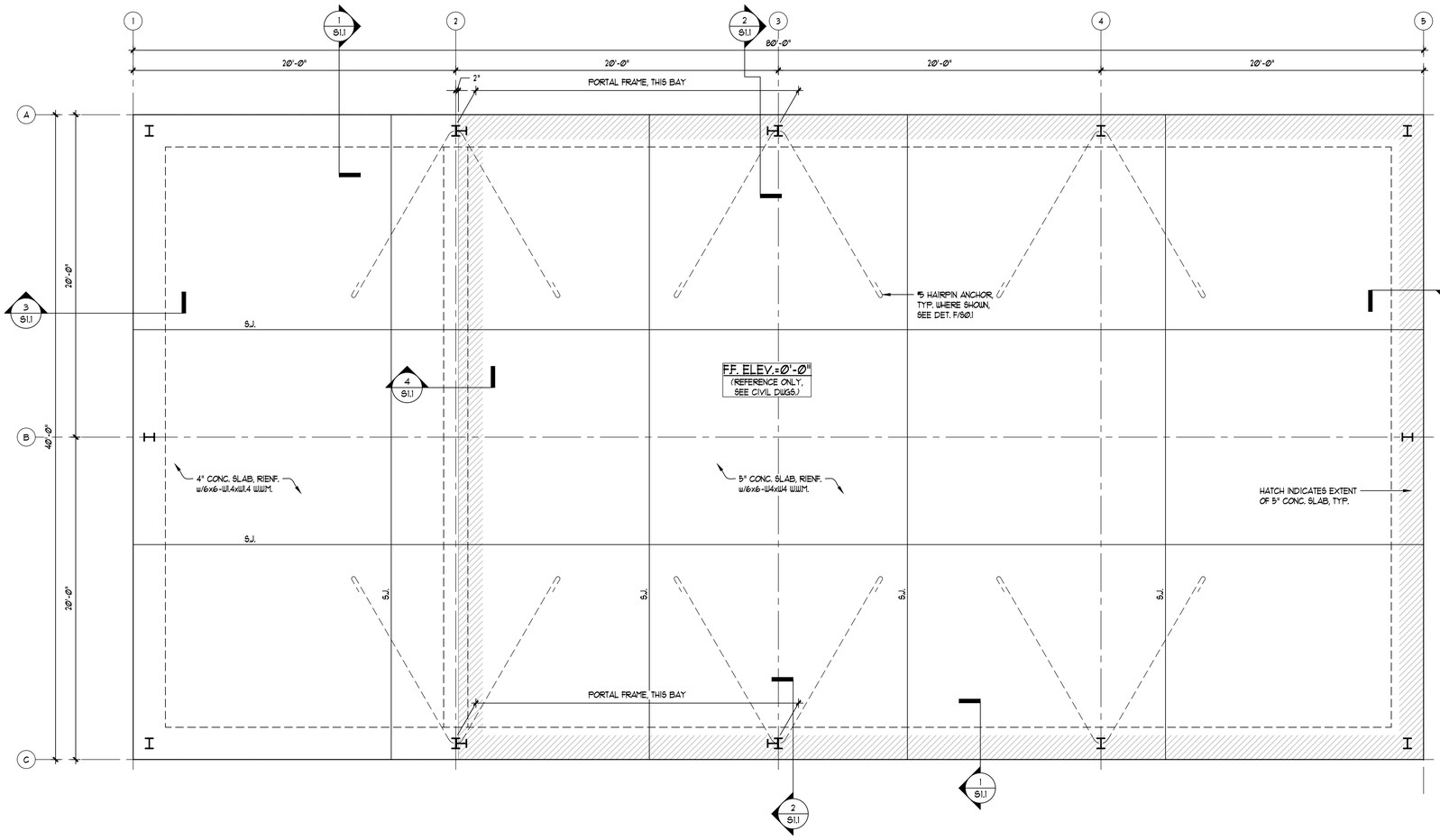
SHEET TITLE: GENERAL STRUCTURAL NOTES AND DETAILS

NEW MUNICIPAL WAREHOUSE
FOR:
TOWN OF GREENWOOD
GREENWOOD, FLORIDA

JOB NUMBER: M-2019-03
DATE: AUG. 3, 2019
DRAWN BY: P.D.J.G./T.K.J.
CHECKED BY: B.B.J.

SHEET No.
S-0.1

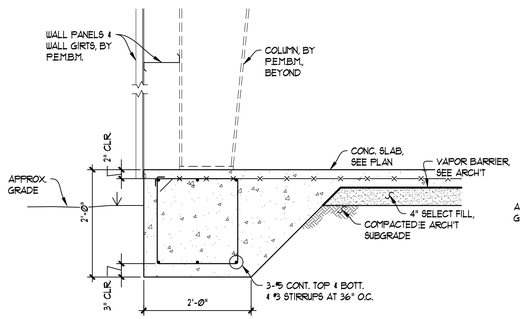


FOUNDATION PLAN

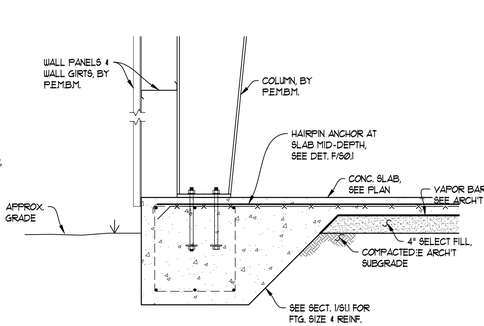
1/4" = 1'-0"

NOTES:

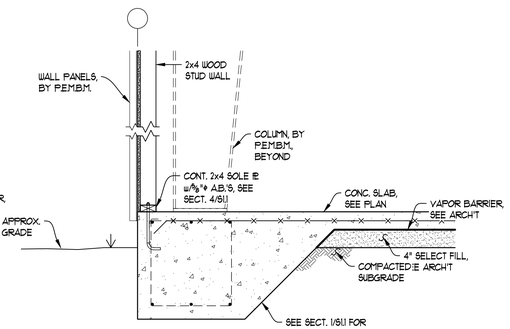
1. C.J.=CONSTRUCTION JOINT, SEE DETAIL A/S0.1 S.J.=SAW JOINT, SEE DET. B/S0.1.
2. SEE SHEET S0.1 FOR GENERAL STRUCTURAL NOTES.
3. FOUNDATION PLAN PLANE IS SHOWN AT APPROXIMATELY TOP OF SLAB ELEVATION.
4. P.E.M.B. COLUMN CONNECTIONS TO THE FOUNDATION SHALL BE DESIGNED AS PINNED CONNECTIONS, NO MOMENT SHALL BE TRANSFERRED TO THE FOUNDATION.



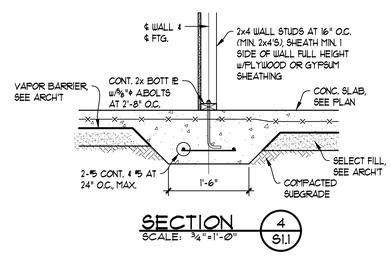
SECTION 1 S1.1
SCALE: 3/4"=1'-0"



SECTION 2 S1.1
SCALE: 3/4"=1'-0"



SECTION 3 S1.1
SCALE: 3/4"=1'-0"



SECTION 4 S1.1
SCALE: 3/4"=1'-0"

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SHEET TITLE: FOUNDATION PLAN AND SECTIONS

NEW MUNICIPAL WAREHOUSE
FOR:
TOWN OF GREENWOOD
GREENWOOD, FLORIDA

JOB NUMBER: M-2019-03
DATE: AUG. 3, 2019
DRAWN BY: P.D.J.G./T.K.J.
CHECKED BY: B.B.J.

SHEET No.
S-1.1

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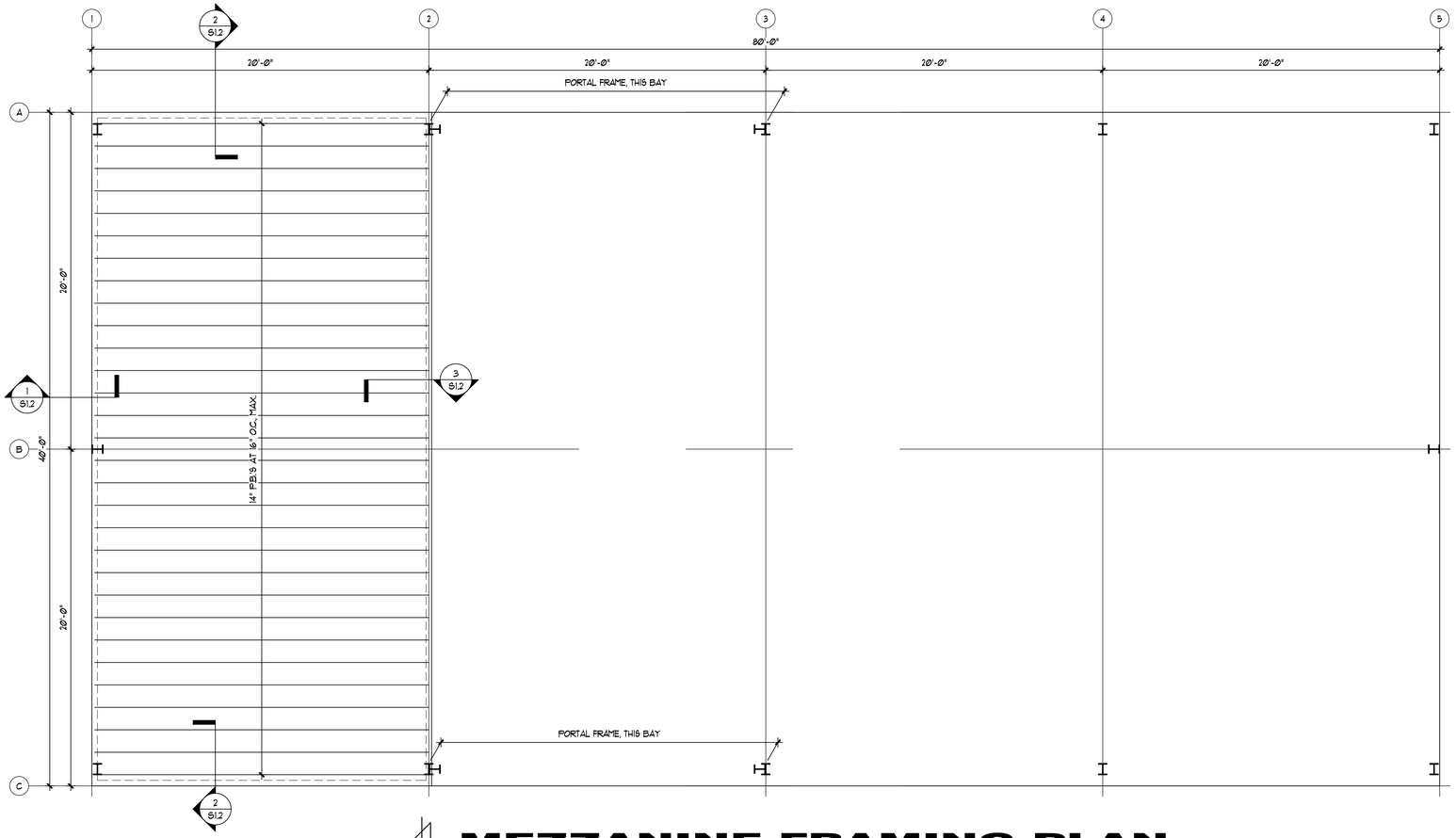
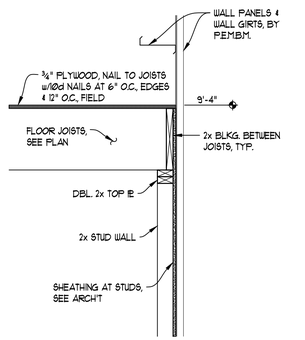


MEZZANINE FRAMING PLAN

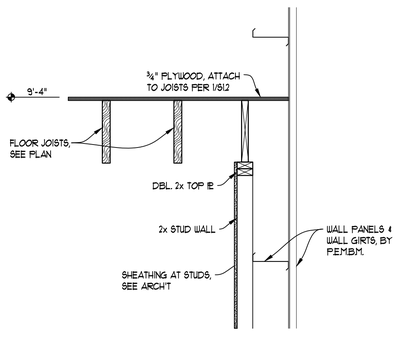
1/4" = 1'-0"

NOTES:

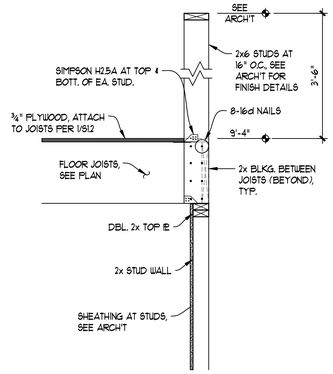
1. FINISH MEZZANINE FLOOR ELEV. = 9'-4", U.N.O.
2. SEE SHEET S0.1 FOR GENERAL STRUCTURAL NOTES.
3. P.S.L.=PARALLAM BEAM AS MANUFACTURED BY TRUSS JOIST MACMILLIAN, OR APPROVED EQUAL.



SECTION 1 S1.2
SCALE: 3/4"=1'-0"



SECTION 2 S1.2
SCALE: 3/4"=1'-0"



SECTION 3 S1.2
SCALE: 3/4"=1'-0"

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SHEET TITLE: MEZZANINE FRAMING PLAN AND SECTIONS

NEW MUNICIPAL WAREHOUSE
FOR:
TOWN OF GREENWOOD
GREENWOOD, FLORIDA

JOB NUMBER: M-2019-03
DATE: AUG. 3, 2019
DRAWN BY: P.D.J.G./T.K.J.
CHECKED BY: B.B.J.

SHEET No.
S-1.2

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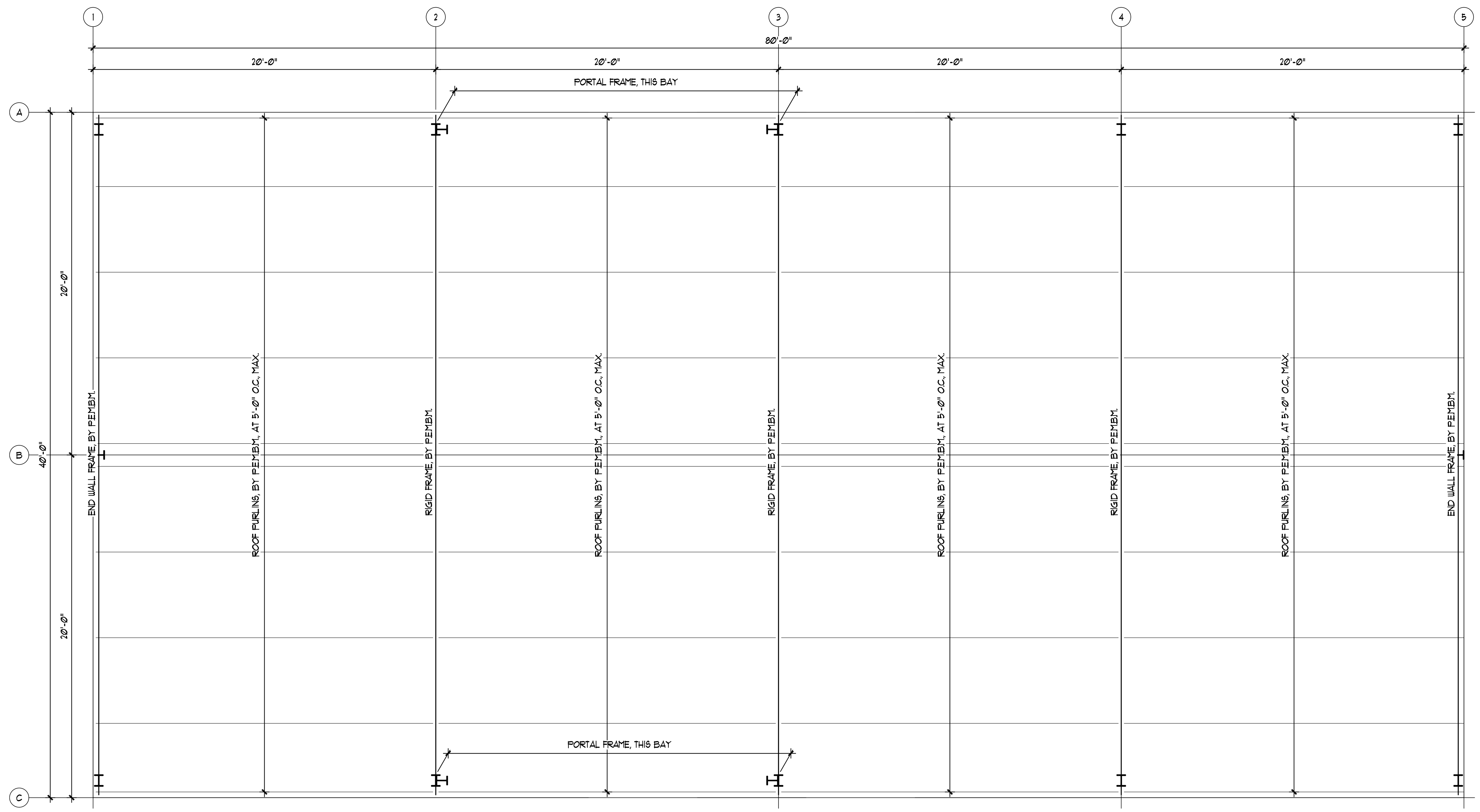

SCHEMATIC ROOF FRAMING PLAN

1/4" = 1'-0"

NOTES:

1. SEE SHEET S0.1 FOR GENERAL STRUCTURAL NOTES. SEE ARCHITECTURAL DWGS. FOR DIMENSIONS AND DETAILS NOT SHOWN.
2. ROOF FRAMING PLAN SHOWN IS SCHEMATIC IN NATURE ONLY. MANUFACTURER/SUPPLIER IS SOLELY RESPONSIBLE FOR FINAL ROOF FRAMING LAYOUT AND DESIGN. CONTACT THE STRUCTURAL ENGINEER OF RECORD PRIOR TO CHANGING ANY ASPECT OF THE ROOF FRAMING DEPICTED ON THIS PLAN.
3. P.E.M.B.M. = PRE-ENGINEERED METAL BUILDING MANUFACTURER.

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SHEET TITLE: SCHEMATIC ROOF FRAMING PLAN

NEW MUNICIPAL WAREHOUSE
FOR:
TOWN OF GREENWOOD
GREENWOOD, FLORIDA

JOB NUMBER: M-2019-03
DATE: AUG. 3, 2019
DRAWN BY: P.D.J.G./T.K.J.
CHECKED BY: B.B.J.

SHEET No.
S-1.3

LEGEND

———	S OR W	SOIL OR WASTE PIPING
- - - - -	V	VENT PIPING
—·—·—	CW	COLD WATER SUPPLY PIPING
—··—··—	HW	HOT WATER SUPPLY PIPING
—— - - ——	HWR	HOT WATER RETURN PIPING
	GV	GATE VALVE
	CV	CHECK VALVE
	BV	BALL VALVE
	WH	WALL HYDRANT
	CO	CLEANOUT TO FLOOR
	FD	FLOOR DRAIN
	FD	FLOOR DRAIN WITH TRAP PRIMER CONNECTION
	COTG	CLEANOUT TO GRADE
		UNION
	VTR	VENT THRU ROOF
		SHEET NOTE
		POINT OF CONNECTION TO EXISTING
		SOLENOID VALVE

SS	SERVICE SINK
WC	WATER CLOSET
TP	TRAP PRIMER
EWH	ELECTRIC WATER HEATER
WHA	WATER HAMMER ARRESTOR TYPE A
WHB	WATER HAMMER ARRESTOR TYPE B
WHC	WATER HAMMER ARRESTOR TYPE C
L	LAVATORY
UR	URINAL
KW	KILOWATT

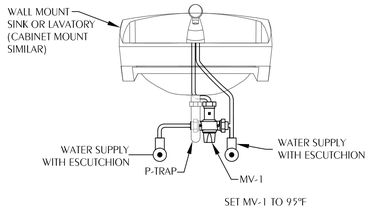
GENERAL NOTES

1. COORDINATE ALL PIPING WITH DUCTWORK SHOP DRAWINGS AND EXISTING CONDITIONS. ROUTE PIPING AS REQUIRED TO AVOID CONFLICTS.
2. PRIOR TO START OF ANY WORK, COORDINATE SANITARY SEWER AND POTABLE WATER PIPING WITH CIVIL DRAWINGS.
3. FIELD VERIFY PIPE INVERTS PRIOR TO LAYING OUT SANITARY SEWER PIPING.
4. ALL PIPING PASSING THROUGH ANY WALL SHALL HAVE A SLEEVE PER SPECIFICATIONS.
5. ALL PIPING PASSING THROUGH FIRE-RATED WALLS SHALL HAVE A FIRE-RATED SLEEVE PER SPECIFICATIONS. ALL PIPING PENETRATIONS THROUGH WALLS OR FLOORS SHALL BE SEALED TO EQUAL THE RATING OF THE WALLS OR FLOORS.
6. ALL PIPING INDICATED IS ABOVE THE CEILING EXCEPT THE OBVIOUS SANITARY SOIL, WASTE, VENT AND POTABLE WATER PIPING BELOW FLOOR OR GRADE.
7. SEE TOILET ROOM ELEVATIONS ON ARCHITECTURAL DRAWINGS FOR PLUMBING FIXTURE MOUNTING HEIGHT.
8. COORDINATE EXACT LOCATION OF ALL EXTERIOR WALL HYDRANTS WITH ARCHITECTURAL DRAWINGS.
9. UNDER SLAB SOIL, WASTE AND VENT PIPING PASSING TO UNDERSIDE OR THROUGH FOUNDATION FOOTING, WALL OR GRADE BEAM SHALL BE PROVIDED WITH A RELIEVING ARCH OR PIPE SLEEVE 2 (TWO) PIPE SIZES GREATER THAN PIPE SIZE INDICATED ON PLANS. COORDINATE FINAL PIPE ROUTING AND LAYOUT WITH STRUCTURAL DRAWINGS.
10. PRIOR TO SUBSTANTIAL COMPLETION OF NEW AND ALTERED WORK AREAS, CONTRACTOR SHALL HAVE SANITARY PLUMBING SYSTEM CLEARED OF DEBRIS OR ANY MATTER THAT WOULD INTERFERE OR PREVENT ADEQUATE CONVEYANCE OF MATERIALS FROM MOVING THROUGH AND TERMINATING INTO BUILDING OR PUBLIC DISPOSAL FACILITIES.
11. ALL (VTR'S) VENT THRU ROOF PENETRATIONS INDICATED ON PLANS ARE PRELIMINARY. FINAL LOCATIONS SHALL BE COORDINATED WITH ALL TRADES. ALL VTR'S SHALL BE A MINIMUM OF 10'-0" FROM ALL FRESH AIR INTAKE OPENINGS.
12. ALL TRAP PRIMERS AND DOMESTIC WATER ISOLATION VALVES SHALL BE ACCESSIBLE. TRAP PRIMERS LOCATED IN THE VICINITY OF WATER CLOSETS SHALL BE ACTIVATED BY WATER CLOSET USAGE. ISOLATION VALVES SHALL BE OF THE QUARTER TURN BALL OR GATE TYPE.
13. CONTRACTOR SHALL DEVELOP AND SUBMIT COORDINATION SHOP DRAWINGS WHICH IDENTIFY ROUTING OF PLUMBING PIPE AND LOCATION OF EQUIPMENT. SHOP DRAWINGS SHALL INDICATE COORDINATION WITH THE WORK OF OTHER TRADES.
14. ALL WORK SHALL COMPLY WITH THE FLORIDA BUILDING CODE 6TH EDITION (2017) PLUMBING.

PLUMBING FIXTURE SCHEDULE

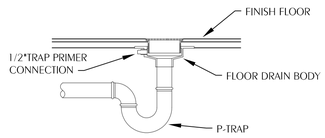
MARK	FIXTURE	PIPE SIZES-INCHES				REMARKS
		CW	HW	TW	W	
WC-1	WATER CLOSET (ADULT HANDICAP, TANK)	3/8	"	"	3	HANDICAP HEIGHT @ 17", FLOOR MOUNT, ELONGATED BOWL, TANK TYPE, 1.28 GPF
L-1	LAVATORY (STAFF, HANDICAP, 20X18)	3/8	"	3/8	1-1/4	COUNTERTOP MOUNT, OVAL, VITREOUS CHINA, SINGLE HOLE, METERING FAUCET, ANGLE STOPS & RISERS, MIXING VALVE, OFFSET TAIL-PIECE, P-TRAP W PRIMER CONNECTION
SK-1	SINK (DOUBLE, 33"x22"x10")	3/8	"	3/8	1-1/2	COUNTERTOP, DOUBLE COMPARTMENT, STAINLESS STEEL, 8" CENTERS, SWING FAUCET, SINGLE LEVER HANDLE WITH SPRAY, MIXING VALVE, VACUUM BREAKER, AERATOR, P-TRAP W/ PRIMER CONNECTION
SS-1	SERVICE SINK (24"x18"x12")	3/8	3/8	"	3	WALL MOUNT, SERVICE TYPE, CAST IRON, 8" CENTERS, TOP BRACE FAUCET, STRAIGHT LEVER HANDLES, VACUUM BREAKER, RIM GUARD
SH-1	SHOWER (HANDICAP)	1/2	1/2	"	2	WALL MOUNT, STAINLESS STEEL,SINGLE HANDLE PRESSURE BALANCING & THERMOSTATIC VALVE MEETING ASSE 1016 - TYPE T/P,MIXING VALVE FACTORY SET AT 110, 2.5 GPM SHOWERHEAD,HAND SHOWER W/ HOSE,VACUUM BREAKER,GLIDE RAIL
UB-1	RECESSED UTILITY WALL BOX (ICE MACHINE HOOK-UP)	1/2	"	"	"	FACTORY FABRICATED, 16 GAUGE STEEL EPOXY FINISH. PROVIDE FINAL CONNECTIONS TO ICE MACHINE.
EWC-1	ELECTRIC WATER COOLER (SINGLE LEVEL)	3/8	"	"	1-1/2	WALL MOUNT, CHAIR CARRIER, DUAL LEVEL, SELF-CONTAINED, STAINLESS STEEL, PUSH BAR,
EWH-1	ELECTRIC WATER HEATER	3/4 INLET	3/4 OUTLET	"	"	4 KW TOTAL, 40 GALLON STORAGE, FLOOR MOUNT, STEEL SHELL DIAPHRAGM EXPANSION TANK, DRAIN PAN, 240 VOLT, SINGLE PHASE
FD	FLOOR DRAIN	1/2	"	"	3	DEEP SEAL, TRAP PRIMER CONNECTION
EW-1	EMERGENCY SHOWER/EYE WASH	1-1/4	"	"	1-1/4	FLOOR MOUNT WITH CAST FLANGE, PULL BAR HANDLE, OPEN TEE WASTE DRAIN
WH	RECESSED WALL HYDRANT/HOSE BIBB	3/4	"	"	"	FLUSH MOUNTING WALL BOX, BRASS, CHROME FINISH, ANTI-SIPHON VACUUM BREAKER, WHEEL HANDLE, INTEGRAL SERVICE STOPS
MV-1	WATER MIXING VALVE	1/2	1/2	"	"	BRONZE, EXPOSED WALL MNT, FAC. PRE-PIPED, THERMOSTATIC, VAC. BRKER, FLOW RATE @ 0.5-3.5 GPM

1. WATER SUPPLY TAPPING TO EACH PLUMBING FIXTURE SHALL BE FULL SIZE (MINIMUM).
2. SEE ELECTRICAL DWGS FOR FINAL POWER REQUIREMENTS.
3. PROVIDE WATER HAMMER ARRESTERS ON HOT & COLD WATER SUPPLY BRANCHES SERVING SINGULAR, MULTIPLE OR GROUPS OF PLUMBING FIXTURES. ADHERENCE TO THE PLUMBING AND DRAINAGE INSTITUTE STANDARD P.D.I.-WH201 (PER SPECIFICATIONS) SHALL BE EMPLOYED IN DETERMINING PROPER SIZE, SELECTION, PLACEMENT, LOCATION AND INSTALLATION OF ARRESTERS.

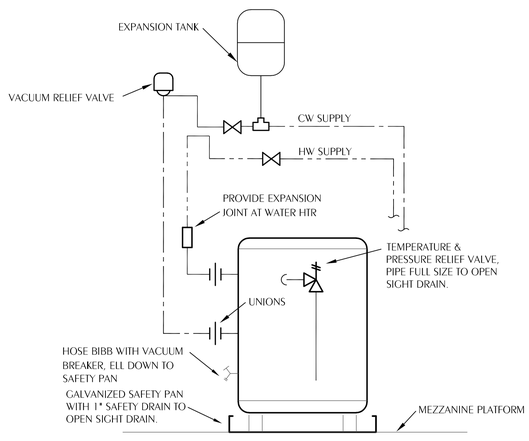


1 LAV/SINK MIXING VALVE DETAIL
P001 SCALE: NONE

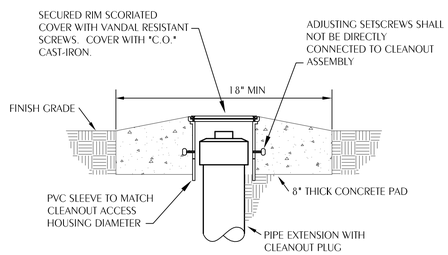
NOTE: MIXING VALVE WILL BE TYPICAL FOR L-1, SK-1



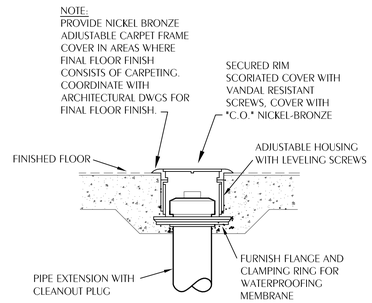
2 FLOOR DRAIN WITH TRAP PRIMER DETAIL
P001 SCALE: NONE



3 EWH DETAIL
P001 SCALE: NONE



4 CLEANOUT TO GRADE
P001 SCALE: NONE



5 CLEANOUT TO FLOOR
P001 SCALE: NONE

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SHEET TITLE: PLUMBING LEGEND, SCHEDULES, DETAILS, AND NOTES

NEW MUNICIPAL WAREHOUSE
FOR:
TOWN OF GREENWOOD
GREENWOOD, FLORIDA

JOB NUMBER: 2019-024
DATE: AUG 3, 2019
DRAWN BY: MMI
CHECKED BY: DNW

SHEET No.
P-1.0

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Florida CA Number: 27825
Project Number: 2019-024
T: 850-526-3447
F: 850-526-3448
David N Watford, PE
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PLUMBING SPECIFICATIONS

1. GENERAL

A. THE CONTRACTOR SHALL FURNISH AL LABOR, MATERIALS, TOOLS, EQUIPMENT, AND PERFORM ALL WORK AND SERVICES FOR ALL PLUMBING AS SHOWN ON DRAWINGS AND AS SPECIFIED, IN ACCORDANCE WITH PROVISIONS OF THE CONTRACT DOCUMENTS, AND COMPLETELY COORDINATED WITH WORK OF ALL OTHER TRADES.
B. ALTHOUGH SUCH WORK IS NOT SPECIFICALLY INDICATED, FURNISH AND INSTALL ALL SUPPLEMENTARY OR MISCELLANEOUS ITEMS, APPURTENANCES AND DEVICES INCIDENTAL TO OR NECESSARY FOR A SOUND, SECURE AND COMPLETE INSTALLATION.
C. ALL WORK SHALL COMPLY WITH THE 2017 FLORIDA BUILDING CODE.

2. SCOPE OF WORK

A. THE WORK INCLUDES THE FOLLOWING ITEMS BUT IS NOT NECESSARILY LIMITED TO THESE:
   1. ALL POTABLE WATER, DRAIN, WASTE AND VENT PIPING FOR COMPLETE PLUMBING SYSTEM.
   2. ALL WASTE AND DRAIN PIPING INCLUDING CONNECTING INTO EXISTING SERVICES.
   3. ALL MATERIALS, EQUIPMENT, FIXTURES, ACCESSORIES AND TRIM, TO MAKE A COMPLETE FINISHED INSTALLATION.
   4. NECESSARY TRENCHING AND BACKFILLING TO INSTALL THE PLUMBING SYSTEM.
   5. ALL INSULATION AS SPECIFIED HEREIN.

3. SITE INSPECTION:

A. BEFORE SUBMITTING PROPOSALS, EACH BIDDER SHALL VISIT THE SITE AND FULLY FAMILIARIZE HIMSELF WITH ALL JOB CONDITIONS AND SHALL BE FULLY INFORMED AS TO THE EXTENT OF WORK.

4. QUALITY OF MATERIALS AND APPROVALS:

A. THE FIXTURES AND EQUIPMENT ARE SPECIFIED BY MANUFACTURER AND MODEL NUMBER FOR THE PURPOSE OF ESTABLISHING TYPE AND QUALITY REQUIRED. OTHER MANUFACTURER'S PRODUCTS OF EQUAL QUALITY AND TYPE, AS DETERMINED BY THE ARCHITECT, MAY BE USED WHEN APPROVED.

5. TESTS

A. CONCEALED WORK SHALL REMAIN UNCOVERED UNTIL REQUIRED TESTS HAVE BEEN COMPLETED. TESTS SHALL BE REPEATED AFTER DEFECTS HAVE BEEN ELIMINATED.
B. DRAIN SYSTEMS: A WATER TEST SHALL BE APPLIED TO ALL PARTS OF THE DRAINAGE SYSTEM BEFORE THE PIPES ARE CONCEALED OR FIXTURES SET IN PLACE.
C. STERILIZATION: THE ENTIRE WATER DISTRIBUTION SYSTEM SHALL BE THOROUGHLY STERILIZED WITH SOLUTION CONTAINING NOT LESS THAN 50 PARTS PER MILLION OF AVAILABLE CHLORINE. THE COMPLETE STERILIZATION OPERATION SHALL BE APPROVED BY THE STATE BOARD OF HEALTH REPRESENTATIVE.

6. PIPE AND FITTINGS

A. WASTE, VENT AND DRAIN PIPING:
   1. PIPING BELOW SLAB SHALL BE SERVICE WEIGHT CAST - IRON WITH BELL AND SPIGOT - LEAD CAULKED, BELL AND SPIGOT NEOPRENE PUSH TYPE GASKET, OR "NO - HUB" JOINTS. PIPE AND FITTINGS SHALL BE COATED INSIDE AND OUTSIDE WITH COAL - TAR VARNISH. "NO - HUB" JOINTS BELOW SLAB SHALL BE MADE USING TYPE MG CAST IRON COUPLINGS ONLY. CONTRACTOR'S OPTION: MAY UTILIZE PVC PIPE AND FITTINGS.
   2. PIPING ABOVE THE SLAB SHALL BE SERVICE WEIGHT CAST - IRON WITH BELL AND SPIGOT LEAD CAULKED OR "NO - HUB" JOINTS OR PVC-DMV PIPE AND FITTINGS. VENT PIPING MAY BE SCHEDULE 40 GALVANIZED STEEL WITH MALLEABLE FITTINGS. CONTRACTOR'S OPTION: MAY UTILIZE PVC PIPE AND FITTINGS.

B. WATER PIPING:
   1. WATER PIPING SHALL BE COPPER TUBING, TYPE "K" (SOFT UP TO 1-INCH, OVER 1-INCH TO BE HARD) BELOW SLAB AND TYPE "L" ABOVE SLAB, WITH SWEAT FITTINGS.
   2. WATER PIPING MORE THAN FIVE FEET OUTSIDE BUILDING SHALL BE TYPE "K" COPPER.

7. PLASTIC PIPE

A. CONTRACTOR MAY, AS INDICATED IN THESE SPECIFICATIONS, USE SCHEDULE 40 PVC.
B. MATERIALS: PVC PIPE SHALL BE SCHEDULE 40 PIPE AND FITTINGS PRODUCED FROM MATERIAL CONFORMING TO ASTM D 1784, TYPE I, GRADE I, 200 PSI DESIGN STRESS (PVC 1120).

8. INSULATION:

A. GENERAL: ALL INSULATION WORK SHALL BE DONE BY WORKMEN THOROUGHLY COMPETENT IN THIS TRADE. B. THE FOLLOWING SHALL BE INSULATED AS INDICATED:
   1. DOMESTIC COLD WATER PIPING AND FITTINGS LOCATED ABOVE CEILING AND ALL HOT WATER PIPING AND FITTINGS: 1" IN. THICK PREFORMED FIBERGLASS WITH FACTORY JACKET THAT MEETS ASTM C547 WITH CONDUCTIVITY OF 0.21-0.28 BTU IN. @ 100°F, FIRE RESISTANT.

9. INSTALLATION OF PIPING SYSTEMS:

A. GRADE: ALL BUILDING SEWERS SHALL HAVE A UNIFORM GRADE OF NOT LESS THAN 1/8 IN. TO THE FOOT, DOWNWARD IN DIRECTION OF FLOW FOR PIPE 3 IN. AND LARGER. PIPE SMALLER THAN 3 IN. SHALL HAVE GRADE OF 1/4 IN. TO THE FOOT.
B. CLEANOUTS: ALL CLEANOUT PLUGS SHALL BE RECESSED BRASS TYPE.
   1. CLEANOUTS TO FINISHED FLOORS SHALL BE EQUAL TO JOSAM SERIES 56000-18-41 (-12, -14), BRONZE PLUG, CLAMP RING AND FLANGE, LEVELEZE ADJUSTABLE HOUSING AND WITH SATIN FINISH BRONZE COVER AND FRAME. CLEANOUTS IN FINISHED WALLS SHALL BE EQUAL TO JOSAM SERIES 58890, WITH POLISHED STAINLESS STEEL COVER AND SECURING SCREWS.
   2. CLEANOUTS TO GRADE SHALL BE WITH LEAD CAULKED CAST-IRON FITTINGS WITH BRASS COUNTERSUNK PLUG, JOSAM 58480 SET IN A 24 IN. SQUARE BLOCK OF POURED CONCRETE, 6 IN. THICK. ALL EXTERIOR CLEANOUTS SHALL BE BROUGHT TO GRADE. PVC SHALL NOT BE USED FOR CLEANOUTS TO GRADE.

C. PIPE SUPPORT:
   1. ALL HORIZONTAL SUSPENDED PIPE SHALL BE SUPPORTED AS REQUIRED IN SECTION 308 OF THE 2017 FLORIDA BUILDING CODE-PLUMBING.

D. PROTECTION OF PIPING SYSTEMS:
   1. ALL PIPING AND PLUMBING SYSTEM COMPONENTS SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 305 OF THE 2017 FLORIDA BUILDING CODE-PLUMBING.

10. INSTALLATION OF FIXTURES AND EQUIPMENT

A. PREPARATIONS OF ROUGH-IN. SUPPORTS AND WALL FINISHES SHALL BE COMPLETED AND TESTED OR INSPECTED BEFORE FIXTURES OR EQUIPMENT ARE INSTALLED.
B. INSTALLATION:
   1. MECHANICAL OR PLUMBING CONNECTIONS SHALL BE MADE WITH CORRECT FITTINGS, GASKETS OR SETTING COMPOUND FOR EACH FIXTURE. SEAL ALL BRASS AND TRIM TO WALLS AND FIXTURES WITH RESILIENT WATERPROOF COMPOUND.

11. START-UP SERVICE:

A. THE CONTRACTOR SHALL PUT ALL ITEMS INSTALLED UNDER THIS SECTION INTO OPERATION AND SHALL INSTRUCT THE OWNER'S MAINTENANCE PERSONNEL IN ALL POINTS.

12. GUARANTEE:

A. THE CONTRACTOR SHALL GUARANTEE ALL WORK IN THIS SECTION FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE AGAINST DEFECTS DUE TO FAULTY WORKMANSHIP OR MATERIALS.

13. FIXTURES AND EQUIPMENT:

A. FURNISH AND INSTALL PLUMBING FIXTURES, EQUIPMENT, DRAINS, ETC., COMPLETE WITH ALL TRIM, FITTINGS, AND OTHER DEVICES WHICH ARE CONSIDERED NECESSARY BY THE TRADE, BY CRAFT STANDARDS AND/OR BY THE ARCHITECT.

WC-1 WATER CLOSET, FLOOR-MOUNT (STANDARD, TANK TYPE):

VITREOUS CHINA LOW CONSUMPTION 1.28 GPF, ELONGATED, SIPHON JET ACTION, CLOSED COUPLED TANK,COMPLETE WITH FLOAT VALVE, VALVE AND CHROME PLATED TRIP LEVER, BOLT CAPS, COLOR "WHITE", CHROME PLATED SOLID BRASS ANGLE STOP WITH FLEXIBLE CHROME PLATED COPPER RISER, LOOSE KEY HANDLE. HEAVY MOLDED PLASTIC, WHITE, ELONGATED, OPEN FRONT SEAT LESS COVER, WITH STAINLESS STEEL, SELF-SUSTAINING CHECK HINGES.

WATER CLOSET	ZURN Z5555
SUPPLY W/STOP	ZURN Z8802CRLK-PC
SEAT	Z595555-EL-SIS
CLOSET BOLT/WAX RING KIT	Z5972-COMB

L-1 LAVATORY, COUNTERTOP (HANDICAP):

VITREOUS CHINA 20" x 17", OVAL, COLOR "WHITE", 4"CENTERS, FRONT OVERFLOW. PROVIDE CHROME PLATED 1/2" x 3/8" ANGLE STOP TO WALL WITH CHROME PLATED 3/8"FLEXIBLE SUPPLY AND LOOSE KEY OPERATOR. INTEGRAL PERFORATED CAST BRASS STRAINER WITH ELBOW AND 1-1/4" OFFSET TAILPIECE, CHROME PLATED 17 GAUGE CAST BRASS P-TRAP WITH CLEANOUT AND TUBE WASTE TO WALL. CHROME PLATED CAST BRASS FAUCET WITH AERATOR OUTLET AND ADA COMPLIANT LEVER HANDLE. UNDER SINK MIXING VALVE WITH SOLDERED CONNECTION, BRONZE BODY, LIMITS HOT WATER BETWEEN 80°F & 120°F, DOUBLE THROTTLING, INTEGRAL INLET FILTER WASHERS & CHECK VALVES, TAMPER RESISTANT LOCKING CAP. MEETS ASSE 1070 STANDARDS. LAVATORY P-TRAP AND SINGLE VALVE ASSEMBLIES SHALL BE INSULATED WITH FULLY MOLDED INSULATION KIT, LIGHT GRAY COLOR WITH 3-PIECE INTERLOCKING TRAP ASSEMBLY AND 2-PIECE INTERLOCKING ANGLE VALVE ASSEMBLY. FASTENERS SHALL BE NYLON-TYPE SUPPLIED WITH KIT. LAVATORY SHALL BE MOUNTED WITH A CLEARANCE OF AT LEAST 28" FROM FLOOR TO BOTTOM OF THE APRON. KNEE AND TOE CLEARANCES SHALL BE AS FOLLOWS: 27" CLEAR HEIGHT SHALL BE PROVIDED FROM FINISHED FLOOR TO A POINT ON UNDERSIDE OF BOWL 8" IN FROM FRONT APRON. TOE CLEARANCE SHALL BE A MINIMUM HEIGHT OF 9" UNDER P-TRAP AND SUPPLIES OR STOPS.

LAVATORY	ZURN Z51114
FAUCET	ZURN Z-81000
SUPPLY W/STOP	ZURN 8802URLK-PC
P-TRAP	ZURN Z1021-PC
DRAIN	ZURN Z8746
INSULATION KIT	ZURN Z8946-3-NT
AERATOR	ZURN -SM
MIXING VALVE	WATTS LFUSG-B

SK-1 DOUBLE COMPARTMENT STAINLESS STEEL SINK:

33" X 22" X 6-1/2" DEEP (BOWL IS 13-1/2X16X6-1/2), TYPE 304, 18 GAUGE, CENTER HOLE, 8"CENTERS, SELF RIMMING SINGLE COMPARTMENT, (18-8) NICKEL BEARING STAINLESS STEEL, BACK LEDGE SINK WITH SATIN FINISH AND SOUND DEADENING MATERIALS ON SIDE AND BOTTOM OF SINK. PROVIDE TOP MOUNT POLISHED CHROME PLATED METAL SWING SPOUT FAUCET WITH SINGLE LEVER HANDLE SPRAY, WITH WATER SAVING AERATOR, STRAINER WITH REMOVABLE CRUMB CUP AND STOPPER, 1-1/2" TAILPIECE, CHROME PLATED BRASS 1-1/2" CONTINUOUS WASTE WITH END OUTLET AND 1-1/2" TAILPIECE, CHROME PLATED 17 GAUGE CAST BRASS P-TRAP WITH CLEANOUT AND TUBE WASTE TO WALL. CHROME PLATED LOOSE KEY 1/2" x 3/8" ANGLE STOP TO WALL WITH 3/8" FLEXIBLE CHROME PLATED COPPER HOT AND COLD WATER SUPPLIES. COORDINATE WITH CABINET SHOP DRAWINGS, BASE CABINET MUST BE A TRUE MINIMUM 24" DEEP BACK TO FRONT IN ORDER FOR SINK TO DROP INTO COUNTERTOP OPENING. SINK DRILLINGS SHALL ACCOMMODATE FITTING INSTALLATION, ONLY, NO OTHER CAPPED OPENINGS WILL BE ALLOWED.

SINK	ELKAY LRAD-332265PD
FAUCET	ZURN Z-871 BW-HS
DRAIN	ELKAY LK-35
WASTE	ELKAY LK-53
SUPPLIES	ZURN Z-8802-LR-LK
P-TRAP	ZURN Z-1021-PC

SS-1 SERVICE SINK (WALL MOUNT):

22" X 18" X 12-3/4" ENAMELED CAST IRON SERVICE SINK WITH 8" ON CENTER, BACK, STAINLESS STEEL RIM GUARD AND WALL HANGER. ROUGH CHROME PLATED FAUCET WITH TOP BRACE, BUCKET HOOK, VACUUM BREAKER, STOPS AND HOSE END, 3" TRAP WITH CLEANOUT TO WALL INSIDE WITH FOOT SUPPORT. CHROME PLATED LOOSE KEY ANGLE STOP TO WALL WITH 3/8" CHROME PLATED FLEXIBLE COPPER SUPPLIES.

SINK	ZURN Z5888
FAUCET	ZURN Z843 M1 RC
DRAIN ASSEMBLY	ZURN TS 2900-IP3
HOSE & BRACKET/MOP HANGER	-HH, -MH
SUPPLY	ZURN Z-8800-LR-LK

EWC-1 ELECTRIC WATER COOLER (HANDICAP):

WALL HUNG, SELF-CONTAINED ELECTRIC WATER COOLER. FURNISH FLOOR MOUNTED SINGLE CARRIER WITH BEARING PLATE, HANGER PLATE, ADJUSTABLE SUPPORTING RODS, STRUCTURAL UPRIGHTS AND BLOCK BASES, SECURE TO FLOOR WITH 1/2" BOLTS AND ANCHORS. UNIT TO BE COMPLETE WITH HERMETIC AIR COOLED REFRIGERATION SYSTEM, COOLER PRE-COOLER, THERMOSTAT, SAFETY CONTROLS, CONDENSER FAN MOTOR, VERMIN PROOF INSULATION, STAINLESS STEEL CABINET, QUIET OPERATION. TOP OF COOLER SHALL BE NO. 3 FINISH STAINLESS STEEL, TWO-STREAM ANTI-SQUIRT PROJECTOR WITH ONE-PIECE CHROME PLATED HOOD GUARD, AND FRONT AND SIDE PUSH BAR CONTROLS. COOLER CAPACITY SHALL BE 8.1 GPH, COOLING 80-DEGREE F WATER TO 50 DEGREE F. PROVIDE ONE-YEAR WARRANTY ON ENTIRE COOLER. PROVIDE 1/2" x 3/8" CHROME PLATED STOP TO WALL WITH CHROME PLATED 3/8" FLEXIBLE COPPER SUPPLY. PROVIDE 1-1/4" CHROME PLATED 17 GAUGE CAST BRASS P-TRAP WITH CLEANOUT AND TUBE WASTE TO WALL, 120 VOLT, SINGLE PHASE, 3.3 FULL LOAD AMPS, 265 RATED WATTS, 1/6 COMPRESSOR HP. MOUNT TO SATISFY ADA REQUIREMENTS, VERIFY FINAL LOCATION, MOUNTING HEIGHT, AND FINISH WITH ARCHITECTURAL DRAWINGS.

EDC	ELKAY EZS8
TRAP	ZURN Z8700-PC
CARRIER	Z1225 BL
SUPPLIES	ZURN Z-8802-LK

EW-1 EMERGENCY FACE AND EYE WASH:

SCHEDULE 40 GALVANIZED STEEL. FURNISHED WITH ORANGE POLYETHYLENE COVERS. PULL BAR HANDLE TO OPERATE EYEWASH. SHOWER AND EYEWASH SHALL HAVE 1-1/4" COLD WATER SUPPLY. FLOOR MOUNT WITH CAST FLANGE, OPEN WASTE TEE DRAIN, FOR INDIRECT CONNECTION.

EYE WASH	GUARDIAN G-1902 HFC

SH-1 SHOWER (HANDICAP):

SINGLE HANDLE PRESSURE-BALANCING MIXING VALVE. CERAMIC CONTROL CARTRIDGE WITH STAINLESS STEEL BALANCING PISTON. MUST HOLD SHOWER TEMPERATURE STEADY WITH PRESSURE FLUCTUATIONS UP TO 85%. PACKING WITH BRASS ADJUSTABLE LIMIT STOP SCREW TO PROHIBIT VALVE HANDLE FROM BEING TURNED TO EXCESSIVE HOT DISCHARGE TEMPERATURES. ALL TRIM TO BE COPPER NICKEL CHROME PLATED. SERVICE STOPS TO BE BRASS AND CAST INTEGRAL WITH VALVE BODY. TWO WAY CHROME DIVERTER VALVE. BRASS SHOWER HEAD WITH ARM AND FLANGE. WALL/HAND SHOWER WITH FLEXIBLE METAL HOSE, IN-LINE VACUUM BREAKER, WALL CONNECTION AND FLANGE, 30" SLIDE BAR FOR HAND SHOWER MOUNTING.

SHOWER	ZURN Z-7301-SS-MT-DV-2P-HW
DRAIN	ZURN ZN-415 2" WITH 5"B

MV-1 WATER MIXING VALVE (THERMOSTATIC MIXING):

UNDER SINK MIXING VALVE, BRONZE BODY, LIMITS HOT WATER BETWEEN 80°F & 120°F, DOUBLE THROTTLING, DUAL CHECK VALVES, INTEGRAL STRAINER WITH 40 MESH SCREEN, TAMPER RESISTANT LOCKING NUT. MEETS ASSE 1070 STANDARDS.

EXPOSED MIXING VALVE	WATTS LFUSG-B

UB-1 WALL BOX WITH SHUT-OFF VALVE (REFRIGERATOR):

RECESSED METAL WALL BOX CONSTRUCTED AND SUITABLE FOR FIRE RATED PARTITIONS, COMPLETE WITH FACTORY INSTALLED SHANK VALVE WITH 1/4" O.D. COPPER OUTLET TESTED @ 100 P.S.I. PROVIDE APPROXIMATELY 5'-0" OF 1/4" O.D. SOFT COPPER TUBING WITH COMPRESSION FITTING IN TIGHT COIL. ANCHOR BOX TO WALL STRUCTURE. VERIFY LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL DRAWINGS OR MOUNT TO MANUFACTURERS RECOMMENDATIONS.

WALL BOX	GUY GRAY BIM 875

EWH-1 ELECTRIC WATER HEATER:

ASHRAE STANDARD 90, GLASS LINED TANK SUITABLE FOR 150 PSI WORKING PRESSURE, 300-PSI TEST. FINISH OF DURABLE HIGH GLOSS BAKED ENAMEL. BLANKET GLASS FIBER INSULATION OVER ENTIRE TANK. ASME PRESSURE AND TEMPERATURE RELIEF VALVE. WATER HEATER SHALL BE ACCEPTABLE FOR COMMERCIAL APPLICATION BY MANUFACTURER. PROVIDE 3 FULL YEAR WARRANTY, SNAP ACTION AUTOMATIC SURFACE MOUNTED THERMOSTATS, IMMERSION TYPE HEATING ELEMENTS AND MAGNESIUM ANODE ROD. PROVIDE UNIT MOUNTED DISCONNECT SWITCH. PROVIDE THERMAL EXPANSION RELIEF VALVE ON COLD WATER INLET SIDE OF HEATER FOR THERMAL EXPANSION CONTROL. PROVIDE GALVANIZED STEEL DRIP PAN. 40GAL., 4.0 KW, 240V/SINGLE PHASE.

WATER HEATER	A. O. SMITH DEN 40 - 4 K.W.
VACUUM RELIEF	WATTS 36A
EXPANSION TANK	AMTROL "THERM-X-TROL"

WH-1 RECESSED HOSE BIB & WALL HYDRANT:

ANTI-SIPHON VACUUM BREAKER, FLUSH MOUNTING STAINLESS STEEL WALL BOX, NARROW INSTALLATION, 3/4 INCH HOSE THREAD, BRONZE BODY WITH CHROME FINISH POLYCARBONATE WHEEL HANDLE, STOP VALVES, LOOSE KEY FAUCET OPERATOR.

WALL FAUCET	ZURN Z1350

PRV-1 PRESSURE REDUCING VALVE (IF REQUIRED):

A WATER PRESSURE REDUCING VALVE AND STRAINER SHALL BE INSTALLED ON THE WATER SERVICE PIPE NEAR ITS ENTRANCE TO THE BUILDING WHERE SUPPLY MAIN PRESSURE EXCEEDS 60PSI (413 KPA) TO REDUCE IT TO 50PSI (345 KPA) OR LOWER. THIS SERIES IS SUITABLE FOR WATER SUPPLY PRESSURES UP TO 300PSI. THE WATER PRESSURE REDUCING VALVE SHALL BE CONSTRUCTED USING LEAD FREE MATERIALS. LEAD FREE * REGULATORS SHALL COMPLY WITH STATE CODES AND STANDARDS, WHERE APPLICABLE, REQUIRING REDUCED LEAD CONTENT. SILL COCKS AND OUTSIDE WALL HYDRANTS MAY BE LEFT ON FULL MAIN PRESSURE AT THE OPTION OF THE OWNER. PROVISION SHALL BE MADE TO PERMIT THE BYPASS FLOW OF WATER BACK THROUGH THE VALVE INTO THE MAIN WHEN PRESSURES, DUE TO THERMAL EXPANSION ON THE OUTLET SIDE OF THE VALVE, EXCEED THE PRESSURE IN THE MAIN SUPPLY. PRESSURE REDUCING VALVES WITH BUILT-IN BYPASS CHECK VALVES AND INTEGRAL STRAINER WILL BE ACCEPTABLE. APPROVED VALVES SHALL COMPLY WITH ASSE 1003.

VALVE	WATTS LFN55B

DONOFRO ARCHITECTS
2910 CALEDONIA ST. P.O. BOX 861
MARIANNA, FL 32446 MARIANNA, FL 32447
OFFICE: (850) 482-5261 FAX: (850) 482-8609

SHEET TITLE: PLUMBING SPECIFICATIONS

NEW MUNICIPAL WAREHOUSE
FOR:
TOWN OF GREENWOOD
GREENWOOD, FLORIDA

JOB NUMBER: 2019-024
DATE: AUG 3, 2019
DRAWN BY: MMI
CHECKED BY: DNW

SHEET No.
P-1.1

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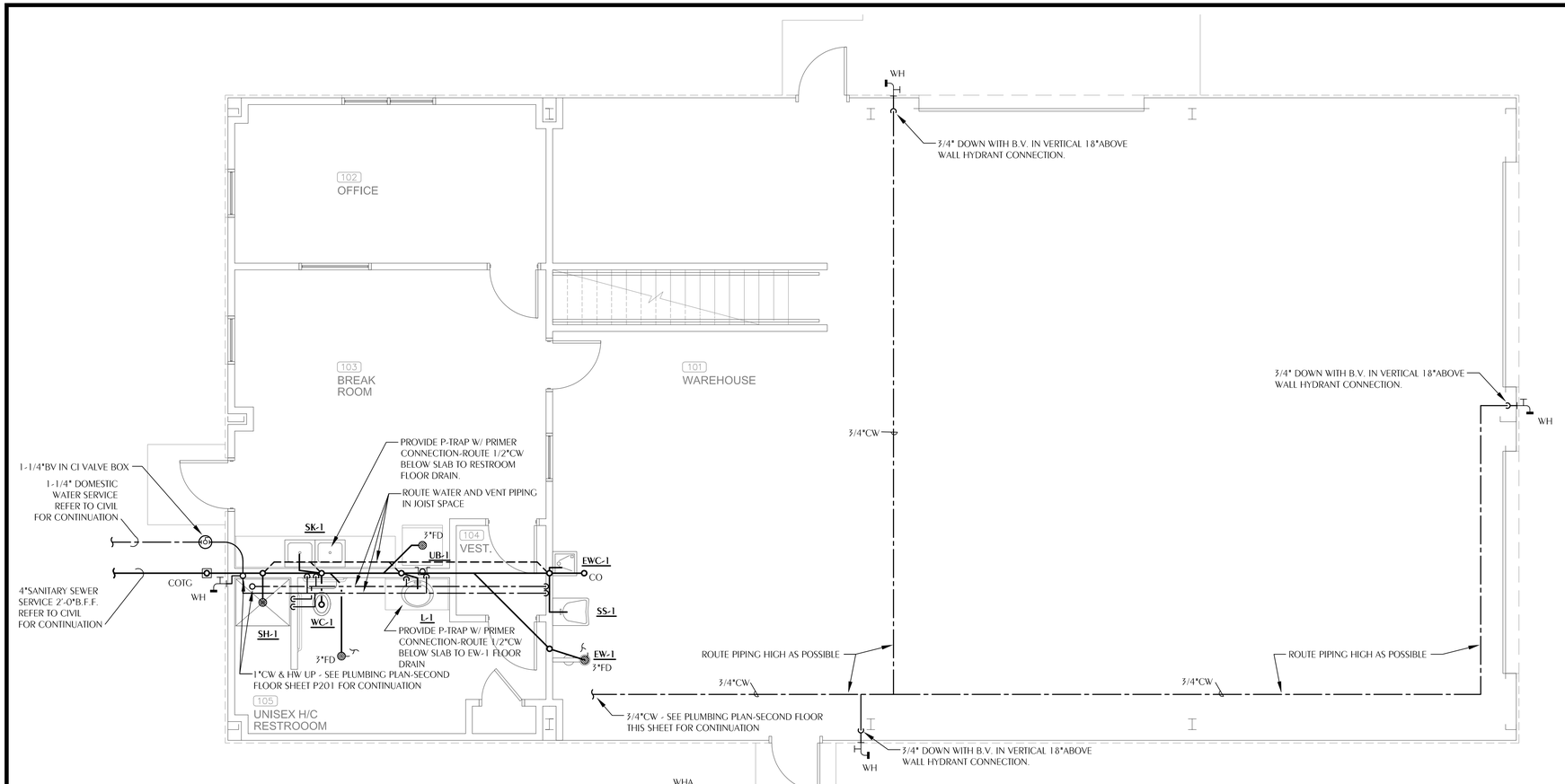
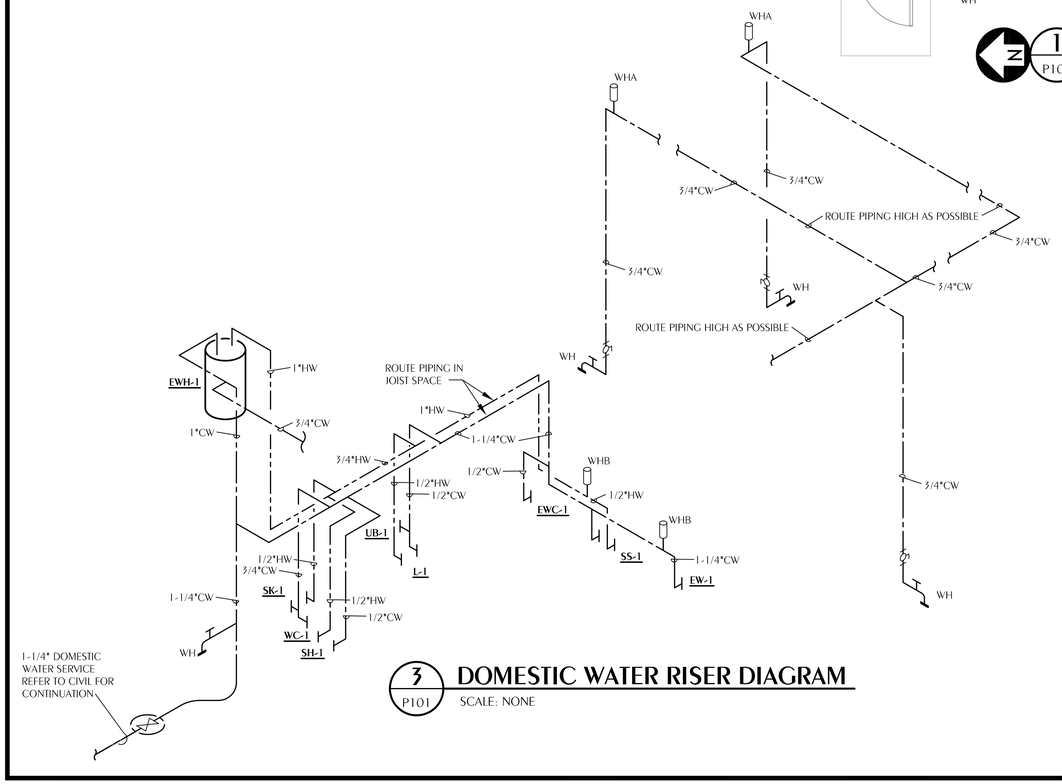


1 PLUMBING PLAN-FIRST FLOOR

P101 — SCALE: 1/4" = 1'-0"

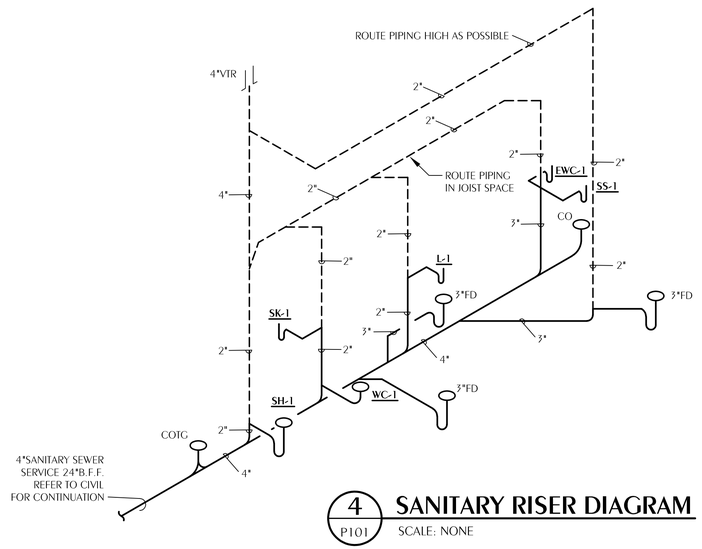
2 PLUMBING PLAN-SECOND FLOOR

P101 — SCALE: 1/4" = 1'-0"



3 DOMESTIC WATER RISER DIAGRAM

P101 — SCALE: NONE



4 SANITARY RISER DIAGRAM

P101 — SCALE: NONE

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SHEET TITLE: PLUMBING PLANS AND RISER DIAGRAMS

NEW MUNICIPAL WAREHOUSE

FOR:
TOWN OF GREENWOOD
GREENWOOD, FLORIDA

JOB NUMBER: 2019-024
DATE: AUG 3, 2019
DRAWN BY: MMI
CHECKED BY: DNW

SHEET No.
P-2.0

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LEGEND

- SUPPLY DUCT SECTION POSITIVE PRESSURE
- RETURN OR EXHAUST DUCT NEGATIVE PRESSURE
- AxB — RECTANGULAR DUCT SIZE ("A" INDICATES SIDE SHOWN; "B" INDICATES SIDE NOT SHOWN)
- INDICATES RISE IN ELEVATION OF DUCT.
- EXTERNALLY INSULATED DUCTWORK
- INTERNALLY INSULATED DOUBLE WALL SPIRAL DUCTWORK
- EXTERNALLY INSULATED ROUND FLEXIBLE DUCTWORK
- DUCT ELBOW WITH TURNING VANES
- RADIUSED DUCT ELBOW
- FLEXIBLE DUCT CONNECTION
- MANUAL VOLUME BALANCING DAMPER
- M — MOTORIZED DAMPER
- FD — FIRE DAMPER WITH ACCESS DOORS
- SD — SMOKE DAMPER WITH ACCESS DOORS
- BD — BACKDRAFT DAMPER
- TEE WITH TURNING VANES
- TRANSITION
- FLEX DUCT TAKE OFF WITH MVD SIZE EQUALS DIFFUSER NECK SIZE UNLESS NOTED OTHERWISE
- BRANCH DUCT TAKEOFF WITH MVD
- AFM — AIRFLOW MEASURING STATION
- DUCT TO BE DEMOLISHED
- HIGH PRESSURE DUCTWORK
- DOUBLE WALL HIGH PRESSURE DUCTWORK
- A/B — FLAT OVAL DUCTWORK, A REPRESENTS THE SIDE SHOWN AND B REPRESENTS THE SIDE NOT SHOWN

- AHU-1 — EQUIPMENT TAG
- 1 / M3 — DETAIL TAG ("1" INDICATES IDENTIFICATION NUMBER; "M3" INDICATES THE SHEET NUMBER DRAWN ON)
- 1 — SHEET NOTE
- SR-1 / 100 — AIR DEVICE TAG. TOP LINE INDICATES TYPE OF DEVICE BOTTOM LINE INDICATES AIRFLOW IN CFM
- (2)SR-1 / 100 — AIR DEVICE TAG. TOP LINE INDICATES TYPE OF DEVICE BOTTOM LINE INDICATES AIRFLOW IN CFM (2) INDICATES TYPICAL OF TWO DEVICES

TYP	TYPICAL
TEMP	TEMPERATURE
SA	SUPPLY AIR
RA	RETURN AIR
EA	EXHAUST AIR
MA	MIXED AIR
OA	OUTDOOR AIR
TA	TRANSFER AIR
EF	EXHAUST FAN
CD	CEILING DIFFUSER
RG	RETURN GRILLE
EG	EXHAUST GRILLE
ER	EXHAUST REGISTER
CEF	CEILING EXHAUST FAN
WM	WALL MOUNTED UNIT
HP	HEAT PUMP
DSHP	DUCTLESS SYSTEM HEAT PUMP
T1	THERMOSTAT, "1" INDICATES UNIT CONTROLLED
S	DUCT MOUNTED SMOKE DETECTOR
FD	FLOOR DRAIN
UC	UNDERCUT DOOR ¾"
DG	DOOR GRILLE, REFER TO DOOR SCHEDULE
AFF	ABOVE FINISHED FLOOR
XFR	TRANSFER AIR
ESP	EXTERNAL STATIC PRESSURE
DDC	DIRECT DIGITAL CONTROL
VFM	VENTURI FLOW METER
AI	ANALOG INPUT
AO	ANALOG OUTPUT
DI	DIGITAL INPUT
DO	DIGITAL OUTPUT
TAB	TESTING, ADJUSTING AND BALANCING
NOM	NOMINAL
VFD	VARIABLE FREQUENCY DRIVE
E	EXISTING
AFF	ABOVE FINISHED FLOOR

GENERAL NOTES

1. ALL DUCT DIMENSIONS ARE NET INSIDE.
2. VERIFY COLLAR SIZES ON ALL AIR TERMINALS, EQUIPMENT OUTLETS AND INLETS, TRANSITION DUCTWORK AS NECESSARY. EXTERNALLY INSULATE TRANSITIONS AT EQUIPMENT CONNECTIONS.
3. FIELD VERIFY CLEAR SPACE AVAILABLE, ROUTING PATH, AND CONFLICTS WITH STRUCTURE AND THE WORK OF OTHER TRADES PRIOR TO FABRICATING DUCTWORK. PROVIDE OFFSETS IN DUCTWORK AS REQUIRED, WHETHER SPECIFICALLY INDICATED ON DRAWINGS OR NOT. SUBMIT SHOP DRAWINGS ON DUCTWORK LAYOUT PRIOR TO COMMENCING WORK. MAINTAIN CLEARANCE AROUND ALL LIGHT FIXTURES AS REQUIRED TO REMOVE AND SERVICE FIXTURES. COORDINATE WITH ROOF TRUSSES/STRUCTURE. PRESSURE TEST ALL NEW DUCTWORK FOR LEAKS. SEE SPECIFICATIONS.
4. CONTRACTOR SHALL INSTALL ALL EQUIPMENT, PIPING, AND DUCTWORK SUCH THAT MANUFACTURERS' RECOMMENDED CLEARANCES ARE MET FOR ALL ACCESS PANELS, MOTORS, FANS, BELTS, FILTERS AND AIR INTAKES. CONDENSATE LINES SHALL BE CLEAR OF FILTER RACK ACCESS.
5. PROVIDE DUCT FLEX CONNECTIONS & VIBRATION ISOLATION FOR ALL UNITS NOT INTERNALLY ISOLATED.
6. ALL SUPPLY, RETURN, EXHAUST AND OUTSIDE AIR INTAKE DUCTWORK SHALL BE GALVANIZED SHEET METAL.
7. ALL AHU AND OAU FILTERS SHALL BE OF A READILY AVAILABLE SIZE, OF DISPOSABLE TYPE, AND BE ACCESSIBLE WITHOUT THE USE OF SCREWS OR OTHER MECHANICAL DEVICES REQUIRING TOOLS.
8. PROVIDE ACCESS PANELS IN CEILINGS AS REQUIRED FOR MAINTENANCE AND ADJUSTMENT OF EQUIPMENT LOCATED ABOVE CEILING.
9. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING LOCATION OF ALL EQUIPMENT AND UTILITIES.

DUCTWORK NOTES

1. ALL ROUND FLEXIBLE DUCT SHALL BE FLEXMASTER TYPE 8M ACOUSTICAL FLEX OR ENGINEER APPROVED EQUAL. MAXIMUM LENGTH OF ANY FLEXIBLE DUCT RUNOUT SHALL BE 5'-0". WHERE LENGTH REQUIRED EXCEEDS 5'-0", INSTALL EXTERNALLY INSULATED ROUND SNAPLOCK DUCT FOR BALANCE OF DISTANCE TO SPIN-IN TAP AT MAIN DUCT TRUNK.
2. SEAL ALL DUCT PENETRATIONS OF WALLS AIRTIGHT, REGARDLESS OF WHETHER WALLS ARE FIRE RATED OR NOT.
3. ALL SUPPLY AIR DUCTWORK FROM AHU'S (EXCEPT TAKEOFFS TO SUPPLY AIR DIFFUSERS) SHALL BE LOW PRESSURE RECTANGULAR, SMACNA STATIC PRESSURE CLASS 2" W.G., SEAL CLASS A, EXTERNALLY INSULATED UNLESS OTHERWISE INDICATED. DUCT SIZES INDICATED ARE INSIDE CLEAR DIMENSIONS.
4. ALL RETURN AIR DUCTWORK SHALL BE LOW PRESSURE RECTANGULAR, SMACNA STATIC PRESSURE CLASS 2" W.G., SEAL CLASS A, EXTERNALLY INSULATED UNLESS OTHERWISE INDICATED. DUCT SIZES INDICATED ARE INSIDE CLEAR DIMENSIONS.
5. ALL OUTSIDE AIR INTAKE DUCTWORK SHALL BE LOW PRESSURE RECTANGULAR, SMACNA STATIC PRESSURE CLASS 2" W.G., SEAL CLASS A, EXTERNALLY INSULATED. DUCT SIZES INDICATED ARE INSIDE CLEAR DIMENSIONS.
6. STANDARD EXHAUST AIR DUCTWORK SHALL BE LOW PRESSURE RECTANGULAR, SMACNA STATIC PRESSURE CLASS 1/2" W.G., SEAL CLASS A.
7. WHEN ROUTING DUCTWORK OVER LIGHTS, PROVIDE A MINIMUM 6" CLEARANCE BETWEEN DUCT AND LIGHTS.

VENTILATION SCHEDULE

SPACE TYPE	VENTILATION CFM/S.F.	VENTILATION CFM/PERSON
OFFICE	0.06	5
BREAK ROOM	0.06	5
VESTIBULE	0.06	0
RESTROOM	0.00	70/50*
WAREHOUSE	0.06	10

*70 CFM PER WATER CLOSET AND 50 CFM PER SHOWER HEAD

LOUVER SCHEDULE

MARK	AIRFLOW CFM (MAX)	LOUVER SIZE (WxH) INCHES	FREE AREA FT² (MIN)	PRESSURE DROP (IN. WG.)
LVR-1 / CFM	120	14x12	0.2	0.06
LVR-2 / CFM	2,390	36x36	3.7	0.08

1. PROVIDE GREENHECK MODEL 'EVH-660D' (OR EQUAL) EXTRUDED ALUMINUM, WIND-DRIVEN RAIN RESISTANT, STATIONARY LOUVER WITH INSECT SCREEN.
2. FINISH TO BE SELECTED BY ARCHITECT FROM MANUFACTURER'S STANDARD COLORS.

AIR DEVICE SCHEDULE

MARK	MAX AIRFLOW CFM	AIR DEVICE SIZE	DUCT CONNECTION SIZE	TITUS MODEL
CD-1 / CFM	90	9x9	6Ø	TDC
RG,EG,SG,TG,RR,ER				
xx-1 / CFM	450	12x12	12x12	350FL

NOTES:
1. MAX NC=20
2. PROVIDE BEVELED MOUNTING FRAME FOR CEILING DIFFUSERS IN HARD CEILINGS.
3. PROVIDE FLAT MOUNTING FRAME FOR GRILLES LOCATED IN HARD CEILINGS.

ENERGY RECOVERY VENTILATOR SCHEDULE

UNIT ERV	BASIS OF DESIGN	MODEL	CONFIGURATION	DESIGN DAY	AIR SIDE	CFM	ESP (IN. H2O)	FAN (HP)	ENTERING CONDITIONS SUMMER (DB/WB)	ENTERING CONDITIONS WINTER (DB/WB)	LEAVING CONDITIONS SUMMER (DB/WB)	LEAVING CONDITIONS WINTER (DB/WB)	ELECTRICAL VOLTS/PHASE	WEIGHT	NOTES
ERV-1	RENEWAIRE	EV130	INDOOR PACKAGED	LATENT	SUPPLY	90	0.15	0.1	82.8/78.7	25.0/22.6	73.7/70.6	63.1/54.2	240/1	48 LBS.	1,2,3,4,5,6,7,8
					EXHAUST	120	0.15		72.0/62.7	70.0/61.0	-	-			
				SENSIBLE	SUPPLY	90	0.15	0.1	92.2/76.5	25.0/22.6	75.1/68.2	63.1/54.2			
					EXHAUST	120	0.15		72.0/62.7	70.0/61.0	-	-			

1. BELT DRIVE FAN
2. PROVIDE 2", MERV 8 FILTERS ON ENTERING SIDE OF EACH AIRSTREAM.
3. ESP DOES NOT INCLUDE FILTERS, CASING, ETC.
4. PROVIDE DEDICATED ENERGY RECOVERY UNIT WITH 1" FOIL FACED FIBERGLASS BOARD INSULATION, 20 GAGE G90 GALVANIZED STEEL CASE, AND FIXED PLATE CROSS FLOW CONSTRUCTION HEAT EXCHANGER WITH 10 YEAR CORE PERFORMANCE WARRANTY. DESICCANT WHEELS ARE NOT ACCEPTABLE.
5. PROVIDE MOTORIZED OA AND EA DAMPER MOUNTED IN DUCT AND INTERLOCKED WITH UNIT.
6. PROVIDE SINGLE POINT POWER CONNECTION.
7. PROVIDE BASIS OF DESIGN UNIT OR PRIOR APPROVED EQUAL.
8. INTERLOCK UNIT WITH 105 RESTROOM LIGHTS

MINI SPLIT INDOOR AIR HANDLING UNIT SCHEDULE

UNIT TAG	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	BASIS OF DESIGN MOUNTING TYPE	CAPACITY (NOMINAL) COOLING (BTUH)	CAPACITY (NOMINAL) HEATING (BTUH)	CAPACITY (DERATED) TOTAL COOLING (BTUH)	CAPACITY (DERATED) SENSIBLE COOLING (BTUH)	CAPACITY (DERATED) HEATING (BTUH)	COOLING DESIGN CONDITIONS TOTAL COOLING (BTUH)	COOLING DESIGN CONDITIONS SENSIBLE COOLING (BTUH)	COOLING DESIGN CONDITIONS ENTERING AIR TEMP (DB °F/WB °F))	HEATING DESIGN CONDITIONS HEATING (BTUH)	HEATING DESIGN CONDITIONS ENTERING AIR TEMP (°F)	AIRFLOW SUPPLY (CFM)	ELECTRICAL VOLTS/PH	ELECTRICAL MCA (AMPS)	ELECTRICAL MOCP (AMPS)	NOTES
WM-1	MITSUBISHI	PKFY-P08NHMU-E2	WALL MOUNTED	8,000	9,000	7,300	6,200	9,000	5,700	4,300	72.2/64.2	4,200	70.4	295	240/1	0.38	15	1,2,3,4,5,6,7,8,9
WM-2	MITSUBISHI	PKFY-P08NHMU-E2	WALL MOUNTED	8,000	9,000	7,100	6,200	9,000	5,900	5,200	72.3/61.2	1,700	71.0	275	240/1	0.38	15	1,2,3,4,5,6,7,8,9
WM-3	MITSUBISHI	PKFY-P06NBMU-E2R1	WALL MOUNTED	6,000	6,700	5,900	3,000	6,700	2,100	2,000	72.3/61.8	1,700	70.5	120	240/1	0.19	15	1,2,3,4,5,6,7,8,9

1. NOMINAL COOLING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 80/67°F (DB/WB), OUTDOOR OF 95°F (DB)
2. NOMINAL HEATING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 70°F (DB), OUTDOOR OF 43°(WB)
3. HEATING AND COOLING SHALL INCLUDE NO DIVERSITY.
4. CORRECTED CAPACITY IS NET CAPACITY FOR INSTALLATION ACCOUNTING FOR PIPE RUN LENGTHS, ETC.
5. PROVIDE UNIT MOUNTED CONDENSATE PUMP
6. PROVIDE FACTORY ENGINEERED SHOP DRAWINGS WITH REFRIGERANT PIPE SIZES.
7. EXPOSED (INDOOR OR OUTDOOR) REF PIPING SHALL BE HARD DRAWN COPPER.
8. PROVIDE HARD WIRED THERMOSTAT AND FILTER HOUSING FOR UNIT MOUNTED FILTERS.

MINI SPLIT OUTDOOR UNIT SCHEDULE

UNIT DSHP	BASIS OF DESIGN	DSHP MODEL	NOMINAL COOLING TOTAL CAPACITY (BTUH)	CORRECTED COOLING TOTAL CAPACITY (BTUH)	DESIGN COOLING TOTAL LOAD (BTUH)	DESIGN COOLING OUTDOOR TEMP (°F)	NOMINAL HEATING CAPACITY (BTUH)	CORRECTED HEATING CAPACITY (BTUH)	DESIGN HEATING CAPACITY (BTUH)	DESIGN HEATING OUTDOOR TEMP (°F)	ELECTRICAL VOLTS/PHASE	ELECTRICAL MCA	ELECTRICAL MOCP	EFFICIENCY EER	EFFICIENCY SEER	EFFICIENCY HSPF	NOTES
1	MITSUBISHI	PUMY-P36NKMU2	36,000	36,000	24,000	95.0	42,000	32,000	7,600	25.0	240/1	29	44	15.0	22.3	12.0	1,2,3,4

1. NOMINAL COOLING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 80/67°F (DB/WB), OUTDOOR OF 95°F (DB)
2. NOMINAL HEATING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 70°F (DB), OUTDOOR OF 43°(WB)
3. EFFICIENCY VALUES FOR EER, SEER, AND HSPF ARE BASED ON NON-DUCTED INDOOR UNITS.
4. PROVIDE OUTDOOR UNIT FOR THREE INDOOR UNITS.

ELECTRIC INFRARED HEATER SCHEDULE

UNIT ERH	BASIS OF DESIGN	MODEL	BTUH	MOUNT HEIGHT	REFLECTOR PATTERN	CONTROL	ELECTRICAL VOLTS/PHASE	ELECTRICAL KW	NOTES
1-12	FOSTORIA	OCH-57-240V	10,200	16 FT	30°	PROGRAM. T-STAT	240/1	3.0	1,2
13,14	FOSTORIA	OCH-57-240V	10,200	7 FT	30°	PROGRAM. T-STAT	240/1	3.0	1,2
15	FOSTORIA	OCH-57-240V	10,200	8 FT	30°	PROGRAM. T-STAT	240/1	3.0	1,2

1. PROVIDE ASYMMETRIC REFLECTOR.
2. PROVIDE COATED STEEL CONSTRUCTION.

FAN SCHEDULE

UNIT	TYPE	CFM	MAX. FAN RPM	ESP (IN. H20)	MAX. MOTOR POWER	SONES/db (MAX.)	BASIS OF DESIGN	MODEL	CONTROL	ELECTRICAL VOLTS/PHASE	NOTES
EF-1	SIDEWALL	2,390	1,028	0.15	3/4 HP	7.3	GREENHECK	SE1-18-429-VG	SWITCH	115/1	1,2,3,4,5,6
EF-2	SIDEWALL	2,390	1,028	0.15	3/4 HP	7.3	GREENHECK	SE1-18-429-VG	SWITCH	115/1	1,2,3,4,5,6

1. PROVIDE DISCONNECT
2. PROVIDE BACK DRAFT DAMPER
3. PROVIDE THERMAL OVERLOAD
4. PROVIDE DIRECT DRIVE FAN
5. PROVIDE VIBRATION ISOLATION

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SHEET TITLE: HVAC LEGEND, SCHEDULES, AND NOTES

FOR: NEW MUNICIPAL WAREHOUSE
TOWN OF GREENWOOD
GREENWOOD, FLORIDA

JOB NUMBER: 2019-024
DATE: AUG 3, 2019
DRAWN BY: ECB
CHECKED BY: DNW

SHEET No.
M-1.0

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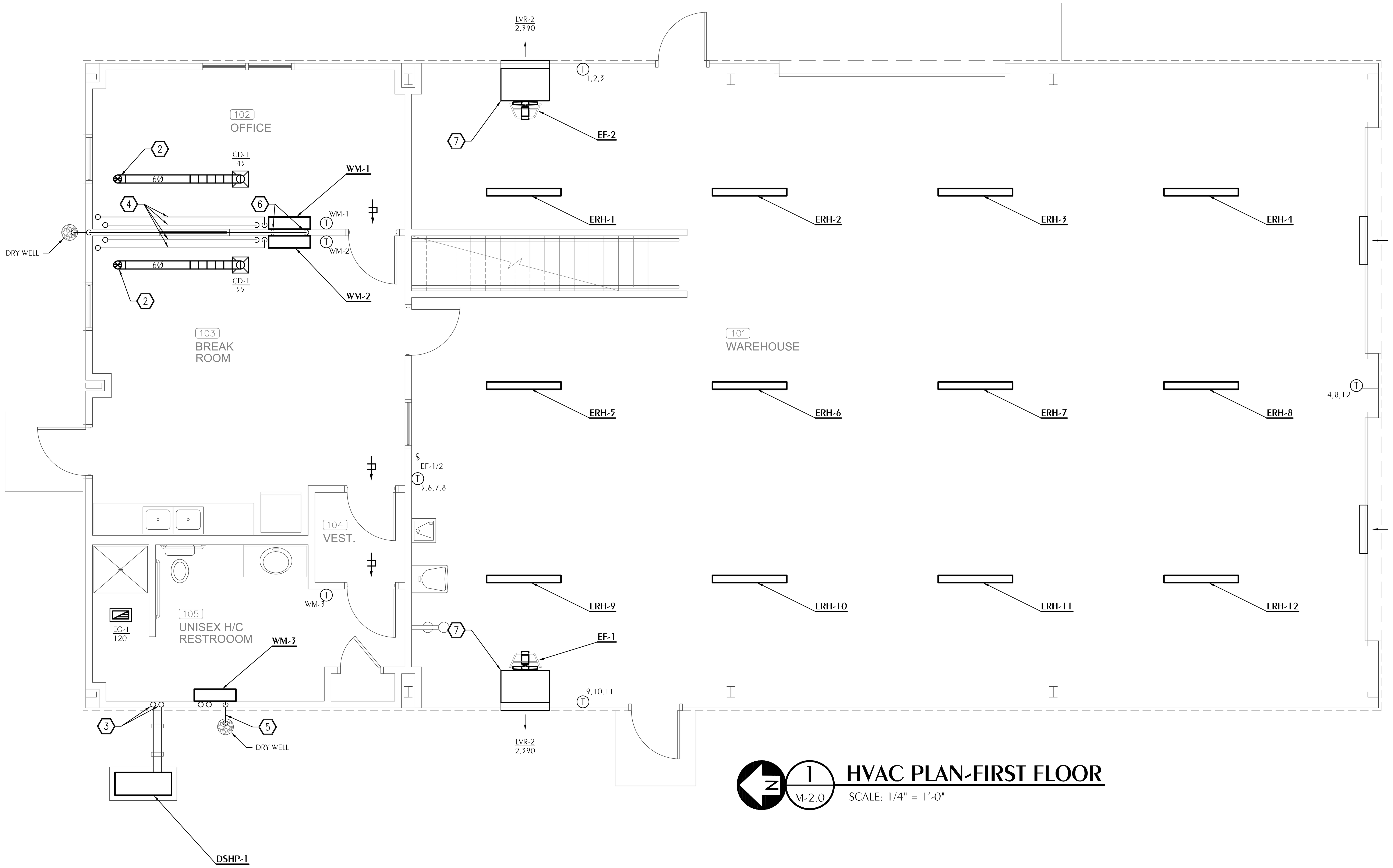
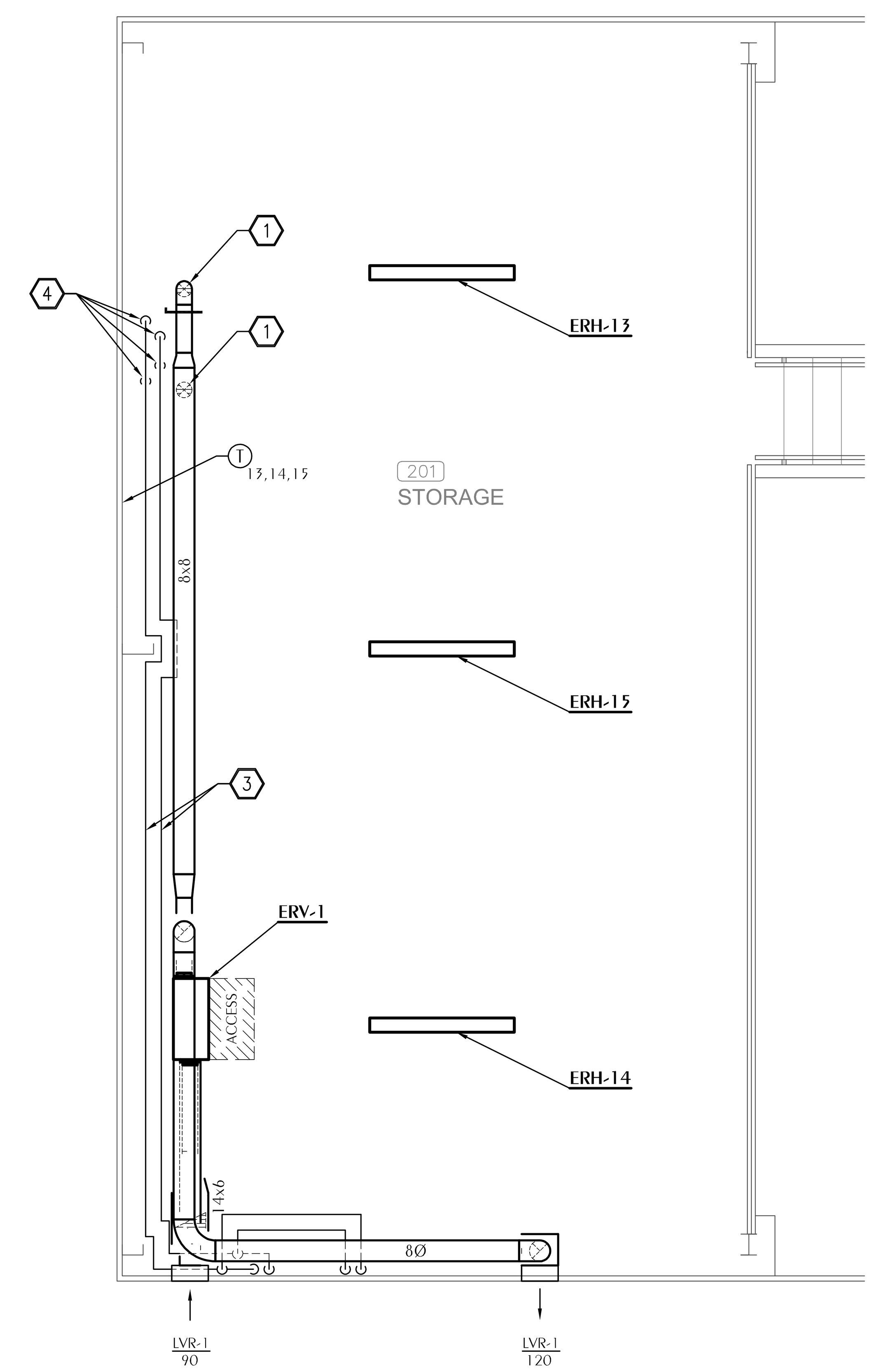


1 M-2.0 HVAC PLAN-FIRST FLOOR
SCALE: 1/4" = 1'-0"



2 M-2.0 HVAC PLAN-SECOND FLOOR
SCALE: 1/4" = 1'-0"

SHEET NOTES

1. ROUTE FA DUCT FROM ERV-1 THROUGH FLOOR INTO JOIST SPACE.
2. ROUTE FA DUCT THROUGH JOIST SPACE TO AIR DEVICE.
3. ROUTE REFRIGERANT LINES FROM DSHP-1 AND ALONG MEZZANINE WALL.
4. ROUTE REFRIGERANT LINES FROM MEZZANINE WALL INTO FLOOR JOIST SPACE AND TO WALL MOUNTED UNIT BELOW.
5. ROUTE CONDENSATE FROM WALL MOUNTED UNIT TO GRAVITY DRAIN THROUGH WALL BELOW AND TO DRY WELL OUTSIDE.
6. ROUTE CONDENSATE FROM WALL MOUNTED UNIT UP INTO JOIST SPACE USING SCHEDULED CONDENSATE PUMP. GRAVITY DRAIN FROM JOIST SPACE TO DRY WELL OUTSIDE.
7. BOTTOM OF LOUVER PLENUM TO BE MOUNTED 10'-0" AFF.

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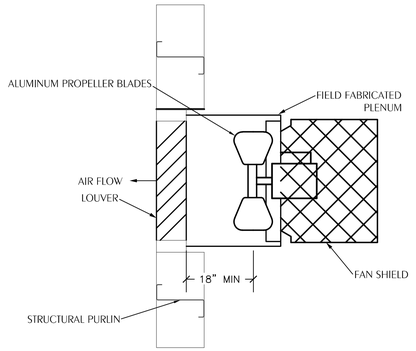
SHEET TITLE: HVAC FLOOR PLANS

NEW MUNICIPAL WAREHOUSE
FOR:
TOWN OF GREENWOOD
GREENWOOD, FLORIDA

JOB NUMBER: 2019-024
DATE: AUG 3, 2019
DRAWN BY: ECB
CHECKED BY: DNW

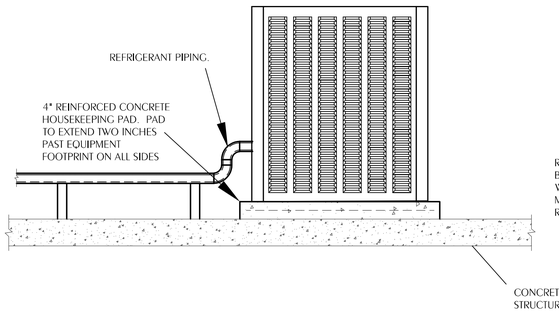
SHEET No.
M-2.0



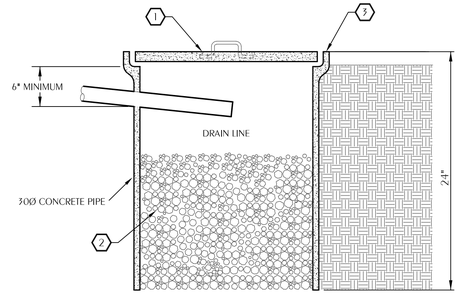
NOTE:

LOUVER TO BE MOUNTED PER MANUFACTURE'S FLORIDA PRODUCT APPROVAL.

1 WALL FAN DETAIL
M-3.0 — NONE

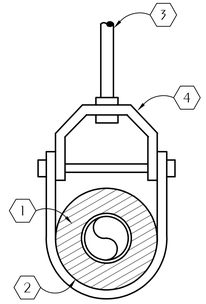


4 TYPICAL EQUIPMENT PAD DETAIL
M-3.0 — SCALE: NONE



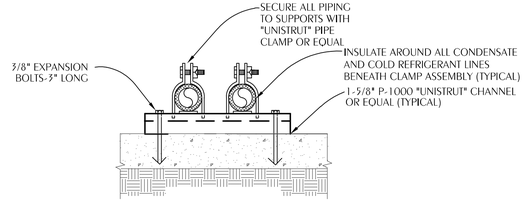
1. 2" THICK CONCRETE COVER WITH CAST-IRON LIFT HANDLE, REINF. WITH 4x4x10 WWF MESH.
2. COARSE GRAVEL FILLER, APPROX. 1-1/2" DIAMETER.
3. TOP 2" ABOVE GRADE.

2 TYPICAL DRY WELL DETAIL
M-3.0 — SCALE: NONE



1. INSULATION
2. PIPE COVERING PROTECTION SADDLE
3. HANGER ROD FASTEN TO STRUCTURE PER SPECIFICATION
4. CLEVIS TYPE HANGER

3 OVERHEAD PIPE SUPPORT
M-3.0 — SCALE: NONE



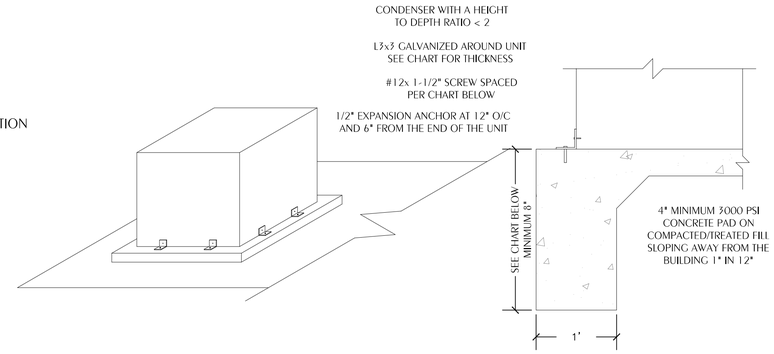
SURFACE MOUNTED

NOTE:
PROVIDE FACTORY END CAPS FOR CHANNEL.

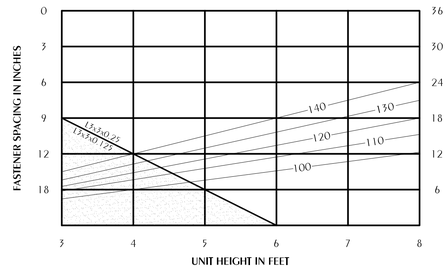
PROVIDE ALUMINUM JACKET BETWEEN INSULATION AND PIPE CLAMP AT ALL INDOOR LOCATIONS.

PROVIDE SMOOTH ALUMINUM JACKET OVER ALL EXPOSED OUTDOOR INSULATION.

PROVIDE SUPPORT AT INTERVALS REQUIRED BY THE FLORIDA BUILDING CODE AND PROJECT SPECIFICATIONS.

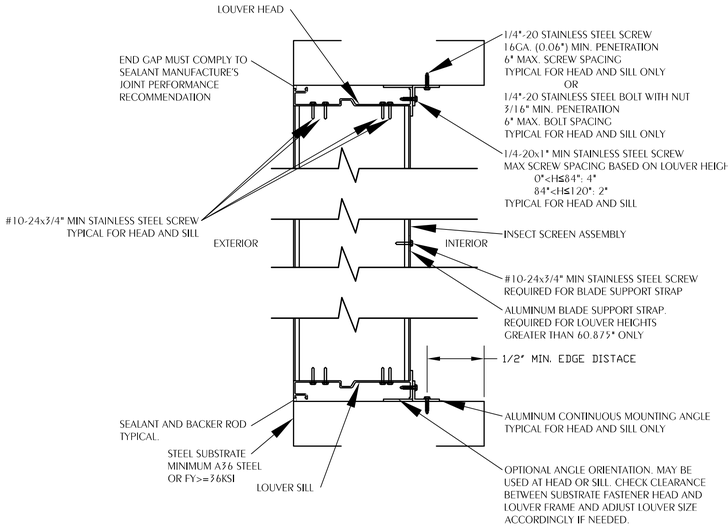


UNIT MOUNTING CHART BASED ON WIND SPEED IN MPH (3 SECOND GUST) (GROUND MOUNTING ONLY)



DESIGN CRITERIA:

CODE:	ASCE 7-05
VELOCITY:	SEE BELOW
Kz:	0.70
Kzt:	1.00
Kd:	0.85
IMPORTANCE:	1.15
EXPOSURE:	B
Ci:	1.3
Gi:	0.85
qz:	
100 mph	17.52 psf
110 mph	21.20 psf
120 mph	25.22 psf
130 mph	29.60 psf
140 mph	34.33 psf
Pdesign:	
100 mph	19.36 psf
110 mph	23.42 psf
120 mph	27.87 psf
130 mph	32.71 psf
140 mph	37.94 psf



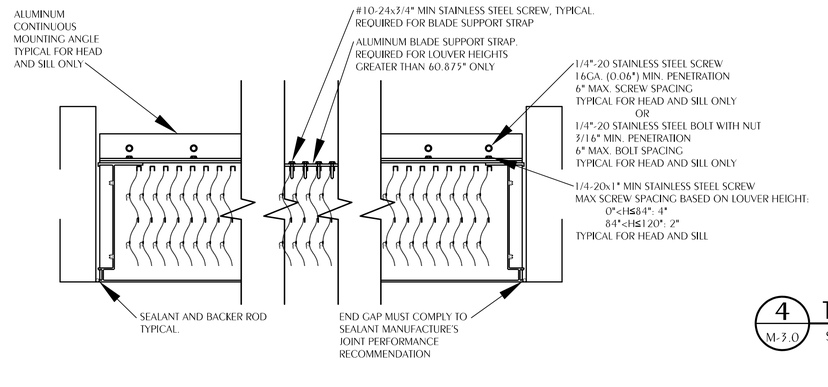
HEAD, SILL, AND SUPPORT DETAIL

NOTES:

1. THE INSTALLATION SHOWN HEREIN MUST BE FOLLOWED STRICTLY TO ENSURE COMPLIANCE WITH FLORIDA BUILDING CODE PRODUCT APPROVAL.
2. CONTINUOUS INSTALLATION ANGLES AND FASTENERS ARE SHIPPED LOOSE AND REQUIRE INSTALLATION IN THE FIELD.
3. SHIMS MAY BE REQUIRED TO ACHIEVE CONSISTENT CLEARANCE BETWEEN LOUVER AND OPENING ON ALL SIDES.
4. INSTALLATION DETAIL IS BASED UPON GREENHECK MODEL 'EVH-660D', IF AN ALTERNATE MANUFACTURER'S LOUVER IS USED, IT MUST BE INSTALLED WITH ITS FLORIDA PRODUCT APPROVAL.

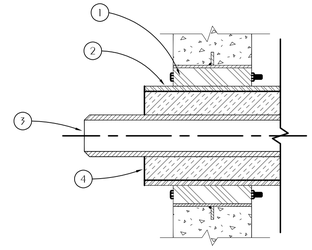
7 WALL LOUVER DETAIL
M-3.0 — SCALE: NONE NOA #:17-807.20

5 TYPICAL EXTERIOR PIPING SUPPORT DETAIL
M-3.0 — SCALE: NONE



JAMB AND SUPPORT DETAIL

6 OUTDOOR MECHANICAL UNIT MOUNTING DETAIL
M-3.0 — SCALE: NONE



1. WALL SEAL APPURTENANCES PER SPECIFICATIONS
2. PIPE SLEEVE PER SPECIFICATIONS
3. CHILLED OR HOT WATER PIPING
4. INSULATION

4 TYPICAL PIPE PENETRATION OF WALL
M-3.0 — SCALE: NONE

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SHEET TITLE: HVAC DETAILS

NEW MUNICIPAL WAREHOUSE

FOR: TOWN OF GREENWOOD
GREENWOOD, FLORIDA

JOB NUMBER: 2019-024
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ELECTRICAL GENERAL NOTES

A. CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT SIZE AND LOCATION OF EQUIPMENT WHICH IS FURNISHED BY OTHERS AND CONNECTED BY ELECTRICAL.

B. RECEPTACLES, SWITCHES AND COVERPLATES COLOR SHALL BE SELECTED BY THE ARCHITECT FROM STANDARD COLORS.

C. VERIFY ALL DOOR SWINGS WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGHING-IN WALL FOR SWITCHES.

D. LOCATION OF LIGHTING FIXTURES, DISCONNECT SWITCHES, ETC. FOR MECHANICAL EQUIPMENT/ROOM SHALL BE COORDINATED WITH FINAL MECHANICAL EQUIPMENT LOCATION TO PROVIDE NATIONAL ELECTRIC CODE REQUIRED ACCESS SPACE.

E. FINAL CONNECTION TO ALL MOTORS SHALL BE WITH FLEXIBLE CONDUIT CONNECTION.

F. ALL EXIT AND EMERGENCY FIXTURES SHALL BE CONNECTED TO LIGHT CIRCUIT AHEAD OF LOCAL SWITCH.

G. ALL PANELBOARDS, BACKBOARDS, TERMINAL CABINETS, ETC SHALL HAVE CUSTOM ENGRAVED MICARTA NAMEPLATE MECHANICALLY AFFIXED IDENTIFYING SYSTEM.

H. PROVIDE GREEN GROUND CONDUCTOR IN ALL CIRCUITS – SIZE PER N.E.C.

I. ALL EXPOSED CONDUITS, BOXES, STRAPS AND HANGERS IN THE BUILDING SHALL BE PAINTED TO MATCH ADJACENT FINISH.

J. GENERAL CONTRACTOR SHALL FIELD-VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING ANY WORK, AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES. FAILURE TO DO SO INDICATES THAT THE CONTRACTOR ACCEPTS THE CONDITIONS AS THEY EXIST, AND SHALL PERFORM THE WORK REQUIRED AS SHOWN AND SPECIFIED.

K. THE ELECTRICAL CONTRACTOR SHALL OBTAIN AND REVIEW THE MECHANICAL AND SPECIAL EQUIPMENT SUBMITTALS PRIOR TO SUBMITTING THE ELECTRICAL SUBMITTALS. ANY ELECTRICAL EQUIPMENT, CONDUIT, AND WIRE SIZE CHANGES RESULTING FROM THIS REVIEW SHALL ALSO BE SUBMITTED FOR APPROVAL.

L. COMPLY WITH ALL LOCAL CODE, LAWS, AND ORDINANCES APPLICABLE TO ELECTRICAL WORK, THE STATE BUILDING CODE AND THE NATIONAL ELECTRIC CODE. OBTAIN ALL PERMITS REQUIRED BY LOCAL ORDINANCES.

M. OBTAIN ARCHITECTS APPROVAL OF ALL LIGHT FIXTURES, SWITCHES, RECEPTACLES, PANELBOARDS, ETC. PRIOR TO PURCHASING.

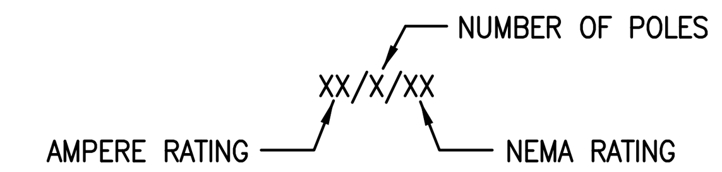
N. THE ELECTRICAL WORK SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. ALL NOT SO INSTALLED SHALL BE REMOVED AND REPLACED AT NO COST TO THE OWNER.

O. ALL WORK SHALL BE INSTALLED IN CONCEALED TYPE CONSTRUCTION. UNDERGROUND CONDUITS UP TO FIRST BOX IN CONCEALED CONSTRUCTION MAY BE SCH.40 PVC. EXTERIOR EXPOSED WORK SHALL BE I.M.C. BRANCH CIRCUIT CONDUIT RUN IN OPEN SPACES ABOVE CEILING OR IN WALLS MAY BE THINWALL (E.M.T.) CONDUIT 1/2" MIN. SIZE.

P. ALL CONDUCTORS LESS THAN 100A. SHALL BE COPPER #12 & #10 SOLID, #8 AND LARGER STRANDED, #6 AND SMALLER TO BE TYPE THW, 600 VOLT INSULATION AND TYPE THW OR THHN FOR #4 AND LARGER. COMPACT SECTOR STRANDED ALUM. CONDUCTORS MAY BE USED FOR 100A. AND LARGER TERMINATIONS.

Q. PROVIDE GROUNDING PER NATIONAL ELECTRIC CODE.

R. THE CONTRACTOR SHALL LEAVE THE ENTIRE ELECTRICAL SYSTEM INSTALLED IN PROPER WORKING ORDER, AND SHALL REPLACE WITHOUT ADDITIONAL COST, ALL WORK OR MATERIAL WHICH MAY DEVELOP DEFECTS, (ORDINARY WEAR AND TEAR OR DAMAGE RESULTING FROM IMPROPER HANDLING EXCEPTED) WITHIN A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER.



DISCONNECT SWITCH DESCRIPTION NOMENCLATURE

4" MAX. / 2" MAX.

SENSOR CONTROLS ABOVE CEILING — 1/4" LETTERS IDENTIFYING ELECTRICAL EQUIPMENT

MICARTA ENGRAVED NAMEPLATE WITH BLACK LETTERS ON WHITE BACKGROUND, MECHANICALLY AFFIXED TO CEILING TILE OR WALL WITH BOLTS, NUTS AND WASHERS

TYPICAL ELECTRICAL EQUIPMENT ABOVE CEILING NAMEPLATE

NOT TO SCALE

CONTACTOR ABOVE CEILING — 1/4" LETTERS IDENTIFYING ELECTRICAL EQUIPMENT

MICARTA ENGRAVED NAMEPLATE WITH BLACK LETTERS ON WHITE BACKGROUND, MECHANICALLY AFFIXED TO CEILING TILE OR WALL WITH BOLTS, NUTS AND WASHERS

TYPICAL ELECTRICAL EQUIPMENT ABOVE CEILING NAMEPLATE

NOT TO SCALE

PANEL A — 1/2" LETTERS

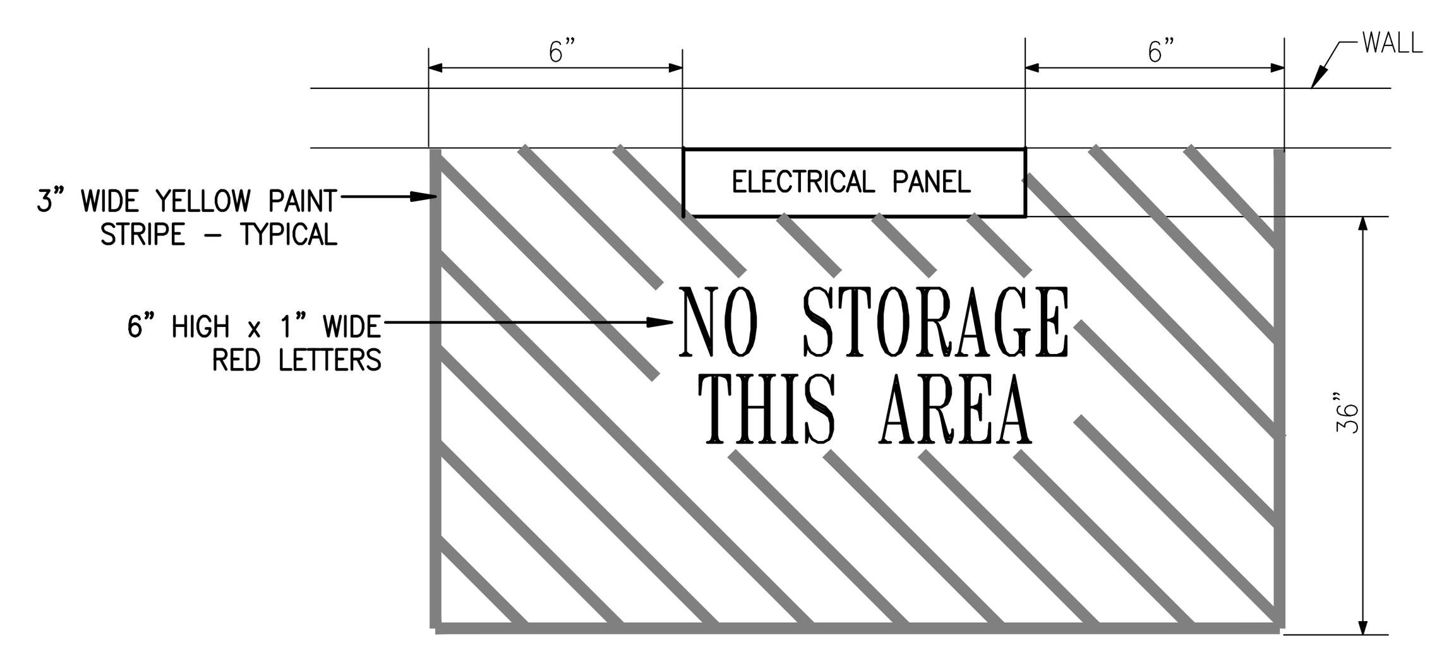
120/240 VOLTS — 1/4" LETTERS

1 PHASE 3 WIRE

MICARTA ENGRAVED NAMEPLATE WITH WHITE LETTERS ON BLACK BACKGROUND, MECHANICALLY AFFIXED.

TYPICAL ELECTRICAL EQUIPMENT NAMEPLATE

NOT TO SCALE



TYPICAL FLOOR MARKING AT ELECTRICAL PANELS

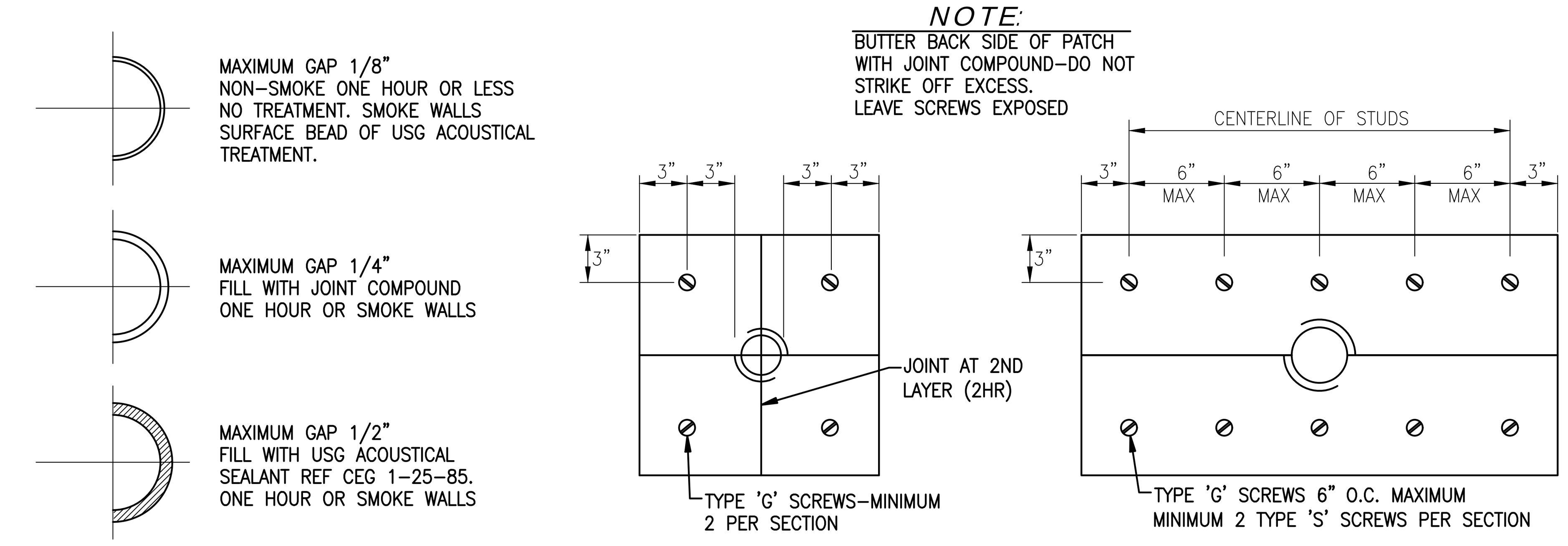
NOT TO SCALE

ABBREVIATIONS

AFF – ABOVE FINISHED FLOOR
EF – EXHAUST FAN
GND – GROUND CONDUCTOR
GFI – GROUND FAULT PROTECTION
LTG – LIGHTING
LTS – LIGHTS
RECEPT – RECEPTACLE
UNO – UNLESS NOTED OTHERWISE
WH – WATER HEATER
WP – WEATHERPROOF
RTU – ROOF TOP AIR CONDITIONER

ELECTRICAL LEGEND

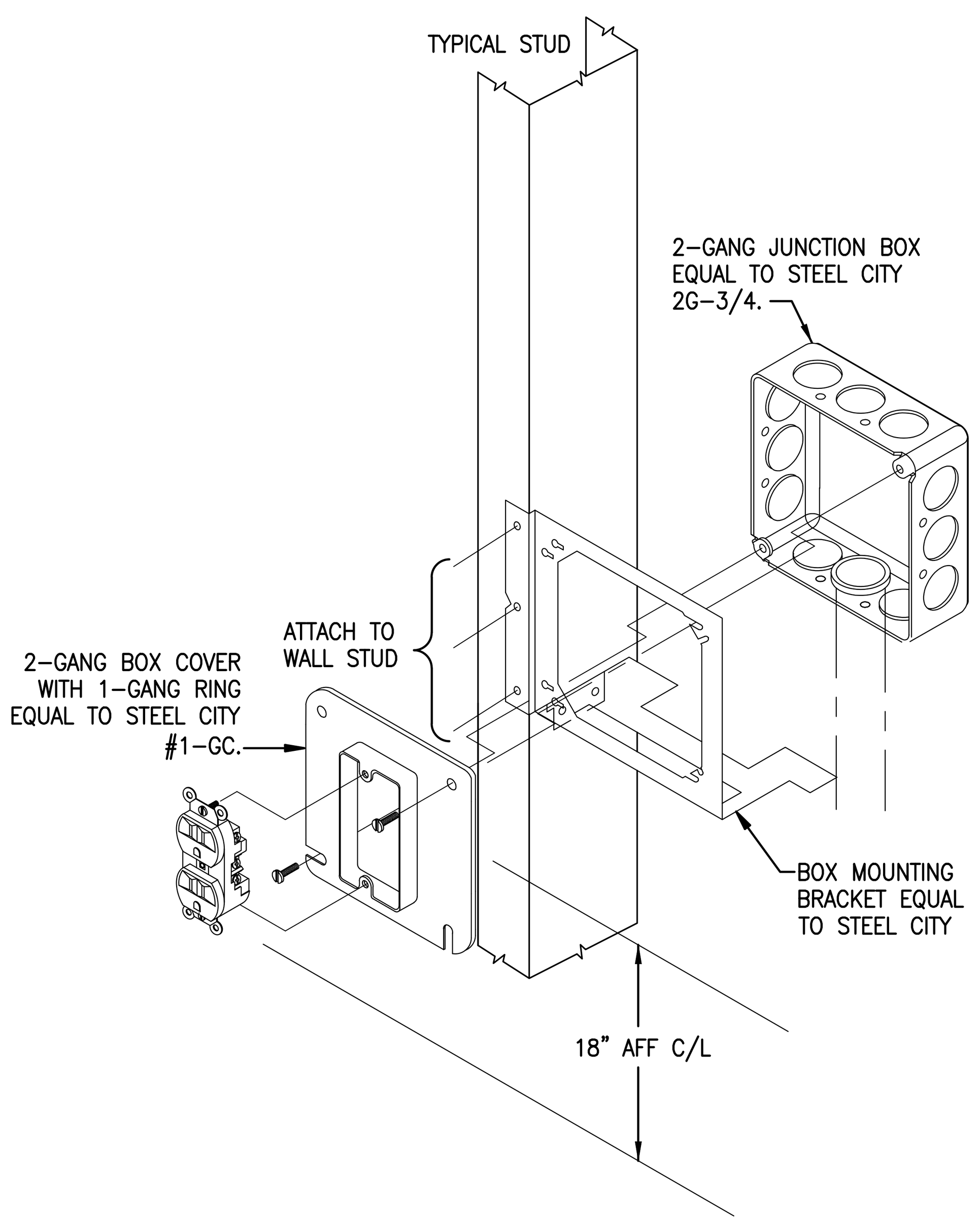
- A-1 ADJACENT TO ARROW INDICATES HOMERUN OF CIRCUIT NUMBER 1 TO PANEL A; "B" INDICATES FIXTURE TYPE; MARKS ACROSS RACEWAY RUN INDICATES THE NUMBER OF #12 CONDUCTORS; UNLESS NOTED OTHERWISE NO MARKS INDICATES TWO #12 CONDUCTORS AND ONE #12 GREEN GROUND CONDUCTOR IN 1/2" CONDUIT (2 #12 & 1 #12 GND-1/2"C)
- CEILING FIXTURE
- WALL BRACKET FIXTURE
- 2' X 2' FIXTURE; CEILING MOUNTED; ARROW INDICATES LENS DIRECTION
- TWIN HEAD EMERGENCY BATTERY UNIT
- EXIT SIGN; CEILING MOUNTED; SHADED SECTION INDICATES LIGHTED FACE OF EXIT SIGN
- EXIT SIGN; BACK WALL MOUNTED; SHADED SECTION INDICATES LIGHTED FACE OF EXIT SIGN
- JUNCTION BOX; MOUNTED ABOVE CEILING
- JUNCTION BOX; MOUNTED FLUSH IN WALL WITH BLANK COVER
- DUPLEX RECEPTACLE; 125V; 20A; 3 POLE GND; MT 18" AFF TO C/L UNLESS NOTED OTHERWISE; NEMA 5-20R; HUBBELL SERIES HBL5352
- QUAD RECEPTACLE; 125V; 20A; 3 POLE GND; MT 18" AFF TO C/L; NEMA 5-20R; HUBBELL SERIES HBL5352
- DUPLEX RECEPTACLE; 125V; 20A; 3 POLE GND; HALF-CONTROLLED RECEPTACLE; MT 18" AFF TO C/L UNLESS NOTED OTHERWISE; NEMA 5-20R; HUBBELL SERIES BR20C1
- DUPLEX RECEPTACLE; 125V; 20A; 3 POLE GND; MT ABOVE COUNTER 46" MAX. TO TOP OF DEVICE; NEMA 5-20R; HUBBELL SERIES HBL5352
- DUPLEX RECEPTACLE; 125V; 20A; 3 POLE GND; GFI; MT ABOVE COUNTER 46" MAX. TO TOP OF DEVICE; NEMA GF-5-20R; HUBBELL SERIES GF5362
- LETTERS "WP" ADJACENT TO SYMBOL INDICATES GFI WEATHER RESISTANT RECEPTACLE WITH WEATHERPROOF COVER; PASS AND SEYMOUR WIUFC10S COVER/BOX.
- S — WALL SWITCH; 120V; 20A; 1 POLE; A.C. ONLY; MT 48" AFF TO C/L; HUBBELL SERIES HBL1221
- SLV — LOW VOLTAGE WALL SWITCH; MT 48" AFF TO C/L; REFER TO SPECS; SEE LIGHTING CONTROL DETAILS
- MOTOR CONTROL SWITCH; 600V; 30A; 2 POLE; A.C. ONLY; NEAR OR ON EQUIPMENT BEING SERVED; HUBBELL SERIES HBL7832D.
- VACANCY SENSOR POWER PACK; MOUNT ABOVE CEILING. SEE LIGHTING CONTROL DETAILS.
- LOW VOLTAGE VACANCY SENSOR; 360° DUAL-TECHNOLOGY TYPE; CEILING MOUNTED. SEE LIGHTING CONTROL DETAILS.
- PANEL; 120/240V; MT 72" AFF TO TOP
- MOTOR; FURNISHED BY OTHERS
- EXHAUST FAN; FURNISHED BY OTHERS
- FUSED DISCONNECT SWITCH; AMP SIZE AS NOTED; FUSE SIZE PER EQUIPMENT NAMEPLATE DATA
- MAGNETIC STARTER; FURNISHED BY OTHERS
- RACEWAY INSTALLED CONCEALED IN WALLS AND/OR ABOVE CEILING
- RACEWAY INSTALLED CONCEALED IN FLOOR SLAB AND/OR BELOW GRADE
- RACEWAY INSTALLED EXPOSED
- CAT 5e DATA CONDUCTOR; COORDINATE WITH DEVICE CONNECTION REQUIREMENTS.
- CONDUIT STUB UP WITH FLEXIBLE CONDUIT CONNECTION TO EQUIPMENT
- DATA SYSTEM WALL OUTLET WITH ONE(1) RJ-45 JACK AND COVERPLATE; MT 18" AFF TO C/L UNLESS NOTED OTHERWISE; INSTALL 3/4"C WITH PULL-RIBBON UP INTO CEILING SPACE.
- PHOTOCELL; TORK MODEL 2101
- DIGITAL TIMESWITCH WITH RESERVE POWER



SMALL DIAMETER GAPS IN ONE HOUR WALLS — OPENINGS UP TO 3' DIA. — OPENINGS OVER 3' DIA.

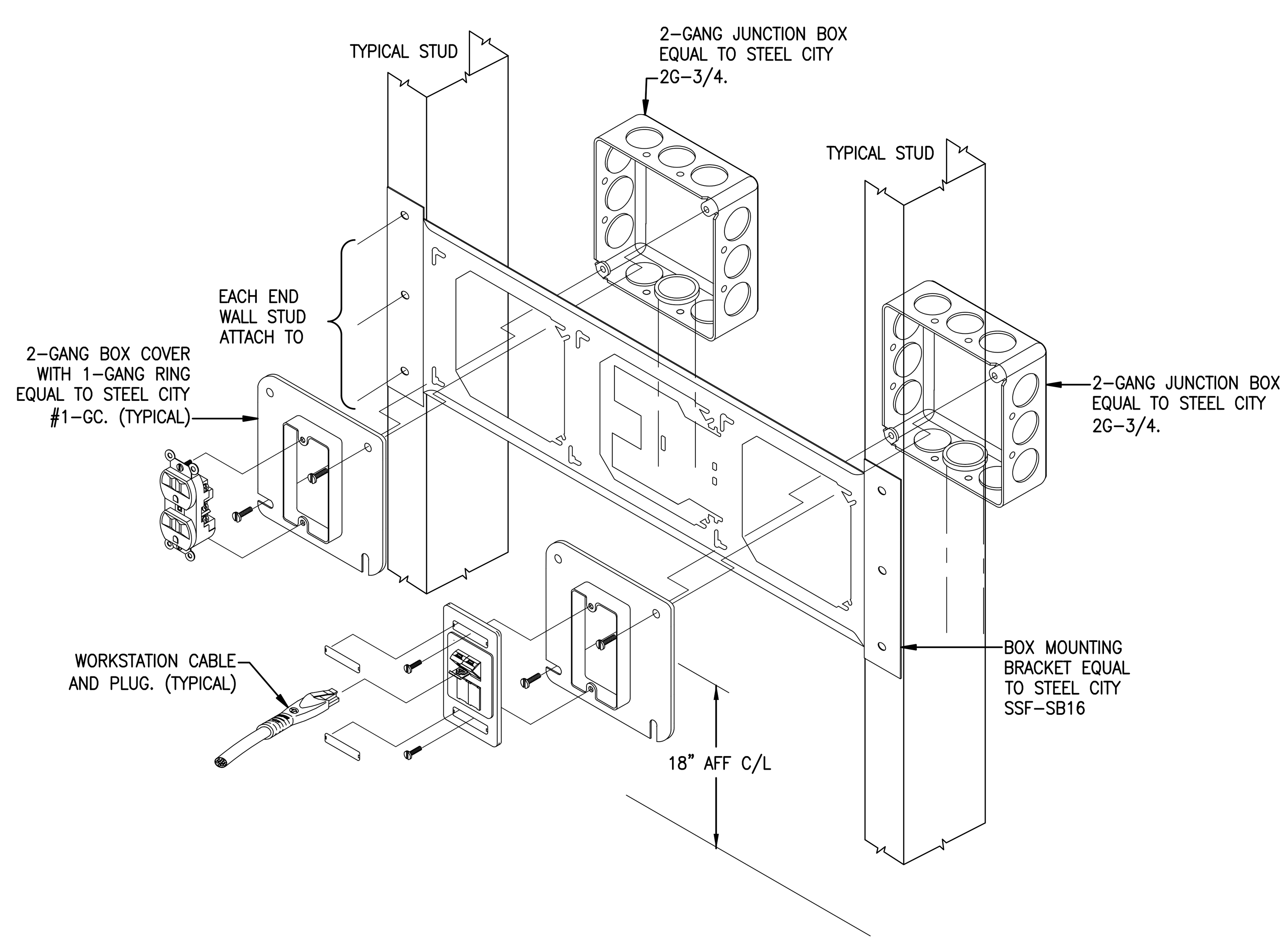
WALL PENETRATIONS – APPLIES TO ALL CORRIDOR, SMOKE AND FIRE RATED WALLS

NOT TO SCALE



TYPICAL POWER ONLY

NOT TO SCALE



TYPICAL POWER & COMMUNICATIONS

NOT TO SCALE

Sheet List Table

Sheet Number	Sheet Title
E-1.0	LEGEND, NOTES and DETAILS
E-2.0	SCHEDULES and POWER RISER
E-2.1	LIGHTING CONTROLS AND SCHEDULES
E-3.0	FIRST FLOOR POWER PLAN
E-3.1	SECOND FLOOR POWER PLAN
E-4.0	FIRST FLOOR LIGHTING PLAN
E-4.1	SECOND FLOOR LIGHTING PLAN

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1962 Job No.

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SHEET TITLE: LEGEND, NOTES AND DETAILS

NEW MUNICIPAL WAREHOUSE
FOR:
TOWN OF GREENWOOD
GREENWOOD, FLORIDA

JOB NUMBER: M-2019-03
DATE: AUG 15, 2019
DRAWN BY: BS
CHECKED BY: DW

SHEET No.
E-1.0

NEW PANEL 'A'	Voltage: 120/240V	Phase: 1ϕ	Wire: 3	Mounting: SURFACE
	Mains: 500A MLO		AIC Rating: 22,000	
	NEMA Rating: 1	Options: BOLT–ON BREAKERS		

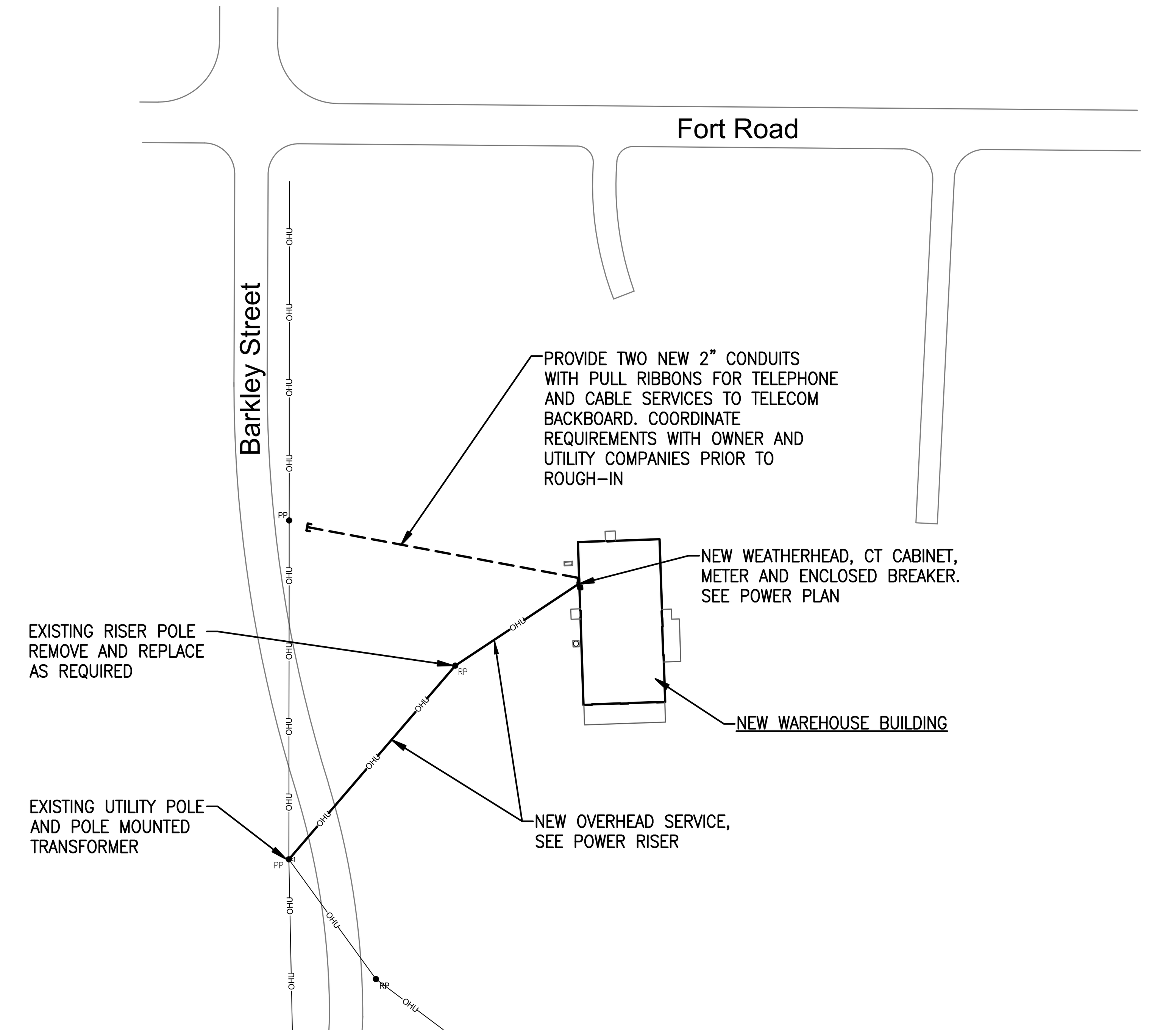
CKT NO.	SERVING	CONN LOAD	CKT BKR TRIP	CKT BKR POLE	CKT BKR POLE	CKT BKR TRIP	CONN LOAD	SERVING	CKT NO.
1	MINI–SPLIT CONDENSER – DSHP–1	7188	40	2	2	15	300	MINI–SPLIT UNITS – CS–1, CS–2 & WM–1	2
3	-----	---	--	–	–	--	---	-----	4
5	AIR COMPRESSOR	4800	60	2	2	25	5010	WATER HEATER – EWH–1	6
7	-----	---	--	–	–	--	---	-----	8
9	INFRARED HEATER – ERH–1	3750	20	2	2	20	3750	INFRARED HEATER – ERH–1	10
11	-----	---	--	–	–	--	---	-----	12
13	INFRARED HEATER – ERH–1	3750	20	2	2	20	3750	INFRARED HEATER – ERH–1	14
15	-----	---	--	–	–	--	---	-----	16
17	INFRARED HEATER – ERH–1	3750	20	2	2	20	3750	INFRARED HEATER – ERH–1	18
19	-----	---	--	–	–	--	---	-----	20
21	INFRARED HEATER – ERH–1	3750	20	2	2	20	3750	INFRARED HEATER – ERH–1	22
23	-----	---	--	–	–	--	---	-----	24
25	INFRARED HEATER – ERH–1	3750	20	2	2	20	3750	INFRARED HEATER – ERH–1	26
27	-----	---	--	–	–	--	---	-----	28
29	INFRARED HEATER – ERH–1	3750	20	2	2	20	3750	INFRARED HEATER – ERH–1	30
31	-----	---	--	–	–	--	---	-----	32
33	INFRARED HEATER – ERH–1	3750	20	2	2	20	3750	INFRARED HEATER – ERH–1	34
35	-----	---	--	–	–	--	---	-----	36
37	INFRARED HEATER – ERH–1	3750	20	2	2	20	---	SPARE	38
39	-----	---	--	–	–	--	---	-----	40
41	LIGHTS – WAREHOUSE (NORTH)	860	20	1	1	20	868	LIGHTS – WAREHOUSE (SOUTH)	42
43	LIGHTS – OFFICE	64	20	1	1	20	134	LIGHTS – BREAK ROOM	44
45	LIGHTS – RESTROOM	157	20	1	1	20	55	LIGHTS – EXTERIOR	46
47	EXHAUST FAN – EF–1	1294	20	1	1	20	1294	EXHAUST FAN – EF–1	48
49	RECEPT – EWC–1	720	20	1	1	20	1200	RECEPT – REFRIGERATOR	50
51	RECEPT – WAREHOUSE (EAST SIDE)	1080	20	1	1	20	1080	RECEPT – WAREHOUSE (WEST SIDE)	52
53	RECEPT – BREAK ROOM – KITCHEN	1200	20	1	1	20	720	RECEPT – OFFICE – EQUIPMENT	54
55	LIGHTS – 2ND FLOOR STORAGE	272	20	1	1	15	200	ENERGY RECOVERY VENTILATOR – ERV–1	56
57	RECEPT – 2ND FLOOR STORAGE	1080	20	1	1	20	1200	MICROWAVE – BREAK ROOM	58
59	RECEPT – OFFICE	1080	20	1	1	20	900	RECEPT – BREAK ROOM	60
61	RECEPT – RESTROOM	1200	20	1	1	20	300	RECEPT – TELECOM BACKBOARD	62
63	SPARE	---	20	1	1	20	---	SPARE	64
65	SPARE	---	20	1	1	20	---	SPARE	66
67	SPACE ONLY	---	--	1	1	--	---	SPACE ONLY	68
69	SPACE ONLY	---	--	1	1	--	---	SPACE ONLY	70
71	SPACE ONLY	---	--	1	1	--	---	SPACE ONLY	72
73	SPACE ONLY	---	--	1	1	--	---	SPACE ONLY	74
75	SPACE ONLY	---	--	1	1	--	---	SPACE ONLY	76
77	SPACE ONLY	---	--	1	1	--	---	SPACE ONLY	78
79	SPACE ONLY	---	--	1	1	--	---	SPACE ONLY	80
81	SPACE ONLY	---	--	1	2	60	---	SURGE SUPPRESSOR	82
83	SPACE ONLY	---	--	1	–	--	---	-----	84

TOTAL CONNECTED LOAD: 90,506 VA / 240 377.1 A TOTAL AMPS

MECHANICAL EQUIPMENT CIRCUIT DESIGN SCHEDULE

(VERIFY ALL EQUIPMENT CIRCUIT REQUIREMENTS WITH MANUFACTURERS SHOP DRAWINGS PRIOR TO ROUGH–IN)

EQUIPMENT DESIGNATION	DESCRIPTION	VOLTAGE	RATED LOAD AMPS	MAXIMUM CIRCUIT OVERCURRENT PROTECTION	PROTECTION SPECIFIED	HEATER KW	FAN HP	CFM	REMARKS
CS–1	MINI–SPLIT UNIT	230V 1ø	0.44	15	15/2	0.03	FRACT	459	
CS–2	MINI–SPLIT UNIT	230V 1ø	0.44	15	15/2	0.03	FRACT	459	
WM–1	WALL MOUNT MINI–SPLIT UNIT	230V 1ø	0.15	15	15/2	0.03	FRACT	210	
DSHP–1	CONDENSING UNIT	230V 1ø	29	44	40/2	–	FRACT	–	
EF–1	EXHAUST FAN	115V 1ø	9	20	20/1	–	3/4	2390	MANUAL SWITCHED
EF–2	EXHAUST FAN	115V 1ø	9	20	20/1	–	3/4	2390	MANUAL SWITCHED
ERH–1	INFRARED HEATER	240V 1ø	12.5	20	20/2	–	–	–	
ERV–1	ENERGY RECOVERY VENTILATOR	120V 1ø	1.3	15	15/1	–	0.1	130	
EWC	WATER COOLER	115V 1ø	5	20	20/1	–	FRACT	–	
EWH–1	WATER HEATER	240V 1ø	16.7	25	25/2	4000	–	–	NON–SIMULTANEOUS
	AIR COMPRESSOR	230V 1ø	28	60	60/2		5		



PARTIAL SITE PLAN

NOT TO SCALE

GENERAL NOTES

1 BOND HOT AND COLD WATER PIPING SYSTEMS.

2 CONDUCTOR SIZES SHOWN ARE MINIMUM AND MAY BE LARGER THAN THE MINIMUM SIZES REQUIRED BY NEC.

3 INSTALL GROUNDING CONNECTIONS TO BUILDING STRUCTURE AND WATER PIPES AT LOCATIONS THAT ARE VISIBLE AND ACCESSIBLE FOR INSPECTION, MAINTENANCE, AND TESTING.

4 INSTALL AN INSULATED THROAT GROUNDING BUSHING ON EACH METALLIC SERVICE ENTRANCE CONDUIT. BOND TO GROUND BUS USING CONDUCTOR THAT IS SIZED BASED ON NEC TABLE 250–66 USING THE SERVICE PHASE CONDUCTOR SIZE.

5 INSTALL AN INSULATED THROAT GROUNDING BUSHING ON EACH METALLIC FEEDER CONDUIT. BOND TO GROUND BUS USING CONDUCTOR THAT IS SIZED BASED ON NEC TABLE 250–122 USING THE FEEDER CIRCUIT OVERCURRENT DEVICE SIZE OR THE SEPARATELY DERIVED SYSTEM OVERCURRENT DEVICE SIZE.

KEYNOTES

① INSTALL GROUNDED (NEUTRAL) CONDUCTOR SAME SIZE AS THE LARGEST PHASE CONDUCTOR IF THE LINE–TO–NEUTRAL LOAD EXCEEDS 5% OF THE CONNECTED LOAD. IF NEUTRAL LOAD IS SMALLER, INSTALL THE NEC MINIMUM GROUNDED CONDUCTOR.

② INSTALL GROUNDING ELECTRODE CONDUCTOR, SIZED BASED ON NEC TABLE 250–66 USING THE SERVICE PHASE CONDUCTOR SIZE, BUT NOT SMALLER THAN NO 4.

③ INSTALL EQUIPMENT GROUNDING CONDUCTOR SIZED BASED ON NEC TABLE 250–122 USING THE FEEDER OVERCURRENT DEVICE SIZE.

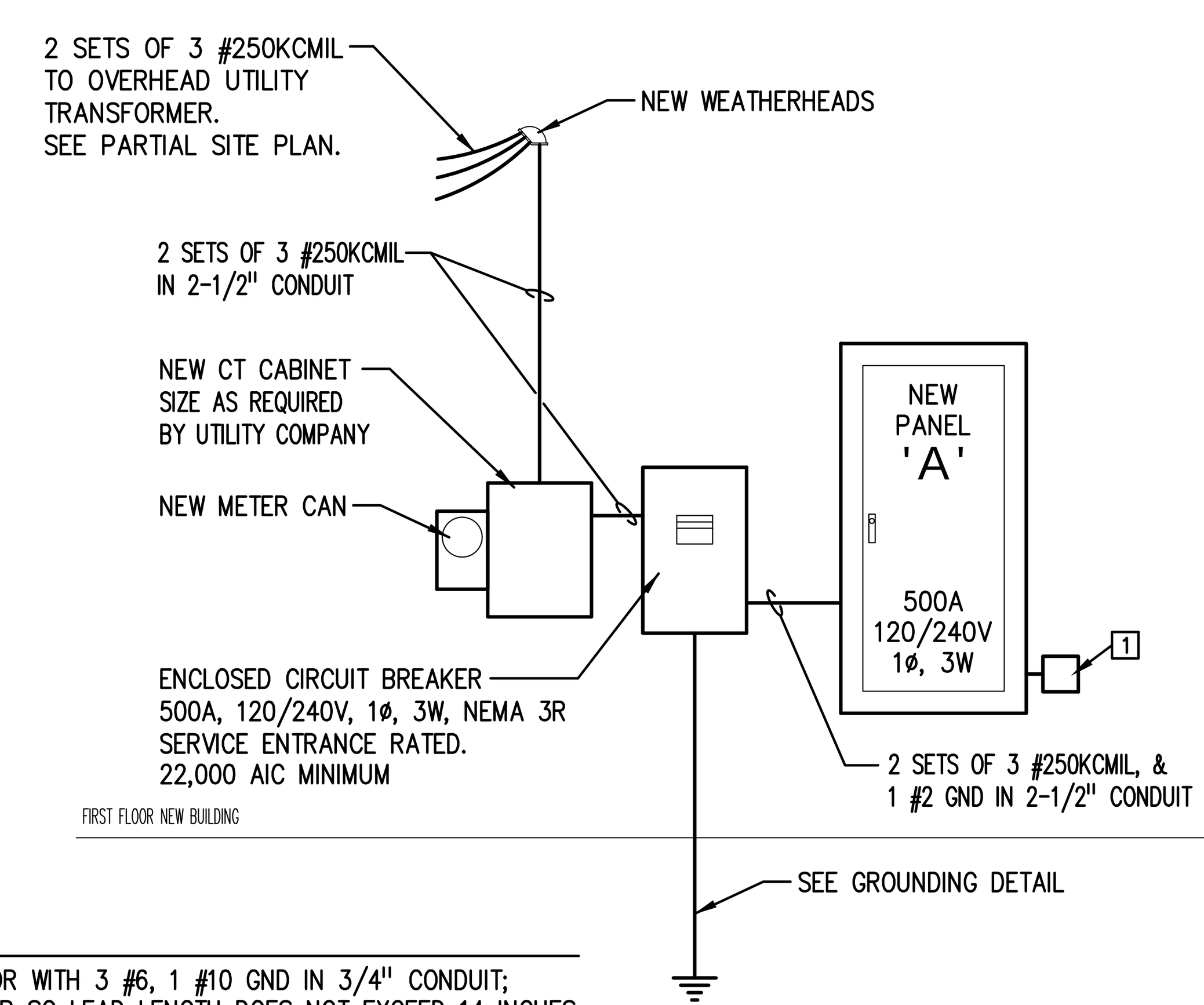
④ 16 FOOT MINIMUM X 3/4" DIAMETER COPPER CLAD STEEL SECTIONAL DRIVEN GROUND ROD.

⑤ INSTALL BONDING JUMPER WIRE THAT IS SIZED BASED ON NEC TABLE 250–66 OR 250.28(D)(1) USING THE SERVICE OR SEPARATELY–DERIVED SYSTEM PHASE PHASE CONDUCTOR SIZE.

⑥ INSTALL A CONCRETE–ENCASED MAIN GROUNDING ELECTRODE IN THE BUILDING FOUNDATION PER NEC ARTICLE 250.52 (A) (3).

⑦ BOND EACH PERIMETER STRUCTURAL STEEL COLUMN TO THE CONCRETE–ENCASED MAIN GROUNDING ELECTRODE. USE COMPRESSION CONNECTORS THAT MEET IEEE 837 REQUIREMENTS OR USE EXOTHERMIC WELDS.

⑧ INSTALL A "MAIN GROUND ELECTRODE GROUND BAR" FOR SINGLE POINT GROUNDING. LOCATE AT AN ACCESSIBLE POINT NEAR THE SERVICE ENTRANCE EQUIPMENT. MAKE CONNECTIONS TO THE GROUND ELECTRODE CONDUCTOR USING IRREVERSIBLE CONNECTORS OR EXOTHERMIC WELDS. MAKE OTHER CONNECTIONS TO THE GROUND BAR USING TWO–HOLE COMPRESSION SPADE LUGS THAT MEET IEEE 837 REQUIREMENTS. LABEL EACH CONNECTION TO THE GROUND BAR

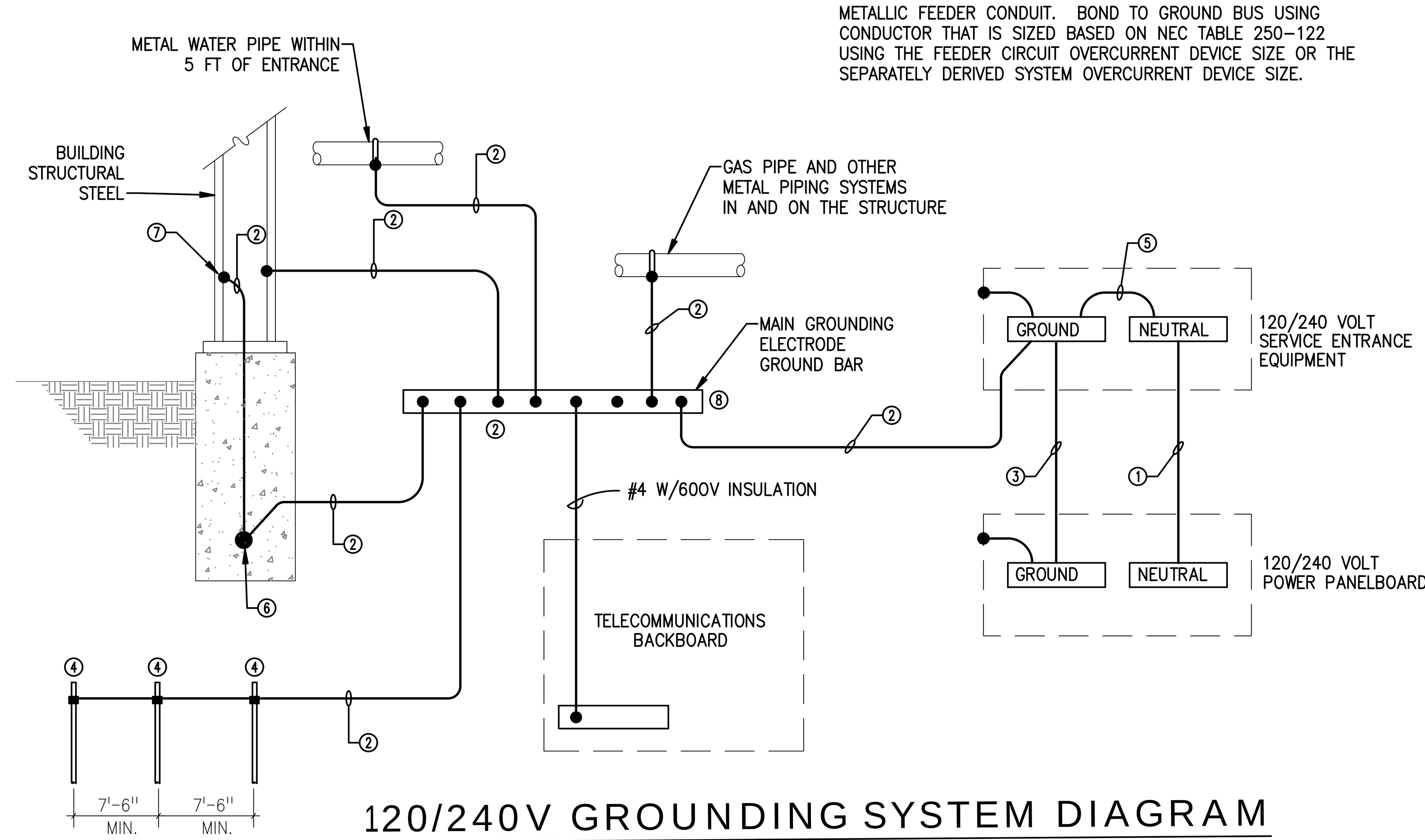


NOTES:

1 INSTALL SURGE SUPPRESSOR WITH 3 #6, 1 #10 GND IN 3/4" CONDUIT; LOCATE SURGE SUPPRESSOR SO LEAD LENGTH DOES NOT EXCEED 14 INCHES PER ANSI/UL 1449-2006 3RD EDITION. BOTTOM FED PANELS SHALL HAVE SURGE SUPRESSOR/BREAKER LOCATED AT BOTTOM OF PANEL.

SINGLE LINE POWER RISER

NOT TO SCALE



120/240V GROUNDING SYSTEM DIAGRAM

NOT TO SCALE

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SHEET TITLE: SCHEDULES AND POWER RISER

NEW MUNICIPAL WAREHOUSE
FOR: TOWN OF GREENWOOD
GREENWOOD, FLORIDA

JOB NUMBER: M–2019–03
DATE: AUG 15, 2019
DRAWN BY: BS
CHECKED BY: DW

DANIEL JOSEPH WHITE LICENSE No. 73790 STATE OF FLORIDA PROFESSIONAL ENGINEER 8-15-19

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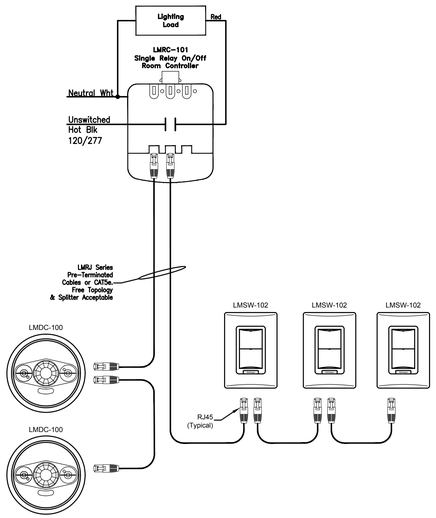
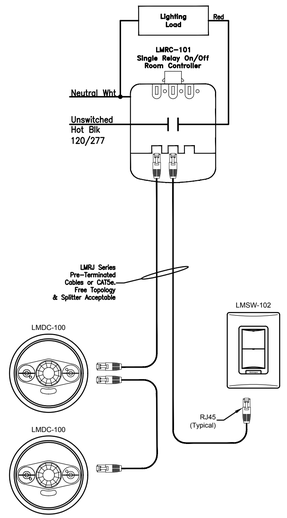
Philip M. Humber; FL. PE No.13870
Thomas A. Alexander; FL. PE No.73172
Daniel J. White; FL. PE No.73790

1962 Job No.

SHEET No. E-2.0



WAREHOUSE AREA
LIGHTING (SWITCHING) CONTROL
WITH OCC SENSOR
(NON-DIMMING)
NOT TO SCALE



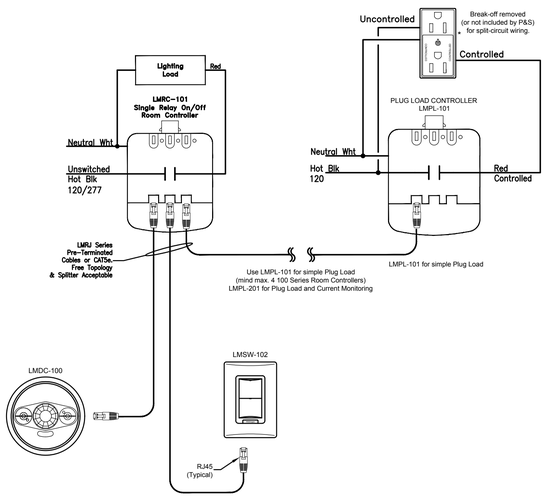
WAREHOUSE STORAGE AREA
LIGHTING (SWITCHING) CONTROL
WITH OCC SENSOR
(NON-DIMMING)
NOT TO SCALE

LIGHTING FIXTURE SCHEDULE

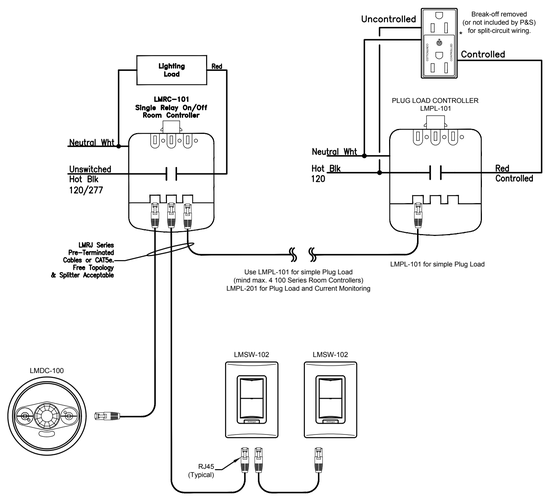
Project: 1962 **Job Name: NEW MUNICIPAL WAREHOUSE for the TOWN of GREENWOOD**

Luminaire Designation	Manufacturer	Catalog Number	Connected Voltage	Luminaire Load (va)	Lamping Source	Color Rendering Index(CRI)	Kelvin Temperature	Mounting	Comments	Luminaire Equals
"BP"	BEGHELLI	PACO-T20-AT	120V	3.2W	LED	n/a	n/a	BACK WALL	ADJUSTABLE TWIN HEAD EMERGENCY BATTERY LIGHT, SELF DIAGNOSTIC / SELF TESTING, 5 YEAR FULL WARRANTY	BASED ON ENGINEER'S APPROVAL IS REQUIRED
"DL"	GOTHAM	EVO 40/20 4WR MD LSS 120 TRW (NON-DIMMING)	120V	23.5W	LED	80-CRI	4000	CEILING RECESSED	4" RECESSED LED DOWNLIGHT, WITH HOUSING AND TRIM, 2000 LUMENS, 120V	BASED ON ENGINEER'S APPROVAL IS REQUIRED
"DS"	GOTHAM	EVO4SH 40/20 4DFRAMF SMO 120 (NON-DIMMING)	120V	29.8W	LED	80-CRI	4000	CEILING RECESSED	4" RECESSED LED DOWNLIGHT, WITH HOUSING AND TRIM, 2000 LUMENS, SHOWER LOCATION,	BASED ON ENGINEER'S APPROVAL IS REQUIRED
"L22"	H. E. WILLIAMS	PTS-2 2-L38/840-RA-DRV-120	120V	32W	LED	80-CRI	4000	CEILING SURFACE	2' x 2' SHALLOW SURFACE LED FIXTURE, 3800 LUMENS, 120V	BASED ON ENGINEER'S APPROVAL IS REQUIRED
"L6"	MARK ARCHITECTURAL	SL6L LOP 6FT RLP FL 80CRI 40K 900LMF NODIM 120	120V	48W	LED	80-CRI	4000	CEILING RECESSED	6" x 6' RECESSED LINEAR LED DOWNLIGHT, WITH HOUSING AND TRIM, 5400 LUMENS, 120V	BASED ON ENGINEER'S APPROVAL IS REQUIRED
"LS"	H. E. WILLIAMS	96-4-L81/840-DCL-SSCMB-SS LATCH-DRV-120	120V	65W	LED	80-CRI	4000	CEILING CHAIN HUNG	4' LED ENCLOSED INDUSTRIAL FIXTURE, VAPOR TIGHT, GASKETED, CEILING SUSPENDED, STAINLESS STEEL LATCHES, 8100 LUMENS, 120V	BASED ON ENGINEER'S APPROVAL IS REQUIRED
"LV"	H. E. WILLIAMS	EGL2-4-L145/840-HIA-SSMRB-SS LATCH-DRV-120	120V	142W	LED	80-CRI	4000	CEILING CHAIN HUNG	4' LED ENCLOSED INDUSTRIAL FIXTURE, VAPOR TIGHT, GASKETED, CEILING SUSPENDED, STAINLESS STEEL LATCHES, 14,600 LUMENS, 120V	BASED ON ENGINEER'S APPROVAL IS REQUIRED
"WB"	H. E. WILLIAMS	WPM-L8/750-120	120V	11W	LED	70-CRI	5000	BACK WALL 7'-8" AFF	MINI WALL PACK FIXTURE, EXTERIOR, WET LOCATION, 120V	BASED ON ENGINEER'S APPROVAL IS REQUIRED
"X"	BEGHELLI	ATX-SA-LR1-W-AT	120V	2W	LED	n/a	n/a	BACK WALL ABOVE DOOR	LED EXIT SIGN, SINGLE SIDED WHITE FACE, EMERGENCY BATTERY BACK-UP, SELF TESTING, WALL MOUNTED, 5 YEAR WARRANTY, 120V	BASED ON ENGINEER'S APPROVAL IS REQUIRED
"XC"	BEGHELLI	ATX-SA-LR1-U-AT	120V	2W	LED	n/a	n/a	CEILING MOUNTED	LED EXIT SIGN, SINGLE SIDED WHITE FACE, EMERGENCY BATTERY BACK-UP, SELF TESTING, CEILING MOUNTED, 5 YEAR WARRANTY, 120V	BASED ON ENGINEER'S APPROVAL IS REQUIRED

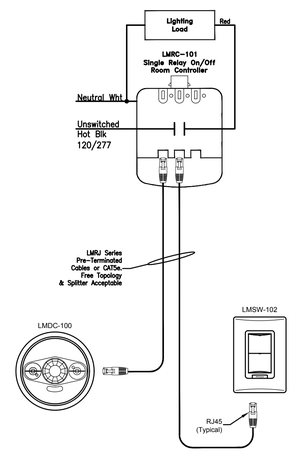
Lighting Space and Zones					Lighting Control Matrix												Low Voltage Switch Matrix (Button Labels to be designated by owner during installation)									
			ZONE OF CONTROL		CONTROL SCENARIOS												CONNECT TO LIGHTING CONTROL PANEL						CONNECT TO LOCAL ROOM CONTROL			
Space Type	Room Number	Automatic Receptacle Control	Description	Designator	Manual On	Manual Off	Dimming	Multi-Level Control	Timeclock On	Timeclock Off	Occupancy Sensor On	Vacancy Sensor Off	Daylight Harvesting	Photo Sensor On	Fire Alarm System Override to On	Security System Override to On	SL1 (1-Button)	SL2 (2-Button)	SL3 (3-Button)	SL4 (4-Button)	SL5 (5-Button)	SL6 (6-Button)	SLa (2-Button)	SLb (4-Button)	SLc (6-Button)	Remarks
WAREHOUSE - SOUTH END	101				X	X					X	X											X			
WAREHOUSE- NORTH END	101				X	X					X	X											X			
OFFICE	102	X			X	X					X	X											X			
BREAK-ROOM	103	X			X	X					X	X											X			
VESTIBULE	104										X	X														
RESTROOM	105				X	X					X	X											X			
STORAGE	201				X	X					X	X											X			
Exterior Security Lighting	n/a								X	X				X												



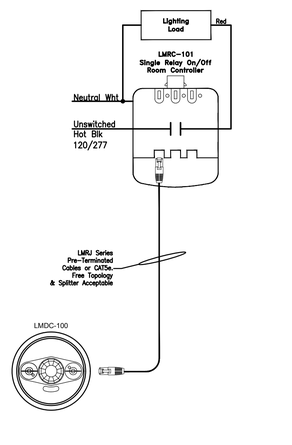
OFFICE AREA
LIGHTING (SWITCHING) CONTROL
WITH OCC SENSOR
AND SWITCHED RECEPTACLES
(NON-DIMMING)
NOT TO SCALE



BREAK-ROOM AREA
LIGHTING (SWITCHING) CONTROL
WITH OCC SENSOR
AND SWITCHED RECEPTACLES
(NON-DIMMING)
NOT TO SCALE



RESTROOM AREA
LIGHTING (SWITCHING) CONTROL
WITH OCC SENSOR
(NON-DIMMING)
NOT TO SCALE



VESTIBULE AREA
LIGHTING CONTROL
WITH OCC SENSOR
(NON-DIMMING)
(NON-SWITCHING)
NOT TO SCALE

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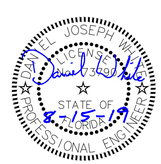
SHEET TITLE: LIGHTING CONTROLS AND SCHEDULES

NEW MUNICIPAL WAREHOUSE
FOR:
TOWN OF GREENWOOD
GREENWOOD, FLORIDA

JOB NUMBER: M-2019-03
DATE: AUG 15, 2019
DRAWN BY: BS
CHECKED BY: DW

SHEET No.
E-2.1



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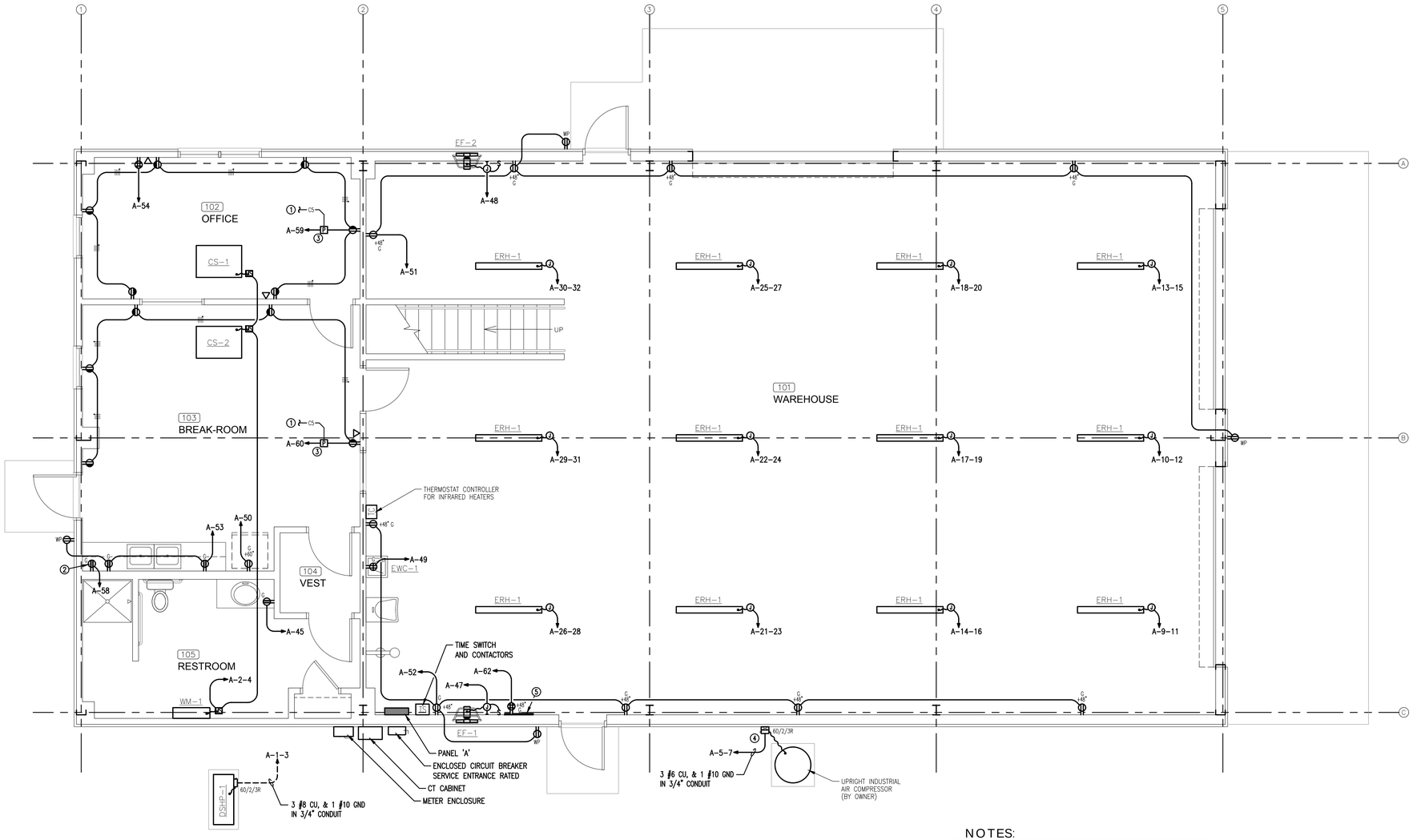
Daniel J. White: FL. PE No.73790

1962 Job No.



NOTES:

1. CONNECT TO RELAY POWER PACK INDICATED ON LIGHTING PLAN. REFER TO LIGHTING PLAN FOR LOCATION ABOVE CEILING.
2. COORDINATE RECEPTACLE LOCATION FOR MICROWAVE WITH OWNER.
3. LOCATE POWER PACK IN CEILING, TO BE ACCESSED FROM LOCKABLE METAL ACCESS HATCH. REFER TO LIGHTING PLANS.
4. COORDINATE POWER REQUIREMENTS WITH ACTUAL AIR COMPRESSOR SYSTEM PROVIDE BY OWNER.
5. TELECOM BACKBOARD, 2 FT x 2 FT x 3/4" THICK, EXTERIOR PLYWOOD. PAINT WITH TWO COATS OF FIRE RETARDANT PAINT. INSTALL ONE #6 COPPER GROUND CONDUCTOR IN 3/4" CONDUIT TO BUILDING GROUND, LEAVE 4 FT OF SLACK CONDUCTOR AT BACKBOARD. STUB-OUT TWO 2" CONDUITS WITH PULL-RIBBONS TO LOCATION INDICATED ON SITE PLAN.

FIRST FLOOR POWER PLAN

1/4" = 1'-0"

0 2' 4' 8'

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SHEET TITLE: FIRST FLOOR POWER PLAN

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E-3.0

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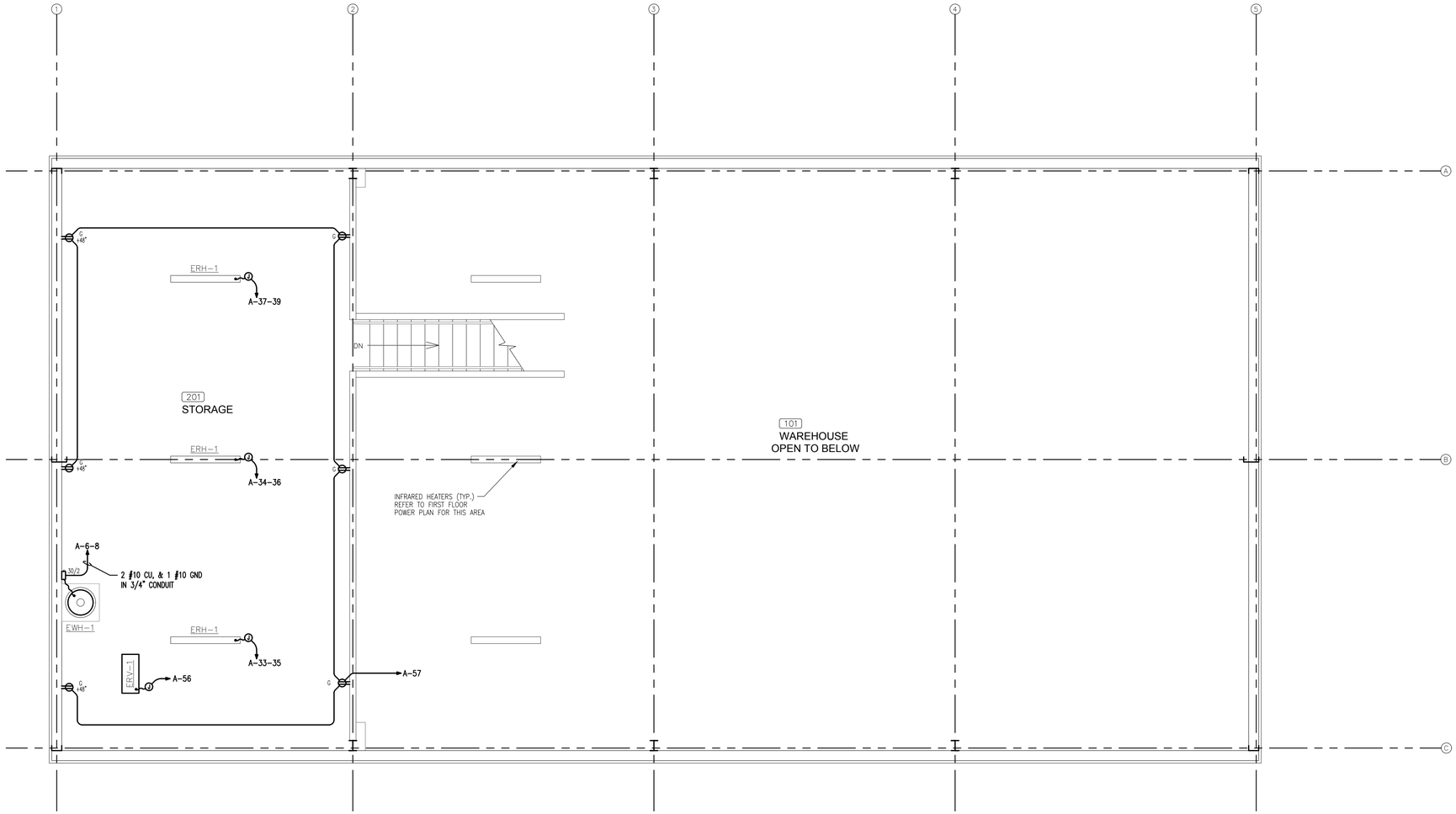

SECOND FLOOR POWER PLAN

1/4" = 1'-0"

0 2' 4' 8'

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SHEET TITLE: SECOND FLOOR POWER PLAN

NEW MUNICIPAL WAREHOUSE
FOR:
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GREENWOOD, FLORIDA

JOB NUMBER: M-2019-03
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DANIEL JOSEPH WHITE LICENSE 73790 STATE OF FLORIDA PROFESSIONAL ENGINEER
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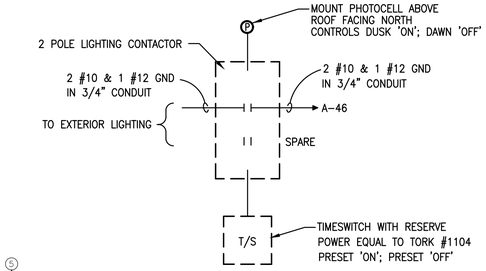
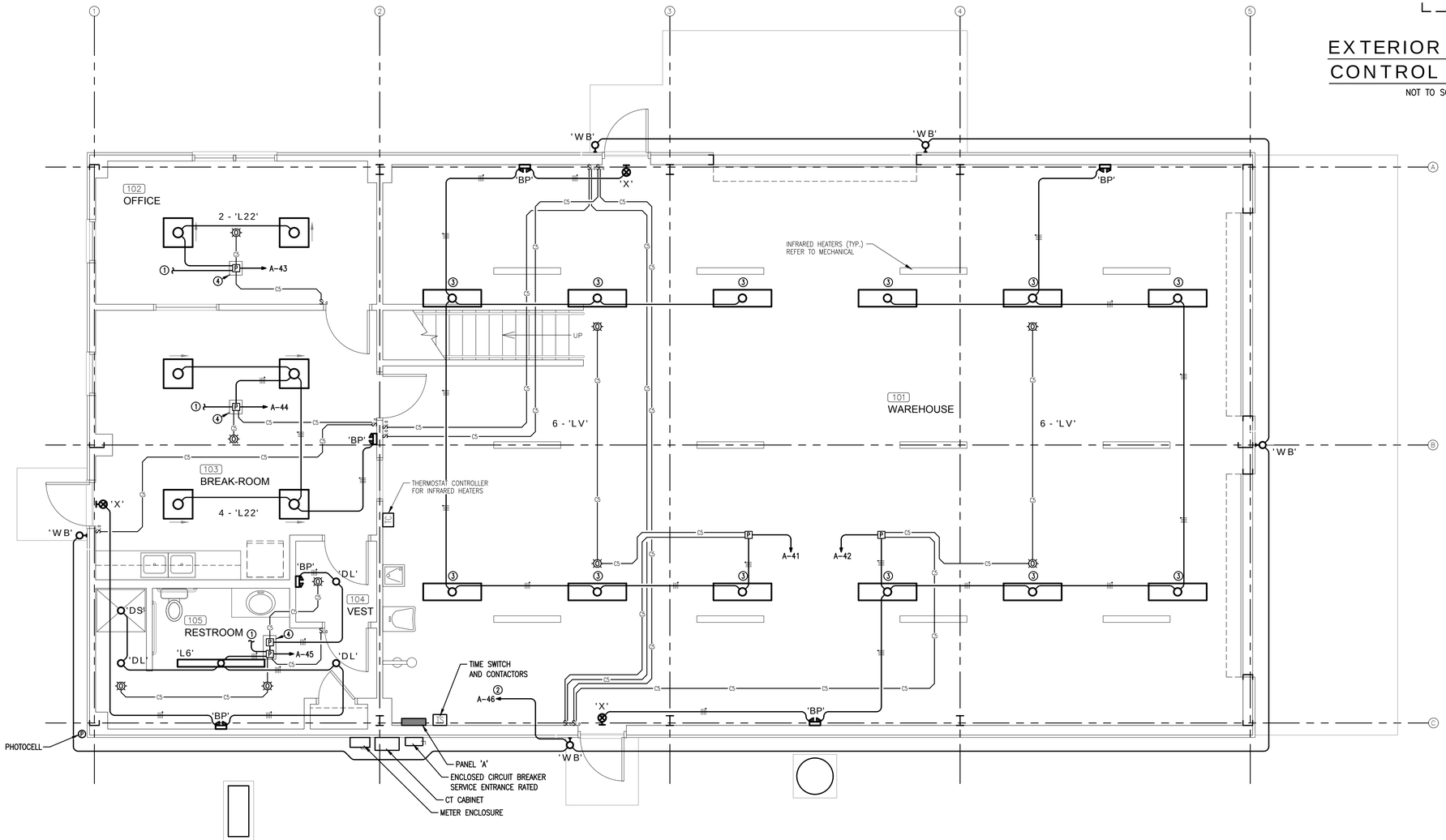


EXTERIOR LIGHTING CONTROL DIAGRAM

NOT TO SCALE



FIRST FLOOR LIGHTING PLAN

1/4" = 1'-0"

0 2' 4' 8'

NOTES:

1. CONNECT POWER CIRCUIT TO RECEPTACLES. SEE POWER PLAN.
2. HOMERUN VIA TIME SWITCH CONTACTOR AND PHOTOCELL. SEE DETAIL.
3. MOUNT FIXTURES AS HIGH AS POSSIBLE. FIXTURES SHALL BE CHAIN HUNG FROM THE METAL BUILDING PURLINS. RUN CONDUITS AS TIGHT AS POSSIBLE TO THE BUILDING STRUCTURE.
4. PROVIDE LOCKABLE METAL ACCESS HATCH IN CEILING TO ACCESS LIGHTING POWER PACKS.

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SHEET TITLE: FIRST FLOOR LIGHTING PLAN

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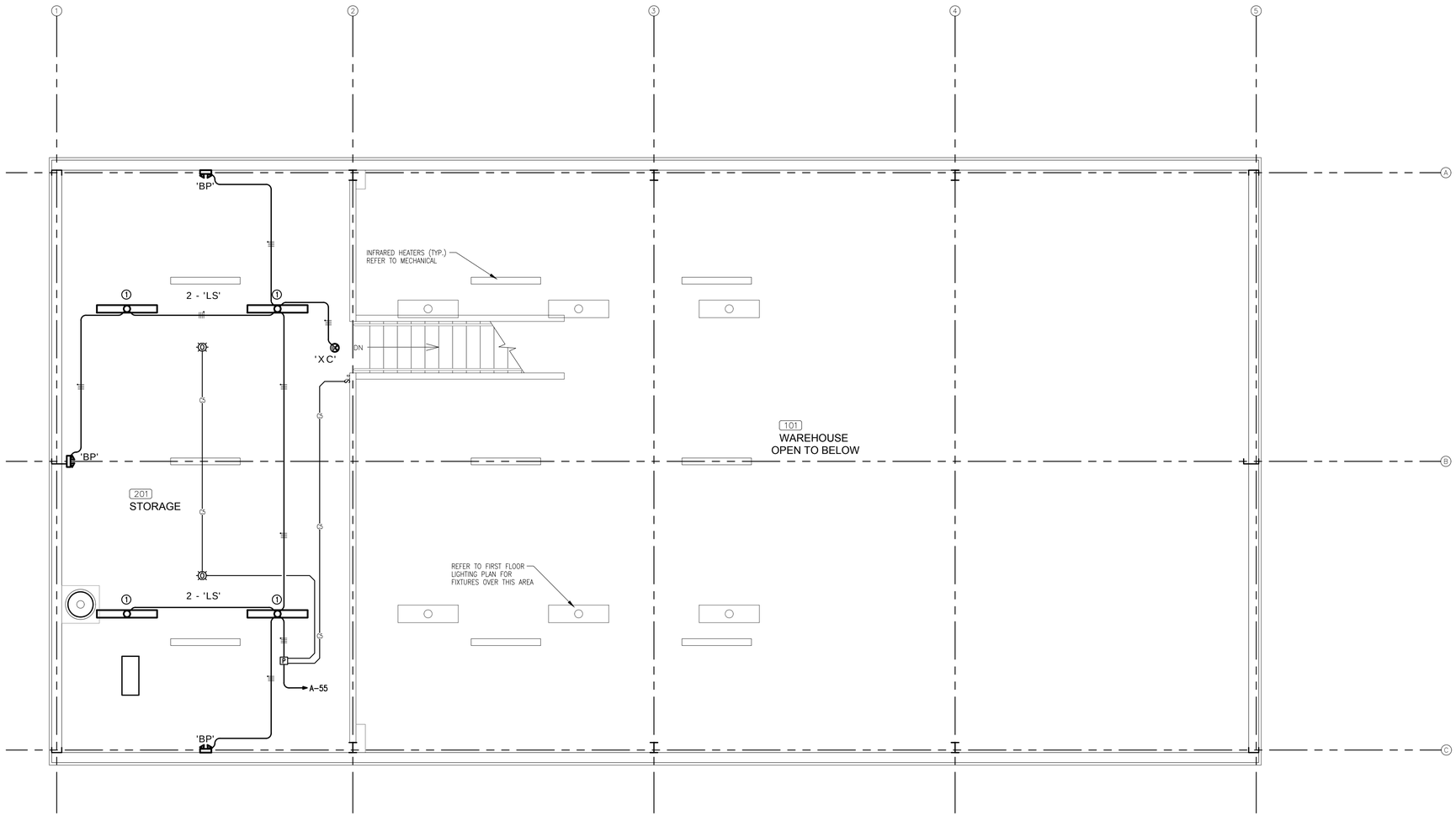

NOTES:

① MOUNT FIXTURES AS HIGH AS POSSIBLE. FIXTURES SHALL BE CHAIN HUNG FROM THE METAL BUILDING PURLINS. RUN CONDUITS AS TIGHT AS POSSIBLE TO THE BUILDING STRUCTURE.

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SECOND FLOOR LIGHTING PLAN

1/4" = 1'-0"

0 2' 4' 8'

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SHEET TITLE: SECOND FLOOR LIGHTING PLAN

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