

### **Purchasing Division**

### **Invitation for Bid**

IFB-4767-20-DH
Grand Junction Public Safety Facilities Renovation

## **Responses Due:**

March 27, 2020 prior to 3:30pm

<u>Accepting Electronic Responses Only</u>

<u>Responses Only Submitted Through the Rocky Mountain E-Purchasing</u>

<u>System (RMEPS)</u>

https://www.rockymountainbidsystem.com/default.asp

(Purchasing Representative does not have access or control of the vendor side of RMEPS. If website or other problems arise during response submission, vendor <u>MUST</u> contact RMEPS to resolve issue prior to the response deadline. 800-835-4603)

#### **Purchasing Representative:**

Duane Hoff Jr., Senior Buyer duaneh@gjcity.org
970-244-1545

This document has been developed specifically to solicit competitive responses for this solicitation, and may not be the same as previous City of Grand Junction solicitations. All vendors are urged to thoroughly review this solicitation prior to responding. Submittal by **FAX**, **EMAIL or HARD COPY IS NOT ACCEPTABLE** for this solicitation.

# **Invitation for Bids**

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# 1. Instructions to Bidders

**1.1. Purpose:** The City of Grand Junction is soliciting competitive bids from qualified and interested companies for all labor, equipment, and materials required for the renovation of the Grand Junction Public Safety Facility. All dimensions and scope of work should be verified by Contractors prior to submission of bids.

#### **IFB Questions:**

Duane Hoff Jr., Senior Buyer duaneh@gjcity.org

The City would like to remind all Contractors, Sub-Contractors, Vendors, Suppliers, Manufacturers, Service Providers, etc. that (with the exception of Pre-Bid or Site Visit Meetings) all questions, inquiries, comments, or communication pertaining to any formal solicitation (whether process, specifications, scope, etc.) must be directed (in writing) to the Purchasing Agent assigned to the project, or Purchasing Division. Direct communication with the City assigned Project Managers/Engineers is not appropriate for public procurement, and may result in disqualification.

- 1.2. Mandatory Pre-Bid Meeting: Prospective bidders are required to attend a mandatory pre-bid meeting on March 13, 2020 at 8:00am. Meeting location shall be in the lobby of the Public Safety Facility/Police Station, located at 555 Ute Avenue, Grand Junction, CO. The purpose of this visit will be to inspect and to clarify the contents of this Invitation for Bids (IFB).
- **1.3. The Owner:** The Owner is the City of Grand Junction, Colorado and is referred to throughout this Solicitation. The term Owner means the Owner or his authorized representative.
- **1.4. Procurement Process:** Procurement processes shall be governed by the most current version of the City of Grand Junction Purchasing Policy and Procedure Manual.
- 1.5. Submission: Each bid shall be submitted in electronic format only, and only through the Rocky Mountain E-Purchasing website (https://www.rockymountainbidsystem.com/default.asp). This site offers both "free" and "paying" registration options that allow for full access of the Owner's documents and for electronic submission of proposals. (Note: "free" registration may take up to 24 hours to process. Please Plan accordingly.) Please view our "Electronic Vendor Registration Guide" at <a href="http://www.gjcity.org/business-and-economic-development/bids/">http://www.gjcity.org/business-and-economic-development/bids/</a> for details. (Purchasing Representative does not have access or control of the vendor side of RMEPS. If website or other problems arise during response submission, vendor MUST contact RMEPS to resolve issue prior to the response deadline. 800-835-4603)
- **1.6.** Modification and Withdrawal of Bids Before Opening. Bids may be modified or withdrawn by an appropriate document stating such, duly executed and submitted to the place where Bids are to be submitted at any time prior to Bid Opening.

**1.7. Printed Form for Price Bid:** All Price Bids must be made upon the Price Bid Schedule attached, and should give the amounts both in words and in figures, and must be signed and acknowledged by the bidder.

The Offeror shall specify a unit price in figures for each pay item for which a quantity is given and shall provide the products (in numbers) of the respective unit prices and quantities in the Extended Amount column. The total Bid price shall be equal to the sum of all extended amount prices. When an item in the Price Bid Schedule provides a choice to be made by the Offeror, Offeror's choice shall be indicated in accordance with the specifications for that particular item and thereafter no further choice shall be permitted.

Where the unit of a pay item is lump sum, the lump sum amount shall be shown in the "extended amount" column and included in the summation of the total Bid.

All blank spaces in the Price Bid Schedule must be properly filled out.

Bids by corporations must be executed in the corporate name by the president or vice president or other corporate office accompanied by evidence of authority to sign. The corporate address and state of incorporation shall be shown below the signature.

Bids by partnerships must be executed in the partnership name and signed by a partner whose title must appear under the signature and the official address of the partnership must be shown below the signature.

All names must be typed or printed below the signature.

The Offeror's Bid shall contain an acknowledgement of receipt of all Addenda, the numbers of which shall be filled in on the Contractor's Bid Form.

The contact information to which communications regarding the Bid are to be directed must be shown.

- **1.8. Exclusions:** No oral, telephonic, emailed, or facsimile bid will be considered
- **1.9. Solicitation documents:** The complete IFB and bidder's response compose the Solicitation documents. Copies of bid documents can be obtained from the City Purchasing website, <a href="http://www.gicity.org/business-and-economic-development/bids/">http://www.gicity.org/business-and-economic-development/bids/</a>.
- 1.10. Examination of Specifications: Bidders shall thoroughly examine and be familiar with the project Statement of Work. The failure or omission of any Offeror to receive or examine any form, addendum, or other document shall in no way relieve any Offeror from any obligation with respect to his bid. The submission of a bid shall be taken as evidence of compliance with this section. Prior to submitting a bid, each Offeror shall, at a minimum:
  - a. Examine the Solicitation documents thoroughly;
  - b. Visit the site to familiarize themselves with local conditions that may in any manner affect cost, progress, or performance of the Work;

- c. Become familiar with federal, state, and local laws, ordinances, rules, and regulations that may in any manner affect cost, progress or performance of the Work;
- d. Study and carefully correlate Bidder's observations with the Solicitation documents, and;
- e. Notify the Purchasing Agent of all conflicts, errors, ambiguities or discrepancies in or among the Solicitation documents within the designated inquiry period.

On request, the Owner will provide each Offeror access to the site to conduct such investigations and tests as each Bidder deems necessary for submission of a Bid. It shall be the Offeror's responsibility to make or obtain any additional examinations, investigations, explorations, tests and studies and obtain any additional information and data which pertain to the physical conditions (including without limitation, surface, subsurface and underground utilities) at or contiguous to the site or otherwise which may affect cost, progress or performance of the work and which the Offeror deems necessary to determine its Bid for performing the work in accordance with the time, price and other terms and conditions of the Solicitation documents. Location of any excavation or boring made by Offeror shall be subject to prior approval of Owner and applicable agencies. Offeror shall fill all holes, restore all pavements to match the existing structural section and shall clean up and restore the site to its former condition upon completion of such exploration. The Owner reserves the right to require the Offeror to execute an access agreement with the Owner prior to accessing the site.

The lands upon which the Work is to be performed, rights of way, and access thereto, and other lands designated for use by Contractor in performing the Work, are identified on the Drawings.

Information and data reflected in the Solicitation documents with respect to underground utilities at or contiguous to the site are based upon information and data furnished to the Owner and the Project Manager by the owners of such underground utilities or others, and the Owner does not assume responsibility for the accuracy or completeness thereof, unless it is expressly provided otherwise in the Solicitation documents.

By submission of a Bid, the Offeror shall be conclusively presumed to represent that the Offeror has complied with every requirement of these Instructions to Bidders, that the Solicitation documents are not ambiguous and are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the Work.

- **1.11.** Questions Regarding Statement of Work: Any information relative to interpretation of Scope of Work or specifications shall be requested of the Purchasing Representative, in writing, in ample time, prior to the inquiry deadline.
- **1.12.** Addenda & Interpretations: If it becomes necessary to revise any part of this solicitation, a written addendum will be posted electronically on the City's website at

http://www.gjcity.org/business-and-economic-development/bids/. The Owner is not bound by any oral representations, clarifications, or changes made in the written specifications by Owner, unless such clarification or change is provided in written addendum form from the City Purchasing Representative.

- **1.13. Taxes:** The Owner is exempt from State retail and Federal tax. The bid price must be net, exclusive of taxes.
- **1.14. Sales and Use Taxes:** The Contractor and all Subcontractors are required to obtain exemption certificates from the Colorado Department of Revenue for sales and use taxes in accordance with the provisions of the General Contract Conditions. Bids shall reflect this method of accounting for sales and use taxes on materials, fixtures and equipment.
- **1.15. Offers Binding 60 Days:** Unless additional time is required by the Owner, or otherwise specified, all formal offers submitted shall be binding for sixty (60) calendar days following opening date, unless the Bidder, upon request of the Purchasing Representative, agrees to an extension.
- 1.16. Exceptions and Substitutions: Bidders taking exception to the specifications and/or scope of work shall do so at their own risk. The Owner reserves the right to accept or reject any or all substitutions or alternatives. When offering substitutions and/or alternatives, Bidder must state these exceptions in the section pertaining to that area. Exception/substitution, if accepted, must meet or exceed the stated intent and/or specifications and/or scope of work. The absence of such a list shall indicate that the Bidder has not taken exceptions, and if awarded a contract, shall hold the Bidder responsible to perform in strict accordance with the specifications and/or scope of work contained herein.
- 1.17. Collusion Clause: Each bidder by submitting a bid certifies that it is not party to any collusive action or any action that may be in violation of the Sherman Antitrust Act. Any and all bids shall be rejected if there is evidence or reason for believing that collusion exists among bidders. The Owner may, or may not, accept future bids for the same services or commodities from participants in such collusion.
- **1.18. Disqualification of Bidders:** A Bid will not be accepted from, nor shall a Contract be awarded to, any person, firm, or corporation that is in arrears to the Owner, upon debt or contract, or that has defaulted, as surety or otherwise, upon any obligation to the Owner, or that is deemed irresponsible or unreliable.

Bidders may be required to submit satisfactory evidence that they are responsible, have a practical knowledge of the project bid upon and that they have the necessary financial and other resources to complete the proposed Work.

Either of the following reasons, without limitation, shall be considered sufficient to disqualify a Bidder and Bid:

a. More than one Bid is submitted for the same Work from an individual, firm, or corporation under the same or different name; and

- b. Evidence of collusion among Bidders. Any participant in such collusion shall not receive recognition as a Bidder for any future work of the Owner until such participant has been reinstated as a qualified bidder.
- 1.19. Public Disclosure Record: If the bidder has knowledge of their employee(s) or sub-contractors having an immediate family relationship with a City employee or elected official, the bidder must provide the Purchasing Representative with the name(s) of these individuals. These individuals are required to file an acceptable "Public Disclosure Record", a statement of financial interest, before conducting business with the City.

# 2. General Contract Conditions for Construction Projects

- **2.1. The Contract:** This Invitation for Bid, submitted documents, and any negotiations, when properly accepted by the City, shall constitute a contract equally binding between the City and Contractor. The contract represents the entire and integrated agreement between the parties hereto and supersedes all prior negotiations, representations, or agreements, either written or oral. The contract may be amended or modified with Change Orders, Field Orders, or Addendums.
- **2.2. The Work:** The term Work includes all labor necessary to produce the construction required by the Solicitation documents, and all materials and equipment incorporated or to be incorporated in such construction.
- 2.3. Execution, Correlation, Intent, and Interpretations: The Solicitation documents shall be signed by the Owner (City) and Contractor. City will provide the contract. By executing the contract, the Contractor represents that he/she has visited the site, familiarized himself with the local conditions under which the Work is to be performed, and correlated his observations with the requirements of the Solicitation documents. The Solicitation documents are complementary, and what is required by any one, shall be as binding as if required by all. The intention of the documents is to include all labor, materials, equipment and other items necessary for the proper execution and completion of the scope of work as defined in the technical specifications and drawings contained herein. All drawings, specifications and copies furnished by the City are, and shall remain, City property. They are not to be used on any other project, and with the exception of one contract set for each party to the contract, are to be returned to the owner on request at the completion of the work.
- 2.4. The Owner: The Owner is the City of Grand Junction, Colorado and is referred to throughout the Solicitation documents. The term Owner means the Owner or his authorized representative. The Owner shall, at all times, have access to the work wherever it is in preparation and progress. The Contractor shall provide facilities for such access. The Owner will make periodic visits to the site to familiarize himself generally with the progress and quality of work and to determine, in general, if the work is proceeding in accordance with the solicitation documents. Based on such observations and the Contractor's Application for Payment, the Owner will determine the amounts owing to the Contractor and will issue Certificates for Payment in such amounts, as provided in the contract. The Owner will have authority to reject work which does not conform to the Solicitation documents. Whenever, in his reasonable opinion, he

considers it necessary or advisable to insure the proper implementation of the intent of the Solicitation documents, he will have authority to require the Contractor to stop the work or any portion, or to require special inspection or testing of the work, whether or not such work can be then be fabricated, installed, or completed. The Owner will not be responsible for the acts or omissions of the Contractor, and sub-Contractor, or any of their agents or employees, or any other persons performing any of the work.

- 2.5. Contractor: The Contractor is the person or organization identified as such in the Agreement and is referred to throughout the Solicitation documents. The term Contractor means the Contractor or his authorized representative. The Contractor shall carefully study and compare the Specifications and Drawings, Scope of Work, Addenda and Modifications and shall at once report to the Owner any error, inconsistency or omission he may discover. Contractor shall not be liable to the Owner for any damage resulting from such errors, inconsistencies or omissions. The Contractor shall not commence work without clarifying Drawings, Specifications, or Interpretations.
- **2.6. Sub-Contractors:** A sub-contractor is a person or organization who has a direct contract with the Contractor to perform any of the work at the site. The term sub-contractor is referred to throughout the solicitation documents and means a sub-contractor or his authorized representative.
- 2.7. Award of Sub-Contractors & Other Contracts for Portions of the Work: Contractor shall submit with their bid response to the Owner, in writing for acceptance, a list of the names of the sub-contractors or other persons or organizations proposed for such portions of the work as may be designated in the proposal requirements, or, if none is so designated, the names of the sub-contractors proposed for the principal portions of the work. Prior to the award of the contract, the Owner shall notify the successful Contractor in writing if, after due investigation, has reasonable objection to any person or organization on such list. If, prior to the award of the contract, the Owner has a reasonable and substantial objection to any person or organization on such list, and refuses in writing to accept such person or organization, the successful Contractor may, prior to the award, withdraw their proposal without forfeiture of proposal security. If the successful Contractor submits an acceptable substitute with an increase in the proposed price to cover the difference in cost occasioned by the substitution, the Owner may, at their discretion, accept the increased proposal or may disqualify the Contractor. If, after the award, the Owner refuses to accept any person or organization on such list, the Contractor shall submit an acceptable substitute and the contract sum shall be increased or decreased by the difference in cost occasioned by such substitution and an appropriate Change Order shall be issued. However, no increase in the contract sum shall be allowed for any such substitution unless the Contractor has acted promptly and responsively in submitting a name with respect thereto prior to the award.
- 2.8. Quantities of Work and Unit Price: Materials or quantities stated as unit price items in the Bid are supplied only to give an indication of the general scope of the Work, and are as such, estimates only. The Owner does not expressly or by implication agree that the actual amount of Work or material will correspond therewith, and reserves the right after award to increase or decrease the quantity of any unit item of the Work without a change in the unit price. The City also reserves the right to make changes in the Work (including the right to delete any bid item in its entirety or add additional bid items).

- 2.9. **Substitutions:** The materials, products and equipment described in the Solicitation documents shall be regarded as establishing a standard of required performance. function, dimension, appearance, or quality to be met by any proposed substitution. No substitution will be considered prior to receipt of Bids unless the Offeror submits a written request for approval to the City Purchasing Division at least ten (10) days prior to the date for receipt of Bids. Such requests for approval shall include the name of the material or equipment for which substitution is sought and a complete description of the proposed substitution including drawings, performance and test data, and other information necessary for evaluation, including samples if requested. The Offeror shall set forth changes in other materials, equipment, or other portions of the Work including changes of the work of other contracts, which incorporation of the proposed substitution would require to be included. The Owner's decision of approval or disapproval of a proposed substitution shall be final. If the Owner approves a proposed substitution before receipt of Bids, such approval will be set forth in an Addendum. Offeors shall not rely upon approvals made in any other manner.
- **2.10.** Supervision and Construction Procedures: The Contractor shall supervise and direct the work, using his best skill and attention. He shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the work under the contract.
- 2.11. Warranty: The Contractor warrants to the Owner that all materials and equipment furnished under this contract will be new unless otherwise specified, and that all work will be of good quality, free from faults and defects and in conformance with the Solicitation documents. All work not so conforming to these standards may be considered defective. If required by Owner, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. If within ten (10) days after written notice to the Contractor requesting such repairs or replacement, the Contractor should neglect to make or undertake with due diligence to the same, the City may make such repairs or replacements. All indirect and direct costs of such correction or removal or replacement shall be at the Contractor's expense. The Contractor will also bear the expenses of making good all work of others destroyed or damaged by the correction, removal or replacement of his defective work.
- 2.12. Permits, Fees, & Notices: The Contractor shall secure and pay for all permits, governmental fees and licenses necessary for the proper execution and completion of the work. The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations and orders of any public authority bearing on the performance of the work. If the Contractor observes that any of the Solicitation documents are at variance in any respect, he shall promptly notify the Owner in writing, and any necessary changes shall be adjusted by approximate modification. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the Owner, he shall assume full responsibility and shall bear all costs attributable.
- **2.13.** Responsibility for Those Performing the Work: The Contractor shall be responsible to the Owner for the acts and omissions of all his employees and all sub-contractors,

their agents and employees, and all other persons performing any of the work under a contract with the Contractor.

- **2.14. Use of the Site:** The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits and the Solicitation documents, and shall not unreasonably encumber the site with any materials or equipment.
- **2.15. Cleanup:** The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by his operations. At the completion of work he shall remove all his waste materials and rubbish from and about the project, as well as all his tools, construction equipment, machinery and surplus materials.
- 2.16. Insurance: The Contractor shall secure and maintain such insurance policies as will provide the coverage and contain other provisions specified in the Solicitation documents.

The Contractor shall file a copy of the policies or Certificates of Insurance acceptable to the City with the Purchasing Agent within ten (10) Calendar Days after issuance of the Notice of Award. These Certificates of Insurance shall contain a provision that coverage afforded under the policies shall not be canceled unless at least thirty (30) Calendar Days prior written notice has been given to the City.

- 2.17. Indemnification: The Contractor shall defend, indemnify and save harmless the Owner, and all its officers, employees, insurers, and self-insurance pool, from and against all liability, suits, actions, or other claims of any character, name and description brought for or on account of any injuries or damages received or sustained by any person, persons, or property on account of any negligent act or fault of the Contractor, or of any Contractor's agent, employee, sub-contractor or supplier in the execution of, or performance under, any contract which may result from proposal award. Contractor shall pay any judgment with cost which may be obtained against the Owner growing out of such injury or damages.
- 2.18. Miscellaneous Conditions: Material Availability: Contractors must accept responsibility for verification of material availability, production schedules, and other pertinent data prior to submission of bid. It is the responsibility of the bidder to notify the Owner immediately if materials specified are discontinued, replaced, or not available for an extended period of time. OSHA Standards: All bidders agree and warrant that services performed in response to this invitation shall conform to the standards declared by the US Department of Labor under the Occupational Safety and Health Act of 1970 (OSHA). In the event the services do not conform to OSHA standards, the Owner may require the services to be redone at no additional expense to the Owner.
- 2.19. Time: Time is of the essence with respect to the time of completion of the Project and any other milestones or deadline which are part of the Contract. It will be necessary for each Bidder to satisfy the City of its ability to complete the Work within the Contract Time set forth in the Solicitation documents. The Contract Time is the period of time allotted in the Solicitation documents for completion of the work. The date of commencement of the work is the date established in a Notice to Proceed. If there is no Notice to Proceed, it shall be the date of the Contract or such other date as may be established therein, or

as established as entered on the Bid Form. The Date of Final Completion of the work is the date certified by the Owner when all construction, and all other work associated to include, but not be limited to: testing, QA/QC, receipt of required reports and/or forms, grant requirements (if applicable), punch list items, clean-up, receipt of drawings and/or as-builts, etc., is fully complete, and in accordance with the Solicitation documents.

- **2.20. Progress & Completion:** The Contractor shall begin work on the date of commencement as defined in the Contract, and shall carry the work forward expeditiously with adequate forces and shall complete it within the contract time.
- 2.21. Payment & Completion: The Contract Sum is stated in the Contract and is the total amount payable by the Owner to the Contractor for the performance of the work under the Solicitation documents. Upon receipt of written notice that the work is ready for final inspection and acceptance and upon receipt of application for payment, the Owner's Project Manager will promptly make such inspection and, when he finds the work acceptable under the Solicitation documents and the Contract fully performed, the Owner shall make payment in the manner provided in the Solicitation documents.
- 2.22. Bid Bond: Each Bid shall as a guaranty of good faith on the part of the Bidder be accompanied by a Bid Guaranty consisting of: a certified or cashier's check drawn on an approved national bank or trust company in the state of Colorado, and made payable without condition to the City; or a Bid Bond written by an approved corporate surety in favor of the City. The amount of the Bid Guaranty shall not be less than 5% of the total Bid amount. Once a Bid is accepted and a Contact is awarded, the apparent successful bidder has ten calendar days to enter into a contractor in the form prescribed and to furnish the bonds with a legally responsible and approved surety. Failure to do so will result I forfeiture of the Bid Guaranty to the City as Liquidated Damages.

Each bidder shall guaranty its total bid price for a period of sixty (60) Calendar Days from the date of the bid opening.

2.23. Performance & Payment Bonds: Contractor shall furnish a Performance and a Payment Bond, each in an amount at least equal to that specified for the contract amount as security for the faithful performance and payment of all Contractor's obligations under the Solicitation documents. These bonds shall remain in effect for the duration of the Warranty Period. Contractor shall also furnish other bonds that may be required. All bonds shall be in the forms prescribed by the Solicitation documents and be executed by such sureties as (1) are licensed to conduct business in the State of Colorado and (2) are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff, Bureau of Accounts, U.S. Treasury Department. All bonds singed by an agent must be accompanied by a certified copy of the Authority Act. If the surety on any bond furnished by the Contractor is declared bankrupt, or becomes insolvent, or its rights to do business in Colorado are terminated, or it ceases to meet the requirements of clauses (1) and (2) of this section, Contractor shall within five (5) days thereafter substitute another bond and surety, both of which shall be acceptable to the City.

- **2.24. Retention:** The Owner will deduct money from the partial payments in amounts considered necessary to protect the interest of the Owner and will retain this money until after completion of the entire contract. The amount to be retained from partial payments will be five (5) percent of the value of the completed work, and not greater than five (5) percent of the amount of the Contract. When the retainage has reached five (5) percent of the amount of the Contract no further retainage will be made and this amount will be retained until such time as final payment is made.
- 2.25. Liquidated Damages for Failure to Enter Into Contract: Should the Successful Bidder fail or refuse to enter into the Contract within ten Calendar Days from the issuance of the Notice of Award, the City shall be entitled to collect the amount of such Bidder's Bid Guaranty as Liquidated Damages, not as a penalty but in consideration of the mutual release by the City and the Successful Bidder of all claims arising from the City's issuance of the Notice of Award and the Successful Bidder's failure to enter into the Contract and the costs to award the Contract to any other Bidder, to readvertise, or otherwise dispose of the Work as the City may determine best serves its interest.
- 2.26. Liquidated Damages for Failure to Meet Project Completion Schedule: If the Contractor does not achieve Final Completion by the required date, whether by neglect, refusal or any other reason, the parties agree and stipulate that the Contractor shall pay liquidated damages to the City for each such day that final completion is late. As provided elsewhere, this provision does not apply for delays caused by the City. The date for Final Completion may be extended in writing by the Owner.

The Contractor agrees that as a part of the consideration for the City's awarding of this Contract liquidated damages in the daily amount of \$1,000.00 is reasonable and necessary to pay for the actual damages resulting from such delay. The parties agree that the real costs and injury to the City for such delay include hard to quantify items such as: additional engineering, inspection and oversight by the City and its agents; additional contract administration; inability to apply the efforts of those employees to the other work of the City; perceived inefficiency of the City; citizens having to deal with the construction and the Work, rather than having the benefit of a completed Work, on time; inconvenience to the public; loss of reputation and community standing for the City during times when such things are very important and very difficult to maintain.

The Contractor must complete the Work and achieve final completion included under the Bid Schedule in the number of consecutive calendar days after the City gives is written Notice to Proceed. When the Contractor considers the entire Work ready for its intended use, Contractor shall certify in writing that the Work is fully complete. Final Completion date is the date by which the Contractor shall have fully completed all clean-up, and all items that were identified by the City in the inspection for final completion. Unless otherwise stated, for purposes of this liquidated damages clause, the Work shall not be finished and the Contract time shall continue to accrue until the City gives its written Final Acceptance.

If the Contractor shall fail to pay said liquidated damages promptly upon demand thereof after having failed to achieve Final Completion on time, the City shall first look to any retainage or other funds from which to pay said liquidated damages; if retainage or other liquid funds are not available to pay said liquidated damages amounts, the Surety on the

Contractor's Performance Bond and Payment Bond shall pay such liquidated damages. In addition, the City may withhold all, or any part of, such liquidated damages from any payment otherwise due the Contractor.

Liquidated damages as provided do not include any sums to reimburse the City for extra costs which the City may become obligated to pay on other contracts which were delayed or extended because of the Contractor's failure to complete the Work within the Contract Time. Should the City incur additional costs because of delays or extensions to other contracts resulting from the Contractor's failure of timely performance, the Contractor agrees to pay these costs that the City incurs because of the Contractor's delay, and these payments are separate from and in addition to any liquidated damages.

The Contractor agrees that the City may use its own forces or hire other parties to obtain Final Completion of the work if the time of completion has elapsed and the Contractor is not diligently pursuing completion. In addition to the Liquidated Damages provided for, the Contractor agrees to reimburse the City for all expenses thus incurred.

- 2.27. Contingency/Force Account: Contingency/Force Account work will be authorized by the Owner's Project Manager and is defined as minor expenses to cover miscellaneous or unforeseen expenses related to the project. The expenses are not included in the Drawings, Specifications, or Scope of Work and are necessary to accomplish the scope of this contract. Contingency/Force Account Authorization will be directed by the Owner through an approved form. Contingency/Force Account funds are the property of the Owner and any Contingency/Force Account funds, not required for project completion, shall remain the property of the Owner. Contractor is not entitled to any Contingency/Force Account funds, that are not authorized by Owner or Owner's Project Manager.
- 2.28. Protection of Persons & Property: The Contractor shall comply with all applicable laws, ordinances, rules, regulations and orders of any public authority having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss. Contractor shall erect and maintain, as required by existing safeguards for safety and protection, and all reasonable precautions, including posting danger signs or other warnings against hazards promulgating safety regulations and notifying owners and users of adjacent utilities. When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct by the Contractor in the execution of the work, or in consequence of the non-execution thereof by the Contractor, he shall restore, at his own expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, rebuilding, or otherwise restoring as may be directed, or it shall make good such damage or injury in an acceptable manner.
- 2.29. Changes in the Work: The Owner, without invalidating the contract, may order changes in the work within the general scope of the contract consisting of additions, deletions or other revisions, the contract sum and the contract time being adjusted accordingly. All such changes in the work shall be authorized by Change Order and shall be executed under the applicable conditions of the solicitation documents. A Change Order is a written order to the Contractor signed by the Owner issued after the execution of the contract, authorizing a change in the work or an adjustment in the contract sum or the

contract time. The contract sum and the contract time may be changed only by Change Order.

- 2.30. Claims for Additional Cost or Time: If the Contractor wishes to make a claim for an increase in the contract sum or an extension in the contract time, he shall give the Owner written notice thereof within a reasonable time after the occurrence of the event giving rise to such claim. This notice shall be given by the Contractor before proceeding to execute the work, except in an emergency endangering life or property in which case the Contractor shall precede in accordance with the regulations on safety. No such claim shall be valid unless so made. Any change in the contract sum or contract time resulting from such claim shall be authorized by Change Order.
- **2.31. Minor Changes in the Work:** The Owner shall have authority to order minor changes in the work not involving an adjustment in the contract sum or an extension of the contract time and not inconsistent with the intent of the solicitation documents.
- **2.32. Field Orders:** The Owner may issue written Field Orders which interpret the Solicitation documents in accordance with the specifications, or which order minor changes in the work in accordance with the agreement, without change in the contract sum or time. The Contractor shall carry out such Field Orders promptly.
- Uncovering & Correction of Work: The Contractor shall promptly correct all work 2.33. rejected by the Owner as defective or as failing to conform to the solicitation documents whether observed before or after substantial completion and whether or not fabricated installed or competed. The Contractor shall bear all costs of correcting such rejected work, including the cost of the Owner's additional services thereby made necessary. If within one (1) year after the date of completion or within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the solicitation documents, any of the work found to be defective or not in accordance with the solicitation documents, the Contractor shall correct it promptly after receipt of a written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discover of condition. All such defective or non-conforming work under the above paragraphs shall be removed from the site where necessary and the work shall be corrected to comply with the solicitation documents without cost to the Owner. The Contractor shall bear the cost of making good all work of separate Contractors destroyed or damaged by such removal or correction. If the Owner prefers to accept defective or non-conforming work, he may do so instead of requiring its removal and correction, in which case a Change Order will be issued to reflect an appropriate reduction in the payment or contract sum, or, if the amount is determined after final payment, it shall be paid by the Contractor.
- **2.30. Amendment:** No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the resulting contract. All amendments to the contract shall be made in writing by the Owner.
- **2.31. Assignment:** The Contractor shall not sell, assign, transfer or convey any contract resulting from this IFB, in whole or in part, without the prior written approval from the Owner.

- **2.32. Compliance with Laws:** Bids must comply with all Federal, State, County and local laws governing or covering this type of service and the fulfillment of all ADA (Americans with Disabilities Act) requirements.
- **2.33. Confidentiality:** All information disclosed by the Owner to the Contractor for the purpose of the work to be done or information that comes to the attention of the Contractor during the course of performing such work is to be kept strictly confidential.
- **2.34. Conflict of Interest:** No public official and/or City/County employee shall have interest in any contract resulting from this IFB.
- **2.35. Contract Termination**: This contract shall remain in effect until any of the following occurs: (1) contract expires; (2) completion of services; (3) acceptance of services or, (4) for convenience terminated by either party with a written *Notice of Cancellation* stating therein the reasons for such cancellation and the effective date of cancellation.
- **2.36. Employment Discrimination:** During the performance of any services per agreement with the Owner, the Contractor, by submitting a Bid, agrees to the following conditions:
  - 2.36.1. The Contractor shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, age, handicap, or national origin except when such condition is a legitimate occupational qualification reasonably necessary for the normal operations of the Contractor. The Contractor agrees to post in conspicuous places, visible to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
  - 2.36.2. The Contractor, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, shall state that such Contractor is an Equal Opportunity Employer.
  - **2.36.3.** Notices, advertisements, and solicitations placed in accordance with federal law, rule, or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.
- **2.37. Affirmative Action:** In executing a Contract with the City, the Contractor agrees to comply with Affirmative Action and Equal Employment Opportunity regulations presented in the General Contract Conditions.
- **2.38.** Immigration Reform and Control Act of 1986 and Immigration Compliance: The Offeror certifies that it does not and will not during the performance of the contract employ illegal alien workers or otherwise violate the provisions of the Federal Immigration Reform and Control Act of 1986 and/or the immigration compliance requirements of State of Colorado C.R.S. § 8-17.5-101, et.seq. (House Bill 06-1343).
- **2.39. Ethics:** The Contractor shall not accept or offer gifts or anything of value nor enter into any business arrangement with any employee, official, or agent of the Owner.

- 2.40. Failure to Deliver: In the event of failure of the Contractor to deliver services in accordance with the contract terms and conditions, the Owner, after due oral or written notice, may procure the services from other sources and hold the Contractor responsible for any costs resulting in additional purchase and administrative services. This remedy shall be in addition to any other remedies that the Owner may have.
- **2.41. Failure to Enforce:** Failure by the Owner at any time to enforce the provisions of the contract shall not be construed as a waiver of any such provisions. Such failure to enforce shall not affect the validity of the contract or any part thereof or the right of the Owner to enforce any provision at any time in accordance with its terms.
- **2.42. Force Majeure:** The Contractor shall not be held responsible for failure to perform the duties and responsibilities imposed by the contract due to legal strikes, fires, riots, rebellions, and acts of God beyond the control of the Contractor, unless otherwise specified in the contract.
- 2.43. Independent Contractor: The Contractor shall be legally considered an Independent Contractor and neither the Contractor nor its employees shall, under any circumstances, be considered servants or agents of the Owner. The Owner shall be at no time legally responsible for any negligence or other wrongdoing by the Contractor, its servants, or agents. The Owner shall not withhold from the contract payments to the Contractor any federal or state unemployment taxes, federal or state income taxes, Social Security Tax or any other amounts for benefits to the Contractor. Further, the Owner shall not provide to the Contractor any insurance coverage or other benefits, including Workers' Compensation, normally provided by the Owner for its employees.
- 2.44. Nonconforming Terms and Conditions: A bid that includes terms and conditions that do not conform to the terms and conditions of this Invitation for Bid is subject to rejection as non-responsive. The Owner reserves the right to permit the Contractor to withdraw nonconforming terms and conditions from its bid prior to a determination by the Owner of non-responsiveness based on the submission of nonconforming terms and conditions.

Items for non-responsiveness may include, but not be limited to:

- a. Submission of the Bid on forms other than those supplied by the City;
- b. Alteration, interlineation, erasure, or partial detachment of any part of the forms which are supplied herein;
- c. Inclusion of unauthorized additions conditional or alternate Bids or irregularities of any kind which may tend to make the Bid incomplete, indefinite, or ambiguous as to its meaning;
- d. Failure to acknowledge receipt of any or all issued Addenda;
- e. Failure to provide a unit price or a lump sum price, as appropriate, for each pay item listed except in the case of authorized alternative pay items;

- f. Failure to list the names of Subcontractors used in the Bid preparation as may be required in the Solicitation documents;
- g. Submission of a Bid that, in the opinion of the Owner, is unbalanced so that each item does not reasonably carry its own proportion of cost or which contains inadequate or unreasonable prices for any item;
- h. Tying of the Bid with any other bid or contract; and
- i. Failure to calculate Bid prices as described herein.

#### **2.45.** Evaluation of Bids and Offerors: The Owner reserves the right to:

- reject any and all Bids,
- waive any and all informalities,
- take into account any prompt payment discounts offered by Bidder,
- negotiate final terms with the Successful Bidder,
- take into consideration past performance of previous awards/contracts with the Owner of any Contractor, Vendor, Firm, Supplier, or Service Provider in determining final award. and
- disregard any and all nonconforming, nonresponsive or conditional Bids.

Discrepancies between words and figures will be resolved in favor of words. Discrepancies between Unit Prices and Extended Prices will be resolved in favor of the Unit Prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. The corrected extensions and totals will be shown in the tabulation of Bids.

The Owner may consider the qualifications and experience of Subcontractors and other persons and organizations (including those who are to furnish the principal items of material or equipment) proposed for those portions of the work as to which the identity of Subcontractors and other persons and organizations must be submitted. Operating costs, maintenance considerations performance data, and guarantees of materials and equipment may also be considered by the Owner.

The Owner will conduct such investigations as deemed necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications and financial ability of the Offeror, proposed Subcontractors and other persons and organizations to do the Work in accordance with the Solicitation documents to the City's satisfaction within the Contract Time.

The Offeror shall furnish the Owner all information and data requested by the Owner to determine the ability of the Offeror to perform the Work. The Owner reserves the right to reject the Bid if the evidence submitted by, or investigation of such Offeror fails to satisfy the Owner that such Offeror is properly qualified to carry out the obligations of the Contract and to complete the Work contemplated therein.

By submitting a Bid, each Offeror authorizes the Owner to perform such investigation of the Offeror as the Owner deems necessary to establish the responsibility, qualifications and financial ability of the Offeror and, by its signature thereon, authorizes the Owner to obtain reference information concerning the Offeror and releases the party providing such information and the Owner from any and all liability to the Offeror as a result of such reference information so provided.

The Owner reserves the right to reject the Bid of any Offeror who does not pass any evaluation to the Owner's satisfaction.

If the Contract is to be awarded, it will be awarded to the Offeror who, by evaluation, the Owner determines will best meet the Owner's interests.

The Owner reserves the right to accept or reject the Work contained in any of the Price Bid Schedules or alternates, either in whole or in part.

2.46. Award of Contract: Unless otherwise indicated, a single award will be made for all the bid items in an individual bid schedule. In the event that the Work is contained in more than one Bid Schedule, the City may award Schedules individually or in combination. In the case of two Bid Schedules which are alternative to each other, only one of such alternative Schedules will be awarded. Within forty-five (45) Calendar Days of Bid Opening, the City will issue a Notice of Award to the Successful Bidder which will be accompanied by four (4) unsigned copies of the Contract and the Performance and Payment Bond forms. Within ten (10) Calendar Days thereafter, the Successful Bidder shall sign and deliver four (4) copies of the Contract, Performance Bond, Payment Bond and Certificates of Insurance to the City. Within ten (10) Calendar Days thereafter, the City will deliver two (2) fully executed counterparts of the Contract to the Contractor. No contract shall exist between the Successful Bidder and the City and the Successful Bidder shall have no rights at law or in equity until the Contract has been duly executed by the City.

The Successful Bidder's failure to sign and submit a Contract and other documents set forth in this Paragraph within the prescribed time shall be just cause of annulment of the award, and forfeiture of the Bid Guaranty. The award of Contract may then be made to the next qualified Bidder in the same manner as previously prescribed.

- **2.47. Ownership:** All plans, prints, designs, concepts, etc., shall become the property of the Owner.
- **2.48. Oral Statements:** No oral statement of any person shall modify or otherwise affect the terms, conditions, or specifications stated in this document and/or resulting agreement. All modifications to this request and any agreement must be made in writing by the Owner.
- 2.49. Patents/Copyrights: The Contractor agrees to protect the Owner from any claims involving infringements of patents and/or copyrights. In no event shall the Owner be liable to the Contractor for any/all suits arising on the grounds of patent(s)/copyright(s) infringement. Patent/copyright infringement shall null and void any agreement resulting from response to this IFB.

- **2.50. Remedies**: The Contractor and Owner agree that both parties have all rights, duties, and remedies available as stated in the Uniform Commercial Code.
- **2.51. Venue**: Any agreement as a result of responding to this IFB shall be deemed to have been made in, and shall be construed and interpreted in accordance with, the laws of the City of Grand Junction, Mesa County, Colorado.
- **2.52. Expenses:** Expenses incurred in preparation, submission and presentation of this IFB are the responsibility of the company and cannot be charged to the Owner.
- **2.53. Sovereign Immunity:** The Owner specifically reserves its right to sovereign immunity pursuant to Colorado State Law as a defense to any action arising in conjunction to this agreement.
- 2.54. Non-Appropriation of Funds: The contractual obligation of the Owner under this contract is contingent upon the availability of appropriated funds from this fiscal year budget as approved by the City Council or Board of County Commissioners from this fiscal year only. State of Colorado Statutes prohibit obligation of public funds beyond the fiscal year for which the budget was approved. Anticipated expenditures/obligations beyond the end of the current Owner's fiscal year budget shall be subject to budget approval. Any contract will be subject to and must contain a governmental non-appropriation of funds clause.
- **Cooperative Purchasing:** Purchases as a result of this solicitation are primarily for the 2.55. City/County. Other governmental entities may be extended the opportunity to utilize the resultant contract award with the agreement of the successful provider and the All participating entities will be required to abide by the participating agencies. specifications, terms, conditions and pricings established in this Bid. The quantities furnished in this bid document are for only the City/County. It does not include quantities for any other jurisdiction. The City or County will be responsible only for the award for its jurisdiction. Other participating entities will place their own awards on their respective Purchase Orders through their purchasing office or use their purchasing card for purchase/payment as authorized or agreed upon between the provider and the individual The City/County accepts no liability for payment of orders placed by other participating jurisdictions that choose to piggy-back on our solicitation. Orders placed by participating jurisdictions under the terms of this solicitation will indicate their specific delivery and invoicing instructions.
- 2.56. Keep Jobs in Colorado Act: Contractor shall be responsible for ensuring compliance with Article 17 of Title 8, Colorado Revised Statutes requiring 80% Colorado labor to be employed on public works. Contractor shall, upon reasonable notice provided by the Owner, permit the Owner to inspect documentation of identification and residency required by C.R.S. §8-17-101(2)(a). If Contractor claims it is entitled to a waiver pursuant to C.R.S. §8-17-101(1), Contractor shall state that there is insufficient Colorado labor to perform the work such that compliance with Article 17 would create an undue burden that would substantially prevent a project from proceeding to completion, and shall include evidence demonstrating the insufficiency and undue burden in its response.

Unless expressly granted a waiver by the Owner pursuant to C.R.S. §8-17-101(1), Contractor shall be responsible for ensuring compliance with Article 17 of Title 8, Colorado Revised Statutes requiring 80% Colorado labor to be employed on public works. Contractor shall, upon reasonable notice provided by the Owner, permit the Owner to inspect documentation of identification and residency required by C.R.S. §8-17-101(2)(a).

- **2.56.1.** "Public project" is defined as:
  - (a) any construction, alteration, repair, demolition, or improvement of any land, building, structure, facility, road, highway, bridge, or other public improvement suitable for and intended for use in the promotion of the public health, welfare, or safety and any maintenance programs for the upkeep of such projects
  - (b) for which appropriate or expenditure of moneys may be reasonably expected to be \$500,000.00 or more in the aggregate for any fiscal year
  - (c) except any project that receives federal moneys.

# 3. Statement of Work

**3.1. GENERAL:** The City of Grand Junction is soliciting competitive bids from qualified and interested companies for all labor, equipment, and materials required for the renovation of the Grand Junction Public Safety Facility. All dimensions and scope of work should be verified by Contractors prior to submission of bids.

#### 3.2. SPECIAL CONDITIONS & PROVISIONS:

3.2.1 Mandatory Pre-Bid Meeting: Prospective bidders are required to attend a mandatory pre-bid meeting on March 13, 2020 at 8:00am. Meeting location shall be in the lobby of the Public Safety Facility/Police Station, located at 555 Ute Avenue, Grand Junction, CO. The purpose of this visit will be to inspect and to clarify the contents of this Invitation for Bids (IFB).

### 3.2.2 QUESTIONS REGUARDING SOLICIATION PROCESS/SCOPE OF WORK:

Duane Hoff Jr., Senior Buyer City of Grand Junction duaneh@gicity.org

**3.2.3 Project Manager:** The Project Manager for the Project is Jay Valentine – General Services Director, who can be reached at (970)244-1517. <u>During Construction</u>, all notices, letters, submittals, and other communications directed to the City shall be addressed and mailed or delivered to:

City of Grand Junction General Services Director Attn: Jay Valentine, Project Manager 250 North Fifth Street Grand Junction, CO 81501

**3.2.4 Pricing:** Pricing shall be all inclusive to include but not be limited to: all labor,

equipment, supplies, materials, freight (F.O.B. Destination – Freight Pre-paid and Allowed to each site), travel, mobilization costs, fuel, set-up and take down costs, and full-time inspection costs, and all other costs related and/or associated to the successful completion of the project.

The Owner shall not pay nor be liable for any other additional costs including but not limited to: taxes, shipping charges, insurance, interest, penalties, termination payments, attorney fees, liquidated damages, etc.

**3.2.5 Freight/Shipping:** All freight/shipping shall be F.O.B. Destination – Freight Pre-Paid and Allowed to the project site(s), Grand Junction, CO.

Contractor must meet all federal, state, and local rules, regulations, and requirements for providing such services.

- **3.2.6 Contract:** A binding contract shall consist of: (1) the IFB and any amendments thereto, (2) the bidder's response (bid) to the IFB, (3) clarification of the bid, if any, and (4) the City's Purchasing Department's acceptance of the bid by "Notice of Award" or by "Purchase Order". All Exhibits and Attachments included In the IFB shall be incorporated into the contract by reference.
  - A. The contract expresses the complete agreement of the parties and, performance shall be governed solely by the specifications and requirements contained therein.
  - B. Any change to the contract, whether by modification and/or supplementation, must be accomplished by a formal contract amendment signed and approved by and between the duly authorized representative of the bidder and the City Purchasing Division or by a modified Purchase Order prior to the effective date of such modification. The bidder expressly and explicitly understands and agrees that no other method and/or no other document, including acts and oral communications by or from any person, shall be used or construed as an amendment or modification to the contract.
- **3.2.7 Time of Completion:** The scheduled time of Completion for the Project is <u>90</u> Calendar Days from the starting date specified in the Notice to Proceed.

Completion is achieved when site cleanup and all punch list items (resulting from the final inspection) have been completed.

**3.2.8 Working Days and Hours:** The working days and hours shall be as stated in the General Contract Conditions or as mutually agreed upon in the preconstruction meeting with the following exception:

All work shall be performed Monday – Friday between the hours of 7:00 AM to 6:00 PM.

**3.2.9 Licenses and Permits:** Contractor is responsible for obtaining all necessary licenses and permits required for Construction, at Contractors expense. See Section 2.12. Contractor shall supply to Owner all copies of finalized permits.

- **3.2.10 Authorized Representatives of the City:** Those authorized to represent the City shall include Purchasing Agent, Project Manager, and Inspectors employed by the City, only.
- **3.2.11 Stockpiling Materials and Equipment:** All stockpiling/storage shall be pre-approved by City Project Manager.
- **3.2.12 Clean-Up:** The Contractor is responsible for cleaning up all loose materials that have been deposited. The costs for all clean-up work shall be considered incidental and will not be paid for separately.
- **3.2.13 Excess Material:** All excess materials shall be disposed in accordance with Federal, State, County, and City rules and regulations.
- **3.2.14 Incidental Items:** Any item of work not specifically identified or paid for directly, but which is necessary for the satisfactory completion of any paid items of work, will be considered as incidental to those items, and will be included in the cost of those items.
- 3.3. SCOPE OF WORK: See Section 3.4 Attachments.
- 3.4. Attachments:

Appendix A: Project Submittal Form

Appendix B: Project Manual

Appendix C: Construction Drawings

- **3.5. Contractor Bid Documents:** For Contractor's convenience, the following is a list of forms/items to be submitted with the Contractor's bid response. However, should a form/item not be listed in this section, but required in the Solicitation documents, it is the Contractor's responsibility to ensure all forms/items are submitted.
  - Contractor's Bid Form
  - Price Bid Schedule
  - Project Submittal Form
  - References
  - Contractor's Project Schedule Detailed with final completion date in mind

# 3.6. IFB TENTATIVE TIME SCHEDULE:

IIIVITATION I DIUS AVAIIADIE	Mai Gii 4, 2020
Mandatory Pre-Bid Meeting	March 13, 2020
Inquiry deadline, no questions after this date	March 19, 2020
Addendum Posted	March 23, 2020
Submittal deadline for proposals	March 27, 2020
City Council Approval	April 15, 2020
Notice of Award & Contract execution	April 16, 2020
Bonding & Insurance Cert due	April 24, 2020
Work begins no later than	April 29, 2020
Final Completion	00 Calandar Day

Final Completion 90 Calendar Days from Notice

to Proceed May 25, 2020 July 3, 2020

March / 2020

Holidays:

# 4. Contractor's Bid Form

Bid Date:			
Project: IFB-4767-20-DH "Grand	Junction Public Safety Facilities	s Renovation"	
Bidding Company:			
Name of Authorized Agent:			
Email			
Telephone	Address		
City	State	Zip	
The undersigned Bidder, in complications Contract Conditions, Statement of Vof, and conditions affecting the propall work for the Project in accordance These prices are to cover all expenthis Contractor's Bid Form is a part.	Nork, Specifications, and any and posed work, hereby proposes to fu ce with Solicitation documents, wi ses incurred in performing the wor	l all Addenda thereto, having inv ırnish all labor, materials and sup ithin the time set forth and at the	estigated the location oplies, and to perform prices stated below.
The undersigned Contractor does connection to any person(s) provid terms and conditions of the Instructi been examined by the undersigned	ing an offer for the same work, and ons to Bidders, the Specifications,	nd that it is made in pursuance	of, and subject to, all
The Contractor also agrees that if a date of Notification of Award. Subm be prepared to complete the project	ittal of this offer will be taken by th		
The Owner reserves the right to ma or technicalities and to reject any or (60) calendar days after closing time (30) period.	r all offers. It is further agreed tha	at this offer may not be withdraw	n for a period of sixty
Prices in the bid proposal have not	knowingly been disclosed with and	other provider and will not be pric	or to award.
Prices in this bid proposal have be purpose of restricting competition.  No attempt has been made nor will be competition.  The individual signing this bid proposis legally responsible for the offer will be purchased by the City of Grant The undersigned certifies that no Fe City of Grand Junction payment term Prompt payment discount of days after the receip when determining the bid award.	pe to induce any other person or firmosal certifies they are a legal agent ith regard to supporting documentand Junction are tax exempt from Coederal, State, County or Municipal ms shall be Net 30 days.	m to submit a bid proposal for the t of the offeror, authorized to rep ation and prices provided. blorado Sales or Use Tax. Tax ex tax will be added to the above q	purpose of restricting resent the offeror and tempt No. 98-903544. uoted prices.
RECEIPT OF ADDENDA: the under and other Solicitation documents.  State number of Addenda r		s receipt of Addenda to the Solici	tation, Specifications,
It is the responsibility of the Bidder t	o ensure all Addenda have been r	received and acknowledged.	
By signing below, the Undersigned	agree to comply with all terms and	d conditions contained herein.	
Company:			
Authorized Signature:			
Title:			

Name & address of	Description of work	% of
Sub-Contractor	to be performed	Contract
		<del></del>

The undersigned Bidder proposes to subcontract the following portion of Work:

The undersigned Bidder acknowledges the right of the City to reject any and all Bids submitted and to waive informalities and irregularities therein in the City's sole discretion.

By submission of the Bid, each Bidder certifies, and in the case of a joint Bid each party thereto certifies as to his own organization, that this Bid has been arrived at independently, without collusion, consultation, communication, or agreement as to any matter relating to this Bid with any other Bidder or with any competitor.



# Grand Junction Public Safety Facilities Renovation

555 Ute Avenue Grand Junction, CO 81501

**Project Manual** 

**For Construction** 

BG Project No. 1949 March 04, 2020



# **SECTION 00 01 10**

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#### **DIVISION 02 -- EXISTING CONDITIONS**

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**END OF SECTION** 

### SECTION 01 10 00 SUMMARY

#### **PART 1 GENERAL**

#### 1.01 PROJECT

- A. Project Name: Grand Junction Public Safety Facilities Renovation
- B. Owner's Name: City of Grand Junction.
- C. Architect's Name: Blythe Group + co..
- D. The Project consists of a renovation of the Grand Junction Public Safety Facilities building at 555 Ute Ave. Grand Junction, CO.

#### 1.02 CONTRACT DESCRIPTION

A. Contract Type: A single prime contract based on a Stipulated Price as described in Division 0.

#### 1.03 DESCRIPTION OF ALTERATIONS WORK

- A. Scope of renovation work is indicated on drawings.
- B. Renovation work is to be sequenced. Proposed sequence as follows (refer to drawings for additional information):
  - 1. Areas where initial work can be completed simultaneously:
    - a. New VAP area (2013A, 2013B, 2013C, 2013D)
    - b. Sleep Room (2015A)
    - c. Storage Room (1082)
    - d. Exterior door at workout room
    - e. Report Writing (1067) when completed, will be used as a temp space for Street Crimes/Crew spaces
    - f. Office (1025)
  - 2. Areas to be completed after areas areas listed above completed for move-in:
    - a. Admin Expansion (2061, 2061A, 2063)
    - b. Intel Hub (2053)
    - c. Street Crimes/Crew Spaces (1019,1020,1021,1022) temp space will be completed report writing area (1067)
    - d. Break Room (1068)

#### 1.04 OWNER OCCUPANCY

- A. Owner intends to continue to occupy adjacent portions of the existing building during the entire construction period.
- B. Owner intends to occupy the Project upon Substantial Completion.
- C. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.
- D. Schedule the Work to accommodate Owner occupancy.
- E. Work will be sequenced to accommodate Owner occupancy during construction. Building is occupied 24 hours a day, 7 days a week. After hours or weekend work may be required and is to be included in bid.

#### 1.05 CONTRACTOR USE OF SITE AND PREMISES

- A. Construction Operations: Limited to areas noted on Drawings.
- B. Arrange use of site and premises to allow:
  - 1. Owner occupancy.
- C. Provide access to and from site as required by law and by Owner:
  - 1. Emergency Building Exits During Construction: Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
  - 2. Do not obstruct roadways, sidewalks, or other public ways without permit.

- D. Existing building spaces may not be used for storage, unless approved by the Grand Junction Police Department.
- E. Utility Outages and Shutdown:
  - 1. Prevent accidental disruption of utility services to other facilities.
  - 2. Coordinate any disruptions of utility services with Owner.

**PART 2 PRODUCTS - NOT USED** 

**PART 3 EXECUTION - NOT USED** 

**END OF SECTION** 

# SECTION 01 10 01 ELECTRONIC DRAWING RELEASE FORM

PROJECT:		
PROJECT NUMBER: 1949		
TO:	FROM:	
BLYTHE GROUP + CO.		
622 ROOD AVENUE		
GRAND JUNCTION, CO 81501		
ATTENTION:		

CONTRACTOR HEREBY REQUESTS ARCHITECT'S ELECTRONIC DRAWING FILES FOR USE IN CONNECTION WITH THE PROJECT IN ACCORDANCE WITH PROVISIONS OF THE CONTRACT DOCUMENTS.

THERE IS THE POTENTIAL FOR LIABILITY PROBLEMS WHEN RELEASING ELECTRONIC DRAWING FILES. CONSEQUENTLY, THE ITEMS LISTED BELOW MUST BE AGREED TO PRIOR TO RELEASING THE FILES.

You agree to hold harmless, indemnify in full, Blythe Group + co., their consultants, agents, employees, servants and assigns, from and against any and all liability, claims and demands arising out of the use of electronic files provided. This indemnification and hold harmless agreement includes but is not limited to any claims, directly or indirectly, for damages, demands or other actions including personal injuries, brought by any persons who seek recovery from Blythe Group + co., their consultants, agents, employees, servants and assigns, regarding the use of the electronic files. It is specifically understood and agreed upon by you, that the content of the electronic files provided has been accomplished with input from the Owner. Blythe Group + co., their consultants, agents, employees, servants and assigns, assume no responsibility for any unauthorized changes or alterations to, nor the accuracy of, the electronic files provided.

The electronic files are provided solely as a convenience and benefit of the Owner for whom design services have been performed and shall NOT be considered "Contract Documents", "Construction Documents" or any type of certified document. The hard copy bid documents, accompanied by a professional's stamp and signature, are the project documents of record and govern over any electronic files.

The electronic files are Copyrighted material, are to be used only for this project and are to be used only by you and shall be shared only with subcontractors as pertinent to this project.

This electronic information provides design intent information current as of the date of its release. Any use of this information is at the sole risk and liability of the user who is responsible for performing all checking, review and coordination as necessary to ensure the data obtained from the electronic file is accurate, the same data as shown on the record hard copy documents, and for updating any information required to reflect any changes in the design not included in this electronic file to accommodate work performed by use of this electronic file(s).

The files are in AUTOCAD 2013. The title blocks will be removed from the drawings.

The accuracy of electronic files which have been translated to a different format, whether by others or by the Architect, shall not be guaranteed by Architect or engineer. Conversion of this electronic information from the system and format used by the Architect or Architect's consultants cannot be accomplished without the introduction of inexactitudes, anomalies, omissions and errors. In the event the electronic data furnished is converted, user agrees to assume all risks associated with such conversion.

#### I AGREE TO THE TERMS OF THIS LETTER.

NAME:	TITLE:	
DATE:		
COMMENTS:		

# SECTION 01 20 00 PRICE AND PAYMENT PROCEDURES

#### **PART 1 GENERAL**

#### 1.01 SECTION INCLUDES

A. Procedures for preparation and submittal of applications for progress payments.

#### 1.02 RELATED REQUIREMENTS

A. Section 00 50 00 - Contracting Forms and Supplements: Forms to be used.

#### 1.03 SCHEDULE OF VALUES

- A. Use Schedule of Values Form: AIA G703, edition stipulated in the Agreement.
- B. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit draft to Architect for approval.
- C. Forms filled out by hand will not be accepted.
- D. Submit Schedule of Values electronically within 15 days after date of Owner-Contractor Agreement.
- E. Include in each line item, the amount of Allowances specified in this section. For unit cost Allowances, identify quantities taken from Contract Documents multiplied by the unit cost to achieve the total for the item.
- F. Include separately from each line item, a direct proportional amount of Contractor's overhead and profit.
- G. Revise schedule to list approved Change Orders, with each Application For Payment.

#### 1.04 APPLICATIONS FOR PROGRESS PAYMENTS

- A. Payment Period: Submit at intervals stipulated in the Agreement.
- B. Use Form AIA G702 and Form AIA G703, edition stipulated in the Agreement.
- C. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit sample to Architect for approval.
- D. Forms filled out by hand will not be accepted.
- E. For each item, provide a column for listing each of the following:
  - 1. Item Number.
  - 2. Description of work.
  - 3. Scheduled Values.
  - 4. Previous Applications.
  - 5. Work in Place and Stored Materials under this Application.
  - 6. Authorized Change Orders.
  - 7. Total Completed and Stored to Date of Application.
  - Balance to Finish.
  - 9. Retainage.
- F. Execute certification by signature of authorized officer.
- G. Use data from approved Schedule of Values. Provide dollar value in each column for each line item for portion of work performed and for stored products.
- H. List each authorized Change Order as a separate line item, listing Change Order number and dollar amount as for an original item of work.
- I. Submit one electronic and three hard-copies of each Application for Payment.
- J. Include the following with the application:
  - 1. Transmittal letter.
  - 2. Construction progress schedule, revised and current as specified in Section 01 30 00.
  - 3. Partial release of liens from major subcontractors and vendors.

K. When Architect requires substantiating information, submit data justifying dollar amounts in question. Provide one copy of data with cover letter for each copy of submittal. Show application number and date, and line item by number and description.

#### 1.05 MODIFICATION PROCEDURES

- A. For minor changes not involving an adjustment to the Contract Sum or Contract Time, Architect will issue instructions directly to Contractor.
- B. For other required changes, Architect will issue a document signed by Owner instructing Contractor to proceed with the change, for subsequent inclusion in a Change Order.
  - The document will describe the required changes and will designate method of determining any change in Contract Sum or Contract Time.
  - 2. Promptly execute the change.
- C. For changes for which advance pricing is desired, Architect will issue a document that includes a detailed description of a proposed change with supplementary or revised drawings and specifications, a change in Contract Time for executing the change with a stipulation of any overtime work required and the period of time during which the requested price will be considered valid. Contractor shall prepare and submit a fixed price quotation within 10 days.
- D. Contractor may propose a change by submitting a request for change to Architect, describing the proposed change and its full effect on the work, with a statement describing the reason for the change, and the effect on the Contract Sum and Contract Time with full documentation.
- E. Computation of Change in Contract Amount: As specified in the Agreement and Conditions of the Contract.
- F. Substantiation of Costs: Provide full information required for evaluation.
- G. Promptly enter changes in Project Record Documents.

#### 1.06 APPLICATION FOR FINAL PAYMENT

- A. Prepare Application for Final Payment as specified for progress payments, identifying total adjusted Contract Sum, previous payments, and sum remaining due.
- B. Application for Final Payment will not be considered until the following have been accomplished:
  - 1. All closeout procedures specified in Section 01 70 00.

#### **END OF SECTION**

### SECTION 01 25 00 SUBSTITUTION PROCEDURES

#### **PART 1 GENERAL**

#### 1.01 SECTION INCLUDES

A. Procedural requirements for proposed substitutions.

#### **PART 2 PRODUCTS - NOT USED**

#### **PART 3 EXECUTION**

#### 3.01 GENERAL REQUIREMENTS

- A. A Substitution Request for products, assemblies, materials, and equipment constitutes a representation that the submitter:
  - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product, equipment, assembly, or system.
  - 2. Agrees to provide the same warranty for the substitution as for the specified product.
  - 3. Agrees to provide same or equivalent maintenance service and source of replacement parts, as applicable.
  - 4. Agrees to coordinate installation and make changes to other work that may be required for the work to be complete, with no additional cost to Owner.
  - 5. Waives claims for additional costs or time extension that may subsequently become apparent.
- B. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents. Burden of proof is on proposer.
- C. Content: Include information necessary for tracking the status of each Substitution Request, and information necessary to provide an actionable response.
  - 1. Forms indicated in the Project Manual are adequate for this purpose, and must be used.
- D. Limit each request to a single proposed substitution item.

#### 3.02 RESOLUTION

- A. Architect may request additional information and documentation prior to rendering a decision. Provide this data in an expeditious manner.
- B. Architect will notify Contractor in writing of decision to accept or reject request.

#### 3.03 ACCEPTANCE

A. Accepted substitutions change the work of the Project. They will be documented and incorporated into work of the project by Change Order, Construction Change Directive, Architectural Supplementary Instructions, or similar instruments provided for in the Conditions of the Contract.

#### 3.04 CLOSEOUT ACTIVITIES

- A. See Section 01 78 00 Closeout Submittals, for closeout submittals.
- B. Include completed Substitution Request Forms as part of the Project record. Include both approved and rejected Requests.

#### **END OF SECTION**

# SECTION 01 25 01 SUBSTITUTION REQUEST FORM

PROJECT:	GRAND JUNCTION PUBLIC SAFETY FACILITIES RENOVATION
PROJECT NUMBER:	1949
то	FROM: (CONTRACTOR)
BLYTHE GROUP + CO.	
622 ROOD AVENUE	
GRAND JUNCTION, CO 81501	
	IEREBY REQUEST ACCEPTANCE OF THE FOLLOWING UBSTITUTION IN ACCORD WITH PROVISIONS OF THE
SPECIFIED PRODUCT OR SYSTE	EM:
SUBSTITUTION REQUEST	FOR:
	NO
ARTICLE(S)	
PARAGRAPH(S)	
	POSED SUBSTITUTION IN ACCORD WITH CONTRACT
REQUIREMENTS. SAMPLE IS ATTACHED	SAMPLE WILL BE SENT IF REQUESTED
QUALITY COMPARISON:	
SPECIFIED PRODUCT	PROPOSED SUBSTITUTION
NAME, BRAND:	
MANUFACTURER:	
VARIATIONS:	<u></u>
MAINTENANCE SERVICE A	VAILABLE: YES NO
WHERE?	
PREVIOUS INSTALLATIONS	
	OF 5 PREVIOUS INSTALLATIONS GIVING FOLLOWING DATA N WHICH PROPOSED SUBSTITUTION WAS USED:
PROJECT 1:	
ADDRESS:	
ARCHITECT/TEL:	

	OWNER/TEL:
	DATE INSTALLED:
	DOLLAR VALUE THIS WORK:
	PROJECT 2:
	ADDRESS:
	ARCHITECT/TEL:
	OWNER/TEL:
	DATE INSTALLED:
	DOLLAR VALUE THIS WORK:
	PROJECT 3:
	ADDRESS:
	ARCHITECT/TEL:
	OWNER/TEL:
	DATE INSTALLED:
	DOLLAR VALUE THIS WORK:
	PROJECT 4:
	ADDRESS:
	ARCHITECT/TEL:
	OWNER/TEL:
	DATE INSTALLED:
	DOLLAR VALUE THIS WORK:
	PROJECT 5:
	ADDRESS:
	ARCHITECT/TEL:
	OWNER/TEL:
	DATE INSTALLED:
	DOLLAR VALUE THIS WORK:
REAS	SON FOR NOT GIVING PRIORITY TO SPECIFIED ITEMS:
	EFFECT OF SUBSTITUTION:
	PROPOSED SUBSTITUTION AFFECTS OTHER PARTS OF WORK:
	NO YES(IF YES, EXPLAIN)
	SUBSTITUTION CHANGES CONTRACT TIME: NO YES
	ADD/DEDUCT DAYS
	SUBSTITUTION REQUIRES DIMENSIONAL REVISION, REDESIGN OF STRUCTURE OR M&E WORK:

NO YES (IF YES, ATTACH COMPLETE DATA.)
SAVING OR CREDIT TO OWNER, IF ANY, FOR ACCEPTING SUBSTITUTION:
\$·
EXTRA COST TO OWNER, IF ANY, FOR ACCEPTING SUBSTITUTION:
\$·
CONTRACTOR'S/SUPPLIER'S STATEMENT OF CONFORMANCE OF PROPOSED SUBSTITUTION TO CONTRACT REQUIREMENTS.
I / WE HAVE INVESTIGATED THE PROPOSED SUBSTITUTION.
I / WE:
BELIEVE THAT IT IS EQUAL OR SUPERIOR IN ALL RESPECTS TO SPECIFIED PRODUCT, EXCEPT AS STATED ABOVE. WILL PROVIDE SAME WARRANTY AS SPECIFIED. HAVE INCLUDED COMPLETE COST DATA AND IMPLICATIONS OF SUBSTITUTION. WILL PAY REDESIGN AND SPECIAL INSPECTION COSTS CAUSED BY USE OF THIS PRODUCT WILL PAY ADDITIONAL COSTS TO OTHER CONTRACTORS CAUSED BY SUBSTITUTION. WILL COORDINATE INCORPORATION OF PROPOSED SUBSTITUTION IN WORK. WILL MODIFY OTHER PARTS OF WORK AS MAY BE NEEDED, TO MAKE ALL PARTS OF WORK COMPLETE AND FUNCTIONING. WAIVE FUTURE CLAIMS FOR ADDED COST TO CONTRACT CAUSED BY SUBSTITUTION.
CLIDDLIED.
SUPPLIER: DATE:
DATE: BY:
DI
GENERAL CONTRACTOR:
DATE:
POSITION:
COMMENTS:

#### **SECTION 01 30 00**

#### **ADMINISTRATIVE REQUIREMENTS**

#### **PART 1 GENERAL**

#### 1.01 SECTION INCLUDES

- A. Preconstruction meeting.
- B. Progress meetings.
- C. Construction progress schedule.
- D. Number of copies of submittals.
- E. Requests for Interpretation (RFI) procedures.
- F. Submittal procedures.

#### **PART 2 PRODUCTS - NOT USED**

#### PART 3 EXECUTION

#### 3.01 PRECONSTRUCTION MEETING

- A. Schedule meeting after Notice of Award.
- B. Attendance Required:
  - 1. Owner.
  - 2. Architect.
  - Contractor.

#### C. Agenda:

- 1. Execution of Owner-Contractor Agreement.
- 2. Submission of executed bonds and insurance certificates.
- Distribution of Contract Documents.
- Submission of list of subcontractors, list of products, schedule of values, and progress schedule
- Designation of personnel representing the parties to Contract, project superintendant and Architect.
- 6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
- 7. Scheduling.
- D. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

#### 3.02 PROGRESS MEETINGS

- Schedule and administer meetings throughout progress of the work at maximum weekly intervals.
- B. Make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.
- C. Attendance Required:
  - 1. Contractor.
  - 2. Owner.
  - 3. Architect.
  - 4. Contractor's superintendent.
  - 5. Major subcontractors.

#### D. Agenda:

- 1. Review minutes of previous meetings.
- 2. Review of work progress.
- 3. Field observations, problems, and decisions.
- 4. Identification of problems that impede, or will impede, planned progress.
- 5. Review of submittals schedule and status of submittals.

- 6. Review of RFIs log and status of responses.
- 7. Maintenance of progress schedule.
- 8. Corrective measures to regain projected schedules.
- 9. Planned progress during succeeding work period.
- 10. Maintenance of quality and work standards.
- 11. Effect of proposed changes on progress schedule and coordination.
- 12. Other business relating to work.
- E. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

#### 3.03 REQUESTS FOR INTERPRETATION (RFI)

- A. Preparation: Prepare an RFI immediately upon discovery of a need for interpretation of the Contract Documents. Failure to submit a RFI in a timely manner is not a legitimate cause for claiming additional costs or delays in execution of the work.
  - 1. Prepare a separate RFI for each specific item.
  - 2. Prepare in a format and with content acceptable to Owner.
  - 3. Combine RFI and its attachments into a single electronic file. PDF format is preferred.
- B. Reason for the RFI: Prior to initiation of an RFI, carefully study all Contract Documents to confirm that information sufficient for their interpretation is definitely not included.
  - 1. Unacceptable Uses for RFIs: Do not use RFIs to request the following::
    - a. Approval of submittals (use procedures specified elsewhere in this section).
    - b. Approval of substitutions.
    - c. Changes that entail change in Contract Time and Contract Sum (comply with provisions of the Conditions of the Contract).
  - 2. Frivolous RFIs: Requests regarding information that is clearly indicated on, or reasonably inferable from, the Contract Documents, with no additional input required to clarify the question. They will be returned without a response.
- C. Content: Include identifiers necessary for tracking the status of each RFI, and information necessary to provide an actionable response.
- D. Attachments: Include sketches, coordination drawings, descriptions, photos, submittals, and other information necessary to substantiate the reason for the request.
- E. RFI Log: Prepare and maintain a tabular log of RFIs for the duration of the project.
  - 1. Indicate current status of every RFI. Update log promptly and on a regular basis.
  - 2. Note dates of when each request is made, and when a response is received.
  - 3. Highlight items requiring priority or expedited response.
  - 4. Highlight items for which a timely response has not been received to date.
  - 5. Identify and include improper or frivolous RFIs.

#### 3.04 SUBMITTAL SCHEDULE

A. Submit to Architect for review a schedule for submittals in tabular format.

Expected submittals include (but are not limited to):

Sheet metal flashing and trim - product data

Storefront - product data, shop drawings

Glass/glazing - product data

Glazing films - product data, samples

Gypsum Wallboard - product data

Insulation - product data

Paint - product data, samples

Flooring and wall base - product data, samples

Doors, frames and hardware - product data, shop drawings, door finish samples

Ceiling grid & tile - product data, samples

Signage - product data, shop drawings

Lighting fixtures - product data

Lighting controls - product data Mechanical - product data, shop drawings Electrical - product data, shop drawings Plumbing - product data, shop drawings Life safety - product data, shop drawings Sprinklers - product data, shop drawings

For all items to match existing, please provide a photograph or other information demonstrating that the proposed matches existing as part of submittal.

B.

#### 3.05 NUMBER OF COPIES OF SUBMITTALS

A. Electronic Documents: Submit one electronic copy in PDF format; an electronically-marked up file will be returned. Create PDFs at native size and right-side up; illegible files will be rejected.

#### 3.06 SUBMITTAL REVIEW

- A. Submittals for Review: Architect will review each submittal, and approve, or take other appropriate action.
- Submittals for Information: Architect will acknowledge receipt and review. See below for actions to be taken.
- Architect's actions will be reflected by marking each returned submittal using virtual stamp on electronic submittals.
  - 1. Notations may be made directly on submitted items and/or listed on appended Submittal Review cover sheet.
- D. Architect's and consultants' actions on items submitted for review:
  - 1. Authorizing purchasing, fabrication, delivery, and installation:
    - a. "Approved", or language with same legal meaning.
    - b. "Approved as noted", or language with same legal meaning.
  - 2. Not Authorizing fabrication, delivery, and installation:
    - a. "Revise and Resubmit".
      - 1) Resubmit revised item, with review notations acknowledged and incorporated.
- E. Architect's and consultants' actions on items submitted for information:
  - 1. Items for which no action was taken:
    - a. "Received" to notify the Contractor that the submittal has been received for record only.

# SECTION 01 32 16 CONSTRUCTION PROGRESS SCHEDULE

#### **PART 1 GENERAL**

#### 1.01 SECTION INCLUDES

A. Preliminary schedule.

#### 1.02 SUBMITTALS

- A. Preliminary Schedule to be submitted with Bid and will be reviewed at the Preconstruction Meeting.
- B. If preliminary schedule requires revision after review, submit revised schedule within 10 days.
- C. Within 10 days after joint review, submit complete schedule.
- D. Submit updated schedule with each Application for Payment.

#### 1.03 SCHEDULE FORMAT

A. Sheet Size: Multiples of 8-1/2 x 11 inches.

#### PART 2 PRODUCTS - NOT USED

#### **PART 3 EXECUTION**

#### 3.01 PRELIMINARY SCHEDULE

A. Prepare preliminary schedule in the form of a horizontal bar chart.

#### 3.02 CONTENT

- A. Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction.
- B. Identify each item by specification section number.
- C. Identify work of separate stages and other logically grouped activities.
- D. Show accumulated percentage of completion of each item, and total percentage of Work completed, as of the first day of each month.
- E. Provide legend for symbols and abbreviations used.

#### 3.03 BAR CHARTS

- A. Include a separate bar for each major portion of Work or operation.
- B. Identify the first work day of each week.

#### 3.04 REVIEW AND EVALUATION OF SCHEDULE

- Participate in joint review and evaluation of schedule with Architect at each submittal.
- B. Evaluate project status to determine work behind schedule and work ahead of schedule.
- C. After review, revise as necessary as result of review, and resubmit within 10 days.

#### 3.05 UPDATING SCHEDULE

- A. Maintain schedules to record actual start and finish dates of completed activities.
- B. Indicate progress of each activity to date of revision, with projected completion date of each activity.
- C. Annotate diagrams to graphically depict current status of Work.
- D. Identify activities modified since previous submittal, major changes in Work, and other identifiable changes.
- E. Indicate changes required to maintain Date of Substantial Completion.
- F. Submit reports required to support recommended changes.

#### 3.06 DISTRIBUTION OF SCHEDULE

- A. Distribute copies of updated schedules to Contractor's project site file, to subcontractors, suppliers, Architect, Owner, and other concerned parties.
- B. Instruct recipients to promptly report, in writing, problems anticipated by projections indicated in schedules.

# SECTION 01 35 53 SECURITY PROCEDURES

#### **PART 1 GENERAL**

#### 1.01 SECTION INCLUDES

A. Security measures including formal security program, entry control, personnel identification, and miscellaneous restrictions.

#### 1.02 SECURITY PROGRAM

#### 1.03 ENTRY CONTROL

- A. Restrict entrance of persons and vehicles into Project site and existing facilities.
- B. Allow entrance only to authorized persons with proper identification.
- C. Maintain log of workers and visitors, make available to Owner on request.
- D. Owner will control entrance of persons and vehicles related to Owner's operations.
- E. No weapons permitted.
- F. Background checks required.
- G. No controlled substances (including but not limited to alcohol, narcotics, etc.).
- H. No audio/video recording of any type.
- I. The Grand Junction Police Department reserves the right to restrict any type of tools they deem unacceptable.

#### 1.04 PERSONNEL IDENTIFICATION

- A. Provide identification badge to each person authorized to enter premises.
- B. Badge To Include: Personal photograph, name, assigned number, expiration date and employer.
- C. Require return of badges at expiration of their employment on the Work.

#### 1.05 RESTRICTIONS

A. Do not allow cameras on site or photographs taken except by written approval of Owner.

**PART 2 PRODUCTS - NOT USED** 

**PART 3 EXECUTION - NOT USED** 

# SECTION 01 40 00 QUALITY REQUIREMENTS

#### **PART 1 GENERAL**

#### 1.01 SECTION INCLUDES

- A. Control of installation.
- B. Defect Assessment.

#### **PART 2 PRODUCTS - NOT USED**

#### PART 3 EXECUTION

#### 3.01 CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.
- D. Comply with specified standards as minimum quality for the work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Have work performed by persons qualified to produce required and specified quality.
- F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

#### 3.02 DEFECT ASSESSMENT

A. Replace Work or portions of the Work not complying with specified requirements.

# SECTION 01 55 00 VEHICULAR ACCESS AND PARKING

#### **PART 1 GENERAL**

#### 1.01 SECTION INCLUDES

- A. Parking.
- B. Existing pavements and parking areas.
- C. Construction parking controls.

#### **PART 2 PRODUCTS - NOT USED**

#### PART 3 EXECUTION

#### 3.01 PARKING

- A. Use of designated areas of existing parking facilities by construction personnel is permitted.
  - Four (4) parking spaces will be made available in the secure area of the Grand Junction
    Police Department parking lot near a building entrance. These parking spots will be
    allocated for a dumpster, parking, and lay down area. Coordinate with Owner for location
    of these parking spots.
  - Additional parking will be made available in the open lot East of 7th Street, between Ute and Pitkin.
  - 3. No parking will be permitted in designated visitor or Grand Junction Police Department spaces on the North side of the building.
- B. Provide temporary signage to direct construction personnel as needed.

#### 3.02 CONSTRUCTION PARKING CONTROL

- A. Control vehicular parking to prevent interference with public traffic and parking, access by emergency vehicles, and Owner's operations.
- B. Monitor parking of construction personnel's vehicles. Maintain vehicular access to and through parking areas.
- C. Prevent parking on or adjacent to access roads or in non-designated areas.

#### **SECTION 01 57 19**

#### **TEMPORARY ENVIRONMENTAL CONTROLS**

#### **PART 1 GENERAL**

#### 1.01 SECTION INCLUDES

A. Construction procedures to promote adequate indoor air quality after construction.

#### 1.02 PROJECT GOALS

- A. Dust and Airborne Particulates: Prevent deposition of dust and other particulates in HVAC ducts and equipment.
  - Cleaning of ductwork is not contemplated under this Contract.
  - 2. Contractor shall bear the cost of cleaning required due to failure to protect ducts and equipment from construction dust.
  - 3. Establish condition of existing ducts and equipment prior to start of alterations.
- B. Airborne Contaminants: Procedures and products have been specified to minimize indoor air pollutants.
  - 1. Furnish products meeting the specifications.
  - 2. Avoid construction practices that could result in contamination of installed products leading to indoor air pollution.

#### 1.03 REFERENCE STANDARDS

A. SMACNA (OCC) - IAQ Guidelines for Occupied Buildings Under Construction; 2007.

#### 1.04 DEFINITIONS

- A. Adsorptive Materials: Gypsum board, acoustical ceiling tile and panels, carpet and carpet tile, fabrics, fibrous insulation, and other similar products.
- B. Contaminants: Gases, vapors, regulated pollutants, airborne mold and mildew, and the like, as specified.
- C. Particulates: Dust, dirt, and other airborne solid matter.
- D. Wet Work: Concrete, plaster, coatings, and other products that emit water vapor or volatile organic compounds during installation, drying, or curing.

#### **PART 2 PRODUCTS - NOT USED**

#### **PART 3 EXECUTION**

#### 3.01 CONSTRUCTION PROCEDURES

- A. Prevent the absorption of moisture and humidity by adsorptive materials by:
  - 1. Sequencing the delivery of such materials so that they are not present in the building until wet work is completed and dry.
  - 2. Delivery and storage of such materials in fully sealed moisture-impermeable packaging.
  - 3. Provide sufficient ventilation for drying within reasonable time frame.
- B. When working in a portion of an occupied building, prevent movement of air from construction area to occupied area.
- C. Do not store construction materials or waste in mechanical or electrical rooms.
- D. Prior to use of return air ductwork without intake filters clean up and remove dust and debris generated by construction activities.
  - 1. Inspect duct intakes, return air grilles, and terminal units for dust.
  - 2. Clean plenum spaces, including top sides of lay-in ceilings, outsides of ducts, tops of pipes and conduit.
  - 3. Clean tops of doors and frames.
  - 4. Clean mechanical and electrical rooms, including tops of pipes, ducts, and conduit, equipment, and supports.
  - 5. Clean return plenums of air handling units.
  - 6. Remove intake filters last, after cleaning is complete.

- E. Do not perform dusty or dirty work after starting use of return air ducts without intake filters.
- F. Use other relevant recommendations of SMACNA (OCC) for avoiding unnecessary contamination due to construction procedures.

# SECTION 01 60 00 PRODUCT REQUIREMENTS

#### **PART 1 GENERAL**

#### 1.01 RELATED REQUIREMENTS

- A. Section 01 25 00 Substitution Procedures: Substitutions made during procurement and/or construction phases.
- B. Section 01 74 19 Construction Waste Management and Disposal: Waste disposal requirements potentially affecting product selection, packaging and substitutions.

#### 1.02 SUBMITTALS

- A. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- B. Shop Drawing Submittals: Prepared specifically for this Project
- C. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
  - 1. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.

#### **PART 2 PRODUCTS**

#### 2.01 EXISTING PRODUCTS

- A. Existing materials and equipment indicated to be removed, but not to be re-used, relocated, reinstalled, delivered to the Owner, or otherwise indicated as to remain the property of the Owner, become the property of the Contractor; remove from site.
- B. Specific Products to be Reused: The reuse of certain materials and equipment already existing on the project site is required.
  - 1. Refer to Drawings for items to be salvaged for reuse and relocation.
  - 2. If reuse of other existing materials or equipment is desired, submit request.

#### 2.02 NEW PRODUCTS

- A. Provide new products unless specifically required or permitted by the Contract Documents.
- B. Use of products having any of the following characteristics is not permitted:
- C. Where other criteria are met, Contractor shall give preference to products that:
  - 1. If used on interior, have lower emissions.
  - 2. If wet-applied, have lower VOC content.

#### 2.03 PRODUCT OPTIONS

- A. Refer to drawings for product specifications. Intent is to match existing in the building, if any conflicts are found notify Architect.
- B. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
- C. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.
- D. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

#### **PART 3 EXECUTION**

#### 3.01 SUBSTITUTION LIMITATIONS

A. See Section 01 25 00 - Substitution Procedures.

#### 3.02 TRANSPORTATION AND HANDLING

- Package products for shipment in manner to prevent damage; for equipment, package to avoid loss of factory calibration.
- If special precautions are required, attach instructions prominently and legibly on outside of packaging.
- C. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
- D. Transport and handle products in accordance with manufacturer's instructions.
- E. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
- F. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- G. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage, and to minimize handling.
- H. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

#### 3.03 STORAGE AND PROTECTION

- A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication. See Section 01 74 19.
- B. Store and protect products in accordance with manufacturers' instructions.
- C. Store with seals and labels intact and legible.
- D. Store sensitive products in weathertight, climate-controlled enclosures in an environment favorable to product.
- E. For exterior storage of fabricated products, place on sloped supports above ground.
- F. Protect products from damage or deterioration due to construction operations, weather, precipitation, humidity, temperature, sunlight and ultraviolet light, dirt, dust, and other contaminants.
- G. Comply with manufacturer's warranty conditions, if any.
- H. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- I. Prevent contact with material that may cause corrosion, discoloration, or staining.
- J. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- K. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

#### **SECTION 01 70 00**

#### **EXECUTION AND CLOSEOUT REQUIREMENTS**

#### **PART 1 GENERAL**

#### 1.01 PROJECT CONDITIONS

A. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.

#### **PART 2 PRODUCTS**

#### 2.01 PATCHING MATERIALS

- A. New Materials: As specified in drawings; match existing products and work for patching and extending work.
- B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.
- C. Product Substitution: For any proposed change in materials, submit request for substitution described in Section 01 25 00.

#### PART 3 EXECUTION

#### 3.01 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- C. Examine and verify specific conditions described in drawings.
- D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
- E. Verify that utility services are available, of the correct characteristics, and in the correct locations.
- F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

#### 3.02 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

#### 3.03 GENERAL INSTALLATION REQUIREMENTS

- A. Install products as specified in drawings, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
- B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- E. Make neat transitions between different surfaces, maintaining texture and appearance.

#### 3.04 ALTERATIONS

- A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
  - 1. Verify that construction is as indicated.

- 2. Report discrepancies to Architect before disturbing existing installation.
- 3. Beginning of alterations work constitutes acceptance of existing conditions.
- B. Keep areas in which alterations are being conducted separated from other areas that are still occupied.
  - 1. Provide, erect, and maintain temporary dustproof partitions of construction as needed for scope of work and phasing .
- C. Maintain weatherproof exterior building enclosure except for interruptions required for replacement or modifications; take care to prevent water and humidity damage.
  - 1. Where openings in exterior enclosure exist, provide construction to make exterior enclosure weatherproof.
  - Insulate existing ducts or pipes that are exposed to outdoor ambient temperatures by alterations work.
- D. Remove existing work as indicated and as required to accomplish new work.
  - Salvage items indicated in drawings.
  - 2. Remove items indicated on drawings.
  - 3. Relocate items indicated on drawings.
  - 4. Where new surface finishes are to be applied to existing work, perform removals, patch, and prepare existing surfaces as required to receive new finish; remove existing finish if necessary for successful application of new finish.
  - 5. Where new surface finishes are not specified or indicated, patch holes and damaged surfaces to match adjacent finished surfaces as closely as possible.
- E. Services (Including but not limited to HVAC, Plumbing, Fire Protection, Electrical, and Telecommunications): Remove, relocate, and extend existing systems to accommodate new construction.
  - 1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components; if necessary, modify installation to allow access or provide access panel.
  - 2. Where existing systems or equipment are not active and Contract Documents require reactivation, put back into operational condition; repair supply, distribution, and equipment as required.
  - 3. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
    - a. Disable existing systems only to make switchovers and connections; minimize duration of outages.
    - b. Provide temporary connections as required to maintain existing systems in service.
  - 4. Verify that abandoned services serve only abandoned facilities.
  - 5. Remove abandoned pipe, ducts, conduits, and equipment, including those above accessible ceilings; remove back to source of supply where possible, otherwise cap stub and tag with identification; patch holes left by removal using materials specified for new construction.
- F. Protect existing work to remain.
  - 1. Provide shoring and bracing if necessary.
  - 2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
  - 3. Repair adjacent construction and finishes damaged during removal work.
- G. Adapt existing work to fit new work: Make as neat and smooth transition as possible.
- H. Patching: Where the existing surface is not indicated to be refinished, patch to match the surface finish that existed prior to cutting. Where the surface is indicated to be refinished, patch so that the substrate is ready for the new finish.
- Refinish existing surfaces as indicated:
  - 1. Where rooms or spaces are indicated to be refinished, refinish all visible existing surfaces to remain to the specified condition for each material, with a neat transition to adjacent finishes.

- If mechanical or electrical work is exposed accidentally during the work, re-cover and refinish to match.
- Clean existing systems and equipment.
- K. Remove demolition debris and abandoned items from alterations areas and dispose of off-site; do not burn or bury.
- L. Do not begin new construction in alterations areas before demolition is complete.
- M. Comply with all other applicable requirements of this section.

#### 3.05 CUTTING AND PATCHING

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. See Alterations article above for additional requirements.
- C. Perform whatever cutting and patching is necessary to:
  - 1. Complete the work.
  - 2. Fit products together to integrate with other work.
  - 3. Provide openings for penetration of mechanical, electrical, and other services.
  - 4. Match work that has been cut to adjacent work.
  - 5. Repair areas adjacent to cuts to required condition.
  - 6. Repair new work damaged by subsequent work.
  - 7. Remove samples of installed work for testing when requested.
  - 8. Remove and replace defective and non-complying work.
- D. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
- E. Employ skilled and experienced installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
- F. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
- G. Restore work with new products in accordance with requirements of Contract Documents.
- H. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- I. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material, to full thickness of the penetrated element.
- J. Patching:
  - 1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
  - 2. Match color, texture, and appearance.
  - 3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.

#### 3.06 PROGRESS CLEANING

- Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- D. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

#### 3.07 PROTECTION OF INSTALLED WORK

- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.
- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- E. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- F. Remove protective coverings when no longer needed; reuse or recycle coverings if possible.

#### 3.08 ADJUSTING

Adjust operating products and equipment to ensure smooth and unhindered operation.

#### 3.09 FINAL CLEANING

- A. Use cleaning materials that are nonhazardous.
- B. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- C. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment.
- D. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
- E. Clean filters of operating equipment.
- F. Sweep paved areas as affected by demolition and construction activities.
- G. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

#### 3.10 CLOSEOUT PROCEDURES

- A. Make submittals that are required by governing or other authorities.
  - 1. Provide copies to Architect and Owner.
- B. Accompany Architect on preliminary inspection to determine items to be listed for completion or correction in the Contractor's Correction Punch List for Contractor's Notice of Substantial Completion.
- C. Notify Architect when work is considered ready for Architect's Substantial Completion inspection.
- D. Submit written certification containing Contractor's Correction Punch List, that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Architect's Substantial Completion inspection.
- E. Conduct Substantial Completion inspection and create Final Correction Punch List containing Architect's and Contractor's comprehensive list of items identified to be completed or corrected and submit to Architect.
- F. Correct items of work listed in Final Correction Punch List and comply with requirements for access to Owner-occupied areas.
- G. Notify Architect when work is considered finally complete and ready for Architect's Substantial Completion final inspection.
- H. Complete items of work determined by Architect listed in executed Certificate of Substantial Completion.
- I. Notify Architect when phases are complete for inspection.

#### 3.11 MAINTENANCE

- A. Provide service and maintenance of components.
- B. Maintenance Period: Not less than one year from the Date of Substantial Completion or the length of the specified warranty, whichever is longer.
- C. Examine system components at a frequency consistent with reliable operation. Clean, adjust, and lubricate as required.
- D. Include systematic examination, adjustment, and lubrication of components. Repair or replace parts whenever required. Use parts produced by the manufacturer of the original component.
- E. Maintenance service shall not be assigned or transferred to any agent or subcontractor without prior written consent of the Owner.

#### **SECTION 01 74 19**

#### **CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL**

#### **PART 1 GENERAL**

#### 1.01 WASTE MANAGEMENT REQUIREMENTS

- A. Employ processes that ensure the generation of as little waste as possible due to error, poor planning, breakage, mishandling, contamination, or other factors.
- B. Minimize trash/waste disposal in landfills; reuse, salvage, or recycle as much waste as economically feasible.
- C. Methods of trash/waste disposal that are not acceptable are:
  - Burning on the project site.
  - 2. Burying on the project site.
  - 3. Dumping or burying on other property, public or private.
  - 4. Other illegal dumping or burying.
  - 5. Incineration, either on- or off-site.
- D. Regulatory Requirements: Contractor is responsible for knowing and complying with regulatory requirements, including but not limited to Federal, state and local requirements, pertaining to legal disposal of all construction and demolition waste materials.

#### 1.02 DEFINITIONS

- A. Clean: Untreated and unpainted; not contaminated with oils, solvents, caulk, or the like.
- B. Construction and Demolition Waste: Solid wastes typically including building materials, packaging, trash, debris, and rubble resulting from construction, remodeling, repair and demolition operations.
- C. Hazardous: Exhibiting the characteristics of hazardous substances, i.e., ignitibility, corrosivity, toxicity or reactivity.
- D. Nonhazardous: Exhibiting none of the characteristics of hazardous substances, i.e., ignitibility, corrosivity, toxicity, or reactivity.
- E. Nontoxic: Neither immediately poisonous to humans nor poisonous after a long period of exposure.
- F. Recyclable: The ability of a product or material to be recovered at the end of its life cycle and remanufactured into a new product for reuse by others.
- G. Recycle: To remove a waste material from the project site to another site for remanufacture into a new product for reuse by others.
- H. Recycling: The process of sorting, cleansing, treating and reconstituting solid waste and other discarded materials for the purpose of using the altered form. Recycling does not include burning, incinerating, or thermally destroying waste.
- I. Return: To give back reusable items or unused products to vendors for credit.
- J. Reuse: To reuse a construction waste material in some manner on the project site.
- K. Salvage: To remove a waste material from the project site to another site for resale or reuse by others.
- L. Sediment: Soil and other debris that has been eroded and transported by storm or well production run-off water.
- M. Source Separation: The act of keeping different types of waste materials separate beginning from the first time they become waste.
- N. Toxic: Poisonous to humans either immediately or after a long period of exposure.
- O. Trash: Any product or material unable to be reused, returned, recycled, or salvaged.
- P. Waste: Extra material or material that has reached the end of its useful life in its intended use. Waste includes salvageable, returnable, recyclable, and reusable material.

#### **PART 2 PRODUCTS - NOT USED**

#### PART 3 EXECUTION

#### 3.01 WASTE MANAGEMENT PROCEDURES

- A. See Section 01 30 00 for additional requirements for project meetings, reports, submittal procedures, and project documentation.
- B. See Section 01 60 00 for waste prevention requirements related to delivery, storage, and handling.
- C. See Section 01 70 00 for trash/waste prevention procedures related to demolition, cutting and patching, installation, protection, and cleaning.

#### 3.02 WASTE MANAGEMENT

- A. Instruction: Provide on-site instruction of appropriate separation, handling, and recycling, salvage, reuse, and return methods to be used by all parties at the appropriate stages of the project.
- B. Facilities: Provide specific facilities for separation and storage of materials for recycling, salvage, reuse, return, and trash disposal, for use by all contractors and installers.
  - 1. Provide containers as required.
  - 2. Provide adequate space for pick-up and delivery and convenience to subcontractors.
  - Keep recycling and trash/waste bin areas neat and clean and clearly marked in order to avoid contamination of materials.
- C. Hazardous Wastes: Separate, store, and dispose of hazardous wastes according to applicable regulations.
- D. Recycling: Separate, store, protect, and handle at the site identified recyclable waste products in order to prevent contamination of materials and to maximize recyclability of identified materials. Arrange for timely pickups from the site or deliveries to recycling facility in order to prevent contamination of recyclable materials.
- E. Reuse of Materials On-Site: Set aside, sort, and protect separated products in preparation for reuse.
- F. Salvage: Set aside, sort, and protect products to be salvaged for reuse off-site.

# SECTION 01 78 00 CLOSEOUT SUBMITTALS

#### **PART 1 GENERAL**

#### 1.01 SECTION INCLUDES

- A. Project Record Documents.
- B. Operation and Maintenance Data.
- C. Warranties and bonds.

#### 1.02 RELATED REQUIREMENTS

A. Section 01 30 00 - Administrative Requirements: Submittals procedures, shop drawings, product data, and samples.

#### 1.03 SUBMITTALS

- A. Project Record Documents: Submit documents to Architect with claim for final Application for Payment.
- B. Operation and Maintenance Data:
  - Submit two copies of preliminary draft or proposed formats and outlines of contents before start of Work. Architect will review draft and return one copy with comments.
  - 2. For equipment, or component parts of equipment put into service during construction and operated by Owner, submit completed documents within ten days after acceptance.
  - 3. Submit one copy of completed documents 15 days prior to final inspection. This copy will be reviewed and returned after final inspection, with Architect comments. Revise content of all document sets as required prior to final submission.
  - Submit two sets of revised final documents in final form within 10 days after final inspection.

#### C. Warranties and Bonds:

- 1. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within 10 days after acceptance.
- 2. Make other submittals within 10 days after Date of Substantial Completion, prior to final Application for Payment.
- 3. For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within 10 days after acceptance, listing the date of acceptance as the beginning of the warranty period.

#### **PART 2 PRODUCTS - NOT USED**

#### PART 3 EXECUTION

#### 3.01 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
  - 1. Drawings.
  - 2. Addenda.
  - 3. Change Orders and other modifications to the Contract.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress.
- E. Record Drawings: Legibly mark each item to record actual construction including:
  - 1. Field changes of dimension and detail.
  - 2. Details not on original Contract drawings.

#### 3.02 OPERATION AND MAINTENANCE DATA

A. Source Data: For each product or system, list names, addresses and telephone numbers of Subcontractors and suppliers, including local source of supplies and replacement parts.

- B. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
- C. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
- D. Typed Text: As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.

#### 3.03 OPERATION AND MAINTENANCE DATA FOR MATERIALS AND FINISHES

- A. For Each Product, Applied Material, and Finish:
- B. Instructions for Care and Maintenance: Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental cleaning agents and methods, and recommended schedule for cleaning and maintenance.
- C. Where additional instructions are required, beyond the manufacturer's standard printed instructions, have instructions prepared by personnel experienced in the operation and maintenance of the specific products.

#### 3.04 OPERATION AND MAINTENANCE DATA FOR EQUIPMENT AND SYSTEMS

- A. For Each Item of Equipment and Each System:
  - 1. Description of unit or system, and component parts.
  - 2. Identify function, normal operating characteristics, and limiting conditions.
  - 3. Include performance curves, with engineering data and tests.
  - 4. Complete nomenclature and model number of replaceable parts.
- B. Where additional instructions are required, beyond the manufacturer's standard printed instructions, have instructions prepared by personnel experienced in the operation and maintenance of the specific products.
- C. Operating Procedures: Include start-up, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shut-down, and emergency instructions. Include summer, winter, and any special operating instructions.
- D. Maintenance Requirements: Include routine procedures and guide for preventative maintenance and trouble shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
- E. Provide servicing and lubrication schedule, and list of lubricants required.
- F. Include manufacturer's printed operation and maintenance instructions.
- G. Include sequence of operation by controls manufacturer.
- H. Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- I. Additional Requirements: As specified in individual product specification sections.

#### 3.05 ASSEMBLY OF OPERATION AND MAINTENANCE MANUALS

- A. Assemble operation and maintenance data into durable manuals for Owner's personnel use, with data arranged in the same sequence as, and identified by, the specification sections.
- B. Where systems involve more than one specification section, provide separate tabbed divider for each system.
- C. Binders: Commercial quality, 8-1/2 by 11 inch three D side ring binders with durable plastic covers; 2 inch maximum ring size. When multiple binders are used, correlate data into related consistent groupings.
- D. Cover: Identify each binder with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; identify title of Project; identify subject matter of contents.
- E. Project Directory: Title and address of Project; names, addresses, and telephone numbers of Architect, Consultants, Contractor and subcontractors, with names of responsible parties.

- F. Tables of Contents: List every item separated by a divider, using the same identification as on the divider tab; where multiple volumes are required, include all volumes Tables of Contents in each volume, with the current volume clearly identified.
- G. Dividers: Provide tabbed dividers for each separate product and system; identify the contents on the divider tab; immediately following the divider tab include a description of product and major component parts of equipment.
- H. Text: Manufacturer's printed data, or typewritten data on 20 pound paper.
- I. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.

#### 3.06 WARRANTIES AND BONDS

- A. Obtain warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within 10 days after completion of the applicable item of work. Except for items put into use with Owner's permission, leave date of beginning of time of warranty until Date of Substantial completion is determined.
- B. Verify that documents are in proper form, contain full information, and are notarized.
- C. Co-execute submittals when required.
- D. Retain warranties and bonds until time specified for submittal.

#### SECTION 02 41 00 DEMOLITION

#### **PART 1 GENERAL**

#### 1.01 SECTION INCLUDES

A. Selective demolition of building elements for alteration purposes.

#### 1.02 RELATED REQUIREMENTS

- A. Section 01 10 00 Summary: Limitations on Contractor's use of site and premises.
- B. Section 01 10 00 Summary: Description of items to be salvaged or removed for re-use by Contractor.
- C. Section 01 60 00 Product Requirements: Handling and storage of items removed for salvage and relocation.
- D. Section 01 70 00 Execution and Closeout Requirements: Project conditions; protection of existing construction to remain; reinstallation of removed products; temporary bracing and shoring.

#### **PART 2 PRODUCTS -- NOT USED**

#### PART 3 EXECUTION

#### **3.01 SCOPE**

- A. Remove portions of existing construction as indicated in the Drawings.
- B. Remove other items indicated, for salvage and relocation.

#### 3.02 GENERAL PROCEDURES AND PROJECT CONDITIONS

- A. Comply with applicable codes and regulations for demolition operations and safety of the public.
  - 1. Obtain required permits.
  - 2. Provide, erect, and maintain temporary barriers and security devices.
  - 3. Conduct operations to minimize effects on and interference with occupants.
  - 4. Do not close or obstruct roadways or sidewalks without permit.
  - Conduct operations to minimize obstruction of public and private entrances and exits; do
    not obstruct required exits at any time; protect persons using entrances and exits from
    removal operations.
- B. Do not begin removal until receipt of notification to proceed from Owner.
- C. Do not begin removal until built elements to be salvaged or relocated have been removed.
- D. Protect existing structures and other elements that are not to be removed.
- E. If hazardous materials are discovered during removal operations, stop work and notify Architect and Owner; hazardous materials include regulated asbestos containing materials, lead, PCB's, and mercury.
- F. Perform demolition in a manner that maximizes salvage and recycling of materials.
  - 1. Dismantle existing construction and separate materials.
  - 2. Set aside reusable, recyclable, and salvageable materials; store and deliver to collection point or point of reuse.

#### 3.03 EXISTING UTILITIES

- A. Coordinate work with utility companies; notify before starting work and comply with their requirements; obtain required permits.
- B. Protect existing utilities to remain from damage.
- C. Do not disrupt public utilities without permit from authority having jurisdiction.
- D. Do not close, shut off, or disrupt existing life safety systems that are in use without at least 7 days prior written notification to Owner.

E. Do not close, shut off, or disrupt existing utility branches or take-offs that are in use without at least 3 days prior written notification to Owner.

#### 3.04 SELECTIVE DEMOLITION FOR ALTERATIONS

- Drawings showing existing construction are based on casual field observation and existing record documents only.
  - 1. Verify that construction is as indicated.
  - 2. Report discrepancies to Architect before disturbing existing installation.
  - 3. Beginning of demolition work constitutes acceptance of existing conditions that would be apparent upon examination prior to starting demolition.
- B. Remove existing work as indicated and as required to accomplish new work.
  - 1. Remove items indicated on drawings.
- C. Services (Including but not limited to HVAC, Plumbing, Fire Protection, Electrical, and Telecommunications): Remove existing systems and equipment as indicated.
  - 1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components.
  - 2. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
  - 3. Verify that abandoned services serve only abandoned facilities before removal.
  - 4. Remove abandoned pipe, ducts, conduits, and equipment, including those above accessible ceilings; remove back to source of supply where possible, otherwise cap stub and tag with identification.
- D. Protect existing work to remain.
  - 1. Provide shoring and bracing if necessary.
  - 2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
  - 3. Repair adjacent construction and finishes damaged during removal work.
  - 4. Patch as specified for patching new work.

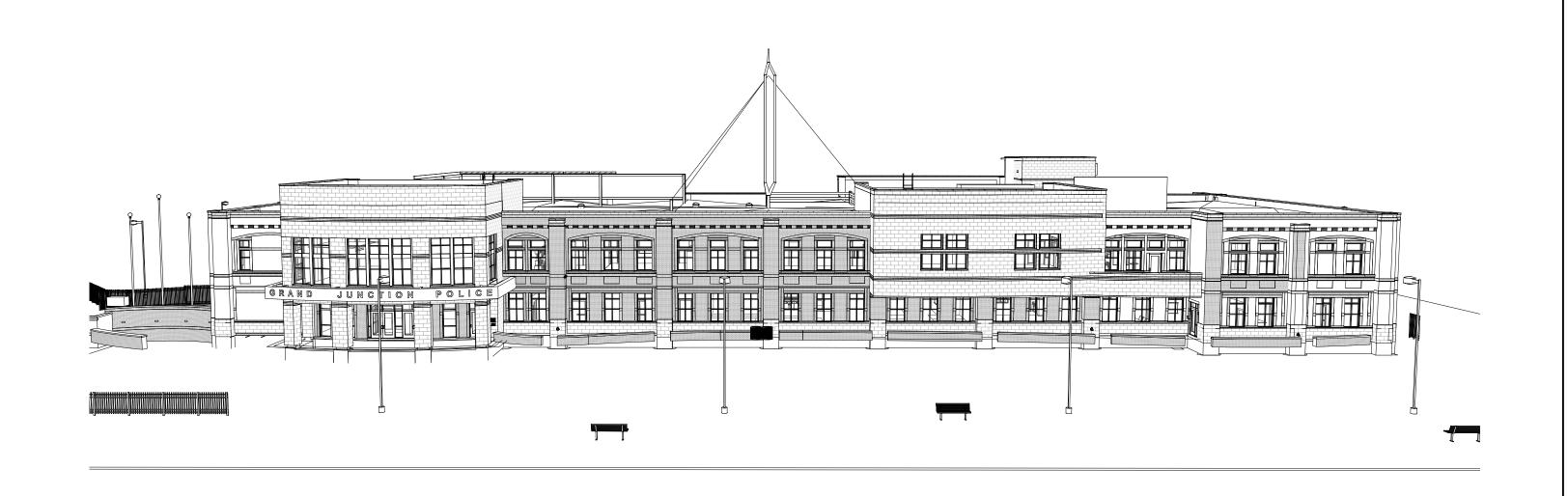
#### 3.05 DEBRIS AND WASTE REMOVAL

- A. Remove debris, junk, and trash from site.
- B. Leave site in clean condition, ready for subsequent work.
- C. Clean up spillage and wind-blown debris from public and private lands.

# GRAND JUNCTION PUBLIC SAFETY FACILITIES RENOVATION

911 REGIONAL COMMUNICATION CENTER AND POLICE BUILDING

BG + CO. PROJECT # 1949 555 UTE AVENUE GRAND JUNCTION, CO



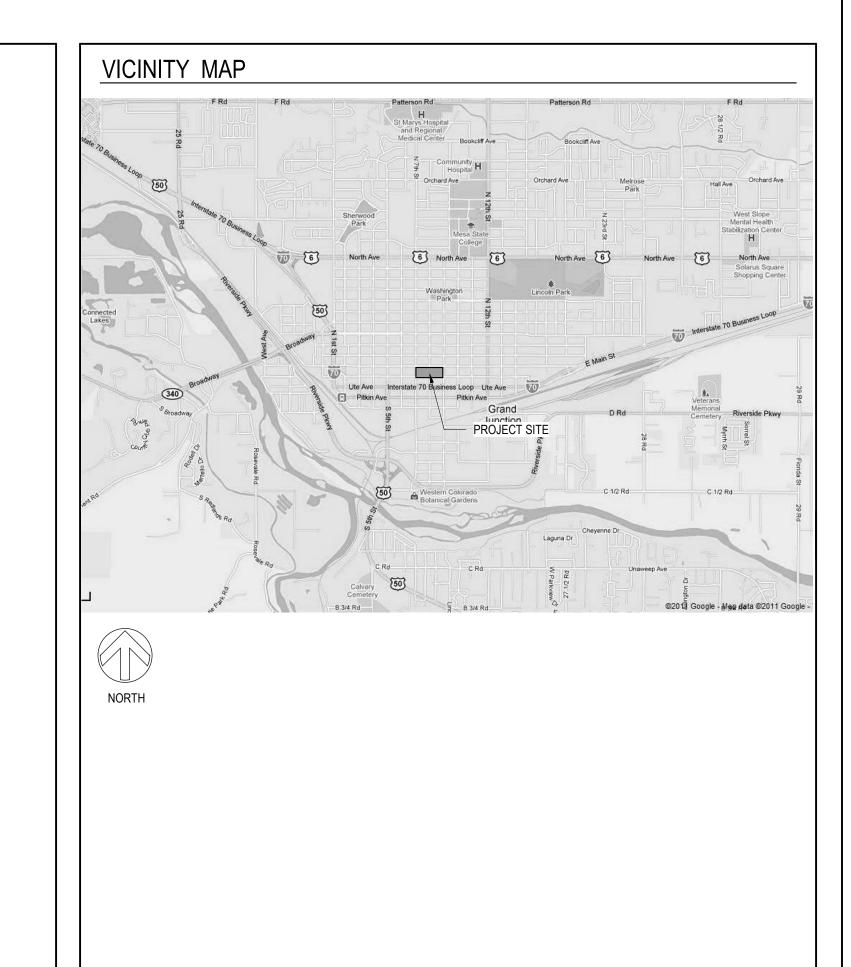
# FOR CONSTRUCTION

02/10/2020

## SYMBOLS LEGEND MATERIALS LEGEND **ROOM TAG** ASPHALT PAV' (SECTION) ASPHALT PAVING DOOR TAG 27 -WALL TAG GRANULAR FILL (SECTION) NEW COLUMN GRID LINE STRUCTURAL FILL (SECTION) EXISTING COLUMN GRIDLINE CONCRETE (PLAN & SECTION) WINDOW / FRAME TYPE 1 VIEW NAME A1-1 1/8" = 1'-0" BRICK VENEER DRAWING REFERENCE CONCRETE MASONRY UNITS (CMU) (PLAN & SECTION) ELEVATION OR DETAIL NUMBER SHEET THAT DETAIL IS ON PRECAST CONCRETE (SECTION) BUILDING SECTION INDICATOR ELEVATION OR DETAIL NUMBER OD SHEET THAT DETAIL IS ON WALL SECTION INDICATOR SIGN TAG WOOD BLOCKING (CONTINUOUS) (SECTION) **ELEVATION INDICATOR** WOOD BLOCKING (INTERMITTENT) (SECLION) WOOD SHEATHING DIMENSION LINES WOOD (FINISH) (SECTION & ELEVATION) **NEW CONTOUR** INSULATION (FIBROUS) (PLAN & SECTION) HIDDEN LINE \_ \_ \_ \_ \_ \_ \_ INSULATION (RIGID) (PLAN & SECTION) OVERHEAD OBJECT \_\_\_\_\_ STUCCO (SECTION) CENTER LINE \_\_\_\_\_ STUCCO (ELEVATION) MATCH LINE ------GYPSUM WALL BOARD (GWB) (REFLECTED CEILING PLAN) LIMITS OF CONSTRUCTION \_ . . . . . . \_ NOTE: SOME MATERIALS SHOWN MAY NOT BE USED ON THIS PROJECT.

**DEMOLISHED ITEMS** 

ADD-X AFF	ADDENDUM NO. X ABOVE FINISH FLOOR	HVAC	HEATING VENTILATING & AIR CONDITIONING	UNO VCT	UNLESS NOTED OTHERW
AHU	AIR HANDLING UNIT	ID	INSIDE DIAMETER	VERT	VERTICAL
AL	ALUMINUM	ILLUM	ILLUMINATED	VFY	VERIFY
ALTV	ALTERNATE NO. Y	INCL	INCLUDED	VIF	VERIFY IN FIELD
ALT-X AM	ALTERNATE NO. X ACOUSTIC MATERIAL	INSUL INT	INSULATION INTERIOR	VWC W	VINYL WALL COVERING WIDE / WIDTH
AM-X	ACOUSTIC MATERIAL TYPE X	JT	JOINT	W/	WITH
ARCH	ARCHITECT / ARCHITECTURAL	Ĺ	LONG / LENGTH	W/O	WITHOUT
ATTEN	ATTENUATION	LAV	LAVATORY	WD	WOOD
AVE	AVENUE	LLH	LONG LEG HORIZONTAL	WOM	WALK OFF MAT
AVG B.O.	AVERAGE BOTTOM OF	LLV MAS	LONG LEG VERTICAL MASONRY		
B.O. BIT	BITUMINOUS	MATL	MATERIAL		
BLDG	BUILDING	MAX	MAXIMUM		
BLKG	BLOCKING	MECH	MECHANICAL		
C/L	CENTER LINE	MFR	MANUFACTURER		
CEM CJ	CEMENT / CEMENTITIOUS CONTROL JOINT	MIN MISC	MINIMUM MISCELLANEOUS		
CLG	CEILING	MO	MASONRY OPENING		
CLR	CLEAR	MTD	MOUNTED		
CMU	CONCRETE MASONRY UNIT(S)	MTL	METAL		
CONC	CONCRETE	NA	NOT APPLICABLE		
CONT CPT	CONTINUOUS CARPET	NIC NO.	NOT IN CONTRACT NUMBER		
CFT	CERAMIC TILE	NRC	NOISE REDUCTION COEFFICIENT		
CTR	CENTER	NTS	NOT TO SCALE		
D	DEEP / DEPTH	OC	ON CENTER		
DBL	DOUBLE PENOLITION	OD	OUTSIDE DIAMETER		
DEMO DEPT	DEMOLISH / DEMOLITION DEPARTMENT	OPNG OPP	OPENING OPPOSITE		
DEFT	DRINKING FOUNTAIN	PERF	PERFORATED		
DIA / Ø		PLAM	PLASTIC LAMINATE		
DIM(S)	DIMENSION(S)	PLBG	PLUMBING		
DN	DOWN		PLYWOOD		
DTL DW	DETAIL DISHWASHER	PNT	PAINT PREFABRICATED		
DWG	DRAWING		PREFINISHED		
EA	EACH	PT	PORCELAIN TILE		
EJ	EXPANSION JOINT	QT	QUARRY TILE		
EL	ELEVATION	QTY	QUANTITY		
ELEC EQ	ELECTRICAL EQUAL	R RB	RADIUS RUBBER BASE		
EQUIP	EQUIPMENT	RCP	REFLECTED CEILING PLAN		
EWC	ELECTRIC WATER COOLER	REF	REFERENCE / REFER TO		
EXIST	EXISTING	REFR	REFRIGERATOR		
EXT	EXTERIOR	REINF	REINFORCE (D) (ING)		
F.O. FAAB	FACE OF FLUID APPLIED AIR BARRIER	REQD RES	REQUIRED RESILIENT		
FAAP	FIRE ALARM ANNUNCIATOR PANEL	RFS	ROOM FINISH SCHEDULE		
FACP	FIRE ALARM CONTROL PANEL	RO	ROUGH OPENING		
FBO	FURNISHED BY OWNER	ROW	RIGHT OF WAY		
FD FDN	FLOOR DRAIN FOUNDATION	RTU SC	ROOF TOP UNIT SEALED CONCRETE		
FEN FE	FIRE EXTINGUISHER		SCHEDULE (D)		
FEC	FIRE EXTINGUISHER CABINET	SECT	SECTION		
FF	FINISHED FLOOR	SF	SQUARE FEET		
FTG	FOOTING	SFT	STORE FRONT		
FURN	FURNISHING / FURNITURE	SIM SPEC	SIMILAR		
GA GALV	GAGE GALVANIZED	SPEC	SPECIFICATION SQUARE		
GL	GLAZING	SS	STAINLESS STEEL		
GL-X	GLAZING TYPE X	SSM	SOLID SURFACE MATERIAL		
GWB	GYPSUM WALL BOARD	STL	STEEL		
H	HIGH / HEIGHT	STN	STAIN		
HC HDW	HANDICAPPED HARDWARE	T&G	STRUCTURAL TONGUE & GROOVE		
HDWD	HARDWOOD	T.O.	TOP OF		
HM	HOLLOW METAL	TEMP	TEMPORARY		
HORIZ	HORIZONTAL	TV	TELEVISION		
		TYP	TYPICAL		



PROJECT DESIGN TEAM



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970-242-1058 office

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Consulting
Engineers, Inc.
Mechanical & Electrical Engineers
386 Indian Road

Mechanical & Electrical Engine 386 Indian Road Grand Junction, CO 81501 phone: 970-241-8709,

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GRAND JUNCTION PUBLIC SAFETY FACILITIES: 911 REGIONAL COMMUNICATION CENTER AND POLICE BUILDING RENOVATION

555 UTE AVENUE GRAND JUNCTION, CO 81501

TITLE SHEET

FOR CONSTRUCTION

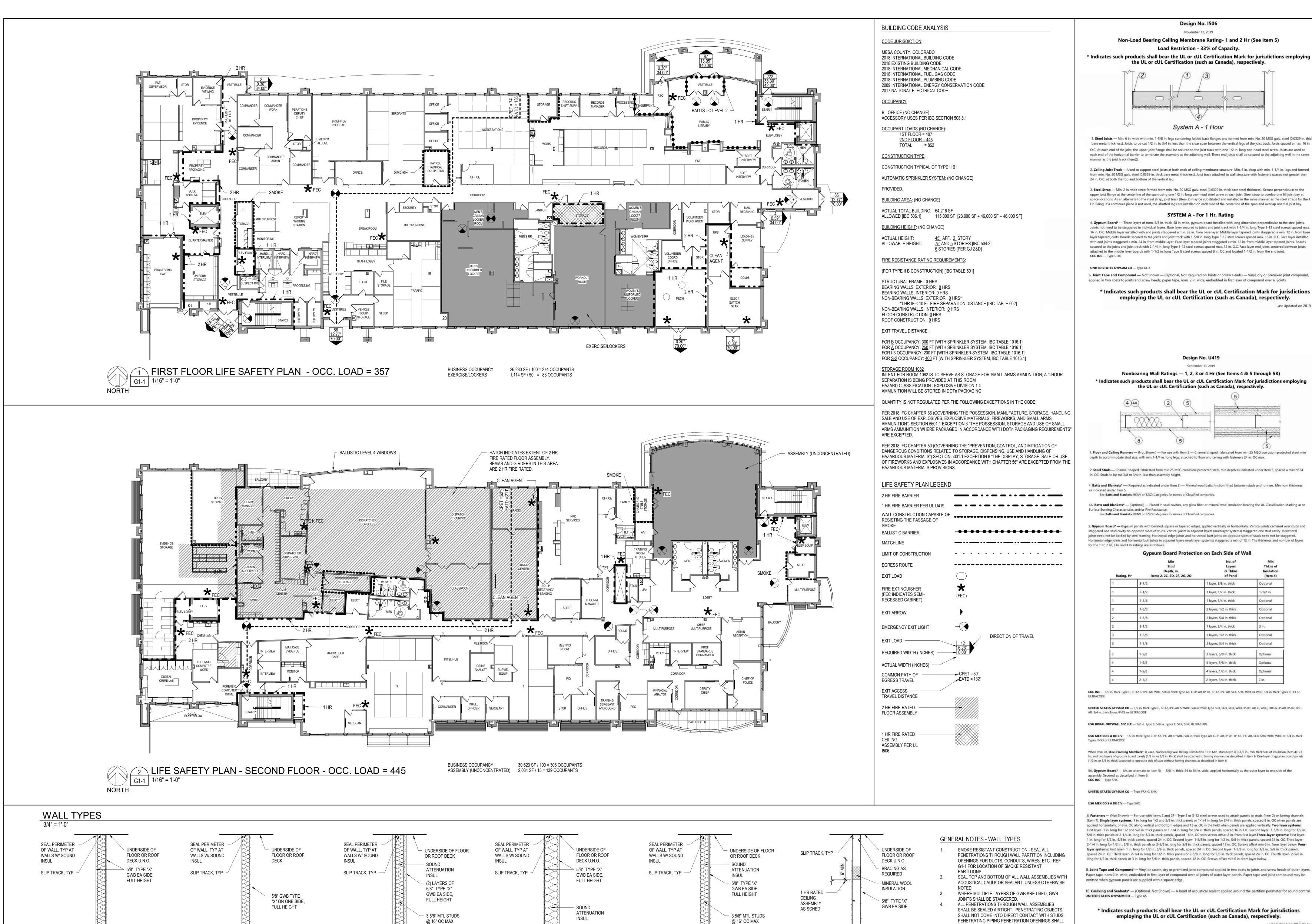
REVISIONS

DATE: 02/10/2020

PROJECT #: 1949

G0-1

lect I eam: t Date: 2/10/2020 2:06:41 PN



— 6" MTL STUDS @

BASE AS SCHED

SEAL PERIMETER

WALLS W/ SOUND

OF WALL, TYP AT

16" OC MAX

SEAL PERIMETER

OF WALL, TYP AT

WALLS W/ SOUND

BASE AS SCHED

Design No. 1506 November 12, 2019 Non-Load Bearing Ceiling Membrane Rating- 1 and 2 Hr (See Item 5)

> Interior Design Project Management **622 Rood Avenue** Grand Junction, CO 81501 970-242-1058 office

> > BLYTHE GROUP + co.

**GRAND JUNCTION PUBLIC** 

**SAFETY FACILITIES: 911** 

**REGIONAL** 

AND POLICE BUILDING

RENOVATION

**555 UTE AVENUE** 

**GRAND JUNCTION, CO** 

LIFE SAFETY PLANS, **BUILDING CODE** 

ANALYSIS, AND WALL

**TYPES** 

FOR CONSTRUCTION

**REVISIONS** 

COMMUNICATION CENTER

1. Steel Joists — Min. 6 in. wide with min. 1-5/8 in. legs containing folded back flanges and formed from min. No. 20 MSG galv. steel (0.0329 in. thick bare metal thickness). Joists to be cut 1/2 in. to 3/4 in. less than the clear span between the vertical legs of the joist track. Joists spaced a max. 16 in.

2. Ceiling Joist Track — Used to support steel joists at both ends of ceiling membrane structure. Min. 6 in. deep with min. 1-1/4 in. legs and formed from min. No. 20 MSG galv. steel (0.0329 in. thick bare metal thickness). Joist track attached to wall structure with fasteners spaced not greater than

3. Steel Strap — Min. 2 in. wide strap formed from min. No. 20 MSG galv. steel (0.0329 in. thick bare steel thickness). Secure perpendicular to the upper joist flange at the centerline of the span using one 1/2 in. long pan-head steel screw at each joist. Steel strap to overlap one fill joist bay at splice locations. As an alternate to the steel strap, joist track (Item 2) may be substituted and installed in the same manner as the steel straps for the 1 Hr. Raing. If a continues piece is not used, the abutted legs are installed on each side of the centerline of the span and overlap one full joist bay.

#### SYSTEM A - For 1 Hr. Rating

4. Gypsum Board\* — Three layers of nom. 5/8 in. thick, 48 in. wide, gypsum board installed with long dimension perpendicular to the steel joists. Joints not need to be staggered in individual layers. Base layer secured to joists and joist track with 1-1/4 in. long Type S-12 steel screws spaced max. 16 in. O.C. Middle layer installed with end joints staggered a min. 32 in. from base layer. Middle layer tapered joints staggered a min. 12 in. from base layer tapered joints. Boards secured to the joists and joist track with 1-5/8 in, long Type S-12 steel screws spaced max. 16 in, O.C. Face layer installed with end joints staggered a min. 24 in. from middle layer. Face layer tapered joints staggered a min. 12 in. from middle layer tapered joints. Boards secured to the joists and joist track with 2-1/4 in. long Type S-12 steel screws spaced max. 12 in. O.C. Face layer end joints centered between joists, attached to the middle layer boards with 1-1/2 in. long Type G steel screws spaced 8 in. OC and located 1-1/2 in. from the end joint.

6. Joint Tape and Compound — Not Shown — (Optional, Not Required on Joints or Screw Heads) — Vinyl, dry or premixed joint compound, applied in two coats to joints and screw heads; paper tape, nom. 2 in. wide, embedded in first layer of compound over all joints.

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

# Design No. U419

# the UL or cUL Certification (such as Canada), respectively.

September 13, 2019

1. Floor and Ceiling Runners — (Not Shown) — For use with Item 2 — Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min

2. Steel Studs — Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24

4. Batts and Blankets\* — (Required as indicated under Item 5) — Mineral wool batts, friction fitted between studs and runners. Min nom thickness

4A. Batts and Blankets\* — (Optional) — Placed in stud cavities, any glass fiber or mineral wool insulation bearing the UL Classification Marking as to

5. Gypsum Board\* — Gypsum panels with beveled, square or tapered edges, applied vertically or horizontally. Vertical joints centered over studs and taggered one stud cavity on opposite sides of studs. Vertical joints in adjacent layers (multilayer systems) staggered one stud cavity. Horizontal joints need not be backed by steel framing. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered. Horizontal edge joints and horizontal butt joints in adjacent layers (multilayer systems) staggered a min of 12 in. The thickness and number of layers

# **Gypsum Board Protection on Each Side of Wall**

Rating, Hr	Min Stud Depth, in. Items 2, 2C, 2D, 2F, 2G, 2O	No. of Layers & Thkns of Panel	Min Thkns of Insulation (Item 4)
1	3-1/2	1 layer, 5/8 in. thick	Optional
1	2+1/2	1 layer, 1/2 in. thick	1-1/2 in.
1	1-5/8	1 layer, 3/4 in. thick	Optional
2	1-5/8	2 layers, 1/2 in. thick	Optional
2	1-5/8	2 layers, 5/8 in. thick	Optional
2	3-1/2	1 layer, 3/4 in. thick	3 in.
3	1-5/8	3 layers, 1/2 in. thick	Optional
3	1-5/8	2 layers, 3/4 in. thick	Optional
3	1-5/8	3 layers, 5/8 in. thick	Optional
4	1-5/8	4 layers, 5/8 in. thick	Optional
4	1-5/8	4 layers, 1/2 in. thick	Optional
4	2-1/2	2 layers, 3/4 in. thick	2 in.

CGC INC — 1/2 in. thick Type C, IP-X2 or IPC-AR; WRC, 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRX or WRC; 3/4 in. thick Types IP-X3 or

UNITED STATES GYPSUM CO — 1/2 in. thick Type C, IP-X2, IPC-AR or WRC; 5/8 in. thick Type SCX, SGX, SHX, WRX, IP-X1, AR, C, WRC, FRX-G, IP-AR, IP-X2, IPC-

USG BORAL DRYWALL SFZ LLC — 1/2 in. Type C; 5/8 in. Types C, SCX, SGX, ULTRACODE

BE OVERSIZED AND WRAPPED WITH CLOSED CELL PIPE

PROVIDE MOISTURE RESISTANT GWB AT ALL WET

FASTEN TOPS OF ALL STUDS WITH SEISMIC DRIFT

WALLS ARE TO BE BUILT AROUND EXISTING DUCTS,

DEFLECTION NOT TO EXCEED L/240 AT 5 PSF

ANY EXISTING PENETRATIONS.

CONDUITS, WIRES, ETC IN LOCATIONS WHERE NEW

WALLS ARE REQUIRED [REF A1-1 FOR LOCATIONS]. SEAL

USE GLASS MAT WATER RESISTANT COATING TO MEET

ASTM C1178 BEHIND TILE INSTALLATION. GYPSUM CORPORATION "DENSHIELD TILE BACKER" OR

INSULATION.

LOCATIONS.

EQUIVALENT.

3 5/8" MTL STUDS

BASE AS SCHED

@ 16" OC MAX

1/2" RESILIENT

BASE AS SCHED

6 EST. STC RATING: 50

RATING: 52.

7 8" MTL STUD' EST. STC

CHANNEL @ 24" OC

SEAL PERIMETER

OF WALL, TYP AT

INSUL

WALLS W/ SOUND

USG MEXICO S A DE C V - 1/2 in. thick Type C, IP-X2, IPC-AR or WRC; 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRX, WRX or; 3/4 in. thick

When Item 78, Steel Framing Members\*, is used, Nonbearing Wall Rating is limited to 1 Hr. Min. stud depth is 3-1/2 in., min. thickness of insulation (Item 4) is 3 in., and two layers of gypsum board panels (1/2 in. or 5/8 in. thick) shall be attached to furring channels as described in Item 6. One layer of gypsum board panels (1/2 in. or 5/8 in. thick) attached to opposite side of stud without furring channels as described in Item 6.

5A. Gypsum Board\* — (As an alternate to Item 5) — 5/8 in. thick, 24 to 54 in. wide, applied horizontally as the outer layer to one side of the

6. Fasteners — (Not Shown) — For use with Items 2 and 2F - Type S or S-12 steel screws used to attach panels to studs (Item 2) or furring channels (Item 7). Single layer systems: 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 8 in. OC when panels are applied horizontally, or 8 in. OC along vertical and bottom edges and 12 in. OC in the field when panels are applied vertically. Two layer systems: First layer- 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels or 2-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC with screws offset 8 in. from first layer. Three-layer systems: First layer-1 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer-2-1/4 in. long for 1/2 in., 5/8 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from layer below. Fourlayer systems: First layer- 1 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 in. OC. Fourth layer- 2-5/8 in.

8. Joint Tape and Compound — Vinyl or casein, dry or premixed joint compound applied in two coats to joints and screw heads of outer layers. Paper tape, nom 2 in. wide, embedded in first layer of compound over all joints of outer layer panels. Paper tape and joint compound may be

10. Caulking and Sealants\* — (Optional, Not Shown) — A bead of acoustical sealant applied around the partition perimeter for sound control.

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions

employing the UL or cUL Certification (such as Canada), respectively.

Last Updated on 2019-09-13

DATE: 02/10/2020

PROJECT #: 1949

SHEET #:

**G1-1** 

SEAL PERIMETER

WALLS W/ SOUND

OF WALL, TYP AT

- SOUND

ATTENUATION

- 3 5/8" MTL STUDS

BASE AS SCHED

SEAL PERIMETER

OF WALL, TYP AT

WALLS W/ SOUND

@ 16" OC MAX

ATTENUATION

3 5/8" MTL STUDS

BASE AS SCHED

SEAL PERIMETER

OF WALL, TYP AT

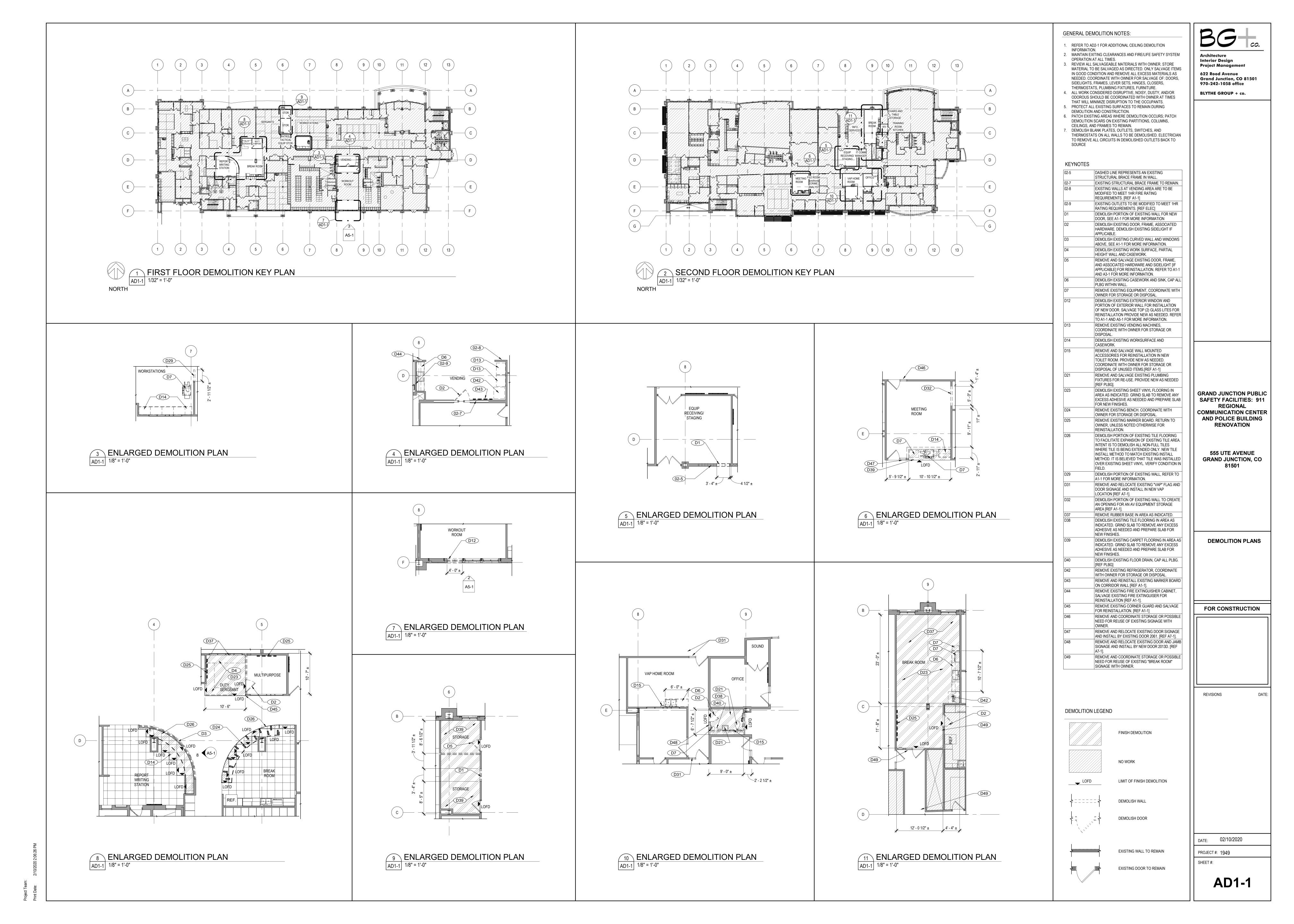
WALLS W/ SOUND

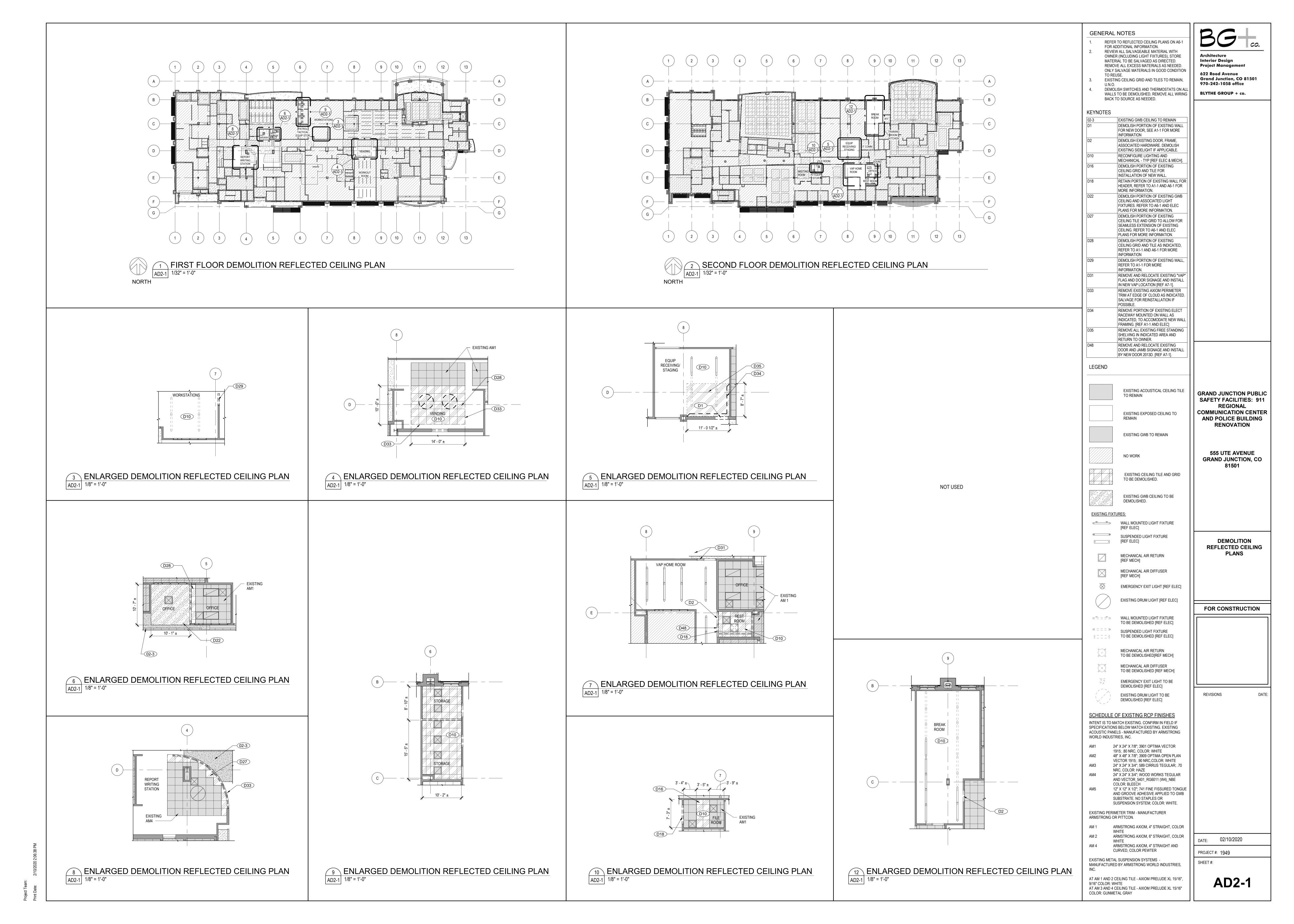
@ 16" OC MAX

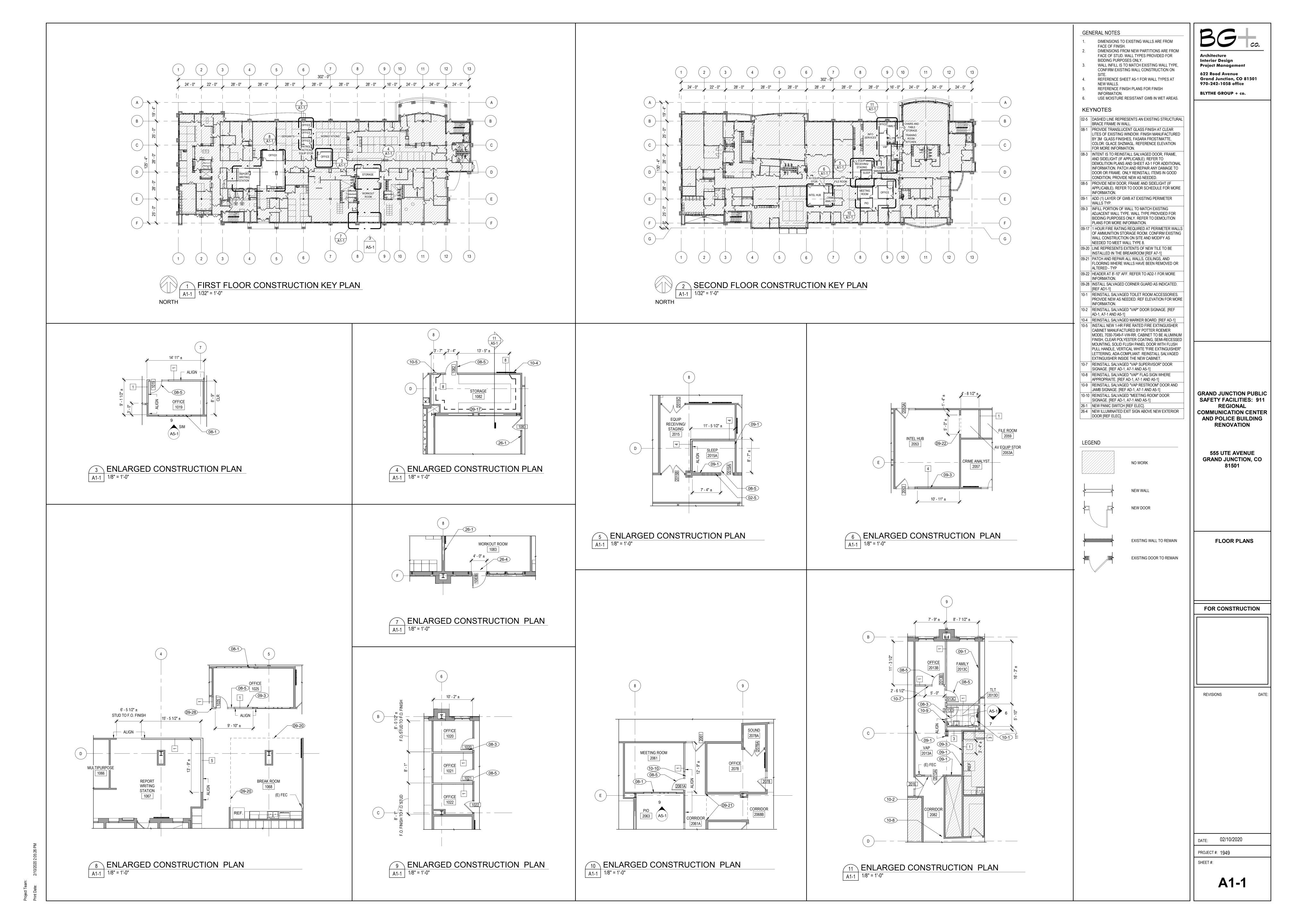
INSUL

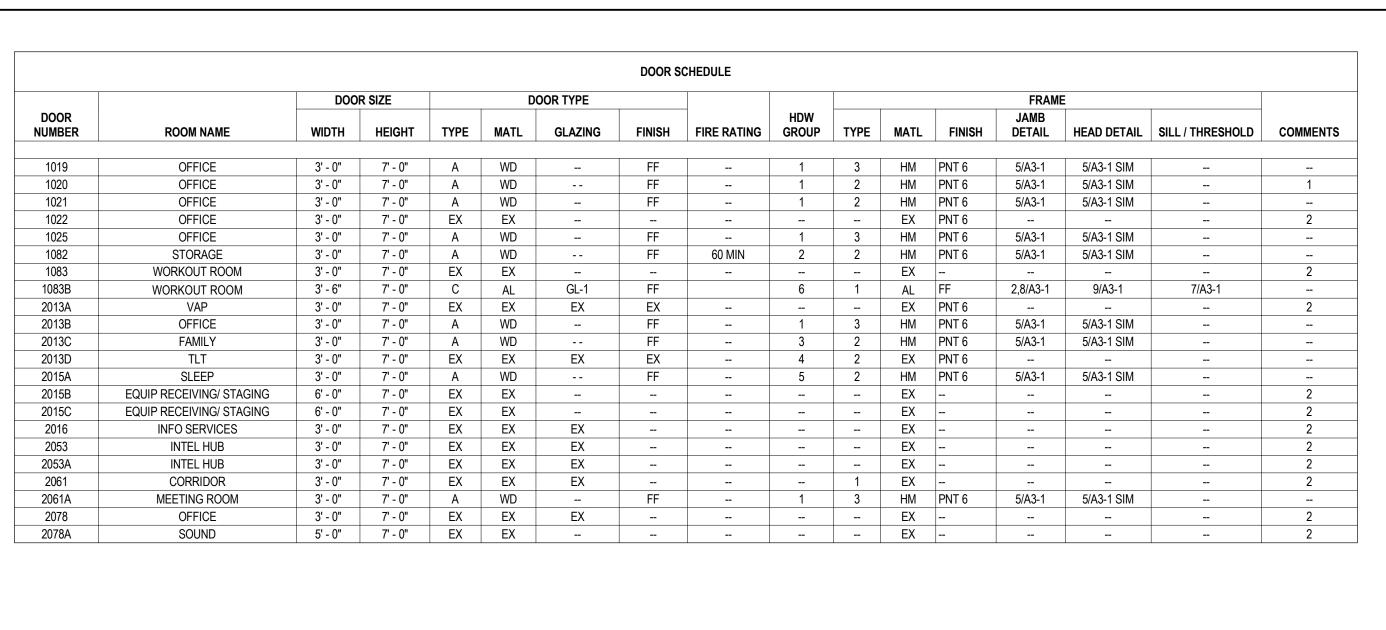
1 EST. STC RATING: 47

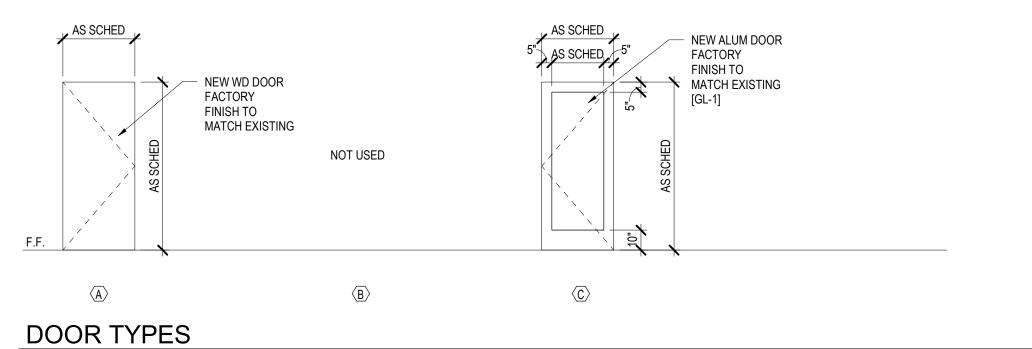
2 W/O INSUL. EST STC RATING: 37

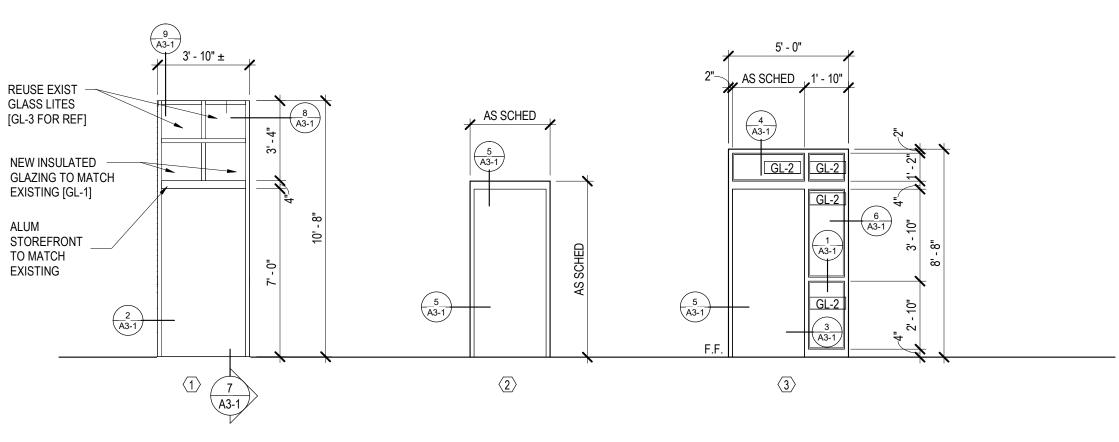










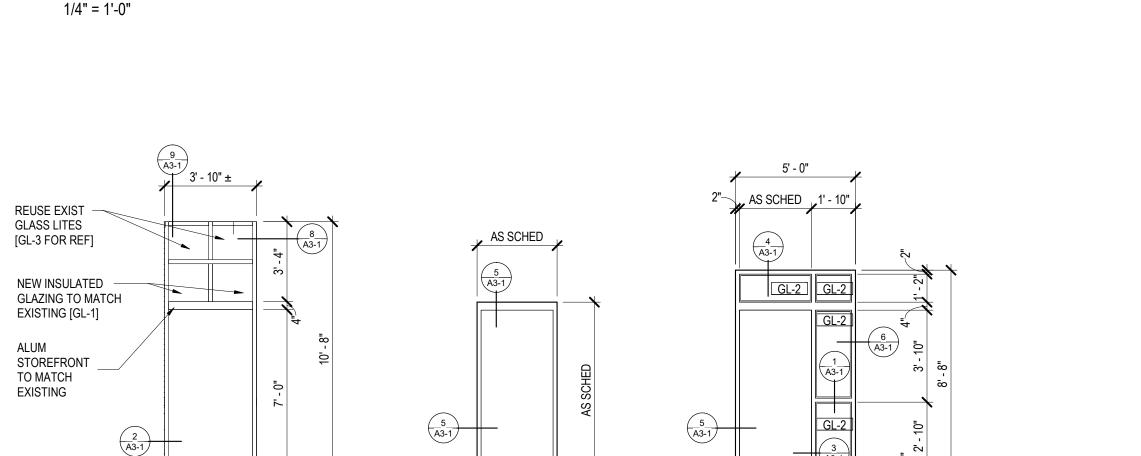


ADJUSTABLE SEISMIC

MASONRY TIES, TYP -

2 ALUM DOOR JAMB

A3-1 1 1/2" = 1'-0"



FRAME ELEVATIONS

1/4" = 1'-0"

NOTE: HEAD IS SIM

SINGLE RABBET

1 HM WINDOW MULLION

HM FRAME

A3-1 1 1/2" = 1'-0"

# SCHEDULE COMMENTS

INTENT IS TO REINSTALL SALVAGED DOOR, FRAME, ASSOCIATED HARDWARE, AND SIDE LITE IF APPLICABLE. HARDWARE GROUP LISTED FOR REFERENCE.

EXISTING DOOR, FRAME, AND ASSOCIATED HARDWARE TO REMAIN, NO WORK,

WD WOOD

- **GENERAL NOTES** WHERE HARDWARE ITEMS ARE REMOVED FROM EXISTING DOORS,
- REPAINT SALVAGED/RELOCATED HM FRAMES SPECIFICATIONS PULLED FROM PREVIOUS PROJECT RECORD DOCUMENTATION. INTENT IS TO MATCH ALL EXISTING FRAMES, DOORS AND GLAZING SPECIFICATIONS, CONFIRM EXISTING IN

# <u>ABBREVIATIONS</u>

PATCH HOLES.

- ALUM ALUMINUM PNT PAINT DHM DETENTION HOLLOW METAL SS STAINLESS STEEL EX EXISTING STEEL FF FACTORY FINISH STN STAIN GL-X/# GLAZING TYPE X/# TYP TYPICAL
- HDW HARDWARE HM HOLLOW METAL MFR MANUFACTURER

3. FIRE RATED DOOR ASSEMBLIES: ASSEMBLIES COMPLYING WITH NFPA 80 THAT ARE LISTED AND LABELED BY A QUALIFIED TESTING AGENCY, FOR FIRE-PROTECTION RATINGS INDICATED, BASED ON TESTING AT POSITIVE PRESSURE ACCORDING TO NFPA 252. HM FRAME MANUFACTURER: STEELCRAFT; AN INGERSOLL-RAND COMPANY. HOLLOW METAL FRAMES: 1. WELD FLUSH FACE JOINTS CONTINUOUSLY; GRIND, FILL, DRESS AND MAKE SMOOTH, FLUSH, AND INVISIBLE. 2. SIDELIGHT AND TRANSOM BAR FRAMES: PROVIDE CLOSED TUBULAR MEMBERS WITH NO

2. STANDARD HOLLOW FRAME WORK FABRICATED ACCORDING TO ANSI/SDI A250.8

1.MINIMUM THICKNESS OF BASE METAL WITHOUT COATINGS ACCORDING TO NAAMM-HMMA 803

EXISTING HOLLOW METAL FRAME SPECIFICATIONS

**HARDWARE SETS:** 

FOR REFERENCE ONLY.

DOORS: 1019, 1020, 1021, 1025, 2061A, 2013B

LOCKSET (STOREROOM) 8204 LNP LC

LOCKSET (OFFICE)

KICK PLATE

WALL STOP

GASKETING

COAT HOOK

HINGE

DOORS: 1082

DOORS: 2013C

SET 4

SET 5

DOORS: 2015A

DOORS: 1083B

DOORS: 2013D

MORTISE CYLINDER

MORTISE CYLINDER

LOCKSET (PASSAGE)

LOCKSET (PRIVACY)

LOCKSET (PASSAGE) 8215 LNP

ELECTRIFIED SIDE PIVOT EM19

MORTISE CYLINDER

OVERHEAD STOP

DOOR CLOSER

POWER SUPPLY

WEATHERSTRIP

DOOR BOTTOM

**MANUFACTURER'S ABBREVIATIONS:** 

MORTISE CYLINDER

BO BY OTHERS

MCKINNEY

PEMKO

RIXSON

ROCKWOOD

SECURITRON BPS

SARGENT

CARD READER. ALWAYS FREE TO EGRESS.

MEETING STILE

DROP PLATE

THRESHOLD

ELECTRIFIED EXIT DEVICE 55 AD8410

ELECTROLYNX HARNESS QC-C003P

ELECTROLYNX HARNESS QC-C1500P

ELECTRIFIED EXIT DEVICE 55 56 AD8410 106 X 862 LC

WALLCARD READER BY SECURITY CONTRACTOR

DOOR POSITION SWITCH BY SECURITY CONTRACTOR

10N0200

351 O/P10EN

272A X L.A.R.

OPERATION: DOORS NORMALLY CLOSED AND LOCKED. ACCESS BY AUTHORIZED USE OF

DOOR CLOSER (HOLDER) 351 H/PH10

AUTO DOOR BOTTOM 420APKL X L.A.R.

DOOR CLOSER

MOP PLATE

KICK PLATE

WALL STOP

GASKETING

KICK PLATE

WALL STOP

PIVOT SET

GASKETING

DOOR CLOSER

KICK PLATE

WALL STOP

GASKETING

DOOR CLOSER

KICK PLATE

WALL STOP

GASKETING

NOTE INTENT IS TO MATCH EXISTING HARDWARE. CONFIRM EXISTING ON SITE.

SPECIFICATIONS PULLED FROM PREVIOUS PROJECT RECORD DOCUMENTATION

K1050 10" X 2" L.W.D. 4BE CSK

K1050 10" X 2" L.W.D. 4BE CSK

K1050 10" X 2" L.W.D. 4BE CSK

K1050 6" X 1" L.D.W. 4BE CSK

K1050 10" X 2" L.W.D. 4BE CSK

K1050 10" X 2" L.W.D. 4BE CSK

S773D @ HEAD JAMBS

1-X36 (SIZE AS REQD)

DOOR MANUFACTURERS STANDARD

DOOR MANUFACTURERS STANDARD

DOOR MANUFACTURERS STANDARD

S773D @ HEAD JAMBS

S773D @ HEAD JAMBS

S773D @ HEAD JAMBS

S773D @ HEAD JAMBS

US26D MK

US26D SA

626 MC

US32D RO

US26D RO

US26D RO

US26D MK

US26D SA

626 MC

US32D RO

US26D RO

US26D MK

US26D SA

US32D RO

US26D RO

US26D MK

US26D SA

US32D RO

US32D RO

US26D RO

US26D MK

US26D SA

US32D RO

QC626 RF

US32D SA

US32D SA

630 RF

US26D RO

TA2714 4-1/2"

8205 LNP LC

TA2714 4-1/2"

351 O/P10EN

TA2714 4-1/2"

351 O/P10EN

TA2714 4-1/2"

SG 49 8265 LNP

351 O/P10EN

TA2714 4-1/2"

8215 LNP

10N0200

10N0200

VISIBLE FACE SEAMS OR JOINTS, FABRICATED FROM SAME MATERIAL AS DOOR FRAME. FASTEN MEMBERS AT CROSSINGS AND TO JAMBS BY BUTT WELDING. 3.LOCATED JAMB ANCHORS NOT MORE THAN 18 INCHES FROM TOP AND BOTTOM OF FRAME. SPACE ANCHORS NOT MORE THAN 32 INCHES O.C. AND FOUR ANCHORS PER JAMB FROM 60 TO 90 INCHES HIGH.

# **EXISTING WD DOOR SPECIFICATIONS**

HOLLOW METAL FRAMES:

OR SDI A250.8

- FLUSH WOOD DOORS: 1. PROVIDE AWI QUALITY CERTIFICATION LABELS OR AN AWI LETTER OF LICENSING FOR PROJECT INDICATING THAT DOORS COMPLY WITH REQUIREMENTS OF GRADES SPECIFIED. 2. FIRE RATED WOOD DOORS COMPLYING WITH NFPA 80 THAT ARE LISTED AND LABELED BY QUALIFIED TESTING AGENCY, FOR FIRE-PROTECTION RATINGS INDICATED, BASED ON TESTING AT POSITIVE PRESSURE ACCORDING TO NFPA 252.
- WD DOOR MANUFACTURER: GRAHAM WOOD DOORS - QTR SAWN WHITE MAPLE FLUSH WOOD DOORS:

VENEER CUT: QUARTER CUT

4. SHEEN TO MATCH EXISTING.

TRANSPARENT FINISH:

VENEER SPECIES: SELECT WHITE, HARD MAPLE

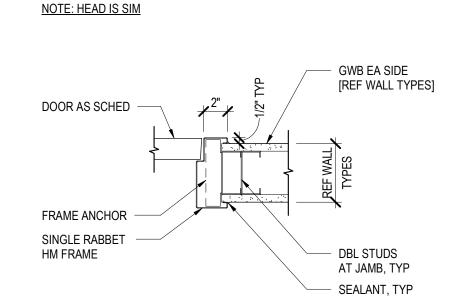
- **BOOK MATCH VENEER LEAVES** EXPOSED VERTICAL AND TOP EDGES, SAME SPECIES AS FACES PARTICLE BOARD OR STRUCTURAL COMPOSITE LUMBER CORE FIVE TO SEVEN PLIES. STILES AND RAILS ARE BONDED TO CORE, THEN ENTIRE UNIT ABRASIVE PLANED BEFORE VENEERING. FACES ARE BONDED TO CORE USING A HOT PRESS.
- 1. GRADE: CUSTOM 2. FINISH: WDMA TR-6 CATALYZED POLYURETHANE. 3. STAINING TO MATCH EXISTING.

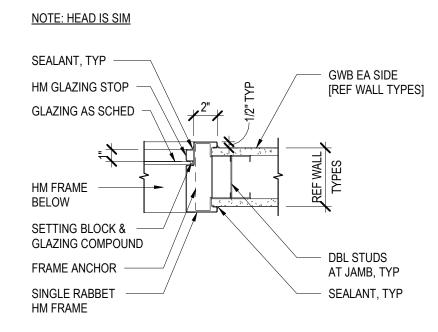
# **EXISTING ALUMINUM FRAME AND DOOR SPECIFICATIONS**

- ALUMINUM DOORS AND FRAMES: 1. ALUMINUM: ALLOY AND TEMPER RECOMMENDED BY MANUFACTURER FOR TYPE OF USE AND
- FINISH INDICATED. 2. SHEET AND PLATE - ASTM B 209
- 3. EXTRUDED BARS, RODS, PROFILES, AND TUBES ASTM B 221 4. STRUCTURAL PROFILES - ASTMB 308/B 308M.
- FRAMING MEMBERS: 1. MANUFACTURERS STANDARD EXTRUDED-ALUMINUM FRAMING MEMBERS OF THICKNESS REQUIRED AND REINFORCED AS REQUIRED TO SUPPORT IMPOSED LOADS.
- 2. CONSTRUCTION; THERMALLY BROKEN. 3. GLAZING SYSTEM: RETAINED MECHANICALLY WITH GASKETS ON FOUR SIDES. 4. GLAZING PLANE: CENTER.
- 5. CONCRETE AND MASONRY INSERTS: HOT-DIP GALVANIZED CAST-IRON, MALLEABLE IRON, OR STEEL INSERTS, COMPLYING WITH ASTM A 123/A 123M OR ASTM A 153/A 153M 6. REINFORCE AS REQUIRED TO SUPPORT LOADS IMPOSED BY DOOR OPERATION AND FOR INSTALLING HARDWARE.
- ALUMINUM ENTRANCE DOORS: 1. DOOR CONSTRUCTION: 2" OVERALL THICKNESS, WITH MINIMUM .188" THICK, EXTRUDED-ALUMINUM TUBULAR RAIL AND STILE MEMBERS. MECHANICALLY FASTEN CORNERS WITH REINFORCING BRACKETS THAT ARE DEEPLY PENETRATED AND FILLET WELDED OC THAT INCORPORATE CONCEALED TIE RODS. 3. HIGH-PERFORMANCE PLASTIC CONNECTORS SEPARATE ALUMINUM MEMBERS EXPOSED TP
- THF FXTERIOR FROM MEMBERS EXPOSED TO THE INTERIOR. 4. GLAZING STOPS AND GASKETS: SQUARE, SNAP-ON, EXTRUDED ALUMINUM STOPS AND PREFORMED GASKETS. PROVIDE NON-REMOVABLE GLAZING STOPS ON OUTSIDE OF DOOR. 5.REINFORCE DOOR AS REQUIRED TO INSTALL HARDWARE. ALUMINUM FINISHES:
- 1.HIGH PERFORMANCE FINISH: ARCHITECTURAL CLASS I ANODIZED IN ACCEPTANCE WITH ALUMINUM ASSOCIATION SPECIFICATION AAM12C22A41. PREPARE, PRETREAT, AND APPLY COATING TO EXPOSED METAL SURFACES TO COMPLY WITH COATING AND RESIN MANUFACTURERS WRITTEN INSTRUCTIONS. 2. COLOR: EFCO 215-R1 CLEAR, CLASS ANDCL1CLR

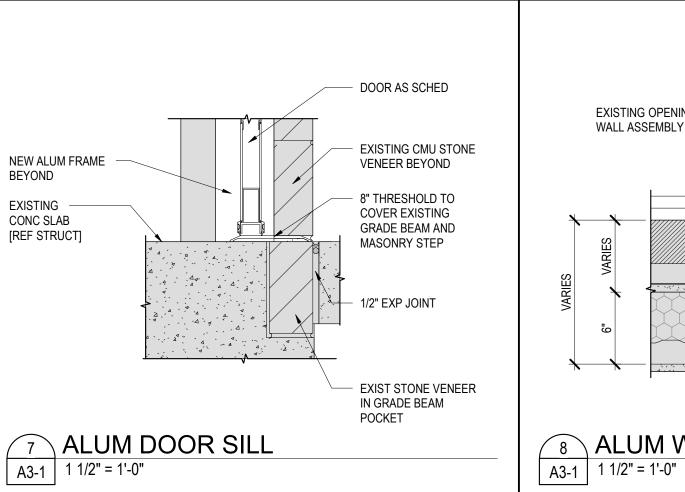
# **EXISTING GLAZING SPECIFICATIONS**

- GL-1: LOW-E COATED, INSULATING GLASS. 1. INSULATED GLASS TEMPERED (BASED ON PPG SOLARBAN 60 LOW-E SYSTEM)
- 2. INNER PANE CLEAR GLASS. 3. OUTER PANE - CLEAR GLASS, LOW-E COATING ON SURFACE 2.
- 4. OVERALL UNIT THICKNESS: 1 INCH 5. THICKNESS OF EACH GLASS LITE: 1/4 INCH
- 6. INTERSPACE CONTENT: AIR 7. LOW-E COATING: SPUTTER COATED. 8. VISIBLE LIGHT TRANSMITTANCE: 70% MINIMUM
- 9. WINTER NIGHTTIME U-FACTOR: .29 MAXIMUM 10. SUMMER DAYTIME U-FACTOR: .27 MAXIMUM
- 11. SOLAR HEAT GAIN COEFFICIENT: .38 MAXIMUM 12. THE GLAZING ON THE NORTH AND THE EAST ELEVATIONS ARE THIS TYPE
- GL-2: CLEAR FULLY TEMPERED FLOAT GLASS. 1. THICKNESS - 6 MM (1/4") 2. PROVIDE SAFETY GLAZING LABEL.
- GL-3: SPANDEL GLASS, OPAQUE INSULATING GLASS. 1. INSULATED GLASS
- 2. INNER PANE CLEAR GLASS, OPACI COAT 300 ON SURFACE 4 3. OUTER PANE - GLASS PPG SOLEXIA
- 4. OVERALL UNIT THICKNESS: 1 INCH 5. THICKNESS OF EACH GLASS LITE: 1/4 INCH
- 6. INTERSPACE CONTENT: AIR
- 7. COLOR TO MATCH EXISTING 8. LOCATED AS INDICATED ON DRAWINGS.





6 HM WINDOW JAMB



SEALANT, TYP

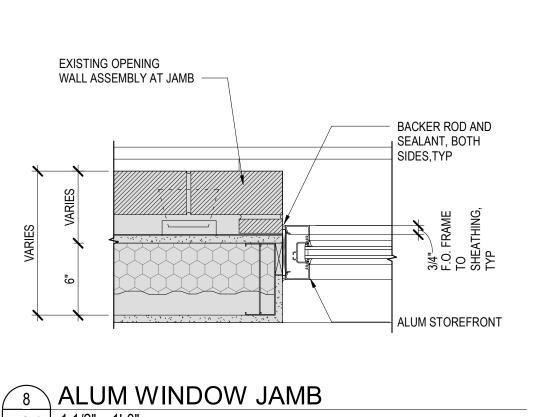
HM GLAZING STOP

GLAZING AS SCHED

SETTING BLOCK &

- HM FRAME BELOW

GLAZING COMPOUND



**ENGINEERED** 

STONE BELOW

BRICK VENEER [OR ENGINEERED STONE]

AND SEAL TO FACE

EXT SHEATHING

**BLDG WRAP INTO OPNG** 

SEALANT, BOTH SIDES, TYP

ALUM BALLISTIC FRAME

- R-21 SPRAY FOAM INSUL

DBL STUDS @ JAMB, TYP

AND GLAZING

5/8" GWB

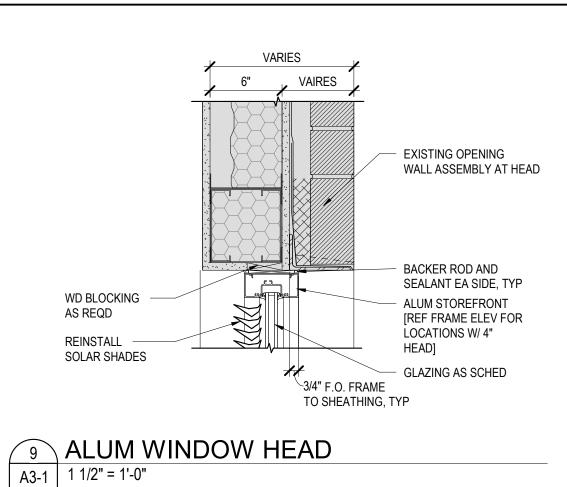
DOOR AS

SINGLE RABBET

HM FRAME

A3-1 1 1/2" = 1'-0"

SCHED



SEALANT, TYP

HM GLAZING STOP

- GLAZING AS SCHED

SETTING BLOCK &

HM FRAME BELOW

GLAZING COMPOUND

3 HM DR SIDE LITE MULLION 4 HM WINDOW HEAD 5 HM DOOR JAMB/HEAD A3-1 1 1/2" = 1'-0" A3-1 1 1/2" = 1'-0" A3-1 1 1/2" = 1'-0"

GWB EA SIDE

[REF WALL TYPES] - MTL STUD BOX **HEADER - TYP** 

FRAME ANCHOR

SINGLE RABBET

GLAZING AS SCHED

HM FRAME

HM GLAZING STOP -

SETTING BLOCK & -

GLAZING COMPOUND

SEALANT EA SIDE - TYP

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DOOR SCHEDULE, FRAME TYPES, AND DETAILS

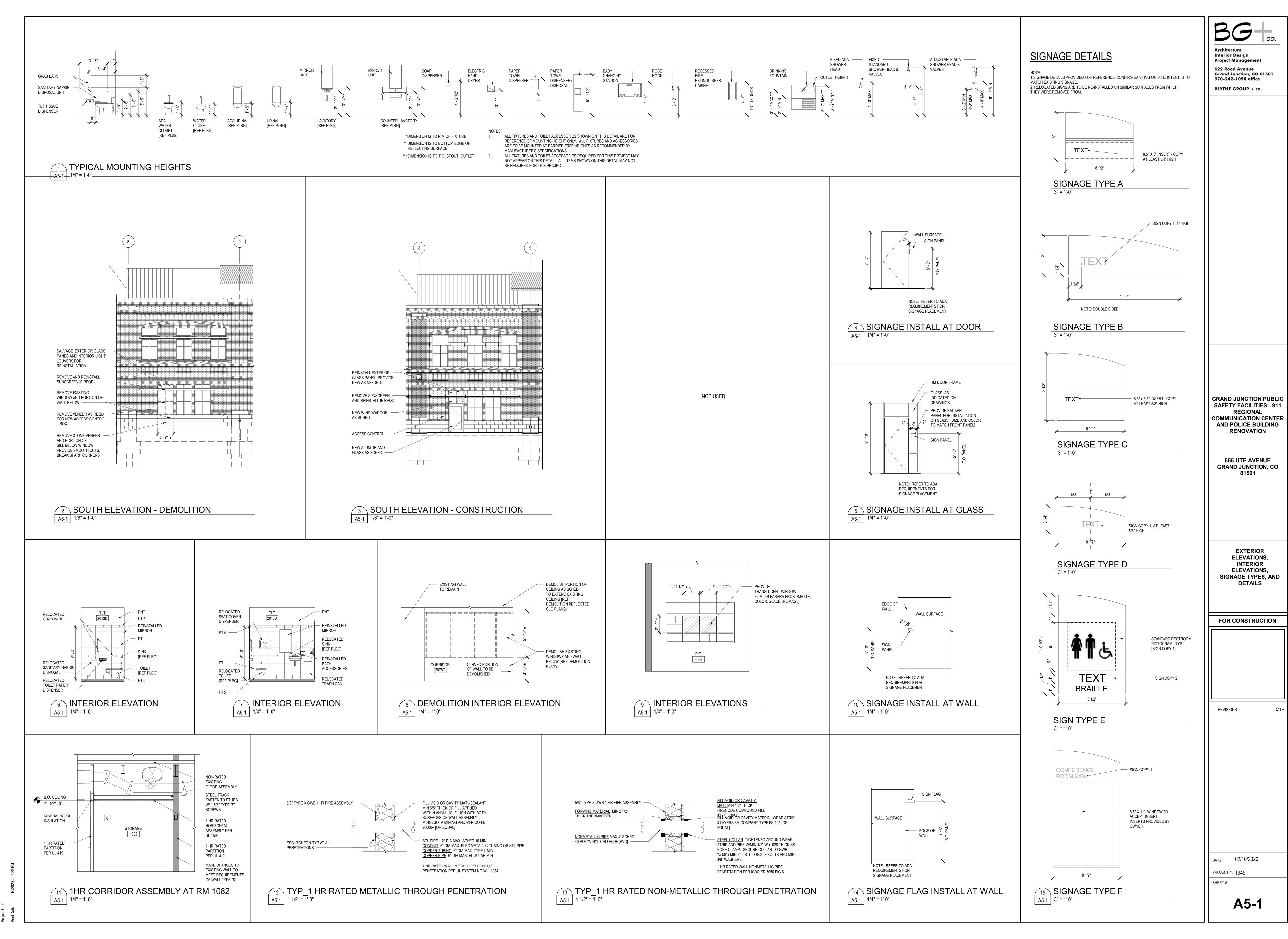
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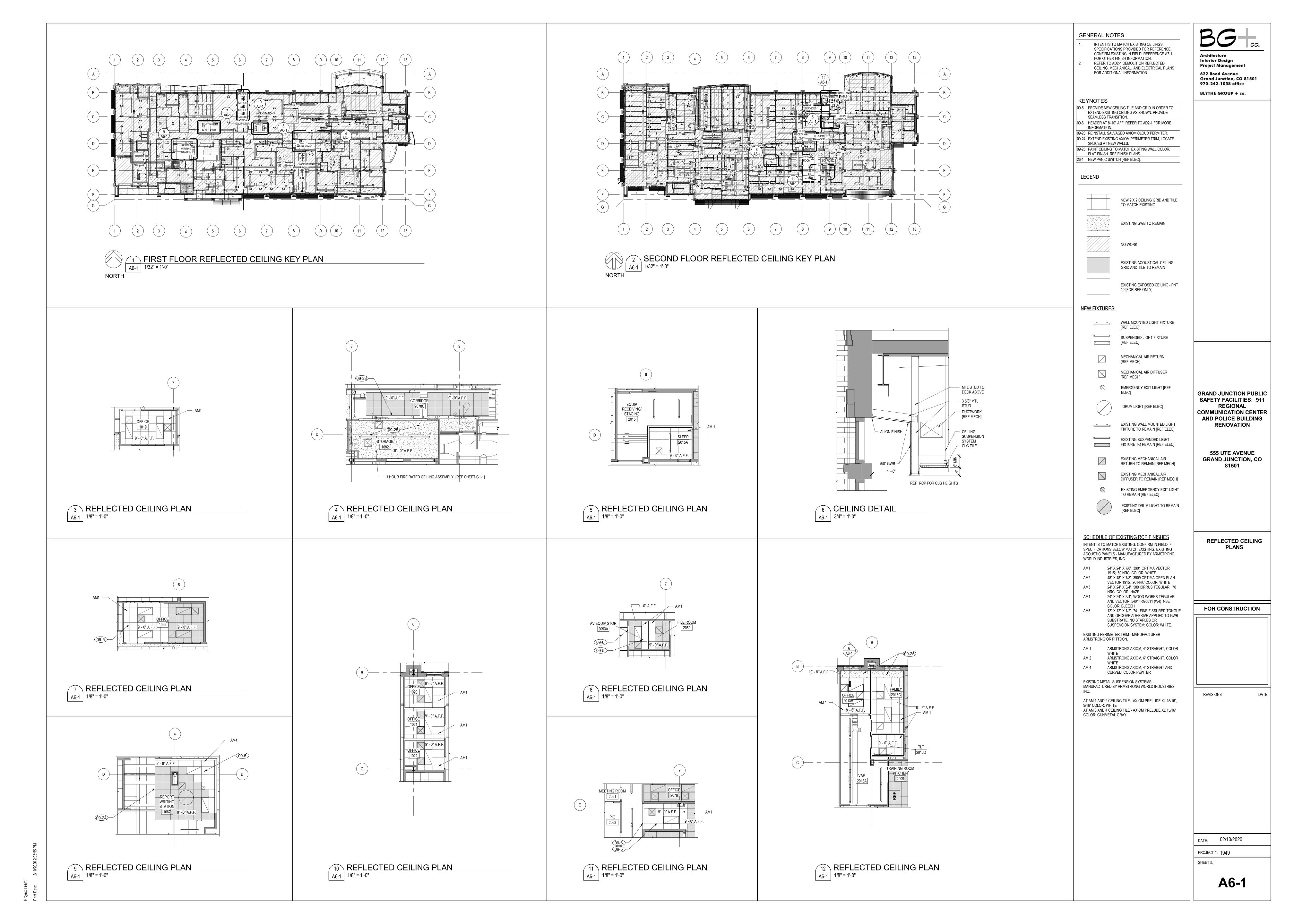
REVISIONS

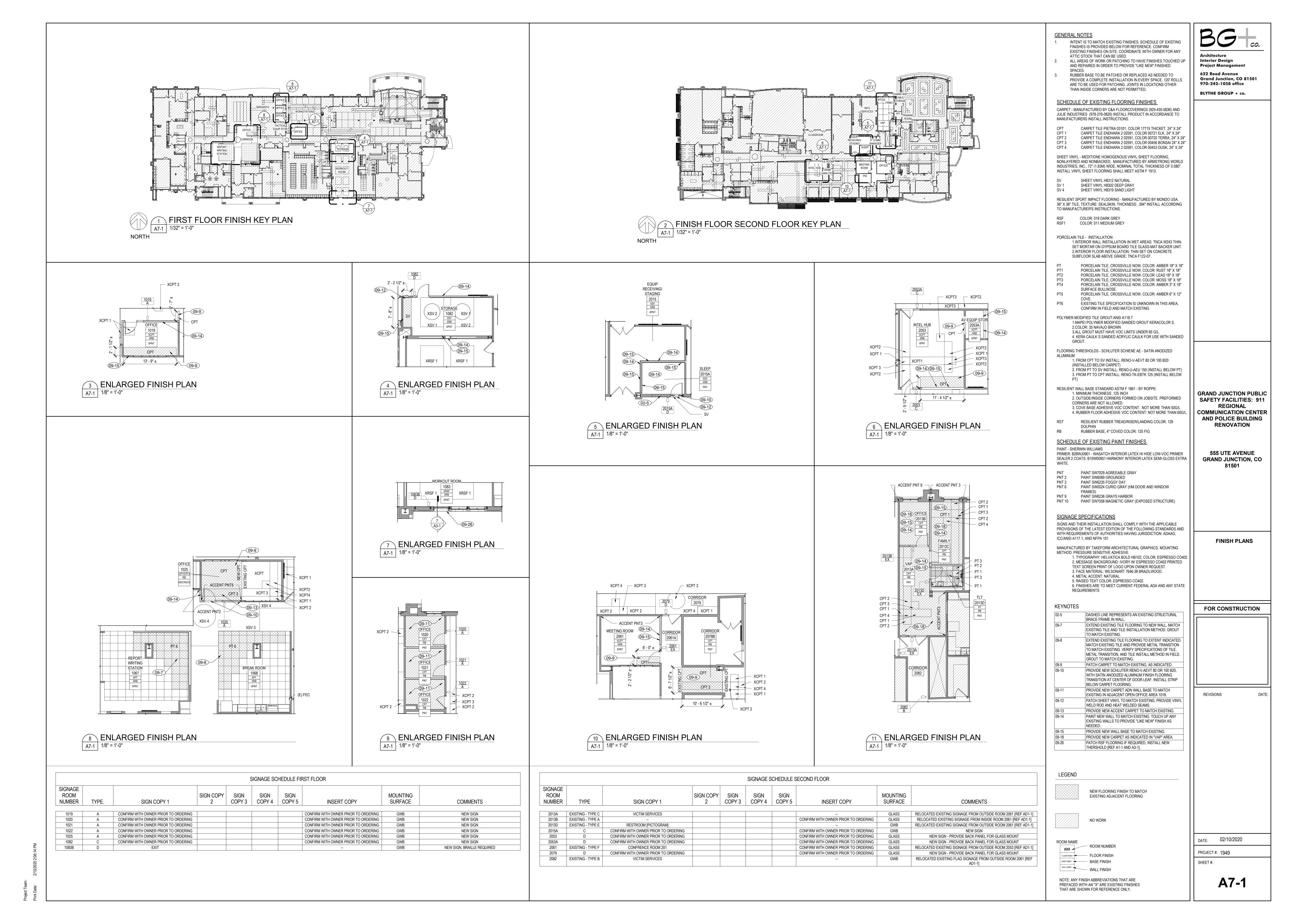
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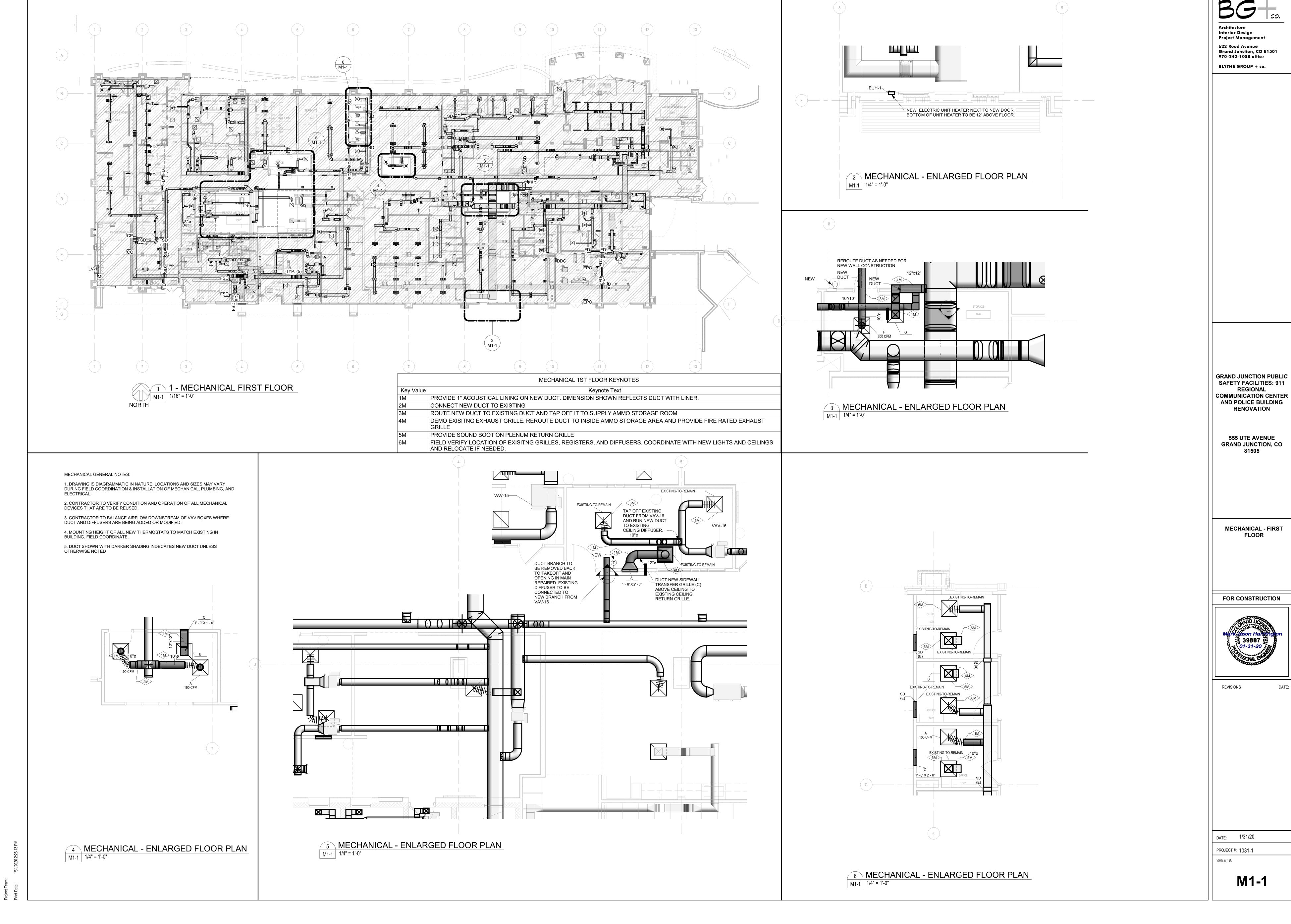
PROJECT #: 1949

**A3-1** 









M1-1

PROJECT #: 1031-1

REGIONAL

RENOVATION

**555 UTE AVENUE** 

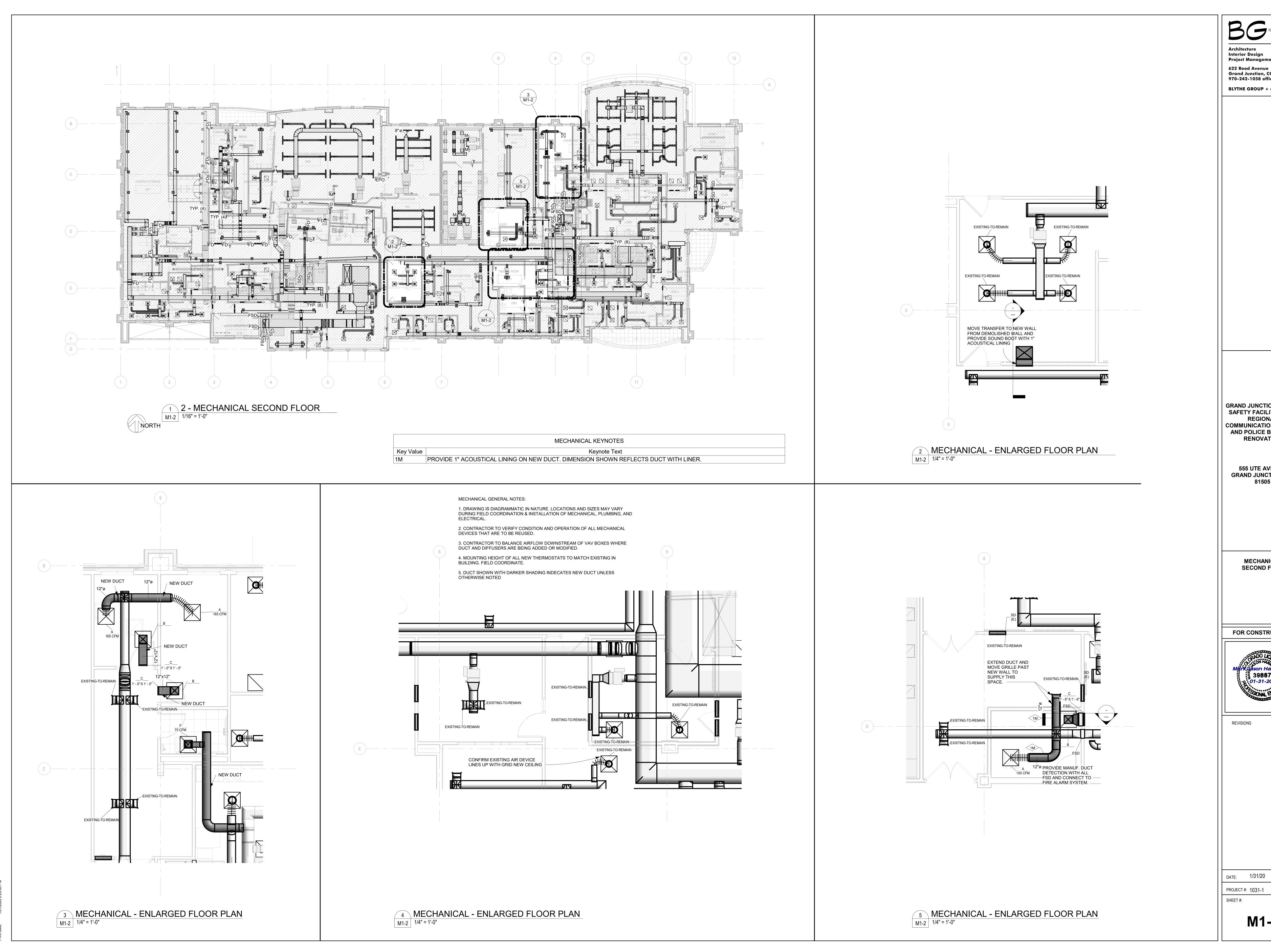
**GRAND JUNCTION, CO** 

81505

MECHANICAL - FIRST FLOOR

FOR CONSTRUCTION

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**555 UTE AVENUE GRAND JUNCTION, CO** 

> **MECHANICAL** -SECOND FLOOR

FOR CONSTRUCTION



M1-2

	AIR DEVICE SCHEDULE									
TAG	SIZE	TYPE	AIR DEVICE MANUFACTURER	AIR DEVICE MODEL	OPTIONS - ACCESSORIES					
A	24" x 24"	SQUARE PLAQUE CEILING DIFFUSER	PRICE	SPD	PROVIDE WITH OBD AND SQUARE TO ROUND TRANSITION					
В	24" x 24"	PERFORATED FACE CEILING RETURN GRILLE	PRICE	PDR	PROVIDE WITH INSULATED SOUND BOOT					
С	PER DRAWING	LOUVERED RETURN 1/2" SPACING 45 DEG. DEFLECTION	PRICE	535	PROVIDE WITH PRIMED FINISH FOR FIELD PAINTING					
D	12" x 12"	LOUVERED SUPPLY 3/4" SPACING DOUBLE DEFLECTION	PRICE	520	PROVIDE WITH OBD					
E	18" x 18"	LOUVERED EXHAUST 3/4" SPACING 0 DEG. DEFLECTION	PRICE	510Z	PROVIDE WITH OBD					
F	24" x 24"	PERFORATED FACE CEILING EXHAUST GRILLE	PRICE	PDR	PROVIDE WITH OBD					
G	24" x 24"	PERFORATED FACE CEILING EXHAUST GRILLE WITH FIRE DAMPER	PRICE	PDR-FR	FIRE RATED DEVICE. PROVIDE WITH OBD					
Н	24" x 24"	SQUARE PLAQUE CEILING DIFFUSER WITH FIRE DAMPER	PRICE	SPD-FR	FIRE RATED DEVICE. PROVIDE WITH OBD					

ELECTRIC UNIT HEATER SCHEDULE										
ELECTRICAL										
			TEMPERATURE			FULL LOAD				
Mark	SERVICE	CFM	RANGE (F)	BTU/HR	KW	AMPS (A)	VOLT/PHASE/HZ	MANUFACTURER	MODEL	NOTES
EUH-1	WORKOUT ROOM	65	40-85	5120	1.5	12.5	120/1/60	QMARK	CWH1151 DSF	NOTE - 1

1. PROVIDE WITH POWER DISCONNECT, SURFACE MOUNTING FRAME, TAMPER-RESISTANT FRONT COVER, AND INTEGRAL THERMOSTAT.

### MECHANICAL PROVISIONS

- 1. SCOPE OF WORK
- A. THE CONTRACTOR IS RESPONSIBLE FOR ALL WORK, MATERIALS, AND LABOR TO SATISFY A COMPLETE WORKING SYSTEM WHETHER
- B. ALL WORK IS TO BE PERFORMED IN STRICT COMPLIANCE WITH
- ALL LOCAL CODES AND ALL OTHER REGULATION GOVERNING WORK C. THE CONTRACTOR SHALL, BEFORE SUBMITTING ANY PROPOSAL, EXAMINE THE PROPOSED SITE AND SHALL DETERMINE FOR HIMSELF
- THE CONDITIONS THAT MAY EFFECT THE WORK. NO ALLOWANCE SHALL BE MADE IF THE CONTRACTOR FAILS TO MAKE SUCH EXAMINATIONS. D. ALL EQUIPMENT AND MATERIALS SHALL BE AS SPECIFIED OR

"APPROVED EQUAL" BY THE ENGINEER OR ARCHITECT.

- A. THE CONTRACTOR SHALL SECURE ALL PERMITS OR APPLICATIONS AND PAY ANY AND ALL FEES.
- 3. SHOP DRAWINGS
- A. SUBMIT MATERIAL LIST AND SHOP DRAWINGS FOR MAJOR EQUIPMENT TO THE ACHITECT/ENGINEER FOR APPROVAL. THE CONTRACTOR SHALL SUBMIT FIVE SETS OF SHOP DRAWINGS AND THEY SHALL BE CLEARLY LABELED.

#### 4. FLEXIBLE DUCT WORK

- A. FLEXIBLE TYPE DUCT SHALL BE OF TWO ELEMENT SPIRAL CONSTRUCTION COMPOSED OF A CORROSION RESISTANT METAL SUPPORTING SPIRAL AND COATED FABRIC WITH A MINERIAL BASE. FLEXIBLE DUCT CONNECTORS SHALL BE LISTED BY U.L., CLASS 1 DUCTS, AND SHALL HAVE A FLAME SPREAD RATING NOT EXCEEDING 25 AND A SMOKE DEVELOPED RATING NOT EXCEEDING 50.
- B. USE OF FLEXIBLE DUCTWORK SHALL BE LIMITED TO NO MORE THAN 6 LINEAR FEET PER RUN. C. CONTRACTOR SHALL BE CAREFUL SO AS NOT TO KINK OR COLLAPSE
- FLEXIBLE DUCT.

# 5. REFRIGERENT

- A. PIPING CONTRACTOR SHALL PROVIDE AND INSTALL REFRIGERANT PIPING IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND IN SUCH A WAY AS TO BE INCONSPICIOUS AND FREE FROM ANY
- POSSIBLE CONDENSATION. B. INSULATE REFRIGERANT LINES WITH ARMOUR-FLEX TYPE INSULATION, SHALL BE TYPE "K" COPPER TUBING, WITH WROUGHT COPPER SOLDER TYPE FITTINGS SUITABLE FOR CONNECTION WITH SILVER SOLDER.
- 6. DUCTWORK
- A. THE DUCTWORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "SMACNA" APPLICABLE MANUALS.
- B. ALL DUCTWORK SHALL BE THE LOW VELOCITY TYPE, UNLESS SPECIFIED C. CONTRACTOR SHALL PROVIDE AND INSTALL APPROVED FIRE
- DAMPERS AND ACCESS PANELS IN ANY AND ALL DUCTWORK WHICH PENETRATES A HORIZONTAL OR VERTICAL FIRE PARTITION, OR AS OTHERWISE SHOWN ON DRAWINGS.
- D. ALL BRANCH DUCTS TO HAVE VOLUME DAMPERS, SMOOTH TURN RADIUS DUCTWORK OR TURNING VANES SHALL BE USED THROUGHOUT WHERE FLOW
- E. ALL DUCT JOINTS TO BE SEALED IN ACCORDANCE WITH "SMACNA" STANDARDS AND ACCEPTED GOOD PRACTICE.
- F. ALL DUCT DIMENSIONS SHOWN ARE NET INSIDE VALUES.DIMENSIONS MAY BE CHANGED SO LONG AS THE NET FREE FACE AREA IS MAINTAINED. G. ALL CONCEALED DUCTWORK SHALL BE INSULATED WITH 1-1/2"
- FIBERGLASS INSULATING BLANKET WITH ALUMINUM FOIL FACING. H. ALL SUPPLY AND RETURN DUCTWORK 15 FEET DOWNSTREAM OF THE HVAC
- UNIT SHALL BE INTERNALLY LINED WITH A 1" ACOUSTICAL DUCT LINER UNLESS OTHERWISE NOTED ON THE DRAWINGS.

#### 7. DRAINAGE PIPING A. (CONDENSATE) SHALL BE TYPE L COPPER PIPE WITH SOLDERED JOINTS.

ROUTED TO FLOOR DRAIN OR INDIRECT WASTE DRAIN. 8. HVAC CONTROLS

PITCH HORIZONTAL LINES 1" IN 10'-0". CONDENSATE DRAINS SHALL BE

# A. CONTRACTOR TO SUPPLY AND INSTALL ALL CONTROL WIRING AND

THERMOSTATS AS REQUIRED. 9. ELECTRICAL

# A. CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR FOR

LOCATION OF WIRING FOR EACH HVAC UNIT. 10. PIPE SUPPORTS A. ALL PIPE SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE IN A

NEAT AND WORKMANLIKE MANNER. THE USE OF WIRE OR METAL STRAP TO SUPPORT PIPES WILL NOT BE PERMITTED. SPACING OF PIPE SUPPORTS SHALL NOT EXCEED 8 FEET FOR ALL PIPING. PLASTIC PIPING TO BE SUPPORTED EVERY 4 FEET.

# 11. GAS PIPING

A. PIPING SHALL BE SCHEDULE 40 BLACK STEEL PIPE WITH MALLEABLE IRON WHERE GAS PIPE CONNECTS TO EQUIPMENT, IT SHALL BE PROVIDED WITH A DRIP LEG THE FULL SIZE OF THE RUNOUT, A 100% SHUT-OFF VALVE AND A UNION. GAS PIPING CONTAINING PRESSURE GREATER THAN 9" W.C. SHALL BE SCHEDULE 40 BLACK STEEL PIPE WITH WELDED JOINTS.

# 12. MISCELLANEOUS

A. ALL EXTERIOR OPENINGS TO BE PROPERLY CAULKED AND SEALED WITH A SEALANT OF HIGH QUALITY AND LONG LIFE, TO PREVENT INFILTRATION OF OUTSIDE AIR INTO CONDITIONED SPACE.

#### COORDINATE INSTALLATION OF ALL ROOF FLASHING AT ROOF PENETRATION. B. DO NOT SCALE THIS DRAWING FOR EXACT DIMENSIONS. C. VERIFY ALL FIGURES, CONDITIONS, AND DIMENSIONS AT THE JOB SITE.

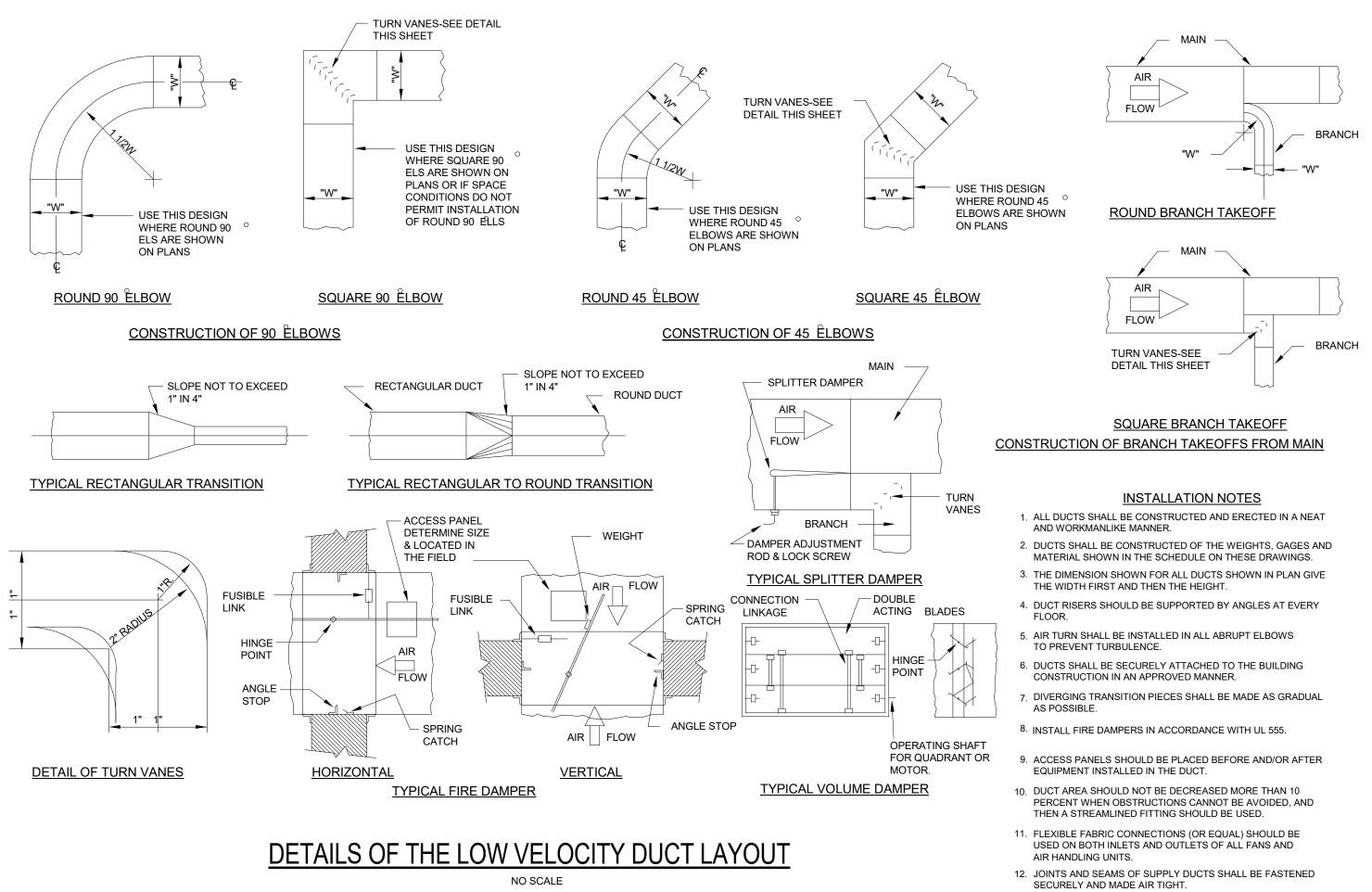
- D. THE MECHANICAL PLANS ARE INTENDED TO BE DIAGRAMMATIC AND ARE BASED ON ONE MANUACTURER'S EQUIPMENT. THEY ARE NOT INTENDED TO SHOW EVERY ITEM IN ITS EXACT LOCATION, THE EXACT DIMENSIONS, OR ALL THE DETAILS OF THE EQUIPMENT.
- E. THE CONTRACTOR SHALL VERIFY THE ACTUAL DIMENSIONS OF THE EQUIPMENT PROPOSED TO ENSURE THAT THE EQUIPMENT WILL FIT IN THE AVAILABLE

# 13. TESTING AND BALANCING

A. THE HVAC SYSTEM SHALL BE TESTED AND AND BALANCED BY AN INDEPENDENT AGENCY, UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER. A SEALED TYPE WRITTEN REPORT SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER FOR REVIEW AND APPROVAL.

# 14. GUARANTEE

- A. MATERIALS, EQUIPMENT AND INSTALLATION SHALL BE GUARANTEED FOR A PERIOD OF ONE(1) YEAR FROM DATE OF ACCEPTANCE. DEFECTS WHICH APPEAR DURING THAT PERIOD SHALL BE CORRECTED AT THIS CONTRACTOR'S
- B. FOR THE SAME PERIOD, THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO PREMISES CAUSED BY DEFECTS IN WORKMANSHIP OR IN THE WORK OR EQUIPMENT FURNISHED AND/OR INSTALLED BY HIM.



# RESPONSIBLE DIVISION

UNLESS OTHERWISE INDICATED ALL HEATING, VENTILATING, AIR CONDITIONING, PLUMBING, AND OTHER MECHANICAL EQUIPMENT, MOTORS, AND CONTROLS SHALL BE FURNISHED, SET

# PLACE AND WIRED AS FOLLOWS:

PLACE AND WIRED AS FOLLOWS:				
ITEM	FURNISHED	SET	POWER	CONTROL
EQUIPMENT COMBINATION MAGNETIC MOTOR STARTERS, MAGNETIC MOTOR STARTERS AND	23	23	26	
CONTACTORS	23	26	26	23
FUSED AND UNFUSED DISCONNECT SWITCHES, THERMAL OVERLOAD SWITCHES AND HEATERS, MANUAL MOTOR STARTERS	26(1)	26(1)	26	
	23(1)	20(1)	20	
MANUAL-OPERATING AND MULTI-SPEED SWITCHES	23	26	26	26
CONTROLS, RELAYS, TRANSFORMERS	23	23	26	23
THERMOSTATS (LOW VOLTAGE) AND TIME SWITCHES	23	23	26	23
THERMOSTATS(LINE VOLTAGE)	23	23	26	26
TEMPERATURE CONTROL PANELS	23	23	26	23
MOTOR AND SOLENOID VALVES, DAMPER MOTORS, PE & EP SWITCHES	23	23(2)	_	23(2)
SWITCHES	23	23(2)		20(2)
PUSH-BUTTON STATIONS AND PILOT LIGHTS	23	23(2)		23(2)
HEATING, COOLING, VENTILATION AND AIR				
CONDITIONING CONTROLS	23	23	26	23

# SUBSCRIPT FOOTNOTES:

EXHAUST FAN SWITCHES

- 1) UNDER DIVISION 23 IF FURNISHED FACTORY-WIRED AS PART OF EQUIPMENT OR IF
- FURNISHED WITH COMBINATION STARTERS.
- 2) IF ITEM IS FOR LINE VOLTAGE, SET IN PLACE AND CONNECT UNDER DIVISION 26. WHERE FACTORY MOUNTED ON EQUIPMENT OR ATTACHED TO PIPING OR DUCTS AND USING LINE VOLTAGE FURNISH AND SET UNDER DIVISION 23, CONNECT UNDER DIVISION 26.

FOR CONSTRUCTION

**GRAND JUNCTION PUBLIC SAFETY FACILITIES: 911** 

**REGIONAL** 

AND POLICE BUILDING

RENOVATION

**555 UTE AVENUE** 

**GRAND JUNCTION, CO** 

MECHANICAL DETAILS

AND SCHEDULES

**COMMUNICATION CENTER** 

Interior Design Project Management

622 Rood Avenue

BLYTHE GROUP + co.

Grand Junction, CO 81501 970-242-1058 office

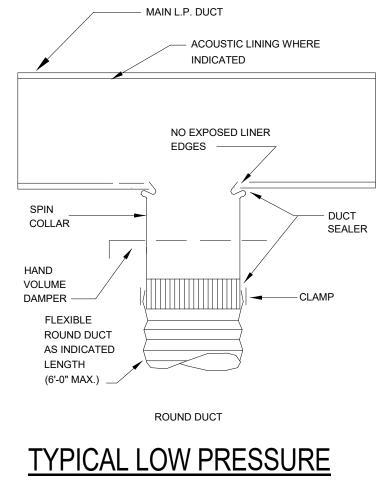


REVISIONS

DATE: 1/31/20 PROJECT #: 1031-1

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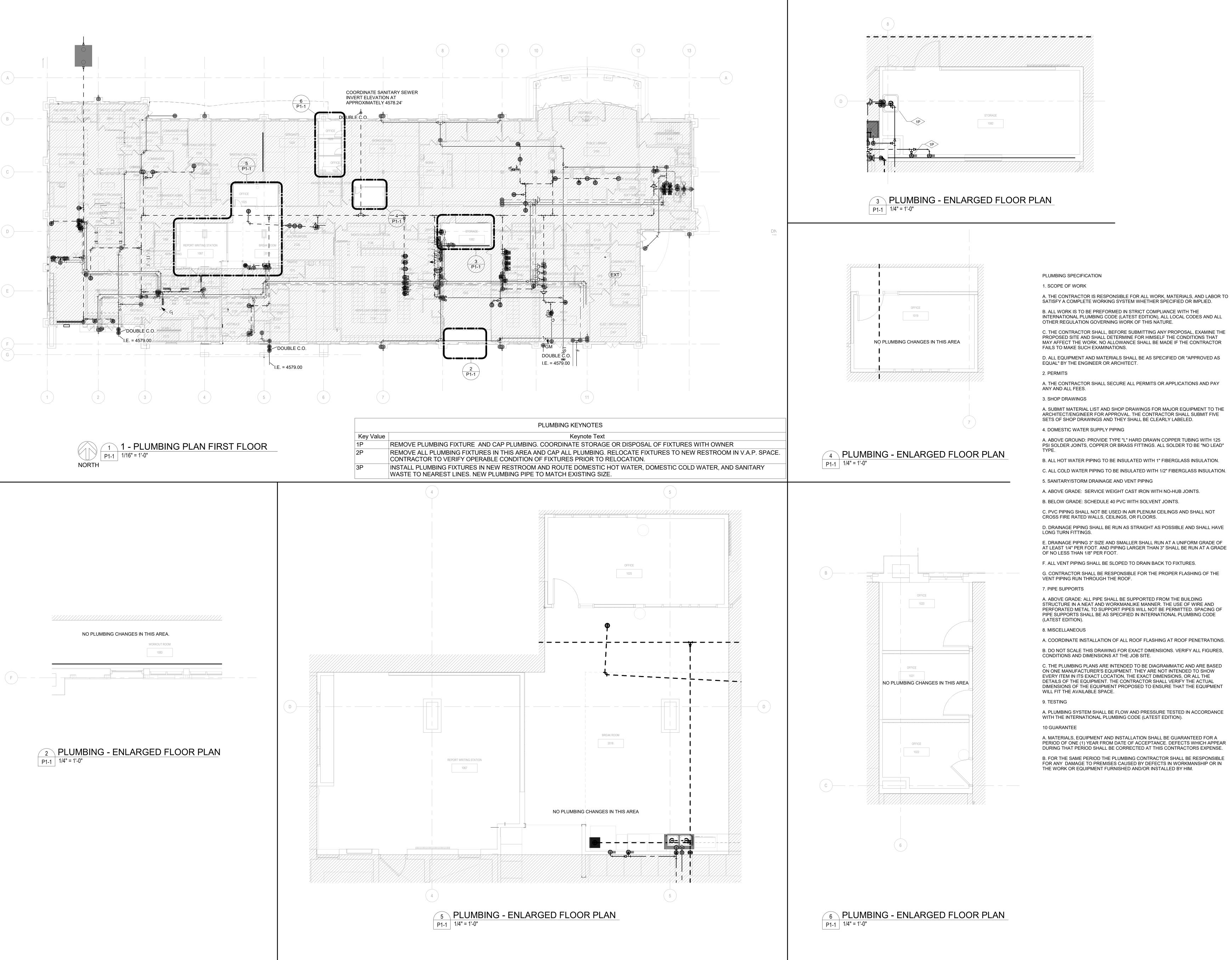
M1-3

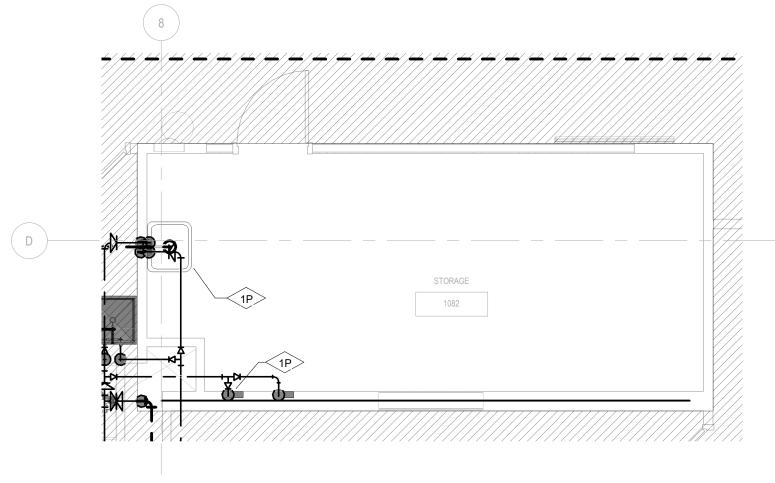


COLLAR -FLEX DUCT MAX. 6'-0" FLEX DUCT SIZE SHALL MATCH NECK SIZE HAND DAMPER OPPOSED BLADE - DRAW BAND WITH SILICONE SEALER DAMPER—

TYPICAL DIFFUSER CONNECTION

NOT TO SCALE





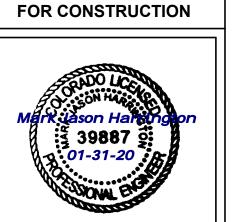


**GRAND JUNCTION PUBLIC SAFETY FACILITIES: 911 REGIONAL COMMUNICATION CENTER** AND POLICE BUILDING RENOVATION

**555 UTE AVENUE GRAND JUNCTION, CO** 

**PLUMBING - FIRST** 

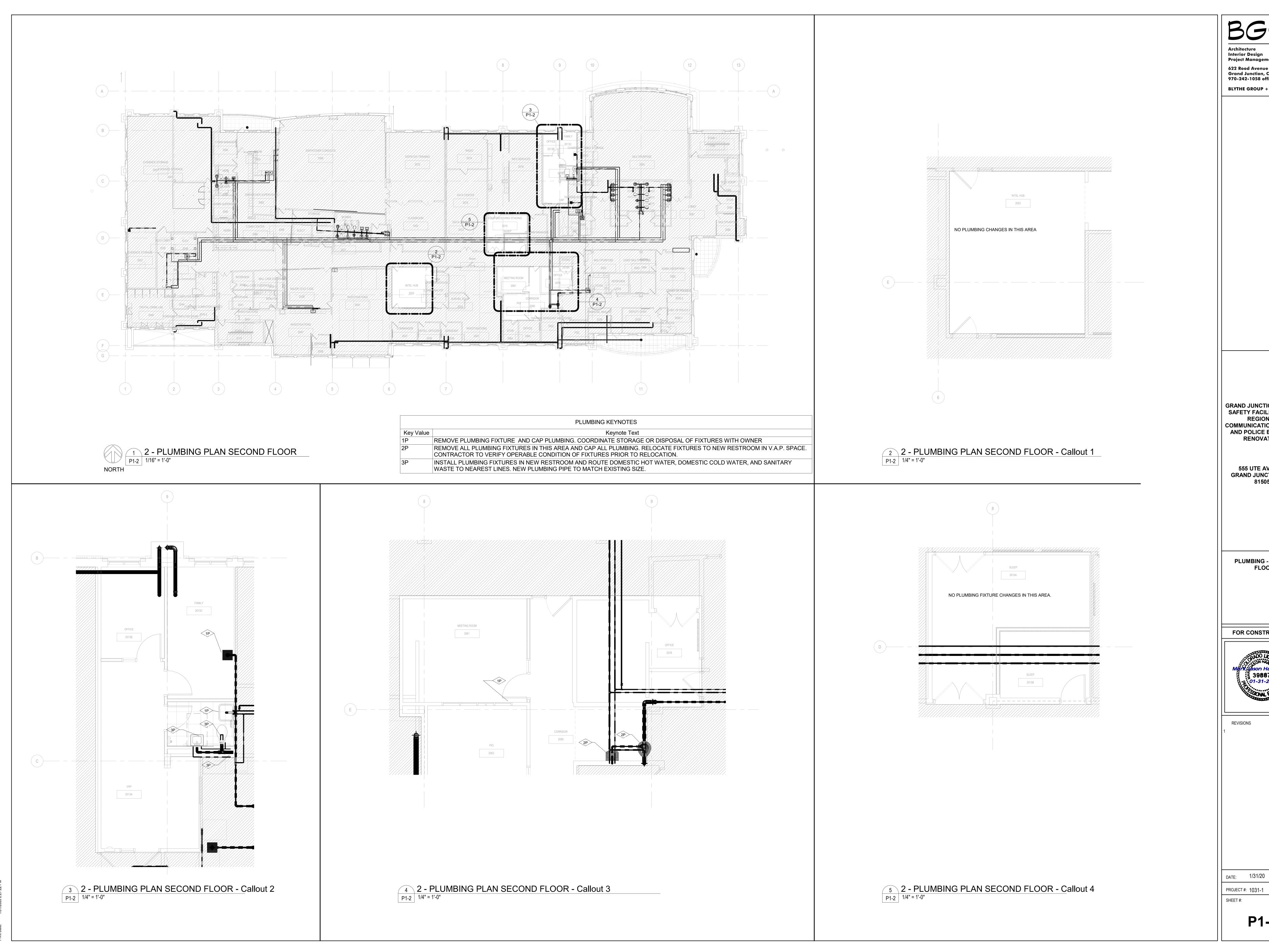
**FLOOR** 



DATE: 1/31/20

PROJECT #: 1031-1

P1-1



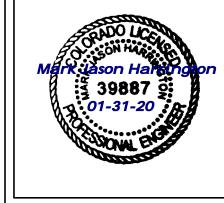
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**GRAND JUNCTION PUBLIC** SAFETY FACILITIES: 911
REGIONAL COMMUNICATION CENTER AND POLICE BUILDING **RENOVATION** 

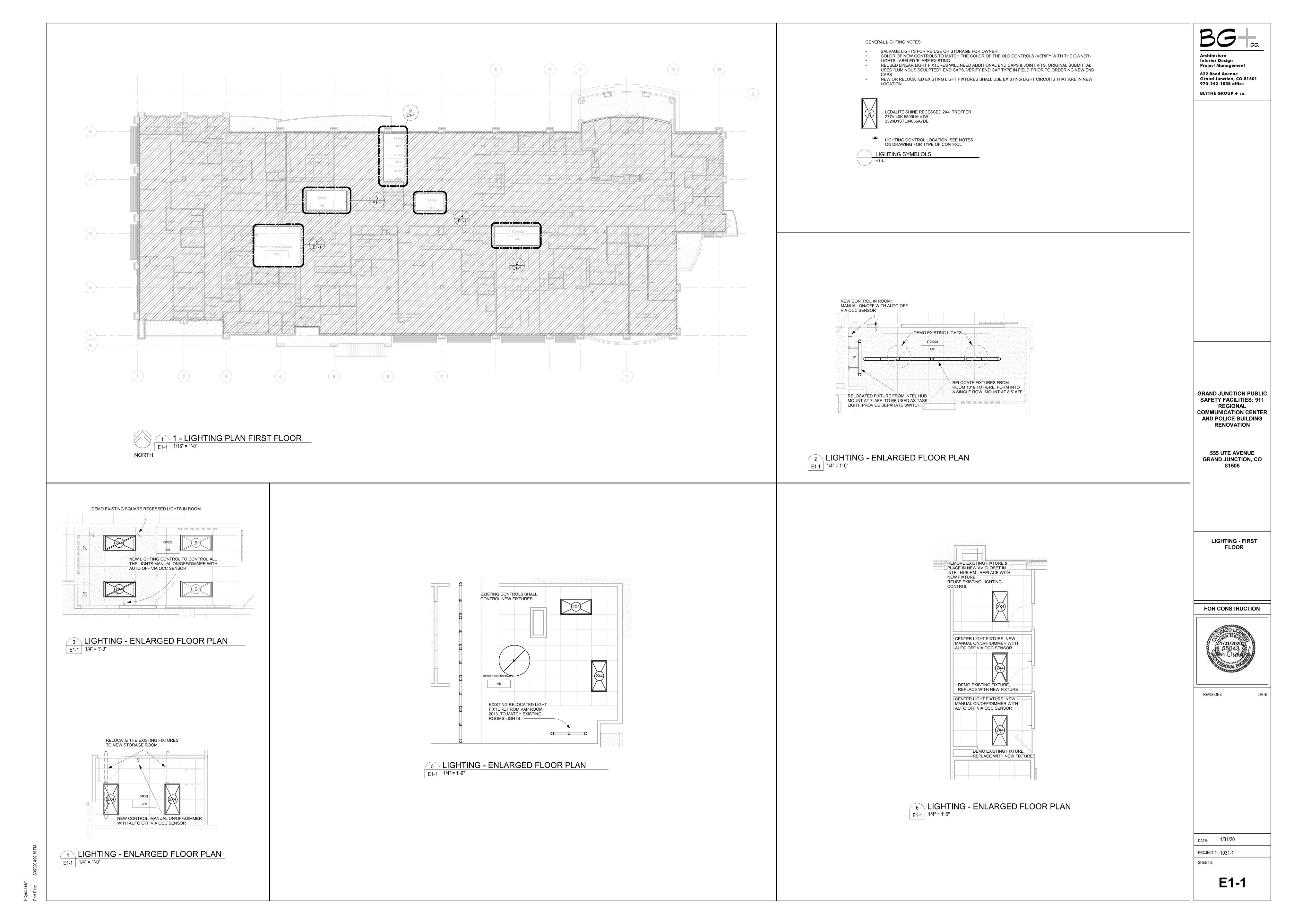
**555 UTE AVENUE** GRAND JUNCTION, CO 81505

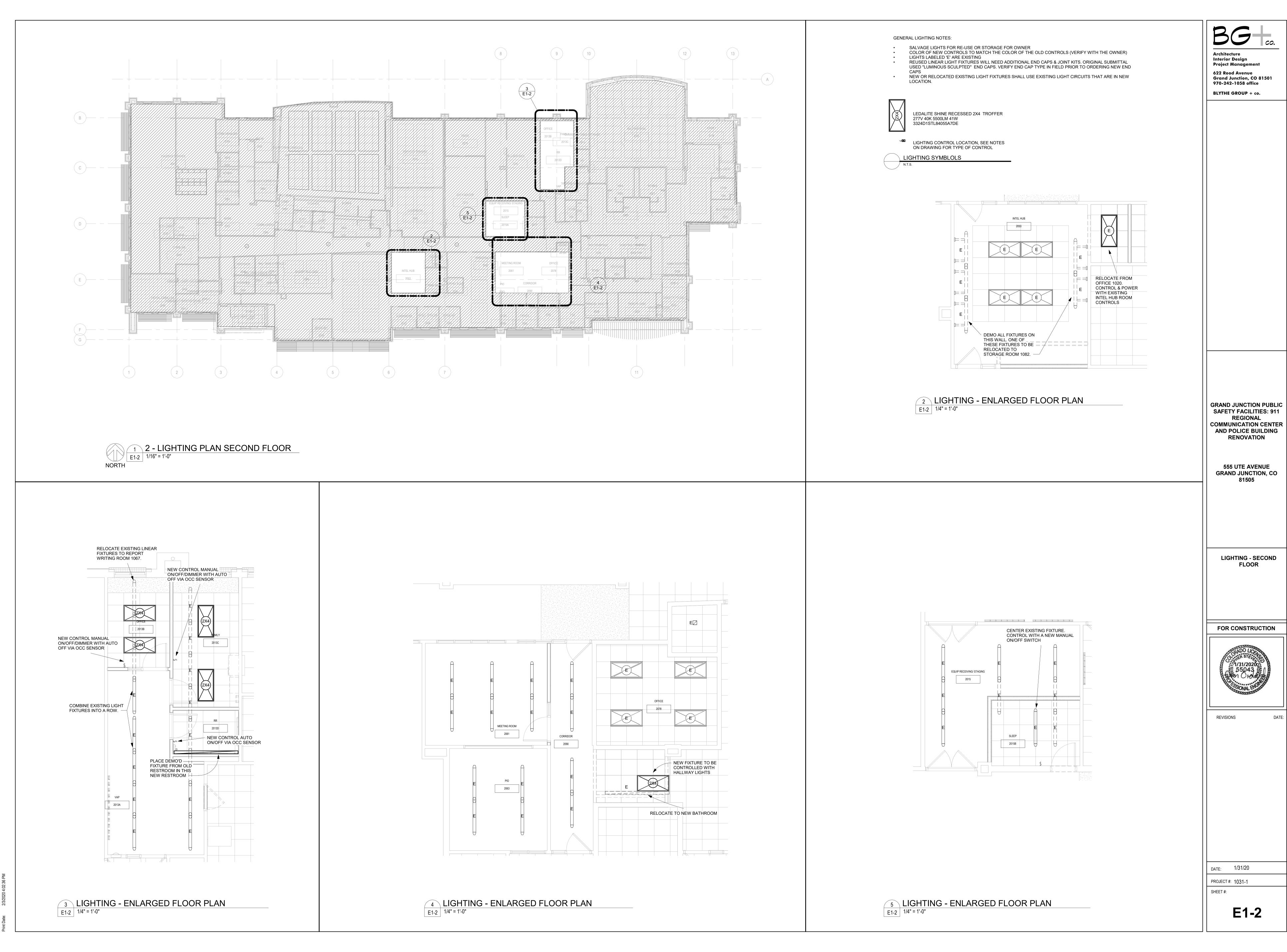
PLUMBING - SECOND FLOOR

FOR CONSTRUCTION

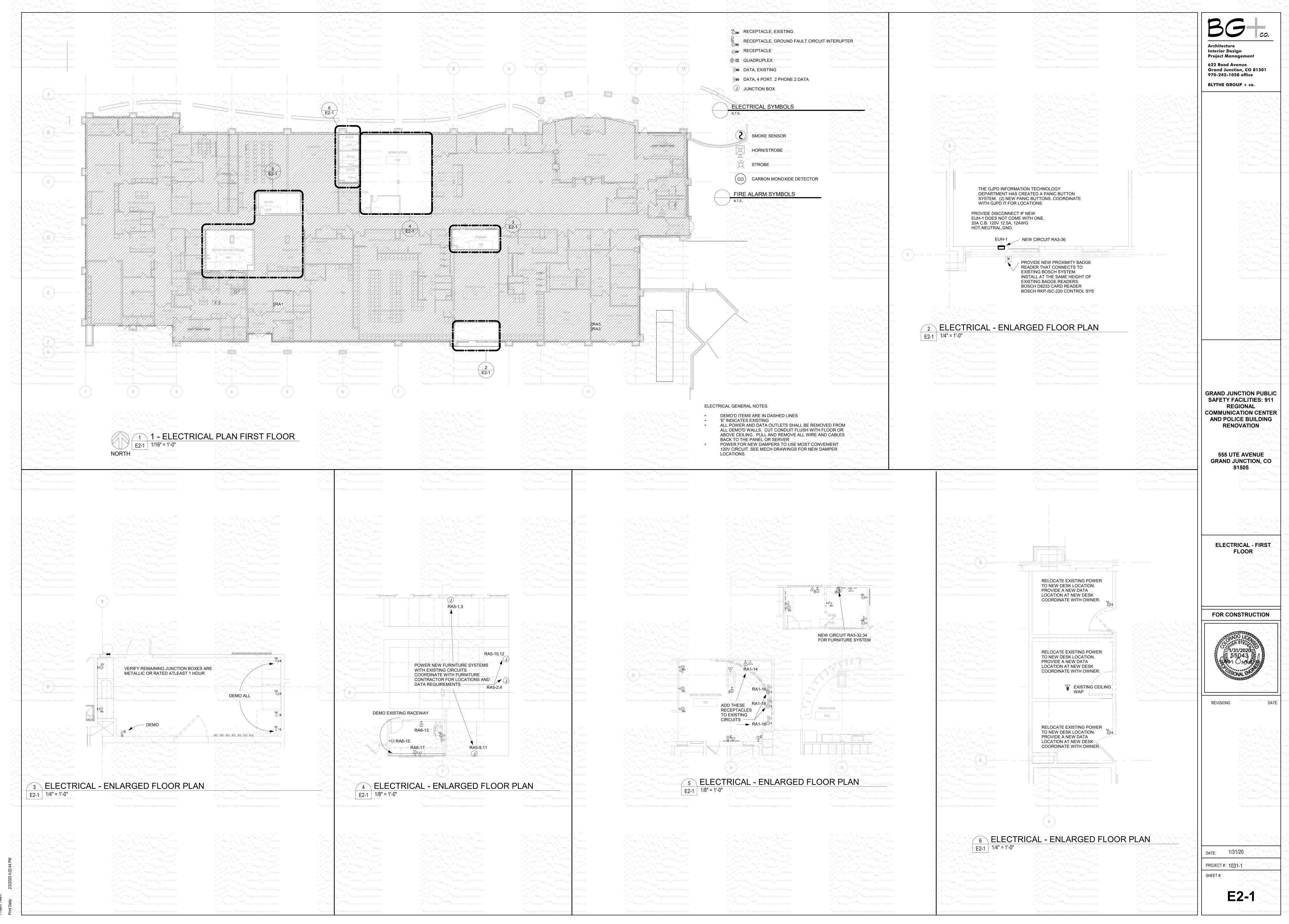


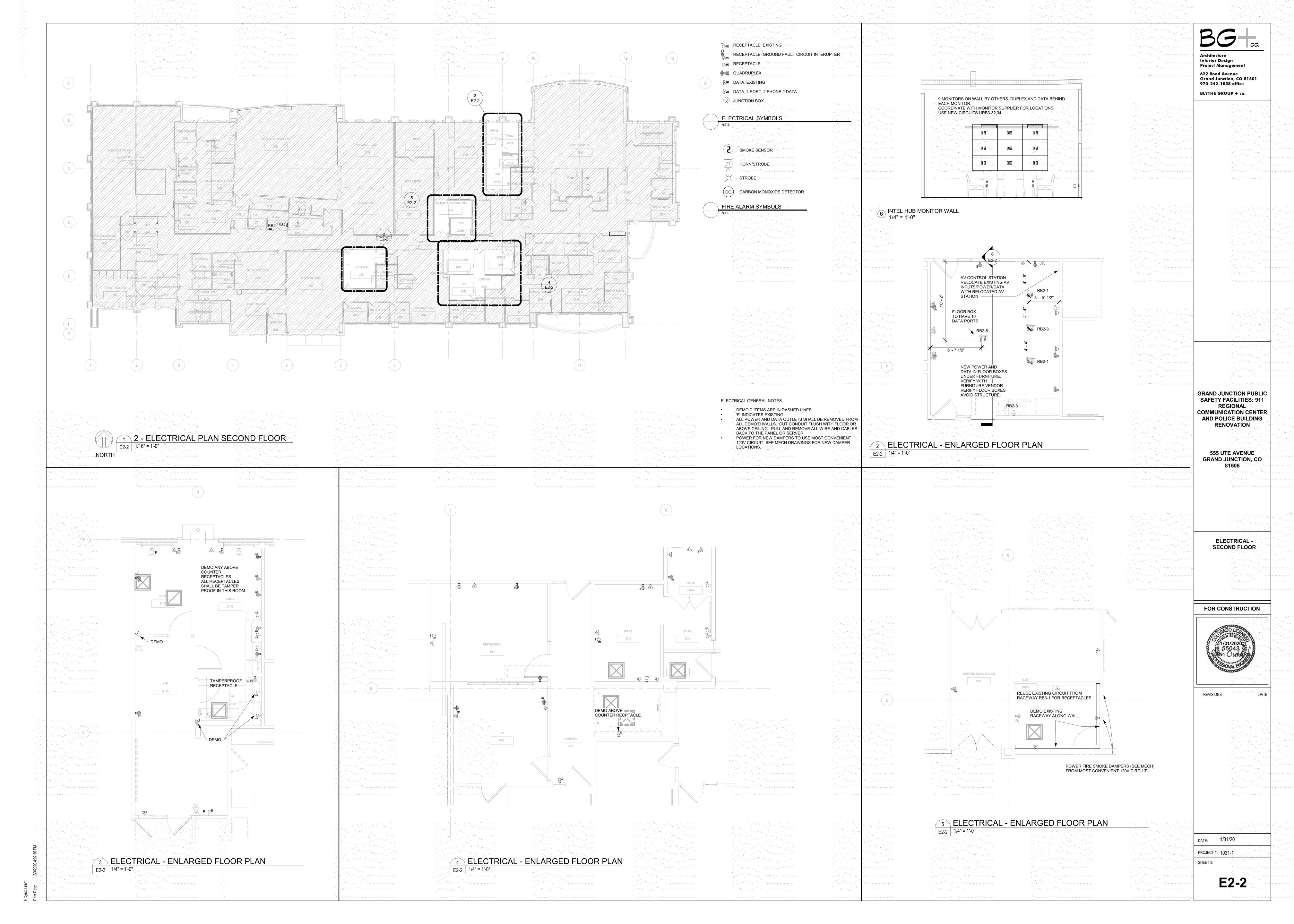
P1-2





Project Team:





GENERAL PROVISIONS

A. THE ARCHITECTURAL GENERAL AND SPECIAL CONDITIONS FOR THE CONSTRUCTION OF THIS PROJECT SHALL BE A PART OF THE ELECTRICAL SPECIFICATIONS. THE ELECTRICAL CONTRACTOR SHALL EXAMINE THE GENERAL AND SPECIAL CONDITIONS BEFORE SUBMITTING HIS OR HER PROPOSAL

B. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK INCLUDED IN THIS SECTION AND THE DELEGATION OF WORK TO THE ELECTRICAL CONTRACTOR. SHALL NOT RELIEVE HIM OF THIS RESPONSIBILITY. THE ELECTRICAL CONTRACTOR AND HIS SUBCONTRACTORS WHO PERFORM WORK UNDER THIS SECTION SHALL BE RESPONSIBLE TO THE GENERAL CONTRACTOR. C.WHERE ITEMS OF THE GENERAL CONDITIONS OR OF THE SPECIAL CONDITIONS ARE REPEATED

IN THIS SECTION OF THE SPECIFICATIONS. IT IS INTENDED TO RE-ENFORCE OR QUALIFY THEM: IT IS NOT INTENDED THAT ANY OTHER PARTS OF THE GENERAL CONDITIONS OR SPECIAL CONDITIONS SHALL BE ASSUMED TO BE OMITTED IF NOT REPEATED HEREIN. D. THE NAMING OF A CERTAIN BRAND OR MAKE OR MANUFACTURER IN THE SPECIFICATIONS IS TO ESTABLISH A QUALITY STANDARD FOR THE ARTICLE DESIRED. THE CONTRACTOR IS NOT RESTRICTED TO THE USE OF THE SPECIFIC BRAND OF THE MANUFACTURER NAMED UNLESS SO INDICATED IN THE SPECIFICATIONS. E. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND PRESENT FIVE (5) COPIES OF SHOP

DRAWINGS OR BROCHURES FOR ALL FIXTURES, EQUIPMENT, AND ACCESSORIES TO THE ENGINEER FOR THE ENGINEER'S APPROVAL. CHECKING IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE SHOWN IS SUBJECT TO THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR: DIMENSIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE; FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; COORDINATION OF HIS WORK WITH THAT OF ALL OTHER TRADES AND THE SATISFACTORY PERFORMANCE OF HIS

F. THE ELECTRICAL CONTRACTOR SHALL EXAMINE DRAWINGS RELATING TO WORK OF ALL TRADES AND BECOME FULLY INFORMED AS TO EXTENT AND CHARACTER OF WORK REQUIRED AND ITS RELATION TO ALL OTHER WORK IN THE PROJECT G.BEFORE SUBMITTING A BID, THE CONTRACTOR SHALL VISIT THE SITE AND EXAMINE ALL ADJOINING EXISTING BUILDINGS, EQUIPMENT AND SPACE CONDITIONS ON WHICH HIS WORK IS IN ANY WAY DEPENDENT FOR THE BEST WORKMANSHIP AND OPERATION ACCORDING TO THE INTENT OF SPECIFICATIONS AND DRAWINGS. HE SHALL REPORT TO THE ARCHITECT ANY CONDITION WHICH MIGHT PREVENT HIM FROM INSTALLING HIS EQUIPMENT IN THE MANNER

H.NO CONSIDERATION OR ALLOWANCE WILL BE GRANTED FOR FAILURE TO VISIT SITE, OR FOR ANY ALLEGED MISUNDERSTANDING OF MATERIALS TO BE FURNISHED OR WORK TO BE DONE. . EXISTING CONDUITS. PIPES. EQUIPMENT. ETC.: REFER TO DIVISION I FOR ADDITIONAL REQUIREMENTS. EXISTING CONDUITS, PIPES, UTILITY LINES, TANKS, EQUIPMENT, OR OTHER OBSTRUCTIONS, WHETHER UNDERGROUND, CONCEALED, OR EXPOSED, ARE NOT IN GENERAL INDICATED ON DRAWINGS. PRIOR TO START OF WORK, HAVE EXISTING UTILITY OBSTRUCTIONS CLEARLY MARKED BY UTILITIES LOCATOR SERVICE. PLAN WORK SO AS TO ROUTE AND LOCATE ALL NEW WORK TO AVOID THESE OBSTRUCTIONS. REPAIR OR REPLACE, AT NO COST TO OWNER, EXISTING INSTALLATIONS WHERE DAMAGED, THAT OCCURRED DURING THE COURSE OF CONSTRUCTION.

END OF SECTION 26010 **SECTION 26015** 

ELECTRICAL DRAWINGS AND REFERENCE SYMBOLS A. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERALLY THE LOCATIONS OF MATERIAL AND EQUIPMENT. THESE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS POSSIBLE. THE FLECTRICAL CONTRACTOR SHALL COORDINATE THE WORK UNDER THIS SECTION WITH THE ARCHITECTURAL, STRUCTURAL, PLUMBING, HEATING AND AIR CONDITIONING, AND THE DRAWINGS OF OTHER TRADES FOR EXACT DIMENSIONS, CLEARANCES AND ROUGHING-IN LOCATIONS: THIS CONTRACTOR SHALL COOPERATE WITH ALL OTHER TRADES IN ORDER TO MAKE MINOR FIELD ADJUSTMENTS TO ACCOMMODATE THE WORK OF OTHERS. DO NOT RELY ON

THE SCALE OF THE DRAWINGS FOR ROUGH-IN MEASUREMENTS, NOR USE THEM AS SHOP B. THE DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY. EACH TO THE OTHER. AND THE WORK REQUIRED BY EITHER SHALL BE INCLUDED IN THE CONTRACT AS IF CALLED FOR BY BOTH. C.IF DIRECTED BY THE ARCHITECT. THE CONTRACTOR SHALL, WITHOUT EXTRA CHARGE, MAKE RFASONABLE MODIFICATIONS IN THE LAYOUT AS NEEDED TO PREVENT CONFLICT WITH WORK OF OTHER TRADES OR FOR PROPER EXECUTION OF THE WORK. D.ELECTRICAL SYMBOLS USED ON THIS PROJECT ARE SHOWN IN A SYMBOL LIST ON THE

ACCOMPANYING WORKING DRAWINGS. THIS LIST SHOWS STANDARD SYMBOLS AND ALL MAY NOT APPEAR ON THE PROJECT DRAWINGS; HOWEVER, WHEREVER THE SYMBOL ON PROJECT DRAWINGS OCCURS, THE ITEM SHALL BE PROVIDED AND INSTALLED. END OF SECTION 26015

SECTION 26020 WORK INCLUDED

A. THE SCOPE OF THE WORK CONSISTS OF ELECTRICAL INSTALLATION AND MODIFICATION AT THE GRAND JUNCTION POLICE DEPARTMENT. THIS SHALL INCLUDE. BUT NOT BE LIMITED TO: INSTALL, DEMO AND RELOCATION OF LIGHTING AND ELECTRICAL FIXTURES OR OTHER ITEMS AS CALLED OUT ON THE DRAWINGS FOR THE REMODEL CONSTRUCTION. THE FLECTRICAL CONTRACTOR SHALL PROVIDE ALL SUPERVISION, LABOR, MATERIALS, EQUIPMENT, MACHINERY, AND ANY OTHER ITEMS NECESSARY TO COMPLETE THE SYSTEMS. THE ELECTRICAL CONTRACTOR SHALL NOTE THAT ALL ITEMS OF EQUIPMENT ARE SPECIFIED IN THE SINGULAR: HOWEVER. THE CONTRACTOR SHALL PROVIDE AND INSTALL THE NUMBER OF ITEMS OF EQUIPMENT AS INDICATED ON THE DRAWINGS AND AS REQUIRED FOR COMPLETE SYSTEMS. B. IT IS THE INTENTION OF THE SPECIFICATIONS AND DRAWINGS TO CALL FOR FINISHED WORK,

TESTED AND READY FOR OPERATION C ANY APPARATUS APPLIANCE MATERIAL OR WORK NOT SHOWN ON DRAWINGS BUT MENTIONED IN THE SPECIFICATIONS, OR VICE VERSA, OR ANY INCIDENTAL ACCESSORIES NECESSARY TO MAKE THE WORK COMPLETE AND PERFECT IN ALL RESPECTS AND READY FOR OPERATION, EVEN IF NOT PARTICULARLY SPECIFIED, SHALL BE FURNISHED, DELIVERED AND INSTALLED BY THE CONTRACTOR WITHOUT ADDITIONAL EXPENSE TO THE OWNER. WITH SUBMISSION OF BID, THE FLECTRICAL CONTRACTOR SHALL GIVE WRITTEN NOTICE TO THE ARCHITECT: ANY MATERIALS OR APPARATUS BELIEVED INADEQUATE OR UNSUITABLE, IN VIOLATION OF LAWS. ORDINANCES OR RULES; ANY NECESSARY ITEMS OR WORK OMITTED. IN THE ABSENCE OF SUCH WRITTEN NOTICE, IT IS MUTUALLY AGREED THE CONTRACTOR HAS INCLUDED THE COST OF ALL REQUIRED ITEMS IN HIS PROPOSAL, AND THAT HE WILL BE RESPONSIBLE FOR THE APPROVED SATISFACTORY FUNCTIONING OF THE ENTIRE SYSTEM WITHOUT EXTRA

COMPENSATION. END OF SECTION 26020

SECTION 26030

CODES AND FEES A. ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH ALL APPLICABLE CODES, SPECIFICATIONS LOCAL ORDINANCES INDUSTRY STANDARDS, UTILITY COMPANY AND FIRE INSURANCE CARRIER'S REQUIREMENTS. CONTACT PROPER AUTHORITIES, OBTAIN AND PAY FOR REQUIRED PERMITS, INSPECTIONS AND UTILITY SERVICE CONNECTIONS. DO NOT INCLUDE ANY UTILITY COMPANY CHARGES THAT CAN BE BILLED DIRECTLY TO THE OWNER. B. IN CASE OF DIFFERENCE BETWEEN THE BUILDING CODES, SPECIFICATIONS, STATE LAWS, LOCAL ORDINANCES INDUSTRY STANDARDS UTILITY COMPANY REGULATIONS FIRE INSURANCE CARRIER'S REQUIREMENTS. AND THE CONTRACT DOCUMENTS. THE MOST STRINGENT SHALL GOVERN. THE CONTRACTOR SHALL PROMPTLY NOTIFY THE ARCHITECT IN WRITING OF ANY SUCH DIFFERENCE

C.NONCOMPLIANCE: SHOULD THE CONTRACTOR PERFORM ANY WORK THAT DOES NOT COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE BUILDING CODES, STATE LAWS, LOCAL ORDINANCES. INDUSTRY STANDARDS. FIRE INSURANCE CARRIER'S REQUIREMENTS. AND UTILITY COMPANY REGULATIONS, HE SHALL BEAR THE COST ARISING IN CORRECTING ANY SUCH DEFICIENCY END OF SECTION 26030

SECTION 26100 BASIC METHODS AND MATERIALS

SECTION 26101 GENERAL

A. PROTECTION: ALL WORK, MATERIALS AND EQUIPMENT SHALL BE COMPLETELY AND ADEQUATELY PROTECTED AT ALL TIMES. PAY FOR ALL DAMAGE, INJURY OR LOSS, EXCEPT SUCH AS MAY BE DIRECTLY DUE TO ERRORS IN THE CONTRACT DOCUMENTS OR BE CAUSED BY AGENTS OR EMPLOYEES OF THE OWNER. POST EFFECTIVE DANGER SIGNS WARNING AGAINST HAZARDS CREATED BY THE WORK.

B. TRENCHING AND BACKFILLING: PERFORM ALL TRENCHING AND BACKFILL REQUIRED BY WORK UNDER THIS DIVISION OF THE SPECIFICATIONS. TRENCHING AND BACKFILLING SHALL BE DONE IN ACCORDANCE WITH THE "SITE WORK" DIVISION OF THE SPECIFICATIONS AND AS HEREIN SPECIFIED. THIS PORTION OF THE WORK SHALL BE EXECUTED UNDER THE DIRECT SUPERVISION OF THE GENERAL CONTRACTOR. TRENCHES SHALL BE EXCAVATED TO THE DEPTH REQUIRED FOR THE UTILITIES INVOLVED. THE TRENCH BOTTOM SHALL BE GRADED. TRUE AND FREE FROM DEBRIS, STONES AND SOFT SPOTS. WHERE DIRECT BURIAL CABLES ARE USED FOUR INCHES OF FINE SAND SHALL BE PLACED IN THE BOTTOM OF THE TRENCH PRIOR TO CABLE PLACEMENT.

C.EQUIPMENT, MATERIALS, INSTALLATION; 1. ALL EQUIPMENT, ACCESSORIES AND SPECIALTIES CONNECTED TO EQUIPMENT AND ALL ITEMS OF MATERIAL SHALL BE INSTALLED AS RECOMMENDED BY THEIR MANUFACTURERS UNLESS SPECIFICALLY STATED OTHERWISE.

2. PROVIDE PROPER SUPPORTS, MOUNTS, ETC., AS REQUIRED 3. COORDINATE WITH THE GENERAL CONTRACTOR.

4 OBTAIN INSTRUCTIONS FROM THE ARCHITECT FOR INSTALLATION OF ITEMS NOT COMPLETELY COVERED BY CONTRACT DOCUMENTS OR PUBLISHED MANUFACTURER'S RECOMMENDATIONS.

D. EQUIPMENT FINISH: ALL ELECTRICAL EQUIPMENT SHALL BE FURNISHED FACTORY PAINTED OR FINISHED WITH TWO COATS OF HIGH GRADE ENAMEL AND IN THE MANUFACTURER'S STANDARD

COLORS UNLESS OTHERWISE SPECIFIED 1. UNPAINTED EQUIPMENT AND MATERIALS, EXCEPT CONDUIT IN CONCEALED SPACES, SHALL BE CLEANED AND PRIMED TO BE PAINTED BY THE PAINTING CONTRACTOR IN ACCORDANCE WITH THE PAINTING SECTION OF THESE SPECIFICATIONS. 2. THE COLORS OF ALL EXPOSED ELECTRICAL MATERIAL AND APPARATUS SHALL BE AS

SELECTED BY THE OWNER.

E. CHASES, SLEEVES, CUTTING, PATCHING 1. PROVIDE FOR NECESSARY CHASES, HOLES, SLEEVES, BOXES, INSERTS AND HANGERS BY ARRANGEMENT WITH CONTRACTORS OF THE OTHER APPROPRIATE TRADES. PROVIDE "FLAMESEAL" OR OF THE APPROVED FIRESTOPPING MATERIAL AT ALL PENETRATIONS THROUGH RATED WALLS, FLOORS AND CEILINGS. 2. PROVIDE FOR ALL CUTTING AND PATCHING OF HOLES, OPENINGS, AND NOTCHES. OBTAIN WRITTEN APPROVAL OF THE ARCHITECT BEFORE NOTCHING, BORING, CHIPPING, BURNING, DRILLING, WELDING TO STRUCTURAL MEMBERS.

1. ALL WORK AND MATERIALS COVERED BY DRAWINGS AND SPECIFICATIONS SHALL BE SUBJECT TO INSPECTION AT ANY AND ALL TIMES BY REPRESENTATIVES OF THE ARCHITECT AND OWNER. IF ANY MATERIAL OR INSTALLATION DOES NOT CONFORM TO THE DRAWINGS AND SPECIFICATIONS, WITHIN THREE DAYS AFTER BEING NOTIFIED BY THE ARCHITECT, REMOVE THE MATERIALS FROM THE PREMISES AND CORRECT THE INSTALLATION TO THE SATISFACTION OF THE ARCHITECT. ASSUME THE ENTIRE COST OF REMOVING AND REPLACING THE MATERIAL AND CORRECTING THE INSTALLATION, INCLUDING CUTTING AND PATCHING THAT MAY BE NECESSARY

ARCHITECT. PROVIDE FOR UNCOVERING AND MAKING REPAIRS, AT NO EXTRA COST, WHEN UNINSPECTED WORK HAS BEEN CLOSED IN. NOTIFY THE ARCHITECT WHEN WORK IS READY FOR INSPECTION 3. NOTIFY PROPER AUTHORITIES WHEN WORK IS READY FOR ANY INSPECTIONS REQUIRED BY APPLICABLE CODES, RULES AND REGULATIONS, ALLOWING SUFFICIENT TIME FOR INSPECTIONS TO BE MADE WITHOUT HINDERING PROGRESS OF THE WORK, AND FURNISH THE OWNER, WITHOUT ADDITIONAL COSTS, PROPER CERTIFICATES OF ACCEPTANCE FROM SUCH

2 WORK SHALL NOT BE CLOSED IN NOR COVERED BEFORE INSPECTION AND APPROVAL BY THE

AUTHORITIES. 4. UPON COMPLETION OF ALL WORK AND ADJUSTMENT OF ALL EQUIPMENT, FINAL INSPECTION SHALL BE MADE UNDER DIRECTION OF THE ARCHITECT. TEST AND OPERATE ALL DEVICES. EQUIPMENT AND SYSTEMS TO DEMONSTRATE THAT THE ELECTRICAL SYSTEM IS COMPLETE AND FUNCTIONAL IN THE MANNER REQUIRED. G.CLEAN UP

1. DURING THE COURSE OF THE WORK REMOVE ANY MATERIALS NOT INSTALLED IN THE WORK

WHICH CONFLICT WITH THE WORK OF OTHERS IF SO DIRECTED BY THE ARCHITECT.

2. AT COMPLETION OF WORK CLEAN UP AND REMOVE FROM THE PREMISES ALL DEBRIS AND MATERIALS NOT INSTALLED IN THE WORK SO THE PREMISES WILL BE LEFT CLEAN. WASH AND WIPE CLEAN ALL LIGHTING FIXTURES AND LAMPS WHICH MAY HAVE BECOME SOILED DURING H.RECORD DRAWINGS: AT COMPLETION OF THE WORK FURNISH TO THE ARCHITECT TWO COMPLETE SETS OF ELECTRICAL PRINTS MARKED TO SHOW THE WORK "AS-BUILT". I. MAINTENANCE AND OPERATING PROCEDURES: UPON COMPLETION OF ALL WORK AND ADJUSTMENT OF ALL EQUIPMENT. INSTRUCT THE OWNER ON THE CORRECT OPERATION AND MAINTENANCE PROCEDURE FOR THE ELECTRICAL SYSTEM IN TOTAL. FURNISH 3 SETS OF TYPED MAINTENANCE MANUALS CONTAINING CUT SHEETS ON ALL EQUIPMENT, TABLES OF FUSES AND FOR WHAT EQUIPMENT, TABLE OF LAMPS AND BALLASTS AND FOR WHAT FIXTURES. INCLUDE A LIST OF CONTACTS WITH PHONE NUMBERS FOR ALL SYSTEMS FOR OWNERS' USE,

IN THE EVENT THE ELECTRICAL SYSTEM REQUIRES SERVICE WORK WITHIN THE WARRANTY J. GUARANTEE: GUARANTEE THAT ALL WORK GOVERNED BY THIS DIVISION SHALL BE NEW AND FREE OF DEFECTIVE WORK, MATERIALS, AND COMPONENTS FOR A PERIOD OF ONE YEAR AFTER WRITTEN ACCEPTANCE. REPAIR. REVISE AND REPLACE DEFECTS AS DIRECTED. WITH NO ADDITIONAL COST TO THE OWNER. (INCANDESCENT LAMPS, FUSES AND ANY EXISTING EQUIPMENT ARE EXEMPT).

END OF SECTION 26101

A. PVC CONDUIT SHALL BE USED FOR ALL UNDERGROUND FEEDERS AND BRANCH CIRCUITS UNLESS OTHERWISE DIRECTED ON PLANS OR AS APPROVED BY NEC. ALL CONDUIT SHALL BE UI APPROVED B. CONDUIT SIZES SHALL BE AS INDICATED ON THE DRAWINGS, OR MINIMUM IN ACCORDANCE WITH THE NEC. INCLUDING PROVISION FOR GREEN EQUIPMENT GROUNDING CONDUCTOR USING 3/4 INCH MINIMUM CONDUIT. THE USE OF 1/2 INCH CONDUIT ELSEWHERE MAY BE APPROVED IF CONDITIONS WARRANT. C.SPECIAL CONDUIT FITTINGS SHALL BE APPROPRIATE FOR EACH APPLICATION AND SHALL BE

MANUFACTURED BY T & B OR APPROVED EQUAL. D.CONDUIT SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE NEC AND SHALL BE INSTALLED IN A NEAT, WORKMANLIKE MANNER. E. THE ENTIRE CONDUIT SYSTEM SHALL BE INSTALLED TO PROVIDE A CONTINUOUS BOND THROUGHOUT THE SYSTEM F. ELECTRICAL METALLIC TUBING (EMT) MAY BE USED FOR BRANCH CIRCUITS AND RACEWAYS OTHER THAN FOR SERVICE ENTRANCE AND MAIN FEEDERS UNLESS PROHIBITED BY THE NEC OR LOCAL ORDINANCES, EMT SHALL BE UL APPROVED, GALVANIZED INSIDE AND OUTSIDE COMPLYING WITH ANSI C-80.3 FOR ZINC COATED EMT WITH FITTINGS OF THE SAME TYPE MATERIAL AND FINISH. OF THE PRESSURE CONNECTED TYPE FOR EXTERIOR INSTALLATION AND OF THE SET SCREW TYPE FOR INTERIOR INSTALLATION. G.ALL CONDUIT JOINTS SHALL BE CUT SQUARE, REAMED SMOOTH, AND DRAWN UP TIGHT. BENDS OR OFFSETS SHALL BE MADE WITH AN APPROVED BENDER OR HICKEY, OR HUB-TYPE CONDUIT FITTINGS. NUMBER OF BENDS PER RUN SHALL CONFORM TO THE NEC LIMITATIONS. H.CONCEALED CONDUITS SHALL BE RUN IN A DIRECT LINE WITH LONG SWEEP BENDS AND OFFSETS. EXPOSED CONDUITS SHALL BE PARALLEL TO AND AT RIGHT ANGLES TO BUILDING LINES, USING CONDUIT FITTINGS FOR ALL TURNS AND OFFSETS. I. TRANSITIONS BETWEEN NONMETALLIC CONDUITS AND CONDUITS OF OTHER MATERIALS SHALL BE MADE WITH THE MANUFACTURER'S STANDARD ADAPTERS DESIGNED FOR SUCH PURPOSE. J. EXPOSED CONDUITS SHALL BE SECURELY FASTENED IN PLACE ON MAXIMUM 10 FOOT

INTERVALS; AND HANGERS, SUPPORTS OR FASTENERS SHALL BE PROVIDED AT EACH ELBOW

AND AT THE END OF EACH STRAIGHT RUN TERMINATING AT A BOX OR CABINET.

**SECTION 260519** WIRES AND CABLES

END OF SECTION 260533

A. WIRE AND CABLE SHALL MEET ALL STANDARDS AND SPECIFICATIONS APPLICABLE. AND SHALL BE IN CONFORMANCE WITH THE LATEST EDITION OF THE NECL INSULATED WIRE AND CABLE SHALL HAVE SIZE, TYPE OF INSULATION, VOLTAGE AND MANUFACTURER'S NAME PERMANENTLY MARKED ON OUTER COVERING AT REGULAR INTERVALS NOT EXCEEDING FOUR FEET. WIRE AND CABLE SHALL BE DELIVERED IN COMPLETE COILS OR REELS WITH IDENTIFYING TAGS, STATING SIZE. TYPE OF INSULATION, ETC. B. WIRE AND CABLE SHALL BE SUITABLY PROTECTED FROM WEATHER AND OTHER DAMAGE DURING STORAGE AND HANDLING, AND SHALL BE IN FIRST CLASS CONDITION AFTER C.WIRE AND CABLE SHALL BE FACTORY COLOR CODED WITH A SEPARATE COLOR FOR EACH PHASE AND NEUTRAL USED CONSISTENTLY THROUGHOUT THE SYSTEM. COLOR CODING SHALL BE AS REQUIRED BY THE NEC. D.ALL CONDUCTORS SHALL BE RATED 600 VOLTS, UNLESS OTHERWISE SPECIFIED OR SHOWN ON THE DRAWINGS, OR FOR ELECTRONIC OR COMMUNICATION USE. E. WIRE AND CABLE FOR VARIOUS APPLICATIONS SHALL BE AS FOLLOWS UNLESS OTHERWISE

1. WIRE #10 AND SMALLER SHALL BE SOLID; WIRE #8 AND LARGER SHALL BE STRANDED. 2 #12 THRU #6 DRY LOCATIONS: TYPE THHN 90 DEGREES ( 3. #12 THRU #6 IN SLABS, UNDERGROUND, OR WET LOCATIONS: TYPE THWN OR TYPE XHHW, 75 DEGREES C. 4. #4 AND LARGER: TYPE XHHW OR TYPE THWN 75 DEGREES C. F. WIRE AND CABLE SHALL BE AS MANUFACTURED BY GENERAL ELECTRIC, ANACONDA WIRE & CABLE, ROME CABLE, TRIANGLE CONDUIT & CABLE, OR APPROVED EQUAL. SUBSTITUTION OF WIRE AND CABLE MANUFACTURER SHALL BE ONLY WITH THE APPROVAL OF THE

ARCHITECT/ENGINEER. G.FOR ANY SPECIFIC USE NOT COVERED HERE ABOVE, COMPLY WITH THE NEC IN CONDUCTOR H.ALL CIRCUITS SHALL BE 2#12 CU + G CU UNLESS OTHERWISE NOTED ON DRAWINGS OR IN I. ALL 15 AND 20 AMP CIRCUITS WITH LENGTHS OVER 150 FT. SHALL HAVE THEIR CONDUCTOR SIZE INCREASED TO #10 FOR VOLTAGE DROP. END OF SECTION 260519

SECTION 26121

DESIGNATED:

WIRE CONNECTIONS A. JOINTS ON BRANCH CIRCUITS SHALL OCCUR ONLY WHERE SUCH CIRCUIT DIVIDE AS INDICATED ON PLANS AND SHALL CONSIST OF ONE THROUGH CIRCUIT TO WHICH SHALL BE SPLICED THE BRANCH FROM THE CIRCUIT. IN NO CASE SHALL JOINTS IN BRANCH CIRCUITS BE LEFT FOR THE FIXTURE HANGER TO MAKE. NO SPLICES SHALL BE MADE IN CONDUCTOR EXCEPT AT OUTLET BOXES, JUNCTION BOXES, OR SPLICE BOXES. B. ALL JOINTS OR SPLICES FOR #10 AWG OR SMALLER SHALL BE MADE WITH UL APPROVED WIRE NUTS OR COMPRESSION TYPE CONNECTORS. C.ALL JOINTS OR SPLICES FOR #8 AWG OR LARGER SHALL BE MADE WITH A MECHANICAL COMPRESSION CONNECTOR. AFTER THE CONDUCTORS HAVE BEEN MADE MECHANICALLY AND ELECTRICALLY SECURE, THE ENTIRE JOINT OR SPLICE SHALL BE COVERED WITH SCOTCH #33 TAPE OR APPROVED EQUAL TO MAKE THE INSULATION OF THE JOINT OR SPLICE EQUAL TO THE INSULATION OF THE CONDUCTORS. THE CONNECTOR SHALL BE UL APPROVED.

SECTION 26125 PULLING CABLES

END OF SECTION 26121

A. INSTALL CONDUCTORS IN ALL RACEWAYS AS REQUIRED, UNLESS OTHERWISE NOTED, IN A NEAT AND WORKMANLIKE MANNER. ALL EMPTY CONDUITS SHALL HAVE A #14 GALVANIZED PULL WIRE OR NYI ON PULL CORD LEFT IN PLACE FOR FUTURE USE B. CONDUCTORS SHALL BE COLOR CODED IN ACCORDANCE WITH THE NEC. MAINS, FEEDERS, SUBFEEDERS SHALL BE TAGGED IN ALL PULL. JUNCTION, AND OUTLET BOXES AND IN THE GUTTER OF PANELS WITH APPROVED CODE TYPE WIRE MARKERS.

C.NO LUBRICANT OTHER THAN POWDERED SOAPSTONE OR APPROVED PULLING COMPOUND MAY BE USED TO PULL CONDUCTORS. D.AT LEAST EIGHT (8) INCHES OF SLACK WIRE SHALL BE LEFT IN EVERY OUTLET BOX WHETHER IT BE IN USE OR LEFT FOR FUTURE USE. E.ALL CONDUCTORS AND CONNECTIONS SHALL TEST FREE OF GROUNDS, SHORTS AND OPENS BEFORE TURNING THE JOB OVER TO THE OWNER

F. PULL BOXES SHALL BE REQUIRED IN RUNS OVER 100 FEET OR WHEN MORE THAN THREE 90-DEGREE BENDS ARE USED, OR AS INDICATED ON THE DRAWINGS. G.FEEDERS ARE TO BE RUN ABOVE GROUND TO ALL POWER PANELS AND LIGHTING PANELS, UNLESS INDICATED OTHERWISE ON DRAWINGS. H. WHERE MOTORS HAVE CONDUIT TERMINAL BOXES, FEEDERS SHALL BE CONNECTED TO SAME BY FLEXIBLE MEANS I. ALL MOTORS WITH SLIDING BASE MOUNTINGS SHALL HAVE NOT LESS THAN 18 INCHES NOR MORE THAN 6 FEET OF CONDUIT CONNECTING RIGID CONDUIT FEED TO MOTOR TERMINAL BOX. J. CONDUCTOR SPLICES SHALL BE MADE ONLY IN JUNCTION BOXES, TERMINAL BOXES, OR PULL

END OF SECTION 16125

SECTION 16133 ALL OUTLET BOXES FOR CONCEALED WIRING SHALL BE SHEET METAL. A. GALVANIZED OR CADMIUM PLATED, AT LEAST 1 INCHES DEEP, SINGLE OR GANGED, OF SIZE TO ACCOMMODATE DEVICES AND NUMBER OF CONDUCTORS NOTED. BOXES SHALL BE EQUIPPED WITH PLASTER RING OR COVER AS NECESSARY. ALL OUTLET BOXES SHALL BE MANUFACTURED BY STEEL CITY OR APPROVED EQUAL.

B. BOXES FOR EXPOSED WIRING SHALL BE MALLEABLE IRON, CADMIUM FINISH, OR CAST ALUMINUM ALLOY, AS MANUFACTURED BY STEEL CITY, AND SHALL NOT BE LESS THAN 4 INCHES SQUARE BY 1 INCHES DEEP UNLESS OTHERWISE NOTED. C.FIXTURE OUTLET BOXES SHALL BE MINIMUM 4 INCH OCTAGONAL AND, WHERE REQUIRED AS OUTLET AND JUNCTION BOXES, THEY SHALL BE 4 11/16 INCHES BY 2 1/8 INCHES DEEP. END OF SECTION 16133

SUPPORTING DEVICES A. THE ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL METALLIC SUPPORTS AS REQUIRED FOR THE PROPER INSTALLATION OF RACEWAY SYSTEMS AND ALL OTHER EQUIPMENT INSTALLED UNDER THIS DIVISION OF THE CONTRACT CONFORMING TO THE LATEST EDITION OF THE NEC. B. CONDUIT SHALL BE SUPPORTED ON APPROVED TYPES OF WALL BRACKETS, CEILING TRAPEZES, STRAP HANGERS OR PIPE SUPPORTS, SECURED BY MEANS OF TOGGLE BOLTS IN HOLLOW MASONRY WALLS OR UNITS. EXPANSION BOLTS WILL BE USED IN CONCRETE OR BLOCK, MACHINE SCREWS ON METAL SURFACES, AND WOOD SCREWS ON WOOD CONSTRUCTION. C.CONDUIT SHALL BE SECURELY FASTENED TO ALL SHEET METAL OUTLETS, JUNCTION AND PULL BOXES WITH TWO GALVANIZED LOCKNUTS AND BUSHING. CARE BEING TAKEN TO SEE THAT THE

FULL NUMBER OF THREADS PROJECT THROUGH TO PERMIT THE BUSHING TO BE DRAWN TIGHT AGAINST THE END OF THE CONDUIT, AFTER WHICH THE LOCKNUTS SHALL BE MADE TIGHT SUFFICIENTLY TO DRAW THEM INTO FIRM ELECTRICAL CONTACT WITH THE OUTLET BOX. INSTALL A PLASTIC BUSHING ON END OF PIPE THREADS PROTRUDING INTO JUNCTION BOXES AND OTHER ENCLOSURES TO PROTECT CABLING. D.THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SUPPORTS REQUIRED FOR THE ELECTRICAL EQUIPMENT AND CONDUIT. END OF SECTION 260529

**SECTION 260553** ELECTRICAL IDENTIFICATION

CIRCUIT MODIFICATIONS UNDER THIS CONTRACT.

END OF SECTION 260553

END OF SECTION 1640

A. THE ELECTRICAL CONTRACTOR SHALL MAINTAIN ACCURATE RECORDS OF ALL DEVIATIONS IN WORK AS ACTUALLY INSTALLED FROM WORK INDICATED ON THE DRAWINGS. UPON COMPLETION OF THE PROJECT, TWO (2) COMPLETE SETS OF MARKED-UP PRINTS SHALL BE DELIVERED TO THE ARCHITECT. B. IDENTIFICATION OF EQUIPMENT

1. PROVIDE AND INSTALL LAMINATED BLACK AND WHITE LAMACOID NAMEPLATES FOR ALL SERVICE SWITCHES, DISTRIBUTION SWITCHES, DISTRIBUTION SWITCHBOARDS, BRANCH CIRCUIT PANELBOARDS, SAFETY SWITCHES, CABINETS, STARTERS, AND OTHER EQUIPMENT WITH THEIR CORRECT DESIGNATION. LABEL EQUIPMENT IN AREAS ACCESSIBLE TO THE PUBLIC ON INSIDE OF ENCLOSURE ONLY. NAMEPLATES SHALL BE FIRMLY SECURED TO FRONT COVER OR DOOR WITH TWO PROPERLY SIZED POP RIVETS. 2 MOUNT A TYPEWRITTEN DIRECTORY BEHIND PLASTIC ON THE INSIDE OF EACH BRANCH. CIRCUIT PANEL DOOR, GIVING THE NUMBER, DESCRIPTION AND LOCATION OF THE CIRCUIT CONTROLLED BY EACH CIRCUIT BREAKER. REVISE EXISTING DIRECTORIES TO REFLECT

3. ALL FUSED SAFETY SWITCHES AND FUSED SWITCH UNITS IN SWITCHBOARDS SHALL INDIVIDUALLY BEAR A FUSE LABEL SHOWING PROPER SIZE AND TYPE OF FUSE TO BE USED. 4. INSTALL WIRING DIAGRAMS ON THE INSIDE COVER OF ALL STARTERS, SWITCHES AND OTHER SUCH EQUIPMENT. SUCH DIAGRAMS SHALL NOT BE HANDWRITTEN. 5. ALL JUNCTION BOXES WITH BLANK COVERS SHALL HAVE CIRCUITS CONTAINED THEREIN IDENTIFIED BY MEANS OF PERMANENT BLACK "MAGIC MARKER" ON THE COVER.

SECTION 16199 ELECTRONIC EQUIPMENT

A. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND CONNECTION OF A PROPER POWER SUPPLY TO ALL ELECTRONIC EQUIPMENT FURNISHED BY OTHERS HE SHALL VERIEY ALL VOLTAGE FREQUENCY FTC. REQUIREMENTS PRIOR TO ENERGIZING THE CIRCUIT. THOSE INSTALLING THE EQUIPMENT WILL BE RESPONSIBLE FOR THE PROPER OPERATION OF THE EQUIPMENT PROVIDED THE PROPER POWER SUPPLY CIRCUIT IS INSTALLED BY THE FLECTRICAL CONTRACTOR. B. PROVIDE TELEPHONE LINES TO EQUIPMENT CONTROL PANELS WITH MODEM ACCESS. COORDINATE WITH MECHANICAL CONTRACTOR. END OF SECTION 16199

SECTION 16400 SERVICE AND DISTRIBUTION

SECTION 16401 A. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL RELATED DISTRIBUTION EQUIPMENT AS INDICATED ON THE FLOOR PLAN, DIAGRAMS, SCHEDULES, AND NOTES. ALL EQUIPMENT SHALL BE NEW AND ULLISTED B. RELATED DOCUMENTS: DRAWINGS AND GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION 1 SPECIFICATIONS SECTION, APPLY TO WORK OF THIS SECTION

**SECTION 262816** 

DISCONNECT SWITCHES A. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL SAFETY SWITCHES AS INDICATED ON THE DRAWINGS OR AS REQUIRED. ALL

SAFETY SWITCHES SHALL BE UL LISTED. 1. THE SWITCHES SHALL BE FUSED SAFETY SWITCHES (FSS) OR NON-FUSED SAFETY SWITCHES (NFSS) AS SHOWN ON THE DRAWINGS OR REQUIRED AND SHALL BE MANUFACTURED BY SIEMENS, SQUARE D. OR APPROVED FQUAL. 2. SWITCHES SHALL HAVE A QUICK-MAKE AND QUICK-BREAK OPERATING HANDLE AND MECHANISM WHICH SHALL BE AN INTEGRAL PART OF THE BOX. PADLOCKING PROVISIONS SHALL BE PROVIDED FOR PADLOCKING IN THE OFF POSITION WITH AT LEAST THREE

PADLOCKS. SWITCHES SHALL BE HORSEPOWER RATED FOR 250 VOLTS AC OR DC OR 600 VOLTS AC AS REQUIRED. LUGS SHALL BE UL LISTED FOR COPPER AND ALUMINUM CABLE. 3. SWITCHES SHALL BE FURNISHED IN NEMA I GENERAL PURPOSE ENCLOSURES WITH KNOCKOUTS UNLESS OTHERWISE NOTED OR REQUIRED. SWITCHES LOCATED ON THE EXTERIOR OF THE BUILDING OR IN "WET" LOCATIONS SHALL HAVE NEMA 3R ENCLOSURES

4. THE SAFETY SWITCHES SHALL BE SECURELY MOUNTED IN ACCORDANCE WITH THE NEC. THE CONTRACTOR SHALL PROVIDE ALL MOUNTING MATERIALS AND INSTALL FUSES IN THE FSS. THE FUSES SHALL BE DUAL ELEMENT ON MOTOR CIRCUITS. END OF SECTION 262816

**SECTION 260526** 

A. THE CONDUIT SYSTEMS AND NEUTRAL CONDUCTOR FOR THE WIRING SYSTEM, AND THE TELEPHONE SYSTEM SHALL BE SECURELY GROUNDED. THE GROUNDS SHALL BE NEC GROUNDS IN EACH CASE. B. A GROUND SHALL BE ESTABLISHED AND TESTS CARRIED OUT TO INDICATE THAT SATISFACTORY GROUND HAS BEEN ESTABLISHED IN ACCORDANCE WITH THE NEC. C.WRITTEN RESULTS OF THIS TEST SHALL BE FORWARDED TO THE ENGINEER BEFORE CONNECTION TO THE SERVICE END OF SECTION 260526

**SECTION 262416 PANELBOARDS** 

A. FURNISH AND INSTALL DISTRIBUTION AND POWER PANELBOARDS AS INDICATED IN THE PANELBOARD SCHEDULE AND WHERE SHOWN ON THE DRAWINGS. PANELBOARDS SHALL BE DEAD-FRONT SAFETY TYPE, EQUIPPED WITH QUICK-MAKE, QUICK-BREAK FUSIBLE BRANCH SWITCHES AND APPROVED FOR SERVICE ENTRANCE. THE ACCEPTABLE MANUFACTURERS OF THE PANELBOARD ARE SIEMENS, SQUARE D, AND GE, PROVIDED THEY ARE FULLY EQUAL TO THE TYPE LISTED ON THE DRAWINGS. THE PANELBOARD SHALL BE UL LISTED AND BEAR THE UL

B. ALL FUSIBLE BRANCH SWITCHES SHALL BE QUICK-MAKE, QUICK BREAK, WITH VISIBLE BLADES AND DUAL HORSEPOWER RATINGS SWITCH HANDLES SHALL PHYSICALLY INDICATE ON AND OFF POSITIONS. SUCH HANDLES SHALL ALSO BE ABLE TO ACCEPT THREE PADLOCKS HAVING HEAVY-DUTY INDUSTRIAL TYPE SHACKLES. COVERS SHALL BE INTERLOCKED WITH THE SWITCH HANDLES TO PREVENT OPENING IN THE ON POSITION. A MEANS SHALL BE PROVIDED TO ALLOW AUTHORIZED PERSONNEL TO RELEASE THE INTERLOCK FOR INSPECTION PURPOSES WHEN A SWITCH IS ON A CARDHOLDER PROVIDING CIRCUIT IDENTIFICATION, SHALL BE MOUNTED ON EACH BRANCH SWITCH. SWITCHES SHALL BE PROVIDED WITH FUSES OR AS NOTED ON THE

C. PANELBOARD BUS STRUCTURE AND MAIN LUGS OR MAIN SWITCH SHALL HAVE CURRENT RATINGS AS SHOWN ON THE PANELBOARD SCHEDULE. THE BUS STRUCTURE SHALL ACCOMMODATE PLUG-ON OR BOLTED BRANCH SWITCHES AND MOTOR STARTERS AS INDICATED IN THE PANELBOARD SCHEDULE WITHOUT MODIFICATION TO THE BUS ASSEMBLY. PROVIDE SOLID NEUTRAL ASSEMBLY (S/N).

D. SWITCHES AND PANELBOARD BUS STRUCTURE SHALL SAFELY AND WITHOUT FAILURE WITHSTAND SHORT CIRCUITS ON THE SYSTEMS CAPABLE OF DELIVERING UP TO 100,000 AMPERES RMS SYMMETRICAL, UNLESS OTHERWISE NOTED. E. PANELBOARD ASSEMBLY SHALL BE ENCLOSED IN A STEEL CABINET. THE RIGIDITY AND GAUGE OF STEEL TO BE AS SPECIFIED IN UL STANDARD FOR CABINETS. THE SIZE OF WIRING GUTTERS SHALL BE IN ACCORDANCE WITH UL STANDARD. CABINETS SHALL BE EQUIPPED WITH A FRONT DOOR AND HAVE FULLY CONCEALED, SELF-ALIGNING TRIM CLAMPS. FRONTS SHALL BE FULL-FINISHED STEEL WITH RUST INHIBITING PRIMER AND BAKED ENAMEL FINISH F. TERMINALS FOR FEEDER CONDUCTORS TO THE PANELBOARD MAINS AND NEUTRAL SHALL BE SUITABLE FOR THE TYPE OF CONDUCTOR SPECIFIED. TERMINALS FOR BRANCH CIRCUIT WIRING, BOTH BREAKER AND NEUTRAL, SHALL BE SUITABLE FOR THE TYPE OF CONDUCTOR

G. BEFORE INSTALLING PANELBOARDS CHECK ALL OF THE ARCHITECTURAL DRAWINGS FOR POSSIBLE CONFLICT OF SPACE AND ADJUST THE LOCATION OF THE PANELBOARD TO PREVENT SUCH CONFLICT WITH OTHER ITEMS. H.THE PANELBOARDS SHALL BE MOUNTED IN ACCORDANCE WITH THE NEC. THE ELECTRICAL CONTRACTOR SHALL FURNISH ALL MATERIAL FOR MOUNTING THE PANELBOARDS. END OF SECTION 26470

BRANCH CIRCUIT PANELBOARD

A. POWER AND LIGHTING PANELS SHALL BE OF THE DEAD-FRONT, SAFETY TYPE, WITH THERMAL MAGNETIC, QUICK-MAKE, QUICK-BREAK, TRIP FREE, BOLTED-TYPE MOLDED CASE CIRCUIT BREAKERS. VOLTAGE RATINGS, NUMBER OF POLES, FRAME SIZE, TRIP RATINGS, MAIN BREAKER OR LUGS, NEUTRAL BUS, AND GROUND BUS ARE ALL AS SHOWN ON THE DRAWINGS. BUS BARS SHALL BE RECTANGULAR, SOLID COPPER, SECURELY MOUNTED AND BRACED. ALL CONNECTIONS TO BUS BARS SHALL BE SECURELY BOLTED. CABINET BOXES SHALL BE CONSTRUCTED OF CODE GRADE GALVANIZED STEEL, SIZED TO PROVIDE MINIMUM 4-INCH WIDE WIRING GUTTERS ON SIDES. TOP AND BOTTOM. FRONTS SHALL BE CONSTRUCTED OF CODE GRADE STEEL, ADJUSTABLE INDICATING TRIM CLAMPS AND WITH DOOR PROVIDED WITH CONCEALED HINGES AND CYLINDER TYPE LOCK AND CATCH. TWO KEYS PER PANEL SHALL BE FURNISHED, AND ALL LOCKS KEYED ALIKE. FRONT SHALL BE FINISH PAINTED BLUE-GRAY. B. POWER PANELS SHALL BE SIEMENS, TYPE S1, S2, S3, SE, OR ENGINEER APPROVED EQUAL, WITH BRANCH BREAKERS, MAIN BREAKERS OR LUGS, NEUTRAL AND GROUND BUSES, ETC., ALL AS SHOWN ON THE DRAWINGS. C. POWER AND LIGHTING PANEL CONSTRUCTION DETAILS SHALL BE IN ACCORDANCE WITH UL STANDARDS AND SHALL CONFORM TO NEMA STANDARDS. THEY SHALL BEAR THE UL LABEL. PANELS SHALL MEET FEDERAL SPECIFICATIONS W-P-115A, TYPE 1, CLASS I.

D. ALL PANEL DIRECTORIES SHALL BE TYPED AND TERMINOLOGY APPROVED BY THE OWNER.

SECTION 26475

OVERCURRENT PROTECTIVE DEVICES A. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL WHERE INDICATED ON THE DRAWINGS OR AS REQUIRED BY THE NEC MOLDED CASE CIRCUIT BREAKERS IN A NEMA TYPE 1 ENCLOSURE. BREAKERS SHALL BE MANUALLY OPERATED, TRIP-FREE AND DESIGNED SO THAT ALL POLES OPEN SIMULTANEOUSLY. TRIPPING MECHANISM SHALL BE (THERMALLY. MAGNETICALLY) OPERATED, SHALL OPEN INSTANTANEOUSLY ON SHORT CIRCUITS AND HAVE TIME DELAY ON OVERLOADS, AND HAVE EFFECTIVE SCALING AGAINST TAMPERING. BREAKERS SHALL BE AS CALLED FOR ON THE DRAWINGS OR IN THE PANELBOARD SCHEDULE AND AS MANUFACTURED BY SIEMENS, SQUARE D, OR APPROVED EQUAL B. FUSES, UNLESS INDICATED OTHERWISE, SHALL BE DUAL ELEMENT, TIME LAG, CARTRIDGE TYPE AS MANUFACTURED BY BUSSMAN. FUSES FOR MOTOR CIRCUITS SHALL BE SIZED IN ACCORDANCE WITH THE NEC. LABELS INDICATING THE SIZE AND TYPE OF REPLACEMENT FUSES SHALL BE GLUED TO INSIDE OF DOOR ON ALL FUSIBLE SWITCHES AND PANELBOARDS. C. ALL FUSES SHALL BE OF THE CURRENT AND VOLTAGE RATING AS REQUIRED OR INDICATED. D. SPARES: SPARE FUSES AMOUNTING TO 10% (MINIMUM THREE) OF EACH TYPE AND RATING SHALL BE SUPPLIED BY THE ELECTRICAL CONTRACTOR. THESE SHALL BE TURNED OVER TO THE OWNER UPON PROJECT COMPLETION. END OF SECTION 26475

SECTION 26900 CONTROLS AND INSTRUMENTATION

END OF SECTION 262426

A. ALL EQUIPMENT AND MATERIALS USED IN RELATION TO CONTROL WORK FOR THE PROJECT SHALL BE NEW AND SHALL BEAR THE MANUFACTURER'S NAME AND TRADE NAME. THE EQUIPMENT AND MATERIAL SHALL BE ESSENTIALLY THE STANDARD PRODUCT OF A MANUFACTURER REGULARLY ENGAGED IN THE PRODUCTION OF THE REQUIRED TYPE OF EQUIPMENT AND SHALL BE THE MANUFACTURER'S LATEST APPROVED DESIGN. B. THE ELECTRICAL CONTRACTOR SHALL RECEIVE AND PROPERLY STORE THE EQUIPMENT AND MATERIAL PERTAINING TO THE ELECTRICAL WORK. THE EQUIPMENT SHALL BE TIGHTLY COVERED AND PROTECTED AGAINST DIRT, WATER, CHEMICAL OR MECHANICAL INJURY AND THEET. THE MANUFACTURER'S DIRECTIONS SHALL BE FOLLOWED COMPLETELY IN THE DELIVERY, STORAGE, PROTECTION AND INSTALLATION OF ALL EQUIPMENT AND MATERIALS. C. THE ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL ITEMS NECESSARY FOR THE COMPLETE INSTALLATION OF THE EQUIPMENT AS RECOMMENDED OR AS REQUIRED BY THE MANUFACTURER OF THE EQUIPMENT OR REQUIRED BY CODE WITHOUT ADDITIONAL COST TO THE OWNER, REGARDLESS OF WHETHER THE ITEMS ARE SHOWN ON THE PLANS OR COVERED IN THE SPECIFICATIONS D.IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO CLEAN THE ELECTRICAL EQUIPMENT, MAKE NECESSARY ADJUSTMENTS AND PLACE THE EQUIPMENT INTO OPERATION BEFORE TURNING EQUIPMENT OVER TO OWNER. ANY PAINT THAT WAS

SCRATCHED DURING CONSTRUCTION SHALL BE "TOUCHED-UP" WITH FACTORY COLOR PAINT TO THE SATISFACTION OF THE ARCHITECT. ANY ITEMS THAT WERE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED. F. GENERAL

1. UNLESS OTHERWISE INDICATED ALL HEATING, VENTILATING, AIR CONDITIONING, PLUMBING, AND OTHER MECHANICAL EQUIPMENT, MOTORS, AND CONTROLS SHALL BE FURNISHED, SET

IN PLACE AND WIRED AS FOLLOWS:

RESPONSIBLE DIVISION ITEM FURNISHED SET POWER- CONTROL-WIRED EQUIPMENT . . . 23 23 26 COMBINATION MAGNETIC MOTOR STARTERS, MAGNETIC MOTOR STARTERS AND CONTACTORS 23 26 FUSED AND UNFUSED DISCONNECT SWITCHES. THERMAL OVERLOAD SWITCHES AND HEATERS, MANUAL MOTOR STARTERS . 26(1) 26(1) 26 --MANUAL-OPERATING AND MULTI-SPEED SWITCHES CONTROLS, RELAYS TRANSFORMERS THERMOSTATS (LOW VOLTAGE) AND TIME SWITCHES THERMOSTATS (LINE VOLTAGE) TEMPERATURE CONTROL PANELS . 23 23 26 23 MOTOR AND SOLENOID VALVES, DAMPER MOTORS, PE & EP . . . . 23 SWITCHES . 23(2) PUSH-BUTTON STATIONS AND PILOT LIGHTS . . . . . 23 23(2) HEATING, COOLING, VENTILATION AND AIR CONDITIONING CONTROLS 23 23 26 23 EXHAUST FAN SWITCHES . . 23 26 26 23(2)

SUBSCRIPT FOOTNOTES: UNDER DIVISION 23 IF FURNISHED FACTORY-WIRED AS PART OF EQUIPMENT OR IF FURNISHED WITH COMBINATION STARTERS.

2) IF ITEM IS FOR LINE VOLTAGE, SET IN PLACE AND CONNECT UNDER DIVISION 26. WHERE FACTORY MOUNTED ON EQUIPMENT OR ATTACHED TO PIPING OR DUCTS AND USING LINE VOLTAGE FURNISH AND SET UNDER DIVISION 23. CONNECT UNDER DIVISION 26 VERIFY LOCATION AND NAMEPLATE DATA OF ALL MECHANICAL EQUIPMENT WITH THE MECHANICAL CONTRACTOR PRIOR TO INSTALLING FLECTRICAL FACILITIES. BE RESPONSIBLE FOR COORDINATION OF REVISIONS AND MODIFICATIONS NECESSARY TO PROPERLY SUPPLY ELECTRICAL FACILITIES TO HEATING, VENTILATING, AIR CONDITIONING, PUMPS, MOTORS. CONTROLS, AND OTHER MECHANICAL EQUIPMENT INSTALLED IN PLACE OF EQUIPMENT SPECIFIED. REQUIRED ELECTRICAL FACILITIES CHANGES SHALL BE CONSIDERED TO BE A PART OF THE MECHANICAL CONTRACT

4) PROVIDE EACH MOTOR WITH A HORSEPOWER RATED DISCONNECT SWITCH AND MOTOR RUNNING OVERCURRENT PROTECTION PER N.E.C. 430-37. TO FACILITATE EASE AND SAFETY OF OPERATION AND MAINTENANCE OF MECHANICAL EQUIPMENT. LOCATE THE DISCONNECT SWITCH IMMEDIATELY ADJACENT TO THE MOTOR, UNLESS OTHERWISE INDICATED. SIZE THERMAL OVERLOAD HEATER UNITS FOR APPROXIMATELY 115% OF FULL LOAD MOTOR CURRENT. SIZE FUSES IN ACCORDANCE WITH THE ACTUAL MOTOR NAMEPLATE RATING AND AS RECOMMENDED BY THE BUSSMAN MFG. CO. CHECK AND COORDINATE ALL STARTERS, FUSES. AND OTHER MOTOR-RUNNING PROTECTIVE DEVICES WITH THE EQUIPMENT THEY CONTROL, AND PROVIDE AND INSTALL THE CORRECT SIZE PROTECTIVE ELEMENTS AS

5) DO NOT CONNECT MOTORS WHICH ARE OF A VOLTAGE RATING DIFFERENT THAN SUPPLY VOLTAGE. REPORT SAME TO THE ARCHITECT IN WRITING AND OBTAIN WRITTEN INSTRUCTIONS FOR RESOLUTION.

6) USE FLEXIBLE CONDUIT FOR ALL CONNECTIONS TO DEVICES DIRECTLY ATTACHED TO

SECTION 26950

A. AS SOON AS ELECTRIC POWER IS AVAILABLE AND CONNECTED TO SERVE THE EQUIPMENT IN THE BUILDING, AND EVERYTHING IS READY FOR FINAL TESTING AND PLACING IN SERVICE, A COMPLETE OPERATIONAL TEST SHALL BE MADE. THE CONTRACTOR SHALL FURNISH ALL NECESSARY INSTRUMENTS AND EQUIPMENT AND MAKE ALL TESTS, ADJUSTMENTS, AND TRIAL OPERATIONS REQUIRED TO PLACE THE SYSTEM IN BALANCED AND SATISFACTORY OPERATING CONDITION: FURNISH ALL NECESSARY ASSISTANCE AND INSTRUCTIONS TO PROPERLY INSTRUCT THE OWNER'S AUTHORIZED PERSONNEL IN THE OPERATION AND CARE OF THE

B. PRIOR TO TESTING THE SYSTEM. THE FEEDERS AND BRANCH CIRCUITS SHALL BE CONTINUOUS FROM MAIN FEEDERS TO MAIN PANELS. TO SUBPANELS. TO OUTLETS. WITH ALL BREAKERS AND FUSES IN PLACE. THE SYSTEM SHALL BE TESTED FREE FROM SHORTS AND GROUNDS. SUCH TESTS SHALL BE MADE IN THE PRESENCE OF THE ENGINEER'S REPRESENTATIVE. C. NO CIRCUITS SHALL BE ENERGIZED WITHOUT THE OWNER'S APPROVAL. D. THE RIGHT IS RESERVED TO INSPECT AND TEST ANY PORTION OF THE EQUIPMENT AND/OR MATERIALS DURING THE PROGRESS OF ITS ERECTION. THE CONTRACTOR SHALL FURTHER TEST ALL WIRING AND CONNECTIONS FOR CONTINUITY AND GROUNDS BEFORE CONNECTING ANY FIXTURES OR EQUIPMENT. E. THE CONTRACTOR SHALL TEST THE ENTIRE SYSTEM IN THE PRESENCE OF THE ARCHITECT OR HIS ENGINEER WHEN THE SYSTEM IS FINALLY COMPLETED TO INSURE THAT ALL PORTIONS ARE FREE FROM SHORT CIRCUITS OR GROUND FAULTS.

DEMONSTRATION OF ELECTRICAL EQUIPMENT

END OF SECTION 26950

DUCTS, PIPING AND MECHANICAL EQUIPMENT.

END OF SECTION 26901

A. THE ELECTRICAL CONTRACTOR SHALL PROVIDE THE ARCHITECT WITH CERTIFICATION OF THE INSPECTION AND APPROVAL OF AN ACTIVE MEMBER OF THE INTERNATIONAL ASSOCIATION OF ELECTRICAL INSPECTORS OF ALL WORK COMPLETED AND INCLUDED IN THE SECTION. IF REQUIRED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE INSPECTOR WHEN WORK REACHES INSPECTION STAGE. B. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE LOCAL AUTHORITY HAVING JURISDICTION IN ORDER THAT LOCAL INSPECTION MAY BE CARRIED OUT AT

THE PROPER STAGE. C.THE ELECTRICAL CONTRACTOR SHALL PAY FOR ALL PERMITS, INSPECTION FEES, AND INSTALLATION FEES AS REQUIRED TO COMPLETE THE WORK UNDER THIS SECTION OF THE

D. THIS CONTRACTOR SHALL GUARANTEE THE MATERIALS AND WORKMANSHIP FOR A PERIOD OF TWELVE (12) MONTHS FROM THE TIME THE INSTALL ATION IS ACCEPTED BY THE OWNER. IF DURING THIS TIME, ANY DEFECTS SHOULD SHOW UP DUE TO ANY DEFECTIVE MATERIALS, WORKMANSHIP, NEGLIGENCE OR WANT OF PROPER CARE ON THE PART OF THIS CONTRACTOR, HE SHALL FURNISH ANY NEW MATERIALS AS NECESSARY. REPAIR SAID DEFECTS. AND PUT THE SYSTEM IN ORDER AT HIS OWN EXPENSE ON RECEIPT OF NOTICE OF SUCH DEFECTS FROM THE ARCHITECT. THIS SPECIFICATION IS NOT INTENDED TO IMPLY THAT THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR NEGLIGENCE OF THE OWNER. END OF SECTION 26980 END OF DIVISION

INTENT IS TO MATCH EXISTING CONDITIONS. IF ANY SPECIFICATIONS LISTED CONFLICT WITH EXISTING CONDITIONS NOTIFY ENGINEER IMMEDIATELY.

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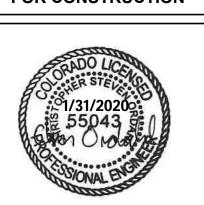
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**ELECTRICAL SPEC** 

FOR CONSTRUCTION



**REVISIONS** 

PROJECT #: 1031-1

**E2-3** 

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