

SPECIFICATIONS FOR

FIRE STATION 11 REMODEL

BID NO. 2022061

PREPARED FOR
THE BOARD OF COUNTY COMMISSIONERS
INDIAN RIVER COUNTY, FLORIDA

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RICHARD B. SZPYRKA, P.E., PUBLIC WORKS DIRECTOR

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SECTION - 00100 Advertisement for Bids

BOARD OF COUNTY COMMISSIONERS

1801 27th Street Vero Beach, Florida 32960



ADVERTISEMENT FOR BIDS INDIAN RIVER COUNTY

Sealed bids will be received by Indian River County until <u>2:00 P.M. on Thursday, July 21, 2022</u>. Each bid shall be submitted in a sealed envelope and shall bear the name and address of the bidder on the outside and the words "Fire Station 11 Remodel" and <u>Bid No. 2022061</u>. Bids should be addressed to Purchasing Division, Room B1-301, 1800 27th Street, Vero Beach, Florida 32960. All bids will be opened publicly and read aloud at 2:00 P.M. All bids received after 2:00 P.M., on the day specified above, will not be accepted or considered.

PROJECT DESCRIPTION: The proposed project includes remodeling of the kitchen and restrooms at Fire Station 11, 2555 93rd Street, Vero Beach, FL 32963.

All material and equipment furnished and all work performed shall be in strict accordance with the plans, specifications, and contract documents pertaining thereto. Detailed specifications are available at: www.demandstar.com or at www.ircgov.com/departments/budget/purchasing under "Current Solicitations".

All bidders shall submit one (1) original and one (1) copy of the Bid Proposal forms provided within the specifications. Please note that the questionnaire must be filled out completely including the financial statement. BID SECURITY must accompany each Bid, and must be in the form of an AIA Document A310 Bid Bond, properly executed by the Bidder and by a qualified surety, or a certified check or a cashier's check, drawn on any bank authorized to do business in the State of Florida. Bid Security must be in the sum of not less than **Five Percent (5%)** of the total amount of the bid, made payable to Indian River County Board of County Commissioners. In the event the Contract is awarded to the Bidder, Bidder will enter in a Contract with the County and furnish the required 100% Public Construction Bond and certificates of insurance within the timeframe set by the County. If Bidder fails to do so, the Bid Security shall be retained by the County as liquidated damages and not as penalty.

The County reserves the right to delay awarding of the Contract for a period of <u>ninety (90)</u> days after the bid opening, to waive informalities in any bid, or reject any or all bids in whole or in part with or without cause/or to accept the bid that, in its judgement, will serve the best interest of Indian River County, Florida. The County will not reimburse any Bidder for bid preparation costs.

The Station will be open to potential bidders for a walk-through on <u>Friday, July 8, 2022 at 9:00 A.M.</u> ATTENDANCE AT THIS CONFERENCE BY ALL BIDDERS IS HIGHLY ENCOURAGED, and will be the only opportunity for contractors and subcontractors to view the facility, as individual visits will not be accommodated.

INDIAN RIVER COUNTY

By: <u>Jennifer Hyde</u> Purchasing Manager

For Publication in the Indian River Press Journal Date: June 26, 2022

For: Indian River Press Journal

Please furnish tear sheet and Affidavit of Publication to:

INDIAN RIVER COUNTY PURCHASING DIVISION 1800 27th Street Building "B" Vero Beach, FL 32960

* * END OF SECTION * *

SECTION 00200 – Instructions to Bidders

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SECTION 00200 - Instructions to Bidders

ARTICLE 1 - DEFINED TERMS

- 1.01 Terms used in these Instructions to Bidders will have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below which are applicable to both the singular and plural thereof:
- A. Bidder--The individual or entity who submits a Bid directly to OWNER.
- B. Issuing Office--The office from which the Bidding Documents are to be issued and where the bidding procedures are to be administered.
- C. Successful Bidder--The lowest responsible Bidder submitting a responsive Bid to whom OWNER (on the basis of OWNER's evaluation as hereinafter provided) makes an award.
- D. ENGINEER References Edlund, Dritenbas, Binkley Architects and Associates, P.A.

ARTICLE 2 - COPIES OF BIDDING DOCUMENTS

- 2.01 Complete sets of the Bidding Documents in the number and for the deposit sum, if any, stated in the Advertisement for Bids or Invitation to Bid may be obtained from the Issuing Office.
- 2.02 Complete sets of Bidding Documents must be used in preparing Bids; neither OWNER nor ENGINEER assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- 2.03 OWNER and ENGINEER in making copies of Bidding Documents available on the above terms do so only for the purpose of obtaining Bids for the Work and do not confer a license or grant for any other use.

ARTICLE 3 - QUALIFICATIONS OF BIDDERS

- 3.01 To demonstrate Bidder's qualifications to perform the Work, within five days of OWNER's request Bidder shall submit written evidence such as financial data, previous experience, present commitments, and such other data as may be called for below.
 - A. Bidder must have at least five years' experience in the construction of similar projects of this size and larger.
 - B. Bidder must have successfully constructed, as prime CONTRACTOR, at least three projects similar in scope to this project.
 - C. Bidder must have good recommendations from at least three clients similar to the OWNER.
 - D. The Bidder's superintendent and assistants must be qualified and experienced in similar projects in all categories.
 - E. Bidder must be able to provide evidence of authority to conduct business in the jurisdiction in which the project is located.

- F. Bidder must be licensed in the State of Florida as a Certified Building Contractor or General Contractor; CONTRACTOR must be registered with the Indian River County Building Division.
- 3.02 Each bid must contain evidence of Bidder's qualification to do business in the state where the Project is located or covenant to obtain such qualification prior to award of the contract.
- 3.03 The OWNER reserves the right to reject bids from Bidders that are unable to meet the listed required qualifications.
- 3.04 Bidder must be registered with and use, at their sole expense, the Department of Homeland Security's E-Verify system (www.e-verify.gov) to confirm the employment eligibility of all newly hired employees, as required by Section 448.095, F.S.. Owner, contractor, and subcontractors may not enter into a contract unless each party to the contract registers with and uses the E-Verify system. Contractor is responsible for obtaining proof of E-Verify registration for all subcontractors. This requirement applies to any provider of services or goods.
- 3.05 Bidder must hold a current registration as a General Contractor in the State of Florida.

ARTICLE 4 - EXAMINATION OF BIDDING DOCUMENTS, OTHER RELATED DATA, AND SITE

4.01 Subsurface and Physical Conditions

- A. The Supplementary Conditions identify:
- 1. Those reports of explorations and tests of subsurface conditions at or contiguous to the Site that Engineer has used in preparing the Bidding Documents.
- 2. Those drawings of physical conditions in or relating to existing surface and subsurface structures at or contiguous to the Site (except Underground Facilities) that ENGINEER has used in preparing the Bidding Documents.
- B. Copies of reports and drawings referenced in paragraph 4.01.A will be made available by OWNER to any Bidder on request. Those reports and drawings are not part of the Contract Documents, but the "technical data" contained therein upon which Bidder is entitled to rely as provided in paragraph 4.02 of the General Conditions has been identified and established in paragraph 4.02 of the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any "technical data" or any other data, interpretations, opinions or information contained in such reports or shown or indicated in such drawings.

4.02 Underground Facilities

A. Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site is based upon information and data furnished to OWNER and ENGINEER by OWNERs of such Underground Facilities, including OWNER, or others.

4.03 Hazardous Environmental Condition

- A. The Supplementary Conditions identify those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that ENGINEER has used in preparing the Bidding Documents.
- B. Copies of reports and drawings referenced in paragraph 4.03.A will be made available by OWNER to any Bidder on request. Those reports and drawings are not part of the Contract Documents, but the "technical data" contained therein upon which Bidder is entitled to rely as provided in paragraph 4.06 of the General Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any "technical data" or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.
- 4.04 Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated conditions appear in paragraphs 4.02, 4.03, and 4.04 of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work appear in paragraph 4.06 of the General Conditions.
- 4.05 Upon a request directed to the Purchasing Division (purchasing@ircgov.com or (772) 226-1416), OWNER will provide Bidder access to the Site to conduct such examinations, investigations, explorations, tests, and studies as Bidder deems necessary for submission of a Bid. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies.
- 4.06 "This paragraph has been deleted intentionally"
- 4.07 It is the responsibility of each Bidder before submitting a Bid to:
- A. examine and carefully study the Bidding Documents, including any Addenda and the other related data identified in the Bidding Documents;
- B. VISIT THE SITE AND BECOME FAMILIAR WITH AND SATISFY BIDDER AS TO THE GENERAL, LOCAL, AND SITE CONDITIONS THAT MAY AFFECT COST, PROGRESS, AND PERFORMANCE OF THE WORK;
- C. become familiar with and satisfy Bidder as to all federal, state, and local Laws and Regulations that may affect cost, progress, or performance of the Work;
- D. carefully study all reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) which have been identified in the Supplementary Conditions as provided in paragraph 4.02 of the General Conditions, and carefully study all reports and drawings of a Hazardous Environmental Condition, if any, at the Site which have been identified in the Supplementary Conditions as provided in paragraph 4.06 of the General Conditions;
- E. obtain and carefully study (or assume responsibility for doing so) all additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (overhead, surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the

means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents, and safety precautions and programs incident thereto:

- F. agree at the time of submitting its Bid that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price bid and within the times and in accordance with the other terms and conditions of the Bidding Documents;
- G. become aware of the general nature of the work to be performed by OWNER and others at the Site that relates to the Work as indicated in the Bidding Documents;
- H. correlate the information known to Bidder, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents;
- I. promptly give ENGINEER written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by ENGINEER is acceptable to Bidder; and
- J. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work.
- 4.08 The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article 4, that without exception the Bid is premised upon performing and furnishing the Work required by the Bidding Documents and applying any specific means, methods, techniques, sequences, and procedures of construction that may be shown or indicated or expressly required by the Bidding Documents, that Bidder has given ENGINEER written notice of all conflicts, errors, ambiguities, and discrepancies that Bidder has discovered in the Bidding Documents and the written resolutions thereof by ENGINEER are acceptable to Bidder, and that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work.

ARTICLE 5 - PRE-BID CONFERENCE

5.01 The date, time, and location for the Pre-Bid conference, if any, is specified in the Advertisement for Bids. Representatives of OWNER and ENGINEER will be present to discuss the Project. Bidders are **REQUESTED** to attend and participate in the conference. ENGINEER will transmit to all prospective Bidders of record such Addenda as ENGINEER considers necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

ARTICLE 6 - SITE AND OTHER AREAS

The Site is identified in the Bidding Documents. All additional lands and access thereto required for temporary construction facilities, construction equipment, or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by CONTRACTOR. Easements for permanent structures or permanent changes in existing facilities are to be obtained and paid for by OWNER unless otherwise provided in the Bidding Documents.

ARTICLE 7 - INTERPRETATIONS AND ADDENDA

- 7.01 <u>CONE OF SILENCE.</u> Potential bidders and their agents shall not communicate in any way with the Board of County Commissioners, County Administrator or any County staff other than Purchasing personnel in reference or relation to this solicitation. This restriction shall be effective from the time of bid advertisement until the Board of County Commissioners meets to authorize award. Such communication may result in disqualification.
- 7.02 All questions about the meaning or intent of the Bidding Documents are to be submitted to PURCHASING (purchasing@ircgov.com) in writing. Interpretations or clarifications considered necessary by ENGINEER in response to such questions will be issued by Addenda mailed or delivered to all parties through the Issuing Office as having received the Bidding Documents. Questions received less than ten days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
- 7.03 Addenda may be issued to clarify, correct, or change the Bidding Documents as deemed advisable by OWNER or ENGINEER.

ARTICLE 8 - BID SECURITY

- 8.01 Each Bid must be accompanied by Bid Security made payable to OWNER in the amount of five percent of the Bidder's maximum base bid price and in the form of a certified check; cashier's check; or an AIA Document A310 Bid Bond issued by a surety meeting the requirements of Paragraph 5.01 of the General Conditions. The Bid Bond shall be executed by such sureties as 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 Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. The Surety must be authorized to issue surety bonds in Florida. The Bidder shall require the attorney-in-fact who executes any Bond, to affix to each a current certified copy of their Power of Attorney, reflecting such person's authority as Power of Attorney in the State of Florida. Further, at the time of execution of the Contract, the Successful Bidder shall for all Bonds, provide a copy of the Surety's current valid Certificate of Authority issued by the United States Department of the Treasury under 31 United States Code sections 9304-9308. The Surety shall also meet the requirements of paragraphs 5.01 and 5.02 of the General Conditions.
- 8.02 The Bid security of the Successful Bidder will be retained until such Bidder has executed the Contract Documents, furnished the required contract security and met the other conditions of the Notice of Award, whereupon the Bid security will be returned. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 15 days after the Notice of Award, OWNER may annul the Notice of Award and the Bid security of that Bidder will be retained by the owner. The Bid Security of other Bidders whom OWNER believes to have a reasonable chance of receiving the award may be retained by OWNER until the earlier of seven days after the Effective Date of the Agreement or 91 days after the Bid opening, whereupon Bid Security furnished by such Bidders will be returned.
- 8.03 Bid Security of other Bidders whom OWNER believes do not have a reasonable chance of receiving the award will be returned within seven days after the Bid opening.

ARTICLE 9 - CONTRACT TIMES

9.01 The number of calendar days within which, or the dates by which, the Work is to be (a) Substantially Completed and (b) also completed and ready for final payment are set forth in the Agreement.

ARTICLE 10 - LIQUIDATED DAMAGES

10.01 Provisions for liquidated damages, if any, are set forth in the Agreement.

ARTICLE 11 - SUBSTITUTE AND "OR-EQUAL" ITEMS

11.01 The Contract, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration of possible substitute or "or-equal" items. Whenever it is specified or described in the Bidding Documents that a substitute or "or-equal" item of material or equipment may be furnished or used by CONTRACTOR if acceptable to ENGINEER, application for such acceptance will not be considered by ENGINEER until after the Effective Date of the Agreement. The procedure for submission of any such application by CONTRACTOR and consideration by ENGINEER is set forth in the General Conditions and may be supplemented in the General Requirements.

ARTICLE 12 - SUBCONTRACTORS, SUPPLIERS, AND OTHERS

12.01 If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, individuals, or entities to be submitted to OWNER in advance of a specified date prior to the Effective Date of the Agreement, the apparent Successful Bidder, and any other Bidder so requested, shall within five days after Bid opening, submit to OWNER a list of all such Subcontractors, Suppliers, individuals, or entities proposed for those portions of the Work for which such identification is required. Such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, individual, or entity if requested by OWNER. If OWNER or ENGINEER, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, OWNER may, before the Notice of Award is given, request apparent Successful Bidder to submit a substitute, without an increase in the Bid.

12.02 If apparent Successful Bidder declines to make any such substitution, OWNER may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, individuals, or entities. Declining to make requested substitutions will not constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which OWNER or ENGINEER makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to OWNER and ENGINEER subject to revocation of such acceptance after the Effective Date of the Agreement as provided in paragraph 6.06 of the General Conditions.

12.03 CONTRACTOR shall not be required to employ any Subcontractor, Supplier, individual, or entity against whom CONTRACTOR has reasonable objection.

- 13.01 The Bid form is included with the Bidding Documents. Only the bid form provided by OWNER is acceptable (Bidders are not to recreate or modify the bid form). Bids not submitted on the bid form(s) shall be rejected, as will bids submitted on rewritten, recreated or modified bid forms.
- 13.02 All blanks on the Bid form shall be completed by printing in ink or by typewriter and the Bid signed. A Bid price shall be indicated for each section, Bid item, alternative, adjustment unit price item, and unit price item listed therein, or the words "No Bid," "No Change," or "Not Applicable" entered.
- 13.03 A Bid by a corporation shall be executed in the corporate name by the president or a vice-president or other corporate officer accompanied by evidence of authority to sign. The corporate seal shall be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown below the signature.
- 13.04 A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership shall be shown below the signature.
- 13.05 A Bid by a limited liability company shall be executed in the name of the firm by a member and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm must be shown below the signature.
- 13.06 A Bid by an individual shall show the Bidder's name and official address.
- 13.07 A Bid by a joint venture shall be executed by each joint venturor in the manner indicated on the Bid form. The official address of the joint venture must be shown below the signature.
- 13.08 All names shall be typed or printed in ink below the signatures.
- 13.09 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid form.
- 13.10 The address and telephone number for communications regarding the Bid shall be shown.
- 13.11 The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located or covenant to obtain such qualification prior to award of the Contract. Bidder's state contractor license number or county registration number for the state or county of the Project, if any, shall also be shown on the Bid form.
- 13.12 All supporting information requested in the Bid Form must be furnished. Do not leave any questions or requests unanswered.
- 13.13 In accordance with Florida Statutes Section 218.80, the "Public Bid Disclosure Act", Indian River County as OWNER is obligated to disclose all license, permit, impact, or inspection fees that are payable to Indian River County in connection with the construction of the Work by the accepted bidder. All permit, impact, or inspection fees payable to Indian River County in connection with the work on this County project will be paid by Indian River County, with the exception of re-inspection fees. The Bidder shall not include ANY PERMIT, IMPACT, NOR INSPECTION FEES payable to **Indian River County** in the bid.

13.14 CONTRACTOR shall furnish all labor, materials, equipment and incidentals necessary to perform additional work not covered on the Contract Drawings. The **FORCE ACCOUNT** is intended as a contingency for unforeseen work. Lump sum amount for **FORCE ACCOUNT** work is included in the bid schedule. The value of force account work will be determined in accordance with Article 12 of the General Conditions.

ARTICLE 14 - BASIS OF BID; EVALUATION OF BIDS

14.01 Unit Price

- A. Bidders shall submit a Bid on a unit price basis for each item of Work listed in the Bid schedule. Omission of unit prices where required will result in disqualification of the bid.
- B. The total of all estimated prices will be determined as the sum of the products of the estimated quantity of each item and the unit price Bid for the item. The final quantities and Contract Price will be determined in accordance with paragraph 11.03 of the General Conditions.
- C. Discrepancies between the multiplication of units of Work and unit 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. Discrepancies between words and figures will be resolved in favor of the words.
- 14.02 The Bid price shall include such amounts as the Bidder deems proper for overhead and profit on account of cash allowances, if any, named in the Contract Documents as provided in paragraph 11.02 of the General Conditions.
- 14.03 The Bidder's attention is called to the fact that any estimate of quantities of work to be done and materials to be furnished under the Specifications as shown on the Bid Schedule, or elsewhere, is approximate only and not guaranteed. The OWNER does not assume any responsibility that the final quantities shall remain in strict accordance with the estimated quantities, nor shall the Bidder plead misunderstanding or deception because of such estimate of quantities or of the character, location of the work, or other conditions pertaining thereto.

ARTICLE 15 - SUBMITTAL OF BID

15.01 The Bid form is to be completed and submitted with the Bid security and the following data:

- A. Sworn Statement under Section 105.08, Indian River County Code, on Disclosure of Relationships.
- B. Qualifications Questionnaire.
- C. List of Subcontractors.
- D. Certification Regarding Prohibition Against Contracting with Scrutinized Companies

15.02 A Bid shall be submitted no later than the date and time prescribed and at the place indicated in the advertisement or invitation to Bid and shall be enclosed in an opaque sealed envelope plainly marked with the Project Title and Bid Number (and, if applicable, the designated portion of the Project for which the Bid is submitted), Bid Number, the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If mail or other delivery system sends a Bid, the sealed envelope containing the Bid shall be enclosed in a separate envelope plainly marked on the outside with the notation "BID ENCLOSED." A mailed Bid shall be addressed to Indian River County, Purchasing Division, 1800 27th Street, Vero Beach, Florida, 32960.

ARTICLE 16 - MODIFICATION AND WITHDRAWAL OF BID

16.01 A Bid may be modified or withdrawn by an appropriate document duly executed in the manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids.

16.02 If, within 48 hours after Bids are opened, any Bidder files a duly signed written notice with OWNER and promptly thereafter demonstrates to the reasonable satisfaction of OWNER that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.

ARTICLE 17 - OPENING OF BIDS

17.01 Bids will be opened at the time and place indicated in the advertisement or invitation to Bid and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

ARTICLE 18 - BIDS TO REMAIN SUBJECT TO ACCEPTANCE

18.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but OWNER may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 19 - AWARD OF CONTRACT

19.01 OWNER reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. OWNER further reserves the right to reject the Bid of any Bidder whom it finds, after reasonable inquiry and evaluation, to be non-responsible. OWNER may also reject the Bid of any Bidder if OWNER believes that it would not be in the best interest of the Project to make an award to that Bidder. OWNER also reserves the right to waive all technicalities and informalities not involving price, time, or changes in the Work and to negotiate contract terms with the Successful Bidder. The County will not reimburse any Bidder for bid preparation costs. Owner reserves the right to cancel the award of any Contract at any time before the execution of such Contract by all parties without any liability to the Owner. For and in consideration of the Owner considering Bids submitted, the Bidder, by submitting its Bid, expressly

waives any claim to damages, of any kind whatsoever, in the event the Owner exercises its right to cancel the award in accordance herewith.

- 19.02 More than one Bid for the same Work from an individual or entity under the same or different names will not be considered. Reasonable grounds for believing that any Bidder has an interest in more than one Bid for the Work may be cause for disqualification of that Bidder and the rejection of all Bids in which that Bidder has an interest.
- 19.03 In evaluating Bids, OWNER will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award.
- 19.04 In evaluating Bidders, OWNER will consider the qualifications of Bidders and may consider the qualifications and experience of Subcontractors, Suppliers, and other individuals or entities proposed for those portions of the Work for which the identity of Subcontractors, Suppliers, and other individuals or entities must be submitted as provided in the Supplementary Conditions.
- 19.05 OWNER may conduct such investigations as OWNER deems necessary to establish the responsibility, qualifications, and financial ability of Bidders, proposed Subcontractors, Suppliers, individuals, or entities to perform the Work in accordance with the Contract Documents.
- 19.06 If the Contract is to be awarded, OWNER will award the Contract to the Bidder whose Bid is in the best interests of the Project.
- 19.07 OWNER has no local ordinance or preferences, as set forth in FS 255.0991 (2) in place, therefore no preference prohibited by that section will be considered in the acceptance, review or award of this bid.
- 19.08 Any actual or prospective bidder or proposer who is aggrieved in connection with the bidding and/or selection process may protest to the OWNER's Purchasing Manager. The protest shall be submitted in writing to the Purchasing Manager within seven (7) calendar days after the bidder or proposer knows or should have known of the facts giving rise to the protest.
- 19.09 CONTRACTOR certifies that it and its related entities as defined by Florida law are not on the Scrutinized Companies that Boycott Israel List, created pursuant to s. 215.4725 of the Florida Statutes, and are not engaged in a boycott of Israel. In addition, if this agreement is for goods or services of one million dollars or more, CONTRACTOR certifies that it and its related entities as defined above by Florida law are not on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, created pursuant to Section 215.473 of the Florida Statutes and are not engaged in business operations in Cuba or Syria.

OWNER may terminate this Contract if CONTRACTOR is found to have submitted a false certification as provided under section 287.135(5), Florida Statutes, been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or been engaged in business operations in Cuba or Syria, as defined by section 287.135, Florida Statutes.

OWNER may terminate this Contract if CONTRACTOR, including all wholly owned subsidiaries, majority-owned subsidiaries, and parent companies, that exist for the purpose of making profit, is found to have been placed on the Scrutinized Companies that Boycott Israel List or is engaged in a boycott of Israel as set forth in section 215.4725, Florida Statutes.

Accordingly, firms responding to this solicitation shall return with their response an executed copy of the attached "Certification Regarding Prohibition Against Contracting With Scrutinized Companies." Failure to return this executed form with submitted bid/proposal/statement of qualifications will result in the response being deemed non-responsive and eliminated from consideration.

ARTICLE 20 - CONTRACT SECURITY AND INSURANCE

20.01 Article 5 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth OWNER's requirements as to Public Construction Bond and insurance. When the Successful Bidder delivers the executed Agreement to OWNER, it must be accompanied by the required insurance certificate(s) and Bond, unless the Bond has been waived due to the total contract being less than \$100,000.

ARTICLE 21 - SIGNING OF AGREEMENT

21.01 When OWNER gives a Notice of Award to the Successful Bidder, it shall be accompanied by the required number of unsigned counterparts of the Agreement with the other Contract Documents which are identified in the Agreement as attached thereto. Within fifteen (15) days thereafter, Successful Bidder shall sign and deliver the required number of counterparts of the Agreement and attached documents to OWNER.

21.02 OWNER shall return one fully signed counterpart to Successful Bidder.

21.03 Should Bidder to whom the Contract has been awarded refuse or fail to complete the requirements of Article 21.01 above, the additional time in calendar days, required to correctly complete the documents will be deducted, in equal amount, from the Contract time. Or, the OWNER may elect to revoke the Award and the OWNER shall hold the Bid Bond for consequential damages incurred, and the Contract may be awarded as the OWNER desires.

* * END OF SECTION * *

SECTION 00300 – Bid Package Contents

THIS PACKAGE CONTAINS:

SECTION TITLE	SECTION NUMBER
Bid Form	00310
Bid Bond	00430
Sworn Statement on Disclosure of Relationships	00452
Qualifications Questionnaire	00456
List of Subcontractors	00458
Certification Regarding Prohibition Against Contracting with Scrutinized Companies	00460

SUBMIT ONE (1) ORIGINAL AND ONE (1) COPY OF THIS COMPLETE PACKAGE WITH YOUR BID

* * END OF SECTION * *

SECTION 00310 - Bid Form

PROJECT IDENTIFICATION:

Project Name: Fire Station 11 Remodel

Bid Number: **2022061**

Project Address: 2555 93rd Street

Vero Beach, FL 32963

Project Description: The proposed project includes remodeling

of the kitchen and restrooms.

THIS BID IS SUBMITTED TO: INDIAN RIVER COUNTY

1800 27th Street

VERO BEACH, FLORIDA 32960

- 1.01 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with OWNER in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.
- 2.01 Bidder accepts all of the terms and conditions of the Advertisement or Invitation to Bid and Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. The Bid will remain subject to acceptance for 90 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of OWNER.
- **3.01** In submitting this Bid, Bidder represents, as set forth in the Agreement, that:

A.	Bidde	r has	examine	d and	carefu	lly st	udied	the Bid	Iding D	ocur	nents,	the o	other	relate	ed data
ide	ntified	in the	Bidding	Docur	ments,	and	the fo	llowing	Adden	ıda,	receipt	of a	ll whi	ch is	hereby
ack	nowle	dged.													

Addendum Date	Addendum Number

- B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress and performance of the Work.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) which have been identified in the Supplementary Conditions as provided in paragraph 4.02 of the General Conditions, and (2) reports and drawings of a Hazardous Environmental Condition, if any, which have been identified in the Supplementary Conditions as provided in paragraph 4.06 of the General Conditions.
- E. Bidder has obtained and carefully studied (or assumes responsibility for having done so) all additional or supplementary examinations, investigations, explorations, tests, studies and data

concerning conditions (surface, subsurface and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents to be employed by Bidder, and safety precautions and programs incident thereto.

- F. Bidder does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by OWNER and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has correlated the information known to Bidder, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents.
- I. Bidder has given ENGINEER written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by ENGINEER is acceptable to Bidder.
- J. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.
- 4.01 Bidder further represents that this Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any individual or entity to refrain from bidding; and Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over OWNER.

[The remainder of page intentionally left blank]

Bidder's Name:			
_			

Bid Schedule:

Item	Total Not to Exceed Price
1. All work as described in Invitation to Bid Documents, Specifications and Plans for Bid 2022061.	\$
2. Force Account	\$20,970.00
Total Bid Price	\$

Total Bid Price in Words	
Project completion time after receipt of "Notice to Proceed" or PO: _	DAYS

- **5.01** Bidder shall complete the Work in accordance with the Contract Documents for the price(s) contained in the Bid Schedule:
- A. The Discrepancies between the multiplication of units of Work and unit 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. Discrepancies between words and figures will be resolved in favor of the words.
- B. The Owner reserves the right to omit or add to the construction of any portion or portions of the work heretofore enumerated or shown on the plans. Furthermore, the Owner reserves the right to omit in its entirety any one or more items of the Contract without forfeiture of Contract or claims for loss of anticipated profits or any claims by the Contractor on account of such omissions.
- C. Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities provided. The quantities actually required to complete the contract and work may be less or more than so estimated, and, if so, no action for damages or for loss of profits shall accrue to the Contractor by reason thereof.
- D. Unit Prices have been computed in accordance with paragraph 11.03.B of the General Conditions.
- **6.01** Bidder agrees that the Work will be substantially completed and ready for final payment in accordance with paragraph 14.07.B of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- **6.02** Bidder accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work within the times specified, which shall be stated in the Agreement.
- **7.01** The following documents are attached to and made a condition of this Bid:
 - A. Itemized Bid Schedule:

	B.	Required Bid security in the form of;	
	C.	Sworn Statement under Section 105.08, Indian River Code, on DR Relationships;	isclosure of
	D.	Qualifications Questionnaire;	
	E.	List of Subcontractors;	
	F.	Certification Regarding Prohibition Against Contracting with Scru Companies	tinized
8.01 Ir		erms used in this Bid with initial capital letters have the meaning as to Bidders, the General Conditions, and the Supplementary Con	
S	UBMITT	ED on, 20	
S	tate Con	tractor License No.	
	der is:		
	dividua	I	
		ped or printed):	
В	y:		(SEAL)
	(Indivi	dual's signature)	
D	oing bus	iness as:address:	
D	usiiiess	auuress	
P	hone No	.: FAX No.:	
	maii		
	<u>rtnershi</u>		(0541)
Ρ	artnersh	ip Name:	(SEAL)
В	y:		<u></u>
	(Signa	ture of general partner attach evidence of authority to sign)	
N	ame (typ	ped or printed):	
		address:	
P	hone No	.: FAX No.:	<u></u>
P E	hone No	.: FAX No.:	<u> </u>
Е	mail:		
A Co	mail: rporations	<u>n</u> on Name:	 (SEAL)
A Co C S	mail: rporation corporation tate of Ir	n on Name: ocorporation:	(SEAL)
A Co C S T	mail: rporation corporation tate of Ir ype (Gen	n Name:	(SEAL)
A Co C S T	mail: rporation corporation tate of Ir ype (Gen	n Name:	(SEAL)
A Co C S T B	mail: rporation forporation tate of Ir ype (Gen y: Signature	n Name:	(SEAL)

Title:	(000000 ATE 05 AL)
,	CORPORATE SEAL)
Attest(Signature of Corporate Secretary)	
Business address:	
Phone No.: FAX No.: Email:	
Date of Qualification to do business is	
Joint Venture Joint Venture Name:	(SEAL)
By:(Signature of joint venture partner attach evidence of authority to s	sign)
Name (typed or printed):	
Title:	
Business address:	
Phone No.: FAX No.: Email:	
Joint Venture Name:	(SEAL)
Bv:	
By:(Signature attach evidence of authority to sign)	
Name (typed or printed):	
Business address:	
Phone No.: FAX No.: Email:	
Phone and FAX Number, and Address for receipt of official communication	

(Each joint venturor must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.)

SECTION 00430 – Bid Bond AIA DOCUMENT A310 BID BOND

The Contractor shall use the document form entitled "AIA Document A310 Bid Bond."

END OF SECTION

SECTION 00452 - Sworn Statement on Disclosure of Relationships

SWORN STATEMENT UNDER SECTION 105.08, INDIAN RIVER COUNTY CODE, ON DISCLOSURE OF RELATIONSHIPS

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICER AUTHORIZED TO ADMINISTER OATHS.

	for Fire Station 11 Remodel This sweet statement is submitted by:
	This sworn statement is submitted by:
-	(Name of entity submitting Statement)
٧	whose business address is:
•	My name is
	(Please print name of individual signing)
í	and my relationship to the entity named above is
ļ	I understand that an "affiliate" as defined in Section 105.08, Indian River County Code, means:
	The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees members, and agents who are active in the management of the entity.
	I understand that the relationship with a County Commissioner or County employee that must be disclosed as follows:
f	Father, mother, son, daughter, brother, sister, uncle, aunt, first cousin, nephew, niece, husband, wife father-in-law, mother-in-law, daughter-in-law, son-in-law, brother-in-law, sister-in-law, stepfather stepmother, stepson, stepdaughter, stepbrother, stepsister, half brother, half sister, grandparent, ograndchild.
	Based on information and belief, the statement, which I have marked below, is true in relation to the entity submitting this sworn statement. [Please indicate which statement applies.]
	Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners shareholders, employees, members, or agents who are active in management of the entity, have an relationships as defined in section 105.08, Indian River County Code, with any County Commissione or County employee.

Name of Affiliate or entity	Name of County Commissioner or employee	Relationship
	or employee	
_		
	(Signa	ature)
STATE OF	(Date)
COUNTY OF		
notarization, this	and subscribed before me by means of	
(name of person making	statement).	
	(Signature of N	Notary Public - State of Florida)

* * END OF SECTION * *

SECTION 00456 – Qualifications Questionnaire

NOTICE: THE OWNER RETAINS THE DISCRETION TO REJECT THE BIDS OF NON-RESPONSIBLE BIDDERS.

Documentation Submitted with Bid No: 2022061

Project Name: Fire Station 11 Remodel

	der's Name / Address:
Bid	der's Telephone & FAX Numbers:
Lice a. b.	Bidder's Contractor License No: [Attach a copy of Contractor's License to the bid]
	mber of years the firm has performed business as a Contractor in construction work of type involved in this contract:
Wh	at is the last project OF THIS NATURE that the firm has completed?
	s the firm ever failed to complete work awarded to you?
th	your answer is "yes", then attach a separate page to this questionnaire that explains e circumstances and list the project name, Owner, and the Owner's telephone umber for each project in which the firm failed to complete the work.]
Has	s the firm ever been assessed liquidated damages?
th	your answer is "yes", then attach a separate page to this questionnaire that explains the circumstances and list the project name, Owner, and the Owner's telephone tumber for each project in which liquidated damages have been assessed.]
Has	the firm ever been charged by OSHA for violating any OSHA regulations?
th	your answer is "yes", then attach a separate page to this questionnaire that explains be circumstances and list the project name, Owner, and the Owner's telephone umber for each project in which OSHA violations were alleged.]
Has	the firm implemented a drug-free workplace program in compliance with Florida
Sta	tute 287.087?
•	n the case of a tie, preference will be given to businesses with drug-free workplace ograms)

10.	Has the firm ever been charged with noncompliance of any public policy or rules?			
	[If your answer is "yes", then attach a separate page to this questionnaire that explains the circumstances and list the project name, Owner, and the Owner's telephone number for each project.]			
11.	Attach to this questionnaire, a notarized financial statement and other information that documents the firm's financial strength and history.			
12.	Has the firm ever defaulted on any of its projects?			
	[If your answer is "yes", then attach a separate page to this questionnaire that explains the circumstances and list the project name, Owner, and the Owner's telephone number for each project in which a default occurred.]			
13.	Attach a separate page to this questionnaire that summarizes the firm's current workload and that demonstrates its ability to meet the project schedule.			
14.	Name of person who inspected the site of the proposed work for the firm:			
	Name: Date of Inspections:			
15.	Name of on-site Project Foreman:			
	Number of years of experience with similar projects as a Project Foreman:			
16.	Name of Project Manager:			
	Number of years of experience with similar projects as a Project Manager:			
17.	State your total bonding capacity:			
18.	State your bonding capacity per job:			
19.	Please provide name, address, telephone number, and contact person of your bonding company:			

[The remainder of this page was left blank intentionally]

19. Complete the following table for SIMILAR projects:

Name of Project	Date Completed	Owner	Contact Person: Name/ Email Address/Phone	Original Contract Amount	Final Contract Amount

SECTION 00458 – List of Subcontractors

The Bidder **MUST** list below the name and address of each Subcontractor who will perform work under this Contract in excess of one-half percent of the total bid price, and shall also list the portion of the work which will be done by such Subcontractor. After the opening of Bids, additions, changes or substitutions will not be allowed unless approved by Indian River County after a request for such a change has been submitted in writing by the Contractor, which shall include reasons for such request. Subcontractors must be properly licensed and hold a valid Certificate of Competency.

Documentation Submitted with Bid No. 2022061 for Fire Station 11 Remodel

	Work to be Performed	Subcontractor's Name/Address	Portion of Work (%)
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			

Note: Attach additional sheets if required.

* * END OF SECTION * *

SECTION 00460 - CERTIFICATION REGARDING PROHIBITION AGAINST CONTRACTING WITH SCRUTINIZED COMPANIES

I hereby certify that neither the undersigned entity, nor any of its wholly owned subsidiaries, majority-owned subsidiaries, parent companies, or affiliates of such entities or business associations, that exists for the purpose of making profit have been placed on the Scrutinized Companies that Boycott Israel List created pursuant to s. 215.4725 of the Florida Statutes, or are engaged in a boycott of Israel.

In addition, if this solicitation is for a contract for goods or services of one million dollars or more, I hereby certify that neither the undersigned entity, nor any of its wholly owned subsidiaries, majority-owned subsidiaries, parent companies, or affiliates of such entities or business associations, that exists for the purpose of making profit are on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, created pursuant to s. 215.473 of the Florida Statutes, or are engaged in business operations in Cuba or Syria as defined in said statute.

I understand and agree that the County may immediately terminate any contract resulting from this solicitation upon written notice if the undersigned entity (or any of those related entities of respondent as defined above by Florida law) are found to have submitted a false certification or any of the following occur with respect to the company or a related entity: (i) it has been placed on the Scrutinized Companies that Boycott Israel List, or is engaged in a boycott of Israel, or (ii) for any contract for goods or services of one million dollars or more, it has been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or it is found to have been engaged in business operations in Cuba or Syria.

Name of	Respondent:
By:	
,	(Authorized Signature)
Title:	
Date:	

BOARD OF COUNTY COMMISSIONERS



Month xx, 2022 via Email

Company
Attn:
Address
Address
Email address

NOTICE OF AWARD

Reference: Indian River County Bid No. <u>2022061</u>

Project Name: <u>Fire Station 11 Remodel</u>

Dear Mr./Ms. :

It is my pleasure to inform you that on [DATE] the Board of County Commissioners awarded the above-referenced project to your company. The following documents are required before the applicable County department can issue a "Notice to Proceed" letter.

- 1. <u>Public Construction Bond (unrecorded)</u> in the amount of **100%** of the award amount (\$......).
- 2. Two Signed Copies of Enclosed Agreement.
- Certificate of Insurance indicating coverage required by Article 5 of the General Conditions (section 00700 of the bid documents) and Supplemental Conditions (Section 00800 of the bid documents).
 Certificate(s) must name <u>Indian River County</u> as additional insured and must provide for a 30-day Notice of Cancellation.
- 4. W-9.

The Public Construction Bond must be executed in accordance with section 255.05(1)(a), Florida Statutes. Please submit the Bond, W-9, the Certificate(s) of Insurance and two fully-executed copies of the enclosed agreement to this office at the address provided below no later than [Due **DATE (15 days from award)**]. Failure to comply with the established deadline for submittal of required documents may be grounds for cancellation of award.

Thank you for your prompt attention and if you have any questions, please do not hesitate to contact our office.

Sincerely,

Jennifer Hyde Purchasing Manager

cc: Fire Rescue Division

Office of Management and Budget ◆ Purchasing Division
1800 27th Street, Vero Beach, Florida 32960◆(772) 226-1416◆Fax: (772) 770-5140

SECTION 00520 Agreement (Public Works)

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SECTION 00520 Agreement (Public Works)

THIS AGREEMENT is by and between INDIAN RIVER COUNTY, a Political Subdivision of the State of Florida organized and existing under the Laws of the State of Florida, (hereinafter called OWNER)

and _____(hereinafter called CONTRACTOR).

OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

ARTICLE 1 - WORK

1.01 CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

Remodeling of kitchen and restrooms in accordance with plans and specifications prepared by Edlund, Dritenbas, Binkley and Associates, P.A.

ARTICLE 2 - THE PROJECT

2.01 The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows:

Project Name: <u>Fire Station 11 Remodel</u>

Bid Number: <u>2022061</u>

Project Address: 2555 93rd Street, Vero Beach, FL 32963

ARTICLE 3 - ENGINEER

3.01 The Indian River County Public Works Department is hereinafter called the ENGINEER and will act as OWNER's representative, assume all duties and responsibilities, and have the rights and authority assigned to ENGINEER in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

ARTICLE 4 - CONTRACT TIMES

- 4.01 Time of the Essence
 - A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.
- 4.02 Days to Achieve Substantial Completion, Final Completion and Final Payment
 - A. The Work will be substantially completed on or before the 90th calendar day after the date when the Contract Times commence to run as provided in paragraph 2.03 of the General Conditions, and completed and ready for final payment in accordance with paragraph 14.07 of the General Conditions on or before the 120th calendar day after the date when the Contract Times commence to run.

4.03 Liquidated Damages

A. CONTRACTOR and OWNER recognize that time is of the essence of this Agreement and that OWNER will suffer financial loss if the Work is not completed within the times specified in paragraph 4.02 above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. Liquidated damages will commence for this portion of work. The parties also recognize the delays, expense, and difficulties involved in proving in a legal proceeding the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty), CONTRACTOR shall pay OWNER **\$566.00** for each calendar day that expires after the time specified in paragraph 4.02 for Substantial Completion until the Work is substantially complete. After Substantial Completion, if CONTRACTOR shall neglect, refuse, or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by OWNER, CONTRACTOR shall pay OWNER \$566.00 for each calendar day that expires after the time specified in paragraph 4.02 for completion and readiness for final payment until the Work is completed and ready for final payment.

ARTICLE 5 - CONTRACT PRICE

- 5.01 OWNER shall pay CONTRACTOR for completion of the Work in accordance with the Contract Documents, an amount in current funds equal to the sum of the amounts determined pursuant to paragraph 5.01.A and summarized in paragraph 5.01.B, below:
 - A. For all Work, at the prices stated in CONTRACTOR's Bid, attached hereto as an exhibit.
 - B. THE CONTRACT SUM subject to additions and deductions provided in the Contract:

Numerical Amount	:: \$	-	
Written Amount:		 	

ARTICLE 6 - PAYMENT PROCEDURES

- 6.01 Submittal and Processing of Payments
 - A. CONTRACTOR shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by ENGINEER as provided in the General Conditions and the Contract Documents.
- 6.02 Progress Payments.
 - A. The OWNER shall make progress payments to the CONTRACTOR on the basis of the approved partial payment request as recommended by ENGINEER in accordance with the provisions of the Local Government Prompt Payment Act, Florida Statutes section 218.70 et. seq. The OWNER shall retain five percent (5%) of the payment amounts due to the CONTRACTOR until final completion and

acceptance of all work to be performed by CONTRACTOR under the Contract Documents.

6.03 Pay Requests.

A. Each request for a progress payment shall be submitted on the application provided by OWNER and the application for payment shall contain the CONTRACTOR'S certification. All progress payments will be on the basis of progress of the work measured by the schedule of values established, or in the case of unit price work based on the number of units completed.

6.04 Paragraphs 6.02 and 6.03

do not apply to construction services work purchased by the County as OWNER which are paid for, in whole or in part, with federal funds and are subject to federal grantor laws and regulations or requirements that are contrary to any provision of the Local Government Prompt Payment Act. In such event, payment and retainage provisions shall be governed by the applicable grant requirements and guidelines.

- 6.05 Acceptance of Final Payment as Release.
 - A. The acceptance by the CONTRACTOR of final payment shall be and shall operate as a release to the OWNER from all claims and all liability to the CONTRACTOR other than claims in stated amounts as may be specifically excepted by the CONTRACTOR for all things done or furnished in connection with the work under this Contract and for every act and neglect of the OWNER and others relating to or arising out of the work. Any payment, however, final or otherwise, shall not release the CONTRACTOR or its sureties from any obligations under the Contract Documents or the Public Construction Bond.

ARTICLE 7 - INDEMNIFICATION

7.01 CONTRACTOR shall indemnify OWNER, ENGINEER, and others in accordance with paragraph 6.20 (*Indemnification*) of the General Conditions to the Construction Contract.

ARTICLE 8 - CONTRACTOR'S REPRESENTATIONS

- 8.01 In order to induce OWNER to enter into this Agreement CONTRACTOR makes the following representations:
 - A. CONTRACTOR has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.
 - B. CONTRACTOR has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 - C. CONTRACTOR is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.
 - D. CONTRACTOR has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating

to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) which have been identified in the Supplementary Conditions as provided in paragraph 4.02 of the General Conditions and (2) reports and drawings of a Hazardous Environmental Condition, if any, at the Site which have been identified in the Supplementary Conditions as provided in paragraph 4.06 of the General Conditions.

- E. CONTRACTOR has obtained and carefully studied (or assumes responsibility for having done so) all additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by CONTRACTOR, including applying the specific means, methods, techniques, sequences, and procedures of construction, if any, expressly required by the Contract Documents to be employed by CONTRACTOR, and safety precautions and programs incident thereto
- F. CONTRACTOR does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.
- G. CONTRACTOR is aware of the general nature of work to be performed by OWNER and others at the Site that relates to the Work as indicated in the Contract Documents.
- H. CONTRACTOR has correlated the information known to CONTRACTOR, information and observations obtained from visits to the Site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.
- CONTRACTOR has given ENGINEER written notice of all conflicts, errors, ambiguities, or discrepancies that CONTRACTOR has discovered in the Contract Documents, and the written resolution thereof by ENGINEER is acceptable to CONTRACTOR.
- J. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- K. Contractor is registered with and will use the Department of Homeland Security's E-Verify system (www.e-verify.gov) to confirm the employment eligibility of all newly hired employees for the duration of this agreement, as required by Section 448.095, F.S. Contractor is also responsible for obtaining proof of E-Verify registration for all subcontractors.

ARTICLE 9 - CONTRACT DOCUMENTS

9.01 Contents

- A. The Contract Documents consist of the following:
 - 1. This Agreement (pages <u>00520-1</u> to <u>00520-10</u>, inclusive);
 - 2. Notice to Proceed (page 00550-1);
 - 3. Public Construction Bond (pages <u>00610-1</u> to <u>00610-3</u>, inclusive);

- 4. Sample Certificate of Liability Insurance (page <u>00620-1</u>);
- 5. Contractor's Application for Payment (pages <u>00622-1</u> to <u>00622-6</u> inclusive);
- 6. Certificate of Substantial Completion (pages <u>00630-1</u> to <u>00630-2</u>, inclusive);
- 7. Contractor's Final Certification of the Work (pages <u>00632-1</u> to <u>00632-2</u>, inclusive);
- 8. Professional Surveyor & Mapper's Certification as to Elevations and Locations of the Work (page <u>00634-1)</u>;
- 9. General Conditions (pages 00700-1 to 00700-38, inclusive);
- 10. Supplementary Conditions (pages <u>00800-1</u> to <u>00800-12</u>, inclusive);
- 11. Specifications as listed in Division 1 (General Requirements) and Division 2 (Technical Provisions);
- 12. Drawings consisting of a cover sheet (COVER), and sheets numbered ABB, A-1 through A-5, inclusive; M0.1, M2.1, E0.1, E2.1, E3.1, P0.1, P2.1, and P3.1, with each sheet bearing the following general title: Station 11 Interior Remodel
- 13. Addenda (if applicable _____);
- 14. Appendices to this Agreement (enumerated as follows):

N/A

- 15. CONTRACTOR'S BID (pages 00310-1 to 00310-8, inclusive);
- 16. Bid Bond (page 00430-1);
- 17. Sworn Statement Under Section 105.08, Indian River County Code, on Disclosure of Relationships (pages 00452-1 to 00452-2, inclusive);
- 18. Qualifications Questionnaire (page <u>00456-1</u> to <u>00456-2</u>, inclusive);
- 19. List of Subcontractors (page 00458-1);
- 20. Certification Regarding Prohibition Against Contracting with Scrutinized Companies (page 00460-1);
- 21. The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:
 - a) Written Amendments;
 - b) Work Change Directives;
 - c) Change Order(s);

ARTICLE 10 - MISCELLANEOUS

10.01 Terms

A. Terms used in this Agreement will have the meanings indicated in the General Conditions.

10.02 Assignment of Contract

A. No assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

10.03 Successors and Assigns

A. OWNER and CONTRACTOR each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

10.04 Severability

A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon OWNER and CONTRACTOR, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

10.05 Venue

A. This Contract shall be governed by the laws of the State of Florida. Venue for any lawsuit brought by either party against the other party or otherwise arising out of this Contract shall be in Indian River County, Florida, or, in the event of a federal jurisdiction, in the United States District Court for the Southern District of Florida.

10.06 Public Records Compliance

- A. Indian River County is a public agency subject to Chapter 119, Florida Statutes. The Contractor shall comply with Florida's Public Records Law. Specifically, the Contractor shall:
- (1) Keep and maintain public records required by the County to perform the service.
- (2) Upon request from the County's Custodian of Public Records, provide the County with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119 or as otherwise provided by law.
- (3) Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration

of the contract term and following completion of the contract if the contractor does not transfer the records to the County.

- (4) Upon completion of the contract, transfer, at no cost, to the County all public records in possession of the Contractor or keep and maintain public records required by the County to perform the service. If the Contractor transfers all public records to the County upon completion of the contract, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the contractor keeps and maintains public records upon completion of the contract, the Contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the County, upon request from the Custodian of Public Records, in a format that is compatible with the information technology systems of the County.
- B. IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:

(772) 226-1424

publicrecords@ircgov.com
Indian River County Office of the County Attorney
1801 27th Street
Vero Beach, FL 32960

C. Failure of the Contractor to comply with these requirements shall be a material breach of this Agreement.

[The remainder of this page was left blank intentionally]

IN WITNESS WHEREOF, OWNER and CONTRACTOR have signed this Agreement in duplicate. One counterpart each has been delivered to OWNER and CONTRACTOR. All portions of the Contract Documents have been signed or identified by OWNER and CONTRACTOR or on their behalf. This Agreement will be effective on _____day_____ of 20____(the date the Contract is approved by the Indian River County Board of County Commissioners, which is the Effective Date of the Agreement). OWNER: CONTRACTOR: INDIAN RIVER COUNTY Peter D. O'Bryan, Chairman (Contractor) Jason E. Brown, County Administrator (CORPORATE SEAL) Attest APPROVED AS TO FORM AND LEGAL SUFFICIENCY: Dylan Reingold, County Attorney Address for giving notices: Jeffrey R. Smith, Clerk of Court and Comptroller License No. _____ (Where applicable) Deputy Clerk (SEAL) Agent for service of process: Designated Representative: Name: David Johnson Designated Representative: Title: Fire Chief Name: _____ 4225 43rd Avenue Title: ___ Vero Beach, Florida 32967 Address: (772) 226-1977 djohnson@ircgov.com Phone: email: (If CONTRACTOR is a corporation or a partnership, attach evidence of authority to sign.)

* * END OF SECTION * *

SECTION 00550 - Notice to Proceed

Dated

TO:	
ADD	(BIDDER) RESS:
Cont	ract For:
	Fire Station 11 Remodel (Insert name of Contract as it appears in the Contract Documents)
IRC	Bid No. <u>2022061</u>
The caler Substitute (CON required the Con substitute (Con sub	You are notified that the Contract Times under the above contract will commence to run on By that date, you are to start performing your obligations under the Contract Documents. contract has allocated 90 calendar days for Substantial Completion of this project and 120 ndar days for Final Completion. In accordance with Article 4 of the Agreement the date of stantial Completion is and the date of readiness for final payment is TRACTOR shall not commence work under this Contract until he has obtained all insurance ired under Article 5 and such insurance has been delivered to the OWNER and approved by DWNER, nor shall the CONTRACTOR allow any Subcontractor to commence work on his ontract until all similar insurance required of the Subcontractor has been so obtained and oved. All such insurance shall remain in effect until final payment and at all times thereafter in CONTRACTOR may be correcting, removing or replacing defective Work in accordance Article 13. The provided HTML is a provided to the contract will be a provided HTML in the contract will be a pr
	INDIAN RIVER COUNTY (OWNER)
	By:(AUTHORIZED SIGNATURE)
	(TITLE)

SECTION 00610 - Public Construction Bond

INSTRUCTION FOR PUBLIC CONSTRUCTION BOND

The front or cover page to the required public construction payment and performance bond shall contain the information required by Fla. Stat. 255.05(1)(a), and be substantially in the format shown on the first page following this instruction.

The Public Construction Bond shall be in the form suggested by Fla. Stat. 255.05(3) as shown on the second page following this instruction.

A Power of Attorney from a surety insurer authorized to do business in Florida, authorizing the signature of the Attorney in Fact who executes the Public Construction Bond shall accompany that Bond.

Public Work F.S. Chapter 255.05 (1)(a) Cover Page

THIS BOND IS GIVEN TO COMPLY WITH SECTION 255.05 OR SECTION 713.23 FLORIDA STATUTES, AND ANY ACTION INSTITUTED BY A CLAIMANT UNDER THIS BOND FOR PAYMENT MUST BE IN ACCORDANCE WITH THE NOTICE AND TIME LIMITATION PROVISIONS IN SECTION 255.05(2) OR SECTION 713.23 FLORIDA STATUTES.

BOND NO:		
CONTRACTOR NAME:		
CONTRACTOR ADDRESS:		
CONTRACTOR PHONE NO:		
SURETY COMPANY NAME:		
SURETY PRINCIPAL		
BUSINESS ADDRESS:		
SURETY PHONE NO:		
OWNER NAME:		
OWNER ADDRESS:		
OWNER PHONE NO:	- <u></u>	
OBLIGEE NAME: (If contracting entity is diffe the owner, the contracting p	rent from ublic entity)	
OBLIGEE ADDRESS:		
OBLIGEE PHONE NO:		
BOND AMOUNT:		
CONTRACT NO:		
(If applicable)		
DESCRIPTION OF WORK:		
PROJECT LOCATION:		
LEGAL DESCRIPTION: (If applicable)		

FRONT PAGE

All other bond page(s) are deemed subsequent to this page regardless of any page number(s) that may be printed thereon.

PUBLIC CONSTRUCTION BOND

	Bona N	O
		(enter bond number)
BY THIS BOND, We	, as Principal and	, a corporation,
as Surety, are bound to	, herein called Owner, in	the sum of \$,
for payment of which we bind ourselves	s, our heirs, personal repre	esentatives, successors, and
assigns, jointly and severally.	of if Data size six	
THE CONDITION OF THIS BOND is the		
1. Performs the contract dated, _		
in the manner prescribed in the contract;		y reference, at the times and
 Promptly makes payments to all clair 		255 05(1) Florida Statutos
supplying Principal with labor, materials, prosecution of the work provided for in the	or supplies, used directly of	
3. Pays Owner all losses, damages, ex	-	av's fees including annellate
proceedings, that Owner sustains becau	•	, , , , , , , , , , , , , , , , , , , ,
4. Performs the guarantee of all work a	,	•
specified in the contract, then this bond i		
Any action instituted by a claimant unde		
notice and time limitation provisions in S		
Any changes in or under the contract of	•	
formalities connected with the contract of	or the changes does not af	ect Surety's obligation under
this bond.		
DATED ON ,		
DATED ON,		
		Name of Principal)
	Ву	
	<u>(</u>	As Attorney in Fact)
		Name of Surety)

SECTION 620 – Sample Certificate of Liability Insurance

PRO	DUCER			т	HIS CERT	IFICATE IS ISSUED AS A	MATTER OF INFOR	MATION ONLY AN	ID CONI	ERS NO		
						PON THE CERTIFICATE HO THE COVERAGE AFFORD			OT AME	ND, EXTEND		
						COMPA	NIES AFFORDING O	OVERAGE				
INSU	IRED				COMPANY A -							
					OMPANY							
					OMPANY							
				C	OMPANY	E-						
JAF	RAGES											
NOTW OR M	S TO CERTIFY THAT THE POLICIES OF II ITHSTANDING ANY REQUIREMENT TER AY PERTAIN THE INSURANCE ACCORDE IES. LIMITS SHOWN MAY HAVE BEEN F	M OR CONDIT	ION OF LICIES I	ANY CONTRAC	CT OR OT	HER DOCUMENT WITH RE	SPECT TO WHICH	THIS CERTIFICAT	E MAY	BE ISSUED		
INSR LTR	TYPE OF INSURANCE	POLIC		POLICY EFFECTIVE DATE (MM/I		POLICY EXPIRATION DATE (MM/D/YY)		LIMITS				
LIK	GENERAL LIABILITY	- NOINE	<u>, , , , , , , , , , , , , , , , , , , </u>	DATE (MINI)	<i>55</i> ,111	DATE (MINISTER)	EACH OCCURRE		\$	1,000,00		
Α	☐ COMMERCIAL GENERAL LIABILITY	,					FIRE DAMAGE (\$	50,00		
^	☐ CLAIMS MADE - ☐ OCCUR						MED. EXP. (Any		\$	5,00		
							, ,		•	4 000 00		
							PERSONAL & AL		\$	1,000,000		
	_						GENERAL AGGE		\$	1,000,00		
							PRODUCTS - CO	DMP/OP AGG.	\$	1,000,00		
A	AUTOMOBILE LIABILITY ANY AUTO						COMBINED SING		\$	1,000,00		
	☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS						BODILY INJURY (Per Person) BODILY INJURY (Per Accident)		\$			
	☐ HIRED AUTOS ☐ NON-OWNED AUTOS								\$			
							PROPERTY DAM	IAGE	\$			
	GARAGE LIABILITY						AUTO ONLY - E	A ACCIDENT	\$			
							OTHER THAN	EA ACC	\$			
							AUTO ONLY	AGG	\$			
Α	EXCESS LIABILITY						EACH OCCURRE	ENCE				
	☐ ☐ CLAIMS MA	DE										
	☐ DEDUCTIBLE						AGGREGATE		\$			
	☐ RETENTION \$								\$			
									\$			
Α	WORKER'S COMPENSATION AND EMPLOYER'S LIABILITY						□WC STATUTO	RY LIMITS				
							E.L. EACH ACCI	DENT	\$	100,000		
	THE						E.L. DISEASE -	EA	\$	500,000		
		NCL XCL					E.L. DISEASE-PO	DLICY LIMIT	\$	100,000		
	OTHER: BUILDER'S RISK						FULL REPLACED OF THE WORK	MENT COST				
DESC	RIPTION OF OPERATIONS/LOCATIONS V	'EHICLES/SPE	CIAL ITE	EMS		,						
CEDT	FICATE HOLDER ADDITIO	NAL INSURED). INCL	DED I ETTED:	CANO	ELLATION						
CERT	HICATE HOLDER ADDITIO	NAL INSUREL); INSUR	KER LETTER:	SHOU EXPIR DAYS TO MA	LD ANY OF THE ABOVE D ATION DATE THEREOF, T WRITTEN NOTICE TO THI ALL SUCH NOTICE SHALL	HE ISSUING COMP E CERTIFICATE HO IMPOSE NO OBLIG	ANY WILL ENDEA LDER NAMED TO ATION OR LIABIL	VOR TO	MAIL 30 FT. FAILURE		
ADDITIONAL INSURED:				UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES. AUTHORIZED REPRESENTATIVE								

SECTION 00622 – Contractor's Application for Payment - PROJECT NAME - PROJECT NAME – PROJECT NAME – PROJECT NAME - PROJECT NAME - PROJECT NAME -

		Application	າ for Payme	ent No
		For Work Accomplished through the period of the	rough	
		, , , , , , , , , , , , , , , , , , , ,	-	
T	o:	Indian River County (OWNER)		
F	rom:	(CONTRACTOR)		
E	Bid No	.: <u>2022061</u>		
1)	Attach detailed schedule and copies of all paid invoices.		
		Original Contract Drings		Φ.
	1.	Original Contract Price:		\$
	2.	Net change by Change Orders and Written Amendments (+ or -):		\$
	3.	Current Contract Price (1 plus 2):		<u>\$</u>
	4.	Total completed and stored to date:		\$
	5.	Retainage (per Agreement):		
		5% of completed Work:		
		% of retainage:	\$	
		Total Retainage:	<u> </u>	\$
	6.	Total completed and stored to date less retainage (4 minus 5):		\$
	7.	Less previous Application for Payments:		\$
	8.	DUE THIS APPLICATION (6 MINUS 7):		\$

CONTRACTOR'S CERTIFICATION:

UNDER PENALTY OF PERJURY, the undersigned CONTRACTOR certifies that (1) the labor and materials listed on this request for payment have been used in the construction of this Work; (2) payment received from the last pay request has been used to make payments to all subcontractors, laborers, materialmen and suppliers except as listed on Attachment A, below; (3) title of all Work, materials and equipment incorporated in said Work or otherwise listed in or covered by this Application for Payment will pass to OWNER at time of payment free and clear of all Liens, security interests and encumbrances (except such as are covered by a Bond acceptable to OWNER indemnifying OWNER against any such Lien, security interest or encumbrance); (4) all Work covered by this Application for Payment is in accordance with the Contract Documents and not defective; and (5) If this Periodic Estimate is for a Final Payment to project or improvement, I further certify that all persons doing work upon or furnishing materials or supplies for this project or improvement under this foregoing contract have been paid in full, and that all taxes imposed by

Chapter 212 Florida Statutes, (Sales and Use Tax Act, as Amended) have been paid and discharged, and that I have no claims against the OWNER.

Attached to or submitted with this form are:

1. Signed release of lien forms (partial or final as applicable) from all subcontractors, laborers, materialmen and suppliers except as listed on Attachment A, together with an explanation as to why any release of lien form is not included;

2. Updated Construction Schedule per Specification Section 01310.

Dated	E	Ву:	
		,	(CONTRACTOR – must be signed by
			an Officer of the Corporation)
			Print Name and Title
STATE OF			
COUNTY OF			
	day of		ns of □ physical presence or □ online 20, by
	·		
			ry Public - State of Florida)
	(Pfint, Type, C	or Sta	amp Commissioned Name of Notary Public)
☐ who is personally known			
	as identificatio	11.	
Please remit payment to:			
Contractor's Name:			
Address:			
*********	********	****	*******
[The	e remainder of this page w	as le	ft blank intentionally]

SURETY'S CONSENT OF PAYMENT TO CONTRACTOR:

The Surety,	
corporation, in accordance with Public Co	nstruction Bond Number, a hereby he CONTRACTOR, for the amounts specified in
this CONTRACTOR's APPLICATION FO	R PAYMENT.
TO BE EXECUTED BY CORPORATE SU	JRETY:
Attest:	
Secretary	Corporate Surety
- -	Business Address
	Dusiness Address
	BY:
	Print Name:
	Title:
	(Affix Corporate SEAL)
STATE OF FLORIDA COUNTY OF INDIAN RIVER	
a	s identification, who being by me first duly swoi
upon oath, says that he/she is and that he/she has been authorized by _ to the CONTRACTOR of the foregoing Cosworn to before me this day of	theit to approve payment by the OWNE ontractor's Application for Payment. Subscribed ar, 20
- 1	Notary Public, State of
	My Commission Expires:

CERTIFICATION OF PROJECT MANAGER:

I certify that I have reviewed the above a Payment; that to the best of my knowledge and be statement of the work performed and/or mate certifying as to whether or not the Contract materialmen and suppliers because I am not in a	pelief it appears to be a reasonably accurate rial supplied by the Contractor. I am not tor has paid all subcontractors, laborers,
Dated	SIGNATURE
	SIGNATORE
CERTIFICATION OF INSPECTOR:	
I have checked the estimate against the Cor Payments and the notes and reports of my ins knowledge, this statement of work performed reasonably accurate, that the Contractor appea Contract with respect to construction, and that requested above, unless otherwise noted by me. Contractor has paid all subcontractors, laborers, in a position to accurately determine that issue.	pections of the project. To the best of my and/or materials supplied appears to be ars to be observing the requirements of the the Contractor should be paid the amount. I am not certifying as to whether or not the
Dated	SIGNATURE

ATTACHMENT A

						
elease of lien equest, toge	contractors, la form (partial ther with an e	or final as explanation	applicable) as to why	is not inc	cluded with	this
elease of lien equest, toge	form (partial	or final as explanation	applicable) as to why	is not inc	cluded with	this
elease of lien equest, toge	form (partial	or final as explanation	applicable) as to why	is not inc	cluded with	this
elease of lien equest, toge	form (partial ther with an e	or final as explanation	applicable) as to why	is not inc	cluded with	this
elease of lien equest, toge	form (partial ther with an e	or final as explanation	applicable) as to why	is not inc	cluded with	this
elease of lien lequest, toge	form (partial ther with an e	or final as explanation	applicable) as to why	is not inc	cluded with	this
elease of lien Request, toge	form (partial ther with an e	or final as explanation	applicable) as to why	is not inc	cluded with	this
elease of lien Request, toge	form (partial ther with an e	or final as explanation	applicable) as to why	is not inc	cluded with	this
elease of lien Request, toge	form (partial ther with an e	or final as explanation	applicable) as to why	is not inc	cluded with	this
elease of lien Request, toge	form (partial ther with an e	or final as explanation	applicable) as to why	is not inc	cluded with	this

PROJECT NAME: <u>Fire Station 11 Remodel</u> Project No. <u>Bid 2022061</u> Payment Application No. _____

						WORK COMPLETED									
				SCHEDULEI	O VALUE	PREVIOUS APPLICATION		THIS PERIOD		TOTAL COMPLETED		%	MATERIALS	BALANCE TO FINISH	
Item No.	Description	Unit	Quantity	Unit Price	Amount	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL		STORED	QUANTITY	TOTAL
								401111111		401111111				401111111	
	SUBTOTAL			SUBTOTAL	0.00		0.00		0.00		0.00		0.00		0.00
			1												•
	FORCE ACCOUNT	1	LS												
	GRAND TOTAL			TOTAL	0.00										

AMOUNT COMPLETED TO DATE

MATERIALS STORED TO DATE

SUB-TOTAL MATERIALS STORED AND COMPLETED TO
DATE

RETAINAGE AT 5%

TOTAL COMPLETED AND STORED LESS RETAINAGE
LESS PREVIOUS PAYMENT

AMOUNT DUE CONTRACTOR

\$0.00

\$0.00

\$0.00

\$0.00

PAGE 00622-6

SECTION 00630 – Certificate of Substantial Completion

Date of Issuance:	, 20
OWNER: CONTRACTOR:	Indian River County
CONTRACT FOR:	Fire Station 11 Remodel
Project Description:	The proposed project includes remodeling of the kitchen and restrooms at Fire Station 11, 2555 93 rd Street, Vero Beach, FL 32963.
OWNER's Bid No.	2022061
This Certificate of Su to the following spec	ubstantial Completion applies to all Work under the Contract Documents or ified parts thereof:
_	
To:	OWNER
	OWNER
And To:	
	CONTRACTOR
OWNER, CONTRAC	his Certificate applies has been inspected by authorized representatives of CTOR and ENGINEER, and that Work is hereby declared to be substantially nce with the Contract Documents on
	DATE OF SUBSTANTIAL COMPLETION

A tentative list of items to be completed or corrected is attached hereto. This list may not be all-inclusive, and the failure to include an item in it does not alter the responsibility of CONTRACTOR to complete all the Work in accordance with the Contract Documents. The items in the tentative list shall be completed or corrected by CONTRACTOR within 30 calendar days of the above date of Substantial Completion.

The responsibilities between OWNER and CONTRACTOR for security, operation, safety, maintenance, heat, utilities, insurance and warranties and guarantees shall be as follows:
OWNER:
CONTRACTOR:
The following documents are attached to and made a part of this Certificate:
[For items to be attached see definition of Substantial Completion as supplemented and other specifically noted conditions precedent to achieving Substantial Completion as required by Contract Documents.]
This certificate does not constitute an acceptance of Work not in accordance with the Contract Documents nor is it a release of CONTRACTOR's obligation to complete the Work in accordance with the Contract Documents.
Executed by ENGINEER on: (Date).
ENGINEER:
Dec
By:(Authorized Signature)
CONTRACTOR accepts this Certificate of Substantial Completion on (date).
CONTRACTOR:
By:(Authorized Signature)
OWNER accepts this Certificate of Substantial Completion on (date).
OWNER: INDIAN RIVER COUNTY
By:
(Authorized Signature)

* * END OF SECTION * *

SECTION 00632 - CONTRACTOR'S FINAL CERTIFICATION OF THE WORK

(TO ACCOMPANY CONTRACTOR'S FINAL APPLICATION FOR PAYMENT)

	CT NAME: Fire Station 11 Remodel CT NO: 2022061						
STATE COUN	OF Y OF						
Persor comes CONTI	Personally before me the undersigned officer, authorized by the laws of said state to administer oaths, comes, who on oath says: That he is the CONTRACTOR with whom Indian River County, Florida, a political subdivision of said state, did on						
certain	day of, 20, enter into a contract for the performance of work, more particularly described as follows:						
Remod	I of kitchen and restrooms.						
all firm	JNDER PENALTY OF PERJURY, affiant further says that said construction has been com- nd the Contract therefore fully performed and final payment is now due and that all liens of and individuals contracting directly with or directly employed by such CONTRACTOR have id in full EXCEPT:						
Name	Description/Amount						
who ha	e not been paid and who are due the amount set forth.						
Affiant	urther says that:						
1.	CONTRACTOR has reviewed the Contract Documents.						
2.	CONTRACTOR has reviewed the Work for compliance with the Contract Documents.						
3.	CONTRACTOR has completed the Work in accordance with the Contract Documents.						
4.	All equipment and systems have been tested in the presence of the ENGINEER or his representative and are fully operational with no defects or deficiencies except as listed below.						
5.	The Work is complete and ready for final acceptance by the OWNER.						

CONTRACTOR hereby certifies that it has no claims against the OWNER.

6.

(Contractor) By: ______ STATE OF _____ COUNTY OF _____ Sworn to (or affirmed) and subscribed before me by means of □ physical presence or □ online notarization, this _____ day of ______ 20_____, by _____ (name of person making statement).

+ + END OF SECTION + +

□ who is personally known to me or □ who has produced _____ as identification.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by

ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

Issued and Published Jointly By

PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE a practice division of the NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

AMERICAN CONSULTING ENGINEERS COUNCIL

AMERICAN SOCIETY OF CIVIL ENGINEERS

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The Associated General Contractors of America

Construction Specifications Institute

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American Consulting Engineers Council 1015 15th Street N.W., Washington, DC 20005

American Society of Civil Engineers 345 East 47th Street, New York, NY 10017

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1.01 Defined Terms

- A. Wherever used in the Contract Documents and printed with initial or all capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof.
- 1. Addenda--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the Contract Documents.
- 2. Agreement--The written instrument which is evidence of the agreement between OWNER and CONTRACTOR covering the Work.
- 3. Application for Payment--The form acceptable to ENGINEER which is to be used by CONTRACTOR during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
- 4. Asbestos--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.
- 5. *Bid*--The offer or proposal of a bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
- 6. Bidding Documents--The Bidding Requirements and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids).
- 7. Bidding Requirements--The Advertisement or Invitation to Bid, Instructions to Bidders, Bid security form, if any, and the Bid form with any supplements.
- 8. *Bonds--*Performance and payment bonds and other instruments of security.
- 9. Change Order--A document recommended by ENGINEER which is signed by CONTRACTOR and OWNER and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.
- 10. Claim--A demand or assertion by OWNER or CONTRACTOR seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A

demand for money or services by a third party is not a Claim.

- 11. Contract--The entire and integrated written agreement between the OWNER and CONTRACTOR concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.
- 12. Contract Documents--The Contract Documents establish the rights and obligations of the parties and include the Agreement, Addenda (which pertain to the Contract Documents), CONTRACTOR's Bid (including documentation accompanying the Bid and any post Bid documentation submitted prior to the Notice of Award) when attached as an exhibit to the Agreement, the Notice to Proceed, the Bonds, these General Conditions, the Supplementary Conditions, the Specifications and the Drawings as the same are more specifically identified in the Agreement, together with all Written Amendments, Change Orders, Work Change Directives, Field Orders, and ENGINEER's written interpretations and clarifications issued on or after the Effective Date of the Agreement. Approved Shop Drawings and the reports and drawings of subsurface and physical conditions are not Contract Documents. Only printed or hard copies of the items listed in this paragraph are Contract Documents. Files in electronic media format of text, data, graphics, and the like that may be furnished by OWNER to CONTRACTOR are not Contract Documents.
- 13. Contract Price--The moneys payable by OWNER to CONTRACTOR for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of paragraph 11.03 in the case of Unit Price Work).
- 14. Contract Times--The number of days or the dates stated in the Agreement to: (i) achieve Substantial Completion; and (ii) complete the Work so that it is ready for final payment as evidenced by ENGINEER's written recommendation of final payment.
- 15. CONTRACTOR--The individual or entity with whom OWNER has entered into the Agreement.
- 16. Cost of the Work--See paragraph 11.01.A for definition.
- 17. Drawings--That part of the Contract Documents prepared or approved by ENGINEER which graphically shows the scope, extent, and character of the Work to be performed by CONTRACTOR. Shop Drawings and other CONTRACTOR submittals are not Drawings as so defined.

- 18. Effective Date of the Agreement--The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.
- 19. *ENGINEER*--The individual or entity named as such in the Agreement.
- 20. ENGINEER's Consultant--An individual or entity having a contract with ENGINEER to furnish services as ENGINEER's independent professional associate or consultant with respect to the Project and who is identified as such in the Supplementary Conditions.
- 21. Field Order--A written order issued by ENGINEER which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.
- 22. General Requirements--Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.
- 23. Hazardous Environmental Condition--The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.
- 24. Hazardous Waste--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.
- 25. Laws and Regulations; Laws or Regulations-Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
- 26. *Liens*--Charges, security interests, or encumbrances upon Project funds, real property, or personal property.
- 27. *Milestone--*A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.
- 28. Notice of Award--The written notice by OWNER to the apparent successful bidder stating that upon timely compliance by the apparent successful bidder with the conditions precedent listed therein, OWNER will sign and deliver the Agreement.
- 29. *Notice to Proceed--*A written notice given by OWNER to CONTRACTOR fixing the date on which the Contract Times will commence to run and on which

- CONTRACTOR shall start to perform the Work under the Contract Documents.
- 30. *OWNER*--The individual, entity, public body, or authority with whom CONTRACTOR has entered into the Agreement and for whom the Work is to be performed.
- 31. Partial Utilization--Use by OWNER of a substantially completed part of the Work for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all the Work.
 - 32. PCBs--Polychlorinated biphenyls.
- 33. Petroleum--Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.
- 34. *Project*--The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part as may be indicated elsewhere in the Contract Documents.
- 35. Project Manual--The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.
- 36. Radioactive Material--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.
- 37. Resident Project Representative--The authorized representative of ENGINEER who may be assigned to the Site or any part thereof.
- 38. Samples--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.
- 39. Shop Drawings--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for CONTRACTOR and submitted by CONTRACTOR to illustrate some portion of the Work.
- 40. Site--Lands or areas indicated in the Contract Documents as being furnished by OWNER upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by OWNER which are designated for the use of CONTRACTOR.

- 41. Specifications--That part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.
- 42. Subcontractor--An individual or entity having a direct contract with CONTRACTOR or with any other Subcontractor for the performance of a part of the Work at the Site.
- 43. Substantial Completion--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of ENGINEER, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.
- 44. Supplementary Conditions--That part of the Contract Documents which amends or supplements these General Conditions.
- 45. Supplier--A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with CONTRACTOR or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by CONTRACTOR or any Subcontractor.
- 46. Underground Facilities--All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
- 47. *Unit Price Work--*Work to be paid for on the basis of unit prices.
- 48. Work--The entire completed construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.
- 49. Work Change Directive--A written statement to CONTRACTOR issued on or after the Effective Date of the Agreement and signed by OWNER and recommended by ENGINEER ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or

physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

50. Written Amendment--A written statement modifying the Contract Documents, signed by OWNER and CONTRACTOR on or after the Effective Date of the Agreement and normally dealing with the nonengineering or nontechnical rather than strictly construction-related aspects of the Contract Documents.

1.02 Terminology

A. Intent of Certain Terms or Adjectives

1. Whenever in the Contract Documents the terms "as allowed," "as approved," or terms of like effect or import are used, or the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of ENGINEER as to the Work, it is intended that such action or determination will be solely to evaluate, in general, the completed Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective shall not be effective to assign to ENGI-NEER any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.10 or any other provision of the Contract Documents.

B. Day

1. The word "day" shall constitute a calendar day of 24 hours measured from midnight to the next midnight.

C. Defective

1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it does not conform to the Contract Documents or does not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents, or has been damaged prior to ENGINEER's recommendation of final payment (unless responsibility for the protection thereof has been

assumed by OWNER at Substantial Completion in accordance with paragraph 14.04 or 14.05).

D. Furnish, Install, Perform, Provide

- 1. The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
- 2. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
- 3. The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
- 4. When "furnish," "install," "perform," or "provide" is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of CONTRACTOR, "provide" is implied.
- E. Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 - PRELIMINARY MATTERS

2.01 Delivery of Bonds

A. When CONTRACTOR delivers the executed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER such Bonds as CONTRACTOR may be required to furnish.

2.02 Copies of Documents

- A. OWNER shall furnish to CONTRACTOR up to ten copies of the Contract Documents. Additional copies will be furnished upon request at the cost of reproduction.
- 2.03 Commencement of Contract Times; Notice to Proceed

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. In no event will the Contract Times commence to run later than the ninetieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

2.04 Starting the Work

A. CONTRACTOR shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

2.05 Before Starting Construction

- A. CONTRACTOR's Review of Contract Documents: Before undertaking each part of the Work, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. CONTRACTOR shall promptly report in writing to ENGINEER any conflict, error, ambiguity, or discrepancy which CONTRACTOR may discover and shall obtain a written interpretation or clarification from ENGINEER before proceeding with any Work affected thereby; however, CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless CONTRACTOR knew or reasonably should have known thereof.
- B. *Preliminary Schedules:* Within ten days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), CONTRACTOR shall submit to ENGINEER for its timely review:
 - 1. a preliminary progress schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents:
 - 2. a preliminary schedule of Shop Drawing and Sample submittals which will list each required submittal and the times for submitting, reviewing, and processing such submittal; and
 - 3. a preliminary schedule of values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

C. Evidence of Insurance: Before any Work at the Site is started, CONTRACTOR and OWNER shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which CONTRACTOR and OWNER respectively are required to purchase and maintain in accordance with Article 5.

2.06 Preconstruction Conference

A. Within 20 days after the Contract Times start to run, but before any Work at the Site is started, a conference attended by CONTRACTOR, ENGINEER, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in paragraph 2.05.B, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

2.07 Initial Acceptance of Schedules

A. Unless otherwise provided in the Contract Documents, at least ten days before submission of the first Application for Payment a conference attended by CONTRACTOR, ENGINEER, and others as appropriate will be held to review for acceptability to ENGINEER as provided below the schedules submitted in accordance with paragraph 2.05.B. CONTRACTOR shall have an additional ten days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to CONTRACTOR until acceptable schedules are submitted to ENGINEER.

- 1. The progress schedule will be acceptable to ENGINEER if it provides an orderly progression of the Work to completion within any specified Milestones and the Contract Times. Such acceptance will not impose on ENGINEER responsibility for the progress schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve CONTRACTOR from CONTRACTOR's full responsibility therefor.
- 2. CONTRACTOR's schedule of Shop Drawing and Sample submittals will be acceptable to ENGINEER if it provides a workable arrangement for reviewing and processing the required submittals.
- CONTRACTOR's schedule of values will be acceptable to ENGINEER as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 Intent

- A. The Contract Documents are complementary; what is called for by one is as binding as if called for by all.
- B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to OWNER.
- C. Clarifications and interpretations of the Contract Documents shall be issued by ENGINEER as provided in Article 9.

3.02 Reference Standards

A. Standards, Specifications, Codes, Laws, and Regulations

- 1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
- No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the or responsibilities of OWNER, CONTRACTOR, or ENGINEER, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents, nor shall any such provision or instruction be effective to assign to OWNER, ENGINEER, or any of **ENGINEER's** Consultants, agents, or employees any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

A. Reporting Discrepancies

If, during the performance of the Work, CONTRACTOR discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, CONTRACTOR shall report it to ENGINEER in writing at once. CONTRACTOR shall not proceed with the Work affected thereby (except in an emergency as required by paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in paragraph 3.04; provided, however, that CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any such conflict, error, ambiguity, or discrepancy unless CONTRACTOR knew or reasonably should have known thereof.

B. Resolving Discrepancies

- 1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:
 - a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or
 - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 Amending and Supplementing Contract Documents

- A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways: (i) a Written Amendment; (ii) a Change Order; or (iii) a Work Change Directive.
- B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways: (i) a Field Order; (ii) ENGINEER's approval of a Shop Drawing or Sample;

or (iii) ENGINEER's written interpretation or clarification.

3.05 Reuse of Documents

A. CONTRACTOR and any Subcontractor or Supplier or other individual or entity performing or furnishing any of the Work under a direct or indirect contract with OWNER: (i) shall not have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of ENGINEER or ENGINEER's Consultant, including electronic media editions; and (ii) shall not reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of OWNER and ENGINEER and specific written verification or adaption by ENGINEER. This prohibition will survive final payment, completion, and acceptance of the Work, or termination or completion of the Contract. Nothing herein shall preclude CONTRACTOR from retaining copies of the Contract Documents for record purposes.

ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; REFERENCE POINTS

4.01 Availability of Lands

- A. OWNER shall furnish the Site. OWNER shall notify CONTRACTOR of any encumbrances or restrictions not of general application but specifically related to use of the Site with which CONTRACTOR must comply in performing the Work. OWNER will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If CONTRACTOR and OWNER are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in OWNER's furnishing the Site, CONTRACTOR may make a Claim therefor as provided in paragraph 10.05.
- B. Upon reasonable written request, OWNER shall furnish CONTRACTOR with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and OWNER's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.02 Subsurface and Physical Conditions

- A. *Reports and Drawings:* The Supplementary Conditions identify:
 - 1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that ENGINEER has used in preparing the Contract Documents; and
 - 2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that ENGINEER has used in preparing the Contract Documents.
- B. Limited Reliance by CONTRACTOR on Technical Data Authorized: CONTRACTOR may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," CONTRACTOR may not rely upon or make any Claim against OWNER, ENGINEER, or any of ENGINEER's Consultants with respect to:
 - 1. the completeness of such reports and drawings for CONTRACTOR's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by CONTRACTOR, and safety precautions and programs incident thereto; or
 - 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 - 3. any CONTRACTOR interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.
- 4.03 Differing Subsurface or Physical Conditions
- A. *Notice:* If CONTRACTOR believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:
 - 1. is of such a nature as to establish that any "technical data" on which CONTRACTOR is entitled to rely as provided in paragraph 4.02 is materially inaccurate; or
 - 2. is of such a nature as to require a change in the Contract Documents; or
 - 3. differs materially from that shown or indicated in the Contract Documents; or
 - 4. is of an unusual nature, and differs materially from conditions ordinarily

encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then CONTRACTOR shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by paragraph 6.16.A), notify OWNER and ENGINEER in writing about such condition. CONTRACTOR shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. *ENGINEER's Review:* After receipt of written notice as required by paragraph 4.03.A, ENGINEER will promptly review the pertinent condition, determine the necessity of OWNER's obtaining additional exploration or tests with respect thereto, and advise OWNER in writing (with a copy to CONTRACTOR) of ENGINEER's findings and conclusions.

C. Possible Price and Times Adjustments

- 1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in CONTRACTOR's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. such condition must meet any one or more of the categories described in paragraph 4.03.A; and
 - b. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of paragraphs 9.08 and 11.03.
- 2. CONTRACTOR shall not be entitled to any adjustment in the Contract Price or Contract Times if:
 - a. CONTRACTOR knew of the existence of such conditions at the time CONTRACTOR made a final commitment to OWNER in respect of Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or
 - b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for CONTRACTOR prior to CONTRACTOR's making such final commitment; or

- c. CONTRACTOR failed to give the written notice within the time and as required by paragraph 4.03.A.
- 3. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in paragraph 10.05. However, OWNER, ENGINEER, and ENGINEER's Consultants shall not be liable to CONTRACTOR for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by CONTRACTOR on or in connection with any other project or anticipated project.

4.04 Underground Facilities

- A. Shown or Indicated: The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to OWNER or ENGINEER by the owners of such Underground Facilities, including OWNER, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:
 - 1. OWNER and ENGINEER shall not be responsible for the accuracy or completeness of any such information or data; and
 - 2. the cost of all of the following will be included in the Contract Price, and CONTRACTOR shall have full responsibility for:
 - a. reviewing and checking all such information and data,
 - b. locating all Underground Facilities shown or indicated in the Contract Documents,
 - c. coordination of the Work with the owners of such Underground Facilities, including OWNER, during construction, and
 - d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. Not Shown or Indicated

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, CONTRACTOR shall,

- promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to OWNER and ENGINEER. ENGINEER will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, CONTRACTOR shall be responsible for the safety and protection of such Underground Facility.
- If ENGINEER concludes that a change in the Contract Documents is required. a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in Contract Documents and CONTRACTOR did not know of and could not reasonably have been expected to be aware of or to have anticipated. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, OWNER or CONTRACTOR may make a Claim therefor as provided in paragraph 10.05.

4.05 Reference Points

A. OWNER shall provide engineering surveys to establish reference points for construction which in ENGINEER's judgment are necessary to enable CONTRACTOR to proceed with the Work. CONTRACTOR shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of OWNER. CONTRACTOR shall report to ENGINEER whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.06 Hazardous Environmental Condition at Site

A. Reports and Drawings: Reference is made to the Supplementary Conditions for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the ENGINEER in the preparation of the Contract Documents.

- B. Limited Reliance by CONTRACTOR on Technical Data Authorized: CONTRACTOR may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," CONTRACTOR may not rely upon or make any Claim against OWNER, ENGINEER or any of ENGINEER's Consultants with respect to:
 - 1. the completeness of such reports and drawings for CONTRACTOR's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto; or
 - 2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
 - 3. any CONTRACTOR interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.
- C. CONTRACTOR shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. CONTRACTOR shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by CONTRACTOR, Subcontractors, Suppliers, or anyone else for whom CONTRACTOR is responsible.
- D. If CONTRACTOR encounters a Hazardous Environmental Condition or if CONTRACTOR or anyone for whom CONTRACTOR is responsible creates a Hazardous Environmental Condition, CONTRACTOR shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by paragraph 6.16); and (iii) notify OWNER and ENGINEER (and promptly thereafter confirm such notice in writing). OWNER shall promptly consult with ENGINEER concerning the necessity for OWNER to retain a qualified expert to evaluate such condition or take corrective action, if any.
- E. CONTRACTOR shall not be required to resume Work in connection with such condition or in any affected area until after OWNER has obtained any required permits related thereto and delivered to CONTRACTOR written notice: (i) specifying that such

- condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If OWNER and CONTRACTOR cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by CONTRACTOR, either party may make a Claim therefor as provided in paragraph 10.05.
- F. If after receipt of such written notice CONTRACTOR does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then OWNER may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If OWNER and CON-TRACTOR cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in paragraph 10.05. OWNER may have such deleted portion of the Work performed by OWNER's own forces or others in accordance with Article 7.
- G. To the fullest extent permitted by Laws and Regulations, OWNER shall indemnify and hold harmless CONTRACTOR, Subcontractors, ENGI-NEER. ENGINEER's Consultants and the officers. directors, partners, employees, agents, other consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by CONTRACTOR or by anyone for whom CONTRACTOR is responsible. Nothing in this paragraph 4.06.E shall obligate OWNER to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- H. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, **ENGINEER's** Consultants, and the officers, directors, partners, employees, agents. other consultants. subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by

CONTRACTOR or by anyone for whom CONTRACTOR is responsible. Nothing in this paragraph 4.06.F shall obligate CONTRACTOR to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

I. The provisions of paragraphs 4.02, 4.03, and 4.04 are not intended to apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 5 - BONDS AND INSURANCE

5.01 Performance, Payment, and Other Bonds

A. CONTRACTOR shall furnish performance and payment Bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all CONTRACTOR's obligations under the Contract Documents. These Bonds shall remain in effect at least until one year after the date when final payment becomes due, except as provided otherwise by Laws or Regulations or by the Contract Documents. CONTRACTOR shall also furnish such other Bonds as are required by the Contract Documents.

- B. All Bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as 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 Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All Bonds signed by an agent must be accompanied by a certified copy of such agent's authority to act.
- C. If the surety on any Bond furnished by CONTRACTOR is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of paragraph 5.01.B, CONTRACTOR shall within 20 days thereafter substitute another Bond and surety, both of which shall comply with the requirements of paragraphs 5.01.B and 5.02.

5.02 Licensed Sureties and Insurers

A. All Bonds and insurance required by the Contract Documents to be purchased and maintained by OWNER or CONTRACTOR shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue Bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional

requirements and qualifications as may be provided in the Supplementary Conditions.

5.03 Certificates of Insurance

A. CONTRACTOR shall deliver to OWNER, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by OWNER or any other additional insured) which CONTRACTOR is required to purchase and maintain. OWNER shall deliver to CONTRACTOR, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by CONTRACTOR or any other additional insured) which OWNER is required to purchase and maintain.

5.04 CONTRACTOR's Liability Insurance

A. CONTRACTOR shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from CONTRACTOR's performance of the Work and CONTRACTOR's other obligations under the Contract Documents, whether it is to be performed by CONTRACTOR, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:

- 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts:
- 2. claims for damages because of bodily injury, occupational sickness or disease, or death of CONTRACTOR's employees;
- 3. claims for damages because of bodily injury, sickness or disease, or death of any person other than CONTRACTOR's employees;
- 4. claims for damages insured by reasonably available personal injury liability coverage which are sustained: (i) by any person as a result of an offense directly or indirectly related to the employment of such person by CONTRACTOR, or (ii) by any other person for any other reason;
- 5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and
- 6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

- B. The policies of insurance so required by this paragraph 5.04 to be purchased and maintained shall:
 - with respect to insurance required by paragraphs 5.04.A.3 through 5.04.A.6 inclusive, include as additional insureds (subject to any customary exclusion in respect of professional liability) OWNER, ENGINEER's Consultants, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, and other consultants agents, subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;
 - 2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;
 - 3. include completed operations insurance;
 - 4. include contractual liability insurance covering CONTRACTOR's indemnity obligations under paragraphs 6.07, 6.11, and 6.20:
 - 5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least thirty days prior written notice has been given to OWNER and CONTRACTOR and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the CONTRACTOR pursuant to paragraph 5.03 will so provide);
 - 6. remain in effect at least until final payment and at all times thereafter when CONTRACTOR may be correcting, removing, or replacing defective Work in accordance with paragraph 13.07; and
 - 7. with respect to completed operations insurance, and any insurance coverage written on a claims-made basis, remain in effect for at least two years after final payment (and CONTRACTOR shall furnish OWNER and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to OWNER and any such additional

insured of continuation of such insurance at final payment and one year thereafter).

5.05 OWNER's Liability Insurance

A. In addition to the insurance required to be provided by CONTRACTOR under paragraph 5.04, OWNER, at OWNER's option, may purchase and maintain at OWNER's expense OWNER's own liability insurance as will protect OWNER against claims which may arise from operations under the Contract Documents.

5.06 Property Insurance

A. Unless otherwise provided in the Supplementary Conditions, OWNER shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:

- 1. include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an additional insured:
- 2. be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, false work, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;
- 3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects):
- 4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by OWNER prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by ENGINEER:

- allow for partial utilization of the Work by OWNER;
 - include testing and startup; and
- 7. be maintained in effect until final payment is made unless otherwise agreed to in writing by OWNER, CONTRACTOR, and ENGINEER with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.
- B. OWNER shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER'S Consultants, and any other individuals or entities identified in the Supplementary Conditions, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.
- C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to OWNER and CONTRACTOR and to each other additional insured to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with paragraph 5.07.
- D. OWNER shall not be responsible for purchasing and maintaining any property insurance specified in this paragraph 5.06 to protect the interests of CONTRACTOR, Subcontractors, or others in the Work to the extent of any deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by CONTRACTOR, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.
- E. If CONTRACTOR requests in writing that other special insurance be included in the property insurance policies provided under paragraph 5.06, OWNER shall, if possible, include such insurance, and the cost thereof will be charged to CONTRACTOR by appropriate Change Order or Written Amendment. Prior to commencement of the Work at the Site, OWNER shall in writing advise CONTRACTOR whether or not such other insurance has been procured by OWNER.

5.07 Waiver of Rights

- A. OWNER and CONTRACTOR intend that all policies purchased in accordance with paragraph 5.06 will protect OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder. OWNER and CONTRACTOR waive all rights against each other and their respective officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors, ENGINEER, ENGINEER's Consultants, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by OWNER as trustee or otherwise payable under any policy so issued.
- B. OWNER waives all rights against CONTRACTOR, Subcontractors, ENGINEER, ENGINEER'S Consultants, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them for:
 - 1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to OWNER's property or the Work caused by, arising out of, or resulting from fire or other peril whether or not insured by OWNER; and
 - 2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by OWNER during partial utilization pursuant to paragraph 14.05, after Substantial Completion pursuant to paragraph 14.04, or after final payment pursuant to paragraph 14.07.

C. Any insurance policy maintained by OWNER covering any loss, damage or consequential loss referred to in paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against CONTRACTOR, Subcontractors, ENGINEER, or ENGINEER's Consultants and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them.

5.08 Receipt and Application of Insurance Proceeds

A. Any insured loss under the policies of insurance required by paragraph 5.06 will be adjusted with OWNER and made payable to OWNER as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of paragraph 5.08.B. OWNER shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order or Written Amendment.

B. OWNER as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to OWNER's exercise of this power. If such objection be made, OWNER as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, OWNER as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, OWNER as fiduciary shall give bond for the proper performance of such duties.

5.09 Acceptance of Bonds and Insurance; Option to Replace

A. If either OWNER or CONTRACTOR has any objection to the coverage afforded by or other provisions of the Bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by paragraph 2.05.C. OWNER and CONTRACTOR shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the Bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent Bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

5.10 Partial Utilization, Acknowledgment of Property Insurer

A. If OWNER finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.01 Supervision and Superintendence

A. CONTRACTOR shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. CON-TRACTOR shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction, but CONTRACTOR shall not be responsible for the negligence of OWNER or ENGINEER in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents. CON-TRACTOR shall be responsible to see that the completed Work complies accurately with the Contract Documents.

B. At all times during the progress of the Work, CONTRACTOR shall assign a competent resident superintendent thereto who shall not be replaced without written notice to OWNER and ENGINEER except under extraordinary circumstances. The superintendent will be CONTRACTOR's representative at the Site and shall have authority to act on behalf of CONTRACTOR. All communications given to or received from the superintendent shall be binding on CONTRACTOR.

- A. CONTRACTOR shall provide competent, suitably qualified personnel to survey, lay out, and construct the Work as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the Site.
- B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, and CONTRACTOR will not permit overtime work or the performance of Work on Saturday, Sunday, or any legal holiday without OWNER's written consent (which will not be unreasonably withheld) given after prior written notice to ENGINEER.

6.03 Services, Materials, and Equipment

- A. Unless otherwise specified in the General Requirements, CONTRACTOR shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.
- B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All warranties and guarantees specifically called for by the Specifications shall expressly run to the benefit of OWNER. If required by ENGINEER, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment. All materials and equipment shall be stored. applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier. except as otherwise may be provided in the Contract Documents.

6.04 Progress Schedule

- A. CONTRACTOR shall adhere to the progress schedule established in accordance with paragraph 2.07 as it may be adjusted from time to time as provided below.
 - 1. CONTRACTOR shall submit to ENGINEER for acceptance (to the extent indicated in paragraph 2.07) proposed adjustments in the progress schedule that will not result in changing the Contract Times (or Milestones). Such adjustments will conform generally to the

progress schedule then in effect and additionally will comply with any provisions of the General Requirements applicable thereto.

2. Proposed adjustments in the progress schedule that will change the Contract Times (or Milestones) shall be submitted in accordance with the requirements of Article 12. Such adjustments may only be made by a Change Order or Written Amendment in accordance with Article 12.

6.05 Substitutes and "Or-Equals"

- A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to ENGINEER for review under the circumstances described below.
 - 1. "Or-Equal" Items: If in ENGINEER's sole discretion an item of material or equipment proposed by CONTRACTOR is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by ENGINEER as an "or-equal" item, in which case review and approval of the proposed item may, in ENGINEER's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment ENGINEER determines that: (i) it is at least equal in quality, durability, appearance, strength, and design characteristics; (ii) it will reliably perform at least equally well the function imposed by the design concept of the completed Project as a functioning whole, and:
 - b. CONTRACTOR certifies that: (i) there is no increase in cost to the OWNER; and (ii) it will conform substantially, even with deviations, to the detailed requirements of the item named in the Contract Documents.

2. Substitute Items

a. If in ENGINEER's sole discretion an item of material or equipment proposed by

CONTRACTOR does not qualify as an "or-equal" item under paragraph 6.05.A.1, it will be considered a proposed substitute item.

- b. CONTRACTOR shall submit sufficient information as provided below to allow ENGINEER to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by ENGINEER from anyone other than CONTRACTOR.
- c. The procedure for review by ENGI-NEER will be as set forth in paragraph 6.05.A.2.d, as supplemented in the General Requirements and as ENGINEER may decide is appropriate under the circumstances.
- d. CONTRACTOR shall first make written application to ENGINEER for review of a proposed substitute item of material or equipment that CONTRACTOR seeks to furnish or use. The application shall certify that the proposed substitute item will perform adequately the functions and achieve the results called for by the general design, be similar in substance to that specified, and be suited to the same use as that specified. The application will state the extent, if any, to which the use of the proposed substitute item will prejudice CONTRACTOR's achievement of Substantial Completion on time, whether or not use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) to adapt the design to the proposed substitute item and whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute item from that specified will be identified in the application, and available engineering, sales, maintenance, repair, and replacement services will be indicated. The application will also contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change, all of which will be considered by ENGINEER in evaluating the proposed substitute item. ENGINEER may require CONTRACTOR to furnish additional data about the proposed substitute item.

- B. Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence, or procedure of construction is shown or indicated in and expressly required by the Contract Documents, CONTRACTOR may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by ENGINEER. CONTRACTOR shall submit sufficient information to allow ENGINEER, in ENGINEER's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The procedure for review by ENGINEER will be similar to that provided in subparagraph 6.05.A.2.
- C. Engineer's Evaluation: ENGINEER will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to paragraphs 6.05.A and 6.05.B. ENGINEER will be the sole judge of acceptability. No "or-equal" or substitute will be ordered, installed or utilized until ENGINEER's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or equal." ENGINEER will advise CONTRACTOR in writing of any negative determination.
- D. Special Guarantee: OWNER may require CONTRACTOR to furnish at CONTRACTOR's expense a special performance guarantee or other surety with respect to any substitute.
- E. ENGINEER's Cost Reimbursement: ENGINEER will record time required by ENGINEER and ENGINEER's Consultants in evaluating substitute proposed or submitted by CONTRACTOR pursuant to paragraphs 6.05.A.2 and 6.05.B and in making changes in the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) occasioned thereby. Whether or not ENGINEER approves a substitute item so proposed or submitted by CONTRACTOR, CONTRACTOR shall reimburse OWNER for the charges of ENGINEER and ENGINEER's Consultants for evaluating each such proposed substitute.
- F. CONTRACTOR's Expense: CONTRACTOR shall provide all data in support of any proposed substitute or "or-equal" at CONTRACTOR's expense.
- 6.06 Concerning Subcontractors, Suppliers, and Others
- A. CONTRACTOR shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to OWNER as indicated in paragraph 6.06.B), whether initially or as a replacement, against whom OWNER may have reasonable objection. CONTRACTOR shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom CONTRACTOR has reasonable objection.

- B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to OWNER in advance for acceptance by OWNER by a specified date prior to the Effective Date of the Agreement, and if CONTRACTOR has submitted a list thereof in accordance with the Supplementary Conditions, OWNER's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. CONTRACTOR shall submit an replacement acceptable for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued or Written Amendment signed. No acceptance by OWNER of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of OWNER or ENGI-NEER to reject defective Work.
- C. CONTRACTOR shall be fully responsible to OWNER and ENGINEER for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just CONTRACTOR responsible as is CONTRACTOR's own acts and omissions. Nothing in the Contract Documents shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between OWNER or ENGINEER and any such Subcontractor, Supplier or other individual or entity, nor shall it create any obligation on the part of OWNER or ENGINEER to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.
- D. CONTRACTOR shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR.
- E. CONTRACTOR shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with ENGINEER through CONTRACTOR.
- F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control CONTRACTOR in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

G. All Work performed for CONTRACTOR by a Subcontractor or Supplier will be pursuant to an appropriate agreement between CONTRACTOR and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of OWNER and ENGINEER. Whenever any such agreement is with a Subcontractor or Supplier who is listed as an additional insured on the property insurance provided in paragraph 5.06, the agreement between the CONTRACTOR and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against OWNER, CONTRACTOR, ENGINEER, ENGINEER's Consultants, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, CONTRACTOR will obtain the same.

6.07 Patent Fees and Royalties

A. CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of OWNER or ENGINEER its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by OWNER in the Contract Documents. To the fullest extent permitted by Laws and Regulations. CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees or agents. and other consultants of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

6.08 Permits

A. Unless otherwise provided in the Supplementary Conditions, CONTRACTOR shall obtain and

pay for all construction permits and licenses. OWNER shall assist CONTRACTOR, when necessary, in obtaining such permits and licenses. CONTRACTOR shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. CONTRACTOR shall pay all charges of utility owners for connections to the Work, and OWNER shall pay all charges of such utility owners for capital costs related thereto, such as plant investment fees.

6.09 Laws and Regulations

- A. CONTRACTOR shall give all notices and comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither OWNER nor ENGINEER shall be responsible for monitoring CONTRACTOR's compliance with any Laws or Regulations.
- B. If CONTRACTOR performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, CONTRACTOR shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work; however, it shall not be CONTRACTOR's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve CONTRACTOR of CONTRACTOR's obligations under paragraph 3.03.
- C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work may be the subject of an adjustment in Contract Price or Contract Times. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in paragraph 10.05.

6.10 Taxes

- A. CONTRACTOR shall pay all sales, consumer, use, and other similar taxes required to be paid by CONTRACTOR in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.
- OWNER qualifies for state and local sales tax exemption in the purchase of all material and equipment.

6.11 Use of Site and Other Areas

A. Limitation on Use of Site and Other Areas

- 1. CONTRACTOR shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.
- 2. Should any claim be made by any such owner or occupant because of the performance of the Work, CONTRACTOR shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.
- To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultant, and the officers, directors, partners, employees, agents, and other consultants of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against OWNER, ENGINEER, or any other party indemnified hereunder to the extent caused by or based upon CONTRACTOR's performance of the Work.
- B. Removal of Debris During Performance of the Work: During the progress of the Work CONTRACTOR shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.
- C. Cleaning: Prior to Substantial Completion of the Work CONTRACTOR shall clean the Site and make it ready for utilization by OWNER. At the completion of the Work CONTRACTOR shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- D. Loading Structures: CONTRACTOR shall not load nor permit any part of any structure to be loaded

in any manner that will endanger the structure, nor shall CONTRACTOR subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.12 Record Documents

A. CONTRACTOR shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Written Amendments, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to ENGINEER for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to ENGINEER for OWNER.

6.13 Safety and Protection

- A. CONTRACTOR shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:
 - 1. all persons on the Site or who may be affected by the Work;
 - 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 - 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. CONTRACTOR shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property. All damage, injury, or loss to any property referred to in paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by CONTRACTOR, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by CONTRACTOR (except damage or loss

attributable to the fault of Drawings or Specifications or to the acts or omissions of OWNER or ENGINEER or ENGINEER's Consultant, or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of CON-TRACTOR or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by anv of them). CONTRACTOR's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and ENGINEER has issued a notice to OWNER and CONTRACTOR in accordance with paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 Safety Representative

A. CONTRACTOR shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

6.15 Hazard Communication Programs

A. CONTRACTOR shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

6.16 Emergencies

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, CONTRACTOR is obligated to act to prevent threatened damage, injury, or loss. CONTRACTOR shall give ENGINEER prompt written notice if CONTRACTOR believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If ENGINEER determines that a change in the Contract Documents is required because of the action taken by CONTRACTOR in response to such an emergency, a Work Change Directive or Change Order will be issued.

6.17 Shop Drawings and Samples

A. CONTRACTOR shall submit Shop Drawings to ENGINEER for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals. All submittals will be identified as ENGINEER may require and in the number of copies specified in the General Requirements. The data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data

to show ENGINEER the services, materials, and equipment CONTRACTOR proposes to provide and to enable ENGINEER to review the information for the limited purposes required by paragraph 6.17.E.

- B. CONTRACTOR shall also submit Samples to ENGINEER for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals. Each Sample will be identified clearly as to material, Supplier, pertinent data such as catalog numbers, and the use for which intended and otherwise as ENGINEER may require to enable ENGINEER to review the submittal for the limited purposes required by paragraph 6.17.E. The numbers of each Sample to be submitted will be as specified in the Specifications.
- C. Where a Shop Drawing or Sample is required by the Contract Documents or the schedule of Shop Drawings and Sample submittals acceptable to ENGINEER as required by paragraph 2.07, any related Work performed prior to ENGINEER's review and approval of the pertinent submittal will be at the sole expense and responsibility of CONTRACTOR.

D. Submittal Procedures

- 1. Before submitting each Shop Drawing or Sample, CONTRACTOR shall have determined and verified:
 - a. all field measurements, quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
 - b. all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;
 - c. all information relative to means, methods, techniques, sequences, and procedures of construction and safety precautions and programs incident thereto; and
 - d. CONTRACTOR shall also have reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.
- 2. Each submittal shall bear a stamp or specific written indication that CONTRACTOR has satisfied CONTRACTOR's obligations under the Contract Documents with respect to CONTRACTOR's review and approval of that submittal.

3. At the time of each submittal, CONTRACTOR shall give ENGINEER specific written notice of such variations, if any, that the Shop Drawing or Sample submitted may have from the requirements of the Contract Documents, such notice to be in a written communication separate from the submittal; and, in addition, shall cause a specific notation to be made on each Shop Drawing and Sample submitted to ENGINEER for review and approval of each such variation.

E. ENGINEER's Review

- 1. ENGINEER will timely review and approve Shop Drawings and Samples in accordance with the schedule of Shop Drawings and Sample submittals acceptable to ENGINEER. ENGINEER's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
- 2. ENGINEER's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
- 3. ENGINEER's review and approval of Shop Drawings or Samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called ENGINEER's attention to each such variation at the time of each submittal as required by paragraph 6.17.D.3 and ENGINEER has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample approval; nor will any approval by ENGINEER relieve CONTRACTOR from responsibility for complying with the requirements of paragraph 6.17.D.1.

F. Resubmittal Procedures

1. CONTRACTOR shall make corrections required by ENGINEER and shall return the required number of corrected copies of Shop Drawings and submit as required new Samples for review and approval. CONTRACTOR shall

direct specific attention in writing to revisions other than the corrections called for by ENGINEER on previous submittals.

6.18 Continuing the Work

A. CONTRACTOR shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with OWNER. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by paragraph 15.04 or as OWNER and CONTRACTOR may otherwise agree in writing.

6.19 CONTRACTOR's General Warranty and Guarantee

- A. CONTRACTOR warrants and guarantees to OWNER, ENGINEER, and ENGINEER's Consultants that all Work will be in accordance with the Contract Documents and will not be defective. CONTRACTOR's warranty and guarantee hereunder excludes defects or damage caused by:
 - 1. abuse, modification, or improper maintenance or operation by persons other than CONTRACTOR, Subcontractors, Suppliers, or any other individual or entity for whom CONTRACTOR is responsible; or
 - 2. normal wear and tear under normal usage.
- B. CONTRACTOR's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of CONTRACTOR's obligation to perform the Work in accordance with the Contract Documents:
 - observations by ENGINEER;
 - 2. recommendation by ENGINEER or payment by OWNER of any progress or final payment;
 - 3. the issuance of a certificate of Substantial Completion by ENGINEER or any payment related thereto by OWNER;
 - 4. use or occupancy of the Work or any part thereof by OWNER;
 - 5. any acceptance by OWNER or any failure to do so:
 - 6. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by ENGINEER;
 - 7. any inspection, test, or approval by others; or

8. any correction of defective Work by OWNER.

6.20 Indemnification

- A. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, **ENGINEER's** Consultants, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of architects. attorneys, and engineers, professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage:
 - 1. is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom; and
 - 2. is caused in whole or in part by any negligent act or omission of CONTRACTOR, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable, regardless of whether or not caused in part by any negligence or omission of an individual or entity indemnified hereunder or whether liability is imposed upon such indemnified party by Laws and Regulations regardless of the negligence of any such individual or entity.
- B. In any and all claims against OWNER or ENGINEER or any of their respective consultants, agents, officers, directors, partners, or employees by any employee (or the survivor or personal representative of such employee) of CONTRACTOR, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for CON-TRACTOR or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- C. The indemnification obligations of CONTRACTOR under paragraph 6.20.A shall not extend to the liability of ENGINEER and ENGINEER's Consultants or to the officers, directors, partners, employees,

agents, and other consultants and subcontractors of each and any of them arising out of:

- 1. the preparation or approval of, or the failure to prepare or approve, maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
- 2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

ARTICLE 7 - OTHER WORK

7.01 Related Work at Site

- A. OWNER may perform other work related to the Project at the Site by OWNER's employees, or let other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:
 - 1. written notice thereof will be given to CONTRACTOR prior to starting any such other work; and
 - 2. if OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in paragraph 10.05.
- B. CONTRACTOR shall afford each other contractor who is a party to such a direct contract and each utility owner (and OWNER, if OWNER is performing the other work with OWNER's employees) proper and safe access to the Site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work and shall properly coordinate the Work with theirs. Unless otherwise provided in the Contract Documents, CONTRACTOR shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. CONTRACTOR shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of ENGINEER and the others whose work will be affected. The duties and responsibilities of CONTRACTOR under this paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of CONTRACTOR in said direct contracts between OWNER and such utility owners and other contractors.

C. If the proper execution or results of any part of CONTRACTOR's Work depends upon work performed by others under this Article 7, CONTRACTOR shall inspect such other work and promptly report to ENGINEER in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of CONTRACTOR's Work. CONTRACTOR's failure to so report will constitute an acceptance of such other work as fit and proper for integration with CONTRACTOR's Work except for latent defects and deficiencies in such other work.

7.02 Coordination

- A. If OWNER intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:
 - 1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified:
 - 2. the specific matters to be covered by such authority and responsibility will be itemized; and
 - 3. the extent of such authority and responsibilities will be provided.
- B. Unless otherwise provided in the Supplementary Conditions, OWNER shall have sole authority and responsibility for such coordination.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

8.01 Communications to Contractor

A. Except as otherwise provided in these General Conditions, OWNER shall issue all communications to CONTRACTOR through ENGINEER.

8.02 Replacement of ENGINEER

A. In case of termination of the employment of ENGINEER, OWNER shall appoint an engineer to whom CONTRACTOR makes no reasonable objection, whose status under the Contract Documents shall be that of the former ENGINEER.

8.03 Furnish Data

A. OWNER shall promptly furnish the data required of OWNER under the Contract Documents.

A. OWNER shall make payments to CONTRACTOR promptly when they are due as provided in paragraphs 14.02.C and 14.07.C.

8.05 Lands and Easements; Reports and Tests

A. OWNER's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in paragraphs 4.01 and 4.05. Paragraph 4.02 refers to OWNER's identifying and making available to CONTRACTOR copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that have been utilized by ENGINEER in preparing the Contract Documents.

8.06 Insurance

A. OWNER's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

8.07 Change Orders

A. OWNER is obligated to execute Change Orders as indicated in paragraph 10.03.

8.08 Inspections, Tests, and Approvals

A. OWNER's responsibility in respect to certain inspections, tests, and approvals is set forth in paragraph 13.03.B.

8.09 Limitations on OWNER's Responsibilities

A. The OWNER shall not supervise, direct, or have control or authority over, nor be responsible for, CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the Work. OWNER will not be responsible for CONTRACTOR's failure to perform the Work in accordance with the Contract Documents.

8.10 Undisclosed Hazardous Environmental Condition

A. OWNER's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in paragraph 4.06.

8.11 Evidence of Financial Arrangements

A. If and to the extent OWNER has agreed to furnish CONTRACTOR reasonable evidence that financial arrangements have been made to satisfy OWNER's obligations under the Contract Documents,

OWNER's responsibility in respect thereof will be as set forth in the Supplementary Conditions.

ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

9.01 OWNER'S Representative

A. ENGINEER will be OWNER's representative during the construction period. The duties and responsibilities and the limitations of authority of ENGINEER as OWNER's representative during construction are set forth in the Contract Documents and will not be changed without written consent of OWNER and ENGINEER.

9.02 Visits to Site

A. ENGINEER will make visits to the Site at intervals appropriate to the various stages of construction as ENGINEER deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of CONTRACTOR's executed Work. Based on information obtained during such visits and observations, ENGINEER, for the benefit of OWNER, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. ENGINEER will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. ENGINEER's efforts will be directed toward providing for OWNER a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, ENGINEER will keep OWNER informed of the progress of the Work and will endeavor to guard OWNER against defective Work.

B. ENGINEER's visits and observations are subject to all the limitations on ENGINEER's authority and responsibility set forth in paragraph 9.10, and particularly, but without limitation, during or as a result of ENGINEER's visits or observations of CONTRACTOR's Work ENGINEER will not supervise, direct, control, or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the Work.

9.03 Project Representative

A. If OWNER and ENGINEER agree, ENGINEER will furnish a Resident Project Representative to assist ENGINEER in providing more extensive observation of the Work. The responsibilities and authority and limitations thereon of any such Resident Project Representative and assistants will be as

provided in paragraph 9.10 and in the Supplementary Conditions. If OWNER designates another representative or agent to represent OWNER at the Site who is not ENGINEER's Consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

9.04 Clarifications and Interpretations

A. ENGINEER will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents as ENGINEER may determine necessary, which shall be consistent with the intent of and reasonably inferable from the Contract Documents. Such written clarifications and interpretations will be binding on OWNER and CONTRACTOR. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a written clarification or interpretation, a Claim may be made therefor as provided in paragraph 10.05.

9.05 Authorized Variations in Work

A. ENGINEER may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on OWNER and also on CONTRACTOR, who shall perform the Work involved promptly. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of a Field Order, a Claim may be made therefor as provided in paragraph 10.05.

9.06 Rejecting Defective Work

A. ENGINEER will have authority to disapprove or reject Work which ENGINEER believes to be defective, or that ENGINEER believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. ENGINEER will also have authority to require special inspection or testing of the Work as provided in paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.07 Shop Drawings, Change Orders and Payments

A. In connection with ENGINEER's authority as to Shop Drawings and Samples, see paragraph 6.17.

- B. In connection with ENGINEER's authority as to Change Orders, see Articles 10, 11, and 12.
- C. In connection with ENGINEER's authority as to Applications for Payment, see Article 14.

9.08 Determinations for Unit Price Work

A. ENGINEER will determine the actual quantities and classifications of Unit Price Work performed by CONTRACTOR. ENGINEER will review with CONTRACTOR the ENGINEER's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). ENGINEER's written decision thereon will be final and binding (except as modified by ENGINEER to reflect changed factual conditions or more accurate data) upon OWNER and CONTRACTOR, subject to the provisions of paragraph 10.05.

9.09 Decisions on Requirements of Contract Documents and Acceptability of Work

A. ENGINEER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. Claims, disputes and other matters relating to the acceptability of the Work, the quantities and classifications of Unit Price Work, the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, and Claims seeking changes in the Contract Price or Contract Times will be referred initially to ENGINEER in writing, in accordance with the provisions of paragraph 10.05, with a request for a formal decision.

B. When functioning as interpreter and judge under this paragraph 9.09, ENGINEER will not show partiality to OWNER or CONTRACTOR and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity. The rendering of a decision by ENGINEER pursuant to this paragraph 9.09 with respect to any such Claim, dispute, or other matter (except any which have been waived by the making or acceptance of final payment as provided in paragraph 14.07) will be a condition precedent to any exercise by OWNER or CONTRACTOR of such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any such Claim, dispute, or other matter.

9.10 Limitations on ENGINEER's Authority and Responsibilities

A. Neither ENGINEER's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by ENGINEER in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by ENGINEER shall create, impose, or give rise

to any duty in contract, tort, or otherwise owed by ENGINEER to CONTRACTOR, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

- B. ENGINEER will not supervise, direct, control, or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the Work. ENGINEER will not be responsible for CONTRACTOR's failure to perform the Work in accordance with the Contract Documents.
- C. ENGINEER will not be responsible for the acts or omissions of CONTRACTOR or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. ENGINEER's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by paragraph 14.07.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with, the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this paragraph 9.10 shall also apply to ENGINEER's Consultants, Resident Project Representative, and assistants.

ARTICLE 10 - CHANGES IN THE WORK; CLAIMS

10.01 Authorized Changes in the Work

- A. Without invalidating the Agreement and without notice to any surety, OWNER may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Written Amendment, a Change Order, or a Work Change Directive. Upon receipt of any such document, CONTRACTOR shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).
- B. If OWNER and CONTRACTOR are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in paragraph 10.05.

10.02 Unauthorized Changes in the Work

A. CONTRACTOR shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in paragraph 3.04, except in the case of an emergency as provided in paragraph 6.16 or in the case of uncovering Work as provided in paragraph 13.04.B.

10.03 Execution of Change Orders

- A. OWNER and CONTRACTOR shall execute appropriate Change Orders recommended by ENGINEER (or Written Amendments) covering:
 - 1. changes in the Work which are: (i) ordered by OWNER pursuant to paragraph 10.01.A, (ii) required because of acceptance of defective Work under paragraph 13.08.A or OWNER's correction of defective Work under paragraph 13.09, or (iii) agreed to by the parties;
 - 2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and
 - changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by ENGINEER pursuant to paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulabut durina any such appeal, tions. CONTRACTOR shall carry on the Work and adhere to the progress schedule as provided in paragraph 6.18.A.

10.04 Notification to Surety

A. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times) is required by the provisions of any Bond to be given to a surety, the giving of any such notice will be CONTRACTOR's responsibility. The amount of each applicable Bond will be adjusted to reflect the effect of any such change.

10.05 Claims and Disputes

A. *Notice:* Written notice stating the general nature of each Claim, dispute, or other matter shall be delivered by the claimant to ENGINEER and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. Notice of the amount or extent of the Claim, dispute, or other matter with supporting data shall be

delivered to the ENGINEER and the other party to the Contract within 60 days after the start of such event (unless ENGINEER allows additional time for claimant to submit additional or more accurate data in support of such Claim, dispute, or other matter). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of paragraph 12.01.B. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to ENGINEER and the claimant within 30 days after receipt of the claimant's last submittal (unless ENGINEER allows additional time).

- B. ENGINEER's Decision: ENGINEER will render a formal decision in writing within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any. ENGINEER's written decision on such Claim, dispute, or other matter will be final and binding upon OWNER and CONTRACTOR unless:
 - 1. an appeal from ENGINEER's decision is taken within the time limits and in accordance with the dispute resolution procedures set forth in Article 16; or
 - if no such dispute resolution procedures have been set forth in Article 16, a written notice of intention to appeal from ENGINEER's written decision is delivered by OWNER or CONTRACTOR to the other and to ENGINEER within 30 days after the date of such decision, and a formal proceeding is instituted by the appealing party in a forum of competent jurisdiction within 60 days after the date of such decision or within 60 days after Substantial Completion, whichever is later (unless otherwise agreed in writing by OWNER and CONTRACTOR), to exercise such rights or remedies as the appealing party may have with respect to such Claim, dispute, or other matter in accordance with applicable Laws and Regulations.
- C. If ENGINEER does not render a formal decision in writing within the time stated in paragraph 10.05.B, a decision denying the Claim in its entirety shall be deemed to have been issued 31 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any.
- D. No Claim for an adjustment in Contract Price or Contract Times (or Milestones) will be valid if not submitted in accordance with this paragraph 10.05.

ARTICLE 11 - COST OF THE WORK; CASH ALLOWANCES; UNIT PRICE WORK

11.01 Cost of the Work

A. Costs Included: The term Cost of the Work means the sum of all costs necessarily incurred and paid by CONTRACTOR in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to CONTRACTOR will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by OWNER, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in paragraph 11.01.B.

- Payroll costs for employees in the direct employ of CONTRACTOR in the performance of the Work under schedules of job classifications agreed upon by OWNER and CONTRACTOR. Such employees shall include without limitation superintendents, foremen, and other personnel employed full time at the Site. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by OWNER.
- 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to CONTRACTOR unless OWNER deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to OWNER. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to OWNER, and CONTRACTOR shall make provisions so that they may be obtained.
- 3. Payments made by CONTRACTOR to Subcontractors for Work performed by Subcontractors. If required by OWNER, CONTRACTOR shall obtain competitive bids from

subcontractors acceptable to OWNER and CONTRACTOR and shall deliver such bids to OWNER, who will then determine, with the advice of ENGINEER, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as CONTRACTOR's Cost of the Work and fee as provided in this paragraph 11.01.

- 4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
- 5. Supplemental costs including the following:
- a. The proportion of necessary transportation, travel, and subsistence expenses of CONTRACTOR's employees incurred in discharge of duties connected with the Work.
- b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of CONTRACTOR.
- c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from CONTRACTOR or others in accordance with rental agreements approved by OWNER with the advice of ENGINEER, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
- d. Sales, consumer, use, and other similar taxes related to the Work, and for which CONTRACTOR is liable, imposed by Laws and Regulations.
- e. Deposits lost for causes other than negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

- Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by CONTRACTOR in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with paragraph 5.06.D), provided such losses and damages have resulted from causes other than the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of OWNER. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining CONTRACTOR's fee.
- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expressage, and similar petty cash items in connection with the Work.
- i. When the Cost of the Work is used to determine the value of a Change Order or of a Claim, the cost of premiums for additional Bonds and insurance required because of the changes in the Work or caused by the event giving rise to the Claim.
- j. When all the Work is performed on the basis of cost-plus, the costs of premiums for all Bonds and insurance CONTRACTOR is required by the Contract Documents to purchase and maintain.
- B. Costs Excluded: The term Cost of the Work shall not include any of the following items:
 - Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnerships and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expediters, timekeepers, clerks, and other personnel employed by CONTRACTOR, whether at the Site or in CONTRACTOR's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in paragraph 11.01.A.1 or specifically covered by paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the CONTRACTOR's fee.

- 2. Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the Site.
- 3. Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the Work and charges against CONTRACTOR for delinquent payments.
- 4. Costs due to the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
- 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraphs 11.01.A and 11.01.B.
- C. CONTRACTOR's Fee: When all the Work is performed on the basis of cost-plus, CONTRACTOR's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, CONTRACTOR's fee shall be determined as set forth in paragraph 12.01.C.
- D. Documentation: Whenever the Cost of the Work for any purpose is to be determined pursuant to paragraphs 11.01.A and 11.01.B, CONTRACTOR will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to ENGINEER an itemized cost breakdown together with supporting data.

11.02 Cash Allowances

- A. It is understood that CONTRACTOR has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums as may be acceptable to OWNER and ENGINEER. CONTRACTOR agrees that:
 - 1. the allowances include the cost to CONTRACTOR (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 - 2. CONTRACTOR's costs for unloading and handling on the Site, labor, installation costs, overhead, profit, and other expenses contemplated for the allowances have been included in the Contract Price and not in the allowances, and no demand for additional

payment on account of any of the foregoing will be valid.

B. Prior to final payment, an appropriate Change Order will be issued as recommended by ENGINEER to reflect actual amounts due CONTRACTOR on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by CONTRACTOR will be made by ENGINEER subject to the provisions of paragraph 9.08.
- B. Each unit price will be deemed to include an amount considered by CONTRACTOR to be adequate to cover CONTRACTOR's overhead and profit for each separately identified item.
- C. OWNER or CONTRACTOR may make a Claim for an adjustment in the Contract Price in accordance with paragraph 10.05 if:
 - 1. the quantity of any item of Unit Price Work performed by CONTRACTOR differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and
 - 2. there is no corresponding adjustment with respect any other item of Work; and
 - 3. if CONTRACTOR believes that CONTRACTOR is entitled to an increase in Contract Price as a result of having incurred additional expense or OWNER believes that OWNER is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

12.01 Change of Contract Price

A. The Contract Price may only be changed by a Change Order or by a Written Amendment. Any Claim for an adjustment in the Contract Price shall be based

on written notice submitted by the party making the Claim to the ENGINEER and the other party to the Contract in accordance with the provisions of paragraph 10.05.

- B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:
 - 1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of paragraph 11.03); or
 - 2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with paragraph 12.01.C.2); or
 - 3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in paragraph 11.01) plus a CONTRACTOR's fee for overhead and profit (determined as provided in paragraph 12.01.C).
- C. CONTRACTOR's Fee: The CONTRACTOR's fee for overhead and profit shall be determined as follows:
 - 1. a mutually acceptable fixed fee; or
 - 2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. for costs incurred under paragraphs 11.01.A.1 and 11.01.A.2, the CONTRACTOR's fee shall be 15 percent;
 - b. for costs incurred under paragraph 11.01.A.3, the CONTRACTOR's fee shall be five percent;
 - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of paragraph 12.01.C.2.a is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and CONTRACTOR will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;

- d. no fee shall be payable on the basis of costs itemized under paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;
- e. the amount of credit to be allowed by CONTRACTOR to OWNER for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in CONTRACTOR's fee by an amount equal to five percent of such net decrease; and
- f. when both additions and credits are involved in any one change, the adjustment in CONTRACTOR's fee shall be computed on the basis of the net change in accordance with paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

12.02 Change of Contract Times

- A. The Contract Times (or Milestones) may only be changed by a Change Order or by a Written Amendment. Any Claim for an adjustment in the Contract Times (or Milestones) shall be based on written notice submitted by the party making the claim to the ENGINEER and the other party to the Contract in accordance with the provisions of paragraph 10.05.
- B. Any adjustment of the Contract Times (or Milestones) covered by a Change Order or of any Claim for an adjustment in the Contract Times (or Milestones) will be determined in accordance with the provisions of this Article 12.

12.03 Delays Beyond CONTRACTOR's Control

A. Where CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of CONTRACTOR, the Contract Times (or Milestones) will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in paragraph 12.02.A. Delays beyond the control of CONTRACTOR shall include, but not be limited to, acts or neglect by OWNER, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.

12.04 Delays Within CONTRACTOR's Control

A. The Contract Times (or Milestones) will not be extended due to delays within the control of CONTRACTOR. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of CONTRACTOR.

12.05 Delays Beyond OWNER's and CONTRACTOR's Control

A. Where CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of both OWNER and CONTRACTOR, an extension of the Contract Times (or Milestones) in an amount equal to the time lost due to such delay shall be CONTRACTOR's sole and exclusive remedy for such delay.

12.06 Delay Damages

- A. In no event shall OWNER or ENGINEER be liable to CONTRACTOR, any Subcontractor, any Supplier, or any other person or organization, or to any surety for or employee or agent of any of them, for damages arising out of or resulting from:
 - 1. delays caused by or within the control of CONTRACTOR; or
 - 2. delays beyond the control of both OWNER and CONTRACTOR including but not limited to fires, floods, epidemics, abnormal weather conditions, acts of God, or acts or neglect by utility owners or other contractors performing other work as contemplated by Article 7.
- B. Nothing in this paragraph 12.06 bars a change in Contract Price pursuant to this Article 12 to compensate CONTRACTOR due to delay, interference, or disruption directly attributable to actions or inactions of OWNER or anyone for whom OWNER is responsible.

ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.01 Notice of Defects

A. Prompt notice of all defective Work of which OWNER or ENGINEER has actual knowledge will be given to CONTRACTOR. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 Access to Work

A. OWNER, ENGINEER, ENGINEER's Consultants, other representatives and personnel of OWNER, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspecting, and testing. CONTRACTOR shall provide them proper and safe conditions for such access and advise them of CONTRACTOR's Site safety procedures and programs so that they may comply therewith as applicable.

13.03 Tests and Inspections

- A. CONTRACTOR shall give ENGINEER timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.
- B. OWNER shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:
 - 1. for inspections, tests, or approvals covered by paragraphs 13.03.C and 13.03.D below;
 - 2. that costs incurred in connection with tests or inspections conducted pursuant to paragraph 13.04.B shall be paid as provided in said paragraph 13.04.B; and
 - as otherwise specifically provided in the Contract Documents.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, CONTRACTOR shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish ENGINEER the required certificates of inspection or approval.
- D. CONTRACTOR shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for OWNER's and ENGINEER's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to CONTRACTOR's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to OWNER and ENGINEER.
- E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by CONTRACTOR without written concurrence of ENGINEER, it must, if requested by ENGINEER, be uncovered for observation.
- F. Uncovering Work as provided in paragraph 13.03.E shall be at CONTRACTOR's expense unless CONTRACTOR has given ENGINEER timely notice of CONTRACTOR's intention to cover the same and ENGINEER has not acted with reasonable promptness in response to such notice.

A. If any Work is covered contrary to the written request of ENGINEER, it must, if requested by ENGINEER, be uncovered for ENGINEER's observation and replaced at CONTRACTOR's expense.

B. If ENGINEER considers it necessary or advisable that covered Work be observed by ENGI-NEER or inspected or tested by others, CONTRAC-TOR, at ENGINEER's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as ENGINEER may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment. If it is found that such Work is defective, CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and OWNER shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, OWNER may make a Claim therefor as provided in paragraph 10.05. If, however, such Work is not found to be defective, CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Times (or Milestones), or both, directly attributable to such uncovering, exposure. observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, CONTRACTOR may make a Claim therefor as provided in paragraph 10.05.

13.05 OWNER May Stop the Work

A. If the Work is defective, or CONTRACTOR fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, OWNER may order CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of OWNER to stop the Work shall not give rise to any duty on the part of OWNER to exercise this right for the benefit of CONTRACTOR, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

A. CONTRACTOR shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by ENGINEER, remove it from the Project and replace it with Work that is not defective. CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).

13.07 Correction Period

A. If within one year after the date of Substantial Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for CONTRACTOR's use by OWNER or permitted by Laws and Regulations as contemplated in paragraph 6.11.A is found to be defective. CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instructions: (i) repair such defective land or areas, or (ii) correct such defective Work or, if the defective Work has been rejected by OWNER, remove it from the Project and replace it with Work that is not defective, and (iii) satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom. If CONTRACTOR does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage. OWNER may have the defective Work corrected or repaired or may have the rejected Work removed and replaced, and all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects. attorneys. and professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by CONTRACTOR.

- B. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications or by Written Amendment.
- C. Where defective Work (and damage to other Work resulting therefrom) has been corrected or

removed and replaced under this paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

D. CONTRACTOR's obligations under this paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this paragraph 13.07 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.

13.08 Acceptance of Defective Work

A. If, instead of requiring correction or removal and replacement of defective Work, OWNER (and, prior to ENGINEER's recommendation of final payment, ENGINEER) prefers to accept it, OWNER may do so. CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to OWNER's evaluation of and determination to accept such defective Work (such costs to be approved by ENGINEER as to reasonableness) and the diminished value of the Work to the extent not otherwise paid by CONTRACTOR pursuant to this sentence. If any such acceptance occurs prior to ENGINEER's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and OWNER shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, OWNER may make a Claim therefor as provided in paragraph 10.05. acceptance occurs after such recommendation, an appropriate amount will be paid by CONTRACTOR to OWNER.

13.09 OWNER May Correct Defective Work

A. If CONTRACTOR fails within a reasonable time after written notice from ENGINEER to correct defective Work or to remove and replace rejected Work as required by ENGINEER in accordance with paragraph 13.06.A, or if CONTRACTOR fails to perform the Work in accordance with the Contract Documents, or if CONTRACTOR fails to comply with any other provision of the Contract Documents, OWNER may, after seven days written notice to CONTRACTOR, correct and remedy any such deficiency.

B. In exercising the rights and remedies under this paragraph, OWNER shall proceed expeditiously. In connection with such corrective and remedial action, OWNER may exclude CONTRACTOR from all or part of the Site, take possession of all or part of the Work and suspend CONTRACTOR's services related thereto, take possession of CONTRACTOR's tools,

appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which OWNER has paid CONTRACTOR but which are stored elsewhere. CONTRACTOR shall allow OWNER, OWNER's representatives, agents and employees, OWNER's other contractors, and ENGINEER and ENGINEER's Consultants access to the Site to enable OWNER to exercise the rights and remedies under this paragraph.

C. All Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects. attorneys. and professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by OWNER in exercising the rights and remedies under this paragraph 13.09 will be charged against CON-TRACTOR, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, OWNER may make a Claim therefor as provided in paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of CONTRACTOR's defective Work.

D. CONTRACTOR shall not be allowed an extension of the Contract Times (or Milestones) because of any delay in the performance of the Work attributable to the exercise by OWNER of OWNER's rights and remedies under this paragraph 13.09.

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

14.01 Schedule of Values

A. The schedule of values established as provided in paragraph 2.07.A will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to ENGINEER. Progress payments on account of Unit Price Work will be based on the number of units completed.

14.02 Progress Payments

A. Applications for Payments

1. At least 20 days before the date established for each progress payment (but not more often than once a month), CONTRACTOR shall submit to ENGINEER for review an Application for Payment filled out and signed by CONTRACTOR covering the Work completed as of the date of the Application and accompanied by such supporting

documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that OWNER has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect OWNER's interest therein, all of which must be satisfactory to OWNER.

- 2. Beginning with the second Application for Payment, each Application shall include an affidavit of CONTRACTOR stating that all previous progress payments received on account of the Work have been applied on account to discharge CONTRACTOR's legitimate obligations associated with prior Applications for Payment.
- 3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

B. Review of Applications

- ENGINEER will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to OWNER or return the Application to CONTRACTOR indicating in writing **ENGINEER's** for refusing reasons recommend payment. In the latter case, CON-TRACTOR may make the necessary corrections and resubmit the Application.
- 2. ENGINEER's recommendation of any payment requested in an Application for Payment will constitute a representation by ENGINEER to OWNER, based on ENGINEER's observations on the Site of the executed Work as an experienced and qualified design professional and on ENGINEER's review of the Application for Payment and the accompanying data and schedules, that to the best of ENGINEER's knowledge, information and belief:
 - a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any

subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under paragraph 9.08, and to any other qualifications stated in the recommendation); and

- c. The conditions precedent to CONTRACTOR's being entitled to such payment appear to have been fulfilled in so far as it is ENGINEER's responsibility to observe the Work.
- 3. By recommending any such payment ENGINEER will not thereby be deemed to have represented that: (i) inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to ENGINEER in the Contract Documents; or (ii) that there may not be other matters or issues between the parties that might entitle CONTRACTOR to be paid additionally by OWNER or entitle OWNER to withhold payment to CONTRACTOR.
- Neither ENGINEER's review CONTRACTOR's Work for the purposes of recommending payments nor ENGINEER's recommendation of any payment, including final payment, will impose responsibility on ENGINEER to supervise, direct, or control the Work or for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for CONTRACTOR's failure to comply with Laws and Regulations applicable to CONTRACTOR's performance of the Work. Additionally, said review or recommendation will not impose responsibility on ENGINEER to make any examination to ascertain how or for what purposes CONTRACTOR has used the moneys paid on account of the Contract Price, or to determine that title to any of the Work, materials, or equipment has passed to OWNER free and clear of any Liens.
- 5. ENGINEER may refuse to recommend the whole or any part of any payment if, in ENGINEER's opinion, it would be incorrect to make the representations to OWNER referred to in paragraph 14.02.B.2. ENGINEER may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in ENGINEER's opinion to protect OWNER from loss because:

- a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;
- b. the Contract Price has been reduced by Written Amendment or Change Orders;
- c. OWNER has been required to correct defective Work or complete Work in accordance with paragraph 13.09; or
- d. ENGINEER has actual knowledge of the occurrence of any of the events enumerated in paragraph 15.02.A.

C. Payment Becomes Due

1. Ten days after presentation of the Application for Payment to OWNER with ENGINEER's recommendation, the amount recommended will (subject to the provisions of paragraph 14.02.D) become due, and when due will be paid by OWNER to CONTRACTOR.

D. Reduction in Payment

- 1. OWNER may refuse to make payment of the full amount recommended by ENGINEER because:
 - a. claims have been made against OWNER on account of CONTRACTOR's performance or furnishing of the Work;
 - b. Liens have been filed in connection with the Work, except where CONTRACTOR has delivered a specific Bond satisfactory to OWNER to secure the satisfaction and discharge of such Liens;
 - c. there are other items entitling OWN-ER to a set-off against the amount recommended; or
 - d. OWNER has actual knowledge of the occurrence of any of the events enumerated in paragraphs 14.02.B.5.a through 14.02.B.5.c or paragraph 15.02.A.
- 2. If OWNER refuses to make payment of the full amount recommended by ENGINEER, **OWNER** must give CONTRACTOR immediate written notice (with a copy to ENGINEER) stating the reasons for such action and promptly pay CONTRACTOR any amount remaining after deduction of the amount so withheld. OWNER shall promptly pay CONTRACTOR the amount so withheld, or any adjustment thereto agreed to by OWNER and CONTRACTOR, when CONTRACTOR corrects to OWNER's satisfaction the reasons for such action.

3. If it is subsequently determined that OWNER's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by paragraph 14.02.C.1.

14.03 CONTRACTOR's Warranty of Title

A. CONTRACTOR warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to OWNER no later than the time of payment free and clear of all Liens.

14.04 Substantial Completion

A. When CONTRACTOR considers the entire Work ready for its intended use CONTRACTOR shall notify OWNER and ENGINEER in writing that the entire Work is substantially complete (except for items specifically listed by CONTRACTOR as incomplete) and request that ENGINEER issue a certificate of Promptly thereafter, Substantial Completion. OWNER, CONTRACTOR, and ENGINEER shall make an inspection of the Work to determine the status of completion. If ENGINEER does not consider the Work substantially complete, ENGINEER will notify CONTRACTOR in writing giving the reasons therefore. If ENGINEER considers the Work substantially complete, ENGINEER will prepare and deliver to OWNER a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. OWNER shall have seven days after receipt of the tentative certificate during which to make written objection to ENGINEER as to any provisions of the certificate or attached list. If, after considering such objections, ENGINEER concludes that the Work is not substantially complete, ENGINEER will within 14 days after submission of the tentative certificate to OWNER notify CONTRACTOR in writing, stating the reasons therefor. If, after consideration of OWNER's objections, ENGINEER considers the Work substantially complete, ENGINEER will within said 14 days execute and deliver to OWNER and CONTRACTOR a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as ENGINEER believes justified after consideration of any objections from OWNER. At the time of delivery of the tentative certificate of Substantial Completion ENGINEER will deliver to OWNER and CONTRACTOR a written recommendation as to division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless OWNER and CONTRACTOR agree otherwise in writing and so inform ENGINEER in writing prior to ENGINEER's issuing the definitive certificate of Substantial Completion, ENGINEER's

aforesaid recommendation will be binding on OWNER and CONTRACTOR until final payment.

B. OWNER shall have the right to exclude CONTRACTOR from the Site after the date of Substantial Completion, but OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the tentative list.

14.05 Partial Utilization

- A. Use by OWNER at OWNER's option of any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which OWNER, ENGINEER, and CONTRACTOR agree constitutes a separately functioning and usable part of the Work that can be used by OWNER for its intended purpose without significant interference with CONTRACTOR's performance of the remainder of the Work, may be accomplished prior to Substantial Completion of all the Work subject to the following conditions.
 - OWNER at any time may request CONTRACTOR in writing to permit OWNER to use any such part of the Work which OWNER believes to be ready for its intended use and substantially complete. If CONTRACTOR agrees that such part of the Work is substantially complete, CONTRACTOR will certify to OWNER and ENGINEER that such part of the Work is substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. CONTRACTOR at any time may notify OWNER and ENGINEER in writing that CONTRACTOR considers any such part of the Work ready for its intended use and substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. Within a reasonable time after either such request. OWNER, CONTRACTOR, ENGINEER shall make an inspection of that part of the Work to determine its status of completion. If ENGINEER does not consider that part of the Work to be substantially complete, ENGINEER will notify OWNER and CONTRACTOR in writing giving the reasons therefor. If ENGINEER considers that part of the Work to be substantially complete, the provisions of paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
 - 2. No occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of paragraph 5.10 regarding property insurance.

14.06 Final Inspection

A. Upon written notice from CONTRACTOR that the entire Work or an agreed portion thereof is complete, ENGINEER will promptly make a final inspection with OWNER and CONTRACTOR and will notify CONTRACTOR in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. CONTRACTOR shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

14.07 Final Payment

A. Application for Payment

- 1. After CONTRACTOR has, in the opinion of ENGINEER, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, Bonds, certificates or other evidence of insurance certificates of inspection, marked-up record documents (as provided in paragraph 6.12), and other documents, CONTRACTOR may make application for final payment following the procedure for progress payments.
- 2. The final Application for Payment shall be accompanied (except as previously delivered) by: (i) all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by subparagraph 5.04.B.7; (ii) consent of the surety, if any, to final payment; and (iii) complete and legally effective releases or waivers (satisfactory to OWNER) of all Lien rights arising out of or Liens filed in connection with the Work.
- In lieu of the releases or waivers of Liens specified in paragraph 14.07.A.2 and as approved by OWNER, CONTRACTOR may furnish receipts or releases in full and an affidavit of CONTRACTOR that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which OWNER or OWNER's property might in any way be responsible have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, CONTRACTOR may furnish a Bond or other collateral satisfactory to OWNER to indemnify OWNER against any Lien.

B. Review of Application and Acceptance

1. If, on the basis of ENGINEER's observation of the Work during construction and final inspection, and ENGINEER's review of the final

Application for Payment and accompanying documentation as required by the Contract Documents, ENGINEER is satisfied that the completed Work has been CONTRACTOR's other obligations under the Contract Documents have been fulfilled, ENGINEER will, within ten days after receipt of the final Application for Payment, indicate in ENGINEER's recommendation of payment and present the Application for Payment to OWNER for payment. At the same time ENGINEER will also give written notice to OWNER and CONTRACTOR that the Work is acceptable subject to the provisions of paragraph 14.09. Otherwise, ENGINEER will return the Application for Payment to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment, in which case CONTRACTOR shall make the necessary corrections and resubmit the Application for Payment.

C. Payment Becomes Due

1. Thirty days after the presentation to OWNER of the Application for Payment and accompanying documentation, the amount recommended by ENGINEER will become due and, when due, will be paid by OWNER to CONTRACTOR.

14.08 Final Completion Delayed

A. If, through no fault of CONTRACTOR, final completion of the Work is significantly delayed, and if ENGINEER so confirms, OWNER shall, upon receipt of CONTRACTOR's final Application for Payment and recommendation of ENGINEER, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by OWNER for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if Bonds have been furnished as required in paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by CONTRACTOR to ENGINEER with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

14.09 Waiver of Claims

- A. The making and acceptance of final payment will constitute:
 - 1. a waiver of all Claims by OWNER against CONTRACTOR, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to paragraph 14.06, from failure to comply with the

Contract Documents or the terms of any special guarantees specified therein, or from CONTRACTOR's continuing obligations under the Contract Documents; and

2. a waiver of all Claims by CONTRACTOR against OWNER other than those previously made in writing which are still unsettled.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

15.01 OWNER May Suspend Work

A. At any time and without cause, OWNER may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to CONTRACTOR and ENGINEER which will fix the date on which Work will be resumed. CONTRACTOR shall resume the Work on the date so fixed. CONTRACTOR shall be allowed an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if CONTRACTOR makes a Claim therefor as provided in paragraph 10.05.

15.02 OWNER May Terminate for Cause

- A. The occurrence of any one or more of the following events will justify termination for cause:
 - 1. CONTRACTOR's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the progress schedule established under paragraph 2.07 as adjusted from time to time pursuant to paragraph 6.04);
 - 2. CONTRACTOR's disregard of Laws or Regulations of any public body having jurisdiction;
 - 3. CONTRACTOR's disregard of the authority of ENGINEER; or
 - 4. CONTRACTOR's violation in any substantial way of any provisions of the Contract Documents.
- B. If one or more of the events identified in paragraph 15.02.A occur, OWNER may, after giving CONTRACTOR (and the surety, if any) seven days written notice, terminate the services of CONTRACTOR, exclude CONTRACTOR from the Site, and take possession of the Work and of all CONTRACTOR's tools, appliances, construction equipment, and machinery at the Site, and use the

same to the full extent they could be used by CONTRACTOR (without liability to CONTRACTOR for trespass or conversion), incorporate in the Work all materials and equipment stored at the Site or for which OWNER has paid CONTRACTOR but which are stored elsewhere, and finish the Work as OWNER may deem expedient. In such case, CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers. architects, attorneys, and professionals and all court or arbitration or other dispute resolution costs) sustained by OWNER arising out of or relating to completing the Work, such excess will be paid to CONTRACTOR. If such claims, costs, losses, and damages exceed such unpaid balance, CONTRACTOR shall pay the difference to OWNER. Such claims, costs, losses, and damages incurred by OWNER will be reviewed by ENGINEER as to their reasonableness and, when so approved by ENGINEER, incorporated in a Change Order. When exercising any rights or remedies under this paragraph OWNER shall not be required to obtain the lowest price for the Work performed.

C. Where CONTRACTOR's services have been so terminated by OWNER, the termination will not affect any rights or remedies of OWNER against CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of moneys due CONTRACTOR by OWNER will not release CONTRACTOR from liability.

15.03 OWNER May Terminate For Convenience

A. Upon seven days written notice to CONTRACTOR and ENGINEER, OWNER may, without cause and without prejudice to any other right or remedy of OWNER, elect to terminate the Contract. In such case, CONTRACTOR shall be paid (without duplication of any items):

- 1. for completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
- 2. for expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;
- 3. for all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or

arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and

- 4. for reasonable expenses directly attributable to termination.
- B. CONTRACTOR shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

15.04 CONTRACTOR May Stop Work or Terminate

A. If, through no act or fault of CONTRACTOR, the Work is suspended for more than 90 consecutive days by OWNER or under an order of court or other public authority, or ENGINEER fails to act on any Application for Payment within 30 days after it is submitted, or OWNER fails for 30 days to pay CON-TRACTOR any sum finally determined to be due, then CONTRACTOR may, upon seven days written notice to OWNER and ENGINEER, and provided OWNER or ENGINEER do not remedy such suspension or failure within that time, terminate the Contract and recover from OWNER payment on the same terms as provided in paragraph 15.03. In lieu of terminating the Contract and without prejudice to any other right or remedy, if ENGINEER has failed to act on an Application for Payment within 30 days after it is submitted, or OWNER has failed for 30 days to pay CONTRACTOR any sum finally determined to be due. CONTRACTOR may, seven days after written notice to OWNER and ENGINEER, stop the Work until payment is made of all such amounts due CONTRACTOR, including interest thereon. The provisions of this paragraph 15.04 are not intended to preclude CONTRACTOR from making a Claim under paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to CONTRACTOR's stopping the Work as permitted by this paragraph.

ARTICLE 16 - DISPUTE RESOLUTION

16.01 Methods and Procedures

A. Dispute resolution methods and procedures, if any, shall be as set forth in the Supplementary Conditions. If no method and procedure has been set forth, and subject to the provisions of paragraphs 9.09 and 10.05, OWNER and CONTRACTOR may exercise such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any dispute.

17.01 Giving Notice

A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

17.02 Computation of Times

A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.03 Cumulative Remedies

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents, and the provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.04 Survival of Obligations

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Agreement.

17.05 Controlling Law

A. This Contract is to be governed by the law of the state in which the Project is located.

SECTION 00800 - SUPPLEMENTARY CONDITION TO THE GENERAL CONDITIONS

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SECTION 00800 - SUPPLEMENTARY CONDITIONS TO THE **GENERAL CONDITIONS**

SC-1.00 Introduction

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract (No. 1910-8, 1996 Edition) and other provisions of the Contract Documents as indicated below. All provisions, which are not so amended or supplemented, remain in full force and effect.

The terms used in these Supplementary Conditions will have the meanings indicated in the General Conditions.

SC-1.01 Defined Terms

SC-1.01.A.20 Add the following language to the end of GC 1.01.A.20.

> **ENGINEERS's Consultant:** Edlund, Ddritenbas, Binkely Architects & Associates, P.A.

> > 65 Royal Palm Pointe, Suite D

Vero Beach, FL 32960

SC-1.01.A.21. Delete paragraph GC 1.01.A.21 in its entirety.

SC-1.02 Terminology

Delete paragraphs GC-1.02.D.1, 2, and 3 in their entirety and insert the following SC-1.02.D.1, 2, and 3 paragraphs in their place:

- D. Furnish, Install, Perform, Provide
 - The word "furnish" shall mean to supply and deliver services, materials, or equipment to 1. the Site (or some other specified location) ready for use or installation and in usable or operable condition.
 - The word "install" shall mean to put into use or place in final position services, materials, or equipment complete and ready for intended use.
 - The words "perform" or "provide" shall mean to furnish and install services, materials, or 3. equipment complete and ready for intended use.

SC-2.05 Before Starting Construction

- SC-2.05.C. Delete paragraph GC 2.05.C in its entirety and insert the following paragraph in its place:
 - C. Evidence of Insurance: CONTRACTOR shall not commence work under this Contract until he has obtained all insurance required under Article 5 and such insurance has been delivered to the OWNER and approved by the OWNER, nor shall the CONTRACTOR allow any Subcontractor to commence work on his subcontract until all similar insurance required of the Subcontractor has been so obtained and approved. All such insurance shall remain in effect until final payment and at all times thereafter when CONTRACTOR may be correcting, removing or replacing defective Work in accordance with Article 13.

SC-2.06 Preconstruction Conference

SC-2.06 Delete paragraph GC-2.06.A in its entirety and insert the following paragraph in its place: A.

Immediately after awarding the contract, but before the CONTRACTOR begins work,

the Project Manager will call a preconstruction conference at a place the ENGINEER designates to establish an understanding among the parties as to the work and to discuss schedules referred to in paragraph 2.05.B, procedures for handling Shop Drawings and other submittals, and maintaining required records. Utility companies and others as appropriate will be requested to attend to discuss and coordinate work.

- B. Per the FDOT Standard Specifications for Road and Bridge Construction, the Contractor will certify to the Engineer the following:
 - 1. A listing of on-site clerical staff, supervisory personnel and their pro-rated time assigned to the contract,
 - 2. Actual Rate for items listed in Table 4-3.2.1 (see below),
 - 3. Existence of employee benefit plan for Holiday, Sick and Vacation benefits and a Retirement Plan, and,
 - 4. Payment of Per Diem is a company practice for instances when compensation for Per Diem is requested.

Such certification must be made by an officer or director of the Contractor with authority to bind the Contractor. Timely certification is a condition precedent to any right of the Contractor to recover compensations for such costs, and failure to timely submit the certification will constitute a full, complete, absolute and irrevocable waiver by the Contractor of any right to recover such costs. Any subsequent changes shall be certified to the Engineer as part of the cost proposal or seven calendar days in advance of performing such extra work.

FDOT Table 4-3.2.1			
ltem	Rate		
FICA	Rate established by Law		
FUTA/SUTA	Rate established by Law		
Medical Insurance	Actual		
Holidays, Sick & Vacation Benefits	Actual		
Retirement Benefits	Actual		
Workers Compensation	Rates based on the National Council on Compensation Insurance basic rates tables adjusted by Contractor's actual experience modification factor in effect at the time of the additional work or unforeseen work		
Per Diem	Actual but not to exceed State of Florida's rate		
Insurance*	Actual		

^{*}Compensation for Insurance is limited solely to General Liability Coverage and does not include any other insurance coverage (such as, but not limited to, Umbrella Coverage, Automobile Insurance, etc.).

SC-3.06 Coordination of Plans, Specifications, and Special Provisions

SC-3.06 Add the following new paragraphs immediately after paragraph GC-3.05:

SC-3.06 Coordination of Plans, Specifications, and Special Provisions

- A. In case of discrepancy, the governing order of the documents shall be as follows:
 - 1. Written Interpretations
 - 2. Addenda
 - 3. Specifications
 - 4. Supplementary Conditions to the General Conditions
 - 5. General Conditions
 - 6. Approved Shop Drawings

- 7. Drawings
- Referenced Standards.
- B. Written/computed dimensions shall govern over scaled dimensions.

SC-4.02 Subsurface and Physical Conditions

SC-4.02 Add the following new paragraphs immediately after paragraph GC-4.02.B:

C. In the preparation of Drawings and Specifications, ENGINEER or ENGINEER's Consultants relied upon the following reports of explorations and tests of subsurface conditions at the Site:

N/A

D. Reports and drawings itemized in SC-4.02.C are included with the Bidding Documents in Appendix D.

SC-5.01 Performance, Payment and Other Bonds

SC-5.01.A. Delete paragraph GC-5.01.A in its entirety and insert the following paragraphs in its place:

- Within fifteen (15) days of receipt of the Contract Documents for execution, the CONTRACTOR shall furnish a Public Construction Bond in an amount equal to 100% of the Contract Price.
- In lieu of the Public Construction Bond, the CONTRACTOR may furnish an alternative form of security in the form of cash, money order, certified check, cashier's check, irrevocable letter of credit or a security as listed in Part II of F.S. Chapter 625. Any such alternative form of security shall be for the same purpose, and be for the same amount and subject to the same conditions as those applicable to the bond otherwise required. The determination of the value of an alternative form of security shall be made by the OWNER.
- 2. Such Bond shall continue in effect for one (1) year after acceptance of the Work by the OWNER.
- 3. The OWNER shall record the Public Construction Bond with the Public Record Section of the Indian River County Courthouse located at 2000 16th Avenue, Vero Beach, Florida 32960.

SC-5.03 Certificates of Insurance

SC-5.03 Delete the second sentence of paragraph GC-5.03 in its entirety.

SC-5.04 CONTRACTOR's Liability Insurance

SC-5.04 Add the following new paragraphs immediately after paragraph GC-5.04.B:

- C. The limits of liability for the insurance required by paragraph 5.04 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:
 - 1. Worker's Compensation: To meet statutory limits in compliance with the Worker's Compensation Law of Florida. This policy must include Employer Liability with a limit \$100,000 for each accident, \$500,000 disease (policy limit) and \$100,000 disease (each employee). Such policy shall include a waiver of subrogation as against OWNER and ENGINEER on account of injury sustained by an employee(s) of the CONTRACTOR.

- 2. Commercial General Liability: Coverage shall provide minimum limits of liability of \$1,000,000 per occurrence Combined Single Limit for Bodily Injury and Property Damage. This shall include coverage for:
 - a. Premises/Operations
 - b. Products/Completed Operations
 - c. Contractual Liability
 - d. Independent Contractors
 - e. Explosion
 - f. Collapse
 - g. Underground.
- 3. Business Auto Liability: Coverage shall provide minimum limits of liability of \$1,000,000 per occurrence Combined Single Limit for Bodily Injury and Property Damage. This shall include coverage for:
 - a. Owned Autos, and other vehicles
 - b. Hired Autos, and other vehicles
 - c. Non-Owned Autos, and other vehicles.

4. Special Requirements:

- a. Ten (10) days prior to the commencement of any work under this Contract, certificates of insurance and endorsement forms in the exact wording and format as presented in these Contract Documents will be provided to the OWNER's Risk Manager for review and approval.
- b. "Indian River County Florida" will be named as "Additional Insured" on both the General Liability and Auto Liability.
- c. The OWNER will be given thirty (30) days notice prior to cancellation or modification of any stipulated insurance. Such notification will be in writing by registered mail, return receipt requested and addressed to the OWNER's Risk Manager.
- d. An appropriate "Indemnification" clause shall be made a provision of the Contract (see paragraph 6.20 of the General Conditions).
- e. It is the responsibility of the CONTRACTOR to insure that all subcontractors comply with all insurance requirements.
- f. It should be remembered that these are minimum requirements, which are subject to modification in response to high hazard operation.
- g. Insured must be authorized to do business and have an agent for service of process in Florida and have Best's Rating of A-VII or better.
- h. All insurance requirements shall be at the Contractor's sole cost and expense, including any deductible or self-insured retention, without contribution from Indian River County or its insurance carriers.

D. Additional Insureds:

- In addition to "Indian River County, Florida," the following individuals or entities shall be listed as "additional insureds" on the CONTRACTOR's liability insurance policies:
 - a. <u>N/A</u>
- Contractor shall be responsible for any deductible or self-insured retention.

SC-5.05 OWNER's Liability Insurance

SC-5.05 Delete paragraph GC-5.05.A in its entirety.

SC-5.06 Property Insurance

SC-5.06 Delete paragraphs GC-5.06.A, B, and C in their entirety and insert the following paragraphs in their place:

- A. CONTRACTOR shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof. This insurance shall:
 - include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER'S
 Consultants and any other individuals or entities identified in the Supplementary
 Conditions, and the officers, directors, partners, employees, agents and other consultants
 and subcontractors of any of them each of whom is deemed to have an insurable interest
 and shall be listed as an insured or additional insured;
 - 2. be written on a Builder's Risk "All Risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss and damage to the Work, temporary buildings, falsework, and materials and equipment in transit and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, and such other perils or causes of loss as may be specifically required by the Supplementary Conditions.
 - 3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);
 - cover materials and equipment stored at the Site or at another location that was agreed to in writing by OWNER prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by ENGINEER; and
 - 5. allow for partial utilization of the Work by OWNER;
 - 6. include testing and startup; and
 - 7. be maintained in effect until final payment is made unless otherwise agreed to in writing by OWNER, CONTRACTOR and ENGINEER with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.
- B. CONTRACTOR shall be responsible for any deductible or self-insured retention.
- C. The policies of insurance required to be purchased and maintained by CONTRACTOR in accordance with this paragraph SC-5.06 shall comply with the requirements of paragraph 5.06.C of the General Conditions.
- SC-5.06.E Delete paragraph GC-5.06.E in its entirety and insert the following in its place:
 - E. Additional Insureds:
 - 1. The following individuals or entities shall be listed as "additional insureds" on the CONTRACTOR's property insurance policies:
 - a. N/A

SC-5.07 Waiver of Rights

SC-5.07 Delete GC-5.07 (paragraphs A, B, and C) in its entirety.

SC-5.08 Receipt and Application of Insurance Proceeds

SC-5.08 Delete GC-5.08 (paragraphs A and B) in its entirety.

SC-5.09 Acceptance of Bonds and Insurance; Option to Replace

SC-5.09 Delete GC-5.09 (paragraph A)in its entirety.

SC-6.02 Labor; Working Hours

SC-6.02.B. Add the following paragraphs immediately after paragraph GC-6.02.B:

1. Regular working hours are defined as Monday through Friday, excluding Indian River County Holidays, from 7 a.m. to 5 p.m.

- 2. Indian River County Holidays are: New Year's Day, Martin Luther King, Jr. Day, Good Friday, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, Friday after Thanksgiving, Christmas Eve and Christmas Day. Working on these days will not be permitted without prior written permission and approval from the Construction Coordination Manager.
- 3. The CONTRACTOR shall receive no additional compensation for overtime work, i.e., work in excess of eight hours in any one calendar day or 40 hours in any one calendar week, even though such overtime work may be required under emergency conditions and may be ordered by the ENGINEER in writing.
- 4. All costs of inspection and testing performed during overtime work by the CONTRACTOR, which is allowed solely for the convenience of the CONTRACTOR, shall be borne by the CONTRACTOR, and a credit given to the OWNER to deduct the costs of all such inspection and testing from any payments otherwise due the CONTRACTOR.
- 5. All costs of OWNER's employees and costs of ENGINEER's Consultant resulting from overtime work by the CONTRACTOR, which is allowed solely for the convenience of the CONTRACTOR, shall be borne by the CONTRACTOR, and a credit given to OWNER to deduct all such costs from any payments otherwise due the CONTRACTOR.
- 6. No work shall commence before 7 a.m. or continue after 5 p.m. except in case of emergency upon specific permission of the ENGINEER.

SC-6.06 Concerning Subcontractors, Suppliers, and Others

SC-6.06.C. Add the following sentence at the end of paragraph GC-6.06.C:

OWNER or ENGINEER may furnish to any such Subcontractor, Supplier, or other individual or entity, to the extent practicable, information about amounts paid to CONTRACTOR on account of Work performed for CONTRACTOR by a particular Subcontractor, Supplier, or other individual or entity.

SC-6.08 Permits

SC-6.08 Add the following paragraphs immediately after paragraph GC-6.08.A:

1. The OWNER has obtained the following permits (copies of these permits are contained in Appendix A):

N/A

- The CONTRACTOR shall obtain and pay for all other required permits and licenses. The CONTRACTOR shall provide copies of the permits to the OWNER and ENGINEER and shall comply with all conditions contained in the permits at no extra cost to the OWNER.
- The CONTRACTOR shall be familiar with all permit requirements during construction and shall be responsible for complying with these requirements. The cost of this effort shall be included in the pay item in which the work is most closely associated with.

SC-9.05 Authorized Variations in Work

SC-9.05.A. Delete the second sentence in paragraph GC-9.05.A in its entirety.

SC-11.01 Cost of the Work

SC-11.01.A.1. Delete paragraph GC-11.01.A.1 in its entirety, and insert the following sentences in its place:

1. CONTRACTOR will receive payment for actual costs of direct labor and burden (see SC-2.06.B) for the additional or unforeseen work. Labor includes foremen actually engaged in the work; and will not include project supervisory personnel nor necessary on-site clerical staff, except when the additional or unforeseen work is a controlling work item and the performance of such controlling work item actually extends completion of the project due to no fault of the Contractor. Compensation for project supervisory personnel, but in no case higher than a Project Manager's position, shall only be for the pro-rata time such supervisory personnel spent on the contract. In no case shall an officer or director of the Company, nor those persons who own more than 1% of the Company, be considered as project supervisory personnel, direct labor or foremen hereunder. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by OWNER.

SC-13.03 Test and Inspections

SC-13.03.B. Delete paragraph GC-13.03.B in its entirety, and insert the following sentences in its place:

- B. OWNER shall employ and pay for the services of an independent testing laboratory to perform all <u>initial</u> inspections, tests, or approvals required by the Contract Documents except those inspections, tests, or approvals listed immediately below. Subsequent inspections, tests, or approvals required after initial failing inspections, tests, or approvals shall be paid for by the CONTRACTOR by back charge to subsequent applications for payment. The CONTRACTOR shall arrange, obtain, and pay for the following inspections, tests, or approvals:
 - 1. inspections, tests, or approvals covered by paragraphs 13.03.C and 13.03.D below;
 - 2. costs incurred in connection with tests or inspections conducted pursuant to paragraph 13.04.B shall be paid as provided in said paragraph 13.04.B;
 - 3. tests otherwise specifically provided in the Contract Documents.

SC-13.05 OWNER May Stop the Work

SC-13.05.A. Delete paragraph GC-13.05.A in its entirety and insert the following paragraph in its place:

A. If the Work is defective, or CONTRACTOR fails to supply sufficient skilled workers or suitable materials or equipment, or fails to comply with permit requirements, or fails to comply with the technical specifications, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, OWNER may order CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of OWNER to stop the Work shall not give rise to any duty on the part of OWNER to exercise this right for the benefit of CONTRACTOR, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

SC-13.07 Correction Period

SC-13.07 A. Delete the first sentence of paragraph GC-13.07.A in its entirety and insert the following sentence in its place

A. If within one year after the date of Final Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for CONTRACTOR's use by OWNER or permitted by Laws and Regulations as contemplated in paragraph 6.11.A is found to be defective, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instructions: (i) repair such defective land or areas, or (ii) correct such defective Work or, if the defective Work has been rejected by OWNER, remove it from the Project and replace it with Work that is not defective, and (iii) satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.

SC-13.07 B. Delete paragraph GC-13.07.B in its entirety and insert the following sentence in its place

B. In special circumstances where a particular item of equipment is placed in continuous service before Final Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications or by Written Amendment.

SC-14.02 Progress Payments

SC-14.02.B.5. Delete paragraph GC-14.02.B.5.d in its entirety and insert the following paragraph in its place:

d. ENGINEER has actual knowledge of the occurrence of any of the events enumerated in paragraph 15.02.A; or

SC-14.02.B.5. Add the following sentences at the end of paragraph GC-14.02.B.5:

- e. OWNER has been required to pay ENGINEER additional compensation because of CONTRACTOR delays or rejection of defective Work; or
- f. OWNER has been required to pay an independent testing laboratory for subsequent inspections, tests, or approvals taken after initial failing inspections, tests, or approvals.

SC-14.02.C.1. Delete paragraph GC-14.02.C.1 in its entirety and insert the following paragraph in its place:

C. Payment Becomes Due

1. Payment shall be made by OWNER to CONTRACTOR according to the Local Government Prompt Payment Act. F.S. 218.70 et. seq.

SC-14.04 Substantial Completion

SC-14.04A. After the third sentence in paragraph GC-14.04A of the General Conditions, delete the remainder of paragraph 14.04A in its entirety and replace with the following:

"If Engineer considers the Work substantially complete, Engineer will prepare and deliver to Owner a tentative certificate of Substantial Completion that shall fix the date of Substantial Completion. In accordance with the provisions of Florida Statutes section 208.735(7)(a)(2005), upon receipt of the tentative certificate of Substantial Completion from Engineer, the Owner, the Engineer, and the Contractor shall conduct a walk-through inspection of the Project to document a list of any items required to render the Work on the Project complete, satisfactory, and acceptable under this Agreement (herein the "Statutory List"). The Statutory List shall be reduced to writing and circulated among the Owner, the Engineer, and the Contractor by the Owner or the Engineer within 30 calendar days after substantial completion. The Owner and Contractor acknowledge and agree that: 1) the failure to include any corrective work, or pending items that are not yet completed, on the Statutory List does not alter the responsibility of the Contractor to complete all of the Work under this Agreement; 2) upon completion of all items on the Statutory List, the Contractor may submit a pay request for all remaining retainage except as otherwise set forth in this Agreement; and 3) any and all items that require correction under this Agreement and that are identified after the preparation of the Statutory List remain the obligation of the Contractor to complete to the Owner's satisfaction under this Agreement. After receipt of the Statutory List by the Contractor, the Contractor acknowledges and agrees that it will diligently proceed to complete all items on the Statutory List and schedule a final walk-through in anticipation of final completion on the Project."

SC-14.04B Add the following new paragraph immediately after paragraph GC 14.04B:

C. At the time of delivery of the tentative certificate of Substantial Completion, Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees

SC-14.07 Final Payment

SC-14.07.C.1. Delete paragraph GC-14.07.C.1 in its entirety and insert the following paragraph in its place:

- C. Payment Becomes Due
 - 1. Payment shall be made by OWNER to CONTRACTOR according to the "Local Government Prompt Payment Act", Florida Statutes section 218.70, et. seq.

SC-15.01 OWNER May Suspend Work

SC-15.01.A Delete the last sentence in paragraph GC-15.01.A and insert the following in its place:

CONTRACTOR shall be allowed an extension of the Contract Times, directly attributable to any such suspension if CONTRACTOR makes a Claim for an extension as provided in paragraph 10.05. CONTRACTOR shall not be allowed an adjustment of the Contract Price and CONTRACTOR shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such Work suspension.

SC-15.02 OWNER May Terminate For Cause

SC-15.02.A.5 and SC-15.02.A.6 Add the following new paragraphs immediately after paragraph GC-15.02.A.4:

- 5. CONTRACTOR's violation of Section 02225 "Erosion Control and Treatment of Dewatering Water From the Construction Site."
- 6. CONTRACTOR's failure to make payment to Subcontractors or Suppliers for materials or labor in accordance with the respective agreements between the CONTRACTOR and the Subcontractors or Suppliers.
- 7. CONTRACTOR certifies that it and its related entities as defined by Florida law are not on the Scrutinized Companies that Boycott Israel List, created pursuant to s. 215.4725 of the Florida Statutes, and are not engaged in a boycott of Israel. In addition, if this agreement is for goods or services of one million dollars or more, CONTRACTOR certifies that it and its related entities as defined above by Florida law are not on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, created pursuant to Section 215.473 of the Florida Statutes and are not engaged in business operations in Cuba or Syria.

OWNER may terminate this Contract if CONTRACTOR is found to have submitted a false certification as provided under section 287.135(5), Florida Statutes, been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or been engaged in business operations in Cuba or Syria, as defined by section 287.135, Florida Statutes.

OWNER may terminate this Contract if CONTRACTOR, including all wholly owned subsidiaries, majority-owned subsidiaries, and parent companies, that exist for the purpose of making profit, is found to have been placed on the Scrutinized Companies that Boycott Israel List or is engaged in a boycott of Israel as set forth in section 215.4725, Florida Statutes.

SC-15.04 CONTRACTOR May Stop Work or Terminate

SC-15.04 Delete the following text from the first sentence of paragraph GC-15.04.A:

or OWNER fails for 30 days to pay CONTRACTOR any sum finally determined to be due,

SC-15.04 Delete the following text from the second sentence of paragraph GC-15.04.A:

or OWNER has failed for 30 days to pay CONTRACTOR any sum finally determined to be due,

SC-16 Dispute Resolution

SC-16.02 Mediation

SC-16 Add the following new paragraph immediately after paragraph GC-16.01.

SC-16.02 Mediation

A. OWNER and CONTRACTOR agree that they shall submit any and all unsettled Claims or counterclaims, disputes, or other matters in question between them arising out of or relating to the Contract Documents or the breach thereof, to mediation by a certified mediator of the 19th Judicial Circuit in Indian River County unless delay in initiating mediation would irrevocably prejudice one of the parties. The mediator of any dispute submitted to mediation under this agreement shall not serve as arbitrator of such dispute unless otherwise agreed.

SC-17 Miscellaneous

SC-17.06 Liens

Add the following new paragraphs immediately after paragraph GC17.05:

SC-17.06 Liens

A. This project is a "Public Works" under Chapter 255, Florida Statutes. No merchant's liens may be filed against the OWNER. Any claimant may apply to the OWNER for a copy of this Contract. The claimant shall have a right of action against the CONTRACTOR for the amount due him. Such action shall not involve the OWNER in any expense. Claims against the CONTRACTOR are subject to timely prior notice to the CONTRACTOR as specified in Florida Statutes Section 255.05. The CONTRACTOR shall insert the following paragraph in all subcontracts hereunder:

"Notice: Claims for labor, materials and supplies are not assessable against Indian River County and are subject to proper prior notice to (CONTRACTOR'S Name) and to (CONTRACTOR Surety Company Name), pursuant to Chapter 255 of the Florida Statutes. This paragraph shall be inserted in every sub-subcontract hereunder." The payment due under the Contract shall be paid by the OWNER to the CONTRACTOR only after the CONTRACTOR has furnished the OWNER with an affidavit stating that all persons, firms or corporations who are defined in Section 713.01, Florida Statutes, who have furnished labor or materials, employed directly or indirectly in the Work, have been paid in full. The OWNER may rely on said affidavit at face value. The CONTRACTOR does hereby release, remiss and quit-claim any and all rights he may enjoy perfecting any lien or any other type of statutory common law or equitable lien against the job.

++END OF SUPPLEMENTARY CONDITIONS++

SECTION 00942 – Change Order Form

					No	
DATE OF ISSUANCE:			EFFECTIVE DATE:			
OWNER: Indian River CONTRACTOR Project: Fire Station		· County				
		n 11 Remodel				
_	<u>I/A</u> I <u>/A</u>	OWNER'S Bid No.2022061				
You are directed to make Description:	the follow	ing changes in	the Contract Docum	nents:		
Reason for Change Order						
Attachments: (List docum		orting change)				
CHANGE IN CONTRACT P	RICE:			CHANGE IN CONTRACT TIMES		
Description Original Contract Price		Amount Description		ima	Time	
Original Contract Price		\$	Original Contract T Subs	tantial Completion: Final Completion:	(days or dates)	
Net Increase (Decrease) from previous Change Orders Noto:		\$	Net change from previous Change Orders Noto: Substantial Completion:		(days)	
Contract Price prior to this Change Order:		\$	Final Completion: Contract Time prior to this Change Order: Substantial Completion:		(days or dates)	
Net increase (decrease) of this Change Order:		\$	Final Completion: Net increase (decrease) this Change Order: Substantial Completion: Final Completion:		(days or dates)	
Contract Price with all approved Change Orders:		\$	Contract Time with all approved Change Orders: Substantial Completion: Final Completion:		(days or dates)	
ACCEPTED:		RECOMMENDED:		APPROVED:		
Ву:		Ву:		By:		
CONTRACTOR (Signature)		ENGINEER (Signature)		OWNER (Signature)		
Date:		Date:		Date:		

SECTION 00948 – Work Change Directive

					No
DATE OF ISSUANCE:		EFFECTIVE DATE:			
OWNER: CONTRACTOR Project: OWNER's Project No. FM No.:	Indian Rive Fire Statio N/A N/A	er County on 11 Remodel	OWNER'S Bid	No	. 2022061
You are directed to pro	ceed promp	otly with the followi	ng changes:		
Description:					
Reason for Change Ord	er:				
Attachments: (List docu	ıments supţ	porting change)			
Claim for a Change of defined in the Contract Method of determining	Order base ct Docume	ed thereon will invents.	volve one or mo	ore rmir	affected Contract Price any of the following methods as ning change in
Contract Prices			Contract Times		
☐_Unit Prices ☐_ Lump Sum ☐_ Other: ☐_ By Change Order		☐ Contractor's Records ☐ Engineer's Records ☐ Other: ☐ By Change Order:			
	(decrease	e) of this Work	Estimated increase (decrease) in Contract Times:		
Change Directive \$ If the change involve amount is not to be authorization.		Substantial Completion:days; Ready for Final Completion:days. If the change involves an increase, the estimated time is not to be exceeded without further authorization.			
ACCEPTED:		RECOMMENDED	:		APPROVED:
Ву:		Ву:			Ву:
CONTRACTOR (Signatu	re)	ENGINEER (Signatu	ıre)		OWNER (Signature)
Date:		Date:			Date:

** END OF SECTION**

DIVISION 1 - GENERAL REQUIREMENTS

DIVISION 1 - GENERAL REQUIREMENTS

SECTION 01009 - SPECIAL PROVISIONS

SECTION 01024 - FORCE ACCOUNT

SECTION 01091 - REFERENCE STANDARDS

SECTION 01215 - GENERAL QUALITY CONTROL

SECTION 01220 - PROGRESS MEETINGS

SECTION 01310 - CONSTRUCTION SCHEDULES

SECTION 01520 - CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

SECTION 01541 - PROTECTION OF THE WORK AND PROPERTY

SECTION 01550 - ACCESS ROADS, PARKING AREAS AND USE OF PUBLIC STREETS

SECTION 01610 - TRANSPORTATION AND HANDLING OF MATERIALS AND EQUIPMENT

SECTION 01611 - STORAGE OF MATERIAL AND EQUIPMENT

SECTION 01630 - SUBSTITUTIONS

SECTION 01710 - SITE CLEANUP AND RESTORATION

SECTION 01820 - POST FINAL INSPECTION

SECTION 01009 - SPECIAL PROVISIONS

1.1 GENERAL

- A. Visits to the construction site may be made by representatives of permitting or governing bodies. Submit details of all instructions from the above to the ENGINEER immediately. The Work will not be accepted by the OWNER until final acceptance has been received from the various Regulatory Agencies having jurisdiction.
- B. Furnish sufficient labor, construction equipment and materials, and work such hours, including night shifts and overtime operations, as may be necessary to insure the prosecution of the work in accordance with the approved progress schedule. If, in the opinion of the ENGINEER, the CONTRACTOR falls behind the progress schedule, take such steps as may be necessary to improve progress, all without additional cost to the OWNER. The ENGINEER shall be compensated for his overtime services in accordance with the Supplementary Conditions, SC-6.02.
- C. All salvageable material and equipment for which specific use, relocation or other disposal is not specifically noted, shall remain the property of the OWNER and shall be delivered to the OWNER at the following location: 4550 41st Street, at the CONTRACTOR's expense. All material and equipment not in salvageable condition, as determined by the ENGINEER and the OWNER, shall be disposed of by the CONTRACTOR, at the CONTRACTOR's expense.
- D. In addition to these Specifications all work must comply with the requirements of the local governing agency, St. Johns River Water Management District, Department of Environmental Protection, Army Corps of Engineers, Indian River Farms Water Control District, and all other applicable State or Federal agencies' specifications and permits. In the event of a conflict, the more stringent specification or requirement shall govern.
- E. Before performing any work outside the designated limits of the work site, secure any necessary permits and authorization from the applicable owner, or verify in writing that such has been previously obtained. Follow all requirements of any said permits or authorization. Give the ENGINEER and appropriate owner ten (10) days minimum notice before commencing construction operations outside the designated limits of the work site.

SECTION 01024 - FORCE ACCOUNT

1.1 GENERAL

A. CONTRACTOR shall furnish all labor, materials, equipment and incidentals necessary to perform additional work <u>not</u> covered on the Contract Drawings. The force Account is intended as a contingency for unforeseen work.

1.2 PAYMENT

A. Lump sum amount for force account work is included in the bid schedule. The value of force account work will be determined in accordance with Article 12 of the General Conditions.

SECTION 01091 - REFERENCE STANDARDS

1.1 GENERAL

- A. Whenever reference is made to the furnishing of materials or testing thereof to conform to the standards of any technical society, organization or body, it shall be construed to mean the latest standard, code, specification or tentative specification adopted and published at the date of advertisement for bids, unless noted otherwise in the Technical Specifications or on the Drawings. When a reference standard is specified, comply with requirements and recommendations stated in that standard, except when they are modified by the Contract Documents, or when applicable laws, ordinances, rules, regulations or codes establish stricter standards. The list of specifications presented in Paragraph B is hereby made a part of the Contract, the same as if repeated herein in full.
- B. Reference to a technical society, organization, or body may be made in the Specifications by abbreviations, in accordance with the following list:

AASHTO The American Association of State Highway and Transportation Officials

ACI American Concrete Institute

AGA American Gas Association

AISC American Institute of Steel Construction

AISI American Iron and Steel Institute

ANSI American National Standards Institute

ASCE American Society of Civil Engineers

ASTM American Society for Testing and Materials

AWPA American Wood Preservers Association

AWWA American Water Works Association

AWS American Welding Society

FED.SPEC. Federal Specifications

CRSI Concrete Reinforcing Steel Institute

FDEP/DEP Florida Department of Environmental Protection

DNR Department of Natural Resources

NCPI National Clay Pipe Institute

NEMA National Electrical Manufacturers Association

NEC National Electric Code

NSPE National Society of Professional Engineers

OSHA Occupational Safety and Health Administration

PCI Prestressed Concrete Institute

FDOT/DOT Florida Department of Transportation

U. L., Inc. Underwriter's Laboratories, Inc.SSPC Steel Structures Painting Council

SJRWMD St. Johns River Water Management District

- C. When no reference is made to a code, standard or specification, the standard specifications of ASTM, FDOT, or ANSI shall govern.
- D. In the event of a conflict between the specifications prepared by the ENGINEER and the above referenced specifications and standards, or any other regulatory specification or standard, the more stringent requirement prevails.

SECTION 01215 - GENERAL QUALITY CONTROL

1.1 DESCRIPTION OF REQUIREMENTS

A. Definitions: Specific quality control requirements for the work are indicated throughout the Contract Documents. The requirements of this section are primarily related to the performance of the work beyond the furnishing of manufactured products. The term "Quality Control" includes, but is not necessarily limited to, inspection and testing and associated requirements. This section does not specify or modify the OWNER and ENGINEER duties relating to quality review and Contract surveillance.

1.2 RESPONSIBILITY FOR INSPECTIONS AND TESTS

- A. Residual OWNER Responsibility: The OWNER will employ and pay for the services of independent testing laboratories to perform those required inspections and tests.
- B. CONTRACTORS General Responsibility: No failure of test agencies, whether engaged by the OWNER or CONTRACTOR, to perform adequate inspections of tests or to properly analyze or report results, shall relieve the CONTRACTOR of responsibility for the fulfillment of the requirements of the Contract Documents. It is recognized that the required inspection and testing program is intended to assist the CONTRACTOR, OWNER, ENGINEER, and governing authorities in the nominal determination of probable compliance with requirements for certain crucial elements of work. The program is not intended to limit the CONTRACTOR in his regular quality control program, as needed for general assurance of compliance.

1.3 QUALITY ASSURANCE

A. General Workmanship Standards: It is a requirement that each category of tradesman or installer performing the work be pre-qualified, to the extent of being familiar with the applicable and recognized quality standards for his category of work, and being capable of workmanship complying with those standards.

1.4 PRODUCT DELIVERY-STORAGE-HANDLING

Handle, store and protect materials and products, including fabricated components, by methods and means which will prevent damage, deterioration and losses (and resulting delays), thereby ensuring highest quality results as the performance of the work progresses. Control delivery schedules so as to minimize unnecessary long-term storage at the project site prior to installation.

1.5 PROJECT PHOTOGRAPHS/VIDEOS

- A. The CONTRACTOR shall make provisions, at his expense, for photographs and video tapes of all work areas just prior to construction, and for unusual conditions during construction. The photographs and videos shall show pertinent physical features along the line of construction. The purpose of the videos is to determine any damage to private or public property during construction. The video must be performed by a professional videographer.
- B. Pre-Construction Photographs and Video:
 - Contractor shall provide the Owner with photographs and video record and one copy of the existing conditions prior to construction. These photographs and videos shall be a standard DVD format and shall be narrated.
 - 2. The photographs and video shall include, but not be limited to, the following items shown in a clear manner:
 - 1) All existing features within the right-of-way.
 - 2) All existing features within the temporary construction easement.
 - 3) All existing features within permanent easements.
 - 4) All existing features adjacent to any construction.
 - 3. Detail of the photographs and video shall be such that the following examples shall be clear and visible:
 - 1) Cracks in walls.
 - 2) Condition of fencing.
 - 3) Condition of planted areas and types of vegetation.
 - 4) Condition of sodded areas.
 - 5) Conditions of sprinkler systems and associated controls and wiring.
 - 6) Condition of signs.
 - 7) Conditions of lighting and associated wiring.
 - 8) Significant detail of any pre-existing damages physical features shall be shown. The coverage of the photographs and video should include the limits of effects of the use of vibratory rollers.
 - 9) These photographs and video record shall be presented and approved by the Owner prior to the Notice to Proceed. A copy shall be kept in the Contractor's field office.
 - 10) Payment No additional payment will be made for this work.

SECTION 01220 - PROGRESS MEETINGS

1.1 SCOPE

- A. Date and Time:
 - 1. Regular Meetings: As mutually agreed upon by ENGINEER and CONTRACTOR.
 - 2. Other Meetings: On call.
- B. Place: CONTRACTOR'S office at Project site or other mutually agreed upon location.
- C. ENGINEER shall prepare agenda, preside at meetings, and prepare and distribute a transcript of proceedings to all parties.
- D. CONTRACTOR shall provide data required and be prepared to discuss all items on agenda.

1.2 MINIMUM ATTENDANCE

- A. CONTRACTOR
- B. SUBCONTRACTOR:

When needed for the discussion of a particular agenda item, CONTRACTOR shall require representatives of Subcontractors or suppliers to attend a meeting.

- C. PROJECT MANAGER
- D. OWNER'S representative, if required.
- E. Utility Representatives
- F. Others as appropriate.
- G. Representatives present for each party shall be authorized to act on their behalf.

1.3 AGENDA

Agenda will include, but will not necessarily be limited to, the following:

- 1. Transcript of previous meeting.
- 2. Progress since last meeting.
- 3. Planned progress for next period.
- 4. Problems, conflicts and observations.
- 5. Change Orders.
- 6. Status of Shop Drawings.
- 7. Quality standards and control.
- 8. Schedules, including off-site fabrication and delivery schedules. Corrective measures, if required.
- 9. Coordination between parties.
- 10. Safety concerns.
- 11. Other business.

SECTION 01310 - CONSTRUCTION SCHEDULES

1.1 GENERAL REQUIREMENTS

- A. No partial payments shall be approved by the ENGINEER until there is an approved construction progress schedule on hand.
- B. Designate an authorized representative who shall be responsible for development and maintenance of the schedule and of all progress and payment reports. This representative shall have direct project control and complete authority to act on behalf of the CONTRACTOR in fulfilling the commitments of the CONTRACTOR's schedules.

1.2 REVISIONS TO THE CONSTRUCTION SCHEDULES

When the ENGINEER requires the CONTRACTOR to submit revised (updated) progress schedules on a monthly basis the CONTRACTOR shall:

- A. Indicate the progress of each activity to the date of submission.
- B. Show changes occurring since the previous submission listing:
 - 1. Major changes in scope.
 - 2. Activities modified since the previous submission.
 - 3. Revised projections of progress and completion.
 - 4. Other identifiable changes.
- C. Provide a narrative report as needed to define:
 - 1. Problem areas, anticipated delays, and the impact on the schedule.
 - 2. Corrective action recommended and its effect.
 - 3. The effect of changes on schedules of other prime contractors.

1.3 SUBMISSION OF THE CONSTRUCTION SCHEDULES

On or before the tenth day after the effective date of the Agreement, submit the initial schedules to the ENGINEER. The ENGINEER will review the schedules and return a review copy to the CONTRACTOR within 21 days after receipt. If required by the ENGINEER, resubmit revised schedules on or before the seventh day after receipt of the review copy. If required by the ENGINEER, submit revised monthly progress schedules with that month's application for payment.

1.4 DISTRIBUTION OF THE CONSTRUCTION SCHEDULES

- A. After receiving approval by the ENGINEER, distribute copies of the approved initial schedule and all reviewed revisions (updated) to:
 - 1. Job site file.
 - 2. Subcontractors.
 - 3. Other concerned parties.
 - 4. OWNER (two copies).
 - 5. ENGINEER
- B. In the cover letter, instruct recipients to report promptly to the CONTRACTOR, in writing, any problems anticipated by the projections shown in the schedules.

SECTION 01520 - CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

1.1 SCOPE

A. Provide all construction equipment and facilities and temporary controls required to satisfactorily complete the work represented on the Drawings and described in the Specifications.

1.2 RESPONSIBILITY

- A. All construction facilities and temporary controls remain the property of the Contractor establishing them and shall be maintained in a safe and useful condition until removed from the construction site.
- B. All false work, scaffolding, ladders, hoistways, braces, pumps, roadways, sheeting, forms, barricades, drains, flumes, and the like, any of which may be needed in construction of any part of the work and which are not herein described or specified in detail, must be furnished, maintained and removed by the CONTRACTOR, who is responsible for the safety and efficiency of such work and for any damage that may result from their failure or from their improper construction, maintenance or operation.
- C. In accepting the Contract, the CONTRACTOR assumes full responsibility for the sufficiency and safety of all hoists, cranes, temporary structures or work and for any damage which may result from their failure or their improper construction, maintenance or operation and will indemnify and save harmless the OWNER and ENGINEER from all claims, suits or actions and damages or costs of every description arising by reason of failure to comply with the above provision.

1.3 TEMPORARY UTILITIES AND SERVICES

A. TEMPORARY WATER

- 1. Provide a temporary water service as required for all construction purposes and pay for all water used.
- 2. Furnish potable drinking water in suitable dispensers and with cups for use of all employees at the job.
- 3. Provide all temporary piping, hoses, etc., required to transport water to the point of usage by all trades.
- 4. When temporary water service is no longer required, remove all temporary water lines.

B. TEMPORARY SANITARY FACILITIES

- Provide temporary toilet facilities separate from the job office. Maintain these during the entire period of construction under this Contract for the use of all construction personnel on the job. Provide enough chemical toilets to conveniently serve the needs of all personnel. Properly seclude toilet facilities from public observation.
- 2. Chemical toilets and their maintenance shall meet the requirements of State and local health regulations and ordinances. Immediately correct any facilities or maintenance methods failing to meet these requirements. Upon completion of work, remove the facilities from the premises.

1.4 SECURITY

Full time watchmen will not be specifically required as a part of the Contract, but the CONTRACTOR shall provide inspection of work area daily and shall take whatever measures are necessary to protect the safety of the public, workmen, and materials, and provide for the security of the site, both day and night.

1.5 TEMPORARY CONTROLS

Take all necessary precautions to control dust and mud associated with the work of this Contract. In dry weather, spray dusty areas daily with water in order to control dust. Take necessary steps to prevent the tracking of mud onto adjacent streets and highways.

1.6 REMOVAL OF TEMPORARY CONSTRUCTION FACILITIES

Remove the various temporary facilities, services, and controls and legally dispose of them as soon as the work is complete. The areas of the site used for temporary facilities shall be properly reconditioned and restored to a condition acceptable to the OWNER.

SECTION 01541 - PROTECTION OF THE WORK AND PROPERTY

1.1 GENERAL

- A. CONTRACTOR shall be responsible for taking all precautions, providing all programs, and taking all actions necessary to protect the Work and all public and private property and facilities from damage as specified in the General Conditions and herein.
- B. In order to prevent damage, injury or loss, CONTRACTOR'S actions shall include, but not be limited to, the following:
 - 1. Store apparatus, materials, supplies, and equipment in an orderly, safe manner that will not unduly interfere with the progress of the Work or the Work of any other Contractor or utility service company.
 - 2. Provide suitable storage facilities for all materials, which are subject to injury by exposure to weather, theft, breakage, or otherwise.
 - 3. Place upon the Work or any part thereof, only such loads as are consistent with the safety of that portion of the Work.
 - 4. Clean up frequently all refuse, rubbish, scrap materials, and debris caused by construction operations, so that at all times, the site of the Work presents a safe, orderly, and workmanlike appearance.
 - 5. Provide barricades and guard rails around openings, for scaffolding, for temporary stairs and ramps, around excavations, elevated walkways and other hazardous areas.
- C. Except after written consent from proper parties, do not enter or occupy privately-owned land with men, tools, materials or equipment, except on easements provided herein.
- D. Assume full responsibility for the preservation of all public and private property or facility on or adjacent to the site. If any direct or indirect damage is done by or on account of any act, omission, neglect or misconduct in the execution of the Work by the CONTRACTOR, it shall be restored by the CONTRACTOR, at its expense, to a condition equal to or better than that existing before the damage was done.

1.2 BARRICADES AND WARNING SIGNALS

CONTRACTOR's responsibility for the maintenance of barricades, signs, lights, and for providing watchmen shall continue until OWNER accepts the Project.

1.3 TREE AND PLANT PROTECTION

- A. Protect existing trees, shrubs and plants on or adjacent to the site that are shown or designated to remain in place against unnecessary cutting, breaking or skinning of trunk, branches, bark or roots.
- B. Do not store or park materials or equipment within the drip line of trees that are to remain.

- C. Install temporary fences or barricades to protect trees and plants in areas subject to traffic.
- D. Fires shall not be permitted under or adjacent to trees and plants.
- E. Within the limits of the Work, water trees and plants that are to remain, in order to maintain their health during construction operations.
- F. Cover all exposed roots with burlap and keep it continuously wet. Cover all exposed roots with earth as soon as possible. Protect root systems from mechanical damage and damage by erosion, flooding, run-off or noxious materials in solution.
- G. If branches or trunks are damaged, prune branches immediately and protect the cut or damaged areas with emulsified asphalt compounded specifically for horticultural use.
- H. Remove all damaged trees and plants that die or suffer permanent injury and replace them with a specimen of equal or better quality.
- I. Coordinate Work in this Section with requirements of other sections herein.

1.4 PROTECTION OF IRRIGATION

The CONTRACTOR shall be responsible for maintaining in good condition all irrigation systems within the easements, which could be damaged by construction activities. The CONTRACTOR shall repair any irrigation systems damaged by construction activities within two (2) days. Irrigation systems partially within the right-of-way and all intersecting side streets within project limits may be cut off and capped or connected to same system to maintain functionality. The CONTRACTOR shall be responsible for maintaining the functionality of the remaining portion of the system if it should fall outside of the right-of-way.

1.5 PROTECTION OF EXISTING STRUCTURES

A. Underground Structures:

- Underground structures are defined to include, but not be limited to, all sewer, water, gas, and other piping, and manholes, chambers, electrical conduits, tunnels and other existing subsurface work located within or adjacent to the limits of the Work.
- 2. All underground structures known to ENGINEER except service connections for water, sewer, electric, and telephone are shown. This information is shown for the assistance of CONTRACTOR in accordance with the best information available, but is not guaranteed to be correct or complete. The existing utilities shown on the Contract Drawings are located according to the information available to the ENGINEER at the time the Drawings were prepared and have not been independently verified by the OWNER or the ENGINEER. Guarantee is not made that all existing underground utilities are shown or that the locations of those shown are

accurate. The locations shown are for bidding purposes only. Finding the actual location of any existing utilities is the CONTRACTOR's responsibility and shall be done before it commences any work in the vicinity. Furthermore, the CONTRACTOR shall be fully responsible for any and all damages, which might be occasioned by the CONTRACTOR's failure to exactly locate and preserve any and all underground utilities. The OWNER or ENGINEER will assume no liability for any damages sustained or costs incurred because of the CONTRACTOR's operations in the vicinity of existing utilities or structures, nor for temporary bracing and shoring of same. If it is necessary to shore, brace, or swing a utility, contact the utility company or department affected and obtain their permission regarding the method to use for such work.

- 3. Contact the various utility companies which may have buried or aerial utilities within or near the construction area before commencing work. Provide 48 hours minimum notice to all utility companies prior to beginning construction.
- 4. Schedule and execute all work involving existing utilities in order to minimize necessary interruption of services. Whenever such interruption is necessary for completion of the work, notify the ENGINEER and the appropriate utility at least 48 hours in advance. Perform all work to repair/restore utility service to the satisfaction of the appropriate utility. Include all costs related to service maintenance, interruption, and restoration in the appropriate line item in the Contract.
- 5. Where it is necessary to temporarily interrupt house or business services, the CONTRACTOR shall notify the owner or occupant, both before the interruption (24-hour minimum), and again immediately before service is resumed. Before disconnecting and pipes or cables, the CONTRACTOR shall obtain permission from their owner, or shall make suitable arrangement for their disconnection by their owner.
- 6. Explore ahead of trenching and excavation work and uncover all obstructing underground structures sufficiently to determine their location, to prevent damage to them and to prevent interruption of the services which such structures provide. If CONTRACTOR damages an underground structure, restore it to original condition at CONTRACTOR's expense.
- 7. Necessary changes in the location of the Work may be made by ENGINEER, to avoid unanticipated underground structures.
- 8. If permanent relocation of an underground structure or other subsurface facility is required and is not otherwise provided for in the Contract Documents, ENGINEER will direct CONTRACTOR in writing to perform the Work, which shall be paid for under the provisions of Article 11 of the General Conditions.

B. Surface Structures:

Surface structures are defined as structures or facilities above the ground surface.
 Included with such structures are their foundations and any extension below the
 surface. Surface structures include, but are not limited to, buildings, tanks, walls,
 bridges, roads, dams, channels, open drainage, piping, poles, wires, posts, signs,
 markers, curbs, walks and all other facilities that are visible above the ground
 surface.

C. Protection of Underground and Surface Structures:

- Sustain in their places and protect from direct or indirect injury, all underground and surface structures located within or adjacent to the limits of the Work. Such sustaining and supporting shall be done carefully, and as required by the party owning or controlling such structure. Before proceeding with the work of sustaining and supporting such structure, satisfy the ENGINEER that the methods and procedures to be used have been approved by the party owning same.
- 2. Assume all risks attending the presence or proximity of all underground and surface structures within or adjacent to the limits of the Work. CONTRACTOR shall be responsible for all damage and expense for direct or indirect injury caused by its Work to any structure. CONTRACTOR shall repair immediately all damage caused by his work, to the satisfaction of the OWNER of the damaged structure.
- D. All other existing surface facilities, including but not limited to, guard rails, posts, guard cables, signs, poles, markers, and curbs which are temporarily removed to facilitate installation of the Work shall be replaced and restored to their original condition at CONTRACTOR'S expense.

1.6 DAMAGE TO EXISTING STRUCTURES AND UTILITIES

- A. The CONTRACTOR shall be responsible for and make good all damage to pavement beyond the limits of this Contract, buildings, telephone or other cables, water pipes, sanitary pipes, or other structures which may be encountered, whether or not shown on the Drawings.
- B. Information shown on the Drawings as to the location of existing utilities has been prepared from the most reliable data available to the Engineer. This information is not guaranteed, however, and it shall be this CONTRACTOR's responsibility to determine the location, character and depth of any existing utilities. He shall assist the utility companies, by every means possible to determine said locations. Extreme caution shall be exercised to eliminate any possibility of any damage to utilities resulting from his activities.

1.7 ADJUSTMENTS OF UTILITY CASTINGS, COVERS AND BOXES

- A. All existing utility castings, including valve boxes, junction boxes, manholes, pull boxes, inlets and similar structures in the areas of construction that are to remain in service shall be adjusted by the CONTRACTOR to bring them flush with the surface of the finished work.
- B. The CONTRACTOR shall coordinate the utilities to ensure proper construction sequencing. CONTRACTOR shall make available survey reference markers to the various utility companies.

SECTION 01550 - ACCESS ROADS, PARKING AREAS AND USE OF PUBLIC STREETS

1.1 GENERAL

- A. Provide all temporary construction roads, walks and parking areas required during construction and for use of emergency vehicles. Design and maintain temporary roads and parking areas so they are fully usable in all weather conditions.
- B. Prevent interference with traffic and the OWNER's operations on existing roads. Indemnify and save harmless the OWNER from any expenses caused by CONTRACTOR's operations over these roads.
- C. Roadways damaged by CONTRACTOR shall be restored to their original condition by the CONTRACTOR subject to approval of the OWNER or ENGINEER.
- D. Remove temporary roads, walks and parking areas prior to final acceptance and return the ground to its original condition, unless otherwise required by the Contract Documents.

1.2 USE OF PUBLIC STREETS

The use of public streets and alleys shall be such as to provide a minimum of inconvenience to the public and to other traffic. Any earth or other excavated material spilled from trucks shall be removed immediately by the CONTRACTOR and the streets cleaned to the satisfaction of the Owner.

1.3 USE OF PUBLIC STREETS FOR HAUL ROADS

- A. Prior to construction, the CONTRACTOR shall designate all proposed haul roads to be used during the life of the project. Any earth or other materials spilled from trucks shall be removed by the CONTRACTOR and streets cleaned to the satisfaction of the Owner. He further shall be responsible for repairs to any damages caused by his operations, prior to final payment.
- B. All trucks carrying earth shall be covered while moving with an appropriate tarpaulin. Should trucks hauling earth fail to cover their loads, the CONTRACTOR will be given two (2) written warnings, after which the CONTRACTOR shall pay a fine of \$50 per uncovered truck to the Owner when invoked by the Owner to Owner's Engineer. All cleanup shall be the responsibility of the CONTRACTOR.
- C. All trucks/moving equipment shall have backup warning horns in proper working order while on the job site.

SECTION 01610 - TRANSPORTATION AND HANDLING OF MATERIALS AND EQUIPMENT

1.1 GENERAL

- A. Make all arrangements for transportation, delivery and handling of equipment and materials required for prosecution and completion of the Work.
- B. Shipments of materials to CONTRACTOR or Subcontractors shall be delivered to the site only during regular working hours. Shipments shall be addressed and consigned to the proper party giving name of Project, street number and city. Shipments shall not be delivered to OWNER except where otherwise directed.
- C. If necessary, to move stored materials and equipment during construction, CONTRACTOR shall move or cause to be moved materials and equipment without any additional compensation.

1.2 DELIVERY

- A. Arrange deliveries of products in accord with construction schedules and in ample time to facilitate inspection prior to installation.
- B. Coordinate deliveries to avoid conflict with Work and conditions at site and to accommodate the following:
 - 1. Work of other contractors, or OWNER.
 - 2. Limitations of storage space.
 - 3. Availability of equipment and personnel for handling products.
 - 4. OWNER'S use of premises.
- C. Do not have products delivered to project site until related Shop Drawings have been approved by the ENGINEER.
- D. Do not have products delivered to site until required storage facilities have been provided.
- E. Have products delivered to site in manufacturer's original, unopened, labeled containers. Keep ENGINEER informed of delivery of all equipment to be incorporated in the Work.
- F. Partial deliveries of component parts of equipment shall be clearly marked to identify the equipment, to permit easy accumulation of parts, and to facilitate assembly.
- G. Immediately on delivery, Contractor shall inspect shipment to assure:
 - 1. Product complies with requirements of Contract Documents and reviewed submittals.
 - 2. Quantities are correct.
 - 3. Containers and packages are intact, labels are legible.
 - 4. Products are properly protected and undamaged.

1.3 PRODUCT HANDLING

- A. Provide equipment and personnel necessary to handle products, including those provided by OWNER, by methods to prevent soiling or damage to products or packaging.
- B. Provide additional protection during handling as necessary to prevent scraping, marring or otherwise damaging products or surrounding surfaces.
- C. Handle products by methods to prevent bending or overstressing.
- D. Lift heavy components only at designated lifting points.
- E. Materials and equipment shall at all times be handled in a safe manner and as recommended by manufacturer or supplier so that no damage will occur to them. Do not drop, roll or skid products off delivery vehicles. Hand carry or use suitable materials handling equipment.

SECTION 01611 - STORAGE OF MATERIAL AND EQUIPMENT

1.1 GENERAL

- A. Store and protect materials and equipment in accordance with manufacturer's recommendations and requirements of Specifications.
- B. Make all arrangements and provisions necessary for the storage of materials and equipment. Place all excavated materials, construction equipment, and materials and equipment to be incorporated into the Work, so as not to injure any part of the Work or existing facilities, and so that free access can be had at all times to all parts of the Work and to all public utility installations in the vicinity of the Work. Keep materials and equipment neatly and compactly stored in locations that will cause a minimum of inconvenience to other contractors, public travel, adjoining owners, tenants and occupants. Arrange storage in a manner to provide easy access for inspection.
- C. Areas available on the construction site for storage of material and equipment shall be as shown or approved by the ENGINEER.
- D. Store materials and equipment which are to become the property of the OWNER to facilitate their inspection and insure preservation of the quality and fitness of the Work, including proper protection against damage by extreme temperatures and moisture.
- E. Do not use lawns, grass plots or other private property for storage purposes without written permission of the OWNER or other person in possession or control of such premises.
- F. CONTRACTOR shall be fully responsible for loss or damage to stored materials and equipment.
- G. Do not open manufacturers containers until time of installation unless recommended by the manufacturer or otherwise specified.
- H. When appropriate store materials on wood blocking so there is no contact with the ground.

SECTION 01630 - SUBSTITUTIONS

1.1 GENERAL

A. Requests for review of a substitution shall conform to the requirements of Article 6.05, "Substitutes and Or-Equals," of the General Conditions, and shall contain complete data substantiating compliance of the proposed substitution with the Contract Documents.

1.2 CONTRACTOR'S OPTIONS

- A. For materials or equipment (hereinafter products) specified only by reference standard, select product meeting that standard by any manufacturer, fabricator, supplier or distributor (hereinafter manufacturer). To the maximum extent possible, provide products of the same generic kind from a single source.
- B. For products specified by naming several products or manufacturers, select any one of the products or manufacturers named which complies with Specifications.
- C. For products specified by naming one or more products or manufacturers and stating "or equivalent," submit a request for a substitution for any product or manufacturer which is not specifically named.
- D. For products specified by naming only one product or manufacturer and followed by words indicating that no substitution is permitted, there is no option and no substitution will be allowed.
- E. Where more than one choice is available as a CONTRACTOR's option, select product which is compatible with other products already selected or specified.

1.3 SUBSTITUTIONS

- A. During a period of 15 days after date of commencement of Contract Time, ENGINEER will consider written requests from CONTRACTOR for substitution of products or manufacturers, and construction methods (if specified).
 - 1. After end of specified period, requests will be considered only in case of unavailability of product or other conditions beyond control of CONTRACTOR.
- B. Submit 5 copies of Request for Substitution. Submit a separate request for each substitution. In addition to requirements set forth in Article 6.05 of General Conditions, include in the request the following:
 - 1. For products or manufacturers:
 - a. Product identification, including manufacturer's name and address.
 - b. Manufacturer's literature with product description, performance and test data, and reference standards.
 - c. Samples, if appropriate.

- d. Name and address of similar projects on which product was used, and date of installation.
- 2. For construction methods (if specified):
 - a. Detailed description of proposed method.
 - b. Drawings illustrating method.
- 3. Such other data as the ENGINEER may require to establish that the proposed substitution is equal to the product, manufacturer or method specified.
- C. In making Request for Substitution, CONTRACTOR represents that:
 - CONTRACTOR has investigated proposed substitution, and determined that it is equal to or superior in all respects to the product, manufacturer or method specified.
 - 2. CONTRACTOR will provide the same or better guarantees or warranties for proposed substitution as for product, manufacturer, or method specified.
 - 3. CONTRACTOR waives all claims for additional costs or extension of time related to a proposed substitution that subsequently may become apparent.
- D. A proposed substitution will not be accepted if:
 - 1. Acceptance will require changes in the design concept or a substantial revision of the Contract Documents.
 - 2. It will delay completion of the Work, or the work of other contractors.
 - 3. It is indicated or implied on a Shop Drawing and is not accompanied by a formal Request for Substitution from CONTRACTOR.
- E. If the ENGINEER determines that a proposed substitute is not equal to that specified, furnish the product, manufacturer, or method specified at no additional cost to OWNER.
- F. Approval of a substitution will not relieve CONTRACTOR from the requirement for submission of Shop Drawings as set forth in the Contract Documents.
- G. The procedure for review by Engineer will include the following:
 - 1. Requests for review of substitute items of material and equipment will not be accepted by Engineer from anyone other than CONTRACTOR.
 - 2. Upon receipt of an application for review of a substitution, Engineer will determine whether the review will be more extensive than a normal shop drawing review for the specified item.
 - 3. If the substitution will not require a more extensive review, Engineer will proceed with the review without additional cost to CONTRACTOR.
 - 4. If the substitution requires a more extensive review, Engineer will proceed with the review only after CONTRACTOR has agreed to reimburse Owner for the review cost.
 - 5. Engineer may require CONTRACTOR to furnish at CONTRACTOR's expense additional data about the proposed substitute.

- H. Any redesign of structural members shall be performed by, and the plans signed and sealed by, a Professional Engineer registered in the State of Florida. The redesign shall be at the CONTRACTOR's expense. Any redesign will require an extensive review by the Engineer. The CONTRACTOR must agree to reimburse the Owner for the review cost prior to the Owner's Engineer proceeding with the design review. The ENGINEER's estimated cost of review shall be provided to the CONTRACTOR prior to proceeding with the review to allow the CONTRACTOR the opportunity to rescind the request.
- I. Engineer will be allowed a reasonable time within which to evaluate each proposed substitution. Engineer will be the sole judge of acceptability and shall have the right to deny use of any proposed substitution. The CONTRACTOR shall not order, install, or utilize any substitution without either an executed Change Order or Engineer's notation on the reviewed shop drawing. Owner may require CONTRACTOR to furnish at CONTRACTOR's expense a special manufacturer's performance guarantee(s) or other surety with respect to any substitute and an indemnification by the CONTRACTOR. ENGINEER will record time required by Engineer and Engineer's consultants in evaluating substitutions proposed by CONTRACTOR and in making changes in the Contract Documents occasioned thereby. Whether or not a proposed substitute is used, CONTRACTOR shall reimburse Owner for the charges of Engineer and Engineer's consultants for evaluating each proposed substitute.
- J. Substitute materials or equipment may be proposed for acceptance in accordance with this Section. In the event that substitute materials or equipment are used and are less costly than the originally specified material or equipment, than the net difference in cost shall benefit the Owner and CONTRACTOR in equal proportions. This cost difference shall not be reduced by any failure of the CONTRACTOR to base his bid on the named materials or equipment.

SECTION 01710 - SITE CLEANUP AND RESTORATION

1.1 SCOPE

Furnish all labor, equipment, appliances, and materials required or necessary to clean up and restore the site after the construction is completed.

1.2 REQUIREMENTS

- A. During the progress of the project, keep the work and the adjacent areas affected thereby in a neat and orderly condition. Remove all rubbish, surplus materials, and unused construction equipment. Repair all damage so that the public and property owners will be inconvenienced as little as possible.
- B. Provide onsite containers for the collection of waste materials, debris, and rubbish and empty such containers in a legal manner when they become full.
- C. Where material or debris has been deposited in watercourses, ditches, gutters, drains, or catch-basins as a result of the CONTRACTOR's operations, such material or debris shall be entirely removed and satisfactorily disposed of during the progress of the work, and the ditches, channels, drains, etc., shall be kept clean and open at all times.
- D. Before the completion of the project, unless otherwise especially directed or permitted in writing:
 - 1. Tear down and remove all temporary buildings and structures;
 - 2. Remove all temporary works, tools, and machinery, or other construction equipment furnished;
 - 3. Remove all rubbish from any grounds occupied; and
 - 4. Leave the roads, all parts of the premises, and adjacent property affected by construction operations, in a neat and satisfactory condition.
- E. Restore or replace any public or private property damaged by construction work, equipment, or employees, to a condition at least equal to that existing immediately prior to the beginning of the operations. To this end, the CONTRACTOR shall restore all highway, roadside, and landscaping work within any right-of-way, platted or prescriptive. Acceptable materials, equipment, and methods shall be used for such restoration.
- F. Thoroughly clean all materials and equipment installed and on completion of the work, deliver the facilities undamaged and in fresh and new-appearing condition.
- G. It is the intent of the Specifications to place the responsibility on the CONTRACTOR to restore to their original condition all items disturbed, destroyed, or damaged during construction. Particular attention will be placed on restoration of canals to equal or better condition than prior to construction.

- H. When finished surfaces require cleaning with cleaning materials, use only those cleaning materials which will not create hazards to health or property and which will not damage the surfaces. Use cleaning materials only on those surfaces recommended by the manufacturer. Follow the manufacturer's directions and recommendations at all times.
- I. Keep the amount of dust produced during construction activities to a minimum. At CONTRACTOR's expense, spray water or other dust control agents over the areas, which are producing the dust. Schedule construction operations so that dust and other contaminants will not fall on wet or newly coated surfaces.

1.3 SITE CLEANUP AND RESTORATION

Prior to final completion, the OWNER, ENGINEER, and CONTRACTOR shall review the site with regards to site cleanup and restoration. Clean and/or restore all items determined to be unsatisfactory by the OWNER or ENGINEER, at no additional expense.

SECTION 01820 - POST FINAL INSPECTION

1.1 GENERAL

- A. Approximately one year after Final Completion, the OWNER will make arrangements with the Project Manager and the CONTRACTOR for a post final inspection and will send a written notice to said parties to inform them of the date and time of the inspection.
- B. Corrections of defective work noted by OWNER and Project Manager shall comply with the applicable sections of Article 13, General Conditions.
- C. After the inspection, the OWNER will inform the CONTRACTOR of any corrections required to release the performance and payment bonds.

Project:

Indian River County Fire Station #11 Remodel

Located at:

2555 93rd Street Vero Beach, Florida, 32963

PROJECT MANUAL / TECHNICAL SPECIFICATIONS

Prepared By:

Edlund, Dritenbas, Binkley Architects & Associates, P.A.
65 Royal Palm Pointe, Suite-D
Vero Beach, Florida 32960
AR #AAC000886

Architect's Commission Number #100221VB

OWNER:

Indian River County 1801 27th Street Vero Beach, FL 32960

DATE: 19 May 2022

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SECTION 05400 - LIGHT GAGE METAL FRAMING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS IN OTHER SECTIONS

Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to work specified in this section.

1.02 DESCRIPTION OF WORK

Extent of lightgage metal framing (LtGMFrm) is shown on drawings. Types of lightgage metal framing units include the following: "C" shaped steel studs.

1.03 QUALITY ASSURANCE

- A. <u>Components Design:</u> Compute structural properties of studs and joists in accordance with AICS "Specification for design of Cold-Formed Steel Structural Members".
- B. <u>Fire-Rated Assemblies</u>: Where framing units are components of assemblies indicated for a fire-resistance rating, including those required for compliance with governing regulations, provide units which have been approved by governing authorities having jurisdiction.
- C. Manufacturers offering products complying with requirements for lightgage metal framing components include the following:

Shaped load bearing studs, 1-5/8" flange:

Alabama Metal Industries

Marino Ware

Dietrick

Roll Form Products, Inc.

U.S. Steel Corp.

Wheeling Corrugating Co.

1.04 SUBMITTALS

- A. <u>Products data:</u> Submit manufacturer's product information and installation instructions for each items of lightgage framing and accessories.
- B. Shop Drawing: Submit shop drawings for special components and installations not fully dimensioned or detailed in manufacturer's product data. Signed and sealed Shop Drawings required by a Florida Registered Structural Engineer. Include placing drawings for framing members showing size and gage designations, number, type, locations and spacing. Indicate supplemental strapping, bracing, splices, accessories, and details required for proper installation.

1.05 DELIVERY AND STORAGE

A. Protect metal framing units from rusting and damage. Deliver to protect site in manufacturer's unopened containers or bundles, fully identified with name, brand, type and grade. Store off ground in a dry ventilated space or protect with suitable waterproof coverings.

PART 2 - PRODUCTS

2.01 METAL FRAMING

A. <u>System Components:</u> With each type of metal framing required, provide manufacturer's standard steel runners, tracks, blocking, lintels, clip angles, shoes, reinforcements, fasteners and accessories recommended by manufacturer for applications indicated as needed to provide a complete metal framing system.

B. Materials and Finishes

For 16 gage and heavier units, fabricate metal framing components of structural quality steel sheet with a minimum yield point of 40,000 psi; ASTM A 446, A 570, or A 611.

For 18 gage and lighter units, fabricate metal framing components of commercial quality steel sheet with a minimum yield point of 33,000 psi; ASTM A 466, A 570, Or A 611. Provide galvanized finish to metal framing components complying with ASTM A 525 for minimum G 60 coating at exterior wall panel studs. Provide prime coated finish with one coat of shop-applied red oxide, zinc-chromate, or other similar rust-inhibitive primer for interior studs. "C"-Shape Studs: Manufacturer's standard load-bearing steel studs of size shape, and as located on the drawings with 1-5/8" (1.625") flange and flange return to lip.

GAGES AS DETERMINED BY THE FOLLOWING CHART:

(Interior Framing: Limiting Heights - ST Style Studs. Stud gages apply for single and double layers of gypsum application on walls using L/360 allowable deflection) with no midspan wall blocking, cats, lateral bracing, or cold rolled channel bracing run through stud perforations. Allowable heights can be exceeded by 20% when continuous wall bracing or blocking is provided.

STUD WIDTH GA	STUD SPACING	MAX. HGT. 25 GA	MAX. HGT. 22 GA	MAX. HGT. 20
3-5/8"	16" o/c	10'-0''	12'-0"	14'-0"
3-5/8"	24" o/c	8'-0"	10'-0"	12'-0"
6"	16" o/c	15'-0"	17'-0"	19'-0"
6"	24" o/c	13'-0"	15'-0"	17'-0"

2.02 FABRICATION

A. <u>General</u>: Framing components may be prefabricated into panels prior to erection. Fabricate panels plumb, square, true to line and braced against racking with joints welded. Perform lifting of prefabricated panels in a manner to prevent damage or distortion. Stud panels to be rechecked for plumbness after installation.

B. <u>Fastenings</u>: Attach similar components by welding. Attach dissimilar components by welding, bolting, or screw fasteners, as standard with manufacturer.

PART 3 - EXECUTION

3.01 INSPECTION AND PREPARATION

<u>Pre-Installation Conference:</u> Prior to star of installation of metal framing systems, meet at project site with installers of other work including metal panels, door and window frames and mechanical and electrical work. Review areas of potential interference and conflict, and coordinate layout and support provisions for interfacing work.

3.02 <u>INSTALLATION</u>

- A. <u>Manufacturer's Instructions:</u> Install metal framing systems in accordance with manufacturer's printed or written instructions and recommendation, and Engineered Shop Drawings, unless otherwise indicated.
- B. Runner Tracks: Install continuous tracks sized to match studs. Align tracks accurately to layout at base and tops of studs. Secure tracks as recommended by stud manufacturer for type of construction involved, except do not exceed 24" o.c. spacing for nail or power-driven fasteners, nor 16" o.c. for other types of attachment. Spacing of studs at metal wall panels to be as per panel manufacturers request. Provide fasteners at corners and ends of tracks.
- C. Set studs plumb, except as needed for diagonal bracing or required for non-plumb walls or warped surfaces and similar requirements.
- D. Where stud system abuts structural columns or walls, including masonry walls, anchor ends of stiffeners to supporting structure.
- E. Install supplementary framing, wood blocking and bracing at metal framing system wherever walls or partitions are indicated to support fixtures, equipment, services, casework, heavy trim and furnishing, wall mounted door stops, bathroom grab bars and similar work requiring attachment to the wall or partition. Where type of supplementary support is not otherwise indicated, comply with stud manufacturer's recommendations and industry standards in each case, considering weight or loading resulting from item supported.
- F. <u>Installation of Wall Stud System:</u> Secure studs to top and bottom runner tracks by either welding or screw fastening at both inside and outside flanges.
- G. Frame wall openings larger than 2'-0' square with double stud at each jamb of frame except where more than 2 are either shown or indicated in manufacturer's instructions. Install runner tracks and jack studs above and below wall openings.

Anchor tracks to jamb studs with stud shoes or by welding, and space jack studs same as full height studs of wall. Secure stud system wall opening frame in manner indicated.

SECTION 06200 - FINISH CARPENTRY

PART 1 - GENERAL

1.01 <u>RELATED WORK SPECIFIED ELSEWHERE</u>

A. Rough Carpentry	Section 06100
B. Wood Doors	Section 08200
C. Finish Hardware	Section 08700
D. Chalkboards, Tackboards, & Pegboards	Section 10100
E. Plastic Laminated Toilet Partitions	Section 10160

1.02 QUALITY ASSURANCE - STANDARDS

- A. The "Quality Standards" of the Architectural Woodwork Institute shall apply and by reference are hereby made a part of this Specification. Any reference to Premium, Custom or Economy shall be as defined in the latest edition of the AWI Standards.
- B. Any items not given a specific quality grade, shall be custom grade.
- C. Products of other manufacturers may be proposed under conditions as set forth in the Contract Conditions of these Specifications.

1.03 DELIVERY AND STORAGE

- A. Deliver manufactured material in original packages.
- B. Store all finish materials in an enclosed shelter providing protection from damage and exposure to the elements.

1.04 MISCELLANEOUS WOODWORK

Shelving not included in Casework Specifications nor in Casework Drawings:

- A. SWI Custom Grade, if stained.
- B. AWI Economy Grade, if painted.

PART 2 - PRODUCTS

2.01 INTERIOR WOODWORK FOR PAINT FINISH

- A. Quality Grade: Economy grade requirements of AWI Quality Standards.
- B. Wood Species: B and better V.G. Fir, Birch, and pines with sound tight knots.

C. Plywood: All plywood shall be exterior grade, Group 1, A, B, Veneer grades. This shall include any plywood shelving to receive paint as indicated on the casework drawings.

2.02 INTERIOR WOODWORK FOR STAINED FINISH

- A. SWI Custom Grade hardwoods and softwoods.
- B. Hardwood Species: (S& B) Select and Better for mouldings, #1 Common or Better for furniture and casework making, or Clear where indicated on drawings.
- C. Softwood Species: Select (clear) and #2 sound tight knots where indicated on the drawings.

PART 3 - EXECUTION

3.01 INSTALLATION OF WOODWORK

- A. Only experienced finish carpenters are to work on exposed woodwork.
- B. Erect all work plumb, level and true to the line and detail.
- C. Make any adjustments necessary for proper operation.
- D. Nailing: Use finish nails and counter sink. Fill holes with putty after prime coat.
- E. Sand all finish woodwork and leave ready for finishing.

3.02 DOORS

- A. Install doors as provided under other Sections of these Specifications.
- B. Install doors true and plumb with equal clearances at jambs and head.
- C. Make any adjustments necessary for proper operation.

3.03 HARDWARE

Install finish hardware as specified under another Section of these Specifications.

A. Installation of all finish hardware shall be by a skilled and experienced mechanic in a neat and workmanlike manner. Where required, the hardware shall be removed for application of finishes and fully protected until final installation.

B. Carefully tag and file all keys in the key file and deliver all keys to the Owner's representative at the completion of the job. See Finish Hardware for detailed specifications and instructions.

3.04 CLEAN UP

- A. Leave all work in neat and in a finished condition.
- B. Remove all debris as result of work under this Section of these Specifications.

SECTION 08100 - HOLLOW METAL DOOR AND FRAMES

PART 1 - GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

A. Wood Doors

Section 08200

B. Finish Hardware

Section 08700

C. Painting

Section 09900

1.02 QUALITY CRITERIA

Hollow Metal Work shall be manufactured by one of the following or equal:

- A. Ceco Corporation
- B. Steelcraft
- C. Firedoor Corporation of Florida
- D. Quality Engineered Products Co., Inc., Tampa, FL
- E. Republic Steel Doors & Frames, Pembroke Park, FL
- F. Amweld Building Products, Inc.
- G. Curries

1.03 SUBMITTALS: SHOP DRAWINGS

- A. Submit shop drawings in accordance with Contract Conditions, covering each type of door and frame, frame conditions, and complete anchorage details, supplemented by suitable schedules covering doors and frames.
- B. Show glass and louver opening sizes and locations in doors.

1.04 DELIVERY, STORAGE AND HANDLING

A. Delivery:

Deliver products to the job site in their original unopened containers or wrappings clearly labeled with the manufacturer's name and brand designation, door schedule number, referenced specification number, type, class and rating as applicable.

B. Storage:

Store products in an approved dry area; protected from contact with soil and from exposure to the elements. Keep products dry at all times.

C. Handling:

Handle products in a manner that will prevent breakage and damage to products.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Frames (Door)

- Exterior: 16 gauge A-60 galv. coated, bonderized sheet steel.
 Exterior: 14 gauge A-60 galv. coated bonderized sheet steel, over 6'-0" in width. NOTE: Provide 3/4" back bents on all frames mounted to brick veneers or prefinished split-faced masonry products in lieu of the standard 1/2".
- 2. Interior: 16 gauge A-60 galv. coated bonderized sheet steel.
 Interior: over 4'-0: in width, 14 gauge. NOTE: Provide 3/4" back bents on all frames mounted to brick veneers or prefinished split-faced masonry products in lieu of the standard 1/2".
- B. Hardware Reinforcement (Frames) Steel

1. Hinges:

7 gauge by 1-1/2" or 1-5/8" x 10"

2. Closers and holders: 12 gauge by 16"

3. Strikes:

1-1/4" x 4-7/8"ANSI 16gauge

1-1/8" x 2-3/4" strike reinf. 16 gauge 1-1/8" x 3-1/2" deadlock strike 12 gauge 1-1/8" x 2-3/4" strike reinf. No lip 16 gauge

C. Frames (Window)

1. Exterior:

14 gauge A-60 galv. coated, bonderized sheet steel

2. Interior:

16 gauge A-60 galv. coated, bonderized sheet steel

D. Doors

1. Exterior:

Face sheets 16 gauge A-60 galv. coated bonderized sheet steel. SDI 100 Grade III, Model 2, full flush, hollow metal, seamless construction. Closed top and bottom edges flush with face sheets. Extra heavy duty.

2. Interior:

Face sheets 16 gauge A-60 galv. coated bonderized sheet steel. SDI 100 Grade III, Model 3, full flush, hollow metal, seamless construction. Closed top and bottom edged flush with face sheets.

3. Internal Stiffeners:

Currie 707 with polystyrene core or approved equal.

4. Sound Deadening:

Type standard with the manufacturer.

5. Hardware Reinforcement - Steel:

a. Hinges: 7 ga. x 1-1/2" or 1-5/8" x 10"

b. Closers and Holders: 12 ga. x 1-3/4" x 10" c. Locks: 7 ga. x 1-1/4" x 3"

d. Push/pull plates: 16 ga. x 14" x 14"

e. Panic bars: 3" x 8" and 4" x 24" (24 ga.)

f. Glazing and louver beads: 18 ga.

g. Coordinator Reinf.: 12 ga. x 1-3/8" x 15-1/2"

Clips, Anchors, Bolts, Screws and Rivets: Steel, types standard with the manufacturer.

7. Metallic filler: FS TT-F-322

 Shop Primer: Baked-on rust-inhibitive. ASTM - B117 Federal Specification TT-P-636

9. Field Painting: See Section 09900

2.02 FABRICATION

A. Frames

- Formed to profile as shown on drawings, constructed with square corners, and free of defects, warps or buckle.
- Welded-type for concrete, masonry construction and metal stud construction.
- Corners and connections welded with exposed welds ground flush and smooth.
- 4. Reinforcement: As per Section 2.01 B₃(3) above.
- Frames punched to receive rubber silencers, three each door on lock side and two at head of double doors.
- Provide removable spreaders attached to bottom of door frames, to insure correct alignment during shipping and installation.
- At angle type thresholds, notch frames and extend exterior portion down to lower floor level.
- 8. Provide sheet metal grout guards in frames at all lock bolts and tapped

hardware locations.

- Do not fill frames with mortar unless specifically called out on the drawings.
- 10. Do not fill mullions, including removable mullions, with mortar unless specifically called out on the drawings.
- 11. Silencers shall be installed in frames after doors are installed and painting is completed.

B. Anchors

- 1. Provide 16-gauge angle shaped floor clips welded to jambs and punched for two 3/8" diameter bolts each.
- 2. Provide adjustable length clip angles as required.

3. Jamb Anchors

- a. Frames set in masonry: For doors not more than 7 ft. High, provide not less than three 10" long adjustable 14 gauge corrugated galvanized masonry anchors for each jamb over 7 feet, not less than 4 for each jamb.
- b. Frames set against previously placed masonry or concrete: For doors not more than 7 feet high, by approval of Owner's representative only punch each frame jamb and dimple countersink for not less than three 3/8" diameter flat head screws. For doors over 7 feet high, punch less than four 3/8" diameter flat head screws. Provide pipe sleeves with spacers welded into each jamb at each fastening location. Provide 3/8" diameter galvanized steel flat head screws with approved expansion anchors or toggles as required. After installing flat head screws fill head of countersink screw with body filler then sand flush with frame.
- c. Frames set in metal stud partitions:
 Provide 16-gauge metal jamb anchor clips welded in each jamb at following locations:
 One at top, one 12" down from top and 24" o.c. for remainder of jamb frames.

C. Doors

1. Internal stiffeners spaced at not over 6" o.c.

- 2. Face sheets spot welded to internal stiffeners at not over 5" apart and in a manner that will prevent the welds from showing on the exposed side of face sheets.
- 3. Hardware reinforcement welded in place as required for hardware application. (See Section 2.02).
- Sound deadening:
 Interior surfaces treated with a sound deadening material to eliminate metallic ring.
- 5. Provide 16 gauge pre-bonderized zinc coated steel perimeter channels. Bevel stile edges 1/8" in 2".
- 6. Spot-weld channels to face sheets 3" o.c.
- 7. Close tops of all exterior out swinging doors flush with steel channels. Close flush and seal watertight.
- 8. Grind welds off smooth and flush.
- 9. Fold edge construction not acceptable.
- 10. At angle type thresholds, extend height of door by one inch over height indicated in Door Schedule.

D. Doors With Glass Panels

- 1. Openings formed so that no bead is required on outside face of doors.
- 2. Bead provided on both faces of doors and secured with oval head countersink screws on the inside face.

E. Doors with Louvers

- 1. Interior:
 - Provide 18-gauge elector zinc coated bonderized sheet steel louver frames and inverted "Y" type louvers full thickness of door, welded into doors.
- 2. Provide special size and shape louvers as shown.
- 3. Louver Door Security Panels: Woven wire mesh. Furnish and install on all interior metal louver doors.

F. Fire Door Assemblies

- Fire door assemblies, including frames and hardware, shall meet fire test and rating requirements in accordance with the procedure of Underwriters Laboratories or Factory Mutual Laboratories. Provide appropriate labels on doors and frame.
- Fabrication and assembly requirements necessary to obtain labels will take precedence over requirements shown or specified, except where requirements shown or specified exceed the sizes or gauges required for labeling.
- 3. Required ratings are as shown on drawings.

G. Finish Hardware Coordination

Metal doors and frames shall be prepared at the factory for application of finish hardware at the job site. Templates are to be supplied by the finish hardware manufacturer to assure accurate preparation of doors and frames in accordance with the Hardware Schedule.

H. Shop Painting by Manufacturer

- 1. Imperfections spot glazed with metallic filler and sand smooth.
- Doors and frames shall be cleaned thoroughly in preparation to receive manufacturer's shop primer.
- 3. After cleaning and treating the frames, the manufacturer shall apply a coat of baked-on-rust-inhibiter primer prior to shipping.

PART 3 - EXECUTION

3.01 INSTALLATION

A. General:

- 1. Install new doors and frames in locations shown on drawings. Thoroughly clean and prime prior to installation.
- 2. Install new window frames in locations shown on drawings. Thoroughly clean and prime prior to installation.
- 3. Prior to applying finish paint, areas where prime coat has been damaged shall have any rust removed, sanded smooth and touched up with same primer as applied at shop.

- 4. Finish paint doors and frames as indicated in Section 09900 PAINTING, in colors as called out on the Interior Design Plans or Painting Schedule.
- B. Deliver the work, ready to set up and erect in place as rapidly as the general construction work permits. Set work in place in accordance with approved setting drawings, in plumb and level positions, strongly secured against displacement and with built-in anchors. In masonry construction, set frames in advance of masonry work.

C. Fastening:

Secure each frame floor clip to concrete floor with two 3/8" diameter cadmium plated bolts set in drilled tamp-ins or self-drilling concrete anchors. Install jamb anchors as called for in 2/02, B.3. NOTE: Do not fill any frames with mortar unless specifically called out on the plans.

- D. Frames Installation Tolerances: Adjust standard steel door frames for squareness, alignment, twist, and plumb to the following tolerances:
 - 1. Squareness: Plus or minus 1/16 inch, measured at door rabbet on a line 90 degrees from jamb and perpendicular to frame head.
 - 2. Alignment: Plus or minus 1/16 inch, measured at jambs on a horizontal line parallel to plane of wall.
 - 3. Twist: Plus or minus 1/16 inch, measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of wall.
 - 4. Plumbness: Plus or minus 1/16 inch, measured at jambs at floor.
- E. Standard Steel Doors Installation Tolerances: Fit hollow-metal doors accurately in frames, within clearances specified below:

Non-Fire Rated Standard Steel Doors

- 1. Jambs and Head: 1/8 inch plus or minus 1/16 inch.
- 2. Between edges of pairs of doors: 1/8 inch plus or minus 1/16 inch.
- 3. Between bottom of door and top of threshold: Maximum 3/8 inch.
- 4. Between bottom of door and top of finished floor (no threshold): Maximum 3/4 inch.

Fire-Rated Steel Doors

1. Install doors with clearances in accordance with NFPA 80.

F. Bracing:

Brace frame jambs and heads receiving poured concrete adequately to resist deflection: brace frames in masonry walls and partitions adequately so the walls and partitions may be erected against same.

G. Install doors after masonry work and plastering have been completed and accurately fit and adjust doors to work properly. Application of finish hardware and door installation is specified in Division 8.

3.02 CLEAN-UP

- A. Upon completion of installation, clean surfaces of doors and frames by the procedure recommended by the Door Manufacturer.
- B. Clean up all rubbish and debris caused by this work and remove from the site. Leave areas surrounding openings in a broom-clean condition.

SECTION 08200 - WOOD DOORS

PART 1 - GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

A. Hollow Metal	Section 08100
B. Finish Hardware	Section 08700
C. Finish Carpentry	Section 06200
D. Painting	Section 09900

1.02 QUALITY ASSURANCE

Products of the following manufacturers or equal are acceptable:

- A. Marshfield Door Systems, Inc. (Formerly Weyerhaeuser Company)
- B. Eggers Industries, Architectural Door Division
- C. Ipik Door Co., Inc.
- D. VT Industries, Inc., Holstein, Iowa
- E. OSHKOSH door company

1.03 SUBMITTALS

- A. <u>Product Data:</u> Submit shop drawings indicating location and size of each door, elevation of each kind of door, details of construction, location and extent of hardware blocking, fire ratings, and other pertinent data.
- B. <u>Shop Drawings:</u> Submit shop drawings indicating location and size of each door, elevation of each kind of door, details of construction, location and extent of hardware blocking, fire ratings, and other pertinent data.
- C. <u>Specific Product Warranty:</u> Submit written agreement on door manufacturer's standard form signed by Manufacturer, Installer and Contractor, agreeing to repair or replace defective doors which have warped (bow, cup or twist) or which show telegraphing of core construction below in face veneers, or do not conform to tolerance limitations of NWMA and AWI.

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Protect wood doors during transit, storage and handling to prevent damage, soiling and deterioration. Comply with the "On-Site Care" recommendations of NWMA pamphlet "Care and Finishing of Wood Doors" and with manufacturer's instructions, and as otherwise indicated.
- B. Package doors at factory prior to shipping using manufacturer's standard method.

PART 2 - PRODUCTS

2.01 <u>SOLID CORE DOORS</u> (When called out on the Door Schedules)

- A. 20 minute at interior locations and offices as indicated on plans. Provide 1-hour label at interior 1-hour rated fire partition assemblies and 1½ hour label at 2 hour rated fire partition assemblies as per the Life Safety Plans or Building Plans.
- B. <u>Standard:</u> Meet or exceed NWMA Industry Standard I.S. 1-78 Series and Architectural woodwork Institute Type SLC and FD.
- C. <u>Veneer:</u> paint grade, luan veneer, plain sliced, per door schedule.
- D. Edge Band: Per manufacturers procedures.
- E. Crossbands: Per manufacturers procedures.
- F. <u>Core:</u> Staved hardwood lumber blocks bonded under pressure with 100% glue coverage; mineral core at label doors.
- G. Glue: Type I (face assembly) and type II (core assembly).
- H. Glass Lights and Louvers: Cut to size as indicated on drawings. Provide wood stops for glass light panels. All glass lights shall be clear 1/4" tempered glass or clear 1/4" safety laminate glass.
- I. Guarantee: 10 Years, interior use only.

2.02 <u>HOLLOW CORE DOORS</u> (When called out on the door schedules)

- A. Veneer: paint grade, luan veneer, plain sliced, per door schedule.
- B. Edge Band: Per manufacturers procedures.
- C. Crossbands: Per manufacturers procedures.
- D. Glue: Type I (face assembly)
- E. Guarantee: 10 Years, interior use only.

PART 3 - EXECUTION

3.01 INSPECTION

A. Verify that door frames are of type required and scheduled for the door and are installed as required for proper installation of doors.

PART 2 - PRODUCTS

2.01 <u>SOLID CORE DOORS</u> (When called out on the Door Schedules)

- A. 20 minute at interior locations and offices as indicated on plans. Provide 1-hour label at interior 1 hour rated fire partition assemblies and 1 ½ hour label at 2 hour rated fire partition assemblies as per the Life Safety Plans or Building Plans.
- B. <u>Standard:</u> Meet or exceed NWMA Industry Standard I.S. 1-78 Series and Architectural woodwork Institute Type SLC and FD.
- C. Veneer: stain grade, natural birch, plain sliced, per door schedule.
- D. Edge Band: Per manufacturers procedures.
- E. <u>Crossbands</u>: Per manufacturers procedures.
- F. <u>Core:</u> Staved hardwood lumber blocks bonded under pressure with 100% glue coverage; mineral core at label doors.
- G. Glue: Type I (face assembly) and type II (core assembly).
- H. Glass Lights and Louvers: Cut to size as indicated on drawings. Provide wood stops for glass light panels. All glass lights shall be clear 1/4" tempered glass or clear 1/4" safety laminate glass.
- I. Guarantee: 10 Years, interior use only.

2.02 HOLLOW CORE DOORS (When called out on the door schedules)

- A. <u>Veneer:</u> stain grade, natural birch, plain sliced, per door schedule.
- B. Edge Band: Per manufacturers procedures.
- C. Crossbands: Per manufacturers procedures.
- D. Glue: Type I (face assembly)
- E. Guarantee: 10 Years, interior use only.

PART 3 - EXECUTION

3.01 INSPECTION

A. Verify that door frames are of type required and scheduled for the door and are

installed as required for proper installation of doors.

- B. Do not install doors in frames which would hinder operation of doors.
- C. Do not remove labels from rated doors or cover with paint.

3.02 INSTALLATION

A. Fitting and machining:

- 1. Fit doors for width by planing; for height by sawing.
 - a. ½" from bottom (3/16 over threshold, saddle or carpet)
 - b. 1/8" maximum frame top and sides.
 - c. Bevel lock and hinge edges 1/8" to 1/2".
- Machine doors for hardware.
- 3. Cut light and louver openings in door not exceeding maximum 40% of height and 5" from door edge.
- 4. Seal all job site cut surfaces with two coats of paint or polyurethane before final hanging.
- B. <u>Installation of Doors:</u> Install in accordance with requirements of NWMA Standard Door Guarantee, and manufacturer's instructions.
- C. Install fire rated doors in corresponding fire rated frames in accordance with requirements of NFPA No. 80.
- D. <u>Finishing:</u> Door shall be field painted or polyurethane finished, per Interior Finish Schedule and in accordance with Section 09900, PAINTING.

3.03 ADJUST AND CLEAN

- A. Replace or re-hang doors which are hinge bound and do not swing or operate freely.
- Replace doors damaged during the construction period and those with visible glue spots.
- C. Refinish or replace doors damaged during installation. No visible runs of paint or polyurethane will be accepted.
- D. Replace doors that are warped and that pull away from door stops.
- E. Adjust all pocket doors so that door faces do not rub jambs or frames, and the

doors hang plumb in the openings. All pocket doors shall utilize 5-1/2" frames and have steel frame stiffeners to prevent frame distortion.

SECTION 08700 - FINISH HARDWARE

PART 1 - GENERAL

1.01 WORK NOT INCLUDED

- A. Rough Hardware
- B. Casework Hardware
- C. Installation of Hardware

1.02 GENERAL

- A. All exterior doors shall open outward or in direction of travel to an exit.
- B. Copies of the Hardware Schedule, templates and keying schedules shall be submitted to the Architect and approved before ordering.
- Exchange schedules and template lists, with related trades, for coordination with their Shop Drawings.

1.03 GUARANTEE

- A. The hardware supplier shall provide a written guarantee that all materials furnished under this Section will be free from defects in the materials and the workmanship for a period of one (1) year from the date of a final "Certificate of Occupancy".
- B. The hardware supplier, after a complete and thorough inspection by the Architect, shall further certify that all items furnished under this Section have been properly located, in accordance with the Hardware Schedule and the manufacturer's instructions.

1.04 SUBMITTALS

- A. Three (3) copies of the Hardware Schedule, complete with catalog cuts, shall be submitted for approval. Door numbers and hardware groups are not to be changed.
- B. Approval of the Hardware Schedule shall be for type, operation and finish only.

1.05 DELIVERY

- A. Each item of hardware shall be delivered to job site, packaged separately, complete with the necessary fasteners, screws and anchors. Provide templates and/or instructions as required.
- B. Mark each item so as to correspond with the Hardware Schedule, identifying contents and defining location.

PART 2 - PRODUCTS

2.01 HINGES

- A. All Hinges shall be STANLEY, HAGER, McKINNEY.
- B. Use three hinges per door leaf on all doors up to a door height of 7'-6"and width up to 3'-0". Add an extra hinge for each additional twenty-four (24) inches of door height and widths over 36" to a maximum of 48".
- C. Provide the following size and type hinges unless otherwise noted in the hardware groups which takes priority. Provide non-removable pins for exterior doors.
 - 1. Exterior Doors:

4-1/2" x 4-1/2", Stainless Steel

2. Interior Doors with Closers:

4-1/2" x 4-1/2", US26D finish

3. Interior Doors without Closers:

4-1/2" x 4-1/2", US26D finish

D. Finish

- 1. Exterior Doors: Stainless Steel
- 2. Interior Doors: Satin Chromium Plated Finish

2.02 LOCKS & EXIT DEVICES

- A. All locksets shall be AS SPECIFIED ON THE HARDWARE SCHEDULE. All locks shall have a minimum throw of ½". Finish to be per the Finish Hardware Schedule. Functioning of the locks shall be as designated in the hardware groups.
- B. Locksets shall comply with the following additional requirements:
 - 1. The hardware manufacturer will meet with the **owner** to finalize keying requirements and to obtain keying instructions in writing.
 - 2. All cylinders will be 6-pin interchangeable core type. All cylinders will be keyed to the existing **Schlage** key system.
 - All cylinders will be supplied with Temporary construction cores.
 Construction Cores and keys will be a different keyway (key section) than the final cores.
 - 4. The following will be provided by the Contractor:
 - a. 3 change keys each cylinder
 - b. 4 Construction keys
 - c. 2 Construction core removal keys
 - d. 2 Each of all GGMK, GMK and MK's used in the system

- e. Catalog cuts and parts manuals
- 5. All keys shall be stamped "DO NOT DUPLICATE".

2.03 CLOSING DEVICES

- A. All hydraulic door closers shall be provided by one manufacturer and guaranteed for five (5) years.
- B. Door Closers shall be LCN, HAGER at all doors per schedule, fully hydraulic, full rack and pinion action. Closers shall have a separate adjustment for latch speed, general speed and back check. All closers and accessories, except special purpose types, whether applied to hinge side, stop face, over door or on bracket, shall be non-handed. All closers are to be installed on the room side of the door except where noted in the Hardware Schedule. All closers are to be installed with thru-bolts and five screws in the foot.

2.04 STOPS

A. Wall Stops shall be AS SPECIFIED ON THE HARDWARE SCHEDULE, NOTE: Utilize Rockwood Model 409, US26D/626 at all doors that have push button locks. This model has a larger diameter recessed receiving hole. Wall stops to be utilized on interior/exterior frame walls to have solid wood backing to prevent drywall failure. Wall Stops WB11 should be mounted to the wood base. Areas with Vinyl or Ceramic Tile Base should utilize the wall stops 50C/60C.

2.05 THRESHOLD, WEATHERSTRIP

- A. Thresholds and Weather stripping shall be PEMKO, HAGER to match the types and sizes indicated on the Hardware Schedule or detailed on the drawings.
- B. Provide screws and anchors as required.
- C. Finish to be per Schedule.

2.06 PLACEMENT OF HARDWARE

Various items shall have the following heights and locations, unless otherwise indicated. (Heights are shown from finish floor to center line of item):

- A. Hinges: Standard Placement
- B. Cylindrical Lockset 38"

- C. Closer per manufacturer template to give maximum degree of opening. All closers to be mounted on room side of door.
- D. Stops:

1. Wall: On wall where knob or pull hits.

2. Floor: As per standard practice.

3. Chain Door: As per standard practice.

4. Over-Head: Per manufacturer template to give maximum degree of opening. All Over-Head stops to be mounted on room side of door.

PART 3 - EXECUTION

3.01 KEYING

- A. All installed locksets shall be keyed to the Owner's satisfaction. Coordinate with Owner as to manufacturer, function and type prior to ordering specified locksets.
- B. Submit keying schedule, based on the instructions and prior approval of the Owner's representative, for final approval before ordering locksets.

C. Delivery

- 1. All locks are to be delivered to the job site without the permanent key. All locks are to be keyed to the existing Owner's master key, if required.
- 2. A representative of the Hardware Supplier, upon the completion of the project, shall check all locks for proper location, operation and keying as well as deactivate the construction-key operation and transfer all locks to a permanent key operation.
- 3. All permanent keys shall be properly identified and tagged with a code number and location and shall be turned over directly to the Owner's representative.
- 4. Furnish six (6) master keys of each set to the Owner.

3.02 DESCRIPTION OF HARDWARE GROUP NUMBERS

The following Hardware Schedule is to be used as a general guide. Special or unusual conditions not covered in the schedule will have hardware of a similar type and quality to meet the job conditions, and it shall be the hardware consultant's responsibility to insure that all hardware is supplied to meet job requirements and produce a complete job.

IRCFD Fire Station #11 remodel

Door Numbers	HwSet#
1	03
2	03
3	03
4	02
5	01

Project: IRCFD Fire Station #11 remodel

Print Date: 05/18/2022

HARDWARE SCHEDULE:

- A. The following schedule is furnished for whatever assistance it may afford the contractor; do not consider it as entirely inclusive. Should any particular door or item be omitted in any scheduled hardware group, provide door or item with hardware same as required for similar purposes. Quantities listed are for each pair of doors; or for each single door.
- B. This hardware schedule prepared by.

HARDWARE GROUP NO. 01 - STORAGE

Allegion, PLC 3451 Technological Ave, Suite 7 Orlando FL 32817 Ph: 407-571-2000 Fax 407-571-2006

Pr	ovid	e each	SGL door(s) with the following:			
C	YT		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3		EA	HINGE	5BB1 4.5 X 4.5	630	IVE
1		EA	VANDL STOREROOM LOCK	ND96P6D RHO	626	SCH
1		EA	SURFACE CLOSER	4040XP REG OR PA AS REQ TBSRT	689	LCN
1		EA	WALL STOP	WS406/407CVX	630	IVE
1		EA	SILENCER	SR64	GRY	IVE
H/		WARE	GROUP NO. 02 - KITCHEN			
Pr	ovid	e each	SGL door(s) with the following:			
C	YT		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3		EA	HINGE	5BB1 4.5 X 4.5	630	IVE
1		EA	PASSAGE SET	ND10S RHO	626	SCH
1		EA	SURFACE CLOSER	4040XP REG OR PA AS REQ TBSRT	689	LCN

HARDWARE	GROUP NO.	03 - PANTRY
4	0	2

EA

EA

EΑ

1

1

Provide each SGL door(s) with the following:

KICK PLATE

WALL STOP

SILENCER

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	630	IVE
1	EA	EXIT CLASSROOM LOCK	ND25X70P6D RHO XN12-004	626	SCH
1	EA	OH STOP	450S	652	GLY
3	EA	SILENCER	SR64	GRY	IVE

SR64

8400 10" X 2" LDW B-CS

WS406/407CVX

Project: IRCFD Fire Station #11 remodel

Print Date: 05/19/2022

IVE

IVE

IVE

630

630

GRY

SECTION 09230 - CEMENT BACKING BOARD

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

Drawings and general provisions of Contract, including general and supplementary conditions and Division-1 Specifications Sections, addenda apply to work of this section.

1.02 RELATED WORK OF OTHER SECTIONS

Lightgage Metal Framing	Section 05400
Rough Carpentry	Section 06100
Gypsum Wallboard	Section 09250
Ceramic Tile	Section 09300

1.03 DESCRIPTION

Extent of cement backing board system work is shown on Drawings and Schedules for areas receiving ceramic tile.

1.04 QUALITY ASSURANCE

- A. Obtain cement board from a single manufacturer.
- B. Single-Installer Responsibility: A single installer shall perform the work of this section; and shall be a firm specializing in this work for at least 3 years, capable of showing successful installations similar to work required for project, using recommended attachment screws and spacing of screws.
- C. ANSI A108.11-1999: Interior installation of cementitious backer units.

1.05 SUBMITTALS

Submit manufacturer's product data, specifications; and installation instructions for the cement board systems.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to the job site in the original packages, containers, or bundles bearing the brand name and manufacturer's identification.
- B. Store materials in dry locations with adequate ventilation, free from water and in such a manner to permit easy access for inspection and handling. Stack cement boards flat to avoid sagging or damage to edges, or surfaces.

C. Handle cement boards to prevent damage. Protect metal framing members from being bent or damaged. Protect gypsum panels in same manner as cement boards.

PART 2 - PRODUCTS

2.01 MANUFACTURER

- A. Subject to compliance with requirements, provide DUROCK Cement Board System as manufactured by the United States Gypsum Company, unless otherwise indicated.
- B. Equivalent systems of other manufacturers will be accepted under conditions as set forth in the contract conditions.

C. Materials:

- Glass Mesh Mortar Unit (Cement Board): USG DUROCK Exterior Cement board ½" x 4' x 8'.
- 2. Cement board fasteners:
 - a. Non-wet areas- 1 1/4", DUROCK Screws: wafer head with anti-corrosive coating. Heads recessed or counter sunk.
 - b. Wet areas- 1 1/4", DUROCK Screws: wafer head stainless steel. Heads recessed or countersunk.
- D. Joint Reinforcement: DUROCK Tape (2" wide). **NOTE:** This portion of the work is to be performed by the Ceramic Tile contractor per Section 09300.
- E. Metal Framing: Comply with ASTM 0645: Manufactured by the United States Gypsum Company Min. 22 ga. Must meet ASTM A446, A525, A568, A463.

PART 3 - EXECUTION

3.01 <u>INSTALLATION</u>:

- A. Install metal framing in accordance with manufacturer's instructions. Stud spacing not to exceed 16 in. o.c. Provide double studs at ends of each board.
- B. Install cement board with rough side facing out and vertical edges over double supports. Stagger joints in successive courses. Install adjacent board closely but not forced.
- C. Fasten boards to framing with DUROCK screws. Space fasteners 8" o.c. at walls. Locate perimeter fasteners at least 3/8" from edges. Counter sink screw heads slightly beneath the board surface. Provide firm board contact with framing. Pre-

drill edge screw locations to prevent breaking at edges.

- D. Joint Reinforcement Tape and Mortar Skim Coat: Apply tape over board joints and interior corners. Do not overlap. NOTE: This portion of work to be performed by the Ceramic Tile Contractor per Specification Section 09300.
- E. Ceramic Tile: Comply with application requirements of Division-9 Section 09300.
- F. In wet areas, or areas subject to wash down due to periodic maintenance, install moisture barrier on top of cement board. NOTE: This portion of the work to be performed by the Ceramic Tile Contractor per specification Section 09300.

SECTION 09250 - GYPSUM DRYWALL

1.01 GENERAL

- A. Gypsum Board Standard: ASTM C 840
- B. As manufactured in the United States by one of the following approved companies:
 - 1. United States Gypsum Co.
 - 2. National Gypsum Co.
 - 3. Georgia-Pacific Gypsum Co.

1.02 MATERIALS

- A. Drywall Materials: Exposed Gypsum Board ASTM C 36
 - 1. Long Edges: Standard taper
 - a. 1/2" Gypsum Drywall (Regular).
 - b. ½" Moisture-Resistant Gypsum Drywall.
 - c. 5/8" Gypsum Drywall (Regular).
 - d. 5/8" Moisture-Resistant Gypsum Drywall.
 - e. 5/8" Type-X Fire Resistant Gypsum Drywall.
 - f. 5/8" Vandal Resistant (High Impact) Gypsum Drywall.
- B. Trim Accessories: Provide manufacturer's standard metal trim accessories, of the beaded type with face flanges for concealment in joint compound except where semi-finishing or exposed type is indicated. See plans and details for specific locations and conditions.
- C. Provide corner beads at external corners. Install with nails or screws at minimum of 16" on center. No crimp bead will be accepted unless in combination with nails or screws. As an alternate use Ultratrim-Outside 90 as manufactured by No-Coat. www.no-coat.com 1-888-662-6281
- D. Provide edge trim of the shape indicated where edge of gypsum board would otherwise be exposed or semi-exposed; L-type for abutment at edges, other Utype except special kerfed-type where kerf is provided in adjoining work. See plans and details for specific locations and conditions.
- E. Gypsum Board Fasteners: Self drilling, self-tapping, bugle head, screws.
- F. Joint tape: ASTM C 475, performed, Type II.
- G. Joint Compound: ASTM 475, Type I.
- H. Provide water-resistant type MR manufactured by United States Gypsum

Company for use with water-resistant backing board and cementitious substrate backing board.

1.03 DRYWALL INSTALLATION AND FINISHING

- A. Install gypsum boards in lengths and directions which will minimize number of end joints, and avoid end joints in central area of ceilings. Install walls and partitions with exposed gypsum boards vertical, with joints offset on opposite sides of partitions. Otherwise, install boards with edges perpendicular to supports, with end joints staggered over supports, except where recommended in a different arrangement by manufacturer. Install as per UL#U305 for 1-hour rating when utilizing rated panels or as specified on the Life Safety Plans.
- B. Form "Floating": Construction for gypsum boards at internal corners, except where special isolation or edge trim is indicated.
- C. Screw gypsum boards to supports.
- D. Drywall Finishing: Except as otherwise indicated, apply joint tape and joint compound at joints (both directions) between gypsum boards. Apply compound at accessory flanges, penetrations, fasteners heads and surface defects.
- E. Apply compound in three (3) coats (plus prefill of cracks where recommended by manufacturer); sand after last two (2) coats to achieve a **Level 4 or Level 5 finish** per U.S. Gypsum Corporation guidelines. Refer to the **Room Finish Schedule** for level of finish required for this project.
- F. Ceiling Finish as per **Finish Schedule** on the Construction Plans. Where a textured ceiling is called for on the drawings the drywall finisher shall provide a 24" X 24" sample board for approval by the Owner prior to applying any finished ceiling textures.
- G. The drywall installer shall notify the General Contractor of walls out of plumb in the vertical or horizontal direction, as well as the absence of proper wall, soffit, overhead deadwood blocking, pipe and wire plate protectors prior to installing drywall. Finished walls shall be no more than 3/16" out of dead straight within any (six) 6-foot direction. Walls not conforming to this standard shall be removed and replaced at the General Contractors expense.
- H. The drywall contractor shall remove all debris associated with his portion of the work and remove all dried finishing compound from the floors. All scrap drywall sections must be taken to a scrap yard by the subcontractor for recycling of the gypsum product.

END OF THIS SECTION

SECTION 09300 - CERAMIC TILE/PORCELAIN TILE/DIMENSIONAL STONE WORK

1.01 GENERAL

A. Coordination: Coordinate all with other trades whose work affects, connects with, or is concealed by tile installations. Before proceeding, make certain all required inspections have been made by local officials and the Architect.

B. Scope of work:

- 1. Preparation of substrate and installation of ceramic tile on walls, floors, and ceilings.
- 2. Preparation of substrate and installation of dimensional stone on floors and walls.
- 3. Preparation of substrate and installation of porcelain tile on floors.
- 4. Installation of waterproofing membrane on prepared substrate.

1.02 RELATED WORK IN OTHER SECTIONS

1.	Lightgauge Metal Framing	Section 05400
2.	Rough Carpentry	Section 06100
3.	Lathing and Stucco	Section 09100
4.	Cement Backing Board	Section 09230
5.	Toilet Accessories	Section 10800
6.	Floor Drains and Shower Drains	Section 15421
7.	Sealants and Adhesives	Section 07900

1.03 QUALITY STANDARDS

- A. Conform to applicable portions of the following:
 - ANSI A108.1A: Installation of ceramic tile in the wet-set method, with Portland cement mortar.
 - 2. ANSI A108.1B: Installation of ceramic tile on a cured Portland cement mortar setting bed with dry-set or Latex-Portland cement mortar.
 - 3. ANSI A108.5: Installation of ceramic tile with dry-set Portland cement mortar or Latex-Portland cement mortar.
 - 4. ANSI A108.13: Installation of load bearing, bonded, waterproof membranes for thin-set ceramic tile and dimension stone.
 - 5. ANSI A118.4: Specifications for Latex-Portland cement mortar.
 - ANSI A108.8: Installation of ceramic tile with chemical resistant furan resin mortar and grout.
 - 7. ANSI 137.1: Porcelain Tile. (ISO standard is equivalent for porcelain manufactured outside the United States).
 - 8. Tile Council of America, Inc.: The Industry's Guide for Installation Practices most current edition.

1.04 SUBMITTALS

- A. Submit samples of all ceramic tiles, porcelain tile and dimensional stone scheduled for installation.
- B. Submit samples of the waterproofing membrane/system proposed for installation.
- C. Submit manufacturer's product data for tile setting compound and grout proposed for installation.

2.01 PRODUCTS

A. Recommended Materials:

- 1. <u>Ceramic tile and dimensional stone:</u> As selected by the Architect or the Interior Designer. See the Drawing Schedules.
 - a. All ceramic floor tile located in areas that may become slippery when wet shall have a **non-slip** impervious surface. The tile must meet a coefficient of friction of 0.5 to 0.6 using a wet/dry test.
- 2. <u>Porcelain Tile:</u> shall have a Water Absorption Rate of 0.5% or less, shall have Abrasion Resistance of IV or V, shall have a Hardness on the Moh's Scale of 7 to 9. Tiles shall be Rectified (mechanically ground edges) with 1/8" grout lines.
- 3. Thin set adhesive per manufacturers recommendations and specification standards of 'The Tile Council of America' and meeting the Low-Emitting requirements of Specifications Section 07900.
- Marble: Window stools shall be Georgia or Alabama White domestic marble, cultured marble, or an approved, comparable product, unless specified otherwise on the drawings.
- Waterproofing Membrane: Laticrete 9235 waterproofing membrane in combination with Laticrete Reinforcing Membrane installed in accordance with manufacturer's recommendations.
- Mortar: Laticrete 4237 latex Thin Set Mortar Additive with Laticrete 211 Crete Filler Powder.
- 7. Grout: Laticrete Spectra Lock Pro Grout in color selected by the Architect.

3.01 EXECUTION

A. Inspection of Surfaces:

- Examine surfaces to receive tile, cement substrate backing board, setting beds, pressure treated wood blocking for mounting of toilet accessories and grab bars and accessories, before installation begins.
- Tile contractor shall be responsible for preparing installed cement backing board including taping of joints and mortar skimming of all faces to a true and level surface prior to installation of any ceramic tile.
- 3. Walls to receive ceramic tile shall not be out of level and true planes more than 1/8" in 24 inches.4. Do not proceed with installations until unsatisfactory conditions are corrected.
- B. Product delivery, storage and handling: Deliver all manufactured materials in original, unbroken containers bearing name of manufacturer, brand and grade seals. Keep materials dry, clean, and protected against deterioration in any form.

C. Installation:

- 1. Layout all work so that where possible no tiles less than half size occur. In any event install no half tiles above first course up from the bottom or away from first vertical course at internal and external corners. Align all joints, vertically and horizontally. Cut and drill neatly without marrying tile. Rub smooth any necessary cuts with a fine stone and set no cut edge against any fixture, cabinet, or other tile without a joint at least 1/16" wide. Cut, fit, adjust, and establish tiles neatly and accurately to accommodate accessories, interruptions, chases, returns, mechanical and electrical outlets, and finish at their exact location (as determined by jobsite conditions). Maximum variation shall be plus-or-minus- 1/8" in 2 feet when straight edge is laid on the surface in any direction.
- 2. Provide all required trim pieces as detailed for the various tiles specified.
- All floor and wall tile to be set using thin-set products as called out in this section. Utilize proper admixes for exterior installations and frost proof applications. When installing porcelain tile utilizing modified thinset, adhere to guidelines stipulated in ANSI 118.4.
- 4. Thoroughly wash out joints and saturate with clean water before grouting. Thoroughly grout into all joints to fill entire length and depth. Fill flush with face of tiles making a neatly finished, smooth surface. Prevent staining of grouted joints by applying a clear sealer to all exposed grout joints.

- 5. Provide preformed metal control joints at door openings and sufficient to isolate maximum areas of 25' X 25'. Color of control joint preformed infill to match the selected grout.
- 6. Installation of waterproofing membrane shall be behind all tiles, full height and full width within showers or areas subject to periodic washdown or wetting as scheduled maintenance. Utilize materials as specified within this section. Insure proper slopes to floor drains. Insure the membrane is installed continuous into drain or adjacent to drains utilizing a perimeter weep hole design. Wall membrane laps over the shower pan membrane. Do not penetrate the membrane with any fasteners within 24 inches above the finished floor tile. Test shower receptor and drainage fitting for leaks before commencing tile work. When installation of grab bars is required, set all concealed stainless steel fasteners in a bed of waterproof white sealant conforming with the Low Emitting requirements in Specifications Section 07900.

3.02 CLEANING AND PROTECTION

- A. Wipe surfaces clean after grouting, remove all traces of mortar and grout. Do not use acid solution for cleaning glazed tile.
- B. Close spaces to traffic or other work until tile is firmly set. Protect all work from damage at no additional cost to Owner.

SECTION 09510 - LAY IN PANEL CEILINGS (See schedule next page)

A. GENERAL

1. Acceptable Manufacturers:

a. Grid System: Chicago Metallic Corporation

Donn Corporation U.S. Gypsum Corp.

W.J. Haertel Division; Leslie-Locke National Rolling Mills Company

Armstrong Ceilings

b. Lay-in-Panels: Celotex

Armstrong Conwed U.S. Gypsum

2. Product delivery storage and handling: Store materials in protective packaging to prevent soiling or physical damage.

B. PRODUCTS

- Lay-in Panels: As per the attached schedule included in this specification section, or an approved equal.
- Grid Systems: With all components conforming to the requirements of ASTM C-635 in a low-sheen, baked-on white enamel finish or in a color and material to be selected by the Architect. See the plans for a complete description.
- 3. Perimeter Molding: Channel formed, of not less than 22-gauge steel, 1" horizontal exposed face with exposed edge hemmed; low sheen, baked-on white enamel finish or in a color to be selected by Architect.
- 4. Suspension System:
 - a. Hangers: Annealed zinc-coated wire #12 gauge or heavier.
 - b. Carrying Channels: 1-1/2" x 3/4 x #16 gauge for greater spans.

C. EXECUTION

- Condition of Surfaces: Examine surfaces scheduled to receive suspended or directly attached lay in panels for unevenness, irregularities that would affect quality or execution of work. Install ceiling system in strict accordance with the manufacturers printed specifications.
- 2. Cleaning: Clean soiled units after installation.
- 3. Remove and replace damaged or improperly installed units.

SCHEDULE OF SELECTED CEILINGS:

Location	Type	Lay In Panel & Grid
Dorm (match existing) field verify	I	ARMSTRONG 24" X 48" X 7/8" Cirus Open Plan 583 Beveled Tegular, Class - A, w/ 9/16" silhouette bolt slot grid

SECTION 09650 - RESILIENT FLOORING AND BASE

PART I - General

1.01 <u>RELATED DOCUMENTS</u>:

The Bidding and Contract Documents, General Requirements and Addenda as may be issued prior to bidding, shall govern the work under this section.

1.02 <u>DESCRIPTION:</u>

- A. Provide resilient flooring, vinyl or rubber base, and related items and their installation. Refer to Finish Schedule for description of base being utilized.
- B. Related Work Specified Elsewhere:
 - 1. Section 09680 & 09681- Carpeting.

1.03 QUALITY ASSURANCE:

Acceptable Manufacturer - Select product of the following manufacturers or equal:

- B. Tarkett Floor Products
- C. Congoleum
- D. Mannington
- E. Armstrong: Azrock
- F. VPI Premium Wall Base
- G. Roppe Rubber Corporation: Wall Base
- H. Burke Mercer: Rubber or Vinyl Wall Base
- I. Johnsonite Wall base
- J. Marley: Flexco
- K. Armstrong: Vinyl or Rubber Base
- L. Allstate: Rubber Base and Flooring

1.04 SUBMITTALS:

- Literature: Submit manufacturers specifications and installation instructions for each type of material specified.
- B. <u>Samples:</u> Submit 12" X 12" samples of all materials specified in this Section for approval and color section.
- C. <u>Maintenance Data</u>: Furnish list of recommended maintenance products and recommended maintenance methods and procedures.

1.05 PRODUCT HANDLING:

<u>Deliver and store</u> on the site in original containers with seals unbroken and labels intact until time of use.

1.06 ENVIRONMENTAL REQUIREMENTS:

<u>Temperature</u> of the rooms shall be 70 F. (21 C.) Minimum for 24 hours prior to installation, during installation, and for 48 hours after installation.

PART 2 - PRODUCTS

2.01 MATERIALS:

- A. <u>Vinyl Composition Tile (VCT):</u> Provide tile complying with FS-SS-T-312B, Type IV, Composition 1 (asbestos free). Colors as selected by Architect, 15% of which shall be feature tile and strips. Size of tile: 12" x 1/8".
- B. <u>Inlaid Commercial Sheet Vinyl Flooring</u>: Inlaid composite with compression-resistant vinyl chips on flexible backing, with am approved mildew protection throughout all layers. Static load limit of 125 p.s.i., Nominal thickness of 0.085 inch; Wear layer thickness 0.050 inch, roll width 6, 8, 9, or 10 feet, Pattern to be omnidirectional, color as selected by the Architect and approved by Owner. Meet Federal Specification SS-T-312B, Type III, Vinyl.
- C. <u>Vinyl or Rubber Base</u>: 4" high x 1/8" thick **roll stock only**, (see finish schedule for different locations and types of base).
- D. <u>Low-Emitting Adhesive</u>: Provide waterproof stabilized type as recommended by the flooring manufacturer and as outlined in its Technical Manual complying with Specifications Section 07900 Sealants and Adhesives.
- E. <u>Concrete Slab Primer</u>: Non-staining type as recommended by the flooring manufacturer.
- F. <u>Wax</u>: As recommended by the flooring manufacturer.
- G. Reducer Strips: Beveled edge, 1" wide, 1/8" thick tapered.
- H. <u>Feature Strip</u>: Provide where no threshold or saddle is scheduled between rooms, with flooring of same type and manufacturer, in a different color and width to match door jamb.

PART 3 - INSTALLATION

3.01 PREPARATION OF SURFACE:

A. The contractor is to carefully examine substrate and conditions to which the VCT tile is to be applied. Any conditions detrimental to work under this Contract shall be reported to the General Contractor in writing. Failure in this respect shall constitute an acceptance of the base to which his work is to be applied and any further corrections to be made in his work will be done at this contractor's expense, insofar as his work is concerned. This Contractor will only be required to patch

minor holes or cracks, with suitable materials, before applying the resilient flooring.

- B. <u>Do not commence</u> work until other trades have completed their work.
- C. <u>Fill all cracks</u>, holes, etc. in concrete sub-floor with fillers as recommended by manufacturer of resilient flooring.

3.02 INSTALLATION:

- A. <u>Apply primer</u>, if recommended by the resilient material manufacturer, prior to application to adhesive.
- B. <u>Resilient Flooring shall be installed</u> in accordance with the manufacturer, prior to application of adhesive. Wood floor faces shall be fully sanded to receive adhesive.
- C. <u>Install</u> reducer strips where VCT abuts concrete floor.

D. <u>Centering:</u>

- Establish center lines for tile patterns both ways with respect to principal walls in areas or rooms. Start laying tile from center lines; keep joints parallel to principal walls.
- 2. Where field pattern is not a whole number of units, lay out the pattern so that the edge units are not smaller than half units (except corner pieces).
- E. <u>Uniformity</u>: If vinyl composition tile, use tile from contents of at least two different containers so that pattern will be uniform and not spotty due to the variance that may be found in different containers. Use tile from one mill run.

F. Application of Adhesive

- Evenly spread approved adhesive on prepared surfaces as recommended by manufacturer; within the time recommended by manufacturer; embed each tile firmly in place to assure proper bond. In wet areas, such as toilet rooms,
 - or rooms with floor drains, utilize a waterproof adhesive complying with the Low-Emitting requirements per Specification Section 07900- Sealants and Adhesives.
- 2. <u>Cover only</u> that amount of area which can be covered by resilient flooring within recommended working time of the adhesive.

G. Laying Vinyl Composition Tile

1. <u>Lay tile</u> with grain in all tile running in the same direction (generally parallel with the short wall of the room).

- Where necessary, cut tiles neatly and snugly around pipes and at other vertical projections.
- 3. <u>Provide hairline joints</u>, cut straight and true. Seal tile joints at pipes with waterproof cement.
- 4. <u>Provide tiles</u> level and flush with the surface of adjoining tiles.
- 5. <u>Immediately</u> remove stains, spots and smears of adhesive.

H. Installing Base

- <u>Do not install</u> base until plaster, painting or other backing materials has thoroughly dried. Install bases on walls, including walls behind movable equipment.
- Extend bases into closets offsets and adjoining areas scheduled to receive base.
- 3. <u>Firmly cement</u> bases to previously prepared surfaces, using an approved recommended adhesive.
- 4. <u>Fit base</u> joints tight and align top and bottom edged in firm contact with walls and floors throughout its entire length.
- 5. <u>Install</u> base in carpet areas after carpet has been installed.
- 6. Provide factory exterior and interior corners where clearance is available.

I. <u>Installing Edge Strips</u>:

- 1. <u>Install edge</u> strips with adhesive wherever exposed tile edges occur.
- 2. Where tile stops at doorways, set edge strips directly under doors.

3.03 <u>CLEANING AND FINISHING</u>:

- A. After flooring has been laid and adhesive is thoroughly cured, clean and finish resilient floors as recommended by tile manufacturer. Install two coats of wax and machine buff.
- B. <u>Keep traffic off</u> finished floors. Protect all floors as necessary with reinforced Kraft building paper and tape joints. Maintain this paper cover and otherwise protect floor until acceptance.
- C. Provide 20 square feet of extra stock of each color used. Provide 8 linear feet of extra stock of each color and size of base used. Each product to be left with General Contractor for delivery to Owner at completion of the job.

SECTION 09655 - VINYL TRANSITION MOLDING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

The bidding and Contract Documents, General Requirements and Addenda as may be issued prior to bidding, shall govern the work under this section.

1.02 DESCRIPTION

Provide vinyl transition strips wherever carpet abuts vinyl flooring systems, ceramic, quarry or porcelain flooring systems. Refer to the Interiors or Floor Plan Drawings to determine the actual model numbers specified and locations.

1.03 QUALITY ASSURANCE

Acceptable Manufacturer: Select product of the following manufacturer or approved equals:

TARKETT
JOHNSONITE
MERCER PRODUCTS COMPANY, INC.
MACKLANBURG-DUNCAN
FLEXCO COMPANY
GENOTEK

1.04 SUBMITTALS

- A. Literature: Submit manufacturers specifications and installation instructions for each type of material specified.
- B. Samples: Submit samples of all materials specified in this Section for approval and color selection.
- Maintenance Data: Furnish list of recommended maintenance methods and procedures.

1.05 PRODUCT HANDLING

Deliver and store on the site in original containers with seals unbroken and labels intact until time of use.

1.06 ENVIRONMENTAL REQUIREMENTS

Temperature of the rooms shall be 70 F. (21 C.) minimum for 24 hours prior to

installation, during installation, and for 48 hours after installation.

PART 2 - PRODUCT

2.01 Shall consist of 100% first quality homopolymer vinyl accessories to act as an edge trim or transition between dissimilar flooring materials. All trim shall meet the requirements of the ADA sections 4.5.2 (changes in level) and 4.5.3 (carpet-edge trim compliance).

Colors shall be clear through as indicated on the Interior Drawings.

PART 3 - INSTALLATION

- 3.01 Pursuant to manufacturer's published instructions and RFCI "Recommended Work Procedures for Resilient Floor Coverings".
- 3.02 Lay materials true to line, level, and with tight butt and miter joints.
- 3.03 Installations shall be at interior spaces only.
- 3.04 Secure the base strips with manufacturer approved adhesives and remove all excess adhesives with approved thinners upon completion of installations.

PART 4 - WARRANTY

4.01 Manufacturer's full warranty shall apply.

*** END OF SECTION ***

SECTION 09730 - SEAMLESS EPOXY FLOORING

PART 1 GENERAL

1.01 SCOPE

- A. Provide all labor and materials for a seamless, decorative, epoxy flooring material, including all surface preparation, primers, and finish coats.
- B. Related work specified elsewhere:
 - 1. Concrete Division 3
 - 2. Thermal & Moisture Protection Division 7

1.02 ACCEPTABLE MANUFACTURER AND INSTALLER

A. DUR-A-FLEX, Inc.

CRAWFORD LAB FLO-ROCKS

CROSSFIELD PROD. CORP. DEX-O-TEX

SELBY SELBACLAD

STONEHARD, Inc. STONESHIELD HRI

VALSPAR Corp: QUARTSITE

B. Installer shall be a manufacturer's approved installer, who has the technical qualifications, current and certified in writing, and the facilities to install the specified systems.

1.03 <u>DELIVERY AND STORAGE</u>

- A. Material shall be delivered to job-site in clean, clearly labeled containers and inspected by installer prior to start of the job.
- B. Material shall be stored in a dry, enclosed area protected from the elements. Temperatures of storage area shall be kept between 60 degrees and 90 degrees F.

1.04 ENVIRONMENTAL REQUIREMENTS

- A. New concrete shall be cured no less than 28 days under good conditions. Concrete subfloors on or below grade shall be properly equipped with vapor barriers and perimeter drains.
- B. Adequate utilities, including electric, water, heat (between 60 degrees and 90 degrees F.) and lighting of no less than 80 ft. Candles measured at floor surface to be supplied by the General Contractor.

Specifier Note: Heat and light are extremely important parts of the installation. Usually these utilities are functioning before epoxy finishes are scheduled for installation, however in some cases the epoxy coating shall be installed prior to equipment, fixtures and even walls in some cases. Lack of these necessities can and will spoil a good installation. Without heat the curing process can be extended or even stopped. Without adequate light even the best mechanic cannot provide a

quality finish.

- C. Work area shall be free of other trades during, and for a period of 24 hours, after floor installation.
- D. Protection of finished floor from damage by subsequent trades is the responsibility of the General Contractor.

1.05 WARRANTY

A. Contractor to submit a (one) year warranty against defects in materials and workmanship upon acceptance of the finished product and Certificate of Occupancy by the Owner.

PART 2 PRODUCTS

2.01 PRODUCT DESCRIPTION

A. The installed product **shall be 3/16" thick** DUR-A-QUARTZ multiple-component, decorative, institutional flooring system, by DUR-A-FLEX, Inc., or an approved equal in **standard non-skid** surface texture.

2.02 PHYSICAL PROPERTIES

A. Physical Properties - (DUR-A-QUARTZ "BM" EPOXY FLOORING)

Mix Ratio (Dur-A-Glaze #4).1 part Hardener, 2 parts Resin.

Pot Life....Approximately 22 minutes at 70 degrees F*.

Hardness, Shore D....ASTM D-2240...75-80.

Compressive Strength...ASTM D-695...17,500 psi.

Tensile Strength...ASTM F-638...4,000 psi.

Tensile Elongation....ASTM D-638...7.5%.

Flexural Strength...ASTM D-790...6,250 psi.

Linear Shrinkage....ASTM D-2566...0.02%.

Coefficient of Linear Expansion...12 degrees F. to 140 degrees F.

In./in./degrees F....ASTM D-696...20 X 10-6.

Bond Strength to Concrete....ACI-403...335 psi, concrete fails.

Shear from Steel Plate....MIL D-3134...no cracking or delamination.

Indentation....MIL D-3134...025.

Impact Resistance...MIL D-3134...no cracking or delamination.

Elevated Temperature...MIL D-3134...no slip or flow.

Water Absorption....ASTM D-570...0.04%.

Electrical Conductivity....non-conductive.

Flammability....ASTM D-635...self-extinguishing.

Abrasion Resistance Taber Abrader...CS-17 wheels, 2000 gm. Load, 1000

cycles...avg. 24.0 mg. loss.

Toxicity....non-toxic, USDA approved.

* Pot Life is shorter at higher temperatures. Do not use below 50 degrees F. or above 95 degrees F. Note: Chemical & stain resistance can be improved by using Poly-Thane #2 as a topcoat(s). Scratch resistance can be improved by using Dur-A-Thane or Dur-A-Glaze #2 as a topcoat(s).

2.2 PRODUCT PACKAGING

A. All materials used shall be precision mixed on site with manufacturer supplied mix and measure apparatus to ensure a timely, accurate mix ratio and minimize waste.

PART 3 EXECUTION

3.01 PREPARATION

A. Concrete preparation to include use of a steel shotblast machine or a solution of muriatic acid to create a profiled substrate, combined with "dust-free" diamond grinding for all edges and areas where shotblast machine is unable to reach.

Specifier Note: For maximum bond strength, steel shotblasting is always recommended.

3.02 PRODUCT INSTALLATION

- A. COLORS: Q28 Colored Quartz Aggregate is available in 21 standard colors. As selected by Architect.
- B. THICKNESS: 1/8" for moderate traffic i.e.: corridors, 3/16" thick for heavy traffic ie: restroom and kitchens, or to fill and level eroded concrete. See Article 2.01 for thickness required for this project.
- C. LIMITATIONS: Substrate and ambient temperature must be higher than 50 degrees F during the installation and curing period. Eroded or spalled areas must be "filled and leveled" with an epoxy grout composed of Dur-A-Glaze #4 and aggregate.
- D. SURFACE PREPARATION: Surface must be dry and perfectly clean, free of all oil, grease, detergent film, sealers and/or curing compounds in accordance with Dur-A-Flex, Inc., preparation guidelines.
- E. APPLICATION PROCEDURE and SPREAD RATES: Troweled application and broadcast is acceptable or a Double Broadcast application is acceptable with either yielding a uniform appearance. Either application must achieve the specified 1/8" to 3/16" thickness called out in Article 2.01. Procedure is as follows:
 - 1. Prepare the surface as recommended.
 - 2. Apply Dur-A-Glaze #4 at approximately 100 sq. Ft. per gallon.

- 3. Broadcast Q28 Colored Quartz at approximately ½ lb. per sq. foot.
- 4. Let cure. (Cure times vary depending on hardener selection, from 2 to 10 hours.)
- 5. Sweep up excess sand.
- 6. Apply Dur-A-Glaze #4 at approximately 100 sq. ft. per gallon. This application serves as a base coat for a second broadcast.
- 7. Broadcast Q28 Colored Quartz at approximately ½ lb. per sq. foot.
- 8. Repeat steps 4 & 5.
- 9. Apply first top coat of Dur-A-Glaze #4 at 100-125 sq.ft. per gallon.
- 10. Let Cure.
- 11. Apply second topcoat of Dur-A-Glaze #4 at 200-250 sq.ft. per gallon, or any Dur-A-Flex high performance topcoat such as Poly-Thane #2, Dur-A-Thane or Dur-A-Glaze #2 at 200-300 sq. ft. per gallon.

<u>NOTE</u>: One top coat is generally sufficient where a high degree of non-skid is required such as a shower room. For shower and bathroom installations, provide only one coat of top coat material to insure a **non-skid** surface.

3.03 DETAILS

- A. Moving cracks and joints shall be thoroughly routed and vacuumed clean, then filled with DUR-A-FILLER #2.
- B. Surface deviations to be pre-patched with patching compound comprised of DUR-A-GLAZE #4 and No-Sag #2 or Q28 Quartz.
- C. A 4" integral cove base is to be installed at perimeter walls.
- D. Prime surface with Elast-O-Coat membrane as per manufacturer's recommendations.

END OF SECTION

SECTION 09900 - PAINTING

1.01 GENERAL

1. Submittals:

- a. In addition to manufacturer's data, application instructions, and label analysis for each coating material, submit samples for Architect's review of color and texture only. Resubmit samples if requested until required sheen, color and texture is achieved. Submittals must also include material requirements data per Article 1.08.
- b. On 8" x 8" hardboard, provide two (2) samples of each color and material, with texture to simulate finish conditions.
- c. On wood surfaces provide two (2) 4" x 8" samples for natural and stained wood finish.
- d. On actual wall surfaces and other building components, duplicate painted finishes of acceptable samples, for approval by the Architect.

1.02 DESCRIPTION OF WORK

- 1. Painting and finishing of interior and exterior items and surfaces, unless otherwise indicated.
- Paint exposed surfaces, except as otherwise indicated, whether or not colors are designated. If not designated, colors will be selected by Architect from standard colors available for the coatings required.
- 3. Work Not Included: Unless otherwise indicated, shop priming of ferrous metal items and fabricated components are included under their respective trades. Unless otherwise indicated, painting not required on surfaces of concealed areas. Finished metals such as anodized aluminum, stainless steel, bronze, and specialty metals will not be painted. Do not paint any moving parts of operating units, or over any equipment identification, performance rating, name or nomenclature plates or coderequired labels.

1.03 DELIVERY AND STORAGE

 Deliver materials to job site in new, original, and unopened containers bearing manufacturer's name, trade name, and label analysis. Store where indicated in accordance with manufacturer's instructions.

1.04 PROTECTION:

1. Protect work of other trades. Correct any painting related damage, by cleaning, repairing or replacing, and refinishing, as directed by Architect.

1.05 PROJECT CONDITIONS:

- 1. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 98 degrees. Do not apply paints in rain, fog or mist; when relative humidity exceeds 95 percent; at temperatures less than 5 degrees F above the dew point; or to damp or wet surfaces.
- 2. Provide finish coats which are compatible with prime paints used. Provide barrier coats over incompatible primers where required. Notify Architect in writing of anticipated problems using specified coatings with substrates primed by others.
- 3. Surface Conditions: Apply paint and coatings when the following surface conditions have been met:
 - a. Interior Drywall 12% maximum moisture content.
 - Exterior Stucco and Cementitious Wall Panels- 12% maximum moisture content.
 - c. Exposed Wood, Wood Doors, Wood Trim- 15% maximum moisture content.

1.06 EXTRA MATERIALS:

1. Provide a minimum of 1 gallon of each material and color of paint as materials applied that are packaged and stored with identification labels describing contents.

1.07 SURFACE PREPARATION:

- 1. Perform preparation and cleaning procedures in strict accordance with coating manufacturer's instructions of each substrate condition.
- Remove hardware and accessories, machined surfaces, plates, lighting fixtures and similar items in place that are not to be finish-painted or provide surface-applied protection. Re-install removed items and remove protective coverings at completion of work.
- 3. Seal all wood required to be job-painted. Prime edges, ends, face, undersides and backsides of counters, cases, fascias, soffits, cabinets, counters, etc.

- 4. Back-prime with one coat on interior paneling only where masonry, plaster, or other wall construction occurs on backside.
- 5. Seal tops, bottoms, and cut-outs of wood doors with heavy coat of quick drying sealer immediately upon delivery to job. Do not paint door UL Labels.

1.08 MATERIAL REQUIREMENTS:

- 1. Paints and coatings used on the interior of the building (i.e., inside of the weatherproofing system and applied on site) must comply with the following criteria as applicable to the project scope:
 - Architectural paints and coatings applied to interior walls and ceilings must not exceed the volatile organic compound (VOC) content limits established in Green Seal Standard GS-11, Paints, 1st Edition, May 20, 1993.
 - Anti-corrosive and anti-rust paints applied to interior ferrous metal substrates must not exceed the VOC content limit of 250 g/L established in Green Seal Standard GC-03, Anti-Corrosive Paints, 2nd Edition, January 7, 1997.
 - c. Clear wood finishes, floor coatings, stains, primers, sealers and shellacs applied to interior elements must not exceed the VOC content limits established in South Coast Air Quality Management District (SCAQMD) Rule 1113, Architectural Coatings, rules in effect on January 1, 2004.

1.09 MATERIAL PREPARATION:

1. Mix, prepare, and store painting and finishing materials in accordance with manufacturer's directions.

1.10 APPLICATION:

- Apply painting and finishing materials in accordance with manufacturer's directions.
 Use applicators, and techniques best suited for materials and surfaces to which
 applied, but in no case will spray application be used unless approved by Architect.
- 2. Apply additional coats when undercoats, stains, or other conditions show through final paint coat, until paint film is of uniform finish, color and appearance.
- 3. Paint surfaces behind movable equipment same as similar exposed surfaces. Paint surfaces behind permanently fixed equipment with prime coat only before equipment is installed.
- 4. Finish exterior doors on tops, bottoms and edges same as exterior faces, unless otherwise indicated. Do not paint door UL Labels.
- 5. Sand lightly between succeeding enamel, urethane or varnish coats.

- 6. Omit first coat (primer) on metal surfaces which have been shop-primed and touch-up painted, unless otherwise specified.
- 7. Apply prime coat to material which is required to be painted or finished, and which has not been prime coated by others.
- 8. Apply each material at not less than the manufacturer's recommended spreading rate, to provide a total dry film to thickness of not less than 4.0 mils for entire coating system of prime and finish coats for (3) coat work.
- 9. Provide a total dry film thickness of not less than 2.5 mils for entire coating system of prime and finish coat for two (2) coat work.

1.11 COMPLETED WORK:

1. Match approved samples for color, texture and coverage. Remove, finish or repaint work not in compliance with specified requirements.

1.12 TOUCHING UP AND CLEANING:

1. Upon completion, all touching up as required shall be done and paint removed from all surfaces which are not specified to receive paint.

1.13 PAINT, GENERAL:

- 1. Material Compatibility:
 - a. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
 - b. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.

1.14 PAINTING SCHEDULE

The following paints specified shall be manufactured by one of the following manufacturer's or an approved, comparable product:

Benjamin Moore Paints Sherwin Williams Paints Porter Paints Devoe Paints MAB Paints ICI Paints

Armourcoat, USA

NOTE: Color selections to be by the Owner, the Architect, and/or the Interior Designer. See Finishes Schedule on the plans for location of paint. When more than five (5) colors are selected for interior <u>or</u> for exteriors, a painting upcharge shall be negotiated prior to application of paints.

A. Exterior wood Trim, Wood Siding, Wood Fascias & Soffits, Etc.:

One (1) coat sealer primer on all faces and edges Two (2) coats Benjamin Moore Exterior Acrylic Latex paint on exposed surfaces.

- B. Interior Drywall: Two (2) coats Benjamin Moore Regal AquaVelvet Eggshell (319) over base sealer coat. Specialty finishes may apply also.
- C. Galvanized Metal: One (1) coat Benjamin Moore Galvanized Iron Primer. Two (2) coats Benjamin Moore Meta-lastic Paint.
- D. Metal Surfaces: Structural Steel Beams & Columns, Wall girts, Roof purlins, Fire Sprinkler Riser Assemblies, Steel Trusses, Steel Tanks:

Exterior Exposed – Two (2) coats Benjamin Moore Retard-X Rust Inhibitive
Latex Primer 162 over the shop delivered primer, welds
and bolts. Allow a minimum of 4 hours between coats.
Finish with two (2) coats Benjamin Moore Eggshell alkyd
house paint 108.

Interior Exposed – Same applications but one (1) coat only of latex Primer 162.

NOTE: All galvanized metal to be washed with mineral spirits to remove any oil.

- E. Exterior Stucco and One (1) coat Benjamin Moore Masonry sealer. Two (2) Cementitious Wall coats Benjamin Moore Latex, or Acrylic Latex paint. Flat Panels: finish.
- F. Steel Doors Spot prime any scratches in factory primer with Benjamin & Frames: Moore Iron Clad Rust Inhibiter Red Oxide. Finish with (2) coats Benjamin Moore oil based or water based enamel, (semi-gloss).
- G. Wood Doors and (When Finish Schedule calls for Painted): Trim (Interior) One (1) coat sealer primer. Two (2) coats Benjamin Moore oil based enamel, (semi-gloss).
- H. Wood Doors and (When Finish Schedule calls for Sealed): Trim (Interior) Three coats of Satin Finish clear urethane, lightly sanded between coats.
- I. Interior Aluminum or Steel Handrails: One coat metal primer and two coats shop applied industrial enamel, or factory powder coating, (both gloss finish).

- J. Exposed finish Grade Concrete Block: One coat block filler and sealer primer. Specialty Paint, two (2) coats acrylic latex, over primer in accordance with the Manufacturers Specifications.
- K. Exterior Aluminum Tubing, Handrails, Guardrails, Caps, Cast Trim and Frames: Powder coated after completed fabrication and assembly and prior to installation. Powder Coat RAL standard color as specified on Architectural Details.
- L. Exterior Architectural Masonry Units (such as decorative split faced, split ribbed, and smooth faced colored block, and any manufactured stone such as Herpel), including the mortar used to set the units, shall be sealed with a water repellent-anti graffiti coating after installation and cleaning of all block faces.
 EXCEPTION: If the block manufacturer supplies an integral water repellent admixture in their block and a water repellent is added to the grout (mortar) during installation, then no exterior sealer is required.
- M. Toilet Room Walls: Apply water base epoxy coating full height on the wall materials scheduled in toilet rooms/bathrooms, to achieve an impervious finish.

NOTE: DO NOT APPLY EPOXY PAINTS TO ANY INTERIOR FACES OF BARE BLOCK AT MASONRY EXTERIOR WALLS. UTILIZE LATEX PAINTS WITH BREATHABILITY OF 1 PERM OR GREATER.

- ON INTERIOR MASONRY Semigloss Finish using Sherwin Williams Paints.
 - a. 1st coat: S-W KEM CATI-COAT EPOXY FILLER/SEALER B42 WA8/B42 WA9 (87-108 sq. ft./gal @ 8-10 mild dry).
 - b. 2nd coat: S-W Water Based Catalyzed Epoxy B70/B60 V25.
 - c. 3rd coat: S-W Water Based Catalyzed Epoxy B70/B60 V25, (8mils wet, 3 mils wet per coat).
- 2. ON DRYWALL Semi-Gloss Finish using Sherwin Williams Paints.
 - a. 1st coat: S-W PrepRite 200 Latex Primer, B28W200, (4 mils wet, 1.2 mils dry).
 - b. 2nd coat: S-W Heavy Duty Epoxy, B67 Series/B60 V3. (3 mils dry per coat)
 - c. 3rd coat: S-W Heavy Duty Epoxy, B67 Series/ B60 V3. (3 mils dry per coat)

- N. Stained Concrete Floors when called for on Finish Schedule: Two coats solid color stain material as per Specification Section 09940. Apply over a clean, cured, dry, dirt and dust free, lightly broomed finished concrete slab. Color as selected by the Architect. Make a special effort to never apply concrete sealers to any surface to receive concrete stains.
- O. Specialty Coatings, when scheduled on the Interior Finish Schedule, shall be placed in accordance with manufacturer's specification for application and protected until the project is occupied by the end user.
- P. Specialty coatings approved, when scheduled on the interiors include:
 - a. Amourcoat
 - b. Polymix

*** END OF THIS SECTION***

SECTION 10155 - SOLID PLASTIC TOILET PARTITIONS

PART I - GENERAL

1.01 RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to work of this section.

1.02 SUMMARY

Extent of toilet partitions as indicated on drawings.

Types of toilet compartments include: 1" thick, solid plastic (polymer) homogenous in color.

Styles of toilet compartments include: Floor-anchored, overhead braced, with integral hinge system.

Styles of screens include: Floor-anchored, wall hung, and overhead braced.

Toilet accessories, such as toilet paper holders and grab bars, are specified elsewhere in Section 10800.

1.03 SUBMITTALS

- A. Product Data: Submit manufacturer's detailed technical data for materials, fabrication, and installation, including catalog cuts of anchors, hardware, fastenings, and accessories.
- B. Recycled Content: Indicate recycled content; indicate percentage of pre-consumer and post-consumer recycled content per unit of product.
- C. Local/Regional materials: Indicate location of manufacturing facility; indicate distance between manufacturing facility and the project site.
- D. Submit environmental data in accordance with Table 1 of ASTM E2129 for products provided under work of this section.
- E. Verify that plastic products to be incorporated into this Project are labeled in accordance with ASTM D1972.
- F. Shop Drawings: Submit shop drawings for fabrication and erection of toilet partition assemblies not fully described by product drawings, templates, and instructions for installation for installation of anchorage devices built into other work. Backing in walls and ceilings supplied under Section 06100.

G. Samples: Submit full range of color samples for each type of unit required. Submit 6" square samples of each color and finish on same substrate to be used in work, for color verification after selections have been made.

1.04 QUALITY ASSURANCE

- A. Field Requirements: Take field measurements prior to preparation of shop drawings and fabrication where possible, allowing for acceptable tolerances, to ensure proper fittings of work.
- B. Coordination: Furnish inserts and anchorages which must be built into other work for installation of toilet partitions and related work; coordinate delivery with other work to avoid delay.
- C. Regulatory Requirements: Conform to ANSI A117.1 and FBC Chapter 11 codes for access for the handicapped operation of toilet compartment door and hardware and screens for urinal access.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

Manufacturer: Subject to compliance with requirements, provide products of one of the following:

Accurate Partitions Div., U.S. Gypsum Co. Bobrick Washroom Equipment, Inc. Santana Products Company AMPCO, Hialeah, FL Capitol Partitions, Inc. Global Steel Products Corporation Rockville Partitions Inc. Columbia Partitions, a division of PSISC

2.02 MATERIALS

- A. General: Provide materials that have been selected for surface flatness and smoothness. Exposed surfaces that exhibit pitting, seam marks, roller marks, stain, discoloration, telegraphing of core material, or other imperfection on finished units are not acceptable.
- B. Solid Plastic: High Density Polyethylene (HDPE) with homogenous color throughout. Provide material not less than 1" thick, seamless construction with edges eased to a radius of .250".
 - 1. Recycled Content: Minimum 20% post-consumer recycled content OR a

minimum of 40% pre-consumer recycled content at Contractor's option.

- C. Pilaster Shoes: ASTM A 167, Type 302/304 stainless steel, not less than 3" high, 20-gauge, finished to match hardware. Anchor to finish floor with plastic anchors and #14 X 1 ½" star head security pin, stainless steel screws.
- D. Stirrup Brackets: Manufacturer's standard design for attaching panels to walls and pilaster, either chromium-plated non-ferrous cast alloy ("Zamac") or anodized aluminum. Continuous stirrups required.
- E. Edging Strips: Anodized aluminum.
- F. Hardware and Accessories: Manufacturer's standard design, heavy-duty operating hardware and accessories of chromium-plated non-ferrous cast alloy ("Zamac").
- G. Wall Brackets: Full length, continuous, (6063-T Alloy) with mill finish weighing not less than .822 lbs. per linear foot. Wall brackets shall be pre-drilled by manufacturer with holes spaced every 6" along full length of brackets. Wall brackets shall be thru-bolted to panels and pilaster with one-way anti-theft bolts. Attachment of brackets to adjacent wall construction shall be accomplished by (1) theft proof Zamac mushroom nail in head anchor directly behind the vertical edge of panels and pilasters at every 12" along the full length of bracket and (2) No. 5 plastic anchors and No. 14 x 1 1/4" stainless steel phillips head screws at each 12" interval alternately spaced between anchor connections.
- H. Headrail: Shall be heavy aluminum extrusion (6063-T6 Alloy) with mill finish in anti-grip configuration weighing not less than 1.88 lbs. per linear foot. Headrail shall be fastened to tops of pilasters and headrail brackets by thru-bolting with star-head security pins, stainless steel barrel bolts (no cadmium plated bolts will be accepted).
- I. Headrail Brackets: Shall be of 16 or 18-gauge stainless steel.
- J. Anchorages and Fasteners: Unless otherwise indicated, use manufacturer's standard exposed fasteners of stainless steel, with theft-resistant type heads and nuts.

2.03 FABRICATION

- A. General: Furnish standard doors, panels, screens, and pilasters fabricated for partition system, unless otherwise indicated. Furnish units with cutouts, drilled holes, and internal reinforcement to receive partition-mounted hardware, accessories, and grab bars, as indicated.
- B. Door Dimensions: Unless otherwise indicated, furnish 24" wide inswinging doors for ordinary toilet stalls and 32" to 36" wide (clear opening) outswinging or inswinging doors at stalls equipped for use by handicapped. See plans for sizes

- and configurations of stall components.
- C. Doors: Fabricated 55" in length to be mounted 13" A.F.F. with edging strip fastened to full bottom edge unless stipulated otherwise on interior elevations.
- D. Pilasters: 82" high and fastened to floor and to wall brackets with pilaster shoes.
- E. Overhead-Braced Partitions: Furnish galvanized steel supports and leveling bolts at pilasters, as recommended by manufacturer to suit floor conditions. Make provisions for setting and securing continuous extruded aluminum anti-grip overhead-bracing at top for each pilaster. Furnish shoe at each pilaster to conceal supports and leveling mechanism.
- F. Floor-Supported Screens: Furnish pilasters not less than 1" in thickness, panels and pilasters of same construction and finish as toilet partitions. Furnish specified anchorage devices, complete with threaded rods, lock washers, and leveling adjusting nuts at pilasters, to permit structural connection to floor. Furnish shoe at pilaster to conceal anchorage.
- G. Hardware: Furnish hardware for each compartment partition system, as follows:
- H. Hinges: Heavy aluminum extrusion (6063-T6 Alloy) with bright dip anodized finish with wrap around flanges, and thru-bolted to doors and pilasters with oneway anti-theft bolts. Hinges will be factory set to a full close position unless otherwise noted. (Recessed flush mounted hinges not acceptable).
- I. Door Pull: Heavy chrome plated Zamac. Include wall stop in handicapped stall.
- J. Coat Hook/Bumper: Heavy chrome plated Zamac with rubber bumper.
- K. Door Strike and Keeper: Heavy aluminum extrusion (6063-T6 Alloy) with bright dip anodized finish with wrap-around flange surface, mounted, and thru bolted to pilaster with one-way anti-theft bolts.
- L. Door Latch Housing: Heavy aluminum extrusion (6063-T6-Alloy) with bright dip anodized finish surface mounted and thru-bolted to door with one-way ant-theft bolts. Slide bolt and bottom shall be heavy aluminum with "Tough-Coat Black" finish.

2.04 FINISHES

A. Surface: Of all Polymer Resin components to be similar and equal to "Plasti-Glaze 280" by Santana products Co., or approved manufacturer listed. Colors are to be selected from manufacturer's standard colors by Architect and confirmed during the submittal process with a maximum of two colors.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. General: Comply with manufacturer's recommended procedures and installation sequence. Install partitions rigid, straight, plumb, and level. Provide clearances of not more than 1/2" between pilasters and panels, and not more than 1" between panels and walls. Secure panels to walls with not less than two stirrup brackets attached near top and bottom of panel. Locate wall brackets so that holes for wall anchorages occur in masonry or tile joints. Secure panels to pilasters with not less than two stirrup brackets located to align with stirrup brackets at wall. Secure panels in position with manufacturer's recommended anchoring devices.
- B. Overhead-Braced Partitions: Secure pilasters to floor and level, plumb, and tighten installation with devices furnished. Secure overhead-brace to each pilaster with not less than two fasteners. Hang doors and adjust so that tops of doors are parallel with overhead-brace when doors are in closed position.
- C. Screens: Attach with concealed anchoring devices, as recommended by manufacturer to suit supporting structure. Set units to provide support and to resist lateral impact.

3.02 ADJUST AND CLEAN

- A. Hardware Adjustment: Adjust and lubricate hardware for proper operation. Set hinges on inswinging doors to hold open approximately 30 degrees from closed position when unlatched. Set hinges on outswinging doors (and entrance swing doors) to return to fully closed position.
- B. Cleaning: Clean exposed surfaces of partition system using materials and methods recommended by manufacturer, and provide protection as necessary to prevent damage during remainder of construction period.

END OF SECTION

SECTION 10260 - CORNER GUARDS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary Conditions and Division - Specification sections, apply to work of this section.

1.02 DESCRIPTION OF WORK

Furnish and install, as detailed, as located on the Drawings, at all exterior doors with drywall corners, and at corridor interior corners C/S Acrovyn Surface Mounted Corner Guard 90 degree Models SM20, SSM-20 and the 135-degree Model SM-20M. All as manufactured by Construction Specialties, Inc. or an approved equal. Complete details, locations and samples of selected models and colors, including end caps, and mounting hardware shall be submitted to the Architect for approval.

1.03 APPROVED MANUFACTURER'S OR EQUAL

Construction Specialties, Inc., Acrovyn Arden Architectural Balco Metalines, Inc. IPC/InPro Corp. Korogard, RJF International Inc. Pawling Corporation, Pro Tek

1.04 MATERIAL

Corner guards shall be manufactured from .078" thick nominal high impact vinyl/acrylic extrusions, designed to absorb and resist abrasions under impact. The extrusion shall include a matte finish pebblette grain surface, and be supplied in a **color to be selected by Owner & Architect**. Continuous retainers shall be a minimum .063" thickness. End caps and mounting hardware shall be furnished to complete the assembly.

1.05 DESIGN

Corner guards shall be securely locked in place yet provide for free-floating action to absorb heavy impact without damage to guard, retainer or adjacent wall. Corner guard shall be straight and true over full length.

1.06 PERFORMANCE

Vinyl/acrylic extrusions shall be U.L. tested, Classified and Labeled reflection a Class I Fire Rating in accordance with UL=723 (ASTM-E84-91a) (CAN 4S102-2-M83 in Canada) test procedures. Chemical and stain resistance shall be per CSAV-280 standards, established by manufacturer.

Color shall be integral with components matched in accordance with SAE J-1545-(Delta E) with color difference no greater than 1.0 units using the Hunter (Lab) scale. Impact tested in accordance with applicable provisions of ASTM-F476-76.

END OF THIS SECTION

SECTION 10520 - PORTABLE FIRE EXTINGUISHERS AND CABINETS

PART I - GENERAL

1.01 RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to work of this section.

1.02 DESCRIPTION OF WORK

- A. Definition: "Portable fire extinguishers" includes units which can be hand-carried as opposed to those which are equipped with wheels or to fixed fire extinguishing systems, unless otherwise indicated.
- B. Extent of fire extinguishers is indicated on drawings with a FE designation.
- C. Accessories include: Mounting brackets and recessed cabinets.

NOTE: All Fire Extinguishers for this project are wall hung and not recessed cabinets.

1.03 QUALITY ASSURANCE

- Provide portable fire extinguishers and accessories by one manufacturer of those specified.
- B. Portable Fire Extinguisher Standard: Provide new portable fire extinguishers which comply with applicable UL standard and are labeled by UL. All extinguishers shall be installed and maintained in accordance with NFPA 10, "Portable Fire Extinguishers." Install only fully charged fire extinguishers.

1.04 SUBMITTALS

- A. Product Data: Submit manufacturer's technical data, detail drawings, and installation instructions for each portable fire extinguisher and/or recessed cabinet for the project.
- B. Schedule: Submit schedule indicating types, quantities, sizes and installation locations for each portable fire extinguisher and/or cabinet for the project.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURER'S

A. Manufacturer: Subject to compliance with requirements, provide extinguishers and cabinets manufactured by one of the following:

J.L. Industries, Inc. Larsen's Manufacturing Co. Modern Metal Products by Muckle Potter-Roemer, Inc.

2.02 MATERIALS - GENERAL

- A. Provide the following types of extinguishers in accordance with area/occupancy uses:
 - In General Office Spaces Fire Extinguishers: Multi-purpose dry chemical type (2A-10BC-FE): UL rated 2-A:10:B:C, 5 lb. Nominal capacity, in enameled steel container, for class A, Class B, and Class C fires. Equal to J.L. Industries Cosmic 5E.
 - 2. In Kitchen/Breakroom/Employee Lounge Spaces/ Electrical Rooms: Liquid carbon dioxide, UL rated, 10 lb nominal capacity, in enameled steel container for class B, and Class C fires only. Equal to J.L. Industries Sentinal 10.
 - 3. In Electronic Equipment/Computer Room: Inergen clean agent EPA approved fire extinguishing system complete with metal supply piping, heads, regulators, sensors and steel tanks secured to approved wall brackets. Discharges as an odorless clear gas leaving no residue to clean-up or reclaim. Class A,B,C fires, with system sized to match volume of room to be protected. This system is not considered portable and is specified under a separate section, when utilized in lieu of sprinkler systems in these specialty rooms.

2.03 MOUNTING BRACKETS

- A. Provide manufacturer's standard bracket designed to prevent accidental dislodgment of extinguisher, of proper size for type and capacity of extinguisher indicated, in manufacturer's standard plated finish. Extinguishers must be mounted with the bottom of the cylinder at 26 inches above the finished floor if the unit projects more than 4 inches off the face of the wall.
- B. Provide a recessed or semi-recessed cabinet, clear anodized aluminum, clear bubble, no letters on the bubble. NOTE: All semi-recessed cabinets must meet ADA guidelines for projections into rooms and hallways. Projections cannot exceed 4 inches. Mount cabinet tubs with case access handles and extinguisher handles at a maximum of 48 inches above finished floor.

PART 3 - EXECUTION

3.01 INSTALLATION

A. Install items included in this section in locations and at mounting heights indicated, or if not indicated, at heights to comply with applicable regulations of governing authorities. Where exact location of surface-mounted cabinets and/or bracket-mounted fire extinguishers is not indicated, locate as directed by Architect.

3.02 IDENTIFICATION

A. Identify bracket-mounted extinguishers with a permanently affixed sign with a red background and white letters spelling "FIRE EXTINGUISHER" applied to wall surface above extinguisher. Letter size, style and location as scheduled in Section 10440- Specialty Signs.

END OF SECTION

SECTION 10800 - TOILET ACCESSORIES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary conditions and Division - 1 Specifications sections, apply to work of this Section.

1.02 DESCRIPTION OF WORK

- A. Extent and location of each type of toilet accessory is shown on drawings. Provide accessory only if drawn and identified on the Architectural Drawings.
- B. Types of toilet accessories required may include the following: (Refer to plans and interior elevations for locations of specific items)

Paper towel dispensers

Toilet tissue dispensers

Grab bars

Soap dispensers

Shower Rods

Mirrors

Heavy Duty Clothes Hook

Shelf with Mop and Broom Holders

Reversible Folding Shower Seat

Diaper Changing Stations

Wall Mounted Electric Hand Dryers

C. Some type of toilet accessories are included as part of toilet partitions elsewhere in Division 10.

1.03 QUALITY ASSURANCE

- A. Inserts and Anchorages: Furnish inserts and anchoring devices which must be set in concrete or built into masonry; provide PT wood backing as required, coordinate delivery with other work to avoid delay.
- B. Accessory Locations: Coordinate accessory locations with other work to avoid interference and to assure proper operation and servicing of accessory units.
- C. Manufacturer: Provide each type of toilet accessory required as manufactured by one of the following:
 - 1. American Specialties Inc.
 - 2. Bradley Corporation
 - 3. Nutone
 - 4. ASI Group Watrous

- 5. Bobrick Washroom Equipment, Inc.
- 6. Gamco
- 7. Franklin Brass
- 8. A & J Washroom Accessories
- 9. San Jamar Dispensers
- 10. Brocar
- 11. Koala
- 12. World Dryer

1.04 SUBMITTALS

- A. Product Data: Submit manufacturer's technical data and installation instructions for each toilet accessory.
- B. Setting Drawings: Provide setting drawings, templates, instructions, and directions for installation of anchorage devices and cut out requirements in other work.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Stainless Steel: AISI Type 302/304, with satin No. 4 finish, 22 gage minimum, unless otherwise indicated.
- B. Galvanized Steel Mounting Devices: ASTM A 153, hot dip galvanized after fabrication.
- C. Fasteners: Screws, bolts, and other devices of same material as accessory unit or of galvanized steel where concealed.

2.02 FABRICATION

- A. General: Stamped names or labels on exposed faces of toilet accessory units are not permitted, except where otherwise indicated. Wherever locks are required for a particular type of toilet accessory, provide same keying throughout project. Furnish two keys for each lock.
- B. Surfaced-Mounted Toilet Accessories, General: Except where otherwise indicated, fabricate units with tight seams and joints, exposed edges rolled. Hang doors or access panels with continuous piano hinge or minimum of two 1 ½" pin hinges of same metal as unit cabinet. Provide concealed anchorage wherever possible.
- C. Recessed Toilet Accessories, General: Except where otherwise indicated, fabricate units of all welded construction, without mitered corners. Hang doors or

access panels with full-length stainless steel piano hinge. Provide anchorage which is fully concealed when unit is closed.

2.03 TOILET TISSUE DISPENSERS

- A. General Toilet Rooms Toilet Tissue Dispenser: BOBRICK B 2740
- B. Public Park Restroom Buildings (non-oceanfront): BOBRICK B-2892
- C. Public Park Restroom Buildings (oceanfront): SAN JAMAR SANR4000TBK

2.04 SURFACE MOUNTED TOWEL DISPENSERS

BOBRICK B - 262

2.05 GRAB BARS (GR BR)

Stainless Steel Type: Equal to Bobrick B-6806 x 36 and B - 6806 x 42.

2.06 SOAP DISPENSERS

Bobrick B-4112 or Bradley 6542 Surface Mounted Dispensers capable of dispersing antibacterial soaps.

2.07 SHOWER RODS

Bradley Model 9531 Heavy Duty 1 1/4" O.D., 18 ga. Satin finish stainless steel.

2.08 MIRRORS

- A. General Toilet Rooms: Bobrick B-165, 18" X 30" mirror. Satin finish stainless steel frame with 1/4" float/plate glass mirror electrolytically copper plated. Mount with reflecting surface a maximum of 40 inches above finished floor.
- B. Public Park Restroom Buildings: Polished Stainless Steel Mirror BOBRICK B-1656, 24" wide X 48" high. Same mounting height requirement as above.

2.09 HEAVY DUTY CLOTHES HOOK

Bobrick B-2116, heavy duty clothes hook with concealed mounting. Withstands 300-1b downward pull. Hook and flange are one-piece brass casting with satin nickelplated finish. Supply 2 X 6 pressure treated wood backing in wall for proper mounting. Flange diameter is 2 3/4" and unit projects 3 7/16" from wall.

2.10 SHELF WITH MOP AND BROOM HOLDERS

Bobrick B-239 X 34, 18-gauge, type 304 stainless steel, satin finish, 13" high, 8" deep, 34" long. Anti-slip mop holders have spring loaded rubber cam that grips handles 7/8" to 1 1/4" diameter. Stainless steel hooks.

2.11 REVERSIBLE FOLDING SHOWER SEAT

Bobrick B-5181, complying with ADA accessibility standards. Seat is ivory colored solid phenolic. Reversible for left- or right-hand installation in the field. Frame and mounting brackets are type 304 stainless steel and feature a self-locking mechanism. Seat measures 33" wide, projects 22 5/16" from wall. Average mounting height 17 to 20" from top of floor to seat.

2.12 DIAPER CHANGING STATION

ASI Model No. 9012, Bobrick B-2200, Brocar Model 100EH, Koala KB100-00, or World Dryer ABC-100, colors grey or white. Sizes are 34.5 to 35 inches wide, 19 to 20 inches high, and 4 inches deep. Changing surface mounted at 34" to 38" above the finished floor. Use manufacturer's mounting hardware and comply with their installation requirements to support a minimum 100-pound load in the open position. Surface mount only, do not recess unit.

2.13 WALL MOUNTED ELECTRIC HAND DRYERS

As manufactured by one of the following: World Dryer SLIMdri Model #L-971 110-120V, 8.3-amp Hand Dryer with brushed chrome cover, Bobrick Model B-7120 115V, 15-amp Hand Dryer with stainless steel cover, Saniflow SPEEDFLOW Model M06ACS, 100-120V, 9.5-amp Hand Dryer with satin finish stainless steel cover or NOVA 1 Model 0830 120V, 10-amp Hand Dryer with white epoxy enamel on die cast aluminum cover. All units include infrared sensors for automatic hands-free operation and both include auto shutoff. Projection off wall is 4 inches to comply with ADA requirements. Mounting height to bottom edge of units for front approach is 44 to 48 inches.

2.14 INSTALLATION

Install toilet accessory units in accordance with manufacturers' instructions, using fasteners which are appropriate to substrate and recommend by manufacturer of unit. Install units plumb and level, firmly anchored in locations indicated.

2.15 ADJUST AND CLEAN

- A. Adjust toilet accessories for proper operation and verify that mechanisms function smoothly.
- B. Replace damaged or defective units.
- C. Clean and polish all exposed surfaces after removing protective coatings.

*** END OF SECTION***

DIVISION 11 - EQUIPMENT

SECTION 11400 - FOOD SERVICE EQUIPMENT

The kitchen equipment depicted on the plans is being purchased and delivered to the site by the Owner. The kitchen equipment by Owner are the gas range, electric dishwasher, and three (3) refrigerators. All equipment to be placed by General Contractor and connected to waste, water supply, electric and natural gas by the General Contractor as part of the Base Bid. The General Contractor is responsible for providing the exhaust hood complete with exhaust fans and make-up air fans, roof curbs, fire suppression in each hood completed to satisfy the local Fire Inspector and local codes, two compartment sink with side drain trays and swing head fittings. These hood items will be supplied and installed by the General Contractor as part of the Base Bid.

END OF SECTION

INDIAN RIVER COUNTY FIRE / EMS STATION #11 INTERIOR REMODEL

Fire Station #11 2555 93rd Street Wabasso, FL 32967

INDEX TO DRAWINGS

ARCHITECTURAL

ABB ABBREVIATIONS / GENERAL NOTES
A-1 DEMOLITION PLAN

A-2 PROPOSED FLOOR PLAN
A-3 REFLECTED CEILING PLAN
A-4 INTERIOR ELEVATIONS
A-5 ROOF PLAN AND DETAIL

MECHANICAL

M-0.1 MECHANICAL NOTES AND SCHEDULES

M-2.1 MECHANICAL PLAN

ELECTRICAL

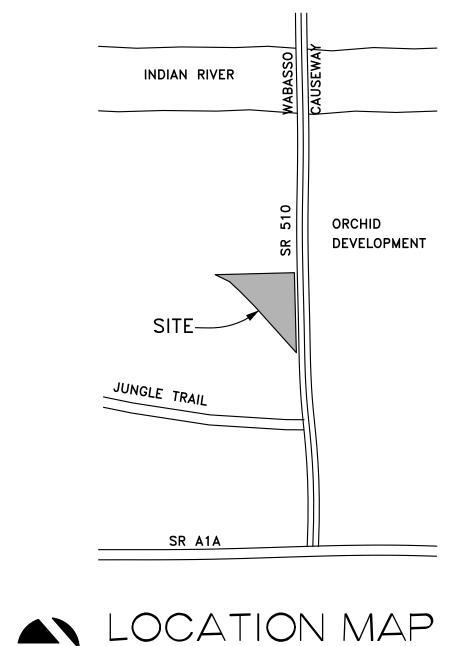
E-0.1 ELECTRICAL NOTES AND SCHEDULES

E-2.1 LIGHTING PLAN
E-3.1 POWER PLAN

PLUMBING

P-0.1 PLUMBING NOTES AND SCHEDULES

P-2.1 SANITARY PLAN
P-3.1 DOMESTIC WATER PLAN



ARCHITECT

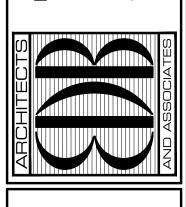




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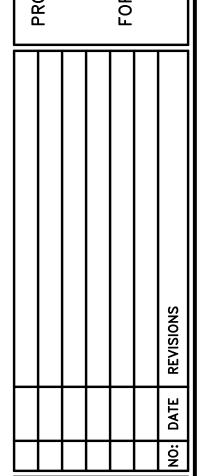
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ROYAL PALM POINTE, SUITE "D"
O BEACH, FLORIDA 32960



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COMM. NO: IOO22IVB
DATE: I7 MAY 2O22
BY: JNR

CH'KD: JFB

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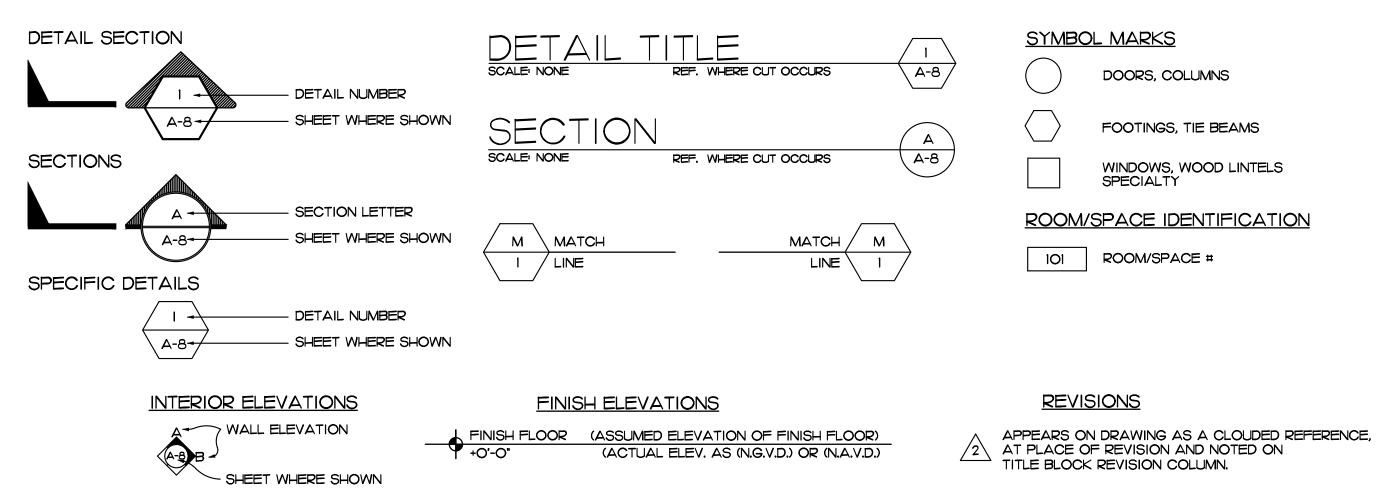
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GENERAL NOTES

- THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS SHOWN ON THE CONSTRUCTION 6. DOCUMENTS AND EXISTING CONDITIONS IN THE FIELD. ANY DISCREPANCIES IN THE ABOVE WILL CONSTITUTE A "STOP WORK" ORDER FOR THAT PORTION OF THE CONSTRUCTION ONLY. THE ARCHITECT IS TO BE NOTIFIED IMMEDIATELY FOR RESOLUTION.
- EVERY ATTEMPT HAS BEEN MADE TO DELINEATE THE EXISTING CONDITIONS AND DETAILS, THE CONTRACTOR MUST VISIT THE SITE TO VISUALLY ESTABLISH THE COMPLETE SCOPE OF WORK AND CONDITIONS TO BE CONSTRUCTED.
- 3. THE GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION SHALL BE AIA DOCUMENT A 201, 2007 EDITION, A COPY OF WHICH IS AVAILABLE FOR REVIEW AT THE ARCHITECTS OFFICE.
- 4. THE CONTRACTOR SHALL WARRANT AND GUARANTEE ALL MATERIALS AND WORKMANSHIP FOR A PERIOD OF I (ONE) YEAR FROM THE "DATE OF SUBSTANTIAL COMPLETION".
- 5. THE CONTRACTOR IS TO SECURE AND PAY FOR ALL PERMITS AND SHALL SECURE THE "CERTIFICATE OF OCCUPANCY".

- THE CONTRACTOR(S) SHALL PROVIDE AND MAINTAIN COMPLETE WORKERS COMPENSATION, GENERAL LIABILITY AND BUILDERS RISK INSURANCE.
- ALL MATERIALS UTILIZED SHALL BE NEW AND OF THE QUALITY SPECIFIED, SUBSTITUTIONS WILL BE ALLOWED ONLY WITH THE ARCHITECT'S PRIOR WRITTEN APPROVAL.
- THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE MANUFACTURER'S INSTRUCTIONS AND CATALOG CUTS.
- PRIOR TO FINAL PAYMENT, THE CONTRACTOR SHALL ISSUE TO THE OWNER. AN EXECUTED "FINAL RELEASE OF LIEN" FORMS FROM ALL PARTIES HAVING LIEN RIGHTS AGAINST THE OWNER.
- IO. ALL WORK IS TO BE PERFORMED IN ACCORDANCE WITH "BEST TRADE PRACTICES" FOR THE GEOGRAPHIC AREA IN WHICH THE PROJECT IS LOCATED.
- II. UNLESS WHERE NOTED OTHERWISE, THE CONTRACTOR SHALL PROVIDE ALL THE NECESSARY LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS FOR A COMPLETE AND OPERATING PROJECT.

_EGEND



CONSTRUCTION ADMINISTRATION GUIDELINES

INSPECTION REQUIREMENTS

- BY ARCHITECT, PRIOR TO ALL CONCRETE POURS
- BEFORE COVERING WORK WITH DRYWALL AND PRIOR TO CEILING INSTALLATION. WHEN MECHANICAL, ELECTRICAL & PLUMBING ROUGH-INS
- TO ESTABLISH A PUNCH LIST (WHEN CONTRACTOR HAS TOTALLY COMPLETED HIS OWN ESTABLISHED PUNCH LIST AND AFTER CERTIFICATE OF OCCUPANCY.)
- AT FINAL INSPECTION, FOLLOWING COMPLETION OF PUNCH LIST.
- AT MONTHLY PAY REQUEST AND WEEKLY PROGRESS INSPECTIONS
- PROJECT SUPERINTENDENT SHOULD ALWAYS BE PRESENT

II. PAY REQUEST

- AS PER OWNER/ CONTRACTOR AGREEMENT UTILIZING AIA DOCUMENTS
- LIEN RELEASES REQUIRED (PARTIALS AND FINALS)
- FOR STORED MATERIALS (CERTIFICATE OF INSURANCE REQUIRED)

III. OTHER REQUIREMENTS OF THE CONTRACTOR

- BAR GRAPH SCHEDULE OF PROGRESS TIME SCHEDULE AND PERIODICALLY UPDATE, AS REQUESTED
- A SCHEDULE OF VALUES (A.I.A. FORM #G-703)

IV. CONSTRUCTION PRIORITIES

- ESTABLISH DATE FOR THE PRECONSTRUCTION MEETING
- CHECK OUT LONG LEAD ITEMS - ALLOW ORDERING TIME
- MAINTAIN CONSTRUCTION LOG DOCUMENTING RAIN DAYS WHEN SCHEDULED WORK COULD NOT BE PERFORMED.
- MAINTAIN A MARKED UP SET OF CONSTRUCTION PLANS W/ RED BALLPOINT PEN TO BE SUPPLIED TO ARCHITECT FOR USE IN ESTABLISHING AS BUILT DRAWINGS.

V. <u>CHANGES / CORRESPONDENCE</u>

- ALL CORRESPONDENCE OR DIRECTIVES THRU ARCHITECT AND COPIED TO OWNER
- NO DIRECTIVES FROM EMPLOYEES. ALL REQUESTS FOR INFORMATION OR CHANGES THRU ARCHITECT AND OWNER

VI. CHANGE ORDERS

- PROPER PROTOCOL MUST BE FOLLOWED IN REGARDS TO ANY CHANGE ORDERS. OWNER, ARCHITECT AND CONTRACTOR MUST SIGN OFF <u>PRIOR</u> TO ANY WORK BEING PERFORMED BY CONTRACTOR OR SUBS.
- GROUP ITEMS INTO ONE (I) CHANGE ORDER, RATHER THAN SEVERAL SINGLE ITEM CHANGE ORDERS.
- ANY WORK COMPLETED PRIOR TO A CHANGE ORDER BEING SIGNED BY ALL PARTIES IS AT CONTRACTOR'S RISK. CHANGE ORDERS SHALL BE SIGNED BEFORE WORK IS COMMENCED.

VII. SHOP DRAWING SUBMITTALS

- FOUR (4) COPIES (NOTE IN RED ANY CHANGES) ONE FOR OWNER ONE FOR ARCHITECT ONE FOR CONTRACTOR ONE FOR SUPPLIER
- CONTRACTOR TO REVIEW AND MARKUP ANY CHANGES ON ALL COPIES BEFORE SUBMITTING TO ARCHITECT. CONTRACTOR SHOULD PROVIDE HIS OR HER REVIEWERS SIGNATURE WITH DATE ON EACH SUBMITTAL.
- SUBMIT TO ARCHITECT AS SOON AS POSSIBLE
- NO SUBSTITUTES WITHOUT PRIOR APPROVAL BY ARCHITECT & OWNER.

VIII. CHANGES IN THE WORK

DO NOT DEVIATE FROM PLANS WITHOUT ARCHITECTS APPROVAL.

IX. PROPER CONDUCT AT JOBSITES

- NO SWEARING
- NO LOUD RADIOS
- PROPERLY DRESSED FOR WORK
- KEEPING JOBSITE CLEAN AND SAFE EACH DAY IS SOLE RESPONSIBILITY OF THE CONTRACTOR.
- HARDHATS ARE REQUIRED PER OSHA REGULATIONS

X. RAIN DAY DOCUMENTATION

- SUBMIT RECORDED RAIN DAYS WITH EACH MONTHLY PAY REQUEST
- WHEN MORE THAN FOUR (4) DAYS ARE ACCUMULATED, A REQUEST FOR CHANGE ORDER SHOULD BE ISSUED. REQUEST ADDITIONAL DAYS TO BE ADDED TO ESTABLISHED CONTRACTUAL COMPLETION DATE.

ABBREVIATIONS

S BINKL CIATES, P.A.

EDLUND · DRITENBA ARCHITECTS AND ASSO(

R O R

STATION
REMODEL
INDIAN RIVER COUNTINATE STREET
VERO BEACH FL 32960

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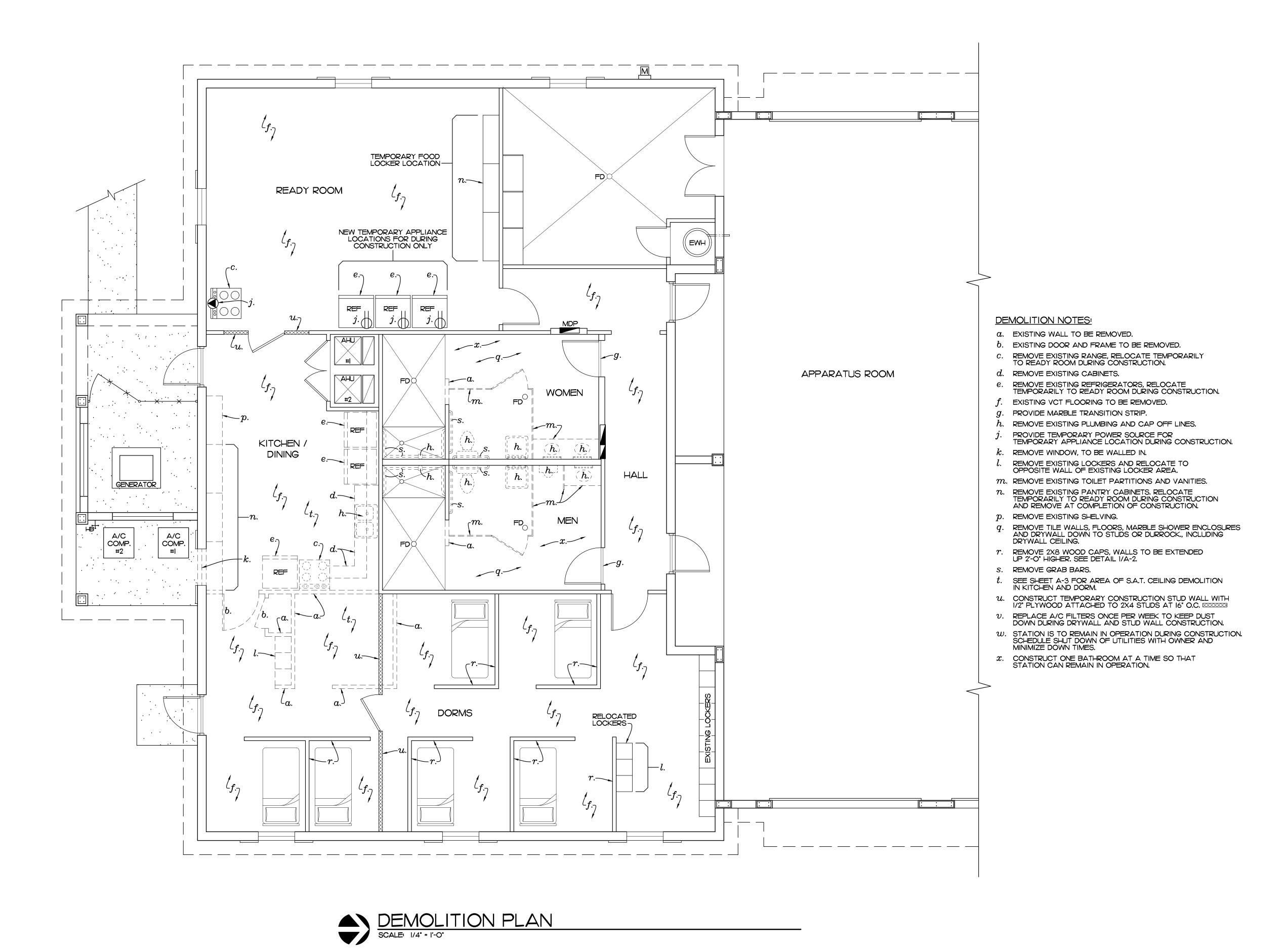
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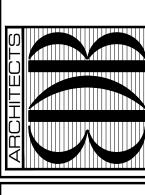
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Ð	AND ANGLE	E.	EAST	L LG.	LONG	S.	SOUTH
	AT	EA.	EACH	LGT.	LIGHT	S.A. S.A.T.	SUPPLY AIR SUSPENDED ACOUSTICAL TIL
A	DIAMETER OR ROUND WELD	E.B. E.E.R.	EXPANSION BOLT ENERGY EFFICIENCY RATIO	L.P. LKR.	LIQUID PROPANE LOCKER	S.C.	SOLID CORE
	VILLO	E.F.	EXHAUST FAN	L.L.	LIVE LOAD	S.C.D.	SEAT COVER DISPENSER
		E.G.	EMERGENCY GENERATOR EXPANSION JOINT	L.L.V.	LONG LEG VERTICAL LATCH SIDE CLEARANCE	SCHED. S.D.	SCHEDULE SOAP DISPENSER
.COUS.	ACOUSTICAL	EL.	ELEVATION	L.S.C. L.T.	LAUNDRY TUB	SECT.	SECTION
A.D.	AREA DRAIN	EL.	EMERGENCY LIGHT			SH.	SHELF
/D7 /'D'Y'	AMERICANS WITH DISABILITIES ACT ADJUSTABLE	ELEC. ELEV.	ELECTRICAL ELEVATOR	М		SHR. SHT.	SHOWER SHEET
F.F.	ABOVE FINISH FLOOR	EMER.	EMERGENCY	MAX.	MAXIMUM	S.H.	SINGLE HUNG
AGGR.	AGGREGATE	ENCL.	ENCLOSURE	M.C. MECH.	MEDICINE CABINET MECHANICAL	SIM.	SIMILAR
.H.U. LUM.	AIR HANDLING UNIT ALUMINUM	E.P. EQ.	ELECTRICAL PANELBOARD EQUAL	MEMB.	MEMBRANE	SLD. CONC. S.L.V.	SEALED CONCRETE SHORT LEG VERTICAL
C.I.	AMERICAN CONCRETE INSTITUTE	EQPT.	EQUIPMENT	MTL. MFR.	METAL MANUFACTURER	S.N.D.	SANITARY NAPKIN DISPENSE
A.S.T.M.	AMERICAN SOCIETY OF TESTING	ESP.	ELECTRO STATIC PAINT	MH.	MANHOLE	S.N.R. SPEC.	SANITARY NAPKIN RECEPTACE SPECIFICATION
A.W.P.A.	AND MEASURES AMERICAN WOOD & PLYWOOD	E.W. E.W.C.	EACH WAY ELECTRIC WATER COOLER	MIN.	MINIMUM	SPEC. SQ.	SQUARE
	ASSOCIATION	E.W.H.	ELECTRIC WATER HEATER	MIRR. MISC.	MIRROR MISCELLANEOUS	S.S.	STAINLESS STEEL
A.B.	ANCHOR BOLTS	EXP.	EXPANSION	MTD.	MOUNTED	S.SK. STA.	SERVICE SINK STATION
APPRVD. APPROX.	APPROVED APPROXIMATE	EXP.BLTS. EX.	EXPANSION BOLTS EXISTING	M.B.	MACHINE BOLT	STD.	STANDARD
ARCH.	ARCHITECTURAL	EXT.	EXTERIOR OR EXTENSION	M.D. M.D.F.	MAIN DISCONNECT MEDIUM DENSITY FIBERBOARD	STL.	STEEL
A.C.C.M.P.	ASPHALT COATED CORRUGATED METAL PIPE	F		M.D.P.	MAIN DISTRIBUTION PANEL	STOR. STRL.	STORAGE STRUCTURAL
ASB.	ASBESTOS	F.A.	FIRE ALARM	MD.	MAIN DRAIN	SUSP.	SUSPENDED
ASPH.	ASPHALT	F.A.C.	FLORIDA ACCESSIBILITY CODE	M.O. M.S.L.	MASONRY OPENING MEAN SEA LEVEL	SYM.	SYMMETRICAL
ASSY.	ASSEMBLY	F.B. F.B.C.	FLAT BAR FLORIDA BUILDING CODE	M.C.	MEDICINE CABINET	S4S. SIS2E.	SANDED 4 SIDES SANDED ONE SIDE
_		F.P.C.	FLORIDA PLUMBING CODE	M.V.	MERCURY VAPOR	010224	AND TWO EDGES
B BR'G.(BRNG.)) BEARING	F.D.	FLOOR DRAIN	M.T. M.P.H.	METAL THRESHOLD MILES PER HOUR	S.S.	SANITARY SEWER
3D.	BOARD	FDN. F.E.	FOUNDATION FIRE EXTINGUISHER	MR.	MOISTURE RESISTANT	SEER	SEASONAL ENERGY EFFICIENCY RATED
BITUM.	BITUMINOUS	F.E.C.	FIRE EXTINGUISHER CAB.	MLD'G.	MOULDING	S.H.	SINGLE HUNG
3LDG. 3LK.	BUILDING BLOCK	F.H.C.	FIRE HOSE CABINET	N			SLIDING GLASS
BLKG.	BLOCKING	FIN. FL.	FINISH FLOOR	N/A	NOT APPLICABLE	S/D S.Y.P.	SMOKE DETECTOR SOUTHERN YELLOW PINE
BM.	BEAM	FLASH.	FLASHING	N N.A.V.D.	NORTH NORTH AMERICAN VERTICAL DATUM	3.1.F. ☑	SQUARE FOOT DIMENSION
30T. 3.C.	BOTTOM CHORD	FLUOR.	FLUORESCENT	N.I.C.	NOT IN CONTRACT	S.F.	SQUARE FOOT
BLT.	BOLT	F.O.C.	FACE OF CONCRETE	NO. OR #	NUMBER	S.J.I.	STEEL JOIST INSTITUTE
		F.O.F. F.O.S.	FACE OF FINISH FACE OF STUDS	NOM. N.T.S.	NOMINAL NOT TO SCALE	SYS. S.V.	SYSTEM SHEET VINYL
С		FPRF.	FIREPROOF	N.E.C.	NATIONAL ELECTRIC CODE	O.V.	OHEET VIIVE
CAB.	CABINET	FG.	FIBERGLASS	N.G.V.D.	NATIONAL GEODETIC VERTICAL DATUM		
CANT. C.B.	CANTILEVER CATCH BASIN	FIN. FL. FXD.	FINISHED FLOOR FIXED	N.L.	NIGHT LIGHT		
CEM.	CEMENT	F.G.	FLOOR GIRDER	0		T TRD.	TREAD
CER.	CERAMIC	F.S.	FULL SIZE	O.A.	OVERALL	T.B.	TOWEL BAR
C.I. C. G .	CAST IRON CORNER GUARD	FT. F.T.A.	FOOT OR FEET FEDERAL TRANSIT AUTHORITY	OBS.	OBSCURE	T.O.C.	TOP OF CURB
CLG.	CEILING	FTG.	FOOTING	O.C. O.D.	ON CENTER OUTSIDE DIAMETER (DIM.)	TEL. TERR.	TELEPHONE TERRAZZO
CL.	CLOSET	FURR. FUT.	FURRING FUTURE	OFF.	OFFICE	T.&G.	TONGUE AND GROOVE
CLR. C.O.	CLEAR CASED OPENING	F.D.O.T.	FLORIDA DEPARTMENT OF	OPNG.	OPENING	THK.	THICK
COL.	COLUMN		TRANSPORTATION	OPP. O.B.D.	OPPOSITE OPPOSED BLADE DAMPER	T.O.P. T.P.D.	TOP OF PAVEMENT TOILET PAPER DISPENSER
CONC.	CONCRETE	F.D.E.P.	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION	O.A.	OUTSIDE AIR	T.V.	TELEVISION
CONN. CONSTR.	CONNECTION CONSTRUCTION			O.H.	OVER HANG	T.O.W.	TOP OF WALL
CONSTR.	CONTINUOUS	G		O.H.D. O.E.	OVERHEAD DOOR OVERHEAD ELECTRIC	TKB. T.CL.	TACKBOARD TIME CLOCK
CORR.	CORRIDOR	GA. GALV.	GAUGE GALVANIZED	O.L.	OVERHEAD LELOTRIO	TYP.	TYPICAL
CPT. CTSK.	CARPET COUNTERSUNK	G.B.	GRAB BAR	P		T.C.	TOP CHORD
CNTR.	COUNTER	GL.	GLASS	P.V.C.	POLY VINYL CHLORIDE	T.O.B. T.L.	TOP OF BEAM TOTAL LOAD
CTR.	CENTER	GND. GR.	GROUND GRADE	P.E.B. P.S.I.	PAINTED EXPOSED BLOCK POUNDS PER SQUARE INCH	TRANSV.	TRANSVERSE
Ð C/C.	CENTERLINE CENTER TO CENTER	GYP.	GYPSUM	P.S.F.	POUNDS PER SQUARE FOOT	T.	TREAD
C.T.	CERAMIC TILE	GAL.	GALLON	PL.	PLATE	T.S.	TUBE SECTION
CKT.	CIRCUIT	G.F.I.	GROUND FAULT INTERRUPT	P.LAM. PLAS.	PLASTIC LAMINATE PLASTER		U
C.C.C.L.	CLEAN OUT COASTAL CONSTRUCTION			PLY.	PLYWOOD	UNF.	UNFINISHED
J.O.O.L.	CONTROL LINE	HCP.	HANDICAPPED	PR.	PAIR	U.N.O. U.C.	UNLESS NOTED OTHERWISE UNDER COUNTER
D.	COLD	HDR.	HEADER	PT. P.T.D.	POINT PAPER TOWEL DISPENSER	U.L.	UNDERWRITERS LAB
C.W. C.B.S.	COLD WATER CONCRETE BLOCK CONSTRUCTION	H.R.U.	HEAT RECOVERY UNIT	P.T.D/R	COMBINATION PAPER TOWEL	U.S.G.	UNITED STATES GYPSUM
C.M.U.	CONCRETE MASONRY UNIT	H.D. H.P.S.	HEAVY DUTY HIGH PRESSURE SODIUM		DISPENSER & RECEPTACLE	U.S.G.B.C.	UNITED STATES GREEN BUILDING COUNCIL
C.M.	CONCRETE MONUMENT	H.J.	HIP JACK	PTN. P.T.	PARTITION PRESSURE TREATED		V
COND.	CONTROL JOINT CONDENSATE OR CONDUIT	H.C.	HOLLOW CORE	P.T.R.	PAPER TOWEL RECEPTACLE	VAC.	VACUUM
	COPPER	H.B. H.C.	HOSE BIBB HOLLOW CORE	P.T.H.	PAPER TOWEL HOLDER	V.B.	VAPOR BARRIER
	CORNER JACK	HDWD.	HARDWOOD	PERF. P	PERFORATED PROPERTY LINE	V.C.T. VERT.	VINYL COMPOSITION TILE VERTICAL
	CORRUGATED METAL PIPE CUBIC FEET PER MINUTE	HDWR	HARDWARE	P.C.	PULL CHAIN	V.P.	VAPOR PROOF
	CUBIC YARD	HH H.M.	HAPPY HOUR HOLLOW METAL	P.B.	PUSH BUTTON	V.R.	VAPOR RETARDER
		HORIZ.	HORIZONTAL	P.P. P.H.W.	POWER POLE PARTIAL HEIGHT WALL	V.T.R.	VENT THRU ROOF
CULV.	CULVERT			1 41 147 74	TACIAL ILIOIII WALL		
CULV.	CULVERT	HR.	HOUR	PORC.	PORCELAIN TILE	W	
CULV.	CULVERT		HOUR HOLLOW CORE HOLLOW METAL			W.	WEST
D D.L.	DEAD LOAD	HR. H.C. H.M. H.M.F.	HOLLOW CORE HOLLOW METAL HOLLOW METAL FRAME	Q		W. W	WASHER
D D.L. DBL.	DEAD LOAD DOUBLE	HR. H.C. H.M. H.M.F. HK.	HOLLOW CORE HOLLOW METAL HOLLOW METAL FRAME HOOK	Q		W.	
	DEAD LOAD	HR. H.C. H.M. H.M.F.	HOLLOW CORE HOLLOW METAL HOLLOW METAL FRAME	Q		W. W W/ W.C. WD.	WASHER WITH WATER CLOSET WOOD
D D.L. DBL. D.C.G. DEPT. D.F.	DEAD LOAD DOUBLE DIRT CONTROL GRATING DEPARTMENT DRINKING FOUNTAIN	HR. H.C. H.M. H.M.F. HK. H.P.	HOLLOW CORE HOLLOW METAL HOLLOW METAL FRAME HOOK HORSE POWER & HIGH POINT	Q.T. QU	ARRY TILE	W. W W/ W.C. WD. W/O	WASHER WITH WATER CLOSET WOOD WITHOUT
D DL. OBL. O.C.G. DEPT. O.F. OEL.	DEAD LOAD DOUBLE DIRT CONTROL GRATING DEPARTMENT DRINKING FOUNTAIN DELAYED	HR. H.C. H.M. H.M.F. HK. H.P. H.	HOLLOW CORE HOLLOW METAL HOLLOW METAL FRAME HOOK HORSE POWER & HIGH POINT HOT	Q.T. QU	ARRY TILE	W. W W/ W.C. WD.	WASHER WITH WATER CLOSET WOOD
D DL. DBL. D.C.G. DEPT. D.F. DEL. DET.	DEAD LOAD DOUBLE DIRT CONTROL GRATING DEPARTMENT DRINKING FOUNTAIN	HR. H.C. H.M. H.M.F. HK. H.P. H.	HOLLOW CORE HOLLOW METAL HOLLOW METAL FRAME HOOK HORSE POWER & HIGH POINT HOT	Q.T. QU Q.T. QU R. R. R.AD. R.D.	ARRY TILE RISER RADIUS ROOF DRAIN	W. W W/ W.C. WD. W/O WP. WSCT. WT.	WASHER WITH WATER CLOSET WOOD WITHOUT WATERPROOF WAINSCOT WEIGHT
D.L. DBL. D.C.G. DEPT. D.F. DEL. DET. DIA. DIM.	DEAD LOAD DOUBLE DIRT CONTROL GRATING DEPARTMENT DRINKING FOUNTAIN DELAYED DETAIL DIAMETER DIMENSION	HR. H.C. H.M. H.M.F. HK. H.P. H. H.D.G.	HOLLOW CORE HOLLOW METAL HOLLOW METAL FRAME HOOK HORSE POWER & HIGH POINT HOT HOT DIPPED GALVANIZED INSIDE DIAMETER (DIM.) INSULATION	Q.T. QU Q.T. QU R. R. RAD.	ARRY TILE RISER RADIUS	W. W W/ W.C. WD. W/O WP. WSCT.	WASHER WITH WATER CLOSET WOOD WITHOUT WATERPROOF WAINSCOT
D DL. OBL. O.C.G. OEPT. OF. OEL. OET. OIA. OIM.	DEAD LOAD DOUBLE DIRT CONTROL GRATING DEPARTMENT DRINKING FOUNTAIN DELAYED DETAIL DIAMETER DIMENSION DISPENSER	HR. H.C. H.M. H.M.F. HK. H.P. H. H.D.G. INSUL. INT.	HOLLOW CORE HOLLOW METAL HOLLOW METAL FRAME HOOK HORSE POWER & HIGH POINT HOT HOT DIPPED GALVANIZED INSIDE DIAMETER (DIM.) INSULATION INTERIOR	Q.T. QU Q.T. QU R. R. R.AD. REF. REFR. REG.	RISER RADIUS ROOF DRAIN REFERENCE REFRIGERATOR REGISTER	W. W W/ W.C. WD. W/O WP. WSCT. WT. WSHR.	WASHER WITH WATER CLOSET WOOD WITHOUT WATERPROOF WAINSCOT WEIGHT WASHER
D DL. DBL. D.C.G. DEPT. D.F. DEL. DET. DIA. DISP. DISP.	DEAD LOAD DOUBLE DIRT CONTROL GRATING DEPARTMENT DRINKING FOUNTAIN DELAYED DETAIL DIAMETER DIMENSION	HR. H.C. H.M. H.M.F. HK. H.P. H. H.D.G.	HOLLOW CORE HOLLOW METAL HOLLOW METAL FRAME HOOK HORSE POWER & HIGH POINT HOT HOT DIPPED GALVANIZED INSIDE DIAMETER (DIM.) INSULATION	Q.T. QU Q.T. QU R. R. R.AD. R.D. REF. REG. REINF.	RISER RADIUS ROOF DRAIN REFERENCE REFRIGERATOR REGISTER REINFORCED	W. W W/ W.C. WD. W/O WP. WSCT. WT. WSHR. W.I.C. W.G. W.W.F.	WASHER WITH WATER CLOSET WOOD WITHOUT WATERPROOF WAINSCOT WEIGHT WASHER WALK IN CLOSET WALL GIRDER WELDED WIRE FABRIC
D D.L. DBL. D.C.G. DEPT. D.F. DEL. DET. DIA. DISP. DN. D.O.O.	DEAD LOAD DOUBLE DIRT CONTROL GRATING DEPARTMENT DRINKING FOUNTAIN DELAYED DETAIL DIAMETER DIMENSION DISPENSER DOWN	HR. H.C. H.M. H.M.F. HK. H.P. H. H.D.G. INT. INT.	HOLLOW CORE HOLLOW METAL HOLLOW METAL FRAME HOOK HORSE POWER & HIGH POINT HOT HOT DIPPED GALVANIZED INSIDE DIAMETER (DIM.) INSULATION INTERIOR INVERT	Q.T. QU Q.T. QU R. R. R.AD. REF. REFR. REG.	RISER RADIUS ROOF DRAIN REFERENCE REFRIGERATOR REGISTER	W. W W/ W.C. WD. W/O WP. WSCT. WT. WSHR. W.I.C. W.G. W.W.F.	WASHER WITH WATER CLOSET WOOD WITHOUT WATERPROOF WAINSCOT WEIGHT WASHER WALK IN CLOSET WALL GIRDER WELDED WIRE FABRIC WELDED WIRE MESH
DDL. DBL. DBL. D.C.G. DEPT. DF. DEL. DET. DIA. DISP. DN. D.O. DWR. DS.	DEAD LOAD DOUBLE DIRT CONTROL GRATING DEPARTMENT DRINKING FOUNTAIN DELAYED DETAIL DIAMETER DIMENSION DISPENSER DOWN DOOR OPENING DRAWER DOWNSPOUT	HR. H.C. H.M. H.M.F. H. H.D.G. I.N.S. I.N. I.N. I.N. I.N. I.N. I.N. I	HOLLOW CORE HOLLOW METAL HOLLOW METAL FRAME HOOK HORSE POWER & HIGH POINT HOT HOT DIPPED GALVANIZED INSIDE DIAMETER (DIM.) INSULATION INTERIOR INVERT IRON PIPE	Q.T. QU Q.T. QU R. R. AD. R.D. REF. REG. REINF. REG. RESIL. RM.	RISER RADIUS ROOF DRAIN REFERENCE REFRIGERATOR REGISTER REINFORCED REQUIRED RESILIENT ROOM	W. W W/ W.C. WD. W/O WP. WSCT. WT. WSHR. W.I.C. W.G. W.W.F.	WASHER WITH WATER CLOSET WOOD WITHOUT WATERPROOF WAINSCOT WEIGHT WASHER WALK IN CLOSET WALL GIRDER WELDED WIRE FABRIC
DOL. OBL. OBL. O.C.G. OEPT. OEL. OIA. OIA. OISP. ON. O.O. OWR. OS.	DEAD LOAD DOUBLE DIRT CONTROL GRATING DEPARTMENT DRINKING FOUNTAIN DELAYED DETAIL DIAMETER DIMENSION DISPENSER DOWN DOOR OPENING DRAWER DOWNSPOUT DRY STANDPIPE	HR. H.C. H.M. H.M.F. H.C. H.D.G. I.D. INT. INT. I.P.	HOLLOW CORE HOLLOW METAL HOLLOW METAL FRAME HOOK HORSE POWER & HIGH POINT HOT HOT DIPPED GALVANIZED INSIDE DIAMETER (DIM.) INSULATION INTERIOR INVERT	Q.T. QU Q.T. QU R. R. R.AD. REF. REG. REINF. REG. RESIL. RM. R.O.	RISER RADIUS ROOF DRAIN REFERENCE REFRIGERATOR REGISTER REINFORCED REQUIRED RESILIENT ROOM ROUGH OPENING	W. W W/ W.C. WD. W/O WP. WSCT. WT. WSHR. W.I.C. W.G. W.W.F.	WASHER WITH WATER CLOSET WOOD WITHOUT WATERPROOF WAINSCOT WEIGHT WASHER WALK IN CLOSET WALL GIRDER WELDED WIRE FABRIC WELDED WIRE MESH WORKING POINT
D DL. DBL. DC.G. DEPT. DF. DET. DIA. DIM. DISP. DN. D.O. DWR. DS. DSP. DWG.	DEAD LOAD DOUBLE DIRT CONTROL GRATING DEPARTMENT DRINKING FOUNTAIN DELAYED DETAIL DIAMETER DIMENSION DISPENSER DOWN DOOR OPENING DRAWER DOWNSPOUT	HR. H.C. H.M.F. H.K. H.P. H. D. E. S. E. S	HOLLOW CORE HOLLOW METAL HOLLOW METAL FRAME HOOK HORSE POWER & HIGH POINT HOT HOT DIPPED GALVANIZED INSIDE DIAMETER (DIM.) INSULATION INTERIOR INVERT IRON PIPE JANITOR	Q.T. QU Q.T. QU R. R. AD. R.D. REF. REG. REINF. REG. RESIL. RM.	RISER RADIUS ROOF DRAIN REFERENCE REFRIGERATOR REGISTER REINFORCED REQUIRED RESILIENT ROOM	W. W W/ W.C. WD. W/O WP. WSCT. WT. WSHR. W.I.C. W.G. W.W.F.	WASHER WITH WATER CLOSET WOOD WITHOUT WATERPROOF WAINSCOT WEIGHT WASHER WALK IN CLOSET WALL GIRDER WELDED WIRE FABRIC WELDED WIRE MESH WORKING POINT
DDL. DBL. D.C.G. DEPT. D.F. DEL. DIA. DISP. DN. D.O. DWR. DS. DSP. DWG. D.J. DP.	DEAD LOAD DOUBLE DIRT CONTROL GRATING DEPARTMENT DRINKING FOUNTAIN DELAYED DETAIL DIAMETER DIMENSION DISPENSER DOWN DOOR OPENING DRAWER DOWNSPOUT DRY STANDPIPE DRAWING DECK-A-JOINT DEEEP	H.C. H.M.F. H.D. G. L. S. T. S. F. J. T. K. H.M. H.	HOLLOW CORE HOLLOW METAL HOLLOW METAL FRAME HOOK HORSE POWER & HIGH POINT HOT HOT DIPPED GALVANIZED INSIDE DIAMETER (DIM.) INSULATION INTERIOR INVERT IRON PIPE JANITOR JOINT	Q.T. QU Q.T. QU R. R. AD. REF. REG. REGI. REG. RESIL. RM. R.O. RWD. R.W.L. R.C.P.	RISER RADIUS ROOF DRAIN REFERENCE REFRIGERATOR REGISTER REINFORCED REQUIRED RESILIENT ROOM ROUGH OPENING REDWOOD	W. W W/ W.C. WD. W/O WP. WSCT. WT. WSHR. W.I.C. W.G. W.W.F.	WASHER WITH WATER CLOSET WOOD WITHOUT WATERPROOF WAINSCOT WEIGHT WASHER WALK IN CLOSET WALL GIRDER WELDED WIRE FABRIC WELDED WIRE MESH WORKING POINT
D OL. OBL. O.C.G. O.F. O.F. OET. OIA. OIM. OISP. ON. O.O. OWR. OS. O.SP. OWG. O.J. OP.	DEAD LOAD DOUBLE DIRT CONTROL GRATING DEPARTMENT DRINKING FOUNTAIN DELAYED DETAIL DIAMETER DIMENSION DISPENSER DOWN DOOR OPENING DRAWER DOWNSPOUT DRY STANDPIPE DRAWING DECK-A-JOINT DEEP DEPARTMENT OF EDUCATION	HR. C. H.M. F. H.D. G I.D. SST. S. I.P. J. J. K. K. T. K. T. K. T. K. K. T.	HOLLOW CORE HOLLOW METAL HOLLOW METAL FRAME HOOK HORSE POWER & HIGH POINT HOT HOT DIPPED GALVANIZED INSIDE DIAMETER (DIM.) INSULATION INTERIOR INVERT IRON PIPE JANITOR JOINT	Q.T. QU Q.T. QU R. R. R	RISER RADIUS ROOF DRAIN REFERENCE REFRIGERATOR REGISTER REINFORCED REQUIRED RESILIENT ROOM ROUGH OPENING REDWOOD RAIN WATER LEADER REINFORCED CONCRETE PIPE REQUIRED	W. W W/ W.C. WD. W/O WP. WSCT. WT. WSHR. W.I.C. W.G. W.W.F.	WASHER WITH WATER CLOSET WOOD WITHOUT WATERPROOF WAINSCOT WEIGHT WASHER WALK IN CLOSET WALL GIRDER WELDED WIRE FABRIC WELDED WIRE MESH WORKING POINT
D OL. OBL. O.C.G. O.F. O.F. OET. OIA. OIM. OISP. ON. O.O. OWR. OS. O.SP. OWG. O.J. OP.	DEAD LOAD DOUBLE DIRT CONTROL GRATING DEPARTMENT DRINKING FOUNTAIN DELAYED DETAIL DIAMETER DIMENSION DISPENSER DOWN DOOR OPENING DRAWER DOWNSPOUT DRY STANDPIPE DRAWING DECK-A-JOINT DEEEP	H.C. H.M.F. H.D. G. L. S. T. S. F. J. T. K. H.M. H.	HOLLOW CORE HOLLOW METAL HOLLOW METAL FRAME HOOK HORSE POWER & HIGH POINT HOT HOT DIPPED GALVANIZED INSIDE DIAMETER (DIM.) INSULATION INTERIOR INVERT IRON PIPE JANITOR JOINT	Q.T. QU R. R.D. REF. REG. RESIL. RM. R.O. R.W.L. R.C.P. REG,D. R.W.L. R.C.P. REG,D. R.W.L. R.C.P. R	RISER RADIUS ROOF DRAIN REFERENCE REFRIGERATOR REGISTER REINFORCED REQUIRED RESILIENT ROOM ROUGH OPENING REDWOOD RAIN WATER LEADER REINFORCED CONCRETE PIPE REQUIRED REQUIRED RESULENT	W. W W/ W.C. WD. W/O WP. WSCT. WT. WSHR. W.I.C. W.G. W.W.F.	WASHER WITH WATER CLOSET WOOD WITHOUT WATERPROOF WAINSCOT WEIGHT WASHER WALK IN CLOSET WALL GIRDER WELDED WIRE FABRIC WELDED WIRE MESH WORKING POINT
DOL. DBL. D.C.G. DEPT. DF. DEL. DIA. DIM. DISP. DN. D.O. DWR. DS. DSP. DWG. D.J. DP. D.O.E. D.E.R.	DEAD LOAD DOUBLE DIRT CONTROL GRATING DEPARTMENT DRINKING FOUNTAIN DELAYED DETAIL DIAMETER DIMENSION DISPENSER DOWN DOOR OPENING DRAWER DOWNSPOUT DRY STANDPIPE DRAWING DECK-A-JOINT DEEP DEPARTMENT OF EDUCATION DEPARTMENT OF ENVIRONMENTAL REGULATION DEPARTMENT OF	HR. C. H. M. F. H. D. G. J. E.	HOLLOW CORE HOLLOW METAL HOLLOW METAL FRAME HOOK HORSE POWER & HIGH POINT HOT HOT DIPPED GALVANIZED INSIDE DIAMETER (DIM.) INSULATION INTERIOR INVERT IRON PIPE JANITOR JOINT KITCHEN KILOWATT KEYBOARD TRAY	Q.T. QUER R. RAD. REF. R. REG. REINF. REG. RESIL. RM. R.O. RWD. R.W.L. R.C.P. REQ. REV. R.C.P. REQ. REV. R.C.P. R.C.P. R.C.P. R.C.P. R.C.P. R.C.P.	RISER RADIUS ROOF DRAIN REFERENCE REFRIGERATOR REGISTER REINFORCED REGUIRED RESILIENT ROOM ROUGH OPENING REDWOOD RAIN WATER LEADER REINFORCED CONCRETE PIPE REGUIRED RETURN AIR REVERSE RIGHT OF WAY	W. W W/ W.C. WD. W/O WP. WSCT. WT. WSHR. W.I.C. W.G. W.W.F.	WASHER WITH WATER CLOSET WOOD WITHOUT WATERPROOF WAINSCOT WEIGHT WASHER WALK IN CLOSET WALL GIRDER WELDED WIRE FABRIC WELDED WIRE MESH WORKING POINT
DDL. DBL. DBL. D.C.G. DEPT. DF. DEL. DIA. DISP. DIA. DISP. DN. D.O. DWR. DS. D.S.P. D.S.P. D.C.E. D.E.P. D.E.P.	DEAD LOAD DOUBLE DIRT CONTROL GRATING DEPARTMENT DRINKING FOUNTAIN DELAYED DETAIL DIAMETER DIMENSION DISPENSER DOWN DOOR OPENING DRAWER DOWNSPOUT DRY STANDPIPE DRAWING DECK-A-JOINT DEEP DEPARTMENT OF EDUCATION DEPARTMENT OF ENVIRONMENTAL REGULATION DEPARTMENT OF ENVIRONMENTAL PROTECTION	HR. C. H.M. F. H. D. G. I. S. T. S. I. Y. Y. L. L. H.M. F. H. H. D. S. I. S. I. Y. L. K. K. T. L. A. J. J. K. K. K. T. L. A. L.	HOLLOW CORE HOLLOW METAL HOLLOW METAL FRAME HOOK HORSE POWER & HIGH POINT HOT HOT DIPPED GALVANIZED INSIDE DIAMETER (DIM.) INSULATION INTERIOR INVERT IRON PIPE JANITOR JOINT KITCHEN KILOWATT KEYBOARD TRAY	Q.T. QUER R. RAD. REF. REG. RESIL. REG. RESIL. R.O. RWD. R.W.L. R.O. R.W.L. R.C.P. REG.D. R.C.P. REG.D. R.C.P. REG.D. R.C.P. REG.D. R.C.P. REG.D. R.C.P. R.C	RISER RADIUS ROOF DRAIN REFERENCE REFRIGERATOR REGISTER REINFORCED REQUIRED RESILIENT ROOM ROUGH OPENING REDWOOD RAIN WATER LEADER REINFORCED CONCRETE PIPE REQUIRED RETURN AIR REVERSE RIGHT OF WAY ROD & SHELF	W. W W/ W.C. WD. W/O WP. WSCT. WT. WSHR. W.I.C. W.G. W.W.F.	WASHER WITH WATER CLOSET WOOD WITHOUT WATERPROOF WAINSCOT WEIGHT WASHER WALK IN CLOSET WALL GIRDER WELDED WIRE FABRIC WELDED WIRE MESH WORKING POINT
DDL. DBL. DBL. D.C.G. DEPT. DF. DEL. DISP. DISP. DS. D.S. DS. DS. DS. DS. DS. DS. DS. D	DEAD LOAD DOUBLE DIRT CONTROL GRATING DEPARTMENT DRINKING FOUNTAIN DELAYED DETAIL DIAMETER DIMENSION DISPENSER DOWN DOOR OPENING DRAWER DOWNSPOUT DRY STANDPIPE DRAWING DECK-A-JOINT DEEP DEPARTMENT OF EDUCATION DEPARTMENT OF ENVIRONMENTAL REGULATION DEPARTMENT OF	HR. C. H. M. F. H. D. G. J. E.	HOLLOW CORE HOLLOW METAL HOLLOW METAL FRAME HOOK HORSE POWER & HIGH POINT HOT HOT DIPPED GALVANIZED INSIDE DIAMETER (DIM.) INSULATION INTERIOR INVERT IRON PIPE JANITOR JOINT KITCHEN KILOWATT KEYBOARD TRAY	Q.T. QUER R. RAD. REF. R. REG. REINF. REG. RESIL. RM. R.O. RWD. R.W.L. R.C.P. REQ. REV. R.C.P. REQ. REV. R.C.P. R.C.P. R.C.P. R.C.P. R.C.P. R.C.P.	RISER RADIUS ROOF DRAIN REFERENCE REFRIGERATOR REGISTER REINFORCED REGUIRED RESILIENT ROOM ROUGH OPENING REDWOOD RAIN WATER LEADER REINFORCED CONCRETE PIPE REGUIRED RETURN AIR REVERSE RIGHT OF WAY	W. W W/ W.C. WD. W/O WP. WSCT. WT. WSHR. W.I.C. W.G. W.W.F.	WASHER WITH WATER CLOSET WOOD WITHOUT WATERPROOF WAINSCOT WEIGHT WASHER WALK IN CLOSET WALL GIRDER WELDED WIRE FABRIC WELDED WIRE MESH WORKING POINT
DDL. DBL. DBL. D.C.G. DEPT. DF. DEI. DIA. DISP. DN. DN. DN. DN. DN. DN. DN. DN. DN. DN	DEAD LOAD DOUBLE DIRT CONTROL GRATING DEPARTMENT DRINKING FOUNTAIN DELAYED DETAIL DIAMETER DIMENSION DISPENSER DOWN DOOR OPENING DRAWER DOWNSPOUT DRY STANDPIPE DRAWING DECK-A-JOINT DEEP DEPARTMENT OF EDUCATION DEPARTMENT OF ENVIRONMENTAL REGULATION DISHWASHER	H.C. H.M.F. H.D. G I.D. S.T. S. P. S. J. T. K.K.K.T. B. M. K.K.T. B. M. K. K.T. B. M. K. K. K.T. B. M. K. K. K.T. B. M. K.	HOLLOW CORE HOLLOW METAL HOLLOW METAL FRAME HOOK HORSE POWER & HIGH POINT HOT HOT DIPPED GALVANIZED INSIDE DIAMETER (DIM.) INSULATION INTERIOR INVERT IRON PIPE JANITOR JOINT KITCHEN KILOWATT KEYBOARD TRAY LABORATORY LAMINATE	Q.T. QUER R. RAD. REF. R. REG. RESIL. REG. RESIL. R.O. RWD. R.W.L. R.C.P. REQ. REQ. REQ. R. AND S. R.O. R.O. S.	RISER RADIUS ROOF DRAIN REFERENCE REFRIGERATOR REGISTER REINFORCED REQUIRED RESILIENT ROOM ROUGH OPENING REDWOOD RAIN WATER LEADER REINFORCED CONCRETE PIPE REQUIRED RETURN AIR REVERSE RIGHT OF WAY ROD & SHELF ROUGH OPENING	W. W W/ W.C. WD. W/O WP. WSCT. WT. WSHR. W.I.C. W.G. W.W.F.	WASHER WITH WATER CLOSET WOOD WITHOUT WATERPROOF WAINSCOT WEIGHT WASHER WALK IN CLOSET WALL GIRDER WELDED WIRE FABRIC WELDED WIRE MESH WORKING POINT

SOME TERMS AND SYMBOLS MAY NOT APPLY TO THIS PROJECT.



EDLUND · DRITENBAS · BINKLEY
ARCHITECTS AND ASSOCIATES, P.A.
AR-AA COOOSS6
65 ROYAL PALM POINTE, SUITE "D"
VERO BEACH, FLORIDA 32960



SEAL:

O Y

STATION #II INTERIOR
REMODEL
INDIAN RIVER COUNTY FIRE DISTRICT
1840 25TH STREET
VERO BEACH FL 32960

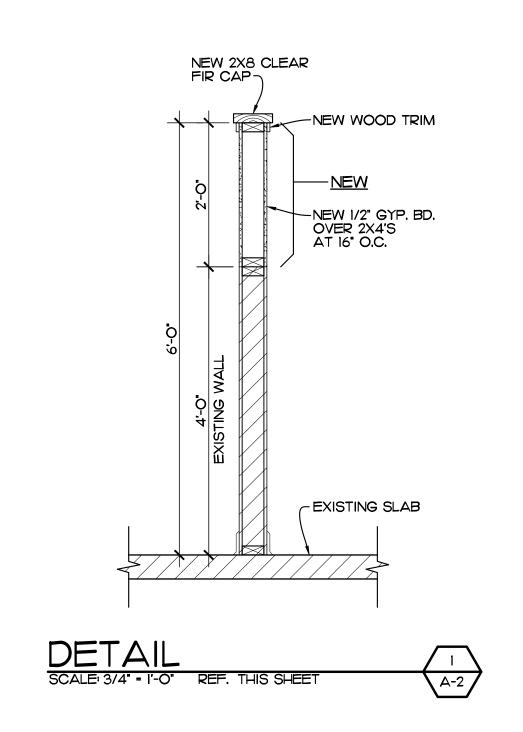
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NO: DATE REVISIONS

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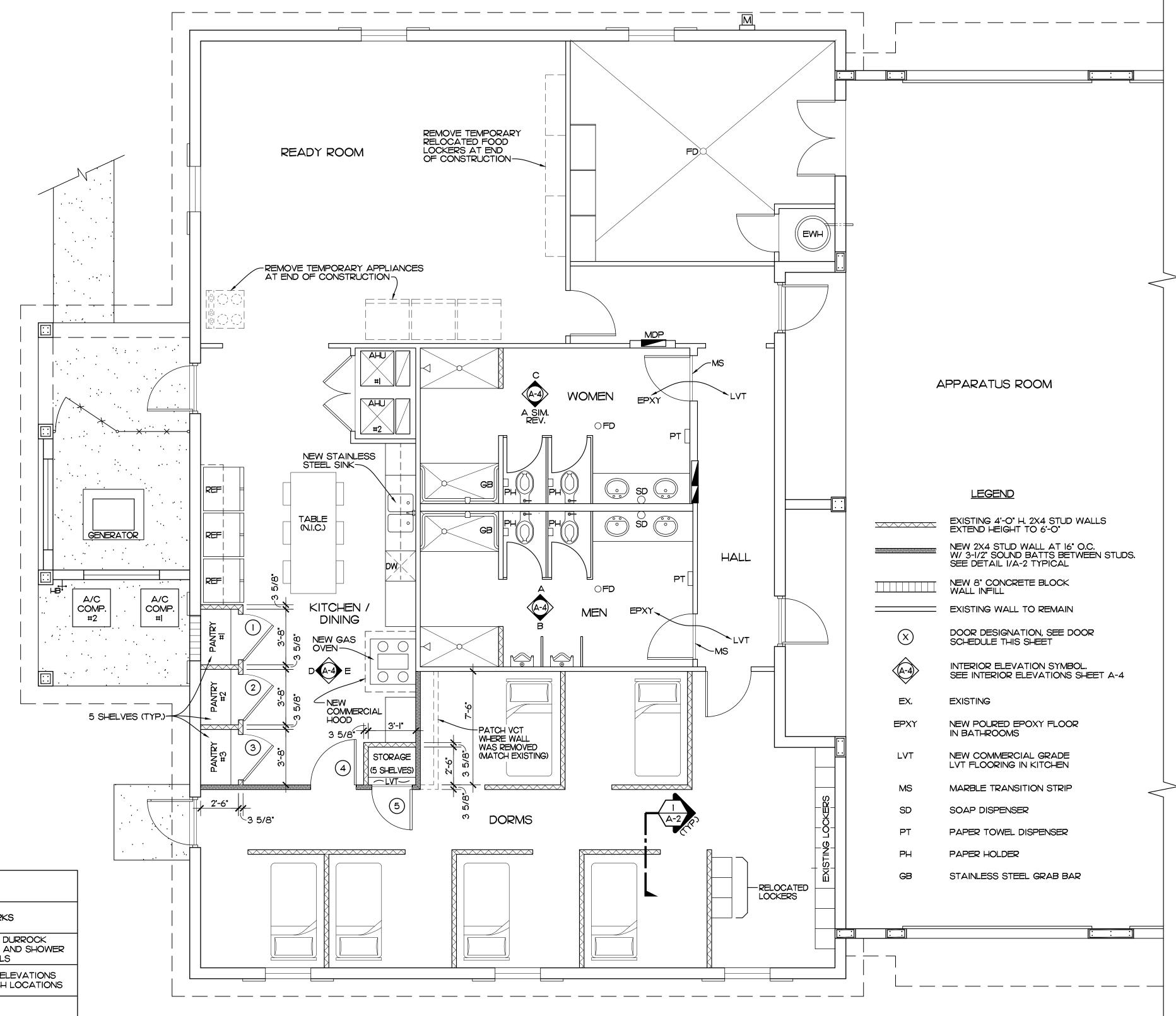
COMM. NO: IOO22IVB
DATE: I7 MAY 2O22
BY: JNR
CH'KD: JFB

SHEET NO.



MARK	SIZE	DESCRIPTION	JAMB	DETAIL	REMARKS	
1	3'-0" W. X 6'-8" H. X I-3/4"	S.C. WOOD WITH BIRCH VENEER PAINTED I	16 GA. STEEL	-		
2				-		
3				-		
4	<u></u>			-		
5	2'-8" W. X 6'-8" H. X I-3/4"	<u></u>		-		

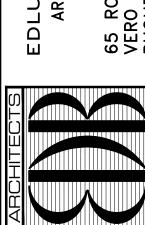
ROOM FINISH	H SCHEDL	LE					
ROOM/SPACE	FLOOR	BASE	SILLS	WALLS	CEILING	CLG. HGT.	REMARKS
MEN / WOMEN	POURED EPOXY	4" TURNED UP EPOXY		米 CERAMIC TILE / CULTURED MARBLE IN SHOWERS	EXISTING 1/2" GYP. BD., / REPAINT	8'-0"	米 PROVIDE I/2" DURROCK BEHIND ALL TILE AND SHOWER WALLS
KITCHEN / DINING	LVT I	4" VINYL	_	1/8" FRP OVER 1/2" PLYWOOD / STAINLESS STEEL	S.A.T.	8'-6" 	SEE INTERIOR ELEVATIONS FOR WALL FINISH LOCATIONS
STORAGE				1/2" GYP. BD., PAINT	I/2" GYP. BD., PAINT		
PANTRY #1, #2, #3				<u></u>	\downarrow		
READY ROOM / HALL				REPAINT WALLS	EXISTING S.A.T. TO REMAIN		
DORMS	<u></u>				<u> </u>	<u> </u>	

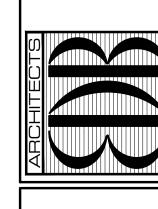




- I.) FIRE STATION TO REMAIN IN OPERATION.
- 2.) COMPLETE ONE BATHROOM AT A TIME TO ALLOW CONTINUOUS USE.
- 3.) SEE CONSTRUCTION BARRIERS LOCATION ON DEMOLITION PLAN.
- 4.) MINIMIZE ALL UTILITY, A/C SHUT DOWNS. SCHEDULE WITH OWNER.

EDLUND · DRITENBAS · BINKL ARCHITECTS AND ASSOCIATES, P.A.



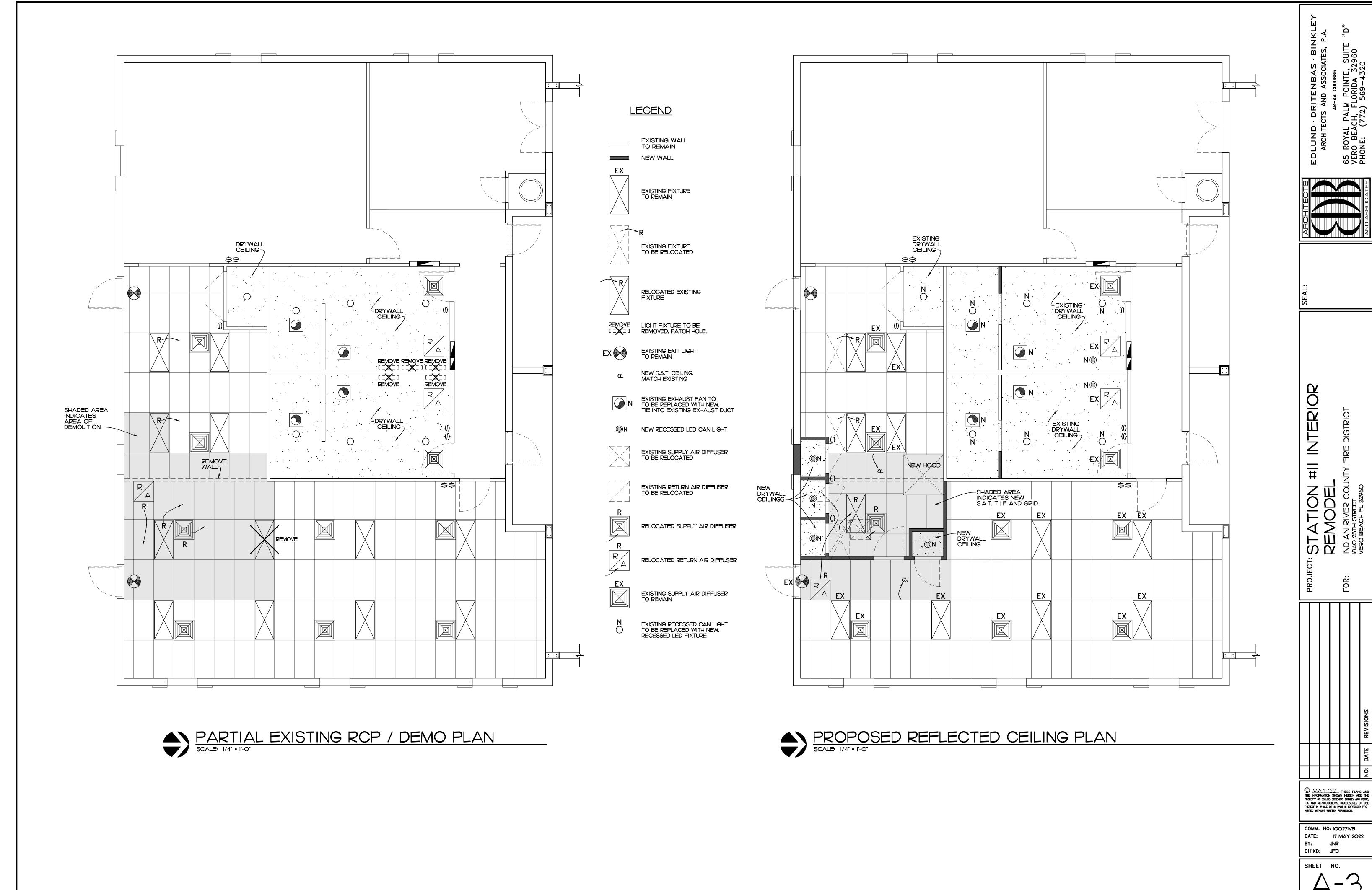


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REMODEL
INDIAN RIVER COUN
1840 25TH STREET
VERO BEACH FL 32960

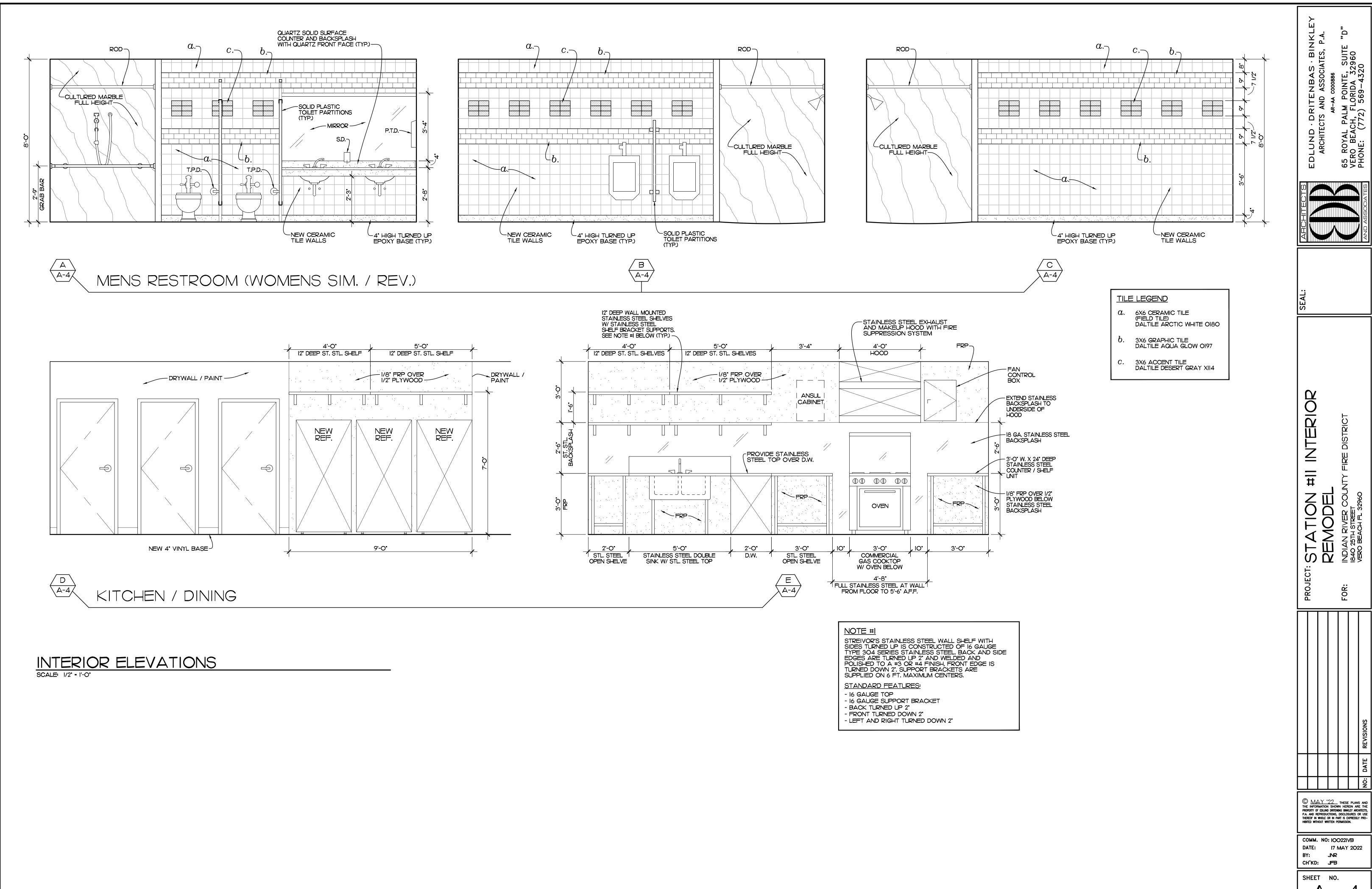
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COMM. NO: IOO22IVB DATE: 17 MAY 2022 BY: JNR CH'KD: JFB

SHEET NO.



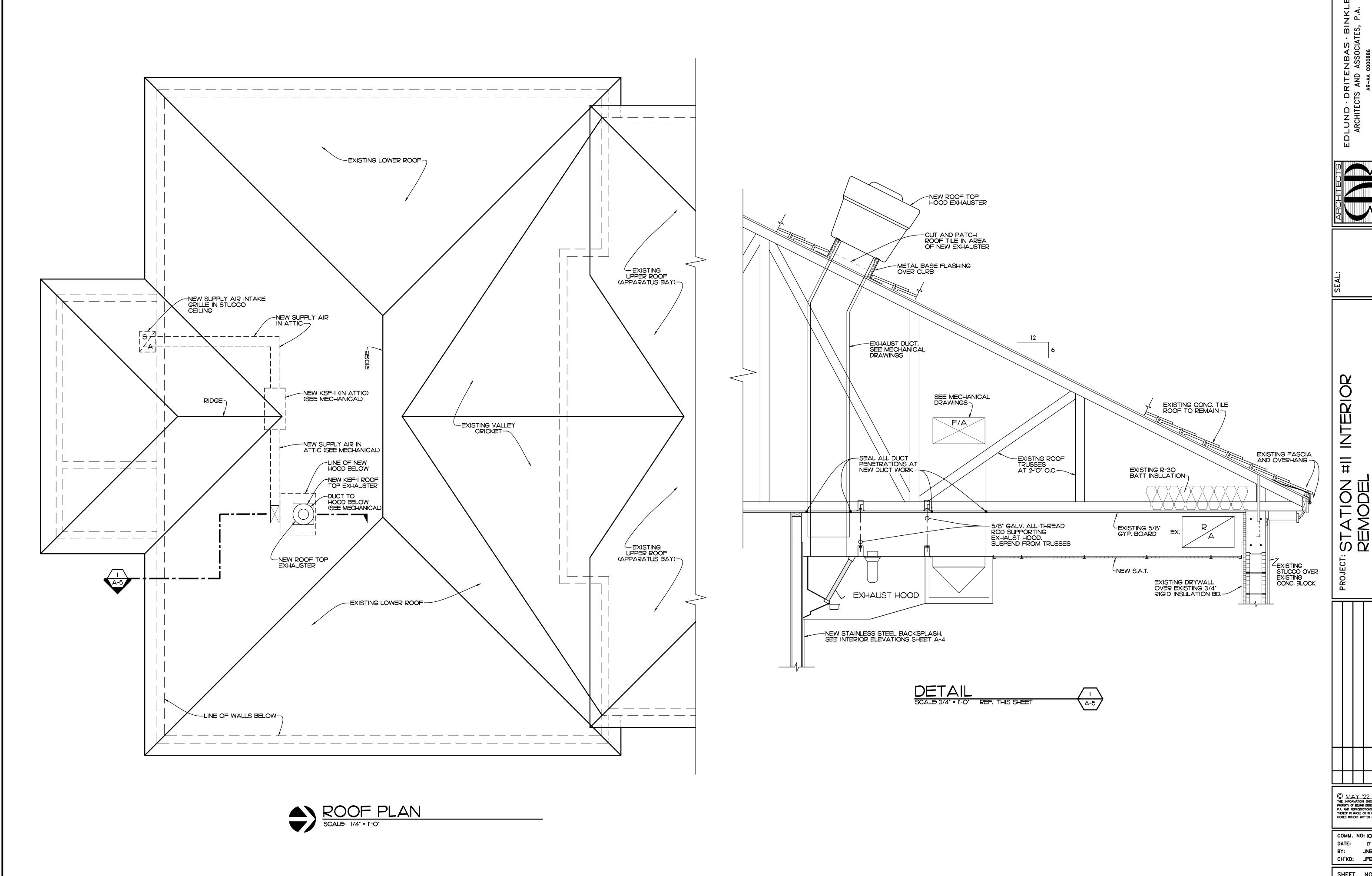
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INDIAN RIVER COUN
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COMM. NO: 100221VB 17 MAY 2022



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VERO BEACH FL 32960

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COMM. NO: IOO22IVB DATE: 17 MAY 2022 BY: JNR CH'KD: JFB

SHEET NO.

					OUTSIDE AIR CALCULATION	N		
OCCUPANO	CY	UNIT	AREA	# OF PEOPLE	PEOPL OUTDOOR AIRFLOW	AREA OUTDOOR	REQUIRED OA	PROVIDED OA
CLASSIFICA	TION				RATE IN BRATH ZONE, Rp	AIRFLOW RATE IN		
					CFM/PERSON	BREATHING ZONE,		
						Ra CFM/SQ.FT		
Dorms		AHU-1	687	6	5	0.06	71	58
Training/	Rec.	EX. AHU	721	6	5	0.06	73	14
Cooridor		EX. AHU	546			0.06	33	
Kitchen		EX. AHU	340		7.5	0.12	41	73
Total			2294				177	145
					EXHAUST AIR CALCULATION	IS		
REA SERV	ED	UNIT TAG	AREA	NO. OF FIXTURES	VENTILATION RATE/SQ.FT	VENTILATION RATE/WC	CFM REQUIRED	CFM PROVIDED
ITCHEN		KEF	340		0.7		238	91
VOMENS S	HOWER	EF-1		2		20	40	4
VENS SHO	WER	EF-2		2		20	40	4
VOMENS F	RR	EF-3		2		50	100	10
∕IENS RR		EF-4		4		50	200	20
VORK ROC	M	EF-5	239		0.5		119.5	12
OTAL							737.5	141
AI	R BALAN	ICE						
	OA	EA						
AHU-1	580							
EX. AHU	140							
KSF-1	730							
KEF-1		912						
EF-1		40						
EF-2		40						
EF-3		100						

AHU-1 TO RUN CONTINUOUSLY. EXISTING AHU TO HAVE MOTORIZED DAMPER INTERLOCKED WITH COMPRESSOR. AHU-1 TO HAVE FULLY MODULATING HOT GAS REHEAT AND KEEP COLD COILS. EF-1.2 TO RUN CONTINOUSLY.

SEQUENCE OF OPERATION

HVAC CONTRACTOR TO VERIFY OPERATION OF EXISTING AC UNITS. CONTRACTOR TO CLEAN EVAPORATOR AND CONDENSER COIL. CHECK CONDENSATE DRAIN PAN AND CONDENSATE DRAIN LINE. SUPPLY TO THE OWNER / ENGINEER A WRITTEN REPORT ON THE OPERATING CONDITION OF THE UNIT. REPORT TO INCLUDE:

- 1. SUCTION AND DISCHARGE REFRIGERANT PRESSURE.
- 2. CONDENSING TEMPERATURE, EVAPORATOR TEMPERATURE, AND SUPERHEAT.
- 3. ENTERING AIR TEMP, DISCHARGE AIR TEMP, AND AMBIENT AIR TEMPERATURE AND TOTAL CFM.
- 4. SUPPLY VOLTAGE.
- 5. COMPRESSOR FULL LOAD AMPS, VERIFY 10 OR 30. CONDENSER FAN MOTOR — FULL LOAD AMPS, VERIFY 10 OR 30. EVAPORATOR FAN MOTOR — FULL LOAD AMPS, VERIFY 10 OR 30.
- 6. CHECK ELECTRICAL CONNECTIONS ON ALL CONTACTORS AND OTHER ELECTRICAL COMPONENTS.
- 7. VERIFY DISCONNECT SIZES AND FUSES.

8. CONTRACTOR TO RESEAL ALL DUCT WORK AND REPAIR LEAKING DUCT PER SMACNA STANDARDS. IF UNIT IS LOW ON REFRIGERANT, CONTRACTOR SHALL LEAK CHECK UNIT. REPORT ANY PHYSICAL DAMAGE TO UNIT. SUPPLY NEW FILTERS.

SPECIAL NOTE TO HVAC CONTRACTOR

NOT TO SCALE

MECHANICAL NOTES

- 1. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE INSTALLATION OF A COMPLETE SYSTEM IN ACCORDANCE WITH THESE DRAWINGS, THE FLORIDA BUILDING CODE 2017 AND ALL OTHER APPLICABLE STATE COUNTY AND LOCAL ORDINANCES AND THE LATEST ADDITION OF THE FOLLOWING PUBLICATIONS; SMACNA-85, 92, 95; ASHRAE 15-01, 34-01, 62-04; NFPA 70-02, 72-02, 90A-02, 90B-02, 91-99, 96-01; ANSI Z10.1-98, Z10.3-98, Z21.8-94, Z21.83-98.
- 2. THE CONTRACTOR SHALL PAY ALL COSTS OF PERMIT, INSPECTIONS AND ALL OTHER COSTS INCIDENTAL TO THE COMPLETION AND TESTING OF THIS WORK.
- 3. THE CONTRACTOR SHALL VISIT THE SITE AND COORDINATE WORK WITH OTHER TRADES.
- 4. THE CONTRACTOR SHALL SUPPLY THE ARCHITECT WITH "AS-BUILT" DRAWINGS.
- CONTRACTOR SHALL SUBMIT, FOR APPROVAL FIVE [5] COPIES OF MANUFACTURER'S DRAWINGS FOR EACH PIECE OF EQUIPMENT AND CONTROLS INCLUDED IN CONTRACT.
- 6. ALL MATERIAL SHALL BE NEW OF U.S. MANUFACTURER OF GOOD QUALITY. ALL WORK SHALL BE PERFORMED AT INDUSTRY STANDARD QUALITY LEVEL BY CERTIFIED PROFESSIONALS. ALL EQUIPMENT SHALL BE UL OR ETL LISTED. ALL INSTALLATIONS SHALL COMPLY WITH FMC 2017, CH. 3, GENERAL REGULATIONS. BUILDINGS
- LOCATED WITHIN 3,000 FT FROM THE OCEAN SHALL UTILIZE NON-FERROUS MATERIALS FOR ALL OUTDOOR EXPOSED SUPPORTS, STANDS, FASTENERS, ETC.
- A. ALL AIR CONDITIONING DUCT WORK SHALL BE OF 1-1/2" (R-6) HEAVY DUTY FOIL REINFORCED FIBERGLASS WITH MANUFACTURER'S LOGO PRINTED ON VAPOR BARRIER ALL FLEXIBLE DUCT TO BE R-6 WITH A MAX. TOTAL LENGTH NOT TO EXCEED 15 FT. INSTALL UL LISTED FOR PLENUM, FLEXIBLE DUCTWORK ELBOW SUPPORTS AT EACH DIFFUSER, GRILLE, AND REGISTER EQUAL TO "FLEXFLOW ELBOW" AS MANUFACTURED BY "THERMAFLEX".
- ALL OUTDOOR EXPOSED DUCTWORK SHALL BE GALVANIZED, DOUBLE WALL SHEETMETAL EQUAL O UNITED McGILL "K-27", WITH MIN. R-8 INSULATION AND SEALED SEAMS AND JOINTS. THE CONTRACTOR SHALL PROVIDE ALL SHEETMETAL DUCTWORK, HANGERS, AUX. SUPPORT STEEL, ETC. PROVIDE SOLID LINER AND COAT WITH TWO COATS OF CORROSION-RESISTANT PAINT OR EQUIVALENT. PROVIDE OPTIONAL (OWNER'S DECISION) ALUMINUM OR STAINLESS STEEL CONSTRUCTION.
- C. ALL FLEX DUCT SHALL BE RATED CLASS I, UL-181 LISTED WITH METALLIZED INNER AND OUTER FOIL LINERS, MIN. R-6 WITH A MAX. TOTAL LENGTH NOT TO EXCEED 15 FT. FLEXIBLE DUCTWORK ELBOW SUPPORTS AT EACH DIFFUSER, GRILLE, AND REGISTER EQUAL TO "FLEXFLOW
- ELBOW" AS MANUFACTURED BY "THERMAFLEX" D. ALL METAL EXHAUST, MAKE-UP OR OTHERWISE DUCTS INSTALLED IN LOCATIONS WHERE DEWPOINT CONDITIONS CAN OCCUR INSIDE THE DUCT SHALL BE EXTERNALLY INSULATED WITH R-6 MIN.
- THE CONTRACTOR SHALL PROVIDE ALL SHEETMETAL DUCTWORK, HANGERS, AUX. SUPPORT STEEL, ETC.
- ALL METAL DUCTS SHALL BE FABRICATED IN ACCORDANCE WITH LATEST EDITION OF S.M.A.C.N.A. SMACNA DUCT PRESSURE CLASSES BASED ON OPERATING PRESSURE ARE: 1/2", 1", 2", 3", 4",

6", AND 10". EACH DUCT SYSTEM SHALL BE CONSTRUCTED FOR THE SPECIFIC DUCT PRESSURE

- WHERE NO PRESSURE CLASS IS SPECIFIED FOR CONSTANT VOLUME SYSTEMS, 1" W.G. PRESSURE CLASS IS THE BASIS OF COMPLIANCE WITH THE SMACNA STANDARDS REGARDLESS OF VELOCITY. WHERE NO PRESSURE CLASS IS SPECIFIED FOR VARIABLE VOLUME SYSTEMS, 2" W.G. PRESSURE CLASS IS THE BASIS OF COMPLIANCE WITH THE SMACNA STANDARDS FOR DUCTWORK UPSTREAM
- ALL DUCTWORK SHALL BE SEALED TO SMACNA "HVAC DUCT CONSTRUCTION STANDARDS" FOR ITS PRESSURE CLASS SEALING METHODS.
- 8. ALL EXHAUST DUCTS AND OUTSIDE AIR DUCTS SHALL BE GALVANIZED SHEET METAL WITH SEALED SEAMS AND JOINTS. ALL OUTSIDE AIR DUCT SHALL BE INSULATED WITH EXTERNAL BLANKET INSULATION R-6 MIN. ALL METAL EXHAUST, MAKE-UP OR OTHERWISE DUCTS INSTALLED IN LOCATIONS WHERE DEWPOINT CONDITIONS CAN OCCUR INSIDE THE DUCT SHALL BE EXTERNALLY INSULATED WITH R-6 MIN.
- 9. OUTSIDE AIR INTAKES SHALL BE SCREENED WITH A CORROSION RESISTANT MATERIAL NOT LARGER THAN 1/2" MESH. O/A INTAKES SHALL NOT BE TAKEN FROM A LOCATION CLOSER THAN 10 FT. FROM ANY CHIMNEY, VENT OUTLET OR SANITARY SEWER VENT OUTLET, UNLESS SUCH VENT IS NOT LESS THAN 24 INCHES ABOVE THE OUTSIDE AIR VENT. OUTSIDE AIR INTAKE VENTS LOCATED ON ROOFS WILL BE PROPERLY MARKED WITH A UNIVERSAL MARKING "INTAKE", PERMANENTLY ATTACHED PER FMC 2017, SEC. 401.5.1
- 10. DUCT SIZES SHOWN ARE INSIDE DIMENSIONS.
- ALL AIR DEVICES (DIFFUSERS, REGISTERS AND GRILLES) SHALL BE ALL ALUMINUM CONSTRUCTION WITH EXPOSED SURFACE OFF WHITE BAKED ENAMEL FINISH OR AS SPECIFIED BY ARCHITECT. DEVICES SHALL BE AS SPECIFIED OR EQUAL TO TITUS OR METALAIRE. PROVIDE OPPOSED BLADE DAMPERS AT ALL DIFFUSERS AND REGISTERS AS INDICATED ON PLANS. PROVIDE BALANCING DAMPERS FOR ALL SUPPLY AND RETURN DIFFUSERS AND REGISTERS TO ENSURE COMPLAINCE WITH FMC 2017, PAR. 601.4 AND PAR. 603.15 FOR BALANCED AIR FLOW.
- 12. TEMPERATURE CONTROLS/THERMOSTAT: A. SHALL BE COMBINATION COOLING/HEATING, WITH SYSTEM "COOL-AUTO-HEAT-OFF" AND FAN "ON-AUTO" SELECTOR SWITCHES. PROVIDE PROGRAMMABLE TYPE AS RECOMMENDED BY MANUFACTURER, HONEYWELL OR EQUAL. PROVIDE TAMPER PROOF COVERS.
- THERMOSTAT LOCATION SHALL BE APPROVED BY OWNER AND ENGINEER BEFORE INSTALLATION. INSTALL THERMOSTAT 48" TO 54" A.F.F. PER A.D.A REQUIREMENTS WHERE APPLICABLE. MECHANICAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR ALL REQUIREMENTS FOR JUNCTION BOXES, CONDUITS, CONTROL WIRING, POWER, ETC. AND DEFINE RESPONSIBILITIES AND SCOPE OF WORK FOR EACH TRADE PRIOR TO ANY PURCHASING OR INSTALLATION. WHENEVER THERE ARE MORE THAN ONE SENSOR OR THERMOSTAT, SIDE BY SIDE, THEY SHALL BE GANGED TOGETHER WITHIN THE SAME COVER PLATE WHEREVER POSSIBLE.
- CONTRACTOR SHALL COORDINATE THIS ISSUE WITH ARCHITECT/OWNER PRIOR TO INSTALLATION AND SHALL BRING ANY DISCREPANCY TO THE ENGINEER'S ATTENTION. REFRIGERANT LINES SHALL BE COPPER, TYPE "L" HARD DRAWN WITH WROUGHT COPPER

SELECTION DATA

SERVICE AREA | MANUF.(*)

WOMENS RR

COOK, TWIN-CITY, ACME, PENN

PURCHASE.

ACCESSORIES NOTES:

PROVIDE BIRD SCREEN.

PROVIDE BALANCING DAMPER.

WITH VIBRATION ISOLATORS.

CORROSION PROTECTION.

(*) APPROVED EQUAL MANUFACTURER:

PROVIDE GRILL COLOR PER

ARCHITECTURE SPECIFICATIONS.

SWITCH AND INTEGRAL THERMAL

PROVIDE BACK DRAFT DAMPER. LOCATE

PROVIDE FACTORY MOUNTED DISCONNECT

WITH ELECTRICAL CONTRACTOR PRIOR TO

BACK DRAFT DAMPER AT DISCHARGE.

OVERLOAD PROTECTION. COORDINATE

SUPPORT FROM STRUCTURE COMPLETE

PROVIDE WEATHERHOOD DRAIN AND

MODEL

GREENHECK | SP-B150 | CEILING

MENS RR | GREENHECK | SP-A250 | CEILING | 240

CONFIG.

BRAZING-JOINT TYPE FITTINGS, USE BRAZING MATERIALS FOR HIGH PRESSURE PIPING PER AWS A5.8: BCuP SERIES COPPER-PHOSPHORUS ALLOY OR BAg1 SILVER ALLOY. REFRIGERANT LINES SHALL BE SIZED PER MANUFACTURER'S RECOMMENDATIONS. SOFT COPPER TYPE "M" SHALL BE ALLOWED FOR RISER PIPING INSIDE CHASE TO LIMIT NUMBER OF JOINTS. COORDINATE WITH ENGINEER FOR PRIOR APPROVAL ALL EXPOSED INSULATION SHALL BE PROTECTED WITH UV RESISTANT PAINT OR ALUMIN. SHIELD.

- 15. ARMAFLEX INSULATION SHALL BE USED FOR SUCTION LINES (1/2" FOR ABOVE 40° F AND 1" FOR BELOW 40° F) PER FLORIDA ENERGY CODE TABLE C403.2.8 FOR PIPING INSULATION. FILTER/DRYER AND SIGHT GLASS SHALL BE PROVIDED AT LIQUID LINES.
 - 16. ALL BRANCH TAKE-OFFS TO BE PROVIDED W/ MANUAL VOLUME DAMPERS. PROVIDE RADIUS ELBOWS WHERE FEASIBLE, SQUARE ELBOWS AND TEE'S SHALL BE FURNISHED W/SINGLE FOIL TURNING VANES. PROVIDE MANUAL VOLUME DAMPERS WITH EXTRACTOR AT ALL FLEX TAKE-OFFS. PROVIDE REMOTE, CABLE OPERATED VOLUME DAMPERS IN INACCESIBLE AND HARD CEILING AREAS, "YOUNG REGULATOR" OR EQUAL.
 - 17. PROVIDE NEW FILTERS FOR ALL AIR CONDITIONING EQUIPMENT BEFORE START-UP, REPLACE PRIOR TO FINAL ACCEPTANCE BY OWNER.
 - 18. PROVIDE SMOKE DETECTORS WITH SERVICE ACCESS DOORS IN ALL RETURN AIR DUCTS FOR FANS AND AHU'S SERVING A COMMON PLENUM OF 2000 CFM OR ABOVE. FOR SMOKE DETECTORS NOT VISIBLE, IN CONCEALED SPACES, PROVIDE REMOTE ANNUNCIATION/TEST STATION AS REQUIRED BY AUTHORITY HAVING JURISDICTION, COORDINATE PRIOR TO INSTALLATION. DETECTORS SHALL BE BY ONE MANUFACTURER, COORDINATE VOLTAGE ETC. WITH ELECTRICAL CONTRACTOR AND FIRE ALARM SYSTEM BEFORE ORDERING. UPON DETECTION, SMOKE DETECTORS SHUT DOWN ASSOCIATED AIR MOVING EQUIPMENT AND ALL AIR MOVING EQUIPMENT SERVING THAT COMMON PLENUM.
 - 19. PROVIDE TYPE "B" DYNAMIC FIRE DAMPERS WITH SERVICE ACCESS DOORS IN ALL DUCTS AND OPENINGS PENETRATING FIRE RATED WALLS, MECHANICAL AND ELECTRICAL EQUIPMENT ROOMS, TENANT SEPARATION, PARTITIONS, FLOOR OR ROOF SLABS AND AT OUTSIDE AIR INTAKES AS REQUIRED. PROVIDE RADIATION DAMPERS IN RATED CEILINGS FOR ALL CEILING OPENINGS, CEILING FANS, DIFFUSERS OR GRILLES RATED FOR USE IN THE CEILING ASSEMBLY. PROVIDE LOW-LEAKAGE CLASS DAMPERS FOR ALL SITUATIONS WHERE THE AIRFLOW CFM HAS TO BE CONTROLLED. VERIFY AND REPLACE AS REQUIRED FOR EXISTING SYSTEMS.
 - 20. HVAC CONTRACTOR SHALL PROVIDE A T & B REPORT PER F.E.C. 2017, CH. C408.2.2, (THE T & B REPORT SHALL BE INDEPENDENT FOR SYSTEMS OVER 15 TONS) FOR ALL MECHANICAL EQUIPMENT, AIR DEVICES, DAMPERS, AHU'S AND FANS. THE TEST AND BALANCE REPORT SHALL BE IN ACCORDANCE WITH THE AIR BALANCE COUNCIL STANDARDS AND SHALL INCLUDE AIR QUANTITIES FOR ALL SUPPLY GRILLES, RETURN GRILLES AND EXHAUST GRILLES AND THE LEAVING AND ENTERING AIR TEMPERATURE ('F) FROM SUPPLY GRILLES AND EVAPORATORS. FOR (EXISTING) SMOKE EVACUATION SYSTEMS HVAC CONTRACTOR SHALL PROVIDE A T & B REPORT PRIOR TO ANY NEW WORK, PROVING THAT THE SMOKE EVACUATION SYSTEM PERFORMS PER ORIGINAL DESIGN DOCUMENTS AND IS COMPLIANT WITH LOCAL CODE REQUIREMENTS.
 - 21. RUN INSULATED FIRE RATED CONDENSATE DRAINS AS REQUIRED.
 - 22. ALL INSULATION WILL HAVE FIRE/SMOKE RATING LESS THAN 25/50.
 - 23. MECHANICAL EQUIPMENT ON ROOF OR ELEVATED STRUCTURES SHALL COMPLY WITH FBC 2017 PAR. 306.5 IF INSTALLED HIGHER THAN 16 FEET A.F.F. MECHANICAL EQUIPMENT INSTALLED IN ATTICS SHALL MEET THE REQUIREMENTS OF FBC 2017 PAR. 306.3 IF THE EQUIPMENT CAN NOT BE SERVICED/REMOVED THROUGH REQUIRED OPENING. MECHANICAL EQUIPMENT SHALL BE PROTECTED WITH MECHANICAL BARRIERS IF EXPOSED TO MECH. DAMAGE. ALL EQUIPMENT SHALL BE INSTALLED ON 6" CONCRETE PAD AT GRADE LEVEL .
 - ALL WIND LOAD AND OTHER COMPLIANCE CALCULATIONS AND/OR INSTALLATION DETAILS FOR ROOF MOUNTED EQUIPMENT AS REQUIRED BY FBC 2017, SEC. 1509, 1522 AND CHAPTER 16, SHALL BE PROVIDED BY STRUCTURAL ENGINEER/ARCHITECT.
 - 24. PROVIDE A MIN. OF 36" CLEARANCE IN FRONT OF ALL 120-208 VOLT PANELS AND MIN. 42" CLEARANCE IN FRONT OF ANY 240-480 VOLT PANEL. PROVIDE ADEQUATE SIDE CLEARANCE
 - 25. MECHANICAL PLANS IN GENERAL, ARE DIAGRAMMATIC IN NATURE, AND ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL, PLUMBING, ELECTRICAL, FIRE SPRINKLER, AND STRUCTURAL PLANS AND SHALL BE CONSIDERED AS ONE SET OF DOCUMENTS. DUCT AND PIPING OFFSETS, BENDS AND TRANSITIONS SHALL BE REQUIRED TO PROVIDE AND INSTALL A COMPLETE FUNCTIONAL SYSTEM AND SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. CHANGES IN DUCTWORK SIZE AND ROUTE WILL BE REQUIRED TO AVOID STRUCTURAL, PLUMBING, FIRE SPRINKLER AND ARCHITECTURAL BUILDING FEATURES. DUCTWORK CHANGES MAY BE MADE BY CONTRACTOR USING EQUIVALENT SIZED DUCT. CONTACT ENGINEER IF DUCT AREA WILL NOT FIT.
 - 26. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BIDDING, ORDERING, FABRICATION OR INSTALLATION OF MATERIALS OR EQUIPMENT, IN ORDER TO PROVIDE A FULLY INTEGRATED MECHANICAL AND CONTROLS SYSTEMS WITH THE EXISTING ONES. ANY DISCREPANCY BETWEEN EXISTING CONDITIONS AND PLANS, OR ADDITIONAL CLARIFICATION REQ'D SHALL BE BROUGHT TO THE ATTENTION OF ENGINEER PRIOR TO FINAL BIDDING AND WORK.
 - 27. NO COMBUSTIBLE MATERIALS ARE ALLOWED IN RETURN AIR PLENUMS OR ABOVE CEILINGS USED AS RETURN AIR PLENUM. IF SPACE WITH RETURN AIR PLENUM HAS ANY DECK TO DECK PARTITIONS AIR TRANSFER DUCTS MUST BE INSTALLED WHEN CPVC PIPING IS USED FOR FIRE SPRINKLER SYSTEMS, THE R/A GRILLES LAYOUT SHALL BE (FIELD) COORDINATED WITH SUCH PIPING SO THAT NO PORTION OF THE GRILLES WILL BE DIRECTLY BELOW THE CPVC PIPING.
 - 28. CONDENSATE DRAIN PIPING TO BE AS SPECIFIED PER PLUMBING PLANS, IF NOT SPECIFIED TO BE TYPE "L" COPPER OR PVC WHERE ALLOWED BY CODE WITH 1/2" ARMAFLEX INSULATION. PROVIDE APPROVED WATER LEVEL DETECTOR OR FLOAT SWITCH TO AUTOMATICALLY SHUT DOWN THE AIR COND. UNIT, AS A SECONDARY DRAIN SYSTEM TO COMPLY WITH FMC 2017, SEC. 307 SUPPLY CONDENSATE PUMP WHERE NECESSARY AS IMPOSED BY FIELD CONDITIONS OR INSTALLATION CHANGES AND PIPE TO CONDENSATE DRAIN PER PLUMBING PLANS.
 - 29. MANUFACTURER'S WARRANTY: CONTRACTOR SHALL PROVIDE WARRANTY FOR A PERIOD OF (1) ONE YEAR AFTER BUILDING C.O. FOR ALL MECHANICAL SYSTEMS, DUCTWORK, CONTROLS ACCESSORIES AND ALL OTHER EQUIPMENT, PARTS AND LABOR UNDER THESE DRAWINGS AND AND SPECIFICATIONS. CONTRACTOR SHALL PROVIDE WARRANTY FOR COMPRESSORS FOR (5) FIVE YEARS. ANY REPAIRS REQUIRING SYSTEM SHUTDOWN WILL BE DONE DURING NON-OPERATIONAL PERIODS OR AS AGREED WITH OWNER.
 - 30 CONTRACTOR SHALL PROVIDE 5 SETS OF COORDINATED DUCTWORK AND EQUIPMENT SHOP DRAWINGS. SHOP DRAWINGS TO REFLECT EQUIPMENT LOCATION AND DUCTWORK ROUTING IN COORDINATION WITH STRUCTURAL SHOP DRAWINGS, FIRE SPRINKLER SHOP DRAWINGS, PLUMBING SHOP DRAWINGS AND FINAL ARCHITECTURAL REFLECTED CEILING PLANS.

GENERAL DATA

WEIGHT | DIMENSIONS

14X12X7

(LBS) L"xW"xH"

CONTROL

CONTINOUS

14X12X12 | CONTINOUS

FAN SCHEDULE

HP

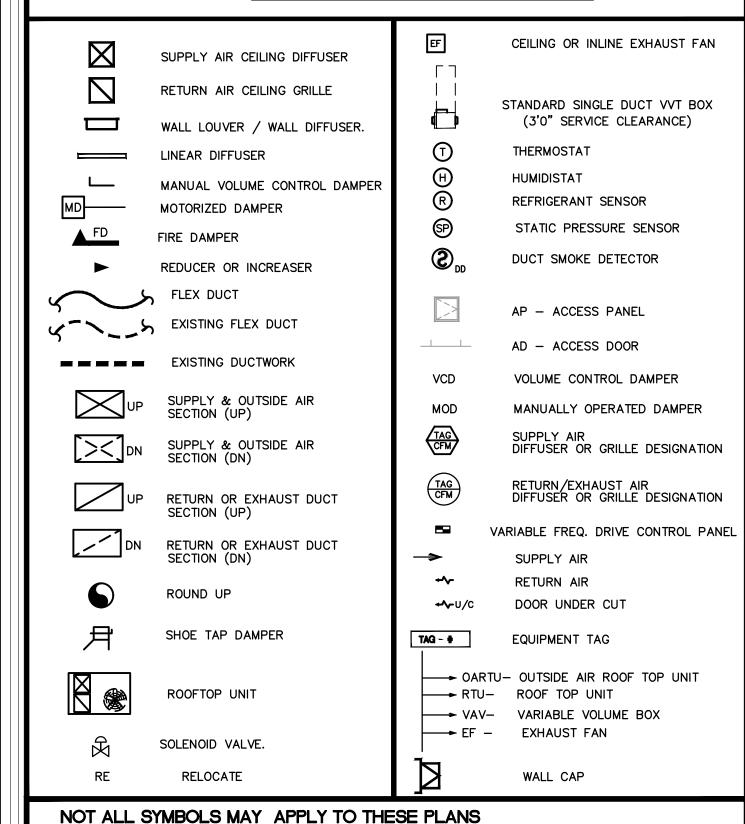
2.5 | 128 WATT |

2.5

HEET#	DESCRIPTION
0.1	MECHANICAL NOTES, LEGEND & INDEX
2.1	MECHANICAL FLOOR PLAN

MECHANICAL SHEET INDEX

MECHANICAL LEGEND



HVAC ARREVIATION I ECENID

	HVAC ABBREVI	AIIO	N LEGEND
AC AFF BDD CD COP DB DIA. E EER EDH EF ESP F FD FLA FMS	AIR CONDITIONING ABOVE FINISH FLOOR BACK DRAFT DAMPER CONDENSATE DRAIN COEFFICIENT OF PERFORMANCE DRY BULB DIAMETER EXISTING TO REMAIN ENERGY EFFICIENCY RATIO ELECTRIC DUCT HEATER EXHAUST FAN EXTERNAL STATIC PRESSURE FILTER FIRE DAMPER FULL LOAD AMPS. FLOW MEASURING STATION	MCA MOD MOCP NC O/A OBD PD R R/A RLA SEER TSP VD VFD WB	MINIMUM CIRCUIT AMPS (FOR WIRE SIZING) MANUALLY OPERATED DAMPER MAXIMUM OVERCURRENT PROTECTION DEVICE A NOISE CRITERIA OUTSIDE AIR OPOSITE BLADE DAMPER PRESSURE DROP. EXISTING TO BE RELOCATED RETURN AIR RATED LOAD AMPS. STANDARD ENERGY EFFICIENCY RATIO TOTAL STATIC PRESSURE VOLUME CONTROL DAMPER VARIABLE FRECUENCY DRIVE WET BULB
IPLV	INTEGRATED PART-LOAD VALUE.		

MCA MOD	
MOCP NC O/A OBD	NOISE CRITERIA
PD R R/A	EXISTING TO BE RELOCATED
RLA SEER TSP VD	STANDARD ENERGY EFFICIENCY RATIO TOTAL STATIC PRESSURE VOLUME CONTROL DAMPER
VFD WB	VARIABLE FRECUENCY DRIVE WET BULB

NOTE: NOT ALL SYMBOLS MAY APPLY TO THESE PLAN.

AIR CONDITIONING SPLIT SYSTEM EQUIPMENT SCHEDULE

	CONDENSING UNIT															
CU TAG	U TAG MANUFACTURER & MODEL NOMINAL TONNAGE CAP. STAGES (S)EER/IPLV REFRIG./LBS LIQ./SUCT. LINES NO. FANS FAN FLA(EA) NO. COMP. COMP.RLA(EA) VOLTAGE/PH MCA/MOCP WEIGHT (LBS) L x W x H (IN) NOTES														NOTES	
CU-1	TRANE/4TTR7060A	5.	.0	1	16.25	R410A/-	3/8:1-1/8	1	1.3	1	32.1	208/1/60	41/60	275	37X34X45	1–14
							AIR HA	NDLING	UNIT							
AHU TAG	MANUFACTURER & MODEL	TOTAL MBH	SENSIBLE MBH	TOTAL CFM	O/A CFM	E.S.P.("W.G.)	ENT. DB/WB	LEAV. DB/WB	ROWS/FPI	FAN HP/FLA	HEATER KW	VOLTAGE/PH	MCA/MOCP	WEIGHT (LBS)	L × W × H (IN)	NOTES
AHU-1	TRANE/TAM9A0C60	57.5	45.0	860	580	0.5	78/65	56.9/55.2	-	1.0-6.4	7.2	208/1/60	51/60	178	21X23X61	1–14

- <u>NOTES:</u> 1. units rated per ari 210, 240 and 270, approved equal:carrier, york, etc. PROVIDE WITH ELECTRIC EXPANSION VALVES, LIQUID LINE FILTER DRYER AND MULTI-USE SERVICE VALVES. PROVIDE COMPRESSOR WITH CRANKCASE HEATER AND MIN. 5-YEAR WARRANTY. PROVIDE HIGH AND LOW PRESSURE CONTROL AND OVER TEMPERATURE PROTECTION. PROVIDE WEATHERPROOF ELECTRIC CONTROLS AND SINGLE SIDE SERVICE ACCESS. PROVIDE DISCONNECT BY ELECTRICAL CONTRACTOR FOR C.U., COORDINATE PRIOR TO PURCHASING.

OTAL | 1450 | 1412

PRESURIZATION 38

- PROVIDE REFRIGERANT LINES SIZE AS RECOMMENDED BY MANUFACTURER, NOT TO EXCEED 50 FT. EQUIV. LENGTH FOR LONGER RUNS COORDINATE WITH MANUFACTURER PRIOR TO PURCHASE OR ANY WORK.
 CONTRACTOR TO COORDINATE WITH ELECTRICAL TO INSURE THAT THE CONDENSING UNIT AND RACK ARE TIED TO THE
- LIGHTNING PROTECTION SYSTEM ON THE ROOF.
- PROVIDE FULLY MODULATING HOT GAS REHEAT PROVIDE MOTORIZED DAMPER. MOTORIZED DAMPER TO BE INTERLOCKED WITH COMPRESSOR.
- ALL EQUIPMENT SHALL COMPLY WITH WIND LOAD REQUIREMENTS SET BY LOCAL CODES, ORDINANCES, OR AUTHORITIES. PROVIDE FACTORY START UP.

COORDINATION NOTE:

MECHANICAL CONTRACTOR SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS AND ACCESSORIES WITH ELECTRICAL CONTRACTOR PRIOR TO PURCHASING AND INSTALLATION AND SHALL BRING ANY DISCREPANCIES TO THE ATTENTION OF ENGINEER

CFM ESP ("WG) SONES

FAN DATA

GENERAL FAN NOTES: a. MOTOR STARTERS, DISCONNECTS (IF NOT FACTORY PROVIDED), ALL NORMAL EQUIPMENT POWER,

| 83 WATT | 1000 | DIRECT | 120/1/60 |

RPM DRIVE VOLTAGE

|1050 | DIRECT | 120/1/60 |

- AND EMERGENCY POWER WIRING BY ELECTRICAL CONTRACTOR. b. ALL CONTINUOUS-DUTY MOTORS SHALL BE PROVIDED WITH OVERLOAD PROTECTION ACCORDING
- TO NATIONAL ELECTRICAL CODE PAR. 430-32. c. FIELD ADJUST OPENINGS WITH STRUCTURE.
- d. ALL OUTDOOR EQUIPMENT SHALL COMPLY WITH LOCAL ZONING NOISE ORDINANCE OR NOT EXCEED A NOISE LEVEL OF 65 dB AS MEASURED RADIALLY 30 FT. FROM THE EQUIPMENT IN ALL DIRECTIONS.
- e. COORDINATE WITH ELECTRICAL CONTRACTOR AND MANUFACTURER BEFORE BIDDING OR ORDERING ANY EQUIPMENT. CONTRACTOR TO PROVIDE NECESSARY STEPDOWN AND/OR MULTI-VOLTAGE TRANSFORMERS
- f. SEE PROJECT PLANS AND SPECIFICATIONS FOR OTHER FIELD SUPPLIED ITEMS AND ADDITIONAL INFORMATION.
- q. ALL FANS ON ROOF SHALL BE PAINTED AS PER ARCHITECTURAL SPECIFICATIONS. h. ALL EQUIPMENT SHALL COMPLY WITH WIND LOAD REQUIREMENTS SET BY LOCAL CODES, ORDINANCES, OR AUTHORITIES. WIND LOAD RATING MAY BE REQUIRED; CONTRACTOR TO PROVIDE NOA RATING IF REQUIRED.

MECHANICAL NOTES

NOT FOR PRICING OR CONSTRUCITON XAMM CONSULTING PROJECT #: PROJECT MANAGER: DUANE MILLAR Fort Pierce, Florida 34950 bbrown@kammconsulting.com Certification of Authorization #8189 Florida License #58232

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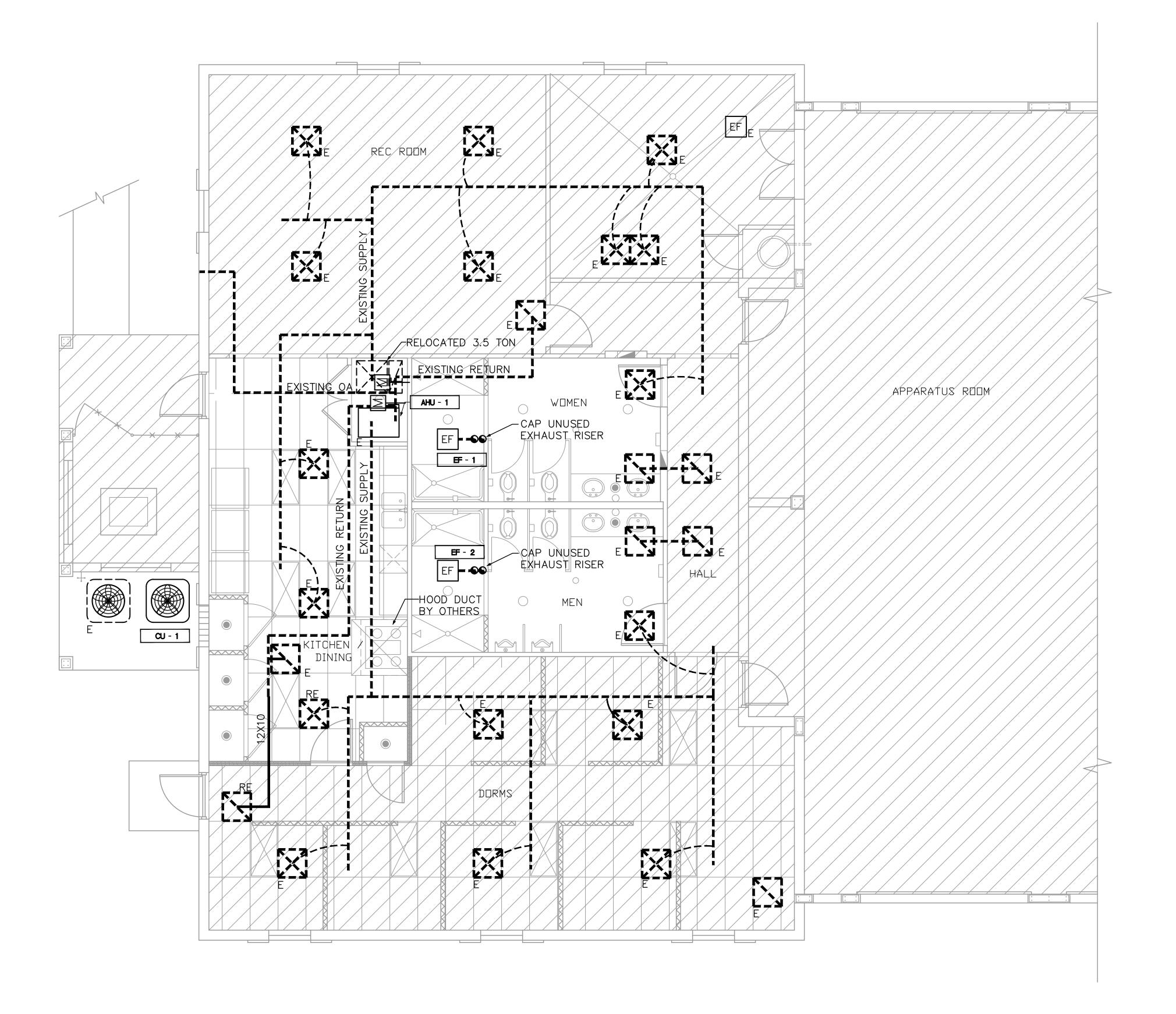
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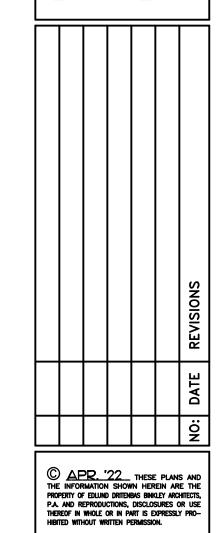
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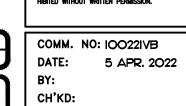
SEAL:

R: INDIAN RIVER COUNTY FIRE DISTRICT
1840 25TH STREET



MECHANICAL PLAN





M2.1

	LIGHTING FIXTURE SCHEDULE												
SYMBOL	TYPE	DESCRIPTION	NO.	LAMPS TYPE	WATT	DRIVER TYPE	VOLTAGE	MOUNTING	REMARKS				
0	©	6" LED RECESSED DOWNLIGHT, DAMP LOCATION RATED. DESIGN SELECTION: DMF LIGHTING CAT# DRDH-N-IC-6/DRD2M-7-9-35/DRD2T-R-6-WET-WH	INTEGRAL	LED 3500°K	50	STANDARD OR 0-10V DIMMING	UNV	CEILING RECESSED	1				
•	(C)	6" LED RECESSED DOWNLIGHT, DAMP LOCATION RATED. DESIGN SELECTION: DMF LIGHTING CAT# DRDH-N-IC-6/DRD2M-7-9-35/DRD2T-R-6-WET-WH	INTEGRAL	LED 3500°K	50	STANDARD OR 0-10V DIMMING	UNV	CEILING RECESSED	1				
4		EMERGENCY LIGHTING, WALL PAK. DESIGN SELECTION: COMPASS CAT# CU2	INTEGRAL	-	12	-		-					
▼		EXIT SIGN, CEILING/WALL MOUNT, RED LED, NUMBER OF FACES PER PLANS. DESIGN SELECTION: COMPASS CAT# CER	_	-	-	-		UNIVERSAL					

1) VERIFY CEILING TYPES PRIOR TO ORDERING FIXTURES.

GENEREAL NOTE: NO SUBSTITUTIONS TO THE LIGHT FIXTURE SCHEDULE CONTAINED IN THESE DOCUMENTS WILL BE CONSIDERED WITHOUT PRIOR REVIEW AND/OR APPROVAL BY THE ARCHITECT AND ELECTRICAL ENGINEER

SCHE	DL	JLE	EC	F	E)	K BR	ANC	<u>H</u>	CI	RC	Ul	ΓР	ANEL "LPE"
MAIN: 100 AMP / 3 POLE MAIN LUG ONLY SPEC: EXISTING MOUNTING: EXISTING AIC SYMM: EXISTING													
DESCRIPTION WIRE GND. COND. TRIP CKT. A PHASE KVA CKT. TRIP COND. GND. WIRE DESCRIPTION													
EXISTING CIRCUIT	_	_	_	20	1	0.8 0.8		2	_	-	-	_	EXISTING CIRCUIT
EXISTING CIRCUIT	_	_	_	20	3		0.8 1.0	4	20	1/2"	#12	#12	REFRIGERATOR
EXISTING CIRCUIT	-	_	-	20	5	0.8 1.0		6	20	1/2"	#12	#12	REFRIGERATOR
EXISTING CIRCUIT	-	-	-	20	7		0.8 0.8	8	-	_	-	ı	EXISTING CIRCUIT
EXISTING CIRCUIT	-	-	-	20	9	0.8 0.8		10	-	-	-	ı	EXISTING CIRCUIT
EXISTING CIRCUIT	-	-	-	20	11		0.8 0.8	12	-	-	_	ı	EXISTING CIRCUIT
EXISTING CIRCUIT	_	_	_	50	13	0.8 0.8		14	-	-	_	ı	EXISTING CIRCUIT
				/2	15		0.8 0.8	16	-	-	_	ı	EXISTING CIRCUIT
EXISTING CIRCUIT	-	-	_	20	17	0.8 0.8		18	-	_	-	-	EXISTING CIRCUIT
EXISTING CIRCUIT	_	-	-	30/	19		0.8 0.8	20	-	_	-	_	EXISTING CIRCUIT
				/2	21	0.8 0.8		22	-	_	-	_	EXISTING CIRCUIT
SPARE	_	_	_	25/	23		0.8 1.0	24	20	1/2"	#12	#12	REFRIGERATOR
				/2	25	0.8 –		26	20	_	-	_	SPARE
AHU-1	2#6	1#10	1"	60	27		5.3 2.9	28	\4 5	3/4"	1#10	2#8	CU-1
				/2	29	5.3 2.9		30	2\				
						18.8	18.2	KVA	PER	PHASE			
	156.6 151.6 AMPS PER PHASE												
						37	7.0	TOT	AL KV	١			

MAIN: 125 AMP / 3 POLE MAIN LUG ONLY VOLTAGE: 208/120V, 1ø, 3 WIRE SPEC: EXISTING MOUNTING: EXISTING AIC SYMM: EXISTING													0V, 1ø, 3 WIRE
IOUNTING: EXISTING										AIC S	YMM: I	EXISTING	G
DESCRIPTION	WIRE	GND.	COND.	TRIP	скт.	A PHASE KVA	C PHASE KVA	скт.	TRIP	COND.	GND.	WIRE	DESCRIPTION
XISTNG CIRCUIT	_	–	-	20	1	0.4 0.4		2	20	_	_	_	EXISTING CIRCUIT
XISTNG CIRCUIT	_	_	-	20	3		0.4 0.4	4	20	_	_	_	EXISTING CIRCUIT
XISTNG CIRCUIT	_	_	_	20	5	0.4 0.4		6	20	_	-	-	EXISTING CIRCUIT
XISTNG CIRCUIT	-	_	_	20	7		0.4 0.4	8	20	_	ı	-	EXISTING CIRCUIT
XISTNG CIRCUIT	-	_	_	20	9	0.4 0.4		10	20	_	ı	-	EXISTING CIRCUIT
XISTNG CIRCUIT	_	_	_	20	11		0.4 0.4	12	20	_	ı	-	EXISTING CIRCUIT
XISTNG CIRCUIT	_	_	_	20	13	0.4 0.4		14	20	_	ı	-	COUNTER TOP RECEPT.
TITCHEN HOOD CONTROLS	-	_	_	20	15		1.0 0.4	16	20	_	ı	1	COUNTER TOP RECEPT.
XISTNG CIRCUIT	-	-	_	20	17	0.4 0.4		18	20	_	ı	1	EXISTING CIRCUIT
XISTNG CIRCUIT	-	_	_	20	19		0.4 0.4	20	20	_	ı	1	EXISTING CIRCUIT
XISTNG CIRCUIT	-	_	_	20	21	0.4 0.4		22	20	_	ı	-	EXISTING CIRCUIT
XISTNG CIRCUIT	_	_	_	20	23		0.4 0.4	24	20	_	ı	1	EXISTING CIRCUIT
XISTING CIRCUIT	-	_	-	39/	25	0.8 0.8		26	40	-	_	ı	EXISTING CIRCUIT
				/2	27		0.8 0.8	28	2				
XISTING CIRCUIT	-	-	_	30/	29	0.8 0.4		30	20		_	_	EXISTING CIRCUIT
				$\sqrt{2}$	31		0.8 1.0	32	20	_	_	_	GARBAGE DISPOSAL
XISTING CIRCUIT		_	_	20	33	0.8 1.0		34	20		_	_	DISHWASHER
HUNT TRIP		_		_	35		- 2.1	36	3 5	3/4"	1#12	2#12	KITCHEN HOOD EXHAUST FAN
ECEPTACLE	#12	#12	1/2"	20	37	0.8 2.1		38	2				
PACE	_	_	_	_	39		- 2.1	40	75	3/4"	1#12	2#12	KITCHEN HOOD SUPPLY FAN
PACE	_	_	_	_	41	- 2.1		42	2				
						13.4	12.2	I KVA	PER F	PHASE			

SCHE	<u>DL</u>	<u>JLE</u>	<u> </u>	<u> </u>	<u>=</u> >	BRA	/NCI	Н	CIF	3CI	<u>JIT</u>	· P	ANEL "MDP"
MAIN: 400 AMP / 3 POLE MAIN CIRCUIT BREAKER VOLTAGE: 208/120V, 1ø, 3 WIRE SPEC: EXISTING MOUNTING: EXISTING AIC SYMM: EXISTING													
DESCRIPTION	WIRE	GND.	COND.	TRIP	скт.	A PHASE KVA	C PHASE KVA	скт.	TRIP	COND.	GND.	WIRE	DESCRIPTION
EXISTNG CIRCUIT	_	_	-	100	1	0.8 0.8	0.8 0.8	2	60	_	_	-	EXISTING CIRCUIT
EXISTNG CIRCUIT	-	-	-	60	5	0.8 0.8	0.8 0.8	6 8	20	_	_		SPACE SPACE
SPACE SPACE	-	=	_	<u>-</u>	9	0.8 0.8	0.8 0.8	10	45	_	_	_	EXISTING CIRCUIT
EXISTNG CIRCUIT	-	-	-	45	13 15	0.8 0.8	0.8 0.8	14	50	=			SPACE EXISTING CIRCUIT
EXISTNG CIRCUIT	<u> </u>		_	20	17	0.8 0.8		18	2	_			
SPARE	_	-	-	30/2	19 21	0.8 0.8	0.8 0.8	20	-	_	-	1	SPACE SPACE
SPACE	_		_	_	23		0.8 0.8	24			-	-	SPACE
9.6 9.6 KVA PER PHASE													
	80.0 80.0 AMPS PER PHASE 19.2 TOTAL KVA												

ELECTRICAL SPECIFICATIONS

- A. THE CONTRACTOR SHALL SUPPLY AND INSTALL ALL NEW ELECTRICAL WORK INDICATED. CONSTRUCTION SHALL BE IN ACCORDANCE WITH DRAWINGS AND APPLICABLE SPECIFICATIONS. IF A PROBLEM IS ENCOUNTERED IN COMPLYING WITH THIS REQUIREMENT, CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER AS SOON AS POSSIBLE AFTER DISCOVERY OF THE PROBLEM AND SHALL NOT PROCEED WITH THAT PORTION OF THE WORK UNTIL ARCHITECT/ENGINEER HAS DIRECTED
- CORRECTIVE ACTION TO BE TAKEN. B. THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO BID AND FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING ELECTRICAL AND COMMUNICATIONS INSTALLATION AND MAKE PROVISIONS AS TO
- THE COST THEREOF. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE (AS ADOPTED BY THE AUTHORITY HAVING JURISDICTION) AND ALL CODES AND ORDINANCES OF THE AUTHORITY HAVING JURISDICTION. THE SPECIFICATION, CODES AND STANDARDS LISTED BELOW ARE
- 1. NATIONAL ELECTRICAL CODE (NFPA-70) 2. CODE FOR SAFETY TO LIFE (NFPA_101)
- 3. STANDARD FOR THE INSTALLATION, MAINTENANCE AND USE OF LOCAL PROTECTIVE SIGNALING
- SYSTEMS (NFPA-72) 4. UNDERWRITERS' LABORATORIES (UL)
- 5. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA) AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
- . FEDERAL SPECIFICATION (FED. SPEC.)
- 8. INSULATED POWER CABLE ENGINEERS ASSOCIATION (IPCEA) 9. FLORIDA BUILDING CODE. FBC 2020 EDITION
- 10. INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE) 11. CITY OF INDIAN RIVER BUILDING CODE. (AMENDMENTS TO FLORIDA BUILDING CODE FBC 2020) 12. ADDITIONALLY, DESIGNS, WORK PRACTICES AND CONDITIONS MUST CONFORM WITH THE
- OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 (OSHA) D. DO NOT SCALE THE ELECTRICAL DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATION OF ALL EQUIPMENT. CONFIRM WITH OWNER'S REPRESENTATIVE.
- . IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS NECESSARY FOR EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.
- CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FROM A PERIOD OF NOT LESS THAN ONE YEAR FROM DATE OF ACCEPTANCE. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE
- REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED . ALL REQUIRED INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LIABILITY AND
- PROPERTY DAMAGE FOR THE DURATION OF THE WORK. CONTRACTOR SHALL PAY FOR ALL PERMITS, FEES, INSPECTIONS AND TESTING. CONTRACTOR TO OBTAIN PERMIT AND APPROVED SUBMITTALS PRIOR TO BEGINNING WORK OR ORDERING EQUIPMENT. THE TERM "PROVIDE" USED IN THE CONSTRUCTION DOCUMENTS AND SPECIFICATIONS SHALL MEAN THAT
- THE CONTRACTOR IS TO FURNISH, INSTALL AND CONNECT COMPLETE.
- CONDUCTORS SHALL BE 98% CONDUCTIVITY, COPPER WITH "THHN-THWN" INSULATION UNLESS OTHERWISE

MINIMUM WIRE SIZE SHALL BE #12 A.W.G. (EXCEPT AS NOTED OTHERWISE FOR CONTROL WIRING). ALL

- B. ELECTRICAL METALLIC TUBING (EMT) SHALL BE OF BEST QUALITY STEEL, SMOOTH INSIDE AND OUT AND SHALL BE HOT-DIPPED GALVANIZED.
- C. OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, CAST ALLOY WITH THREADED HUBS IN WET OR DAMP LOCATIONS AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.
- D. RIGID NONMETALIC CONDUIT SHALL BE SCHEDULE 40 PVC. . ALL MATERIALS SHALL BE NEW AND BEAR UNDERWRITERS' LABELS WHERE APPLICABLE.
- . PANELBOARDS: 1. CURRENT CARRYING BUSES SHALL BE COPPER. GROUND BUS BARS SHALL BE COPPER.
- 2. ALL CIRCUIT BREAKERS SHALL BE BOLT ON. PLUG-IN BREAKERS ARE NOT ACCEPTABLE. 3. CIRCUIT BREAKERS USED AS SWITCHES IN FLUORESCENT OR HID LIGHTING CIRCUITS SHALL
- BE LISTED AND MARKED "SWD"
- 4. ALL CIRCUIT BREAKERS FEEDING MECHANICAL EQUIPMENT SHALL BE HACR TYPE. 5. A.I.C. RATINGS SHALL BE AS INDICATED ON PANELBOARD SCHEDULES.
- 6. ALL PANELBOARDS SHALL BE FURNISHED WITH PLASTIC LAMINATE NAMEPLATES WITH 1/4" ENGRAVED LETTERING FOR PANEL IDENTIFICATION.
- 7. ALL PANELBOARDS SHALL BE PROVIDED WITH TYPE-WRITTEN DIRECTORY OF BRANCH CIRCUIT
- G. DISCONNECT SWITCHES SHALL BE H.P. RATED, HEAVY DUTY, QUICK—MAKE, QUICK—BREAK. ENCLOSURES
- SHALL BE NEMA-1 FOR INDOOR LOCATIONS, NEMA 3R FOR OUTDOOR LOCATIONSOR AS OTHERWISE NOTED. . MOTOR STARTERS SHALL BE MANUAL OR MAGNETIC AS INDICATED ON THE ELECTRICAL DRAWINGS, WITH
- OVERLOAD RELAYS IN EACH PHASE. WIRING DEVICES (GENERAL PURPOSE RECEPTACLES AND WALL SWITCHES) COLOR SHALL BE COORDINATED WITH CLIENT.

PART 3 - EXECUTION

- . COLOR CODING OF CONDUCTORS SHALL BE AS FOLLOWS: 1. 208/120 VOLTS, 3 PHASE, 4-WIRE SYSTEM: UNGROUNDED CONDUCTORS: 1 BLACK, 1 RED AND 1 BLUE. GROUNDED (NEUTRAL) CONDUCTOR; WHITE. GROUNDING CONDUCTORS SHALL BE GREEN.
- 2. 480/277 VOLT, 3-PHASE, 4-WIRE SYSTEM: UNGROUNDED CONDUCTORS: 1 BROWN, 1 YELLOW, AND 1 PURPLE. GROUNDED (NEUTRAL) CONDUCTORS; GREY. GROUNDING CONDUCTORS SHALL BE GREEN. 3. BRANCH CIRCUIT WIRING (#6 AND SMALLER) SHALL BE COLOR CODED BY CONTINUOUS INSULATION COLOR AND FEEDERS AND SERVICES (#4 AND LARGER) SHALL BE CODED AT ALL JUNCTION OR
- PULL POINTS (EXCEPT LB'S OR LBD'S) USING COLOR MARKERS OR PLASTIC TAPE MANUFACTURED FOR THE PURPOSE. 3. WIRING METHODS 1. ALL CONDUCTORS SHALL BE INSTALLED IN ELECTRICAL METALLIC TUBING (EMT) UNLESS
 - OTHERWISE NOTED, SPECIFIED OR AS SPECIFICALLY PROHIBITED BY THE AUTHORITY HAVING JURISDICTION. ALL FITTINGS AND COUPLINGS FOR EMT CONDUIT SHALL BE ALL STEEL RAIN TIGHT COMPRESSION TYPE OR ALL STEEL CONCRETE TIGHT SET SCREW TYPE. 2. SCHEDULE 40 PVC CONDUIT, WITH FITTINGS AND COUPLINGS APPROPRIATE FOR THE USE, SHALL
 - BE INSTALLED UNDERGROUND OR BELOW SLABS ON GRADE. 3. TYPE MC CABLE WITH ALUMINUM ARMOR AND INTERNAL GROUND IS ACCEPTABLE FOR USE AS GENERAL BRANCH CIRCUIT WIRING FOR CIRCUITS 20 AMPERES OR LESS AND CONCEALED
- IN WALLS OR ABOVE SUSPENDED CEILING AND AS APPROVED BY THE AUTHORITY HAVING . ELECTRICAL SYSTEM SHALL BE COMPLETE AND EFFECTIVELY GROUNDED AS REQUIRED BY THE LATEST
- EDITION OF THE N.E.C. AND LOCAL CODES. . ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS
- WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE AND ACCEPTED BY ENGINEER / ARCHITECT. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS
- OF CONSTRUCTION. THE ELECTRICAL INSTALLATION SHALL MEET ALL STANDARD REQUIREMENTS OF POWER AND TELEPHONE COMPANIES, AND SHALL BE FULLY COORDINATED WITH THEM PRIOR TO COMMENCEMENT OF WORK.

PROVIDE AND INSTALL CONDUIT, CONDUCTORS, PULL WIRES, BOXES, COVER PLATES, AND WIRING

- DEVICES, FOR ALL OUTLETS AS INDICATED. MATERIALS, PRODUCTS, AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF, SHALL BE NEW AND SUCH AS APPEAR ON THE UL LIST OF APPROVED ITEMS AND SHALL MEET OR EXCEED THE REQUIREMENTS OF NEC, NEMA, AND IECE.
- CONTRACTOR SHALL SUBMIT AT LEAST FIVE (5) SETS OF SHOP DRAWINGS OR CUT SHEETS OF LIGHTING FIXTURES, SWITCHES, AND OTHER ELECTRICAL ITEMS FOR APPROVAL BY ENGINEER/ARCHITECT. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING REQUIRED OF HIS WORK. ALL LAY-IN LIGHTING FIXTURES SHALL BE SECURED TO THE SUSPENDED CEILING GRID AT EACH CORNER.
- CONTRACTOR SHALL COORDINATE WITH MECHANICAL DRAWINGS AND PROVIDE ALL NECESSARY CONTROL M. ALL ELECTRICAL POWER WIRING FOR THE HVAC SYSTEM INCLUDING WIRING THRU LINE VOLTAGE CONTROL
- DEVICES SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR. N. THE CONTRACTOR SHALL CONFIRM WITH THE ELECTRICAL UTILITY COMPANY ANY AND ALL REQUIREMENTS SUCH AS: METERING EQUIPMENT REQUIREMENTS AND METERING EQUIPMENT LOCATION, TRANSFORMER

SIZE AND LOCATION OR SERVICE POINT, CONDUIT ENTRY AND LUG SIZE RESTRICTIONS. THE CONTRACTOR

SHALL SCHEDULE ALL REQUIRED DOWN TIME FOR THE OWNERS CONFIRMATION. ANY CONFLICTS AND DESCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCFEDING WITH ANY WORK. PER NEC 210.8(B)(2) ALL 15- AND 20-AMPERE, 125-VOLT RECEPTACLES IN NONDWELLING-TYPE KITCHENS TO BE GFCI PROTECTED.

BRANCH CIRCUIT CONDUCTORS SHALL BE SIZED FOR A MAXIMUM VOLTAGE DROP OF 3% DESIGN LOAD. FBC 2020 FBC ENERGY CONSERVATION SECTION 405.7.3.

Q. FEEDER CONDUCTORS SHALL BE SIZED FOR A MAXIMUM OF 2% VOLTAGE DROP PER 405.7.3.

ELECTRICAL SHEET INDEX

E0.1	ELECTRICAL NOTES, LEGEND & INDEX
E2.1	LIGHTING PLAN
E3.1	POWER PLAN

ELECTRICAL LEGEND

- TELEPHONE OUTLET WITH 3/4" CONDUIT STUBBED OUT FROM WALL 6" ABOVE CEILING. MOUNT 18" A.F.F. TO CENTER LINE OF OUTLET UNLESS OTHERWISE NOTED.
- DATA OUTLET WITH 3/4" CONDUIT STUBBED OUT FROM WALL 6" ABOVE CEILING. MOUNT 18" A.F.F. TO CENTER LINE OF OUTLET UNLESS OTHERWISE NOTED.
- TELEPHONE/DATA OUTLET WITH 3/4" CONDUIT STUBBED OUT FROM WALL 6" ABOVE CEILING. MOUNTED ABOVE COUNTER, SEE ARCHITECTURAL DRAWING FOR SPECIFIC REQUIREMENTS.
- TELEPHONE/DATA OUTLET WITH 3/4" CONDUIT STUBBED OUT FROM WALL 6" ABOVE CEILING. MOUNT 18" A.F.F. TO CENTER LINE OF OUTLET UNLESS OTHERWISE NOTED.
- TELEPHONE/DATA OUTLET WITH 3/4" CONDUIT RUN TO THE NEAREST STUD WALL AND STUBBED OUT FROM WALL 6" ABOVE CEILING. PROVIDE BRASS COVER PLATE AND CARPET FLANGE.
- TELEVISION RECESSED OUTLET. LEGRAND "TV1WMTVSSWCC2". MOUNT AT 18" A.F.F. TO CENTER LINE OF OUTLET UNLESS OTHERWISE NOTED.
- 20 AMP SINGLE RECEPTACLE (NEMA 5-20R) MOUNTED AT 18" A.F.F. TO CENTER LINE OF OUTLET UNLESS NOTED OTHERWISE.
- 20 AMP DUPLEX RECEPTACLE (NEMA 5-20R) MOUNTED AT 18" A.F.F. TO CENTER LINE OF OUTLET UNLESS NOTED OTHERWISE.
- 20 AMP QUADRUPLEX RECEPTACLE (NEMA 5-20R) MOUNTED AT 18" A.F.F. TO CENTER LINE
- OF OUTLET UNLESS NOTED OTHERWISE. 20 AMP DUPLEX RECEPTACLE (NEMA 5-20R) WITH GROUND FAULT CIRCUIT INTERRUPTER,
- MOUNT AT 18" A.F.F. TO CENTER LINE OF OUTLET. UNLESS NOTED OTHERWISE. 20 AMP DUPLEX RECEPTACLE (NEMA 5-20R) MOUNTED ABOVE COUNTER
- SEE ARCHITECTURAL DRAWINGS FOR SPECIFIC REQUIREMENTS. 20 AMP DUPLEX RECEPTACLE (NEMA 5-20R) WITH ISOLATED GROUND, MOUNT AT 18" A.F.F. TO CENTERLINE OF OUTLET UNLESS OTHERWISE NOTED.
- 20 AMP QUADRUPLEX RECEPTACLE (NEMA 5-20R) WITH ISOLATED GROUND, MOUNT AT 18" A.F.F. TO CENTERLINE OF OUTLET UNLESS OTHERWISE NOTED.
- 20 AMP DUPLEX RECEPTACLE (NEMA 5-20R), RECESS FLOOR MOUNTED. PROVIDE BRASS COVER PLATE AND CARPET FLANGE.
- 20 AMP DUPLEX RECEPTACLE (NEMA 5-20R), CEILING MOUNTED.
- SPECIAL-PURPOSE RECEPTACLE
- JUNCTION BOX
- SINGLE GANG JUNCTION BOX FOR POWER CONNECTION TO MODULAR FURNITURE SYSTEM INSTALL IN EXACT MANNER AS DIRECTED BY FURNITURE SUPPLIER.
- DOUBLE GANG JUNCTION BOX FOR TELEPHONE/DATA CONNECTION TO MODULAR FURNITURE SYSTEM. INSTALL IN EXACT MANNER AND LOCATION AS DIRECTED BY FURNITURE SUPPLIER. EXTEND (2) 3/4" EMPTY CONDUITS FROM JUNCTION BOX TO ABOVE CEILING AND TERMINATE WITH INSULATING BUSHING 6" FROM WALL.
- TELE/POWER POLE FOR TELEPHONE/DATA/POWER CONNECTION TO MODULAR FURNITURE 8 WIRE SYSTEM (SEE DETAIL THIS SHEET). INSTALL IN EXACT MANNER AND LOCATION
- AS DIRECTED BY FURNITURE SUPPLIER, WIREMOLD CATALOG # 25DTP-4D W/IVORY FINISH. SPECIAL PURPOSE RECEPTACLE MOUNTED BELOW RAISE FLOOR.
- EXHAUST FAN. SEE MECHANICAL DRAWINGS FOR SPECIFICATIONS.
- SINGLE POLE, 20 AMP, SWITCH. MOUNT 46" A.F.F. TO CENTERLINE OF SWITCH UNLESS
- 3-WAY, 20 AMP, SWITCH. MOUNT 46" A.F.F. TO CENTERLINE OF SWITCH UNLESS OTHERWISE NOTED.
- SINGLE POLE, 20 AMP, SWITCH WITH DIMMER. MOUNT 46" A.F.F. TO CENTERLINE OF SWITCH UNLESS OTHERWISE NOTED.
- MOTOR RATED SWITCH
- VACANCY SENSOR SWITCH, WATTSTOPPER, MOUNT 46" A.F.F. TO CENTERLINE OF SWITCH UNLESS OTHERWISE NOTED.
- TWO POLE, 30 AMP SWITCH. MOUNT ADJACENT EQUIPMENT TO BE CONTROLLED.
- FACTORY MOUNTED DISCONNECT/STARTER (SEE MECHANICAL SCHEDULE)
- FUSIBLE DISCONNECT SWITCH A = POLES, B= FRAME SIZE, C= FUSE RATING
- INST A분 FUSIBLE MOTOR STARTER DISCONNECT SWITCH A = POLES, B= NEMA SIZE, C= FUSE RATING
 - GROUNDING ELECTRODE & CONDUCTOR SYSTEM
- TRANSFORMER
- ELECTRICAL PANELBOARD TELEPHONE WOOD BACKBOARD
- WEATHERPROOF
- TIME CLOCK
- RELOCATED
- EXISTING TO REMAIN ABOVE FINISH FLOOR
- CEILING MOUNTED DUAL TECHNOLOGY MOTION SENSOR BY WATTSTOPPER.
- CEILING MOUNTED LOW VOLTAGE DUAL TECHNOLOGY MOTION SENSOR BY WATTSTOPPER.
- CEILING MOUNTED DAY LIGHTING SENSOR. SENSOR TO CONTROL THE DIMMING OF ALL FIXTURES WITHIN 15' OF THE WINDOWS WITH IN ROOM.

ELECTRICAL NOTES

NOT FOR PRICING OR CONSTRUCITON

KAMM CONSULTING PROJECT #: 2022-0097

Fort Pierce, Florida 34950 bbrown@kammconsulting.com

Certification of Authorization #8189 Florida License #58232

CH'KD: SHEET NO.

5 APR. 2022

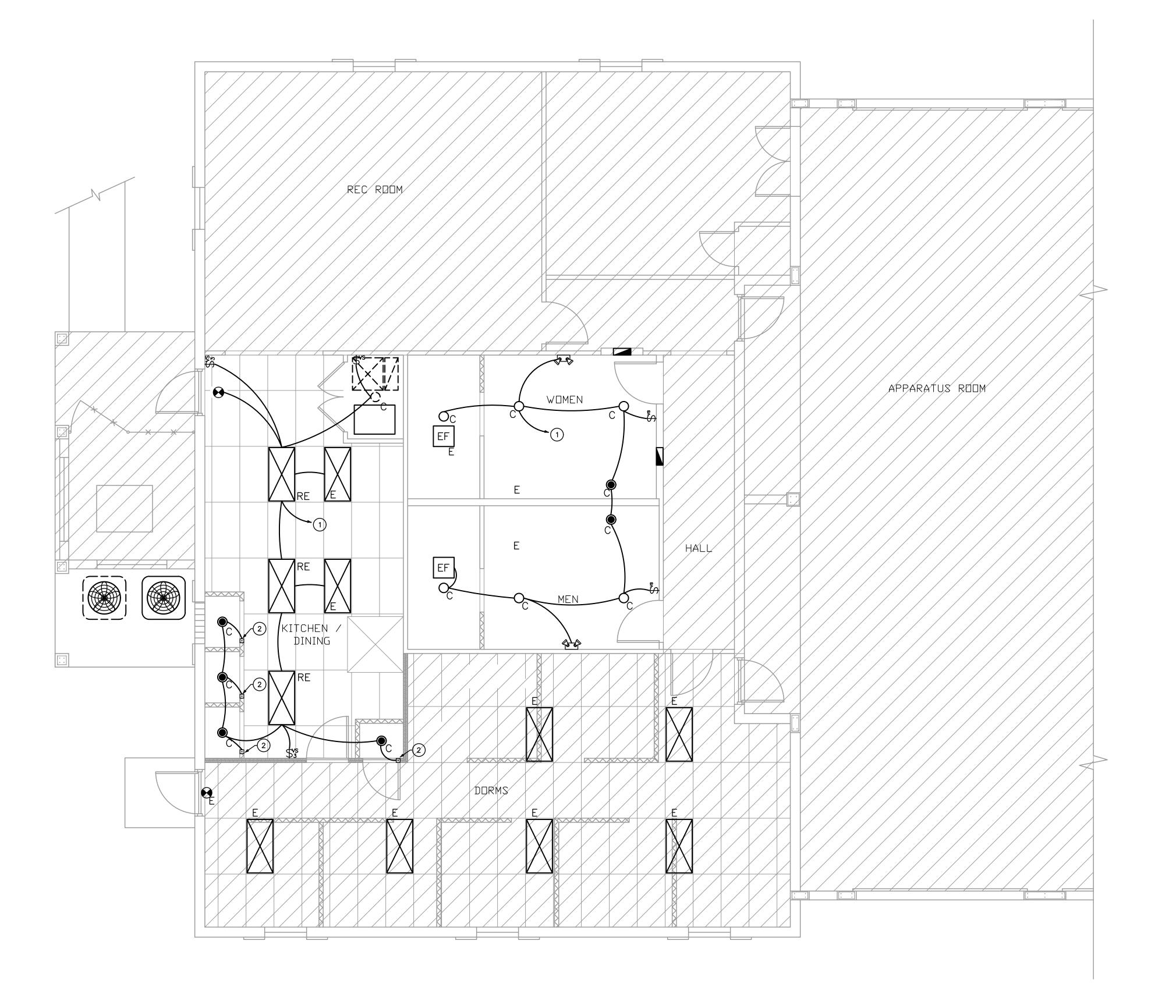
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INTERIOR ==

KEY NOTES

1 TIE NEW CIRCUIT TO EXITING CIRCUIT AND CONTROLS IN AREA. NO NEW LOADS ADDED. SEE CONTROLS DETAIL ON THIS SHEET. 2 DOOR JAM SWITCH

LIGHTING PLAN

ISSUED FOR REVIEW NOT FOR PRICING OR CONSTRUCITON KAMM CONSULTING PROJECT #: 2022-0097 PROJECT MANAGER: DUANE MILLAR

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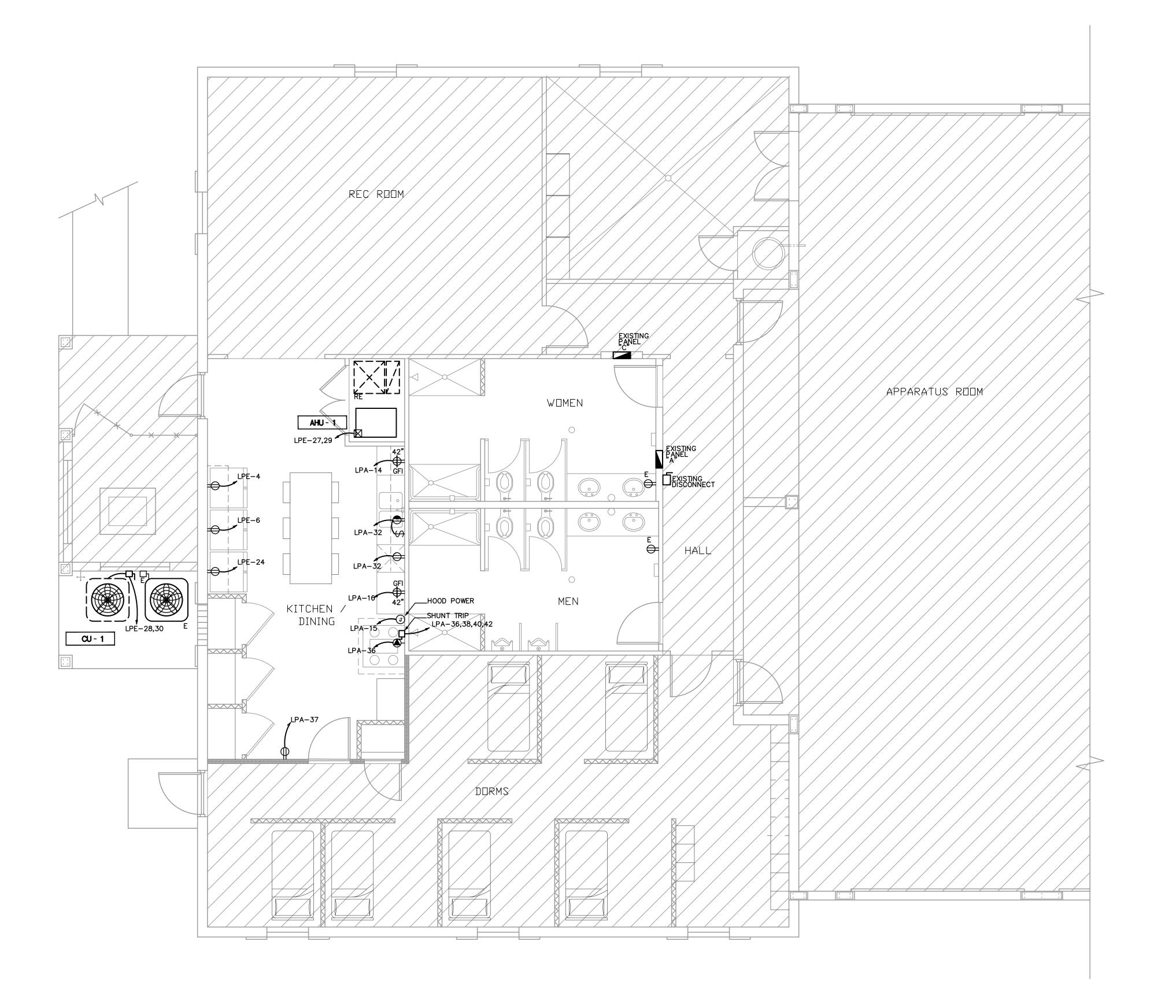
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OF -





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DATE: 5 APR. 2022

POWER PLAN

ISSUED FOR REVIEW NOT FOR PRICING OR CONSTRUCITON KAMM CONSULTING PROJECT #: 2022-0097 PROJECT MANAGER: DUANE MILLAR

KEY NOTES

1 CONTRACTOR TO COORDINATE WITH HOOD DRAWINGS

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SHEET NO. E3.1 OF -

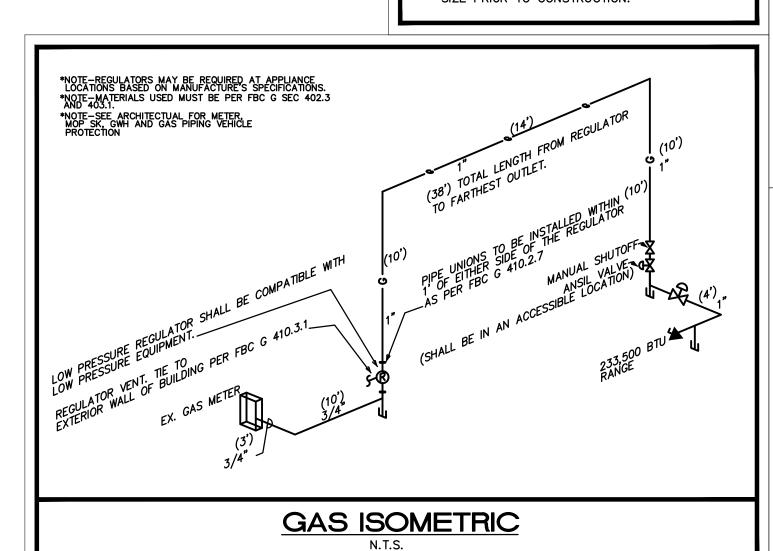
CH'KD:

CONDENSATE DE	RAIN PIPE SIZING
HVAC EQUIPMENT CAPACITY	MINIMUM CONDENSATE PIPE DIAMETER
UP TO 20 TONS OF REFRIGERATION	1"
OVER 21 TONS TO 40 TONS OF REFRIGERATION	1-1/4"
OVER 41 TONS TO 60 TONS OF REFRIGERATION	1-1/2"
OVER 61 TONS TO 100 TONS OF REFRIGERATION	2"
OVER 101 TONS TO 250 TONS OF REFRIGERATION	3"
OVER 251 TONS & LARGER OF REFRIGERATION	4"

KEY NOTES

1 TIE NEW SANITARY LINE TO EXISTING IN AREA. CONTRACTOR TO FIELD VERIFY LOCATION AND SIZE PRIOR TO CONSTRUCTION.

TIE NEW DOMESTIC LINE TO EXISTING IN AREA. CONTRACTOR TO FIELD VERIFY LOCATION AND SIZE PRIOR TO CONSTRUCTION.



<u>LESS THAN 2 PSI SYSTEM</u>

TOTAL CONNECTED BTU = 233,500 BTUH = 13 FT TOTAL LENGTH SIZING OF PIPING BASED ON THE FLORIDA BUILDING CODE 2020 EDITION - FUEL GAS, CHAPTER 4, TABLE 402.4(2) METALLIC

2 PSI SYSTEM

TOTAL CONNECTED BTU = 233,500 BTUH TOTAL LENGTH = 38 FT SIZING OF PIPING BASED ON THE FLORIDA BUILDING CODE 2020 EDITION — FUEL GAS, CHAPTER 4, TABLE 402.4(5) 2 PSI METALLIC

COMBUSTION CALC

KITCHEN APPLIANCES = 233,500 BTUH FBC FG 304.9 = 0.35CFM PER 1,000 BTUH COMBUSTION AIR REQ. = 81.7 CFM O/A MECH. PROVIDED =700 CFM

FOR GAS PIPING INSTALLATION CONTRACTOR SHALL COORDINATE EXACT LOCATION IN FIELD WITH OWNER/ARCHITECT AND GAS COMPANY PRIOR TO

FURNISH AND INSTALL GAS COCK VALVE AT EACH CONNECTION IN ACCESSIBLE LOCATION.

. REFER TO INDIVIDUAL EQUIPMENT SYSTEM DETAILS AND MANUFACTURERS RECOMMENDATIONS FOR VALVING ARRANGEMENTS.

AND ALL GOVERNING BODIES.

. GAS PIPING SHALL BE BLACK STEEL SCH. 40 THREADED WITH WROUGHT FITTINGS. ALL GAS PIPING, FITTINGS AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY CO.

PLUMBING FIXTURE SCHEDULE

LAVATORY, AMERICAN STANDARD #0491.019 RONDALYN COUNTER TOP, FAUCET, T&S BRASS BS-2701-VF05 SINGLE LEVER HANDLE W/ETF 460 A GRID DRAIN. WATER CLOSET, FLUSH VALVE BOWL; FLOOR MOUNTED, SIPHON JET ACTION VITREOUS CHINA, ELONGATED RIM AND 1-1/2" TOP SPUD, AMERICAN STANDARD 2234.015 MADERA AQUAMETER, 1.28 GPF TOILET WITH A SLOAN ROYAL #111 FLUSH VALVE AND A CENTOCO #1500CC OPEN FRONT SEAT LESS COVER.

URINAL AMERICAN STANDARD, WASHBROOK #6501.010, FLUSH VALVE SLOAN ROYAL #186-1, WALL MOUNTED, WHITE URINAL. WALL CARRIER, WADE # 400AM11-M36. MUST MEET A.D.A. CODE. URINAL AMERICAN STANDARD, ALLBROOK #6541.132. FLUSH VALVE, SLOAN ROYAL #186-1, WALL MOUNTED, WHITE URINAL. WALL CARRIER, WADE # 400AM11-M36. MUST MEET A.D.A. CODE.

SHOWER, MIXING VALVE HOT AND COLD WATER, SHOWER MIXING VALVE SHALL BE A SYMMONS ORIGINS MODEL #9603-PLR TEMPTROL PRESSURE BALANCED SHOWER VALVE TO INCLUDE A 2.5 GPM FLOW RESTRICTOR AND INTEGRAL SERVICE STOPS.

HANDICPPED SHOWER, MIXING VALVE HOT AND COLD WATER, SHOWER MIXING VALVE SHALL BE A HSH SYMMONS ORIGIN MODEL #9603-PLR TEMPTROL PRESSURE BALANCED SHOWER VALVE TO INCLUDE A 2.5 GPM FLOW RESTRICTOR AND INTEGRAL SERVICE STOPS

FLOOR DRAIN, WADE MODEL # 1103-TY-STD5.

SINGLE STAINLESS STEEL SINK, 25 X 22 DAYTON MODEL #K-12522 WITH A T&S BRASS FAUCET MODEL #B-0199-01-N05 WITH A 5-11/16" SPREAD GOOSENECK

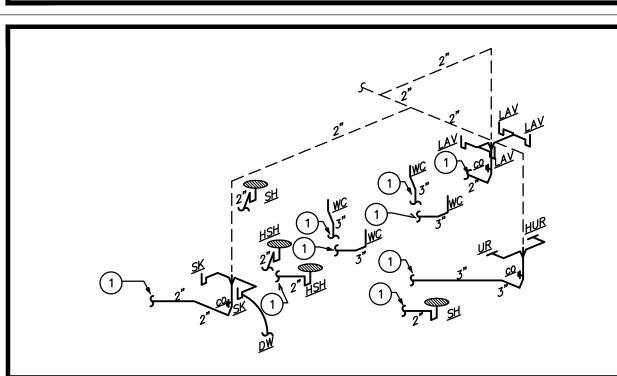
GENERAL NOTES:

(1) — FIXTURES SHALL BE AS SHOWN OR EQUAL

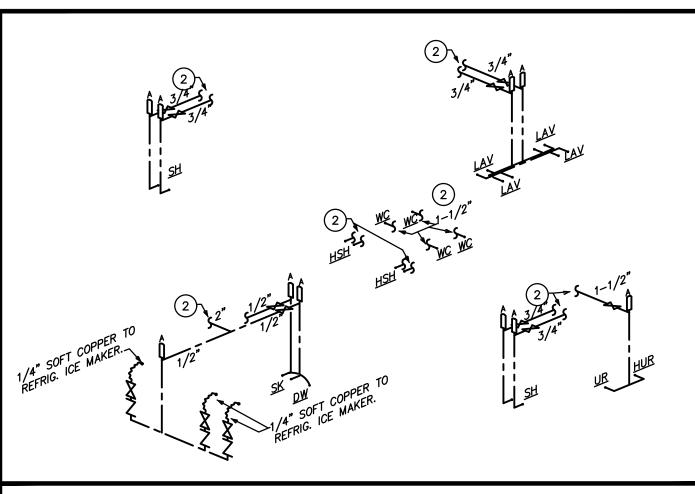
WITH 4" WRIST BLADE FAUCET HANDLES.

- ALL FIXTURES SHALL COMPLY WITH TABLE 604.4 OF FBC 2020 - ALL FIXTURE TRIM PACKAGES INCLUDING BUT NOT LIMITED TO TRAP, ANGLE STOP, FLUSH VALVE, SUPPLY TUBES, AND CLEANOUT COVER PLATES SHALL BE OF THE SAME FINISH AS THE ABOVE

SPECIFIED FAUCET AND PER ARCHITECTURAL FINISH SCHEDULE. $oldsymbol{(4)}$ — ALL FIXTURES SHALL BE ROUGHED IN PER MANUFACTURER CUT SHEET TO MAINTAIN UNIFORMITY.



SANITARY ISOMETRIC



DOM. WATER ISOMETRIC

TYPE	SOIL / WASTE	VENT	TRAP	CW	HW	REMARKS
2" HUB DRAIN	2"	2"	2"	-	_	PROVIDE 1/2" CW TRAP PRIMER CONNECTION.
3" HUB DRAIN	3"	2"	3"	_	_	PROVIDE 1/2" CW TRAP PRIMER CONNECTION.
COFFEE MAKER/WATER FILTER	-	_		½"	_	PROVIDE WITH BACKFLOW PREVENTER WATTS MODEL #SD-2
DISHWASHER (RESIDENTIAL TYPE)	1"	_	_	_	1/2"	CONNECT WASTE TO KITCHEN SINK TAILPIECE. PROVIDE WITH VACUUM BREAKER
ELECTRIC WATER COOLER	2"	2"	1¼"	½"	_	_
OUTLET BOX	_	_		½"	_	PROVIDE w/ INTEGRAL WATER HAMMER ARRESTOR.
WASHING MACHINE OUTLET BOX	3"	2"	2"	½"	1/2"	PROVIDE w/ INTEGRAL WATER HAMMER ARRESTORS.
SINK	2"	2"	1½"	½"	1/2"	1.0 GPM AT 60 PSI MAXIMUM.
MOP SINK	3"	2"	3"	½"	1/2"	PROVIDE HOSE THREAD FAUCET WITH INTEGRAL VACUUM BREAKER.
LAVATORY (PUBLIC)	2"	2"	1¼"	½"	1/2"	0.5 GPM AT 60 PSI MAXIMUM. (0.25 GALLON METERING CYCLE)
REFRIGERATOR	_	_	_	½"	_	PROVIDE WITH BACKFLOW PREVENTER WATTS MODEL #SD-2
WATER CLOSET (FLUSH VALVE)	3" OR 4"	2"	INTEGRAL	1"	_	1.28 GALLONS PER FLUSHING CYCLE MAXIMUM.
WATER CLOSET (FLUSH TANK)	3" OR 4"	2"	INTEGRAL	½"	-	1.28 GALLONS PER FLUSHING CYCLE MAXIMUM.
URINAL	2"	2"	INTEGRAL	34"	_	0.128 GALLONS PER FLUSHING CYCLE MAXIMUM.

PLUMBING FIXTURE MANUFACTURER'S REQUIREMENTS. ALL FIXTURES SHALL COMPLY WITH REQUIREMENTS OF LOCAL WATER—USE EFFICIENCY ORDINANCES.

PLUMBING NOTES

- THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE INSTALLATION OF A COMPLETE SCOPE OF WORK. ALL WORKMANSHIP AND MATERIALS SHALL BE IN STRICT ACCORDANCE WITH THE FLORIDA BUILDING CODE 7TH EDITION (2020) - PLUMBING, APPLICABLE LOCAL CODES, RULES, AND ORDINANCES.
- 2. PLUMBING CONTRACTOR SHALL VISIT THE JOB SITE AND THOROUGHLY FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS.
- 3. ALL MATERIALS SHALL BE NEW AND OF GOOD QUALITY.
- ALL WORK SHALL BE PERFORMED BY A LICENSED PLUMBING CONTRACTOR IN A FIRST CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY-OPERATIONAL. ALL EXCAVATION AND BACKFILL AS REQUIRED FOR THIS PHASE OF CONSTRUCTION SHALL BE A PART OF THIS
- REQUIRED INSURANCE SHALL BE PROVIDED BY THE PLUMBING CONTRACTOR FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
- PLUMBING CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, FEES, INSPECTIONS AND TESTS. PLUMBING CONTRACTOR SHALL OBTAIN PERMIT AND APPROVED SUBMITTALS PRIOR TO BEGINNING WORK OR ORDERING EQUIPMENT. PLUMBING CONTRACTOR MUST BE PRESENT FOR ALL INSPECTIONS OF HIS WORK BY REGULATORY AUTHORITIES.
- CONTRACTOR SHALL SUBMIT TO ARCHITECT/ENGINEER, FOR REVIEW & APPROVAL, FIVE (5) SETS OF MANUFACTURER'S CUT SHEETS FOR EACH FIXTURE, PIPING/FITTING MATERIAL AND EQUIPMENT ITEM WITH ASSOCIATED CONTROLS, THAT ARE INCLUDED IN THE CONTRACT.
- DRAWINGS ARE DIAGRAMMATIC. DO NOT SCALE FOR THE EXACT LOCATION OF FIXTURES, PIPING,
- ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION. REPORT ANY DISCREPANCY TO ARCHITECT/ENGINEER PRIOR TO BEGINNING CONSTRUCTION.
- 10. VERIFY LOCATION, SIZE, DIRECTION OF FLOW AND INVERT ELEVATIONS OF ALL EXISTING UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION. ADVISE ARCHITECT/ENGINEER OF ANY DISCREPANCIES.
- 11. WATER DISTRIBUTION PIPING ABOVE AND BELOW GROUND SHALL BE TYPE "L" COPPER. ALTERNATE PIPING & FITTING MATERIALS MAY BE USED IN ACCORDANCE WITH FLORIDA BUILDING CODE 7TH EDITION (2020) - PLUMBING, TABLES 605.3, 605.4 & 605.5, WHEN APPROVED BY ENGINEER OF RECORD AND LOCAL AUTHORITY HAVING JURISDICTION. PROVIDE ALTERNATE FOR CPVC PIPING & FITTINGS EQUAL TO LUBRIZOL CORZAN OR FLOW-GUARD GOLD. PROVIDE ALTERNATE FOR PEX TYPE 'A' PIPING & FITTINGS EQUAL TO UPONOR. ALTERNATES ARE PERTINENT FOR WATER SERVICES KNOWN OR DETERMINED TO HAVE ACIDIC CHARACTERISTICS OR OTHER PARTICULAR CIRCUMSTANCES AS DEEMED APPROPRIATE BY DIRECTIVE FROM THE OWNER. CONTRACTOR SHALL PERFORM A WATER TEST TO DETERMINE WATER CHEMISTRY PRIOR TO ANY WORK OR PIPING INSTALLATION AND SHALL SUBMIT TEST RESULTS TO THE ARCHITECT/ENGINEER FOR REVIEW AND APPROVAL. DISINFECTION OF POTABLE WATER SYSTEM SHALL COMPLY WITH FLORIDA BUILDING CODE 7TH EDITION (2020) -PLUMBING, SECTION 610. ALL WATER PIPING & FITTINGS SHALL BE OF DOMESTIC MANUFACTURE; SPECIFICALLY IN THE UNITED STATES OF AMERICA.
- 12. SOIL, WASTE, VENT, AND RAINWATER (DWV) PIPING & FITTINGS SHALL BE CAST IRON OR PVC, WHERE CODE ALLOWS. PVC MAY NOT BE USED THRU RATED ASSEMBLIES OR IN PLENUMS. PVC PIPING SHALL BE SOLID-CORE ONLY; FOAM-CORE PIPING SHALL NOT BE ACCEPTED. CAST IRON PIPING & FITTINGS SHALL BEAR THE CISPI-301 MARK. ALL DWV PIPING & FITTINGS SHALL BE OF DOMESTIC MANUFACTURE; SPECIFICALLY IN THE UNITED STATES OF AMERICA.
- 13. ALL FIXTURES MUST BE PROVIDED WITH READILY ACCESSIBLE ANGLE STOPS AND APPROPRIATELY MARKED ACCESS PANELS (WHERE REQUIRED). COORDINATE LOCATIONS WITH GENERAL CONTRACTOR
- 14. PROVIDE APPROVED WATER HAMMER ARRESTORS FOR ALL (GROUP) PLUMBING FIXTURES, SIZED & LOCATED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS & PDI-WH201.
- 15. PROVIDE DIELECTRIC COUPLINGS OR FLANGES BETWEEN ALL DISSIMILAR METALS IN PIPING AND EQUIPMENT CONNECTIONS.
- 16. ISOLATE COPPER PIPING FROM METALLIC HANGERS OR SUPPORTS WITH ISOLATOR PADS OR NON-CONDUCTIVE MATERIAL.
- 17. ALL FIRE RATED FLOOR AND WALL PENETRATIONS SHALL BE PROPERLY PROTECTED FROM FIRE, SMOKE AND WATER PENETRATION BY FILLING ANNULAR SPACE BETWEEN PIPING AND SLEEVES WITH INTUMESCENT CAULK, TO ACHIEVE THE SAME RATING AS WALLS OR FLOORS, AS PART OF THE PLUMBING CONTRACTOR'S WORK.
- 18. PLUMBING CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE (1) YEAR FROM DATE OF ACCEPTANCE BY OWNER. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE
- 19. PROVIDE ACCESS PANELS FOR ALL CONCEALED VALVES. ACCESS PANELS IN RATED WALLS SHALL MAINTAIN THE SAME RATING AND SHALL MATCH THE FINISH OF THE WALL IN WHICH IT IS INSTALLED.
- 20. PROVIDE COMBINATION CLEANOUT PLUG AND COVER PLATE OR ACCESS PANEL FOR ALL WALL CLEANOUTS. FINISH TO MATCH NEARBY FIXTURE TRIM.
- 21. NO COMBUSTIBLE MATERIAL SHALL BE INSTALLED IN MECHANICAL ROOMS NOR IN CEILING SPACES WHERE USED AS RETURN AIR PLENUMS.
- 22. NO WATER, SANITARY OR DRAINAGE PIPING SHALL BE INSTALLED IN ELECTRICAL OR ELEVATOR EQUIPMENT ROOMS.
- 23. ALL CONTROL VALVES SHALL BE TAGGED AND MARKED. A REPRODUCIBLE DIAGRAM LOCATING ALL VALVES SHALL BE FURNISHED FOR OWNER/OPERATOR.
- 24. CONDENSATE DRAIN PIPING SHALL BE TYPE "L" COPPER WITH ARMAFLEX INSULATION AND A VAPOR-BARRIER JACKET PER FLORIDA BUILDING CODE 7TH EDITION (2020) - ENERGY CONSERVATION, TABLE C403.2.8. PVC WITHOUT INSULATION IS ACCEPTABLE FOR RISERS AND BELOW GRADE PIPING. WHEN USED IN A RETURN AIR PLENUM, PVC PIPING WITH INSULATION IS ACCEPTABLE IN LOCATIONS WHERE ALLOWED BY LOCAL CODES. CONDENSATE PIPING SHALL NOT DRAIN ONTO THE ROOFING SYSTEM NOR ANY OF ITS COMPONENTS. CONDENSATE PIPING ARRANGEMENT IS EXEMPT FROM MINIMUM EQUIPMENT CLEARANCE REQUIREMENTS PER FLORIDA BUILDING CODE 7TH EDITION (2020), SECTION 1522.3.5. ALL HORIZONTAL RAINWATER PIPING RUN ABOVE FINISHED FLOOR THAT RECEIVES CONDENSATE DISCHARGE SHALL BE INSULATED WITH ARMAFLEX AND A VAPOR-BARRIER
- 25. HOT WATER PIPING INSULATION SHALL BE PROVIDED IN ACCORDANCE WITH FLORIDA BUILDING CODE 7TH EDITION (2020) - PLUMBING, TABLE 607.5 & FLORIDA BUILDING CODE 7TH EDITION (2020) -ENERGY CONSERVATION, TABLE C403.2.8. CONTRACTOR SHALL USE ARMAFLEX OR EQUAL WHERE APPLICABLE. WHERE DOMESTIC WATER TEMPERATURES CAN CAUSE SWEATING, ALL COLD WATER PIPING SHALL BE INSULATED WITH ARMAFLEX INSULATION AND A VAPOR-BARRIER JACKET, PER FLORIDA BUILDING CODE 7TH EDITION (2020) - ENERGY CONSERVATION, TABLE C403.2.8.
- 26. AIR ADMITTANCE VALVES MAY BE USED AS AN ALTERNATE TO VENT PIPING THRU ROOF WHERE ACCEPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION. INSTALLATION METHODS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS.

 27. PROVIDE ANGLE STOPS ON ALL WATER SERVICE LINES TO FIXTURES FOR INDIVIDUAL
- 28. STUDOR MINI/MAXI AIR ADMITTANCE VALVES MAY BE USED AS AN ALTERNATE TO VENT PIPING THRU ROOF WHERE ACCEPTABLE BY THE PLUMBING OFFICIAL AND LOCAL
- CODES. INSTALLATION SHALL BE AS PER MANUFACTURER'S RECOMMENDATIONS. 29. ALL HORIZONTAL RAINWATER PIPING THE RECEIVES CONDENSATE DISCHARGE FROM AIR CONDITIONING EQUIPMENT SHALL BE INSULATED WITH 1" THK. ARMAFLEX.

SHUT-OFF.

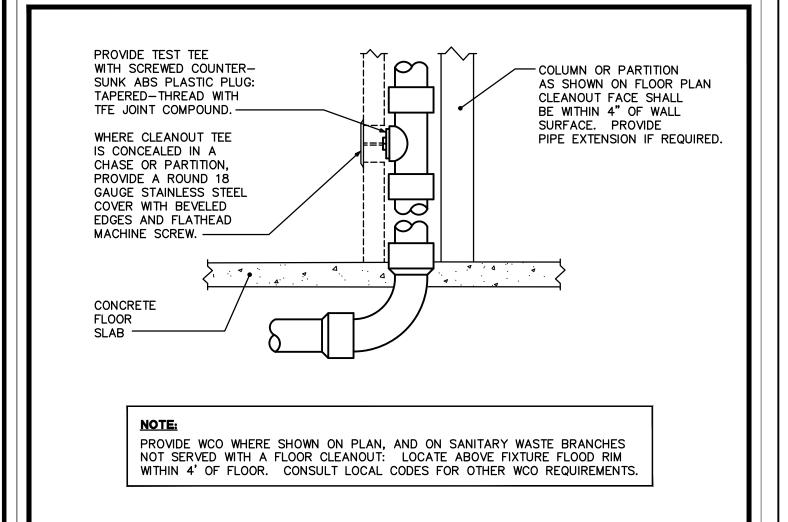
- 30. PLUMBING PLANS IN GENERAL, ARE DIAGRAMMATIC IN NATURE, AND ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, FIRE SPRINKLER, STRUCTURAL AND CIVIL PLANS AND SHALL BE CONSIDERED AS ONE SET OF DOCUMENTS. PIPING MODIFICATIONS SUCH AS OFFSETS, BENDS, TRANSITIONS, AND SIZES SHALL BE REQUIRED TO PROVIDE AND INSTALL A COMPLETE FUNCTIONAL SYSTEM AND SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. CHANGES IN PIPE SIZES AND ROUTING SHALL BE REQUIRED BY THE CONTRACTOR TO AVOID CONFLICTS AND TO ADAPT TO EXISTING FIELD CONDITIONS PROVIDED THAT INSTALLATION MEETS ALL
- 31. SUPPLY TRAP PRIMER FOR ALL FLOOR DRAINS, FLOOR SINKS, HUB DRAINS, ETC. SHOWN ON PLANS. 32. CONTRACTOR TO FIELD VERIFY ALL SUPPLY PRESSURE REQUIREMENTS AND LIMITATIONS. PROVIDE
- PRESSURE REDUCING VALVE IF REQUIRED. 33. ANY REFERENCE OR APPLICATION OF DENTAL COMPRESSED AIR AS NOTED ON THIS PLAN IS NOT USED OR INTENDED FOR LIFE-SUPPORT PURPOSES SUCH AS RESPIRATORS, IPPB MACHINES, ANALGESIA, ANESTHESIA, ETC. THE ONLY USE IS AS INCIDENTAL AIR DISCHARGE INTO THE ORAL

CAVITY AND NOT A PRIMARY OR SECONDARY SOURCE OF AIR TO SUSTAIN LIFE.

		PLUMBING SHEET INDEX
	SHEET#	DESCRIPTION
	P0.1	PLUMBING NOTES, LEGENDS, AND DETAILS
	P2.1	SANITARY PLAN
	P3.1	DOMESTIC WATER PLAN

PLUMBING LEGEND

SANITARY SEWER PIPING CLEAN OUT S.O.V. SHUT-OFF VALVE COTC CLEAN OUT TO GRADE DOMESTIC COLD WATER PIPING FLOOR SINK ├─ - - - HOT WATER PIPING (140°) DOMESTIC COLD WATER **├ ---** HOT WATER RECIRCULATING PIPING DOMESTIC HOT WATER DOMESTIC HOT WATER RECIRCULATING CONDENSATE PIPING ← CA ← COMPRESSED AIR PIPING VENT THRU ROOF GATE VALVE SD — STORM DRAIN PIPING GLOBE VALVE \bowtie GAS SOLENOID VALVE PIPE DOWN OR DROP GAS COCK CAPPED END OF PIPE WATER HAMMER ARRESTER (PDI No.) POINT OF CONNECTION FLOOR DRAIN P-TRAP 一



WALL CLEANOUT DETAIL

P.D.I. DESIGNATION	MANUF. & MODEL	FIXTURE UNITS	CONNECTION
Α	SIOUX CHIEF 652-A	1–11	1/2"
В	SIOUX CHIEF 653-B	12-32	3/4"
С	SIOUX CHIEF 654-C	33–60	1"
	K ARRESTORS APPRO		
THE SECTION OF THE SE		71101771002 1010 0	
	OF HORIZ. DI	•	
SLOPE C		RAINAGE F	
SLOPE C	OF HORIZ. DI	RAINAGE F	PIPE
SLOPE C SIZE (2-1/2	DF HORIZ. DI	RAINAGE F	PIPE E (inch per foot)

SHOCK ARRESTOR SCHEDULE

PLUMBING NOTES

NOT FOR PRICING OR CONSTRUCITON Fort Pierce, Florida 34950 bbrown@kammconsulting.com Certification of Authorization #8189

signed

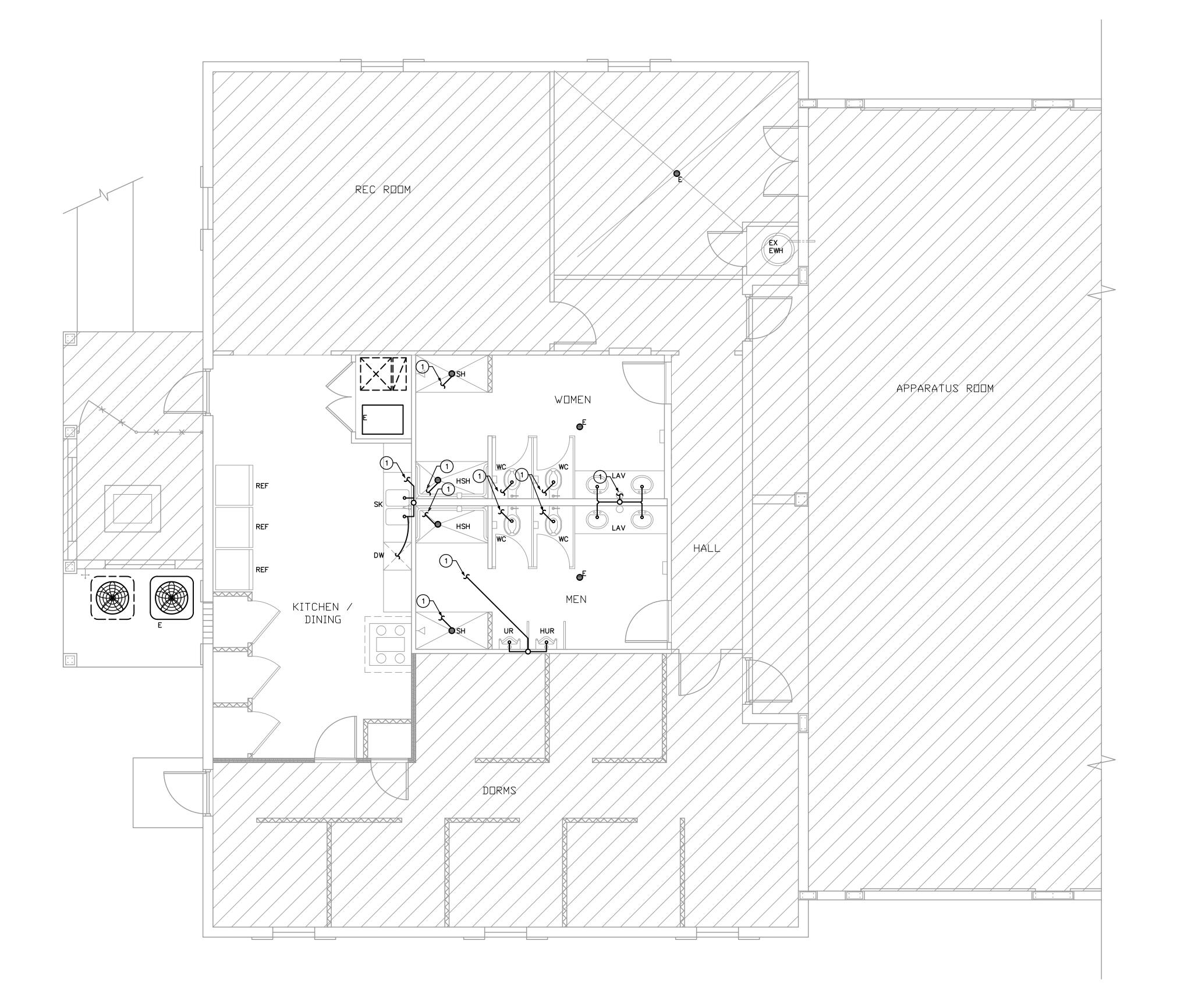
ISSUED FOR REVIEW

COMM. NO: 100221VB DATE: 5 APR. 2022 CH'KD:

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SHEET NO.





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PHONE: (772) 569-4320

KEY NOTES

1) TIE NEW SANITARY LINE TO EXISTING IN AREA. CONTRACTOR TO FIELD VERIFY LOCATION AND SIZE PRIOR TO CONSTRUCTION.

SANITARY PLAN

ISSUED FOR REVIEW NOT FOR PRICING OR CONSTRUCITON

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Certification of Authorization #8189

SHEET NO.

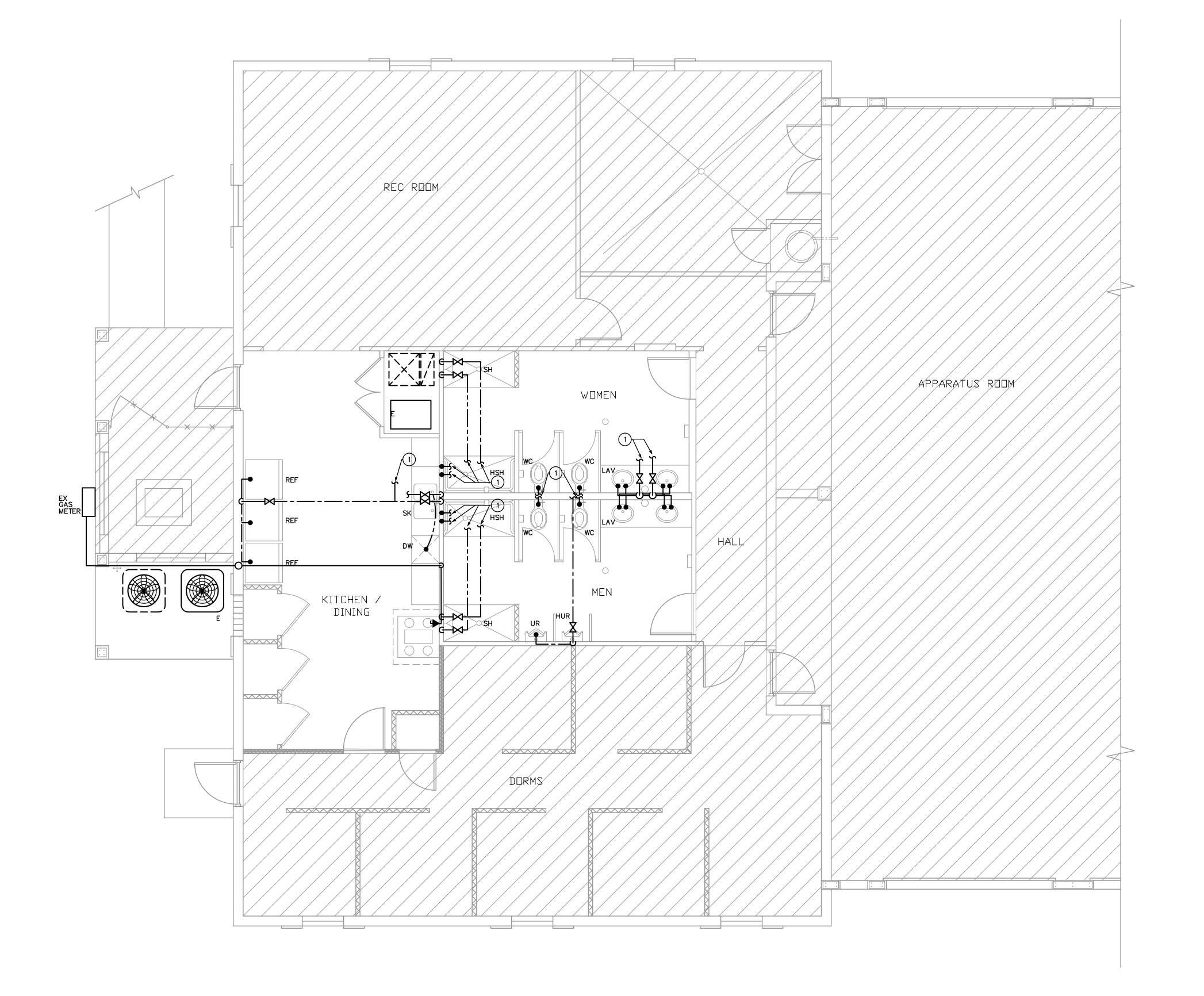
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OF -

CH'KD:





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ANDASSOCIATES

SEAL:

 Ω

STSTATION #11 INTERIOR
REMODEL
INDIAN RIVER COUNTY FIRE DISTRICT
1840 25TH STREET

REVISIONS

KEY NOTES

TIE NEW DOMESTIC LINE TO EXISTING IN AREA. CONTRACTOR TO FIELD VERIFY LOCATION AND SIZE PRIOR TO CONSTRUCTION.

DOMESTIC WATER PLAN

ISSUED FOR REVIEW

NOT FOR PRICING OR CONSTRUCITON

KAMM CONSULTING PROJECT #: 2022-0097
PROJECT MANAGER: DUANE MILLAR

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P3.1