

CONTRACT DOCUMENTS AND SPECIFICATIONS FOR JACKIE ROBINSON TRAINING COMPLEX TICKET OFFICE BUILDING RENOVATIONS

BID NO. 2022026

PROJECT NO. IRC-2020

PREPARED FOR THE BOARD OF COUNTY COMMISSIONERS INDIAN RIVER COUNTY, FLORIDA PETER D. O'BRYAN, CHAIRMAN JOE EARMAN, VICE CHAIRMAN COMMISSIONER SUSAN ADAMS COMMISSIONER JOSEPH E. FLESCHER COMMISSIONER LAURA MOSS JASON E. BROWN, COUNTY ADMINISTRATOR JEFFREY R. SMITH, CLERK OF COURT AND COMPTROLLER DYLAN REINGOLD, COUNTY ATTORNEY RICHARD B. SZPYRKA, P.E., PUBLIC WORKS DIRECTOR JAMES W. ENNIS, P.E., PMP, ASSISTANT PUBLIC WORKS DIRECTOR

00001 - Project Title Page - REV 04-07

TABLE OF CONTENTS

Section No. Title

DIVISION 0 - BIDDING DOCUMENTS, CONTRACT FORMS, AND CONDITIONS OF THE CONTRACT

00001 Cover Sheet

00010 Table of Contents

BIDDING DOCUMENTS

- 00100 Advertisement for Bids
- 00200 Instructions to Bidders
- 00300 Bid Package Contents
- 00310 Bid Form & Itemized Bid Schedule
- 00430 Bid Bond
- 00452 Sworn Statement under Section 105.08, Indian River County Code, on Disclosure of Relationships
- 00456 Qualifications Questionnaire
- 00458 List of Subcontractors
- 00460 Certification Regarding Prohibition Against Contracting with Scrutinized Companies

CONTRACT FORMS

- 00510 Notice of Award
- 00520 Agreement
- 00550 Notice to Proceed
- 00610 Public Construction Bond
- 00620 Sample Certificate of Liability Insurance
- 00622 Contractor's Application for Payment
- 00630 Certificate of Substantial Completion
- 00632 Contractor's Final Certification of the Work
- 00634 Professional Surveyor and Mapper's Certification as to Elevations and Locations of the Work

CONDITIONS OF THE CONTRACT

- 00700 EJCDC Standard General Conditions of the Construction Contract
- 00800 Supplementary Conditions to the General Conditions
- 00942 Change Order Form
- 00948 Work Change Directive

DIVISION 1 - GENERAL REQUIREMENTS

DIVISION 2 – PROJECT MANUAL/TECHNICAL SPECIFICATIONS – BY EDLUND, DRITENBAS, BINKLEY ARCHITECTS AND ASSOCIATES, P.A.

APPENDIX A – PERMIT

+ + END OF TABLE OF CONTENTS + +

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.</u> on <u>Wednesday</u>, <u>February 16, 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 "<u>Jackie Robinson Training Complex</u> <u>Ticket Office Building Renovations</u> and <u>Bid No.2022026</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.

INDIAN RIVER COUNTY PROJECT NO. <u>IRC-2020</u> INDIAN RIVER COUNTY BID NO. <u>2022026</u>

PROJECT DESCRIPTION: The project consists of rebuilding walls that have been demolished during mold remediation activities, interior upgrades for ADA accessibility, and additional mold remediation. The project shall provide a "turn key ready to occupy facility" upon completion. The main improvements include drywall removal, replacement and finishing, wall relocations, removal and replacement of floor coverings, removal and replacement of ceiling grid and tiles, replacement of plumbing, fixtures, tile work in showers and restrooms, grading and landscaping improvements

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 <u>Five Percent</u> (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.

A Pre-Bid Conference will be held on <u>Wednesday, February 2, 2022 at 10:00 A.M.</u> in the Public Works conference room A1-303 of the Indian River County Administration Building located at 1801 27th Street, Vero Beach, Florida, 32960. A site visit will be available for everyone in attendance following the meeting. ATTENDANCE AT THIS CONFERENCE BY ALL BIDDERS IS HIGHLY ENCOURAGED.

INDIAN RIVER COUNTY

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

For Publication in the Indian River Press Journal Date: January 16, 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 * *

00100 - 2

SECTION 00200 - Instructions to Bidders TABLE OF CONTENTS

Article No Title P	<u>age</u>
ARTICLE 1 - DEFINED TERMS	1
ARTICLE 2 - COPIES OF BIDDING DOCUMENTS	1
ARTICLE 3 - QUALIFICATIONS OF BIDDERS	1
ARTICLE 4 - EXAMINATION OF BIDDING DOCUMENTS, OTHER RELATED DATA, AND SITE	2
ARTICLE 5 - PRE-BID CONFERENCE	4
ARTICLE 6 - SITE AND OTHER AREAS	5
ARTICLE 7 - INTERPRETATIONS AND ADDENDA	5
ARTICLE 8 - BID SECURITY	5
ARTICLE 9 - CONTRACT TIMES	6
ARTICLE 10 - LIQUIDATED DAMAGES	6
ARTICLE 11 - SUBSTITUTE AND "OR-EQUAL" ITEMS	6
ARTICLE 12 - SUBCONTRACTORS, SUPPLIERS, AND OTHERS	6
ARTICLE 13 - PREPARATION OF BID	7
ARTICLE 14 - BASIS OF BID; EVALUATION OF BIDS	8
ARTICLE 15 - SUBMITTAL OF BID	8
ARTICLE 16 - MODIFICATION AND WITHDRAWAL OF BID	9
ARTICLE 17 - OPENING OF BIDS	9
ARTICLE 18 - BIDS TO REMAIN SUBJECT TO ACCEPTANCE	9
ARTICLE 19 - AWARD OF CONTRACT	9
ARTICLE 20 - CONTRACT SECURITY AND INSURANCE	11
ARTICLE 21 - SIGNING OF AGREEMENT	11

00200 - i

00200 - Instructions to Bidders REV 10-18

SECTION 00200 - Instructions to Bidders TABLE OF ARTICLES (Alphabetical by Subject)

<u>Subject</u>	<u>Article</u>
Award of Contract	19
Basis of Bid; Evaluation of Bids	14
Bid Security	8
Bids to Remain Subject to Acceptance	
Contract Security and Insurance	20
Contract Times	9
Copies of Bidding Documents	2
Defined Terms	1
Examination of Bidding Documents, Other Related Data, and Site	4
Interpretations and Addenda	7
Liquidated Damages	10
Modification and Withdrawal of Bid	16
Opening of Bids	17
Pre-Bid Conference	5
Preparation of Bid	13
Qualifications of Bidders	3
Signing of Agreement	21
Site and Other Areas	6
Subcontractors, Suppliers and Others	12
Submittal of Bid	15
Substitute and "Or-Equal" Items	11

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 County Engineer or their designee.

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.

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 (<u>purchasing@ircgov.com</u> 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 AFTER CONTACTING THE PURCHASING DIVISION (<u>purchasing@ircgov.com</u> or (772) 226-1416) TO MAKE ARRANGEMENTS IN ADVANCE, 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;

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, 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 a Pre-Bid conference, if any, are specified in the Advertisement for Bids. Representatives of OWNER and ENGINEER will be present to discuss the Project. Bidders are *HIGHLY ENCOURAGED* 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.

00200 - Instructions to Bidders REV 10-18

6.01 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 (<u>purchasing@ircgov.com</u>) 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

Each Bid must be accompanied by Bid Security made payable to OWNER in the 8.01 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 00200 - Instructions to Bidders REV 10-18

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, 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 00200 - Instructions to Bidders REV 10-18

00200 - 6

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.

ARTICLE 13 - PREPARATION OF BID

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 the bid form). *Bids not submitted on the bid form(s) shall be rejected, as will bids submitted on rewritten or recreated 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 vicepresident 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", 00200 - Instructions to Bidders REV 10-18

^{00200 - 7}

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 Building Permit fees. (See Appendix "A" for permit fees).

Other agencies that may have permitting authority over the project area include: St. Johns River Water Management District, City of Vero Beach.

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 24 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 00200 - Instructions to Bidders REV 10-18

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 ork 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. It is the OWNER's intent to accept alternates (if any are accepted) in the order in which they are listed on the Bid form, but OWNER may accept them in any order or combination.

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 * *

00300 1

00300 - Bid Package Contents - REV 10-18

SECTION 00310 - Bid Form

PROJECT IDENTIFICATION:

Project Name:	JACKIE ROBINSON TRAINING COMPLEX TICKET OFFICE BUILDING RENOVATIONS
County Project Number:	IRC-2020
Bid Number:	2022026
Project Address:	4007 26 [™] STREET
	VERO BEACH, FL. 32960
Project Description:	The project consists of rebuilding walls that have been demolished during mold remediation activities, interior upgrades for ADA accessibility, and additional mold remediation. The project shall provide a "turn key ready to occupy facility" upon completion. The main improvements include drywall removal, replacement and finishing, wall relocations, removal and replacement of floor coverings, removal and replacement of ceiling grid and tiles, replacement of plumbing, fixtures, tile work in showers and restrooms, grading and landscaping improvements.

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. Bidder has examined and carefully studied the Bidding Documents, the other related data identified in the Bidding Documents, and the following Addenda, receipt of all which is hereby acknowledged.

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]

ITEMIZED BID SCHEDULE PROJECT NAME: JACKIE ROBINSON TRAINING COMPLEX TICKET OFFICE BUILDING RENOVATIONS

PROJECT NO.

BIDDER'S NAME:

Quantity Item No. Unit Unit Price Description Amount LS MOBILIZATION 1 1 2 PUBLIC CONSTRUCTION BOND LS 1 LS 3 DEMOLITION AND DISPOSAL 1 LS SITE WORK - AS DETAILED IN CONSTRUCTION PLANS 4 1 SF 5 AREA 1 645 AREA 2 SF 1,965 6 7 AREA 3 SF 2,385 8 AREA 4 SF 1,700 PERFORMANCE TURF - SOD (BAHIA) SY 9 286 RECORD DRAWINGS LS 10 1 JACKIE ROBINSON TRAINING COMPLEX TICKET OFFICE BUILDING RENOVATIONS SUB TOTAL FORCE ACCOUNT \$50,000.00 TOTAL BID AMOUNT (INCLUDING FORCE ACCOUNT)

LS=Lump Sum SF=Square Foot SY=Square Yard

NOTE: IF THERE IS A DISCREPANCY BETWEEN THE PLANS (SUMMARY OF PAY ITEMS) AND THE ITEMIZED BID SCHEDULE, THE BID SCHEDULE WILL BE UTILIZED FOR BIDDING PURPOSES.

TOTAL PROJECT BID AMOUNT IN WORDS

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 Disclosure of Relationships;
 - D. Qualifications Questionnaire;
 - E. List of Subcontractors;
 - F. Certification Regarding Prohibition Against Contracting with Scrutinized Companies

8.01 The terms used in this Bid with initial capital letters have the meanings indicated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

SUBMITTED on _____, 20___.

State Contractor License No.	
If Bidder is:	
An Individual Name (typed or printed):	
By:	(SEAL)
Phone No.: FAX No.: Email:	
<u>A Partnership</u> Partnership Name: By: <i>(Signature of general partner attach evidence of authority to sign,</i>	(SEAL)
Name (typed or printed):	,
Business address:	
Phone No.: FAX No.: Email:	
<u>A Corporation</u> Corporation Name: State of Incorporation: Type (General Business, Professional, Service, Limited Liability): By:	(SEAL)
(Signature attach evidence of authority to sign)	
Name (typed or printed):	
Title: Attest <i>(Signature of Corporate Secretary)</i>	(CORPORATE SEAL)
(Signature of Corporate Secretary) Business address:	
Phone No.: FAX No.: Email:	
Date of Qualification to do business is	

A Joint Venture

Joint Venture Name:		(SEAL)
By:	ttach evidence of authority to sign)	_
(Signature of joint venture partner a		
Name (typed or printed):		
Title:		
Business address:		_
Phone No.: Email:		_
Joint Venture Name:		 (SEAL)
By:		_
(Signature attach evidence of autho	prity to sign)	
Name (typed or printed):		
Title: Business address:		_
Phone No.: Email:		_
Phone and FAX Number, and Address for	receipt of official communications:	

(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.)

* * END OF SECTION * *

SECTION 00430

AIA DOCUMENT A310 BID BOND

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

END OF SECTION

00430 - 1 F:\Public Works\ENGINEERING DIVISION PROJECTS\2020 JRTC Ticket Office Renovations\1-Admin\Bids\Bid Documents\Rebid\00430 - Bid Bond REV 04-07.doc Rev. 05/01

00430 - Bid Bond REV 04-07

SECTION 00452

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.

1. This sworn statement MUST be submitted with Bid, Proposal or Contract No. 2022026

for JACKIE ROBINSON TRAINING COMPLEX TICKET OFFICE BUILDING RENOVATIONS

2. This sworn statement is submitted by: _____

(Name of entity submitting Statement)

whose business address is:

3. My name is _____

(Please print name of individual signing)

and my relationship to the entity named above is _____

4. 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.

5. I understand that the relationship with a County Commissioner or County employee that must be disclosed as follows:

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, or grandchild.

6. 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 any relationships as defined in section 105.08, Indian River County Code, with any County Commissioner or County employee.

____ The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents, who are active in management of the entity have the following relationships with a County Commissioner or County employee:

Name of Affiliate or entity	Name of County Commissioner or employee	Relationship
		(Signature)
		(Date)
STATE OF		
COUNTY OF		
	, 20, by	rsical presence or □ online notarization, (name of person
 (Pri	(Signature of Notary Pub int, Type, or Stamp Commissioned N	lic - State of Florida)
□ who is personally known to me		

END OF SECTION

SECTION 00456 – QUALIFICATIONS QUESTIONNAIRE

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

Documentation Submitted with Project No: IRC-2020

Bidder's Name / Address:

1.

Project Name: JACKIE ROBINSON TRAINING COMPLEX TICKET OFFICE BUILDING RENOVATIONS

Bio	Ider's Telephone & FAX Numbers:	
	ensing and Corporate Status: Is Contractor License current?	
	Bidder's Contractor License No: License to the bid]	[Attach a copy of Contractor'
C.	Attach documentation from the State of Fl indicates the business entity's status is active all officers.	

- 4. Number of years the firm has performed business as a Contractor in construction work of the type involved in this contract: _____
- 5. What is the last project OF THIS NATURE that the firm has completed?
- 6. Has the firm ever failed to complete work awarded to you? _____

[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 the firm failed to complete the work.]

7. Has the firm ever been assessed liquidated damages? _____

[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 liquidated damages have been assessed.]

8. Has the firm ever been charged by OSHA for violating any OSHA regulations? _____

[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 OSHA violations were alleged.]

9. Has the firm implemented a drug-free workplace program in compliance with Florida Statute 287.087?

(In the case of a tie, preference will be given to businesses with drug-free workplace programs)

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: _____

- 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]

00456 - Qualifications Questionnaire

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 Project No. <u>IRC-2020</u> for <u>JACKIE ROBINSON TRAINING</u> <u>COMPLEX TICKET OFFICE BUILDING RENOVATIONS</u>

	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 * *

00458 - 1 F:\Public Works\ENGINEERING DIVISION PROJECTS\2020 JRTC Ticket Office Renovations\1-Admin\Bids\Bid Documents\Rebid\00458 - List of Subcontractors REV 3-18A.doc

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, majorityowned 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 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:_____

00460 - Certification Regarding Prohibition Against Contracting

BOARD OF COUNTY COMMISSIONERS



October 6, 2020

via Email

Company Attn: Address Address Email address

NOTICE OF AWARD

Reference: Indian River County Bid No. 2022026 Project Name: JACKINE ROBINSON TRAINING COMPLEX TICKET BUILDING RENOVATIONS

Dear Mr./Ms. :

It is my pleasure to inform you that on [DATE] the Board of County Commissioners awarded the abovereferenced 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. <u>Two Signed Copies of Enclosed Agreement.</u>
- <u>Certificate of Insurance</u> 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. <u>W-9.</u>

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: Michael Heller, Project Specialist

Office of Management and Budget • Purchasing Division 1800 27th Street, Vero Beach, Florida 32960•(772) 226-1416•Fax: (772) 770-5140 E-mail: purchasing@ircgov.com

00510-1

00510 - Notice of Award REV 08-2020

SECTION 00520 - Agreement (Public Works)

TABLE OF CONTENTS

Title	<u>Page</u>
ARTICLE 1 - WORK	2
ARTICLE 2 - THE PROJECT	2
ARTICLE 3 – ENGINEER	2
ARTICLE 4 - CONTRACT TIMES	2
ARTICLE 5 - CONTRACT PRICE	3
ARTICLE 6 - PAYMENT PROCEDURES	3
ARTICLE 7 - INDEMNIFICATION	4
ARTICLE 8 - CONTRACTOR'S REPRESENTATIONS	4
ARTICLE 9 - CONTRACT DOCUMENTS	6
ARTICLE 10 - MISCELLANEOUS	7

[THE REMAINDER OF THIS PAGE WAS LEFT BLANK INTENTIONALLY]

00520 - Agreement (Public Works) REV 9-2020

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:

The project consists of rebuilding walls that have been demolished during mold remediation activities, interior upgrades for ADA accessibility, and additional mold remediation. The project shall provide a "turn key ready to occupy facility" upon completion. The main improvements include drywall removal, replacement and finishing, wall relocations, removal and replacement of floor coverings, removal and replacement of ceiling grid and tiles, replacement of plumbing, fixtures, tile work in showers and restrooms, grading and landscaping improvements.

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: JACKIE ROBINSON TRAINING COMPLEX TICKET OFFICE BUILDING RENOVATIONS County Project Number: IRC-2020 Bid Number: 2022026 Project Address: 4007 26TH Street, Vero Beach, FL 32960

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 <u>120</u> 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 <u>150</u> 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 <u>\$1,694.00</u> 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 <u>\$1,694.00</u> 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 <u>\$1,694.00</u> 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.

00520 - 3

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.
- 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.
- I. 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 (<u>www.e-verify.gov</u>) 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 00520-1 to 00520-9, 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 00620-1);
 - 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 <u>00700-1</u> to <u>00700-44</u>, inclusive);
 - 10. Supplementary Conditions (pages <u>00800-i</u> to <u>00800-11</u>, inclusive);
 - 11. Specifications as listed in Division 1 (General Requirements) and Division 2 (Technical Provisions);
 - 12. Drawings consisting of a cover sheet and sheets numbered <u>ABB</u> through <u>A-9</u>, inclusive, with each sheet bearing the following general title: <u>JACKIE ROBINSON</u> <u>TRAINING COMPLEX TICKET BUILDING REMODEL</u>
 - 13. Addenda (if applicable _____);
 - 14. Appendices to this Agreement (enumerated as follows):

Appendix A – Permit

- 15. CONTRACTOR'S BID (pages 00310-1 to 00310-6, inclusive);
- 16. Bid Bond (page 00430-1);
- 17. Qualifications Questionnaire (page 00456-1 to 00456-4, inclusive);
- 18. List of Subcontractors (page 00458-1);

19. Sworn Statement Under Section 105.08, Indian River County Code, on Disclosure of Relationships (pages <u>00452-1</u> to <u>00452-2</u>, inclusive);

20. Certification Regarding Prohibition Against Contracting with Scrutinized Companies (page <u>00460-1</u>);

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

00520 - Agreement (Public Works) REV 9-2020

- 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 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 ______, 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:

Ву: _____

INDIAN	RIVER	COUNTY

By: _____ Peter D. O'Bryan, Chairman

By: __

Jason E. Brown, County Administrator

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

By:

Dylan Reingold, County Attorney

Jeffrey R. Smith, Clerk of Court and Comptroller

Attest:

Deputy Clerk

(SEAL)

Designated Representative: Name: James W. Ennis, P.E., PMP Title: Assistant Public Works Director 1801 27th Street Vero Beach, Florida 32960 (772) 226-1221 Facsimile: (772) 778-9391

Attest _____

Address for giving notices:

License No. ______(Where applicable)

(Contractor)

(CORPORATE SEAL)

Agent for service of process:

Designated Representative:

Name: _____ Title:

Address:

Phone: _____

Facsimile:

(If CONTRACTOR is a corporation or a partnership, attach evidence of authority to sign.)

* * END OF SECTION * *

00520 - 9

SECTION 00550 - Notice to Proceed

Dated _____

TO:

ADDRESS:

(BIDDER)

Contract For:

JACKIE ROBINSON TRAINING COMPLEX TICKET OFFICE BUILDING RENOVATIONS

Project No: IRC-2020

IRC Bid No. 2022026

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. The contract has allocated <u>120</u> calendar days for Substantial Completion of this project and <u>150</u> calendar days for Final Completion. In accordance with Article 4 of the Agreement the date of Substantial Completion is _____ and the date of readiness for final payment is _____.

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.

Also, before you may start any Work at the Site, you must: (add other requirements, if applicable)

> INDIAN RIVER COUNTY (OWNER)

Ву:____

(AUTHORIZED SIGNATURE)

(TITLE)

00550 - Notice to Proceed REV 1-4-11

00550 - 1

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:	
OBLIGEE NAME: (If contracting entity is different from the owner, the contracting public 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.

00610 - 2

00610 - Public Construction Bond

PUBLIC CONSTRUCTION BOND

Bond No.

(enter bond number)

BY THIS BOND, We _____, as Principal and ______, as Principal and ______ , herein called Owner, in the sum of \$_____, for payment of which we bind ourselves, our heirs, personal representatives, successors, and assigns, jointly and severally. THE CONDITION OF THIS BOND is that if Principal: 1. Performs the contract dated _____, ___, between Principal and Owner for construction of _____, the contract being made a part of this bond by reference, at the times and in the manner prescribed in the contract: and 2. Promptly makes payments to all claimants, as defined in Section 255.05(1), Florida Statutes, supplying Principal with labor, materials, or supplies, used directly or indirectly by Principal in the prosecution of the work provided for in the contract; and 3. Pays Owner all losses, damages, expenses, costs, and attorney's fees, including appellate proceedings, that Owner sustains because of a default by Principal under the contract; and 4. Performs the guarantee of all work and materials furnished under the contract for the time specified in the contract, then this bond is void; otherwise it remains in full force. 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), Florida Statutes. Any changes in or under the contract documents and compliance or noncompliance with any formalities connected with the contract or the changes does not affect Surety's obligation under this bond.

DATED ON _____,

(Name of Principal)

Ву ___

(As Attorney in Fact)

(Name of Surety)

00610 - 3

00610 - Public Construction Bond

SECTION 00620 - Sample Certificate of Liability Insurance

CERTIFICATE OF LIABILITY INSURANCE					
PRODUCER	THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. COMPANIES AFFORDING COVERAGE				
INSURED	COMPANY A -				
	COMPANY B -				
	COMPANY C -				
	COMPANY D -				
	COMPANY E -				

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED NOTWITHSTANDING ANY REQUIREMENT TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN THE INSURANCE ACCORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURAN	NCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DI	D/YY)	POLICY EXPIRATION DATE (MM/D/YY)		LIMITS	
	GENERAL LIABILITY			27.12 (1111/21	,,		EACH OCCURRE		\$ 1,000,000
A		LIABILITY					FIRE DAMAGE (\$ 50,00
							MED. EXP. (Any		\$ 5,00
							PERSONAL & AI		\$ 1,000,00
							GENERAL AGGE	REGATE	\$ 1,000,00
							PRODUCTS - CO	OMP/OP AGG.	\$ 1,000,00
									\$
A	AUTOMOBILE LIABILITY						COMBINED SING (Ea. Occurrence)		\$ 1,000,00
	ALL OWNED AUTOS SCHEDULED AUTOS						BODILY INJURY (Per Person)		\$
	☐ HIRED AUTOS ☐ NON-OWNED AUTOS						BODILY INJURY (Per Accident)		\$
							PROPERTY DAM	IAGE	\$
	GARAGE LIABILITY						AUTO ONLY - E	A ACCIDENT	\$
							OTHER THAN	EA ACC	\$
							AUTO ONLY	AGG	\$
A	EXCESS LIABILITY						EACH OCCURRE	INCE	
		LAIMS MADE							
							AGGREGATE		\$
	RETENTION \$								\$
									\$
A	WORKER'S COMPENSATION EMPLOYER'S LIABILITY	AND						RY LIMITS	
							E.L. EACH ACCI	DENT	\$ 100,00
	THE	_					E.L. DISEASE - I	EA	\$ 500,00
	PROPRIETOR/PARTNERS/ EXECUTIVE OFFICERS ARE:						E.L. DISEASE-PO	DLICY LIMIT	\$ 100,00
	OTHER: BUILDER'S RISK						FULL REPLACE	MENT COST	

AUTHORIZED REPRESENTATIVE

SECTION 00622 - Contractor's Application for Payment JACKIE ROBINSON TRAINING COMPLEX TICKET OFFICE BUILDING RENOVATIONS

		Ap For Work Accomplished through the period of	plication for Payment No through
To:		Indian River County (OWNER)	
From	n:		
Proje	ect No.:	IRC-2020	
Bid N	lo.:	2022026	
1) A 1. 2.	Origina	etailed schedule and copies of all paid invoices. al Contract Price: ange by Change Orders and Written Amendments (+ o	<u>\$</u> or -): \$
3.		t Contract Price (1 plus 2):	\$
4.		ompleted and stored to date:	\$
5.	Retaina	age (per Agreement):	
		<u>5%</u> of retainage:	<u>\$</u>
6. 7.		Total Reta ompleted and stored to date less retainage (4 minus 5 revious Application for Payments:	• . <u> </u>
8.	DUE T	HIS 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;

00622 - 1

00622 - Contractor's Application for Payment - 03-10 rev

2. Updated Construction Schedule per Specification Section 01310.

Dated _____

By:

(CONTRACTOR – must be signed by an Officer of the Corporation)

Print Name and Title

STATE OF FLORIDA COUNTY OF INDIAN RIVER

Before me, a Notary Public, duly commissioned, qualified, and acting, personally appeared _____, who being by me first duly sworn upon oath, says that he/she is the of the CONTRACTOR mentioned above and that he/she has been duly authorized to act on behalf of it, and that he/she executed the above Contractor's Application for Payment and Contractor's Certification statement on behalf of said CONTRACTOR; and that all of the statements contained herein are true, correct, and complete. Subscribed and sworn to before me this day of , 20 . ____ is personally known to me or has produced as identification. NOTARY PUBLIC:

(SEAL)

Printed name:

Commission No.:_____

Commission Expiration: _____

00622 - Contractor's Application for Payment - 03-10 rev

Please remit payment to:

Contractor's Name: _____

Address:

[The remainder of this page was left blank intentionally]

SURETY'S CONSENT OF PAYMENT TO CONTRACTOR:

The Surety, _____

______, a corporation, in accordance with Public Construction Bond Number ______, hereby consents to payment by the OWNER to the CONTRACTOR, for the amounts specified in this CONTRACTOR'S APPLICATION FOR PAYMENT.

TO BE EXECUTED BY CORPORATE SURETY:

Attest:

Secretary

Corporate Surety

Business Address

BY:

Print Name:

Title: _____

(Affix Corporate SEAL)

STATE OF FLORIDA COUNTY OF INDIAN RIVER

Before me, a Notary Public, duly commissioned, qualified, and acting, personally appeared

______, to me well known or who produced _______as identification, who being by me first duly sworn upon oath, says that he/she is the _______for _____and that he/she has been authorized by ______it to approve payment by the OWNER to the CONTRACTOR of the foregoing Contractor's Application for Payment. Subscribed and sworn to before me this ______ day of _____, 20____.

> Notary Public, State of _____ My Commission Expires: _____

[The remainder of this page was left blank intentionally]

CERTIFICATION OF PROJECT MANAGER:

I certify that I have reviewed the above and foregoing Periodic Estimate for Partial Payment; that to the best of my knowledge and belief it appears to be a reasonably accurate statement of the work performed and/or material supplied by the Contractor. I am not certifying as to whether or not the Contractor has paid all subcontractors, laborers, materialmen and suppliers because I am not in a position to accurately determine that issue.

Dated _____

SIGNATURE

CERTIFICATION OF INSPECTOR:

I have checked the estimate against the Contractor's Schedule of Amounts for Contract Payments and the notes and reports of my inspections of the project. To the best of my knowledge, this statement of work performed and/or materials supplied appears to be reasonably accurate, that the Contractor appears to be observing the requirements of the Contract with respect to construction, and that the Contractor should be paid the amount requested above, unless otherwise noted by me. I am not certifying as to whether or not the Contractor has paid all subcontractors, laborers, materialmen and suppliers because I am not in a position to accurately determine that issue.

Dated _____

SIGNATURE

[The Remainder of This Page Was Left Blank Intentionally]

00622 - 4

00622 - Contractor's Application for Payment - 03-10 rev

ATTACHMENT A

1. List of all subcontractors, laborers, materialmen and suppliers who have not been paid from the payment received from the last Pay Request and the reason why they were not paid (attach additional pages as necessary):

2. List of all subcontractors, laborers, materialmen and suppliers for which a signed release of lien form (partial or final as applicable) is not included with this Pay Request, together with an explanation as to why the release of lien form is not included (attach additional pages as necessary):

00622 - Contractor's Application for Payment - 03-10 rev

PROJECT NAME: JACKIE ROBINSON TRAINING COMPLEX TICKET OFFICE BUILDING RENOVATIONS

Project No. <u>IRC-2020</u>

Payment Application No.

								WORK CO	OMPLETE	D					
				SCHEDULE	D VALUE	PREVIC APPLICA	OUS ATION	THIS PE	RIOD	TOTAL CO	OMPLETED	%	MATERIALS	BALANC FINIS	
ltem No.	Description	Unit	Quantity	Unit Price	Amount	QUANTITY	TOTAL	QUANTITY	TOTAL	QUANTITY	TOTAL		STORED	QUANTITY	TOTAL
											0.00				
	SUBTOTAL			SUBTOTAL	0.00		0.00		0.00		0.00		0.00		0.00
	FORCE ACCOUNT	1	LS												
				70741	0.00										
	GRAND TOTAL			TOTAL	0.00										
										AMOUNT CO	OMPLETED TO	DAT	Е		\$0.00
											STORED TO I MATERIALS S		ED AND COMPI	LETED TO	\$0.00
0 2 11										DATE					\$0.00
ñ										RETAINAGE	5%				\$0.00

TOTAL COMPLETED AND STORED LESS RETAINAGE

LESS PREVIOUS PAYMENT

AMOUNT DUE CONTRACTOR

\$0.00

\$0.00

\$0.00

SECTION 00630 - Certificate of Substantial Completion

Date of Issuance: , 20

OWNER: Indian River County CONTRACTOR: CONTRACT FOR: JACKIE ROBINSON TRAINING COMPLEX TICKET OFFICE BUILDING RENOVATIONS Project No.: IRC-2020

Project Description: The project consists of rebuilding walls that have been demolished during mold remediation activities, interior upgrades for ADA accessibility, and additional mold remediation. The project shall provide a "turn key ready to occupy facility" upon completion.

facility" upon completion. The main improvements include drywall removal, replacement and finishing, wall relocations, removal and replacement of floor coverings, removal and replacement of ceiling grid and tiles, replacement of plumbing, fixtures, tile work in showers and restrooms, grading and landscaping improvements

OWNER's Bid No. 2022026

This Certificate of Substantial Completion applies to all Work under the Contract Documents or to the following specified parts thereof:

То:_____

And To:_____

CONTRACTOR

OWNER

The Work to which this Certificate applies has been inspected by authorized representatives of OWNER, CONTRACTOR and ENGINEER, and that Work is hereby declared to be substantially complete in accordance 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 allinclusive, 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 _____

00630 - 1

00630 - Certificate of Substantial Completion REV 04-07

F:\Public Works\ENGINEERING DIVISION PROJECTS\2020 JRTC Ticket Office Renovations\1-Admin\Bids\Bid Documents\Rebid\00630 - Certificate of Substantial Completion REV 04-07.doc 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:

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

Ву: _____

(Authorized Signature)

* * END OF SECTION * *

00630 - 2

00630 - Certificate of Substantial Completion REV 04-07

SECTION 00632 - CONTRACTOR'S FINAL CERTIFICATION OF THE WORK

(TO ACCOMPANY CONTRACTOR'S FINAL APPLICATION FOR PAYMENT)

PROJECT NAME: JACKIE ROBINSON TRAINING COMPLEX TICKET OFFICE BUILDING RENOVATIONS

PROJECT NO: **<u>IRC-2020</u>**

STATE OF ______ COUNTY OF ______

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 the _____ day of ______, 20____, enter into a contract for the performance of certain work, more particularly described as follows:

UNDER PENALTY OF PERJURY, affiant further says that said construction has been completed and the Contract therefore fully performed and final payment is now due and that all liens of all firms and individuals contracting directly with or directly employed by such CONTRACTOR have been paid in full EXCEPT:

Name

Description/Amount

who have not been paid and who are due the amount set forth.

Affiant further 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.
- 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.

00632-1

F:\Public Works\ENGINEERING DIVISION PROJECTS\2020 JRTC Ticket Office Renovations\1-Admin\Bids\Bid Documents\Rebid\00632 - Contractor's Final Certification REV 04-07.doc

- 5. The Work is complete and ready for final acceptance by the OWNER.
- 6. CONTRACTOR hereby certifies that it has no claims against the OWNER.

(Corporate Seal)

(Contractor)

Ву: _____

STATE OF _____

COUNTY OF _____

Sworn to (or affirmed) and subscribed before me by means of \Box physical presence or \Box online notarization, this _____ day of _____, 20___, by _____ (name of person making statement).

Florida) Commissioned Name of Notary Public) (Signature of Notary Public - State of (Print, Type, or Stamp

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

++END OF SECTION++

SECTION 00634 - PROFESSIONAL SURVEYOR AND MAPPER'S CERTIFICATION AS TO ELEVATIONS AND LOCATIONS OF THE WORK

(TO BE COMPLETED BY A FLORIDA PROFESSIONAL SURVEYOR AND MAPPER RETAINED BY THE CONTRACTOR AND TO ACCOMPANY CONTRACTOR'S FINAL APPLICATION FOR PAYMENT)

I CERTIFY that I am a Florida Professional Surveyor and Mapper retained by:

(Insert name of CONTRACTOR)

Who is the CONTRACTOR for the following Project:

PROJECT NAME: JACKIE ROBINSON TRAINING COMPLEX TICKET OFFICE BUILDING RENOVATIONS PROJECT # IRC-2020

I FURTHER CERTIFY that I have personally performed the survey work for the preparation of Record Drawings for the CONTRACTOR for this project or that such work was performed under my direct control and supervision.

I FURTHER CERTIFY that all constructed elevations and locations of the Work are in conformance with the Contract Documents, except for discrepancies listed below.

	[Attach addi	tional sheets as	necessary]	
				(SURVEYOR'S SEAL)
	CERTIFIEI	D BY:		
	Printed	d Name:		
Florida Professional S	Surveyor and Mapp	er Registration I	Number:	
Date Signed and Sea	led by Professional	Surveyor and N	/lapper:	
Company Name:				
Company Address:				
Telephone Number: _				
-		00634 - 1	00634 - Profe	ssional Surveyor and Mapper's Cert

F:\Public Works\ENGINEERING DIVISION PROJECTS\2020 JRTC Ticket Office Renovations\1-Admin\Bids\Bid Documents\Rebid\00634 - Professional Surveyor and Mapper's Cert.doc Rev. 06/01

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

This document has been approved and endorsed by

The Associated General Contractors of America

Construction Specifications Institute

Copyright ©1996

National Society of Professional Engineers 1420 King Street, Alexandria, VA 22314

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

TABLE OF CONTENTS

Title		Page
ARTICLE 2	I - DEFINITIONS AND TERMINOLOGY	5
	1.01 Defined Terms	
	1.02 Terminology	7
ARTICLE	2 - PRELIMINARY MATTERS	8
	2.01 Delivery of Bonds	8
	2.02 Copies of Documents	8
	2.03 Commencement of Contract Times; Notice to Proceed	8
	2.04 Starting the Work	
	2.05 Before Starting Construction	
	2.06 Preconstruction Conference	
	2.07 Initial Acceptance of Schedules	9
ARTICLE	3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE	9
	3.01 Intent	
	3.02 Reference Standards	
	3.03 Reporting and Resolving Discrepancies	
	3.04 Amending and Supplementing Contract Documents	
	3.05 Reuse of Documents	
ARTICLE 4	4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; REFER	ENCE
	POINTS	
	4.01 Availability of Lands	
	4.02 Subsurface and Physical Conditions	11
	4.03 Differing Subsurface or Physical Conditions	11
	4.04 Underground Facilities	
	4.05 Reference Points	
	4.06 Hazardous Environmental Condition at Site	13
ARTICLE	5 - BONDS AND INSURANCE	
	5.01 Performance, Payment, and Other Bonds	14
	5.02 Licensed Sureties and Insurers	
	5.03 Certificates of Insurance	
	5.04 CONTRACTOR's Liability Insurance	
	5.05 OWNER's Liability Insurance	
	5.06 Property Insurance	
	5.07 Waiver of Rights	
	5.08 Receipt and Application of Insurance Proceeds	
	5.09 Acceptance of Bonds and Insurance; Option to Replace 5.10 Partial Utilization, Acknowledgment of Property Insurer	
ARTICLE (6 - CONTRACTOR'S RESPONSIBILITIES	
	6.01 Supervision and Superintendence	
	6.02 Labor; Working Hours	
	6.03 Services, Materials, and Equipment	
	6.04 Progress Schedule 6.05 Substitutes and "Or-Equals"	
	6.06 Concerning Subcontractors, Suppliers, and Others	
	0.00 concerning eucoentractore, euppilere, and eurore	····· 🖌 🖌

6.07 Patent Fees and Royalties	21
6.08 Permits	22
6.09 Laws and Regulations	22
6.10 Taxes	22
6.11 Use of Site and Other Areas	22
6.12 Record Documents	23
6.13 Safety and Protection	23
6.14 Safety Representative	23
6.15 Hazard Communication Programs	23
6.16 Emergencies	24
6.17 Shop Drawings and Samples	
6.18 Continuing the Work	25
6.19 CONTRACTOR's General Warranty and Guarantee	25
6.20 Indemnification	25
ARTICLE 7 - OTHER WORK	26
7.01 Related Work at Site	
7.02 Coordination	27
ARTICLE 8 - OWNER'S RESPONSIBILITIES	27
8.01 Communications to Contractor	
8.02 Replacement of ENGINEER	
8.03 Furnish Data	
8.04 Pay Promptly When Due	
8.05 Lands and Easements; Reports and Tests	
8.06 Insurance	
8.07 Change Orders	
8.08 Inspections, Tests, and Approvals	
8.09 Limitations on OWNER's Responsibilities	
8.10 Undisclosed Hazardous Environmental Condition	
8.11 Evidence of Financial Arrangements	
ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION	28
9.01 OWNER'S Representative	
9.02 Visits to Site	
9.03 Project Representative	
9.04 Clarifications and Interpretations	
9.05 Authorized Variations in Work	
9.06 Rejecting Defective Work	
9.07 Shop Drawings, Change Orders and Payments	
9.08 Determination for Unit Price Work	
9.09 Decisions on Requirements of Contract Documents and Acceptability of Work	
9.10 Limitations on ENGINEER's Authority and Responsibilities	
ARTICLE 10 - CHANGES IN THE WORK; CLAIMS	20
10.01 Authorized Changes in the Work.	
10.01 Additionzed Changes in the Work	
10.02 Onautionized Changes in the Work	
10.03 Execution of Change Orders	
10.04 Nouncation to Surety	
10.00 Olainio and Disputes	

ARTICLE 11 - COST OF THE WORK; CASH ALLOWANCES; UNIT PRICE WORK	
11.01 Cost of the Work	
11.02 Cash Allowances	
11.03 Unit Price Work	
ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES	
12.01 Change of Contract Price	
12.02 Change of Contract Times	
12.03 Delays Beyond CONTRACTOR's Control	
12.04 Delays Within CONTRACTOR's Control	
12.05 Delays Beyond OWNER'S and Contractor's Control	
12.06 Delay Damages	35
ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF	
DEFECTIVE WORK	
13.01 Notice of Defects	
13.02 Access to Work	
13.03 Tests and Inspections	
13.04 Uncovering Work	
13.05 OWNER May Stop the Work	
13.06 Correction or Removal of Defective Work	
13.07 Correction Period.	
13.08 Acceptance of Defective Work	
13.09 OWNER May Correct Defective Work	
ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION	
14.01 Schedule of Values	
14.02 Progress Payments	
14.03 CONTRACTOR's Warranty of Title	40
14.04 Substantial Completion	40
14.05 Partial Utilization	40
14.06 Final Inspection	
14.07 Final Payment	
14.08 Final Completion Delayed	
14.09 Waiver of Claims	
ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION	40
15.01 OWNER May Suspend Work	
15.02 OWNER May Terminate for Cause	
15.03 OWNER May Terminate For Convenience	
15.04 CONTRACTOR May Stop Work or Terminate	43
ARTICLE 16 - DISPUTE RESOLUTION	43
16.01 Methods and Procedures	43
ARTICLE 17 - MISCELLANEOUS	40
17.01 Giving Notice	
17.02 Computation of Times	
17.03 Cumulative Remedies	
17.04 Survival of Obligations	
17.05 Controlling Law	

GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

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.

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), CONTRAC-TOR shall submit to ENGINEER for its timely review:

> a preliminary progress schedule 1. 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

a preliminary schedule of values for 3. all of the Work which includes guantities 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 ENGI-NEER 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.

> CONTRACTOR's schedule of Shop 2. 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 3. 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.

Reference Standards 3.02

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

> Reference to standards, specifica-1. tions, 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.

> 2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties 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. of ENGINEER's ENGINEER. or anv 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.

3.03 Reporting and Resolving Discrepancies

A. Reporting Discrepancies

If, during the performance of the 1. 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 CON-TRACTOR knew or reasonably should have known thereof.

B. Resolving Discrepancies

Except as may be otherwise 1 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.

Subsurface and Physical Conditions 4.02

A. Reports and Drawings: The Supplementary Conditions identify:

> those reports of explorations and 1. tests of subsurface conditions at or contiguous to the Site that ENGINEER has used in preparing the Contract Documents; and

> those drawings of physical conditions 2. 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

> other data, interpretations, opinions, 2 and information contained in such reports or shown or indicated in such drawings; or

> any CONTRACTOR interpretation of 3. 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:

> is of such a nature as to establish 1. that any "technical data" on which CONTRAC-TOR is entitled to rely as provided in paragraph 4.02 is materially inaccurate; or

> is of such a nature as to require a 2. change in the Contract Documents; or

> differs materially from that shown or 3. indicated in the Contract Documents; or

> 4. is of an unusual nature, and differs conditions ordinarily materially from 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 CON-TRACTOR 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.

If OWNER and CONTRACTOR are 3. 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 However, OWNER, paragraph 10.05. 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 bv 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 CONTRAC-TOR 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 ENGI-NEER. 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.

2. 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 the Contract Documents and that 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. CON-TRACTOR 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. data" Such "technical 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

00700 - General Conditions

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 ENGI-NEER (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 If OWNER and CONdeleted from the Work. 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, emplovees. directors. partners. 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, consultants. employees, agents, other 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 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 CON-TRACTOR 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 OWN-ER or any other additional insured) which CON-TRACTOR 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 1. 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, 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, agents, and other consultants and 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;

contain a provision or endorsement 5. 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 CON-TRACTOR pursuant to paragraph 5.03 will so provide);

6. remain in effect at least until final payment and at all times thereafter when CON-TRACTOR may be correcting, removing, or replacing defective Work in accordance with paragraph 13.07; and

with respect to completed operations 7. 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:

> include the interests of OWNER, 1 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:

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);

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 5____ by OWNER;

6. include testing and startup; and

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 interests of OWNER, CONTRACTOR, the 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 CON-TRACTOR 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 CONTRAC-TOR by appropriate Change Order or Written Amendment. Prior to commencement of the Work at the Site, OWNER shall in writing advise CONTRAC-TOR 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 CONTRACTOR, will_ protect OWNER, 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 thei r 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

> loss or damage to the completed Pro-2. ject 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.

6.02 Labor; Working Hours

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 guality 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.

> "Or-Equal" Items: If in ENGINEER's 1 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 preiudice 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, maintenance, sales. 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, CON-TRACTOR 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 acceptable replacement 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 ENGINEER 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 is responsible as 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 Subcon-

tractors, 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 architects. attorneys. and engineers. other 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.
 - B. 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.

3. 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 CONTRAC-TOR 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 ENGI-NEER 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 CONTRACTOR or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any 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 ENGI-NEER 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 ENGI-NEER 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, CON-TRACTOR 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.

ENGINEER's review and approval of 3. 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 ENGI-NEER 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 CON-TRACTOR 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. CON-TRACTOR 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:

1. 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 engineers, architects, attorneys, and other 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 CONTRACTOR 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 CON-TRACTOR 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.

8.04 Pay Promptly When Due

A. OWNER shall make payments to CONTRAC-TOR 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 gualified 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 On the basis of such visits and Documents. 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, ENGI-NEER 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 CON-TRACTOR 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 ENGI-NEER (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

3. 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 Regulations, but during any such appeal, 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

2. 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. Pavroll 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, CON-TRACTOR 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 CON-TRACTOR.

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.

f. 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 1. 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 CON-TRACTOR, 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 CONTRAC-TOR.

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

3. 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 submitted equipment 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 CON-TRACTOR without written concurrence of ENGI-NEER, 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.

13.04 Uncovering Work

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 CON-TRACTOR 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.

13.06 Correction or Removal of Defective Work

A. CONTRACTOR shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by ENGI-NEER, 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 other 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. If the 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 enaineers. architects. attornevs. and other 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 ENGI-NEER. 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

At least 20 days before the date 1. established for each progress payment (but not often than once month). more а 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 1. 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 writina ENGINEER's reasons refusing for to recommend payment. In the latter case, CON-TRACTOR may make the necessary corrections and resubmit the Application.

ENGINEER's recommendation of 2. any payment requested in an Application for Payment will constitute a representation by OWNER, ENGINEER to 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) inspec-

tions 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 of 4 CONTRACTOR's Work for the purposes of recommending payments nor ENGINEER's recommendation of any payment, including final will impose payment. 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.

ENGINEER may refuse to recom-5. mend 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 Substantial Completion. Promptly thereafter. 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 CONTRAC-TOR 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 quarantees. 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 CON-TRACTOR 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.

1. 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, and ENGINEER shall make an inspection of that part of the Work to determine its status of completion. lf 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. lf 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.

3. 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, CON-TRACTOR may furnish a Bond or other collateral satisfactory to OWNER to indemnify OWNER against any Lien.

B. Review of Application and Acceptance

If, on the basis of ENGINEER's 1. 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 Work has been completed and 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 writing 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 CONTRAC-TOR 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. CON-TRACTOR 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 the written notice. terminate 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 other 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 CON-TRACTOR from liability.

15.03 OWNER May Terminate For Convenience

A. Upon seven days written notice to CON-TRACTOR 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.

ARTICLE 17 - MISCELLANEOUS

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 CONDITIONS TO THE GENERAL CONDITIONS

Article Title	Article Number
Introduction	SC - 1.00
Defined Terms	SC – 1.01
Terminology	SC – 1.02
Before Starting Construction	SC – 2.05
Preconstruction Conference	SC – 2.06
Coordination of Plans, Specifications, and Special Provisions	SC - 3.06
Subsurface and Physical Conditions	SC - 4.02
Performance, Payment and Other Bonds	SC – 5.01
Certificates of Insurance	SC - 5.03
CONTRACTOR's Liability Insurance	SC – 5.04
OWNER's Liability Insurance	SC - 5.05
Property Insurance	SC - 5.06
Waiver of Rights	SC – 5.07
Receipt and Application of Insurance Proceeds	SC – 5.08
Acceptance of Bonds and Insurance; Option to Replace	SC – 5.09
Labor; Working Hours	SC - 6.02
Concerning Subcontractors, Suppliers and Others	SC - 6.06
Permits	SC - 6.08
Authorized Variations in Work	SC – 9.05
Cost of the Work	SC – 11.01
Test and Inspections	SC – 13.03
OWNER May Stop the Work	SC – 13.05
Correction Period	SC – 13.07
Progress Payments	SC - 14.02

Substantial Completion	SC - 14.04
Final Payment	SC – 14.07
OWNER May Suspend Work	SC – 15.01
OWNER May Terminate for Cause	SC – 15.02
CONTRACTOR May Stop Work or Terminate	SC – 15.04
Mediation	SC -16.02
Liens	SC – 17.06

+++ END OF THIS SUPPLEMENTARY CONDITIONS INDEX +++

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, Dritenbas, Binkley Architects and Associates, P.A.

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

SC-1.02 Terminology

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

- D. Furnish, Install, Perform, Provide
 - 1. The word "furnish" shall mean to supply and deliver 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" shall mean to put into use or place in final position services, materials, or equipment complete and ready for intended use.
 - 3. The words "perform" or "provide" shall mean to furnish and install services, materials, or 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	
Item	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

8. 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

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.
- 1. 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
- b. Hired Autos
- c. Non-Owned Autos.
- 4. Special Requirements:
 - h. 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.
 - i. "Indian River County Florida" will be named as "Additional Insured" on both the General Liability and Auto Liability.
 - j. 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.
 - k. An appropriate "Indemnification" clause shall be made a provision of the Contract (see paragraph 6.20 of the General Conditions).
 - I. It is the responsibility of the CONTRACTOR to insure that all subcontractors comply with all insurance requirements.
 - m. It should be remembered that these are minimum requirements, which are subject to modification in response to high hazard operation.
 - n. 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.
 - o. 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:
 - 1. 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. Verotown, LLC

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. Indian River County, Florida
 - b. Verotown, LLC.

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 applied and paid the following permits; <u>Indian River County Building Permit #2020100201</u>

- The CONTRACTOR shall obtain all 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.
- 3. 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: <u>Claims for labor, materials and supplies are not assessable against</u> <u>Indian River County and are subject to proper prior notice to (CONTRACTOR'S</u> <u>Name) and to (CONTRACTOR Surety Company Name), pursuant to Chapter</u> <u>255 of the Florida Statutes. This paragraph shall be inserted in every sub-</u> <u>subcontract hereunder.</u>" 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++

No. _____

DATE OF ISSUANCE: _____

EFFECTIVE DATE:

OWNER: Indian River County CONTRACTOR _____ Project: JACKIE ROBINSON TRAINING COMPLEX TICKET OFFICE BUILDING RENOVATIONS OWNER'S Project No. IRC-2020 OWNER'S Bid No. 2022026

You are directed to make the following changes in the Contract Documents: Description:

Reason for Change Order:

Attachments: (List documents supporting change)

CHANGE IN CONTRACT PRICE	:	CHANGE IN COM	NTRACT TIMES		
Description	Amount			Time	
Original Contract Price	\$		Original Contract Time:		
			antial Completion:		
			Final Completion:		
Net Increase (Decrease) from	\$		Net change from previous Change		
previous Change Orders No.		Orders No.	_to:	(days)	
to:			antial Completion:		
	•		Final Completion:		
Contract Price prior to this	\$	-	or to this Change		
Change Order:		Order:		(days or dates)	
			antial Completion:		
	<u> </u>		Final Completion:		
Net increase (decrease) of this	\$		Net increase (decrease) this		
Change Order:		Change Order:	antial Completion	(days or dates)	
			antial Completion: Final Completion:		
Contract Price with all approved \$		Contract Time wit	,		
Contract Price with all approved Change Orders:	Ψ	Change Orders:	in all approved	(days or dates)	
Change Orders.			antial Completion:	(days of dates)	
			Final Completion:		
ACCEPTED:	D: RECOMM		NDED: APPROVED:		
By:	By:		By:		
CONTRACTOR (Signature)	ENGINEER (Signature)		OWNER (Signa	ature)	
, , , ,		· - /	, U	,	
Date:	Date:		Date:		

00942 - 1

No. ____

DATE OF ISSUANCE:

EFFECTIVE DATE:

OWNER: Indian River County CONTRACTOR: Project: JACKIE ROBINSON TRAINING COMPLEX TICKET OFFICE BUILDING RENOVATIONS OWNER's Project No. IRC-2020

You are directed to proceed promptly with the following changes:

Description:

Purpose of Work Change Directive:

Attachments: (List documents supporting change)

If OWNER or CONTRACTOR believe that the above change has affected Contract Price any Claim for a Change Order based thereon will involve one or more of the following methods as defined in the Contract Documents.

Method of determining change in	
Contract Prices	

Method of determining change in **Contract Times**

Unit Prices
Lump Sum
Other:
By Change Order:

\$_____

Contractor's Records Engineer's Records Other: By Change Order:

Estimated increase (decrease) of this Work Estimated increase (decrease) in Contract Times: Change Directive

Substantial Completion: _____ days; Ready for Final Completion: davs

If the change involves an increase, the estimated amount is not to be exceeded without further authorization.

-				•		increas		stimated
time	is	not	to	be	exe	ceeded	without	further
autho	riza	tion.						

ACCEPTED:	RECOMMENDED:	APPROVED:
By:	By:	By:
CONTRACTOR (Signature)	ENGINEER (Signature)	OWNER (Signature)
Date:	Date:	Date:

* * END OF SECTION * *

DIVISION 1 GENERAL REQUIREMENTS

TITLE	SECTION NO.
SPECIAL PROVISIONS	01009
FORCE ACCOUNT	01024
REFERENCE STANDARDS	01091
GENERAL QUALITY CONTROL	01215
PROGRESS MEETINGS	01220
CONSTRUCTION SCHEDULES	01310
SUBMITTAL OF SHOP DRAWINGS, PRODUCT DATA AND SAMPLES	01340
CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS	01520
PROTECTION OF THE WORK AND PROPERTY	01541
TRANSPORTATION AND HANDLING OF MATERIALS AND EQUIPMENT	01610
STORAGE OF MATERIAL AND EQUIPMENT	01611
SUBSTITUTIONS	01630
SITE CLEANUP AND RESTORATION	01710
POST FINAL INSPECTION	01820

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.

FORCE ACCOUNT

1.1 General

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.

1.1 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.

+ + END OF SECTION + +

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.

+ + END OF SECTION + +

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.

GENERAL QUALITY CONTROL

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:
 - 1. 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.
 - 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.

+ + END OF SECTION + +

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. CONSTRUCTION COORDINATION 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.

++ END OF SECTION ++

01220 Progress Meetings

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.

CONSTRUCTION SCHEDULES

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.

+ + END OF SECTION + +

01310-2

01310 Construction Schedule

F:\Public Works\ENGINEERING DIVISION PROJECTS\2020 JRTC Ticket Office Renovations\1-Admin\Bids\Bid Documents\Rebid\01310 - Construction Schedule.doc

1.1 SCOPE

A. Submit shop drawings, product data and samples as required by or inferred by the Drawings and Specifications. Submittals shall conform to the requirements of Article 6.17 of the General Conditions, Section 00700, and as described in this Section.

1.2 SHOP DRAWINGS

- A. Shop drawings are original drawings, prepared by the CONTRACTOR, a subcontractor, supplier, or distributor, which illustrate some portion of the work; showing fabrication, layout, setting, or erection details. Shop drawings are further defined in Article 6.17, Section 00700.
- B. Shop drawings shall be prepared by a qualified detailer and shall be identified by reference to sheet and detail numbers on the Contract Drawings.

1.3 PRODUCT DATA

- A. Product data are manufacturer's standard schematic drawings and manufacturer's catalog sheets, brochures, diagrams, schedules, performance charts, illustrations, and other standard descriptive data. Product data are further defined in Article 6.17, Section 00700.
- B. Modify standard drawings to delete information which is not applicable to the project and supplement them to provide additional information applicable to the project.
- C. Clearly mark catalog sheets, brochures, etc., to identify pertinent materials, products, or models.

1.4 SAMPLES

Samples are physical examples to illustrate materials, equipment, or workmanship and to establish standards by which work is to be evaluated. Samples are further defined in Article 6.17, Section 00700.

1.5 CONTRACTOR'S RESPONSIBILITIES FOR SUBMITTAL OF SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

- A. The CONTRACTOR's responsibilities for submittal of shop drawings, product data, and samples are set forth in paragraph 6.17 of the General Conditions and as further explained herein.
- B. Prior to submission, thoroughly check shop drawings, product data, and samples for completeness and for compliance with the Contract Documents, verify all dimensions and field conditions, and coordinate the shop drawings with the requirements for other related work. Also review each shop drawing before submitting it to the ENGINEER to determine that it is acceptable in terms of the means, methods, techniques, sequences and operations of construction, safety precautions and programs incidental thereto, all of which are the CONTRACTOR's responsibility.
 - It is CONTRACTOR'S responsibility to review submittals made by his suppliers and Subcontractors before transmitting them to ENGINEER to assure proper coordination of the Work and to determine that each submittal is in accordance with its desires and that there is sufficient information about materials and equipment for ENGINEER to determine compliance with the Contract Documents.
 - 2. Incomplete or inadequate submittals will be returned for revision without review.
- C. The CONTRACTOR's responsibility for errors and omissions in submittals is not relieved by the ENGINEER's review of submittals. The CONTRACTOR shall approve the shop drawings based on his in-the-field measurements, prior to submittal to the ENGINEER for his review.
- D. Notify the ENGINEER, in writing at the time of submission, of deviations in submittals from the requirements of the Contract Documents. The CONTRACTOR's responsibility for deviations in submittals from the requirements of the Contract Documents is not relieved by the ENGINEER's review of submittals, unless the ENGINEER gives written acceptance of specific deviations.
- E. Begin no work, which requires submittals until return of submittals with the ENGINEER's stamp and initials or signature indicating the submittal has been reviewed.

01340-2

1.6 SUBMITTAL REQUIREMENTS AND ENGINEER'S REVIEW FOR SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

- A. Submit electronic copy via email: Michael Heller Project Manager mheller@ircgov.com
- B. A letter of transmittal shall accompany each submittal. If data for more than one Section of the Specifications is submitted, a separate transmittal letter shall accompany the data submitted for each Section.
- C. At the beginning of each letter of transmittal, provide a reference heading indicating the following:
 - 1. OWNER'S Name
 - 2. Project Name
 - 3. Project Number
 - 4. Transmittal Number
 - 5. Section Number
- D. All submittals shall have a title block with complete identifying information satisfactory to the ENGINEER. The following is a sample Submittal Form that the CONTRACTOR may use:

[The remainder of this page has been left blank intentionally]

01340 - Submittal of Shop Drawings

01340-3

F:\Public Works\ENGINEERING DIVISION PROJECTS\2020 JRTC Ticket Office Renovations\1-Admin\Bids\Bid Documents\Rebid\01340 - Submittal of Shop Drawings.doc

CONTRACTOR SUBMITTALS			
SUBMITTAL Contractor:	. NO		
Date	Sent to County		
No. C	Copies Sent to County		
	riginal Submittal 🗌 Re-Submittal		
Project Name: <u>JACKIE ROBINSON TRAINING C</u> <u>RENOVATIONS</u> Project No.: <u>IRC-2020</u>	OMPLEX TICKET OFFICE BUILDING		
Shop Drawing Cut Sheet Description:	Other		
Sub-Contractor:			
Remarks:			
Reviewing Agency: (As checked below)	* * * * * * * * * * * * * * * * * * * *		
	ed Date Returned No. Copies Ret'd		
IR C Engineering Div.			
IRCUtilities Services			
Remarks:			

IRC Engineering Division	Date Rec'd from Contractor Date Ret'd to Contractor		
1801 27 th Street	No. Copies Ret'd		
Vero Beach, Fl. 32960			
Remarks:			
Distribution of Copies:			
IRC Engineering Division			
Office File Field Office File			
01340	01340 Submittal of Shop Drawings		

F:\Public Works\ENGINEERING DIVISION PROJECTS\2020 JRTC Ticket Office Renovations\1-Admin\Bids\Bid Documents\Rebid\01340 - Submittal of Shop Drawings.doc

- E. All submittals shall bear the stamp of approval and signature of CONTRACTOR as evidence that they have been reviewed by CONTRACTOR. Submittals without this stamp of approval will not be reviewed by the ENGINEER and will be returned to CONTRACTOR.
- F. Assign a number to each submittal starting with No. 1 and thence numbered consecutively. Identify resubmittals by the original submittal number followed by the suffix "A" for the first resubmittal, the suffix "B" for the second resubmittal, etc.
- G. Initially submit to ENGINEER an electronic copy of all submittals that can be printed on 11-inch by 17-inch or smaller sheets (no less than 8 1/2-inch x 11-inch).
- H. After ENGINEER completes his review, Shop Drawings will be marked with one of the following notations:
 - 1. Approved
 - 2. Approved as Noted
 - 3. NOT Approved Resubmit
- I. If a submittal is acceptable, it will be marked "Approved" or "Approved as Noted". One (1) electronic copy of the submittal will be returned to CONTRACTOR.
- J. Upon return of a submittal marked "Approved" or "Approved as Noted", CONTRACTOR may order, ship or fabricate the materials included on the submittal, provided it is in accordance with the corrections indicated.
- K. If a submittal is unacceptable, one (1) copy will be returned to CONTRACTOR with following notation, "NOT Approved Resubmit".
- L. Upon return of a submittal marked "NOT Approved Resubmit", make the corrections indicated and repeat the initial approval procedure. Upon return of a submittal so marked, repeat the initial approval procedure utilizing acceptable material or equipment.
- M. Work shall not be performed nor equipment installed without an ENGINEER "Approved" or "Approved as Noted" Shop Drawing.
- N. Submit Shop Drawings well in advance of the need for the material or equipment for construction and with ample allowance for the time required to make delivery of material or equipment after data covering such is approved. CONTRACTOR shall assume the risk for all materials or

01340-5

SUBMITTAL OF SHOP DRAWINGS

equipment which is fabricated or delivered prior to the approval of Shop Drawings. Materials or equipment requiring Shop Drawings which have not yet received approval by the ENGINEER shall not be installed on the project. Materials or equipment will not be included in periodic progress payments until approval thereof has been obtained in the specified manner.

- P. ENGINEER will review and process all submittals promptly, but a reasonable time should be allowed for this, for the Shop Drawings being revised and resubmitted, and for time required to return the approved Shop Drawings to CONTRACTOR.
- Q. Furnish required submittals with complete information and accuracy in order to achieve required approval of an item within three submittals. All costs to ENGINEER involved with subsequent submittals of Shop Drawings, Samples or other items requiring approval, will be back-charged to CONTRACTOR in accordance with the General Conditions and the Supplementary Conditions. If the CONTRACTOR requests a substitution for a previously approved item, all of ENGINEER'S costs in the reviewing and approval of the substitution will be back-charged to CONTRACTOR unless the need for such substitution is beyond the control of CONTRACTOR.

+ + END OF SECTION + +

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. <u>TEMPORARY WATER</u>
 - 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.

CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

Β. **TEMPORARY SANITARY FACILITIES**

- Provide temporary toilet facilities separate from the job office. 1 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.

+ + END OF SECTION + +

01520-2

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.

PROTECTION OF THE WORK AND PROPERTY

- 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. 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:
 - 1. 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.

PROTECTION OF THE WORK AND PROPERTY

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.

- 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.

PROTECTION OF THE WORK AND PROPERTY

- 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:
 - 1. 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.

PROTECTION OF THE WORK AND PROPERTY

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.

+ + END OF SECTION + +

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.

TRANSPORTATION AND HANDLING OF MATERIALS AND EQUIPMENT

- 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.

+ + END OF SECTION + +

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.

+ + END OF SECTION + +

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).
 - 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.

SUBSTITUTIONS

- c. Samples, if appropriate.
- Name and address of similar projects on which product was used, d. and date of installation.
- 2. For construction methods (if specified):
 - Detailed description of proposed method. a.
 - Drawings illustrating method. b.
- Such other data as the ENGINEER may require to establish that the 3. 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 deter-1. mined that it is equal to or superior in all respects to the product, manufacturer or method specified.
 - CONTRACTOR will provide the same or better guarantees or 2. 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:
 - Acceptance will require changes in the design concept or a substantial 1. revision of the Contract Documents.
 - 2. It will delay completion of the Work, or the work of other contractors.
 - It is indicated or implied on a Shop Drawing and is not accompanied by 3. 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.

01630 Substitutions F:\Public Works\ENGINEERING DIVISION PROJECTS\2020 JRTC Ticket Office Renovations\1-Admin\Bids\Bid Documents\Rebid\01630 - Substitutions.doc

SUBSTITUTIONS

- 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.

+ + END OF SECTION + +

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.

SITE CLEANUP AND RESTORATION

- 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, VEROTOWN, LLC, 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.

+ + END OF SECTION + +

01710 Site Cleanup

Post Final Inspection

1.1 GENERAL

- A. Approximately one year after Final Completion, the OWNER will make arrangements with the Construction Coordination 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 Construction Coordination 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:

Jackie Robinson Training Complex Ticket Office Building Renovations

Located at:

4007 26th Street Vero Beach, FL 32960

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 #040420VB

OWNER:



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

DATE: 22 September 2020

TABLE OF CONTENTS

SECTION & DESCRIPTION

DIVISION 1, GENERAL REQUIREMENTS-BY OWNER

DIVISION 2, SITE WORK-NOT USED

DIVISION 3, CONCRETE

Section 03100 – Concrete Formwork Section 03300 – Cast in Place Concrete

DIVISION 4, MASONRY-NOT USED

DIVISION 5, METALS

Section 05400 - Lightgauge Metal Framing

DIVISION 6, CARPENTRY-NOT USED

DIVISION 7, THERMAL & MOISTURE PROTECTION

Section 07900 - Joint Sealants and Adhesives

DIVISION 8, DOORS, WINDOWS AND GLASS

Section 08100 - Hollow Metal Doors & Frames

Section 08200 – Wood Doors

Section 08700 – Finish Hardware

Section 08710 - Finish Hardware Schedule

DIVISION 9, FINISHES

Section 09230 – Cement Backing Board Section 09250 – Gypsum Drywall Section 09300 – Ceramic Tile/Porcelain Tile/Dimensional Stone Work Section 09510 – Lay in Panel Ceilings Section 09624 – Resilient Rubber Flooring in Fitness Rooms Section 09650 – Resilient Flooring and Base Section 09900 – Painting

DIVISION 10, SPECIALTIES

Section 10160 - Plastic Laminate Toilet Partitions

DIVISION 11, EQUIPMENT-NOT USED

DIVISION 12, FURNISHINGS-NOT USED Section 12290 – Manufactured Casework: Light Commercial

DIVISION 13, SPECIAL CONSTRUCTION-NOT USED

DIVISION 14, CONVEYING SYSTEMS-NOT USED

DIVISION 15, MECHANICAL

Section 15400 – Plumbing Section 15421 – Floor Drains Section 15450 – Plumbing Fixtures and Trim Section 15870 – Air Distribution Devices

DIVISION 16, ELECTRICAL

Section 16500 – Interior Lighting Fixtures

SECTION 03100 - CONCRETE FORMWORK

PART 1 - GENERAL

1.01 QUALITY ASSURANCE

- A. Qualifications of Workmen:
 - 1. Provide at least one person who shall be present at all times during execution of this portion of the work and who shall be thoroughly familiar with the type of materials being installed, the referenced standards, and the requirements of this work, and who shall direct all work performed under this Section.
- B. Codes and Standards:
 - 1. Comply with applicable provisions of the latest edition of Building Code that has jurisdiction and Occupational Safety and Health Act.
 - 2. Where provision of pertinent codes and standards conflict with the requirements of this Section of these Specifications, the more stringent provisions shall govern.
 - 3. Product Standard PS 1-83 for Construction and Industrial Plywood.
 - 4. American Concrete Institute Standard recommended practice for concrete formwork, ACI 347-latest edition.

PART 2 - PRODUCTS

2.01 FORM MATERIALS

- A. Form Lumber:
 - 1. All form lumber in contact with exposed concrete shall be new except as allowed for under Re-use of Forms in Part 3 of this Section of the Specifications. All form lumber shall be one of the following, a combination thereof, or an equal approved in advance by the Engineer.
 - a. "Plyform", Class I 5/8" or 3/4" PS 1066, C-D exterior plywood, bearing the label of the Douglas Fir Plywood Association.
 - b. Douglas Fir-Larch, number two grade, seasoned, surfaced four (4) sides.

2.02 OTHER MATERIALS

A. All other materials, not specifically described but required for proper completion of concrete formwork, shall be as selected by the Contractor subject to the advance approval of the Engineer.

PART 3 - EXECUTION

3.01 SURFACE CONDITIONS

A. Inspection and Soil Treatment:

- 1. Prior to all work of this section, carefully inspect the installed work of all other trades and verify that all such work is completed to the point where this installation may properly commence.
- 2. Verify that forms may be constructed in accordance with all pertinent codes and regulations, the referenced standards, and the original design.
- 3. Treat underlying soil to prevent vegetation growth and insect infestation.

3.02 CONSTRUCTION OF FORMS

- A. General:
 - 1. Construct all required forms to be substantial, sufficiently tight to prevent leakage of mortar, and able to withstand pressures without excessive deflection when filled with wet concrete.
- B. Embedded Items:
 - 1. Set all required steel frames, angles, grilles, bolts, inserts, and other such items required to be anchored in the concrete before the concrete is placed.
- C. Bracing:
 - 1. Properly brace and tie the forms together so as to maintain position and shape and to ensure safety to personnel.
 - 2. Construct all bracing and supporting members of amply size and strength to safely carry, without excessive deflection, all dead and live loads to which they may be subjected.
 - 3. Space the forms the proper distance apart and securely tie them together, using metal spreader ties that provide positive tying and accurate spreading.

3.03 <u>RE-USE OF FORMS</u>

A. General:

1. Re-use of forms shall be subject to advance written approval of the Structural Engineer or his designer.

B. Requirements:

- 1. Except as specifically approved in advance by the Structural Engineer, re-use of forms shall in no way delay or change the schedule of placement of concrete from the schedule obtainable if all form were new.
- 2. Except as specifically approved in advance by the Structural Engineer, re-use of forms shall in no way impart less structural stability to the forms no less acceptable appearance to finished exposed concrete.

3.04 REMOVAL OF FORMS

A. General:

1. Minimum periods to form removal after concrete placement shall be as follows:

Slabs and curbs	24 hours
Vertical walls (4'-0" Ht.)	36 hours
Vertical walls (over 4'-0" Ht.)	7 days

2. Removal of formwork may be extended if deemed necessary by the Structural Engineer.

B. Removal:

- 1. Remove metal spreader ties on exposed concrete by removing or snapping off inside the wall surface and point up and rubbing the resulting pockets to match the surrounding areas.
- 2. Flush all holes resulting from the use of spreader rods and sleeve nuts, using water, and then solidly pack throughout the wall thickness with cement grout applied under pressure by means of a grouting gun; grout shall be one (1) part Portland cement and two and one-half (2-1/2) parts sand; apply grout immediately after removing forms.

END OF SECTION

SECTION 03300 - CAST IN PLACE CONCRETE

PART 1 - GENERAL

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

A.	Concrete Formwork	Section 03100
В.	Concrete Reinforcement	Section 03200
C.	Unit Masonry	Section 04200
D.	Underslab Vapor Retarder	Section 07160
E.	Metal Building Systems	Section 13122
F.	Plumbing	Section 15000
G.	Electrical	Section 16000

1.02 QUALITY ASSURANCE

- A. ASTM Standards (Latest Editions):
 - 1. C-31 Standard Method of Making and Curing Concrete Test Specimens in the Field
 - 2. C-33 Standard Specification for Concrete Aggregates
 - 3. C-39 Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens
 - 4. C-42 Standard Method of Obtaining and Testing Drilled cores and Sawed Beams of Concrete
 - 5. C-94 Standard Specification for Ready Mixed Concrete
 - 6. C-143 Standard Test Method for Slump of Portland Cement Concrete
 - 7. C-150 Standard Specification for Portland Cement
 - 8. C-172 Standard Method of Sampling Freshly Mixed Concrete
- B. ACI standards (Latest Editions):
 - 1. ACI-318, Building Code Requirements for Structural Concrete
 - 2. Concrete work shall conform to all requirements of ACI-301 (Latest Editions), Specifications for Structural Concrete for Buildings, except as modified by the supplemental requirements herein.
 - 3. ACI 318 Detailing Standards.

- 4. ACI 315 Specifications for structural Concrete for Buildings
- 5. CRSI 347R Recommended Practice for Placing reinforcing bars.

1.03 TESTS AND INSPECTIONS

- A. All tests shall be made in accordance with ASTM recommendations referred to herein.
- B. Tests shall be performed by an independent laboratory approved by the Architect.
- C. Contractor will pay for testing, including tests which indicated failure; in which case that test and all costs incurred as a result thereof, shall be paid for by the Contractor.
- D. Standard slump tests shall be taken of the concrete sample for each strength test and whenever consistency of concrete appears to vary. The maximum slump of concrete shall be 4" plus/minus 1", unless specifically otherwise noted.
- E. Concrete that fails by test shall be replaced at no cost to Owner.
- F. Test for strength shall be made as follows:
 - 1. **Slump Test:** One test for each load of concrete at the point of discharge taken out of a wheelbarrow and not out of the chute. Maximum slump measurements as stated above.
 - 2. **Compressive Strength Test:** Randomly test cylinders taken at each major pour; footings, floor slabs, columns and tie-beams. Two (2) specimens are to be tested at 7 days and two (2) specimens tested at 28 days. Hold one cylinder for future use if test does not comply at 28 days.
 - 3. All test results are to be reported, in writing, to the Owner, and the Architect. Test results should stipulate the day the tests were performed.
 - 4. Samples for testing shall be taken at 1/4 and 3/4 points of the load discharged from the mixer.
 - 5. If necessary, comply with Architect or Engineer's request for additional cylinders, slump or load test.

PART 2 - PRODUCTS

2.01 CONCRETE

- A. Cement shall be Portland cement, ASTM C-150.
- B. Aggregates for normal weight concrete shall meet the requirements of ASTM C-33.
- C. Mixing water for concrete shall be potable and meet the requirements of ASTM C-94.

2.02 ACCESSORIES

- A. Anchor slots, reglets and inserts of type, size and spacing required by trades involved, and shown on plans.
- B. <u>Vapor Barrier:</u> 6 mil Polyethylene Film, such as "visqueen". Refer to the Building Plan Sections for specific applications.
- C. <u>Vapor Retarder:</u> 10 mil vapor retarder such as Perminator by WJ Meadows. Refer to the Building Plan Sections for specific applications.
- D. <u>Chemical Curing Compound:</u> Application of a curing compound shall be made to all slabs and such application shall conform to ASTM C-309. The compound shall be applied in accordance with the recommendations of the manufacturer immediately after any water sheen which may develop after finishing has disappeared from the concrete surface. It shall not be used on any surface against which additional concrete or other material is to be bonded unless it is proven that the curing compound will not prevent bond, or unless positive measures are taken to remove it completely from areas to receive bonded applications.

Acceptable materials shall be one of the following:

- 1. Burke Company Aqua resin Cure
- 2. Sika Corporation Sikagard Cure/Hard
- 3. Sonneborn Hydrocide
- E. <u>Expansion Joint Water Stops:</u> Continuous, pre-formed, finned, center bulb type, polyvinyl chloride, of sufficient width to provide 3" minimum embedment in concrete each side. Equal to Greenstreak #703.
- F. Pre-molded Joint Filler: Bituminous Fiber Type, ASTM D-1751-83 and D 545-77 equal to "Celotex Flexcell" of thickness and width indicated or required.

- G. Reinforcement shall be cleaned of all scale and excessive rust. All reinforcement shall be set with the standard accessories as per ACI 315-74. Minimum coverage of reinforcement shall be as follows:
 - 1. Footings 3" minimum.
 - 2. Slabs $-\frac{3}{4}$ " minimum.
 - 3. Beams and Columns -1-1/2" minimum.

PART 3 - EXECUTION

3.01 PROPORTIONING AND MIXING

- A. <u>Concrete Mix:</u>
 - 1. All cast-in-place concrete shall be ready mixed and in accordance with ASTM Specifications C-94 (Latest Edition).
 - 2. Minimum 5 bags cement per yard of concrete.
- B. <u>Concrete Strength:</u>
 - 1. Unless specifically noted otherwise, all concrete shall have a minimum compressive strength of f'c = 3000 psi.
 - 2. A design mix shall be prepared by a Florida Registered Professional Engineer employed by the concrete supplier.
 - 3. The Contractor shall submit to the Architect/Engineer the concrete materials and the concrete mix designs proposed for use with a written request for acceptance. This submittal shall include the results of all testing performed to qualify the materials and to establish the mix designs.
- C. Job Tempering:
 - 1. All Concrete shall be placed within 1½ hours after introduction of water to the mix.
 - 2. Under no condition may additional water be added that exceeds the allowable gallons stipulated on the batch ticket.
 - 3. Submit time stamped batching tickets on delivery of concrete to job site.
 - 4. All concrete where water has been added will be removed and replace with proper concrete at no cost to the Owner.

5. When air temperature is between 85 and 90 degrees **F**, reduce mixing and delivery time to 75 minutes. When air temperature is higher than 90 degrees, reduce mixing and delivery time to 60 minutes.

3.02 PLACING OF CONCRETE

- A. <u>Review:</u> No concrete shall be placed until all reinforcing steel, pipes, sleeves, inserts, etc. have been set in place and reviewed by the Owner's representative. **Contractor shall notify the Architect of scheduled pours 24 hours prior to pouring.**
- B. <u>Placing:</u> Concrete shall be placed in properly cleaned and prepared forms in accordance with the requirements of ACI-301. Concreting should be carried on at such a rate that the concrete is at all times plastic.
- C. <u>Conveying:</u> Concrete shall be handled from the mixer to the place of final deposit as rapidly as practicable by methods which will prevent segregation or loss of ingredients and in a manner which will assure that the required quality of the concrete is maintained. All other requirements of ACI-301 shall be followed.
- D. <u>Depositing:</u> Concrete shall be deposited continuously or in layers of such thickness that no concrete will be deposited on concrete which is hardened sufficiently to cause the formation of seams or planes of weakness within the section.
- E. <u>Consolidation:</u> All concrete shall be consolidated by vibration, spading, rodding, or forking so that the concrete is thoroughly worked around the reinforcement, around embedded items, and into corner of forms eliminating all air or stone pockets which may cause honeycombing, pitting, or planes of weakness.
- F. All slabs on grade are to be Regular ³/₄ rock concrete at 3000 psi ultimate strength at 28 days. NO PUMP MIX (pea rock) WILL BE ACCEPTED for any slab on prepared grade. This does not prohibit the pumping of the regular ³/₄ rock mix.

3.03 <u>JOINTS</u>

A. <u>Construction Joints:</u>

- 1. Locate as shown on the drawings or near points of minimum shear and as approved by Architect/Engineer for beam or slabs. Construction joints shall be straight saw-cut by a walk behind motorized saw, tooled, mechanical or actual cold joints as called out on the plans.
- 2. Locate joints in vertical members, walls at underside of floors or beams, and at tops of footings.

- 3. Floor slabs keyed joints maximum spacing 20' plus or minus each direction unless otherwise noted.
- A. Expansion Joints:
 - 1. Locate as shown on drawings.
 - 2. Joints in walkways maximum at 20' o.c., snap lines and saw-cut 1/8" wide by 1" deep between expansion joints in equal bays at not over 5' o.c., within 24 hours of concrete placement or until concrete is trafficable with power saw.
 - 3. Joints shall be straight and smooth. They shall have hardened before fresh concrete is deposited against them.
 - 4. Do not place expansion joints where slabs are up against the exterior of masonry walls, unless otherwise detailed on plans. Do not place any expansion material on the inside face of masonry walls where slabs are poured against same walls.
 - 5. After concreting has been started, it should be carried on as a continuous operation until placing of a panel or section, as determined by its boundaries or joints, is completed.

3.04 CURING

- A. Begin curing of concrete as soon as practicable after placing, but not more than 3 hours thereafter. Provide a total wet cure time of 7 days minimum at 50 degrees F minimum temperature.
- B. Curing of structural members shall begin immediately after removal of forms.
- C. Apply curing compounds as specified above, clear for exposed slabs. Compound used on floors that are to receive tile or other additional finish shall be compatible with adhesives and finish materials. Apply first coat of curing compound as soon as possible after pouring.

3.05 FINISHES

- A. Formed Surfaces:
 - 1. <u>Finishes Defined:</u>
 - a. <u>Rough Form Finish:</u> Reasonable true to line and place. Tie holes and defects shall be patched and fins exceeding 1/4" in height shall

be chipped off or rubbed off. Otherwise, surfaces may be left with the texture imparted by the forms.

- b. <u>Smooth Form Finish:</u> The form facing material shall produce a smooth, hard, uniform texture on the concrete. It may be plywood, tempered concrete-form-grade hardboard, metal, or other material capable of producing the desired finish. The arrangement of the facing material shall be orderly and symmetrical, with the number of seams kept to the practical minimum. It shall be supported by studs or other backing capable of preventing excessive deflection. Material with raised grain, torn surfaces, worn edges, patches, dents, or other defects which will impair the texture of the concrete surface shall not be used. Tie holes and defects shall be patched. All fins shall be completely removed. It is the intention of this surface to produce an Architectural Surface suitable for public view as a completed surface to receive paint. Strict quality control of this surface shall be required. See ACI 301.
- c. <u>Smooth Rubbed Finish:</u> To be applied to all smooth form finishes. (All

work will conform with ACI Standard 301-latest edition) to produce a smooth architectural effect.

- 2. <u>Finishes Unspecified Buildings:</u> If the finish is unspecified, the following finishes shall be used as applicable.
 - a. Rough Form Finish: For all concrete surfaces not exposed to public view, including concrete to receive stucco.
 - b. Smooth Form Finish: For all concrete surfaces exposed to view.
 - c. Smooth Rubbed Finish: Concrete shall have a Smooth Rubbed Finish applied to produce an architectural effect.
- 3. <u>Patching:</u> Immediately after stripping forms patch all defective areas with mortar similar to the concrete mix except that coarse aggregate shall be omitted. Bulges, minor honeycomb and other minor defects, as designated by the Architect, shall be patched only where exposed to view. Clean, dampen, and fill tie holes with patching mortar. All patching shall follow procedures and conform to ACI 301.
 - a. Major defective areas, as judged by the Owner's representative including those resulting from leakage of forms, excessive honeycomb, large bulges and large offsets at form joints, shall be

chipped away down to sound concrete. The patching mortar shall be pressed in for a complete bond and finished to match adjacent areas, or where defective areas impair the strength of the member in question, as judged by the Owner's representative, the member shall be removed or united as determined by the Owner's representative.

b. Minor defective areas, as judged by the Owner's representative including honeycomb, air bubbles, holes resulting from removal of ties, and those resulting from leakage of forms shall be patched with grout without resorting to chipping. Minor bulges and offsets at form joints shall be finished as specified herein below.

B. <u>Uniform Surfaces – Flatwork:</u>

- 1. <u>General:</u> Grade and screed the surfaces to the exact elevation, or slope shown or required. Make proper allowances for setting beds for ceramic tile. After screeding tamp mixture thoroughly to drive the coarse aggregate down from the surfaces and apply the applicable finish specified hereinafter. Always slope exterior walks away from the building at 1/8" per foot. Uncovered walks slope at 1/8" per foot or crown. Covered walks between buildings always slope to drain to the exterior and away from the buildings. At cross intersections of the walks, and at exterior doors, warp the surfaces to drain water from the walls. Provide control joints as indicated on drawings. Follow the requirements and procedures of ACI 301.
- 2. Finishes Definitions (See also ACI 301):
 - a. <u>Scratched Finish:</u> After concrete has been placed, struck off, consolidated and leveled to a Class B tolerance, surface shall be roughened with stiff brush, rates or metal lath roller, before final set.
 - <u>Floated Finish:</u> After concrete has been placed, struck off, consolidated and leveled, concrete shall not be worked further until water sheen has disappeared and/or when mix has stiffened sufficiently to permit proper operations of a power driven float. Consolidate with power driven float, check trueness of surface, fill low spots and cut down high spots to achieve Class B tolerance. Then, re-float to uniform, smooth, granular texture.
 - c. <u>Troweled Finish:</u> Finish same as above for floated finish and in addition, steel trowel the surface by hand to produce a smooth, glassy, impervious surface free of trowel marks to a Class A tolerance. On surfaces intended to support floor coverings, defects of sufficient magnitude to show through the floor covering shall be removed by grinding.

d. <u>Broom Finish:</u> Finish same as above for floated finish to a Class B tolerance and then draw a broom or burlap belt across surface transversely.

Finishes - Unspecified

- 1. When type of finish is not specified, the following shall be applicable:
 - a. <u>Scratched Finish:</u> For surfaces to receive bonded cementitious application, i.e. ceramic tile, single ply epoxy flooring etc., refer to drawings for locations of specific floor coverings.
 - b. <u>Troweled Finish:</u> For surfaces intended as smooth walking surfaces or for receipt of floor coverings.
 - c. <u>Broom Finish:</u> For exterior walks, loggias, curbs and where indicated on drawings.
 - d. <u>Float Finish:</u> Exterior platforms, steps, stairways, landings, and ramps.

Specific Finish Locations:

1. Slab areas to receive ceramic tile, resilient floor coverings, specialized gymnasium flooring, or slabs within a minimum of 2 feet each side of accordion doors shall be "dead level" - Class A. All other slab areas - Class B.

Tolerances for finishes as specified shall be as follows:

- 1. Class A True planes within 1/8" in 10 ft.
- 2. Class B True planes within 1/4" in 10 ft.

NOTE: Tolerances shall be measured by placing a 10-ft. straightedge anywhere in any direction.

END OF SECTION

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. <u>Shop Drawing:</u> 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.

<u>STUD WIDTH</u> <u>GA</u>	STUD SPACING	<u>MAX. HGT. 25 GA</u>	<u>MAX. HGT. 22 GA</u>	<u>MAX. HGT, 20</u>
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 INSTALLATION

- 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. <u>Runner Tracks:</u> 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.

END OF SECTION

.

SECTION 07900 - JOINT SEALANTS AND ADHESIVES

PART 1- GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes joint sealants for the following applications, including those specified by reference to this Section: following applications:
 - 1. Interior joints in the following vertical surfaces and horizontal non-traffic surfaces:
 - a. Control and expansion joints on exposed interior surfaces of exterior walls.
 - b. Perimeter joints of exterior openings where indicated.
 - c. Tile control and expansion joints.
 - d. Vertical joints on exposed surfaces of interior unit masonry concrete walls and partitions.
 - e. Perimeter joints between interior wall surfaces and frames of interior doors windows and elevator entrances.
 - f. Joints between plumbing fixtures and adjoining walls, floors, and counters.
 - g. Other joints as indicated.
 - 2. Interior joints in the following horizontal traffic surfaces:
 - a. Control and expansion joints in tile flooring.
 - b. Other joints as indicated.
 - 3. Exterior joints in the following vertical surfaces and horizontal traffic surfaces:
 - a. Control and expansion joints at Structural Control Joints in masonry wall coursing and in combination with stucco accessories as detailed on the Architectural and Structural plans.
 - b. Control and expansion joints in concrete decking as detailed on the Architectural

and Structural plans.

- B. Related Sections include the following:
 - 1. Division 8 Section "Glass and Glazing" for glazing sealants.
 - 2. Division 9 Section "Gypsum Drywall" for sealing perimeter joints of gypsum board partitions to reduce sound transmission.

3. Division 9 Section "Ceramic Tile Work" for sealing tile joints.

1.3 PERFORMANCE REQUIREMENTS

- A. Provide elastomeric joint sealants that establish and maintain watertight and airtight continuous joint seals without staining or deteriorating joint substrates.
- B. Delete paragraph above or below if not applicable. Revise wording to reflect performance required for both interior and exterior joints. Add specific applications where watertight or water-resistant performance may not be required or attainable with products selected.
- C. Provide joint sealants for interior applications that establish and maintain airtight and water-resistant continuous joint seals without staining or deteriorating joint substrates.
- D. All sealants and adhesives **used on the interior of the building** (i.e. inside of the weatherproofing system and applied on-site) must comply with the following requirements as applicable to the project scope:
- E. Adhesives, Sealants and Sealant Primers must comply with South Coast Air Quality Management District (SCAQMD) Rule #1168. Volatile organic compound (VOC) limits listed in the table (see the last page of this spec section) correspond to an effective date of July 1, 2005 and rule amendment date of January 7, 2005.

1.4 <u>SUBMITTALS</u>

- A. Product Data: For each joint-sealant product indicated.
- B. Samples for Initial Selection: Manufacturer's color charts consisting of strips of cured scalants showing the full range of colors available for each product exposed to view.
- C. Delete paragraph above if colors are preselected and specified or scheduled. Retain first paragraph below with or without above.
- D. Samples for Verification: For each type and color of joint sealant required, provide samples with joint sealants in 1/2-inch- (13-mm-) wide joints formed between two 6-inch- (150-mm-) long strips of material matching the appearance of exposed surfaces adjacent to joint sealants.
- E. Product Certificates: For each type of joint sealant and accessory, signed by product manufacturer.
- G. SWRI Validation Certificate: For each elastomeric sealant specified to be validated by SWRI's Sealant Validation Program.

- H. Coordinate paragraph below with qualification requirements in Division 1 Section "Quality Requirements" and as supplemented in "Quality Assurance" Article.
- I. Qualification Data: For Installer.
- J. Preconstruction Field Test Reports: Indicate which sealants and joint preparation methods resulted in optimum adhesion to joint substrates based on preconstruction testing specified in "Quality Assurance" Article.
- K. Field Test Report Log: For each elastomeric sealant application.
- L. Product Test Reports: Based on comprehensive testing of product formulations performed by a qualified testing agency, indicating that sealants comply with requirements.
- M. Warranties: Special warranties specified in this Section.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized Installer who is approved or licensed for installation of elastomeric sealants required for this Project.
- B. Source Limitations: Obtain each type of joint sealant through one source from a single manufacturer.
- C. Product Testing: Obtain test results for "Product Test Reports" Paragraph in "Submittals" Article from a qualified testing agency based on testing current sealant formulations within a 36-month period preceding the Notice to Proceed with commencement of the Work.
 - 1. Testing Agency Qualifications: An independent testing agency qualified according to ASTM C 1021 to conduct the testing indicated, as documented according to ASTM E 548.
 - 2. If retaining subparagraph below, also retain "Product Test Reports" Paragraph in "Submittals" Article.
 - 3. Test elastomeric joint sealants for compliance with requirements specified by reference to ASTM C 920, and where applicable, to other standard test methods.
 - 4. Test elastomeric joint sealants according to SWRI's Sealant Validation Program for compliance with requirements specified by reference to ASTM C 920 for adhesion and cohesion under cyclic movement, adhesion-inpeel, and indentation hardness.
 - 5. Test other joint sealants for compliance with requirements indicated by referencing standard specifications and test methods.
- D. Pre-construction Field-Adhesion Testing: Before installing elastomeric sealants, field test their adhesion to Project joint substrates as follows:

- 1. Locate test joints where indicated on Project or, if not indicated, as directed by Architect.
- 2. Conduct field tests for each application indicated below:
 - a. Each type of elastomeric sealant and joint substrate indicated.
 - b. Each type of nonelastomeric sealant and joint substrate indicated.
- 3. Notify Architect seven days in advance of dates and times when test joints will be erected.
- 4. Report whether sealant in joint connected to pulled-out portion failed to adhere to joint substrates or tore cohesively. Include data on pull distance used to test each type of product and joint substrate. For sealants that fail adhesively, retest until satisfactory adhesion is obtained.
- 5. Evaluation of Pre-construction Field-Adhesion-Test Results: Sealants not evidencing adhesive failure from testing, in absence of other indications of noncompliance with requirements, will be considered satisfactory. Do not use sealants that fail to adhere to joint substrates during testing.

1.6 PROJECT CONDITIONS

- A. Do not proceed with installation of joint sealants under the following conditions:
 - 1. When ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer or are below 40 deg F.
 - 2. When joint substrates are wet.
 - 3. Where joint widths are less than those allowed by joint-sealant manufacturer for applications indicated.
 - 4. Contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

1.7 <u>WARRANTY</u>

- A. When warranties are required, verify with Owner's counsel that special warranties stated in this Article are not less than remedies available to Owner under prevailing local laws. Coordinate with Division 1 Section "Product Requirements."
- B. Special Installer's Warranty: Installer's standard form in which Installer agrees to repair or replace elastomeric joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
 - 1. Warranty Period: Two years from date of Substantial Completion.
- C. Special warranties specified in this Article exclude deterioration or failure of elastomeric joint sealants from the following:
 - 1. Movement of the structure resulting in stresses on the sealant exceeding sealant manufacturer's written specifications for sealant elongation and compression caused by structural settlement or errors attributable to design or construction.
 - 2. Disintegration of joint substrates from natural causes exceeding design specifications.

- 3. Mechanical damage caused by individuals, tools, or other outside agents.
- 4. Changes in sealant appearance caused by accumulation of dirt or other atmospheric contaminants.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

A. See Editing Instructions No. 1 and No. 2 in the Evaluations for cautions about naming manufacturers and products and in coordinating requirements in this Section with other Part 2 articles.

Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, products listed in other Part 2 articles.

2.2 MATERIALS, GENERAL

- A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer, based on testing and field experience.
- B. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range.

2.3 ELASTOMERIC JOINT SEALANTS

Elastomeric Sealants: Comply with ASTM C 920 and other requirements indicated for each liquid-applied chemically curing sealant specified, including those referencing ASTM C 920 classifications for type, grade, class, and uses related to exposure and joint substrates.

B. Stain-Test-Response Characteristics: Where elastomeric sealants are specified to be nonstaining to porous substrates, provide products that have undergone testing according to ASTM C 1248 and have not stained porous joint substrates indicated for Project.

C. Suitability for Contact with Food: Where elastomeric sealants are indicated for joints that will come in repeated contact with food, provide products that comply with 21 CFR 177.2600.

- D Single-Component Nonsag Polysulfide Sealant:
 - 1. Available Products:

- a. Pacific Polymers, Inc.; Elastoseal 230 Type I (Gun Grade).
- b. Polymeric Systems Inc.; PSI-7000.
- 2. Type and Grade: S (single component) and NS (nonsag).
- 3. Class: 25.
- 4. Use Related to Exposure: NT (nontraffic).
- 5. Uses Related to Joint Substrates: M, G, A, and, as applicable to joint substrates indicated, O.

2.4 LATEX JOINT SEALANTS

- A. Latex Sealant: Comply with ASTM C 834, Type P, Grade NF.
- B. Available Products:
 - 1. Pecora Corporation; AC-20+.
 - 2. Sonneborn, Division of ChemRex Inc.; Sonolac.
 - 3. Tremco; Tremflex 834.

2.5 ACOUSTICAL JOINT SEALANTS

A. Acoustical Sealant for Concealed Joints: Manufacturer's standard, nondrying, nonhardening, nonskinning, nonstaining, gunnable, synthetic-rubber sealant recommended for sealing interior concealed joints to reduce airborne sound transmission.

- 1. Available Products:
- a. Pecora Corporation; BA-98.
- b. Tremco; Tremco Acoustical Sealant.

2.6 JOINT-SEALANT BACKING

A. General: Provide sealant backings of material and type that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.

B Elastomeric Tubing Sealant Backings: Neoprene, butyl, EPDM, or silicone tubing complying with ASTM D 1056, nonabsorbent to water and gas, and capable of remaining resilient at temperatures down to minus 26 deg F. Provide products with low compression set and of size and shape to provide a secondary seal, to control sealant depth, and to otherwise contribute to optimum sealant performance. Backing rods used in combination with silicone sealants shall be soft rod "open cell" to prevent off-grassing bubbles in the cured surface. All other backing rods shall be "closed cell".

C. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint where such adhesion would result in sealant failure. Provide self adhesive tape where applicable.

D. When proposing paintable silicones using acrylic latex paints make special consideration that these products must be painted within seven days of placement of sealants. Refer to manufacturer's literature for proper sequence of applications.

2.7 MISCELLANEOUS MATERIALS

A. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.

B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants to joint substrates.

C. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint-sealant performance.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions and the following requirements:

1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer), old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.

- 2. Clean porous joint substrate surfaces by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air. Porous joint substrates include the following:
 - a. Concrete.
 - b. Masonry.
 - c. Unglazed surfaces of ceramic tile.
- 3. Remove laitance and form-release agents from concrete.
- 4. Clean nonporous surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants. Nonporous joint substrates include the following:
 - a. Metal.
 - b. Glass.
 - c. Porcelain enamel.
 - d. Glazed surfaces of ceramic tile.

B Joint Priming: Prime joint substrates, where recommended in writing by joint-sealant manufacturer, based on preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.

C. Masking Tape: Use masking tape where required to prevent contact of sealant with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

3.3 INSTALLATION OF JOINT SEALANTS

A. General: Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.

B. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.

C. Acoustical Sealant Application Standard: Comply with recommendations in ASTM C 919 for use of joint sealants in acoustical applications as applicable to materials, applications, and conditions indicated.

D. Install sealant backings of type indicated to support sealants during application and at

position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.

- 1. Do not leave gaps between ends of sealant backings.
- 2. Do not stretch, twist, puncture, or tear sealant backings.
- 3. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.

E. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.

F. Install sealants using proven techniques that comply with the following and at the same time backings are installed:

- 1. Place sealants so they directly contact and fully wet joint substrates.
- 2. Completely fill recesses in each joint configuration.
- 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.

G. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.

- 1. Remove excess sealant from surfaces adjacent to joints.
- 2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
- 3. Provide concave joint configuration per Figure 5A in ASTM C 1193, unless otherwise indicated.
- 4. Provide flush joint configuration where indicated per Figure 5B in ASTM C 1193.
- 5. Provide recessed joint configuration of recess depth and at locations indicated per Figure 5C in ASTM C 1193.
 - a. Use masking tape to protect surfaces adjacent to recessed tooled joints.

H. Install sealants to size and shape shown on drawings, or, if not shown, with slightly concave surfaces.

a. The minimum opening should be 1/4".

b. The opening should be at least 4 times the maximum movement of the sealant.

- c. The sealant should be more than 1/4" and less than 1/2" deep.
- d. The depth of the sealant should be no greater than the width.
- e. No joint to receive sealant should be less than 1/4" deep.

3.4 FIELD QUALITY CONTROL

A. Field-Adhesion Testing: Field test joint-sealant adhesion to joint substrates as follows:

1. Extent of Testing: Test completed elastomeric sealant joints as follows:

a. Perform 10 tests for the first 1000 feet (300 m) of joint length for each type of elastomeric sealant and joint substrate.

b. Perform 1 test for each 1000 feet of joint length thereafter or 1 test per each floor per elevation.

2. Test Method: Test joint sealants according to Method A, Field-Applied Sealant Joint Hand Pull Tab in Appendix X1 in ASTM C 1193, as appropriate for type of joint-sealant application indicated.

- a. For joints with dissimilar substrates, verify adhesion to each substrate separately; do this by extending cut along one side, verifying adhesion to opposite side. Repeat procedure for opposite side.
- 3. Inspect joints for complete fill, for absence of voids, and for joint configuration complying with specified requirements. Record results in a field-adhesion-test

log.

- 4. Inspect tested joints and report on the following:
 - a. Whether sealants in joints connected to pulled-out portion failed to adhere to joint substrates or tore cohesively. Include data on pull distance used to test each type of product and joint substrate. Compare these results to determine if adhesion passes sealant manufacturer's field-adhesion handpull test criteria.
 - b. Whether sealants filled joint cavities and are free of voids.
 - c. Whether sealant dimensions and configurations comply with specified requirements.
- 5. Record test results in a field-adhesion-test log. Include dates when sealants were installed, names of persons who installed sealants, test dates, test locations, whether joints were primed, adhesion results and percent elongations, sealant fill, sealant configuration, and sealant dimensions.
- 6. Repair sealants pulled from test area by applying new sealants following same procedures used originally to seal joints. Ensure that original sealant surfaces are clean and that new sealant contacts original sealant.

B. Evaluation of Field Test Results: Sealants not evidencing adhesive failure from testing or noncompliance with other indicated requirements will be considered satisfactory. Remove sealants that fail to adhere to joint substrates during testing or to comply with other requirements. Retest failed applications until test results prove sealants comply with indicated requirements.

3.5 CLEANING

A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

3.6 **PROTECTION**

A. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from original work.

Architectural Applications	VOC Limit (g/L less water)	Specially Applications	VOC Limit (g/L less water).
Indoor carpet adhesives	50	PVC welding	510
Carpet pad adhesives	50	CPVC welding	490
Wood flooring adhesives	100	ABS welding	325
Rubber floor adhesives	60	Plastic cement welding	250
Subfloor adhesives	50	Adhesive primer for plastic	550
Ceramic tile adhesives	65	Contact adhesive	80
VCT and asphalt adhesives	50	Special purpose contact adhesive	250
Drywall and panel adhesives	50	Structural wood member adhesive	140
Cove base adhesives	50	Sheet applied rubber lining operations	850
Multipurpose construction adhesives	70	Top and trim adhesive	250
Structural glazing adhesives	100		
Substrate Specific Applications	VOC Limit (g/L less water)	Sealánts	VOC Limit (g/L less water)
Metal to metal	30	Architectural	250
Plastic foams	50	Roadway	250
Porous material (except wood)	50	Other	420
Wood	30		
Fiberglass	80		
Sealant Primers	VOC Limit (g/L less water)		
Architectural, nonporous	250		
Architectural, porous	775		
Other	750		
This table excludes adhesives and sealants in	tegral to the water-proof	ing system or that are not building related.	

Aerosol Adhesives	VOC Limit
General purpose mist spray	65% VOCs by weight
General purpose web spray	55% VOCs by weight
Special purpose aerosol adhesives (all types)	70% VOCs by weight

*** END OF SECTION ***

SECTION 08100 - HOLLOW METAL DOOR AND FRAMES

PART 1 - GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

A. Wood Doors

B. Finish Hardware

Section 08200 Section 08700 Section 09900

1.02 QUALITY CRITERIA

C. Painting

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".
 - 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"

- 6. Clips, Anchors, Bolts, Screws and Rivets: Steel, types standard with the manufacturer.
- 7. Metallic filler: FS TT-F-322
- 8. Shop Primer: Baked-on rust-inhibitive. ASTM - B117 Federal Specification TT-P-636
- 9. Field Painting: See Section 09900

2.02 FABRICATION

- A. Frames
 - 1. Formed to profile as shown on drawings, constructed with square corners, and free of defects, warps or buckle.
 - 2. Welded-type for concrete, masonry construction and metal stud construction.
 - 3. Corners and connections welded with exposed welds ground flush and smooth.
 - 4. Reinforcement: As per Section 2.01 B,(3) above.
 - 5. Frames punched to receive rubber silencers, three each door on lock side and two at head of double doors.
 - 6. Provide removable spreaders attached to bottom of door frames, to insure correct alignment during shipping and installation.
 - 7. 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.

- 9. 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).
- 4. 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
 - 1. 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.
 - 2. 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.
 - 2. 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.

END OF SECTION

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. Veneer: 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. <u>Glass Lights and Louvers:</u> 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>: 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 SOLID CORE DOORS (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. 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. <u>Glass Lights and Louvers:</u> 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. <u>Guarantee:</u> 10 Years, interior use only.
- 2.02 <u>HOLLOW CORE DOORS</u> (When called out on the door schedules)
 - A. Veneer: 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 <u>INSPECTION</u>

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. $\frac{1}{2}$ " 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".
 - 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.
- B. 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.

END OF SECTION

.

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.
- C. 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.
 - 3. 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 <u>STOPS</u>

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.

END OF SECTION

SECTION 08710 - DOOR FINISH HARDWARE SCHEDULE

1.01 List of Materials and Approved Manufacturers

LISTED MANUFACTURER: HARDWARE TYPE: **APPROVED EQUALS:** Hinges Hager Stanley, Mckinney Locks Corbin/Russwin, Yale, Schlage Best Corp. Exits Von Duprin Precision Door Closers LCN Norton, Corbin/Russwin Push/Pulls/Kick & Mop Plates Rockwood Brookline, Baldwin Stops Rockwood Ives, Baldwin Thresholds Pemko Reese, Zero Weatherstrip Pemko Reese, Zero

DOOR HARDWARE SCHEDULE

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.

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

Door		
Numbers		
1	02	
2	01	
3	02	
4	01	

HARD	WARE	GROUP NO. 01			
2		4			
Provid	ie each :	SGL door(s) with the following:			
QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	STOREROOM LOCK	ALX80P6 RHO 14-028	626	SCH
1	EA	SURFACE CLOSER	1450 REG OR PA AS REQ STD	689	LCN
3	EA	SILENCER	SR64	GRY	IVE
HARD	WARE	GROUP NO. 02			
1		3			
Provid	ie each S	SGL door(s) with the following:			
QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	CLASSROOM LOCK	ALX70P6 RHO 14-028	626	SCH
1	EA	SURFACE CLOSER	1450 REG OR PA AS REQ STD	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

The Door Hardware Schedule was prepared by a Hardware Consultant. The Contractor's Final Schedule for construction, must be submitted to the Architect and for review and approval.

END OF SECTION

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 FramingSection 05400Rough CarpentrySection 06100Gypsum WallboardSection 09250Ceramic TileSection 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:
 - 1. Glass Mesh Mortar Unit (Cement Board): USG DUROCK Exterior Cement board ¹/₂" x 4' x 8'.
 - 2. Cement board fasteners:
 - a. Non-wet areas- 1 1/4", DUROCK Screws: wafer head with anticorrosive 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 INSTALLATION:
 - 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.

í

- 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.

END OF SECTION

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. ¹/₂" 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

<u>SECTION 09300 - CERAMIC TILE/PORCELAIN TILE/DIMENSIONAL STONE</u> 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:
 - 1. 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.
 - 6. 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.
 - Porcelain Tile: 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.
 - 4. Marble: Window stools shall be Georgia or Alabama White domestic marble, cultured marble, or an approved, comparable product, unless specified otherwise on the drawings.
 - 5. Waterproofing Membrane: Laticrete 9235 waterproofing membrane in combination with Laticrete Reinforcing Membrane installed in accordance with manufacturer's recommendations.
 - 6. 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:

- 1. 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.
- 2. 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:
 - 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.
 - 3. 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.

END OF SECTION

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

- A. <u>GENERAL</u>
 - 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

- 1. Lay-in Panels: As per the attached schedule included in this specification section, or an approved equal.
- 2. 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: $1-1/2^{"} \ge 3/4 \ge 416$ gauge for greater spans.

C. EXECUTION

- 1. 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	Туре	Lay In Panel & Grid
Visitors Locker, Bath #1, Trainer #1, Mens, Womens, Bath #2	1	ARMSTRONG 24" X 48 " X 5/8" Ceramaguard Fine Fissured in AL Prelude 15/16 " Grid
Coaches #1, Ticket Windows, Equipment	11	ARMSTRONG 24" X 48" X 7/8" Fine Fissured Bev- eled Tegular in Silhouette Bolt Slot Grid
Trainer #2, G.M., Asst. G.M., Scout, Interns, Copy, Hall		ARMSTRONG 24" X 24" X 7/8" Fine Fissured Bev- eled Tegular in Silhouette Bolt Slot Grid
Umpires Restroom	IV	ARMSTRONG 24" X 24" X 5/8" Ceramaguard Fine Fissured in AL Prelude 15/16" Grid

END OF SECTION

.

 \sim

SECTION 09624 – RESILIENT RUBBER FLOORING IN FITNESS ROOMS

PART 1 – GENERAL

1.01 **RELATED DOCUMENTS**

Work under this section is subject to the provisions of the contract documents which in any way affect the work specified herein.

1.02 SCOPE

Provide all resilient rubber flooring and adhesive as indicated on the plans and scheduled in the specifications.

PART 2 – PRODUCTS

2.01MATERIALS

A. Resilient rubber flooring shall have the following minimum requirements:

1. be compounded to sufficient density to preclude the possibility of creeping, stretching, or shrinking under traffic.

2. have optimum resiliency.

3. have coloring matter of the highest quality and all pigments shall be insoluble in water and non-bleeding.

- 4. have thickness with tolerances of (-) .005 inch or (+) 0.015 inch.
- 5. have a hardness not to exceed 70 when tested by a Shore A durometer test.
- 6. be 3/8 inch thick and in square tiles 27" X 27".

7. be Tuflex resilient rubber flooring as manufactured by Rubber Products, Inc., 4521 W. Crest Ave., Tampa, Florida 33614, Ph: 1-800-543-0390.

B. Technical Data (Typical Properties): Composition: 100% recycled elastomers

<u>Ph</u>	vsical Properties	Results
	Hardness-Shore A (ASTM D-2240) Taber Abrasion (ASTM C-501-1kg. wt. 7000 cycles)	60 +/- 5pts 4.0% wt. loss
	Tear Resistance (ASTM D-624)	93 +/- 15 lbs/in

3. Tear Resistance (ASTM D-624)

- 4. Tensile Strength (ASTM D-412)
- 5. Elongation (ASTM D-412)
- 6. 100% Modulus (ASTM D-412)
- 7. Compression Set (ASTM D-395 method B)
- Ozone Resistance (ASTM D-1149-50pphm, 70 hrs. @ 104 degrees F, Bent Loop Method)
- 9. Impact Resilience (ASTM D-2632)
- 10. Coefficient of Friction (ASTM D-2047)
- 11. Critical Radiant Flux (ASTM E-648 class II)
- 12. Specific Gravity
- 13. Acoustic Properties
- 14. Stain Resistance
- 15. Chemical Resistance
- 16. Spike/Skate Traffic

PART 3 - EXECUTION

3.01 INSTALLATION – TUFLEX RUBBER FLOORING

A. Specific instructions for installation must be followed as described on the cans of adhesive and in the manufacturers instruction manual.

1. Material shall be installed by a qualified installer.

2. Acceptance of Surfaces: No tile shall be installed if variation of the subfloor exceeds 1/8 inch in any direction when tested with a ten-foot straight edge.

3. Temperatures: A temperature of at least 70 degrees F shall be maintained in the surrounding area and on the surface receiving the floor covering for 24 hours prior to beginning work, during installation, and for 48 hours after the installation is completed.

4. Preparation of sub-floors: All oil, grease, wax, old floor finishes and other materials shall be removed by scraping, sanding or scrubbing.

5. Surfaces shall be swept clean of dust and dirt. Where detergents are used, surfaces shall be rinsed thoroughly and time allowed for complete drying.

a. Wood Sub-floors: All loose flooring and protruding nailheads shall be secured. Damaged floorboards shall be replaced. All warped or uneven flooring shall be sanded to a true and even surface. All cracks over 1/8" shall be filled with plastic wood or wood stripping. Singly constructed or excessively rough floors shall be covered with plywood or masonite nailed at 4 inch intervals at edges, and 6 inch intervals from center.

525 +/- 100psi 130% +/- 25% 390 +/- 50 psi 6.0% +/- 1% Pass

32.0% Rebound 1.20 dry or wet 0.25 watts per sq. cm. 1.14 +/- 0.03 0.60 Sound Abs. Coef. Good Good Excellent b. Concrete Sub-floors: New concrete sub-floors must be thoroughly cured before Tuflex is installed. If sub-floors are considered to be unusually smooth, an application of 50% commercial grade muratic acid and water shall be used to etch the surface to ensure a permanent bond. Acid shall be removed after effervescence ceases and surface rinsed with clear water and allowed to dry; All cracks, expansion joints or damaged portions of the floor shall be filled with floor fill and moisture tests shall be made on all new concrete surfaces. If a curing compound is used in floor slab it shall be one that is compatible with adhesive for resilient flooring.

6. Application of Adhesive: Adhesive shall be applied in strict accordance with manufacturer's directions. Adhesive shall be applied with a notched trowel and in amounts not less than those recommended on labels and published instructions. Notches in the trowel shall be: depth 1/8", open area 1/8", flat area 1/16", and care shall be taken to maintain full depth during the entire installation. An approved trowel is Gunlach model FOW. It is essential that the tile be applied promptly as the adhesive sets rapidly by chemical reaction. It is recommended that not more than one unit of adhesive be spread, then tile be laid promptly (approximately 70-8-square feet.

7. *Application of Flooring:* Tile for each space shall be taken from several containers and distributed evenly into one group to reduce variation in pattern. Tile shall be laid so as to ensure good contact with close, even joints in true and continuous alignment: it shall be carefully scribed to form a tight and neat joint with vertical surfaces. Tile shall be rolled immediately after installation with a 75-lb. sectional roller. Excessive adhesive shall be cleared from tile, while still wet, with a cloth dampened in denatured alcohol.

8. Edging Strips: Use edge strips where tile stops and the edge is exposed.

9. Cleaning: At completion of floor covering work, all surfaces shall be thoroughly cleaned of all spots, stains and other foreign substances with TC-1 cleaner.

3.02 SPECIAL CONSIDERATIONS

A. Colors: Colors given in the "Color Selection Schedule" on the Interiors Drawings were selected from the manufacturer's standard color chart.

B. Installation of Resilient Tile: Shall be deferred until all other work that might cause damage to the flooring is completed.

C. Protection of Floor: All traffic shall be prohibited for a period of 24 hours after installation, then limited traffic for an additional 24 hours.

3.03 SUBMITTAL DATA

A. Samples:

- 1. 4" X 4" X 3/8" samples of each Tuflex color Pattern selected.
- 2. Feature strips, 9 inch sample.

B. Maintenance: Submit manufacturer's maintenance instructions for the care and maintenance of the specified live rubber tile.

C. Warranty: Submit full manufacturer's written warranty.

Tuflex Flooring products are warranted to withstand the exceptional use and conditions of the intended athletic and commercial applications described in our literature for a period of up to five (5) years from the date of original purchase. It is the responsibility of the purchaser to obtain a copy of the complete Tuflex Limited Warranty terms and conditions and to clarify any questions related to those terms prior to sale. Any claims regarding physical defects or cosmetic appearance issues must be made prior to installation.

*** END OF SECTION ***

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 **DESCRIPTION:**

- 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:

- A. <u>Literature</u>: 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 <u>MATERIALS:</u>

- 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 compressionresistant 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. <u>Reducer Strips</u>: 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. <u>The contractor</u> 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>
 - 1. <u>Establish center</u> 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. <u>Where field pattern</u> 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
 - 1. <u>Evenly spread</u> 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).

- 2. <u>Where necessary</u>, 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
 - 1. <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.
 - 2. <u>Extend</u> 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 joints tight and align top and bottom edged in firm contact with</u> 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. Installing Edge Strips:
 - 1. <u>Install edge</u> strips with adhesive wherever exposed tile edges occur.
 - 2. <u>Where tile stops</u> at doorways, set edge strips directly under doors.

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

- A. <u>After flooring</u> 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.

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.
- 2. 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 code-required labels.

1.03 DELIVERY AND STORAGE

1. 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.
 - b. 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.
- 2. 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 January1, 2004.

1.09 MATERIAL PREPARATION:

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

1.10 <u>APPLICATION</u>:

- 1. 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 <u>COMPLETED WORK</u>:

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, WoodOne (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, (semigloss).
- 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 <u>shop</u> <u>applied</u> 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.

<u>NOTE:</u> 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.

- 1. 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 10160 - PLASTIC LAMINATE TOILET PARTITIONS

PART 1 - 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. Extent of toilet partitions, screens & shower enclosures are indicated on drawings.
- B. Type of toilet partitions required include plastic laminate, floor anchored, headrail braced.
- C. Type of screens required include plastic laminate, wall-hung.
- D. Type of shower enclosures required include plastic laminate, floor supported, headrail braced.
- E. Toilet accessories are specified in Section 10800.

1.03 QUALITY ASSURANCE

- A. Field Measurements: Take field measurements prior to preparation of shop drawings and fabrication where possible, to ensure proper fitting of work. However, allow for adjustments within specified tolerances wherever taking field measurements before fabrication might delay 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.

1.04 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. Shop Drawings: Submit shop drawings for fabrication and erection of partition assemblies not fully described by product drawings, templates, and instructions for installation of anchorage devices built into other work.
- C. 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.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

Available Manufacturers" Subject to compliance with requirements, manufacturers offering products which may be incorporated in the work included, but are not limited to, the following:

Flush-Metal Partition Corp. General Partitions Mfg. Corp. Global Steel Products Corp. Knickerbocker Partition Corp. Metpar Steel Products Corp. AMPCO, Hialeah, FL

2.02 MATERIALS

- A. General: Provide materials which have been selected for surface flatness and smoothness. Exposed surfaces which exhibit pitting, seam marks, roller marks, stains, discoloration, telegraphing of core material, or other imperfections of finished units are not acceptable.
- B. Plastic Laminate: NEMA Std. LD-3, minimum 0.062" thick, color and pattern as indicated or, if not indicated, as selected by Architect from manufacturer's standards.
- C. Core Material for Plastic Laminate: Manufacturer's standard particleboard or plywood, in thickness to provide nominal dimension of 1" minimum for doors, panels, and screens, 1 1/4" for pilasters. Water resistant care material required at shower enclosures.
- D. Pilaster Shoes: ASTM A 167, Type 302/304 stainless steel, not less than 3" high, 20 gage, finished to match hardware.
- E. Stirrup Brackets: Manufacturer's standard design for attaching panels to walls and pilasters, either chromium-plates non-ferrous cast alloy ("Zamac") or anodized aluminum.
- F. Hardware and Accessories: Manufacturer's standard exposed fasteners of stainless steel, chromium-plated steel, or brass finished to match hardware, with theft-resistant type heads and nuts. For concealed anchors, use hot-dipped galvanized, cadium plated to other rust resistant protective coated seal.
- G. Anchorages and Fasteners: Manufacturer's standard exposed fasteners of stainless

steel, chromium plated steel, or brass finished to match hardware, with theftresistant type heads and nuts. For concealed anchors, use hot-dipped galvanized cadium plated, or other rust-resistant protective-coated steel.

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" wide (clear opening) outswinging doors to stalls equipped for use by handicapped.
- C. Plastic Laminate Partitions and Screens General: Pressure laminate one piece face sheets to core material with no splices or joints, and with edges straight and sealed. Seal exposed core material at cutouts to protect against moisture.
- D. Floor-Supported Partitions: Furnish galvanized steel anchorage devices, complete with threaded rods, lock washers, and leveling adjustment not at pilasters, to permit structural connection at floor. Furnish shoe at each pilaster to conceal anchorage.
- E. Wall-Hung Screens: Furnish panel units in sizes indicated, of same construction and finish as partition system panels.
- F. Hardware: Furnish hardware for each compartment in partition system, as follows:
 - 1. Latch and Keeper: Manufacturer's standard surfaces mounted latch unit, designed for emergency access, with combination rubber-faced door strike and keeper.
 - 2. Coat Hook: Manufacturer's standard unit, combination hook and rubbertipped bumper.
 - 3. Door Pull: Manufacturer's standard unit.
- G. Accessories: Furnish units with chromium-plated finish, unless otherwise indicated.

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 ½" 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 joint. 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.
- B. Floor-Supported Partitions: Set pilaster units with anchorages having not less than 2" penetration into structural floor, unless otherwise recommended by partition manufacturer. Level, plumb, and tighten installation with devices furnished. Hang doors and adjust so that tops of doors are level with tops of pilasters 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.
- D. Accessories: Mount accessories to partition units in accordance with manufacturer's instructions.

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. Clean exposed surfaces of partition systems using materials and methods recommended by manufacturer, and provide protection as necessary to prevent damage during remainder of construction period.

*** END OF SECTION***

SECTION 12290 - MANUFACTURED CASEWORK: LIGHT COMMERCIAL

PART 1 - GENERAL

1.01 <u>RELATED DOCUMENTS</u> -

The Bidding and Contract Documents, General Requirements and Addenda, as may be issued during the bid process, shall govern the work under this Section.

A. <u>References</u>

- 1. AWI Architectural Woodwork Institute: Applicable Quality Standards.
- 2. FS MM-L-736 Lumber, Hardwood.
- 3. FS MMM-A-130 Adhesive, Contact.
- 4. NEMA LD3 High Pressure Decorative Laminates.
- 5. ANSI A156.9 American National Standard for Cabinet Hardware.
- 6. PS 1 Construction and Industrial Hardwood.
- 7. PS 20 American Softwood Lumber Standard.
- 8. PS 51 Hardwood and Decorative Plywood.
- 9. ASTM E84 Test Method for Surface Burning Characteristics of Materials
- 10. BHMA A156.9 Cabinet Hardware

1.02 SCOPE OF THE WORK

- A. Provide all labor, materials, necessary equipment and service to complete the casework and related work, as indicated on the drawings, as specified herein or both, except as for items specifically indicated as "NOT IN CONTRACT" (NIC).
- B. Including, but not necessarily limited to the following:
 - 1. Fabrication of Casework.
 - 2. Installation.
 - 3. Accessories.
 - 4. Hardware.
 - 5. Filler Panels.

1.03 WORK OF OTHER SECTIONS

- A. Rough Carpentry, Section 06100, and Finish Carpentry Section 06200. Provide blocking within wall, floor, or ceiling, required to give adequate support for casework.
- B. Mechanical Division 15000: Stainless steel sinks and fittings which are integral with casework, including all work for plumbing rough-in, supply waste and vent, including shut-off valves at floor or wall. All heating and ventilating ductwork and grilles in cabinets where required including connections, flashings, caps or

hoods.

C. Electrical Division 16000: Electrical rough-in and connections from rough-in to cabinet or equipment fixtures and devices requiring same, whatever type and kind.

1.04 BIDDING

Do not bid sections of casework separately. Any item required to make the casework a complete and workable unit will be by the casework Subcontractor, including installation.

1.05 **QUALITY ASSURANCE**

- A. The "Quality Assurance" of the Architectural Woodwork Institute shall apply and by reference are made part of this specification. Perform work in compliance with AWI standards. All work shall conform to section 400B - Laminate Clad Cabinets as defined in the latest edition of the AWI "Quality Standards" unless detailed as a higher grade.
- B. Design Type: Reveal overlay design in accordance with AWI Architectural Casework General Details, except as otherwise specified herein or detailed on the drawings.
- C. Competence: The approved casework manufacturer must have a reputation for doing satisfactory work on time and shall have completed comparable work.
- D. The Woodwork Manufacturer and the Contractor shall be jointly responsible to make certain that casework is not delivered until the building and storage areas are sufficiently dry so that the casework will not be damaged by excessive changes in moisture content.
- E. Fire Hazard Classification: Comply with required NFPA, ANSI and UL surface burning characteristics for plastic laminates, lumber and plywood.

1.06 LIST OF SAMPLES, CERTIFICATES AND SHOP DRAWINGS

- A. This list shall consist of samples, certificates and shop drawings which require review by the Contractor prior to submission to the Architect for approval.
- B. Any omission of items which require the Contractor's compliance under the contract documents does not relieve said Contractor from such responsibility.
- C. Submit samples, product data, certificates and shop drawings as required or requested by the Architect, whether included in this list or not.

1.07 SUBMITTALS

- A. Submit complete shop drawings on all items showing details, materials, location in building and installation requirements prior to starting work.
- B. Submit sample cabinet built to specification, prior to starting of work, for approval of all materials.
- C. The casework manufacturer is responsible for details and dimensions not controlled by job conditions and shall show on his shop drawings all required field measurements beyond his control. The General Contractor and the casework manufacturer shall cooperate to establish and maintain these field dimensions prior to final fabrication.
- D. Submit samples of laminated plastic for color selection by Architect.
- E. Submit manufacturer's descriptive literature of all items not manufactured by the casework contractor, as requested by the Architect, including, MSD (manufacturer's safety data) sheets, for composite wood and agrifiber products, MDF (medium density fiberboard), plywood (Columbia Forest Products Purebond Plywood or equal), panel substrates and door covers to demonstrate these products do not contain any added urea-formaldehyde resins. In addition, laminating adhesives used to fabricate on-site and shop-applied composite and wood and agrifiber assemblies must not contain added urea-formaldehyde resins.
- F. The Contractor is solely responsible for reviewing MSD sheets, signed attestations or other official literature from the manufacturer prior to submittal to the Architect, to insure compliance for projects pursuing a Sustainable (Green Building) rating.

1.08 DELIVERY, STORAGE AND HANDLING

- A. Protect woodwork during transit, delivery, storage and handling to prevent damage, soiling and deterioration.
- B. Do not deliver woodwork until painting, wet work, grinding or similar operations which could damage, soil or deteriorate the woodwork, have been completed in the installation areas. If, due to unforeseen circumstances, woodwork must be stored in other than installation areas, store only in areas meeting the requirements specified for the installation area.

1.09 ENVIRONMENTAL REQUIREMENTS AND PROTECTION

A. Conditioning: Woodwork manufacturer and installer shall advise the Contractor of temperature and humidity requirements for the woodwork installation and storage areas.

- B. Maintain temperature and humidity in installation areas as required to maintain moisture content of installed woodwork within a 1.0% tolerance of optimum moisture content, from date of installation to through remainder of construction period. Require woodwork manufacturer to establish optimum moisture content and required temperature and humidity conditions.
- C. Protect all work from damage until final acceptance.

PART 2 - PRODUCTS

2.01 CABINET MATERIALS

- A. Softwood Lumber for stiles and rails: PS 20; graded in accordance with AWI; moisture content of 6 to 11 percent; 8 to 13 percent for damp locations (as defined by AWI).
- B. All lumber in contact with concrete floor shall be pressure treated. See plan details for base rail requirements.
- C. Softwood Plywood for box construction to be 3/4" 9-ply closed grain luan or hardwood plywood with melamine finish for bottoms, tops and sides of wall cabinets, ends and sides of base cabinets, and all upper and base unit shelving. Backs shall be 1/4" luan plywood on wall cabinets and ½" luan plywood on base cabinets; both with heat fused melamine finish, color white. All base and upper shelving adjustable, recessed K & V metal standards with metals shelf support clips. Adjustable shelving on open-front book storage cabinets shall be 3/4" BC plywood with a maximum span of 30" with plastic laminate on sides and back and edge trim slotter black vinyl bumper moulding on the horizontal face edge. Fixed vertical and horizontal rails on open-front book storage cabinets shall be laminate covered.
- D. Countertops all 3/4" BC plywood construction with 3/4" buildup, and all exposed faces plastic laminate covered.
- E. Doors shall be 3/4" MDF or 3/4" BC plywood covered with plastic laminate and with thermally fused melamine backs. Door edges on base cabinets in high use conditions will be allowed .018 PVC edge banding machine applied with waterproof hot melt adhesive in lieu of laminate to prevent spalling of the laminate edges.
- F. Drawer faces shall be 3/4 MDF or 3/4" BC plywood covered with plastic laminate and with thermally fused melamine backs. Drawer sides shall be 5/8" plywood with heat fused melamine faces and interiors. Door bottoms shall be 1/4" plywood with heat fused melamine surface.

Note: Particleboard, hardboard and flake-board are not acceptable products.

2.02 LAMINATED PLASTIC

All laminated plastic shall meet NEMA LD-3 Standards and application of various types shall be as follows:

- A. 0.050" Nominal thickness, matte finish, standard quality: located at counter tops, back-splashes and counter top edges and faces.
- B. 0.042" Nominal thickness, mate finish, vertical surface grade: located on door fronts and edges, drawer fronts and edges, cabinet facings, ends and bottom of uppers, shelving faces and edges, and edges of other exposed vertical and postformed surfaces.
- C. BK 20 for concealed facings over plywood, .020" thick, matte finish, vertical grade, white unless otherwise: located on interior faces of cabinets and cabinet base interior faces. Use in lieu of melamine.
- D. Acceptable Laminate Manufacturers:
 - 1. Nevamar
 - 2. Wilsonart
 - 3. Pionite
 - 4. Formica
 - 5. Substitutions: Only allowed with prior written approval from the Architect.

2.03 ACCESSORIES

- A. Adhesive: FS MMM-A-130 or Type II, CS 35 type recommended by laminate manufacturer to suit application. NOTE: Laminating adhesives utilized on Sustainable (Green Building) projects for field and shop-applied assemblies, must not contain any added urea-formaldehyde resins. Utilize water based low VOC, non-toxic, PVA adhesives or equal products.
- B. Fasteners: Size and type to suit application. All base and wall cabinets shall be screwed together. Dowels are not acceptable.
- C. Bolts, Nuts, Washers, Lags, Pins and Screws: Of size and type to suit application; galvanized finish in concealed locations and stainless steel finish in exposed locations.

2.04 HARDWARE

A. TYPES AND MANUFACTURERS

- 1. Doors Hinges: Stanley, Grant, Hettich America or approved equal.
- 2. Drawer and Door Pulls: Stanley, Grant, Hettich America or approved

equal.

- 3. Cabinet Locks: CCL or approved equal. (Provide only if called for on cabinet drawings).
- 4. Robe Hooks: Ives or Stanley.
- 5. Drawer Glides: Accuride, Keil, Blum, NSF, K&V, Sugatsune or approved equal.

B. HINGES

- 1. 1 pair, heavy-duty institutional, self-closing for doors up to 48" in height, Stanley HT1592, US28, anodized dull aluminum.
- 2. 2 pair, heavy duty institutional, self-closing for doors over 48" in height, Stanley HT1592, US28, anodized dull aluminum.

C. <u>PULLS</u>

1. 3" drill centers, wire pulls, brushed aluminum finish, Stanley 4483, US28, anodized dull aluminum.

D. DRAWER GLIDES

- 1. Drawer glides all metal zinc coated, rated for 75 lbs. to 100 lbs., 3/4 extension, ball bearing, by K & V model 8400 or equal.
- 2. Utilize 150# full extension, ball bearing drawer glides at file drawers.

E. <u>SILENCERS</u>

1. Neoprene type with self-adhesive at all upper and lower cabinet doors.

F. GLAZING

1. Provide clear, tempered glass for glazed doors in cabinetwork, 1/4" thick unless otherwise indicated or approved.

G. TRIM FOR TOP DROP AND HORIZONTAL CORD CHASES

1. Provide PVC round 1¹/₂" to 2" diameter trim rings for electrical or low voltage cord chases. Color: black. Manufacturer of fabricators choice.

2.05 ANCHORS

A. Select material, type, size and finish required by each substrate for secure anchorage. Provide non-ferrous metal or hot-dipped galvanized anchors and inserts for exterior installations and elsewhere as required for corrosionresistances. Provide toothed steel or lead expansion bolt shields for drilled-inplace anchors. Furnish inserts and anchors, as required, to be set into concrete or masonry work for subsequent woodwork anchorage.

2.06 CASEWORK FABRICATION

Detail shall conform to AWI (flush overlay design) and or as shown on drawings.

- A. Wood moisture Content: Comply with requirements of referenced quality standard for moisture content of lumber at time of fabrication and for relative humidity conditions in the installation areas.
- B. Shop assemble casework for delivery to site in units easily handled and to permit passage through building openings. Condition to average prevailing humidity conditions prior to installation.
- C. Measurements: Before proceeding with fabrication of casework required to be fitted to other construction, obtain field measurements and verify dimensions and shop drawing details as required for accurate fit. Where sequence of measuring substrates before fabrication would delay the project, proceed with fabrication (without field measurements) and provide ample borders and edges to allow for subsequent scribing and trimming of casework for accurate fit.
- D. Complete fabrication, assembly, finishing, hardware application and other work before shipment to project site to maximum extent possible. Disassemble components only as necessary for shipment and installation.
- E. Apply plastic laminate finish in full uninterrupted sheets consistent with manufactured sizes. Make joints hairline. Ease edges of laminate as required to eliminate sharp edges.
- F. Fully bed back-splashes and end-splashes to top and each other with Dow Corning, or equal, low VOC mildew resistant silicone sealant.
- G. Pre-Cut Openings: Fabricate architectural casework with pre-cut openings, where possible, to receive hardware, appliances, plumbing fixtures, electrical work and similar items. Locate openings accurately and use templates or rough-in diagrams for proper size and shape. Treat all cutouts in plywood with a water resistant coating.

PART 3 - EXECUTION

3.01 COORDINATION

A. Casework manufacturer is responsible for coordinating his work with work of other trades, such as structural, plumbing, electrical and air conditioning. In so far as possible, dimensional adjustments are to be determined before fabrication, and reflected on the Shop Drawings to minimize changes required by field conditions.

3.02 INSPECTION

- A. Prior to installation of casework, examine shop fabricated work for completion and complete work as required, including back priming and removal of packing.
- B. Condition casework to average prevailing humidity conditions in the installation areas prior to installing.

3.03 INSTALLATION:

- A. Pre-Installation Meeting: Set up a meeting at the project site with the general contractor prior to delivery of casework and review coordination and environmental controls required for proper installation and ambient conditioning in areas to receive work. Proceed with casework installation only when everyone concerned agrees that required ambient conditions can be properly maintained.
- B. Install casework plumb, level, true and straight with no distortions. Shim as required using concealed shims. Install to a tolerance of 1/16" in 10' 0" for plumb and level (including tops); and with no variations in flushness of adjoining surfaces.
- C. Anchor casework to anchors or blocking built-in or directly attached to substrates. Secure to grounds, stripping and blocking with countersunk, concealed fasteners and blind nailing as required for a complete installation.
- D. Cabinets: Install without distortion so that doors and drawers fit openings properly and are accurately aligned. Adjust hardware to center doors and drawers in openings and to provide unencumbered operation. Complete the installation of hardware and accessory items as indicated.
- E. Tops: Anchor securely to base units and other support systems as indicated and secure cabinet and counter bases to the floor using appropriate angles and anchorages.
- F. Use threaded steel concealed joint fasteners to align and secure adjoining cabinet units and countertops.
- G. Carefully scribe and cut casework to fit adjoining casework or other building materials, leaving gaps of 1/32" maximum. Do not use additional overlay trim for this purpose but refinish the cut surface.
- H. Fasten tops to bases with screws driven through base cabinet top frame into bottom of countertop.
- I. Do not install cabinetry or millwork closer than 24" to ceilings in fully sprinklered

buildings or such that installation obstructs any fire sprinkler head.

3.04 ADJUSTMENT, CLEANING, FINISHING AND PROTECTION

- A. Repair damaged and defective casework where possible to eliminate defects functionally and visually; where not possible to repair the casework, replace it. Adjust joinery for uniform appearance. Adjust doors, drawers, hardware, fixtures and other moving or operating parts to function smoothly and correctly.
- B. Clean casework on exposed and semi-exposed surfaces. Touch-up shop-applied finishes to restore damaged or soiled areas.
- C. Complete the finishing work specified as work of this section to whatever extent not completed at the shop or prior to installation of casework.
- D. Provide final protection and maintain conditions, in manner acceptable to Fabricator and Installer, which ensures architectural casework being without damage or deterioration at time of substantial completion.
- E. Caulk top of backsplash at walls with paintable sealant by GE or equal. If wall varies over 1/8" at back splash, the gypsum wall is to be refinished to correct waves.
- F. All casework to receive finished base, by other trades, at the portion that touches the floor as scheduled on the drawings.

END OF SECTION

SECTION 15400 - PLUMBING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SCOPE

- A. The work pertaining to this Division occurs within the confines of the building line, and within a boundary outside of the building line for a distance of five (5) feet, measured normal to the building line, or as indicated on the drawings.
- B. Alternates may or may not substantially change scope and general character of the work; and must not be confused with "change orders", "substitutions", and other similar provisions.

1.3 RELATION TO OTHER WORK

A. Refer to the section, "General Mechanical Provisions", for related requirements. Refer to other sections of Division 15 and to all other applicable portions of the Drawings and Specifications.

1.4 SUBMITTALS

A. Submit manufacturer's data for review before any work is commenced.

PART 2 - PRODUCTS

- 2.1 PIPING SPECIALTIES
 - A. Where it is desirable or necessary to support the pipe hangers to concrete, inserts shall be placed in the forms by the Mechanical Contractor prior to the time concrete is poured.
 - B. Lead tamp-ins may be used when installed in a concrete or masonry wall or other like vertical surface to support a vertical hanger. Lead tamp-ins will not be permitted to support hangers to the underside of concrete slab.
 - C. For parallel runs of above ground suspended piping, an acceptable trapeze-type hanger may be used. Provide permanent, non-conductive type wrapping between copper pipe and steel trapeze hangers.
 - D. Pipes passing through walls, floors shall have sleeves of the same materials as the pipe. Sleeves shall allow insulated pipes to pass without changing the insulation thickness. Clearance around sleeves shall be packed with glass fiber after completion of pipe work. Sleeves in all floor slabs except slabs on grade shall have pipe sleeves extended 1 inch above finish floor to prevent water from running through sleeves to area below. Make watertight, caulk with sealant around each sleeve.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. The contractor shall furnish all labor, materials, *including gases* equipment and instruments required to conduct tests of piping systems. Tests shall be as herein called for.
- B. PVC piping, fittings and other PVC materials shall not be installed in air conditioning plenums or equipment rooms used as air conditioning plenums.
- C. Tests shall be conducted and the inspection of the piping shall be made in the presence of the Architect and/or Engineers.
- D. Material and/or joints found defective shall be replaced and/or corrected and additional tests shall be conducted after correction of work.

3.2 PIPE SIZING, DRAWINGS AND SPECIFICATIONS

- A. It is intended that work covered by these specifications and drawings include everything requisite and necessary to make the various systems complete and operative, irrespective of whether or not every item is specifically provided for. Any omission of direct reference herein to any essential item shall not excuse contractor from complying with the above intent.
- B. Figured dimensions supercede scaled ones. Contractor shall take no advantage of, and shall promptly call the Owner's Representative's attention to any error, omission or inconsistency in specifications and drawings.
- C. Special attention is directed to requirements that equipment and materials stated in specifications and/or indicated on drawings shall be furnished, except if otherwise noted, completely installed, adjusted and left in safe and satisfactory operating condition. Accessories, appliances and connections necessary for operation of equipment shall be provided to satisfaction of the Owner's Representative.
- D. Materials, apparatus or equipment specified or otherwise provided for on drawings, addenda, or change orders issued subsequent to award of contract shall be same brand, type, quality and character originally specified unless otherwise provided.
- E. Layout of equipment, accessories, specialties and suspended, concealed or exposed piping systems are diagrammatic unless dimensioned. In preparing shop drawings, contractor shall check project conditions before installing work. If there are any interferences or conflicts, they shall be called to attention of the Owner's Representative immediately for clarification.
- F. The drawings indicate required size and points of termination of pipes and ducts and suggest proper routes to conform to structure, avoid obstructions and preserve clearances. However, it is not intended that drawings indicate all necessary offsets, and it shall be the work of this contractor to make the installation in such a manner as to conform to structure, avoid obstructions, preserve headroom and keep openings and passageways clear, without further obstruction or cost to the Owner.
- G. Shop drawings shall be furnished by this contractor, indicating all changes to meet space requirements, code requirements and as necessary to resolve all space conflicts.

- H. It is intended that all apparatus be located symmetrical with architectural elements, and shall be installed at exact height and locations as shown on the architectural drawings. Refer to architectural details in completing and correlating work.
- I. The contractor shall fully inform himself regarding any and all peculiarities and limitations of the spaces available for the installation of all work and materials furnished and installed under the contract, prior to submitting his bid. He shall exercise due and particular caution to determine that all parts of his work are made quickly and easily accessible.
- J. The contractor shall carefully examine any existing conditions, existing piping and ducts and premises and compare the drawing with the existing conditions, prior to submitting his bid.
- K. It cannot be too strongly emphasized that, except for work specifically excluded herein, every system shall be turned over to Owner installed completed, with components, ready for normal operation.
- L. In addition to work shown on mechanical drawings, see Architectural Drawings for existing work to be removed, relocated and/or modified. Modify existing systems by rerouting for systems to remain or remove the abandoned systems as required to accommodate new general construction, plumbing, electrical and mechanical work.
- M. Pipe sizes shall be minimum as allowed by local codes or as shown on the drawings, whichever is larger.

END OF SECTION

SECTION 15421 - FLOOR DRAINS AND SHOWER DRAINS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SCOPE

- A. Furnish and install floor drains and shower drains including strainers and trap primers.
- B. Alternates may or may not substantially change scope and general character of the work; and must not be confused with "change orders", "substitutions", and other similar provisions.

1.3 RELATION TO OTHER WORK

A. Refer to the section, "General Mechanical Provisions", for related requirements. Refer to other sections of Division 15 and to all other applicable portions of the Drawings and Specifications.

1.4 SUBMITTALS

A. Submit manufacturer's data for review before any work is commenced.

PART 2 - PRODUCTS

2.1 DRAINS

- A. Drains shall be of the type and materials as scheduled on the drawings
- B. Provide all necessary bolts, clamping rings and appurtenances to effect a complete installation.
- C. The strainer size shall be as recommended by the manufacturer unless otherwise indicated on the drawings. The strainers shall be nickel alloy or polished brass. Provide tapped boss and trap primer floor drains as indicated on the drawings.

2.2 TRAP PRIMERS

- A. Provide for all floor drains.
- B. Units shall be cast bronze, with removable top cover, threaded or sweat pattern, and integral vacuum breaker.
- C. Acceptable manufacturers are: Wade, Josam, Smith, MIFAB and Zurn.

2.3 SHOWER PANS

- A. Shower pans shall be constructed from lead. Sheet lead shall be 6-pound weight, except that 4-pound sheet lead may be used for each pan installed without joints or seams other than corner seams.
- B. Shower pans shall be constructed of polyethylene concealed chlorinated waterproofing membrane; nominal 0.040-inch thickness, equal to chloraloy. All joints and/or seams shall be welded tight with CPE (non plasticized chlorinated polyethylene) solvent bonding liquid or xylene.

PART 3 - EXECUTION

3.1 DRAINS

A. Install all drains in accordance with the manufacturer's instructions.

3.2 TRAP PRIMERS

A. Trap primer outlet should extend vertically a minimum of 12" before a change in direction to horizontal is made. The horizontal line to the trap primer connection shall be installed sloping to the trap it serves. Provide a minimum size of 12" x 12" stainless steel access cover for each trap primer.

3.3 SHOWER PANS

- A. The floor of each individual shower, the shower area portion of combination shower and drying room, and the entire shower and drying room where the two are not separated by curbing or partition shall be made watertight with a shower pan fabricated in place. The shower pan material shall be cut to size and shape of the area indicated, in one piece to the maximum extent practicable, allowing not less than eight inches for turn-up on walls or partitions, and shall be folded over the curb with an approximate return of one-fourth of curb height. The upstands shall be placed behind any wall or partition finish. Shower pans shall be clamped to drain as specified herein. After installation of the pan and the finished floor, the drain shall be temporarily plugged below the weep holes. The floor area shall be flooded with water to a minimum depth of 4 inches at curb areas and 1 inch without curbs for a period of 24 hours. Any drop in the water level during the test, except for evaporation, shall be reason for rejection, repair and retest.
- B. When a shower pan of required size cannot be furnished in one piece, the separate metal pieces shall be joined with a flat-lock seam and soldered or burned. The corners shall be folded tight, not cut, and the corner seam shall be soldered or burned. Pans, including upstands, shall be coated inside and outside with one brush coat of roofing asphalt. Asphalt shall be applied evenly at not less than one gallon per 50 square feet. The joining surfaces of metal pan and drain shall be given a brush coat of roofing asphalt after the pan is connected to the drain.

C. When a shower pan of required size cannot be furnished in one piece, the separate pieces shall be joined with solvent bonding liquid. The corners shall be folded tight, not cut, and the corner seam shall be sealed.

END OF SECTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SCOPE

- A. Furnish and install plumbing fixtures indicated on drawings or specified herein.
- B. All plumbing fixtures shall be "First Quality" as defined and set forth in Commercial Standard CS77-28 as promulgated by the U.S. Department of Commerce. All fixtures are to be white vitreous china unless otherwise specifically noted. Where enameled iron fixtures are specified, they shall be furnished with acid resisting enamel.
- C. Fixtures shall be properly protected from damage during construction and shall be cleaned in accordance with manufacturer's instruction under this section of the specifications.
- D. Fixtures and fittings proposed shall be from one manufacturer and of similar character in any room or location. Escutcheons, handles, etc., on the different fixtures shall be of the same design.
- E. The fixture numbers and types are scheduled on the drawings, and are used to indicate type and quality of fixtures desired. Acceptable fixture manufacturers are as follows: American Standard, Eljer and Kohler. Fixture manufacturers not listed herein will be considered subject to the general requirement outlined in Section 15010 Mechanical General Provisions.
- F. Alternates may or may not substantially change scope and general character of the work; and must not be confused with "change orders", "substitutions", and other similar provisions.

1.3 RELATION TO OTHER WORK

A. Refer to the section, "General Mechanical Provisions", for related requirements. Refer to other sections of Division 15 and to all other applicable portions of the Drawings and Specifications.

1.4 SUBMITTALS

A. Submit manufacturer's data for review before any work is commenced.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Flush valves and water closet seats shall be as scheduled on the drawings.

- B. All exposed metal not otherwise specified shall be polished chromium on brass or bronze. All supply valves shall have renewable seats and discs. All hot and cold water supply to fixtures shall be provided with stops. Provide P-trap with cleanout for each lavatory and sink except as specifically noted:
- C. All seats shall be solid, white, open front seat with checking and self sustaining, stainless steel hinge.
- D. Chair carriers and combination chair carriers and fittings shall be as scheduled on the drawings.
- E. Chrome-plated. Provide where exposed piping passes through finished surfaces. Escutcheons for extended sleeves shall be of the type designed for that purpose.
- F. Provide a concealed hanger type lavatory chair carrier with short foot mounted in the chase to support lavatories shown on walls of a chase.
- G. Provide through toggle bolts, 1/8" thickness steel backing plate, and wall hangers for support of lavatories on 6" or thicker concrete block walls.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Layout fixtures as indicated on the drawings.
- B. Carefully install fixtures in accordance with manufacturer's data with sufficient clearances to coordinate with accessories, specialties and equipment specified in other divisions of these specifications and/or as shown on the drawings.
- C. Hangers and carriers shall be installed in accordance with manufacturer's recommendations and in accordance with good practice and workmanship.
- D. Clean all exposed metal surfaces from grease, dirt, paint or other foreign material.
- E. Fixtures shall be properly protected from damage during construction and shall be cleaned in accordance with manufacturer's instruction under this section of the specification.
- F. Fixtures, chrome-plated piping, fittings and trim shall be polished before requesting acceptance of the system.

END OF SECTION

PART I - GENERAL

1.01 <u>SCOPE</u>

A. Contractor is to furnish and install all supply, return and exhaust grills and registers for a complete system.

1.02 ACCEPTED MANUFACTURERS

A. Grill and registers shall be as manufactured by Titus or Metalaire, or Air Horizons.

PART 2 - PRODUCTS

2.01 AIR DISTRIBUTION DEVICES

- A. Air distribution devise shall be the standard catalog product of the manufacturer, designed for air conditioning, under the conditions for which it is to be used and scheduled. All devices shall have the nominal measurements indicated on the drawings and shall be designed to deliver the amount of air indicated on the drawings at the required throws. All devices shall be listed and tested in accordance with Air Diffusion Council requirement and as specified on the drawings.
- B. All air distribution devices are to be aluminum, unless installed in a fire rated ceiling. Registers in fire rated ceiling shall be steel with a UL approved fire damper assembly.

PART 3 - EXECUTION

3.01 GENERAL

- A. Contractor is to coordinate ceiling types with grill and register designations.
- B. Where possible provide air control by a damper located in the branch duct feeding the register. If unaccessible, provide the damper at the register.
- C. All registers and grills are to be supported from the building structure.
- D. Registers are to finish flush with the surrounding surface.
- E. Clean and adjust registers prior to final inspection.
- F. All ductwork, plenums, etc., that are visible through the grill or register shall be painted with black nontoxic paint.

SECTION END

SECTION 16500 LIGHTING FIXTURES

PART 1 - GENERAL

1.01 DESCRIPTION

A. The work covered in this section consists of furnishing and installing all interior and exterior lighting fixtures, complete with lamps and all accessories necessary for the complete installation as indicated on the drawings and specified herein.

1.02 **QUALITY CRITERIA**

- A. Documented Luminaire photometric data shall be provided by the manufacturer's laboratories that are accredited under the National Volunteer Laboratory Accreditation program for energy efficient lighting products.
- B. Photometric data for lighting layout and design shall be performed using nationally recognized computer software.
- C. All Electrical components and fixture assemblies shall be UL listed and comply with NFPA-70.

1.03 <u>SUBMITTALS</u>

- A. Fixture data, arranged in order of designation, shall provide all the necessary information to establish compliance with the plans and specifications. The following shall be provided:
 - 1. Physical description including dimensions
 - 2. Ballast information including operating voltage
 - 3. Energy efficiency data
 - 4. Photometric data
 - 5. Lamp data
 - 6. Fixture weights
 - 7. Fixture accessories
 - 8. Wiring diagrams
 - 9. Fixture supports
- B. Provide operation and maintenance manuals for the entire fixture package. This shall be provided in ".pdf" format.
- C. Provide warranties for all products.

1.04 COORDINATION

A. Coordinate layout and installation of all lighting fixtures with the construction documents and with other trades that can interfere with the installation of the lighting fixtures, such as HVAC grills, sprinkler heads, speakers, movable partitions, landscape, and exterior attachments.

PART 2 - PRODUCTS

2.01 <u>BALLASTS</u>

- A. Provide 0 degrees ballast for all units located outside.
- B. Fluorescent ballast serving four foot long lamps shall be energy saving, electronic type. Ballast shall be manufactured by Magnatek, Motorola or General Electric.
- C. High intensity discharge fixtures shall have high power factor, regulated output ballast.

2.02 <u>LAMPS</u>

- A. Fluorescent lamps shall be cool white reduced wattage type in sizes indicated. General Electric Trimline T8, Energy Saving Lamps, 4100K.
- B. H.I.D. lamps shall be scheduled on drawings.
- C. Manufacturer: General Electric, Westinghouse or Sylvania.

PART 3 - EXECUTION

3.01 LIGHTING FIXTURES

- A. Provide fixtures as indicated on the drawings.
- B. Provide lamps for all fixtures.
- C. Coordinate ceiling types with designated fixtures prior to purchase.

3.02 <u>SUPPORT</u>

- A. All lighting fixtures shall be supported from the building structures, except where installed in plastered or suspended ceilings.
- B. Fixtures shall be supported in a manner that will ensure the fixture weight being equally distributed from each support and the fixture remaining in a level position. Pendant mounted fixtures shall have stem supported by a fixture stud mounted in the outlet box. The outlet box is to be supported from the building structure.

SECTION END

APPENDIX A

PERMIT

F:\Public Works\ENGINEERING DIVISION PROJECTS\2020 JRTC Ticket Office Renovations\1-Admin\Bids\Bid Documents\Rebid\APPENDIX A - Permits.doc

Appendix A-Permits

INDIAN RIVER COUNTY BUILDING DIVISION 1801 27TH STREET VERO BEACH, FL 32960

APPL DATE 10/3/2020

PERMIT APPLICATION

Confirm. #: 889

BCALT COMMERCIAL ALTERATION

PERMIT #: 2020100201 PERMIT TYPE: BCALT **ISSUED DATE:** BY: JOB DESCRIPTION: INTERIOR RENOVATION TO THE EXISTING TICKET OFFICE/LOCKER RM BLDG ON THE EAST JOB ADDRESS 4007 26TH ST BLDG STADUIM TICKET BOOTH & GIFT SHOP **BLOCK** 0230 LOT: 00001.0 SUBDIVISION #: 742-VERO BEACH MUNICIPAL AIRPORT SUB FOLIO NBR: 32-39-26-00011-0230-00001.0 ADDR NBR: 153093 WWP (2X fee): N **OWNER NAME:** INDIAN RIVER COUNTY JURISDICTION: VB FLOOD ZONE X FLOOD ELEV: U FLOOD MAP: 155E **INSP AREA: PROJECT** 2002040028 APPLICANT: OUT TO BID **TYPE:** CONTRACTOR **JOB PHONE:** DBA: **CERT NBR:** JOB FAX: SETBACKS FRONT: **REAR:** LEFT: **RIGHT:** FCC CODE: 831 ALTERATIONS; COMMERCIAL **SQFT:** 0 JOB VALUE: \$ 415,705.0(**#UNITS: #FLOORS #BLDGS:** <u>TIFF #:</u> **ROW NBR** PLAN NBR: ADDITIONAL INFO: RENOVATIONS INCLUDE: DRYWALL REPLACEMENT, FLOORING REPLACEMENT, REMOVAL & REPLACEMENT OF EXISTING CEILING TILE & GRID, AND PLUMBING UPGRADES IN ACCORDANCE WITH THE FLORIDA BUILDING CODE AND THE APPLICATION ON FILE IN THIS OFFICE, WORK MUST BE INSPECTED BEFORE BEING CONCEALED OR COVERED. NOTICE: In addition to the requirements in this permit, there may be additional restrictions applicable to this property that

<u>NOTICE: In addition to the requirements in this permit, there may be additional restrictions applicable to this property that</u> may be found in the public records of this county, and there may be additional permits required from other governmental entities such as water management districts, state agencies, or federal agencies. FS:553.79(10)

A permit expires unless work has commenced and a "passed" inspection is obtained within 180 days after its issuance. Exception: ALL DEMOLITION PERMITS WILL EXPIRE 60 DAYS FROM ISSUE DATE.

Schedule Inspections Online at: www.ircgov.com and select the Building Division Online Services link

This permit issued by order of Building Official.

For administrative inquiries call 772-226-1260.

Owner/Contractor

Date

Print Name

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

105.6 Suspension or revocation. The Building Official is authorized to suspend or revoke a permit issued under the provisions of this code wherever the permit is issued in error or on the basis of incorrect, inaccurate or incomplete information, or in violation of any ordinance or regulation or any of the provisions of this code. Engineering reserves the right to modify the original permitted conditions as needed at any time prior to final acceptance in order to comply with Indian River County Ordinances.