CHILES HIGH SCHOOL WELDING LAB LEON COUNTY SCHOOLS

CONSTRUCTION DOCUMENTS NOVEMBER 8, 2024



JRA Commission Number – 24856





JRA ARCHITECTS, INC.

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CHILES HIGH SCHOOL WELDING LAB LEON COUNTY SCHOOLS CONSTRUCTION DOCUMENTS NOVEMBER 08, 2024 Specification Index



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SECTION A

ADVERTISEMENT

Invitation to Bid

Construction Manager to Insert Advertisement

END OF SECTION A

SECTION B

ADDITIONAL INSTRUCTION TO BIDDERS

Contractors bidding the project may secure Bidding Documents at: (Insert Place, address, telephone, etc.)

1. **DEFINITIONS**:

- 1.01 All definitions set forth in the LCS General Conditions of the Contract for Construction, The School Board of Leon County, Florida, are applicable to these Instructions to Bidders.
- 1.02 Bidding Documents include the Advertisement to Bid, Instructions to Bidders, applicable Policies of the School Board, the proposed Construction Contract, LCS General Conditions, Special Conditions, Bid Bond, Performance and Payment Bond, Proposal Form, and the proposed Contract Documents (which consist of the Contract and other component documents as set forth in Section K), including any Addenda issued prior to receipt of bids.
- 1.03 Addenda are written or graphic instruments issued prior to the receipt of Bids which modify, clarify, correct or interpret the Bidding Documents. Addenda will become part of the Contract Documents when the Construction Contract is executed.
- 1.04 "Small Business Enterprise" (SBE) shall mean a business whose SBE Certification is recognized, effective and accepted by the District SBDO Program with an annual gross income of less than \$2 million at the time of application or with less than fifteen (15) full-time employees.

2. BIDDER'S REPRESENTATION:

- 2.01 Each Bidder, by submitting his Bid, represents that he has read and understands the Bidding Documents.
- 2.02 Each Bidder, by submitting his Bid, represents that he has visited the site and familiarized himself with the local conditions under which the Work is to be performed.
- 2.03 Each Bidder must comply with the level two background screening requirements set forth in LCSB Policy 8475 and Florida law. LCSB Policy 8475 states, in part, "Non-instructional school district employees or contractual personnel who are permitted access on school grounds when students are present, who have direct contact with students or who have access to or control of school funds must meet level 2 screening requirements as described in s.1012.32."
- 2.03.1 Reciprocity of Florida School I.D. Badges: If respondent has a Level II clearance registered with another Florida School Board, they may be able to obtain a Leon County School Board vendor i.d. badge. Respondent should check with the Safety & Security Department Fingerprint Services office (850)487-7293. to verify clearance and obtain a vendor i.d. badge.

3. <u>BIDDING PROCEDURES</u>:

- 3.01 All Bids must be prepared using the forms contained in the Bidding Documents provided by the Construction Manager and submitted in accordance with the Instructions to Bidders.
- 3.02 A Bid is invalid if it has not been deposited at the location designated in the Advertisement prior to the time and date for receipt of bids indicated in the Advertisement (Bid Opening), or prior to any extension thereof issued to the bidders.

- 3.03 Unless otherwise provided in any supplement to these Instructions to Bidders, no Bidder shall modify, withdraw or cancel his Bid or any part thereof for 60 days after the date designated for the receipt of bids in the advertisement or invitation to bid.
- 3.04 Prior to the date designated for receipt of bids, any issued Addenda will be mailed or delivered to each qualified General Contractor recorded by the Architect as having received the Bidding Documents, and will be available from the Construction Manager.
- 3.05 The Prospective Bidder (General Contractor or Construction Manager) must submit a Small Business Participation Plan that shall identify the Small Business Enterprises (SBE) to be utilized, their percentage of utilization, and the commercial services they are providing, consistent with the commodities or services for which they are certified and/or qualified to provide.

For more information please contact Rod McQueen, Director of Small Business Development Office, Leon County Schools, Tallahassee, Florida. Telephone: 850-617-5912 or http://leonschools.schoolwires.net/Domain/242

- (a) **SBE Targets**: All Bidders (general contractor or construction manager) including SBE's shall demonstrate in their bid that a good faith effort was made to meet the goals of the department. All prime bidders will make contact with the Leon County School SBE Division for a listing of available SBEs who provide the services needed for the Bid or proposal.
- 3.06. The Owner reserves the right to waive informality in any bid, to reject any and all bids in whole or in part, with or without cause, and/or to accept the apparent low Bid, considering base bid and accepted alternates.

4. **EXAMINATION OF DOCUMENTS AND SITE:**

- 4.01 Each Bidder shall examine the Bidding Documents carefully;, Bidders shall make a <u>written</u> request to the Architect for interpretation or correction of any ambiguity, inconsistency or error which may be discovered. Any interpretations or corrections will be issued as addenda. The Architect and/or Owner shall not be responsible for oral clarifications. No Addenda shall be issued after seven (7) calendar days prior to Bid Opening.
- 4.02 Bidders shall carefully examine the Bidding Documents and the construction site to obtain first-hand knowledge of the existing conditions. Contractors shall not be given extra payment for conditions which can be determined by examining the site and Bidding Documents.
- 4.03 The submission of a Bid by a Bidder shall be an acknowledgment that Bidder has thoroughly examined the Bidding Documents and the construction site, and completely understands their obligations and those of the Owner under the Bidding Documents. Failure to mention any work, materials, appurtenances, or safety methods in the specifications or plans set forth in the bidding Documents which are required for the satisfactory and safe completion of an efficient, safe, complete, and working system as implied by the specifications and drawings shall not relieve the Contractor of any responsibility to provide such for the completion of such a system.
- 4.04 The Owner assumes no responsibility for any understanding or representations made by any of its officers or agents during or prior to the execution of the Contract, unless (1) such understanding or representation are expressly stated in the contract and (2) the Contract expressly provides that the responsibility therefore is assumed by the Owner.

5. SUBSTITUTIONS:

- 5.01 Each Bidder represents that his Bid is based upon the materials and equipment described in the Bidding Documents.
- 5.02 No substitutions for other material and equipment will be considered unless a written request has been submitted to the Architect for approval prior to the date for receipt of Bids. Each such request shall include a complete description of the proposed substitute, the name of the material or equipment for which it is to be substituted, drawings, cuts, performance and test data and any other data or information necessary for a complete evaluation.
- 5.03 If the Architect approves any proposed substitution, such approval will be set forth in an addendum.

If any Bidder is unable to procure written approval of any substitution from the Architect prior to the opening of bids, then he shall base his bid on the exact items specified.

- 5.05 Substitutions which have not been approved in writing by the Architect prior to the opening of Bids may be listed on the Bid Proposal form along with the amount the Bidder will add to or deduct from the Base Bid if such substitution is approved. Substitutions so submitted shall include any and all adjustments of that work or any other affected thereby. Substitutions listed on the Bid Proposal Form which are approved will be incorporated into the Contract with the successful Bidder.
- 5.06 Requests for any substitutions not submitted in accordance with the above instructions will be denied by the Architect.
- 5.07 The successful Bidder shall not remove or replace subcontractors listed in the Bid after the Bid opening, except upon good cause shown.

6. REJECTION OF BIDS:

- 6.01 The Bidder acknowledges the right of the Owner to reject any or all Bids and to waive any informality or irregularity in any Bid received. In addition, the Bidder recognizes the right of the Owner to reject a Bid if the Bidder failed to furnish any required Bid Guarantee, or to submit the data required by the Bidding Documents, or if the Bid is in any way incomplete or irregular; to reject the Bid of a Bidder who is not in a position to perform the contract; and to re-advertise for other or further bid proposals.
- 6.02 The Owner reserves the right to reject any or all Bids when such rejection is in the interest of the Owner, and to reject the Bid of a Bidder who is not in a position to perform the Contract, or whose list of subcontractors is improperly prepared, or not included in the Bid.

7. PERFORMANCE BOND AND PAYMENT BOND:

- 7.01 The Construction Manager shall be required to furnish a Performance Bond and Payment Bond in the amount of one-hundred percent (100%) of the Contract amount.
- 7.02 The Subcontractor shall be required to furnish a Performance Bond and Payment Bond as required in the Construction Manager Bid Documents.

8. FAMILIARITY WITH LAWS:

8.01 The Bidder shall be familiar with and shall perform work in accordance with all Federal, State and local laws, ordinances, rules, regulations and Leon County Schools Policy affecting the work. Special

attention is called to, but not limited to, 1) s. 1013.371, Florida Statutes, 2) s.1013.45(4), 3) the State Requirements for Educational Facilities, Florida Building Code and the Local Environmental Ordinances.

Ignorance of them on the part of the Bidder shall in no way relieve Bidder from responsibility of compliance with all said laws, ordinances, rules and regulations.

8.02 **LCS District Building Permit:** Upon acknowledgement of award of contract, the General contractor will apply for a Permit Application Packet online http://www.leonschools.net/Page/282. Complete this application (print it out) and submit, along with his/her contracts, **three (3)** complete sets of 100% Construction Specifications. If you need any further information please contact the Leon County School District's Facilities/Construction Department by Building Permit Official, (850)617-1837 or (850)617-1838.

9. ASSESSMENTS AND TAXES:

9.01 Although the Owner is not subject to the Florida Sales Tax, any contractor who purchases materials which will be used in the construction of a public works facility **will not** be exempt from the sales tax on those materials, The Owner is exempt from all Federal excise taxes on materials, appliances, etc., which are incorporated into and become a part of the finished improvements. The Owner is not required to pay for any municipal building permit. The Bidder shall take this information into consideration in preparing their proposal.

10. FLORIDA PRODUCTS AND LABOR

10.01 The Bidder's attention is called to Section 255.04, Florida Statutes, which requires that on public building contracts, Florida products and labor shall be used whenever price and quality are equal.

10.02 LCSB Purchasing Policies - Local Preference Part III

It shall be the policy of the Leon County School Board to afford local preference to the lowest responsive Leon County vendors and Florida vendors in accordance with the terms set forth in Board Policy 6450 Local Purchasing - https://go.boarddocs.com/fla/leon/Board.nsf/Public

11. ALTERNATES:

11.01 Alternates may be included in the specifications, and where included, the Bidder shall indicate the sum Bidder will deduct from, or add to, their Base Bid. Such Alternates may or may not be accepted.

12. BIDDER'S QUALIFICATIONS:

12.01 The Bidder and all Subcontractors for this project shall be fully qualified by experience to perform the work and install the type of equipment and systems which are included in this project. The Contractor and each major Subcontractor, including particularly mechanical, electrical and plumbing shall each have successfully completed a minimum of three projects of equal or larger scope and size.

13. LICENSE:

13.01 The Contractor and his subcontractors shall meet all requirements of the State of Florida, county and city license regulations. The Bidder shall complete the portion of the Bid Form dealing with licenses; should Bidder fail to complete the license information, the bid may be rejected.

14. DISQUALIFICATION OF BIDDER:

14.01 More than one Bid from an individual, firm, partnership, corporation or association under the same or different names will not be considered. Reasonable grounds for believing that a Bidder is interested in more than one Bid for the same work will cause the rejection of all bids in which such Bidder is believed to be interested. Bids will be rejected if there is reason to believe that collusion exists between Bidders. Bids in which the prices obviously are unbalanced may be rejected.

15. HAZARDOUS MATERIALS AND WASTE:

15.01 <u>Toxic Substances:</u> Each Contractor and their designated subcontractor shall submit a written list of all toxic substances, pursuant to Chapter 1013.49 Educational Facilities, to be used on said project. Said list must be sent to the Director of Construction (if it is a construction project) or the Director of Maintenance (if it is a maintenance project) of the School Board of Leon County at least three (3) working days prior to the commencement of construction.

Said notification shall contain the following:

- A. The name of the substance to be used;
- B. Where the substance is to be used; and
- C. When the substance will be used.

The Contractor **must** also attach to the notification a copy of a Material Safety Data Sheet for each toxic substance to be used. A copy of this list is to be kept at the site during duration of construction project.

15.02. <u>Hazardous Waste:</u> Each Contractor and his designated Subcontractor is responsible for the proper storage, handling, and disposal of hazardous wastes generated at a school site during construction or maintenance activities.

Contractors must notify the <u>Industrial Hygienist</u>, **Carl Green**, **(850-617-1777)**, of their intent to generate, store, and remove hazardous waste from a site. Any costs including, but not limited to, fines, disposal, and clean up incurred by the School District to comply with the proper storage and disposal of hazardous waste shall be withheld from Final Payment to the Contractor.

15.03 <u>Asbestos:</u> Any maintenance, construction, renovation, demolition, or other alteration of an educational facility must be cleared by the Industrial Hygienist to preclude disturbance of asbestos containing materials. Failure to obtain proper clearance will subject the Contractor to all expenses incurred in decontaminating the facility.

Architect should denote in plans any known hazardous materials on site, and if it (hazardous materials) impacts construction in any way, then it should be included in scope of work of contractor.

Neither Contractors nor their designated Subcontractors shall use or substitute building materials which contain asbestos for any component of an educational facility. Contractors will be held liable for the cost of removing any asbestos containing building materials (A.C.B.M.) and re-installation of non-asbestos building materials should subsequent sampling of materials reveal the presence of more than 1% asbestos.

No asbestos containing building materials are to be specified or substituted for specified materials.

END OF SECTION B

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SECTION C

BID FORM

Construction Manager to Insert Bid Form

END OF SECTION C

SECTION D

Construction Manager to Provide

LISTING OF SUBCONTRACTORS

(To be submitted in a separate envelope marked, "LISTING OF SUBCONTRACTORS," along with Bidder's Bid Form)

TO: School Board of Leon County, Florida 3420 West Tharpe Street, Suite 100 Tallahassee, FL 32303

ATTENTION: Director of Construction

NOTE: To be executed as part of the Bidders Proposal. If, due to Alternate bids, more than one subcontractor must be considered, Contractor shall list each and state which is to be considered for Base Bid work and which is to be considered for alternate work if a specific alternate is to be taken.

Bidder agrees that, if they are apparent low bidder or if so requested by the Owner, they will submit to the Owner a full list of subcontractors and suppliers within 24 hours of bid opening (contained in Section P) to the Contract Administrator for the School Board of Leon County, Florida, 3420 West Tharpe Street, Suite 100, Tallahassee, FL 32303.

All subcontractors and suppliers are subject to approval of the Owner. The following are the subcontractors and suppliers proposed to be used if the undersigned is awarded the contract. If you need to add a separate sheet listing the subcontractors, then do so.

Division of Work Corporate Name and Address Principal or Officer's Name

The undersigned declares that they have fully investigated each subcontractor listed and have determined to their own complete satisfaction that such contractor maintains a fully-equipped organization capable technically and financially of performing the pertinent work, and has made similar installations in a satisfactory manner.

Name of Firm		
Signed By:		
Title:		
Address/Zip:		
Telephone No. :	Contractor Certificate No.:	

END OF SECTION D

SECTION E

SUBCONTRACTOR BID BOND

Construction Manager to Insert Bond Requirements for Subcontractors

END OF SECTION E

SECTION F

ACCEPTABLE SURETY COMPANIES

GENERAL:

To be acceptable as Surety on the Performance Bond and Materials and Payment Bond, a surety company shall comply with the following provisions:

The Surety Company must be admitted to do business in the State of Florida.

The Surety Company shall have been in business and have a record of successful and continuous operations for at least five (5) years.

Provide bonds as stipulated herein and in Section 1013.47, Florida Statutes. The

Surety Company shall have at least the following minimum ratings:

REQUIRED FINANCIAL CONTRACT AMOUNT

\$1 to 1,000,000 \$1,000,000 OR MORE

REQUIRED RATING 1*

A - or Better [per 2014 S.R.E.F. 4(1)(a)(2)]
A - or Better

The Surety Company shall not expose itself to any loss of any one risk in an amount exceeding ten percent (10%) of its surplus to policy holders, provided:

Any risk or portion of any risk which shall have reinsured (in which case these minimum requirements contained herein also apply to the reinsuring carrier) in an assuming insurer authorized or approved by the insurance commissioner to do such business in this State shall be deducted in determining the limitation of risk prescribed in this Division.

In the case of a surety insurance company, there shall be deducted, in addition to the deduction for reinsurance, the amount assumed by any co-surety, the value of any surety deposited, pledged or held subject to the consent of the surety and for the protection of the surety.

END OF SECTION F

^{*}Best's Financial Rating.

CONTRACT BONDS Construction Manager to Insert Subcontractor Contract Bond Requirements

SECTION G

END OF SECTION G

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SECTION H

SUBCONTRACTORS

1.1 **DEFINITIONS**

- **1.1.1** A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term 'Subcontractor' is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term 'Subcontractor' does not include a separate Contractor or Subcontractors of a separate Contractor.
- **1.1.2** A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term 'Sub-subcontractor' is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

1.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

- 1.2.1 The Owner desires to have the best construction product at the lowest cost possible. Therefore, the Owner requires that the Contractors have a minimum of three (3) sealed bids for each division on all Owner construction projects. Before opening any sealed bids the Contractor will verify that three (3) sealed bids from pre-qualified sub-contractors have been received for each division. If less than three (3) sealed bids are received in any division, those sealed bids will be unopened and returned to for rebidding. The Contractor may only proceed with fewer than three (3) sealed bids for good cause, which shall be justified in writing by the Contractor and approved in writing by the project Architect and the Owner Director of Construction or his or her designee.
- **1.2.1.2** The Contractor shall submit to the Owner a list of Subcontractors proposed for the Work per Specifications, Section 00430 Coordination. Subcontractors listed in the bid shall not be replaced without good cause. The Contractor shall indemnify and save harmless the Owner and its agents from the claims of any Subcontractors who allege that the Contractor replaced them without first establishing good cause to justify such a replacement.
- **1.2.1.3** Notwithstanding anything contained herein to the contrary, the Owner and Architect shall maintain the right to require the Contractor to replace a Subcontractor with which the Owner or Architect has reasonable objection.
- **1.2.2** The Contractor shall not contract with a proposed person or entity to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.
- 1.2.3 If the Owner or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner or Architect has no reasonable objection. The Contract Sum shall be increased by the lesser of the following: (1) the difference between the subcontract amount proposed by the person or entity recommended by the Contractor and the subcontract amount proposed by the person or entity accepted or designated by the Owner and the Architect; (2) the amount by which the subcontract amount proposed by the person or entity accepted or designated by the Owner and the Architect exceeds the amount set forth in the Schedule of Values which is applicable to the Work

covered by such subcontract. However, no increase in the Contract Sum shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.

- **1.2.4** The Contractor shall not change a Subcontractor, person or entity previously selected if the Owner or Architect makes reasonable objections to such change.
- **1.2.5** The contractor shall provide LCS and the architect/engineer of record a copy of the signed bid tabulation sheets at the completion of the sealed bid opening.
- 1.2.6 The Contractor shall within fifteen (15) days of execution of the subcontractor's contract submit to the Owner copies of each subcontractor's contract.

1.3 SUB CONTRACTUAL RELATIONS

By appropriate agreement, written where legally required for validity, the Contractor shall require each 1.3.1 Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities which the Contractor, by these Documents, assumes toward the Owner. Each subcontract agreement shall preserve and protect the rights of the Owner and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-Subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement which may be at variance with the Contract Documents. Subcontractors shall similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

1.4 CONTINGENT ASSIGNMENT OF SUBCONTRACTS

- **1.4.1** Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner provided that:
- 1.4.1.1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Paragraph 14.2 and only for those subcontract agreements which the Owner accepts by notifying the Subcontractor in writing; and
- **1.4.1.2** assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract
- **1.4.2** If the Work in connection with a subcontract has been suspended for more than thirty (30) days after termination of the contract by the Owner pursuant to Paragraph 14.2 and the Owner chooses to accept assignment of such subcontract, the Subcontractor's compensation shall be equitably adjusted for any increase in direct costs incurred by such Subcontractor as a result of the suspension beyond the thirty (30) day period.
- **1.4.3** Each subcontract shall specifically provide that the Owner shall only be responsible to the Subcontractor for those obligations of the Contractor that accrue subsequent to the Owner's exercise of any rights under this conditional assignment

END OF SECTION H

SECTION I

LIQUATED DAMAGES

- Failure to complete the Project within the time fixed in this Agreement or Construction Documents will result in substantial injury to the Owner, and as damages arising from such failure cannot be calculated with any degree of certainty within the time fixed or within such further time, the Contractor shall pay to the Owner as Liquidated Damages for such delay, and not as a penalty, an amount stipulated in the Construction Documents. These Liquidated Damages shall be payable in addition to any expenses or costs payable by the Contractor to the Owner under the provisions of the Contract Documents and shall not exclude the recovery of damages of the Owner under the Contract Documents. The Contractor shall pay to the Owner as Liquidated Damages for such delay, and not as a penalty, Five Hundred Dollars (\$500.00) for each and every calendar day elapsing between the date fixed for Substantial Completion and the date such Substantial Completion shall have been fully accomplished. It is also hereby agreed that if after thirty (30) calendar days after Substantial Completion this Project is not fully and finally completed in accordance with the requirements of the Contract Documents, the Contractor shall pay to the Owner as Liquidated Damages, and not as a penalty, for such delay, one-fourth (1/4) of the rate previously stated. These Liquidated Damages shall be payable in addition to any expenses or costs payable by the Contractor to the Owner under the provisions of the Contract Documents and shall not exclude the recovery damages of the Owner under the Contract Documents. This provision of Liquidated Damages for delay shall in no manner affect the Owner's right to terminate the Contract. The Owner's exercise of the right to terminate shall not release the Contractor from his obligation to pay Liquidated Damages. It is further agreed that the Owner may deduct from the balance of the Contract Sum held by the Owner the Liquidated Damages stipulated herein, or such portions as said balance will cover.
- **1.1.2** The Contractor agrees to make no claim for damages for delay in the performance of the contract occasioned by any act or omission of the Owner or any of its agents or representatives, or because of any injunction which may be brought against the Owner and agrees that any such claim shall be fully compensated for by an extension of time to complete performance of the Work as provided herein.

END OF SECTION I

SECTION J

INSURANCE

INSURANCE CERTIFICATIONS - GENERAL:

CONTRACTORS INSURANCE CERTIFICATIONS:

Certifications are required for compliance with LCS General Conditions for Contractor's Liability.

11.1 CONTRACTOR'S INSURANCE

- 11.1.1 The Contractor shall, at its sole expense, maintain in effect at all times during the performance of Work, insurance coverages with limits not less than those set forth below with insurers and under forms of policies satisfactory to Owner. The Contractor shall deliver to Owner no later than ten (10) days after award of this Agreement but, in any event, prior to execution of this Agreement by Owner and prior to commencing Work on the Project, Certificates of Insurance, IDENTIFIED ON THEIR FACES AS TO PROJECT NAME AND THIS AGREEMENT NUMBER TO WHICH APPLICABLE, as evidence that policies providing such coverage and limits of insurance are in full force and effect, which Certificates shall provide that no less than thirty (30) days advance notice will be given in writing to Owner prior to cancellation, termination or material alteration of said policies or insurance. The subject Certificates and other evidence are subject to the review and approval by the Owner as to form and substance
- 11.1.2 The Contractor shall purchase and maintain, at its sole cost and expense, in a company or companies to which the Owner has no reasonable objection, insurance for protection from claims which mayarise out of or result from the Contractor's operations under this Agreement for Construction, whether such operations by itself or by any subcontractor, sub-subcontractor or materialman, or by anyone directly or indirectly employed by any of them or by anyone for whose acts any of them may be liable in the amounts and for the coverages required in this Article. Contractor shall not allow any subcontractor to commence work on the Project until such subcontractor has obtained the same insurance coverages and limits as required of Contractor herein.
- **11.1.3** All insurance shall be carried in companies satisfactory to Owner, shall name Owner as additional insured. Contractor shall not commence the Work under this Agreement until it has obtained all insurance required hereunder and true copies of policies evidencing such insurance have been submitted to and approved by Owner.
- **11.1.4** The insurance required under this Section shall include the following coverage and limits in the following categories, amounts and detail:
- **11.1.4.1** Worker's Compensation and Employers' Liability Insurance for all employees at the Project, as follows
- **11.1.4.1.1** Coverage A (Worker's Compensation) Statutory Limits
- **11.1.4.1.2** Coverage B (Employers' Liability) One Million and No/100 U.S. Dollars (\$1,000,000.00) each accident
- 11.1.4.1.2.1 Broad Form All States Endorsement
- **11.1.4.1.2.2** Voluntary Compensation Endorsement

- **11.1.4.2** Commercial General Liability Insurance, on an "occurrence" basis, including:
- **11.1.4.2.1** Bodily injury and Property Liability
- **11.1.4.2.1.1** One Million and No/100 U.S. Dollars (\$1,000,000.00) each occurrence
- **11.1.4.2.1.2** Two Million and No/100 U.S. Dollars (\$2,000,000.00) for aggregate-products and completed operations
- **11.1.4.2.1.3** Two Million and No/100 U.S. Dollars (\$2,000,000.00) general aggregate (General Aggregate Limit specified above is warranted to be unimpaired by either payment of final claims or amounts reserved for pending claims as of the date of this Agreement. Separate Primary Limits of Insurance with Two Million and No/100 U.S. Dollars (\$2,000,000.00) General Aggregate Limit [other than products completed operations] will be maintained solely for this Project
- **11.1.4.2.2** These Commercial General Liability Policies shall include the following coverages:
- **11.1.4.2.2.1** Premises Operations Liability
- **11.1.4.2.2.2** Independent Contractors Liability (to cover Contractor's liability arising out of the Work performed by its subcontractors.
- **11.1.4.2.2.3** Blanket Contractual Liability Insurance (including Completed Operations).
- 11.1.4.2.2.4 Personal Injury Liability Insurance (with employee and contractual exclusions removed).
- **11.1.4.2.2.5** Broad Form Property Damage Liability Insurance (including completed operations).
- **11.1.4.2.2.6** Railroad Protective Liability Insurance.
- **11.1.4.3** Comprehensive Automobile Liability Insurance covering allowed, hired or non-owned vehicles including the loading or unloading thereof One Million and No/100 U.S. Dollars (\$1,000,000.00) each accident
- **11.1.4.4** Umbrella Liability Insurance covering all operations of the Contractor:
- **11.1.4.4.1** One Million and No/100 U.S. Dollars (\$1,000,000.00) each occurrence.
- **11.1.4.4.2** Two Million and No/100 U.S. Dollars (\$2,000,000.00) aggregate.
- **11.1.4.4.3** List Leon County School Board as "Additional Insured" to General Liability Insurance.
- **11.1.5** <u>Indemnification Rider:</u> The Construction Manager at Risk's Liability Policy should provide a "Hold Harmless" rider to cover provisions include Contractual Liability Coverage designed to protect the Contractor for contractual liabilities assumed by the Contractor in the performance of this Contract.

11.2 PROPERTY INSURANCE

11.2.1 Unless otherwise provided, the Contractor shall purchase and maintain, in a company or companies Page 26 of 32

lawfully authorized to do business in the State of Florida, property insurance in the amount of the initial Contract sum as well as subsequent modifications thereto for the entire Work at the site on a replacement cost basis. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made as provided in Paragraph 9.10 or until no person or entity other than the Owner has an insurable interest in the Property required by this Paragraph 11.2 to be covered, whichever is earlier. This insurance shall include interests of the Owner, the Contractor, Subcontractors and Subsubcontractors in the Work.

- **11.2.1.1** Property insurance shall be on an all-risk replacement value policy form and shall insure against the perils of fire, storm, sinkhole, flood and wind damage extended coverage and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, false-work, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's services and expenses required as a result of such insured loss. The form of policy for this coverage shall be the full insurable value of the Work.
- **11.2.1.2** Unless otherwise provided in the Contract Documents, this property insurance shall cover portions of the Work stored off the site after written approval of the Owner at the value established in the approval, and also portions of the Work in transit.

11.3 DEDUCTIBLES

- **11.3.2.1** The Contractor shall pay all deductibles for all insurance coverages in Article 11, with the exception of Articles 11.4.
- **11.3.2.2** The Contractor shall be responsible for all costs which are less than the deductible amounts.
- **11.3.3** The Owner shall have power to adjust and settle a loss with insurers unless one of the parties in interest shall object in writing within five (5) days after occurrence of loss to the Owner's exercise of this power.
- **11.3.4** Partial occupancy or use in accordance with Paragraph 9.9 shall not commence until the insurance company or companies providing property insurance have consented to such partial occupancy or use by endorsement or otherwise. The Owner and the Contractor shall take reasonable steps to obtain consent of the insurance company or companies and shall, without mutual written consent, take no action with respect to partial occupancy or use that would cause cancellation, lapse or reduction of insurance.

11.4 OWNER'S LIABILITY INSURANCE

11.4.1 The Owner shall be responsible for purchasing and maintaining the Owner's usual liability insurance. Optionally, the Owner may purchase and maintain other insurance for self-protection against claims which may arise from operations under the contract. The Contractor shall not be responsible for purchasing and maintaining this optional Owner's liability insurance unless specifically required by the Contract Documents.

11.5 PERFORMANCE BOND AND PAYMENT BOND

- **11.5.1** The Contractor shall furnish bonds covering faithful performance of the Contract and payment of obligations arising thereunder as stipulated in bidding requirements or specifically required in the Contract Documents on the date of execution of the contract. The amount of each bond shall be equal to one hundred percent (100%) of the Contract sum.
- **11.5.2** The Contractor shall furnish Payment and Performance Bonds as required by Section 255.05, Florida Statutes and Section 1013.47 Florida Statues.

- **11.5.3** The form of the Performance and Payment Bonds shall be as prescribed in Section 255.05, Florida Statutes. The original bond documents shall be recorded with the Clerk of the Court in the public records of Leon County, Florida, and two (2) certified copies of the recorded documents shall be provided to the Owner.
- **11.5.4** Contractor's Bonds shall be issued by a surety licensed to conduct business in the State of Florida, and shall be rated "A-" or better by Best Insurance Rating Guide and appear in the current list of Sureties published by the U.S. Department of Treasury.
- **11.5.5** The Surety will include on the bond form the cost of the Performance and Payment Bond.

END OF SECTION J

SECTION K

CONTRACT DOCUMENTS COMPONENT PARTS:

The Contract Documents shall consist of the following component parts.

Construction Manager to Insert Copy of Draft Subcontractor Contract

END OF SECTION K

SECTION L:

SMALL BUSINESS DEVELOPMENT PROGRAM

The Construction Manager shall comply with the Owner's Small Business Development Office program requirements:

http://www.neola.com/leonfl/seach/policies/po6325.htm

Webpage: http://www.leonschools.net/Domain/242

For more information contact Rod McQueen, Director of Small Business Development Office, Leon County Schools, Tallahassee, FL, Telephone: 850-617-5912.

End of Section L.

CHILES HIGH SCHOOL WELDING LAB LEON COUNTY SCHOOLS CONSTRUCTION DOCUMENTS NOVEMBER 08, 2024

SECTION 00 07 00 - GENERAL CONDITIONS

PART 1 - STANDARD GENERAL CONDITIONS

- A. The "General Conditions of the Contract for Construction" of the American Institute of Architects, AIA Document No. A201-2017, are an integral part of the Specifications as if written in full herein.
- B. Copies of the "General Conditions" are on file and may be examined in the office of the Architect, or may be purchased from the Florida Association, The American Institute of Architects, Document Department, P.O. Box 10388, Tallahassee, Florida, 32302.
- C. The Contractor is hereby specifically directed, as a condition of the Contract, to obtain the necessary number of copies of Document A201, to acquaint himself with the Articles contained therein and to notify and appraise all Subcontractors, Suppliers and any other parties of the Contract or individuals or agencies engaged in the work as to its contents.
- D. No contractual adjustments shall be due or become exigent as a result of, or failure on the part of the Contractor to fully acquaint himself and all other parties to the contract with the conditions of Document A201.

END OF SECTION 00 07 00

CHILES HIGH SCHOOL WELDING LAB LEON COUNTY SCHOOLS CONSTRUCTION DOCUMENTS NOVEMBER 08, 2024

SECTION 00 84 20 - SAFETY REQUIREMENTS

PART 1 - GENERAL

1.1 OSHA REGULATIONS:

A. It is the responsibility of the Contractor to ensure that all OSHA regulations applying to this job are adhered to at all times.

1.2 FLORIDA RIGHT-TO KNOW LAW:

- A. Florida Statutes, as applicable to the work required to fulfill the Contractor's obligations under this contract. These requirements include, but are not necessarily limited to, the following: It is the responsibility of the Contractor to comply with the requirements of Chapter 442,
 - 1. That if the work requires the direct purchase of any item designated as a toxic substance, the manufacturer, importer, or distributer of said toxic substance shall prepare and provide the purchaser (Contractor) with a Material Safety Data Sheet (MSDS) that is current, accurate, and complete.
 - 2. That every employer (Contractor) who manufactures, produces, uses, applies, or stores toxic substances in the workplace shall in a place where notices are normally posted post a notice informing employees of their rights under this statute.
 - 3. That every employer (Contractor) who manufactures, produces, uses, or applies toxic substances in the workplace shall maintain an MSDS for each product which is present in such workplace.
 - 4. That an independent contractor (Contractor) or subcontractor working in the workplace of another employer (Owner) may request in writing and shall have the right to examine the MSDS for the toxic substances to which he/she or his/her employees, are, have been, or may be exposed.
 - a. A toxic substance is defined as any chemical substance or mixture in gaseous, liquid or solid state, if such substance appears on the "Florida Substance List" promulgated by the Department of Labor and Employment Security; is manufactured, produced, used, applied or stored in the workplace; and causes a significant risk to safety or health during, or as a proximate result of, any customary or reasonably foreseeable handling or use.

- B. Any questions regarding the above requirements should be directed to: Department of Labor and Employment Security, Bureau of Industrial Safety and Health, Toxic Waste Information Center, 2551 Executive Center Circle West, Tallahassee, FL 32301-5014, Telephone: 1-800-367-4378.
- C. The MSDS must be maintained by the user agency and must include the following information:
 - 1. The Chemical name and the common name of the toxic substance.
 - 2. The hazards or other risks in the use of the toxic substance, including:
 - a. The potential for fire, explosion, corrosion, and reactivity.
 - b. The known acute and chronic health effects of risks from exposure, including the medical conditions which are generally recognized as being aggravated by exposure to the toxic substance;
 - c. The primary routes of entry and symptoms of overexposure.
 - 3. The proper precautions, handling practices, necessary personal protective equipment, and other safety precautions in the use of or exposure to the toxic substances, including appropriate emergency treatment in case of overexposure.
 - 4. The emergency procedure for spills, fire, disposal, and first aid.
 - 5. A description in lay terms of the known specific potential health risks posed by the toxic substance intended to alert any person reading this information.
 - 6. The year and month, if available, that the information was compiled and the name, address, and emergency telephone number of the manufacturer responsible for preparing the information.

1.3 EXCAVATIONS AND TRENCHES:

A. Excavations and trenches shall comply with the Trench Safety Act, Chapter 553, part VI, Florida Statutes.

END OF SECTION 00 84 20

SECTION 01 00 00 - SUMMARY

PART 1 - GENERAL

1.1 WORK COVERED BY CONTRACT DOCUMENTS

- A. Project Identification: Project consists of a +/- 2,000 sf open-air addition to an existing 2-story classroom building.
 - 1. Project Location: Tallahassee, Florida
 - 2. Owner: Leon County Schools
- B. Architect Identification: The Construction Documents, dated 11/08/24, were prepared for Project by JRA Architects, Inc., 2551 Blairstone Pines Drive, Tallahassee, Florida.
- C. Owner's Project Coordinator: Ryan Williams
- D. The Work:
 - 1. Demolition of existing interior walks and minor items in building interior.
 - 2. Provide new slab and foundations for the installation of Owner provided and installed metal building.
 - 3. Providing power to new structure.

1.2 CONTRACT

A. Project will be constructed under single contract with a construction manager and by a separate contractor hired by Leon County Schools.

1.3 WORK SEQUENCE

A. The Work shall be conducted in one phase.

1.4 USE OF PREMISES

A. General: Contractor shall have full use of Project Site, during construction period.

1.5 WORK UNDER OTHER CONTRACTS

- A. Design and installation of metal building.
- 1.6 FUTURE WORK (Non-Applicable)
- 1.7 PRODUCTS ORDERED IN ADVANCE (Non-Applicable)
- 1.8 OWNER-FURNISHED PRODUCTS (Non-Applicable)
- 1.9 SPECIFICATION FORMATS AND CONVENTIONS
 - A. Specification Format: The Specifications are organized into Divisions and Sections using the "MasterSpec Format" numbering system.
 - 1. Section Identification: The Specifications use section numbers and titles to help cross-referencing in the Contract Documents. Sections in the Project Manual are in numeric sequence; however, the sequence is incomplete. Consult the table of contents at the beginning of the Project Manual to determine numbers and names of sections in the Contract Documents.
 - B. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 - 1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural, and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates.
 - 2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.
 - a. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

1.10 MISCELLANEOUS PROVISIONS

A. Thru-out this document the terms GC (General Contractor) and CM (Construction Manager) shall be used interchangeable and shall be used to identify the Primary contract holder for construction.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 Complete project on schedule and in accordance with Contract Documents.

END OF SECTION 01 00 00

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SECTION 01 01 50 - CONTRACTOR'S USE OF THE PREMISES

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK INCLUDED:

This Section applies to situations in which the Contractor or his representatives including, but not necessarily limited to, suppliers, subcontractors, employees, and field engineers, enter upon the Owner's property.

1.2 QUALITY ASSURANCE:

- A. Promptly upon award of the Contract, notify all pertinent personnel regarding requirements of this Section.
- B. Require that all personnel who will enter upon the University's property certify their awareness of and familiarity with the requirements of this Section.

1.3 TRANSPORTATION FACILITIES:

A. Provide adequate protection for curbs and sidewalks over which trucks and equipment pass to reach the job site.

1.4 DELIVERIES

A. <u>Deliveries/Unloading</u> - Subcontractor will provide all necessary equipment, manpower and rigging to safely and efficiently unload its materials in areas assigned or approved by contractor. Material delivery times will be coordinated with suppliers and approved by contractor so as not to impede or disrupt the work or schedule of contractor or other Subcontractors. All materials delivered to the project will be properly tagged, labeled and/or marked with the appropriate building and room number to match the designations indicated on the contract documents

1.5 SECURITY:

- A. Restrict the access of all persons entering upon the Owner's property in connection with the Work to the Access Route and to the actual site of the Work.
- B. The Contractor shall at all times guard against damage or loss to the property of the University or other vendors or contractors and shall be held responsible for replacing or repairing any such loss or damage. The University may withhold payment or make such

deductions as deemed necessary to insure reimbursement or replacement for loss or damaged property through negligence of the successful bidder or his agents. Replace any trees, shrubs, lawns, or plantings damaged by Contractor during work of this project within two (2) weeks of occurrence. Grassed areas generally have irrigation systems below grade; verify location of these systems and all underground utilities in work or staging areas prior to start of construction. Repair utilities damaged by work of this project.

- C. The Contractor shall keep the premises free from accumulation of waste material and rubbish, and shall remove from the premises all rubbish, implements, surplus materials, and temporary facilities provided by him during the course of his work and leave spaces involved broom clean.
- D. Any welding operations shall have shields provided by the Contractor as required to protect the public from such welding.

1.6 SPECIFIC POLICE DEPARTMENT REQUIREMENTS:

The following list of requirements are to be met by Construction Companies, Contractors and their employees, while they are engaged in construction projects at all Leon County Schools properties. Any Construction Site located on a Leon County School Campus comes under the jurisdiction of the Leon County Schools Safety and Security Office. Any incident requiring police service should be reported to the Leon County Schools Safety and Security Office at (850) 617-5973 immediately.

- A. All employers are prohibited from allowing employees to work on campus who have been convicted of violent crimes.
- B. Construction employers will not knowingly allow person(s) who currently have outstanding criminal warrants to work on campus.
- C. All contractors who employ Work Release persons as employees are to furnish the University Police Department with all names of such persons employed under the Work Release Program.
- D. Contractors and employees are to obey all laws, as well as the rules of the FAMU when they are on University property.
- E. Construction companies and employees are required to secure all property as much as feasible to reduce theft or damage to equipment or property.

1.7 TEMPORARY UTILITIES:

A. If any utilities are required which are not already readily available at the construction site, the Contractor shall pay for the temporary installation of such utilities and a monthly charge, as determined by usage.

END OF SECTION 01 01 50

SECTION 01 02 00 - USE OF ASBESTOS CONTAINING MATERIAL

PART 1 - GENERAL:

1. WORK COVERED BY CONTRACT DOCUMENTS

- A. No asbestos containing building materials shall be used in the construction of the project.
- B. The Contractor, if aware, shall notify the Architect/Engineer of any asbestos containing building material which has been specified for this project. No asbestos containing building material shall be knowingly installed.
- C. The contractor shall notify the Owner and Architect immediately if any asbestos containing materials are uncovered or discovered during Demolition or Construction Activities in any existing building or structures.
- D. At substantial completion, the Contractor shall sign and turn over to the Owner the following certificate. Three (3) copies shall be provided and included in the closeout documents, see Division 01 Section "Closeout Procedures".

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION 01 02 00

CONTRACTOR'S CERTIFICATE OF ASBESTOS USE

I certify that no materials containing asbestos were used or installed in the renovation or construction of the Chiles High School Welding Lab located in Tallahasse, FL	
Contractor's Signature	Date
Contractor's Name (Typed)	
Firm Name	
Address	

SECTION 01 02 70 - APPLICATIONS FOR PAYMENT

The contractor shall submit partial payment applications through the A/E. The contractor shall use AIA Documents G 702 & G 703.

END OF SECTION 01 02 70

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SECTION 01 04 00 - COORDINATION

PART 1 - GENERAL:

1. WORK INCLUDED

- A. Contractor shall supervise and direct the work competently and efficiently, devoting such attention thereto and applying such skills as may be necessary to perform the work in accordance with the Contract Documents.
- B. Contractor shall be solely responsible for all means, methods, techniques, sequences and procedures of construction, and for providing adequate safety precautions and coordinating all portions of the work under the Contract Documents.
- C. Contractor shall be responsible to see that the finished work complies accurately with the Contract Documents.

2. DESCRIPTION

- A. Coordinate scheduling, submittals, and work of the various sections of specifications to assure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items to be installed later.
 - 1. Maintain reports and records at job site:
 - a. Daily log of progress of work and other pertinent data. Maintain log accessible to Owner, Architect and his representatives.
 - b. Assemble documentation for handling of any claims or disputes which may arise.

2. Inspections and Testing:

- a. Inspect the work to assure that it is performed in accordance with the requirements of the Contract Documents.
- b. Arrange for special inspections and testing required by Sections of the specifications.

- c. Reject work which does not conform to requirements of the Contract Documents.
- B. Coordinate sequence of work to insure proposed completion dates are met.

1. Construction Schedule:

- a. Prepare detailed schedule of Contractor's operations and for all subcontractors on the project.
- b. Monitor schedules as work progresses.
 - 1. Identify potential variances between scheduled and probable completion date.
 - 2. Recommend to Architect any adjustments in schedule to meet required completion date.
 - 3. Provide monthly summary reports of each monitoring.
- c. Observe work to monitor compliance with schedule.
 - 1. Verify that labor and equipment are adequate to meet and maintain the schedule for the work.
 - 2. Verify that product deliveries are adequate to meet and maintain the schedule for the work.
 - 3. Report any non-compliance to Architect, with recommendations for remedy.
 - 4. Verify that adequate services are provided to comply with requirements for work and climatic conditions.
 - 5. Verify proper maintenance and operation of temporary facilities.
 - 6. Administer traffic and parking controls for construction workers. Construction traffic shall not interfere with surrounding traffic movement or the schedule of the FAMU.

2. Coordination of Subcontractors:

- a. Coordinate work of all subcontractors and relationship between them.
- b. Establish on-site lines of authority and communication. Schedule and conduct progress meetings among Owner and Architect representatives and subcontractors.

c. Ensure that specified cleaning is done during progress of the work and at completion of contract.

3. MEETINGS

In addition to progress meeting specified in Section 01 20 00, hold coordination meetings and preinstallation conferences with personnel and subcontractors to assure coordination of work.

4. COORDINATION OF SUBMITTALS

A. Schedule and coordinate submittals.

Administer processing of shop drawings, product data, and samples.

- B. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
 - 1. Coordinate Testing Laboratory Services:
 - a. Notify laboratory of test schedule.
 - b. Verify that required personnel are present.
 - c. Verify that specified tests are made as scheduled.
 - d. Verify compliance of the test results with specified criteria. Determine need for retesting and submit recommendations to Architect. Administer and pay for required retesting.
 - 2. Coordinate with Sub-contractors as required:
 - a. Provide temporary utilities (electric, water) required by the Subcontractors in the performance of their work.
 - b. Provide designated location where the Subcontractors may place construction debris for removal by the Contractor.
- C. Coordinate requests for changes to assure compatibility of space, of operating elements, and effect on work of other sections.
 - 1. Recommend necessary of desirable changes to Architect.
 - 2. Review subcontractor's requests for changes and substitutions. Submit recommendations to Architect.

3. Process Change Orders in accord with General Conditions and Change Order Procedures.

5. COORDINATION OF SPACE

- A. Coordinate use of Project space and sequence of installation of subcontractor work which is indicated diagrammatically on Drawings. Follow routings shown for pipes, ducts, and conduits as closely as practicable, with due allowance for available physical space; make runs parallel with lines of building. Utilize space efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- B. In finished areas, except as otherwise shown, conceal pipes, ducts, and wiring in the construction. Coordinate locations of fixtures and outlets with finish elements.

6. INTERPRETATION OF CONTRACT DOCUMENTS

- A. Consult with Architect to obtain interpretation or clarifications for any portions of the contract documents which are unclear or ambiguous. Transmit all requests for interpretation in writing.
- B. Assist in the answering of any questions which may arise.
- C. Transmit written interpretations to Sub Contractors, Suppliers and Others who's work may be affected by the clarification.
- D. Interpretations shall be based on the Architect review of the Contract Documents. In case of conflicting data, assumption shall be made that the item of greater quality, cost of quantity was bid.

7. START-UP

- A. Direct the check-out of utilities, operational systems, and equipment.
- B. Assist in initial start-up and testing.
- C. Record dates of the start of the operations of systems and equipment.

8. COORDINATION OF CONTRACT CLOSEOUT

- A. Substantial Completion:
 - 1. Coordinate completion and cleanup of work of separate sections in preparation for Substantial Completion.

- 2. When Work is ready for Substantially Complete, prepare for the Architect a list of incomplete or unsatisfactory items. See Prerequisites to Substantial Completion.
- 3. Secure and transmit to Architect required Substantial Completion submittals.

B. Final Completion:

- 1. When Work is ready for Final Completion:
 - a. Submit written notice to Architect that the work is ready for final inspection. See Prerequisites to Final Completion.
 - b. Secure and transmit to Architect required closeout submittals.
- C. After Owner occupancy of premises, coordinate access to site by various sections for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.
- D. Assemble and coordinate closeout submittals specified.

PART 2 - PRODUCTS:

Not used.

PART 3 - EXECUTION:

Not used.

END OF SECTION 01 04 00

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SECTION 01 06 00 - REGULATORY REQUIREMENTS

PART 1 - GENERAL

1.1 CONTRACTOR

- A. It is the Contractor's responsibility to apply for, and obtain, the building permit prior to commencing construction.
- B. To initiate the application process, the Contractor shall submit the permit application along with two sets of construction documents (obtained from the Design Professional).
- C. A building permit will be issued after the application and associated submittals have been reviewed and approved by Leon County Building Department.
- D. The Contractor shall meet with the Building Code Administrator to develop a building inspection plan. The Contractor shall be responsible for scheduling all required inspections in accordance with the plan developed. Subsequent construction may not proceed until the previous phase of construction (requiring inspection) has been inspected and approved. When the Contractor believes the project is complete, the Contractor shall request that a Certificate of Completion or Certificate of Occupancy be issued.

1.2 DESIGN PROFESSIONAL

- A. The Facilities Planning and Construction Department's Design Professional, shall prepare construction documents in accordance with the requirements of the appropriate adopted codes and standards and deliver them to the Facilities Planning and Construction Department at various prescribed stages of design completion for University review. The Design Professional will also provide the Contractor with a sufficient number of construction documents as necessary to obtain the building permit.
- B. Leon County Schools will review the construction documents for code compliance at the prescribed stages of review and make comments as necessary.

END OF SECTION 01 06 00

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SECTION 01 09 00 – DEFINITIONS, STANDARDS AND REFERENCES

PART 1 - DEFINITIONS

1.1 GENERAL:

- A. Except as specifically defined otherwise, the following definitions supplement definitions of the Contract, General Conditions, Supplementary Conditions and other general contract documents, and apply generally to the work.
- B. Indicated: Shown on drawings by notes, graphics or schedules, or written into other portions of Contract Documents. Terms such as "shown", "noted", "scheduled" and "specified" have same meaning as "indicated", and are used to assist the reader in locating particular information.
- C. General: Basic Contract definitions are included in the Conditions of the Contract.
- D. "Approved": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.
- E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. "Installer": Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
 - a. Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to tradespeople of the corresponding generic name.
- G. "Experienced": When used with an entity, "experienced" means having successfully completed a minimum of five previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

- H. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.
- I. Directed, Requested, Reviewed, etc.: These terms imply "by the Architect/Engineer", unless otherwise indicated.
- J. "Reviewed by Architect/Engineer" in no case releases Contractor from responsibility to fulfill requirements of Contract Documents.
- K. Space available to Contractor at location of project, either exclusively or to be shared with separate contractors, for performance of the work.
- L. Furnish: Supply and deliver to project site, ready for unloading, unpacking, assembly, installation, and similar subsequent requirements.
- M. Install: Operations at project site, including unloading, unpacking, assembly, erection, placing, anchoring, applying, working dimension, finishing, curing, protecting, cleaning, and similar requirements.
- N. Provide: Furnish and install, complete and ready for intended use.
- O. Installer: Entity (firm or person) engaged to install work, by Contractor, Subcontractor or Sub subcontractor. Installers are required to be skilled in work they are engaged to install.
- P. Specification Text Format: Underscoring facilitates scan reading, no other meaning. Imperative language is directed at Contractor, unless otherwise noted.
- Q. Overlapping/Conflicting Requirements: Most stringent (generally) requirement written directly into the Contract Documents is intended and shall be enforced. Refer uncertainties to the Architect/Engineer for a decision before proceeding.
 - a. Where optional requirements are specified in parallel manner, option is indended to be Contractor's unless otherwise indicated.
- R. Minimum Requirements: Indicated requirements are for a specific minimum acceptable level of quality/quantity, as recognized in the industry. Actual work must comply (within specified tolerances), or may exceed minimums within reasonable limits. Refer uncertainties to Architect/Engineer before proceeding.
- S. Abbreviations, Plural Words: Abbreviations, where not defined in Contract Documents, shall be interpreted to mean the normal construction industry terminology, determined by recognized grammatical rules, by the Architect/Engineer. Plural words shall be interpreted as singular and singular

- words shall be interpreted as plural where applicable for context of Contract Documents.
- T. Testing Laboratory: An independent entity engaged for the project to provide inspections, tests, interpretations, reports and similar services.

PART 2 - STANDARDS AND REGULATIONS

2.1 INDUSTRY STANDARDS

- A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
- B. Publication Dates: Comply with standards in effect as of date of the Contract Documents, unless otherwise indicated.
- C. Conflicting Requirements: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Architect for a decision before proceeding.
 - 1. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.
- D. Copies of Standards: Each entity engaged in construction on Project must be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
 - 1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source and make them available on request.
 - E. Abbreviations and Acronyms for Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations as used by the construction industry.

END OF SECTION 01 09 00

SECTION 01 20 00 - PROJECT MEETINGS

PART 1 - GENERAL:

1.1 REQUIREMENTS INCLUDED:

- A. Contractor shall attend a Pre-Construction meeting administered by the Architect/Engineer.
- B. Contractor shall schedule and administer monthly progress meetings and specially called meetings throughout progress of work.
- C. Representative of Contractors, Subcontractors and suppliers attending meetings shall be qualified and authorized to act on behalf of the entity each represents.

1.2 PRECONSTRUCTION MEETING:

- A. Location: A site approved by owner.
- B. Attendance:
 - 1. Owner's Project Coordinator.
 - 2. Architect/Engineer and/or his professional consultants.
 - 3. Contractor's Superintendent.
 - 4. Major Subcontractors.
 - 5. Others as Appropriate.

C. Suggested Agenda:

- 1. Distribution and discussion of:
 - a. List of major subcontractors and suppliers.
 - b. Projected Construction Schedules.

- 2. Critical work sequencing.
- 3. Major equipment deliveries and priorities.
- 4. Project Coordination:

Designation of responsible personnel.

- 5. Procedures and processing of:
 - a. Field decisions.
 - b. Proposal requests.
 - c. Submittals.
 - d. Change Orders.
 - e. Applications for Payment.
- 6. Adequacy of distribution of Contract Documents.
- 7. Procedures for maintaining Record Documents.
- 8. Use of Premises:
 - a. Office, work and storage areas.
 - b. Owner's requirements.
- 9. Construction facilities, controls and construction aids.
- 10. Temporary Utilities.
- 11. Safety and first-aid procedures.
- 12. Security procedures.
- 13. Housekeeping procedures.

1.3 PROGRESS MEETINGS:

- A. Contractor shall schedule regular periodic meetings one a month (or more often if deemed appropriate by the Architect and/or Owner.) The Contractor shall be responsible for the following:
 - 1. Prepare agenda for meetings.
 - 2. Distribute written agenda of each meeting four days in advance of meeting date.
 - 3. Make physical arrangements for meetings.
 - 4. Preside at meetings.
 - 5. Record the minutes; include significant proceedings and decisions.
 - 6. Reproduce and distribute copies of minutes within three days after each meeting.
 - a. To participants in the meeting.
 - b. To parties affected by decisions made at the meetings.
 - c. Furnish three copies of minutes to Architect/Engineer.

B. Attendance:

- 1. Owner and Architect/Engineers and his professional consultants as needed.
- 2. Subcontractors as appropriate to the agenda.
- 3. Suppliers as appropriate to the agenda.
- 4. Others.

C. Suggested Agenda:

- 1. Review, approval of minutes of previous meetings.
- 2. Review of work progress since previous meetings.
- 3. Field observations, problems, conflicts.
- 4. Problems which impeded Construction Schedule.

- 5. Review of off-site fabrication, delivery schedule.
- 6. Corrective measures and procedures to regain projected schedule.
- 7. Revisions to Construction Schedule.
- 8. Progress, schedule, during succeeding work period.
- 9. Coordination of schedules.
- 10. Review submittal schedules; expedite as required.
- 11. Maintenance of quality standards.
- 12. Pending changes and substitutions.
- 13. Review proposed changes for:
 - a. Effect on Construction Schedule and on completion date.
 - b. Effect on other contracts of the Project.
- 14. Review draft of payment application.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

Not used.

END OF SECTION 01 20 00

SECTION 01 31 00 - CONSTRUCTION SCHEDULE

PART 1 - GENERAL

- 1.1 The Construction Schedule required under the General Conditions shall be a CPM (Critical Path Method) Schedule as described herein.
 - A. The CPM Schedule will consist of a time-scaled critical path graphic arrow network showing all contract activities (including shop drawings, off-site fabrication, start-up, inspections, etc.) required for completion of the Work. Work headings shall generally correspond with the headings listed in the Contractor's Schedule of Values. The schedule shall be organized by Building or major element of the Work, ie, Wastewater Treatment System, showing the planned start date, duration and completion dates for each construction activity, and the relationships between activities, for each Building or major element of the Project. The schedule shall be a complete delineation of all activities and represent a realistic approach to the Work.
 - B. The planning, scheduling, management, and execution of the Work is the sole responsibility of the Contractor. The Construction Schedule requirement is established to allow the Architect and Owner to review Contractor's planning, scheduling, management and execution of the work; to assist the Architect and Owner in evaluating work progress and make progress payments; and to coordinate the activities of the Owner with those of the Contractor.

1.2 INITIAL CONSTRUCTION SCHEDULE SUBMITTAL

- A. The initial Construction Schedule shall be submitted for review in accordance with the General and Supplementary General Conditions. Any necessary revisions shall be incorporated into the schedule prior to acceptance by the Architect.
- B. No progress payments for work performed shall be made until the Construction Schedule is submitted and accepted.

1.3 MONTHLY UPDATED CONSTRUCTION SCHEDULES

A. An Updated Construction Schedule shall be submitted each month, at the Monthly Progress Meeting, until Final Completion of the Project.

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- B. The Monthly Updated Construction Schedule shall maintain, unaltered the "Original" Construction Schedule, except that any Change Orders adjusting the Contract Time shall be appropriately incorporated into the "Original" Construction Schedule. The Monthly Updated Construction Schedule shall differentiate the "Original" Construction Schedule from the Monthly Progress Schedule.
- C. The Monthly Progress Schedules shall differentiate between "planned" and "actual" activities and shall be updated to include:
 - 1. Actual completion dates for activities completed during the report period, and actual start dates for activities commenced during the report period.
 - 2. Estimated start dates for activities scheduled to commence during the following report period.
 - 3. Any required additional workforce or extended workdays or workweeks required to maintain or accelerate durations of any activities required to maintain the Construction Schedule.
 - 3. Changes in the duration of any activity and minor logic changes.
 - 4. Added activities not already included in the currently accepted Construction Schedule.
 - 5. Major changes in scope, incorporation of Change Orders, and other identifiable changes.

1.4 TIME EXTENSIONS

- A. Change order requests that include proposed extensions to the overall contract duration shall be substantiated by graphical and report-based illustrations of the effect of the change upon the project's Critical Path.
- B. Claims for weather-based delays shall include substantiation of the actual and "normal" weather for the period and location in question, along with documentation that links those period(s) with actual adverse impact *on* Critical Path activities in the schedule.

1.5 DISTRIBUTION

- A. Distribute copies of the Initial and Monthly Updated Construction Schedules to:
 - 1. Architect

- 2. Job Site
- 3. Subcontractors
- 4. Other concerned parties
- B. Instruct recipients to report promptly to the Contractor, in writing, any problems anticipated by the projections shown in the schedules.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

Not used.

END OF SECTION 01 31 00

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SECTION 01 34 00 - SUBMITTALS

PART 1 – GENERAL

1.1 REQUIREMENTS INCLUDED

- A. Submit Shop Drawings, Product Data and Samples required by Contract Documents.
- B. Submittals may include, but are not limited to the following:
 - 1. All items listed in each section of specifications.
 - 2. Submittals required to be submitted to Owner when submitted to Architect/Engineer

1.2 RELATED REQUIREMENTS:

- A. Definitions and Additional Responsibilities of Parties: General Conditions of the Contract.
- B. Designate in the Construction Schedule, Application for Payments, or in a separate coordinated schedule, the dates for submission of Shop Drawings, Product Data and Samples.
- C. Contractual Conditions
- D. Note requirements for mechanical and electrical submittals in Division 15 and 16 specifications.
- E. As required by Florida Statute 553.842 and Florida Administrative Code 9B-72, provide the information and approval numbers on the building components listed on the Florida Product Approval Specification Sheet (form is attached at the end of this section) if they will be utilized on this construction project. Statewide approved products are listed online at www.floridabuilding.org.

1.3 SHOP DRAWINGS

- A. Drawings shall be presented in a clear and thorough manner.
- B. Details shall be identified by reference to sheet and detail, schedule or room numbers shown on Contract Drawings.

- C. Shall be <u>original drawings</u>, prepared by Contractor, Subcontractor, Supplier or Distributor, which illustrate some portion of the work, showing fabrication, layout, setting or erection details. Duplication of contract Documents for any submittal shall not be acceptable.
 - 1. Prepared by a qualified detailer.
 - 2. Identify details by reference to sheet and detail numbers shown on Contract Drawings.
- D. Shop Drawing transmittal letter shall be submitted separate for each required section as provided at the end of this section. Submittal shall note any and all deviations from Contract Documents.

1.4 PRODUCT DATA:

A. Preparation

- 1. Clearly mark each copy to identify pertinent products or models.
- 2. Show performance characteristics and capacities.
- 3. Show dimensions and clearances required.
- 4. Show wiring or piping diagrams and controls.
- 5. Note deviations from Contract Documents.
- B. Manufacturer's standard schematic drawings and diagrams:
 - 1. Modify drawings and diagrams to delete information which is not applicable to the work.
 - 2. Supplement standard information to provide information specifically applicable to the work.
 - 3. Note deviations from Contract Documents.

1.5 SAMPLES:

- A. Office samples shall be of sufficient size and quantity to clearly illustrate materials, equipment or workmanship, and to establish standards by which completed work is to be judged.
 - 1. Functional characteristics of the product, with integrally related parts and attachment devices.
 - 2. Full range of color, texture and pattern.
 - 3. After review, samples shall be used for comparison in construction of project.
 - 4. Note deviations from Contract Documents.
- B. Field samples and mock-ups.
 - 1. Erect at project site at location acceptable to Architect/Engineer.
 - 2. Construct each sample or mock-up complete, including work of all trades required in finished work.
 - 3. Note deviations from Contract Documents.

1.6 CONTRACTOR RESPONSIBILITIES:

- A. Review Shop Drawings, Product Data and Samples prior to submission.
- B. Check and stamp submittal with his approval.
- C. Determine and verify:
 - 1. Field measurements.
 - 2. Field construction criteria.
 - 3. Catalog numbers and similar data.
 - 4. Conformance with specifications.
 - 5. Note deviations from Contract Documents.
- D. Coordinate each submittal with requirements of the work and of the Contract Documents.
- E. Notify the Architect/Engineer in writing, at time of submission, of his review and approval of submittal and of any deviations in the submittals from requirements of the Contract Documents.
 - 1. Contractor's responsibility for deviations in submittals from requirements of Contract Documents is not relieved by Architects/Engineers review of submittals, unless specific deviations are called to the attention of the Architect/Engineer in writing and the Architect/Engineer gives written acceptance of specific deviations.
 - 2. Contractor's responsibility for errors and omissions in submittals is not relieved by Architect's/Engineer's review of submittals.
- F. Begin no fabrication or work which requires submittals until return of submittals with Architect/Engineer review.
- G. Submittals not reviewed and approved by the Construction Manager will be rejected.

1.7 ELECTRONIC COPIES OF FILES

- A. The General Contractor or Construction Manager can purchase from the architect a single electronic CADD file copy of the construction documents. The cost to the contractor is \$1,500.00.
- B. All request for CADD files will be fulfilled by the General Contractor. No request will be made to the Architect.
- C. If the General contractor chooses not to purchase the entire set of files from the Architect, no CADD files will be released to any Sub-Contractor or Supplier.
- D. Any purchased drawings or documents may be subject to change without notice. Responsibility for the accuracy of current conditions and/or digital transfers is solely that of the user. These conditions of use shall be supplied to all users of this data. The signed &

sealed documents take precedence over magnetic or electronically stored medium. JRA Architects, Inc. or it's Consultants makes no warranties, express or implied, concerning the accuracy of the information contained in any documents transmitted or reviewed by computer or other electronic means.

1.8 SUBMISSION REQUIREMENTS

- A. Within 21 days of Notice-to-Proceed, furnish a Schedule of Submittals, coordinated with the Construction Schedule, listing all submittals to be made with the following information provided:
 - 1. Identification of Product, Item or Trade.
 - 2. Specification Section reference.
 - 3. Date scheduled to be submitted.
 - 4. Priority of importance of submittal.
- B. Make submittals promptly in accordance with accepted schedule, and in such sequence as to cause no delay in the work or in the work of any other Contractor. Use transmittal format included herein.
- C. Number of submittals required:
 - 1. Shop Drawings: Submit five (5) blueline prints of shop Drawing, four blueline will be returned to the Contractor.
 - 2. Product Data: Submit four (4) copies of Product data of which three (3) shall be returned to the Contractor.
 - 3. Samples: Submit the number stated in each specification section. Provide five (5) samples if not indicated, of which two (2) shall be returned to Contractor.
 - 4. In-lieu of hard copies required above, the contractor may use an outline based construction management program by which electronic submittals may be submitted to and approved by the Architect or Engineer.

D. Submittals shall contain:

- 1. The date of submission and the dates of any previous submissions.
- 2. The project title and number.
- 3. Contract identification.
- 4. The names of Contractor, Supplier and Manufacturer.
- 5. Identification of the product, with the specification section number.
- 6. Field dimensions, clearly identified as such.
- 7. Relation to adjacent or critical features of the work or materials.
- 8. Identification of revisions on resubmittals.
- 9. Applicable Standards (such as ASTM or Federal Specification numbers).
- 10. An 8 inch x 3 inch blank space for contractor and Architect/Engineer or provide review status cover page.
- 11. Contractor's stamp, initialed or signed, certifying to review of submittal, verification of products, field measurements and field construction criteria, and coordination of

the information within the submittal with requirements of the work and of Contract Documents.

E. Submittal requirements for Engineering Seal must be prepared by a Florida Registered Professional Engineer

1.9 RE-SUBMISSION REQUIREMENTS

- A. Make any corrections or changes in the submittals required by the Architect/Engineer and resubmit until accepted.
- B. Shop drawings and product data:
 - 1. Revise initial drawings of data, and resubmit as specified for the initial submittal.
 - 2. Cloud any change which has been made other than those required by the Architect/Engineer.
 - 3. Indicate shop drawing is being resubmitted, use Architect's/Engineer's shop drawing identification number if provided.
- C. Samples: Submit new samples if requested by Architect.

1.10 DISTRIBUTION

- A. Distribute reproductions of Shop Drawings and copies of Product Data which carry the Architect/Engineer stamp of acceptance to:
 - 1. Job site file.
 - 2. Subcontractors.
 - 3. Supplier or Fabricator.
 - 4. Project close-out documents.

1.11 ARCHITECT/ENGINEER DUTIES

- A. Review submittals; allow Architect/Engineer a period of 21 calendar days for review and return of Shop drawings.
- B. Affix stamp and initials or signature and indicate requirements for resubmittal or approval of submittal.
- C. Return submittals to Contractor for distribution or for re-submission.

1.12 COLOR SUBMITTALS

A. <u>All Submittals</u> which require Architects approval of color shall be submitted within 60 days of notice to proceed.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

- 3.1 Shop Drawing Submittals shall be reviewed in accord with the following:
 - A. Review by Architect/Engineer of Record of submittals is for general conformance with the design concept as presented by the Contract Documents. No detailed check of quantities or dimensions will be made.
 - B. The General Contractor is responsible for assuring that all submittals comply with the latest project plans, specifications, governing codes and regulations and is solely responsible for confirming all quantities, dimensions, fabrication techniques and coordinating work with all trades.
 - C. Shop drawings are to be submitted in a timely manner allowing adequate time for processing.
 - D. Submit shop drawings for specific components, such as columns, footings, etc., in their entirely. Shop drawings for similar floors shall be submitted in the same package.
 - E. All submittals are to be accompanied by a letter of transmittal. Do not combine different submittals on the same transmittal.
 - F. All shop drawings must bear evidence of the Contractor's approval prior to submitting to the Architect/Engineer of Record.
 - G. Submit quantities per Part 1: 8.C unless otherwise requested.
 - H. All changes and additions made on re-submittals must be clearly flagged an noted. The purpose of the re-submittals must be clearly noted on the letter of transmittal. Architect/Engineer of Record review is limited to those items causing the resubmission.
 - I. For criteria applicable to shop drawings requiring engineering input by a specialty engineer, see below.
 - J. Shop drawings not meeting the above criteria or submitted after fabrication will not be reviewed.
 - K. The Contract Documents are not to be reproduced for use as shop drawings.
- 3.2 Shop Drawings requiring input by Specialty Engineer shall be reviewed in accord with the following:
 - A. Specialty Engineer:

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- 1. Definition A Florida registered professional engineer, not the structural engineer of record, who specializes in and who undertakes the design of structural components or structural systems included in a specific submittal prepared for this project.
- 2. Shall be:
 - a. An employee or officer of a fabricator.
 - b. An employee or officer of an entity supplying components to a fabricator.
 - c. An independent consultant retained by the fabricator of his supplier
- B. Shop Drawings requiring a specialty engineer are fabrication and erection drawings prepared for, but not limited to the following items:
 - 1. Precast concrete components, formwork and falsework shoring and reshoring.
- C. Submittals shall clearly identify the specific project, applicable codes, list the design criteria, and shall show all details and plans necessary for proper fabrication and installation. Calculations and shop drawings shall identify specific product utilized. Generic products will not be accepted.
- D. Shop drawings and calculations must be prepared under the direct supervision and control of the specialty engineer.
- E. Shop drawings and calculations require the impressed seal, date and signature of the specialty engineer. Computer printouts are an acceptable substitute for manual computations provided they are accompanied by sufficient descriptive information to permit their proper evaluation. Such descriptive information shall bear the impressed seal and signature of the specialty engineer as an indication that he has accepted responsibility for the results. Sepias do not require signature and seal. Architect/Engineer of Record will retain one signed and sealed blueline print for record.
- F. Drawings prepared solely to serve as a guide for fabrication and installation (such as reinforcing steel shop drawings or structural steel erection drawings) and requiring no engineering input do not require the seal of a specialty engineer.
- G. Catalog information on standard products does not required the seal of a specialty engineer.
- H. Review by the Architect and Structural Engineer of record of submittals is limited to verifying the following:
 - 1. That the specified structural submittals have been furnished.
 - 2. That the structural submittals have been signed and sealed by the specialty engineer.
 - 3. That the specialty engineer has understood the design intent and has used the specified structural criteria. (No detailed check of calculations will be made.)
 - 4. That the configuration set forth in the structural submittals is consistent with the contract documents. (No detailed check of dimensions or quantities will be made.)
- I. List of drawings shall be prepared and maintained for all shop drawings requiring participation of a specialty engineer. The list shall contain project name, name of General Contractor, name of subcontractor, name of specialty engineer, drawings number, drawing

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title and latest revision number and date. For partial submittals, the list shall contain all anticipated drawing numbers and titles required to complete the contract. The General Contractor is responsible for submitting the latest updated list of drawings with each submittal.

- J. Upon the completion of the submittal process for the project, the General Contractor shall submit to the Architect/Engineer of record a notarized affidavit stating the following:
 - 1. "This is to certify that the undersigned as General Contractor for the referenced project has furnished to and has received acceptance from the Architect/Engineer of Record for all structural submittals requiring participation of a specialty engineer. These submittals were prepared for work performed by the following subcontractors: (name of subcontractors)..." The final lists of shop drawings shall be attached to the affidavit.
- K. Submittals not meeting the above criteria will not be reviewed.
- L. Submit quantities per Part 1: 8.C, unless otherwise requested.
- M. Partial submittals will be returned to contractor and will not be reviewed.

END OF SECTION 01 34 00

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PRODUCT APPROVAL SPECIFICATION SHEET

Location:	Project Name:

As required by Florida Statute 553.842 and Florida Administrative Code 9N-3.006, please provide the information and the product approval number(s) on the building components listed below if they will be utilized on a construction project for which you are applying for a building permit. We recommend you contact your local product supplier should you not know the product approval number for any of the applicable listed products. More information about statewide product approval can be obtained at www.floridabuilding.org.

can be obtained at www.floridabuilding			
Category/Subcategory	Manufacturer	Product Description	Approval Number(s)
A. EXTERIOR DOORS			
1. Swinging			
2. Sliding			
3. Sectional			
4. Roll Up			
5. Automatic			
6. Other			
B. WINDOWS			
1. Single Hung			
2. Horizontal Slider			
3. Casement			
4. Double Hung			
5. Fixed			
6. Awning			
7. Pass-through			
8. Projected			
9. Mullion			
10. Wind Breaker			
11. Dual Action			
12. Other			
C. PANEL WALL			
1. Siding			
2. Soffits			
3. EIFS			
4. Storefronts			
5. Curtain Walls			
6. Wall Louver			
7. Glass Block			
8. Membrane			
9. Greenhouse			
10. Other			
D. ROOFING PRODUCTS			
1. Asphalt Shingles			
2. Underlayments			
3. Roofing Fasteners			
4. Non-structural Metal Roof			
5. Built-up Roofing			
6. Modified Bitumen			
7. Single Ply Roofing System			
8. Roofing Tiles			
9. Roofing Insulation			
10. Waterproofing			
11. Wood Shingles/Shakes			
12. Roofing Slate			
13. Liquid Applied Roof System			
15. Roof Tile Adhesive			
16. Spray Applied Polyurethane Roof			
17. Other			

B - :	
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Category/Subcategory	Manufacturer	Product Description	Approval Number(s)	
E. SHUTTERS				
1. Accordion				
2. Bahama				
3. Storm Panels				
4. Colonial				
5. Roll-up				
6. Equipment				
7. Other				
F. SKYLIGHTS				
1. Skylight				
2. Other				
G. STRUCTURAL COMPONENTS				
1. Wood Connector/Anchor				
2. Truss Plates				
3. Engineered Lumber				
4. Railing				
5. Coolers – Freezers				
6. Concrete Admixtures				
7. Material				
8. Insulation Forms				
9. Plastics				
10. Deck – Roof				
11. Wall				
12. Sheds				
13. Other				
H. NEW EXTERIOR ENVELOPE	PRODUCTS			
1.	RODUCIS			
2.				
3.				
3.				
The products listed below did not demothese products, the following informati 2) the performance characteristics whi manufacturer's installation requirement	on must be available to the in ch the product was tested and ts.	spector on the job site: 1) c certified to comply with; a	opy of the product approval; nd 3) copy of the applicable	
I understand these products may have t	o be removed if approval cann	ot be demonstrated during in	nspection.	
Contractor or Contractor's Authorized	Agent Signature Prin	at Name	Date	
Location		Permit # (FOR STAFF USE ONLY)		



CAD/Electronic File Transfer Agreement

Project Name: PROJECT NAME

At your request, JRA Architects (JRA) will provide electronic files for your convenience and use subject to the following terms and conditions:

JRA electronic files are compatible with AutoCAD. JRA makes no representation as to the compatibility of these files with your hardware or your software beyond the specified release of the referenced specifications.

Data contained on these electronic files are part of JRA's instruments of service and shall not be used by you or anyone else receiving this data through or from you for any purpose other than as a convenience in the preparation for construction or as a reference for the referenced project. Any other use or reuse by you or by others will be at your sole risk and without liability or legal exposure to JRA. You agree to make no claim and hereby waive, to the fullest extent permitted by law, any claim or cause of action of any nature against us, our officers, directors, employees, agents, or sub consultants that may arise out of or in connection with your use of the electronic files.

Furthermore, you shall, to the fullest extent permitted by law, indemnify and hold JRA harmless against all damages, liabilities, or costs, including reasonable attorney's fees and defense costs, arising out of, or resulting from your use of these electronic files.

These electronic files are not construction documents. Differences may exist between these electronic files and corresponding hard-copy construction documents. JRA makes no representation regarding the accuracy or completeness of the electronic files you receive. If a conflict arises between the signed or sealed construction documents and the electronic files, the signed or sealed construction documents shall govern. You are responsible for determining if any conflict exists. The use of these electronic files by any contractor having received them does not relieve them of the duty to fully comply with the contract documents, including and without limitation, the need to check, confirm and coordinate all dimensions and details, take field measurements, verify field conditions and coordinate the work with that of other contractors for the project.

Because information presented on the electronic files can be modified, unintentionally or otherwise, JRA reserves the right to remove all indicia of ownership and/or involvement from each electronic display.

Under no circumstances shall delivery of the electronic files for use by you be deemed a sale by JRA, and JRA makes no warranties, either express or implied, of merchantability and fitness for any particular purpose. In no event, shall JRA be liable for any loss of profit or any consequential damages as a result of your use or reuse of these electronic files.

Re-use of these electronic files in part or whole on a project other than that listed above is strictly forbidden and shall be considered theft unless approval has been granted in writing.

Signature (sign) Date		
Name of Company		

SUBMITTAL TRANSMITTAL

JRA PROJECT NAME:		JRA PROJECT #:	
CONTRACTOR/CM:			
NTACT NAME: CONTACT NO.:			
SUBMITTAL NO.:	REV. NO.:	DATE:	
SPEC NO: SPEC NAME:			
SUBMITTAL TYPE:			
PREPARED BY:	CONTACT NAME:		
CONTACT NO.: OFFICE	CELL		
CONTRACTOR APPROVAL STAMP	ARC	HITECT / ENGINEER APPROVAL STAMP	
	- II		
CONTRACTOR REMARKS:		ARCHITECT / ENGINEER REMARKS:	

SECTION 01 51 00 - TEMPORARY & PERMANENT UTILITY CONNECTIONS

PART 1 - GENERAL

- 1.1 REQUIREMENTS: Furnish, install and maintain temporary utilities required for construction, remove on completion of work. These may include, but are not limited to, the following:
 - A. Temporary lighting and power for all construction activities, including extension of temporary electrical service into building.
 - B. Temporary heat and ventilation.
 - C. Temporary water for construction, including all distribution systems.
 - D. Temporary sanitary facilities for construction personnel.
 - E. Temporary fire protection system as required by local authorities.
 - F. Provide and make available for use by Subcontractors temporary light, power and water required in the performance of their Work as part of the Work of this Section.

1.2 REQUIREMENTS OF REGULATORY AGENCIES:

- A. Comply with National Electric Code.
- B. Comply with Federal, State and local codes and regulations and with utility company requirements.

PART 2 - PRODUCTS

2.1 MATERIALS

A. May be new or used, but must be adequate in capacity for the required usage, must not create unsafe conditions and must not violate requirements of applicable codes and standards.

2.2 TEMPORARY ELECTRICITY AND LIGHTING

A. Arrange with utility company, provide service required for power and lighting, and pay all costs for service and for power used.

- 1. Provide required disconnects, grounding, and all other devices and appurtenances required by all applicable agencies and codes, and remove same upon completion of work.
- 2. Provide generator, if required, to obtain power required which is greater than temporary services furnished.
- 3. Provide all required transformers, fused main switches, distribution boards, panels, but-outs, wiring and grounding, sockets, lamps, fuses and motor connections to suit all load and safety requirements.
- B. Install circuit and branch wiring, with are distribution boxes located so that power and lighting is available throughout the construction by the use of construction type power cords.
- C. Provide adequate artificial lighting for all areas of work when natural light is not adequate for Work and for areas accessible to the public.
- D. Provide and maintain temporary feeders to permanent mechanical equipment requiring service, including ventilation, until permanent feeds are connected and energized.
- E. After permanent power has been switched over, remove those portions of temporary light and power installation which are the responsibility of the Contractor.
- F. Provide temporary site security lighting to maintain 3 fc measured minimum light level.

2.3 TEMPORARY WATER:

- A. The Contractor shall provide water tap for construction purposes and pay all costs for installation, maintenance and removal. The Contractor shall provide a meter.
- B. Install branch piping with taps located so that water is available throughout the construction. Protect piping and fittings against freezing.

2.4 TEMPORARY SANITARY FACILITIES:

- A. Provide sanitary facilities in compliance with laws and regulations.
 - 1. Since no services will be available for temporary toilets, provide, maintain and remove when directed, portable chemical toilets for construction personnel.
 - 2. Provide quantity and location of temporary toilets as required by authorities having jurisdiction, including, but not limited to OSHA, and subject to further

directions by the Engineer. Temporary toilets shall be located as accepted by the Owner and Architect/Engineer.

- B. Service, clean and maintain facilities and enclosures.
- C. Field office trailer toilet may be provided with holding tank to be maintained and serviced by the Contractor.

2.5 TEMPORARY FIRE PROTECTION SYSTEM

A. Provide temporary fire protection systems for the project in accord with NFPA Standard #241.

PART 3 - EXECUTION

3.1 GENERAL:

- A. Comply with applicable requirements specified within other divisions of the specifications.
- B. Maintain and operate systems to assure continuous service.
- C. Modify and extend systems as work progress requires.

3.2 REMOVAL

- A. Completely remove temporary materials and equipment when their use is no longer required.
- B. Clean and repair damage caused by temporary installations or use of temporary facilities.
- C. Restore existing facilities used for temporary services to specified, or to original condition.
- D. Restore permanent facilities used for temporary services to specified condition. Prior to Final Inspection, remove temporary lamps and install new lamps.

END OF SECTION 01 51 00

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SECTION 01 60 00 - MATERIAL AND EQUIPMENT

PART 1 - GENERAL

1.1 REQUIREMENTS

- A. Material and Equipment Incorporated into the Work:
 - 1. Conform to the applicable specifications and standards.
 - 2. Comply with size, make, type and quality specified, or as specifically accepted in writing by the Architect.
 - 3. Manufactured and Fabricated Products:
 - a. Design, fabricate and assemble in accord with the best engineering and shop practices.
 - b. Manufacturer like parts of duplicate units to standard sizes and gauges, to be interchangeable.
 - c. Two or more items of the same kind shall be identical, by the same manufacturer.
 - d. Products shall be suitable for service conditions.
 - e. Equipment capacities, sizes and dimensions shown or specified shall be adhered to unless variations are specifically accepted in writing.
 - 4. Do not use material or equipment for any purpose other than that for which it is designed or is specified.

1.2 MANUFACTURER'S INSTRUCTIONS:

- A. When Contract Documents require that installation of Work shall comply with manufacturer's printed instructions, obtain and distribute copies of such instructions to parties involved in the installation, including an electronic copy to the Architect.
 - 1. Maintain one set of complete instructions at the job site during installation and until complete.
- B. Handle, install, connect, clean, condition and adjust products in strict accord with such instructions and in conformity with specified requirements.
 - 1. Should job conditions or specified requirements conflict with manufacturer's instructions, consult with Architect/Engineer for further instructions.
 - 2. Do not proceed with work without clear instructions.

C. Perform Work in accord with manufacturer's instructions, unless otherwise specified. Do not omit any preparatory step or installation procedure unless specifically modified or exempted by Contract Documents.

1.3 TRANSPORTATION AND HANDLING:

- A. Arrange deliveries of Products in accord with construction schedules, coordinate to avoid conflict with Work and conditions at the site.
 - 1. Deliver Products in undamaged condition, in manufacturer's original containers or packaging, with identifying labels intact and legible.
 - 2. Immediately on delivery, inspect shipments to assure compliance with requirements of Contract Documents and submittals, and that Products are properly protected and undamaged.
- B. Provide equipment and personnel to handle Products by methods to prevent soiling or damage to Products or packaging.

1.4 STORAGE AND PROTECTION:

- A. Store products in accord with manufacturer's instructions, with seals and labels intact and legible.
 - 1. Store products subject to damage by the elements in weathertight enclosures.
 - 2. Maintain temperature and humidity within the ranges required by manufacturer's instructions.

B. Exterior Storage.

- 1. Store fabricated products above the ground, on blocking or skids, prevent soiling or staining. Cover products which are subject to deterioration with impervious sheet coverings, provide adequate ventilation to avoid condensation.
- 2. Store loose granular materials in a well-drained area on solid surfaces to prevent mixing with foreign matter.
- C. Arrange storage in a manner to provide easy access for inspection. Make periodic inspections of stored Products to assure that Products are maintained free from damage or deterioration.
- D. Remove and replace materials which are damaged or deteriorated from the site.
- E. Protection After Installation:
 - 1. Provide substantial coverings as necessary, to protect installed products from damage from traffic, water and subsequent construction operations. Remove when no longer needed.
 - 2. Remove and replace installed products which are subsequently damaged or deteriorated from the Project.

PART 2 - PRODUCTS

2.1 NOT USED

PART 3 - EXECUTION

3.1 NOT USED

END OF SECTION 01 60 00

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SECTION 01 70 00 – CONTRACT CLOSEOUT

PART 1 - GENERAL

1.1 PREREQUISITES TO SUBSANTIAL COMPLETION

- A. Prior to requesting Architect's/Engineer's inspection for substantial completion of either entire Work or portions thereof, complete the following and list all known exceptions in request:
 - 1. Submit to Architect a complete, comprehensive list of every incomplete and unsatisfactory item in the Work. The list shall differentiate between incomplete and unsatisfactory items.
 - 2. For all incomplete and unsatisfactory items, list the reasons for being incomplete or unsatisfactory, the date the item will be completed and the estimated cost to complete the item.
 - 3. Submit all items required in individual Specifications Sections.
 - 4. Submit specific warranties, workmanship/maintenance bonds, maintenance agreements, final certifications and similar documents.
 - 5. Deliver keys, tools, spare parts, extra stocks of materials and similar physical items to Owner.
 - 6. Complete start-up testing of systems and instructions of Owner's operating/maintenance personnel. Discontinue (or change over) and remove from project site temporary facilities and services, along with construction tools and facilities, mock-ups and similar elements.
 - 7. Obtain and submit releases enabling Owner's full and unrestricted use of the Work and access to services and utilities, including (where required) occupancy permits, operating certificates and similar releases.
 - 8. Advise Owner of pending insurance change-over requirements.

B. Substantial Completion Inspection

1. Upon receipt of Contractor's request, Architect/Engineer will either proceed with observations or advise contractor of prerequisites not fulfilled. Following initial observations, Architect/Engineer will either prepare a Certificate of Substantial Completion or advise Contractor of work which must be performed prior to issuance of Substantial Completion Certificate. If another observation is required, the Contractor shall submit with his request for another observation, a list of previously incomplete or unsatisfactory work and shall certify that all items prerequisite to Substantial Completion are complete. The Architect will only perform observations upon receipt of this request. Unsatisfactory items remaining

- at the completion of the Substantial Completion Inspection will form the "Punch-List" for completion prior to Final Acceptance.
- 2. If the Architect has to make more than one observation trip due to Contractor failure to Substantially Complete the Work, the Owner shall deduct the Architect's expenses for subsequent Inspection Trips from the Contract Amount.

1.2 PREREQUISITES TO FINAL ACCEPTANCE

- A. Prior to requesting Architect's and FAMU's observation for final acceptance, complete the following and list known exceptions (if any) in request:
 - 1. Submit a copy of the Substantial Completion "Punch List" certifying that each item has been completed or otherwise resolved or accepted. For any item remaining incomplete due to circumstances accepted by the Architect, indicate the date item will be completed and the cost of completion.
 - 2. Submit record drawings, maintenance manuals, final project photographs, damage or settlement survey, property survey and similar final record information.
 - 3. Complete final cleaning up requirements, including touch-up of marred surfaces.
 - 4. Submit final meter readings for utilities, measured record of stored fuel and similar data as of time of substantial completion or when Owner took possession of and responsibility for corresponding elements of the work.
 - 5. Revise and submit evidence of final, continuing insurance coverage complying with insurance requirements.
 - 6. Submit final liquidated damages settlement statement, acceptable to Owner.
 - 7. Submit updated final statement accounting for additional (final) changes to Contract Sum.
 - 8. Submit original Consent of Surety.
 Submit final payment request with final releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.

B. Final Inspection:

- 1. Upon receipt of Contractor's certification that work has been completed and requesting Final Observation, the Architect and FAMU will reinspect work. Upon completion of reinspection, Architect will either prepare certificate of final acceptance of occupancy or advise Contractor of work not completed or obligations not fulfilled as required for final acceptance. If necessary, procedure will be repeated.
- 2. If the Architect has to make more than one Final Observation trip due to Contractor failure to Finally Complete the Work, the Owner shall deduct the Architect's expenses for subsequent Observation Trips from the Contract Amount.

1.3 RECORD DOCUMENT SUBMITTAL

- A. Provide Record Documents as outlined in Project Record Document Section.
- B. Record Drawings.

C. Record Specifications:

1. Maintain one copy of specifications including addenda, change orders and similar modifications issued in printed form during construction and mark-up variations (of substance) in actual Work in comparison with text of specifications and modifications as issued. Give particular attention to substitutions, selection of options and similar information on work where it is concealed or cannot otherwise be readily discerned at a later date by direct observation. Note related record drawing information and product data where applicable.

D. Record Shop Drawings and Product Data:

1. Maintain one copy of each reviewed product data submittal and mark-up significant variations in actual work in comparison with submitted information. Include both variations from manufacturer's instructions and recommendations for installation. Give particular attention to concealed products and portions of the Work which cannot otherwise be readily discerned at a later date by direct observation. Note related change orders and mark-up or record drawings and specifications.

E. Record Sample Submittal:

1. Immediately prior to date(s) of substantial completion, Architect will meet with Contractor at site and will determine which (if any) of submitted samples maintained by Contractor during progress of the work are to be transmitted to Owner for record purposes. Comply with Architect's instructions for packaging, identification marking and delivery to owner's sample storage space.

F. Miscellaneous Record Submittals:

1. Refer to other sections of these specifications for requirements of miscellaneous record-keeping and submittals in connection with actual performance of the Work. Immediately prior to date(s) of substantial completion, complete miscellaneous records and place in good order, properly identified and bound or filed, ready for continued use and reference.

G. Operation and Maintenance Data:

- See Individual Sections
- H. Warranties and Bonds:
 - 1. See Individual Sections
- I. Spare Parts and Maintenance Materials:
 - 1. See Individual Sections

1.4 FINAL CLEANING

A. Special cleaning for specific units of work is specified in sections of Divisions 2 through 16. General cleaning during progress or work is specified in General Conditions and as temporary service in "Temporary Facilities" section of this Division and in section 01 70 00-Final Cleaning. Provide final cleaning of the work at time indicated, consisting of cleaning each surface or unit of Work to normal "clean" condition expected for a first-

class building cleaning and maintenance program. Comply with manufacturer's instructions for cleaning operations. The following are examples of cleaning levels required:

- 1. Clean project site (yard and grounds) of litter and foreign substances. Sweep paved areas to a broom-clean condition; remove stains, petro-chemical spills and other foreign deposits. Rake grounds which are neither planted nor paved, to a smooth, even-textured surface.
- 2. See Section other sections in the specifications.

B. Removal of Protection:

1. Remove temporary protection devices and facilities which were installed during course of the Work to protect previously completed Work during remainder of construction period.

C. Compliances:

- 1. Comply with safety standards and governing regulations for cleaning operations. Do not burn waste materials at site or bury debris or excess materials on Owner's property or discharge volatile or other harmful or dangerous materials into drainage systems; remove waste materials from site and dispose of in a lawful manner.
- 2. Where extra materials of value remaining after completion of associated Work have become Owner's property, which are not accepted by the Owner shall be disposed of to Owner's best advantage as directed.

1.5 CLOSEOUT DOCUMENT CHECKLIST

- A. All items listed below shall be bound in individual heavy duty 3-ring vinyl covered binders. Mark appropriate identification on front and spine of each binder.
 - 1. List of contractors and every subcontractor and material supplier performing work on the Project including:
 - a. work or trade performed, or material supplied
 - b. name of contact person
 - c. Firm name, address, phone and fax number
 - 2. Contractor's Guarantee and Warranties as specified under Division 01 74 00.
 - 3. Fully executed Roof Warranty in the name of the Owner.
 - 4. Special warranties as required by the specifications, in the name of the Owner.
 - 5. Provide a list summarizing the various guarantees and warranties and stating the following with respect to each:
 - a. Character of work affected.
 - b. Name, address and telephone number of each Subcontractor.
 - c. Name, address and telephone number of each local firm designated to provide warranty service for an out-of-town firm. Copy of agreement between the firms.
 - d. Period of guarantee and effective date.
 - 6. Verification that the Owner's personnel has been trained in the use of all equipment and systems. Submit attendance lists of all training sessions.
 - 7. Operation and Maintenance Manuals.

- 8. Equipment Inventory List A list of the equipment furnished for the project, to include drawings code designation, location, description, manufacturer, full model number, serial number, warranty period and warranty expiration date.
- 9. As-built drawings. Provide in accordance with other specification sections.
- 10. Energy management system programming, operation, maintenance, and parts service manuals.

END OF SECTION 01 70 00

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SECTION 01 71 00 - FINAL CLEANING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for final cleaning at Substantial Completion.
- B. Environmental Requirements: Conduct cleaning and waste-disposal operations in compliance with local laws and ordinances. Comply fully with federal and local environmental and antipollution regulations.
 - 1. Do not dispose of volatile wastes, such as mineral spirits, oil, or paint thinner, in storm or sanitary drains.
 - 2. Burning or burying of debris, rubbish, or other waste material on the premises is not permitted.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Cleaning Agents: Use cleaning materials and agents recommended by the manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: Provide final-cleaning operations when indicated. Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit of Work to the condition expected from a commercial building cleaning and maintenance program. Comply with manufacturer's instructions.
- B. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for the entire Project or a portion of the Project.
 - 1. Clean the Project Site, yard and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and foreign substances.
 - 2. Sweep paved areas broom clean. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
 - 3. Remove petrochemical spills, stains, and other foreign deposits.
 - 4. Remove tools, construction equipment, machinery, and surplus material from the site.
 - 5. Leave the Project clean and ready for the Owners usage.
- C. Pest Control: Engage an experienced, licensed exterminator to make a final inspection and rid the Project of rodents, insects, and other pests. Comply with regulations of local authorities.
- D. Removal of Protection: Remove temporary protection and facilities installed during construction to protect previously completed installations during the remainder of the construction period.
- E. Compliances: Comply with governing regulations and safety standards for cleaning operations. Remove waste materials from the site and dispose of lawfully.
 - 1. Where extra materials of value remain after completion of associated Work, they become the Owner's property. Dispose of these materials as directed by the Owner.

END OF SECTION 01 71 00

SECTION 01 72 00 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for Project Record Documents.
- B. Project Record Documents required include the following:
 - 1. Marked-up copies of Contract Drawings.
 - 2. Marked-up copies of Shop Drawings.
 - 3. Newly prepared drawings.
 - 4. Marked-up copies of Specifications, addenda, and Change Orders.
 - 5. Marked-up Product Data submittals.
 - 6. Record Samples.
 - 7. Field records for variable and concealed conditions.
 - 8. Record information on Work that is recorded only schematically.
- C. Multiple Prime Contracts: Each prime contractor is responsible for obtaining, maintaining, and recording Project Record Document information for its own Work. The Construction Manager is responsible for coordinating information, where information from more than one prime contractor is to be integrated with information from other prime contractors to form one combined record.
- D. Maintenance of Documents and Samples: Store record documents and Samples in the field office apart from the Contract Documents used for construction. Do not use Project Record Documents for construction purposes. Maintain record documents in good order and in a clean, dry, legible condition. Make documents and Samples available at all times for the Architect's inspections.

1.2 RECORD DRAWINGS

- A. Markup Procedure: During construction, maintain a set of record prints of Contract Drawings and Shop Drawings for Project Record Document purposes.
 - 1. Mark these Drawings to show the actual installation where the installation varies from the installation shown originally. Give particular attention to information on

concealed elements that would be difficult to identify or measure and record later. Items required to be marked include, but are not limited to, the following:

- a. Dimensional changes to the Drawings.
- b. Revisions to details shown on the Drawings.
- c. Locations and depths of underground utilities.
- d. Revisions to routing of piping and conduits.
- e. Changes made by change order or Construction Change Directive.
- f. Changes made following the Architect's written orders.
- g. Details not on original Contract Drawings.
- 2. Mark record prints of Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. Where Shop Drawings are marked, show cross-reference on Contract Drawings location.
- 3. Mark record sets with red. Use other colors to distinguish between changes for different categories of the Work at the same location.
- 4. Mark important additional information that was either shown schematically or omitted from original Drawings.
- 5. Note Construction Change Directive numbers, alternate numbers, change-order numbers, and similar identification.
- B. Responsibility for Markup: The individual or entity who obtained record data, whether the individual or entity is the Installer, subcontractor, or similar entity, shall prepare the markup on record drawings.
 - 1. Accurately record information in an understandable drawing technique.
 - 2. Record data as soon as possible after obtaining it. Record and check the markup prior to enclosing concealed installations.
 - 3. At time of Substantial Completion, submit record drawings to the Architect for the Owner's records. Organize into sets and bind and label sets for the Owner's continued use.
- C. Preparation of As Built Drawings: Immediately prior to inspecting Certification of Substantial Completion, review completed marked-up record drawings with the Architect. When authorized, prepare a full set of corrected As-Built of Contract Drawings and Shop Drawings.
 - 1. Incorporate changes and additional information previously marked on print sets. Erase, redraw, and add details (including any supplemental drawings from Architect/Engineer) and notations where applicable. Identify and date each drawing; include the printed designation "PROJECT RECORD DRAWINGS" in a prominent location on each drawing.
 - 2. Refer instances of uncertainty to the Architect for resolution.
 - 3. The Contractor is responsible for printing original Contract Drawings and other drawings as required to produce As-Builts. The Architect will make original Contract Drawings available to the Contractor's print shop.

- 4. Where installations by 2 or more prime contractors are indicated on the same Drawing, the Contractor responsible for the principal installation, as determined by the Architect, is responsible for printing and distributing transparencies.
 - a. The Construction Manager is responsible for printing and distributing As-Builts where the Drawing covers installations of other prime contractors.
- 5. Review of As-Builts: Before copying and distributing, submit original marked-up prints to the Architect for review.
- D. Copies and Distribution: Bind each set with durable-paper cover sheets. Include appropriate identification, including titles, dates, and other information on the cover sheets.
 - 1. Organize and bind original marked-up set of prints that were maintained during the construction period in the same manner.
 - 2. Organize record drawings into sets matching the print sets. Place these sets in durable tube-type drawing containers with end caps. Mark the end cap of each container with suitable identification.
 - 3. Submit the marked-up record set, record drawings, and 3 copy sets to the Architect for the Owner's records; the Architect will retain 1 copy set.

1.3 RECORD SPECIFICATIONS

- A. During the construction period, maintain 2 copies of the Project Specifications, including addenda and modifications issued, for Project Record Document purposes.
 - 1. Mark the Specifications to indicate the actual installation where the installation varies from that indicated in Specifications and modifications issued. Note related project record drawing information, where applicable. Give particular attention to substitutions, selection of product options, and information on concealed installations that would be difficult to identify or measure and record later.
 - a. In each Specification Section where products, materials, or units of equipment are specified or scheduled, mark the copy with the proprietary name and model number of the product furnished.
 - b. Record the name of the manufacturer, supplier, installer, and other information necessary to provide a record of selections made and to document coordination with record Product Data submittals and maintenance manuals.
 - c. Note related record Product Data, where applicable. For each principal product specified, indicate whether record Product Data has been submitted in maintenance manual instead of submitted as record Product Data.
 - 2. Upon completion of markup, submit record Specifications to the Architect for the Owner's records.
 - 3. Each prime contractor is responsible for marking up Sections that contain its own Work.

- a. The Construction Manager is responsible for collecting marked-up record Sections from each of the other prime contractors. The Construction Manager is also responsible for collating these Sections in proper numeric order with its own Sections to form a complete set of record Specifications.
- b. The Construction Manager is responsible for submitting the complete set of record Specifications as specified.

1.4 RECORD PRODUCT DATA

- A. During the construction period, maintain one copy of each Product Data submittal for Project Record Document purposes.
 - 1. Mark Product Data to indicate the actual product installation where the installation varies substantially from that indicated in Product Data submitted. Include significant changes in the product delivered to the site and changes in manufacturer's instructions and recommendations for installation.
 - 2. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 - 3. Note related Change Orders and markup of record Drawings, where applicable.
 - 4. Upon completion of markup, submit a complete set of record Product Data to the Architect for the Owner's records.
 - 5. Where record Product Data is required as part of maintenance manuals, submit marked-up Product Data as an insert in the manual instead of submittal as record Product Data.
 - 6. Each prime contractor is responsible for marking up and submitting record Product Data for its own Work.

1.5 RECORD SAMPLE SUBMITTAL

A. Immediately prior to date of Substantial Completion meet with the Architect and the Owner's personnel at the site to determine which of the Samples maintained during the construction period shall be transmitted to the Owner for record purposes. Comply with the Architect's instructions for packaging, identification marking, and delivery to the Owner's Sample storage space. Dispose of other Samples in a manner specified for disposing surplus and waste materials.

1.6 MAINTENANCE MANUAL SUBMITTAL

A. See other Specification Sections for requirements.

1.7 MISCELLANEOUS RECORD SUBMITTALS

- A. Refer to other Specification Sections for miscellaneous record-keeping requirements and submittals in connection with various construction activities. Immediately prior to Substantial Completion, complete miscellaneous records and place in good order, properly identified and bound or filed, ready for use and reference. Submit to the Architect for the Owner's records.
 - 1. Categories of requirements resulting in miscellaneous records include, but are not limited to, the following:
 - a. Field records on excavations and foundations.
 - b. Field records on underground construction and similar work.
 - c. Survey showing locations and elevations of underground lines.
 - d. Invert elevations of drainage piping.
 - e. Surveys establishing building lines and levels.
 - f. Authorized measurements utilizing unit prices or allowances.
 - g. Records of plant treatment.
 - h. Ambient and substrate condition tests.
 - i. Certifications received in lieu of labels on bulk products.
 - j. Batch mixing and bulk delivery records.
 - k. Testing and qualification of tradesmen.
 - 1. Documented qualification of installation firms.
 - m. Load and performance testing.
 - n. Inspections and certifications by governing authorities.
 - o. Leakage and water-penetration tests.
 - p. Fire-resistance and flame-spread test results.
 - q. Final inspection and correction procedures.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 RECORDING

A. Post changes and modifications to the Documents as they occur. Do not wait until the end of the Project.

END OF SECTION 01 72 00

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SECTION 01 73 00 - OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 REQUIREMENTS

- A. Format and content of manuals.
- B. Instruction of Owner's personnel.
- C. Schedule of submittals.

1.2 FORMAT

- A. Prepare data in the form of an instructional manual.
- B. Binders: Commercial quality, 8-1/2 x 11, three-ring binders with hardback, cleanable, vinyl covers.
- C. Cover: Identify each binder with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; list title of Project; use volumes as needed.
- D. Arrange content by systems, process flow, under section numbers and sequence of Table of Contents of this Project Manual.
- E. Provide tabbed fly leaf for each separate project and system, with typed description of product and major component parts of equipment.
- F. Text: Manufacturer's printed data, or typewritten data.
- G. Drawings: Provide with reinforced pocket folders. Bind in with text; fold drawings; insert into pocket folders.

1.3 CONTENTS OF EACH VOLUME

A. Table of Contents: Provide title of Project; names, addresses, and telephone numbers of Architect/Engineer and Contractor with name of responsible parties; schedule of products and systems, indexed to content of the volume.

- B. For Each Product or System: List names, addresses and telephone numbers of subcontractors and suppliers, including local source of supplies and replacement parts.
- C. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation; delete inapplicable information.
- D. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
- E. Warranties and Bonds: Bind in copy of each.

1.4 MANUAL FOR MATERIALS AND FINISHES:

- A. Building Products, Applied Materials, and Finishes: Include product data, with catalog number, size, composition, color and texture designations. provide information for reordering custom manufactured products.
- B. Instructions for Care and Maintenance: Include manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.
- C. Moisture-protection and Weather-exposed Products: Include product data listing applicable reference standards, chemical composition, and details of installation; delete inapplicable information.
- D. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
- E. Warranties and Bonds: Bind in copy of each.

1.5 MANUAL FOR EQUIPMENT AND SYSTEMS:

- A. Each Item of Equipment and Each System: Include description of unit or system, and component parts. Give function, normal operating characteristics, and limiting conditions. Include performance curves, with engineering data and tests, and complete nomenclature and commercial number or replaceable parts.
- B. Maintenance Requirements: Include routine procedures and guide for trouble-shooting; disassembly, repair, and reassembly instructions; and checking instructions.
- C. Include manufacturer's printed operations and maintenance instructions.
- D. Provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.
- E. Include test reports as specified.

- F. Additional Requirements: As specified individual specifications sections.
- G. Provide a listing in Table of Contents for design data, with tabbed flysheet and space for insertion of data.

1.6 INSTRUCTION OF OWNER PERSONNEL:

- A. Before substantial inspection, instruct Owner's designated personnel in operation, adjustment, and maintenance of products, equipment, and systems, at agreed upon times.
- B. Use operation and maintenance manuals as basis of instruction. Review contents of manual with personnel in detail to explain all aspects of operation and maintenance.
- C. Prepare and insert additional data in Operation and Maintenance Manual when need for such data become apparent during instruction.

1.7 SUBMITTALS

- A. Submit one (1) copy of completed volumes in final form 15 days prior to substantial inspection. Copy will be returned after substantial inspection, with Architect/Engineer comments. Revise content of documents as required prior to substantial submittal.
- B. Submit two (2) copies of revised volumes of data in substantial form within ten days after substantial inspection. If submitted electronically, only one (1) hard copy is required.

PART 2 - NOT USED

PART 3 - NOT USED

END OF SECTION 01 73 00

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SECTION 01 74 00 - WARRANTIES AND BONDS

PART 1 - GENERAL

1.1 REQUIREMENTS

- A. Preparation and submittal of warranties and bonds.
- B. Schedule of submittals.

1.2 FORMS OF SUBMITTAL

A. Bind with operation and maintenance manuals.

1.3 PREPARATION OF SUBMITTALS

- A. Obtain warranties and bonds, executed in triplicate (3) by responsible subcontractors, suppliers, and manufacturers after completion of the applicable item of work. Date of beginning of time of warranty will be the Date of Substantial Completion.
- B. Verify that documents are in proper form, contain full information, and are notarized.
- C. Co-execute submittals when required.
- D. Retain warranties and bonds until time specified for submittal.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.1 WARRANTY SERVICE

- A. The Contractor shall proceed with warranty repair or replacement within 24 hours of being notified that a warranty deficiency exists.
- B. In order to insure prompt and effective correction of warranty deficiencies, the Contractor shall, if he or any of his Subcontractors do not maintain fully staffed service organizations within 1 hour of the Project Site, designate firms within 1 hour of the Project Site authorized to perform

warranty work on the Contractor's behalf. The name, addresses, and phone numbers of these designated firms shall be included within the closeout documents, along with affidavits signed by officers of the designated firms stating that they have been retained and will perform required warranty service.

END OF SECTION 01 74 00

SECTION 01 75 00 - SPARE PARTS AND MAINTENANCE MATERIALS

PART 1 - GENERAL

1.1 REQUIREMENTS

- A. Products required.
- B. Storage and delivery of products.

1.2 PRODUCTS REQUIRED

- A. Provide quantity of products, spare parts, maintenance tools, and maintenance materials specified in individual sections to be provided to Owner, in addition to that required for completion of Work.
- B. Products: Identical to those installed in the Work. Include quantities in original purchase from supplier or manufacturer to avoid variations in manufacture.

1.3 STORAGE AND MAINTENANCE

- A. Store products with products to be installed in the Work, under provisions of Section 01 60 00.
- B. Maintain spare products in original containers with labels intact and legible, until delivery to Owner.

1.4 DELIVERY

A. Coordinate with Owner: Deliver and unload spare products to Owner at Project site and obtain receipt prior to final payment.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION 01 75 00

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SECTION 02 41 19 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

- 1. Demolition and removal of selected portions of building or structure.
- 2. Demolition and removal of selected site elements.

1.2 DEFINITIONS

- A. Remove: Detach items from existing construction and dispose of them off-site unless indicated to be salvaged or reinstalled.
- B. Existing to Remain: Leave existing items that are not to be removed and that are not otherwise indicated to be salvaged or reinstalled.

1.3 MATERIALS OWNERSHIP

A. Unless otherwise indicated, demolition waste becomes property of Contractor.

1.4 INFORMATIONAL SUBMITTALS

- A. Engineering Survey: Submit engineering survey of condition of building.
- B. Proposed Protection Measures: Submit report, including Drawings, that indicates the measures proposed for protecting individuals and property, for environmental protection, for dust control and for noise control. Indicate proposed locations and construction of barriers.
- C. Schedule of Selective Demolition Activities: Indicate the following:
 - 1. Detailed sequence of selective demolition and removal work, with starting and ending dates for each activity.
 - 2. Interruption of utility services. Indicate how long utility services will be interrupted.
 - 3. Coordination for shutoff, capping, and continuation of utility services.
 - 4. Use of elevator and stairs.
- D. Pre-demolition Photographs or Video: Show existing conditions of adjoining construction, including finish surfaces, that might be misconstrued as damage caused by demolition operations.

- E. Statement of Refrigerant Recovery: Signed by refrigerant recovery technician responsible for recovering refrigerant, stating that all refrigerant that was present was recovered and that recovery was performed according to EPA regulations. Include name and address of technician and date refrigerant was recovered.
- F. Warranties: Documentation indicating that existing warranties are still in effect after completion of selective demolition.

1.5 FIELD CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
- B. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- C. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.
 - 1. Hazardous materials will be removed by Owner before start of the Work.
 - 2. If suspected hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Hazardous materials will be removed by Owner under a separate contract.
- D. Storage or sale of removed items or materials on-site is not permitted.
- E. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
 - 1. Maintain fire-protection facilities in service during selective demolition operations.

1.6 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials and using approved contractors so as not to void existing warranties. Notify warrantor before proceeding.
- B. Notify warrantor on completion of selective demolition, and obtain documentation verifying that existing system has been inspected and warranty remains in effect. Submit documentation at Project closeout.

1.7 COORDINATION

A. Arrange selective demolition schedule so as not to interfere with Owner's operations.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ASSE A10.6 and NFPA 241.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting selective demolition operations.
- B. Review Project Record Documents of existing construction or other existing condition and hazardous material information provided by Owner. Owner does not guarantee that existing conditions are same as those indicated in Project Record Documents.
- C. Steel Tendons: Locate tensioned steel tendons and include recommendations for de-tensioning.
- D. Verify that hazardous materials have been remediated before proceeding with building demolition operations.

3.2 PREPARATION

A. Refrigerant: Before starting demolition, remove refrigerant from mechanical equipment according to 40 CFR 82 and regulations of authorities having jurisdiction.

3.3 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Services/Systems to Remain: Maintain services/systems indicated to remain and protect them against damage.
- B. Existing Services/Systems to Be Removed, Relocated, or Abandoned: Locate, identify, disconnect, and seal or cap off utility services and mechanical/electrical systems serving areas to be selectively demolished.
 - 1. Arrange to shut off utilities with utility companies.
 - 2. If services/systems are required to be removed, relocated, or abandoned, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.
 - 3. Disconnect, demolish, and remove fire-suppression systems, plumbing, and HVAC systems, equipment, and components indicated on Drawings to be removed.
 - a. Piping to Be Removed: Remove portion of piping indicated to be removed and cap or plug remaining piping with same or compatible piping material.

- b. Piping to Be Abandoned in Place: Drain piping and cap or plug piping with same or compatible piping material and leave in place.
- c. Equipment to Be Removed: Disconnect and cap services and remove equipment.
- d. Equipment to Be Removed and Reinstalled: Disconnect and cap services and remove, clean, and store equipment; when appropriate, reinstall, reconnect, and make equipment operational.
- e. Equipment to Be Removed and Salvaged: Disconnect and cap services and remove equipment and deliver to Owner.
- f. Ducts to Be Removed: Remove portion of ducts indicated to be removed and plug remaining ducts with same or compatible ductwork material.
- g. Ducts to Be Abandoned in Place: Cap or plug ducts with same or compatible ductwork material and leave in place.

3.4 PROTECTION

- A. Temporary Protection: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
 - 1. Provide temporary weather protection, during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent water leakage and damage to structure and interior areas.
 - 2. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
 - 3. Cover and protect furniture, furnishings, and equipment that have not been removed.
- B. Temporary Shoring: Design, provide, and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.
 - 1. Strengthen or add new supports when required during progress of selective demolition.
- C. Remove temporary barricades and protections where hazards no longer exist.

3.5 SELECTIVE DEMOLITION, GENERAL

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
 - 1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.
 - 2. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.
 - 3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
 - 4. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before

- starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
- 5. Maintain fire watch during and after flame-cutting operations.
- 6. Maintain adequate ventilation when using cutting torches.
- 7. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
- 8. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
- 9. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
- 10. Dispose of demolished items and materials promptly.
- B. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
- C. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location during selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.

3.6 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove demolition waste materials from Project site and dispose of them in an EPA-approved construction and demolition waste landfill acceptable to authorities having jurisdiction.
 - 1. Do not allow demolished materials to accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
 - 3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
 - 4. Comply with requirements specified in Section 017419 "Construction Waste Management and Disposal."
- B. Burning: Do not burn demolished materials.

3.7 CLEANING

A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 02 41 19

SECTION 09 91 13 - EXTERIOR PAINTING

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 surface preparation and the application of paint systems on the following exterior substrates:
 - 1. Concrete / CMU

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Samples for Initial Selection: For each type of topcoat product indicated.
- C. Samples for Verification: For each type of paint system and each color and gloss of topcoat indicated.
 - 1. Submit Samples on rigid backing, 8 inches (200 mm) square.
 - 2. Step coats on Samples to show each coat required for system.
 - 3. Label each coat of each Sample.
 - 4. Label each Sample for location and application area.
- D. Product List: For each product indicated, include the following:
 - 1. Cross-reference to paint system and locations of application areas. Use same designations indicated on Drawings and in schedules.
 - 2. Printout of current "MPI Approved Products List" for each product category specified in Part 2, with the proposed product highlighted.

1.4 QUALITY ASSURANCE

A. MPI Standards:

- 1. Products: Complying with MPI standards indicated and listed in "MPI Approved Products List."
- 2. Preparation and Workmanship: Comply with requirements in "MPI Architectural Painting Specification Manual" for products and paint systems indicated.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F (7 deg C).
 - 1. Maintain containers in clean condition, free of foreign materials and residue.
 - 2. Remove rags and waste from storage areas daily.

1.6 PROJECT CONDITIONS

- A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F (10 and 35 deg C).
- B. Do not apply paints in snow, rain, fog, or mist; when relative humidity exceeds 85 percent; at temperatures less than 5 deg F (3 deg C) above the dew point; or to damp or wet surfaces.

1.7 EXTRA MATERIALS

- A. Furnish extra materials described below that are from same production run (batch mix) as materials applied and that are packaged for storage and identified with labels describing contents.
 - 1. Quantity: Furnish an additional [5] percent, but not less than [1 gal. (3.8 L)] of each material and color applied.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Benjamin Moore & Co.
 - 2. Benjamin Moore & Co., Limited (Canada).
 - 3. California Paints.
 - 4. Duron, Inc.
 - 5. ICI Paints.
 - 6. Porter Paints.
 - 7. PPG Architectural Finishes, Inc.
 - 8. Sherwin-Williams Company (The).

2.2 PAINT, GENERAL

A. Material Compatibility:

- 1. 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.
- 2. 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.
- B. Colors: As selected by Architect from manufacturer's full range..

2.3 PRIMERS/SEALERS

- A. Alkali-Resistant Primer: MPI #3.
 - 1. VOC Content: E Range of E1, E2, or E3.
- B. Bonding Primer (Water Based): MPI #17.
 - 1. VOC Content: E Range of E1, E2, or E3.
- C. Bonding Primer (Solvent Based): MPI #69.
 - 1. VOC Content: E Range of E1, E2, or E3.

2.4 METAL PRIMERS

- A. Alkyd Anticorrosive Metal Primer: MPI #79.
 - 1. VOC Content: E Range of E1 or E2.
- B. Quick-Drying Alkyd Metal Primer: MPI #76.
 - 1. VOC Content: E Range of E1 or E2.

2.5 EXTERIOR LATEX PAINTS

- A. Exterior Latex (Flat): MPI #10 (Gloss Level 1).
 - 1. VOC Content: E Range of E1, E2, or E3.
- B. Exterior Latex (Semigloss): MPI #11 (Gloss Level 5).
 - 1. VOC Content: E Range of E1, E2, or E3.

2.6 EXTERIOR ALKYD PAINTS

- A. Exterior Alkyd Enamel (Semigloss): MPI #94 (Gloss Level 5).
 - 1. VOC Content: E Range of E1 or E2.
 - 2. VOC Content: E Range of E1 or E2.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
 - 1. Concrete: 12 percent.
 - 2. Wood: 15 percent.

- C. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
- D. Begin coating application only after unsatisfactory conditions have been corrected and surfaces are dry.
 - 1. Beginning coating application constitutes Contractor's acceptance of substrates and conditions.

3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual" applicable to substrates and paint systems indicated.
- B. Remove plates, machined surfaces, and similar items already in place that are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
 - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
 - 2. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
- C. Clean substrates of substances that could impair bond of paints, including dirt, oil, grease, and incompatible paints and encapsulants.
 - 1. Remove incompatible primers and reprime substrate with compatible primers as required to produce paint systems indicated.
- D. Concrete Substrates: Remove release agents, curing compounds, efflorescence, and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces to be painted exceeds that permitted in manufacturer's written instructions.
- E. Galvanized-Metal Substrates: Hollow metal remove grease and oil residue from galvanized sheet metal fabricated from coil stock by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.

3.3 APPLICATION

- A. Apply paints according to manufacturer's written instructions.
 - 1. Use applicators and techniques suited for paint and substrate indicated.
 - 2. Paint surfaces behind movable items same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed items with prime coat only.
- B. Tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Tint undercoats to match color of topcoat, but provide sufficient difference in shade of undercoats to distinguish each separate coat.
- C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.

D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

3.4 FIELD QUALITY CONTROL

- A. Testing of Paint Materials: Owner reserves the right to invoke the following procedure at any time and as often as Owner deems necessary during the period when paints are being applied:
 - 1. Owner will engage the services of a qualified testing agency to sample paint materials being used. Samples of material delivered to Project site will be taken, identified, sealed, and certified in presence of Contractor.
 - 2. Testing agency will perform tests for compliance of paint materials with product requirements.
 - 3. Owner may direct Contractor to stop applying paints if test results show materials being used do not comply with product requirements. Contractor shall remove noncomplying-paint materials from Project site, pay for testing, and repaint surfaces painted with rejected materials. Contractor will be required to remove rejected materials from previously painted surfaces if, on repainting with complying materials, the two paints are incompatible.

3.5 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.6 EXTERIOR PAINTING SCHEDULE

- A. Concrete Substrates, Nontraffic Surfaces:
 - 1. Latex System: MPI EXT 3.1A (Concrete Vertical Surfaces).
 - a. Prime Coat: Alkali-Resistant Primer, W.B. (MPI #3).
 - b. Intermediate Coat: Exterior latex matching topcoat (MPI #10).
 - c. Topcoat: Exterior latex (flat) (MPI #10).

B. Exterior trim.

- 1. Latex System: MPI EXT 6.4K.
 - a. Prime Coat: Exterior latex wood primer (MPI #6).
 - b. Intermediate Coat: Exterior latex matching topcoat (MPI #11).
 - c. Topcoat: Exterior latex (semigloss) (MPI #11).
- 2. Latex Over Alkyd Primer System: MPI EXT 6.4G.

- a.
- Prime Coat: Exterior alkyd wood primer (MPI #5). Intermediate Coat: Exterior latex matching topcoat (MPI #11). Topcoat: Exterior latex (semigloss) (MPI #11). b.
- c.

END OF SECTION 09 91 13

SECTION 323113 - CHAIN LINK FENCES AND GATES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

- 1. Chain-link fence framework.
- 2. Chain-link fence fabric.
- 3. Chain-link fittings.
- 4. Chain-link wires and ties.
- 5. Chain-link swing gates.

B. Related Requirements:

1.2 ACTION SUBMITTALS

A. Product Data:

- 1. For each type of product.
 - a. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for the following:
 - b. Fence [and gate] posts, rails, and fittings.
 - c. Chain-link fabric, reinforcements, [gate types, hardware,] and attachments.
- B. Shop Drawings: For each type of fence [and gate] assembly.
 - 1. land attachments to other work.
 - 2. Include accessories, hardware, gate operation, and operational clearances.
- C. Samples for Initial Selection: For each type of factory-applied finish.
- D. Samples for Verification: For each type of component with factory-applied finish, prepared on Samples of size indicated below:

1.3 INFORMATIONAL SUBMITTALS

A. Sample Warranty: For special warranty.

1.4 CLOSEOUT SUBMITTALS1

A. Operation and Maintenance Data: For gate operators to include in emergency, operation, and maintenance manuals.

1.5 QUALITY ASSURANCE

- A. Testing Agency Qualifications: For testing fence grounding; member company of NETA or an NRTL.
 - 1. Testing Agency's Field Supervisor: Certified by NETA to supervise on-site testing.

1.6 FIELD CONDITIONS

A. Field Measurements: Verify layout information for chain-link fences and gates shown on Drawings in relation to property survey and existing structures. Verify dimensions by field measurements.

1.7 WARRANTY

- A. Special Warranty: Installer agrees to repair or replace components of fences and gates that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Failure to comply with performance requirements.
 - b. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
 - c. Faulty operation of gate.
 - 2. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Structural Performance: Chain-link fence and gate frameworks are to withstand the design wind loads and stresses for fence height(s) and under exposure conditions indicated in accordance with [ASCE/SEI 7].
 - 1. Design Wind Load: 140 mph loads.
 - a. Minimum Post Size: Determine in accordance with ASTM F1043 for post spacing not to exceed 10 feet for Material [Group IA, ASTM F1043, Schedule 40 steel pipe].

2.2 CHAIN-LINK FENCES, GENERAL

A. CLFMI Publications: Comply with the CLFMI Product Manual unless modified by requirements in the Contract Documents.

- B. Chain-Link Fence and Gate Assemblies: Include materials applicable for a complete assembly of application types, consisting of commercial, industrial, and security chain-link fences and gates.
 - 1. Source Limitations: Obtain chain-link fence and gate components from single source or manufacturer.

2.3 CHAIN-LINK FENCE FRAMEWORK

- A. Posts and Rails: ASTM F1043 for framework, including rails, braces, and line; terminal; and corner posts. Provide members with minimum dimensions and wall thicknesses in accordance with ASTM F1043 based on the following:
 - 1. Fence Height: Match existing at site perimeter, 6'-0" at equipment enclosures.
 - 2. Light-Industrial-Strength Material: Group IC-L, round steel pipe, electric-resistance-welded pipe.
 - a. Line Post: match existing.
 - b. End, Corner, and Pull Posts: match existing.
 - 3. Horizontal Framework Members: [top] rails in accordance with ASTM F1043.
 - a. Top Rail: match existing.
 - 4. Brace Rails: ASTM F1043.
 - 5. Metallic Coating for Steel Framework:
 - a. Type B: Zinc with organic overcoat, consisting of a minimum of **0.9 oz./sq. ft.** of zinc after welding, a chromate conversion coating, and a clear, verifiable polymer film.

2.4 CHAIN-LINK FENCE FABRIC

- A. General: Provide fabric in one-piece heights measured between top and bottom of outer edge of selvage knuckle or twist in accordance with "CLFMI Product Manual" and requirements indicated below:
 - 1. Fabric Height: match existing.
 - 2. Steel Wire for Fabric: Wire diameter of match existing.
 - a. Mesh Size: Match existing.
 - b. Zinc-Coated Fabric: ASTM A392, Type II, [Class 1, 1.2 oz./sq. ft.] with zinc coating applied after weaving.
 - c. Coat selvage ends of metallic-coated fabric before the weaving process with manufacturer's standard clear protective coating.
 - 3. Aluminum Wire Fabric: ASTM F1183, with mill finish, and wire diameter of 0.192 inch.

- a. Mesh Size: 2 inches.
- 4. Selvage: [Knuckled at both selvages].

2.5 CHAIN-LINK FITTINGS

- A. Provide fittings in accordance with ASTM F626.
- B. Post Caps: Provide for each post.
 - 1. Provide line post caps with loop to receive tension wire or top rail.
- C. Rail and Brace Ends: For each gate, corner, pull, and end post.
- D. Rail Fittings: Provide the following:
 - 1. Top Rail Sleeves: Pressed-steel or round-steel tubing not less than 6 inches long.
 - 2. Rail Clamps: Line and corner boulevard clamps for connecting intermediate and rails to posts.
- E. Tension and Brace Bands: [Pressed steel].
- F. Tension Bars: Steel, length not less than 2 inches shorter than full height of chain-link fabric. Provide one bar for each gate and end post, and two for each corner and pull post, unless fabric is integrally woven into post.
- G. Truss Rod Assemblies: Steel, hot-dip galvanized after threading rod and turnbuckle or other means of adjustment.
- H. Tie Wires, Clips, and Fasteners: In accordance with ASTM F626.
 - 1. Standard Round Wire Ties: For attaching chain-link fabric to posts, rails, and frames, in accordance with the following:
 - a. Hot-Dip Galvanized Steel: 0.148-inch- diameter wire; galvanized coating thickness matching coating thickness of chain-link fence fabric.
- I. Finish:
 - 1. Metallic Coating for Pressed Steel or Cast Iron: Not less than 1.2 oz./sq. ft. of zinc.
- 2.6 CHAIN-LINK WIRE AND TIES
 - A. Metallic-Coated Steel Wire: **0.177-inch-** diameter, marcelled tension wire in accordance with ASTM A817 or ASTM A824, with the following metallic coating:
 - 1. Type II: Zinc coated (galvanized) by hot-dip process, with the following minimum coating weight:

a. Matching chain-link fabric coating weight.

2.7 CHAIN-LINK SWING GATES

- A. General: ASTM F900 for gate posts and single swing gate types.
 - 1. Gate Leaf Width: As indicated.
 - 2. Framework Member Sizes and Strength: Based on gate fabric height match existing.
- B. Swing Gate Pipe and Tubing:
 - 1. Swing Gate Posts: Round tubular steel. 10'-0"
 - 2. Gate Frames and Bracing: Round tubular steel.
 - 3. Zinc-Coated Steel: ASTM F1043 and ASTM F1083; protective coating and finish to match fence framework.
- C. Swing Frame Corner Construction: Welded or assembled with corner fittings.
- D. Swing Gate Hardware:
 - 1. Hinges: 180-degree outward swing.
 - 2. Latch: Permitting operation from both sides of gate[with provision for padlocking accessible from both sides of gate].

2.8 CONCRETE

A. Concrete Post Footings: Minimum 28-day compressive strength of 2500 psi.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for site clearing, earthwork, pavement work, and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Stake locations of fence lines, gates, and terminal posts. Do not exceed intervals of **500 feet** or line of sight between stakes. Indicate locations of utilities, lawn sprinkler system, underground structures, benchmarks, and property monuments.

3.3 INSTALLATION OF CHAIN-LINK FENCES

- A. Install chain-link fencing in accordance with ASTM F567 and more stringent requirements specified.
 - 1. Install fencing on established boundary lines inside property line.
- B. Post Excavation: Drill or hand-excavate holes for posts to diameters and spacings indicated, in firm, undisturbed soil.
- C. Post Setting: Set posts in concrete at indicated spacing into firm, undisturbed soil.
 - 1. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices.
 - 2. Concrete Fill: Place concrete around posts to dimensions indicated and vibrate or tamp for consolidation. Protect aboveground portion of posts from concrete splatter.
- D. Terminal Posts: Install terminal end, corner, and gate posts in accordance with ASTM F567 and terminal pull posts at changes in horizontal or vertical alignment of 30 degrees or more. For runs exceeding 500 feet, space pull posts an equal distance between corner or end posts.
- E. Line Posts: Space line posts uniformly at 10 feet o.c.
- F. Post Bracing and Intermediate Rails: Install in accordance with ASTM F567, maintaining plumb position and alignment of fence posts. Diagonally brace terminal posts to adjacent line posts with truss rods and turnbuckles. Install braces at end and gate posts and at both sides of corner and pull posts.
 - 1. Locate horizontal braces at midheight of fabric 72 inches or higher, on fences with top rail, and at two-third fabric height on fences without top rail. Install so posts are plumb when diagonal rod is under proper tension.
- G. Tension Wire: Install in accordance with ASTM F567, maintaining plumb position and alignment of fence posts. Pull wire taut, without sags. Fasten fabric to tension wire with 0.120-inch- diameter hog rings of same material and finish as fabric wire, spaced a maximum of 24 inches o.c. Install tension wire in locations indicated before stretching fabric. Provide horizontal tension wire at the following locations:
- H. Top Rail: Install in accordance with ASTM F567, maintaining plumb position and alignment of fence posts. Run rail continuously through line post caps, bending to radius for curved runs and terminating into rail end attached to posts or post caps fabricated to receive rail at terminal posts. Provide expansion couplings as recommended in writing by fencing manufacturer.
- I. Intermediate and Bottom Rails: Secure to posts with fittings.
- J. Chain-Link Fabric: Apply fabric to outside of enclosing framework. Leave [1-inch] bottom clearance between finish grade or surface and bottom selvage unless otherwise

indicated. Pull fabric taut and tie to posts, rails, and tension wires. Anchor to framework so fabric remains under tension after pulling force is released.

- K. Tension or Stretcher Bars: Thread through fabric and secure to end, corner, pull, and gate posts, with tension bands spaced not more than 15 inches o.c.
- L. Tie Wires: Use wire of proper length to firmly secure fabric to line posts and rails. Attach wire at one end to chain-link fabric, wrap wire around post a minimum of 180 degrees, and attach other end to chain-link fabric in accordance with ASTM F626. Bend ends of wire to minimize hazard to individuals and clothing.
 - 1. Maximum Spacing: Tie fabric to line posts at 12 inches o.c. and to braces at 24 inches o.c.
- M. Fasteners: Install nuts for tension bands and carriage bolts on the side of fence opposite the fabric side. [Peen ends of bolts or score threads to prevent removal of nuts.]
- 3.4 INSTALLATION OF GATES
 - A. Install gates in accordance with manufacturer's written instructions, level, plumb, and secure for full opening without interference. Attach fabric as for fencing. Attach hardware using tamper-resistant or concealed means. Install ground-set items in concrete for anchorage. Adjust hardware for smooth operation.
- 3.5 ADJUSTING
 - A. Gates: Adjust gates to operate smoothly, easily, and quietly, free of binding, warp, excessive deflection, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range. Confirm that latches and locks engage accurately and securely without forcing or binding.
 - B. Lubricate hardware and other moving parts.

END OF SECTION 323113