PROJECT MANUAL

BID-SJR-2011-06

RENOVATIONS TO THE
ADMINISTRATION BUILDING
ST. AUGUSTINE CAMPUS
for
ST. JOHNS RIVER STATE COLLEGE
PALATKA, FLORIDA

CRG ARCHITECTS/PALATKA, INC.
JOB NO. 015J04

RENOVATIONS TO THE ADMINISTRATION BUILDING
ST. AUGUSTINE CAMPUS

for

ST. JOHNS RIVER STATE COLLEGE
5001 ST. JOHNS AVENUE, PALATKA, FLORIDA 32177

BID-SJRCC-2011-06
ARCHITECT'S JOB NO. 015J04

ARCHITECTS

CRG Architects/Palatka, Inc.
216A St. Johns Avenue
Palatka, Florida 32177
Tel: 386-325-0213
Fax: 386-328-1401
E: crgarchitects@comcast.net

ELECTRICAL ENGINEERS

Shaffer Engineering Group
13820 Old St. Augustine Road
Suite 113-113
Jacksonville, FL 32258
Tel: 904-239-3621
Fax: 904-239-3623
E: bshaffer@shaffereg.com

Statement of Compliance: To the best of my knowledge, this Project Manual is complete and complies with the State Requirements for Educational Facilities, latest edition.

_____

Robert C. Goodwin, AIA AR0003044

OCTOBER 19, 2011

TABLE OF CONTENTS

The General Contractor shall be required to compare this Table of Contents with the bound Project Manual for legibility, omission or inclusion of any part of any section listed herein. It shall be the General Contractor's responsibility to request, in writing, clarification from the office of the Architect. Clarifications shall be addressed by addenda to all who are registered with the Architect as having received Bidding documents. All clarifications shall be received seven (7) days prior to the date set for the receipt of Bids.

The General Contractor and Subcontractors shall review other sections of work applicable to their work and ascertain requirements in other sections applicable to their work. Each shall be held responsible for coordination and inclusion of the work indicated as if it were in the particular subcontractor's section. All subcontractors, suppliers, etc., shall be responsible for knowing what information is given on all sheets of the plans and specifications concerning his particular work.

SECTION 00020

INVITATION TO BID

1.01 INVITATION TO BIDDERS

A. Sealed bids will be received in the office of the Director of Purchasing and Contract Administration at St. Johns River State College, Palatka, Florida for renovations to the Administration Building, at SJR State College, St. Augustine Campus, St. Augustine, Florida.

BID NO.: BID-SJR-2011-06

RENOVATIONS TO THE ADMINISTRATION BUILDING
for
ST JOHNS RIVER STATE COLLEGE
5001 ST. JOHNS AVENUE
PALATKA, FLORIDA 32177

1.02 BIDS

A. Bids will be received at the Business Office of St. Johns River State College, 5001 St. Johns Avenue, Palatka, Florida, until:

LOCAL TIME: 2:00 p.m.
DAY OF WEEK: WEDNESDAY
DATE: NOVEMBER 30, 2011

The bids will then be publicly opened at **2:30 p.m.**, read aloud, and recorded in the **Administration Building, Room A-154, SJR State/Palatka, 5001 St. Johns Avenue, Palatka, Florida**

1.03 BIDDING DOCUMENTS

A. The Contract Documents for bidding may be examined and obtained at the office of the Design Professional:

CRG ARCHITECTS/PALATKA, INC.
216A ST. JOHNS AVENUE
PALATKA, FLORIDA 32177
TEL: 386/325-0213
FAX: 386/328-1401

B. The Contract Documents may be examined but not obtained at:

McGraw-Hill Dodge Construction, Jacksonville
Construction Bulletin, Jacksonville
Reed Construction Data (reedconstructiondata.com)

C. General: Bidding Documents, in whole, are available at the Design Professional's Office upon receipt of checks or money orders made payable to CRG Architects for the total required amount. **Payments for deposit item shall be separate from shipping charges. Do not combine payment**.

1. Request for billing will not be honored. Cash or check will be accepted.

D. Bidding Document Cost: Shipping charges are in addition to below stated amounts:

ITEM	NON- REFUNDABLE DEPOSIT/EACH
Complete Set Bidding Documents	$ 30.00
Shipping Charges (per set)	$ 10.00

E. Distribution:

1. Bidders: Pre-Qualified General Contractors are eligible for two (2) sets of bidding documents upon payment of a non-refundable deposit for each. Additional copies are available on non-refundable cost basis. **Shipping charges are in addition thereto.**

2. Major sub-bidders and major material suppliers: Eligible for one (1) set of bidding documents upon payment of a non-refundable deposit. Additional copies are available on a non-refundable cost basis. **Shipping charges are in addition thereto.**

3. Sub-bidders, product suppliers and other interested parties: Eligible for bidding documents upon payment of non-refundable deposit and shipping cost as applicable. **No partial sets will be distributed.**

F. Return of Bidding Documents: Documents, regardless of method of procurement, remain the property of the Design Professional and shall be issued for no other purpose other than bidding on this project. Bidding documents shall be returned *complete, bound, in original order, intact and within (14) days after receipt of bids.*

1.04 BONDS

A. The successful contractor is required to furnish Performance and Payment Bonds described in the Contract Documents.

B. Bid guarantee in the form of a Bid Bond executed by the bidder and a qualified surety or a certified or cashier's check on any national or state bank in the amount of five percent (5%) of the proposal, including alternates, made payable to St. Johns River State College, must accompany competition after opening bids, and in the event contract is awarded to the bidder, will, within ten (10) days after receiving same, execute contract and furnish the required bond, failing which the security shall become the property of the Board of Trustees as liquidated damages.

1.05 PREPARATION AND SUBMISSION OF PROPOSAL

A. All bids must be made on Proposal Forms, included herein, properly executed and placed in envelopes and marked:

RENOVATIONS TO THE ADMINISTRATION BUILDING,
ST. AUGUSTINE CAMPUS
BID-SJR-2011-06

Deliver or mail to: Office of the Director of Purchasing and Contract Administration - Room A-10
Administration Building
St. Johns River State College
5001 St. Johns Avenue
Palatka, Florida 32177

B. St. Johns River State College reserves the right to reject any or all bids, waive informalities in any bid, make the award in part or whole and to make the award in the best interest of St. Johns River State College. It is the intention of St. Johns River State College to award a contract to a single qualified Bidder submitting the lowest total base bid and for any bid alternate proposals contingent upon availability of funding.

C. No changes in the amounts of bids appearing on the outside of bids will be considered. Only the amounts shown inside the envelope will be considered. All changes, corrections and erasures must be initialed by the person signing the bid.

D. Furnish with your bid the satisfaction of your proper licensing.

E. There will be a **Mandatory Pre-Bid Conference** to be held on **November 3, 2011** at **10:00 a.m.** at the **Administration Building, St. Johns River State College**, **2990 College Drive, St. Augustine, Florida.** Bidders or their representatives are **required** to attend in order to be eligible to bid.

F. **This project is limited to Invited, Pre-Qualified Bidders only**. Only those bids by Invited, Pre-Qualified Contractors will be considered.

END OF SECTION

SECTION 00101

INSTRUCTIONS TO BIDDERS

A. BID DATE:

Sealed proposals will be received by the St. Johns River State College Board of Trustees at the date, time and place so stated in the "Invitation to Bid" for all work herein. The bidder or his authorized representative is invited to be present at the bid opening.

B. PROJECT SITE LOCATION:

ADMINISTRATION BUILDING (BUILDING “A”)
ST. JOHNS RIVER STATE COLLEGE
ST. AUGUSTINE, FLORIDA

C. PROPOSALS:

All work on the project shall be included in the proposal for the General Construction. Proposals for bid items for this project shall be submitted *in duplicate* on the proposal form enclosed in this project manual. The proposal shall be sealed in an envelope and marked to indicate the project name, bid number and contractor's name. The envelope shall then be forwarded or delivered to the Office of the Director of Purchasing and Contract Administration, in the Administration Building at St. Johns River State College, Palatka, Florida.

1. The bidder shall fill in their proposal completely and correctly sign the proposal. Proposals that show any omissions, alterations of the proposal, additions not authorized by the St. Johns River State College Board, conditional bids, or irregularities of any kind, may be rejected.

2. Proposals shall be submitted in sufficient time for receipt by the St. Johns River State College, prior to scheduled hour for receipt of the proposals. Bids received after the scheduled bid date and time will not be considered. No changes will be permitted after bids have been submitted. All bidders shall be notified of the bid results.

3. No proposals may be withdrawn, after the schedule closing time for bids, for a period of sixty (60) days.

4. It is the intention of the St. Johns River State College Board of Trustees to award a contract to a single bidder submitting the lowest proposal for the work. However, the Board reserves the right to reject any or all bids, to accept any bid submitted, to waive any informalities, and to negotiate with the low bidder or bidders on any changes which the Board considers necessary for their own interests, including but not limited to direct purchase of materials.

D. Completion:

Time of completion for this project is a condition of the contract and as such is not flexible. The time of completion is indicated in the specifications and no extension of time is anticipated. If the bidder cannot meet the construction schedule, they should not submit a bid.

E. Contractor's License: All bidders shall be licensed as required by the State of Florida laws.

F. Site Investigation:

Each bidder shall, before submitting their proposal, examine the sites to determine the extent of the work involved and the conditions under which they must perform the work.

The submittal of a proposal will be construed as evidence that such examination has been made and no subsequent allowance will be made in this connection.

G. Permits, Fees and Taxes:

Cost of social security and other applicable state and federal government taxes and any sales taxes for which the bidder is liable shall be included in his proposal for the work. No local building permits are required for work on the campus. The College will issue the General Building Permit.

H. Performance and Payment Bond:

The successful bidder shall furnish a satisfactory performance and payment bond with a corporate surety authorized to do business in the State of Florida and acceptable to the College, within ten (10) days after notice of award. The bond shall be conditioned well and truly to perform the contract and pay all bills and invoices, for labor done and materials furnished in the performance of the work including guarantee period of one (1) year against faulty work, and be on **AIA Document Form A312.**

1. All bonds must be executed under corporate seal of the surety and countersigned on the part of the surety by a qualified resident agent of the company or an attorney in fact with proof of power attached.

2. In case of default on the part of the contractor, actions for all expenses incident to ascertaining and collecting losses under the bond including both architectural and legal services shall lie against bond.

3. Such bond shall be in the penal sum of 100% of the contract.

4. Premiums for the performance and payment bond shall be included in the bidder's proposal.

I. Bid Security:

Bid security will be required in an amount not less than five percent (5%) of the base bid amount and all alternates, in the form indicated in Section 00020, Invitation to Bid.

J. Interpretation of Drawings and Specifications:

Should a bidder find discrepancies or ambiguities in, or omissions, from the drawings and specifications, or should he be in doubt as to their meaning, the bidder shall at once notify the Design Professional for an interpretation in the form of an addendum. Addendum will be forwarded to all bidders and each bidder shall acknowledge the receipt of each addendum on his proposal in the spaces provided. Bidders should address all inquires in written form for this project to:

CRG Architects/Palatka, Inc.
Robert Goodwin, AIA, Architect
216A St. Johns Avenue
Palatka, Florida 32177
Tel: 386/325-0213
Fax: 386/328-1401
Email: crgarchitects@comcast.net

K. Standard Basis for Bidding:

1. Equality: Where materials, etc., are referred to in the specifications as "equivalent to" or words of similar import, the Design Professional shall decide as to equality. In addition to data required under paragraph "Shop Drawings" and "Manufacturer's Description data", the contractor shall furnish other detailed data as required by the Design Professional for comparison if the product is mentioned by name. All data shall be submitted at least seven (7) days prior to the scheduled bid opening date. No extra will be allowed because of such substitution, if permitted, either for the article substituted or for revisions in other work affected by the substitution.

2. Substitutions: Where a particular system, product or material is specified by one or more trade names without the "equivalent" qualification, it shall be considered as a standard basis for bidding, and is most satisfactory for its particular purpose in the work. Substitutions for the named systems, products or materials and substitutions for any other product or material, which the bidder considered pertinent, will be considered under the following conditions only:

   a. To insure a uniform basis for bidding, the bidder shall base his proposal on the particular system, product or material named in the specifications.

   b. The bidder shall attach to his form of proposal at the time of submission, a separate sheet upon which he shall list the particular system, product or material that he wishes to substitute and directly opposite each such item, the amount that he will add to or deduct from his base bid, if such substitution is approved by the College and the Design Professional previous to the signing of the contract.

c. If no addition or deduction to the base estimate is allowed by the bidder for such substitutions, it shall be so stated opposite the item involved on the sheet attached. Substitutions so submitted shall include any and all adjustments of that or any other work affected by the substitution. Such substitutions shall be permitted and adopted only upon the written approval of the Design Professional.

d. Any proposal submitted that does not conform to the above requirements shall be considered as informal and unfair to other bidder's submitted proposals, and will not be accepted.

3. Adjustments Because of Substitutions: In general, the drawings have been prepared, based upon sizes, loads and requirements of specific items of equipment, products or materials. In the event the contractor elected to use other than the item or items for which designs have been prepared and included in the drawings, and, if because of such substitutions or changes from the conditions shown, the Design Professional is required to revise the drawings or is caused added expense therefore, the College shall be equitably reimbursed by the contractor for such costs.

a. No changes in the amount of bid appearing on the outside of the bid envelope will be considered. Only the amount shown inside the envelope will be considered. All changes, corrections and erasures must be initially by the person signing the bid.

4. Subcontractors and Shop Fabricators:

a. Bidders shall furnish with their bids and prior to the opening of bids, the names and the class of work to be performed by fabricators when the amount to be paid each subcontractor exceeds 5 percent of the total price.

b. The successful bidder shall employ the subcontractors listed in the bidder's proposal along with the class of work to be performed by each. This list shall not be modified in any way whatsoever without the written consent of the College by Change Order to ensure those subcontractors shall be utilized for the specified class of work.

c. Modifications to the listed subcontractors by Change Order may be granted by the College only in those instances where the bidder presents written evidence that use of the listed subcontractor would not be in the best interest of the College.

L. Equivalents:

1. In these specifications where one certain kind, type or brand of material manufacturer is named, it shall be regarded as the required minimum standard of quality. Substitutions lowering the performance, quality, method of assembly of installation, or in general, not in keeping with the details and specifications will not be permitted. It is understood that when a bid is submitted, the bidder is aware of the requirements, and that the materials within his bid are equal to or better on such items and that prior approval of substitutions has been obtained.

2. No time extensions will be permitted, to revise or redesign a product found not to comply, and that evidence of noncompliance shall automatically classify the bid as having been informal and rejected.

3. Since time is of the essence, the College cannot be expected to delay the award of bid, and their decisions shall be in strict accordance to the details and specifications, these items should be brought to the attention of the Design Professional of the project and of the College prior to submitting a bid proposal.

M. Disqualification of Bidders:

1. Only one proposal from an individual, firm, partnership, or corporation, under the same or different names will be considered.

2. Should there be any reasonable grounds for the College Board, believing that a collusion or combination exists between bidders, all proposals may be rejected and all such bidders or participants in such combination or collusion will not be considered in the future proposal for the same work.

3. No proposal or bid will be considered unless accompanied by a proposal guarantee or good faith deposit in the amount in the form specified in the Invitation to Bid and/or Advertisements for Bid.
4. Proposals that are incomplete or not signed by the bidder may be rejected.

5. Proposals that are submitted without the sub-bidders listing completed as required and indicated in Sections 00220 Supplementary Instructions (including Appendix A) and Section 00420 Bid Form Attachment, may be rejected.

N. Return of Proposal Guarantees:

All proposal guarantees and good faith deposits will be returned immediately after the tabulation and analysis of the bids, except for the three (3) lowest bidders; these will be returned within fifteen (15) days following award of the contract.

O. Contract Award:

The College intends to award a contract to a single bidder submitting the lowest total base bid and for any bid alternate proposals contingent upon availability of funding proposals in compliance with the requirements of the Contract Documents.

P. Execution of Contract:

1. Within the (10) days after Notice of Award, the successful bidder shall enter into a formal contract. The contractor will provide a guarantee period of one (1) year against faulty work and be on the form as provided by the College.

2. Failure to execute the contract as provided in these documents within ten (10) days from the date of the notification of award shall be just cause and the College may annul and void the award and declare forfeiture of the proposal guarantee or good faith deposit in liquidation of all damages sustained.

    a. Award may then be made to the next lowest responsible bidder, or the work may be re-advertised.

3. No award will be binding upon the College until the construction contract has been executed.

4. The construction contract shall be signed in triplicate by the College and the Contractor.

Q. Bid Protests:

Bid protests pursuant to Florida Statutes §120.57 shall be served on Melissa C. Miller, Executive Vice President, SJRCC/Palatka, and Beverly Barker, Director of Purchasing and Contract Administration, 5001 St. Johns Avenue, Palatka, Florida 32177 with a copy to SJRCC Board Counsel Joe C. Miller II, 97 Orange Street, St. Augustine, Florida 32084, all via certified mail. Bid protests may be preliminarily filed, if followed by a certified mail original, via facsimile transmittal to Melissa C. Miller at 386/312-4229, Beverly Barker at 386/312-4167 and Mr. Joe Miller at 904/824-3857. Bid protests must be accompanied by a cost deposit of five thousand dollars ($5,000.00) or one percent of the total contract price, whichever is greater.

In the event the protesting party is not the prevailing party, as a result of final agency action taken by pursuant to §120.57, said cost deposit shall be retained by the College to defray its costs, expenses and fees, including reasonable attorney's fees with respect to their participation in the bid protest process. Furthermore, the unsuccessful protester shall be responsible to the College for all other and additional reasonable fees, expenses and costs, in the event the deposit which the College retains pursuant to this paragraph is insufficient to reimburse the College for all costs and fees incurred.

R. A **Mandatory Pre-Bid Conference** will be held **November 3, 2011** at **10:00 a.m.** in the Administration Building at St. Johns River State College, 2990 College Drive, St. Augustine, Florida. All qualified bidders or their representatives **must** attend in order to be eligible to bid.

END OF SECTION

SECTION 00130

MANDATORY PRE-BID CONFERENCE

PART 1 - GENERAL

1.01 SUMMARY

A. Prime Bidders (Invited, Pre-Qualified Contractors) must attend the Mandatory **PRE-BID CONFERENCE** described in the Invitation to Bid (Section 00020, this manual)

B. Attendance is mandatory for Pre-Qualified Prime Bidders. Sub-contractors are invited and encouraged to attend the Mandatory Pre-Bid Conference.

C. Agenda Outline: Prepared by Architect

1. Attendance roster to be signed by all attendees.
2. Introduction of Owner Architect/Engineer Project Team and Attendees.
3. Project Summary and Scope of Work
4. Availability of Documents
   a. Plan Rooms
   b. General Contractors
   c. Sub-Trade Plan Availability
   d. Set Purchases (full)
5. Instructions to Bidders and Review of Bid Process (see Section 00101, this manual)
6. Contractual Agreement (Section 00520)
7. Proposal Submission Requirements & List (s) of Subcontractors (Sections 00220 and 00420)
8. Products and Substitutions (Section 01600)
9. Addenda Schedule
10. Contractor Question Period (answers will be included in an addendum)
11. Closing Statements & Site Visit

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

3.01 AGENDA:

A. Copies of this agenda will be distributed to all parties in attendance.

END OF SECTION

SECTION 00210

PROJECT SCHEDULE

- Bid Documents/Plans Available to Pre-Qualified General Contractors
    - Date: on or after October 21, 2011 (Available from CRG Architects/Palatka, Inc.)
- **Mandatory Pre-Bid Conference**
    - Date: November 3, 2011
    - Time: 10:00 a.m.
    - Location: St. Johns River Community College, Administration Building, 2990 College Drive, St. Augustine, Florida
- Deadline for Bid Submission
    - Date: November 30, 2011
    - Time: By 2:00 p.m.
    - Location: Sealed bids, bearing on the outside of the envelope the name of the contractor and 'BID-SJR-2011-06, must be received in the St. Johns River Community College, **Business Office, Attention: Beverly Barker**, 5001 St. Johns Avenue, Palatka, FL 32177
- Public Meeting to Verbally Announce Bids Received (Bid Opening)
    - Date: November 30, 2011
    - Time: 2:30 p.m.
    - Location: St. Johns River Community College, **Board Room (A-154),** 5001 St. Johns Avenue, Palatka, FL 32177
- Electronic Posting of Recommendation for Bid Award
    - Date: On or about December 2, 2011 (viewable at www.sjrstate.edu/201106)
- Award of Bid by Board of Trustees
    - Date: December 14, 2011
    - Time: 4:00 P.M.
    - Location: Board of Trustees Meeting, St. Johns River Community College, Executive Board Room, 5001 St. Johns Avenue, Palatka, Florida.
- Electronic Posting of Bid Award
    - Date: On or about December 15, 2011 at www.sjrstate.edu/201106

- Notice to Proceed Issued:
    - December 26, 2011
- Pre-Construction Conference
    - Date**:** TBA
    - Time: TBA
    - Location: St. Johns River Community College, Administration Building, 2990 College Drive, St. Augustine, Florida.
- Construction Start
    - December 26, 2011
- Substantial Completion: March 6, 2012 (72 days after Notice to Proceed)
- Final Completion: March 20, 2012 (14 days after Substantial Completion)

END OF SECTION

SECTION 00220

SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

The following supplements modify, change, delete from or add to the "Instructions to Bidders", AIA Document A701, Fourth Edition, 1997.

Where any Article of the Instructions to Bidders is modified or any Paragraph, Subparagraph, or Clause thereof is modified or deleted by these Supplementary Instructions to Bidders, the unaltered provisions of that Article, Paragraph, Subparagraph or Clause shall remain in effect.

Add the following new Articles:

Article 9, Liquidated Damages

9.1 The Bidder agrees that liquidated damages in the amount of One Hundred Dollars ($100.00) per calendar day for each day the work remains incomplete, shall be assessed against the Bidder if the work is not completed within the specified time limit. It shall be understood that liquidated damages are not a penalty, but are intended to provide a means of recovery of actual damages suffered by the Owner as a result of delayed completion.

Article 10, Contract Time

10.1 Contract time to Substantial Completion is Seventy-two (72) Calendar Days.

The following is Supplemental Bid Information

Bidding Questions

Questions concerning the bidding process and bid specifications, other than the technical specifications, should be directed to Beverly Barker, Director of Purchasing and Contract Administration, via email at BeverlyBarker@sjrstate.edu or by calling 386-312-4110.

Questions concerning the technical specifications of this bid shall be directed in writing, referencing the drawings and specifications to Robert C. Goodwin, AIA, Architect, CRG Architects/Palatka, Inc., crgarchitects@comcast.net, tel: 386-325-0213, fax: 386-328-1401.

Definitions

The College, SJR State, or St. Johns River State College, refers to the District Board of Trustees of St. Johns River State College, Palatka, Florida. The College is a political subdivision of the State of Florida.

Firm, vendor, contractor or bidder in this document refers to respondents to this invitation to bid.

Taxes

The College does not pay federal, excise, or state sales taxes. The applicable tax-exemption numbers are:

Florida Sales Tax: 85-8013170533C-4
Federal Identification Number: 59-1033399

Mandatory Pre-Bid Conference

Attendance at the Mandatory Pre-Bid Conference is a requirement in order to be eligible to bid.

Bidding Costs

St. Johns River State College is not responsible for any cost incurred by bidders in their efforts in submitting this bid.

Bid Bond

Bid guarantee in the form of a Bid Bond executed by the bidders and a qualified surety, or a certified or cashier's check on national or state bank in the amount of five percent (5%) of the proposal, including alternates, made payable to St. Johns River State College, must accompany the proposal.

Open Competition

The College encourages free and open competition among Pre-Qualified Firms. Whenever possible, specifications, bid invitations, and conditions are designed to accomplish this objective, consistent with the necessity to satisfy the College's needs and the accomplishment of a sound economical operation. The Firm's signature on the Bid Checklist/Response Form guarantees that the Firm, its agents, officers, or employees have not been bribed or attempted to bribe or influence in any way an officer, employee or Agent of the College.

Minority & Women Owned Business Enterprises (M/WBE) Participation

M/WBE participation is encouraged.

Insurance Coverage

Contractor shall obtain, maintain, and pay for insurance in the categories listed in the insurance schedule. The insurance coverage is each category shall meet or exceed the minimum limits set forth in the insurance schedule. The College, the Board of Trustees of St. Johns River State college and the State of Florida shall be included as additional named insured on each policy. The insurance shall cover the Firms entire operations under Agreement with the College and shall be effective throughout the effective period of this Agreement. It is not the intent of this schedule to limit the types of insurance otherwise required by this Agreement or that the Firm may desire to obtain.

Minimum Insurance Requirement Schedule

Refer to 00801 Supplementary Conditions For All Insurance Requirements.

Bid Award Process

The bid award shall be made to the lowest and best proposal, Base and Alternates within budget, which meets or exceeds the conditions of the bid specifications and the College reserves the right to award by individual item, groups of items, "All or None" or a combination thereof contingent upon budget availability. The College is not necessarily bound to accept the lowest bid if that bid is contrary to the best interests of the College. The District Board of St. Johns River State College reserves the right to waive any minor deviations in otherwise valid bid proposal, to waive any informalities, to reject any or all bid proposals, and to accept the bid which will be in the best interest of SJR State. In addition, the College shall have the right to reject any bid not accompanied by data required by the bid specifications, or a proposal in any way incomplete or irregular. Conditional bids will not be accepted. Bidders are cautioned to make no assumption until St. Johns River State College has entered into a contract and issued related purchase order(s).

Bid Rejection

The College shall have the right to reject any or all bids and in particular to reject a bid no accompanied by data required by the bid specifications or a proposal in any way incomplete or irregular. Conditional bids will not be accepted.

Bid Specification Interpretation

Interpretation of the wording of this document shall be the responsibility of the College and that interpretation shall be final.

Bid Response Materials

The materials submitted in response to this invitation to bid becomes the property of the College upon delivery to the Office of the Director of Purchasing and Contract Administration and may be appended to any formal document which would further define or expand the contractual relationship between the College and the successful bidder.

Errors and Omissions

The successful bidder is expected to comply with the true intent of these bid specifications taken as a whole and shall not avail itself of any errors or omissions to the detriment of the services. Should successful bidder suspect any error, omission or discrepancy in the bid documents or instructions, the successful bidder shall immediately notify the College, in writing, and the College shall issue written instructions to be followed. The successful bidder is responsible for the contents of its proposal and for satisfying the requirements set forth in the bid documents.

Bidder Responsibility

It is understood, and the bidder hereby agrees, that it shall be solely responsible for all services that it proposes, notwithstanding the detail present in the bid specifications.

Severability

If any provisions of the agreement resulting from this bid are contrary to, prohibited by, or deemed invalid by applicable laws or regulations of any jurisdiction in which it is sought to be enforced, then said provisions shall be deemed inapplicable and omitted and shall not invalidate the remaining provisions of the agreement.

In the event any provision of this agreement shall be held invalid or unenforceable by a court of competent jurisdiction, or by an administrative hearing officer in accordance with Chapter 120, Florida Statutes, such holding shall not invalidate or render unenforceable any other provision hereof.

Venue

The contract, when entered into and any disputes hereunder, shall be construed in accordance with the laws of the State of Florida and enforced in the courts of the State of Florida. College and Firm hereby agree that venue shall be in Putnam County, Florida.

Americans with Disabilities Act of 1990

If special accommodations are required in order to attend the Public Meeting to announce bids received, contact the Director of Purchasing and Contract Administration at 386-312-4110 or email BeverlyBarker@sjrcc.edu a minimum of three business days prior to the meeting.

Protests of Awards or Specifications

Failure to file a protest within the time prescribed in § 120.57(3) Florida Statutes, shall constitute a waiver of proceedings under Chapter 120, Florida Statutes.

Independent Firm

Nothing herein is intended or shall be construed in any way creating or establishing the relation of co-partners between the parties or in any way making the Firm the agent or representative of the College for any purposes in any manner whatsoever. Firm is, and shall remain, an independent Firm with respect to all services performed.

Laws, Ordinances, Rules, Regulations, Permits, and Licenses

The Firm shall observe and obey all laws, ordinances, rules, regulation, and policies of the District Board of Trustees of St. Johns River State College and the federal and state governments which may be applicable to the Firm's operation at St. Johns River State College, and shall, at the sole cost to the Firm, obtain and maintain all permits and licenses necessary to comply with such requirements and standards.

INSTRUCTIONS FOR SUBMISSION OF BIDS

Instructions to Bidders

Sealed bids will be accepted in the office of the **Director of Purchasing and Contract Administration, St. Johns River State College, Business Office, 5001 St. Johns Avenue, Palatka, FL 32177** until **2:00 p.m. EST** on **November 30, 2011.** The bid submission must be sealed and clearly marked **'BID SJR-2011-06'** on the outside of the package containing the bid response. Bids received after that time and date will be marked late and will not be considered. It is the sole responsibility of the applicant to ensure that bids are delivered to the Office of the Director of Purchasing and Contract Administration, St. Johns River State College, 5001 St. Johns Avenue, Palatka, Florida prior to the deadline. Facsimile (fax) and/or email bids are not acceptable and shall not be considered.

Submit one original (marked as Original) and one copy (marked as Copy) of your bid response. The bid response must include a signed Bid Checklist/Response Form and each document indicated on this form. All documents should be bound or stapled to the Bid Checklist/Response Form. The documents should be included in the response in the following order:

- Bid Checklist/Response Form (Use Appendix A)
  NOTE: In order to be considered, the response to this bid must be submitted on this form and the form must be signed.
- Bid Bond
- Copy of License to do business in the State of Florida
- List of Subcontractors (Name, Address, and License Number REQUIRED)

Bid Response Authorization

The bid response shall be signed by a person legally authorized to bind the Firm.

Firm Warranty of Ability to Perform

Firm shall warrant by authorized signature on the bid response that there is no action suit, proceeding, inquiry, or investigation, at law or equity, before or by a court, governmental agency, public board or body, pending or, to the best of the Firm's knowledge, threatened, which would in any way prohibit, restrain, or enjoin the execution or delivery of the Firms obligations, diminish the Firm's obligations or diminish the Firm's financial ability to perform the terms of the proposed contract.

Contract

The successful bidder will enter into a contract with the College based on bid documents and the result of the bid.

Assignment

Neither this agreement nor any duties or obligations under this agreement or resulting contract(s) shall be assigned by Firm without prior written consent of the College.

Indemnification

The firm shall indemnify and hold harmless the College, and any agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys' fees arising out of or resulting from performance of the Work, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or injury to or destruction of tangible property (other than the Work itself) including loss of use resulting therefrom, but only to the extent caused in whole or in part by negligent acts or omissions of the Firm or anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense, is caused in part by a party indemnified hereunder. Such obligations shall not be considered to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist.

Payment

When the Contractor receives payment from the Owner for labor, services, or materials furnished by subcontractors and suppliers hired by the Contractor for the project, the Contractor shall remit payment due to those subcontractors and suppliers, less the value of any items contested in accordance with the Contract, within 10 days after the Contractor's receipt of payment from the Owner. When the payment due the subcontractor is for final payment, including retainage, the subcontractor must include with the invoice for final payment a conditional release of lien and all appropriate warranties and closeout documentation. When the subcontractor receives payment from the Contractor for labor, services, or materials furnished by subcontractors and suppliers hired by the subcontractor, the subcontractor shall remit payment due to those subcontractors, less the value of any item contested in accordance with the contract, within ten (10) days after the subcontractor's receipt of payment.

END OF SECTION

APPENDIX A
BID SJR-2011-06
BID CHECKLIST / BID FORM

Bid Checklist:

Place an "x" on the lines below of the documents attached to this form.

_____ Copy of license to do business in the State of Florida

_____ Section 00307 – Public Entity Crime Statement

_____ Section 00308 – Drug Free Workplace Form

_____ Section 00420 – Bid Form Attachment, List of Subcontractors

_____ Section 00435 – Bid Bond Form

Bid Response Form:

The undersigned Bidder hereby declare that the only person or persons interested in this proposal as Principal is named herein mentioned has any interest in this proposal or in the contract to be entered into; that this proposal is made without any connection with any person, company, or party submitting a proposal; and that it is in all respects fair and in good faith, without collusion or fraud.

The Bidder further declares that he has examined the site of the work and informed himself fully in regard to all conditions pertaining to the places where the work is to be done; that he has satisfied himself relative to the work to be performed and agrees to and by them.

_____

NAME OF BIDDER

The bidder proposes and agrees to provide all necessary materials, equipment, machinery, tools, apparatus, and means of transportation, labor and services necessary to complete the renovations to the Business Office at St. Johns River State College, Palatka Campus.

Base Bid Proposal:_____ ($_____)

The Bidder proposes and agrees hereby to commence the Work with an adequate force and equipment within seven (7) consecutive days after being notified by the Owner to do so, and shall carry on at a rate to secure Substantial completion as indicated in the Supplementary Instructions to Bidders.

The Bidder agrees that Liquidated Damages in the amount as indicated in the Supplementary Instructions to Bidders for each day the work remains incomplete, shall be assessed against him if the work is not completed within the above specified time limit.

Attached hereto is a Bid Bond in the sum of

_____ Dollars ($ _____)

made payable to the Owner.

The following Addenda were received:

Addendum ____, Dated _____ Addendum ____, Dated _____

Addendum ____, Dated _____ Addendum ____, Dated _____

Addendum ____, Dated _____ Addendum ____, Dated _____

Date: _____

Authorizing Signature: _____

All companies certify by their signature that they have read and understand the conditions and specifications of the bid and have included all required documents, and that they have the authority, capacity, and capability to perform according to the conditions and specifications of BID SJR-2011-XX.

Company Name: _____

Address: _____

City, State, Zip: _____

Telephone Number: _____

Authorized Signature: _____

Printed Name: _____

Title: _____

END OF SECTION

SECTION 00307

PUBLIC ENTITY CRIME FORM

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. St. Johns River State College will require for this project, in accordance with F.S. 287.017, a Public Entity Crime Statement form be attached with the bid. This form must be completed and submitted with the Bids and Contract Documents from all subs, material suppliers, and/or consultants for the project. See sample form enclosed.

PART 2 – PRODUCTS *(Not Used)*

PART 3 – EXECUTION *(Not Used)*

END OF SECTION

PUBLIC ENTITY CRIME STATEMENT

A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases or real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for Category Two for a period of 36 months from the date of being placed on the convicted vendor list.

I, _____, being an authorized representative of the firm of

_____, located at _____

City: _____, State: _____ Zip: _____

have read and understand the contents of the above. As the person authorized to sign the statement, I certify that this form is not on the convicted vendor list and complies fully with the above requirements.

Signature: _____ Date: _____

Telephone: _____

Fax: _____

Federal ID# _____

SECTION 00308

DRUG-FREE WORKPLACE

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. St. Johns River State College Drug Free Workplace Form is attached. This form must be copied, completed, and submitted with the Contract Documents.

PART 2 – PRODUCTS *Not used*

PART 3 – EXECUTION *Not used*

END OF SECTION

DRUG FREE WORKPLACE PROGRAM FORM

In order to have a drug-free workplace program, a business shall:

1) Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.

2) Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

3) Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in Subsection (1).

4) In the statement specified in Subsection (1), notify the employees that, as a condition of working in the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendre to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after conviction.

5) Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.

6) Make good faith effort to continue to maintain a drug-free workplace through implementation of this section.

AS THE PERSON AUTHORIZED TO SIGN THIS STATEMENT, I CERTIFY THAT THIS FIRM,

_____

(Name of Company)

COMPLIES FULLY WITH THE ABOVE REQUIREMENTS.

Authorized Signature Date

_____ _____

SECTION 00420

BID FORM ATTACHMENT – LIST OF SUBCONTRACTORS

DIVISION OF WORK	PROPOSED SUBCONTRACTOR	PRINCIPAL/OFFICER	CORP. ADDRESS	LICENSE NO.
DEMOLITION				
FRAMING				
DRYWALL				
ACOUSTICAL CEILING				
FLOORING				
MILLWORK				
MECHANICAL				
ELECTRICAL				

SIGNED: _____

(BIDDER)

END OF SECTION

SECTION 00435

BID BOND FORM

BID BOND FORM

AIA Document A310, Bid Bond, February, 2010, is the form to be used.

AIA Document A310 may be purchased from the Florida Association of the American Institute of Architects, (AIA Florida), 104 East Jefferson Street, Tallahassee, Florida, tel: 904-222-7590, fax: 904-224-8048, or may be examined at the Architect's office.

END OF SECTION

AIA® Document A101™ – 2007

Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum

AGREEMENT made as of the day of in the year
(In words, indicate day, month and year.)

BETWEEN the Owner:
(Name, legal status, address and other information)

and the Contractor:
(Name, legal status, address and other information)

for the following Project:
(Name, location and detailed description)

SAMPLE FOR PROJECT MANUAL

The Architect:
(Name, legal status, address and other information)

The Owner and Contractor agree as follows.

ADDITIONS AND DELETIONS:
The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

AIA Document A201™–2007, General Conditions of the Contract for Construction, is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

TABLE OF ARTICLES

ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. An enumeration of the Contract Documents, other than a Modification, appears in Article 9.

ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others.

ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be the date of this Agreement unless a different date is stated below or provision is made for the date to be fixed in a notice to proceed issued by the Owner.

(Insert the date of commencement if it differs from the date of this Agreement or, if applicable, state that the date will be fixed in a notice to proceed.)

If, prior to the commencement of the Work, the Owner requires time to file mortgages and other security interests, the Owner's time requirement shall be as follows:

§ 3.2 The Contract Time shall be measured from the date of commencement.

§ 3.3 The Contractor shall achieve Substantial Completion of the entire Work not later than ( ) days from the date of commencement, or as follows:

(Insert number of calendar days. Alternatively, a calendar date may be used when coordinated with the date of commencement. If appropriate, insert requirements for earlier Substantial Completion of certain portions of the Work.)

Portion of Work	Substantial Completion Date

, subject to adjustments of this Contract Time as provided in the Contract Documents.
(Insert provisions, if any, for liquidated damages relating to failure to achieve Substantial Completion on time or for bonus payments for early completion of the Work.)

ARTICLE 4 CONTRACT SUM

§ 4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be ($), subject to additions and deductions as provided in the Contract Documents.

§ 4.2 The Contract Sum is based upon the following alternates, if any, which are described in the Contract Documents and are hereby accepted by the Owner:
(State the numbers or other identification of accepted alternates. If the bidding or proposal documents permit the Owner to accept other alternates subsequent to the execution of this Agreement, attach a schedule of such other alternates showing the amount for each and the date when that amount expires.)

§ 4.3 Unit prices, if any:
(Identify and state the unit price; state quantity limitations, if any, to which the unit price will be applicable.)

Item	Units and Limitations	Price Per Unit ($0.00)

§ 4.4 Allowances included in the Contract Sum, if any:
(Identify allowance and state exclusions, if any, from the allowance price.)

Item	Price

ARTICLE 5 PAYMENTS

§ 5.1 PROGRESS PAYMENTS

§ 5.1.1 Based upon Applications for Payment submitted to the Architect by the Contractor and Certificates for Payment issued by the Architect, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.

§ 5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

§ 5.1.3 Provided that an Application for Payment is received by the Architect not later than the day of a month, the Owner shall make payment of the certified amount to the Contractor not later than the day of the month. If an Application for Payment is received by the Architect after the application date fixed above, payment shall be made by the Owner not later than ( ) days after the Architect receives the Application for Payment.
(Federal, state or local laws may require payment within a certain period of time.)

§ 5.1.4 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be prepared in such form and supported by such data to substantiate its accuracy as the Architect may require. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment.

§ 5.1.5 Applieations for Payment shall show the pereentage of eompletion of each portion of the Work as of the end of the period covered by the Application for Payment.

§ 5.1.6 Subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

.1 Take that portion of the Contract Sum properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the Contract Sum allocated to that portion of the Work in the schedule of values, less retainage of percent (%). Pending final determination of cost to the Owner of changes in the Work, amounts not in dispute shall be included as provided in Section 7.3.9 of AIA Document A201™–2007, General Conditions of the Contract for Construction;

.2 Add that portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing), less retainage of percent (%);

.3 Subtract the aggregate of previous payments made by the Owner; and

.4 Subtract amounts, if any, for which the Architect has withheld or nullified a Certificate for Payment as provided in Section 9.5 of AIA Document A201–2007.

§ 5.1.7 The progress payment amount determined in accordance with Section 5.1.6 shall be further modified under the following circumstances:

.1 Add, upon Substantial Completion of the Work, a sum sufficient to increase the total payments to the full amount of the Contract Sum, less such amounts as the Architect shall determine for incomplete Work, retainage applicable to sueh work and unsettled claims; and
(Section 9.8.5 of AIA Document A201–2007 requires release of applicable retainage upon Substantial Completion of Work with consent of surety, if any.)

.2 Add, if final completion of the Work is thereafter materially delayed through no fault of the Contractor, any additional amounts payable in accordance with Section 9.10.3 of AIA Document A201–2007.

§ 5.1.8 Reduction or limitation of retainage, if any, shall be as follows:
(If it is intended, prior to Substantial Completion of the entire Work, to reduce or limit the retainage resulting from the percentages inserted in Sections 5.1.6.1 and 5.1.6.2 above, and this is not explained elsewhere in the Contract Documents, insert here provisions for such reduction or limitation.)

§ 5.1.9 Except with the Owner's prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

§ 5.1.10 When the Contractor receives payment from the Owner for labor, services or materials furnished by subcontractors and suppliers hired by the Contractor for the project, the Contractor shall remit payment due to those subcontractors and suppliers, less the value of any item contested in accordance with the contract, within ten (10) days after the Contractor's receipt of payment by the Owner. When the payment due the subcontractor is for final payment, including retainage, the subcontractor must include with the invoice for final payment a conditional release of lien and all appropriate warranties and closeout documentation. When the subcontractor receives payment from the Contractor for labor, services, or materials furnished by subcontractors and suppliers hired by the subcontractor, the subcontractor shall remit payment due to those subcontractors, less the value of any item contested in accordance with the contract, within ten (10) days after the subcontractor's receipt of payment.

§ 5.2 FINAL PAYMENT

§ 5.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

.1 the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Section 12.2.2 of AIA Document A201–2007, and to satisfy other requirements, if any, which extend beyond final payment; and

.2 a final Certificate for Payment has been issued by the Architect.

§ 5.2.2 The Owner's final payment to the Contractor shall be made no later than 30 days after the issuance of the Architect's final Certificate for Payment, or as follows:

ARTICLE 6 DISPUTE RESOLUTION

§ 6.1 INITIAL DECISION MAKER

The Architect will serve as Initial Decision Maker pursuant to Section 15.2 of AIA Document A201–2007, unless the parties appoint below another individual, not a party to this Agreement, to serve as Initial Decision Maker.
(If the parties mutually agree, insert the name, address and other contact information of the Initial Decision Maker, if other than the Architect.)

§ 6.2 BINDING DISPUTE RESOLUTION

For any Claim subject to, but not resolved by, mediation pursuant to Section 15.3 of AIA Document A201–2007, the method of binding dispute resolution shall be as follows:
(Check the appropriate box. If the Owner and Contractor do not select a method of binding dispute resolution below, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, Claims will be resolved by litigation in a court of competent jurisdiction.)

[ ] Arbitration pursuant to Section 15.4 of AIA Document A201–2007

[ ] Litigation in a court of competent jurisdiction

[ ] Other *(Specify)*

ARTICLE 7 TERMINATION OR SUSPENSION

§ 7.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A201–2007.

§ 7.2 The Work may be suspended by the Owner as provided in Article 14 of AIA Document A201–2007.

ARTICLE 8 MISCELLANEOUS PROVISIONS

§ 8.1 Where reference is made in this Agreement to a provision of AIA Document A201–2007 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

§ 8.2 Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.
(Insert rate of interest agreed upon, if any.)

%

§ 8.3 The Owner's representative:
(Name, address and other information)

§ 8.4 The Contractor's representative:
(Name, address and other information)

§ 8.5 Neither the Owner's nor the Contractor's representative shall be changed without ten days written notice to the other party.

§ 8.6 Other provisions:

ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS

§ 9.1 The Contract Documents, except for Modifications issued after execution of this Agreement, are enumerated in the sections below.

§ 9.1.1 The Agreement is this executed AIA Document A101–2007, Standard Form of Agreement Between Owner and Contractor.

§ 9.1.2 The General Conditions are AIA Document A201–2007, General Conditions of the Contract for Construction.

§ 9.1.3 The Supplementary and other Conditions of the Contract:

Document	Title	Date	Pages

§ 9.1.4 The Specifications:
(Either list the Specifications here or refer to an exhibit attached to this Agreement.)

Section	Title	Date	Pages

§ 9.1.5 The Drawings:
(Either list the Drawings here or refer to an exhibit attached to this Agreement.)

Number	Title	Date

§ 9.1.6 The Addenda, if any:

Number	Date	Pages

Portions of Addenda relating to bidding requirements are not part of the Contract Documents unless the bidding requirements are also enumerated in this Article 9.

§ 9.1.7 Additional documents, if any, forming part of the Contract Documents:

.1 AIA Document E201™–2007, Digital Data Protocol Exhibit, if completed by the parties, or the following:

.2 Other documents, if any, listed below:
(List here any additional documents that are intended to form part of the Contract Documents. AIA Document A201–2007 provides that bidding requirements such as advertisement or invitation to bid, Instructions to Bidders, sample forms and the Contractor's bid are not part of the Contract Documents unless enumerated in this Agreement. They should be listed here only if intended to be part of the Contract Documents.)

ARTICLE 10 INSURANCE AND BONDS

The Contractor shall purchase and maintain insurance and provide bonds as set forth in Article 11 of AIA Document A201–2007.
(State bonding requirements, if any, and limits of liability for insurance required in Article 11 of AIA Document A201–2007.)

Type of insurance or bond	**Limit of liability or bond amount ($0.00)**

This Agreement entered into as of the day and year first written above.

OWNER *(Signature)*	**CONTRACTOR** *(Signature)*
(Printed name and title)	*(Printed name and title)*

SECTION 00600

BONDS AND CERTIFICATES

PART 1 – GENERAL

1.1 PERFORMANCE BOND AND LABOR & MATERIAL PAYMENT BOND

A. AIA Document A312 Performance and Payment Bond, 2010 Edition is the form of to be used for this Work.

B. AIA Document A312 may be purchased from the Florida Association of the American Institute of Architects, (AIA Florida), 104 East Jefferson Street, Tallahassee, Florida, tel: 904-222-7590, fax: 904-224-8048, or may be examined at the Architect's office.

1.3 BONDS SPECIFIED ELSEWHERE

A. See Divisions 1 – 16 for other bonds, warranties, etc., that may be required.

1.4 CERTIFICATE OF INSURANCE

A. Contractor shall provide all relevant certificates of insurance.

END OF SECTION

SECTION 00700

GENERAL CONDITIONS OF THE CONTRACT

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. AIA Document A201, General Conditions, 2007 Edition, Articles 1-15 inclusive, are hereby made a full part of the contract documents and will be the General Conditions for this work.

B. AIA Document A201 may be purchased from the Florida Association of the American Institute of Architects, (AIA Florida), 104 East Jefferson Street, Tallahassee, Florida, tel: 904-222-7590, fax: 904-224-8048, or may be examined at the Architect's office.

PART 2 – PRODUCTS (*Not used)*

PART 3 – EXECUTION (*Not used)*

END OF SECTION

SECTION 00801

SUPPLEMENTARY CONDITIONS OF THE CONTRACT

INTRODUCTORY PARAGRAPH

The following supplements, modify, change, delete from or add too the General Conditions of the Contract for Construction, AIA Document A201, 2007. Where a portion of the General Conditions is modified or deleted by these supplements, the unaltered portions of the General Conditions shall remain in effect.

ARTICLE 1 GENERAL PROVISIONS

1.1.3 THE WORK

Add the following sentence to the end of Paragraph 1.1.3

The term “furnish” includes purchase and delivery to Project Site. The term “install” includes receiving, unloading and storing at Project site, installing in place, and placing in operation or finishing complete for intended use. The term “provide” includes furnishing and installing.

1.1.9 MISCELLANEOUS DEFINITIONS

1.1.9.1 The term “provide” as used in the Project Manual means to furnish and install, complete and ready for intended use.

1.1.9.2 The term “product” as used in the Project Manual includes materials, fabrications, systems, and equipment.

1.2 CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS

Add the following subparagraphs to Paragraph 1.2

1.2.4 Should the drawings and specifications conflict on any point, the work is to be done according to the Specifications insofar as the quality of materials and workmanship is concerned; but the Drawings shall govern insofar as the form or extent of the work is concerned. Should details and schedules shown on drawings conflict on any point, the schedules prevail. Large-scale details prevail over small-scale plans and elevations, and figure dimensions over scaled dimensions. AIA General Conditions, Addenda, and Change Orders supersede the affected portions of the Documents.

1.2.5 The Drawings are intended to show the general arrangements, design and extent of the Work, and are partly diagrammatic; they are not intended to be called for rough-in measurements, or to serve as Shop Drawings. In general, the better quality or greater quantity of Work or materials shall be furnished unless otherwise indicated in Writing by the Architect.

1.2.6 Where a typical or representative detail is shown on the Drawings, this detail shall constitute the standard in workmanship and materials throughout corresponding parts of the Work; adaptation, however, shall be subject to the approval of the Architect.

1.6 TRANSMISSION OF DATA IN DIGITAL FORM

Add the following subparagraph 1.6.1 to Paragraph 1.6

1.6.1 Contractor’s Use of Instruments of Service in Electronic Form

.1 The Architect may, with the concurrence of the Owner, furnish to the Contractor versions of Instruments of Service in electronic form. The Contract Documents executed or identified in accordance with Subparagraph 1.5.1 shall prevail in case of an inconsistency with subsequent versions made through manipulatable electronic operations involving computers.

.2 The Contractor shall not transfer or reuse Instruments of Service in electronic or machine readable form without the prior written consent of the Architect.

ARTICLE 2 OWNER

2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER

Paragraph 2.2.2: At the end of this paragraph, add the following new text:

> As it relates to sanitary sewer and water utility services, the Owner shall pay any applicable capital facilities fees or front footage fees, tap fees, water meters, or other required equipment items related to services provided by the utility entity.

Paragraph 2.2.5, delete the text in this paragraph and replace with the following new text:

> 2.2.5 Upon award of the Contract, the Architect will furnish to the Contractor without charge, five (5) set of Contract Drawings, Specifications and Addenda. The Contractor may obtain additional sets of the above from the Architect, at the cost of printing and handling.

ARTICLE 3 CONTRACTOR

3.2 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR

Add the following Clause after Subparagraph 3.2.1

3.2.1.1 Contractor shall ascertain the location of all existing utilities prior to beginning new and alteration work. Verify locations of utility lines shown on drawings; locate and mark each utility prior to start of construction. Any damage caused to any utility as a result of Work on this Project shall be promptly repaired or replaced at the sole expense of the Contractor and no additional money will be paid by the Owner.

Add the following Subparagraph 3.2.5 to Paragraph 3.2

3.2.5 The Owner shall be entitled to deduct from the Contract Sum amounts paid to the Architect for the Architect to evaluate and respond to the Contractor's requests for information, where such information was available to the Contractor from a careful study and comparison of the Contract Documents, field conditions, or other Owner-provided information, Contractor-prepared coordination drawings, or prior Project correspondence or documentation.

Add the following Subparagraph 3.2.6

3.2.6 Claims for additional compensation or extensions of time because of the failure of the Contractor to field verify proposed and existing Work will not be allowed.

3.3 SUPERVISION AND CONSTRUCTION PROCEDURES

Add the following after Subparagraph 3.3.1

.1 The Contractor shall review, verify, and be in agreement with any specified construction or installation procedure and instruction prior to performing the Work, including manufacturers recommended and referenced standards, and shall report to the Architect at once if the specified procedure and instruction (1) does not appear to follow reasonable construction practice, (2) may invalidate any specific warranty or the general Contractor's warranty, or (3) may be objectionable to the Contractor for some reason.

3.3.1.2 In conjunction with reporting an objection, the Contractor shall propose, in writing, alternative procedures to which the Contractor will agree and warrant.

3.4 LABOR AND MATERIALS

Delete Subparagraph 3.4.2 and add the following:

3.4.2 After the Contract has been executed, the Owner and Architect will consider a formal request for the substitution of products in place of those specified only under the conditions set forth in the General Requirements (Division 1 of the Specifications). By making requests for substitutions, the Contractor:

.1 represents that the Contractor has personally investigated the proposed substitute product and determined that it is equal or superior in all respects to that specified.

.2 represents that the Contractor will provide the same warranty for the substitutions that the Contractor would for that specified.

.3 certifies that the cost data presented is complete and includes all related costs under this Contract except the Architect's re-design costs, and waives all claims for additional costs related to the substitution which subsequently become apparent; and

.4 will coordinate installation of the accepted substitute, making such changes as may be required for the Work to be complete in all respects.

Add the following Subparagraph 3.4.4 to Paragraph 3.4

3.4.4. The Owner shall be entitled to deduct from the Contract Sum amounts paid to the Architect to evaluate the Contractor's proposed substitutions and to make agreed-upon changes in the Drawings and Specifications made necessary by the Owner's acceptance of such substitutions.

Add the following to Subparagraph 3.4.3

Should the Architect or Owner find any person(s) employed on the project to be incompetent, unfit, or otherwise objectionable for his duties, the Contractor shall immediately cause the employee to be dismissed and said employee shall not be re-employed on this project without the written consent of the Architect and the Owner.

After paragraph 3.4.4, add the following new paragraph 3.4.5:

3.4.5 The Owner will require of the Contractor that, to the fullest extent possible, preference in the employment of all skilled and unskilled labor, other than the Contractor's key personnel, be given to residents of Putnam, St. Johns and Clay counties when such labor is available and qualified to do the type of work required.

3.5 WARRANTY

After paragraph 3.5, add the following new Subparagraph 3.5.1:

3.5.1 Specific and special warranties specified are in addition to and not in lieu of the Contractor's general warranty.

3.6 TAXES

Add the following to Paragraph 3.6

3.6.1 Contractor shall pay unemployment and Social Security taxes and other taxes imposed by Local, City, State, or Federal government and certify to Owner that this has been done before final payment is made to Contractor.

3.6.2 SJR State reserves the right to implement a sales tax savings program by selecting certain items for Direct Purchase. See Article 16.6 of these Supplementary Conditions.

3.7 PERMITS, FEES AND NOTICES

Delete Subparagraph 3.7.1 and substitute the following:

3.7.1 The Owner shall secure and pay for the building permit and the Contractor shall secure and pay for all other permits and governmental fees, licenses, and inspections necessary for proper execution and completion of the Work which are customarily secured after execution of the Contract and which are legally required when bids are received or negotiations concluded.

Add the following Clause 3.7.1.1 to Subparagraph 3.7.1

3.7.1.1 Contractor shall provide copies of Change Orders to the Building Official and DOE.

3.9 SUPERINTENDENT

Add the following Subparagraph 3.9.4 to Paragraph 3.9

3.9.4 The Contractor shall employ a superintendent or an assistant to the superintendent who will perform as coordinator for the mechanical and electrical work. The coordinator shall be knowledgeable in mechanical and electrical systems and capable of reading, interpreting and coordinating Drawings, Specifications, and shop drawings pertaining to such systems. The coordinator shall assist the Subcontractors in arranging space conditions to eliminate interference between the mechanical and electrical systems and other work, and shall

supervise the preparation of coordination drawings documenting the spatial arrangements for such systems within restricted spaces. The coordinator shall assist in planning and expediting the proper sequence of delivery of mechanical and electrical equipment to the site.

3.12 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

Add the following Subparagraph 3.12.11 to Paragraph 3.12

3.2.11 The Architect's review of the Contractor's submittals will be limited to examination of an initial submittal and two (2) resubmittals. The Architect's review of additional submittals will be made only with the consent of the Owner after notification by the Architect. The Owner shall be entitled to deduct from the Contract Sum amounts paid to the Architect for evaluation of such additional resubmittals.

3.13 USE OF SITE

Add the following Subparagraph 3.13.2 and 3.13.3 to Paragraph 3.13

3.13.2 The Contractor shall confine his equipment, storage of materials, and operations of his workmen to limits directed by the Architect. Materials shall not be brought onto the site until reasonably required for the progress of the Work. Storage space will be confined to a designated area of the site. When the site is not in a condition to receive a material shipment, the Contractor shall have materials properly stored elsewhere at no additional cost to the Owner. No payment for materials shall be made unless material is stored on site.

3.13.3 Material shall be arranged and maintained in an orderly manner with use of walks, drives, roads, and entrances unencumbered. Store, place, and handle material and equipment delivered to project site so as to preclude inclusion of foreign substances or causing discoloration. Pile neatly and completely and barricade to protect public from injury. Protect material as required to prevent damage from ground or weather. Should it be necessary to move material at any time, or move sheds or storage platforms, Contractor shall move them as and when required at no additional cost to the Owner. The Owner assumes to responsibility for stored materials in building or on site. The Contractor shall assume full responsibility for damage due to storing of materials. Repairing of areas used for the placing of sheds, offices, and storage of materials shall be done by Contractor.

3.14 CUTTING AND PATCHING

After paragraph add the following new paragraph 3.14.3:

3.14.3 Existing structures and facilities, including but not limited to buildings, utilities, topography, streets, cubs, sidewalks, landscape materials and other improvements that are damaged or removed due to Contractor's work, shall be patched, repaired, or replaced by the Contractor to the satisfaction of the Architect and authorities having jurisdiction. In the event that local authorities having jurisdiction require that such repairing and patching be done with their own labor and materials, the Contractor shall abide by such regulations and pay for such work.

ARTICLE 4 ARCHITECT

4.2 ADMINISTRATION OF THE CONTRACT

Paragraph 4.2.3, at the end of this paragraph, add the following new text:

> If on-site inspections and observations disclose defects and deficiencies, or work not being carried out **in accordance with the Contract Documents, the Architect shall request the Contractor to correct such deficiencies.** If the Contractor fails to take corrective action within a reasonable time, the Architect will notify the Owner in writing with copy of such notice to the Contractor, calling the Owner's attention to the Contractor's failures to carry out the provisions of the Contract.

at the end of Paragraph 4.2.13, add the following new text to the end of the last sentence:

> And, if and when approved by the Owner.

Add the following Clause after Subparagraph 4.2.4:

4.2.4.1 Any direct communication between the Owner and Contractor which may affect the administration or performance of the Contract shall be made or confirmed in writing, with copies to the Architect.

ARTICLE 5 SUBCONTRACTORS

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

In the first sentence of Subparagraph 5.2.1, change the phrase "…as soon as practicable…" to read "…within 10 days…"

ARTICLE 6 CONSTRUCTION BY OWNER OR SEPARATE CONTRACTORS

6.2 MUTUAL RESPONSIBILITY, after paragraph 6.2.5, add the following paragraph 6.2.6:

6.2.6 Claims, disputes and other matters in question between the Contractor and a separate contractor shall be subject to the provisions of Paragraph 4.3, provided the separate contractor has reciprocal obligations. If such separate contractor sues the Owner on account of damages alleged to have been sustained, Owner shall have option of defending such proceeding or of notifying Contractor who shall defend such proceeding and shall pay all costs in connection therewith; and if any judgment against Owner arises therefrom, Contractor shall pay or satisfy it, together with Owner's reasonable costs, including attorney's fees and court costs.

Add the following Subparagraphs to Paragraph 6.2

6.2.7 Project meetings will be held at times designated by the Architect after conference with the Contractor. Contractor and designated Subcontractors must attend these meetings. If the principal of the firm does not attend meetings, the individual representing the firm must be a responsible representative of the company who can bind the company to a decision at the meeting.

6.2.8 Contractor or Contractor's representative shall, on a monthly basis, at a minimum, prepare and present an oral and written report to the Board of Trustees at one of its regularly scheduled meetings. The written report shall be provided to the Board's Secretary ten (10) days in advance of the meeting at which the oral report will be made. The Board may, at its discretion, from time to time, modify this schedule to decrease the frequency of these reports or to modify the form or content of the reports. Such report shall include, as a minimum, a progress report, problem areas, if any, conditions and requests for change orders, and other information as may be requested from time to time by the Owner.

ARTICLE 7 CHANGES IN THE WORK

7.1 GENERAL

Add the following to Paragraph 7.1.3

"The cost of all changes in the Work shall be substantiated by complete itemized statements showing quantities and unit prices for all material, labor (including all fringe benefits), equipment and other items of cost. Coast of labor (including applicable fringe benefits) and materials shall be actual costs to the Contractor. The Contractor shall submit receipts or other evidences, as the Architect may direct, showing his actual costs and his rights to the payment claims"

Add the following Paragraph 7.1.4 and Clauses to Paragraph 7.1

7.1.4 In the maximum percentage of profit and overhead which may be added to actual costs of changes in the Work shall be as follows:

.1 For Work done by his own organization, the Contractor may add ten percent (10%) of his actual costs.
.2 For Work done by Subcontractors, the respective Subcontractor may add ten percent (10%) of their costs and the Contractor may add ten percent (10%) of the above Subcontractor's total.
.3 Overhead shall include the following: Supervision, wages or time-keepers, watchmen and clerks, hand tools, incidentals, general office expense, and all other expenses not included in "cost".
.4 Authorizations for changes in the Work shall be made in writing to the Architect and the Owner, and no claim for a revision of the Contract Sum shall be valid unless so authorized.

7.3 CONSTRUCTION CHANGE DIRECTIVES

Paragraph 7.3.7 Delete the first sentence and replace with the following new first sentence:

If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the method and the adjustment shall be determined by the Architect on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an

increase in the Contract Sum, an allowance for overhead and profit in accordance with the Contract Specifications.

Paragraph 7.3.7, at the end of this paragraph add the following new text:

Costs shall not include any of the following:

.6 Salaries or other compensation of the Contractor's personnel at the Contractor's office unless direct additional expenses have been incurred exclusively because of the change;
.7 Expenses of the Contractor's offices, including the field office;
.8 Any part of the Contractor's capital expenses, including interest on the Contractor's capital;
.9 Costs due to the negligence of the Contractor, or any Subcontractor
.10 Overhead, general expense, and the cost of any item not specifically or reasonably inferable as included in the items described in 7.3.6.1 through 7.3.6.5.

ARTICLE 8 TIME

Add the following Subparagraphs to Paragraph 8.2

8.2.4 The Contractor shall furnish sufficient forces, construction plant and equipment, and shall work such hours, including night shifts and overtime operations, as may be necessary to insure prosecution of the work in accordance with the approved progress schedule. If the Contractor falls behind the progress schedule, he shall take such steps as may be necessary or as may be directed by the Architect to improve his progress by increasing the number of shifts, overtime operations, days of work, and the amount of construction plant, as may be required, at no additional cost to the Owner.

8.2.5 Failure of the Contractor to comply with the requirements under this provision shall be grounds for determination that the Contractor is not prosecuting the work with such diligence as will insure completion within the time specified and such failure constitutes a substantial violation of the conditions of the Agreement.

8.2.6 Upon such determination, the Owner may terminate the Contractor’s right to proceed with the work, or any separate part thereof, in accordance with Paragraph 14.2.

8.2.7 Failure to complete the project within the time fixed in the Agreement will result in substantial injury to the Owner, and damages arising from such failure cannot be calculated with any degree of certainty; therefore, if the project is not substantially completed within the time fixed in the Agreement, or within such further time, if any, as shall be allowed for substantial completion, the Contractor shall pay to the Owner liquidated damages for such delay 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 in accordance with the following:

SCHEDULE OF LIQUIDATED DAMAGES:

One Hundred Dollars ($100.00) per calendar day.

8.2.8 Provision for assessment of liquidated damages for delay shall in no manner affect the Owner’s right to terminate the Contract as provided in Article 14 of the General Conditions or elsewhere in the Contract Documents. The Owner’s exercise of the right to terminate shall not release the Contractor from his obligation to pay said liquidated damages in the amounts set out in the Agreement.

8.2.9 The Owner may deduct from the balance retained by the Owner under the provisions of Paragraph 9.4.3 any liquidated damages which may have occurred of such portion thereof as the said balance will cover.

ARTICLE 9 PAYMENTS AND COMPLETION

Add the following after Subparagraph 9.1.1.

9.1.2 In conformance with the requirements of Section 725.06, Florida Statutes, the specific considerations for the Contractor’s promises are:

9.1.2.1 One dollar ($1.00) in hand paid by the Owner, the Architect and the Architect’s employees to the Contractor, receipt whereof is hereby acknowledged and adequacy of which the Contractor accepts as completely fulfilling the obligations of the Owner, the Architect and the Architect’s employees under the requirements of Section 725.06, Florida Statutes, and;

9.1.1.2 The entry of the Owner and the Contractor into the construction contract because, but for the Contractor's promises as contained in the Contract Documents, the Owner would not have entered into the construction contract with the Contractor.

9.3 APPLICATION FOR PAYMENT

Add the following Clause to Subparagraph 9.3.1:

9.3.1.3 Until Substantial Completion, the Owner will pay ninety percent (90%) of the amount due the Contractor on account of progress payments.

In Subparagraph 9.3.3, change the first sentence to read:

"The Contractor warrants that title to all work and equipment covered by an Application for Payment will pass to the Owner either by incorporation in the construction or upon receipt of payment by the Contractor."

In the second sentence of Subparagraph 9.3.3., delete the words, "to the best of the Contractor's knowledge and belief"

9.4 CERTIFICATES FOR PAYMENT

Add the following to Subparagraph 9.4

9.4.3 Ten percent (10%) of each payment will be retained until the Contract, including Change Orders, is substantially complete. Payments of the amounts retained will be due ten (10) days after final acceptance by the Owner and issuance of certificates by the State as described in Paragraph 9.10.1

9.6 PROGRESS PAYMENTS

In the first line of Subparagraph 9.6.3, change the words "The Architect will, on request…" to read, "The Architect may, on request and at his discretion…"

9.8 SUBSTANTIAL COMPLETION

Add the following Clause 9.8.3.1 to Subparagraph 9.8.3

9.8.3.1 Except with the consent of the Owner, the Architect will perform no more than two (2) inspections to determine whether the Work, or a designated portion thereof has attained Substantial Completion in accordance with the Contract Documents. The Owner shall be entitled to deduct from the Contract Sum amounts paid to the Architect for any additional inspections.

9.8.5 Delete the second sentence and substitute the following:

"Upon such acceptance and consent of surety, if any, the Owner shall make payment sufficient to increase the total payments to Ninety-Five Percent (95%) of the Contract Sum, less such amounts as the Architect shall determine for incomplete work and unsettled claims."

9.10 FINAL COMPLETION AND FINAL PAYMENT

Add the following Clauses to Subparagraph 9.10.1:

.1 The Architect will files with the Department of Education a Request for Final Inspection. Prior to final payment, a Certificate of Final Inspection from the DOE is required in conjunction with the following actions by the Architect.

.2 Except with the consent of the Owner, the Architect will perform no more than two (2) inspections to determine whether the Work, or a designated portion thereof has attained Final Completion in accordance with the Contract Documents. The Owner shall be entitled to deduct from the Contract Sum amounts paid to the Architect for any additional inspections.

Add the following Subparagraph to Paragraph 9.10

9.10.6 Final payment shall be made to the Contractor as provided by the Agreement between the Owner and Contractor. Application for final payment shall in the same form as application for progress payments as described in Paragraph 9.3.1 and shall be accompanied by the following additional items:

.1 Completed and notarized waivers and releases of lien in a form acceptable to the Architect and Owner (refer to attached Waiver of Lien Certificate).
.2 Certificates of Inspection and Occupancy as required by law.
.3 Such other data and substantiating information as may be required elsewhere in these Contract Documents including but not limited to all required guarantees, warranties, operating and maintenance manuals, As-Built drawings, or as may be required by the Owner or Architect and as described in DIVISION 1, SECTION 1770 CLOSEOUT PROCEDURE.

ARTICLE 10 PROTECTION OF TREES AND PROPERTY

Add the following after Article 10.5:

10.6 FLORIDA TRENCH SAFETY ACT

10.6.1 The Occupational Safety and Health Administration excavation safety standards, 29CFR 1926.650 Subpart B trench safety standards are in effect during the period of construction of the Project. In compliance with current State of Florida statutes, the Contractor or subcontractor performing trench excavation work on the Project shall comply with the applicable trench safety standards.

ARTICLE 11 INSURANCE AND BONDS

Article 11 of the AIA General Conditions as written is deleted in its entirety and is superseded as follows:

11.1 Definitions:

11.1.1 Contractor: As used in this Article 11, is the Contractor and any and all of his Subcontractors, employees, agents and representatives.

11.2 Builder's Risk Insurance: Owner shall purchase, maintain, and pay for the costs of Builder's Risk Insurance (fire, extended coverage, vandalism, theft, and malicious mischief) on all construction materials and the buildings or structures in the course of construction. Said Builder's Risk insurance shall insure to the benefit of Owner and Owner's interests. Said Builder's Risk insurance shall be subject to a $10,000.00 (ten thousand dollars) "deductible" clause. Contractor shall be responsible for paying for any and all losses up to said $10,000.00 deductible, excluding any loss which is the result of natural causes. Contractor shall be responsible for the loss of, or damage to, any and all of Contractor's personal property; such as tools, equipment, mobile office, etc.

11.2.1 Extended Coverage: The usual form currently available and covering perils of windstorm, hail, explosive, riot and civil commotion, damage from aircraft and vehicles and smoke damage.

11.3 Liability Insurance: The Contractor will purchase and maintain during the entire time of this Agreement comprehensive general liability and comprehensive automobile liability insurance as shall protect him from claims for property damages which may arise from operations under this Agreement whether such operations be by himself or by anyone directly or indirectly employed by him, and the amounts of such insurance shall be the minimum limits as follows:

11.3.1 Comprehensive General Liability including Personal Injury, Products Completed Operations Coverage, Independent Contractor's Protective, and Contractual Liability.

Bodily Injury and Property Damage:

$1,000,000	Each Occurrence
$5,000	Medical Payments (Any one person)
$1,000,000	Personal and Adv. Injury
$2,000,000	General Aggregate
$2,000,000	Products – Comp/OP Aggregate

General Aggregate Limit applies per Project; Products – Comp/OP Aggregate applies per Project; Waiver of Subrogation in favor of Owner.

Products and Completed Operations to be maintained for one (1) year after final payment.

Property Damage Liability Insurance will provide X, C, and U coverage when such contracts are affected. Owner shall be named as additional insured on all liability insurance.

11.3.2 Comprehensive Automobile Liability:

Combined Single Limit Each Accident	$1,000,000 – or –
Bodily Injury per Person	$1,000,000
Bodily Injury per Accident	$2,000,000
Property Damage per Accident	$1,000,000

Owner shall be named additional insured; Waiver of Subrogation in favor of Owner.

11.3 Worker's Compensation Insurance: Contractor shall take out and maintain, during the life of this Agreement, Worker's Compensation Insurance in compliance with Chapter 440, Florida Statutes, for all of his employees connected with the work of this project and further, the Contractor shall require his Subcontractors similarly to provide Worker's Compensation Insurance. In case any class of employee engaged in hazardous work under this Contract at the site of project is not protected under the Workmen's Compensation Statute, the Contractor shall provide adequate insurance satisfactory to the Owner for the protection of his employees not otherwise protected.

Required Limits:

1. Worker's Compensation - Statutory Benefits
2. Employer's Liability

$1,000,000 each employee	Bodily Injury by accident
$1,000,000 each employee	Bodily Injury by disease
$1,000,000 policy limit	Bodily Injury by disease

Waiver of Subrogation in favor of Owner.

11.4 Anything in the Contract Documents to the contrary notwithstanding and in addition to the insurance required to be maintained by the Contractor as hereinabove set forth, Contractor agrees to indemnify, hold harmless and defend Owner and Architect against any and all claims, loss, damage to or destruction of property including, without limitation, property and employees of Owner, occurring wholly or in part, as the result of work done or omitted to be done by, or contracted to be done but not done by, Contractor or his Subcontractors or the employees or agents or invites either arising from injury to or death of persons or damage to or destruction of property due or claimed to be due, in whole or in part, to any negligence or fault of Owner or its employees, agents, or invites, except claims, loss, damage, costs or expense resulting from risks as are hereinabove required to be insured by Owner.

11.5 Contractor shall submit to Owner before commencement of work, evidence of the above require insurance, which shall contain certification by the insurance companies that such insurance shall not be canceled or materially changed until at least ten (10) days prior to written notification being given to the Owner. The Form of Certificate shall be the standard "Accord" form, Certificate of Insurance. The Contractor shall furnish the Owner copies of any endorsements that are subsequently issued amending coverage or limits.

11.6 Anything in Paragraphs 4.18.1, 4.18.2, and 4.18.3 of the General Conditions to the contrary of the indemnification obligations hereby set forth shall not be applicable as between the Owner and Contractor, and any and all references to Owner therein deleted.

ARTICLE 12 - UNCOVERING AND CORRECTION OF WORK

Delete Paragraph 12.2.2 in its entirety and add the following:

12.2.2 If, after the approval of final payments and prior to expiration of one (1) year thereafter, or such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents, any work is found to be defective, it shall be repaired by the Contractor. In the case of an emergency, brought about by defective work of the Contractor, the Owner may proceed immediately to make the necessary repairs and charge the cost of same to the Contractor without giving any notice to the Contractor.

ARTICLE 13 MISCELLANEOUS PROVISIONS

13.6 INTEREST

Delete Paragraph 13.6.1

ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT

14.2 TERMINATION BY THE OWNER

Delete Paragraph 14.2.1 in its entirety and add the following:

14.2.1 If the Contractor is adjudged a bankrupt, or makes a general assignment for the benefit of creditors, or if a receiver is appointed on account of the Contractor's insolvency, or if the Contractor persistently or repeatedly refuses or fails, except in cases for which extension of time is provided, to supply enough properly skilled workers or proper materials, or fails to make prompt payment to Subcontractors for materials or labor, or persistently disregards laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction, or if the Contractor:

1. Fails to correct, replace and/or re-execute faulty or defective work and/or materials furnished under this Agreement; or

2. Fails to complete or diligently proceed with the Work required by this Agreement, within the time constraints of the construction schedule maintained by the Architect; or

3. Fails to correct or repair any damage to Work caused by him or his failure to protect his Work or the work of others; or

4. Fails to provide safe and sufficient facilities, orderly premises and the cleanup of the Work required under this Agreement; or

5. Is unable to proceed with the Work because of any action by one or more employees of the Trade Contractor or by a person or labor organization supporting or attempting to represent any employees of the Trade Contractor; or otherwise is guilty of a substantial violation of the provision of the Contract Documents, and fails within 72 hours after receipt of written notice to commence and continue correction of such default, neglect or violation with diligence and promptness, the Owner, upon certification by the Architect that sufficient cause exists to justify such action, may without prejudice to any other remedy the Owner may have, terminate the employment of the Contractor and take possession of the site and all materials, equipment, tools, construction equipment and machinery thereon owned by the Contractor and may finish the Work by whatever methods the Owner may deem expedient. In such case, the Contractor shall not be entitled to receive any further payment until the Work is finished.

ARTICLE 15 CLAIMS AND DISPUTES

Add the following to Paragraph 15.1.4

Unless otherwise provided in the Contract Documents, cost shall be limited to the following: cost of material at the trade discount cost, including sales tax and cost of delivery; cost of labor, including Social Security, unemployment insurance, and fringe benefits required by agreement or custom; workers compensation insurance; bond premium not to exceed one percent (1%); rental value of equipment and machinery at trade discount cost plus sales tax and the additional cost of supervision directly attributable to the change only if the change (or total time extension of all changes) results in an extension of the contract time for more than thirty (30) days. The bond premium of all credit amounts shall be added to the total credit allowed the Owner. No bond cost shall be allowed for a Subcontractor's bond cost.

Add the following Clauses to Subparagraph 15.1.5

15.1.5.3 Claims for an increase in Contract Time shall set forth in detail the circumstances that form the basis for the claim, the date upon which each cause of delay began to affect the progress of the Work, the date upon which each cause of delay ceased to affect the progress of the Work, and the number of days' increase in the Contract Time claimed as a consequence of each cause of delay. The Contractor shall provide such supporting documentation as the Owner may require including, where appropriate, a revised construction schedule indicating all the activities affected by the circumstances forming the basis of the claim.

15.1.5.4 The Contractor shall not be entitled to a separate increase in the Contract Time for each one of the number of causes of delay which may have concurrent delays due to the fault of the Contractor.

ARTICLE 16 - ADDITIONAL CONDITIONS (ADDED ARTICLE)

16.1 MINIMUM WAGE (NOT REQUIRED)

16.2 APPRENTICES AND TRAINEES

16.2.1 The Contractor shall conform to all requirements of Section 466.101 of the Florida Statutes with respect to apprentice and trainee employment.

16.3 EQUAL OPPORTUNITY

16.3.1 The Contractor and all Subcontractors shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, or age. The Contractor shall take affirmative action to insure that applicants are employed, and that employees are treated fairly during employment without regard to their race, religion, color, sex, national origin, or age. Such action shall include, but not be limited to the following:

16.3.2 Employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the policies of non-discrimination in accordance with local, state and federal guidelines.

16.4 PREFERENCE TO HOME INDUSTRIES

16.4.1 The Contractor agrees that, pursuant to Section §255.04, Florida Statutes, preference will be given in the purchase of material and in the letting of contracts for the construction of this project to the residents of the State whenever such material can be purchased or services can be employed at no greater expense than that which could be obtained if such purchase was made or contract let to a person or firm doing business beyond the limits of the State, provided that quality of materials, qualifications, character, responsibility and fitness be equal.

16.5 CODE REQUIREMENTS

16.5.1 All work under this Contract shall be completed in accordance with the Florida Building Code, 2007 Edition, with the 2009 Supplement and Florida State Requirements for Educational Facilities (SREF) 2007 and all subsequent addenda, as well as all local, County, State, and Federal laws, codes or requirements

WAIVER OF LIEN AND CERTIFICATION

St. Johns River State College
Palatka, Florida

KNOW ALL MEN BY THESE PRESENTS, that _____

_____

for and in consideration of _____ Dollars, and other good and valuable considerations, lawful money of the United States of America, to me in hand paid, the receipt whereof is hereby acknowledged, does hereby waive, release, remise and relinquish any and all right to claim any lien or liens for work done or material furnished, or any kind of class of lien whatsoever on the following described property:

DATED this ____day of _____, 20_____,

at_____.

BY:_____

TITLE:_____

Sworn to and Subscribed to before me this _____day of _____,20____.

_____

NOTARY PUBLIC
MY COMMISSION EXPIRES:

NOTARY SEAL

_____
(Date)

END OF SECTION

SECTION 00900

ADDENDA AND MODIFICATIONS

PART 1 – GENERAL

1.1 ADDENDA

A. Addenda are written or graphic instruments issued by the Architect prior to the execution of the Contract which may modify or interpret the Bidding Documents by additions, deletions, clarifications, or corrections.

B. Addenda prepared prior to issuance of the Project Manual are included or referenced at the end of this document.

C. Addenda prepared after the issuance of the Project Manual should be added for reference at the end of this document.

D. All addenda shall be acknowledged by the Bidder on the Bid Form.

E. Drawings and general provisions of the contract, including General and Supplementary Conditions and Division 1 Specification sections apply to this section.

1.2 MODIFICATIONS

A. See General Conditions, Article 1 for the complete definition of modifications

B. Modifications, if inserted into the Project Manual, should be located at the end of this document.

PART 2 – PRODUCTS (*Not used*)

PART 3 – EXECUTION (*Not used*)

END OF SECTION

SECTION 01010

SUMMARY OF WORK

PART 1 - GENERAL

1.01 RELATED WORK

A. General Conditions - 00701

B. Supplementary Conditions - 00801

C. Special Requirements - Section 01040

1.02 WORK COVERED BY CONTRACT DOCUMENTS

A. The work to be performed under this contract consists of that work defined in the Contract Documents for the interior renovations to the Administration Building on the St. Augustine Campus of St. Johns River State College and includes selective demolition, partitions, interior finishes, wood interior doors, architectural millwork, roll-up grilles, carpet tile, acoustical ceiling system, and related electrical, data, and HVAC work, to provide the facility as shown, complete and ready for operation.

1.03 CONTRACTOR RESPONSIBILITIES:

A. Designate submittals and delivery date for each product.

B. Review shop drawings, product data, samples, and other submittals. Submit to DP with notification due to non-conformance with Contract Documents. Shop drawings that are not reviewed by the Contractor shall be returned.

C. Receive and unload products at site

D. Inspect deliveries, record shortages, and damaged of defective items and inform the DP accordingly.

E. Coordination of Work

1. The General Contractor and Subcontractors shall review other sections of work applicable to their work and ascertain requirements in other sections applicable to their work. Each shall be held responsible for coordination and inclusion of the work indicated as it were in the particular subcontractor's section. The DP shall be advised of any discrepancies or conflicts at the earliest moment.

2. All subcontractors, suppliers, etc., shall be responsible for knowing what information is given on all sheets of the plans and specifications concerning his particular work.

3. Paragraphs 1 and 2 shall be included in the Contractor-Subcontractor agreement.

F. Effect Of Addenda, Amendments, Bulletins, Deletions, Omissions And Change Orders

1. No special implication, interpretation, in construction, connotation, denotation, import, or meaning shall be assigned to any provision of the Contract Documents because of changes created by the issuance of any (1) addendum, (2) amendment, (3) bulletin, (4) notice of other than the precise meaning that the contract documents would have had if the provision thus created had read originally as it reads subsequently to the (1) addendum, (2) amendment, (3) bulletin, (4) notice of deletion, (5) notice of omission, or (6) change order by which it was created.

G. Contract Forms And Requirements

1. Forms, requirements and documents included under Division 1 of this Project Manual together with the Table of Contents are a part of the Contract Documents.

2. Drawing sheets as identified on Index to Drawings are a part of the Contract Documents.

3. Documents, affidavits, and printed forms included in the Contract Documents are required by the Owner.

4. The requirement of Division 1 applies to all Divisions and Sections of the Project Manual as if reproduced therein.

END OF SECTION

SECTION 01020

ALLOWANCES

1.1 Lump Sum Allowances

A. Selection and Purchase: At the earliest feasible date after Contract award, advise the Architect of the date when selection and purchase of each product or system described by an allowance must be completed to avoid delay.

B. When requested by the Architect, obtain proposals for each allowance for use in making final selections; include recommendations that are relevant to performance of the work.

C. Purchase products and systems from the designated supplier.

D. Submittals: Submit proposals for purchase of products or systems included in allowances, in the form of Change Orders.

1. Submit invoices or delivery slips to indicate quantities of materials delivered for use in fulfillment of each allowance.

E. Inspection: Inspect products covered by an allowance promptly upon delivery for damage or defects.

F. Preparation: Coordinate materials and installation for each allowance with related materials and installations to ensure that each allowance item is integrated with related construction activities.

G. Installation of allowance item shall be included in Project's Base Bid or appropriate alternate bid.

1.2 Schedule of Allowances:

A. Interior Building Signage: $300.00

END OF SECTION

SECTION 01030

SPECIAL REQUIREMENTS

PART I - GENERAL

1.1 PROJECT SCHEDULE

A. The following is a summary of major timeframe events which shall be met by the Contractor. As such the summary does not include all schedules outlined in the Contract Documents it shall not be considered conclusive.

1. Contract Award by St. Johns River State College Board; execution by Contractor

    a. Begin equipment procurement.
    b. Submit construction schedule.
    c. Submit schedule of values.
    d. Submit certificate of insurance.

2. A Notice to Proceed with the contract work will be issued by the Owner. No contract time extensions will be granted for failure to provide the required documents within the specified time. The Contractor may begin work activity such as ordering construction materials, processing shop drawings and submittals and scheduling immediately after the award by the College Board. The Contract time shall commence from the time specified in the written Notice to Proceed.

    a. Schedule work.
    b. Contract for equipment and materials
    c. Contract with subcontractors
    d. Order materials and equipment
    e. Prepare and submit shop drawings and material samples for approval
    f. Coordination of work and schedule with the Owner's Asbestos Abatement Contractor and Owner's Electrical, HVAC and fire alarm contractors

3. Pre-Construction Conference: TBA

4. Start Construction: within ten (10) days of contract execution

5. Substantial Completion Punch List: Seventy-two (72) calendar days

6. Final Completion: Fourteen (14) days after Substantial Completion

1.2 EARLY OCCUPANCY

A. Where certain portions of the work are completed in advance of the scheduled date, the Owner shall have the right to take possession of and use any such completed or partially completed portions of the work. Such taking possession and use of shall not be deemed as acceptance of any work not completed in accordance with acceptance of any work not completed in accordance with the Contract Documents. Owner, Design Professional and Contractor shall inspect that portion of the work to determine its status of completion prior taking possession or use. A certificate of Substantial Completion shall be issued by the Design Professional to the Contractor which defines the extent of the portion of the work which has been inspected and of which possession is taken or use established.

END OF SECTION

SECTION 01040

PROJECT COORDINATION

1.1 This Section specifies requirements for project coordination including:

A. Coordination.
B. Administrative and supervisory personnel.
C. General installation provisions.
D. Cleaning and protection.

1.2 Coordination:

A. Coordinate activities included in various Sections to assure efficient and orderly installation of each component. Coordinate operations included under different Sections that are dependent on each other for proper installation and operation. Coordinate construction work to allow Owner to continue normal operation in the portions of the building that must remain operational during the construction period.

B. Where installation of one component depends on installation of other components before or after its own installation, schedule activities in the sequence required to obtain the best results.

C. Where space is limited, coordinate installation of different components to assure maximum accessibility for maintenance, service and repair.

1.3 Administrative Procedures:

A. Coordinate scheduling and timing of administrative procedures with other activities to avoid conflicts and ensure orderly progress. Such activities include:

1. Preparation of schedules.
2. Installation and removal of temporary facilities.
3. Delivery and processing of submittals.
4. Progress meetings.
5. Project closeout activities.

1.4 Inspection of Conditions:

A. The Installer of each component shall inspect the substrate and conditions under which Work is performed. Do not proceed until unsatisfactory conditions have been corrected.

1.5 Manufacturer's Instructions: Comply with manufacturer's installation instructions and recommendations, to the extent that they are more stringent than requirements in Contract Documents.

A. Inspect material immediately upon delivery and again prior to installation. Reject damaged and defective items.

B. Provide attachment and connection devices and methods necessary for securing each construction element. Secure each construction element true to line and level. Allow for expansion and building movement.

1.6 Visual Effects:

A. Provide uniform joint widths in exposed Work. Arrange joints to obtain the best effect. Refer questionable choices to the Architect for decision.

1. Recheck measurements and dimension, before starting installation.

B. Install each component during weather conditions and project status that will ensure the best results. Isolate each part from incompatible material as necessary to prevent deterioration.

C. Coordinate temporary enclosures with inspections and tests, to minimize uncovering completed construction for that purpose.

1.7 Mounting Heights:

A. Where mounting heights are not indicated, install components at standard heights for the application indicated. Refer questionable decisions to the Architect.

1.8 Cleaning and Protection:

A. During handling and installation, clean and protect construction in progress and adjoining materials in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.

B. Clean and maintain completed construction a often as necessary through the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.

END OF SECTION

SECTION 01045

CUTTING AND PATCHING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of contract including General and Supplementary Conditions and Division 1 Specification Sections, apply to work of this section.

1.2 SUMMARY

A. This Section includes administrative and procedural requirements for cutting and patching.

B. Related Sections: The following Sections contain requirements that relate to this Section:

1. Refer to other sections for specific requirements and limitations applicable to cutting and patching individual parts of the work.

2. Requirements of this Section apply to mechanical and electrical installations. Refer to Division 15 and 16 Sections for other requirements and limitations applicable to cutting and patching mechanical and electrical installations.

1.3 SUBMITTALS - See Section 01300 for requirements.

1.4 QUALITY ASSURANCE

A. Requirements for Structural Work: Do not cut and patch structural elements in a manner that would change their load-carrying capacity or load-deflection ratio.

B. Operational Limitations: Do not cut and patch operating elements or related components in a manner that would result in reducing their capacity to perform as intended. Do not cut and patch operating elements or related components in a manner that would result in increased or decreased operational life or safety.

C. Visual Requirements: Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in the Architect's opinion, reduce the building's aesthetic qualities. Do not cut and patch construction in a manner that would result in visual evidence of cutting and patching. Remove and replace construction cut and patched in a visually unsatisfactory manner.

1.5 WARRANTY

A. Existing Warranties: Replace, patch, and repair material and surfaces cut or damaged by methods and with materials in such a manner as not to void any warranties required or existing.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

A. Use materials identical to existing materials. For exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible if identical materials are unavailable or cannot be used. Use materials whose installed performance will equal or surpass that of existing materials.

PART 3 - EXECUTION

3.1 INSPECTION

A. Examine surfaces to be cut and patched and conditions under which cutting and patching is to be performed before cutting. If unsafe or unsatisfactory conditions are encountered, take corrective action before proceeding.

1. Before proceeding, meet at the Project Site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate all procedures and resolve all potential conflicts before proceeding.

3.2 PREPARATION

A. Temporary Support: Provide temporary support of work to be cut.

B. Protection: Protect existing construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of the Project that might be exposed during cutting and patching operations.

C. Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

D. Avoid cutting existing pipe, conduit, or ductwork serving the building but scheduled to be removed or relocated until provisions have been made to bypass them.

3.3 PERFORMANCE

A. General: Employ skilled workmen to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time and complete without delay.

1. Cut existing construction to provide for installation of other components or performance of other construction activities and the subsequent fitting and patching required to restore surfaces to their original condition.

B. Cutting: Cut existing construction using methods least likely to damage elements retained or adjoining construction. Where possible, review proposed procedures with the original Installer; comply with original Installer's recommendations.

1. In general, where cutting, use hand or small power tools designed for sawing or grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.

2. To avoid marring existing finished surfaces, cut or drill from the exposed or finished side into concealed surfaces.

3. Cut through concrete and masonry using a cutting machine, such as a carborundum saw or a diamond-core drill.

4. Comply with requirements of applicable Division 2 sections where cutting and patching requires excavating and backfilling.

5. Where services are required to be removed, relocated, or abandoned, by-pass utility services, such as pipe or conduit, before cutting. Cut-off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal the remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after by-passing and cutting.

6. Coordinate with Owner's roofing Consultant prior to making any penetrations of the membrane roof.

C. Patching: Patch with durable seams that are as invisible as possible. Comply with specified tolerances.

1. Where feasible, inspect and test patched areas to demonstrate integrity of the installation.

2. Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.

3. Where removing walls or partitions extends one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform color and appearance. Remove existing floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.

a. Where patching occurs in a smooth painted surface, extend final paint coat over entire unbroken surface containing the patch after the area received primer and second coat.

4. Patch, repair, or rehang existing ceilings as necessary to provide an even-plane surface of uniform appearance.

5. Coordinate with the Owner's roofing Consultant on the proper method and procedure of flashing and repairing penetrations on the membrane roof for the installation of the scheduled mechanical equipment.

6. Patch and seal all space around ducts, conduits, and piping penetrations to exterior walls. This requirement applies to both new and existing conditions

3.4 CLEANING

A. Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar items. Thoroughly clean piping, conduit, and similar features before applying paint or other finishing materials. Restore damaged pipe covering to its original condition.

END OF SECTION

SECTION 01060

REGULATORY REQUIREMENTS

PART 1 - GENERAL

1.01 WORK WITHIN PUBLIC PROPERTY

A. No work shall be performed within public property until the Contractor has secured from controlling government agency written permission and/or permits and where required furnished bond or guarantee for the accomplishment of such.

1.02 NOTICE OF COMMENCEMENT

A. No work shall be commenced or materials ordered until Notice of Commencement has been recorded in accordance with Chapter 713 Liens, generally Part I, Mechanics' Lien Law, Florida Statute in effect on date of Contract. Contractor shall either record such or ascertain that such has been recorded.

1.03 GOVERNMENT REGULATIONS AND REQUIREMENTS

A. Contractor shall inform himself of and comply with all government regulations and requirements affecting accomplishment of the work.

B. The Contractor shall not be responsible for code or government design violations incorporated into the Construction Documents. He shall, however, inform the Architect of observed conflicts in accordance with provisions of Section 00701, Conditions of the Contract, and shall not proceed with affected work until conflict (if such exists) is clarified or corrected.

1.04 GOVERNING BUILDING CODE

A. Rules of the Florida State Board of Education, State Requirements for Educational Facilities, (SREF) 2007, in effect as of the date of these Construction Documents, Chapter 1, Section 1.2 and Chapter 5, including all subsequent additions or addenda thereto incorporated as of the date of the Construction Documents, Florida Building Code 2007 (including 2009 supplement and any subsequent addenda), and any other documents or codes including designated portions of SREF by reference.

END OF SECTION

SECTION 01070

ALTERNATES

PART I - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

A. This section specifies administrative and procedural requirements for Alternates.

B. Definition: an Alternate is an amount proposed by Bidders and stated on the Bid Form for certain construction activities defined in the Bidding Requirements that may be added to or deducted from the Base Bid amount if the Owner decides to accept a corresponding change in either the amount of the construction to be completed, or in the products, materials, equipment, systems or installation methods described in Contract Documents.

C. Coordination: Coordinate related work and modify or adjust adjacent work as necessary to ensure that work affected by each accepted alternate is complete and fully integrated into the project.

D. Notification: Immediately following the award of the Contract, prepare and distribute to each party involved, notification of the status of each alternate. Indicate whether alternate have been accepted, rejected or deferred for consideration at a later date. Include a complete description of negotiated modifications to alternates.

E. Schedule: A "Schedule of Alternates" is included at the end of this Section. Specification Sections referenced in the Schedule contain requirements for materials and methods necessary to achieve the work described under each alternate.

1. Include as part of each alternate, miscellaneous devices, accessory objects and similar items incidental to or required for a complete installation whether or not mentioned as part of the alternate.

SCHEDULE OF ALTERNATES:

END OF SECTION

SECTION 01090

DEFINITIONS AND STANDARDS

A. Definitions:

1. General: 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.

2. General Requirements: The provisions of Division-1 sections, General Requirements, apply to the entire work of the Contract.

3. 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.

4. Directed, Requested, Approved, Accepted, etc.: These terms imply "by the Architect/Engineer", unless otherwise indicated.

5. Approved by Architect/Engineer: In no case releases Contractor from responsibility to fulfill requirements of contract documents.

6. Project Site: Space available to Contractor at location of project, either exclusively or to be shared with separate contractors, for performance of the work.

7. Furnish: Supply and deliver to project site, ready for unloading unpacking, assembly, installation, and similar subsequent requirements.

8. Install: Operations at project site, including unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning and similar requirements.

9. Provide: Furnish and install, complete and ready for intended use.

10. 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.

11. Specification Text Format: Underscoring facilities scan reading, no other meaning, imperative language is directed at Contractor, unless otherwise noted.

12. Overlapping/Conflicting Requirements: Most stringent (generally) requirement written directly into the contract documents is intended and will be enforced, unless specifically detailed language written into the contract documents clearly indicates that a less stringent requirement is acceptable. Refer uncertainties to the Architect/Engineer for a decision before proceeding.

13. 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.

14. Abbreviations, Plural Words: Abbreviations, where not defined in contract documents, will be interpreted to mean the normal construction industry terminology, determined by recognized grammatical rules, by the Architect/Engineer. Plural words will be interpreted as singular and singular words will be interpreted as plural where applicable for context of contract documents.

15. Testing Laboratory: An independent entity engaged for the project to provide inspections, tests, interpretations, reports and similar services.

B. Standards and Regulations:

1. Industry Standards: Applicable standards of construction industry have same force and effect on performance of the work as if copies directly into contract documents or bound and published therewith. Standards referenced in contract documents or in governing regulations have precedence over non-referenced standards, insofar as different standards may contain overlapping or conflicting

requirements. Comply with standards in effect as of date of contract documents, unless otherwise indicated.

a. Abbreviations: Where abbreviations or acronyms are used in contract documents, they mean the well recognized name of entity in building construction industry; refer uncertainties to Architect/Engineer before proceeding, or consult “Encyclopedia of Associations" by Gale Research Co.

2. Trade Union Jurisdictions: Maintain current information on jurisdictional matters, regulations, actions and pending actions; and administer/supervise performance of work in a manner which will minimize possibility of disputes, conflicts, delays, claims or losses.

END OF SECTION

SECTION 01200

PROJECT ADMINISTRATION

PART 1 - GENERAL

1.01 RELATED REQUIREMENTS

A. Submittals: 01300

B. Quality Control: 01400

C. Construction Facilities and Temporary Control: 01500

D. Materials and Equipment: 01600

E. Project Close-Out: 01700

F. Project Record Documents: 01720

1.02 PROJECT MEETING - GENERAL

A. Schedule and administer progress meetings:

1. Agenda items: To the maximum extent practicable, advise the DP at least 24 hours in advance of project meetings regarding all items to be added to the agenda.

2. Minutes: The DP will compile minutes of each project meeting and will furnish three copies to the Contractor. The Contractor may make and distribute such other copies as he wishes.

B. Design Professional will attend meetings to ascertain that work is expedited consistent with construction schedule and with Contract Documents.

C. Work Included: To enable orderly review during progress of the work, and to provide for systematic discussion of problems, the DP will conduct project meeting throughout the construction period.

D. Related Work Described Elsewhere: The Contractor's relations with his subcontractors and materials suppliers, and discussions relative thereto, are the Contractor's responsibility and are not part of the project meetings content.

E. Persons designated by the Contractor to attend and participate in the project meetings shall have all required authority to commit the Contractor solutions agreed upon in the project meetings.

1.03 PRE-CONSTRUCTION MEETING

A. A pre-construction meeting will be scheduled by the Owner. Owner will set the time and place of meeting prior to start of any construction. Authorized representatives of the Contractor, the job superintendent and major subcontractors shall attend. Purpose of the meeting will be to verify general construction procedures expedite the handling of shop drawings and scheduling, and establish a working understanding among the parties involved in project.

B. Minimum Agenda: Distribute data on, and discuss:

1. Organizational arrangement of Contractor's forces and personnel, and those of subcontractors, materials suppliers, and DP.
2. Channels and procedures for communications.
3. Construction schedule, including sequence of critical work.
4. Contract Documents, including distribution of required copies of original Documents and revisions.
5. Processing of Shop Drawings and other data submitted to the DP for review.
6. Processing of field decisions and Change Orders.
7. Rules and regulations governing performance of the work.
8. Procedures for safety and first aid, security, quality control, housekeeping, and other related matters.

1.04 PROGRESS MEETINGS

A. Schedule regular monthly meetings prior to submitting each Request for Payment at a time agreed upon by the Design Professional. Subcontractors, materials suppliers, and others may be invited to attend those project meetings in which their aspects of the work involved.

B. Hold called meetings as progress of work dictates.

C. Locations of Meetings: Construction office, at the job site, or other location acceptable to Owner and Design Professional. Indicate in notice.

D. Minimum Agenda:

1. Review, revise as necessary, and approve minute of previous meeting.
2. Review progress of the work since last meeting, including status of submittals for approval.
3. Identify problems which impede planned progress.
4. Develop corrective measures and procedures to regain planned schedule.
5. Complete other current business.

1.05 CONSTRUCTION SCHEDULES - GENERAL

A. Provide projected construction schedules for entire work; revise periodically.

B. Prepare schedule in form of horizontal bar chart, with horizontal bars representing project breakdown by various units of work. Superimpose on bar chart vertical lines representing months of year and weeks of each month.

C. Minimum sheet size: As required to fit all information rendered in a legible manner on one (1) sheet.

D. Provide complete sequence of construction by activity.

E. Provide sub-schedules to define critical portions of entire schedule.

F. Update schedule as required. Show all changes occurring since previous submission of updated schedule.

G. Indicate progress of each activity; show start and completion dates. Review with each update.

1.06 SUBMITTALS AND DISTRIBUTION OF SCHEDULES

A. Submit initial schedule within fifteen (15) days after date of Notice to Proceed.

B. Design Professional will review schedules and return reviewed copy within ten (10) days after receipt.

C. If required, resubmit within seven (7) days after return of reviewed copy.

D. Submit periodically updated schedules accurately depicting progress to first day of each month.

E. Submit the number of copies required by Contractor, plus three (3) copies to be retained by Design Professional.

F. Instruct recipients to report any inability to comply, and provide detailed explanation, with suggested remedies.

1.07 PROJECT INSPECTIONS

A. Where inspections of in-place work are specified and Design Professional's approval is required before further work can take place, or where records of procedures are specified; schedule inspection:

1. With Design Professional or his designated Consultant.
2. Give no less than twenty-four (24) hours notice.
3. On Mondays through Thursdays between the hours of 7:30 a.m. and 5:15 p.m.

B. Where daylight or installed project lighting at areas to be inspected is less than 30 candle power, provide this same level by artificial illumination with portable lighting.

1.08 PROJECT RECORD DOCUMENTS (PRINTS)

A. Store record documents apart from documents used for construction.

B. File documents in accordance with Table of Contents of Specifications.

C. Maintain documents in clean, dry, legible condition.

D. Do not use record documents for construction purposes.

E. Make documents available at all times for inspection by Design Professional and Owner.

F. Provide legible, indelible marking instruments for marking.

G. Label each document "PROJECT RECORD".

H. Specifications and Addenda: Legibly mark up each section to record:

1. Manufacturer, trade name, catalog number, and supplier of each product and item of equipment actually installed.
2. Changes made by Change Order or Field Order.

1.09 PROJECT PERMANENT RECORD DOCUMENTS

A. The Contractor shall mark all changes to the contract documents and upon completion of the project he shall deliver the revised record set to the Design Professional.

B. The Design Professional shall review the revised record set for accuracy and conformity and shall transfer all revised data from the record set to the original tracings. He shall make the set of documents "As-Built" and deliver two sets of prints of same to the St. Johns River State College, Department of Facilities.

C. The St. Johns River State College, Department of Facilities shall review the "As-Built" documents for accuracy and conformity. After which St. Johns River State College shall receive from the Design Professional the original tracings from which film reproducibles will be made along with microfilm copies for the permanent record of St. Johns River State College. This permanent record printing shall be at the expense of St. Johns River State College. At the completion of this permanent record printing, the original tracing shall be returned to the Design Professional.

END OF SECTION

SECTION 01300

SUBMITTALS:

A. Progress Schedule: Within 15 days of the date established for "commencement of the work," submit a comprehensive progress schedule indicating a time bar for each significant category of work to be performed. Arrange schedule to indicated required sequencing and to show time allowances for submittals, inspections and similar time margins.

1. Submittal: Provide 3 copies of the schedule to the Architect. Post in the temporary office. Revise at intervals matching payment requests and redistribute.

B. Project Meetings: Conduct monthly progress and coordination meetings attended by representative of each entity engaged for performance of work. Record discussions and decisions. Distribute copies to those attending and others affected, including the Architect.

C. Schedule of Values: Prepare a schedule of values to show breakdown of Contract Sum corresponding with payment request breakdown and progress schedule line items. Show dollar value and percent of total for each unit of work scheduled. Submit not less than 7 days prior to first payment request. Revise each time schedule is affected by change order or other revision.

D. Payment Request: Submit a request each calendar month. Use AIA form G702, fully completed and executed.

1. Prior to the initial payment request, submit the schedule of values, a list of principal subcontractors and suppliers, the progress schedule and copies of building permits and similar start-up authorization.

E. Shop Drawings, Product Data and Samples:

1. General: Coordinate submittals with the progress schedule and actual work progress. Allow 2 weeks for the Architect's review. Provide additional copes as required by governing authorities. Contractor shall review all shop drawings for conformity and completeness prior to submission to the Design Professional. Shop drawings that are incomplete will be returned for corrections.

2. Shop Drawings:

a. Initial Submittal: Submit a minimum of five opaque blue/black line prints and a minimum of five copies of other data required for approval. Two of the submitted copies will be retained by the Architect.

3. Product Data: Mark each copy to indicate the actual product to be provided; show selections from among options in the manufacturer's printed product data. Submit 2 copies to Architect; submittal if for information and record purposes only. Where the product data is required for maintenance manuals, submit with additional copies, which will be returned.

a. Maintain one additional copy at the project site for reference purpose.
b. Do not proceed with the installation of manufactured products until a copy of related product data is in the installer's possession at the project site.

4. Samples: Submit 3 sets of samples; one set will be returned. Provide 3 or more samples in each set where variations in color, pattern or texture are observable; show average condition and extreme range of variations. Submit full documentation with each set. Sample submittals are for Architect's observation of color, texture, pattern and "kind". Maintain returned set at project site for purposes of quality control comparisons.

F. Miscellaneous Submittals: Provide copies, plus additional copies as required for maintenance manual.

1. Warranties: Submit 2 executed copies, and additional copies as required for maintenance manual.
2. Field Records: 4 copies, including one copy that will be returned for inclusion in the submittal of record documents.
3. Maintenance Manuals: Submit 2 bound copies.
4. Record Drawings: Submit original maintained marked-up prints.

G. Architect's Action:

1. Stamp: The Architect/Engineer will stamp each submittal to be returned with a uniform, self explanatory action stamp, appropriately marked and executed to indicate the status of the submittal.

END OF SECTION

SECTION 01400

QUALITY CONTROL

PART 1 – GENERAL

1.1 PERFORMANCE OF WORK

A. Except where specifically required otherwise in the technical specifications the Contractor shall be responsible for all construction quality control and shall perform or coordinate all tests and inspections in accordance with Article 13.5 of the AIA General Conditions. See SECTION 01300 – SUBMITTALS

1.2 DEFINITIONS

A. Certified Test Reports: Certified test reports are reports of tests signed by a qualified professional attesting that the test results reported are accurate and that items tested either meet or fail to meet the stated minimum requirements. These test reports include those performed by Factory Mutual, Underwriters Laboratories, Inc., and others.

B. Certified Inspection Reports: Certified inspection reports are those signed by approved inspectors attesting that the items inspected meet the specification requirements other than those exceptions included in the report.

C. Manufacturer's Certificate of Conformance or Compliance: A certificate signed by an authorized manufacturer's official attesting that the material or equipment delivered meets the specification requirements.

1.3 TESTS All testing shall be divided into three categories as follows:

A. Field Tests made at, or in the vicinity of the job site in connection with the actual construction including, but not limited to, concrete batch plants, and similar establishments directly involved in the construction process.

B. Factory Tests, made at the point of manufacture of various products which are shipped to the job site as a unit, including but not limited to such items as transformers, boilers, air conditioning equipment, and electrical equipment.

C. Certified Tests, made by approved testing agencies on material and equipment which are to be incorporated into the structure under the Contract. These tests are such as are performed by Factory Mutual, Underwriters Laboratories, Inc., and others.

1.4 FIELD TESTS

A. Field Tests by the Contractor: The Contractor shall perform certain field testing specifically required of him in the contract specifications. In those cases, he shall furnish all equipment, instruments, qualified personnel, and facilities necessary to perform all tests required by the Contract Documents. Testing services shall be performed by the Contractor or acquired by the Contractor through qualified commercial testing laboratory. If a commercial testing laboratory is retained to perform tests under this contract, all test reports shall be certified by a representative of the testing laboratory who is authorized to sign certified test reports for the laboratory. Test reports shall include the acceptable value for each specification item, the actual test results obtained, and the test methods used. Each report shall be conspicuously stamped on the cover sheet in large red letters "CONFORMS" or "DOES NOT CONFORM" to the specification requirements as the case maybe. The Contractor shall arrange for immediate and direct delivery of the signed original of all reports, certifications, and other documentation to the Architect.

B. Factory Tests: The Contractor will arrange for factory tests when such tests are required.

C. Manufacturer's Certified Tests: Certified tests on materials to be incorporated into the work will be acceptable, provided they are performed by the manufacturer or by Government approved agencies or laboratories, show that the materials conform to the specification, and that the tests and certifications meet the requirements of the paragraph entitled "Certificates and Certifications" below.

D. Approval of Laboratories: All laboratory work performed under this contract shall be done by a laboratory approved by the Architect. The basis of approval includes the following:

1. Laboratories performing work in connection with concrete, steel and bituminous materials must conform to American Society for Testing and Materials (ASTM) Designation # 329-77.
2. Laboratories performing work not in connection with concrete, steel and bituminous materials must conform to Sections 3 and 4 of ASTM Designation E 329-77.

1.5 INSPECTION: All inspection shall be divided into two categories as follows:

A. Field Inspection is that inspection in the vicinity of the job site which, when performed properly, will result in the complete compliance of all work-in-place with the contract drawings and specifications.

B. Factory Inspection is that inspection at the point of manufacture of the various products which are shipped to the job site, including but not limited to such items as transformers, boilers, air conditioning equipment, and electrical equipment.

C. Contractor Field Inspection: The Contractor or his designated representative shall inspect all work under this contract.

1.6 SUBMITTALS

A. Submittals shall be prepared in accordance with SECTION 01300 – SUBMITTALS. Each submittal shall be accompanied by a cover letter signed by the Contractor. Each item proposed to be incorporated into the Contract shall be clearly marked and identified in the submittals, and shall be cross-referenced to the contract drawings and specifications so as to identify clearly the use for which it is intended. Each sheet of submittal shall be stamped with the Contractor's certification stamp. Data submitted in a bound volume or on one sheet printed on two sides may be stamped on the front of the first sheet only. The Contractor's certification stamp shall be worded as follows:

B. "It is hereby certified that the (equipment) (material) shown and marked in this submittal is that proposed to be incorporated into the project. It is in compliance with the contract drawings and specifications, can be installed in the allocated spaces, and is submitted for the Architect's review.

Certified by: _____ Date: _____"

C. The person signing the certification shall be one designated in writing by the Contractor as having that authority. The signature shall be in original ink. Stamped signatures are not acceptable.

D. Submittal Status Logs: The Contractor shall maintain at the job site an up-to-date submittal status log showing the status of submittals required by the contract.

E. Shop drawings, manufacturer's data and samples shall be identified clearly and submitted in accordance with the General Conditions.

F. Certified Test Reports: Before delivery of materials and equipment, certified copies of the reports of all tests listed in the technical sections shall be submitted and approved. The testing shall have been performed in a laboratory meeting the requirements specified herein. Test reports shall be accompanied by certificates from the manufacturer certifying that the material and equipment proposed to be supplied is of the same type, quality, manufacture, and make as that tested.

G. Formwork, Falsework and Erection Procedures Certification: When the Contractor is required to submit a design or certification for formwork, falsework, or erection procedures, daily inspection report must indicate that the work has been inspected for conformance to the design or certification. A specific statement for these items rather than a general statement is required.

1.7 CERTIFICATES AND CERTIFICATIONS

A. Manufacturer's certification may be furnished by the Contractor, on items of materials and equipment incorporated into the work, only when this method will assure full compliance with the provisions of the Contract, as determined by the Architect. Pre-printed certifications will not be acceptable. All certifications shall be in the original. The original of all manufacturer's

certifications shall name the appropriate item of equipment or material, specification, standard or other document spefi8ced as controlling the quality of that item of equipment or material, specification, standard or other document specified as controlling the quality of that item and shall have attached thereto certified copies of test reports upon which the certifications are based.

1.8 RECORD OF INSPECTIONS

A. Pursuant to the Contractor's Inspection, the Contractor shall maintain, on a day-to-day basis, a record of all inspections and field tests performed that day.

1.9 REPEATED TESTS AND INSPECTIONS

A. The Contractor shall repeat tests and inspections after each correction made to nonconforming materials and workmanship until tests and inspections indicate the materials, equipment, and workmanship conform to the Contract requirements. The retesting and re-inspections shall be performed at no cost to the Owner.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

END OF SECTION

SECTION 01500

CONSTRUCTION FACILITIES AND TEMPORARY CONTROL

PART I - GENERAL

1.1 DURATION

All facilities required as part of this section shall be provided and maintained for duration of project or as specifically required.

1.2 TEMPORARY UTILITIES

A. The Contractor is responsible for the following:

1. Temporary telephone service. (Contractor's option)
2. Temporary field offices. (Contractor's option)
3. Temporary toilets, including disposable supplies.
4. Temporary wash facilities, including disposable supplies.
5. Drinking water.
6. Temporary daily janitorial services.
7. Construction aids and miscellaneous services and facilities.
8. Barricades, warning signs and lights.
9. Security enclosure and lockup.
10. Environmental protection.
11. Temporary electric and water will be furnished by owner, from the existing facilities.

1.3 BARRIERS

A. Contractor shall provide as needed or required and comply with applicable governmental requirements for barricades, lighting, marking, flagmen, etc., to protect work, property and persons.

B. Dust proof partitions shall be provided during demolition and renovation construction activity and at other times as required to prevent spread of dust and debris into other areas of the Administration Building where no work is scheduled and other areas of the building.

1.4 TEMPORARY CONTROLS

A. Environmental Requirements: Comply with all governmental requirements as such affects work hereunder.

B. Noise: Construction noise shall be kept to a minimum.

C. Debris Control: Keep premises clean and free from accumulation of debris and rubbish. Provide trash and debris receptacles and require use. Remove from construction site daily.

1.5 PROJECT SAFETY

Contractor shall comply with all applicable governmental and insuring company requirements relative to construction and project safety. Either the superintendent, or other company representatives shall be on the site during all working hours. This person shall be trained in project safety and designated as Contractor's Safety Director.

END OF SECTION

SECTION 01600

MATERIAL AND EQUIPMENT

PART 1 - GENERAL

1.01 REFERENCED DOCUMENTS

A. References to standards or specifications such as Federal, ASTM, ANSI, etc., shall be latest edition in effect on the date of this Project Manual except where specific issues are noted.

B. Reference to such thereby makes them a part of this Project Manual as if bound herein. The Architect's approval shall be required where use of an edition other than referenced is desired. Provide completion information as to request.

1.02 PROPRIETARY PRODUCTS AND SUBSTITUTIONS

A. Where products of one or more manufacturers are listed as approved, such designated products shall be furnished unless a written request for a substitution is made and approved by the Architect.

B. Approved products shall be considered equivalent regardless of listing. Request and reason for substitution shall be through the Contractor to the Architect fully describing item, material, or system. Such information shall include any and all adjustments to that or any other work, and shall state credit or extra involved. If samples are requested, such shall be provided. The Architect will review data, judging quality, workmanship, economy of operation and general suitability for purpose a compared with that specified and shall advise in writing as to acceptance or rejection. No change shall be made without written approval from the Architect.

1.03 NON-PROPRIETARY PRODUCTS AND SUBSTITUTIONS

A. Performance specifications establish minimum standards for all competitors.

B. Construction Documents may reference a product that meets such requirements, but such reference is for information only and not proprietary in intent.

C. Request for substitutions shall be as outlined under paragraph 1.02 "Proprietary Products and Substitutions".

1.04 PRODUCT DELIVERY AND STORAGE

A. Delivery:

1. Deliver products, subject to delivery or storage damage in packages, containers, bundles or on pallets as applicable to protect from damage, adulteration or loss.

2. Each shall bear manufacturer's name, product name and/or type, along with sufficient data to determine that such complies with the Contract Documents.

3. Where labels of testing agencies or associations are required, such shall be affixed to products prior to leaving point of manufacture.

B. Storage:

1. Determine and comply with requirements or recommendation relative to safety and precautions in storage of products.

2. Ascertain that stored materials do not exceed structural limitations of areas on which stored.

3. Keep materials stacked, well ventilated, covered and protected against water, displacement by the elements and damage.

4. Stack on supports of adequate strength and spacing not to damage or deform materials stored thereon or supporting substrate.

5. Provide sufficient clearance from supporting substrate to assure adequate drainage and no contact with water or moist surfaces.

6. Where stored inside, provide protective covering over supporting substrate to protect against spillage, etc.

1.04 PAYMENT FOR STORED MATERIAL

A. Material stored, but not incorporated in the work, and for which Contractor desires payment prior to incorporation must be stored to protect Owner's interest.

B. Storage shall be at the site and fully insured or in an approved warehouse with evidence of insurance and consent of surety provided. Method of storage, location and proof that owner's interest is protected is required a time of submitting application for payment.

END OF SECTION

SECTION 01631

PRODUCTS AND SUBSTITUTIONS

A. Procedural Requirements:

1. Source Limitations: To the fullest extent possible, provide products of the same generic kind, from a single source, for each unit of work. Where it is not possible to do so, match separate procurements as closely as possible.

2. Product Selection Limitations:

a. Product Selections: Comply with the following requirements in the selection of products, materials and equipment:

(1) Single Product Name: Where only a single product or manufacturer is named, provide the product, unless it is not available, is incompatible with existing work, or does not comply with specified requirements of governing regulations.

(2). Two or More Products Named: Where two or more products or manufacturers are named, the selection is at the Contractor's option, provided the product selected complies with specified requirements.

b. "Or Equal" Provisions": Where products or manufacturers are specified by name accompanied by the term "or equal", provide either the product named, or comply with the requirements for gaining approval of "substitutions" for the use of an unnamed product.

B. Compliance with Standards: Where the specifications require only compliance with an imposed standard, code or regulation, the Contractor has the option of selecting any product that complies with specified requirements provided no product names are indicated.

C. Performance Requirements: Where the specifications require compliance with indicated performance requirements, the contractor has the option of selecting any product that complies with the specific performance requirements, provided no product names are indicated.

D. Visual Requirements: Where the specifications indicate that a product is to be selected from the manufacturer's standard options, without naming the manufacturer, the Architect/Engineer has the option of making the selection, after the Contractor has determined or selected the manufacturer.

E. Nameplates: Except as otherwise indicated for required labels and operating data, do not permanently attach or imprint manufacturer's or producer's nameplates or trademarks on exposed surfaces of products which will be exposed to view either in occupied spaces or on the exterior of the completed project.

F. Substitutions:

1. Conditions: The Contractor's requests for substitutions will be considered when they are reasonable, timely, fully documented, and when they qualify under one or more of the following circumstances.

a. The proposed substitution is related to an "or equal" or similar provision in the contract documents.

b. The required product cannot be supplied in time for compliance with Contract Time requirements.

c. The required product cannot be properly coordinated with other materials in the work, or cannot be warranted or insured as specified.

d. The proposed substitution will offer a substantial advantage to the Owner after deducting offsetting disadvantages including delays, additional compensation to the Architect/Engineer for redesign, evaluation and other necessary services, and similar considerations.

2. Submittals: Include the following information, as appropriate, in each request for substitution:

a. Provide complete product documentation, including product data and samples, where appropriate.

b. Provide detailed performance comparisons and evaluation, including testing laboratory reports where applicable.

c. Provide coordination information indicating the effects of the substitution on other work and the time schedule.

d. Provide cost information for the proposed change order.

e. Provide the Contractor's general certification of the recommended substitution.

3. Change Order: Approval of substitutions is possible only by the change order procedure.

G. Delivery, Storage, and Handling:

1. General: Receive, store and handle products, materials and equipment in a manner that will prevent loss, deterioration and damage. Schedule deliveries to minimize long-term storage at the project site.

END OF SECTION

SECTION 01700

PROJECT CLOSEOUT

A. Description of Requirements: Provisions of this section apply to the procedural requirements for the actual closeout of the Work, not to administrative matters such as final payment or the change over of insurance. Closeout requirements relate to both substantial and final completion of the Work; they also apply to individual portions of completed work as well as the total Work. Specific requirements contained in other sections have precedence over the general requirements contained in this section.

B. Procedures at Substantial Completion:

1. Prerequisites: Comply with the General Conditions and complete the following before requesting the Architect's inspection of the Work, or a designated portion of the Work, for certification of substantial completion.

a. Submit executed warranties, workmanship bonds, maintenance agreements, inspection certificates and similar required documentation for specific units of work enabling Owner's unrestricted occupancy and use.

b. Submit record documentation, maintenance manuals, tools, spare parts, keys and similar operational items.

c. Complete instruction of Owner's operating personnel, and start-up of systems.

d. Complete final cleaning, and remove temporary facilities and tools.

C. Inspection Procedures: Upon receipt of Contractor's request Architect will either proceed with inspection or advise Contractor of prerequisites not fulfilled. Following initial inspection, Architect will either prepare certificate of substantial completion, or advise Contractor of work that must be performed prior to issuance of the certificate of substantial completed. Results of the completed inspection will form the initial "punch-list" for final acceptance.

D. Procedures at Final Acceptance:

1. Re-inspection Procedure: The Architect will re-inspect the Work upon receipt of the Contractor's notice that, except for these items whose completion has been delayed due to circumstances that are acceptable to the Architect, the Work has been completed, including punch-list items from earlier inspections.

2. Upon completion of re-inspection, the Architect will advise the contractor of work not completed or obligations not fulfilled as required for final acceptance. If necessary, this procedure will be repeated.

E. Record Documentation:

1. Record Drawings: Maintain a complete set of either blue- or black-line prints of the contract drawings and shop drawings for record mark-up purposes throughout the Contract Time. Mark-up these drawings during the course of the work to show bother changes and the actual installation, in sufficient detail to form a complete record for the Owner's purposes. Give particular attention to work that will be concealed and difficult to measure and record at a later date, and work that may require servicing or replacement during the life of the project. Require the entities marking prints to sign and date each mark-up.

F. General Closeout Requirements:

1. Operator Instructions: Require each Installer of systems requiring continued operation and maintenance by Owner's operating personnel, to provide on-location instruction to Owner's personnel, sufficient to ensure safe, secure, efficient, non-failing utilization and operation of systems.

G. Final Cleaning: At the time of project closeout, clean or re-clean the work to the condition expected from a normal, commercial building cleaning and maintenance program. Complete the following cleaning operations before requesting the Architect/Engineer's inspection for certification of substantial completions.

1. Remove non-permanent protection and labels
2. Clean exposed finishes, including windows.
3. Touch-up minor finish damage
4. Remove debris
5. Broom-clean and vacuum area
6. Clean light fixtures and replace burned-out lamps
7. Sweep and wash paved areas
8. Police yards, grounds

END OF SECTION

SECTION 01720

PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 DESCRIPTION

A. Work Included:

1. Throughout progress of the Work of this Contract, maintain an accurate record of all changes in the Contract Documents, as described in Article 3.1 below.

2. Upon completion of the Work of this Contract, transfer the recorded changes to a set of Record Documents, as described in Article 3.2 below.

B. Related Work Described Elsewhere:

1. Submittals: Section 01300

1.2 QUALITY ASSURANCE

A. General: Delegate the responsibility for maintenance of Record Documents to one person on the Contractor's staff as approved in advance by the Design Professional.

B. Accuracy of Records: Thoroughly coordinate all changes within the Record Documents, making adequate and proper entries on each page of Specifications and each sheet of Drawings and other Documents where such entry is required to properly show the change. Accuracy of records shall be such that future searches for items shown in the Contract Documents may reasonably rely on information obtained from the approved Record Documents.

C. Timing of Entries: Make all entries within 24 hours after receipt of information.

1.3 SUBMITTALS

A. General: The Design Professional's approval of the current status of Record Documents will be a prerequisite to his approval of requests for progress payment and request for final payment under the Contract.

B. Progress Submittals: Prior to submitting each request for progress payment, secure the Design Professional's approval of the Record Documents as currently maintained.

C. Final Submittal: Prior to submitting request for final payment, submit the final Record Documents to the Design Professional and secure his approval.

1.4 PRODUCT HANDLING

A. Use all means necessary to maintain the job set of Record Documents completely protected from deterioration and from loss and damage until completion of the Work and transfer of the recorded data to the final Record Documents. In the event of loss of recorded data, use all means necessary to secure the data to the Design Professional's approval; such means shall include, if necessary in the opinion of the Design Professional, removal and replacement of concealing materials and, in such case, all replacements shall be to the standards originally specified in the Contract Documents.

PART 2 - PRODUCTS

2.1 RECORD DOCUMENTS

A. Job Set: Promptly following award of Contract, secure from the Design Professional, at no charge to the Contractor, one complete set of all documents comprising the Contract.

PART 3 - EXECUTION

3.1 MAINTENANCE OF JOB SET

A. Identification: Immediately upon receipt of the job set described in Paragraph 2.1A above, identify each of the documents with the title "RECORD DOCUMENTS - JOB SET".

B. Preservation:

1. Considering the Contract completion time, the probable number of occasions upon which the job set must be taken out for new entries and for examination, and the conditions under which these activities will be performed, devise a suitable method for protecting the job set to the approval of the Architect.

2. Do not use the job set for any purpose except entry of new data and for review by the Architect, until start of transfer of data to final Record Documents.

3. Maintain the job set at the site of Work as that site is designated by the Architect.

C. Making Entries on Drawings: Using an erasable colored pencil (not ink or indelible pencil), clearly describe the change by note and by graphic line, as required. Date all entries. Call attention to the entry by a "cloud" around the area or areas affected. In the event of overlapping changes, different colors may be used for each of the changes.

D. Making Entries on Other Documents:

1. Where changes are caused by directives issued by the Architect, clearly indicate the change by note in ink, colored pencil, or rubber stamp.

2. Where changes are caused by Contractor-originated proposals approved by the Architect, including inadvertent errors by the Contractor which have been accepted by the Architect, clearly indicate the change by note in erasable colored pencil.

3. Make entries in the pertinent documents as approved by the Architect.

E. Conversion of Schematic Layouts:

1. In most cases on the drawings, arrangement of conduits and circuits, piping, ducts, and other similar items, is shown schematically and is not intended to portray precise physical layout. Final physical arrangement is as determined by the Contractor, subject the Architect's approval. However, design of future modifications of the facility may require accurate information as to the final physical arrangement of items which are shown only schematically on the drawings.

2. Show on the job set of Record Drawings, by dimension accurate to within 1", the center line of each run of items such as are described in Paragraph E.1 above. Clearly identify the item by accurate note such as "cast iron drain", "galv. water", etc. Show by symbol or note, the vertical location of the item ("under slab", "in ceiling plenum", "exposed", etc.). Make all identification sufficiently descriptive that it may be related reliably to the specifications.

3. The Architect may waive the requirements for conversion of schematic data where, in the Architect's judgment, such conversion serves no beneficial purpose. However, do not rely upon waivers being issued except as specifically issued in writing by the Architect.

4. Timing of Entries: Be alert to changes in the work from how it is shown in the Contract Documents. Promptly, and in no case later than 24 hours after the change has occurred and been made known to the Contractor, make the entry or entries required.

5. Accuracy of entries: Use all means necessary, including the proper tools for measurement, to determine actual locations of the installed items.

3.2 FINAL RECORD DOCUMENTS

A. General: The purpose of the final Record Documents is to provide factual information regarding all aspects of the work, both concealed and visible, to enable future modification of design to proceed safely without lengthy and expensive site measurement, investigation, and examination.

B. Approval of Recorded Data Prior to Transfer: Following receipt of the sepia transparencies described in Paragraph 2.1B above, and prior to start of transfer of recorded data thereto, secure a review by the Architect of all recorded data. Make all required revisions.

C. Transfer of Data to Drawings: Carefully transfer all change data shown on the job set of Record Drawings to corresponding final record set of prints, coordinating the changes as required, and clearly indicating at each affected detail and other drawing the full description of all changes made during construction and the actual location of items described in Paragraph E.3 above. Call attention to each entry by drawing a "cloud" around the area or areas affected. Make all change entries on the sepias neatly, consistently, and in ink or crisp black pencil.

D. Transfer of Data to Other Documents: If the Documents other than Drawings have been kept clean successfully during progress of the Work, and if entries have been sufficiently orderly thereon to the approval of the Architect, the job set of those documents (other than drawings) will be accepted by the Architect as final Record Documents for those Documents. If any such Document is not so approved by the Architect, secure a new copy of that document from the Architect as the Architect's usual charge for reproduction; carefully transfer the charge data to the new copy and to the approval of the Architect.

E. Review and Approval: Submit the completed total set of Record Documents to the Architect as described in Paragraph 1.3C above. Participate in review meeting or meetings as required by the Architect, make all required changes in the Record Documents to the Architect.

END OF SECTION

SECTION 02070

SELECTIVE DEMOLITION

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 the following:

1. Demolition and removal of designated interior walls, floor finishes, doors, door frames, and acoustical ceiling system.
2. Patching and repairs
3. Relocation of existing doors, millwork, TV monitor, camera, light fixtures and HVAC grilles

1.3 DEFINITIONS

A. Remove: Remove and legally dispose of items except those indicated to be reinstalled, salvaged, or to remain the Owner's property.

B. Remove and Salvage: Items indicated to be removed and salvaged remain the Owner's property. Remove, clean and protect against damage. Deliver items as directed by Owner to locations on Campus.

C. Existing to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. All site landscaping damaged during the construction phase shall be restored by the Contractor at the closeout of the job.

1.4 MATERIALS OWNERSHIP

A. Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain the Owner's property, demolished materials shall become the Contractor's property and shall be removed from the site with further disposition at the Contractor's option and expense.

1.5 SUBMITTALS

A. General: Submit each item in this Article according to the Conditions of the Contract and Division 1 Specification Sections, for information only, unless otherwise indicated.

B. Photographs or videotape, sufficiently detailed, of existing conditions of adjoining construction and site improvements that might be misconstrued as damage caused by selective demolition operations.

C. Record drawings at Project Closeout according to Division 1 Section "Project Closeout"

1. Identify and accurately locate capped utilities and other subsurface structural, electrical, or mechanical conditions.

1.6 QUALITY ASSURANCE

A. Regulatory Requirements: Comply with governing EPA notification regulations before starting selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

1.7 PROJECT CONDITIONS

A. Owner will occupy portions of the building immediately adjacent to selective demolition area. Conduct selective demolition so that Owner's operations will not be disrupted. Provide not less than 72 hours' notice to Owner of activities that will affect Owner's operations.

B. Storage or sale or removed items or materials on-site will not be permitted.

1.8 SCHEDULING

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

PART 2 – PRODUCTS (Not Applicable)

2.1 REPAIR MATERIALS

A. Use repair materials identical to existing materials.

1. Where identical materials are unavailable or cannot be used for exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible.
2. Use materials whose installed performance equals or surpasses that of existing materials.

PART 3 – EXECUTION

3.1 EXAMINATION

A. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.

B. When unanticipated mechanical, electrical or structural elements that conflict with the intended function or design are encountered, investigate and measure the nature and extent of the conflict. Promptly submit a written report to the Architect.

C. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.

3.2 UTILITY SERVICES

A. Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.

1. Do not interrupt existing utilities serving occupied or operating facilities, except when authorized in writing by Owner and authorities having jurisdiction.

a. Provide not less than 72 hours' notice to Owner if shutdown of service is required during changeover.

B. Utility Requirements: Locate, identify, disconnect and seal or cap off indicated utility services serving building to be selectively demolished.

1. Arrange to shut off indicated utilities with utility companies.
2. Where utility services are required to be removed, relocated, or abandoned, provide bypass connections to maintain continuity of service to other parts of the building before proceeding with selective demolition.

C. Utility Requirements: Refer to any Division 15 and 16 Sections listed for shutting off, disconnecting, removing and sealing or capping utility services. Do not start selective demolition work until utility disconnecting and sealing have been completed and verified in writing.

D. Conduct demolition operations to prevent injury to people and damage to adjacent buildings and facilities to remain. Ensure safe passage of people around selective demolition area.

1. Protect existing site improvements, appurtenances, and landscaping to remain.
2. Protect walls, ceilings, floors and other existing finish work that are to remain and are exposed during selective demolition operations.

3.3 POLLUTION CONTROLS

A. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

B. Clean adjacent surfaces and improvements of dust, dirt and debris caused by selective demolition operations. Return adjacent areas to condition existing before start of selective demolition.

C. Provide dust control for the affected portion of the Buildings included in this project.

D. HVAC systems shall not be operational during this project. All HVAC diffusers and return-air grilles shall be sealed during demolition and construction phases of the project.

3.4 SELECTIVE DEMOLITION

A. Demolish and remove existing construction only to the extent required by new construction as indicated. Use methods required to complete Work within limitations of governing regulations and as follows:

1. 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.
2. 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.
3. Dispose of demolished items and materials promptly. On-site storage or sale of removed items is prohibited.
4. Return elements of construction and surfaces to remain to condition existing before start of selective demolition operations.
5. Protect from damage all existing finished areas that are to remain.

B. Break up and remove concrete slabs on grade, unless otherwise shown to remain.

3.5 PATCHING AND REPAIRS

A. Promptly patch and repair holes and refinish damaged surfaces caused to adjacent construction by selective demolition operations.

B. Patching is specified in Division 1 Section “Cutting and Patching”

C. Restore exposed finishes of patched areas and extend finish restoration into adjoining construction to remain in a manner that eliminates evidence of patching and refinishing.

3.6 DISPOSAL OF DEMOLISHED MATERIALS

A. General: Promptly dispose of demolished materials. Do not allow materials to accumulate on site.

B. Burning: Do not burn demolished materials.

C. Disposal: Transport demolished materials off Owner’s property and legally dispose of them.

3.7 CLEANING

A. Sweep the building broom clean on completion of selective demolition operation.

B. Change filters on air-handling equipment on completion of selective demolition operations.

END OF SECTION

SECTION 06100

ROUGH CARPENTRY

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specifications Sections, apply to this section.

1.2 SUMMARY

A. This section includes the following:

1. Wood blocking, cants, and nailers
2. Wood furring and grounds
3. Plywood backing panels

B. Building is classified as Construction Type IV N.C., NFPA, and FBC Type IV, N.C.

1.3 DEFINITIONS

A. Rough Carpentry: Carpentry work not specified in other sections and not exposed, unless otherwise indicated.

B. Lumber grading agencies, and the abbreviations used to reference them, include the following:

NELMA: Northeastern Lumber Manufacturers Association
NLGA: National Lumber Grades Authority
SPIB: Southern Pine Inspection Bureau

1.4 SUBMITTALS

A. Product Data: For each type of process and factory-fabricated products. Indicate component materials and dimensions and include construction and application details.

1. Include data for wood preservative treatment from chemical treatment manufacturer and certification by treating plant that tested materials comply with requirements. Indicate type of preservative used, net amount of preservative retained, and chemical treatment manufacturer's written instructions for handling, storing, installing, and finishing treated material.

2. Fire retardant treatment of wood lumber products for this project is not permitted.

3. For products receiving a waterborne treatment, include statement that moisture content of treated materials was reduced to levels specified before shipment to project site.

4. Include copies of warranties from chemical treatment manufacturers for each type of treatment.

B. Research/Evaluation Reports: For the following, showing compliance with building code in effect for the Project:

1. Preservative-treated wood

1.5 QUALITY ASSURANCE

A. Source Limitations for Treated Wood: Obtain each type of treated wood product through one source from a single producer.

1.6 DELIVERY, STORAGE AND HANDLING

A. Stack lumber and panels; place spacers between each bundle to provide air circulation. Provide for air circulation around stacks and under covering.

PART 2 – PRODUCTS

2.1 WOOD PRODUCTS, GENERAL

A. Lumber: DOC PS 20 and applicable rules of lumber grading agencies certified by the American Lumber Standards Committee Board of Review

1. Factory mark each piece of lumber with grade stamp of grading agency.

2. Where nominal sizes are indicated, provide actual sizes required by DOC PS 20 for moisture content specified. Where actual sizes are indicated, they are minimum dressed sizes for dry lumber.

3. Provide dressed lumber, S4S, unless otherwise indicated.

4. Provide dry lumber with 19 percent maximum moisture content at time of dressing for 2" nominal thickness or less, unless otherwise indicated.

2.2 WOOD PRESERVATIVE-TREATED MATERIALS

A. Preservative Treatment by Pressure Process: AWPA C2 (lumber) except that lumber that is not in contact with the ground and is continuously protected from liquid water may be treated according to AWPA C31 with inorganic boron (SBX). Preservative Chemicals: Acceptable to authorities having jurisdiction and containing no arsenic or chromium. Treat indicated items and the following:

1. Wood cants, nailers, curbs, equipment support bases, blocking, stripping, and similar members in connection with roofing, flashing, vapor barriers, and waterproofing.

2. Wood sills, sleepers, blocking, furring, stripping and similar concealed members in contact with masonry or concrete.

3. Wood framing members less than 18" above grade.

B. Kiln-dry material after treatment to maximum moisture content of 19 percent for lumber. Do not use material that is warped or does not comply with requirements for untreated material.

C. Mark each treated item with the treatment quality mark of an inspection agency approved by the American Lumber Standards Committee Board of Review.

D. Application: Treat all rough carpentry, unless otherwise indicated.

2.3 MISCELLANEOUS LUMBER

A. Provide lumber for support of or attachment to other construction, including the following:

1. Blocking
2. Cants
3. Nailers
4. Furring
5. Grounds

B. For items of dimension lumber size, provide Construction, Stud, or No. 2 grade lumber with 19 percent maximum moisture content and any of the following species:

1. Mixed Southern pine (SPIB)
2. Hem-fir or Hem-fir (north) (NLGA, WCLIB or WWPA)

3. Spruce-pine-fir (south) or Spruce-pine-fir (NELMA, NLGA, WCLIB, or WWPA)
4. Eastern softwoods (NELMA)
5. Northern species (NLGA)

C. For concealed boards, provide lumber with 19 percent moisture content and any of the following species and grades:

1. Mixed Southern pine, No. 2 grade (SPIB)
2. Hem-fir or Hem-fir (north) Construction or No. 2 common grade (NLGA, WCLIB or WWPA)
3. Spruce-pine-fir (south) or Spruce-pine-fir Construction or No. 2 Common grade (NELMA, NLGA, WCLIB, or WWPA)
4. Eastern softwoods No. 2 common grade (NELMA)
5. Northern species, No. 2 common grade (NLGA)
6. Western woods, Construction or No. 2 common grade (WCLIB or WWPA)

2.4 PLYWOOD BACKING PANELS

A. Telephone and Electrical Equipment Backing Panels: DOC PS 1, Exposure 1, C-D Plugged, fire-retardant-treated, in thickness indicated or, if not indicated, not less than 1/2" thick.

2.5 FASTENERS

A. Provide fasteners of size and type indicated that comply with requirements specified in this Article for material and manufacture. Provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M

B. Nails: ASTM F 1667

C. Screws for Fastening to Cold-Formed Metal Framing: ASTM C 954, except with wafer heads and reamer wings, length as recommended by screw manufacturer for materials being fastened.

D. Lag Bolts: ASME B18.2.1

E. Bolts: Steel bolts complying with ASTM A 307, Grade A; with ASTM A 563 hex nuts, and where indicated, flat washers.

F. Expansion Anchors: Anchor bolt and sleeve assembly of material indicated below with capability to sustain, without failure, a load equal to 6 times the load imposed when installed in unit masonry assemblies and equal to 4 times the load imposed when installed in concrete as determined by testing per ASTM E 488 conducted by a qualified independent testing and inspecting agency. Material: Carbon steel components, zinc plated to comply with ASTM B 633, Class Fe/Zn 5.

PART 3 – EXECUTION

3.1 INSTALLATION, GENERAL

A. Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit rough carpentry to other construction; scribe and cope as needed for accurate fit. Locate furring, nailers, blocking, grounds, and similar supports to comply with requirements for attaching other construction.

B. Do not use materials with defects that impair quality of rough carpentry or pieces that are too small to use with a minimum number of joints or optimum joint arrangement.

C. Apply field treatment complying with AWPA M4 to cut surfaces of preservative-treated lumber and plywood.

D. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated, complying with Table 2306.1, “Fastening Schedule,” in the 2004 Florida Building Code and amendments.

E. Use common wire nails or screws unless otherwise indicated. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting wood, pre-drill as required.

F. Use finishing nails or screws for exposed work, unless otherwise indicated. Countersink nail heads or screws and fill holes with wood filler.

3.2 WOOD GROUND, BLOCKING AND NAILER INSTALLATION

A. Install where indicated and were required for attaching other work. Form to shapes indicated and cut as required for true line and level of attached work. Coordinate locations with other work involved.

B. Attach items to substrates to support applied loading. Recess bolts and nuts flash with surfaces, unless otherwise indicated. Build anchor bolts into masonry during installation of masonry work. Where possible, secure anchor bolts to formwork before concrete placement.

C. Provide permanent grounds of dressed, pressure-preservative-treated, key-beveled lumber not less than 1-1/2" wide and of thickness required to bring face of ground to exact thickness of finish material. Remove temporary grounds when no longer required.

END OF SECTION

SECTION 06402

INTERIOR ARCHITECTURAL WOODWORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. This section includes the following:

1. Plastic laminate cabinets
2. Plastic laminate countertops
3. Utility shelving and panels.
4. Wood window frames finished trim and stops

1.3 DEFINITIONS

A. Interior architectural woodwork includes laminate plastic millwork (including countertops), desk units, panels, finish wood fixed glass window frames, trim and stops, wood furring, blocking, shims, and hanging strips for installing woodwork items unless concealed within other construction before woodwork installation.

1.4 SUBMITTALS

A. Product Data: For each type of product indicated, including cabinet hardware and accessories, and finishing materials and processes.

B. Shop Drawings: Show location of each item, dimensioned plans and elevations, large-scale details, attachment devices, and other components.

1. Show details full size.
2. Show locations and sizes of furring, blocking and hanging strips, including concealed blocking and reinforcement specified in other sections.
3. Show locations and sizes of cutouts and holes for plumbing fixtures and other items installed in architectural woodwork.

C. Samples for Initial Selection:

1. Plastic laminates
2. PVC edge material
3. Thermoset decorative panels

D. Samples for Verification:

1. Plastic laminates, 8x10 inches, for each type, color, pattern, and surface finish.
2. Lumber for transparent finish, not less than 5 sq. in. for each species with 1/2 of exposed surface finished.
3. Exposed cabinet hardware and accessories, one unit for each type and finish.

E. Product Certificates: For each type of product, signed by product manufacturer.

F. Woodwork Quality Standard Compliance Certificates: AWI Quality Certification Program certificates.

G. Qualification Data: For Installer and Fabricator.

1.5 QUALITY ASSURANCE

A. Fabricator Qualifications: Shop that employs skilled workers who custom-fabricate products similar to those required for this Project and whose products have a record of successful in-service performance. Shop is a certified participant in AWI's Quality Certification Program.

B. Installer Qualifications: Certified participant in AWI's Quality Certification Program.

C. Source Limitations: Engage a qualified woodworking film to assume undivided responsibility for production of interior architectural woodwork with sequence-matched wood veneers.

D. Quality Standard: Comply with AWI's "Architectural Woodwork Quality Standards" for grades of interior architectural woodwork indicated for construction, finishes, installation, and other requirements. AWI's standard for this project shall be "Custom". Provide AWI's Quality Certification Program certificates including that woodwork, including installation, complies with requirements of grades specified.

1.6 DELIVERY, STORAGE AND HANDLING

A. Do not deliver woodwork until painting and similar operations that could damage woodwork have been completed in installation areas. If woodwork must be stored in other than installation areas, store only in areas where environmental conditions comply with requirements specified in "Project Conditions" article.

1.7 PROJECT CONDITIONS

A. Environmental Limitations: Do not deliver or install woodwork until building is enclosed, wet work is complete, and HVAC system is operating and maintaining temperature and relative humidity at occupancy levels during the remainder of the construction period.

B. Field Measurements: Where woodwork is indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication, and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

1. Locate concealed framing, blocking and reinforcements that support the woodwork by field measurements before being enclosed, and indicate measurements on the Shop Drawings.
2. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish dimensions and proceed with fabricating woodwork without field measurements. Provide allowance for trimming at site, and coordinate construction to ensure that actual dimensions correspond to established dimensions.

1.8 COORDINATION

A. Coordinate sizes and locations of framing, blocking, furring, reinforcements, and other related units of Work specified in other sections to ensure that interior architectural woodwork can be supported and installed as indicated.

PART 2 – PRODUCTS

2.1 MATERIALS

A. Provide materials that comply with requirements of AWI's "Custom" quality standard for each type of woodwork and quality grade specified, unless otherwise indicated.

B. Wood Species and Cut for Transparent Finish: Wood species shall match existing interior doors, plain sawn or sliced

C. Wood Species for Opaque Finish: Any closed-grain hardwood.

D. Wood Products: Comply with the following:

1. Softwood Plywood: DOC PS1, Medium Density Overlay
2. Veneer-Faced Panel Products (Hardwood Plywood): HPVA HP-1, made with adhesive containing no urea formaldehyde.

E. Thermoset Decorative Panels: Particleboard or medium-density fiberboard finished with thermally-fused, melamine-impregnated decorative paper complying with LMA SAT-1. Provide PVC or polyester edge-banding complying with LMA EDG-1 on components with exposed or semi-exposed edges.

F. High-Pressure Decorative Laminate: NEMA LD 3, grades as indicated or, if not indicated, as required by woodwork quality standard.

1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering high-pressure decorative laminates that may be incorporated into the Work include but are not limited to the following:

a. Formica Corporation
b. Nevamar Company LLC; Decorative Products Div.
c. Wilsonart International; Div. of Premark International, Inc.

2.2 CABINET HARDWARE AND ACCESSORIES

A. Provide cabinet hardware and accessory materials associated with architectural cabinets.

B. Frameless Concealed Hinges (European Type): BHMA A156.9, B01602, 100 degrees of opening, self-closing.

C. Wire Pulls: Back mounted stainless steel, 4” long, 2” deep, and 5/16” in diameter.

D. Adjustable Shelf Standards and Supports, Typical Cabinets: BHMA A156.9, B04071; with shelf rests, B04081.

E. Drawer Slides: BHMA A156.9, B05091. Heavy Duty (Grade 1HD-200); side-mounted, full extension type; zinc plated steel ball-bearing slides.

F. Door Locks: BHMA A156.11, E07121. Schlage or campus standard, keyed to office keyway. Coordinate keying with College Facilities Manager.

G. Drawer Locks: BHMA A156.11, E07041. Schlage or campus standard, keyed to office keyway. Coordinate keying with College Facilities Manager.

H. Grommets for Cable Passage through Countertops: 2” OD, color as selected to match countertop. Molded-plastic grommets and matching plastic caps with slot for wire passage. Product: Subject to compliance with requirements: provide “OG” Series by Doug Mockett & Company, Inc.

I. Exposed Hardware Finishes: For exposed hardware, provide finish that complies with BHMA A156.18 for BHMA finish number indicated. Satin Chrome Plated: BHMA 626 for brass or bronze base; BHMA 652 for steel base.

J. For concealed hardware, provide manufacturers standard finish that complies with product class requirements in BHMA A156.9.

2.3 MISCELLANEOUS MATERIALS

A. Furring, Blocking, Shims and Hanging Strips: Softwood or hardwood lumber, kiln dried to less than 15 percent moisture content.

B. Furring, Blocking, Shims and Hanging Strips: Softwood lumber, kiln dried to less than 15 percent moisture content.

C. Anchors: Select material, type, size, and finish required for each substrate for secure anchorage. Provide non-ferrous metal or hot-dip galvanized anchors and inserts on inside face of exterior

walls and elsewhere as required for corrosion resistance. Provide toothed-steel or lead expansion sleeves for drilled-in place anchors.

D. Adhesives, General: Do not use adhesives that contain urea formaldehyde.

E. VOC Limits for Installation Adhesives and Glues: Use installation adhesives that comply with the following limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24):

1. Wood Glues: 30g/L
2. Contact Adhesive: 250g/L

F. Adhesive for Bonding Plastic Laminate: Contact cement. Adhesive for Bonding Edges: Hot melt adhesive or adhesive specified above for faces.

2.4 FABRICATION, GENERAL

A. Interior Woodwork Grade: Unless otherwise indicated, provide “Custom” grade interior woodwork complying with referenced quality standard.

B. Fabricate woodwork to dimensions, profiles and details indicated. Ease edges to radius indicated for exposed corners and edges of solid-wood (lumber) members 3/4" thick or less: 1/16”

C. Wood Moisture Content: Comply with requirements of referenced quality standard for wood moisture content in relation to ambient relative humidity during fabrication and in installation areas.

D. Complete fabricating, including assembly, finishing and hardware application, to maximum extent possible before shipment to Project site. Disassemble components only as necessary for shipment and installation. Where necessary for fitting at site, provide ample allowance for scribing, trimming and fitting.

E. Trial fit assemblies at fabrication shop that cannot be shipped completely assembled. Install dowels, screws, bolted connectors, and other fastening devices that can be removed after trial fitting. Verify that various parts fit as intended and check measurements of assemblies against field measurements indicated on shop drawings before disassembling for shipment.

F. Shop-cut openings to maximum extent possible to receive hardware, appliances, plumbing fixtures, electrical work and similar items. Locate openings accurately and use templates or roughing-in diagrams to produce accurately sized and shaped openings. Sand edges of cutouts to remove splinters and burrs. Seal edges of openings in countertops with one coat of varnish.

G. Install glass to comply with applicable requirements in Division 8 section “Glazing” and in GANA’s “Glazing Manual”

2.5 PLASTIC LAMINATE CABINETS

A. Grade: Custom

B. AWI Type of Cabinet Construction: Flush overlay

C. Laminate Cladding for Exposed Surfaces: High-pressure decorative laminate complying with the following requirements:

1. Horizontal Surfaces Other Than Tops: Grade HGL
2. Vertical Surfaces: Grade VGS
3. Edges: Grade VGS

D. Materials for Semi-Exposed Surfaces:

1. Surfaces Other Than Drawer Bodies: High-Pressure Decorative Laminate, Grade VGS.

a. Edges of Plastic Laminate Shelves: PVC edge banding, 0.12" thick, matching laminate in color, pattern and finish.
b. For semi-exposed backs of panels with exposed plastic laminate surfaces, provide surface of high-pressure decorative laminate, Grade VGS

2. Drawer Slides and Backs: Thermoset decorative panels
3. Drawer Bottoms: Thermoset decorative panels

E. Concealed Backs of Panels with Exposed Plastic Laminate Surfaces: High-pressure decorative laminate, Grade BKL.

F. Colors, Patterns, and Finishes: Provide materials and products that result in colors and textures of exposed laminate surfaces complying with the following requirements:

1. As indicated by laminate manufacturer's designations.
2. Match Architect's sample
3. As selected by Architect from laminate manufacturer's full range in the following categories:

a. Solid colors, matte finish
b. Metal clad high-pressure laminate.

2.6 PLASTIC LAMINATE COUNTERTOPS

A. Grade: Custom

B. High-Pressure Decorative Laminate Grade: HGS

C. Colors, Patterns, and Finishes: Provide materials and products that result in colors and textures of exposed laminate surfaces complying with the following requirements:

1. As selected by Architect from laminate manufacturer's full range in the following categories:

a. Solid colors, matte finish

D. Edge Treatment: Same as laminate cladding on horizontal surfaces, as indicated.

E. Core Material: Exterior grade plywood.

F. Core Material at Sinks: Exterior grade plywood or marine grade plywood.

G. Paper Backing: Provide paper backing on underside of countertop substrate.

PART 3 – EXECUTION

3.1 PREPARATION

A. Before installation, condition woodwork to average prevailing humidity conditions in installation areas.

B. Before installing architectural woodwork, examine shop-fabricated work for completion and complete work as required, including removal of packing and backpriming.

3.2 INSTALLATION

A. Grade: Install woodwork to comply with requirements for the same grade specified in Part 2 for the fabrication of type of woodwork involved.

B. Assemble woodwork and complete fabrication at the Project site to comply with requirements for fabrication in Part 2, to the extent that it was not completed in the shop.

C. Install woodwork level, plumb, true and straight. Shim as required with concealed shims. Install level and plumb (including tops) to a tolerance of 1/8" in 96".

D. Scribe and cut woodwork to fit adjoining work, refinish cut surfaces, and repair damaged finish at cuts.

E. Anchor woodwork to anchors or blocking built in or directly attached to substrates. Secure with countersunk, concealed fasteners and blind nailing as required for complete installation. Use fine finishing nails for exposed fastening, countersunk and filled flush with woodwork and matching final finish if transparent finish is indicated.

F. Cabinets: Install without distortion so doors and drawers fit properly and are accurately aligned. Adjust hardware to center doors and drawers in openings and to provide unencumbered operation. Complete installation of hardware and accessory items as indicated.

1. Install cabinets with no more than 1/8" in 96" sag, bow or other variation from a straight line.
2. Fasten wall cabinets through back, near top and bottom, at ends, and not more than 16" o.c. with No. 10 wafer-head screws sized for 1" penetration into wood framing, blocking, or hanging strips or No. 10 wafer-head sheet metal screws through metal backing or metal framing behind wall finish.

G. Countertops: Anchor securely by screwing through corner blocks of base cabinets or other supports into underside of countertop.

1. Align adjacent solid-surfacing material countertops and form seams to comply with manufacturer's written recommendations using adhesive in color to match countertop. Carefully dress joints smooth, remove surface scratches, and clean entire surface.
2. Install cabinets with no more than 1/8" in 96" sag, bow or other variation from a straight line.
3. Secure backsplashes to walls with adhesive.
4. Caulk space between backsplash and wall with sealant specified in Division 7 section "Joint Sealants"

H. Touch up finishing work specified in this section after installation of woodwork. Fill nail holes with matching filler where exposed.

3.3 ADJUSTING AND CLEANING

A. Repair damaged and defective woodwork, where possible, to eliminate functional and visual defects; where not possible to repair, replace woodwork. Adjust joinery for uniform appearance.

B. Clean, lubricate, and adjust hardware.

C. Clean woodwork on exposed and semi-exposed surfaces. Touch-up shop applied finishes restoring damaged or soiled areas.

END OF SECTION

SECTION 07200

INSULATION

1.1 GENERAL:

A. Thermal resistivity or r-value represents the rate of heat flow through a homogenous material exactly 1" thick and are expressed by the temperature difference in degrees F between the two exposed faces required to cause 1 BTU to flow throughout 1 sq. ft. per hr. at mean temperatures indicated.

B. Fire Performance Characteristics: Provide insulation with fire performance characteristics indicated per ASTM E 119, ASTM E 84 and E 136, as applicable, and which correspond to products listed in UL "Fire Resistance Directory" or "Building Materials Directory".

C. Maximum Allowable Asbestos Content: Less than 0.25% by weight of asbestos of any type or mixture of types occurring naturally as impurities, as determined by polarized light microscopy test per Appendix A of 40 CFR 763.

D. Submittals: Submit product data for each form and type of insulation indicated.

1.2 PRODUCTS:

A. General: Provide preformed units in sizes to fit applications indicated, selected from manufacturer's standard thickness, widths and lengths.

B. Extruded Polystyrene Board Insulation: ASTM C 578, Type as indicated below; with 5-year aged r-values of 5.4 and 5 at 40 and 75 deg. F (4.4 and 23.9 deg. C), respectively; and as follows:

1. Type IV, 1.6 lb./cu. ft. min density.
2. Type V, 3.0 lb./cu. ft. min. density where indicated.
3. Type VI, 1.8 lb./cu. ft. min. density.
4. Type VII, 2.2 lb./cu. ft. min. density.
5. Type X, 1.35 lb./cu. ft. min. density.
6. Surface Burning Characteristics: Maximum flame spread and smoke developed values of 5 and 165, respectively.

C. Molded Polystyrene Board Insulation: ASTM C 578, Type as indicated below:

1. Type I, 0.9 lb./cu. ft. min. density, aged r-value of 4.0 and 3.6 at 40 and 75° F (4.4 and 23.9° C), respectively.

2. Type II, 1.3 lb./cu. ft. min. density, aged r-value of 4.4 and 4.0 at 40 and 75° F (4.4 and 23.9° C), respectively.

3. Type VIII, 1.15 lb./cu. ft. min. density, aged r-value of 4.2 and 3.8 at 40 and 75° F (4.4 and 23.9° C), respectively.

4. Surface Burning Characteristics: Maximum flame spread and smoke developed values of 75 and 175, respectively.

D. Phenolic Board Insulation: Rigid, cellular thermal insulation with thermoset phenolic-based closed-cell-foam core and 2-ply foil-kraft-liner facing laminated to both sides, aged r-value of 8.33 per ASTM C 518.

1. Surface Burning Characteristics: Maximum flame spread and smoke developed values of 25 and 15, respectively.

E. Faced Mineral Fiber Blanket/Batt Insulation: ASTM C 665 for Type II, Class A (blankets with vapor-retarder membrane facing with flame spread of 25 or less); kraft vapor-retarder membrane on one face, respectively; and as follows:

1. Mineral Fiber Type: Fibers manufactured from glass or slag.

F. Combustion Characteristics: Unfaced materials passes ASTM E 136 test.

1. Surface Burning Characteristics: Maximum flame spread and smoke developed value of 25 and 50, respectively.

G. Mechanical Anchors: Type and size recommended by insulation manufacturer.

H. Spray foam insulation shall be polyicynene insulation as manufactured by Icynene, Inc., or approved equal. The spray formula shall be a 1/2 pound density, free rise, open celled material.

I. Sound batt insulation (STC 50) shall be similar and equal to JM Formaldehyde-Free Thermal/Acoustical Fiberglass Batts"

1.3 INSTALLATION:

A. General: Comply with insulation manufacturer's instructions for installation of insulation.

B. Support insulation units by adhesive or mechanical anchorage or both as applicable to location and conditions indicated.

END OF SECTION

SECTION 07900

JOINT SEALERS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

A. Extent of each form and type of joint sealer is indicated on drawings and as herein noted.

B. This section includes joint sealers for the following locations:

1. Interior joints in vertical surfaces and horizontal non-traffic surfaces as listed below:

a. Control and expansion joints on exposed interior surfaces of exterior walls
b. Perimeter joints of exterior openings where indicated
c. Vertical control joints on exposed surfaces of interior units masonry and concrete walls and partitions
d. Perimeter joints between interior wall surfaces and frames of interior doors, windows, and elevator entrances
e. Perimeter joints of toilet fixtures
f. Other joints as indicated, and needed

C. Sealants for glazing purposes are specified in Division 8 Section “Glass and Glazing”.

D. Sealing compound perimeter joints of gypsum drywall partitions to reduce sound transmission characteristics is specified in Division 9 Section “Gypsum Drywall”.

1.03 SYSTEM PERFORMANCES

A. Provide joint sealers that have been produces and installed to establish and maintain watertight and airtight continuous seals.

1.04 SUBMITTALS

A. Product Data from manufacturers for each joint sealer product required, including instructions for joint preparation and joint sealer application.

B. Samples for Initial Selection Purposes: Manufacturer’s standard bead samples consisting of strips of actual products showing full range of colors available, for each product exposed to view.

C. Certificates from manufacturers of joint sealers attesting that their products comply with specification requirements and are suitable for the use indicated.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: Engage an Installer who has successfully completed within the last three years at least three joint sealer applications similar in type and size to that of this Project.

B. Single Source Responsibility for Joint Sealer Materials: Obtain joint sealer materials from a single manufacturer for each different product required.

1.06 DELIVERY, STORAGE AND HANDLING

A. Deliver materials to Project site in original unopened containers or bundles with labels informing about manufacturer, product name and designation, color, expiration period for use, pot life, curing time, and mixing instructions for multicomponent materials.

B. Store and handle materials in compliance with manufacturer's recommendations to prevent their deterioration or damage due to moisture, high or low temperatures, contaminants, or other causes.

1.07 PROJECT CONDITIONS

A. Environmental Conditions: Do not proceed with installation of joint sealers under the following conditions:

1. When ambient and substrate temperature conditions are outside the limits permitted by joint sealer manufacturers.

2. When joint substrates are wet due to rain, frost, condensation, or other causes.

B. Joint Width Conditions: Do not proceed with installation of joint sealers where joint widths are less than allowed by joint sealer manufacturer for application indicated.

C. Joint Substrate Conditions: Do not proceed with installation of joint sealers until contaminants capable of interfering with their adhesion are removed from joint substrates.

1.08 SEQUENCING AND SCHEDULING

A. Sequence installation of joint sealers to occur not less than 21 nor more than 30 days after completion of waterproofing, unless otherwise indicated.

PART 2 - PRODUCTS

2.01 MATERIALS, GENERAL

A. Compatibility: Provide joint sealers, joint fillers and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer based on testing and field experience.

B. Colors: Provide color of exposed joint sealers indicated or, if not otherwise indicated, as selected by Architect from manufacturer's standard colors.

2.02 ELASTOMERIC JOINT SEALERS

A. Elastomeric Sealant Standard: Provide manufacturer's standard chemically curing, elastomeric sealant of base polymer indicated which complies with ASTM C 920 requirements, including those referenced for Type, Grade, Class, and Uses.

B. One-Part Polysulfide Sealant: Type S, Grade NS, Class 12-½; Uses NT, M, G, A, and, as applicable to joint substrates indicated, O.

C. One-Part Mildew-Resistant Silicone Sealant: Type S, Grade NS, Class 25; Uses NT, G, A, and, as applicable to nonporous joint substrates indicated, O; formulated with fungicide; intended for sealing interior joints with nonporous substrates and subject to in-service exposure to conditions of high humidity and temperature extremes.

D. Products: Subject to compliance with requirements, provide one of the following:

1. One-Part Polysulfide Sealant:

"Chem-Calk 100", Bostik Construction Products Div.
"GC-9 Synthacalk", Pecora Corporation
"PRC Rubber Calk 7000", Product Research and Chemical Corp.

2. One-Part Mildew Resistant Silicone Sealant:

"Dow Corning 786", Dow Corning Co.

"SCS 1702 Sanitary", General Electric Co.
"863 #345 White", Pecora Corp.
"Rhodorsil 6B White" Rhone-Poulenc, Inc.
"Proglaze White", Tremco Corp.
"OmniPlus" Sonneborn Building Products Div., Rexnord Chemical Products, Inc.

2.03 MISCELLANEOUS JOINT SEALANTS:

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

B. Butyl-Polyisobutylene Sealant: Manufacturer's standard, solvent-release-curing, butyl polyisobutylene sealant complying with AAMA 809.2, recommended for concealed joints.

C. Products: Subject to compliance with requirements, provide one of the following:

1. Acoustical Sealants for Concealed Joints:

"BA-98", Pecora Corporation
"Tremco Acoustical Sealant", Tremco, Inc.

2. Butyl-Polyisobutylene Sealant:

"PTI 404", Protective Treatments, Inc.

2.04 COMPRESSION SEALS

A. Preformed Foam Sealant: Manufacturer's standard preformed, precompressed, impregnated open-cell foam sealant manufactured from high-density urethane foam impregnated with a nondrying, water repellent agent; factory-produced in pre-compressed sizes and in roll or stick form to fit joint widths indicated and to develop a watertight and airtight seal when compressed to the degree specified by manufacturer; and complying with the following requirements:

1. Properties: Permanently elastic, mildew-resistant, nonmigratory, nonstaining, compatible with joint substrates and other joint sealers.

2. Impregnating Agent: Manufacturer's standard.

3. Density: Manufacturer's standard.

4. Backing: Coated in one face with release agent serving as bond breaker for primary joint sealant.

5. Products: Subject to compliance with requirements, provide one of the following:

"Emseal", Emseal Corporation
"Emseal Greyflex", Emseal Corporation
"Polytite R", Sandell Manufacturing Co., Inc.
"Polytite Standard", Sandell Manufacturing Co., Inc.
"Will-Seal 150", Wil-Seal Construction Foams Div., Illbruck
"Will-Seal 250", Wil-Seal Construction Foams Div., Illbruck
"York-Seal 100", York Manufacturing, Inc.
"York Seal 200", York Manufacturing, Inc.

2.05 FIRE-RESISTANT JOINT SEALERS:

A. General: Provide manufacturer's standard fire-stopping sealant, with accessory materials, having fire-resistance ratings indicated as established by testing identical assemblies per ASTM E 814 by Underwriters Laboratory, Inc., or other testing and inspecting agency acceptable to authorities having jurisdiction.

B. One-Part Fire-Stopping Sealant: One part elastomeric sealant formulated for use in a through-penetration fire-stop system for sealing openings around cables, conduit, pipes and similar penetrations through walls and floors.

C. Products: Subject to compliance with requirements, provide one of the following:

1. One-Part Fire-Stopping Sealant:

"Dow Corning Fire Stop Sealant", Dow Corning Corporation
"3M Fire Barrier Caulk CP-25", Electrical Products Division, 3M
"RTV 7403", General Electric Co.
"Fyre Putty", Standard Oil Engineered Materials Co.

2.06 JOINT SEALANT BACKING

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

B. Plastic Foam Joint Fillers: Preformed, compressible, resilient, nonwaxing, nonextruding strips of flexible, nongassing plastic foam of material indicated below; nonabsorbent to water and gas; and of size, shape and density to control sealant depth and otherwise contribute to producing optimum sealant performance.

1. Closed-cell polyethylene foam

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

2.07 MISCELLANEOUS MATERIALS:

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

B. Cleaners for Nonporous Surfaces: Provide nonstaining, chemical cleaners of type which are acceptable to manufacturers of sealants and sealant backing materials, which are not harmful to substrates and adjacent nonporous materials, and which do not leave oily residues or otherwise have a detrimental effect on sealant adhesion or in-service performance.

C. Masking Tape: Provide nonstaining, nonabsorbent type compatible with joint sealants and to surfaces adjacent to joints.

D. Accessory Materials for Fire-Stopping Sealants: Provide forming, joint fillers, packing and other accessory materials required for installation of fire-stopping sealants as applicable to installation conditions indicated.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Examine joints indicated to receive joint sealers, with Installer present, for compliance with requirements for joint configuration, installation tolerances and other conditions affecting joint sealer performance. Do not proceed with installation of joint sealers until unsatisfactory conditions have been corrected.

3.02 PREPARATION

A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealers to comply with recommendations of joint sealer manufacturers and the following requirements:

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

2. Clean concrete, masonry, unglazed surfaces of ceramic tile and similar porous joint substrate surfaces, by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealers. Remove loose particles remaining from above cleaning operations by vacuuming or blowing our joints with oil-free compressed air.

3. Remove laitance and form release agents from concrete.

4. Clean metal, glass, porcelain enamel, glazed surfaces or ceramic tile, and other nonporous surfaces by chemical cleaners or other means which are not harmful to substrates or leave residues capable of interfering with adhesion of joint sealers.

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

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

3.03 INSTALLATION OF JOINT SEALERS

A. General: Comply with joint sealer manufacturers' printed installation instructions applicable to products and applications indicated, except where more stringent requirements apply.

B. Elastomeric Sealant Installation Standard: Comply with recommendations of ASTM C 962 for use of joint sealants as applicable to materials, applications and conditions indicated.

C. Installation of Sealant Backings: Install sealant backings to comply with the following requirements:

1. Install joint fillers of type indicated to provide support of sealants during applications and at position required to produce the cross-sectional shapes and depths of installed sealants relative to joint widths which allow optimum sealant movement capability.

a. Do not leave gaps between ends of joint fillers.
b. Do not stretch, twist, puncture, or tear joint fillers.
c. Remove joint fillers which have become wet prior to sealant application and replace with dry material.

D. Install bond breaker tape between sealants and joint fillers, compression seals, or back of joints where adhesion of sealant to surfaces at back of joints would result in sealant failure.

1. Install compressible seals serving as sealant backings to comply with requirements indicated above for joint fillers.

a. Installation of Sealants: Install sealants by proven techniques that result in sealants directly contacting and fully wetting joint substrates, completely filling recesses provided for each joint configuration, and providing uniform, cross-sectional shapes and depths relative to joint widths which allow optimum sealant movement capability.

E. Tooling of Nonsag Sealants: Immediately after sealant application and prior to time skinning or curing begins, tool sealants to form smooth, uniform beads of configuration indicated, to eliminate

air pockets, and to ensure contact and adhesion of sealant with sides of joint. Remove excess sealants from surfaces adjacent to joint. Do not use tooling agents which discolor sealants or adjacent surfaces or are not approved by sealant manufacturer.

a. Provide concave joint configuration per Figure 6A in ASTM C 962, unless otherwise indicated.

F. Installation of Fire-Stopping Sealant: Install sealant, including forming, packing, and other accessory materials to fill openings around mechanical and electrical services penetrating floors and walls to provide fire-stops with fire resistance ratings indicated for floor or wall assembly in which penetration occurs. Comply with installation requirements established by testing and inspecting agency.

3.04 CLEANING:

A. Clean off excess sealants or sealant smears adjacent to joints as work progress by methods and with cleaning materials approved by manufacturers of joint sealers and of products in which joints occur.

3.05 PROTECTION

A. Protect joint sealers during and after curing period from contact with contaminating substances or from damage resulting from construction operations or other causes so that they are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove or deteriorated joint sealers immediately and reseal joints with new materials to produce joint sealer installations with repaired areas indistinguishable from original work.

END OF SECTION

SECTION 08110

HOLLOW METAL DOORS AND FRAMES

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:

1. Pressed steel hollow metal door frames.
2. Metal louvers in doors.
3. Rough bucks, frame reinforcing, door reinforcing, door insulation, closer reinforcements, clip angles and anchorage.
4. Factory prime paint finish.
5. Grouting of hollow metal frames with masonry mortar where not covered under other Sections.

B. Related Sections:

1. Section 08710 - Hardware: Finish hardware, weather-stripping and sound-stripping.
2. Section 08800 - Glazing: Glass and glazing.
3. Section 09900 - Painting: Finish painting.

1.2 REFERENCES

A. ANSI A250.8-1998/SDI-100 - Recommended Specifications - Standard Steel Doors and Frames, Steel Door Institute, unless herein specified.

B. ANSI A250.13-2003 – Standard procedures for component testing to Florida Building Code

C. Underwriters' Laboratories Inc. (UL) UL 10C-98 – Fire Tests of Door Assemblies.

D. NFPA-80-2003 – Standard for Fire Doors and Windows.

E. NFPA-101-2001 – Life Safety Code.

F. NFPA-105 – Standard for Smoke and Draft Control Assemblies.

G. ASTM-A 366-95A – Specification for Steel, Sheet, Carbon, Cold-Rolled, Commercial Quality.

H. ASTM-A 568-95 – Specification for Steel, Sheet, Carbon, and High Strength, Low-Alloy, Hot-Rolled, and Cold-Rolled.

I. ASTM-A 569-91a – Specification for Steel, Carbon, (0.15 maximum percent), Hot-Rolled Sheet and Strip Commercial Quality.

J. ASTM-A 924-95 – General Requirements for Steel Sheet, Metallic Coated by the Hot-Dip Process.

K. SDI-105-92 – Recommended Erection Instructions for Steel Frames.

L. ANSI A115.1-.18 - Specification for Door and Frame Preparation for Hardware.

M. ANSI A156.7 - Standard Template Hinge Dimensions.

N. Florida Building Code Rule 9B-72 – 2003

1.3 SUBMITTALS

A. Shop Drawings: Submit in accordance with Section 01300. Indicate general construction, configurations, jointing methods, reinforcements, and location of hardware and cutouts for glass and louvers.

1.4 QUALITY ASSURANCE

A. Applicable Standards: Specifications and standards of SDI 100-98.

1.5 PRODUCT HANDLING

A. Frame Storage: Store frames under cover on 4 inch wood sills on floors in manner that will prevent rust and damage. Do not use non-vented plastic or canvas shelters which create humidity chamber and promote rusting. Store assembled frames in vertical position, 5 units maximum in stack. Provide 1/4 inch space between frames to promote air circulation.

1.6 SEQUENCING AND SCHEDULING

A. Deliver frames to the jobsite in a timely manner so as not to delay progress of other trades.

PART 2 PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A. Ceco Door Products

B. Curries Company

C. Deansteel Manufacturing Co.

D. Pioneer Industries, Inc.

2.2 HOLLOW METAL

A. Acceptable Manufacturers: (providing the products supplied comply with the provisions of this specification) Curries.

B. Cold Rolled Steel Sheets: Commercial quality, stretcher leveled flatness, cold-rolled steel, free from scale, pitting or other surface defects, complying with ASTM A366 and A568 general requirements.

C. Galvanealed Steel Sheets: ASTM A924, A60 zinc coating. Use galvanealed steel sheets for exterior hollow metal doors, door frames and door louvers. Internal reinforcing may be manufactured of hot rolled pickled and oiled steel per ASTM-A569.

D. Minimum gauges of hollow metal are specified below. Provide heavier gauge if required by details or specific condition. Entire frame and sidelight shall be of same gauge.

1. 16 gauge: Interior door frames, and glazed opening frames.

2. 20 gauge: Interior doors (or heavier if required by label).

3. 20 gauge: Trim members.

E. Coating Materials, primer: Use manufacturer's standard rust inhibiting primer conforming to ANSI-A224.1-1990.

2.3 RELATED MATERIALS

A. Steel Reinforcing: ASTM A36.

B. Door Bumpers or Silencers: Per ANSI A156.16.

2.4 HOLLOW METAL FRAMES

A. General: Form to profiles indicated. Where necessary, alternate details will be considered provided design intent is maintained. Consider and provide for erection methods.

B. Typical Reinforcing: Provide minimum hinge reinforcement 3/16 inch by 1-1/2 inch by 10 inch. Provide similar reinforcement for hardware items as required to adequately withstand stresses, minimum 12 gauge, including channel reinforcement for door closers and closer arms, door holders and similar items. Provide reinforcement and clearances for concealed in-head door closers and for mortise locks.

C. Cover Plates: For hinge and strike plate cutouts, provide fully enclosed pressed steel cover boxes spot welded to frames behind mortises.

D. Hardware: Mortise, reinforce, drill and tap for mortise hardware, except drilling and tapping for surface door closers, door closer brackets and adjusters shall be done in field.

E. Anchorage: Provide standard and special anchorage items as required. Provide formed steel channel spreader at bottom of frames, removable without damaging frame. At masonry, provide anchors (about 2 inch by 10 inch) approximately 24 inches on center.

F. Silencers: Provide specified silencers, except where stop does not occur and at smoke gasketed openings, 3 per jamb at single door and one for each door at double doors.

G. Extensions: Reinforce transom bars or mullions as necessary to provide rigid installation. Where required (as at multiple openings) to stabilize large frames, provide frame or mullion extensions to anchor to structure above, proper size to fit within overhead construction. Provide angle clips to fasten to structure.

H. Mullions: Provide mullions, straight and without twist, of tubular design. For removable mullions provide reinforcing at frame head.

I. Clearances: Provide and be responsible for proper clearances at metal frames, including for weather-stripping, sound stripping and smoke gasketing. Glass clearance shall be thickness of glass plus clearance each side (1/8 inch minimum exterior - 1/16 inch minimum interior), adjust for installation, glass thickness to allow for glazing and sealant. Where sealed double glazing is indicated, provide rebates minimum of 3/4 inch and provide 1/4 inch clearance at glass edges. Where units fit around concrete blocks (blocks built into frames) obtain actual dimensions of blocks being used to establish minimum clearances.

J. Joinings: At frames with equal width jambs and head, neatly miter on face (except locations as at transom bars and at frames with large head members). Cope and butt stops. Weld length of entire joint, including face and flat intersections. Grind smooth, at other frames, provide same mitered joint wherever possible (at intersection of jamb-head or jamb-sill) and at other locations butt metal neatly and full weld. If tight butt joints are utilized, joints shall be neatly caulked smooth.

K. Workmanship: Fabricate so no grind marks, hollow or other out-of-plane areas are visible. At joints of intermediate members (such as mullions and transom bars), provide tight joining, neatly accomplished without holes, burned out spots, weld build up or other defacing work. Fill to close cracks and to preserve shapes. Tightly fit loose stops, to hairline joints.

L. Finish: Clean frames by degreasing process and apply thorough coating of baked-on primer, covering inside as well as outside surfaces. At galvanealed frames, coat welds and other disrupted surface with zinc-rich paint containing not less than 90 percent zinc dust by weight.

2.5 FASTENINGS

A. Provide fastenings, anchors and clips as required to secure hollow metal work in place. Provide Jackson head screws, or flatter. Dimple metal work to receive screw heads. Set stops and other non-structural fastenings with #6 Jackson head self-tapping screws.

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine supporting structure and conditions under which hollow metal is to be installed. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Install hollow metal in accordance with reviewed shop drawings and manufacturer's printed instructions. Securely fasten and anchor work in place without twists, warps, bulges or other unsatisfactory or defacing workmanship. Set hollow metal plumb, level, square to proper elevations, true to line and eye. Set clips and other anchors with Ramset "shot" anchors or drill in anchors as approved. Units and trim shall be fastened tightly together, with neat, uniform and tight joints.

B. Placing Frames: Set frames accurately in position, plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is complete, remove temporary braces and spreaders leaving surfaces smooth and undamaged. In masonry construction, building-in of anchors and grouting of frames with mortar is specified in Section 04210 - Unit Masonry. At in-place concrete or masonry construction, set frames and secure in place using countersunk bolts and expansion shields, with bolt heads neatly filled with metallic putty, ground smooth and primed.

C. Place fire-rated frames in accordance with NFPA Standard #80.

3.3 ADJUSTING AND CLEANING

A. Prime Coat Touch-Up: Immediately after installation, sand smooth rusted or damaged areas of prime coat and apply touch-up of compatible air-drying primer.

B. Protection Removal: Immediately before final inspection, remove protective wrappings from doors and frames.

END OF SECTION

SECTION 08210

WOOD DOORS

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:

1. Prefinished wood doors.

B. Related Sections:

1. Section 06100 - Rough Carpentry.
2. Section 06402 – Interior Architectural Woodwork
3. Section 08110 - Hollow Metal Door Frames.
4. Section 08710 - Hardware.
5. Section 08800 - Glazing: Glass and glazing for doors.

1.2 REFERENCES

A. ANSI/WDMA - Window and Door Manufacturers Association: IS 1-A latest Industry Standard for Architectural Flush Wood Doors.

B. NFPA-80 Standards for Fire Doors latest Edition.

C. Uniform Building Code: UBC 7-2 1997 or UL10c, Positive Pressure Fire Door Test Method.

D. NFPA-105 Recommended Practice for Installation of Smoke-Control Door Assemblies, latest Edition

E. ASTM E152-Methods of fire Tests and Door Assemblies

F. Labeling Agencies: Intertek Testing Services – Warnock Hersey (ITS-WH)

1.3 SUBMITTALS

A. Shop Drawings and Product Data:

1. Submit in accordance with Section 01330.
2. Indicate general construction, jointing methods, hardware and louver locations, and locations of cut-outs for glass. Indicate thickness of veneers.

B. Samples:

1. Submit samples of wood veneer and factory finishing in accordance with ANSI/WDMA Quality Standards I.S. 1-A 1997, sections G-18 and Guide Specifications 1.03 C.

C. Certification:

1. Submit certification that doors and frames comply with UBC 7-2 1997or UL10c, Positive Pressure Fire Door Test Method.

1.4 QUALITY ASSURANCE

A. Fire-Rated Wood Doors: Provide wood doors which are identical in materials and construction to units tested in door and frame assemblies in accordance UBC 7-2 1997 or UL10c, Positive Pressure Fire Door Test Method and which are labeled and listed for ratings indicated by ITS - Warnock Hersey, UL or other testing and inspection agency acceptable to authorities having jurisdiction.

1. Doors: Comply with UBC 7-2 1997 or UL10c where required.

2. Provide smoke gaskets or fire seals as required by manufacturers' individual authorities in compliance with UBC 7-2 1997 or UL-10c.

B. Meet or exceed ANSI/WDMA I.S. 1-A 1997 Quality Standard: Window and Door Manufacturers Association Quality Standards for grade of door, core, construction, finish, and other requirements.

1.5 PRODUCT HANDLING

A. Plastic wrap and protect wood doors during transit, storage and handling to prevent damage, soiling or deterioration. Follow the Care and Installation guidelines as described in ANSI/WDMA I.S. 1-A 1997.

B. Upon acceptance on site inspect for damage, do not store in damp wet areas, HVAC system should be operating and balanced prior to arrival of the doors, and have acceptable humidity conditions ranging from 25% to 50% relative humidity.

1.6 GUARANTEE/WARRANTY

A. Guarantee: Provide manufacturer’s guarantee for all wood doors. Guarantee period: Lifetime of original installation. Doors exhibiting defects in materials or workmanship within guarantee period shall be replaced (including hanging and finishing) with new doors. These terms shall be part of the manufacturer’s standard warranty.

PART 2 PRODUCTS

2.0 ACCEPTABLE MANUFACTURERS

A. GRAHAM Manufacturing

B. Eggers Industries

C. Algoma Hardwoods

2.1 MATERIALS

A. Door Construction:

1. Non-Fire Rated Doors: SLC-5 or SCL-5; Thickness: 1-3/4 inches, interior flush wood, bonded, staved lumber core conforming to ANSI/WDMA I.S. 1-A 1997 and the following;

    a. Core: bonded, Staved Lumber Core (SLC) conforming to ANSI/WDMA I.S. 1-A 1997.
    b. Door construction shall conform to ANSI/WDMA I.S. 1-A 1997 Premium Grade requirements.
    c. Stiles: Hardwood or veneer edge banded to match face veneer over Structural Composite Lumber backers (SCL), glued to core.
    d. Rails: Mill option hardwood or SCL. Top and bottom.
    e. Facing: Wood veneer cut and specie as specified shall conform to ANSI/WDMA I.S. 1-A 1997 "A" grade for Premium Grade Door Construction requirements.

B. WOOD VENEER

1. Door face veneers shall match existing doors and meet quality standards conforming to ANSI/WDMA I.S. 1-A 1997 "A" grade. Minimum face veneer thickness shall be 1/50” at 12% moisture content after finish sanding
2. Species: Match existing pre-finished doors – field verify and match.
3. Face Cut: Match existing pre-finished doors – field verify and match.
4. Face Assembly: Match existing (FIELD VERIFY MATCH).
5. Face Symmetry: Running Match, match existing.

C. ADHESIVES

1. Adhesives: Face to core adhesives shall be Type I or Type II as appropriate for location in building. Adhesives must be classified Type I or Type II per WDMA TM-6 “Adhesive Bond Test Method.” Type I adhesives shall be used for doors in exterior applications, Type II adhesives shall be used for doors in interior applications.

D. CORE

1. Non-rated and 20 minute doors: Staved lumbercore or structural composite lumber.
2. Fire-rated doors: Non-combustible fire resistive core containing no asbestos.

2.2 STC - SOUND RATED ACOUSTICAL WOOD DOORS

A. Faces and grade shall match non-rated and fire rated doors.

B. The sound transmission class specified shall be certified by the manufacturer to be based on tests conducted at an independent testing agency in accordance with ASTM E90-90.

C. Design of STC Doors are based on STC-30 flush door construction.

D. Provide gasketing systems necessary to achieve STC ratings. This is to include but not limited to, sound seal, door bottoms and thresholds as required.

2.3 FACTORY FINISHING

A. Comply with referenced WDMA Section G-15, “Factory Finishing” for Premium Grade factory finish systems.

B. Pre-finish wood doors at factory. Match existing doors (field verify match).

C. Transparent Finish: Match finish indicated in WDMA Section G-17: WDMA System #6. Submit sample of transparent finish for selection by Architect.

2.4 ACCESSORIES

A. Vision Frames:

1. Non-rated doors: Flush wood frames, hardwood to match face veneer.
2. Glass: Refer to Section 08800 for glass types.

2.5 FABRICATION

A. Fabricate wood doors in accordance with requirements of ANSI/WDMA I.S. 1-A 1997 Quality Standards.

B. Fabricate non-fire rated and fire rated doors with WDMA Quality Standards hardware blocking options. Appropriate blocking shall be included for all doors to receive both surface mounted and mortised hardware, the use of thru bolts will not be accepted.

C. Make cut-outs and provide stops for glass and louvers. Install metal door louvers. Seal cut-outs prior to installation of moldings.

1. For full light doors: Provide cut out from flush wood door, with vertical grain direction.

D. Bevel lock and hinge edges of single acting doors 3 degrees or 1/8 inch in 2 inches. Radius strike edge of double acting swing doors as required by pivot hinge manufacturer.

E. Prepare doors to receive hardware. Refer to Section 08710 - Hardware, NFPA 80 1999 Edition and UL10c Positive Pressure Fire Door Test Method for hardware requirements.

1. Prefit and bevel to net opening size less approximately 1/4 inch in width on single swing doors 3/16 inch in width for paired doors, each leaf. Provide 1/4 inch clearance above finished floor, unless otherwise indicated on drawings. Provide 1/8 inch clearance at top of door.
2. Slightly ease vertical edges.

PART 3 EXECUTION

3.0 EXAMINATION

A. Examine installed door frames before hanging doors.

B. Verify that frames comply with indicated requirements for type, size, location, and swing characteristics and have been installed with plumb jambs and level heads.

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

3.1 INSTALLATION

A. Handle doors in accordance with recommendations of ANSI/WDMA I.S. 1-A, “Care and Installation at Job Site.”

B. Condition doors to average temperature and humidity in area of installation for not less than 48 hours prior to installation. Store doors per recommendations of ANSI/WDMA I.S. 1-A, “Care and Installation at Job Site.”

C. Install in neat and workmanlike manner, free from hammer or tool marks, open joints or slivers.

D. Set plumb, level, square and true. Install work after building humidity is at acceptable level.

E. Remove and replace all doors found to be warped, twisted, bowed, or otherwise damaged. Do not install doors which cannot be properly fitted to frames.

F. Adjust prefinished doors and hardware and other moving or operating parts to function smoothly and correctly.

G. If doors are to be field finished, the process must follow the ANSI/WDMA I.S. 1-A, “Care and Handling at Job Site” instructions for field applied finishes.

H. Ensure that smoke gaskets are in-place before prefinished door installation.

3.2 CLEANING / PROTECTION

A. Clean prefinished doors and hardware.

B. At clear finished doors, do not partially cover door surfaces with paper, cardboard, or any other opaque covering that will create uneven aging of wood veneer.

C. Protect doors as directed under Section 01700.

D. Replace pre-finished doors damaged during installation.

END OF SECTION

SECTION 08410

ALUMINUM ENTRANCES AND STOREFRONTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. This Section includes the following types of aluminum entrance and storefront work:

1. Interior entrance door.
2. Interior storefront.

B. Related Sections: The following sections contain requirements that relate to this Section:

1. Glazing requirements for aluminum entrances and storefronts, including entrances specified to be factory glazed, are included in Division 8 Section "Glass and Glazing".

1.3 SYSTEM PERFORMANCE REQUIREMENTS

A. General: Provide aluminum entrance and storefront assemblies that comply with performance characteristics specified, as demonstrated by testing the manufacturer's corresponding stock assemblies according to test methods indicated.

B. Thermal Movement: Design the aluminum entrance and storefront framing systems to provide for expansion and contraction of the component materials. Entrance doors shall function normally over the specified temperature range.

1. The system shall be capable of withstanding a metal surface temperature range of 180 degrees F (100 degrees C) without buckling, failure of joint seals, undue stress on structural elements, damaging loads in fasteners, reduction of performance, stress on glass, or other detrimental effects.

C. Design Requirements: Provide aluminum entrance and storefront systems that comply with performance requirements indicated.

1. Dead Loads: Provide entrance and storefront system members that do not deflect an amount which will reduce glazing bite below 75% of design dimension when carrying full dead load.

a. Provide a minimum 1/8-inch clearance between members and top of glazing or other fixed part immediately below.

b. Provide a minimum 1/16-inch clearance between members and operable windows and doors.

2. Live Loads: Provide entrance and storefront systems, including anchorage, that accommodate the supporting structures' deflection from uniformly distributed and concentrated live loads indicated without failure of materials or permanent deformation.

1.4 SUBMITTALS

A. General: Submit the following in accordance with Conditions of the Contract and Division Specification Sections:

1. Product data for each aluminum entrance and storefront system required, including:

a. Manufacturer's standard details and fabrication methods.
b. Data on finishing, hardware, and accessories.
c. Recommendations for maintenance and cleaning of exterior surfaces.

2. Shop drawings for each aluminum entrance and storefront system required.
3. Hardware Schedule: Submit complete hardware schedule.
4. Samples for Initial Color Selection: Submit pairs of samples of each specified color and finish.
5. Test Reports: Provide certified test reports from a qualified independent testing laboratory showing that aluminum entrance and storefront systems have been tested in accordance with specified test procedures and comply with performance characteristics indicated.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: Engage an experienced Installer who has completed installations of aluminum storefront and entrances similar in design and extent to those required for the project and whose work has resulted in construction with a record of successful in-service performance.

B. Manufacturer's Qualifications: Provide aluminum entrances and storefront systems produced by a firm experienced in manufacturing systems that are similar to those indicated for this project and that have a record of successful in-service performance.

C. Single-Source Responsibility: Obtain aluminum entrance and storefront systems from one source and from a single manufacturer.

D. Design Criteria: The drawings indicate the size, profile, and dimensional requirements of aluminum entrance and storefront work required and are based on the specific types and models indicated. Aluminum entrance and storefront by other manufacturers may be considered, provided deviations in dimensions and profiles are minor and do not change the design concept as judged by the Architect. The burden of proof of equality is on the proposer.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver aluminum entrance and storefront components in the manufacturer's original protective packaging.

1.7 WARRANTY

A. Submit a written warranty, executed by the manufacturer, agreeing to repair or replace units that fail in materials or workmanship within the specified warranty period.

B. Warranty Period: 3 years after the date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering entrance and storefront systems that may be incorporated into the work include, but are not limited to, the following:

1. Amarlite Architectural Products
2. EFCO Corporation
3. Kawneer Company
4. PPG Industries
5. Tubelite Division of Indal, Inc.
6. United States Aluminum Corp.

2.2 MATERIALS

A. Aluminum Members: Alloy and temper recommended by the manufacturer for strength, corrosion resistance, and application of required finish; comply with ASTM B 221 for aluminum extrusions, ASTM B 209 for aluminum sheet or plate, and ASTM B 211 for aluminum bars, rods, and wire.

B. Carbon steel reinforcement of aluminum framing members shall comply with ASTM A 36 for structural shapes, plates, and bars, ASTM A 611 for cold rolled sheet and strip, or ASTM A 570 for hot rolled sheet and strip.

C. Glass and Glazing Materials: Comply with requirements of "Glass and Glazing" section of these specifications.

D. Fasteners: Provide fasteners of aluminum, nonmagnetic stainless steel, zinc plated steel, or other material warranted by the manufacturer to be non-corrosive and compatible with aluminum components, hardware, anchors, and other components.

1. Reinforcement: Where fasteners screw-anchor into aluminum members less than 0.125 inches thick, reinforce the interior with aluminum or nonmagnetic stainless steel to receive screw threads, or provide standard non-corrosive, pressed-in, splined grommet nuts.

2. Exposed Fasteners: Do not use exposed fasteners except for application of hardware. For application of hardware, use Phillips flat-head machine screws that match finish of member or hardware being fastened.

E. Concealed Flashing: 0.0179 inch (26 gage) minimum dead-soft stainless steel, or 0.026 inch thick minimum extruded aluminum of alloy and type selected by manufacturer for compatibility with other requirements.

F. Brackets and Reinforcements: Provide high-strength aluminum brackets and reinforcements; where use of aluminum is not feasible, provide nonmagnetic stainless steel or hot-dip galvanized steel complying with ASTM A 123.

G. Concrete and Masonry Inserts: Provide cast-iron, malleable iron, or hot-dip galvanized steel inserts complying with ASTM A 123.

H. Sliding Weatherstripping: Manufacturer's standard replaceable weatherstripping of wool, polypropylene, or nylon woven pile, with nylon fabric or aluminum strip backing, complying with AAMA 701.2

2.3 HARDWARE

A. General: Refer to Division 8 Section "Finish Hardware" for requirements for hardware items other than those indicated to be provided by the aluminum entrance manufacturer.

B. Provide heavy duty hardware units as indicated, scheduled or required for operation of each door, including the following items of sizes, number, and type recommended by manufacturer for service required; finish to match door.

1. Ball-Bearing Butts: 5-knuckle, 2-bearings, steel ball bearing butts to comply with ANSI A156.1, Grade 1.
2. Surface-Mounted Overhead Closers: Modern type with cover, for hinge side installation. Comply with ANSI A156.4, Grade 1. Comply with manufacturer's recommendations for closer size, depending on door size, exposure to weather and anticipated frequency of use. Include the following:
   a. Door Stop: Floor- or wall-mounted door stop, as appropriate, with integral rubber bumper; comply with ANSI A156.1, Grade 1.
3. Cylinders are supplied under another Division 8 Section for keying into the building system.
4. Deadlocks: Mortised maximum security deadlock, with minimum 1" long pivoted bolt and stainless steel strike-box; comply with ANSI A156.5, Grade 1.
5. Pull Handles: Aluminum pull handles of style indicated, similar to Kawneer "G3".
6. Push Bars: manufacturer's “Paneline” full door width push panel. Similar to Kawneer "Paneline".
7. Thresholds: Extruded aluminum threshold of size and design indicated in mill finish, complete with anchors and clips, coordinated with pivots and floor-concealed closers.
8. Panic hardware: Kawneer “Paneline” with concealed rods and panic lock cylinder at Door No. 001.

2.4 COMPONENTS

A. Basis of Design: Kawneer Tri-Fab II 400. Provide manufacturer’s standard 1-¾” thick glazed doors with minimum 0.125” thick, extruded tubular rail and stile members similar to the Basis of Design. Mechanically fasten corners with reinforcing brackets that are deep penetration and fillet welded or that incorporate concealed tie-rods.

1. Glazing Stops and Gaskets: Provide manufacturer’s standard snap-on extruded-aluminum glazing stops and preformed gaskets.
2. Stile Design: 350 medium stile.

B. Brackets and Reinforcements: Provide manufacturer’s standard brackets and reinforcements that are compatible with adjacent materials. Provide non-staining, non-ferrous shims for aligning system components.

C. Fasteners and Accessories: Manufacturer’s standard corrosion-resistant, non-staining, non-bleeding fasteners and accessories compatible with adjacent materials.

1. Reinforce members as required to retain fastener threads.

2.5 FABRICATION

A. General: Fabricate aluminum entrance and storefront components to designs, sizes, and thicknesses indicated and to comply with indicated standards. Sizes and profile requirements are indicated on the drawings. Variable dimensions are indicated, with maximum and minimum dimensions required, to achieve design requirements and coordination with other work.

B. Prefabrication: Complete fabrication, assembly, finishing, hardware application, and other work to the greatest extent possible before shipment to the Project site. Disassemble components only as necessary for shipment and installation.

1. Perform fabrication operations including cutting, fitting, forming, drilling, and grinding of metal work to prevent damage to exposed finish surfaces. Complete these operations for hardware prior to application of finishes.

2. Do not drill and tap for surface-mounted hardware items until time of installation at project site.

3. Preglaze door and frame units to greatest extent possible.

C. Welding: Comply with AWS recommendations. Grind exposed welds smooth to remove weld spatter and welding oxides. Restore mechanical finish.

1. Welding behind finished surfaces shall be performed in such a manner as to minimize distortion and discoloration on the finished surface.

D. Storefront: The framing system shall provide for flush glazing on all sides with no projecting stops. Vertical and horizontal framing members shall have a nominal face dimension of 1-3/4". Overall depth shall be 4". Entrance framing members shall be compatible with glass framing in appearance. All single acting entrance frames shall include the positive barrier weathering.

1. Provide subframes and reinforcing of types indicated or, if not indicated, as required for a complete system. Factory-assemble components to greatest extent possible. Disassemble components only as necessary for shipment and installation.

E. Entrances: Fabricate door framing in profiles indicated. Reinforce as required to support imposed loads. Factory assemble door and frame units as required for installing hardware indicated. Cut, drill, and tap for factory-installed hardware before finishing components.

F. Reinforcing: Install reinforcing as required for hardware and as necessary for performance requirements, sag resistance and rigidity.

G. Dissimilar Metals: Separate dissimilar metals with bituminous paint, or a suitable sealant, or a nonabsorptive plastic or elastomeric tape, or a gasket between the surfaces. Do not use coatings containing lead.

H. Continuity: Maintain accurate relation of planes and angles with hairline fit of connecting members.

1. Uniformity of Metal Finish: Abutting extruded aluminum members shall not have an integral color or texture variation greater than half the range indicated in the sample pair submittal.

I. Fasteners: Conceal fasteners wherever possible.

J. Weatherstripping: For exterior doors, provide compression weatherstripping against fixed stops. At other edges, provide sliding weatherstripping retained in adjustable strip mortised into door edge.

1. Provide EPDM or vinyl-blade gasket weatherstripping in bottom door rail, adjustable for contact with threshold.

2.6 FINISHES

A. General: Comply with NAMM "Metal Finishes Manual" for recommendations relative to application and designations of finishes.

B. Finish designations prefixed by "AA" conform to the system established by the Aluminum Association for designating aluminum finishes.

C. Finish of aluminum entrance framing shall match aluminum entrance doors. Finish aluminum entrance doors shall be an architectural class 1 color anodic coating conforming with AAM12C22A42/44, Clear Anodized.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates and supports, with the Installer present, for compliance with requirements indicated, installation tolerances, and other conditions that affect installation of aluminum entrances and storefronts. Correct unsatisfactory conditions before proceeding with the installation.

1. Do not proceed with installation until unsatisfactory conditions are corrected.

3.2 INSTALLATION

A. Comply with manufacturer's instructions and recommendations for installation.

B. Set units plumb, level and true to line, without warp or rack of framing members, doors, or panels. Install components in proper alignment and elation to established grades and lines indicated. Provide proper support and anchor securely in place.

C. Separate aluminum and other corrodible metal surfaces from sources of corrosion or electrolytic action at points of contact with other materials.

1. Zinc or cadmium plate steel anchors and other unexposed fasteners after fabrication.

2. Paint dissimilar metals where drainage from them passes over aluminum.

3. Paint aluminum surfaces in contact with mortar, concrete or other masonry with alkali resistant coating.

4. Paint wood and similar absorptive material in contact with aluminum and exposed to the elements or otherwise subject to wetting, with two coats of aluminum house paint. Seal joints between the materials with sealant.

D. Drill and tap frame and doors and apply surface-mounted hardware items. Comply with hardware manufacturer's instructions and template requirements. Use concealed fasteners wherever possible.

E. Set still members and other members in bed of sealant as indicated, or with joint filler or gaskets as indicated to provide weathertight construction. Comply with requirements of Division 7 for sealants, fillers, and gaskets.

3.3 ADJUSTING

A. Adjust operating hardware to function properly, for smooth operation without binding, and for weathertight closure.

3.4 CLEANING

A. Clean the completed system, inside and out, promptly after installation, exercising care to avoid damage to coatings.

B. Clean glass surfaces after installation. Remove excess glazing and sealant compounds, dirt and other substances from aluminum surfaces.

END OF SECTION

SECTION 08710

FINISH HARDWARE

PART I – GENERAL

1.01 SUMMARY

A. SECTION INCLUDES

1. The work in this section includes furnishing all items of finish hardware as hereinafter specified or obviously necessary for all swinging, sliding, folding and other doors. Except items, which are specifically excluded from this section of the specification or of unique hardware, specified in the same sections as the doors and frames on which they are installed.

B. RELATED DOCUMENTS

1. Related documents, drawings and general provisions of contract, including General and Supplementary Conditions and Division 1 specification sections apply to this section.

C. RELATED SECTIONS

1. 06200 – Finish Carpentry
2. 08110 – Hollow Metal Doors and Frames
3. 08210 – Wood Doors
4. Division 16 – Access Control

1.02 REFERENCES

A. STANDARDS

1. ANSI A156.1 – Butts and Hinges
2. ANSI A156.2 – Bored Locks and Latches
3. ANSI A156.3 – Exit Devices
4. ANSI A156.4 – Door Controls – Door Closers
5. ANSI A156.5 – Auxiliary Locks and Associated Products
6. ANSI A156.6 – Architectural Door Trim
7. ANSI A156.7 – Template Hinge Dimensions
8. ANSI A156.8 – Door Controls – Overhead Holders
9. ANSI A156.13 – Mortise Locks and Latches
10. ANSI A156.15 – Closer Holder Release Devices
11. ANSI A156.16 – Auxiliary Hardware
12. ANSI A156.18 – Material and Finishes
13. NFPA 80 – Fire Doors and Windows
14. UL10C – Positive Pressure Fire Tests of Door Assemblies
15. AIA A201 1997 – General Conditions of the Contract

B. CODES

1. NFPA 101 – Life Safety Code
2. IBC 2003 – International Building Code
3. ANSI A117.1 – Accessible and Usable Buildings and Facilities
4. ADA – Americans with Disabilities Act

1.03 SUBMITTALS

A. GENERAL REQUIREMENTS

1. Submit copies of finish hardware schedule in accordance with Division 1, General Requirements.

B. SCHEDULES AND PRODUCT DATA

1. Schedules to be in vertical format, listing each door opening, and organized into “hardware sets” indicating complete designations of every item required for each door opening to function as intended. Hardware schedule shall be submitted within two (2) weeks from date the purchase order is received by the finish hardware supplier. Furnish four (4) copies of revised schedules after approval for field and file use. Note any special mounting instructions or requirements with the hardware schedule. Schedules to include the following information:

    a. Location of each hardware set cross-referenced to indications on drawings, both on floor plans and in door and frame schedule.
    b. Handing and degree of swing of each door.
    c. Door and frame sizes and materials.
    d. Keying information.
    e. Type, style, function, size, and finish of each hardware item.
    f. Elevation drawings and operational descriptions for all electronic openings.
    g. Name and manufacturer of each hardware item.
    h. Fastenings and other pertinent information.
    i. Explanation of all abbreviations, symbols and codes contained in schedule
    j. Mounting locations for hardware when varies from standard.

2. Submit catalog cuts and/or product data sheets for all scheduled finish hardware.

3. Submit separate detailed keying schedule for approval indicating clearly how the owner’s final instructions on keying of locks has been fulfilled.

C. SAMPLES

1. Upon request, samples of each type of hardware in finish indicated shall be submitted. Samples are to remain undamaged and in working condition through submittal and review process. Items will be returned to the supplier or incorporated into the work within limitations of keying coordination requirements.

D. TEMPLATES

1. Furnish a complete list and suitable templates, together with finish hardware schedule to contractor, for distribution to necessary trades supplying materials to be prepped for finish hardware.

E. OPERATIONS AND MAINTENANCE MANUALS

1. Upon completion of construction and building turnover, furnish two (2) complete maintenance manuals to the owner. Manuals to include the following items:

    a. Approved hardware schedule, catalog cuts and keying schedule.
    b. Hardware installation and adjustment instructions.
    c. Manufacturer’s written warranty information.
    d. Wiring diagrams, elevation drawings and operational descriptions for all electronic openings.

1.04 QUALITY ASSURANCE

A. SUBSTITUTIONS

1. All substitution requests must be submitted before bidding and within the procedures and time frame as outlined in Division 1, General Requirements. Approval of products is at the discretion of the architect and his hardware consultant.

B. SUPPLIER QUALIFICATIONS

1. A recognized architectural door hardware supplier who has maintained an office and has been furnishing hardware in the project’s vicinity for a period of at least two (2) years.

2. Hardware supplier shall have office and warehouse facilities to accommodate this project.

3. Hardware supplier shall have in his employment at lease one (1) Architectural Hardware Consultant (AHC) who is available at reasonable times during business hours for consultation about the project's hardware and requirements to the owner, architect and contractor.

4. Hardware supplier must be an authorized factory distributor of all products specified herein.

1.05 FIRE-RATED OPENINGS

1. Provide door hardware for fire-rated openings that comply with NFPA 80 and requirements of authorities having jurisdiction. Provide only items of door hardware that are listed by Underwriter's Laboratories (UL) or Warnock Hersey (WH) for use on types and sizes of doors indicated.

2. Project requires door assemblies and components that are compliant with positive pressure and S-label requirements. Specifications must be cross-referenced and coordinated with door manufacturers to ensure that total opening engineering is compatible with UL10C Standard for Positive Pressure Fire Tests of Door Assemblies.

   a. Hardware required for fire doors shall be listed with Underwriters Laboratories for ratings specified.

   b. Certification(s) of compliance shall be made available upon request by the Authority Having Jurisdiction.

1.06 DELIVERY, STORAGE AND HANDLING

A. MARKING AND PACKAGING

1. Properly package and mark items according to the approved hardware schedule, complete with necessary screws and accessories, instructions and installation templates for spotting mortising tools. Contractor shall check deliveries against accepted list and provide receipt for them, after which he is responsible for storage and care. Any shortage or damaged good shall be made without cost to the owner.

2. Packaging of door hardware is the responsibility of the supplier. As hardware supplier receives material from various manufacturers, sort and repackage in containers clearly marked with appropriate hardware set and door numbers to match the approved hardware schedule. Two or more identical sets may be packed in same container.

B. DELIVERY

1. The supplier shall deliver all hardware to the project site; direct factory shipments are not allowed unless agreed upon beforehand. Hardware supplier shall coordinate delivery times and schedules with the contractor. Inventory door hardware jointly with representatives of hardware supplier and hardware installer/contractor until each is satisfied that count is correct.

2. No keys, other than construction master keys and/or temporary keys are to be packed in boxes with the locks.

3. At time of hardware delivery, door openings supplier in conjunction with the contractor shall check in all hardware and set up a hardware storage room.

C. STORAGE

1. Provide secure lock-up for door hardware delivered to the Project, but not yet installed. Control handling and installation of hardware items that are not immediately replaceable so that completion of work will not be delayed by hardware losses both before and after installation.

1.07 WARRANTY

A. All items, except as noted below, shall be warranted in writing by the manufacturer against failure due to defective materials and workmanship for a minimum period of one (1) year commencing on the date of final completion and acceptance. In the event of product failure, promptly repair or replace item with no additional cost to the owner.

1. Cylindrical locksets – Heavy Duty: Five (5) years

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Only manufacturers as listed below shall be accepted. Obtain each type of finish hardware (hinges, latch and locksets, exit devices, door closers, etc.) from a single manufacturer.

2.02 MATERIALS

A. SCREWS AND FASTENERS

1. All required screws shall be supplied as necessary for securing finish hardware in the appropriate manner. Thru-bolts shall be supplied for exit devices and door closers where required by code and the appropriate blocking or reinforcing is not present in the door to preclude their use.

B. HANGING DEVICES

1. HINGES

a. Hinges shall conform to ANSI A156.1 and have the number of knuckles as specified, oil-impregnated bearings as specified with NRP (non-removable pin) feature, at all exterior reverse bevel doors. Unless otherwise scheduled, supply one (1) hinge for every 30” of door height. Hinges shall be a minimum of 4 1/2” high and 4” wide; heavy weight hinges (.180) shall be supplied at all doors where specified.

1) Specified Manufacturer: McKinney
2) Approved Substitutes: Bommer, Hager, Stanley

C. CYLINDERS AND KEYING

1. CYLINDERS

a. Provide cylinders and keys to match existing system.

1) Specified Manufacturer: Sargent
2) Approved Substitutes: none

2. KEYING

a. All locks and cylinders shall be construction master-keyed. All locks and cylinders to be master-keyed or grandmaster-keyed as directed by the owner. The factory shall key all locks and cylinders. Furnish the following key amounts:

1) Two (2) change keys per lock
2) Three (3) grand master keys
3) Six (6) master keys per master level
4) Fifteen (15) construction/temporary keys

D. LOCKING DEVICES

1. CYLINDRICAL LOCKSETS – HEAVY DUTY

a. All locksets shall be ANSI 156.2 Series 4000, Grade 1 Certified. Furnish with standard 2 3/4" backset. Lock housing shall be fabricated of steel zinc dichromate and stainless steel. Latchbolt shall be brass or stainless steel with a minimum 1/2" throw. Locks shall be non-handed and fully field reversible.

1) Specified Manufacturer: Sargent 10 Line
2) Approved Substitutes: none

2. LOCKSET STRIKES

a. Strikes shall be non-handed and available with curved lip, full lip or ASA type strikes as required. Provide strikes with lip-length required to accommodate jamb and/or trim detail and projection.

E. DOOR STOPS AND HOLDERS

1. WALL MOUNTED DOOR STOPS

a. Where a door is indicated on the plans to strike flush against a wall, wall bumpers shall be provided. Provide convex or concave design as indicated.

1) Specified Manufacturers: Rockwood
2) Approved Substitutes: Quality, McKinney, Trimco

F. SILENCERS

1. Furnish rubber door silencers all hollow metal frames; two (2) per pair and three (3) per single door frame.

2.03 FINISHES

A. The designations used in schedules and elsewhere to indicate hardware finishes are those listed in ANSI/BHMA A156.18 or traditional U.S. finishes shown by certain manufacturers for their products.

B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware.

C. Where specified hardware shall have an antimicrobial coating which permanently suppresses the growth of bacteria, algae, fungus, mold and mildew applied. The finish shall control the spread and growth of bacteria, mold and mildew and shall be FDA listed for use in medical and food preparation equipment.

PART III – EXECUTION

3.01 EXAMINATION

A. Contractor shall ensure that the building is secured and free from weather elements prior to installing interior door hardware. Examine hardware before installation to ensure it is free of defects.

3.02 INSTALLATION

A. Mount hardware units at heights indicated in the following applicable publications, except as specifically indicated or required to comply with the governing regulations.

1. "Recommended Locations for Builders Hardware for Standard Steel Doors and Frames" by the Door and Hardware Institute (DHI.)

2. NWWDA Industry Standard I.S.1.7, "Hardware Locations for Wood Flush Doors."

B. All hardware shall be applied and installed in accordance with best trade practice by an experienced hardware installer. Care shall be exercised not to mar or damage adjacent work.

C. Install each hardware item in compliance with the manufacturer's instructions and recommendations. Where cutting and fitting is required to install hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation or application of surface protection with finishing work specified in the Division 9 Sections. Do not install surface-mounted items until finishes have been completed on the substrates involved.

D. Provide a secure lock up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items so that the completion of the work will not be delayed by hardware losses before and after installation.

3.03 FIELD QUALITY CONTROL

A. The Contractor shall comply with AIA A201 1997 section 3.3.1 which reads as follows: “The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless the contract Documents give other specific instructions concerning these matters.”

B. The hardware supplier shall do a final inspection prior to building completion to ensure that all hardware was correctly installed and is in proper working order.

3.04 ADJUSTING, CLEANING, AND DEMONSTRATING

A. Adjust and check each operating item of hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate freely and smoothly or as intended for the application made.

B. Where door hardware is installed more than one month prior to acceptance or occupancy of a space or area, return to the installation during the week prior to acceptance or occupancy and make final check and adjustment of all hardware items in such space or area. Clean operating items as necessary to restore to proper function and finish of hardware and doors. Adjust door control devices to compensate for final operation of heating and ventilating equipment.

C. Instruct owner's personnel in the proper adjustment and maintenance of door hardware and hardware finishes and usage of any electronic devices.

3.05 PROTECTION

A. Contractor shall protect all hardware, as it is stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.

3.06 HARDWARE SCHEDULE

A. The following schedule is furnished for whatever assistance it may afford the Contractor; do not consider it as entirely inclusive. Should any particular door or item be omitted in any scheduled hardware heading, provide door or item with hardware same as required for similar purposes. Hardware supplier is responsible for handing and sizing all products as listed in the hardware heading. Quantities listed are for each pair of doors, or for each single door.

B. Manufacturer’s Abbreviations:

1. MC – McKinney
2. SA – Sargent
3. RO – Rockwood

Hardware Schedules

Set: 1.0

Doors: 001
Description: Storefront Single

1	Continuous Hinge	MCK-12HD	CL	MK
1	Mortise Deadlock	MS1850S-050	628	AD
1	Cylinder	4066	628	AD
1	Cylinder	41 101	US26D	SA
1	Push Bar & Pull	11147	US32D	RO
1	Door Closer (surface)	351 CPS	EN	SA

Notes: Balance of Hardware: threshold, door seals, mounting brackets furnished by Storefront Door Manufacturer.

Set: 2.0

Doors: 010
Description: Open Administration Area

3	Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1	Cylindrical Lock (office)	10G05 LL	US26D	SA
1	Door Closer (surface)	351 UO	EN	SA
1	Kick Plate	K1050 8" x L.A.R.	US32D	RO
1	Wall Stop	409	US32D	RO
3	Silencer	608		RO

Set: 3.0

Doors: 005
Description: Testing

3	Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1	Cylindrical Lock (classroom)	28 10G37 LL	US26D	SA
1	Door Closer (surface)	351 UO	EN	SA
1	Kick Plate	K1050 8" x L.A.R.	US32D	RO
1	Wall Stop	409	US32D	RO
3	Silencer	608		RO

Set: 4.0

Doors: 006, 007, 008, 009
Description: Testing Rooms

3	Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1	Cylindrical Lock (passage)	28 10U15 LL	US26D	SA
1	Wall Stop	409	US32D	RO
1	Gasketing	S88D		PE

Set: 5.0

Doors: 003, 011
Description: Existing

1 Exist	Existing Hardware to Remain	OM

END OF SECTION

SECTION 08800

GLASS AND GLAZING

PART 1 – GENERAL

1.1 SCOPE

A. This section describes the required materials and installation standards for all glass and glazing including, but not limited to: interior windows, sidelights and door lights.

1.2 APPLICABLE PUBLICATIONS

A. The following publications form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only:

B. American Society for Testing and Materials (ASTM) Publications:

1. Cellular Elastomeric Preformed Gasket and Sealing Material
2. Staining and Color Change of Single or Multicomponent Joint Sealants
3. Volatility of Oil and Resin Based, Knife Grade, Channel Glazing Compounds
4. Standard Specification for Flat Glass

C. American National Standards Institute, Inc. (ANSI):
797.1-75 Performance Specification and Methods of Test for Safety Glazing Material used in Buildings.

D. Consumer Products Safety Commission (CPSC) Standard:
16 CFR Safety Standard for Architectural Glazing Materials, January 1977, Part 1201

E. National Fire Protection Association (NFPA) Publication:
80-1977 Fire Doors and Windows

F. Flat Glass Marketing Association (FGMA) Publications:
Glazing Manual – 1974 Edition.
Glazing, Sealing Systems Manual, First Edition, 1970

G. National Association of Architectural Metal Manufacturers (NAAMM) Publication:
SG-1-70 Dense Rubber-Like Compression Gasket Material

1.3 SUBMITTALS: See SECTION 01300 – SUBMITTALS

PART 2 – PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. See drawings for location of each type of glass specified herein. Unless otherwise shown, all door lights and sidelights, entrance ways and high traffic areas shall be glazed with safety glazing materials conforming to CPC 16 CFR, Part 1201.

B. All glazing within 48 inches of a door shall be tempered safety or laminate safety glass.

2.2 SHEET OR FLOAT GLASS

A. Clear sheet or float glass shall be glazed in interior openings not indicated or specified otherwise. Install 7/32” glass for glazing openings up to over 45 square feet. Sheet for float glass shall be one of the following manufacturer’s products:

1. DS Float Glass: PPG Industries, Inc.
2. DS Float Glass: Ford Glass Division
3. DS Float Glass: Guardian Industries

2.3 TEMPERED GLASS:

A. Tempered glass shall be fully tempered safety glass manufactured by a special heat treating process to improve its mechanical strength. Glass shall meet the requirements of ANSI Z97.1 and USPC standard 16 CFR 1201 C1 and C11. Interior glass shall be clear with tongless edges of thickness shall be minimum of $^{7}/_{32}$" or as required by CPSC for openings size.

B. Tempered glass shall be products of one of the following manufacturers:

1. Herculite as manufactured by PPG Industries, Inc.
2. Tempered safety glass as manufactured by Ford Glass Division
3. Guardian tempered glass as manufactured by Guardian Industries, Inc.

2.6 MIRRORS:

A. Mirrors shall be ¼" Plate Glass.

2.7 SEALING MATERIALS

A. Provide neoprene setting materials of the types required for the applicable setting method specified in the FGMA Glazing Sealing Systems Manual, unless specified otherwise herein. Do not use metal sash putty, nonskinning compounds, nonresilient preformed sealers or impregnated preformed gaskets. Materials which will be exposed to view and unpainted shall be gray or neutral color.

2.8 GLAZING TAPE

A. Butyl-polyisobutylene preformed sealant complying with AAMA 804.1 for Channel Glazing.

2.9 GLAZING COMPOUND

A. Non-hardening, elastic type as recommended by glass manufacturer.

2.10 ELASTOMERIC SEALANT

A. Shall be recommended by sealant manufacturer for glazing applications of project. Sealant shall be chemically compatible with setting blocks, edge blocks, sealing tapes and with sealants used in manufacture of insulating glass units.

2.11 PREFORMED CHANNELS

A. Neoprene, vinyl, or rubber, NAAMM SG-1, as recommended by the glass manufacturer for the particular condition.

2.12 SEALING TAPES

A. Preformed, semisolid, polymeric based material of proper size and compressibility for the particular condition. Use only where glazing rabbet is designed for tape and tape is recommended by the glass or sealant manufacturer. Provide spacer shims for use with compressible tapes.

2.13 SETTING BLOCKS AND EDGE BLOCKS

A. Lead or neoprene of 70 to 90 Shore durometer hardness, chemically compatible with sealants used, and of sizes recommended by the glass manufacturer.

2.14 ACCESSORIES

A. As required by manufacturer to provide a complete installation, including glazing points, clips, shims, angles, beads, and spacer strips. Provide non-corroding metal accessories. Provide primer-sealers and cleaners as recommended by the glass and sealant manufacturers.

PART 3 – EXECUTION

3.1 PRECAUTIONS AND PROCEDURES

A. Determine the sizes to provide the required edge clearances by field measuring the actual openings to receive the glass. Grind smooth all edges of glass that will be exposed in finish work. Leave labels in place until the installation is approved, except remove applied labels on insulating glass units as soon as glass is installed. Securely fix movable items or keep in a closed and locked position until glazing compound has thoroughly set.

3.2 GLASS SETTING

A. Items to be glazed shall be either shop or field glazed using glass of the quality and thickness specified or indicated. Preparation and glazing, unless otherwise specified or approved, shall conform to applicable recommendations in the FGMA Glazing Manual and Glazing Sealing Systems Manual. Aluminum windows, wood doors, and wood windows may be glazed in conformance with one of the glazing methods described in the standards under which they are produced, except that face puttying with no bedding will not be permitted. Handle and install glazing materials in accordance with the manufacturer's instructions. Use beads or stops which are furnished with the items to be glazed to secure the glass in place.

3.3 EDGE CLEARANCE, FACE CLEARANCE AND BITE

A. The glazing system must provide adequate edge and face clearance to properly cushion the glass, thermally and mechanically isolate the glass from the framing members and prevent glass to metal contact.

3.4 FLOAT GLASS

A. Cut and set with any visible lines or waves horizontal.

3.5 CLEANING

A. Thoroughly clean glass surfaces and remove labels, paint spots, putty and other defacement. Glass shall be clean at the time the work is accepted.

END OF SECTION

SECTION 09250

GYPSUM WALLBOARD (DRYWALL)

PART 1 – GENERAL

1.1 SCOPE

A. The listing herein of article or material, operation or method requires that the Contractor shall furnish and install each item listed, of quality, or subject to qualification, noted: according to conditions stated providing therefore all necessary labor, equipment, and incidentals, including:

1. Gypsum Wallboard
2. Metal trim features, including corner treatment
3. Metal wall and ceiling framing systems
4. Joint reinforcement and treatment
5. Fasteners
6. Clean-up

1.2 APPLICABLE PUBLICATIONS

A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

B. American Society for Testing and Materials (ASTM) Publications:

1. Gypsum Wallboard
2. Joint Treatment Materials for Gypsum Wallboard Construction
3. Steel Drill Screws for the Application of Gypsum Board to Light-Gauge Steel Studs
4. Application and Finishing of Gypsum Board
5. Surface Burning Characteristics of Gypsum Board

C. Underwriters Laboratories (UL) Publication:

1. Fire Resistance Directory, 1980 Edition.

D. Commercial Publication:

1. United States Gypsum Company Publications SA-923, SA-932

1.3 SUBMITTALS

A. See Section 01300 – Submittals for requirements, if any.

PART 2 – PRODUCTS

2.1 GYPSUM WALLBOARD

A. Gypsum wallboard shall be manufactured from asbestos-free materials. Gypsum wallboard shall be as follows:

1. Gypsum Wallboard: ASTM C36

1. Regular: m 48” wide, 5/8” thick, tapered edges (unless noted otherwise on drawings).
2. Type X Special Fire-Resistant: 48” wide, 5/8” thick, tapered edges (rated assemblies).
3. Moisture Resistant (MR): 48” wide, 5/8” thick, tapered edges (Provide in all toilet rooms shown to be finished with tile on gypsum wallboard).

2.2 JOINT TREATMENT MATERIAL: ASTM C475

A. Taping or Embedding Compound: Specifically formulated and manufactured for use in embedding tape at gypsum board joints and completely compatible with tape and substrate.

B. Finishing or Topping Compound: Specifically formulated and manufactured for use as a finishing compound.

C. All-Purpose Compound: Specifically formulated and manufactured to serve as both a taping and a finishing compound and compatible with tape and substrate.

D. Joint Tape: Perforated cross-laminated, tapered edge, reinforced paper, or special tape recommended by the manufacturer.

E. Screws: ASTM C546, Type “S” or Type “W” steel, self-drilling and self-tapping screws.

F. Adhesives: Adhesive containing benzene, carbon tetrachloride, and trichloroethylene shall not be used.

G. Adhesive for Fastening Gypsum Board to Metal Framing: Type as recommended by the gypsum board manufacturer and approved.

H. Corner Bead and Edge Trim: Fabricate from protective-coated steel or plastic designed for its intended use. Flanges shall be free of dirt, grease and other materials that may adversely affect the bond of joint treatment. Materials shall be prefinished or decorated.

I. Water: Clean, fresh and potable.

2.3 WALL/PARTITION SUPPORTS MATERIALS:

A. Studs: 25 gauge (except noted otherwise on the drawings) screw-type “Cee” shaped studs of the depth indicated on the drawings, zinc-coated steel; comply with ASTM C645. Provide 20 gauge studs at following locations:

1. Interior door jambs in 25 gauge stud walls.
2. Studs higher than 13’-6” and where wall hung cabinets or other wall mounted equipment is to be installed.

B. Depth of Section: 3-5/8”, except as otherwise indicated on the drawings.

C. Runners: Match studs; type recommended by stud manufacturer for floor and ceiling support of studs, and for vertical abutment of drywall at other work.

D. Stiffeners: ¾” rolled steel channels at 0.3 lb. per ft. , rust-inhibitive paint finish.

E. Stud System Accessories: Provide stud manufacturer’s standard clips, shoes, ties, reinforcements, fasteners, and other accessories as needed for a complete stud system.

2.4 CEILING SUPPORT/FRAMING MATERIALS

A. Support/framing for suspended gypsum wallboard ceilings shall consist of 1-1/2” galvanized steel main runner channels and hat shaped galvanized steel furring channels.

B. Hangers supporting main runner channels shall be soft steel wire not less than 0.1620” nominal diameter (8 gauge) conforming to Federal Specification QQ-W-461, AISI No. 1010, Class 2 zinc coating. Flat steel hangers, 1” by 3/16”, with zinc coating, may be substituted for the wire hangers.

C. Tie wires for splicing furring channels or securing furring to main runner channels shall be galvanized steel of not less than 0.0915” nominal diameter (13 gauge). Tie wires for splicing hat-shaped furring channels to main runner channels or to structural members shall be galvanized steel of not less than 0.0625” nominal diameter (16 gauge).

D. Clips used in lieu of wire shall be galvanized steel equivalent in holding power to that provided by tie wires for the specific application.

E. Metal trim features for wallboard shall be formed from zinc-coated steel not lighter than 0.0217: nominal thickness (25 gauge) and shall conform to Federal Specification QQ-S-775, Type I, Class D or E. Metal trim shall be in the following shapes and sizes:

F. Casing beads shall be channel shaped with a concealed wing not less than 7/8" wide and an exposed wing. Exposed wing may be covered with paper cemented to metal and shall be suitable for joint treatment.

G. Corner beads for use at perimeter of ceilings shall be angle-shaped with wings not less than ¾" wide. Concealed wing shall be perforated for nailing and exposed wing edge folded flat. Exposed wing may be factory finished in a white color.

2.5 GYPSUM WALLBOARD/ASSEMBLY FASTENERS:

A. Bolts shall conform to Federal Specification FF-B-575.

B. Expansion shields shall conform to Federal Specification FF-S-325, Group I, II, or III, of the type and class applicable.

C. Metal screws shall be not less than 1" long with self-tapping threads and self-drilling points.

D. Toggle bolts shall conform to Federal Specification FF-B-588, type and class best suited for the purpose.

E. Approved manufacturers of gypsum drywall products subject to compliance with the drawings and this section are as follows:

1. Gypsum Board and Related Products:

a. United States Gypsum Company
b. Flintkote Products, Genstar Building Materials Company
c. Georgia Pacific Company
d. Gold Bond Building Products Division, National Gypsum Company.

2. Metal Support Materials:

a. United States Gypsum Company
b. Gold Bond Building Products Division, National Gypsum Company
c. Milcor Division, Inryco, Inc.

3. Direct Suspension Systems:

a. Chicago Metallic Corporation
b. Donn Corporation
c. National Rolling Mills Company
d. United States Gypsum Company

PART 3 – EXECUTION

3.1 DELIVERY AND STORAGE

A. Wallboard delivered prior to use shall be stored within a completely enclosed structure or off the ground and completely enclosed within a weathertight covering. Wallboard shall be dry, free of warpage, and with bundling tape intact immediately prior to use. Application shall commence only after the structure is completely weathertight.

3.2 CEILING FRAMED SYSTEMS

A. Framing for furred ceilings shall be installed at the locations indicated and shall conform to the following:

1. Suspended Ceilings: For spans up to and including 4' on centers: Ceiling framing shall consist of 1-1/2" steel main runner channels suspended plumb from structural slab or frame by hanger wires or straps spaced at not more than 4' on centers. Hanger wires shall be wrapped around power driven inserts installed in the supporting precast concrete slab. Hanger wires shall be looped around steel supports and shall receive three full turns around itself. Hanger strap shall be looped around structural framing and connected to itself with 3/8" galvanized bolts and nuts. Hanger wire shall be saddle-tied to main runner channels and shall receive three full turns around itself. Hanger strap shall be looped

under main runner channels to form stirrups and through-bolted shall be located within 6" of parallel walls and shall be cut short of abutting walls ½" plus or minus ¼". Where channels are spliced, the ends shall be overlapped not less than 12" with flanges of channels interlocked and securely tied near each end of the splice with two loops of 16 gauge tie wire. Splices shall be staggered.

3.3 FURRING

A. Hat-shaped steel channels or steel studs shall be provided where steel furring is indicated for screw attachment of gypsum wallboard.

B. For Spans Up To and Including 4' On Centers: Hat-shaped furring members shall be spaced 16" on centers and securely attached across suspended main runner channels with wire clips or double strand of 16 gauge tie-wire saddle-tied at each crossing. Ends of wire ties shall receive three full twists. Furring shall be spliced with 8" nested laps securely tied near each end of lap with two loops of 16 gauge tie-wire. Splices shall be staggered. Furring wall channels shall be located within 2" of walls. Where wallboard abuts dissimilar wall materials, perimeter of ceilings shall be finished with an edge bead trim strip applied to wall and accurately aligned with the finished ceiling.

3.4 WALL/PARTITION SUPPORT SYSTEM:

A. Install supplementary framing, in accordance with ASTM C754. Provide blocking and bracing to support fixtures, equipment, services, heavy trim, furnishings and similar work which cannot be adequately supported on gypsum board alone. Blocking for TV brackets, grab bars, or other equipment shall support a minimum weight of 200 lb.

B. Isolate stud system from transfer of structural loading to system, both horizontally and vertically. Provide slip or cushioned type joints to attain lateral support and avoid axial loading.

C. Anchor ends of horizontal stiffeners where system abuts structural columns or walls.

D. Install runner tracks at floors, ceilings, and structural walls and columns where gypsum drywall stud system abuts other work, except as otherwise indicated.

E. Space studs 16" o.c., except as otherwise indicated.

F. Fasten studs at ends of floor and ceiling runner tracks by installing a screw into both flanges at each end.

G. Install horizontal stiffeners in stud system; space 4'-0" o.c. vertically; wire-tie at each intersection.

H. Secure jamb studs to frames of openings with screws, wire-ties or welds, either directly to frames or to special frame-support brackets; and install runner track sections (for jack studs) above and below openings, secured to jamb studs.

I. Space jack studs same as partition studs, and screw to runner tracks above and below.

J. Install 2 studs at each jamb of each opening and one additional stud not more than 6" from jamb studs.

K. Install horizontal stiffeners 6" above and 6" below each opening more than 3'-0" wide, and extend 2 regular stud spaces beyond each jamb.

L. Wall furring shall be "2" members. Space furring members 24" o.c. except as otherwise indicated.

M. Install extra furring members and angle runners at terminations of drywall work, and at openings and where required for support of other work occurring in the drywall work.

3.5 APPLICATION OF GYPSUM BOARD

A. Apply gypsum board to framing and furring members in accordance with ASTM C840 and the requirements specified herein. Apply gypsum board with separate boards in moderate contact; do not force in place. Stagger end joints of adjoining boards. Neatly fit abutting end and edge joints.

Use gypsum board of maximum practical length. Cut out gypsum board as required to make neat close joints around openings. In vertical application of gypsum board, panels shall be of length required to reach full height of vertical surfaces in one continuous piece. Surfaces of gypsum board and substrate members may be adhered together with an adhesive, except where prohibited by fire rating(s). Leave a space approximately ¼" at the bottom of gypsum board for caulking. Type of gypsum board for use in each system specified herein shall be as indicated. Screw spacing shall not exceed 8".

B. Erection Tolerances: Wall surfaces shall have square corners, be plumb and true, with variations not exceeding 1/8' in 8' from required plane.

C. Control Joints: Install expansion and contraction joints in ceilings and walls in accordance with ASTM C 840, System XIII, unless indicated otherwise.

3.6 FINISHING OF GYPSUM BOARD

A. Tape and finish gypsum board in accordance with ASTM C840. Provide joint, fastener depression, and corner treatment. Gypsum board finishing shall be Level 4.

B. Caulking: Caulk openings around pipes, fixtures and other items projecting through gypsum board as specified in SECTION 07900 – JOINT SEALANTS. Apply caulking material with exposed surface flush with gypsum board.

3.7 FIRE-RESISTANT ASSEMBLIES

A. Wherever fire-rated gypsum board construction is indicated, provide all materials and application methods, including types and spacing of fasteners, in accordance with the specifications contained in the UL Fire Resistance Directory for the Design Number(s) indicated.

3.8 PATCHING

A. Correct surface defects and damage as required to leave gypsum board smooth, uniform in appearance, and ready to receive finish as specified.

3.9 CLEAN UP

A. Clean up all debris caused by the work of this Section.

END OF SECTION

SECTION 09510

ACOUSTICAL TREATMENT

PART 1 – GENERAL

1.1 SCOPE:

A. This section includes the furnishing, installation of acoustical ceilings complete, and replacement of existing acoustical tile system in areas of building where scheduled on the drawings.

1.2 APPLICABLE PUBLICATIONS

A. The following publications of the issues listed below, but referenced thereafter by basic designation only, form a part of this specification to the extent indicated by the references thereto.

B. American Society for Testing Materials (ASTM):

1. Metal Suspension Systems for Acoustical Tile Lay-In Panel Ceilings.
2. Installation of Metal Ceiling Suspension Systems (1981) for Acoustical Tile and Lay-In Panels.
3. Surface Burning Characteristics of Building Materials:
4. C-423-81a Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
5. Latex Ceiling Compounds (R 1981)
6. Fire Test of Building Construction and Materials.
7. Determination of Sound Transmission Class.

1.3 SUBMITTALS (See Section 01300 – Submittals)

PART 2 – PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Ceiling Sound Absorption: The Noise Reduction Coefficient (NRC) shall be determined in accordance with ASTM C-423 Method of Test.

2.2 CEILING MATERIALS

A. Acoustical ceiling units shall be mineral fiber lay-in panels with minimum NRC at 0.53 for AT-1 when tested in accordance with ASTM E 795 (E 400 mounting) and Class A flame spread rating when tested in accordance with ASTM E 84-81

B. Finish shall be factory-applied white vinyl latex paint. Size and face pattern shall be as follows.

C. Acoustical Ceiling Units AT-1 Typical: 24” x 24’ x 5/8", non-directional, all-purpose ceiling pattern, beveled, tegular, lay-in panels. All new acoustical ceiling units shall match the existing ceiling units. Bidder shall field verify. Product of one of the following manufacturers may match the existing units:

1. USG Radar Clima-Plus
2. Armstrong Fine Fissured (#1734)
3. Certain-Teed Fine Fissured

2.2 CEILING SUSPENSION SYSTEM: ASTM C 635 and the following requirements:

A. Type: 15/16” exposed grid, direct hung, concealed, upward access. All additional grid shall match the existing grid. Bidders shall field verify.

B. Finish: Surfaces exposed to view shall be of uniform width (15/16”) and shall be aluminum or steel with factory applied white baked enamel finish. Zinc-coated steel shall receive a phosphate treatment prior to painting.

C. Accessories: Provide manufacturer’s standard wall or edge moldings.

D. Accessibility: Provide access panels in locations indicated on the drawings. Access panels shall match adjacent acoustical units in appearance. Equip the panels with suitable framing or fastening devices designed to permit removal or replacement without damage to the units or supporting system. Access panels shall not be less than 24" x 24", no more than 24" x 48" in size.

2.3 HANGERS

A. Wires: ASTM A 641-81, soft annealed, light zinc coated carbon steel wire.

B. Straps: 1" by 1/16" galvanized steel conforming to ASTM A 526 with a light commercial zinc coating or ASTM A 366 with an electrodeposited zinc coating conforming to ASTM B 633, Type RS.

C. Rods: 3/16" diameter threaded steel rods, zinc- or cadmium-coated.

2.4 ADHESIVE: ASTM D 1779

A. Acoustical Sealant: Synthetic rubber or polymeric-based materials complying with ASTM C 834.

B. Extra Stock: Furnish five spare acoustical units for each 100 units installed.

PART 3 – EXECUTION

3.1 DELIVERY AND STORAGE

A. Deliver acoustical units in the manufacturer's original unopened containers with brand name and type clearly marked. Handle materials carefully and store them under cover in dry, watertight enclosures. Immediately before installation, store acoustical units for not less than 24 hours at the same temperature and relative humidity as the space where they will be installed.

3.2 ENVIRONMENTAL CONDITIONS

A. Maintain a uniform temperature of not less than 60° F nor more than 85° F and a relative humidity of not more than 70% continuously before, during and after installation of acoustical units. Interior finish work such as plastering, concrete and terrazzo work shall be completed and dry before installation. Mechanical, electrical and other work above the ceiling line shall be completed and approved prior to the start of acoustical ceiling installation.

3.3 CONDITIONS OF SURFACES

A. Examine surfaces to receive directly attached acoustical units for unevenness, irregularities, and dampness that would affect quality and execution of the work. Areas to which acoustical units will be cemented shall be free of oils, from residue, or other materials that reduce bonding capabilities of the adhesive.

3.4 INSTALLATION

A. Suspended Ceilings: Install the suspension system in accordance with ASTM C 635 and ASTM C 636 and the following additional requirements:

B. Hangers: Space hangers 4' on centers each direction. Hangers shall be laid out for each individual room or space. Install additional hangers where required to support framing around beams, ducts, columns, grilles, light fixtures and other penetrations through the ceiling.

C. Suspension Members: Keep main runners and carrying channels clear of abutting walls and partitions. Provide at least two main runners for each ceiling span.

D. Directly attach hanger wires to overhead steel structure. Where structural members do not occur at required maximum hanger location, provide 1-½" C.R. steel channels intermediate support between structural members.

E. Provide metal edge molding at perimeter of each room, space or panel and at adjacent vertical surfaces. Edge molding shall be steel with baked enamel finish. Molding shall be installed to level horizontal line, except in those areas indicated on the drawing to have sloped ceilings.

F. Erect acoustical units with joints close, straight and true to line and with exposed surfaces level and flush at joints. Make corners and arrises full and without worn or broken places. Join units neatly to connecting work.

G. Caulking: Seal all joints around pipes, ducts or electrical outlets penetrating the ceiling. Apply a continuous ribbon of acoustical sealant on vertical web of wall or edge moldings.

3.4 CLEANING

A. Clean soiled or discolored unit surfaces after installation. Touch up scratches, abrasions, voids or other defects in painted surfaces. Remove damaged or improperly installed units and install new materials.

END OF SECTION

SECTION 09681

CARPET TILE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, and Division 1 Specifications, apply to this section.

1.2 SUMMARY

A. This Section includes modular, textured loop carpet tile.

1.3 SUBMITTALS

A. Product Data: For each product indicated. Include manufacturer's written data on physical characteristics, durability, and fade resistance. Include installation recommendations for each type of substrate.

B. Shop Drawings: Show the following:

1. Columns, doorways, enclosing walls or partitions, built in cabinets and locations where cutouts are required in carpet tiles.
2. Carpet tile type, color, and dye lot.
3. Type of subfloor
4. Type of installation
5. Pattern of installation
6. Pattern type, location and direction.
7. Pile direction
8. Type, color and location of insets and borders
9. Type, color and location of edge, transition, and other accessory strips
10. Transition details to other flooring materials. Provide edging strips as required.

C. Samples: For each of the following products and for each color and texture required. Label each sample with manufacturer's name, material description, color, pattern, and designation indicated on Drawings.

1. Carpet Tile: Full-size Sample.
2. Exposed Edge, Transition, and other Accessory Stripping: 12-inch-long Samples.

D. Product Schedule: For carpet tile. Use same designations indicated on Drawings.

E. Qualification Data: For Installer.

F. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency

G. Maintenance Data: For carpet tiles to include in maintenance manuals. Include the following:

1. Methods for maintaining carpet tile, including cleaning and stain removal products and procedures and manufacturer's recommended maintenance schedule.
2. Precautions for cleaning materials and methods that could be detrimental to carpet tile.

H. Warranty: Special warranty specified in this Section.

1.4 QUALITY ASSURANCE

A. Installer Qualifications: An experienced commercial carpet installer who is certified by the Floor Covering Installation Board or who can demonstrate compliance with its certification program requirements.

B. Fire Test Response Characteristics: Provide products with the critical radiant flux classification indicated in Part 2, as determined by testing identical products per ASTM E 648 by an independent testing and inspecting agency acceptable to authorities having jurisdiction.

C. Smoke Density Characteristics: Provide products with smoke density classification indicated in Part 2, as determined by testing identical products per ASTM-E-662 by an independent testing and inspecting agency acceptable to authorities having jurisdiction.

D. Pre-Installation Conference: Conduct conference at Project site to comply with requirements in Division 1 section “Project Management and Coordination”

1.5 DELIVERY, STORAGE, AND HANDLING

A. Comply with CRI 104, Section 5, "Storage and Handling."

1.6 PROJECT CONDITIONS

A. Comply with CRI 104, Section 7.2, "Site Conditions; Temperature and Humidity" and Section 7.12, "Ventilation."

B. Environmental Limitations: Do not install carpet tiles until wet work in spaces is complete and dry, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.

C. Do not install carpet tiles over concrete slabs until slabs have cured and are sufficiently dry to bond with adhesive and concrete slabs have pH range recommended by carpet tile manufacturer. Prep existing floor slabs as required to receive carpet tile as required by the carpet manufacturer.

D. Where demountable partitions or other items are indicated for installation on top of carpet tiles, install carpet tiles before installing these items.

1.7 WARRANTY

A. Special Warranty for Carpet Tiles: Manufacturer's standard form in which manufacturer agrees to repair or replace components of carpet tile installation that fail in materials or workmanship within specified warranty period.

1. Manufacturer’s Warranty does not include discoloration or failure of carpet tile due to unusual traffic.
2. Failures include, but are not limited to, more than 10 percent loss of face fiber, edge raveling, snags, runs, loss of tuft bind strength, dimensional stability, excess static discharge,]and delamination.
3. Manufacturer’s Warranty Period: Lifetime as defined as “the period of time that the original purchaser of the carpet chooses to keep the carpet on the floor at the original installation site”.

1.8 EXTRA MATERIALS

A. Furnish extra materials described below, before installation begins, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Carpet Tile: Full-size units equal to 5 percent of amount installed for each type indicated, but not less than 10 sq. yd.

PART 2 - PRODUCTS

2.1 CARPET TILE

A. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:

1. Milliken Design Rhythms; pattern Quiet Leafery.
2. Shaw Color Play #59358

B. Products that meet the specification requirements of the specified product for design intent must be submitted to the architect of record no less than 5 days before bid date for approval.

C. Bids utilizing products that have not been approved by the architect of record will not be accepted.

D. Fiber Type: 100% Type 6,6 Nylon

E. Pile Characteristic: Textured Loop

F. Dye Method: Millitron Post Dyed

G. Nominal Total Thickness: 0.34 inch

H. Avg Density: 6,545

I. Finished Face Weight: 20 oz.

J. Gage: 1/10

K. Total Weight: 102.4 oz/sq yard for finished carpet tile.

L. Primary Backing/Backcoating: PVC-Free Comfort Plus ES Cushion

M. Size: 24 x 24 inches

N. Applied Soil-Resistance Treatment: Stain Smart

O. Antimicrobial: AlphaSan Built-in Protection

P. Performance Characteristics: As follows:

1. Indoor Air Quality CRI Green Label Plus Certified: Certification #GLP793, Carpet Category 5Y

2. Flame Resistance: Rated Class I

3. Smoke Density: less than or equal to 450

2.2 INSTALLATION ACCESSORIES

A. Trowelable Leveling and Patching Compounds: Latex-modified, hydraulic-cement-based formulation provided or recommended by carpet tile manufacturer.

B. Adhesives: Water-resistant, mildew-resistant, nonstaining, pressure-sensitive type to suit products and subfloor conditions indicated, that complies with flammability requirements for installed carpet tile and is recommended by carpet tile manufacturer for releasable installation.

a. CRI Green Label Plus Approved

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas and conditions, with Installer present, for compliance with requirements for maximum moisture content, alkalinity range, installation tolerances, and other conditions affecting carpet tile performance. Examine carpet tile for type, color, pattern and potential defects.

B. Concrete Subfloors: Verify that existing concrete floor slabs comply with ASTM F 710 and the following:

1. Slab substrates are dry and free of curing compounds, sealers, hardeners, previous flooring adhesives, and other materials that may interfere with adhesive bond. Determine adhesion and dryness characteristics by performing bond and moisture tests recommended by carpet tile manufacturer.
2. Subfloor finishes comply with requirements specified in Division 3 Section “Concrete, General” for slabs receiving carpet tile.
3. Subfloors are free of cracks, ridges, depressions, scale and foreign deposits.

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

3.2 PREPARATION

A. Comply with CRI 104, Section 6.2 “Site Conditions: Floor Preparation” and with carpet tile manufacturer’s written installation instructions for preparing substrates indicated to receive carpet tile installation.

B. Use trowelable leveling and patching compounds, according to manufacturer’s written instructions, to fill cracks, holes, depressions, and protrusions in substrates. Fill or level cracks, holes and depressions 1/8” wide or wider and protrusions more than 1/32”, unless more stringent requirements are required by the manufacturer’s written instructions.

C. Remove coatings, including curing compounds, and other substances that are incompatible with adhesives and that contain soap, wax, oil or silicone, without using solvents. Use mechanical methods recommended in writing by carpet tile manufacturer.

D. Broom and vacuum clean substrates to be covered immediately before installing carpet tile.

3.3 INSTALLATION

A. General: Comply with CRI 104, Section 14, "Carpet Modules," and with carpet tile manufacturer's written installation instructions.

B. Installation Method: As recommended in writing by carpet tile manufacturer. Glue down; install every tile with full-spread, releasable, pressure-sensitive adhesive.

C. Maintain dye lot integrity; do not mix dye lots in the same area.

D. Cut and fit carpet tile to butt tightly to vertical surfaces, permanent fixtures, and built-in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosings.

E. Extend carpet tile into toe spaces, door reveals, closets, open-bottomed obstructions, removable flanges, alcoves, and similar openings.

F. Maintain reference markers, holes and openings that are in place or marked for future cutting by repeating on finish flooring as marked on subfloor. Use non-permanent, non-staining marking device.

G. Install pattern parallel to walls and borders.

3.4 CLEANING AND PROTECTION

A. Perform the following operations immediately after installing carpet tile:

1. Remove excess adhesive, seam sealer, and other surface blemishes using cleaner recommended by carpet tile manufacturer.
2. Remove yarns that protrude from carpet tile surface.
3. Vacuum carpet tile using commercial machine with face-beater element.

B. Protect installed carpet tile to comply with CRI 104, Section 16, “Protection of Indoor Installations”

C. Protect carpet tile against damage from construction operations and placement of equipment and fixtures during the remainder of construction period. Use protection methods indicated or recommended in writing by carpet tile manufacturer.

END OF SECTION

SECTION 09900

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 field painting of the following:

1. Exposed interior items and surfaces.
2. Surface preparation, priming and finish coats specified in this Section are in addition to shop priming and surface treatment specified in other Sections.

B. Paint exposed surfaces except where the paint schedules indicate that a surface or material is not to be painted or is to remain natural. If the paint schedules do not specifically mention an item or a surface, paint the item or surface the same as similar adjacent materials or surfaces whether or not schedules indicate colors. If the schedules do not indicate color or finish, the Architect will select from standard colors and finishes available.

C. Do not paint prefinished items, finished metal surfaces, operating parts, and labels.

1. Prefinished items include the following factory-finished components:

a. Plastic toilet enclosures
b. Metal lockers
c. Casework
d. Finished mechanical and electrical equipment
e. Light fixtures
f. Distribution cabinets

2. Concealed surfaces include walls or ceilings in the following generally inaccessible spaces:

a. Furred areas
b. Ceiling plenums

3. Operating parts include moving parts of operating equipment and the following:

a. Valve and damper operators
b. Linkages
c. Sensing devices
d. Motor and fan shafts

4. Labels: Do not paint over Underwriters Laboratories (UL), Factory Mutual (FM), or other code-required labels or equipment name, identification, performance rating or nomenclature plates.

D. Related Sections include the following:

1. Division 6 Section “Interior Architectural Woodwork” for shop priming interior architectural woodwork.
2. Division 8 Section “Hollow Metal Doors and Frames” for shop priming steel doors and frames.
3. Divisions 15 and 16: Painting of mechanical and electrical work is specified in Divisions 15 and 16, respectively.

1.3 SUBMITTALS

A. Product Data: For each paint system specified. Include block fillers and primers.

1. Material List: Provide an inclusive list of required coating materials. Indicate each material and cross-reference specific coating, finish system and application. Identify each material by the manufacturer's catalog number and general classification.

B. Samples for Initial Selection: Manufacturer's color charts showing the full range of colors available for each type of finish-coat material indicated.

1.5 QUALITY ASSURANCE

A. Applicator Qualifications: Engage an experienced applicator who has completed painting system applications similar in material and extent to that indicated for this Project with a record of successful in-service performance.

B. Source Limitations: Obtain block fillers, primers and undercoat materials for each coating system from the same manufacturer as the finish coats. Sherwin-Williams paint shall be used.

C. Benchmark Samples (Mockups): Provide a full-coat benchmark finish sample of each type of coating and substrate required on the Project. Comply with procedures specified in PDCA P5. Duplicate finish of approved prepared samples.

1. The Architect will select one room or surface to represent surfaces and conditions for each type of coating and substrate to be painted.

a. Wall Surfaces: Provide samples on at least 100 sq. ft. of wall surface.
b. Small Areas and Items: The Architect will designate an item or area as required.

2. After permanent lighting and other environmental services have been activated, apply coatings in this room or to each surface according to the Schedule or as specified. Provide required sheen, color and texture on each surface.

3. After finishes are accepted, the Architect will use the room or surface to evaluate coating systems of a similar nature.

4. Final approval of colors will be from job-applied samples

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to the Project site in the manufacturer's original, unopened packages and containers bearing manufacturer's name and label and the following information:

1. Product name or title of material
2. Product description (generic classification or binder type)
3. Manufacturer's stock number and date of manufacture
4. Contents by volume for pigment and vehicle constituents
5. Thinning instructions
6. Application instructions
7. Color name and number
8. VOC content

B. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45° F. Maintain containers used in storage in a clean condition, free of foreign materials and residue. Protect from freezing. Keep storage area neat and orderly. Remove oily rags and waste daily. Take necessary measures to ensure that workers and work areas are protected from fire and health hazards resulting from handling, mixing and application.

1.7 PROJECT CONDITIONS

A. Apply water-based paints only when the temperature of surfaces to be painted and surrounding air temperatures are between 50 and 90° F.

B. Apply solvent-thinned paints only when the temperature of surfaces to be painted and surrounding air temperatures are between 45 and 95° F.

C. Do not apply paint in rain, fog or mist; or when the relative humidity exceeds 85 percent; to at temperatures less than 5° F above the dew point or to damp or wet surfaces. Painting may continue

during inclement weather if surfaces and areas to be painted are enclosed and heated within temperature limits specified by manufacturer during application and drying periods.

1.8 EXTRA MATERIALS

A. Furnish extra paint materials from the same production run as the materials applied in the quantities described below. Package paint materials in unopened, factory-sealed containers for storage and identify with labels describing contents. Deliver extra materials to the Owner. Furnish the Owner with an additional 5 percent, but not less than 1 gallon or 1 case, as appropriate, of each material and color applied.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Products: Subject to compliance with requirements, provide one of the products in the paint schedules.

B. Manufacturers Names: The following manufactures are referred to in the paint schedules by use of shortened versions of their names, which are shown in parentheses:

1. Sherwin-Williams (S-W)

2.2 PAINT MATERIALS, GENERAL

A. Material Compatibility: Provide block fillers, primers, undercoats and finish-coat materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.

B. Material Quality: Provide manufacturer's best-quality paint material of the various coating types specified. Paint-material containers not displaying manufacturer's product identification will not be acceptable.

C. Colors: Provide color selections made by the Architect.

PART 3 – EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas and conditions with the Applicator present, under which painting will be performed for compliance with paint applications requirements. Do not begin to apply paint until unsatisfactory conditions have been corrected and surfaces receiving paint are thoroughly dry. Start of painting will be construed as the Applicator's acceptance of surfaces and conditions within a particular area.

B. Coordination of Work: Review other Sections in which primers are provided to ensure compatibility of the total system for various substrates. On request, furnish information on characteristics of finish materials to ensure use of compatible primers. Notify the Architect about anticipated problems using the material specified over substrates primed by others.

3.2 PREPARATION

A. General: Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and similar items already installed that are not to be painted. If removal is impractical or impossible because of the size or weight of the item, provide surface-applied protection before surface preparation and painting.

1. After completing painting operations in each space or area, reinstall items removed using workers skilled in the trades involved.

B. Cleaning: Before applying paint or other surface treatments, clean the substrates of substances that could impair the bond of the various coatings. Remove oil and grease before cleaning.

C. Surface Preparation: Clean and prepare surfaces to be painted according to manufacturer's written instructions for each particular substrate condition and as specified.

1. Provide barrier coats over incompatible primers or remove and reprime.

2. Cementitious Materials: Prepare concrete, concrete masonry block, cement plaster and mineral-fiber-reinforced cement panel surfaces to be painted.

    a. Use abrasive blast-cleaning methods if recommended by paint manufacturer.
    b. Determine alkalinity and moisture content of surfaces by performing appropriate tests. If surfaces are sufficiently alkaline to cause the finish paint to blister and burn, correct this condition before application. Do not paint surfaces where moisture content exceeds that permitted in manufacturer's written instructions.
    c. Clean concrete floors to be painted with a 5 percent solution of muriatic acid or other etching cleaner. Flush the floor with clean water to remove acid, neutralize with ammonia, rinse, allow to dry, and vacuum before painting.

3. Wood: Clean surfaces of dirt, oil, and other foreign substances with scrapers, mineral spirits, and sandpaper as required. Sand surfaces exposed to view, smooth and dust off.

    a. Scrape and clean small, dry, seasoned knots and apply a thin coat of white shellac or other recommended knot sealer before applying primer. After priming, fill holes and imperfections in finish surfaces with putty or plastic wood filler. Sand smooth when dried.
    b. When transparent finish is required, backprime with spar varnish.
    c. Ferrous Metals: Clean nongalvanized ferrous-metal surfaces that have not been shop coated; remove oil, grease, dirt, loose mill scale, and other foreign substances. Use solvent or mechanical cleaning methods that comply with recommendations of the Steel Structures Painting Council (SSPC).

4. Galvanized Surfaces: Clean galvanized surfaces with non-petroleum-based solvents so that the surface is free of oil and surface contaminants. Remove pretreatment from galvanized sheet metal fabricated from coil stock by mechanical methods.

D. Materials Preparation: Carefully mix and prepare paint materials in accordance with manufacturer's directions.

E. Tinting: Tint each undercoat a lighter shade to simplify identification of each coat where multiple coats of the same material are applied. Tint undercoats to match the color of the finish coat, but provide sufficient differences in shade of undercoats to distinguish each separate coat.

3.3 APPLICATION

A. General: Apply paint according to manufacturer's written directions. Use applicators and techniques best suited for substrate and type of material being applied.

1. Paint colors, surface treatments and finishes are indicated in the schedules.
2. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces or conditions detrimental to formation of a durable paint film.
3. Provide finish coats that are compatible with primers used.
4. The term "exposed surfaces" includes areas visible when permanent or built-in fixtures, covers for finned tube radiation, grilles and similar components are in integrity and provide desired protection.
5. Paint surfaces behind movable equipment and furniture the same as similar exposed surfaces.
6. Paint interior surfaces of ducts with a flat, nonspecular black paint where visible through registers or grilles.
7. Finish exterior doors on tops, bottoms and side edges the same as exterior faces.
8. Sand lightly between each succeeding enamel.

B. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.

1. The number of coats and the film thickness required are the same regardless of application method. Do not apply succeeding coats until the previous has cured as recommended by the manufacturer. If sanding is required to produce a smooth even surface, according to manufacturer's written instructions, sand between applications.
2. Omit primer on metal surfaces that have been shop primed and touchup painted.
3. If undercoats, stains, or other conditions show through final coat of paint, apply additional coats until paint film is of uniform finish, color, and appearance. Give special attention to ensure edges, corners, crevices, welds and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.

4. Allow sufficient time between successive coats to permit proper drying. Do not recoat surfaces until paint has dried to where it feels firm, does not deform or feel sticky under moderate thumb pressure, and where application of another coat of paint does not cause the undercoat to lift or lose adhesion.

C. Application Procedures: Apply paints and coatings by brush, roller, spray or other applicators according to manufacturer's written instructions.

1. Brushes: Use brushes best suited for the type of material applies.
2. Rollers: Use rollers of carpet, velvet black or high-pile sheep's wool as recommended by the manufacturer for the material and texture required.
3. Spray Equipment: Use airless spray equipment with orifice size as recommended by the manufacturer for the material and texture required.

D. Minimum Coating Thickness: Apply paint materials no thinner than the manufacturer's recommended spreading rate.

E. Mechanical and Electrical Work: Painting of mechanical and electrical work is limited to items exposed in equipment rooms and in occupied spaces.

F. Electrical items to be painted include, but are not limited to, the following:

1. Conduit and fittings
2. Switchgear
3. Panelboards

G. Block Fillers: Apply block fillers to concrete masonry block at a rate to ensure complete coverage with pores filled.

H. Prime Coats: Before application of finish coats, apply a prime coat of material, as recommended by the manufacturer, to material that is required to be painted or finished and has not been prime coated by others. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn through or other defects due to insufficient sealing.

I. Pigmented (Opaque) Finishes: Completely cover surfaces as necessary to provide a smooth, opaque surface of uniform finish, color, appearance and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness or other surface imperfections will not be acceptable.

J. Transparent (Clear) Finishes: Use multiple coats to produce a glass-smooth surface film of even luster. Provide a finish free of laps, cloudiness, color irregularity, runs, brush marks, orange peel, nail holes, or other surface imperfections.

1. Provide satin finish for final coats.

K. Completed Work: Match approved samples for color, texture and coverage. Remove, refinish or repaint work not complying with requirements.

3.4 CLEANING

A. Cleanup: At the end of each work day, remove empty cans, rags, rubbish, and other discarded paint materials from the site.

B. Upon completion of painting, clean glass and paint-spattered surfaces. Remove spattered paint by washing and scraping, using care not to scratch or damage adjacent finished surfaces.

3.5 PROTECTION

A. Protect work of other trades, whether to be painted or not, against damage by painting. Correct damage by cleaning, repairing or replacing, and repainting, as acceptable to Architect.

B. Provide "Wet Paint" signs to protect newly painted finishes. Remove temporary protective wrappings provided by others to protect their work after completing painting operations.

1. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces. Comply with procedures specified in PDCA P1.

3.6 INTERIOR PAINT SCHEDULE

A. Concrete: Provide the following paint systems over interior concrete surfaces:

1. Satin, Acrylic-Enamel Finish: 2 finish coats over primer.

a. Primer: Alkali-resistant, acrylic-latex, interior primer applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.0 mils.

(1) SW: Prep Rite Masonry Primer B28 W300

b. First and Second Coats: Satin, acrylic-latex, interior enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 2.6 mils.

(1) SW: Pro Green 200 Satin B31 W651

B. Concrete Masonry Units: Provide the following paint systems over interior concrete masonry block units:

1. Satin, Acrylic-Enamel Finish: 2 finish coats over a block filler.

a. Block Filler: High-Performance, latex-based, block filler applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 5.0 mils.

(1) SW: Prep Rite Block Filler B25 W25

b. First and Second Coats: Satin, acrylic-latex, interior enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 2.6 mils.

(1) SW: Pro Green 200 Satin B31 W651

C. Gypsum Board: Provide the following paint systems over interior gypsum board surfaces:

1. Satin, Acrylic-Enamel Finish: 2 finish coats over primer.

a. Primer: Latex-based, interior primer applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.2 mils.

(1) SW: Prep-Rite 400 Primer

b. First and Second Coats: Satin, acrylic-latex, interior enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 2.6 mils.

(1) SW: Pro Green 200 Satin B31 W651

D. Woodwork and Hardboard: Provide the following paint systems over new, interior wood surfaces:

1. Satin, Acrylic-Enamel Finish: 2 finish coats over a wood undercoater.

a. Undercoat: Alkyd- or acrylic-latex-based, interior wood undercoater, as recommended by manufacturer for this substrate, applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.2 mils.

(1) SW: Prep Rite Classic Primer B28 W101

b. First and Second Coats: Satin, acrylic-latex, interior enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 2.6 mils.

(1) SW: Pro Green 200 Satin B31 W651

E. Stained Woodwork: Provide the following stained finishes over new, interior woodwork:

1. Waterborne, Satin-Varnish Finish: 2 finish coats of a waterborne, clear-satin varnish over a sealer coat and a waterborne, interior wood stain. Wipe wood filler before applying stain.

a. Filler Coat: Paste-wood filler applied at spreading rate recommended by the manufacturer.

(1) SW: Minwax Wood Filler 926-0779

b. Stain Coat: Interior wood stain applied at spreading rate recommended by manufacturer.

(1) SW: Wood Classics Oil-Based Stain A48 Series

c. Sealer Coat: Clear sanding sealer applied at spreading rate recommended by manufacturer.

(1) SW: Wood Classics Sanding Sealer B26 V43

d. First and Second finish Coats: Waterborne, varnish finish applied at spreading rate recommended by manufacturer.

(1) SW: Wood Classics Waterborne Polyurethane Varnish A86F9C

F. Ferrous Metal: Provide the following finish systems over ferrous metal:

1. Semi-gloss, Acrylic-Enamel Finish: One (1) finish coat over an enamel undercoater and a primer.

a. Primer: Quick-drying, rust-inhibitive, alkyd-based or epoxy-metal primer, as recommended by manufacturer for this substrate, applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.5 mils.

(1) SW: Kem-Kromik Universal Primer B50 W21

b. Undercoat: Alkyd, interior enamel undercoat or semi-glass, acrylic-latex, interior enamel, as recommended by the manufacturer for this substrate, applied at spreading rate recommended by manufacturer to achieve a total dry film thickness of not less than 1.3 mils.

(1) SW: DTM Semi-Gloss B66 W211

c. Finish Coat: Semi-gloss, acrylic-latex, interior enamel applied at spreading rate recommended by manufacturer to achieve a total dry film thickness of not less than 1.3 mils.

(1) SW: DTM Semi-Gloss B66 W211

G. Zinc-Coated Metal: Provide the following finish systems over zinc-coated metal:

1. Semi-gloss, Acrylic-Enamel Finish: 2 finish coats over a primer.

a. Primer: Galvanized metal primer applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.2 mils.

(1) SW: Pro-Cryl Universal Primer B66 W310

b. First and Second Coats: Semi-gloss, acrylic-latex, interior enamel applied at spreading rate recommended by manufacturer to achieve a total dry film thickness of not less than 2.6 mils.

(1) SW: DTM Semi-Gloss B66 W211

2. Full-gloss, Acrylic-Enamel Finish: 2 finish coats over a primer.

a. Primer: Galvanized metal primer applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.2 mils.

(1) SW: Pro-Cryl Universal Primer B66 W310

b. First and Second Coats: Full-gloss, acrylic-latex, interior enamel applied at spreading rate recommended by manufacturer to achieve a total dry film thickness of not less than 2.6 mils.

(1) SW: ProMar 200 Interior Latex Gloss Enamel B21W201.

END OF SECTION

SECTION 10431

SIGNS

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions apply.

B. See Section 01020 Allowances for signage allowance.

1.2 SUMMARY

A. This section includes the following:

1. Panel signs
2. Signage accessories
3. New signage that shall match the existing building signage in design, colors, size and layout.

1.3 SUBMITTALS

A. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of sign.

B. Shop Drawings: Include plans, elevations and large-scale sections of typical members and other components. Show mounting methods, grounds, mounting heights, layout, spacing, reinforcement, accessories, and installation details. Provide message list for each sign, including large-scale details of wording, lettering, artwork, and Braille layout.

C. Samples for Initial Selection: For each type of sign material indicated that involves color selection.

D. Samples for Verification: For each type of sign, include the following samples to verify color selected:

1. Panel Signs: full-size samples of each type of sign required.

E. Qualification Data: For Installer

F. Maintenance Data: For signage cleaning and maintenance requirements to include in maintenance manuals.

1.4 QUALITY ASSURANCE

A. Source Limitations: Obtain each sign type through one source from a single manufacturer.

B. Regulatory Requirements: Comply with the Americans with Disabilities Act (ADA) and with code provisions as adopted by authorities having jurisdiction.

1. Interior Code Signage: Provide signage as required by accessibility regulations and requirements of authorities having jurisdiction.

1.5 PROJECT CONDITIONS

A. Field Measurements: Where sizes of signs are determined by dimensions of surfaces on which they are installed, verify dimensions by field measurement before fabrication and indicate measurements on shop drawings.

1.6 COORDINATION

A. For signs supported by or anchored to permanent construction, advise installers of anchorage devices about specific requirements for placement of anchorage devices and similar items to be used for

attaching signs. For signs supported by or anchored to permanent construction, furnish templates for installation of anchorage devices.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

A. Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include but are not limited to the manufacturer specified.

B. Basis of Design Product: The design for each sign is based on the product named. Subject to compliance with requirements, provide either the named product or a comparable product by one of the other manufacturers specified.

2.2 PANEL SIGNS

A. Provide panel signs that comply with requirements indicated for materials, thicknesses, finishes, colors, designs, shapes, sizes, and details of construction. Produce smooth panel sign surfaces constructed to remain flat under installed conditions within tolerance of plus or minus 1/16 of an inch measured diagonally.

B. Available Manufacturers:

1. ASI Sign Systems, Inc.
2. Baron Signs
3. Best Manufacturing Co.
4. Mohawk Sign Systems
5. Seton Identification Products

C. Cast-Acrylic Sheet: Manufacturer's standard as follows:

1. Mil-P-8184 E, Type II, Class 1
2. Water white non-glare optically clear.
3. Color: As selected by Architect from manufacturer's full range.

D. Aluminum Sheet and Plate: ASTM B 209 (ASTM B 209M), alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated, and with not less than the strength and durability properties of 5005-HI5.

E. Tactile and Braille Copy: Manufacturer's standard process for producing copy complying with ADA Accessibility Guidelines and ICC/ANSI A117.1. Text shall be accompanied by Grade 2 Braille. Produce precisely formed characters with square cut edges free from burrs and cut marks.

1. Panel Material: Acrylic sheet
2. Raised-copy Thickness: Not less than 1/32"

2.3 PANEL SIGN TYPES

A. Room Signs: Acrylic

1. Interior acrylic sign system capable of being arranged in a variety of configurations with a minimum of attachments, devices and connectors.

a. Acrylic signs which are specific to the Acrylic Signs System are interchangeable and are comprised of four primary components.

1) Back plaque to allow for uniform, modular sizing of sign types.
2) Spacers to allow for insertion of inserts by sliding in horizontally from either side.
3) Copy inserts, made of a variety of materials to allow for different graphics needs.
4) Face plaque made of non-glare, optically clear acrylic that will allow for clear reading of the copy insert text. Face plaque to have a second (subsurface) color

applied to the border to create a window. Certain sign types will have window routed out of the acrylic.

b. Sign configurations vary in width from 9" to 80" and have height dimensions of 2", 3", 6", 9" and 12". Height shall be increased beyond 12" by repeating height module in full or in part.
c. Colors used in acrylic sign system shall be selected from manufacturer's standard colors. Engraving stock used must conform to the specified color for both background and text.

2. Back Plaque: Functions as structural member of sign and shall be acrylic.

a. Shall accept additional sign components being adhered to it and function as the element of the sign to which attachments are made for installing the sign.
b. Shall allow for a variety of mounting devices including wall mounting for screw-on applications using pressure-sensitive tape, freestanding mount, ceiling mount, and other mounting devices as needed.

3. Spacer: Functions to create a pocket to accept a copy insert or sliding tile.

a. Acrylic sign pocket created by spacers between back plaque and face plaque shall have a depth to receive a 0.0150" copy insert thickness.
b. All pockets for inserts shall be the same depth to accept the same copy insert thickness. Coordinate thickness of insert and pocket.

4. Face Plaque: Functions as the front member of the sign and is non-glare, optically clear acrylic.

a. Shall be optically clear to allow for clear reading of copy insert text.
b. Window in sign face is created with second (subsurface) color applied border.
c. Certain sign types will have window routed out of the acrylic.

5. Copy Inserts: To accept various forms of copy and graphics and slide into the pocket of an acrylic sign.

a. Materials: Polycarbonate inserts, 0.0150" water white clear polycarbonate.
b. Copy inserts must be interchangeable to any other sign in system by sliding horizontally from either side of sign and to any other sign in the system of equal height and width.
c. Copy insert material, thickness, and type of graphic reproduction on insert must be clearly specified in all shop drawings and submittals.
d. Easily cleanable without use of special chemicals or cleaning solutions.

6. Typography: First surface engraved copy Engraving stock plastic insert with first surface engraved copy. Single stroke engraving font is NOT to be used.

B. Interchangeable Component System:

1. Sign Type Families: Interchangeable Component Sign.
2. Interior sign system capable of being arranged in a variety of configurations with a minimum of attachments, devices and connectors.

a. Interchangeable nature of the system will allow for changes of graphic components of the installed sign, without changing sign in its entirety.
b. Component Sign System is comprised of the following primary components:

1) Rail back utilizing horizontal rails, spaced to allow for uniform, modular sizing of sign types.
2) Rail Insert mounted to back of Copy Panels to allow for attachment to Rail Back.
3) Copy Panels, made of a variety of materials to allow for different graphic needs.
4) End Caps which interlock to Rail Back to enclose and secure changeable Copy Panels.
5) Joiners and Accent Joiners connect separate Rail Backs together.
6) Top Accent Bars which provide decorative trim cap that encloses the top of sign or can connect the sign to a Type 03 Room Number Sign.

c. Rail Back, Rail Insert and End Caps in anodized extruded aluminum to allow for tigl1t tolerances and consistent quality of fit and finish.

d. Signs in system are convertible in the field and can be enlarged from one size to another in height and width through use of Joiners or Accent Joiners, which connect Rail Back panels together blindly, providing a butt joint between Copy Panel. Accent Joiners connect Rail Backs together with a visible 1/8" horizontal rib, flush to the adjacent copy insert surfaces.

e. Sign configurations vary in width from 9 inches to 80 inches and have height dimensions of 2 inches, 3 inches, 6 inches, 9 inches and 12 inches. Height shall be increased beyond 12 inches by repeating height module in full or in part.

3. Rail Back: Functions as internal structural member of sign using 6063T5 extruded aluminum and anodized black.

a. Shall accept an extruded aluminum or plastic insert on one sign or on both sides, depending upon sign type.

b. Shall be convertible in field to allow for connection to other Rail Back panels so that additive changes can be made to sign unit

c. Rail shall allow for a variety of mounting devices including: wall mounting for screw-on applications, using pressure sensitive tape, freestanding mount, ceiling mount and other mounting devices as needed.

4. Rail Insert: Functions as a mounting device for Copy Panels on to the Rail Back. The Rail Insert mounts to the back of the Copy Panel with adhesive suitable for use with the particular copy insert material.

a. Shall allow Copy Panels to slide or snap into the horizontal Rail Back for ease of changeability.

b. Shall mount to the back of the Copy Panel with adhesive suitable for use with particular Copy Panel material.

5. Copy Panels: To accept various forms of copy and graphics and attach to the Rail Back with the Rail Insert. Copy Panels are ABS plastic with integral color or an acrylic lacquer finish, photo polymer or acrylic.

a. Interchangeable by sliding horizontally from either side of sign and to other signs in system of equal or greater width or height.

b. Cleanable without use of special chemicals or cleaning solutions.

c. Copy Insert Materials: ABS Inserts -0.090 inches extruded ABS plastic core with 0.003 inches with resistant acrylic cap bonded during extrusion/texturing process. Pressure bonded to extruded Rail Insert using adhesive. Background color is either integral or painted in acrylic lacquer. ABS inserts finished in a chromium industries #HM335RA texture pattern to prevent glare.

C. Symbols of Accessibility: Provide 6-inch-high symbol fabricated from opaque non-reflective vinyl film, 0.0035-inch nominal thickness, with pressure-sensitive adhesive backing suitable for both exterior and interior applications.

2.4 ACCESSORIES

A. Mounting Methods Interior Panel Signs: Use concealed fasteners double-sided vinyl tape fabricated from materials that are not corrosive to sign material and mounting surface.

B. Anchors and Inserts: Provide nonferrous-metal or hot-dip galvanized anchors and inserts for exterior installations and elsewhere as required for corrosion resistance. Use toothed steel or lead expansion-bolt devices for drilled-in-place anchors. Furnish inserts, as required, to be set into concrete or masonry work.

2.5 FINISHES, GENERAL

A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

B. Protect mechanical finishes on exposed surfaces from damage by applying strippable, temporary protective covering before shipping.

C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of range of approved Samples. Noticeable variations in same piece are not acceptable. Variations in appearance of other components are acceptable if they are within range of approved Samples and are assembled or installed to minimize contrast.

2.6 ALUMINUM FINISHES

A. Clear Anodic Finish: Manufacturer's standard clear anodic coating, 0.018 mm or thicker over a satin (directionally textured) mechanical finish.

B. Baked-Enamel Finish: Manufacturer's standard baked enamel complying with paint manufacturer's written instructions for cleaning, conversion coating, and painting. Color: As selected by Architect from manufacturer's full range.

PART 3 – EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of work.

B. Verify that items, including anchor inserts, provided under other sections of Work are sized and located to accommodate signs.

C. Examine supporting members to ensure that surfaces are at elevations indicated or required \0 comply with authorities having jurisdiction and are free from dirt and other deleterious matter.

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

3.2 INSTALLATION

A. Locate signs and accessories where indicated, using mounting methods of types described and in compliance with manufacturer's written instructions,

1. Install signs level, plumb, and at heights indicated, with sign surfaces free from distortion and other defects in appearance.
2. Interior Wall Signs: Install signs on walls adjacent to latch side of door where applicable. Where not indicated or possible, such as double doors, install signs on nearest adjacent walls. Locate to allow approach within 3 inches of sign without encountering protruding objects or standing within swing of door.

B. Wall-Mounted Panel Signs: Attach panel signs to wall surfaces using methods indicated below:
1. Vinyl-Tape Mounting: Use double-sided foam tape to mount signs to smooth, nonporous surfaces. Do not use this method for vinyl-covered or rough surfaces.
2. Where panel signs are scheduled or indicated to be mounted on glass, provide matching plate on opposite side of glass to conceal mounting materials.

3.3 CLEANING AND PROTECTION

A. After installation, clean soiled sign surfaces according to manufacturer's written instructions. Protect signs from damage until acceptance by Owner.

3.4 SIGN SCHEDULE

A. Quantities, type, finishes and sizes to be verified with the Owner. See sign allowance.

1. Interior: Campus to provide copy and numbering.

a. Size: 9” x 9”
b. Finish: Clear anodized and colored acrylic.
c. Quantity: T. B. D.

2. Regulatory signage as required.