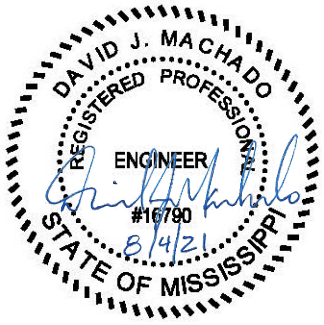
PROJECT MANUAL

GULFPORT SCHOOL DISTRICT – WINDOWS REPLACEMENT

Anniston Elementary School
Bayou View Elementary School
Bayou View Middle School
Central Elementary School
Gaston Elementary School
The Learning Center
Pass Road Elementary School

Gulfport School District
2001 Pass Road | Gulfport, Mississippi 39501



MACHADO | PATANO
ENGINEERING + ARCHITECTURE
M | P DESIGN GROUP
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M|P Project # 0247.21.001
REV 0: ISSUED FOR CONSTRUCTION 08.04.2021

SECTION 000102
PROJECT INFORMATION

PART 1 GENERAL

1.01 PROJECT IDENTIFICATION

A. Project Name: Gulfport School District - Windows Replacement, located at the following addresses:

Anniston Elementary School - 2314 Jones Street, Gulfport, MS 39507

Bayou View Elementary - 4898 Washington Avenue, Gulfport, MS 39507

Bayou View Middle School - 212 43rd Street, Gulfport, MS 39507

Central Elementary School - 1043 Pass Road, Gulfport, MS 39501

Gaston Elementary School - 1526 Mill Road, Gulfport, MS 39507

The Learning Center - 1215 Church Street, Gulfport, MS 39507

Pass Road Elementary School - 37 Pass Road, Gulfport MS 39507

B. The Owner, hereinafter referred to as Owner: Gulfport School District

C. Owner's Project Manager: Engineer/Architect.

1.02 NOTICE TO PROSPECTIVE BIDDERS

A. These documents constitute an Invitation to Bid to General Contractors for the construction of the project described below.

1.03 PROJECT DESCRIPTION

A. Summary Project Description: This project will consist of the following general scope of work. This description is provided for convenience purposes only and shall not be considered all inclusive. It is the general contractor's responsibility to become fully famliar with the existing conditions, review all of the construction document drawings, specifications, and any additional information documents in their entirety and bring forth any and all questions regarding scope confusion, misinterpretations, and/or possible errors and omissions to the Architect and/or Engineer prior to bid submission and/or start of construction.

1. This project consists of windows replacement as described in the Construction Documents and Specifications.

B. Contract Terms: Lump sum (fixed price, stipulated sum).

C. All bid amounts must be based on the most stringent requirement called for in the complete construction document package. In addition, the most stringent requirement shown shall govern and take precedence in the event of any and all conflicts between different drawings (plans, elevations, details, sections, schedules, etc...), between different specification sections, within specification sections, and between the drawings and the specifications. It will be the General Contractor's responsibility to bring any and all discrepancies to the architect's attention for further clarity prior to submitting a formal bid.

D. The currently occupied premises at the project site are open for examination by bidders only during the following hours:

1. Monday through Friday: 8:00 AM to 5:00 PM.

1.04 PROJECT CONSULTANTS

A. The Architect, hereinafter referred to as Engineer/Architect: M|P Design Group, PLLC/Machado Patano, PLLC.

1. Address: 918 Howard Avenue, Suite F.
2. City, State, Zip: Biloxi, MS 39530.
3. Phone: 228-388-1950.
4. Fax: 228-388-1971

5. Website: www.mpeng.us
6. Plan Room: www.mpengplans.us
7. E-mail: dmachado@mpeng.us, fsilva@mpeng.us.

1.05 PROCUREMENT TIMETABLE

A. A non-mandatory Pre-Bid Meeting and site walk: Thursday, August 19, 2021 at 09:00AM local time at the front entry lobby of Gaston Point Elementary at 1526 Mill Road, Gulfport, MS 39507. Followed the meeting, a site walkthrough in all schools included in this project will be conducted.

B. Last Request for Substitution Due: 7 days prior to due date of bids.

C. Last Request for Information Due: 7 days prior to due date of bids.

D. Bid Due Date: Thursday, September 2, 2021, before 10 AM local time.

E. Bid Opening: Same day, after the bids are due at the descretion of the Onwer and a time that is best determined by the Owner.

F. Notice to Proceed: Will be issued after contract award with anticipated starts dates as shown below.

G. Bids May Not Be Withdrawn Until: 60 days after due date.

H. Contract Time: 240 Calendar Days.

I. Anticipated Construction Start: Not later than Monday, October 4, 2021.

J. Completion date is critical due to requirements of Owner's operations.

K. The Owner reserves the right to change the schedule or terminate the entire procurement process at any time.

1.06 PROCUREMENT DOCUMENTS

A. Availability of Documents: Complete sets of procurement documents may be obtained:
   1. Bid Documents for a Stipulated Sum contract may be obtained from the website of the Architect at www.mpengplans.us upon receipt of a nonrefundable deposit, by cash or check, in the amount indicated on the plan room site for one set delivered in PDF format.
   2. Bid Documents can be obtained from PlanHouse printing in Gulfport, MS. Contact PlanHouse Printing at (228) 248-0181 for more detailed information on pricing and available construction document delivery formats.

B. Documents may be viewed at Office of the Architect.

1.07 BID SECURITY

A. Bids shall be accompanied by a security deposit as follows:
   1. Bid Bond of a sum no less than 5 percent of the Bid Amount on AIA A310 Bid Bond Form.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 000110
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END OF SECTION

SECTION 000820
FEDERAL REQUIREMENTS

PART 1 GENERAL

1.01 GENERAL REQUIREMENTS

A. This project is a federally funded project and must comply with federal construction and related laws, including, but not limited to, the Davis Bacon Act, Buy American Act, Clean Air Act, Occupational Safety and Health Act (OSHA), as well as Preservation of Historical Sites and Buildings. All energy conservation must be considered using American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) standards.

B. In addition, the contractor will be required to comply with the requirements below, but not limited to Sections 34 CFR Section 76.600 (Where to Find Construction Regulations), 34 CFR Sections 75.600-75.617, 2 Section 200.321 Contracting with Small and Minority Businesses, Women's Business Enterprises, and Labor Surplus Area Firms, 2 Section 200.322 Domestic Preference for Procurements, 2 Section 200.324 Contract Cost and Price, 2 Section 200.325 Federal Awarding Agency or Pass-Through Entity Review, 2 Section 200.326 Bonding Requirements, 2 Section 200.327 Contract Provisions, 2 Section 200.329(d) Construction Performance Reports, as well as Appendix II to Part 200- Contract Provision for Non-Federal Entity Contract under Federal awards, including Equal Employment Opportunity, Davis Bacon Act, as amended (40 U.S.C. 3141-3148), Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708), Rights to Inventions Made Under Contract or Agreement, Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387) as amended, Debarment and Suspension (Executive Orders 12549 and 12689) and the Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)

PART 2 EQUAL OPPORTUNITY

2.01 REQUIREMENTS

A. The contractor will maintain policies of employment as follows:
   1. The Contractor and all Subcontractors will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, or age. The Contractor will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, religion, color, sex, national origin, or age. Such action will include, but not limited to the following employment, upgrading, demotion or transfer, recruitment, or recruitment advertisement, layoff or termination, rates of pay or other forms of compensation, 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.
   2. The Contractor and all Subcontractors will, in all solicitations or advertisements for employees' places by them or their behalf, state that all qualified applicants receive consideration for employment without regard to race, religion, color, sex, national origin or age.

PART 3 DAVIS-BACON ACT REGULATIONS

3.01 CONTRACT PROVISIONS AND RELATED MATTERS

A. Every employer performing work covered by the labor standards of The Davis-Bacon and related Acts shall post the notice *WH-1321 attached in Appendix A* (including any applicable wage determination) at the site of the work in a prominent and accessible place where it may be easily seen by employees.

B. Under the Davis-Bacon and related Acts, covered contractors must maintain payroll and basic records for all covered laborers and mechanics during the course of the work and for a period of the three years thereafter. Records to be maintained include:
   1. Name, address, and social security number of each worker

2. Each worker's work classifications
3. Hourly rates of pay, including rates of contributions or costs anticipated for fringe benefits or their cash equivalents
4. Daily and weekly numbers of hours worked
5. Deductions made
6. Actual wages paid
7. Detailed information regarding bona fide fringe benefit plans and programs, including records that show that the plan or program has been communicated in writing to the laborers and mechanics affected
8. If applicable, detailed information regarding approved apprenticeship or trainee programs
9. See *Fact sheet #21*: Recordkeeping requirements under the Fair Labor Standards Act attached in Appendix *A*.

C. Each covered contractor and subcontractor must, on a weekly basis, provide the contracting agency a copy of all payrolls providing the information listed above under “Recordkeeping” for the preceding weekly payroll period, except that that full social security numbers and home addresses shall not be included on weekly transmittals, and instead the payrolls only need to include an individually identifying number for each worker (e.g., the last four digits of the worker’s social security number). Each payroll submitted must be accompanied by a “Statement of Compliance” using page 2 of *Form WH-347 Payroll attached in Appendix A* (For Contractors Optional Use), or any form with identical wording, certifying compliance with applicable requirements. The statement is to be signed by the contractor or subcontractor, or by an authorized officer or employee of the contractor or subcontractor who supervises the payment of wages, and delivered to a representative of the federal or state agency in charge. This must be submitted within seven days after the regular pay date for the pay period

D. Minimum Wages:
1. (i) All mechanics and laborers employed or working upon the site of the work, will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account (except such payroll deductions as permitted by regulations, issued by the Secretary of Labor under the Copeland Act, 29 CFR Part 3), the full amounts due at time of payment computed at wages rates not less than those contained in the wage determination decision of the Secretary of Labor which is attached hereto and made part of hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics, and the wage determination decision will be posted by the Contractor at the site of the work in a prominent place where can be easily seen by workers. For the purpose of this clause, contributions made costs reasonably anticipated under Section 1 (b) (2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 28 CFR 5.5 (a) (1) (iv). Also, for the purpose of this clause, regular contributions made or costs incurred for more than a weekly period under plans, funds or programs, but covering the particular weekly period are deemed to be constructively made or incurred during such weekly periods.
2. (ii) The contracting officer will require that any class of laborers or mechanics, including apprentices and trainees, which is not listed in the wage determination and which is to be employed under the contract, will be classified or reclassified conformably to wage determination and a report of the action taken will be sent by the State Agency to the Secretary of Labor in the event the interested parties cannot agree on the proper classification or reclassification of a particular class of laborers and mechanics, including apprentices and trainees to be used, the question, accompanied by the recommendation of the contracting officer, will be referred to the Secretary for final determination.
3. (iii) The contracting officer will require, whenever the minimum wage rate prescribed in the Contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly wage rate and the contractor is obligated to pay a cash equivalent of such a fringe benefit, an hourly cash equivalent thereof to be established. In the event

the interested parties cannot agree upon a cash equivalent of the fringe benefit the question, accompanied by the recommendation of the contracting officer, shall be referred to the Secretary of Labor for determination.

4. (iv) If the Contractor does not make payments to a trustee or other third person, he may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing benefits under a plan or program of a type expressly listed in the wage determination decision of the Secretary of Labor is a part of this Contract. Provide, however, the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan, or program.

E. Withholding: The State may withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to laborers and mechanics, including apprentices and trainees, employed by the Contractor or any Subcontractor on the work the full amount of wages required by the Contract. In the event of failure to pay any laborer or mechanic, including any apprentice of the Project, all or part of the wages required by the Contract, the State may, after written notice to the Contractor, sponsor, applicant of Owner, take such action as may be necessary to cause the suspension of any further payment, advance or guarantee of funds until such violations have ceased.

F. Payroll and Basic Records:

1. (i) Payrolls and basic record relating thereto will be maintained during the course of the work and preserved for a period of three (3) years thereafter for all laborers and mechanics working at the site of the work in the construction or development of the Project. Such record will contain the name and address of each employee, his correct classification, rates of pay (including rates of contributions or costs anticipated of the types described in Section 1 (b) (2) of the Davis-Bacon Act, daily and weekly number of hours worked, deductions made, and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5 (a) (1) (iv) the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1 (b) (2) (b) of the Davis-Bacon Act, the Contractor will maintain record which show that the commitment to provide such benefits is enforceable that the plan or program is financially responsible and that the plan or program has been communicated in writing to the laborers or mechanics affected and records which show the costs anticipated or the actual cost incurred in providing such benefits.
2. (ii) The Contractor will submit weekly a copy of all payrolls to the Project Architect/Engineer or will submit payrolls to the applicant, sponsor or Using Agency as the case may be, for transmission to the State. The copy will be accompanied by a statement signed by the employer or his agent indicating that the payrolls are correct and complete, that the wage rates contained therein are not less than those determined by the Secretary of Labor and that the classifications set forth for each laborer or mechanic conform with the work he performed. A submission of a “Weekly Statement of Compliance” which is required under this Contract and the Copeland regulations of the Secretary of Labor (29 DFR, Part 3) and the filing with the initial payroll or any subsequent payroll of a copy of any findings by the Secretary of Labor under 29 CFR 5.5 (a) (1) (iv) will satisfy this requirement. The Prime Contractor will be responsible for submission of copies of payrolls of all Subcontractors. The Contractor will make the records required under the labor standards clauses of the Contract available for inspection by authorized representatives to interview employees during working hours on the job.

G. Apprentices and Trainees:

1. (i) Apprentices: Apprentices will be permitted to work as such only when they are registered individually under a bona fide apprenticeship program registered with a State apprenticeship agency which is recognized by the Bureau of Apprenticeship and Training, U. S. Department of Labor or, if no such recognized agency exists in a State, under a

program registered with the Bureau of Apprenticeship and Training, U.S., Department of Labor. The allowable ratio of apprentices to journeymen in any craft classification will not be greater than the ratio of permitted to the Contractor as to his entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not a trained as defined in subdivision (kk) of this subparagraph or is not registered as above, will be paid the wage rate determined by the Secretary of Labor for the classification of work he actually performed. The Contractor or Subcontractor will be required to furnish to the contracting officer written evidence of the registration of his program and apprentices, as well as of the appropriate ratios and wage rates, for the area of construction prior to using any apprentices on the contract work.

2. (ii) Trainees: Trainees will be permitted to work as such when they are bona fide trainees employed pursuant to a program approved by the U. S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and training, and where subdivision (iii) of this subparagraph is applicable, in accordance with the provisions of Part 5a of this subtitle.
3. (iii) Application of 29 CFR part 5a: On Contracts in excess of $10,000, the employment of all laborers and mechanics, including apprentices and trainees, as defined in 5.2 ©, will also be subject to the provisions of Part 5a of this subtitle. Apprentices and trainees will be hire in accordance with the requirements of Part 5a of this subtitle.

H. Compliance with Copeland Regulations 29CFR Part 3: The Contractor will comply with the Copeland Regulations (29 CFR Part 3) of the Secretary of Labor which are herein incorporated by reference.

I. Subcontractors: The contractor will insert in any subcontracts the clauses contained in 29 DFR 5.5 (a) (1) through (5) and (7) and such other clauses as the State may, by appropriate instructions, require and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts which they may enter into, together with a clause requiring this insertion in any further subcontracts that they may in turn be made.

J. Contract Termination, Debarment: A breach of clauses (1) through (6) may be grounds for termination of the Contract for debarment as provided in 29 CFR 5.6.

K. PART 5A – LABOR STANDARDS FOR RATIOS OF APPRENTICES AND TRAINEES TO JOURNEYMEN ON FEDERAL AND FEDERALLY ASSISTED CONSTRUCTION.

L. 5a.3 APPRENTICE AND TRAINEE EMPLOYMENT REQUIREMENTS:
1. The following Contract clauses will be conditions of each Federal or Federally assisted construction Contract in excess of $10,000 and each Federal agency concerned will include the clauses or provide for their inclusion in each such Contract.
2. The contractors agree:
    a. (i) That he will make a diligent effort to hire for the performance of the Contract a number of apprentices or trainees, or both, in each occupation, which bears to the average number of the journeymen in that occupation to be employed in the performance of the Contract the applicable ratio as determined by the Secretary of Labor.
    b. (ii) That he will assure that twenty-five percent (25%) of such apprentices or trained in each occupation are in their first year of training, where feasible. Feasibility here involves a consideration of: (a) the availability of training opportunities for first year apprentices; (b) the hazardous nature of the work for beginning workers; and (c) excessive unemployment of apprentices in their second and subsequent years of training.
    c. (iii) That during the performance of the Contract, he will, to the greatest extent possible, employ the number of apprentices or trainees necessary to meet currently the requirements of subdivisions (i) and (ii) of this subparagraph.
    d. The contractor agrees to maintain records of employment by trade of the number of apprentices and trainees, apprentices and trainees by first year of training, and of journeymen and the wages paid and hours of work of such apprentices, trainees and

journeymen. The contractor agrees to make these records available for inspection upon request of the Department of Labor and the Federal agency concerned.

e. The Contractor who claims compliance based on the criterion stated in 5a.4(a) agrees to maintain records of employment, as described in 5a3(a) (2), on non-Federal and Non-federally assisted construction work done during the performance of this Contract in the same labor area. The contractor agrees to make these record available for inspection upon request of the Department of Labor and the Federal agency concerned.

3. CRITERIA FOR MEASURING DILIGENT EFFORT
   a. (A) The Contractor employs, on all his public and private construction work combined in the labor market area of his Project, an average number of apprentices and trainees by craft as required by the contract clauses, at least equal to the ratios established in accordance with 5a.5.
4. DETERMINATION OF RATIOS OF APPRENTICES OR TRAINEES TO JOURNEYMEN
   a. The Secretary of Labor has determined that the applicable ratios of apprentices and trainees to journeymen in an occupation will be as follow:
      1) (a) In any occupation the applicable ratio of apprentices and trainees to journeymen will be equal to the predominant ratio for the occupation in the area where the construction is to be undertaken, set forth in collective bargaining agreements or other employment agreements and available through the regional Manager for the Bureau of Apprenticeship and Training for the applicable area.
      2) (b) For any occupation for which no such ratio is found, the ratio of apprentices and trainees to journeymen will be determined by the Contractor in accordance with the recommendations set forth in the standards of the National Joint Apprentice Committee for the occupation, which are field with the U. S. Department of Labor’s Bureau of Apprenticeship and Training.
      3) (c) For any occupation for which no such recommendations are found, the ratio of apprentices and trainees to journeymen will be at least (1) apprentice or trainee for every five (5) journeymen.

PART 3 – FEDERAL AQUISITION REGULATIONS

4.01 25.1102(A) BUY AMERICAN-CONSTRUCTION MATERIALS (FEB 2021)

(a) Definitions. As used in this clause - Commercially available off-the-shelf (COTS) item

(1) Means any item of supply (including construction material) that is

(i) A commercial item (as defined in paragraph (1) of the definition at Federal Acquisition Regulation (FAR) 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4), such as agricultural products and petroleum products.

"Construction material" means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

Cost of components means—

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or

not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

Domestic construction material means—

(1) For construction material that does not consist wholly or predominantly of iron or steel or a combination of both-

(i) An unmanufactured construction material mined or produced in the United States; or

(ii) A construction material manufactured in the United States, if–

(A) The cost of its components mined, produced, or manufactured in the United States exceeds 55 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic. Components of unknown origin are treated as foreign; or

(B) The construction material is a COTS item; or

(2) For construction material that consists wholly or predominantly of iron or steel or a combination of both, a construction material manufactured in the United States if the cost of foreign iron and steel constitutes less than 5 percent of the cost of all components used in such construction material. The cost of foreign iron and steel includes but is not limited to the cost of foreign iron or steel mill products (such as bar, billet, slab, wire, plate, or sheet), castings, or forgings utilized in the manufacture of the construction material and a good faith estimate of the cost of all foreign iron or steel components excluding COTS fasteners. Iron or steel components of unknown origin are treated as foreign. If the construction material contains multiple components, the cost of all the materials used in such construction material is calculated in accordance with the definition of "cost of components".

Fastener means a hardware device that mechanically joins or affixes two or more objects together. Examples of fasteners are nuts, bolts, pins, rivets, nails, clips, and screws.

Foreign construction material means a construction material other than a domestic construction material.

Foreign iron and steel means iron or steel products not produced in the United States.

Produced in the United States means that all manufacturing processes of the iron or steel must take place in the United States, from the initial melting stage through the application of coatings, except metallurgical processes involving refinement of steel additives. The origin of the elements of the iron or steel is not relevant to the determination of whether it is domestic or foreign.

Predominantly of iron or steel or a combination of both means that the cost of the iron and steel content exceeds 50 percent of the total cost of all its components. The cost of iron and steel is the cost of the iron or steel mill products (such as bar, billet, slab, wire, plate, or sheet), castings, or forgings utilized in the manufacture of the product and a good faith estimate of the cost of iron or steel components excluding COTS fasteners.

Steel means an alloy that includes at least 50 percent iron, between 0.02 and 2 percent carbon, and may include other elements.

"United States" means the 50 States, the District of Columbia, and outlying areas.

(b) Domestic preference.

(1) This clause implements 41 U.S.C.chapter 83, Buy American, by providing a preference for domestic construction material. In accordance with 41 U.S.C. 1907, the domestic content test of the Buy American statute is waived for construction material that is a COTS item, except that for construction material that consists wholly or predominantly of iron or

steel or a combination of both, the domestic content test is applied only to the iron and steel content of the construction materials, excluding COTS fasteners. (See FAR 12.505(a)(2)). The Contractor shall use only domestic construction material in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.

(2) This requirement does not apply to information technology that is a commercial item or to the construction materials or components listed by the Government as follows:

_____[Contracting Officer to list applicable excepted materials or indicate "none"]

(3) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(2) of this clause if the Government determines that-

(i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the requirements of the Buy American statute is unreasonable when the cost of such material exceeds the cost of foreign material by more than 20 percent;

(ii) The application of the restriction of the Buy American statute to a particular construction material would be impracticable or inconsistent with the public interest; or

(iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) Request for determination of inapplicability of the Buy American statute.

(1) (i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(3) of this clause shall include adequate information for Government evaluation of the request, including-

(A) A description of the foreign and domestic construction materials;

(B) Unit of measure;

(C) Quantity;

(D) Price;

(E) Time of delivery or availability;

(F) Location of the construction project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(2) If the Government determines after contract award that an exception to the Buy American statute applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(3)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American statute applies, use of foreign construction material is noncompliant with the Buy American statute.

(d) Data. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable

supporting data based on the survey of suppliers:

4.02 52.225-10 NOTICE OF BUY AMERICAN REQUIREMENT-CONSTRUCTION MATERIALS

(a) Definitions. "Commercially available off-the-shelf (COTS) item," "construction material," "domestic construction material," and "foreign construction material," as used in this provision, are defined in the clause of this solicitation entitled "Buy American-Construction Materials" (Federal Acquisition Regulation (FAR) clause 52.225-9).

(b) Requests for determinations of inapplicability. An offeror requesting a determination regarding the inapplicability of the Buy American statute should submit the request to the Contracting Officer in time to allow a determination before submission of offers. The offeror shall include the information and applicable supporting data required by paragraphs (c) and (d) of the clause at FAR 52.225-9 in the request. If an offeror has not requested a determination regarding the inapplicability of the Buy American statute before submitting its offer, or has not received a response to a previous request, the offeror shall include the information and supporting data in the offer.

(c) Evaluation of offers.

(1) The Government will evaluate an offer requesting exception to the requirements of the Buy American statute, based on claimed unreasonable cost of domestic construction material, by adding to the offered price the appropriate percentage of the cost of such foreign construction material, as specified in paragraph (b)(3)(i) of the clause at FAR 52.225-9.

(2) If evaluation results in a tie between an offeror that requested the substitution of foreign construction material based on unreasonable cost and an offeror that did not request an exception, the Contracting Officer will award to the offeror that did not request an exception based on unreasonable cost.

(d) Alternate offers.

(1) When an offer includes foreign construction material not listed by the Government in this solicitation in paragraph (b)(2) of the clause at FAR 52.225-9, the offeror also may submit an alternate offer based on use of equivalent domestic construction material.

(2) If an alternate offer is submitted, the offeror shall submit a separate Standard Form 1442 for the alternate offer, and a separate price comparison table prepared in accordance with paragraphs (c) and (d) of the clause at FAR 52.225-9 for the offer that is based on the use of any foreign construction material for which the Government has not yet determined an exception applies.

(3) If the Government determines that a particular exception requested in accordance with paragraph (c) of the clause at FAR 52.225-9 does not apply, the Government will evaluate only those offers based on use of the equivalent domestic construction material, and the offeror shall be required to furnish such domestic construction material. An offer based on use of the foreign construction material for which an exception was requested-

(i) Will be rejected as nonresponsive if this acquisition is conducted by sealed bidding; or

(ii) May be accepted if revised during negotiations.

PART 5 - COMPLIANCE DOCUMENTS

5.01 ATTACHEMENTS

A. Refer to attachment General Decision Number: *MS20210050 04/02/2021*.

B. Refer to Appendix A - Federally Funded Project Requirements & Associated Documents

END OF SECTION

"General Decision Number: MS20210050 04/02/2021

Superseded General Decision Number: MS20200050

State: Mississippi

Construction Type: Building
BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

County: Harrison County in Mississippi.

Note: Under Executive Order (EO) 13658, an hourly minimum wage of $10.95 for calendar year 2021 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least $10.95 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate,if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/01/2021
1	02/12/2021
2	04/02/2021

ELEC0903-012 12/01/2019

	Rates	Fringes
ELECTRICIAN (Includes Low Voltage Wiring)	$ 27.45	9.5%+5.52

ENGI0624-008 01/01/2017

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
Forklift	$ 26.20	12.30

IRON0798-009 10/01/2020

	Rates	Fringes
IRONWORKER, REINFORCING	$ 27.30	15.87

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* PLUM0568-007 11/01/2020

	Rates	Fringes
PIPEFITTER (Includes HVAC Unit Installation (Excludes HVAC Pipe Installation))	$ 27.11	10.57
PLUMBER (Includes HVAC Pipe Installation (Excludes HVAC Unit Installation))	$ 27.11	10.02

SHEE0441-006 07/01/2014

	Rates	Fringes
SHEET METAL WORKER (Includes HVAC Duct Installation)	$ 20.00	11.72

SUMS2015-011 04/03/2017

	Rates	Fringes
BRICKLAYER	$ 22.00	0.02
CARPENTER, Includes Drywall Hanging, Finishing/Taping and Form Work	$ 15.90	0.00
CEMENT MASON/CONCRETE FINISHER	$ 18.37	0.00
IRONWORKER, STRUCTURAL	$ 18.51	0.00
LABORER: Common or General	$ 10.91	0.00
LABORER: Mason Tender - Cement/Concrete	$ 12.50	0.00
OPERATOR: Backhoe/Excavator/Trackhoe	$ 17.93	1.62
OPERATOR: Bulldozer	$ 15.14	1.03
OPERATOR: Crane	$ 21.40	3.58
PAINTER (Brush and Roller)	$ 17.00	0.00
ROOFER	$ 14.50	0.00
SPRINKLER FITTER (Fire Sprinklers)	$ 21.21	0.00
TILE SETTER	$ 18.00	0.00
TRUCK DRIVER: Dump Truck	$ 14.11	0.27

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this

contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007

in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.

Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

MISSISSIPPI DEPARTMENT OF EDUCATION
Ensuring a bright future for every child

INDEPENDENT CONTRACTOR DEBARMENT VERIFICATION FORM

(Please print clearly or type)

Subgrantee's/Contractor's Name	
Authorized Official's Name	
Complete Address	
Contact Number	
Are you currently registered with www.sam.gov (Yes or No) If yes, attach supporting documentation and DUNS number must be Active with open access. **(Federal fund requirement)**	
Are you currently registered to do business in the State of Mississippi? (Yes or No) If yes, attach supporting documentation of registration status. If not, please register and provide documentation of registration status. **(Federal and State/Other fund requirement)**	

***Appropriate signatures shall certify statements below.*

FEDERAL DEBARMENT CERTIFICATION:

CONTRACTOR hereby certify that at the execution of a contract with the Mississippi Department of Education, CONTRACTOR is not on the list for federal debarment on www.sam.gov – System for Award Management.

STATE OF MISSISSIPPI REGISTRATION:

CONTRACTOR hereby certify that at the execution of a contract with the Mississippi Department of Education, CONTRACTOR is not on the list for debarment on www.sos.ms.gov for doing business with the State of Mississippi or with any Mississippi State Agency.

PARTNERSHIP DEBARMENT CERTIFICATION:

CONTRACTOR hereby certify that all entities who are in partnership through this contract or grant with the Mississippi Department of Education (MDE) (subcontractors, subrecipients, et al.) are not on the federal debarment list on www.sam.gov – System for Award Management or the State of Mississippi debarment list. Proof of documentation of partnership verification with SAM shall be kept on file and the debarment status shall be checked prior to submission of every contract/subgrant and modification to MDE.

_____ _____

Original Signature of Contractor or Authorized Official *Date*

SECTION 001113
ADVERTISEMENT FOR BIDS

FROM:

1.01 THE OWNER (HEREINAFTER REFERRED TO AS OWNER):

A. Gulfport School District

B. Address:
2001 Pass Road
Gulfport, MS, 39501

1.02 AND THE ENGINEER/ARCHITECT (HEREINAFTER REFERRED TO AS ENGINEER/ARCHITECT):

A. Machado|Patano, PLLC & M|P Design Group, PLLC

B. Address:
918 Howard Avenue, Suite F
Biloxi, MS 39530
Phone: 228-388-1950
1. Fax: 228-388-1971
2. Web Site: www.mpeng.us
3. Plan Room: www.mpengplans.us

1.03 TO: POTENTIAL BIDDERS

A. Your firm is invited to submit an offer under seal to Owner for renovations to existing buildings located at Gulfport School District Schools and indicated below:
Anniston Elementary School
Bayou View Elementary School
Bayou View Middle School
Central Elementary School
Gaston Point Elementary School
Learning Center
Pass Road Elementary School

Before 10:00 am local standard time on the 2nd day of September, 2021, for:

B. Project Name: Gulfport School District - Windows Replacement

C. Project Number: 0247.21.001

D. Project Description: This project consists of windows replacement as described in the Construction Documents and Specifications.

E. Bid Documents for a Stipulated Sum contract may be obtained from the website of the Architect at www.mpengplans.us upon receipt of a non-refundable deposit, by cash or check, in the amount indicated on the plan room site for one set delivered in electronic PDF format.

F. Bidders will be required to provide Bid security in the form of a Bid Bond of a sum no less than 5 percent of the Bid Amount or a certified check for a sum no less than 5 percent of the Bid Amount.

G. Refer to other bidding requirements described in Document 002113 - Instructions to Bidders and Document 003100 - Available Project Information.

H. Submit your offer on the Bid Form provided. Bidders may supplement this form as appropriate.

I. If Bids are mailed or hand delivered, then they must be contained in a sealed envelope marked on the outside with the project name. They must be on file as received or delivered by the time stated above to the address of the Owner stated above. Do not deliver Bids to the project address or the Architect's address.

J. Electronic Bid Submission will be accepted on this project. Online bids can be placed on the website of the Architect at www.mpengplans.us. If Bids are electronically submitted, then a title page containing the same information as would occur on the front of a sealed envelope must be included and must be clearly indicated as such in the file name.

K. Bids in excess of $50,000.00 must be marked on the outside of the envelope with the contractor's Mississippi certificate of responsibility number as issued by the Mississippi Board of Contractors.

L. Your offer will be required to be submitted under a condition of irrevocability for a period of 60 days after submission.

M. This is a federally funded project and shall comply with all State and Federal requirements, including but not limited to compliance with any applicable Davis-Bacon Act requirements and other laws and regulations as referenced in the Construction Documents and Specifications.

N. The Owner reserves the right to accept or reject any or all offers.

END OF SECTION

SECTION 002113
INSTRUCTIONS TO BIDDERS

INVITATION

1.01 BID SUBMISSION

A. Bids signed and under seal, executed, and dated will be received at the office of the Owner at 2001 Pass Road, Gulfport, MS 39501 before 10 a.m. local standard time on the 2nd day of September, 2021.

B. Electronic Bid Submission will be accepted on this project. Online MUST be placed on the website of the Architect at www.mpengplans.us. For any questions relating to the electronic bidding process, please call Central Bidding at 225-810-4814.

C. Offers submitted after the above time shall be returned to the bidder unopened.

D. Offers will be opened publicly after the time for receipt of bids.

1.02 INTENT

A. The intent of this Bid request is to obtain an offer to perform work to complete Windows replacement located at Anniston Elementary School - 2314 Jones Street, Gulfport, MS 39507; Bayou View Elementary - 4898 Washington Avenue, Gulfport, MS 39507; Bayou View Middle School - 212 43rd Street, Gulfport, MS 39507; Central Elementary School - 1043 Pass Road, Gulfport, MS 39501; Gaston Elementary School - 1526 Mill Road, Gulfport, MS 39507; The Learning Center - 1215 Church Street, Gulfport, MS 39507 and Pass Road Elementary School - 37 Pass Road, Gulfport MS 39507 for a Stipulated Sum contract, in accordance with the Contract Documents.

1.03 WORK IDENTIFIED IN THE CONTRACT DOCUMENTS

A. Work of this proposed Contract comprises renovation, including structural, mechanical, and electrical Work.

B. All bid amounts must be based on the most stringent requirement called for in the complete construction document package. In addition, the most stringent requirement shown shall govern and take precedence in the event of any and all conflicts between different drawings (plans, elevations, details, sections, schedules, etc...), between different specification sections, within specification sections, and between the drawings and the specifications. It will be the General Contractor’s responsibility to bring any and all discrepancies to the architect’s attention for further clarity prior to submitting a formal bid.

1.04 BUILDING PERMITS AND PLAN REVIEW

A. Refer to 011000 Summary

1.05 CONTRACT TIME

A. Inclement Weather: The Contract Time for the project has incorporated all days for inclement weather. No additioinal request inclement weather days will be allowed during the project duration. The only inclement weather delays that will be considered to be above and beyond standard adverse conditions and will be considered appropriate for the Contractor's request for addtional time will be Acts of God that have directly effected the project site as follows:
   1. Named Storms
   2. Earthquakes
   3. Tornadoes
   4. Floods
   5. Hail Storms

BID DOCUMENTS AND CONTRACT DOCUMENTS

2.01 DEFINITIONS

A. Bid Documents include the Advertisement for Bids, Instructions to Bidders, Bid Form, Information Available to Bidders, Supplements To Bid Forms and Appendices, other sample bidding and contract forms, and the proposed Contract Documents including any Addenda issued prior to receipt of bid. The Contract Documents proposed for the Work consist of the Owner-Contractor Agreement, the Conditions of the Contract (General, Supplementary, and other Conditions), the Drawings, the Specifications, and all Addenda issued prior to and all Modifications issued after execution of the Contract.

B. All definitions set forth in the General Conditions of the Contract for Construction, AIA Document A201, or in other Contract Documents are applicable to the Bidding Documents.

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

D. A Bid is a complete and properly signed proposal to do the Work or designated portion thereof for the sums stipulated therein, submitted in accordance with the Bidding Documents.

E. The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which work may be added or from which work may be deleted for sums stated in Alternate Bids.

F. An Alternate Bid (or Alternate) is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted.

G. A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials or services as described in the Bidding Documents or in the proposed Contract Document.

H. A bidder is a person or entity who submits a Bid.

I. A Sub-Bidder is a person or entity who submits a bid to a Bidder for materials or labor for a portion of the work.

2.02 CONTRACT DOCUMENTS IDENTIFICATION

A. The Contract Documents are identified as Gulfport School District - Windows Replacement Number 0247.21.001, as prepared by Engineer/Architect , and with contents as identified in the Project Manual.

2.03 AVAILABILITY

A. Bid Documents can also be obtained from the Plan Room website of the Architect at www.mpengplans.us upon receipt of a nonrefundable deposit, by cash or check, in the amount indicated on the plan room site for one set delivered in PDF format.

B. Bid Documents can be obtained from PlanHouse printing in Gulfport, MS. Contact PlanHouse Printing at (228) 248-0181 for more detailed information on pricing and available construction document delivery formats.

C. Bid Documents are made available only for the purpose of obtaining offers for this project. Their use does not grant a license for other purposes.

2.04 EXAMINATION

A. Bid Documents may be viewed at the office of Engineer/Architect .

B. Upon receipt of Bid Documents verify that documents are complete. Notify Engineer/Architect should the documents be incomplete.

C. Immediately notify Engineer/Architect upon finding discrepancies or omissions in the Bid Documents.

2.05 INQUIRIES/ADDENDA AND INTERPRETATIONS

A. Direct questions to David Machado or Fernanda Silva, at email: dmachado@mpeng.us and fsilva@mpeng.us respectively.

B. Addenda may be issued during the bidding period. All Addenda become part of Contract Documents. Include resultant costs in the Bid Amount.

C. Verbal answers are not binding on any party.

D. Clarifications requested by bidders must be in writing not less than 7 days before date set for receipt of bids. The reply will be in the form of an Addendum, a copy of which will be forwarded to known recipients .

E. Any interpretation, correction or change of the Bidding Documents will be made by Addendum issued during the bidding period. All Addenda become part of the Contract Documents. Interpretations, corrections or changes of the Bidding Documents made in any other manner will not be binding.

F. Failure of any bidder to receive addendum issued, or to acknowledge receipt on the bid form, shall not relieve such bidder from any obligation under this bid as submitted.

G. All bid amounts must be based on the most stringent requirement called for in the complete construction document package. In addition, the most stringent requirement shown shall govern and take precedence in the event of any and all conflicts between different drawings (plans, elevations, details, sections, schedules, etc...), between different specification sections, within specification sections, and between the drawings and the specifications. It will be the General Contractor's responsibility to bring any and all discrepancies to the architect's attention for further clarity prior to submitting a formal bid. No other method of estimating shall be used in preparing the bid proposal, unless contrary instructions are issued in the form of an Addendum before bid proposal due date.

H. Any claim by the Contractor or Subcontractors that they, in submitting their respective bid proposals, did not include all items as shown in the Contract Documents will be given no consideration for an adjustment of any kind. If any item is specified in a Section which would not normally furnish this item, it shall be the responsibility of the Contractor to provide the work in question, without any additional cost to the Owner.

2.06 PRODUCT/ASSEMBLY/SYSTEM SUBSTITUTIONS

A. Where the Bid Documents stipulate a particular product, substitutions will be considered up to 10 days before receipt of bids.

B. Submit substitution requests by completing the form in Section 004325 - Substitution Request Form - During Procurement; see this section for additional information and instructions. Use only this form; other forms of submission are unacceptable. If this form is not completed in its entirety, then it will be rejected and will have to be resubmitted.

C. When a request to substitute a product is made, Engineer/Architect may approve the substitution and will issue an Addendum to known bidders.

D. The submission shall provide sufficient information to determine acceptability of such products.

E. Provide complete information on required revisions to other work to accommodate each proposed substitution.

F. Provide products as specified unless substitutions are submitted in this manner and accepted.

G. See Section 016000 - Product Requirements for additional requirements.

SITE ASSESSMENT

3.01 SITE EXAMINATION

A. Examine the project site before submitting a bid.

B. A visit to the project site has been arranged for bidders as follows: Immediately following the Pre-Bid Conference

C. The currently occupied premises at the project site are open for examination by bidders only during the following hours:
   1. Monday through Friday: 8 AM to 5 PM.
   2. Contractor will be require to contact the School Front Office prior to arriving to schedule a time for examination.

3.02 PREBID CONFERENCE

A. A bidders conference has been scheduled for 09:00 a.m. on the 19th day of August at the location of 1526 Mill Road, Gulfport, MS 39507. Meet in the main lobby of the Gaston Point Elementary School. We will then relocate to a designated area as directed by the staff for the formal meeting. After the Pre-Bid Meeting we will tour the site of the schools included in this project.

B. All general contract bidders and suppliers are invited.

C. Representatives of Engineer/Architect will be in attendance.

D. Summarized minutes of this meeting may be circulated to all known bidders. These minutes will not form part of the Contract Documents.

E. No verbal answers during this meeting are binding nor do they become a part of the Bid Documents. Information relevant to the Bid Documents will be recorded in an Addendum, issued to Bid Document recipients.

QUALIFICATIONS

4.01 SUBCONTRACTORS/SUPPLIERS/OTHERS

A. Owner reserves the right to reject a proposed subcontractor for reasonable cause.

B. Refer to General Conditions.

BID SUBMISSION

5.01 SUBMISSION PROCEDURE

A. Bidders shall be solely responsible for the delivery of their bids in the manner and time prescribed.

B. Submit one copy of the executed offer on the Bid Forms provided, signed and sealedwith the required security in a closed opaque envelope, clearly identified with bidder's name, project name and Owner's name on the outside. If Bids are electronically submitted, then a title page containing the same information as would occur on the front of a sealed envelope must be included and must be clearly indicated as such in the file name (i.e. "open first," or "Envelope Information," etc...), so that it will to be the first item opened.

C. Bids in excess of $50,000.00 must be marked on the outside of the envelope with the contractor's Mississippi Certificate of Responsibility Number as issued by the Mississippi Board of Contractors.

D. Electronic Bid Submission will be accepted on this project. Online bids can be placed on the website of the Architect at www.mpengplans.us.

5.02 BID INELIGIBILITY

A. Bids that are unsigned, improperly signed or sealed, conditional, illegible, obscure, contain arithmetical errors, erasures, alterations, or irregularities of any kind, may at the discretion of the Owner, be declared unacceptable.

B. Bid Forms, Appendices, and enclosures that are improperly prepared may, at the discretion of Owner, be declared unacceptable.

C. Failure to provide security deposit, bonding or insurance requirements may, at the discretion of Owner, invalidate the bid.

BID ENCLOSURES/REQUIREMENTS

6.01 SECURITY DEPOSIT

A. Bids shall be accompanied by a security deposit as follows:
   1. Bid Bond of a sum no less than 5 percent of the Bid Amounton AIA A310 Bid Bond Form.
      -OR-
   2. Certified check in the amount of a sum no less than 5 percent of the Bid Amount.

B. Endorse the certified check in the name of the Owner.

C. The security deposit will be returned after delivery to the Owner of the required Performance and Payment Bond(s) by the accepted bidder.

D. Include the cost of bid security in the Bid Amount.

E. If no contract is awarded, all security deposits will be returned.

6.02 PERFORMANCE ASSURANCE

A. Accepted Bidder:
   1. Provide a Performace Bond
   2. Provide a Payment Bond
   3. Provide a Schedule of Values
   4. Provide a Construction Schedule

B. Include the cost of Performance and Payment Bonds in the Bid Amount.

6.03 INSURANCE

A. Provide an executed "Undertaking of Insurance" letter on official letterhead provided by the insurance company stating their intention to provide insurance to the bidder in accordance with the insurance requirements of the Contract Documents. This is nothing more than a letter. There is no special form required. The intent is to assure the Owner that the Bidder is capable of obtaining insurance coverage requirements set forth herein for this specific project.

6.04 NON COLLUSIVE AFFIDAVITT

A. Bids shall be accompanied with 004105 Form of Non Collusive Affidavit.

6.05 BID FORM REQUIREMENTS

A. Complete all requested information in the Bid Form and Appendices.

6.06 BID FORM SIGNATURE

A. The Bid Form shall be signed by the bidder, as follows:
   1. Sole Proprietorship: Signature of sole proprietor in the presence of a witness who will also sign. Insert the words "Sole Proprietor" under the signature.
   2. Partnership: Signature of all partners in the presence of a witness who will also sign. Insert the word "Partner" under each signature.
   3. Corporation: Signature of a duly authorized signing officer(s) in their normal signatures. Insert the officer's capacity in which the signing officer acts, under each signature. Affix the corporate seal. If the bid is signed by officials other than the president and secretary of the company, or the president/secretary/treasurer of the company, a copy of the by-law resolution of their board of directors authorizing them to do so, must also be submitted with the Bid Form in the bid envelope.

6.07 ADDITIONAL BID INFORMATION

A. Upon request by the Architect, the selected Bidder shall within seven days thereafter submit the following:
   1. A schedule of values for each major item of work included in the bid.

2. A list of the work to be performed by the Bidder with his own work forces.
3. A list of Subcontractors or other persons or organizations proposed for use on this project. The Bidder will be required to establish to the Architect, Owner and the Owner's Representative the reliability and responsibility of the proposed Subcontractors to furnish and perform the work. Subcontractors and other persons and organizations proposed by the Bidder and accepted by the Owner, Architect, and the Owner's Representative must be used on the work for which they were proposed and accepted and shall not be changed except with the written approval of the Owner, Architect and Owner's Representative.

6.08 SELECTION AND AWARD OF ALTERNATES

A. Bids will be evaluated on the total of the base bid price and any combination of the Alternates. After determination of the successful bidder, consideration will be given to which Alternates will be included in the Work.

6.09 QUALIFICATION OF BIDDERS

A. If required, a Bidder shall submit to the Architect a properly executed Contractor's Qualification Statement AIA Document A305, within five (5) days from request.

B. The successful low bidder(s) will have to meet the following criteria to the Owners' satisfaction, prior to award of bid. Failure to do so may result in the rejection of the defaulting Contractors' Bid.
   1. The Contracting Company's ability to perform the designated scope of work.
   2. Qualified personnel and adequate work force capable of completing the specified project Work.
   3. Satisfactory construction plan.
   4. Satisfactory safety plan and work history related to safety and reportable OSHA related incidences.
   5. Successful completion of a similar project and no documented letters of dissatisfaction from similar owners.

C. Independent Contractor Status: It is understood and agreed that the contractor is an independent Contractor and not an employee of the Owner and that the Contractor shall be responsible for all necessary licenses, federal and state taxes, liability insurance, worker's compensation coverage and other obligations imposed upon him and his employees as an independent Contractor under applicable laws, rules and regulations.

D. Indemnity to the Owner: It is understood and agreed that the Contractor shall hold the Owner harmless and indemnify the Owner against any losses, damages, or liabilities resulting from the performance of the aforesaid services by said Contractor. Contractor shall be responsible for all employee withholding, payroll and FICA taxes, and shall maintain any and all Worker's Compensation Insurance on its laborers as required by law and shall hold the Owner harmless from all claims, if any, concerning Contractor's employees or subcontractors.

E. The Owner reserves the right to reject any Bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the Owner that such bidder is properly qualified to carry out the obligations of the Contract and to complete the scope of Work. Conditional bids will not be accepted. The Owner may consider either of the following reasons as being sufficient for the disqualification of a bidder and the rejection of the bidder's proposal:
   1. Submission of more than one proposal for the same work from an individual, partnership, firm or corporation under the same or different name(s),
   2. Evidence of collusion among bidders. Participants of such collusion may be disqualified for future Work of the Owner, and
   3. If the Bidder has been placed in default on another project with the Owner.

6.10 DURATION OF OFFER

A. Bids shall remain open to acceptance and shall be irrevocable for a period of sixty (60) days after the bid closing date.

6.11 ACCEPTANCE/ REJECTION OF OFFER

A. Owner reserves the right to accept or reject any or all offers.

B. The Bidder acknowledges the right right of the Owner to reject any or all bids and to waive any informality or irregularity in any bid received. In addition, the Bidder recognizes the right of the Owner to reject a bid if the Bidder failed to furnish required bid security or to submit the data required by the bidding documents, or if the bid is in any way incomplete or irregular. Each actual or prospective bidder agrees to waive any claim it has or may have against the Owner, or against the Architect, or against the Owner's Representative, and their respective employees and agents, arising out of or in connection with the bidding process specifically including the receipt, evaluation, recommendation, and administration of any bid.

C. The Owner intends to award a Contract to the lowest and best Bidder within available funds, based on the sum of the base bid plus accepted alternates, if any. A bidder may be disqualified for any legally permissible reason. In making award, the Owner reserves the right to consider a bidder's experience, quality of previous work, availability of appropriate financial, material, facility, managerial or personal resources, warranties, life cycle cost and any other legal factors related to evaluating the bidder's capability to perform contract requirements in a timely and proper manner.

D. The Owner reserves the right to cancel the award of a contract any time prior to the execution by all parties without liability against the Owner.

E. Any protest from any bidder must be delivered to the Owner in writing within seventy-two (72) hours of bid opening.

F. Any claim of error and request to be released from the bid by any bidder must be delivered to the Owner within twenty-four (24) hours of bid opening. Sufficient documentation and proof must accompany this written request clearly showing an error was made by the bidder.

G. The Contract will provide for Liquidated Damages in the amounts indicated on the Bid Form. Amounts indicated are to be paid per day by the Contractor for this Project to the Owner for each calendar day after the date of substantial completion.

H. After acceptance by Owner, Engineer/Architect on behalf of Owner, will issue to the successful bidder, a written Notice To Proceed.

6.12 LIQUIDATED DAMAGES FOR FAILURE TO ENTER INTO CONTRACT

A. The successful Bidder, upon his failure or refusal to execute and deliver the Contract and bonds required within seven (7) days after he has received notice of the acceptance of his bid, shall forfeit to the Owner, as liquidated damages for such failure or refusal, the difference between his bid and the next acceptable bid, up to the maximum amount of the Bid Security.

B. Refer to the Bid Form for the Amount and Time Frame for the Liquidated Damages.

6.13 TIME OF COMPLETION

A. Bidder must agree to commence work on a date to be specified in a written "Notice to Proceed" and to substantially complete the Work within the number of calendar days indicated on the bid form.

B. Bidders shall substantially complete all the work involved in its contract within the calendar days stated and shall be subject to damages for each calendar day of delay thereafter in accordance with the General Conditions of the Contract for Construction.

END OF SECTION

SECTION 004000
PROCUREMENT FORMS AND SUPPLEMENTS

PART 1 GENERAL

1.01 FORMS

A. Use the following forms for the specified purposes unless otherwise indicated elsewhere in the procurement requirements.

B. Bid Form: Section 004100 - Bid Form.

C. Procurement Form Supplements:
   1. Certificate of Responsibilty Number: Required on the Outside of the Envelope
   2. Bid Bond Form: AIA A310. Required to be submitted with the Bid.
   3. Proposed Schedule of Values Form: AIA G703. This does not have to be submitted with the bid, but must be provided to the Architect within seven (7) if so requested.
   4. Form of Non Collusive Affidavit: 004105 Form of Non Collusive Affidavit. Required to be submitted with the Bid.

1.02 REFERENCE STANDARDS

A. AIA A310 - Bid Bond 2010.

B. AIA G703 - Continuation Sheet 1992.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 004100
BID FORM

THE PROJECT AND THE PARTIES

1.01 TO:

A. Gulfport School District (Owner)
2001 Pass Road
Gulfport, MS 39507

1.02 FOR:

A. Project Name: Gulfport School District - Windows Replacement

B. Architect's Project Number: 0247.21.001

C. Project Addresses:
Anniston Elementary School - 2314 Jones Street, Gulfport, MS 39507
Bayou View Elementary - 4898 Washington Avenue, Gulfport, MS 39507
Bayou View Middle School - 212 43rd Street, Gulfport, MS 39507
Central Elementary School - 1043 Pass Road, Gulfport, MS 39501
Gaston Elementary School - 1526 Mill Road, Gulfport, MS 39507
The Learning Center - 1215 Church Street, Gulfport, MS 39507
Pass Road Elementary School - 37 Pass Road, Gulfport MS 39507

1.03 DATE: _____

1.04 CERTIFICATE OF RESPONSIBILITY NUMBER: _____

1.05 SUBMITTED BY:

A. Bidder's Full Name _____
1. Address _____
2. City, State, Zip _____

1.06 OFFER

A. Having examined the Place of The Work and all matters referred to in the Instructions to Bidders and the Contract Documents prepared by MP Design Group/Machado Patano for the above mentioned project, we, the undersigned, hereby offer to enter into a Contract to perform the Work, within the time set forth herein for the Sum of:

B. **BASE BID LUMP SUM PRICE:**

_____
_____ dollars
($_____), in lawful money of the United States of America.

C. **ADDITIVE BID ALTERNATE NO. 01:**

_____
_____ dollars
($_____), in lawful money of the United States of America.

D. We have included the required security Bid Bond as required by the Instruction to Bidders.

E. We have included the required Non Collusive Affidavit Form as required by the Instructions to Bidders.

F. We have included the cost of the required performance assurance bonds in the Bid Amount as required by the Instructions to Bidders.

G. We have included the cost of all local jurisdiction building permits required to complete the construction of this project in our Base Bid amount unless specifically called for otherwise in Section 012100 Allowances.

H. All applicable federal taxes are included and State of Mississippi taxes are included in the Bid Sum.

I. All Cash and Contingency Allowances described in Section 012100 - Allowances are included in the Bid Sum.

1.07 ACCEPTANCE

A. This offer shall be open to acceptance and is irrevocable for sixty days from the bid closing date.

B. If this bid is accepted by Owner within the time period stated above, we will:
   1. Furnish the required bonds within seven days of receipt of Notice of Award.
   2. Commence work within seven days after written Notice to Proceed of this bid.

C. If this bid is accepted within the time stated, and we fail to commence the Work or we fail to provide the required Bond(s), the security deposit shall be forfeited as damages to Owner by reason of our failure, limited in amount to the lesser of the face value of the security deposit or the difference between this bid and the bid upon which a Contract is signed.

D. In the event our bid is not accepted within the time stated above, the required security deposit shall be returned to the undersigned, in accordance with the provisions of the Instructions to Bidders; unless a mutually satisfactory arrangement is made for its retention and validity for an extended period of time.

1.08 CONTRACT TIME

A. Complete the Work in 240 calendar days from Notice to Proceed.

B. If the Substantial Completion date falls beyond the above date based on days, we will pay to the Owner the following amount as liquidated damages, not as a penalty, for each calendar day of delay for the Project until the actual date of Substantial Completion of the Project:

   *** UP **$500.00 PER CALENDAR DAY** ***

1.09 CHANGES TO THE WORK

A. When Architect establishes that the method of valuation for Changes in the Work will be net cost plus a percentage fee in accordance with General Conditions, our percentage fee will be:
   1. Ten percent overhead and profit on the net cost of our own Work;
   2. Ten percent on the cost of work done by any Subcontractor.

1.10 ADDENDA

A. The following Addenda have been received. The modifications to the Bid Documents noted below have been considered and all costs are included in the Bid Sum.
   1. Addendum # _____ Dated _____.
   2. Addendum # _____ Dated _____.
   3. Addendum # _____ Dated _____.
   4. Addendum # _____ Dated _____.
   5. Addendum # _____ Dated _____.

1.11 BID FORM SUPPLEMENTS

A. The following information is to be included with Bid submission:
   1. Non Collusive Affidavit
   2. Bid Bond: Form AIA Document A310
   3. Letter from Insurance Company

B. If so requested by the Architect, we agree to submit the following Supplements to Bid Forms within 7 days after submission of this bid for additional bid information:

1. Proposed Schedule of Values Form

1.12 BID FORM SIGNATURE(S)

A. The Corporate Seal of

B. _____

C. (Bidder - print the full name of your firm)

D. was hereunto affixed in the presence of:

E. _____

F. (Authorized signing officer, Title)

G. (Seal)

H. _____

I. (Authorized signing officer, Title)

1.13 IF THE BID IS A JOINT VENTURE OR PARTNERSHIP, ADD ADDITIONAL FORMS OF EXECUTION FOR EACH MEMBER OF THE JOINT VENTURE IN THE APPROPRIATE FORM OR FORMS AS ABOVE.

END OF SECTION

SECTION 004105
FORM OF NON COLLUSIVE AFFIDAVIT

PART 1 GENERAL

1.01 FORM OF NON-COLLUSION AFFIDAVIT IS AS FOLLOWS:

A. A copy of the Non-Collusion Affidavit is attached to the end of this Section. It will be the General Contractor's (Bidders) responsibility to complete this form in its entirety and submit it with and in his bid package.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

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NON-COLLUSION AFFIDAVIT

The undersigned bidder or agent, being duly sworn on oath, says that he/she has not, nor has any other member, representative, or agent of the firm, company, corporation or partnership represented by him, entered into any combination, collusion or agreement with any person relative to the price to be bid by anyone at such letting nor to prevent any person from bidding nor to include anyone to refrain from bidding, and that this bid is made without reference to any other bid and without any agreement, understanding or combination with any other person in reference to such bidding.

He/She further says that no person or persons, firms, or corporation has, have or will receive directly or indirectly, any rebate, fee gift, commission or thing of value on account of such sale.

OATH AND AFFIRMATION

I HEREBY AFFIRM UNDER THE PENALTIES FOR PERJURY THAT THE FACTS AND INFORMATION CONTAINED IN THE FOREGOING BID FOR PUBLIC WORKS ARE TRUE AND CORRECT.

Dated this ____ day of _____, _____

_____
General Contractor (GC) Company Name

_____ _____
Printed Name and Title of GC's Representative Signature of GC's Representative

NOTARY PUBLIC ACKNOWLEDGEMENT

STATE OF _____ COUNTY OF _____

Before me, a Notary Public, personally appeared the above named and swore that the statements contained in the foregoing document are true and correct.

Subscribed and sworn to me this _____ day of _____, _____.

_____
Signature

My Commission Expires: _____

SEAL

SECTION 004325
SUBSTITUTION REQUEST FORM - DURING PROCUREMENT

PART 1 GENERAL

1.01 SUBSTITUTION REQUEST FORM IS AS FOLLOWS:

A. A copy of the Substitution Request Form that must be used is attached at the end of this section.
   1. No other forms will be allowed.
   2. Any additional information that can be provided to substantiate the substitution request will be gladly accepted.
   3. An incomplete Substitution Request Form will be immediately rejected.

1.02 RELATED REQUIREMENTS

A. Section 002113 - Instructions to Bidders

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

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Project: _____

Specification Section Number and Paragraph: _____

Contract Drawings Affected: _____

Proposed Manufacturer: _____

Proposed Product Substitution: _____

Proposed Product Description: _____

EFFECTS OF PROPOSED PRODUCT SUBSTITUTION

PROVIDE THE FOLLOWING:

1. Attach list of at least 3 projects where proposed substitution has been used within past 6 to 12 months include name, address, and telephone number of Owner and Architect.
2. Does substitution affect dimensions indicated on Drawings? (Y/N) _____
3. Does substitution affect Work of other Specification Sections? (Y/N) _____
4. Does substitution require modifications to design, changes to Drawings, or revisions to specifications? (Y/N) _____

CONTRACTOR'S / BIDDER'S RESPONSIBILITY

Undersigned accepts responsibility for coordination of proposed substitution and accepts all additional costs resulting from the incorporation of proposed substitution into the Project per Section 01600. The only response to this Request for Substitution will be by Addendum.

SUBMITTED BY

(Include name, address, telephone, and contract person of manufacturer/supplier of proposed substitution)

Contact Name: _____

Contact Address: _____

Contact Telephone: _____

Signature and date: _____

ARCHITECT / ENGINEER REVIEW

Reviewed by: _____ Date: _____

Comments: _____

_____

_____

_____

_____

SECTION 005000
CONTRACTING FORMS AND SUPPLEMENTS

PART 1 GENERAL

1.01 AGREEMENT AND CONDITIONS OF THE CONTRACT

A. The Agreement is based on AIA A101.

B. The General Conditions are based on AIA A201.

1.02 FORMS

A. Use the following forms for the specified purposes unless otherwise indicated elsewhere in Contract Documents.

B. Bond Forms:
   1. Bid Bond Form: AIA A310.
      a. Must be submitted with the Bid Form.
   2. Performance and Payment Bond Form: AIA A312.
      a. A Performance Bond and a Payment (Labor and Material) Bond are required as a condition of this Contract.
      b. Simultaneous with delivery of the executed contract, the Contractor shall furnish a surety bond or bonds as security for the faithful performance of this Contract and for the payment of all persons performing labor on the project under this Contract and furnishing materials in connection with this Contract in the amount of 100% of the contract sum for payment, executed on AIA Document A3 l 2.
      c. The surety on such bond or bonds will be a duly authorized surety company who is licensed by the State of Mississippi's Commissioner of Insurance and who has a B++ or higher rating in accordance with the most recent edition of the A.M. Best Company, Inc., Key Rating Guide.
      d. All bonds shall be countersigned by a Mississippi resident agent with the name and address typed or lettered legibly.
      e. All bonds must be accompanied by an appropriate Power of Attorney.

C. Post-Award Certificates and Other Forms:
   1. Architect's Submittal Transmittal Letter Form: Attached at the end of this section.
   2. Schedule of Values Form: AIA G703.
   3. Application for Payment Forms: AIA G702 with AIA G703 (for Contractors).

D. Clarification and Modification Forms:
   1. Architect's Request for Interpretation Form: Attached to the end of this section.
   2. Architect's Substitution Request Form (During the Bidding/Negotiating Stage): Attached at the end of this section.
   3. Architect's Supplemental Instructions Form: AIA G710.
   4. Construction Change Directive Form: AIA G714.
   5. Change Order Form: AIA G701.

E. Closeout Forms:
   1. Certificate of Substantial Completion Form: AIA G704.
   2. Affidavit of Release of Liens Form: AIA 706A.

1.03 REFERENCE STANDARDS

A. AIA A101 - Standard Form of Agreement Between Owner and Contractor where the basis of Payment is a Stipulated Sum 2017.

B. AIA A201 - General Conditions of the Contract for Construction 2017.

C. AIA A310 - Bid Bond 2010.

D. AIA A312 - Performance Bond and Payment Bond 2010.

E. AIA G701 - Change Order 2017.
F. AIA G702 - Application and Certificate for Payment 1992.
G. AIA G703 - Continuation Sheet 1992.
H. AIA G704 - Certificate of Substantial Completion 2017.
I. AIA G710 - Architect's Supplemental Instructions 2017.
J. AIA G714 - Construction Change Directive 2017.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

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Project Name: Project

Number:

RFI Number	Submitted To	Submitted By	Copies To
Date			

Subject	Discipline	Co-Author

Specification Section	Drawing Reference	

Information Requested (suggest solution, if possible):	Date Requested:

Response

By responding to the RFI, we do not agree to any additional costs and/or time. Any additional costs and/or time shall be submitted in accordance with the Contract Documents.

Date Answered: Answered By:

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SUBMITTAL IDENTIFICATION

Submittal No. _____

Contractor to Complete

Project Name: _____

MP Project Number: _____

General Contractor: _____

Submittal Subcontractor: _____

Date Submitted to MP: _____

Specification Number: _____

Specification Description: _____

_____

Architect/Engineer to Complete

Date Returned: _____

Method Returned: _____

Returned To: _____

SECTION 005200
AGREEMENT FORM

PART 1 GENERAL

1.01 FORM OF AGREEMENTS ARE AS FOLLOWS:

A. Standard Form of Agreement Between Owner and Contractor, American Institute of Architects Document A101, 2017 Edition will be used for the Contract.

B. Standard Form Insurance and Bonds, American Institute of Architects Document A101, 2017 Exhibit A will be used for the Contract.

C. Prospective bidders should read and understand the Agreement forms before submitting bids or executing the Agreement.

D. Draft copies of these Agreements are available at the Architect's office for the Contractor's examination M-F from 8-5. The Agreements are incorporated by reference as though fully written herein.

1.02 RELATED REQUIREMENTS

A. Section 007200 - General Conditions.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 006200
INSURANCE AND BONDS

PART 1 GENERAL

1.01 INSURANCE

A. The Contractor is responsible for maintaining the following insurance coverages described herein.

B. **PROPERTY INSURANCE (BUILDER'S RISK)**

1. The Contractor shall purchase and maintain, from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located, property insurance written on a Builder's Risk “all-risks” completed value or equivalent policy form and sufficient to cover the total value of the entire Project on a replacement cost basis. The Owner’s property insurance coverage shall be no less than the amount of the initial Contract Sum, plus the value of subsequent Modifications and labor performed and materials or equipment supplied by others. The property insurance shall be maintained until Substantial Completion. This insurance shall include the interests of the Owner, Contractor, Subcontractors, and Sub-subcontractors in the Project as insureds. This insurance shall include the interests of mortgagees as loss payees.

C. **COMMERCIAL GENERAL LIABILITY INSURANCE**

1. Commercial General Liability Insurance for the Project shall be written on an occurrence form with policy limits of not less than One Million Dollars ($1,000,000) each occurrence, Two Million Dollars ($2,000,000) general aggregate, and One Million Dollars ($1,000,000) aggregate for products-completed operations hazard, providing coverage for claims including:
    a. damages because of bodily injury, sickness or disease, including occupational sickness or disease, and death of any person;
    b. personal injury and advertising injury;
    c. damages because of physical damage to or destruction of tangible property, including the loss of use of such property;
    d. bodily injury or property damage arising out of completed operations; and
    e. the Contractor’s indemnity obligations under the General Conditions.
2. The Contractor’s Commercial General Liability policy shall not contain an exclusion or restriction of coverage for the following:
    a. Claims by one insured against another insured, if the exclusion or restriction is based solely on the fact that the claimant is an insured, and there would otherwise be coverage for the claim.
    b. Claims for property damage to the Contractor’s Work arising out of the products-completed operations hazard where the damaged Work or the Work out of which the damage arises was performed by a Subcontractor.
    c. Claims for bodily injury other than to employees of the insured.
    d. Claims for indemnity of the General Conditions arising out of injury to employees of the insured.
    e. Claims or loss excluded under a prior work endorsement or other similar exclusionary language.
    f. Claims or loss due to physical damage under a prior injury endorsement or similar exclusionary language.
    g. Claims related to residential, multi-family, or other habitational projects, if the Work is to be performed on such a project.
    h. Claims related to roofing, if the Work involves roofing.
    i. Claims related to exterior insulation finish systems (EIFS), synthetic stucco or similar exterior coatings or surfaces, if the Work involves such coatings or surfaces.

j. Claims related to earth subsidence or movement, where the Work involves such hazards.
k. Claims related to explosion, collapse and underground hazards, where the Work involves such hazards.

D. **AUTOMOBILE LIABILITY INSURANCE**
1. Automobile Liability Insurance covering vehicles owned, and non-owned vehicles used, by the Contractor, with policy limits of not less than One Million Dollars ($1,000,000) per accident, for bodily injury, death of any person, and property damage arising out of the ownership, maintenance and use of those motor vehicles along with any other statutorily required automobile coverage.

E. **EMPLOYERS' LIABILITY INSURANCE (WORKER'S COMP)**
1. Employers' LiabilityInsurance with policy limits not less than Two Million Dollars ($2,000,000) each accident, One Million Dollars ($1,000,000) each employee, and Two Million Dollar ($2,000,000) policy limit.

1.02 SECURITY BONDS FOR FAITHFUL PERFORMANCE

A. A Performance Bond and a Payment (Labor and Material) Bond are required as a condition of this Contract.

B. Simultaneous with delivery of the executed contract, the Contractor shall furnish a surety bond or bonds as security for the faithful performance of this Contract and for the payment of all persons performing labor on the project under this Contract and furnishing materials in connection with this Contract in the amount of 100% of the contract sum for payment, executed on AIA Document A3l2.

C. The surety on such bond or bonds will be a duly authorized surety company who is licensed by the State of Mississippi's Commissioner of Insurance and who has a B++ or higher rating in accordance with the most recent edition of the A.M. Best Company, Inc., Key Rating Guide.

D. All bonds shall be countersigned by a Mississippi resident agent with the name and address typed or lettered legibly.

E. All bonds must be accompanied by an appropriate Power of Attorney.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 007200
GENERAL CONDITIONS

PART 1 GENERAL

1.01 GENERAL CONDITOINS ARE AS FOLLOWS:

A. Standard Form of General Conditions of the Contract for Construction, American Institute of Architects Document A201, 2017 Edition will be used for the Contract.

B. If a conflict exists between the General Conditions and the Specifications, the Specifications shall rule. Any party discovering a conflict between the Specifications and the General Conditions shall immediately notify the Architect in writing.

C. Prospective bidders should read and understand the General Conditions before submitting bids or executing the Agreement.

D. A copy of the Agreement is available at the Architect's office for the Contractor's examination on M-F from 8-5. The Agreement is incorporated by reference as though fully written herein.

END OF SECTION

SECTION 009000
ADDENDA

PART 1 GENERAL

1.01 SUMMARY

A. Any addenda to the drawings or specifications issued before or during the time of bidding shall be included in the proposal and become a part of the Contract.

B. Indicate receipt of addenda on the proposal form.

1.02 PART 2 PRODUCTS (NOT USED)

1.03 PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 011000
SUMMARY

PART 1 GENERAL

1.01 PROJECT

A. Project Name: Gulfport School District - Windows Replacement

B. Owner's Name: Gulfport School District.

1.02 PROJECT DESCRIPTION

A. This description is provided for convenience purposes only and shall not be considered all inclusive. It is the General Contractor's responsibility to become fully famliar with the existing conditions, review all of the construction document drawings, specifications, and any additional information documents in their entirety and bring forth any and all questions regarding scope confusion, misinterpretations, and/or possible errors and omissions to the Architect, Engineer prior to bid submission.
   1. This project consists of windows replacement as described in the Construction Documents and Specifications.

B. Alternates: refer to Division 1 Section "Alternates" for information.

C. All accessories or incidental items not specifically shown and detailed in the specifications herein, which are necessary and/or required to complete the work within the intent of the specifications, shall be included by the Contractor without additional cost to the Owner.

D. All bid amounts must be based on the most stringent requirement called for in the complete construction document package. In addition, the most stringent requirement shown shall govern and take precedence in the event of any and all conflicts between different drawings (plans, elevations, details, sections, schedules, etc...), between different specification sections, within specification sections, and between the drawings and the specifications. It will be the General Contractor's responsibility to bring any and all discrepancies to the architect's attention for further clarity prior to submitting a formal bid.

1.03 BUILDING PERMITS AND PLAN REVIEW

A. Building Permits:
   1. All Building Permits including all special subcontractor permits will be required for this project.
   2. The General Contractor will be required to apply for and pull all permits in their name.
   3. The General Contractor will be required to pay for all permits. Refer to Allowances section for any specified amount that may be allocated for the paying of said permits. If there is no set allowance provided, then it will be the General Contactor's responsibility to coordinate with the AHJ and provide for the costs of all permits in his base bid amount.

B. Plan Review:
   1. The project will be required to go through the plans review process with the Authority Having Jurisdiction (AHJ).
   2. The General Contractor will be required to pay for all plans review fees. Refer to Allowances section for any specified amount that may be allocated for the paying of said plan review. If there is no set allowance provided, then it will be the General Contactor's responsibility to coordinate with the AHJ and provide for the costs of the plan review in his base bid amount.
   3. The General Contractor will be responsible for providing and paying for all hard copy sets of plans and specifications required by the AHJ for their completion of the plan review process.

1.04 DESCRIPTION OF ALTERATIONS WORK

A. Scope of demolition and removal work is indicated on drawings.

B. Scope of alterations work is indicated on drawings.

C. Some items will be furnished and installed by Owner under separate contracts. Contractors shall coordinate and cooperate with these separate contractors including scheduling, delivery and installation dates, storage of materials, and use of utilities.
   1. Loose Furniture
   2. Promethean Boards
   3. Copy Machines
   4. Refrigerators
   5. Microwaves
   6. Paper Towel Dispensers

1.05 GENERAL INFORMATION

A. All work shall be performed in a professional manner and workmanlike manner.

B. Submittals: Submittals shall be submitted in accordance with Division 1 Section "Submittals".

C. Scheduling: The contractor shall prepare a construction schedule showing each construction activity, based on the project specification divisions, prior to starting work.

D. The Contractor will be expected to cooperate with the Owner and his representative in pursuing work continuously and with the highest degree of efficiency possible.

E. The Contractor will be required to finish the job and leave the site in a condition similar to starting project.

F. Inclement Weather: The Contract Time for the project has incorporated all days for inclement weather. No additional request inclement weather days will be allowed during the project duration. The only inclement weather delays that will be considered to be above and beyond standard adverse conditions and will be considered appropriate for the Contractor's request for additional time will be Acts of God that have directly effected the project site as follows:
   1. Named Storms
   2. Earthquakes
   3. Tornadoes
   4. Floods
   5. Hail Storms

G. Storm Damage: Should warnings of winds of gale force or stronger be issued, the Contractor shall take every practical precaution to minimize danger to persons and damage to property. These precautions shall be coordinated through the Owner’s Representative and shall include closing all openings; removing all loose materials, tools, and equipment from exposed locations; as well as removing or securing scaffolding and other temporary work.

H. Interruption of Utility Service: Interruptions to utility services shall be minimized. Necessary outages shall be coordinated with the Owner a minimum of 10 days in advance of the planned outage.

1.06 OWNER OCCUPANCY/WORKING CONDITIONS

A. Owner intends to continue to occupy adjacent portions of the existing building during the entire construction period.

B. Workmen shall be limited to the use of only those areas necessary to perform the work.

C. Owner intends to occupy the Project upon Substantial Completion.

D. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.

E. The Contractor shall take all necessary and prudent safety precautions to ensure the safety of the workforce and other exposed personnel.

1.07 CONTRACTOR USE OF SITE AND PREMISES

A. Construction Operations: Limited to areas permitted by Law, Ordinances, Permits, and Contract Documents..

B. Provide access to and from site as required by law and by Owner:
   1. Do not obstruct roadways, sidewalks, or other public ways without permit and/or permission by Owner.
   2. Deliveries and access/exit to project site is not available during the student drop off/unloading and student pick up/unloading times in the morning hours of 7:15 a.m. to 8:00 a.m. and during the afternoon hours of 3:15 to 4:00 p.m. General Contractor shall coordinate with Owner and not schedule or maneuver equipment during this time to obstruct traffic flow of buses and parents entering/exiting the school grounds during these time frames.

C. Existing building spaces and portions of site occupied by Owner for daily use may not be used for storage.

D. Contractor shall not unreasonably encumber site with materials or equipment.

E. Contractor shall assume full responsibility for protection and safe-keeping of products sorted on premises.
   1. Move any stored materials/products which interfere with operations of other Contractors.
   2. Obtain and pay for, use of additional storage or work areas needed for operations.
   3. Refer to Division 1 Section "Temporary Facilities and Controls" for additional information.

F. No Smoking (Tobacco) Policy:
   1. Smoking and other tobacco products including vaping are prohibited within and outside of all buildings. This applies to **ALL** buildings including the project site during all times of construction.

G. No Weapons Policy:
   1. No deadly weapons of any kind are permitted on the property.

H. No Alcohol Policy:
   1. No alcoholic beverages of any kind are permitted on the property.

I. Utility Outages and Shutdown:
   1. Limit disruption of utility services to hours the existing surrounding building is unoccupied.
   2. Do not disrupt or shut down life safety systems, including but not limited to fire sprinklers and fire alarm system, without 7 days notice to Owner and authorities having jurisdiction.
   3. Prevent accidental disruption of utility services to other facilities.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 012000
PRICE AND PAYMENT PROCEDURES

PART 1 GENERAL

1.01 SECTION INCLUDES

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

B. Documentation of changes in Contract Sum and Contract Time.

C. Change procedures.

D. Procedures for preparation and submittal of application for final payment.

1.02 RELATED REQUIREMENTS

A. Section 005000 - Contracting Forms and Supplements: Forms to be used.

B. Section 007200 - General Conditions.

C. Section 012100 - Allowances.

1.03 SCHEDULE OF VALUES

A. Use Schedule of Values Form: AIA G703, edition stipulated in the Agreement.

B. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit draft to Engineer/Architect for approval.

C. Forms filled out by hand will not be accepted.

D. Submit Schedule of Values in duplicate within 15 days after date established in Notice to Proceed.

E. Revise schedule to list approved Change Orders, with each Application For Payment.

1.04 APPLICATIONS FOR PROGRESS PAYMENTS

A. Payment Period: Submit at intervals stipulated in the Agreement.

B. Forms filled out by hand will not be accepted.

C. For each item, provide a column for listing each of the following:
   1. Item Number.
   2. Description of work.
   3. Scheduled Values.
   4. Previous Applications.
   5. Work in Place and Stored Materials under this Application.
   6. Authorized Change Orders.
   7. Total Completed and Stored to Date of Application.
   8. Percentage of Completion.
   9. Balance to Finish.
   10. Retainage.

D. Notarize certification by signature of authorized officer.

E. Use data from approved Schedule of Values. Provide dollar value in each column for each line item for portion of work performed and for stored products.

F. List each authorized Change Order as a separate line item, listing Change Order number and dollar amount as for an original item of work.

G. Submit one electronic and three hard-copies of each Application for Payment.

H. Include the following with the application:
   1. Transmittal letter as specified for submittals in Section 013000.
   2. Construction progress schedule, revised and current as specified in Section 013000.
   3. Current construction photographs specified in Section 013000.

4. Partial release of liens from major subcontractors and vendors.
5. Back up information will be required for stored materials.

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

1.05 MODIFICATION PROCEDURES

A. For minor changes not involving an adjustment to the Contract Sum or Contract Time, Engineer/Architect will issue instructions directly to Contractor.

B. For other required changes, Engineer/Architect will issue a document signed by Owner instructing Contractor to proceed with the change, for subsequent inclusion in a Change Order.
1. The document will describe the required changes and will designate method of determining any change in Contract Sum or Contract Time.
2. Promptly execute the change.

C. For changes for which advance pricing is desired, Engineer/Architect will issue a document that includes a detailed description of a proposed change with supplementary or revised drawings and specifications, a change in Contract Time for executing the change Contractor shall prepare and submit a fixed price quotation within 7 days.

D. Contractor may propose a change by submitting a request for change to Engineer/Architect, describing the proposed change and its full effect on the work, with a statement describing the reason for the change, and the effect on the Contract Sum and Contract Time with full documentation. Document any requested substitutions in accordance with Section 01 6000.

E. Computation of Change in Contract Amount: As specified in the Agreement and Conditions of the Contract.
1. For change requested by Engineer/Architect for work falling under a fixed price contract, the amount will be based on Contractor's price quotation.
2. For change requested by Contractor, the amount will be based on the Contractor's request for a Change Order as approved by Engineer/Architect.

F. Substantiation of Costs: Provide full information required for evaluation.
1. On request, provide the following data:
   a. Quantities of products, labor, and equipment.
   b. Taxes, insurance, and bonds.
   c. Overhead and profit.
   d. Justification for any change in Contract Time.
   e. Credit for deletions from Contract, similarly documented.
2. Support each claim for additional costs with additional information:
   a. Origin and date of claim.
   b. Dates and times work was performed, and by whom.
   c. Time records and wage rates paid.
   d. Invoices and receipts for products, equipment, and subcontracts, similarly documented.

G. Execution of Change Orders: Engineer/Architect will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.

H. After execution of Change Order, promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Sum.

I. Promptly revise progress schedules to reflect any change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.

J. Promptly enter changes in Project Record Documents.

1.06 APPLICATION FOR FINAL PAYMENT

A. Prepare Application for Final Payment as specified for progress payments, identifying total adjusted Contract Sum, previous payments, and sum remaining due.

B. Application for Final Payment will not be considered until the following have been accomplished:
   1. All closeout procedures specified in Section 017000.

END OF SECTION

SECTION 012100
ALLOWANCES

PART 1 GENERAL

1.01 SUMMARY

A. This Section sets forth the following allowances to be included in the Contract:
   1. Contingency Allowance
   2. AHJ Plan Review Fee
   3. Electrical Service Entrance Allowance
   4. Underground Utility Relocation Allowance

B. Conditions:
   1. The Contractor shall include in his base bid the cash and/or material allowances as described hereinafter for the purchase of materials as described or as to be determined herein. All costs for overhead, profit, bond, insurance and taxes shall not be included as part of the specified allowances and these overhead amounts shall be carried as an additional cost, where applicable, in a separate line item on the contractor's bid and subsequent schedule of values.
   2. All specified allowances shall appear as a line item amount, matching the amount specified herein, on the contractor's AIA Document G703, schedule of values.

1.02 CASH ALLOWANCES

A. Purchase products under allowance as directed by Architect/Engineer or as specified herein.

B. Use of any allowance shall be specifically authorized in writing upon approval by authorized Owner Representative. A final accounting of all contingency funds used will be made by issuance of a change order at the end of the project.

C. At close-out of Contract, funds remaining in Allowances will be credited to owner by Change Order. In addition to the balance of the allowance all applicable costs for overhead, profit, bond, insurance and taxes will be added to the allowance change order credit. Overhead amounts that can be clearly documented as being expended over the course of the project will be excluded from this added amount to the allowance credit. Refer to AIA A201 General Conditions for further information.

D. Contractor shall solicit a minimum of three (3) quotes for material and labor to be performed under all allowances.
   1. General Contractor's Overhead and Profit cannot be included in these proposals. The General Contractor's Overhead and Profit in relation to all allowances shall be included in the General Contractor's Base Bid.

E. Costs Included in Cash Allowances: Cost of product to Contractor or subcontractor, less applicable trade discounts.
   1. Net cost of product
   2. Delivery to site
   3. Installation
   4. Labor
   5. Insurance
   6. Payroll
   7. Taxes
   8. Bonding
   9. Overhead and Profit (O&P).
   10. Equipment Rental

F. Engineer/Architect Responsibilities:
   1. Consult with Contractor for consideration and selection of products, suppliers , and installers.

2. Select products in consultation with Owner and transmit decision to Contractor.
3. Prepare Change Order.

G. Contractor Responsibilities:
1. Assist Engineer/Architect in selection of products, suppliers , and installers.
2. Obtain proposals from suppliers and installers and offer recommendations.
3. On notification of which products have been selected, execute purchase agreement with designated supplier and installer.
4. Arrange for and process shop drawings, product data, and samples. Arrange for delivery.
5. Promptly inspect products upon delivery for completeness, damage, and defects. Submit claims for transportation damage.

H. Differences in costs will be adjusted by Change Order.

1.03 ALLOWANCE SCHEDULE:

A. **General Contingency Allowance:**
1. In addition to the work shown on the contract documents, the contractor shall include in the base bid contract amount the following lump sum cash allowance amount:
a. Seventy Five Thousand Dollars ($75,000).
2. Contractor shall solicit a minimum of three (3) quotes for additional material or work to be performed under the Contingency Allowance.
a. General Contractor's Overhead and Profit cannot be added to these proposals. The General Contractor's Overhead and Profit in relation to the

1.04 SELECTION/DELIVERY/INSTALLATION PROCESS

A. Architect shall consult with Contractor in coordination of products and suppliers and shall make selection of products to be used.

B. Contractor shall assist Architect in determining qualified suppliers, obtain proposals from suppliers for Architect's review, and enter into purchase agreement with designated supplier chosen.

C. Contractor is responsible for arranging delivery, unloading and inspecting products for damage and defects.

D. Contractor shall comply with requirements of referenced specification section for installation and/or install per Manufacturer's recommendations.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 012200
UNIT PRICES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Measurement and payment criteria applicable to Work performed under a unit price payment method.

1.02 RELATED REQUIREMENTS

A. Document 002113 - Instructions to Bidders: Instructions for preparation of pricing for Unit Prices.

B. Section 012000 - Price and Payment Procedures: Additional payment and modification procedures.

1.03 COSTS INCLUDED

A. Unit Prices included on the Bid Form shall include full compensation for all required labor, products, tools, equipment, plant, transportation, services and incidentals; erection, application or installation of an item of the Work; overhead and profit.

1.04 UNIT QUANTITIES SPECIFIED

A. Quantities indicated in the Bid Form are for bidding and contract purposes only. Quantities and measurements of actual Work will determine the payment amount.

1.05 MEASUREMENT OF QUANTITIES

A. Contractor will take all measurements and compute quantities. Measurements and quantities will be verified by Engineer/Architect or Engineer of Record.

B. Assist by providing necessary equipment, workers, and survey personnel as required.

C. Measurement by Volume: Measured by cubic dimension using mean length, width and height or thickness. Soils muck out volume will be determined by Field Measure (FM).

D. Measurement by Area: Measured by square dimension using mean length and width or radius. Area will be determined by Field Measure (FM).

1.06 PAYMENT

A. Payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities of Work that is incorporated in or made necessary by the Work and accepted by the Engineer/Architect, multiplied by the unit price.

B. Only payment for unforseen unsuitable soils above and beyond what is already called out to be removed in the Geotech Report or any of the Construction Document Drawings shall will be deducted from the Removal/Replacement of Unsuitable Soils Allowance amount.

C. Payment will not be made for any of the following:
   1. Products wasted or disposed of in a manner that is not acceptable.
   2. Products determined as unacceptable before or after placement.
   3. Products not completely unloaded from the transporting vehicle.
   4. Products placed beyond the lines and levels of the required Work.
   5. Products remaining on hand after completion of the Work.
   6. Loading, hauling, and disposing of rejected Products.

1.07 DEFECT ASSESSMENT

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

1.08 SCHEDULE OF UNIT PRICES

A. The General Contractor shall provide a unit price per square foot (SF) field measured (FM) for the patch gypsum boad walls repair, finish, prime and paint to match existing finish color and

texture. This unit pricing amount will be used to charge against either the general contingency allowance as called for under 012100 Allowances.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 012300
ALTERNATES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Description of administrative and procedural requirements for Alternates.

B. Description of Alternates.

1.02 RELATED REQUIREMENTS

A. Document 002113 - Instructions to Bidders: Instructions for preparation of pricing for Alternates.

1.03 ACCEPTANCE OF ALTERNATES

A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in the Owner-Contractor Agreement.

B. Coordinate related work and modify surrounding work to integrate the Work of each Alternate designated in the Contract.

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 indicated as part of alternate.
2. Execute accepted alternates under the same conditions as other work of the Contract.

1.04 SCHEDULE OF ALTERNATES

A. Additive Alternate No. 01 - Additive alternate shall include operable window in lieu of fixed window as indicated in attached drawings and specifications.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 013000
ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. General administrative requirements.

B. Preconstruction meeting.

C. Progress meetings.

D. Progress photographs.

E. Coordination drawings.

F. Submittals for review, information, and project closeout.

G. Number of copies of submittals.

H. Requests for Interpretation (RFI) procedures.

I. Submittal procedures.

1.02 RELATED REQUIREMENTS

A. Section 016000 - Product Requirements: General product requirements.

1.03 GENERAL ADMINISTRATIVE REQUIREMENTS

A. Comply with requirements of Section 017000 - Execution and Closeout Requirements for coordination of execution of administrative tasks with timing of construction activities.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 COLLABORATION SOFTWARE

A. SUMMARY
   1. The Contractor will be required to utilize a web based construction project management collaboration software to submit, track, distribute and collaborate on project documentation and action items.
   2. The intent of utilizing a web based construction management application is to reduce cost and schedule risk, improve quality and safety, and maintain a healthy team dynamic by improving information flow, reducing non-productive activities, reducing rework and decreasing turnaround times.

B. SOFTWARE
   1. Procore (www.procore.com)

C. SOFTWARE CAPABILITIES (including but not limited to)
   1. Daily Log
      a. Provide daily log entry from web and mobile with automatic capture of daily weather conditions.
      b. Provide ability to attach photographs to entries directly from mobile.
      c. Provide reporting capabilities to easily report on man-hours and activities for a certain time frame and contractor.
   2. Dashboards
      a. Provide a dashboard that shows the status of all currently assigned items with drill down capability to see the subject, assignee and due date of each item.
   3. Deficiency Tracking
      a. Provide a means for recording, assigning and confirming completion of any deficiency or observation noted during the course of construction. Must be accessible from web and mobile.

4. Directory
    a. Provide a directory of all team member's contact information that is accessible from web and mobile.
5. Documents
    a. Provide a storage location for miscellaneous project documents with the ability to have a folder hierarchy and privacy settings on folders.
    b. There should not be a storage limit.
    c. Provide download tracking.
    d. Provide the ability to revision and check out files, with access to all previous revisions.
6. Drawings
    a. Provide access to a system maintained current set of drawings on web and mobile, with access to all previous revisions as well.
    b. Provide automatic hyperlinking capability for detail callouts.
    c. Provide drawing markup capabilities on web and mobile.
    d. Provide ability to link RFIs, Submittals, Punchlist Items, Photos and Project Documents to the drawings.
    e. Drawing Markups should be carried forward when new revisions are uploaded.
    f. Markups and linked documentation should be able to be public or private.
7. Financial Management
    a. Provide ability to manage contracts, payment applications and change orders through the software.
    b. Provide ability to view contracts and change orders from web and mobile.
8. Inspections
    a. Provide ability to create inspections from web and mobile.
    b. Provide ability to create a deficiency item from an inspection that can be assigned and tracked to completion.
9. Meetings
    a. Provide ability to create, edit and view meeting minutes from web and mobile.
    b. Provide ability to create action items with assignees and due dates from a meeting item.
10. Mobile Accessibility
    a. Provide native mobile applications for iOS and Android phones at a minimum that provide access to relevant project documentation, including as-built versions of Drawings and Specifications, even when there is no internet access.
11. Photos
    a. Provide ability to upload and view photos from web and mobile.
    b. Provide ability to markup photos from mobile to clarify anything important in the photo.
    c. Provide ability to link photos to specific locations on drawings.
12. Punchlist
    a. Provide ability to create punchlist items from web and mobile and link them to specific locations on the drawings.
    b. Provide ability to distribute punchlist items to all contractors, for contractors to mark them as resolved with photographic proof of resolution via mobile, and for the items to be marked as complete via mobile or web. .
13. Requests for Information (RFIs)
    a. Provide ability to create RFIs with assignees, due dates and attachments.
    b. Provide ability for assignees to respond to RFIs both via the software and by responding to the system generated email.
    c. Provide an auto-generated log of all RFIs.
14. Schedule

a. Provide ability to display schedules from typical scheduling software such as Microsoft Project, Primavera P3, Primavera P6 or Asta Powerproject.

15. Specifications
    a. Provide ability to upload project specifications and manage them at the individual specification level.
    b. Provide ability to view and search specifications on web and mobile.
    c. Provide ability to upload revisions to individual specifications and maintain all revision history.
    d. Provide an auto-generated current specification log that provides access to the current version of each specification.
    e. Provide ability to link specifications to submittals and view the specification from the submittal.
16. Submittals
    a. Provide ability to upload a submittal register of all expected submittals.
    b. Provide ability to create multi-step approval workflows for submittals, with reminder notifications for the current assignee.
    c. Provide the ability to upload any file type without size restrictions.
    d. Provide an auto-generated submittal log.

D. TECHNOLOGY
1. Fully web based with mobile apps for Windows, iOS and Android phones.
2. Accessible without logging in through a virtual private network (VPN).
3. Works on the current version of Internet Explorer, Google Chrome, Mozilla firefox and Apple Safari browsers.
4. Can generate emails automatically, and all attachments are included in the emails via download links to avoid emails not being delivered due to size.
5. PDF output of forms such as RFIs, Submittals, Meetings, Change Orders, etc. should be available and customizable.

E. TRAINING AND SUPPORT
1. The software selected must provide support to all parties via email, phone and live chat at no additional charge.
2. The software selected must provide training in the form of self-paced learning videos as well as interactive webinars.
3. The contractor shall hold a kickoff meeting with the Owner and applicable consultants at the beginning of the project to discuss how the software will be used, routing & naming protocols, etc.

F. PROCEDURES
1. RFIs and Submittals
    a. The Contractor will be responsible for submitting all RFIs and Submittals through the software and assigning them to the appropriate parties.
    b. Architects / Engineers / Consultants etc. are responsible for posting all responses to these items via the software, including all relevant attachments.
    c. The Contractor will distribute responses to all affected subcontractors and confirm agreement with the response by closing the item.
2. Construction Documentation
    a. The Contractor will manage Drawings, Specifications and Documents in the software to ensure that the current version of all applicable construction documentation is available to the entire team via web and mobile.
    b. The Contractor will ensure that all RFIs which modify the current drawings are posted to the drawings and available via web and mobile within 24 hours of the RFI being responded to.
3. Contractor will record and distribute meeting minutes and action items via the software.
4. Contractor will take daily site photos and make them publicly available.

5. Punchlist
    a. All punchlist items will be managed through the software.
    b. Punchlist items will be created by the Contractor while walking with the Owner and applicable consultants.
    c. It will be at the Owner's discretion whether or not Punchlist Items can be closed while a representative from the Owner or applicable consultant is not present.
6. General
    a. It is intended that the contractor will utilize the software for at least all functions identified in "Section B - Software Capabilities."

G. PRICING
1. The Contractor's proposal shall be inclusive of all software costs.
2. The cost of Procore Technologies services has been paid in full by the Architect/Engineer.
3. The software must allow for unlimited users to ensure that all parties have access to the system.

3.02 PRECONSTRUCTION MEETING

A. Engineer/Architect will schedule a meeting within 7 days after Notice of Award.

B. Attendance Required:
1. Owner.
2. Engineer/Architect.
3. Contractor.

C. Agenda:
1. Execution of Owner-Contractor Agreement.
2. Submission of executed bonds and insurance certificates.
3. Submission of list of subcontractors, list of products, schedule of values, and progress schedule.
4. Designation of personnel representing the parties of the owner, contractor and <1|A/E|>.
5. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
6. Owners requirements and work constraints.

D. Record minutes and distribute copies within two days after meeting to participants, with two copies to Engineer/Architect, Owner, participants, and those affected by decisions made.

3.03 PROGRESS MEETINGS

A. Schedule and administer meetings throughout progress of the Work at maximum monthly intervals.

B. Make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.

C. Attendance Required:
1. Contractor.
2. Owner.
3. Engineer/Architect.
4. Contractor's superintendent.
5. Major subcontractors.

D. Agenda:
1. Review minutes of previous meetings.
2. Review of work progress.
3. Field observations, problems, and decisions.
4. Identification of problems that impede, or will impede, planned progress.
5. Review of submittals schedule and status of submittals.
6. Review of off-site fabrication and delivery schedules.

7. Maintenance of progress schedule.
8. Corrective measures to regain projected schedules.
9. Planned progress during succeeding work period.
10. Maintenance of quality and work standards.
11. Effect of proposed changes on progress schedule and coordination.
12. Other business relating to work.

E. Record minutes and distribute copies within two days after meeting to participants, with two copies to Engineer/Architect, Owner, participants, and those affected by decisions made.

3.04 CONSTRUCTION PROGRESS SCHEDULE - SEE SECTION 013216

3.05 REQUESTS FOR INTERPRETATION (RFI)

A. Definition: A request seeking one of the following:
1. An interpretation, amplification, or clarification of some requirement of Contract Documents arising from inability to determine from them the exact material, process, or system to be installed; or when the elements of construction are required to occupy the same space (interference); or when an item of work is described differently at more than one place in Contract Documents.

B. Preparation: Prepare an RFI immediately upon discovery of a need for interpretation of Contract Documents. Failure to submit a RFI in a timely manner is not a legitimate cause for claiming additional costs or delays in execution of the work.
1. Prepare a separate RFI for each specific item.
2. Combine RFI and its attachments into a single electronic file. PDF format is preferred.

C. Reason for the RFI: Prior to initiation of an RFI, carefully study all Contract Documents to confirm that information sufficient for their interpretation is definitely not included.
1. Include in each request Contractor's signature attesting to good faith effort to determine from Contract Documents information requiring interpretation.
2. Unacceptable Uses for RFIs: Do not use RFIs to request the following::
a. Approval of submittals (use procedures specified elsewhere in this section).
b. Approval of substitutions (see Section - 016000 - Product Requirements)
c. Changes that entail change in Contract Time and Contract Sum (comply with provisions of the Conditions of the Contract).
d. Different methods of performing work than those indicated in the Contract Drawings and Specifications (comply with provisions of the Conditions of the Contract).
3. Improper RFIs: Requests not prepared in compliance with requirements of this section, and/or missing key information required to render an actionable response. They will be returned without a response, with an explanatory notation.
4. Frivolous RFIs: Requests regarding information that is clearly indicated on, or reasonably inferable from, Contract Documents, with no additional input required to clarify the question. They will be returned without a response, with an explanatory notation.

D. Content: Include identifiers necessary for tracking the status of each RFI, and information necessary to provide an actionable response.
1. Official Project name and number, and any additional required identifiers established in Contract Documents.
2. Owner's, Engineer/Architect's, and Contractor's names.
3. Discrete and consecutive RFI number, and descriptive subject/title.
4. Issue date, and requested reply date.
5. Reference to particular Contract Document(s) requiring additional information/interpretation. Identify pertinent drawing and detail number and/or specification section number, title, and paragraph(s).
6. Annotations: Field dimensions and/or description of conditions which have engendered the request.

7. Contractor's suggested resolution: A written and/or a graphic solution, to scale, is required in cases where clarification of coordination issues is involved, for example; routing, clearances, and/or specific locations of work shown diagrammatically in Contract Documents. If applicable, state the likely impact of the suggested resolution on Contract Time or the Contract Sum.

E. Attachments: Include sketches, coordination drawings, descriptions, photos, submittals, and other information necessary to substantiate the reason for the request.

F. RFI Log: Prepare and maintain a tabular log of RFIs for the duration of the project.
   1. Maintain on the Electronic Document Submittal Service.

G. Review Time: Engineer/Architect will respond and return RFIs to Contractor within seven calendar days of receipt. For the purpose of establishing the start of the mandated response period, RFIs received after 12:00 noon will be considered as having been received on the following regular working day.
   1. Response period may be shortened or lengthened for specific items, subject to mutual agreement, and recorded in a timely manner in progress meeting minutes.

H. Responses: Content of answered RFIs will not constitute in any manner a directive or authorization to perform extra work or delay the project. If in Contractor's belief it is likely to lead to a change to Contract Sum or Contract Time, promptly issue a notice to this effect, and follow up with an appropriate Change Order request to Owner.
   1. Response may include a request for additional information, in which case the original RFI will be deemed as having been answered, and an amended one is to be issued forthwith. Identify the amended RFI with an R suffix to the original number.
   2. Do not extend applicability of a response to specific item to encompass other similar conditions, unless specifically so noted in the response.
   3. Upon receipt of a response, promptly review and distribute it to all affected parties, and update the RFI Log.
   4. Notify Engineer/Architect within seven calendar days if an additional or corrected response is required by submitting an amended version of the original RFI, identified as specified above.

3.06 SUBMITTAL SCHEDULE

A. Submit to Engineer/Architect for review a schedule for submittals in tabular format.
   1. Submit at the same time as the preliminary schedule specified in Section - 013216 - Construction Progress Schedule.

3.07 SUBMITTALS FOR REVIEW

A. When the following are specified in individual sections, submit them for review:
   1. Product data.
   2. Shop drawings.
   3. Samples for selection.
   4. Samples for verification.

B. The contractor who prepared the submittals for review must represent that they are licensed and qualified to perform the work in the submittal, and said work is in full compliance with applicable codes.

C. The contractor agrees that all submittals have been reviewed by the Architect and/or Engineer only for conformance with the design concept of the project and with the information delineated in the contract drawings and specifications. A returned review whether marked as "No Exceptions" or "Exceptions as Noted" does not waive any provisions of the contract documents. Contractor shall verify all details, dimensions and quantities, and coordinate with the work of other trades. Architect and/or Engineer's review of a submittal shall not relieve the contractor from responsibility for deviations, errors, or omissions in the shop drawings or submittals.

D. Samples will be reviewed for aesthetic, color, or finish selection.

E. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article below and for record documents purposes described in Section 017800 - Closeout Submittals.

3.08 SUBMITTALS FOR INFORMATION

A. When the following are specified in individual sections, submit them for information:
   1. Design data.
   2. Certificates.
   3. Test reports.
   4. Inspection reports.
   5. Manufacturer's instructions.
   6. Manufacturer's field reports.
   7. Other types indicated.

3.09 SUBMITTALS FOR PROJECT CLOSEOUT

A. Submit Correction Punch List for Substantial Completion.

B. Submit Final Correction Punch List for Substantial Completion.

C. When the following are specified in individual sections, submit them at project closeout in compliance with requirements of Section 017800 - Closeout Submittals:
   1. Project record documents.
   2. Operation and maintenance data.
   3. Warranties.
   4. Bonds.
   5. Other types as indicated.

D. Submit for Owner's benefit during and after project completion.

3.10 SUBMITTAL PROCEDURES

A. General Requirements:
   1. Use a separate transmittal for each item and each school campus.
   2. Transmit using approved form.
      a. Use Contractor's form, subject to prior approval by Engineer/Architect.
   3. Sequentially identify each item. For revised submittals use original number and a sequential numerical suffix.
   4. Identify: Project; Contractor; subcontractor or supplier; pertinent drawing and detail number; and specification section number and article/paragraph, as appropriate on each copy.
   5. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction work, and coordination of information is in accordance with the requirements of the work and Contract Documents.
      a. Submittals from sources other than the Contractor, or without Contractor's stamp will not be acknowledged, reviewed, or returned.
   6. Deliver each submittal on date noted in submittal schedule, unless an earlier date has been agreed to by all affected parties, and is of the benefit to the project.
      a. Upload submittals in electronic form to Electronic Document Submittal Service website.
   7. Schedule submittals to expedite the Project, and coordinate submission of related items.
      a. For each submittal for review, allow 10 working days excluding delivery time to and from the Contractor.
      b. For sequential reviews involving Engineer/Architect's consultants, Owner, or another affected party, allow an additional 7 days.
   8. Identify variations from Contract Documents and product or system limitations that may be detrimental to successful performance of the completed work.

9. When revised for resubmission, identify all changes made since previous submission.
10. Incomplete submittals will not be reviewed, unless they are partial submittals for distinct portion(s) of the work, and have received prior approval for their use.

B. Product Data Procedures:
1. Submit only information required by individual specification sections.
2. Collect required information into a single submittal.
3. Do not submit (Material) Safety Data Sheets for materials or products.
4. Submit manufacturer's standard published data. **Where multiple choices occur on a submittal, it will be the Contractor's responsibility to cleary mark in contrasting color by means of underlining, highlighting, circling, ect... each copy to identify applicable products, models, options, and other data.** Unmarked copies will be immediately rejected and sent back to the General Contractor. Supplement manufacturers' standard data to provide information specific to this Project.

C. Shop Drawing Procedures:
1. Prepare accurate, drawn-to-scale, original shop drawing documentation by interpreting Contract Documents and coordinating related work.
2. Do not reproduce Contract Documents to create shop drawings.
3. Generic, non-project-specific information submitted as shop drawings do not meet the requirements for shop drawings.
4. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances. **Canned or Typical drawings, unless they specifically apply to the project, will be immediatly rejected.**

D. Samples Procedures:
1. Transmit related items together as single package.
2. Identify each item to allow review for applicability in relation to shop drawings showing installation locations.
3. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
a. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.
b. **All submisions for the chosing of a products color must be physical samples indicating the products true and final color.** Digital and or printed samples will not be accepted.

E. Transmit each submittal with a copy of approved submittal identification form.

F. Contractor bears responsibility for all additional costs or work associated with work performed or materials installed prior to a returned apporved submittal.

3.11 SUBMITTAL REVIEW

A. Submittals for Review: Engineer/Architect will review each submittal, and provide no exceptions, or take other appropriate action.

B. Submittals for Information: Engineer/Architect will acknowledge receipt and review. See below for actions to be taken.

C. Engineer/Architect's actions will be reflected by marking each returned submittal using virtual stamp on electronic submittals.

D. Engineer/Architect's actions on items submitted for review:
1. No Exceptions
a. Purchase, Fabrication, delivery, and/or installation may take place.
2. Exceptions as Noted
a. Contractor's option to resubmit. However; all mark ups must be incorporated in the construction whether acknowledged in a resubmittal or not.

3. Revise and Resbubmit
    a. Must be resubmitted
4. Incomplete Submittal
    a. Must be resubmitted
5. Submit Specified Item
    a. Must be resubmitted
6. Submittal Rejected
    a. Must be resubmitted

E. Engineer/Architect's and consultants' actions on items submitted for information:

END OF SECTION

SECTION 014000
QUALITY REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Submittals.

B. Quality assurance.

C. Testing and inspection agencies and services.

D. Contractor's construction-related professional design services.

E. Contractor's design-related professional design services.

F. Control of installation.

G. Mock-ups.

H. Tolerances.

I. Manufacturers' field services.

J. Defect Assessment.

1.02 REFERENCE STANDARDS

A. IAS AC89 - Accreditation Criteria for Testing Laboratories 2018.

1.03 CONTRACTOR'S CONSTRUCTION-RELATED PROFESSIONAL DESIGN SERVICES

A. Coordination: Contractor's professional design services are subject to requirements of project's Conditions for Construction Contract.

B. Provide such engineering design services as may be necessary to plan and safely conduct certain construction operations, pertaining to, but not limited to the following:
   1. Temporary sheeting, shoring, or supports.
   2. Temporary bracing.

1.04 CONTRACTOR'S DESIGN-RELATED PROFESSIONAL DESIGN SERVICES

A. Coordination: Contractor's professional design services are subject to requirements of project's Conditions for Construction Contract.

B. Base design on performance and/or design criteria indicated in individual specification sections.

C. Scope of Contractor's Professional Design Services: Provide for the following items of work:
   1. Structural Design of Steel Trusses: As described in Section 054400 - Cold-Formed Metal Trusses.

1.05 SUBMITTALS

A. See Section 013000 - Administrative Requirements, for submittal procedures.

B. Test Reports: After each test/inspection, promptly submit two copies of report to Engineer/Architect and to Contractor.
   1. Include:
      a. Date issued.
      b. Project title and number.
      c. Name of inspector.
      d. Date and time of sampling or inspection.
      e. Identification of product and specifications section.
      f. Location in the Project.
      g. Type of test/inspection.
      h. Date of test/inspection.
      i. Results of test/inspection.

j. Compliance with Contract Documents.
k. When requested by Engineer/Architect, provide interpretation of results.

C. Certificates: When specified in individual specification sections or by code, submit certification by the manufacturer and Contractor or installation/application subcontractor to Engineer/Architect, in quantities specified for Product Data.
1. Indicate material or product complies with or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

D. Erection Drawings: Submit drawings for Engineer/Architect's benefit as contract administrator or for Owner.
1. Submit for information for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents.

1.06 QUALITY ASSURANCE

A. Testing Agency Qualifications:
1. Prior to start of work, submit agency name, address, and telephone number, and names of full time registered Engineer and responsible officer.
2. Submit copy of report of laboratory facilities inspection made by NIST Construction Materials Reference Laboratory during most recent inspection, with memorandum of remedies of any deficiencies reported by the inspection.

1.07 REFERENCES AND STANDARDS

1.08 TESTING AND INSPECTION AGENCIES AND SERVICES

A. Contractor shall employ and pay for services of an independent testing agency to perform specified testing and inspection.

B. Employment of agency in no way relieves Contractor of obligation to perform Work in accordance with requirements of Contract Documents.

C. Contractor Employed Agency:
1. Testing agency: Comply with requirements of ASTM E329, ASTM E543, ASTM C1021, ASTM C1077, ASTM C1093, and ASTM D3740.
2. Laboratory Qualifications: Accredited by IAS according to IAS AC89.
3. Laboratory: Authorized to operate in the State in which the Project is located.
4. Laboratory Staff: Maintain a full time registered Engineer on staff to review services.
5. Testing Equipment: Calibrated at reasonable intervals either by NIST or using an NIST established Measurement Assurance Program, under a laboratory measurement quality assurance program.

PART 3 EXECUTION

2.01 CONTROL OF INSTALLATION

A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.

B. Comply with manufacturers' instructions, including each step in sequence.

C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Engineer/Architect before proceeding.

D. Comply with specified standards as minimum quality for the work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

E. Have work performed by persons qualified to produce required and specified quality.

F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.

G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

2.02 MOCK-UPS

A. Before installing portions of the Work where mock-ups are required, for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work. The purpose of mock-up is to demonstrate the proposed range of aesthetic effects and workmanship.

B. Accepted mock-ups establish the standard of quality the Engineer/Architect will use to judge the Work.

C. Integrated Exterior Mock-ups: Construct integrated exterior mock-up as indicated on drawings. Coordinate installation of exterior envelope materials and products as required in individual Specification Sections. Provide adequate supporting structure for mock-up materials as necessary.

D. Notify Engineer/Architect seven (7) working days in advance of dates and times when mock-ups will be constructed.

E. Tests shall be performed under provisions identified in this section and identified in the respective product specification sections.

F. Assemble and erect specified items with specified attachment and anchorage devices, flashings, seals, and finishes.

G. Obtain Engineer/Architect's approval of mock-ups before starting work, fabrication, or construction.
   1. Engineer/Architect will issue written comments within five (5) working days of initial review and each subsequent follow up review of each mock-up.
   2. Make corrections as necessary until Architect's approval is issued.

H. Accepted mock-ups shall be a comparison standard for the remaining Work.

I. Where mock-up has been accepted by Engineer/Architect and is specified in product specification sections to be removed, protect mock-up throughout construction, remove mock-up and clear area when directed to do so by Engineer/Architect.

2.03 TOLERANCES

A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.

B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Engineer/Architect before proceeding.

C. Adjust products to appropriate dimensions; position before securing products in place.

2.04 TESTING AND INSPECTION

A. Testing Agency Duties:
   1. Test samples of mixes submitted by Contractor.
   2. Provide qualified personnel at site. Cooperate with Engineer/Architect and Contractor in performance of services.
   3. Perform specified sampling and testing of products in accordance with specified standards.
   4. Ascertain compliance of materials and mixes with requirements of Contract Documents.
   5. Promptly notify Engineer/Architect and Contractor of observed irregularities or non-compliance of Work or products.
   6. Perform additional tests and inspections required by Engineer/Architect.
   7. Submit reports of all tests/inspections specified.

B. Limits on Testing/Inspection Agency Authority:

1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
2. Agency may not approve or accept any portion of the Work.
3. Agency may not assume any duties of Contractor.
4. Agency has no authority to stop the Work.

C. Contractor Responsibilities:
1. Deliver to agency at designated location, adequate samples of materials proposed to be used that require testing, along with proposed mix designs.
2. Cooperate with laboratory personnel, and provide access to the Work and to manufacturers' facilities.
3. Provide incidental labor and facilities:
a. To provide access to Work to be tested/inspected.
b. To obtain and handle samples at the site or at source of Products to be tested/inspected.
c. To facilitate tests/inspections.
d. To provide storage and curing of test samples.
4. Notify Engineer/Architect and laboratory 24 hours prior to expected time for operations requiring testing/inspection services.
5. Employ services of an independent qualified testing laboratory and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
6. Arrange with Owner's agency and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.

D. Re-testing required because of non-compliance with specified requirements shall be performed by the same agency on instructions by Engineer/Architect.

E. Re-testing required because of non-compliance with specified requirements shall be paid for by Contractor.

2.05 MANUFACTURERS' FIELD SERVICES

A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, as applicable, and to initiate instructions when necessary.

B. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

2.06 DEFECT ASSESSMENT

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

B. If, in the opinion of Engineer/Architect, it is not practical to remove and replace the work, Engineer/Architect will direct an appropriate remedy or adjust payment.

END OF SECTION

SECTION 014100
REGULATORY REQUIREMENTS

PART 1 GENERAL

1.01 SUMMARY OF REFERENCE STANDARDS

A. Regulatory requirements applicable to this project that all work shall comply with are as follows:

B. 28 CFR 35 - Nondiscrimination on the Basis of Disability in State and Local Government Services; Final Rule; Department of Justice current edition.

C. 28 CFR 36 - Nondiscrimination by Public Accommodations and in Commercial Facilities; Final Rule; Department of Justice current edition.

D. 36 CFR 1191 - Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities; Architectural Barriers Act (ABA) Accessibility Guidelines current edition.

E. 49 CFR 37 - Transportation Services for Individuals with Disabilities (ADA) current edition.

F. ADA Standards - Americans with Disabilities Act (ADA) Standards for Accessible Design 2010.

G. 29 CFR 1910 - Occupational Safety and Health Standards current edition.

H. ICC A117.1 - Accessible and Usable Buildings and Facilities 2017.

I. Building Code: ICC (IBC) - International Building Code 2018.

J. Plumbing Code: ICC International Plumbing Code 2018.

K. Mechanical Code: ICC International Mechanical Code 2018.

L. Fuel Gas Code: ICC Fuel Gas Code 2018.

M. NFPA 70 - National Electrical Code Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

1.02 RELATED REQUIREMENTS

A. Section 014000 - Quality Requirements.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 014533
CODE-REQUIRED SPECIAL INSPECTIONS AND PROCEDURES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Code-required special inspections.

B. Testing services incidental to special inspections.

C. Submittals.

1.02 DEFINITIONS

A. Code or Building Code: AHJ's currently adopted edition of the International Building Code and, more specifically, Chapter 17 - Structural Tests and Inspections, of same.

B. Authority Having Jurisdiction (AHJ): Agency or individual officially empowered to enforce the building, fire and life safety code requirements of the permitting jurisdiction in which the Project is located.

C. Special Inspection:
   1. Special inspections are inspections and testing of materials, installation, fabrication, erection or placement of components and connections mandated by the AHJ that also require special expertise to ensure compliance with the approved Contract Documents and the referenced standards.
   2. Special inspections are separate from and independent of tests and inspections conducted by Owner or Contractor for the purposes of quality assurance and contract administration.

1.03 REFERENCE STANDARDS

A. ACI 318 - Building Code Requirements for Structural Concrete and Commentary 2014 (Errata 2018).

B. AISC 360 - Specification for Structural Steel Buildings 2016 (Revised 2021).

C. ASTM C31/C31M - Standard Practice for Making and Curing Concrete Test Specimens in the Field 2021a.

D. ASTM C172/C172M - Standard Practice for Sampling Freshly Mixed Concrete 2017.

E. ASTM D3740 - Standard Practice for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction 2019.

F. AWS D1.1/D1.1M - Structural Welding Code - Steel 2020.

G. AWS D1.3/D1.3M - Structural Welding Code - Sheet Steel 2018.

H. AWS D1.4/D1.4M - Structural Welding Code - Reinforcing Steel 2018.

I. IAS AC89 - Accreditation Criteria for Testing Laboratories 2018.

J. IAS AC291 - Accreditation Criteria for Special Inspection Agencies 2017.

1.04 SUBMITTALS

A. See Section 013000 - Administrative Requirements, for submittal procedures.

B. Special Inspection Agency Qualifications: Prior to the start of work, the Special Inspection Agency is required to:
   1. Submit agency name, address, and telephone number, names of full time registered Engineer and responsible officer.
   2. Submit copy of report of laboratory facilities inspection made by NIST Construction Materials Reference Laboratory during most recent inspection, with memorandum of remedies of any deficiencies reported by the inspection.

3. Submit certification that Special Inspection Agency is acceptable to AHJ.

C. Testing Agency Qualifications: Prior to the start of work, the Testing Agency is required to:
   1. Submit agency name, address, and telephone number, and names of full time registered Engineer and responsible officer.
   2. Submit copy of report of laboratory facilities inspection made by NIST Construction Materials Reference Laboratory during most recent inspection, with memorandum of remedies of any deficiencies reported by the inspection.
   3. Submit certification that Testing Agency is acceptable to AHJ.

D. Special Inspection Reports: After each special inspection, Special Inspector is required to promptly submit at least two copies of report; one to Engineer/Architect and one to the AHJ.
   1. Include:
      a. Date issued.
      b. Project title and number.
      c. Name of Special Inspector.
      d. Date and time of special inspection.
      e. Identification of product and specifications section.
      f. Location in the Project.
      g. Type of special inspection.
      h. Date of special inspection.
      i. Results of special inspection.
      j. Compliance with Contract Documents.

E. Test Reports: After each test or inspection, promptly submit at least two copies of report; one to Engineer/Architect and one to AHJ.
   1. Include:
      a. Date issued.
      b. Project title and number.
      c. Name of inspector.
      d. Date and time of sampling or inspection.
      e. Identification of product and specifications section.
      f. Location in the Project.
      g. Type of test or inspection.
      h. Date of test or inspection.
      i. Results of test or inspection.
      j. Compliance with Contract Documents.

1.05 SPECIAL INSPECTION AGENCY

A. The Contractor will be required to pay for and employ services of a Special Inspection Agency to perform inspections and associated testing and sampling in accordance with ASTM E329 and required by the building code.

B. Employment of agency in no way relieves Contractor of obligation to perform work in accordance with requirements of Contract Documents.

1.06 TESTING AND INSPECTION AGENCIES

1.07 QUALITY ASSURANCE

A. Special Inspection Agency Qualifications:
   1. Independent firm specializing in performing testing and inspections of the type specified in this section.
   2. Accredited by IAS according to IAS AC291.

B. Testing Agency Qualifications:
   1. Independent firm specializing in performing testing and inspections of the type specified in this section.

2. Accredited by IAS according to IAS AC89.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 SCHEDULE OF SPECIAL INSPECTIONS, GENERAL

A. Frequency of Special Inspections: Special Inspections are indicated as continuous or periodic.
   1. Continuous Special Inspection: Special Inspection Agency is required to be present in the area where the work is being performed and observe the work at all times the work is in progress.
   2. Periodic Special Inspection: Special Inspection Agency is required to be present in the area where work is being performed and observe the work part-time or intermittently and at the completion of the work.

3.02 SPECIAL INSPECTIONS FOR STEEL CONSTRUCTION

A. High-Strength Bolt, Nut and Washer Material:
   1. Verify identification markings comply with ASTM standards specified in the approved contract and to AISC 360, Section A3.3; periodic.
   2. Submit manufacturer's certificates of compliance; periodic.

B. High-Strength Bolting Installation: Verify items listed below comply with AISC 360, Section M2.5.
   1. Snug tight joints; periodic.

C. Structural Steel and Cold Formed Steel Deck Material:
   1. Structural Steel: Verify identification markings comply with AISC 360, Section M3.5; periodic.
   2. Other Steel: Verify identification markings comply with ASTM standards specified in the approved Contract Documents; periodic.
   3. Submit manufacturer's certificates of compliance and test reports; periodic.

D. Weld Filler Material:
   1. Verify identification markings comply with AWS standards specified in the approved Contract Documents and to AISC 360, Section A3.5; periodic.
   2. Submit manufacturer's certificates of compliance; periodic.

E. Welding:
   1. Structural Steel and Cold Formed Steel Deck:
      a. Complete and Partial Joint Penetration Groove Welds: Verify compliance with AWS D1.1/D1.1M; continuous.
      b. Multipass Fillet Welds: Verify compliance with AWS D1.1/D1.1M; continuous.
      c. Single Pass Fillet Welds Less than 5/16 inch (7.94 mm) Wide: Verify compliance with AWS D1.1/D1.1M; periodic.
      d. Plug and Slot Welds: Verify compliance with AWS D1.1/D1.1M; continuous.
      e. Single Pass Fillet Welds 5/16 inch (7.94 mm) or Greater: Verify compliance with AWS D1.1/D1.1M; continuous.
      f. Floor and Roof Deck Welds: Verify compliance with AWS D1.3/D1.3M; continuous.
   2. Reinforcing Steel: Verify items listed below comply with AWS D1.4/D1.4M and ACI 318, Section 3.5.2.
      a. Verification of weldability; periodic.
      b. Reinforcing steel resisting flexural and axial forces in intermediate and special moment frames as well as boundary elements of special structural walls of concrete and shear reinforcement; continuous.
      c. Shear reinforcement; continuous.
      d. Other reinforcing steel; periodic.

F. Steel Frame Joint Details: Verify compliance with approved Contract Documents.

1. Details, bracing and stiffening; periodic.
2. Member locations; periodic.
3. Application of joint details at each connection; periodic.

3.03 SPECIAL INSPECTIONS FOR CONCRETE CONSTRUCTION

A. Reinforcing Steel, Including Prestressing of Tendons and Placement: Verify compliance with approved Contract Documents and ACI 318, Sections 3.5 and 7.1 through 7.7; periodic.

B. Reinforcing Steel Welding: Verify compliance with AWS D1.4/D1.4M and ACI 318, Section 3.5.2; periodic.

C. Anchors Cast in Concrete: Verify compliance with ACI 318, 17.8.2; periodic.

D. Anchors Post-Installed in Hardened Concrete: Verify compliance with ACI 318.

E. Design Mix: Verify plastic concrete complies with the design mix in approved Contract Documents and with ACI 318, Chapter 4 and 5.2; periodic.

F. Concrete Sampling Concurrent with Strength Test Sampling: Each time fresh concrete is sampled for strength tests, verify compliance with ASTM C172/C172M, ASTM C31/C31M and ACI 318, Sections 5.6 and 5.8 and record the following, continuous:
   1. Slump.
   2. Air content.
   3. Temperature of concrete.

G. Specified Curing Temperature and Techniques: Verify compliance with approved Contract Documents and ACI 318, Sections 5.11 through 5.13; periodic.

H. Concrete Strength in Situ: Verify concrete strength complies with approved Contract Documents and ACI 318, Section 6.2, for the following.

I. Formwork Shape, Location and Dimensions: Verify compliance with approved Contract Documents and ACI 318, Section 6.1.1; periodic.

J. Welding of Reinforcing Bars: Conduct special inspections and verify Special Inspector's qualifications in accordance with requirements of AWS D1.4/D1.4M.

3.04 SPECIAL INSPECTIONS FOR MASONRY CONSTRUCTION

A. Masonry Structures Subject to Special Inspection:
   1. Empirically designed masonry, glass unit masonry and masonry veneer in structures designated as "essential facilities".
   2. Engineered masonry in structures classified as "low hazard..." and "substantial hazard to human life in the event of failure".

B. Verify each item below complies with approved Contract Documents and the applicable articles of TMS 402/602.
   1. Inspections and Approvals:
      a. Verify compliance with the required inspection provisions of the approved Contract Documents; periodic.
      b. Verify approval of submittals required by Contract Documents; periodic.
   2. Compressive Strength of Masonry: Verify compressive strength of masonry units prior to start of construction unless specifically exempted by code; periodic.
   3. Slump Flow and Visual Stability Index (VSI): Verify compliance as self consolidating grout arrives on site; continuous.
   4. Joints and Accessories: When masonry construction begins, verify:
      a. Proportions of site prepared mortar; periodic.
      b. Construction of mortar joints; periodic.
      c. Location of reinforcement, connectors, prestressing tendons, anchorages, etc; periodic.
   5. Structural Elements, Joints, Anchors, Protection: During masonry construction, verify:

a. Size and location of structural elements; periodic.
b. Type, size and location of anchors, including anchorage of masonry to structural members, frames or other construction; periodic.
c. Size, grade and type of reinforcement, anchor bolts and prestressing tendons and anchorages; periodic.
d. Welding of reinforcing bars; continuous.

6. Grouting Preparation: Prior to grouting, verify:
   a. Grout space is clean; periodic.
   b. Correct placement of reinforcing, connectors, prestressing tendons and anchorages; periodic.
   c. Correctly proportioned site prepared grouts and prestressing grout for bonded tendons; periodic.
   d. Correctly constructed mortar joints; periodic.
7. Preparation of Grout Specimens, Mortar Specimens and Prisms: Observe preparation of specimens; periodic.

3.05 SPECIAL INSPECTIONS FOR SOILS

A. Materials and Placement: Verify each item below complies with approved construction documents and approved geotechnical report.
   1. Design bearing capacity of material below shallow foundations; periodic.
   2. Design depth of excavations and suitability of material at bottom of excavations; periodic.
   3. Materials, densities, lift thicknesses; placement and compaction of backfill: continuous.
   4. Subgrade, prior to placement of compacted fill verify proper preparation; periodic.

B. Testing: Classify and test excavated material; periodic.

3.06 SPECIAL INSPECTIONS FOR WIND RESISTANCE

A. Cold-Formed Steel Light Frame Construction:
   1. Field welding; periodic.
   2. Screw attachment, bolting, anchoring and other fastening of components within the main wind force-resisting system; periodic

B. Wind Resisting Components:
   1. Roof covering, roof deck, and floor framing connections; periodic.
   2. Exterior wall covering and wall connections to roof and floor diaphragms and framing; periodic.

C. Structural Observations for Wind Resistance: Visually observe structural system for general compliance with the approved Contract Documents; periodic.

3.07 OTHER SPECIAL INSPECTIONS

A. Provide for special inspection of work that, in the opinion of the AHJ, is unusual in nature.

3.08 SPECIAL INSPECTION AGENCY DUTIES AND RESPONSIBILITIES

A. Special Inspection Agency shall:
   1. Provide qualified personnel at site. Cooperate with Engineer/Architect and Contractor in performance of services.
   2. Perform specified sampling and testing of products in accordance with specified reference standards.
   3. Ascertain compliance of materials and products with requirements of Contract Documents.
   4. Promptly notify Engineer/Architect and Contractor of observed irregularities or non-compliance of work or products.
   5. Perform additional tests and inspections required by Engineer/Architect.
   6. Submit reports of all tests or inspections specified.

B. Limits on Special Inspection Agency Authority:

1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
2. Agency may not approve or accept any portion of the work.
3. Agency may not assume any duties of Contractor.
4. Agency has no authority to stop the work.

C. Re-testing required because of non-compliance with specified requirements shall be performed by the same agency on instructions by Engineer/Architect.

D. Re-testing required because of non-compliance with specified requirements shall be paid for by Contractor.

3.09 TESTING AGENCY DUTIES AND RESPONSIBILITIES

A. Testing Agency Duties:
1. Test samples submitted by Contractor.
2. Provide qualified personnel at site. Cooperate with Engineer/Architect and Contractor in performance of services.
3. Perform specified sampling and testing of products in accordance with specified standards.
4. Ascertain compliance of materials and mixes with requirements of Contract Documents.
5. Promptly notify Engineer/Architect and Contractor of observed irregularities or non-compliance of work or products.
6. Perform additional tests and inspections required by Engineer/Architect.
7. Submit reports of all tests or inspections specified.

B. Limits on Testing or Inspection Agency Authority:
1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
2. Agency may not approve or accept any portion of the work.
3. Agency may not assume any duties of Contractor.
4. Agency has no authority to stop the work.

C. On instructions by Engineer/Architect, perform re-testing required because of non-compliance with specified requirements, using the same agency.

D. Contractor will pay for re-testing required because of non-compliance with specified requirements.

3.10 CONTRACTOR DUTIES AND RESPONSIBILITIES

A. Contractor Responsibilities, General:
1. Deliver to agency at designated location, adequate samples of materials for special inspections that require material verification.
2. Cooperate with agency and laboratory personnel; provide access to approved documents at project site, to the work, to manufacturers' facilities, and to fabricators' facilities.
3. Provide incidental labor and facilities:
   a. To provide access to work to be tested or inspected.
   b. To obtain and handle samples at the site or at source of Products to be tested or inspected.
   c. To facilitate tests or inspections.
   d. To provide storage and curing of test samples.
4. Notify Engineer/Architect and laboratory 24 hours prior to expected time for operations requiring testing or inspection services.
5. Arrange with Owner's agency and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.

B. Contractor Responsibilities, Wind Force-Resisting System and Wind Force-Resisting Component: Submit written statement of responsibility for each item listed in the Statement of Special Inspections to AHJ and Owner prior to starting work. Statement of responsibility shall acknowledge awareness of special construction requirements and other requirements listed.

END OF SECTION

SECTION 015000
TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Temporary utilities.

B. Temporary sanitary facilities.

C. Temporary Controls: Barriers, enclosures, and fencing.

D. Vehicular access and parking.

E. Waste removal facilities and services.

1.02 TEMPORARY UTILITIES

A. Owner will provide the following:

1. Electrical power and metering, consisting of providing the power source. The contractor will be required to provide all means necessary to connect to it without added cost to the Owner.
2. Water supply, consisting of provided the water source. The contractor will be required to provide all means necessary to connect to it without added cost to the Owner.

B. Use trigger-operated nozzles for water hoses, to avoid waste of water.

1.03 TEMPORARY SANITARY FACILITIES

A. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.

B. Use of existing facilities is not permitted.

C. Maintain daily in clean and sanitary condition.

D. At end of construction, return facilities to same or better condition as originally found.

1.04 BARRIERS

A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public and to protect existing facilities and adjacent properties from damage from construction operations and demolition.

B. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

1.05 FENCING

A. Construction: Commercial grade chain link fence.

B. Provide 6 foot (1.8 m) high fence around construction site; equip with vehicular and pedestrian gates with locks.

1.06 EXTERIOR ENCLOSURES

A. Provide temporary insulated weather tight closure of exterior openings to accommodate acceptable working conditions and protection for Products, to allow for temporary heating and maintenance of required ambient temperatures identified in individual specification sections, and to prevent entry of unauthorized persons. Provide access doors with self-closing hardware and locks.

1.07 SECURITY

A. Coordinate with Owner's security program.

1.08 VEHICULAR ACCESS AND PARKING

A. Comply with regulations relating to use of streets and sidewalks, access to emergency facilities, and access for emergency vehicles.

B. Coordinate access and haul routes with governing authorities and Owner.

C. Provide and maintain access to fire hydrants, free of obstructions.

D. Provide means of removing mud from vehicle wheels before entering streets.

E. Existing on-site roads may be used for construction traffic.

F. Provide temporary parking areas to accommodate construction personnel. When site space is not adequate, provide additional off-site parking.

G. Do not interupt, alter, or disrupt bus or parent standard drop off or pick up times, procedures, or operations. Coordinate with Owner.

1.09 WASTE REMOVAL

A. Provide waste removal facilities and services as required to maintain the site in clean and orderly condition.

B. Provide containers with lids. Remove trash from site periodically.

C. If materials to be recycled or re-used on the project must be stored on-site, provide suitable non-combustible containers; locate containers holding flammable material outside the structure unless otherwise approved by the authorities having jurisdiction.

D. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.

1.10 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

A. Remove temporary utilities, equipment, facilities, materials, prior to Date of Substantial Completion inspection.

B. Remove underground installations to a minimum depth of 2 feet (600 mm). Grade site as indicated.

C. Clean and repair damage caused by installation or use of temporary work.

1.11 TEMPORARY STORAGE

A. General Contractor will be required to provide lockable temprary storage as required or necessary to complete the job. Existing facilities will not be allowed to be used for storage of any king.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 016000
PRODUCT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. General product requirements.

B. Transportation, handling, storage and protection.

C. Product option requirements.

D. Substitution limitations.

E. Maintenance materials, including extra materials, spare parts, tools, and software.

F. Non Asbestos containing materials certification.

1.02 RELATED REQUIREMENTS

A. Section 012500 - Substitution Procedures: Substitutions made during procurement and/or construction phases.

B. Section 017419 - Construction Waste Management and Disposal: Waste disposal requirements potentially affecting product selection, packaging and substitutions.

1.03 SUBMITTALS

A. Refer to Section 013000 Administrative Requirements for additional submittal requirements not indicated herein.

B. Proposed Products List: Submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.
   1. Submit within 7 days after date of Agreement of Notice of intent to award, whichever is sooner..
   2. For products specified only by reference standards, list applicable reference standards.

C. Product Data Submittals: Submit manufacturer's standard published data. **Where multiple choices occur on a submittal, it will be the Contractor's responsibility to cleary mark in contrasting color by means of underlining, highlighting, circling, ect... each copy to identify applicable products, models, options, and other data.** Unmarked copies will be rejected and sent back to the General Contractor. Supplement manufacturers' standard data to provide information specific to this Project.

D. Shop Drawing Submittals: Prepared specifically for this Project nad submit individually per each School; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances. **Canned or Typical drawings, unless they specifically apply to the project, will be rejected.**

E. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
   1. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.
   2. All submisions for the chosing of a products color must be physical samples indicating the products true and final color. Digital and or printed samples will not be accepted.

PART 2 PRODUCTS

2.01 NEW PRODUCTS

A. Provide new products unless specifically required or permitted by Contract Documents.

B. Use of products having any of the following characteristics is not permitted:
   1. Made using or containing CFC's or HCFC's.
   2. Containing lead, cadmium, or asbestos.

2.02 PRODUCT OPTIONS

A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.

B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.
   1. Where more than one manufacturer is specified for one use, the Drawings have been prepared for he one listed first; and building adjustments may be necessary to accommodate the others. The Contractor will be responsible for any changes in the building construction required due to product selection, and shall make any such changes to the satisfaction of the Architect.

C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions by "or approved equal/equal as approved" or "or equal", Contractor shall submit a request for substitution for any manufacturer not named prior to bid.

2.03 MAINTENANCE MATERIALS

A. Furnish extra materials, spare parts, tools, and software of types and in quantities specified in individual specification sections.

B. Deliver to Project site; obtain receipt prior to final payment.

PART 3 EXECUTION

3.01 SUBSTITUTION LIMITATIONS

A. See Section 012500 - Substitution Procedures.

B. Substitution Submittal Procedure:
   1. Submit substitution request at least 10 days prior to bid.
   2. The Architect/Engineer will notify all bidders via addendum of decision to accept a request.

3.02 TRANSPORTATION AND HANDLING

A. Package products for shipment in manner to prevent damage; for equipment, package to avoid loss of factory calibration.

B. If special precautions are required, attach instructions prominently and legibly on outside of packaging.

C. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.

D. Transport and handle products in accordance with manufacturer's instructions.

E. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.

F. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.

G. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage, and to minimize handling.

H. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

3.03 STORAGE AND PROTECTION

A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication. See Section 017419.

B. Store and protect products in accordance with manufacturers' instructions.

C. Store with seals and labels intact and legible.

D. Store sensitive products in weathertight, climate-controlled enclosures in an environment favorable to product.

E. For exterior storage of fabricated products, place on sloped supports above ground.

F. Protect products from damage or deterioration due to construction operations, weather, precipitation, humidity, temperature, sunlight and ultraviolet light, dirt, dust, and other contaminants.

G. Comply with manufacturer's warranty conditions, if any.

H. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.

I. Prevent contact with material that may cause corrosion, discoloration, or staining.

J. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.

K. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

3.04 PRODUCT CERTIFICATION

A. Submit letter on company letterhead and signed by company executive stating and certifying that "This project (insert project name, description, and location) has been completed and that no asbestos containing materials were found at the project site that were not properly remedied and that no new materials were used or installed that contain asbestos." Final pay application will not be processed until certification is received.

END OF SECTION

SECTION 017000
EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Examination, preparation, and general installation procedures.

B. Requirements for alterations work, including selective demolition, except removal, disposal, and/or remediation of hazardous materials and toxic substances , [_____].

C. Pre-installation meetings.

D. Cutting and patching.

E. Surveying for laying out the work.

F. Cleaning and protection.

G. Closeout procedures, including Contractor's Correction Punch List, except payment procedures.

H. General requirements for maintenance service.

1.02 RELATED REQUIREMENTS

A. Section 015000 - Temporary Facilities and Controls: Temporary exterior enclosures.

B. Section 015000 - Temporary Facilities and Controls: Temporary interior partitions.

C. Section 078400 - Firestopping.

1.03 SUBMITTALS

A. See Section 013000 - Administrative Requirements, for submittal procedures.

B. Survey work: Submit name, address, and telephone number of Surveyor before starting survey work.
   1. On request, submit documentation verifying accuracy of survey work.
   2. Submit a copy of site drawing signed by the Land Surveyor, that the elevations and locations of the work are in compliance with Contract Documents.
   3. Submit surveys and survey logs for the project record.

C. Demolition Plan: Submit demolition plan as specified by OSHA and local authorities.
   1. Indicate extent of demolition, removal sequence, bracing and shoring, and location and construction of barricades and fences. Include design drawings and calculations for bracing and shoring.
   2. Identify demolition firm and submit qualifications.
   3. Include a summary of safety procedures.

D. Cutting and Patching: Submit written request in advance of cutting or alteration that affects:
   1. Structural integrity of any element of Project.
   2. Integrity of weather exposed or moisture resistant element.
   3. Efficiency, maintenance, or safety of any operational element.
   4. Visual qualities of sight exposed elements.
   5. Work of Owner or separate Contractor.

1.04 QUALIFICATIONS

A. For asbestos demolition work, employ a firm specializing in the type of work required.
   1. Minimum of 5 years of documented experience.

B. For surveying work, employ a land surveyor registered in the State in which the Project is located and acceptable to Engineer/Architect. Submit evidence of surveyor's Errors and Omissions insurance coverage in the form of an Insurance Certificate. Employ only individual(s) trained and experienced in collecting and recording accurate data relevant to

ongoing construction activities,

C. For design of temporary shoring and bracing, employ a Professional Engineer experienced in design of this type of work and licensed in the State in which the Project is located.

1.05 PROJECT CONDITIONS

A. Use of explosives is not permitted.

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

C. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere and over adjacent property.
   1. Provide dust-proof barriers between construction areas and areas continuing to be occupied by Owner.

D. Noise Control: Provide methods, means, and facilities to minimize noise produced by construction operations.
   1. Outdoors: Limit conduct of especially noisy exterior work to the hours of 8 am to 5 pm.
   2. Indoors: Limit conduct of especially noisy interior work to the hours of 6 pm to 7 am.

1.06 COORDINATION

A. Coordinate scheduling, submittals, and work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.

B. Notify affected utility companies and comply with their requirements.

C. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.

D. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on drawings. Follow routing indicated for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.

E. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.

F. Coordinate completion and clean-up of work of separate sections.

G. After Owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

PART 2 PRODUCTS

2.01 PATCHING MATERIALS

A. New Materials: As specified in product sections; match existing products and work for patching and extending work.

B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.

C. Product Substitution: For any proposed change in materials, submit request for substitution described in Section 016000 - Product Requirements.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.

B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.

C. Examine and verify specific conditions described in individual specification sections.

D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.

E. Verify that utility services are available, of the correct characteristics, and in the correct locations.

F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

3.02 PREPARATION

A. Clean substrate surfaces prior to applying next material or substance.

B. Seal cracks or openings of substrate prior to applying next material or substance.

C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

3.03 PREINSTALLATION MEETINGS

A. When required in individual specification sections, convene a preinstallation meeting at the site prior to commencing work of the section. A preinstall meeting with the contractor, roofing vendor, and Architect/Engineer will be required.

B. Require attendance of parties directly affecting, or affected by, work of the specific section.

C. Notify Engineer/Architect four days in advance of meeting date.

D. Prepare agenda and preside at meeting:
   1. Review conditions of examination, preparation and installation procedures.
   2. Review coordination with related work.

E. Record minutes and distribute copies within two days after meeting to participants, with two copies to Engineer/Architect, Owner, participants, and those affected by decisions made.

3.04 LAYING OUT THE WORK

A. Verify locations of survey control points prior to starting work.

B. Promptly notify Engineer/Architect of any discrepancies discovered.

C. Protect survey control points prior to starting site work; preserve permanent reference points during construction.

D. Promptly report to Engineer/Architect the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.

E. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Engineer/Architect.

F. Utilize recognized engineering survey practices.

G. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means:
   1. Site improvements including pavements; stakes for grading, fill and topsoil placement; utility locations, slopes, and invert elevations; and [_____].
   2. Grid or axis for structures.
   3. Building foundation, column locations, ground floor elevations, and [_____].

H. Periodically verify layouts by same means.

I. Maintain a complete and accurate log of control and survey work as it progresses.

3.05 GENERAL INSTALLATION REQUIREMENTS

A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.

B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.

C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.

D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.

E. Make neat transitions between different surfaces, maintaining texture and appearance.

3.06 ALTERATIONS

A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
   1. Verify that construction and utility arrangements are as indicated.
   2. Report discrepancies to Engineer/Architect before disturbing existing installation.
   3. Beginning of alterations work constitutes acceptance of existing conditions.

B. Keep areas in which alterations are being conducted separated from other areas that are still occupied.
   1. Provide, erect, and maintain temporary dustproof partitions of construction specified in Section 015000 in locations indicated on drawings.

C. Maintain weatherproof exterior building enclosure except for interruptions required for replacement or modifications; take care to prevent water and humidity damage.
   1. Where openings in exterior enclosure exist, provide construction to make exterior enclosure weatherproof.
   2. Insulate existing ducts or pipes that are exposed to outdoor ambient temperatures by alterations work.

D. Remove existing work as indicated and as required to accomplish new work.
   1. Remove rotted wood, corroded metals, and deteriorated masonry and concrete; replace with new construction specified.
   2. Remove items indicated on drawings.
   3. Relocate items indicated on drawings.
   4. Where new surface finishes are to be applied to existing work, perform removals, patch, and prepare existing surfaces as required to receive new finish; remove existing finish if necessary for successful application of new finish.
   5. Where new surface finishes are not specified or indicated, patch holes and damaged surfaces to match adjacent finished surfaces as closely as possible.

E. Services (Including but not limited to HVAC, Plumbing, Fire Protection, Electrical, Telecommunications, and [_____]): Remove, relocate, and extend existing systems to accommodate new construction.
   1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components; if necessary, modify installation to allow access or provide access panel.
   2. Where existing systems or equipment are not active and Contract Documents require reactivation, put back into operational condition; repair supply, distribution, and equipment as required.
   3. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
      a. Disable existing systems only to make switchovers and connections; minimize duration of outages.
      b. Provide temporary connections as required to maintain existing systems in service.

4. Verify that abandoned services serve only abandoned facilities.
5. Remove abandoned pipe, ducts, conduits, and equipment , including those above accessible ceilings; remove back to source of supply where possible, otherwise cap stub and tag with identification; patch holes left by removal using materials specified for new construction.

F. Protect existing work to remain.
1. Prevent movement of structure; provide shoring and bracing if necessary.
2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
3. Repair adjacent construction and finishes damaged during removal work.

G. Adapt existing work to fit new work: Make as neat and smooth transition as possible.
1. When existing finished surfaces are cut so that a smooth transition with new work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to Engineer/Architect.
2. Where removal of partitions or walls results in adjacent spaces becoming one, rework floors, walls, and ceilings to a smooth plane without breaks, steps, or bulkheads.
3. Where a change of plane of 1/4 inch (6 mm) or more occurs in existing work, submit recommendation for providing a smooth transition for Engineer/Architect review and request instructions.

H. Patching: Where the existing surface is not indicated to be refinished, patch to match the surface finish that existed prior to cutting. Where the surface is indicated to be refinished, patch so that the substrate is ready for the new finish.

I. Refinish existing surfaces as indicated:
1. Where rooms or spaces are indicated to be refinished, refinish all visible existing surfaces to remain to the specified condition for each material, with a neat transition to adjacent finishes.
2. If mechanical or electrical work is exposed accidentally during the work, re-cover and refinish to match.

J. Clean existing systems and equipment.

K. Remove demolition debris and abandoned items from alterations areas and dispose of off-site; do not burn or bury.

L. Do not begin new construction in alterations areas before demolition is complete.

M. Comply with all other applicable requirements of this section.

3.07 CUTTING AND PATCHING

A. Whenever possible, execute the work by methods that avoid cutting or patching.

B. See Alterations article above for additional requirements.

C. Perform whatever cutting and patching is necessary to:
1. Complete the work.
2. Fit products together to integrate with other work.
3. Provide openings for penetration of mechanical, electrical, and other services.
4. Match work that has been cut to adjacent work.
5. Repair areas adjacent to cuts to required condition.
6. Repair new work damaged by subsequent work.
7. Remove samples of installed work for testing when requested.
8. Remove and replace defective and non-complying work.

D. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.

E. Employ skilled and experienced installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.

F. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.

G. Restore work with new products in accordance with requirements of Contract Documents.

H. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.

I. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material in accordance with Section 078400, to full thickness of the penetrated element.

J. Patching:
   1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
   2. Match color, texture, and appearance.
   3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.

3.08 PROGRESS CLEANING

A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.

B. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

3.09 PROTECTION OF INSTALLED WORK

A. Protect installed work from damage by construction operations.

B. Provide special protection where specified in individual specification sections.

C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.

D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.

E. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.

F. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.

G. Remove protective coverings when no longer needed; reuse or recycle coverings if possible.

3.10 FINAL CLEANING

A. Execute final cleaning after Substantial Completion but before making final application for payment.
   1. Clean areas to be occupied by Owner prior to final completion before Owner occupancy.

B. Use cleaning materials that are nonhazardous.

C. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces,

D. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment.

E. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.

F. Clean filters of operating equipment.

G. Clean debris from roofs, gutters, downspouts, scuppers, and overflow drains.

H. Clean site; sweep paved areas, rake clean landscaped surfaces.

I. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

3.11 CLOSEOUT PROCEDURES

A. Make submittals that are required by governing or other authorities.
   1. Provide copies to Engineer/Architect and Owner.

B. Accompany Project Coordinator on preliminary inspection to determine items to be listed for completion or correction in the Contractor's Correction Punch List for Contractor's Notice of Substantial Completion.

C. Notify Engineer/Architect when work is considered ready for Engineer/Architect's Substantial Completion inspection.

D. Submit written certification containing Contractor's Correction Punch List, that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Engineer/Architect's Substantial Completion inspection.

E. Conduct Substantial Completion inspection and create Final Correction Punch List containing Engineer/Architect's and Contractor's comprehensive list of items identified to be completed or corrected and submit to Engineer/Architect.

F. Correct items of work listed in Final Correction Punch List and comply with requirements for access to Owner-occupied areas.

G. Notify Engineer/Architect when work is considered finally complete and ready for Engineer/Architect's Substantial Completion final inspection.

H. Complete items of work determined by Engineer/Architect listed in executed Certificate of Substantial Completion.

3.12 MAINTENANCE

A. Provide service and maintenance of components indicated in specification sections.

B. Maintenance Period: As indicated in specification sections or, if not indicated, not less than 2 years from the Date of Substantial Completion or the length of the specified warranty, whichever is longer.

C. Maintenance service shall not be assigned or transferred to any agent or subcontractor without prior written consent of the Owner.

END OF SECTION

SECTION 017800
CLOSEOUT SUBMITTALS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Project Record Documents.

B. Operation and Maintenance Data.

C. Warranties and bonds.

1.02 RELATED REQUIREMENTS

A. Section 007200 - General Conditions and 007300 - Supplementary Conditions: Performance bond and labor and material payment bonds, warranty, and correction of work.

B. Section 013000 - Administrative Requirements: Submittals procedures, shop drawings, product data, and samples.

C. Section 017000 - Execution and Closeout Requirements: Contract closeout procedures.

D. Individual Product Sections: Specific requirements for operation and maintenance data.

E. Individual Product Sections: Warranties required for specific products or Work.

1.03 SUBMITTALS

A. Project Record Documents: Submit documents to Engineer/Architect with claim for final Application for Payment.

B. Operation and Maintenance Data:
   1. For equipment, or component parts of equipment put into service during construction and operated by Owner, submit completed documents within ten days after acceptance.
   2. Submit one copy of completed documents 15 days prior to final inspection. This copy will be reviewed and returned after final inspection, with Engineer/Architect comments. Revise content of all document sets as required prior to final submission.
   3. Submit two sets of revised final documents in final form within 10 days after final inspection.

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

PART 3 EXECUTION

2.01 PROJECT RECORD DOCUMENTS

A. Maintain on site one set of the following record documents; record actual revisions to the Work:
   1. Drawings.
   2. Addenda.
   3. Change Orders and other modifications to the Contract.

B. Ensure entries are complete and accurate, enabling future reference by Owner.

C. Store record documents separate from documents used for construction.

D. Record information concurrent with construction progress.

E. Record Drawings: Legibly mark each item to record actual construction including:
   1. Field changes of dimension and detail.

2. Details not on original Contract drawings.

2.02 OPERATION AND MAINTENANCE DATA

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

B. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.

C. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.

D. Typed Text: As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.

2.03 OPERATION AND MAINTENANCE DATA FOR MATERIALS AND FINISHES

A. For Each Product, Applied Material, and Finish:
   1. Product data, with catalog number, size, composition, and color and texture designations.
   2. Information for re-ordering custom manufactured products.

B. Instructions for Care and Maintenance: Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental cleaning agents and methods, and recommended schedule for cleaning and maintenance.

C. Where additional instructions are required, beyond the manufacturer's standard printed instructions, have instructions prepared by personnel experienced in the operation and maintenance of the specific products.

2.04 WARRANTIES AND BONDS

A. Obtain warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within 10 days after completion of the applicable item of work. Except for items put into use with Owner's permission, leave date of beginning of time of warranty until Date of Substantial completion is determined.

B. Verify that documents are in proper form, contain full information, and are notarized.

C. Co-execute submittals when required.

D. Retain warranties and bonds until time specified for submittal.

END OF SECTION

SECTION 061000
ROUGH CARPENTRY

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Rough opening framing for doors, windows, and roof openings.

B. Roofing nailers.

C. Miscellaneous wood nailers, furring, and grounds.

1.02 RELATED REQUIREMENTS

1.03 REFERENCE STANDARDS

A. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware 2016a.

B. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials 2021a.

C. AWPA U1 - Use Category System: User Specification for Treated Wood 2018.

D. PS 1 - Structural Plywood 2009 (Revised 2019).

E. PS 2 - Performance Standard for Wood-Based Structural-Use Panels 2010.

F. PS 20 - American Softwood Lumber Standard 2020.

G. SPIB (GR) - Grading Rules 2014.

1.04 SUBMITTALS

A. See Section 013000 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide technical data on wood preservative materials and application instructions.

1.05 DELIVERY, STORAGE, AND HANDLING

A. General: Cover wood products to protect against moisture. Support stacked products to prevent deformation and to allow air circulation. Provide for air circulation around stacks and under coverings.

PART 2 PRODUCTS

2.01 GENERAL REQUIREMENTS

A. Dimension Lumber: Comply with PS 20 and requirements of specified grading agencies.
   1. If no species is specified, provide any species graded by the agency specified; if no grading agency is specified, provide lumber graded by any grading agency meeting the specified requirements.
   2. Grading Agency: Any grading agency whose rules are approved by the Board of Review, American Lumber Standard Committee (www.alsc.org) and who provides grading service for the species and grade specified; provide lumber stamped with grade mark unless otherwise indicated.

2.02 DIMENSION LUMBER

A. Grading Agency: Southern Pine Inspection Bureau, Inc; SPIB (GR).

B. Sizes: Nominal sizes as indicated on drawings, S4S.

C. Moisture Content: Kiln-dry or MC15.

D. Miscellaneous Framing, Blocking, Nailers, Grounds, and Furring:
   1. Lumber: S4S, No. 2 or Standard Grade.
   2. Boards: Standard or No. 3.

2.03 PLYWOOD

A. Minimum Construction Standards of Plywood are as follows:
   1. Thickness as indicated on Drawings.
      a. 1/2 inch shall be 4 ply
      b. 5/8" shallwe be 5 ply
      c. 3/4" shall be 6 ply
   2. Warped plywood panels are not acceptable.
   3. Provide pressure treated plywood in areas indicated on drawings.

B. General Plywood Sheathing:
   1. Thickness as indicated on Drawings.
   2. Grade: APA Rated Sheathing.
   3. Span Rating: 32/16
   4. Exposure Durability: Exposure 1

C. Factory mark panels according to indicated standard.

2.04 CONSTRUCTION PANELS

A. Roof Sheathing, For parapet coping sub framing: Any PS 2 type, rated Structural I Sheathing.
   1. Bond Classification: Exterior.
   2. Span Rating: 16.
   3. Performance Category: 3/4 PERF CAT.

B. Communications and Electrical Room Mounting Boards: PS 1 A-D plywood, or medium density fiberboard; 3/4 inch (19 mm) thick; flame spread index of 25 or less, smoke developed index of 450 or less, when tested in accordance with ASTM E84.

2.05 ACCESSORIES

A. Fasteners and Anchors:
   1. Provide fasteners of size and type indicated that comply with requirements specified for material and manufacture.
   2. Metal and Finish: Hot-dipped galvanized steel complying with ASTM A153/A153M for high humidity and preservative-treated wood locations, unfinished steel elsewhere.
   3. Nails, Wire, Brads, and Staples: FS FF-N-105.
   4. Power-Driven Fasteners: CABO NER-272.
   5. Bolts: Steel bolts complying with ASTM A 307, Grade A with ASTM A 563 hex nuts and, where indicated, flat washers.
   6. 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.
      a. Material: Carbon-steel components, zinc plated to comply with ASTM B 633, Class Fe/Zn 5.

2.06 FACTORY WOOD TREATMENT

A. Treated Lumber and Plywood: Comply with requirements of AWPA U1 - Use Category System for wood treatments determined by use categories, expected service conditions, and specific applications.
   1. Preservative-Treated Wood: Provide lumber and plywood marked or stamped by an ALSC-accredited testing agency, certifying level and type of treatment in accordance with AWPA standards.

B. Preservative Treatment:
   1. Preservative Pressure Treatment of Lumber Above Grade: AWPA U1, Use Category UC3B, Commodity Specification A using waterborne preservative.

a. Kiln dry lumber after treatment to maximum moisture content of 19 percent.
b. Treat lumber exposed to weather.
c. Treat lumber in contact with roofing, flashing, or waterproofing.
d. Treat lumber in contact with masonry or concrete.
e. Treat lumber less than 18 inches (450 mm) above grade.
f. Treat lumber in other locations as indicated on the drawings.

2. Preservative Pressure Treatment of Plywood/Sheathing Above Grade: AWPA U1, Use Category UC2 and UC3B, Commodity Specification F using waterborne preservative to 0.25 lb/cu ft retention (to 4.0 kg/cu m retention).
   a. Kiln dry plywood after treatment to maximum moisture content of 19 percent.
   b. Treat plywood in contact with roofing, flashing, or waterproofing.
   c. Treat plywood in contact with masonry or concrete.
   d. Treat plywood less than 18 inches (450 mm) above grade.
   e. Treat plywood in other locations as indicated on the drawings.
3. Preservative Pressure Treatment of Lumber in Contact with Soil: AWPA U1, Use Category UC4A, Commodity Specification A using waterborne preservative.
   a. Preservative for Field Application to Cut Surfaces: As recommended by manufacturer of factory treatment chemicals for brush-application in the field.

PART 3 EXECUTION

3.01 PREPARATION

A. Coordinate installation of rough carpentry members specified in other sections.

3.02 INSTALLATION - GENERAL

A. Fit carpentry work to other work; scribe and cope as requried for accurate fit. Correlate location of furring, nailers, blocking and similar supports to allow proper attachment of other work.

B. Select material sizes to minimize waste.

C. Reuse scrap to the greatest extent possible; clearly separate scrap for use on site as accessory components, including: shims, bracing, and blocking.

D. Where treated wood is used on interior, provide temporary ventilation during and immediately after installation sufficient to remove indoor air contaminants.

E. Discard units of material with defects which might impair quality of work, and units which are too small to use in fabricating work with minimum joints or optimum joint arrangement.

F. Provide all framing and support members, not indicated or specified, as necessary to properly carry out all work shown and inferred by Drawings and Specifications.

G. Spiking, nailing and bolting shall be done in an approved manner; spikes, nails, and bolts shall be of the proper size, and care shall be used so as not to split the members. Members shall be drilled accurately for bolting; and for nailing where necessary to avoid splitting. Suitable washers shall be provided under bolt head, and nuts and bolts shall be drawn up tight.

H. Provide framing to support all edges of covering material.

I. Securely attach carpentry work as indicated and according to applicable codes and recognized standards.

J. Use fasteners of approprate type and length. Predrill members when necessary to avoid splitting wood.

3.03 BLOCKING, NAILERS, AND SUPPORTS

A. Provide framing and blocking members as indicated or as required to support finishes, fixtures, specialty items, and trim.

B. Attach to substrates as required to support applied loading. Countersink bolts and nuts flush with surfaces, unless otherwise shown. Build into masonry during installation of masonry work.

C. In walls, provide blocking attached to studs as backing and support for wall-mounted items, unless item can be securely fastened to two or more studs or other method of support is explicitly indicated.

D. Where ceiling-mounting is indicated, provide blocking and supplementary supports above ceiling, unless other method of support is explicitly indicated.

3.04 PLYWOOD

A. Comply with applicable recommendations contained in Form No. E 304 APA Design/Construction Guide - Residential & Commercial for types of plywood products and applications indicated.

B. Apply sheathing with long dimension (face grain) perpendicular to framing. Apply with side edges 1/4 inch apart and end edges 1/8 inch apart. All end edges of sheathing shall bear on a support. Stagger end joints of roof sheathing.

3.05 ROOF-RELATED CARPENTRY

A. Coordinate installation of roofing carpentry with deck construction, framing of roof openings, and roofing assembly installation.

B. Provide wood curb at all roof openings except where specifically indicated otherwise. Form corners by alternating lapping side members.

3.06 INSTALLATION OF CONSTRUCTION PANELS

A. Roof Sheathing: Secure panels with long dimension perpendicular to framing members, with ends staggered and over firm bearing.
   1. Nail panels to framing; staples are not permitted.

B. Communications and Electrical Room Mounting Boards: Secure with screws to studs with edges over firm bearing; space fasteners at maximum 24 inches (610 mm) on center on all edges and into studs in field of board.
   1. At fire-rated walls, install board over wall board indicated as part of the fire-rated assembly.
   2. Where boards are indicated as full floor-to-ceiling height, install with long edge of board parallel to studs.
   3. Install adjacent boards without gaps.

3.07 TOLERANCES

A. Framing Members: [1/8] inch ([____] mm) from true position, maximum.

B. Variation from Plane (Other than Floors): 1/4 inch in 10 feet (2 mm/m) maximum, and 1/4 inch in 30 feet (7 mm in 10 m) maximum.

3.08 CLEANING

A. Waste Disposal: Comply with the requirements of Section 017419 - Construction Waste Management and Disposal.
   1. Comply with applicable regulations.
   2. Do not burn scrap on project site.
   3. Do not burn scraps that have been pressure treated.
   4. Do not send materials treated with pentachlorophenol, CCA, or ACA to co-generation facilities or “waste-to-energy” facilities.

B. Do not leave any wood, shavings, sawdust, etc. on the ground or buried in fill.

C. Prevent sawdust and wood shavings from entering the storm drainage system.

END OF SECTION

SECTION 079200
JOINT SEALANTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Each form and type of joint sealants.

B. Applications for joint sealers.

C. Joint backings and accessories.

1.02 REFERENCE STANDARDS

A. ASTM C920 - Standard Specification for Elastomeric Joint Sealants 2018.

B. ASTM C1193 - Standard Guide for Use of Joint Sealants 2016.

C. ASTM C1248 - Standard Test Method for Staining of Porous Substrate by Joint Sealants 2018.

D. ASTM C1311 - Standard Specification for Solvent Release Sealants 2014.

E. SCAQMD 1168 - Adhesive and Sealant Applications 1989 (Amended 2017).

1.03 SUBMITTALS

A. See Section 013000 - Administrative Requirements, for submittal procedures.

B. Product Data for Sealants: Submit manufacturer's technical data sheets for each product to be used, that includes the following.
   1. Physical characteristics, including movement capability, VOC content, hardness, cure time, and color availability.
   2. List of backing materials approved for use with the specific product.
   3. Substrates that product is known to satisfactorily adhere to and with which it is compatible.
   4. Substrates the product should not be used on.
   5. Substrates for which use of primer is required.

C. Product Data for Accessory Products: Submit manufacturer's technical data sheet for each product to be used, including physical characteristics, installation instructions, and recommended tools.

D. Color Cards for Selection: Where sealant color is not specified, submit manufacturer's color cards showing standard colors available for selection.

E. Samples for Verification: Where custom sealant color is specified, obtain directions from Engineer/Architect and submit at least two physical samples for verification of color of each required sealant.

F. Preinstallation Field Adhesion Test Reports: Submit filled out Preinstallation Field Adhesion Test Reports log within 10 days after completion of tests; include bagged test samples and photographic records.

1.04 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.

B. Installer Qualifications: Company specializing in performing the work of this section and with at least three years of documented experience.

C. Field Adhesion Test Procedures:
   1. Allow sealants to fully cure as recommended by manufacturer before testing.
   2. Have a copy of the test method document available during tests.
   3. Record the type of failure that occurred, other information required by test method, and the information required on the Field Quality Control Log.

4. If any combination of sealant type and substrate does not show evidence of minimum adhesion or shows cohesion failure before minimum adhesion, report results to Engineer/Architect.

1.05 WARRANTY

A. See Section 017800 - Closeout Submittals, for additional warranty requirements.

B. Correct defective work within a five year period after Date of Substantial Completion.

C. Warranty: Include coverage for installed sealants and accessories that fail to achieve watertight seal , exhibit loss of adhesion or cohesion, or do not cure.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Non-Sag Sealants: Permits application in joints on vertical surfaces without sagging or slumping.
1. Bostik Inc; <>: www.bostik-us.com/#sle.
2. Dow Chemical Company; [_____]: consumer.dow.com/en-us/industry/ind-building-construction.html/#sle.
3. Hilti, Inc; <>: www.us.hilti.com/#sle.
4. Momentive Performance Materials, Inc (formerly GE Silicones); <>: www.momentive.com/#sle.
5. Sika Corporation; <>: www.usa-sika.com/#sle.
6. Substitutions: See Section 016000 - Product Requirements.

2.02 JOINT SEALANT APPLICATIONS

A. Scope:
1. Exterior Joints: Seal open joints, whether or not the joint is indicated on drawings, unless specifically indicated not to be sealed. Exterior joints to be sealed include, but are not limited to, the following items.
   a. Wall expansion and control joints.
   b. Joints between door, window, and other frames and adjacent construction.
   c. Joints between different exposed materials.
   d. Openings below ledge angles in masonry.
   e. Concrete/Masonry expansion joints.
   f. At Locations of dissimilar metals.
   g. Other locations to properly seal building.
   h. Other joints indicated below.
2. Interior Joints: Do not seal interior joints unless specifically indicated to be sealed. Interior joints to be sealed include, but are not limited to, the following items.
   a. Joints between door, window, and other frames and adjacent construction.
   b. Other joints indicated below.
3. Do not seal the following types of joints.
   a. Intentional weepholes in masonry.
   b. Joints indicated to be treated with manufactured expansion joint cover or some other type of sealing device.
   c. Joints where sealant is specified to be provided by manufacturer of product to be sealed.
   d. Joints where installation of sealant is specified in another section.
   e. Joints between suspended panel ceilings/grid and walls.

B. Exterior Joints: Use nonsag polyurethane sealant, unless otherwise indicated.

C. Interior Joints: Use non-sag polyurethane sealant, unless otherwise indicated.
1. Type [___] - Wall and Ceiling Joints in Wet Areas: Non-sag polyurethane sealant for continuous liquid immersion.

2. Type [___] - Floor Joints in Wet Areas: Non-sag polyurethane "non-traffic-grade" sealant suitable for continuous liquid immersion.
3. Type [___] - Joints between Fixtures in Wet Areas and Floors, Walls, and Ceilings: Mildew-resistant silicone sealant; white.
4. Type [___] - Other Floor Joints: Self-leveling polyurethane "traffic-grade" sealant.

D. Interior Wet Areas: Bathrooms, restrooms, kitchens, food service areas, and food processing areas; fixtures in wet areas include plumbing fixtures, food service equipment, countertops, cabinets, and other similar items.

2.03 JOINT SEALANTS - GENERAL

A. Sealants and Primers: Provide products having lower volatile organic compound (VOC) content than indicated in SCAQMD 1168.

B. Colors: As indicated on the drawings or as selected from Manufacturer's standard colors.

C. Select materials for compatibility and select elasticity and hardness based on Manufacturer's recommendations for application intended.

2.04 JOINT SEALANTS

A. Non-Staining Silicone Sealant: ASTM C920, Grade NS, Uses M and A; not expected to withstand continuous water immersion or traffic.
1. Movement Capability: Plus and minus [____] percent, minimum.
2. Non-Staining To Porous Stone: Non-staining to light-colored natural stone when tested in accordance with ASTM C1248.
3. Dirt Pick-Up: Reduced dirt pick-up compared to other silicone sealants.
4. Color: To be selected by Engineer/Architect from manufacturer's full range.
5. Cure Type: [_____].

B. Type Interior Wet Areas -Mildew-Resistant Silicone Sealant: ASTM C920, Grade NS, Uses M and A; single component Type S, mildew resistant; not expected to withstand continuous water immersion or traffic.
1. Color: White.
2. Manufacturers:
a. Sika Corporation; Sikasil GP: www.usa-sika.com/#sle.
b. Or Equal.
c. Substitutions: See Section 016000 - Product Requirements.

C. Non-Curing Butyl Sealant: Solvent-based, single component, non-sag, non-skinning, non-hardening, non-bleeding; non-vapor-permeable; intended for fully concealed applications.

D. Type 5 Exterior Concealed Joints between two assembled rigid surfaces in compression: Polyisobutylene sealant tape conforming to AAMA 804.1.

E. Type 6 Acoustical Sealant: Nonskinning, nonhardening, permanently flexible sealant specifically designed for sealing gypsum wallboard.

F. Type 7 Foam Sealants: Equal to Styrofoam Brand Sill Seal Foam Gasket; provide in width required for Metal Stud Sizes.

2.05 ACCESSORIES

A. Backer Rod: Cylindrical cellular foam rod, plyethylene-jacketed polyurethane foam, butyl rubber foam, neoprene foam, or other flexible , permanent, durable non abrasive material with surface that sealant will not adhere to, compatible with specific sealant used, and recommended by backing and sealant manufacturers for specific application.

B. Backing Tape: Self-adhesive polyethylene tape with surface that sealant will not adhere to and recommended by tape and sealant manufacturers for specific application.

C. Joint Cleaner: Non-corrosive and non-staining type, type recommended by sealant manufacturer; compatible with joint forming materials.

D. Primers: Type recommended by sealant manufacturer to suit application; non-staining.

E. Fiber Expansion Joint Material: Preformed cellular fiber complying with ASTM D1751.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that joints are ready to receive work.

B. Verify that backing materials are compatible with sealants.

C. Verify that backer rods are of the correct size.

D. Preinstallation Adhesion Testing: Install a sample for each test location indicated in the test plan.
   1. Test each sample as specified in PART 1 under QUALITY ASSURANCE article.
   2. Notify Engineer/Architect of date and time that tests will be performed, at least 7 days in advance.
   3. Record each test on Preinstallation Adhesion Test Log as indicated.
   4. If any sample fails, review products and installation procedures, consult manufacturer, or take whatever other measures are necessary to ensure adhesion; re-test in a different location; if unable to obtain satisfactory adhesion, report to Engineer/Architect.
   5. After completion of tests, remove remaining sample material and prepare joint for new sealant installation.

3.02 PREPARATION

A. Remove loose materials and foreign matter that could impair adhesion of sealant.

B. Clean joints, and prime as necessary, in accordance with manufacturer's instructions.

C. Perform preparation in accordance with manufacturer's instructions and ASTM C1193.

D. Mask elements and surfaces adjacent to joints from damage and disfigurement due to sealant work; be aware that sealant drips and smears may not be completely removable.

3.03 INSTALLATION

A. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.

B. Perform installation in accordance with ASTM C1193.

C. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer, except where specific dimensions are indicated.

D. Install bond breaker backing tape where backer rod cannot be used.

E. Install sealant free of air pockets, foreign embedded matter, ridges, and sags, and without getting sealant on adjacent surfaces. Clean adjacent surfaces to eliminate evidence of spillage.

F. Do not install sealant when ambient temperature is outside manufacturer's recommended temperature range, or will be outside that range during the entire curing period, unless manufacturer's approval is obtained and instructions are followed.

G. Nonsag Sealants: Tool surface concave, unless otherwise indicated; remove masking tape immediately after tooling sealant surface.

H. Dure sealants and caulking compounds in compliance with Manufacturer's instructions and recommendations to obtain high early bond strength, internal cohesive strength and surface durability.

I. Concrete Floor Joint Filler: After full cure, shave joint filler flush with top of concrete slab.

3.04 FIELD QUALITY CONTROL

A. Perform field quality control inspection/testing as specified in PART 1 under QUALITY ASSURANCE article.

B. Remove and replace failed portions of sealants using same materials and procedures as indicated for original installation.

END OF SECTION

SECTION 084313
ALUMINUM-FRAMED STOREFRONTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Aluminum-framed storefront, with vision glass.

B. Aluminum doors and frames.

1.02 REFERENCE STANDARDS

A. AAMA CW-10 - Care and Handling of Architectural Aluminum From Shop to Site 2015.

B. AAMA 609 & 610 - Cleaning and Maintenance Guide for Architecturally Finished Aluminum (Combined Document) 2015.

C. AAMA 611 - Voluntary Specification for Anodized Architectural Aluminum 2014 (2015 Errata).

D. AAMA 612 - Voluntary Specification, Performance Requirements, and Test Procedures for Combined Coatings of Anodic Oxide and Transparent Organic Coatings on Architectural Aluminum 2017a.

E. ASCE 7 - Minimum Design Loads and Associated Criteria for Buildings and Other Structures Most Recent Edition Cited by Referring Code or Reference Standard.

F. ASTM B209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate 2014.

G. ASTM B209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate (Metric) 2014.

H. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes 2020.

I. ASTM B221M - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric) 2013.

J. ASTM E283 - Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen 2004 (Reapproved 2012).

K. ASTM E330/E330M - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference 2014.

L. ASTM E331 - Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference 2000 (Reapproved 2016).

M. ASTM E1996 - Standard Specification for Performance of Exterior Windows, Curtain Walls, Doors, and Impact Protective Systems Impacted by Windborne Debris in Hurricanes 2017.

N. Miami (APD) - Approved Products Directory; Miami-Dade County Current Edition.

1.03 ADMINISTRATIVE REQUIREMENTS

A. Coordinate with installation of other components that comprise the exterior enclosure.

B. Preinstallation Meeting: Conduct a preinstallation meeting one week before starting work of this section; require attendance by all affected installers.

1.04 SUBMITTALS

A. See Section 013000 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide component dimensions, describe components within assembly, anchorage and fasteners, glass and infill, internal drainage details.

C. Shop Drawings: Indicate system dimensions, framed opening requirements and tolerances, affected related work, expansion and contraction joint location and details, and field welding required.

1. Indicate system dimensions, framed opening requirements and tolerances, anticipated deflection under load, affected related work, weep drainage network, expansion and contraction joint location and details, and field welding required.
2. Provide full elevations at a minimum scale of 1/4 inch to 1 foot.
3. Provice full-size joint details illustrating details including flashing.
4. Indicate means of adjustment to accommodate field conditions.
5. Indicate locations and details for attachment of components to building structure including but not limited to masonry, concrete, primary steel, and secondary steel.

D. Samples: Submit two samples 18 by 18 inches (____by____ mm) in size illustrating finished aluminum surface, glass, glazing materials.
1. Submit manufacturer's samples indicating quality of finish in required colors.
2. Where normal texture or color variations are expected, include additional samples illustrating range of variation.

E. Manufacturer's Certificate: Certify that the products supplied meet or exceed the specified requirements.

F. Design Data: Provide framing member structural and physical characteristics, engineering calculations, and dimensional limitations.

G. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.

1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in performing work of type specified and with at least 5 years of documented experience.

B. Installer Qualifications: Company specializing in performing work of type specified and with at least 5 years of documented experience. Installer must be approved and cerified in writing by the system manufacturer for quality installation performance of specified systems.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Handle products of this section in accordance with AAMA CW-10.

B. Protect finished aluminum surfaces with wrapping. Do not use adhesive papers or sprayed coatings that bond to aluminum when exposed to sunlight or weather.

1.07 FIELD CONDITIONS

A. Do not install sealants when ambient temperature is less than 40 degrees F (5 degrees C). Maintain this minimum temperature during and 48 hours after installation.

1.08 WARRANTY

A. See Section 017800 - Closeout Submittals, for additional warranty requirements.

B. Correct defective Work within a five year period after Date of Substantial Completion.

C. Provide five year manufacturer warranty against failure of glass seal on insulating glass units, including interpane dusting or misting. Include provision for replacement of failed units.

D. Provide five year manufacturer warranty against excessive degradation of exterior finish. Include provision for replacement of units with excessive fading, chalking, or flaking.
1. Discoloration, fading, chalking, staining, pitting, corrosion, or other deterioration or inconsistency in finish surface.
2. Aging or weathering that does not match exta materials in storage.
3. Penetration of water into the building esceeding specified limits.
4. Ait infiltration exceeding specified limits.
5. Structural failure of components resulting from forces within specified limits.
6. Failure of operating parts to function normally.

PART 2 PRODUCTS

2.01 BASIS OF DESIGN -- FRAMING FOR INSULATING GLAZING

A. Center-Set Style, Wind-Borne-Debris Resistance Tested:
   1. Basis of Design: Kawneer IR 500 <>.

B. Operable Style for Bid Alternate:
   1. Basis of Design: Kawneer Trifab 451 Storefront Framing with Storefront GLASSvent Windows for Storefront framing in the areas shown to be operable on the drawings.

C. Other Manufacturers: Provide either the product identified as "Basis of Design" or an equivalent product of one of the manufacturers listed below:
   1. EFCO, a Pella Company; <>: www.efcocorp.com/sle.
   2. YKK AP America Inc; <>: www.ykkap.com.

D. Substitutions: See Section 016000 - Product Requirements.
   1. For any product not identified as "Basis of Design", submit information as specified for substitutions.

2.02 BASIS OF DESIGN -- SWINGING DOORS

A. Wind-Borne-Debris Resistance Tested:
   1. Basis of Design: Kawneer 500 IR.

B. Medium Stile, Monolithic Glazing:
   1. Thickness: 1-3/4 inches (43 mm).

C. Other Manufacturers: Provide either the product identified as "Basis of Design" or an equivalent product of one of the manufacturers listed below:
   1. EFCO, a Pella Company; <>: www.efcocorp.com/sle.
   2. Tubelite
   3. YKK AP America Inc; <>: www.ykkap.com.
   4. Oldcastle Building Envelope: www.obe.com.

2.03 STOREFRONT

A. Aluminum-Framed Storefront: Factory fabricated, factory finished aluminum framing members with infill, and related flashings, anchorage and attachment devices.
   1. Unitized, shop assembly.
   2. Glazing Rabbet: For [1-5/16"] inch ([____] mm) insulating glazing.
   3. Finish: Class I color anodized.
      a. Factory finish all surfaces that will be exposed in completed assemblies.
      b. Touch-up surfaces cut during fabrication so that no natural aluminum is visible in completed assemblies, including joint edges.
      c. Coat concealed metal surfaces that will be in contact with cementitious materials or dissimilar metals with bituminous paint.
   4. Finish Color: As selected by Architect from manufacturer's standard line.
   5. Fabrication: Joints and corners flush, hairline, and weatherproof, accurately fitted and secured; prepared to receive anchors and hardware; fasteners and attachments concealed from view; reinforced as required for imposed loads.
   6. Construction: Eliminate noises caused by wind and thermal movement, prevent vibration harmonics, and prevent "stack effect" in internal spaces.
   7. System Internal Drainage: Drain to the exterior by means of a weep drainage network any water entering joints, condensation occurring in glazing channel, and migrating moisture occurring within system.
   8. Expansion/Contraction: Provide for expansion and contraction within system components caused by cycling temperature range of 170 degrees F (95 degrees C) over a 12 hour period without causing detrimental effect to system components, anchorages, and other building elements.

9. Movement: Allow for movement between storefront and adjacent construction, without damage to components or deterioration of seals.
10. Perimeter Clearance: Minimize space between framing members and adjacent construction while allowing expected movement.
11. Air and Vapor Seal: Maintain continuous air barrier and vapor retarder throughout assembly, primarily in line with inside pane of glazing and inner sheet of infill panel and heel bead of glazing compound.
12. Gaskets: Glazing gaskets for flush glazing shall comply with ASTM C864 and be extruded of a slicone compatible EPDM rubber that provides for silicone adhesion.

B. Performance Requirements:
1. Wind Loads: Design and size components to withstand the specified load requirements without damage or permanent set, when tested in accordance with ASTM E330/E330M, using loads 1.5 times the design wind loads and 10 second duration of maximum load.
a. Design Wind Loads: Comply with requirements of ASCE 7.
b. Member Deflection: Limit member deflection to flexure limit of glass in any direction, with full recovery of glazing materials.
2. Wind-Borne-Debris Resistance: Identical full-size glazed assembly without auxiliary protection, having Florida Building Code FLA (PAD) approval for Large and Small Missile impact and pressure cycling at design wind pressure.
3. Water Penetration Resistance on Manufactured Assembly: No uncontrolled water on interior face, when tested in accordance with ASTM E331 at pressure differential of 8 psf (390 Pa).
4. Air Leakage Laboratory Test: Maximum of 0.06 cu ft/min sq ft (0.3 L/sec sq m) of wall area, when tested in accordance with ASTM E283 at 6.27 psf (300 Pa) pressure differential across assembly.

2.04 COMPONENTS

A. Aluminum Framing Members: Tubular aluminum sections, drainage holes and internal weep drainage system.
1. Glazing Stops: Flush.
2. Cross-Section: 2.5x5 inch (____x____ mm) nominal dimension.

B. Glazing: As specified in Section 088000.

C. Swing Doors: Glazed aluminum.
1. Thickness: 1-3/4 inches (43 mm).
2. Top Rail: [3.5] inches ([____] mm) wide.
3. Vertical Stiles: [3.5] inches ([____] mm) wide.
4. Bottom Rail: [6.5] inches ([____] mm) wide.
5. Glazing Stops: Shall be hook-in type with EPDM glasaing gaskets reinforced with non-stretchable cord.
6. All glazing shall be flush, including the horizontal muntins and sills. Glass shall be held in place by EPDM glazing gaskets on both sides. No applied stops shall be permitted.
7. Finish: Same as storefront.

2.05 MATERIALS

A. Extruded Aluminum: ASTM B221 (ASTM B221M).

B. Sheet Aluminum: ASTM B209 (ASTM B209M).

C. Fasteners: Stainless steel.

D. Exposed Flashings: Aluminum sheet, 20 gage, 0.032 inch (0.81 mm) minimum thickness; finish to match framing members.

E. Concealed Flashings: Sheet aluminum, 26 gage, 0.017 inch (0.43 mm) minimum thickness.

F. Sill Flashing Sealant: Elastomeric, silicone or polyurethane, compatible with flashing material.

G. Sealant for Setting Thresholds: Non-curing butyl type.

H. Glazing Gaskets: Type to suit application to achieve weather, moisture, and air infiltration requirements.

2.06 FINISHES

A. Class I Color Anodized Finish: AAMA 611 AA-M12C22A44 Electrolytically deposited colored anodic coating not less than 0.7 mils (0.018 mm) thick.

B. Color: As selected by Engineer/Architect from manufacturer's standard range.

C. Touch-Up Materials: As recommended by coating manufacturer for field application.

2.07 HARDWARE

A. For each door, include weatherstripping, sill sweep strip, and threshold (ADA compliant locking type). Sill sweep to be resilient neoprene type and not brush.

B. Hardware must coordinate and be in full compliance with the submittted system's tested wind borne debris application requirements.

C. Other Door Hardware: Storefront manufacturer's standard type to suit application.
   1. Coordination during the bidding phase with Section 087100 is required and any descrepencies or compications with the hardware specified therein including the access control systems and hardware that portentially keeps the ASF system from being a hurricane tested assembly must be brought to the attention of the Architect. Any complications arising after bid award will be resolved and all corrective hardware will be supplied at no cost to the Owner.
   2. Finish on Hand-Contacted Items: Satin Chrome.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify dimensions, tolerances, and method of attachment with other work.

B. Verify that wall openings and adjoining air and vapor seal materials are ready to receive work of this section.

3.02 PREPARATION

A. In addition to the finish specified, aluminum surfaces against masonry, concrete, wood, or steel shall be protected from contact by use of a coat of bituminous paint to prevent galvanic or corrosive action, or as recommended by the manufacturer and approved by the Architect.

3.03 INSTALLATION

A. Install wall system in accordance with manufacturer's instructions.

B. Attach to structure to permit sufficient adjustment to accommodate construction tolerances and other irregularities.

C. Sealant Backings: Install sealant backings to comply with the following requirements:
   1. Install joint backers to provide support of sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint width that allow optimum sealant movement capabiity.
      a. Do not leave gaps between ends of joint backer.
      b. Do not stretch, twist, puncture, or tear joint backer.
      c. Remove absorbent joint backer that have become wet prior to sealant application and replace with dry material.
   2. Install bond breaker tape between sealants where backer rods are not used between sealants and joint backer or back of joints.

D. Installation of Sealants: Install all sealants by proven techniques that result in sealants directly contacting and fully wetting the joint substrates,compeltely filling recess provided for each joint

configuration, and providing uniform cross-sectional shapes and depths relative to joints widths that allow optimum sealant movement capability:

1. Fill the sealant rabbet to a slightly concave surface. Tool joints as necessary to assure continuous bonding, obtain a uniform appearance free from defects.
2. Install sealants to depths as recommended by sealant manufacturer.
3. Use sealing materials in strict accordance with salant manufacturer's printed instructions.

E. Sealant curing and Protection:
   1. Cure sealants in acompliance with manufacturer's recommendations, to obtain high early cond strength, internal cohesive strength and surface durability.
   2. Ensure procedures required for cure and protection of joint sealants are followed during construction period, so that they will b without deterioration or damage.
   3. Cure and protect sealants in a manner which will minimize increases in modulus of elasticity and other accelerated aging effects. Replace or restore sealants which are damaged or deteriorating during construction period.

F. Spaces filled with backer rod and sealant that occur between adjoing building materials and structure in excess of 3/8" will not be allowed. If the separation between the adjoing materials and the the frame exceeds 3/8," then it will be the Contractor's responsibility to replace the framed unit at no cost to the Owner.

G. Provide alignment attachments and shims to permanently fasten system to building structure.

H. Align assembly plumb and level, free of warp or twist. Maintain assembly dimensional tolerances, aligning with adjacent work.

I. Provide thermal isolation where components penetrate or disrupt building insulation.

J. Install sill flashings. Turn up ends and edges; seal to adjacent work to form water tight dam.

K. Where fasteners penetrate sill flashings, make watertight by seating and sealing fastener heads to sill flashing.

L. Pack fibrous insulation in shim spaces at perimeter of assembly to maintain continuity of thermal barrier.

M. Install hardware using templates provided.

N. Install glass in accordance with Section 088000, using exterior dry glazing method.

O. Touch-up minor damage to factory applied finish; replace components that cannot be satisfactorily repaired.

3.04 TOLERANCES

A. Maximum Variation from Plumb: 0.06 inch per 3 feet (1.5 mm per m) non-cumulative or 0.06 inch per 10 feet (1.5 mm per 3 m), whichever is less.

B. Maximum Misalignment of Two Adjoining Members Abutting in Plane: 1/32 inch (0.8 mm).

C. Work shall have sharp, clean profiles, be straight and free from defects, dents, marks, waves, or flaws.

D. Glazing rabbets shall be alligned between horizontal and vertical mullions toa tolerance of 1/32 inch total misalignment.

E. Removable glass stops shall be centered in openings with no more than 1/32 inch gap on either side.

3.05 FIELD QUALITY CONTROL

A. Curtain wall manufacturer to provide field surveillance of the installation or their products. Provide site surveillance at start up, 20% completion, and 60% completion of the work. Monitor installation procedures and report unacceptable contitions in writing to the Architect.

3.06 ADJUSTING

A. Adjust operating hardware and sash for smooth operation.

3.07 CLEANING

A. Remove protective material from pre-finished aluminum surfaces.

B. Wash down surfaces with a solution of mild detergent in warm water, applied with soft, clean wiping cloths, and take care to remove dirt from corners and to wipe surfaces clean.

C. Upon completion of installation, thoroughly clean aluminum surfaces in accordance with AAMA 609 & 610.

3.08 PROTECTION

A. Protect installed products from damage until Date of Substantial Completion.

END OF SECTION

SECTION 088000
GLAZING

PART 1 -GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

A. Section includes glazing for the following products and applications, including those specified in other Sections where glazing requirements are specified by reference to this Section:
   1. Aluminum storefront frames and door units

1.03 DEFINITIONS

A. Glass Manufacturers: Firms that produce primary glass, fabricated glass, or both, as defined in referenced glazing publications.

B. Glass Thicknesses: Indicated by thickness designations in millimeters according to ASTM C 1036.

C. Interspace: Space between lites of an insulating-glass unit.

1.04 PERFORMANCE REQUIREMENTS

A. General: Installed glazing systems shall withstand normal thermal movement and wind and impact loads (where applicable) without failure, including loss or glass breakage attributable to the following: defective manufacture, fabrication, or installation; failure of sealants or gaskets to remain watertight and airtight; deterioration of glazing materials; or other defects in construction.

B. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes acting on glass framing members and glazing components.
   1. Temperature Change: 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.

1.05 PRECONSTRUCTION TESTING

A. Preconstruction Adhesion and Compatibility Testing: Test each glazing material type, tape sealant, gasket, glazing accessory, and glass-framing member for adhesion to and compatibility with elastomeric glazing sealants.
   1. Testing will not be required if data are submitted based on previous testing of current sealant products and glazing materials matching those submitted.
      a. Use ASTM C 1087 to determine whether priming and other specific joint-preparation techniques are required to obtain rapid, optimum adhesion of glazing sealants to glass, tape sealants, gaskets, and glazing channel substrates.
      b. Test no fewer than eight Samples of each type of material, including joint substrates, shims, sealant backings, secondary seals, and miscellaneous materials.
      c. Schedule sufficient time for testing and analyzing results to prevent delaying the Work.
      d. For materials failing tests, submit sealant manufacturer's written instructions for corrective measures including the use of specially formulated primers.

1.06 ACTION SUBMITTALS

A. Product Data: For each glass product and glazing material indicated.

B. Glass Samples: For each type of the following products; 12 inches (300 mm) square.
   1. Tinted glass.
   2. Laminated glass

C. Glazing Accessory Samples: For gaskets sealants, in 12-inch (300-mm) lengths. Install sealant Samples between two strips of material representative in color of the adjoining framing system.

1.07 INFORMATIONAL SUBMITTALS

A. Qualification Data: For installers manufacturers of insulating-glass units with sputter-coated, low-e coatings glass testing agency sealant testing agency.

B. Product Certificates: For glass and glazing products, from manufacturer.

C. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, for tinted glass insulating glass glazing sealants glazing gaskets.
   1. For glazing sealants, provide test reports based on testing current sealant formulations within previous 36-month period.

1.08 QUALITY ASSURANCE

A. Manufacturer Qualifications for Insulating-Glass Units with Sputter-Coated, Low-E Coatings: A qualified insulating-glass manufacturer who is approved and certified by coated-glass manufacturer.

B. Installer Qualifications: A qualified installer who employs glass installers for this Project who are certified under the National Glass Association's Certified Glass Installer Program.

C. Glass Testing Agency Qualifications: A qualified independent testing agency accredited according to the NFRC CAP 1 Certification Agency Program.

D. Sealant Testing Agency Qualifications: An independent testing agency qualified according to ASTM C 1021 to conduct the testing indicated.

E. Source Limitations for Glass: Obtain tinted float glass laminated glass insulating glass from single source from single manufacturer for each glass type.

F. Source Limitations for Glazing Accessories: Obtain from single source from single manufacturer for each product and installation method.

G. Glazing Publications: Comply with published recommendations of glass product manufacturers and organizations below, unless more stringent requirements are indicated. Refer to these publications for glazing terms not otherwise defined in this Section or in referenced standards.
   1. GANA Publications: GANA's "Laminated Glazing Reference Manual" and GANA's "Glazing Manual."
      a. AAMA Publications: AAMA GDSG-1, "Glass Design for Sloped Glazing," and AAMA TIR-A7, "Sloped Glazing Guidelines."
      b. IGMA Publication for Sloped Glazing: IGMA TB-3001, "Guidelines for Sloped Glazing."
      c. IGMA Publication for Insulating Glass: SIGMA TM-3000, "North American Glazing Guidelines for Sealed Insulating Glass Units for Commercial and Residential Use."

H. Safety Glazing Labeling: Where safety glazing labeling is indicated, permanently mark glazing with certification label of the SGCC or another certification agency acceptable to authorities having jurisdiction. Label shall indicate manufacturer's name, type of glass, thickness, and safety glazing standard with which glass complies.

I. Insulating-Glass Certification Program: Permanently marked either on spacers or on at least one component lite of units with appropriate certification label of IGCC.

1.09 DELIVERY, STORAGE, AND HANDLING

A. Protect glazing materials according to manufacturer's written instructions. Prevent damage to glass and glazing materials from condensation, temperature changes, direct exposure to sun, or other causes.

B. Comply with insulating-glass manufacturer's written recommendations for venting and sealing units to avoid hermetic seal ruptures due to altitude change.

1.10 PROJECT CONDITIONS

A. Environmental Limitations: Do not proceed with glazing when ambient and substrate temperature conditions are outside limits permitted by glazing material manufacturers and when glazing channel substrates are wet from rain, frost, condensation, or other causes.

1.11 WARRANTY

A. Manufacturer's Special Warranty for Coated-Glass Products: Manufacturer's standard form in which coated-glass manufacturer agrees to replace coated-glass units that deteriorate within specified warranty period. Deterioration of coated glass is defined as defects developed from normal use that are not attributed to glass breakage or to maintaining and cleaning coated glass contrary to manufacturer's written instructions. Defects include peeling, cracking, and other indications of deterioration in coating.
   1. Warranty Period: 10 years from date of Substantial Completion.

B. Manufacturer's Special Warranty on Laminated Glass: Manufacturer's standard form in which laminated-glass manufacturer agrees to replace laminated-glass units that deteriorate within specified warranty period. Deterioration of laminated glass is defined as defects developed from normal use that are not attributed to glass breakage or to maintaining and cleaning laminated glass contrary to manufacturer's written instructions. Defects include edge separation, delamination materially obstructing vision through glass, and blemishes exceeding those allowed by referenced laminated-glass standard.
   1. Warranty Period: 10 years from date of Substantial Completion.

C. Manufacturer's Special Warranty on Insulating Glass: Manufacturer's standard form in which insulating-glass manufacturer agrees to replace insulating-glass units that deteriorate within specified warranty period. Deterioration of insulating glass is defined as failure of hermetic seal under normal use that is not attributed to glass breakage or to maintaining and cleaning insulating glass contrary to manufacturer's written instructions. Evidence of failure is the obstruction of vision by dust, moisture, or film on interior surfaces of glass.
   1. Warranty Period: 10 years from date of Substantial Completion.
   2. Warranty on Hermetic Seals: Provide insulating glass manufacture’s written warranty, agreeing to, within specified warranty period, to furnish FOB project site, replacement units for insulating glass units which have defective hermetic seals (excluding that do to glass breakage); defined to include intrusion of moisture or deterioration of internal glass coatings, and other visual evidence of seal failure or performance failure. Warranty period is 5 years after seal date permanently imprinted on unit, but not less than 4 years after the date of Substantial Completion of the project.
   3. Any leaks or defective work shall be immediately corrected by the Manufacturer and Contractor at no expense to the Owner.
   4. The Contractor shall guarantee to the Owner in writing that the installed Curtainwall and/or storefront systems and associated glass panels meet all local code wind conditions, and that the entire system shall remain free of water leaks for a period of one year from the date of Substantial Completion of the project.

PART 2 -PRODUCTS

2.01 GLASS PRODUCTS, GENERAL

A. Insulating-Glass Units, General: Factory-assembled units consisting of sealed lites of glass separated by a dehydrated interspace, and complying with ASTM E 774 for Class CBA units.

B. Thickness: Where glass thickness is indicated, it is a minimum. Dimensions indicated for insulating-glass units are nominal and the overall thicknesses of units are measure perpendicularly from outer surfaces of glass lites at unit’s edge.

C. Lites separated by 1/2 inch dry air space or gas filled space with -20 deg F dew point, with Class a sealant type edge construction to maintain a hermetic seal. Twin primary seals of polyisobutylene; tubular aluminum or galvanized steel spacer-bar frame with sealed or soldered sealed corners, and filled with desiccant; and secondary seal outside of bar, bonded to both sheets of glass and bar, or polysulfide, silicone or hot-melt butyl elastomeric sealant (fabricator's option). Five year warranty as previously specified. Sealants shall contain no asbestos.

D. Provide glass lites in thicknesses as needed to comply with requirements indicated.
   1. Minimum Glass Thickness for Exterior Lites: Not less than 1/4 inch.
      a. Thickness of Tinted Glass: Provide same thickness for each tint color indicated throughout Project.

E. Low-E Coating: Pyrolitic Hard Coating or equal on all exterior glazing.

F. Basis of Design on insulating units in exterior walls. The following are maximum values only. If different values, which increase the efficiency of the glazing, are called for in other areas of this section or in the drawings, then the more stringent will overrule.
   1. Manufacturer: Guardian Sunguard
   2. Product: Equal to SNX 62/27 SuperNeutral Low-E
   3. Outboard Substrate: Crystal Gray
   4. Inboard Substrate: Clear
   5. Exterior Appearance: Light Gray
   6. Transmittance:
      a. Visible Light: 44
      b. UV%: 3
      c. Solar Energy %: 16
   7. Reflectance:
      a. Visible Light Out %: 8
      b. Visible Light In %: 11
      c. Solar Energy %: 19
   8. Heat Gain:
      a. Relative Heat Gain: 54
      b. Solar Heat Gain Coefficient: 0.22
      c. Light-to-Solor Gain: 1.99
   9. U-Value
      a. Winter Nightime Argon: 0.24
      b. Winter Nightime Air: 0.29
      c. Summer Daytime Air: 0.27

G. Strength: Where float glass is indicated, provide annealed float glass, Kind HS heat-treated float glass, or Kind FT heat-treated float glass as needed to comply with "Performance Requirements" Article. Where heat-strengthened glass is indicated, provide Kind HS heat-treated float glass or Kind FT heat-treated float glass as needed to comply with "Performance Requirements" Article. Where fully tempered glass is indicated, provide Kind FT heat-treated float glass.

H. Thermal and Optical Performance Properties: Provide glass with performance properties specified, as indicated in manufacturer's published test data, based on procedures indicated below:
   1. For monolithic-glass lites, properties are based on units with lites 6.0 mm thick.
      a. For laminated-glass lites, properties are based on products of construction indicated.
      b. For insulating-glass units, properties are based on units of thickness indicated for overall unit and for each lite.
      c. U-Factors: Center-of-glazing values, according to NFRC 100 and based on LBL's WINDOW 5.2 computer program, expressed as Btu/sq. ft. x h x deg F (W/sq. m x K).

d. Solar Heat-Gain Coefficient and Visible Transmittance: Center-of-glazing values, according to NFRC 200 and based on LBL's WINDOW 5.2 computer program.
e. Visible Reflectance: Center-of-glazing values, according to NFRC 300.

2.02 LAMINATED GLASS

A. Laminated Glass: ASTM C 1172, and complying with testing requirements in 16 CFR 1201 for Category II materials, and with other requirements specified. Use materials that have a proven record of no tendency to bubble, discolor, or lose physical and mechanical properties after fabrication and installation.
1. Construction: Laminate glass with polyvinyl butyral interlayer to comply with interlayer manufacturer's written recommendations.
a. Interlayer Thickness: Provide thickness not less than that indicated and as needed to comply with requirements.
b. Interlayer Color: Clear unless otherwise indicated.

B. Glass: Comply with applicable requirements in "Glass Products" Article as indicated by designations in "Laminated-Glass Types" Article.

2.03 GLAZING GASKETS

A. Dense Compression Gaskets: Molded or extruded gaskets of profile and hardness required to maintain watertight seal, made from one of the following:
1. Neoprene complying with ASTM C 864.
a. EPDM complying with ASTM C 864.
b. Silicone complying with ASTM C 1115.
c. Thermoplastic polyolefin rubber complying with ASTM C 1115.

2.04 MISCELLANEOUS GLAZING MATERIALS

A. General: Provide products of material, size, and shape complying with referenced glazing standard, requirements of manufacturers of glass and other glazing materials for application indicated, and with a proven record of compatibility with surfaces contacted in installation.

B. Cleaners, Primers, and Sealers: Types recommended by sealant or gasket manufacturer.

C. Setting Blocks: Elastomeric material with a Shore, Type A durometer hardness of 85, plus or minus 5.

D. Spacers: Elastomeric blocks or continuous extrusions of hardness required by glass manufacturer to maintain glass lites in place for installation indicated.

E. Edge Blocks: Elastomeric material of hardness needed to limit glass lateral movement (side walking).

F. Cylindrical Glazing Sealant Backing: ASTM C 1330, Type O (open-cell material), of size and density to control glazing sealant depth and otherwise produce optimum glazing sealant performance.

G. Perimeter Insulation for Fire-Resistive Glazing: Product that is approved by testing agency that listed and labeled fire-resistant glazing product with which it is used for application and fire-protection rating indicated.

2.05 FABRICATION OF GLAZING UNITS

A. Fabricate glazing units in sizes required to fit openings indicated for Project, with edge and face clearances, edge and surface conditions, and bite complying with written instructions of product manufacturer and referenced glazing publications, to comply with system performance requirements.

B. Clean-cut or flat-grind vertical edges of butt-glazed monolithic lites to produce square edges with slight chamfers at junctions of edges and faces.

C. Grind smooth and polish exposed glass edges and corners.

2.06 GLASS TYPE GL-1: TINTED, INSULATED, LOW E, IMPACT RESISTANT GLASS:

A. Conformance Requirements: ASTM E 2190, Class CBA; ASTM C 1172 and complying with testing requirements in CPSC 16CFR-1201 for Category II materials and with "Windborne-Debris-Impact Resistance".

B. Location: As called for in the drawings.

C. Overall Unit Thickness: 1-5/16 inch

D. Inboard Lite: 1/4" thick clear heat-strengthened fully tempered float glass. eeTCHED

E. Interspace Content: Argon.

F. Interspace Thickness: 1/2 inch.

G. Outboard Lite: laminated glass comprised of two plies of ASTM C1048-12e1 compliant heat-strengthened fully tempered float glass.
   1. Thickness of Each Glass Ply: 1/4 inch.
   2. Interlayer: Polyvinyl butyral (PVB) plastic interlayer, clear, 0.090 inch thick.
   3. Tint: Grey

H. Low-E Coating: Pyrolytic on third surface.

I. Total Visible Light Transmittance: 45 percent, nominal.

J. Total Solar Heat Gain Coefficient:.22 percent, nominal.

K. Provide permanent safety glazing etched labeling.

2.07 GLASS TYPE GL-2: SATIN ETCHED TINTED, INSULATED, LOW E, IMPACT RESISTANT GLASS

A. Conformance Requirements: ASTM E 2190, Class CBA; ASTM C 1172 and complying with testing requirements in CPSC 16CFR-1201 for Category II materials and with "Windborne-Debris-Impact Resistance".

B. Location: As called for in the drawings.

C. Overall Unit Thickness: 1-5/16 inch.

D. Inboard Lite: 1/4" thick clear heat-strengthened fully tempered float glass. Standard satin etched glass (1 Side).

E. Interspace Content: Argon.

F. Interspace Thickness: 1/2 inch.

G. Outboard Lite: laminated glass comprised of two plies of ASTM C1048-12e1 compliant heat-strengthened fully tempered float glass.
   1. Thickness of Each Glass Ply: 1/4 inch.
   2. Interlayer: Polyvinyl butyral (PVB) plastic interlayer, clear, 0.090 inch thick.
   3. Tint: Grey

H. Low-E Coating: Pyrolytic on interior face of second surface.

I. Total Visible Light Transmittance: 45 percent, nominal.

J. Total Solar Heat Gain Coefficient:.22 percent, nominal.

K. Glazing Method: Exterior dry method, tape and gasket spline.

L. Provide permanent safety glazing etched labeling.

2.08 GLASS TYPE GL-3: SPANDREL PANEL, INSULATED, IMPACT RESISTANT

A. Manufacturer: Mapes Architectural Panels or Approved Equal.

B. Product: Mapeshield Hurricane Resistant Panels

C. Conformance Requirements: ASTM E 1996, and complying with testing requirements in CPSC 16CFR-1201 for Category II materials and with "Windborne-Debris-Impact Resistance".

D. Location: As called for in the drawings.

E. Skin: Standard .032 Kynar

F. Substrate: 1/8 inch High-Density hardboard

G. Core: 2# Density Polystyrene

H. Color: To be selected by architect from Standard Kynar on Aluminum manufacturer's selection.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine framing, glazing channels, and stops, with Installer present, for compliance with the following:
   1. Manufacturing and installation tolerances, including those for size, squareness, and offsets at corners.
      a. Presence and functioning of weep systems.
      b. Minimum required face and edge clearances.
      c. Effective sealing between joints of glass-framing members.

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

3.02 PREPARATION

A. Clean glazing channels and other framing members receiving glass immediately before glazing. Remove coatings not firmly bonded to substrates.

B. Examine glazing units to locate exterior and interior surfaces. Label or mark units as needed so that exterior and interior surfaces are readily identifiable. Do not use materials that will leave visible marks in the completed work.

3.03 GLAZING, GENERAL

A. Comply with combined written instructions of manufacturers of glass, sealants, gaskets, and other glazing materials, unless more stringent requirements are indicated, including those in referenced glazing publications.

B. Adjust glazing channel dimensions as required by Project conditions during installation to provide necessary bite on glass, minimum edge and face clearances, and adequate sealant thicknesses, with reasonable tolerances.

C. Protect glass edges from damage during handling and installation. Remove damaged glass from Project site and legally dispose of off Project site. Damaged glass is glass with edge damage or other imperfections that, when installed, could weaken glass and impair performance and appearance.

D. Apply primers to joint surfaces where required for adhesion of sealants, as determined by preconstruction testing.

E. Install setting blocks in sill rabbets, sized and located to comply with referenced glazing publications, unless otherwise required by glass manufacturer. Set blocks in thin course of compatible sealant suitable for heel bead.

F. Do not exceed edge pressures stipulated by glass manufacturers for installing glass lites.

G. Provide spacers for glass lites where length plus width is larger than 50 inches (1270 mm).
   1. Locate spacers directly opposite each other on both inside and outside faces of glass. Install correct size and spacing to preserve required face clearances, unless gaskets and glazing tapes are used that have demonstrated ability to maintain required face clearances and to comply with system performance requirements.

a. Provide 1/8-inch (3-mm) minimum bite of spacers on glass and use thickness equal to sealant width. With glazing tape, use thickness slightly less than final compressed thickness of tape.

H. Provide edge blocking where indicated or needed to prevent glass lites from moving sideways in glazing channel, as recommended in writing by glass manufacturer and according to requirements in referenced glazing publications.

I. Set glass lites in each series with uniform pattern, draw, bow, and similar characteristics.

J. Set glass lites with proper orientation so that coatings face exterior or interior as specified.

K. Where wedge-shaped gaskets are driven into one side of channel to pressurize sealant or gasket on opposite side, provide adequate anchorage so gasket cannot walk out when installation is subjected to movement.

L. Square cut wedge-shaped gaskets at corners and install gaskets in a manner recommended by gasket manufacturer to prevent corners from pulling away; seal corner joints and butt joints with sealant recommended by gasket manufacturer.

3.04 GASKET GLAZING (DRY)

A. Cut compression gaskets to lengths recommended by gasket manufacturer to fit openings exactly, with allowance for stretch during installation.

B. Insert soft compression gasket between glass and frame or fixed stop so it is securely in place with joints miter cut and bonded together at corners.

C. Installation with Drive-in Wedge Gaskets: Center glass lites in openings on setting blocks and press firmly against soft compression gasket by inserting dense compression gaskets formed and installed to lock in place against faces of removable stops. Start gasket applications at corners and work toward centers of openings. Compress gaskets to produce a weathertight seal without developing bending stresses in glass. Seal gasket joints with sealant recommended by gasket manufacturer.

D. Installation with Pressure-Glazing Stops: Center glass lites in openings on setting blocks and press firmly against soft compression gasket. Install dense compression gaskets and pressure-glazing stops, applying pressure uniformly to compression gaskets. Compress gaskets to produce a weathertight seal without developing bending stresses in glass. Seal gasket joints with sealant recommended by gasket manufacturer.

E. Install gaskets so they protrude past face of glazing stops.

3.05 CLEANING AND PROTECTION

A. Protect exterior glass from damage immediately after installation by attaching crossed streamers to framing held away from glass. Do not apply markers to glass surface. Remove nonpermanent labels and clean surfaces.

B. Protect glass from contact with contaminating substances resulting from construction operations. If, despite such protection, contaminating substances do come into contact with glass, remove substances immediately as recommended in writing by glass manufacturer.

C. Examine glass surfaces adjacent to or below exterior concrete and other masonry surfaces at frequent intervals during construction, but not less than once a month, for buildup of dirt, scum, alkaline deposits, or stains; remove as recommended in writing by glass manufacturer.

D. Remove and replace glass that is broken, chipped, cracked, or abraded or that is damaged from natural causes, accidents, and vandalism, during construction period.

E. Wash glass on both exposed surfaces in each area of Project not more than four days before date scheduled for inspections that establish date of Substantial Completion. Wash glass as recommended in writing by glass manufacturer.

SECTION 092116
GYPSUM BOARD ASSEMBLIES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Metal stud wall framing.

B. Acoustic insulation.

C. Gypsum wallboard.

D. Joint treatment and accessories.

1.02 RELATED REQUIREMENTS

1.03 REFERENCE STANDARDS

A. ASTM C645 - Standard Specification for Nonstructural Steel Framing Members 2018.

B. ASTM C665 - Standard Specification for Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing 2017.

C. ASTM C754 - Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products 2020.

D. ASTM C840 - Standard Specification for Application and Finishing of Gypsum Board 2020.

E. ASTM C1002 - Standard Specification for Steel Self-Piercing Tapping Screws for Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs 2020.

F. ASTM C1047 - Standard Specification for Accessories For Gypsum Wallboard and Gypsum Veneer Base 2019.

G. ASTM C1396/C1396M - Standard Specification for Gypsum Board 2017.

H. GA-216 - Application and Finishing of Gypsum Panel Products 2018.

1.04 SUBMITTALS

A. See Section 013000 - Administrative Requirements, for submittal procedures.

B. Shop Drawings: Indicate special details associated with fireproofing and acoustic seals.

C. Product Data: Provide data on metal framing, gypsum board, accessories, and joint finishing system.

D. Product Data: Provide manufacturer's data on partition head to structure connectors, showing compliance with requirements.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: Company specializing in performing gypsum board installation and finishing, with minimum five years of experience.

PART 2 PRODUCTS

2.01 GYPSUM BOARD ASSEMBLIES

A. Provide completed assemblies complying with ASTM C840 and GA-216.
   1. See PART 3 for finishing requirements.

2.02 METAL FRAMING MATERIALS

A. Manufacturers - Metal Framing, Connectors, and Accessories:
   1. Clarkwestern Dietrich Building Systems LLC; <>: www.clarkdietrich.com/#sle.
   2. Substitutions: See Section 016000 - Product Requirements.

B. Non-Loadbearing Framing System Components: ASTM C645; galvanized sheet steel, of size and properties necessary to comply with ASTM C754 for the spacing indicated, with maximum deflection of wall framing of L/360 at 5 psf (L/360 at 240 Pa).

1. Studs: "C" shaped with flat or formed webs. Size as called for on the drawings unless deflection requirements above require deeper members.
2. Runners: U shaped, sized to match studs. Size as called for on the drawings unless deflection requirements above require deeper members.
3. Furring: 1-1/2" hat-chaped sections
4. Metal Stud Clip Angles: Size as required for proper installation and support of adjacent studwork.

C. Partition Head To Structure Connections: Provide track fastened to structure with legs of sufficient length to accommodate deflection, for friction fit of studs cut short and fastened as indicated on drawings.
1. For walls with top tracks that do not connect directly to building structure: Diagonally Brace Stud wall partitions to structure above as required to maintain defection requirements hererin.

2.03 BOARD MATERIALS

A. Manufacturers - Gypsum-Based Board:
1. Georgia-Pacific Gypsum; <>: www.gpgypsum.com/#sle.
2. Substitutions: See Section 016000 - Product Requirements.

B. Gypsum Wallboard: Paper-faced gypsum panels as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut.
1. Application: Use for vertical surfaces and ceilings, unless otherwise indicated.
2. At Assemblies Indicated with Fire-Rating: Use type required by indicated tested assembly; if no tested assembly is indicated, use Type X board, UL or WH listed.
3. Thickness:
a. Vertical Surfaces: 5/8 inch (16 mm).
b. Ceilings: 5/8 inch (16 mm).
4. Paper-Faced Products:
a. Georgia-Pacific Gypsum; ToughRock Fireguard X.
5. Mold Resistant Paper Faced Products:
a. Continental Building Products; Mold Defense Type X.

2.04 GYPSUM WALLBOARD ACCESSORIES

A. Acoustic Insulation: ASTM C665; preformed glass fiber, friction fit type, unfaced. Thickness: [match wall stud depth in] inch ([_____] mm)es.

B. Beads, Joint Accessories, and Other Trim: ASTM C1047, galvanized steel or rolled zinc, unless noted otherwise.
1. Corner Beads: Low profile, for 90 degree outside corners.
a. Products:
1) Phillips Manufacturing Co; Everlast Corner Bead: www.phillipsmfg.com/#sle.
2) Substitutions: See Section 016000 - Product Requirements.

C. Screws for Fastening of Gypsum Panel Products to Cold-Formed Steel Studs Less than 0.033 inch (0.84 mm) in Thickness and Wood Members: ASTM C1002; self-piercing tapping screws, corrosion resistant.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that project conditions are appropriate for work of this section to commence.

3.02 FRAMING INSTALLATION

A. Metal Framing: Install in accordance with ASTM C754 and manufacturer's instructions.

B. Studs: Space studs at 16 inches on center (at 406 mm on center).
1. Extend partition framing to structure where indicated and to ceiling in other locations.

2. Partitions Terminating at Ceiling: Attach ceiling runner securely to ceiling track in accordance with manufacturer's instructions.
3. Partitions Terminating at Structure: Attach extended leg top runner to structure, maintain clearance between top of studs and structure, and brace both flanges of studs with continuous bridging.

C. Openings: Reinforce openings as required for weight of doors or operable panels, using not less than double studs at jambs.

D. Standard Wall Furring: Install at masonry walls scheduled to receive gypsum board, not more than 4 inches (100 mm) from floor and ceiling lines and abutting walls. Secure in place on alternate channel flanges at maximum 16 inches ([____] mm) on center.
1. Orientation: Horizontal.
2. Spacing: At 16 inches on center (At 400 mm on center).

E. Blocking: Install wood blocking for support of:
1. Framed openings.
2. Wall mounted cabinets.
3. Plumbing fixtures.
4. Toilet partitions.
5. Toilet accessories.
6. Wall mounted door hardware.

3.03 ACOUSTIC ACCESSORIES INSTALLATION

A. Acoustic Insulation: Place tightly within spaces, around cut openings, behind and around electrical and mechanical items within partitions, and tight to items passing through partitions.

3.04 BOARD INSTALLATION

A. Comply with ASTM C840, GA-216, and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations.

B. Single-Layer Non-Rated: Install gypsum board in most economical direction, with ends and edges occurring over firm bearing.
1. Exception: Tapered edges to receive joint treatment at right angles to framing.

C. Installation on Metal Framing: Use screws for attachment of gypsum board.

3.05 INSTALLATION OF TRIM AND ACCESSORIES

A. Corner Beads: Install at external corners, using longest practical lengths.

3.06 TOLERANCES

A. Maximum Variation of Finished Gypsum Board Surface from True Flatness: 1/8 inch in 10 feet (3 mm in 3 m) in any direction.

END OF SECTION

SECTION 099123
INTERIOR PAINTING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Surface preparation.

B. Field application of paints.

C. Scope: Finish interior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated.
   1. Both sides and edges of plywood backboards for electrical and telecom equipment before installing equipment.
   2. Roof access ladders.
   3. Prime surfaces to receive wall coverings.
   4. Mechanical and Electrical:
      a. In finished areas, paint insulated and exposed pipes, conduit, boxes, insulated and exposed ducts, hangers, brackets, collars and supports, mechanical equipment, and electrical equipment, unless otherwise indicated.
      b. In finished areas, paint shop-primed items.
      c. Paint interior surfaces of air ducts that are visible through grilles and louvers with one coat of flat black paint to visible surfaces.
      d. Paint dampers exposed behind louvers, grilles, to match face panels.

D. Do Not Paint or Finish the Following Items:
   1. Items factory-finished unless otherwise indicated; materials and products having factory-applied primers are not considered factory finished.
   2. Items indicated to receive other finishes.
   3. Items indicated to remain unfinished.
   4. Fire rating labels, equipment serial number and capacity labels, bar code labels, and operating parts of equipment.
   5. Floors, unless specifically indicated.
   6. Ceramic and other tiles.
   7. Glass.
   8. Concealed pipes, ducts, and conduits.

1.02 DEFINITIONS

A. Comply with ASTM D16 for interpretation of terms used in this section.

1.03 REFERENCE STANDARDS

A. 40 CFR 59, Subpart D - National Volatile Organic Compound Emission Standards for Architectural Coatings; U.S. Environmental Protection Agency current edition.

B. ASTM D16 - Standard Terminology for Paint, Related Coatings, Materials, and Applications 2016.

C. ASTM D4442 - Standard Test Methods for Direct Moisture Content Measurement of Wood and Wood-Based Materials 2020.

D. MPI (APL) - Master Painters Institute Approved Products List; Master Painters and Decorators Association Current Edition.

E. MPI (APSM) - Master Painters Institute Architectural Painting Specification Manual Current Edition.

F. SSPC V1 (PM1) - Good Painting Practice: Painting Manual, Volume 1 2016.

G. SSPC-SP 1 - Solvent Cleaning 2015, with Editorial Revision (2016).

H. SSPC-SP 2 - Hand Tool Cleaning 2018.

I. SSPC-SP 3 - Power Tool Cleaning 2018.

J. SSPC-SP 13 - Surface Preparation of Concrete 1997 (Reaffirmed 2003).

1.04 SUBMITTALS

A. See Section 013000 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide complete list of products to be used, with the following information for each:
   1. Manufacturer's name, product name and/or catalog number, and general product category (e.g. "alkyd enamel").
   2. MPI product number (e.g. MPI #47).
   3. Cross-reference to specified paint system(s) product is to be used in; include description of each system.

C. Samples: Submit three paper "draw down" samples, 8-1/2 by 11 inches (216 by 279 mm) in size, illustrating range of colors available for each finishing product specified.
   1. Where sheen is specified, submit samples in only that sheen.
   2. Where sheen is not specified, discuss sheen options with Engineer/Architect before preparing samples, to eliminate sheens definitely not required.
   3. Allow 10 days for approval process, after receipt of complete samples by Engineer/Architect.
   4. Paint color submittals will not be considered until color submittals for major materials not to be painted, such as masonry, have been approved.

D. Certification: By manufacturer that paints and finishes comply with VOC limits specified.

E. Manufacturer's Instructions: Indicate special surface preparation procedures.

F. Maintenance Data: Submit data including finish schedule showing where each product/color/finish was used, product technical data sheets, material safety data sheets (MSDS), care and cleaning instructions, touch-up procedures, repair of painted and finished surfaces, and color samples of each color and finish used.

G. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
   1. See Section 016000 - Product Requirements, for additional provisions.
   2. Extra Paint and Finish Materials: 1 gallon (4 L) of each color; from the same product run, store where directed.
   3. Label each container with color in addition to the manufacturer's label.

1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the products specified, with minimum three years documented experience.

B. Applicator Qualifications: Company specializing in performing the type of work specified with minimum 5 years experience and approved by manufacturer.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.

B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.

C. Paint Materials: Store at minimum ambient temperature of 45 degrees F (7 degrees C) and a maximum of 90 degrees F (32 degrees C), in ventilated area, and as required by manufacturer's instructions.

1.07 FIELD CONDITIONS

A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.

B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.

C. Do not apply materials when relative humidity exceeds 85 percent; at temperatures less than 5 degrees F (3 degrees C) above the dew point; or to damp or wet surfaces.

D. Minimum Application Temperatures for Paints: 50 degrees F (10 degrees C) for interiors unless required otherwise by manufacturer's instructions.

E. Provide lighting level of 80 ft candles (860 lx) measured mid-height at substrate surface.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Provide paints and finishes from the same manufacturer to the greatest extent possible.
   1. In the event that a single manufacturer cannot provide specified products, minor exceptions will be permitted provided approval by Engineer/Architect is obtained using the specified procedures for substitutions.
   2. Substitution of MPI-approved products by a different manufacturer is preferred over substitution of unapproved products by the same manufacturer.
   3. Substitution of a different paint system using MPI-approved products by the same manufacturer will be considered.

B. Paints:
   1. Behr Process Corporation: www.behr.com/#sle.
   2. PPG Paints: www.ppgpaints.com/#sle.
   3. Sherwin-Williams Company: www.sherwin-williams.com/#sle.

2.02 PAINTS AND FINISHES - GENERAL

A. Paints and Finishes: Ready mixed, unless intended to be a field-catalyzed paint.
   1. Where MPI paint numbers are specified, provide products listed in Master Painters Institute Approved Product List, current edition available at www.paintinfo.com, for specified MPI categories, except as otherwise indicated.
   2. Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
   3. DOOR SLABS, DOOR FRAMES, AND OPENING FRAMES TO BE FIELD PAINTED MUST BE SPRAYED. BRUSH APPLICATION WILL NOT BE ACCEPTED. If brushed, the contractor will be required to strip and/or replace the product or installation in question and repaint, which will be up to the Architect’s discretion with no fault to the Architect or Owner and without time or monetary compensation to the Contractor.
   4. Provide 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.
   5. Supply each paint material in quantity required to complete entire project's work from a single production run.
   6. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.

B. Volatile Organic Compound (VOC) Content:
   1. Provide paints and finishes that comply with the most stringent requirements specified in the following:
      a. 40 CFR 59, Subpart D--National Volatile Organic Compound Emission Standards for Architectural Coatings.
      b. Architectural coatings VOC limits of the State in which the Project is located.
   2. Determination of VOC Content: Testing and calculation in accordance with 40 CFR 59, Subpart D (EPA Method 24), exclusive of colorants added to a tint base and water added

at project site; or other method acceptable to authorities having jurisdiction.

C. Flammability: Comply with applicable code for surface burning characteristics.

D. Sheens: Provide the sheens specified; where sheen is not specified, sheen will be selected later by Engineer/Architect from the manufacturer's full line.

E. Colors: As indicated on drawings.
   1. Allow for minimum of three colors for each system, unless otherwise indicated, without additional cost to Owner.
   2. Extend colors to surface edges; colors may change at any edge as directed by Engineer/Architect.
   3. In finished areas, finish pipes, ducts, conduit, and equipment the same color as the wall/ceiling they are mounted on/under.

2.03 PAINT SYSTEMS - INTERIOR

A. Non Wet AreaInterior Surfaces to be Painted, Unless Otherwise Indicated: Including gypsum board, concrete masonry units, uncoated steel, and shop primed steel.
   1. Two top coats and one coat primer.
   2. Top Coat(s): Institutional Low Odor/VOC Interior Latex; MPI #143, 144, 145, 146, 147, or 148.
   3. Top Coat Sheen:
      a. Flat: MPI gloss level 1; use this sheen for ceilings and other overhead surfaces.
      b. Eggshell: MPI gloss level 3; use this sheen at walls.
      c. Satin: MPI gloss level 4; use this sheen for items subject to frequent touching by occupants, including door frames and railings.
   4. Primer: As recommended by top coat manufacturer for specific substrate.

B. Medium Duty Door/Trim: For surfaces subject to frequent contact by occupants, including metals:
   1. Medium duty applications include doors and door frames.
   2. Two top coats and one coat primer.
   3. Top Coat(s): Interior Epoxy-Modified Latex; MPI #115 or 215.
   4. Top Coat Sheen:
      a. Semi-Gloss: MPI gloss level 5; use this sheen at all locations.

C. Wet AreaMedium Duty Vertical and Overhead: Including gypsum board.
   1. Two top coats and one coat primer.
   2. Top Coat(s): Interior Epoxy-Modified Latex; MPI #115 or 215.
   3. Top Coat Sheen:
      a. Satin: MPI gloss level 4; use this sheen at all locations.

2.04 PRIMERS

A. Primers: Provide the following unless other primer is required or recommended by manufacturer of top coats.
   1. Interior/Exterior Latex Block Filler; MPI #4.
      a. Products:
         1) Kilz Pro-X p50 Block Filler Primer.
   2. Interior Latex Primer Sealer; MPI #50.
      a. Products:
         1) Behr Premium Plus Interior All-In-One Primer and Sealer [No. 75]. (MPI #50)
   3. Interior Drywall Primer Sealer.
      a. Products:
         1) Behr Premium Plus Interior Drywall Primer and Sealer [No. 73].
   4. Interior Rust-Inhibitive Water Based Primer; MPI #107.
      a. Products:

1) Behr Premium Plus Interior/Exterior Multi-Surface Primer and Sealer [No. 436]. (MPI #107)

5. Interior Water Based Primer for Galvanized Metal; MPI #134.
   a. Products:
      1) Behr Premium Plus Interior/Exterior Multi-Surface Primer and Sealer [No. 436]. (MPI #134)
6. Latex Primer for Interior Wood; MPI #39.
   a. Products:
      1) Kilz Premium Water-Based Primer [No. 1300].

2.05 ACCESSORY MATERIALS

A. Accessory Materials: Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of painted surfaces.

B. Patching Material: Latex filler.

C. Fastener Head Cover Material: Latex filler.

PART 3 EXECUTION

3.01 EXAMINATION

A. Do not begin application of paints and finishes until substrates have been properly prepared.

B. Verify that surfaces are ready to receive work as instructed by the product manufacturer.

C. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially effect proper application.

D. If substrate preparation is the responsibility of another installer, notify Engineer/Architect of unsatisfactory preparation before proceeding.

E. Test shop-applied primer for compatibility with subsequent cover materials.

F. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below the following maximums:
   1. Gypsum Wallboard: 12 percent.
   2. Interior Wood: 15 percent, measured in accordance with ASTM D4442.
   3. Concrete Floors and Traffic Surfaces: 8 percent.

3.02 PREPARATION

A. Clean surfaces thoroughly and correct defects prior to application.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

C. Remove or repair existing paints or finishes that exhibit surface defects.

D. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces or finishing.

E. Seal surfaces that might cause bleed through or staining of topcoat.

F. Remove mildew from impervious surfaces by scrubbing with solution of tetra-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.

G. Concrete:
   1. Remove release agents, curing compounds, efflorescence, and chalk. Do not coat surfaces if moisture content or alkalinity of surfaces to be coated exceeds that permitted in manufacturer's written instructions.
   2. Prepare surface as recommended by top coat manufacturer and according to SSPC-SP 13.
   3. Remove efflorescence and chalk. Do not coat surfaces if moisture content or alkalinity of surfaces or if alkalinity of mortar joints exceed that permitted in manufacturer's written

instructions. Allow to dry.

4. Prepare surface as recommended by top coat manufacturer.

H. Concrete Floors and Traffic Surfaces: Remove contamination, acid etch, and rinse floors with clear water. Verify required acid-alkali balance is achieved. Allow to dry.

I. Gypsum Board: Fill minor defects with filler compound. Spot prime defects after repair.

J. Wood Surfaces to Receive Opaque Finish: Wipe off dust and grit prior to priming. Seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after primer has dried; sand between coats. Back prime concealed surfaces before installation.

K. Wood Doors to be Field-Finished: Seal wood door top and bottom edge surfaces with clear sealer.

L. Metal Doors to be Painted: Prime metal door top and bottom edge surfaces.

3.03 APPLICATION

A. Remove unfinished louvers, grilles, covers, and access panels on mechanical and electrical components and paint separately.

B. Apply products in accordance with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual".

C. Where adjacent sealant is to be painted, do not apply finish coats until sealant is applied.

D. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.

E. Apply each coat to uniform appearance in thicknesses specified by manufacturer.

F. Sand wood and metal surfaces lightly between coats to achieve required finish.

G. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.

H. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

3.04 CLEANING

A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.05 PROTECTION

A. Protect finishes until completion of project.

B. Touch-up damaged finishes after Substantial Completion.

END OF SECTION

SECTION 260010
BASIC ELECTRICAL REQUIREMENTS

PART 1 GENERAL

1.01 DESCRIPTION

A. This section is an extension of the General Requirements and certain items of a common or administrative nature that pertain to all electrical work.

B. The work of this section consists of furnishing materials, equipment, constant competent supervision, special tools, test equipment, technicians, and labor necessary for installation of a complete working electrical system as indicated herein and on the Drawings.

C. The work shall include but not necessarily be limited to the following:
   1. Temporary electrical service for construction.
   2. All Electrical Construction.

D. Lighting System.

E. Power System.

F. Fire Alarm System

G. Telecommunication System.

H. Timeclock System

I. Intercom System

J. Security System

K. Security Cameras (Conduit and Ethernet Cable only)

L. Grounding system.

1.02 QUALITY ASSURANCE

A. The electrical installation shall conform to the requirements of the latest edition of the National Electrical Code (NEC). Notify Architect/Engineer of conflicts before performance.

B. Electrical material shall be built and tested in accordance with the applicable standards of the (NEMA), (ANSI), (ASTM), and (IEEE).

C. Electrical materials shall be new and unused and shall be listed and labeled for the service intended by Underwriters' Laboratories, Inc., where such labeling service is available.

1.03 REGULATORY REQUIREMENTS

A. Permits: Obtain and pay for all necessary permits, inspections, connection charges, fees, insurance, bond, licenses, and comply with all governing laws, ordinances, rules and regulations.

B. Certificates of Inspection: Upon completion and before the date of substantial completion of each designated Phase, furnish a certificate of inspection issued by Ingalls to the effect that the installation is in full conformity with all Ingalls requirements.

1.04 COORDINATION

A. Contractor shall be responsible for coordination of all work with other disciplines.

B. Arrange work in a neat, well organized manner with exposed conduit and similar services running parallel with primary lines of the building construction, high as possible with a minimum of 8'-0" overhead clearance or as directed by the Engineer.

C. Where the method of installation is not certain, ask for details. Lack of details, not requested, will not be an excuse for improper installation, and any such work must be corrected at contractor’s cost.

D. Coordination Drawings: For locations where several elements of electrical or combined mechanical and electrical work must be sequenced and positioned with precision in order to fit into the available space, prepare coordination drawings showing the actual physical dimensions (at accurate scale, minimum 1/4") required for the installation. Prepare and submit coordination drawings prior to purchase-fabrication-installation of any of the elements involved in the coordination.

E. All Bidders shall be responsible to insure that equipment selected, switchboards, panel boards, etc., fit in spaces selected, along with NEC compliance. If standard equipment does not fit, Contractor shall be required to utilize custom equipment as required.

1.05 DRAWINGS AND SPECIFICATIONS

A. Contract Documents (Drawings and Specifications) are intended to convey the scope of work and indicate general arrangements of equipment, fixtures and piping, and approximate sizes and locations of equipment and outlets. Follow these documents in laying out the work, check all Drawings to become familiar with all conditions affecting the work, and verify spaces in which the work will be installed.

B. The contractor shall fully coordinate installation of electrical system with other disciplines. The Drawings show approximate locations only of selected feeders, branch circuits, outlets, etc., except where specific routing or dimensions are indicated. The Engineer reserves the right to make reasonable changes in locations indicated before roughing-in without additional cost to the Owner.
   1. Contractor shall investigate the structural and finish conditions affecting Division 26 work and shall arrange such work accordingly, furnishing fittings, bends, junction boxes, pull boxes, access panels, and accessories required to meet such conditions.
   2. These Specifications, together with the accompanying Drawings, contemplate apparatus fully erected, and in satisfactory operating condition with the Contractor furnishing and installing everything that may be necessary to complete the job.
   3. Contractor shall install circuits, breakers, equipment, etc. as indicated and label the above as noted. Contractor shall not deviate from equipment/circuit identification unless approved by Owner/Engineer.

1.06 SUBMITTALS

A. Shop Drawings:
   1. Listed below are shop drawings required for transmittal. Refer to Phasing Plan for scheduling of submittal. No time delays will be allowed for failure to be so informed.
      a. Lighting Fixtures
      b. Lighting Controls
      c. Lamps
      d. Raceways
      e. Connectors
      f. Safety Switches
      g. Fuses
      h. Circuit Breakers
      i. Wiring Devices
      j. Motor Controls
      k. Panel boards
      l. Switchgear
      m. Conductors
      n. Fire Alarm System Components
      o. Telecommunicaton System Components
      p. Intercom System Components
      q. Relays and Contactors
   2. Transformers

3. Grounding products
4. Further descriptions or information required with shop drawings shall be included with the description of materials specified herein as follows:
   a. Grounding Products: Include a complete grounding system diagram with materials and ground conductor sizes.
   b. Miscellaneous Electrical Controls and Control Wiring: Include control wiring diagrams for all miscellaneous electrical controls.
   c. Housekeeping Pads: Include location and dimensions of housekeeping pads, including blockouts and anchor bolts.
5. Firestops: Include all firestop materials for the project, indicating intended use and UL fire rating where applicable.
   a. Provide “SpecSeal” products or equal. Provide SSB series firestop pillows (or equal) around the cable tray where cable trays make penetration in the walls, etc. Provide “LC150” series sealant (or equal) to seal the penetrations made by conduits.
6. Contractor prepared, new, detailed, dimensioned shop Drawings for the installation of the work in the electrical equipment rooms areas shall be prepared and submitted for review. In preparing shop Drawings, establish lines and levels for the work specfied and check the drawings to avoid interference with structural features an the work of other trades. Immediately call ot the attention of the Engineering in writing any interferences for clarification.
7. Corrections or comments made on shop Drawings during the review do not relieve the Contractor from compliance with requirements of the contract documents. Review of shop Drawings shall not permit any deviation from Drawings and Specifications. Shop Drawings must be accompanied by signed statement from contractor, stating that he has reviewed the submittal and checked it for compliance. Contractor shall make note on the submittals if they deviate from the contract documents.
8. Contractor shall provide products as specified if submittals for review of materials are not received within thirty (30) days after award of the Contract.

1.07 PROJECT/SITE CONDITIONS

A. Visit the site before bidding to become familiar with conditions under which the work will be performed.

B. No additional compensation will be allowed for failure to be so informed.

1.08 CUTTING AND PATCHING

A. Do all cutting, patching, fitting, and all other work that may be required to make the several parts come together and fit.

B. Provide, everything required for the work or to conceal any of the work, in any part of the structure.

C. Fireproofing:
   1. Plastic sleeves/pipe shall not be used within the building when penetrating a fire-resistant-rated wall, ceiling, partition, or floor.

1.09 RECORD DRAWINGS

A. Upon completion of the project, provide a complete set of detailed electronic as-built drawings in AutoCAD 2005 format with all information required. Contractor shall also produce (2) sets of as-built drawings with modifications to construction documents in red ink. Contractor shall maintain a current set of as-built drawings on site at all times. As-built drawings shall include, but not be limited to detailed dimensions of all conduits, ductbank, etc. install in slab or below grade.

B. Equipment Manuals:
   1. Before the date of substantial completion, Contractor shall furnish to the Engineer three (3) bound sets of descriptive, dimensional and parts data on all major items of electrical

equipment and material including those items listed above under "Shop Drawings:".

1.10 WARRANTY/GUARANTEE

A. Except where longer periods of warranty are specified, guarantee all labor and materials for a period of twelve (12) months from the date of substantial completion of the particular phase of the work. Repair all defective materials and work; replace with new materials and/or equipment, any material and/or equipment failing to give satisfactory service.

B. During the period of guarantee, promptly correct any defects in equipment, materials or workmanship without cost to the Owner.

C. Guarantee includes equipment capacity and performance ratings specified without excessive noise levels. Any deficiencies in equipment specified shall be promptly corrected.

D. Contractor's warranty shall include an inspection of the system one (1) week before the end of the one (1) year warranty period. Replace or repair any items found to be defective at this time.

1.11 TESTS AND BALANCING

A. At such times as the Engineer directs, conduct operating tests to demonstrate that the electrical systems are installed and will operate properly and in accordance with the requirements of this Specification. Tests shall be performed in the presence of the Engineer's representative. Furnish instruments and personnel required for such tests.

B. Any work and materials tested and found varying from the requirements of the Drawings and Specifications shall be replaced without additional cost to the Owner.

C. This section does not relieve the Contractor from testing equipment installed under this Division but not listed in this section. Contractor is required to test all equipment, feeders, etc., installed under this Division.

PART 2 PRODUCTS

2.01 GENERAL

A. Refer to DIVISION 1 sections for general requirements on products, materials and equipment. Refer to other DIVISION 26 sections for additional requirements.

B. Provide products which are compatible with other products of the electrical work, and with other work requiring interface with the electrical work, including electrical connections and control devices. Determine in advance of purchase that equipment and materials proposed for installation will fit into the confines indicated, leaving adequate clearance as required by applicable codes, and for adjustment, repair, or replacement.

2.02 MANUFACTURERS' NAMEPLATES

A. Each major component of the equipment shall have the manufacturer's name, address, model number, and rating on a plate securely affixed in a conspicuous place.

PART 3 EXECUTION

3.01 GENERAL

A. Visit the building site before bidding to determine existing conditions and assume all responsibility and bear all expenses in allowing for these conditions in the bid.

B. Obtain all necessary permits, pay all legal fees and charges.

C. No work shall be concealed until approved by the engineer and all regulations are adhered to. Provide certificate of completion.

D. Cooperate with other trades in installing work in order that there will be no conflict of space required by conduit, piping, ducts, outlets, etc.

E. Verify dimensions with certified shop Drawings of the materials actually approved and purchased.

3.02 TEMPORARY WIRING, LIGHTING AND POWER AT THE SITE

A. Furnish and install provisions for temporary electrical service and construction light and power during the construction period.

B. Furnish, install, and maintain all temporary service equipment as required until permanent service is installed, switch-over temporary systems to the permanent service when latter is ready for same.

C. Furnish, install, maintain, and switch on and off on all regular work days a complete temporary light system, for the building while under construction.

D. Provide any and/or all relocations of temporary electric facilities as necessary to avoid the permanent installations of all trades.

3.03 WIRING FOR EQUIPMENT BY OTHERS

A. Electrical service for all equipment furnished under this Specification and/or indicated on the Drawings shall be roughed-in and connected under this Section.

B. Electrical work for equipment specified in Division 25 - Mechanical shall be as specified.

C. Electrical work for Performing Arts Theatrical and AV - Electrical Contractor shall refer to the Theatrical and AV drawings for wiring requirements.

D. Raceways, outlets, backboards, cabinets, grounding connections, handholes, underground distribution system, and other roughing-in indicated shall be provided as work of this division for intercom system, telecommunication system, fire alarm system and HVAC Control 120V power (Contractor to provide cable as well).

3.04 WORKMANSHIP

A. Install all materials and electrical components of the work in accordance with instructions of manufacturer following the best modern construction practices and conforming with the Contract Documents. Workmanship shall be first class, in both function and appearance, whether finally concealed or exposed and shall be performed by experienced workmen skilled in the type of work. As practicable, the lines of all components of the system shall be perpendicular or parallel. In general, workmanship shall conform to guidelines set forth in N.E.C.A. manuals.

3.05 MOUNTING HEIGHTS

A. Upon approval of the Engineer mounting heights may be adjusted.

END OF SECTION

APPENDIX A – FEDERALLY FUNDED PROJECT REQUIREMENTS & ASSOCIATED DOCUMENTS

EMPLOYEE RIGHTS

UNDER THE DAVIS-BACON ACT

FOR LABORERS AND MECHANICS EMPLOYED ON FEDERAL OR FEDERALLY ASSISTED CONSTRUCTION PROJECTS

PREVAILING WAGES

You must be paid not less than the wage rate listed in the Davis-Bacon Wage Decision posted with this Notice for the work you perform.

OVERTIME

You must be paid not less than one and one-half times your basic rate of pay for all hours worked over 40 in a work week. There are few exceptions.

ENFORCEMENT

Contract payments can be withheld to ensure workers receive wages and overtime pay due, and liquidated damages may apply if overtime pay requirements are not met. Davis-Bacon contract clauses allow contract termination and debarment of contractors from future federal contracts for up to three years. A contractor who falsifies certified payroll records or induces wage kickbacks may be subject to civil or criminal prosecution, fines and/or imprisonment.

APPRENTICES

Apprentice rates apply only to apprentices properly registered under approved Federal or State apprenticeship programs.

PROPER PAY

If you do not receive proper pay, or require further information on the applicable wages, contact the Contracting Officer listed below:

or contact the U.S. Department of Labor's Wage and Hour Division.

WAGE AND HOUR DIVISION
UNITED STATES DEPARTMENT OF LABOR

1-866-487-9243
TTY: 1-877-889-5627
www.dol.gov/whd

WH1321 REV 10/17

U.S. Department of Labor
Wage and Hour Division

U.S. Wage and Hour Division
(Revised July 2008)

Fact Sheet #21: Recordkeeping Requirements under the Fair Labor Standards Act (FLSA)

This fact sheet provides a summary of the FLSA's recordkeeping regulations, 29 CFR Part 516.

Records To Be Kept By Employers

Highlights: The FLSA sets minimum wage, overtime pay, recordkeeping, and youth employment standards for employment subject to its provisions. Unless exempt, covered employees must be paid at least the minimum wage and not less than one and one-half times their regular rates of pay for overtime hours worked.

Posting: Employers must display an official poster outlining the provisions of the Act, available at no cost from local offices of the Wage and Hour Division and toll-free, by calling 1-866-4USWage (1-866-487-9243). This poster is also available electronically for downloading and printing at http://www.dol.gov/osbp/sbrefa/poster/main.htm.

What Records Are Required: Every covered employer must keep certain records for each non-exempt worker. The Act requires no particular form for the records, but does require that the records include certain identifying information about the employee and data about the hours worked and the wages earned. The law requires this information to be accurate. The following is a listing of the basic records that an employer must maintain:

1. Employee's full name and social security number.
2. Address, including zip code.
3. Birth date, if younger than 19.
4. Sex and occupation.
5. Time and day of week when employee's workweek begins.
6. Hours worked each day.
7. Total hours worked each workweek.
8. Basis on which employee's wages are paid (e.g., "$9 per hour", "$440 a week", "piecework")
9. Regular hourly pay rate.
10. Total daily or weekly straight-time earnings.
11. Total overtime earnings for the workweek.
12. All additions to or deductions from the employee's wages.
13. Total wages paid each pay period.
14. Date of payment and the pay period covered by the payment.

How Long Should Records Be Retained: Each employer shall preserve for at least three years payroll records, collective bargaining agreements, sales and purchase records. Records on which wage computations are based should be retained for two years, i.e., time cards and piece work tickets, wage rate tables, work and time schedules, and records of additions to or deductions from wages. These records must be open for inspection by the Division's representatives, who may ask the employer to make extensions, computations, or transcriptions. The records may be kept at the place of employment or in a central records office.

What About Timekeeping: Employers may use any timekeeping method they choose. For example, they may use a time clock, have a timekeeper keep track of employee's work hours, or tell their workers to write their own times on the records. Any timekeeping plan is acceptable as long as it is complete and accurate.

The following is a sample timekeeping format employers may follow but are not required to do so:

DAY	DATE	IN	OUT	TOTAL HOURS
Sunday	6/3/07	--------	--------	--------
Monday	6/4/07	8:00am	12:02pm	
		1:00pm	5:03pm	8
Tuesday	6/5/07	7:57am	11:58am	
		1:00pm	5:00pm	8
Wednesday	6/6/07	8:02am	12:10pm	
		1:06pm	5:05pm	8
Thursday	6/7/07	--------	--------	--------
Friday	6/8/07	--------	--------	--------
Saturday	6/9/07	--------	--------	--------
Total Workweek Hours:				**24**

Employees on Fixed Schedules: Many employees work on a fixed schedule from which they seldom vary. The employer may keep a record showing the exact schedule of daily and weekly hours and merely indicate that the worker did follow the schedule. When a worker is on a job for a longer or shorter period of time than the schedule shows, the employer must record the number of hours the worker actually worked, on an exception basis.

Where to Obtain Additional Information

For additional information, visit our Wage and Hour Division Website: http://www.wagehour.dol.gov and/or call our toll-free information and helpline, available 8 a.m. to 5 p.m. in your time zone, 1-866-4USWAGE (1-866-487-9243).

This publication is for general information and is not to be considered in the same light as official statements of position contained in the regulations.

U.S. Department of Labor
Frances Perkins Building
200 Constitution Avenue, NW
Washington, DC 20210

1-866-4-USWAGE
TTY: 1-866-487-9243
Contact Us

U.S. Department of Labor
Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)

Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number.

U.S. Wage and Hour Division

Rev. Dec. 2008

OMB No.:1235-0008
Expires: 07/31/2024

NAME OF CONTRACTOR ☐ OR SUBCONTRACTOR ☐	ADDRESS	
PAYROLL NO.	FOR WEEK ENDING	PROJECT AND LOCATION / PROJECT OR CONTRACT NO.

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT. OR ST.	(4) DAY AND DATE — HOURS WORKED EACH DAY	(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS: FICA	WITH-HOLDING TAX			OTHER	TOTAL DEDUCTIONS	(9) NET WAGES PAID FOR WEEK
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			S											
			O											
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While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Public Burden Statement

We estimate that is will take an average of 55 minutes to complete this collection, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W. Washington, D.C. 20210

(over)

Date _____

I, _____ _____
(Name of Signatory Party) (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by

_____ on the
(Contractor or Subcontractor)

_____; that during the payroll period commencing on the
(Building or Work)

_____ day of _____, _____, and ending the _____ day of _____, _____,

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

_____ from the full
(Contractor or Subcontractor)

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

_____

_____

_____

_____

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☐ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 3729 OF TITLE 31 OF THE UNITED STATES CODE.

Request For Wage Determination And Response To Request

(Davis Bacon Act as Amended and Related Statuses)

U.S. Department of Labor

Employment Standards Administration
Wage and Hour Division

FOR DEPARTMENT OF LABOR USE

Response To Request

☐ Use area determination issued for this area

_____

_____

☐ The attached decision noted below is applicable to this project

Decision Number

Date of Decision

Expires

Supersedes Decision Number

Approved

Mail Your Request To:

U.S. Department of Labor
Employment Standards Administration
Wage and Hour Division
Branch of Construction Contract Wage Determinations
Washington, D.C. 20210

Requesting Officer (Typed name *and signature)*

Department, Agency, or Bureau

Phone Number

Date of Request

Estimated Advertising Date

Estimated Bid Opening Date

Prior Decision Number (If any)

Estimated $ Value of Contract

☐ Under 1/2 Mil ☐ 1 to 5 Mil
☐ 1/2 to 1 Mil ☐ Over 5 Mil

Type of Work

☐ Bldg. ☐ Highway
☐ Resid. ☐ Heavy

Address to which wage determination should be mailed. (Print or type)

Location of Project *(City, County, State, Zip Code)*

Description of Work *(Be specific) (Print or type)*

CHECK OR LIST CRAFTS NEEDED

(Attach continuation sheet if *needed)*

☐ Asbestos workers
☐ Boilermakers
☐ Bricklayers
☐ Carpenters
☐ Cement masons
☐ Electricians
☐ Glaziers
☐ Ironworkers
☐ Laborers (Specify classes)
☐ _____
☐ _____
☐ _____
☐ Lathers
☐ Marble & tile setters. terrazzo workers
☐ Painters
☐ Piledrivermen
☐ Plasterers
☐ Plumbers
☐ Roofers
☐ Sheet metal workers
☐ Soft floor layers
☐ Stearnfitters
☐ Welders-rate for craft
☐ Truck drivers
☐ Power equipment operators *(Specify types)*
☐ _____
☐ _____
☐ _____
☐ _____
☐ _____
☐ _____

Other Crafts

☐ _____
☐ _____
☐ _____
☐ _____