CALCASIEU PARISH SCHOOL BOARD



CD DOCUMENTS dated March 31, 2023

FOR PROJECT:

Lake Charles Boston – Field House (Bldg F) Roof Repairs HL-748-02

PREPARED BY:



Grace Hebert Curtis Architects, LLC 3100 Ryan Street, Suite C Lake Charles, LA 70601 GHC Project # 3223113

SECTION 00 0001 – TABLE OF CONTENTS

00 0001 00 0002 00 0003	Table of Contents Project Directory Professional Seal Page		00 0001-1-3 00 0002-1-1 00 0003-1-1
	DIVISION 00 - PROCUREMEN	T AND CONTRACTING REQUIREM	<u>MENTS</u>
		ont End Documents	00 0004 4 4
00 0004 00 0005	Advertisement for Bids Instructions to Bidders		00 0004-1-1 00 0005-1-13
00 0006	List of Required Documents		00 0005-1-15
00 0007		s Bid Form and Unit Price Form	00 0007-1-2
8000 00	Bid Bond Form		00 0008-1-2
00 0009	Resolution		00 0009-1-1
00 0010	CPSB Non-Collusion Affidavit	(I DC 20-2224)	00 0010-1-1
00 0011 00 0012	Louisiana Non-Collusion Affida Verification of Employees Affida		00 0011-1-1 00 0012-1-1
00 0012		al Conviction of Bidders (LRS 38.22)	
00 0014		Worker's Compensation Insurance	00 0014-1-1
00 0015	Subcontractor Approval List		00 0015-1-1
00 0016	Contract Between Owner & Co and Performance Bond		00 0016-1-3
00 0017	Federal Contract Clauses Exhil		00 0017-1-8
00 0018	A201-2017, amended by Owne	ract for Construction AIA Document	00 0018-1-44
00 0019	Change Order Form	•	00 0019-1-1
00 0020	Application for Payment Docun	nents	00 0022-1-1
00 0021	Beneficial Occupancy Form		00 0021-1-2
00 0022	Recommendation of Acceptance		00 0022-1-1
00 0023 00 0024	Louisiana Dept. of Revenue Sa	iles Tax Exemption Form	00 0023-1-1
00 0024	CPSB HL Roofing Guarantee		00 0024-1-2
	· · · · · · · · · · · · · · · · · · ·	Front End Documents	
00 0100	Architect's Instructions to Bidde		00 0100-1-2
00 0100a	How to Access Bidding Docum		00 0100a-1-2
00 0100b 00 0100c	How to Enter Request for Char	Substitution Requests from Bidding S	ide 00 0100b-1-3 00 0100c-1-4
00 0110	Notice of Award	ige During Constitution	00 0110-1-2
00 0120	Notice to Proceed		00 0120-1-1
00 0130	Applied Technology Council (A	TC) Windspeed Determination	00 0130-1-3
	DIVISION 01 – G	ENERAL REQUIREMENTS	
01 1000	Summary		01 1000-1-4
01 2500	Substitution Procedures		01 2500-1-3
01 2600	Contract Modification Procedur	res	01 2600-1-2
01 2900	Payment Procedures		01 2900-1-4
01 3000	Administrative Requirements	-11: 41: :-	01 3000-1-9
01 3100 01 3200	Project Management and Coor Construction Progress Docume		01 3100-1-6 01 3200-1-7
01 3233	Photographic Documentation	entation	01 3233-1-2
01 4000	Quality Requirements		01 4000-1-7
01 5000	Temporary Facilities and Contr	ols	01 5000-1-5
	SB Lake Charles I - Roofing Repairs	00 0001 - 1	TABLE OF CONTENTS
Bldg. F	. Rooming Ropalis		

01 6000 01 7300 01 7419 01 7700 01 7800 01 7900 01 8000	Product Requirements Execution Construction Waste Management and Disposal Closeout Procedures Closeout Submittals Demonstration and Training Electronic Reporting and Communications	01 6000-1-4 01 7300-1-5 01 7419-1-3 01 7700-1-5 01 7800-1-5 01 7900-1-4 01 8000-1-1
	DIVISION 02 – EXISTING CONDITIONS	
02 4100	Demolition	02 4100-1-3
	DIVISION 03 – CONCRETE (NONE)	
	<u>DIVISION 04 - MASONRY</u>	
04 2000	Unit Masonry	04-2000-1-9
	<u>DIVISION 05 – METALS (NONE)</u>	
	DIVISION 06 - WOOD, PLASTICS AND COMPOSITES	
06 1000	Rough Carpentry	06 1000-1-5
	DIVISION 07 – THERMAL AND MOISTURE PROTECTION	
07 2000 07 5000 07 5500 07 6200 07 7100 07 7200	Roof and Deck Insulation Preparation for Re-Roofing SBS Modified Bitumen Roofing Membrane Sheet Metal Flashing and Trim Roof Specialties Roof Accessories	07 2000-1-5 07 5000-1-2 07 0550-1-13 07 6200-1-6 07 7100-1-2 07 7200-1-2

DIVISION 08 – OPENINGS (NONE)

DIVISION 09 - FINISHES (NONE)

DIVISION 10 - SPECIALTIES (NONE)

DIVISION 11 – EQUIPMENT (NONE)

DIVISION 12 – FURNISHINGS (NONE)

DIVISION 13 – SPECIAL CONSTRUCTION (NONE)

DIVISION 14 – CONVEYING SYSTEMS (NONE)

DIVISIONS 15 – 19 - NOT USED

<u>DIVISION 20 – COMMON FIRE SUPPRESSION, PLUMBING, AND HVAC REQUIREMENTS (NONE)</u>

DIVISION 21 – FIRE SUPPRESSION (NONE)

DIVISION 22 – PLUMBING (NONE)

DIVISION 23 – HEATING VENTILATING AND AIR CONDITIONING (NONE)

3223113 / CPSB Lake Charles Boston School - Roofing Repairs Bldg. F 00 0001 - 2

TABLE OF CONTENTS

DIVISONS 24 & 25 – NOT USED

DIVISION 26 - ELECTRICAL (NONE)

DIVISION 27 – COMMUNICATIONS (NONE)

DIVISION 28 – ELECTRONIC SAFETY AND SECURITY (NONE)

DIVISION 30 – NOT USED

<u>DIVISION 31 – EARTHWORK (NONE)</u>

DIVISION 32 - EXTERIOR IMPROVEMENTS (NONE)

DIVISION 33 – UTILITIES (NONE)

DIVISION 34 – TRANSPORTATION (NONE)

END OF TABLE OF CONTENTS

00 0002 - PROJECT DIRECTORY

Owner:

Calcasieu Parish School Board 3310 Broad Street Lake Charles, LA. 70615 p. 337.217.4000

Program Management:

CSRS, Inc. 1811 Ryan Street Lake Charles, LA 70601 p. 337.214.6072

Architect/Interior Design:

Grace Hebert Curtis Architects, LLC 3100 Ryan Street Lake Charles, LA 70601 p. 225.338.5569

SECTION 00 0003 - PROFESSIONAL SEALS

DAVID HEREN	
ARCHITECT – GRACE HEBERT CURTIS ARCHITECTS, LLC	

ADVERTISEMENT FOR BIDS

The Calcasieu Parish School Board will receive sealed bids before 11:00 A.M., Tuesday, May 9, 2023 at the Calcasieu Parish School Board, Attention: Tony Motamedi, Superintendent's Conference Room, 3310 Broad St., Lake Charles, Louisiana 70615 for the following Project:

CPSB Lake Charles Boston – Field House (Bldg F) Roof Repairs, HL-748-02

Complete Bid Documents prepared by Grace Hebert Curtis Architects, LLC for this Project are available in electronic form. They may be obtained without charge and without deposit from www.CPSB.org/Page/524. Bid Documents may also be obtained from www.centralbidding.com for a nominal charge or subscription. Printed copies are not available from the Owner or Architect, but arrangements can be made to obtain printed Bid Documents through most reprographic firms. Bidders are responsible for any subscription, downloading, reproduction or mailing costs.

No Bid shall be considered or accepted unless the bid is accompanied by bid security in an amount not less than five percent (5%) of the Base Bid and all Additive Alternates. The bid security shall be in the form of certified check or cashier's check drawn on a bank insured by the FDIC, or on the Calcasieu Parish School Board Bid Bond Form contained in the Front End Documents written by a surety company licensed to do business in Louisiana with a A.M. Best rating of "A" or better, countersigned by a person who is under contract with the surety company or bond insurer as a licensed agent in this state and who is residing in this state.

Bids shall be accepted only from Contractors who are licensed under LS R.S. 37:2150-2163 for the classification of Building Construction. No bid may be withdrawn for a period of thirty (30) days after receipt of bids, except under the provisions of LA. R.S. 38:2214. Evidence of authority to submit the bid shall be required in accordance with LA. R.S. 38:2212 (B) (2), (5) and/or LA. R.S. 39:1594 (C) (4).

A Pre-Bid Conference will be conducted at the Lake Charles Boston – Field House (Bldg F) Site located at 1509 Enterprise Blvd., Lake Charles, LA 70601 on April 25, 2023 at 1:00PM. Attendance is non-mandatory and a pre-requisite for submitting a Bid.

Each bid must be placed in an envelope, sealed and marked on the outside:

"Bid Enclosed for CPSB Lake Charles Boston – Field House (Bldg F) Roof Repairs, HL-748-02 to be opened at 11:00 A.M., Tuesday, May 9, 2023 at the Calcasieu Parish School Board, Attention: Tony Motamedi, Superintendent's Conference Room, 3310 Broad Street, Lake Charles, LA 70615". Refer to Instructions for Bidders for other requirements on outside of envelope.

Bid may also be submitted by electronic means via website <u>www.centralbidding.com</u>. Free registration is required in order to submit a bid via the Central Bidding website.

The Owner reserves the right to reject any and all bids for just cause as permitted by LA. R.S. 38:2214 (B). The ability of an entity to reject any bid is applicable only when administered in accordance with the Public Bid Law. In accordance with LA. R.S. 38:2212 (B) (1), the provisions and requirements of this section, and those stated in the Bidding Documents shall not be waived by any public entity.

Dr. Shannon LaFargue, Superintendent Calcasieu Parish School Board

Pc: Bourne, Heath, Architect, State Licensing Board for Contractors, Daily Journal of Commerce, F. W. Dodge, File.

Publish in the Lake Charles American Press Newspaper: April 11, April 18 and April 25, 2023.

INSTRUCTIONS TO BIDDERS

ARTICLE 1 - DEFINITIONS

1.1 The Bid documents include the following:

Advertisement for Bids.

Instructions to Bidders.

List of Required Documents.

Louisiana Uniform Public Works Bid Form and Unit Price Form.

Bid Bond Form.

Resolution.

CPSB Non-Collusion Affidavit.

Louisiana Non-Collusion Affidavit (LRS 38:2224).

Verification of Employees Affidavit (LRS 38:2212.10).

Attestation Form – Past Criminal Conviction of Bidders (LRS 38:2227).

Certification Regarding Unpaid Worker's Compensation Insurance (LRS 23:1726(B)).

Subcontractor Approval List.

Contract Between Owner & Contractor including Payment and Performance Bond.

Federal Contract Clauses Exhibit A.

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

Supplementary Conditions.

Change Order Form.

Application for Payment Documents.

Beneficial Occupancy Form.

Recommendation of Acceptance Form.

Louisiana Dept. of Revenue Sales Tax Exemption Form.

CPSB HL Roofing Guarantee (if applicable).

Specifications

Drawings

Addenda issued during bid period and acknowledged on the Bid Form

- 1.2 All definitions set forth in the General Conditions of the Contract for Construction, AIA Document A201-2017 as amended, or in other Contract Documents, are applicable to the Bid Documents.
- 1.3 Addenda are written and/or graphic instruments issued by the Architect prior to the opening of bids which modify or interpret the Bid Documents by additions, deletions, clarifications, corrections, and prior approvals.
- 1.4 A Bid is a complete and properly signed proposal to do the work or designated portion thereof for the sums stipulated therein, supported by data called for by the Bid Documents.
- 1.5 Base Bid is the sum stated in the Bid for which the Bidder offers to perform the work

- described as the Base, to which work may be added for sums stated in Alternate Bids.
- 1.6 An Alternate Bid (or Alternate) is an amount stated in the Bid to be added to or subtracted from the amount of the Base Bid if the corresponding change in project scope or materials or methods of construction described in the Bid Documents is accepted.
- 1.7 A Bidder is one who submits a bid for a prime contract with the Owner for the work described in the proposed Contract Documents.
- 1.8 A Sub-Bidder is one who submits a bid to a Bidder for materials and/or labor for a portion of the work.
- 1.9 Where the word "Architect" is used in any of the Documents, it shall refer to the Prime Designer of the project, a state-licensed Architect, Engineer or Landscape Architect.

ARTICLE 2 - BIDDER'S REPRESENTATION

- 2.1 Each Bidder by making his Bid represents that:
- 2.1.1 He has read and understands the Bid Documents and his Bid is made in accordance therewith.
- 2.1.2 He has visited the site and has familiarized himself with local conditions under which the work is to be performed.
- 2.1.3 His Bid is based upon the materials, systems, and equipment described in the Bid Documents as advertised and as modified by Addenda.
- 2.2 The Bidder must be fully qualified under any state or local licensing law for Contractors in effect at the time and at the location of the work before submitting his Bid. In the State of Louisiana, Revised Statute 37:2150 et. seq. will be considered, if applicable. Contractor shall be responsible for determining that all of his sub-bidders or prospective subcontractors are duly licensed in accordance with law.
- 2.3 The Bidder must not be debarred as determined by the Federal Government's Excluded Parties List, and it is the responsibility of the Contractor to verify subcontractor eligibility based on factors such as past performance, proof of liability insurance, possession of a federal ID tax number, debarment, and state and local licensing requirements. The prime contractor may use the web site: https://www.sam.gov/SAM to determine if a subcontractor has been debarred at the federal level.

ARTICLE 3 - BID DOCUMENTS

- 3.1 Bid Documents.
- 3.1.1 Complete Bid Documents for this Project are available in electronic form. They may be obtained without charge and without deposit from www.CPSB.org/Page/524. Bid Documents may also be obtained from www.centralbidding.com for a nominal charge or subscription. Printed copies are not available from the Owner or Architect, but arrangements can be made to obtain printed Bid Documents through most reprographic firms. Bidders are responsible for any subscription, downloading, reproduction or mailing costs.
- 3.1.2 Complete sets of Bid Documents shall be used in preparing Bids; neither the Owner nor the Architect assumes any responsibility for error of misinterpretation resulting from the use of incomplete sets of Bid Documents.
- 3.1.3 The Owner and Architect make the Bid Documents available to Bidders only for the purpose of obtaining bids on the work and do not confer a license or grant for any other use.
- 3.2 Interpretation or Correction of Bid Documents
- 3.2.1 Bidders shall promptly notify the Architect of any ambiguity, inconsistency or error, which they may discover upon examination of the Bid Documents or of the site and local conditions.
- 3.2.2 Bidders requiring clarification or interpretation of Bid Documents shall make a written request to the Architect to reach him at least seven (7) days prior to the date and time of receipt of bids.
- 3.2.3 Any interpretation, correction or change of the Bid Documents will be made by Addendum. Interpretations, corrections or changes of Bid Documents made in any other manner will not be binding, and Bidders shall not rely upon such interpretations, corrections, or changes.
- 3.3 Substitutions
- 3.3.1 The materials, products, and equipment described in the Bid Documents establish a standard of required function, dimension, appearance and quality to be met by any proposed substitution.
- 3.3.2 No substitution will be considered unless written request for approval has been submitted by the Proposer and has been received by the Architect at least seven (7) days prior to the date and time for receipt of bids. Each such request shall include the name of the material or equipment for which it is to be substituted and complete

description of the proposed substitute including model numbers, drawings, cuts, performance and test data, and other information necessary for evaluation. A statement setting forth any changes in any other materials, equipment or work that incorporation of the substitute would require shall be included. The burden of proof of the merit of the proposed substitute is upon the Proposer. The Architect's decision of approval or disapproval of a proposed substitution shall be final.

- 3.3.3 If the Architect approves any proposed substitution such approval will be set forth in an Addendum. Bidders shall not rely upon approvals made in any other manner.
- 3.4 Addenda.
- 3.4.1 Addenda will be posted on www.centralbidding.com. Printed copies are not available from the Owner or Architect, but arrangements can be made to obtain printed Addenda through most reprographic firms. Bidders are responsible for any subscription, downloading, reproduction or mailing costs.
- 3.4.2 Bidders are responsible for obtaining Addenda online. Addenda will not be mailed or distributed by Architect or Owner.
- 3.4.3 Addenda shall not be issued within a period of seventy-two (72) hours prior to the advertised time for the opening of bids, excluding Saturdays, Sundays, and any legal holidays; however, if the necessity arises to issue an addendum modifying plans and specifications within the seventy-two (72) hour period prior to the advertised time for the opening of bids, then the opening of bids shall be extended exactly one (1) week, without the requirement of re-advertising.
- 3.4.4 Each Bidder shall ascertain from www.centralbidding.com prior to submitting his Bid that he has received (via download) all Addenda issued, and he shall acknowledge their receipt on the Bid Form.

ARTICLE 4 - BIDDING PROCEDURES

- 4.1 Form and Style of Bids
- 4.1.1 Bids shall be submitted on the forms provided in the Bid Documents. Refer to **List of Required Documents** for other items required to be submitted with Bid.
- 4.1.2 All blanks on the Bid Form shall be filled in by typewriter or manually in ink.
- 4.1.3 Where so indicated by the makeup of the Bid Form, sums shall be expressed in both

- words and figures, and in case of discrepancy between the two, the written words shall govern.
- 4.1.4 Any interlineation, alteration or erasure must be initialed by the signer of the Bid or his authorized representative.
- 4.1.5 Bidders are cautioned to complete all Alternates should such be required in the Bid Form. Failure to submit alternate prices will render the Proposal informal and may cause its rejection.
- 4.1.6 Bidder shall make no additional stipulation on the Bid Form nor qualify his Bid in any other manner.
- 4.1.7 The Bid shall include the legal name of Bidder and statement whether the Bidder is a sole proprietorship, partnership, corporation, or any other legal entity and his Bid shall be signed by the person or person legally authorized to bind the Bidder to a contract. Bid submitted by an agency shall have a current Power of Attorney attached certifying the agent's authority to bind Bidder.
- 4.1.8 On any Bid in excess of Fifty Thousand Dollars & no cents (\$50,000.00), the Contractor shall certify that he is licensed under LA R.S. 37:2150-2163 and show his license number on the Bid above his signature or signature of his duly authorized representative.
- 4.2 Bid Security
- 4.2.1 No Bid shall be considered or accepted unless the bid is accompanied by bid security in an amount of not less than five percent (5%) of the Base Bid and all additive Alternates. The bid security shall be in the form of a certified check or cashier's check drawn on a bank insured by the Federal Deposit Insurance Corporation, or on the Calcasieu Parish School Board Bid Bond contained in the Front End Documents written by a surety company licensed to do business in Louisiana and with a current A.M. Best rating of "A- VII" or better, countersigned by a person who is under contract with the surety company or bond insurer as a licensed agent/broker in this state and who is residing in this state and accompanied by appropriate Power of Attorney in Fact or of the State of Louisiana.
- 4.2.2 Bid security furnished by the Contractor shall guarantee that the Contractor will, if awarded the work according to the terms of his proposal, enter into the Contract and furnish Performance and Payment Bonds as required by these Contract Documents, within ten (10) days after written notice that the instrument is ready for his signature.
- 4.2.3 Should the Bidder refuse to enter into such Contract or fail to furnish such bonds, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as

penalty.

- 4.2.4 The Owner will have the right to retain the bid security of Bidders until either (a) the Contract has been executed and bonds have been furnished, or (b) the specified time has elapsed so that bids may be withdrawn, or (c) all bids have been rejected.
- 4.3 Submission of Bid
- 4.3.1 Bids shall be sealed in an opaque envelope and will be received until the time specified and at the place specified in the Advertisement for Bids. It shall be the specific responsibility of the Bidder to deliver his sealed bid to the <u>Calcasieu Parish School Board</u> at the appointed place and prior to the announced time for the opening of bids. Late delivery of a bid for any reason, including late delivery by U.S. Mail or express delivery, shall disqualify the Bid.
- 4.3.2 The sealed bid envelope shall be marked on the outside with: "Bid Enclosed for CPSB Lake Charles Boston Field House (Bldg F) Roof Repairs, HL-748-02 to be opened at 11:00 AM, Tuesday, May 9, 2023 at the Calcasieu Parish School Board, Attention: Tony Matamedi, Superintendent's Conference Room, 3310 Broad Street, Lake Charles, LA 70615". The outside of the bid envelope shall include the name, address and Contractor's license number of the Bidder as required by LA. R.S. 37:2163.
- 4.3.3 If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the same notation described at 4.3.2 on the face thereof. Such bids shall be sent by Registered or Certified Mail, Return Receipt Requested, and addressed to: Calcasieu Parish School Board, 3310 Broad Street, Lake Charles, LA 70615.
- 4.3.4 Bids shall be deposited at the designated location <u>prior to</u> the time and the date for receipt of bids indicated in the Advertisement for Bids, or an extension thereof made by Addendum. Bids received after the time and date for receipt of bids will be returned unopened.
- 4.3.5 Bidder shall assume full responsibility for timely delivery at location designated for receipt of bids.
- 4.3.6 Oral, telephonic or telegraphic bids or modifications to bids are invalid and will not receive consideration. Owner will not consider notation written on outside of bid envelope which has the effect of amending the Bid.
- 4.3.7 Bid may also be submitted by electronic means via website <u>www.centralbidding.com</u>. Free registration is required in order to submit a bid via the Central Bidding website.
- 4.4 Modification or Withdrawal of Bid

- 4.4.1 A Bid may not be modified, withdrawn or cancelled by the Bidder during the time stipulated in the Advertisement for Bids, for the period following the time and bid date designated for the receipt of bids, and Bidder so agrees in submitting his bid, except in accordance with Act III of 1983 which states, in part, "Bids containing patently obvious mechanical, clerical or mathematical errors may be withdrawn by the Contractor, if clear and convincing sworn, written evidence of such errors is furnished to the public entity within forty-eight hours of the bid opening excluding Saturdays, Sundays and legal holidays."
- 4.4.2 Prior to the time and date designated for receipt of Bids, Bids submitted early may be modified or withdrawn only by notice to the party receiving bids at the place and prior to the time designated for receipt of bids.
- 4.4.3 Withdrawn Bids may be resubmitted up to the time designated for the receipt of Bids provided that they are then fully in conformance with these Instructions to Bidders.
- 4.4.4 Bid Security shall be in an amount sufficient for the Bid as modified or resubmitted.

ARTICLE 5 - CONSIDERATION OF BIDS

- 5.1 Opening of Bids
- 5.1.1 The properly identified bids received on time will be opened publicly and read aloud, and a tabulation abstract of the amounts of the Base Bid and Alternates, if any, will be made available to Bidders.
- 5.2 Rejection of Bids
- 5.2.1 The Owner shall have the right to reject any or all bids and in particular to reject a bid not accompanied by any required bid security or data required by the Bid Documents or a bid in any way incomplete or irregular.
- 5.3 Acceptance of Bid
- Any bid shall include no more than three alternates. Alternates, if accepted, shall be accepted in the order in which they are listed on the bid form. Determination of the low bidder shall be on the basis of the sum of the base bid and any alternates accepted. However, the Owner reserves the right to accept alternates in any order which does not affect determination of the low bidder, per LA. R.S. 38:2212 (J).
- 5.3.2 It is the intent of the Owner to award a contract to the lowest responsible bidder in accordance with the requirements of the Bid Documents, and if the bid does not exceed the funds available.

5.3.3 Due to the nature of potential Project funding sources, full funding may not be readily-available at the time the bids are received. As a result, pursuant to Louisiana Revised Statute 38:2215, the Owner is exempt from the requirement of acting to award the Contract or reject all bids within forty-five (45) calendar days of receipt of the bids. Pursuant to this Statute, the Owner specifically reserves the right to hold all bids for greater than forty-five (45) calendar days.

ARTICLE 6 - POST BID INFORMATION

- Refer to **List of Required Documents** for other items required to be submitted by the apparent low bidder within ten (10) days after bid opening. Where forms are required, blank forms are included in the Bid Documents.
- The apparent low Bidder has a maximum of ten (10) days from the bid opening to produce any required post bid submittals. If the apparent low Bidder does not submit the proper information or documentation as required by the Bid documents within the ten-day period, such Bidder shall be declared non-responsive, which will result in automatic disqualification of bid.
- 6.3 Proposed list of subcontractors, materials suppliers, and superintendents.
- 6.3.1 Within 24 hours after bids are opened, the Contractor identified as the apparent low bidder shall make the following submittals to the Architect: A tentative list of all subcontractors or other persons or organizations (including those who are to furnish materials or equipment fabricated to special design) proposed for principal portions of the work, as well as the proposed superintendent. Also provide a designation of the work to be performed by the Contractor with his own forces.
- 6.3.2 It is recognized that the acceptance or rejection of alternates contained in the bid proposal may ultimately determine the low bidder on the project. In the event a Contractor, other than the Contractor identified as the apparent low bidder at the bid opening, becomes the low bidder as a result of such selection of alternates, this contractor shall make the submittals required by this section within 24 hours after notification by the Owner.
- 6.3.3 The Contractor will be required to establish to the satisfaction of the Architect and the Owner the reliability and responsibility of the proposed subcontractors to furnish and perform the work described in the section of the specifications pertaining to such proposed subcontractors' respective trades.
- 6.3.4 The Architect will notify the Contractor if the Owner, after due investigation, has

reasonable and substantial objection to any person or organization on the Contractor's list of proposed subcontractors. If there are objections the Contractor shall submit alternative subcontractor(s) for their approval.

- 6.3.5 Subcontractors and other persons and organizations proposed by the Bidder and accepted by the owner and the Architect upon the awarding of a contract must be used on the work for which they were proposed and accepted and shall not be changed except upon the recommendation of the Architect and approved by the Owner in the form of a change order. Any changes on the tentative 24 hour list submitted by the Contractor prior to the awarding of the contract must be requested in writing to the Architect with proper justification. Any change in the tentative list of subcontractors will require recommendation from the Architect to the Owner. The recommendation and approval of the Owner must be made in writing.
- 6.3.6 The lowest responsible bidder shall submit to the Architect and the Owner prior to award of the contract a letter from the manufacturer that the manufacturer will issue the roof system guarantee based on the specified roof system and include the name of the applicator acceptable to the manufacturer for installing the specified roof system. This manufacturer shall be one that has received prior approval or is named in the specifications.
- 6.4 Additional Submissions
- 6.4.1 A Schedule of Values segregating the entire Contract Sum into the divisions of the Specifications shall be provided to the Architect. No payments will be made to the Contractor until this is received.
- 6.4.2 A copy of applicable state, parish, or municipal licenses legally required for Contractor and subcontractors shall be provided to the Architect. No payments will be made to the Contractor until this is received.
- 6.4.3 Federal and state tax identification numbers on General Contractors and subcontractors shall be provided to the Architect. No payments will be made to the Contractor until this is received.

ARTICLE 7 - PERFORMANCE & PAYMENT BONDS

7.1 Bond Required

7.1.1 The Contractor shall furnish and pay for a Performance & Payment Bond written by a company licensed to do business in Louisiana, which shall be countersigned by a person who is contracted with the surety company or bond issuer or approved broker,

and who is licensed as an insurance agent/broker of the company or issuer, and who is licensed as an insurance agent in this State, and who is residing in this State, in an amount equal to the 100% of the Contract amount. By issuing such Performance and Payment Bond, the surety acknowledges they are on the current U.S. Department of the Treasury Financial Management Service List of approved bonding companies, and complies with all other provisions of R.S. 38:2219.

- 7.2 Time of Delivery and Form of Bond
- 7.2.1 The Bidder shall deliver the required bond to the Owner simultaneous with the execution of the contract.
- 7.2.2 Bond shall be in form furnished by the <u>Calcasieu Parish School Board</u>, entitled Performance & Payment Bond, a copy of which is included in the Bid Documents.
- 7.2.3 The Bidder shall require the Attorney-In-Fact who executes the required bond on behalf of the surety to affix thereto a certified and current copy of his power of attorney.

ARTICLE 8 - FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR

- 8.1 Form to be Used
- 8.1.1 Form of the contract to be used shall be furnished by <u>Calcasieu Parish School Board</u>, a copy of which is included in the Bid Documents.
- 8.2 Award
- 8.2.1 In accordance with Louisiana Law, if the Contract is awarded to the Bidder, he shall at the time of the signing of the Contract or prior, execute the Non-Collusion Affidavit included in the Bid Documents, and shall execute the Byrd Anti-Lobbying Certification contained in Exhibit A to Contract Between Owner and Contractor.
- 8.2.2 Before award of the contract, the successful Bidders shall furnish to the Owner a certified copy of the minutes of the corporation or partnership meeting which authorized the party executing the Bid to sign on behalf of the Contractor.
- 8.2.3 When a project is financed either partially or entirely with School Board bonds, the award of a contract is contingent upon the sale of bonds by the School Board. The School Board shall incur no obligation to the Contractor until the Contract between the Owner and Contractor is duly executed.

ARTICLE 9 - COMPLETION TIME & LIQUIDATED DAMAGES

- 9.1 The completion of the contract must be as stated below, subject to such extensions as may be granted under Paragraph 8.3, Delays and Extensions of Time: in the General Conditions and the Supplementary Conditions, or the Contractor will be subject to pay to the Owner Liquidated Damages in the amount of <u>Five Hundred Dollars (\$500.00)</u> <u>per calendar day.</u> Time is of the essence in performance of this Contract and satisfactory completion of this Project.
- 9.2 Bidder acknowledges that all phases of the Project shall be Substantially Complete in Sixty (60) calendar days from receipt of written Notice to Proceed from Owner.

ARTICLE 10 - BUILDING MATERIAL EXCLUSIONS

- 10.1 All building materials shall be free of asbestos.
- 10.2 All plumbing materials shall be free of lead.
- 10.3 All paints shall be free of lead.
- All contractors should use the least hazardous materials on all jobs. Material Safety Data Sheets (MSDS) shall be given to the Owner on all materials used.

ARTICLE 11 - PRE-BID CONFERENCE

- A pre-bid conference shall be held at the project site at least ten (10) days before the date for receipt for bids. Refer to the Advertisement for Bids to determine if attendance at the pre-bid conference is mandatory and a pre-requisite for submitting a bid, or if attendance is non-mandatory. The Architect shall coordinate the setting of the date, time and place for the pre-bid conference. The purpose of the pre-bid conference is to familiarize Bidders with the requirements of the Project and the intent of the Contract Documents, and to receive comments and information from interested Bidders.
- Any revision of the Bid Documents made as a result of the pre-bid conference shall not be valid unless included in an Addendum issued in accordance with Paragraph 3.4 of the Instructions to Bidders.

ARTICLE 12 - APPLICABILITY

12.1 Any article located in the Instructions to Bidders found to be in conflict with the

General Conditions and/or Supplementary Conditions will take precedence over the latter of the two set of Articles.

ARTICLE 13 - FEDERALLY FUNDED PROJECTS

The Owner intends to pursue reimbursement of eligible Project costs from funding sources including Federal Emergency Management Agency (FEMA) Public Assistance Program, therefore compliance with applicable Federal Contract Clauses (attached as Exhibit A to Contract Between Owner and Contractor) is required.

ARTICLE 14 - MISCELLANEOUS PROVISIONS

- 14.1 The Contractor shall repair, replace or pay for the relocation of telephones and wiring, fire alarms, intercoms, bells, TV cable, security system, wiring and equipment and any other cable type installation that may be damaged, cut or removed during the construction.
- 14.2 The Contractor will be responsible for the removal, reinstallation and/or relocation of any playground equipment that needs to be moved due to construction.
- The <u>Calcasieu Parish School Board</u> is hereby recognized as a statutory employer of Contractor's employees, including but not limited to Contractor's direct employees, immediate employees, and statutory employees. This contract recognizes the existence of a statutory employer relationship between <u>Calcasieu Parish School Board</u> and Contractor in accord with Act 315 of 1997.
- 14.4 The costs of any required construction, demolition or other permits from any authority having jurisdiction over the Project are to be included in the Base Bid.

ARTICLE 15 - SALES AND USE TAX EXEMPTION

15.1 In accordance with applicable rules adapted and promulgated by the Louisiana Department of Revenue, the Owner shall designate the contractor and all subcontractors as its agents for the purchase and lease of materials, supplies or equipment for the project. The Contractor and all subcontractors shall accept the agency designation. The designation and acceptance thereof shall be made on the form prescribed by the Louisiana Department of Revenue which form shall be part of the contract between the Owner, <u>Calcasieu Parish School Board</u>, and the Contractor. A copy of this form is available at the Architect's office.

The agency relationship between the Owner and the contractor and all subcontractors

shall relieve the Contractor and subcontractors (1) from paying any state or local sales or state or local use taxes on materials, supplies or equipment which is affixed to and/or made a part of the real estate of the project or work or which is permanently incorporated into the project or work and, (2) from paying any state or local use taxes on any materials, supplies or equipment which are leased and used exclusively for the project or work. Accordingly, in preparing their bids and computing costs the contractor and subcontractors shall not consider sales and or use taxes which would otherwise be due.

The Owner will furnish to the contractor and subcontractors its Certificate of Sales/Use Tax Exemption/Exclusion on the form prescribed by the Louisiana Department of Revenue. The contractor and subcontractors shall furnish a copy of such certificate to all vendors or suppliers of any of the materials, supplies or equipment described above,

The Contractor and subcontractors shall make all purchases and leases on behalf of and as the agent of the Calcasieu Parish School Board.

Rules and regulations of the Louisiana Department of Revenue shall prevail over any conflicting provisions or specifications of the contract.

End of Instructions to Bidders

LIST OF REQUIRED DOCUMENTS

The following items are required to be submitted as part of the Contractor's Bid:

- 1. Louisiana Uniform Public Works Bid Form.
- 2. Louisiana Uniform Public works Bid Form Unit Price Form (when applicable).
- 3. Bid Security check or Bid Bond Form (with Power of Attorney if applicable).
- 4. Evidence of Corporate Authority of the person signing the Bid, in accordance with LRS 38:2212(5).

The following items are required to be submitted by the Apparent Low Bidder to the Architect or Owner within ten (10) days of the Bid, and prior to award of the project:

Note: The Calcasieu Parish School Board requires that 6 original, signed and/or notarized copies (as is applicable) of each item listed below be submitted.

- 1. Resolution.
- 2. CPSB Non-Collusion Affidavit
- 3. Louisiana Non-Collusion Affidavit (LRS 38:2224).
- 4. Verification of Employees Affidavit (LRS 38:2212.10).
- 5. Attestation Form Past Criminal Conviction of Bidders (LRS 38:2227).
- 6. Subcontractor Approval List.
- 7. For Projects involving repair or replacement of roofing: Roofing Manufacturer's Certification and Compliance Letter, issued on the Roofing Manufacturer's Company Letterhead, and signed by an officer, or other duly appointed representative of the Roofing Manufacturer, stating the following:
 - That the proposed Roofing Installer is an Approved Applicator for the system(s) specified and/or prior approved, and is in current good standing with the company.
 - That the roofing system as specified, or as modified by Addendum, is acceptable to the Roofing Manufacturer, and meets the requirements for issuance of the specified 30- year, No-Dollar-Limit-Non-Pro-Rated Roof Weathertightness Warranty, in accordance with the Specifications.
 - That the Roofing Manufacturer will issue the required 30-year, No-Dollar-Limit-Non-Pro-Rated Roof Weathertightness Warranty, in accordance with the Specifications.
 - That the Roofing Manufacturer will provide the required on-site inspections, performed by the Roofing Manufacturer's full-time, Technical Field Representative, and will issue written reports along with photographic documentation accordingly, in accordance with the requirements of the applicable Specifications.

END OF SECTION

LOUISIANA UNIFORM PUBLIC WORK BID FORM

TO: Calcasieu Parish School Board

3310 Broad Street, Lake Charles, LA 70615

BID FOR:

CPSB Lake Charles Boston – Field House (Bldg F) Roof Repairs, HL-748-02 1509 Enterprise Blvd., Lake Charles, LA 70601

The undersigned bidder hereby declares and represents that she/he: a) has carefully examined and understands the Bidding Documents, b) has not received, relied on, or based his bid on any verbal instructions contrary to the Bidding Documents or any addenda, c) has personally inspected and is familiar with the project site, and hereby proposes to provide all labor, materials, tools, appliances and facilities as required to perform, in a workmanlike manner, all work and services for the construction and completion of the referenced project, all in strict accordance with the Bidding Documents prepared by: Grace Hebert Curtis Architects, LLC, 3100 Ryan Street, Lake Charles, LA 70601 and dated: March 31, 2023

Bidders must acknowledge all addenda. The Bidder acknowledges receipt of the following ADDENDA: (Enter to	ne number the
Designer has assigned to each of the addenda that the Bidder is acknowledging)	·
TOTAL BASE BID : For all work required by the Bidding Documents (including any and all unit prices designate * but not alternates) the sum of:	d "Base Bid"
Dollars (\$)
ALTERNATES: For any and all work required by the Bidding Documents for Alternates including any and a designated as alternates in the unit price description.	ll unit prices
Alternate No. 1 (Remove Exterior Metal Stair) for the lump sum of:	
Dollars (\$)
Alternate No. 2 (N/A) for the lump sum of:	
Dollars (\$)
Alternate No. 3 (N/A) for the lump sum of:	
Dollars (\$)
NAME OF BIDDER:	
ADDRESS OF BIDDER:	
LOUISIANA CONTRACTOR'S LICENSE NUMBER:	
NAME OF AUTHORIZED SIGNATORY OF BIDDER:	
TITLE OF AUTHORIZED SIGNATORY OF BIDDER:	
SIGNATURE OF AUTHORIZED SIGNATORY OF BIDDER **:	
DATE:	

THE FOLLOWING ITEMS ARE TO BE INCLUDED WITH THE SUBMISSION OF THIS LOUISIANA UNIFORM PUBLIC WORK BID FORM:

- * The <u>Unit Price Form</u> shall be used if the contract includes unit prices. Otherwise it is not required and need not be included with the form. The number of unit prices that may be included is not limited and additional sheets may be included if needed.
- ** A CORPORATE RESOLUTION OR WRITTEN EVIDENCE of the authority of the person signing the bid for the public work as prescribed by LA R.S. 38:2212(B)(5).

BID SECURITY in the form of a bid bond, certified check or cashier's check as prescribed by LA R.S. 38:2218(A) attached to and made a part of this bid.

LOUISIANA UNIFORM PUBLIC WORK BID FORM <u>UNIT PRICE FORM</u>

TO: Calcasieu Parish School Board

3310 Broad Street, Lake Charles, LA 70615

BID FOR: CPSB Lake Charles Boston – Field House (Bldg F) Roof

Repairs HL-748-02

1509 Enterprise Blvd., Lake Charles, LA 70601

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	☐ Base Bid or ☐ A	Alt.#	•	
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
DESCRIPTION:	☐ Base Bid or ☐ A	\lt.#		
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
DESCRIPTION:	☐ Base Bid or ☐ A	\1+ #		
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REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
DESCRIPTION:	☐ Base Bid or ☐ A	\lt.#		
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
DESCRIPTION:	☐ Base Bid or ☐ A			
			I D HT DDICE	IDUE BRICE EVERYGION (C
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)

Wording for "DESCRIPTION" is to be provided by the Owner.

All quantities are estimated. The contractor will be paid based upon actual quantities as verified by the Owner.

BID BOND

PROJECT NAME: CPSB Lake Charles Boston – Field House (Bldg F) Roof Repairs

HL-748-02

LOCATION: 1509 Enterprise Blvd.

Lake Charles, LA 70601

		Date:	
KNOW ALL MEN BY T	THESE PRESENTS:		
That	of	, a	s Principal,
and			, as Surety,

are held and firmly bound unto the Calcasieu Parish School Board, (Obligee), in the full and just sum of five (5%) percent of the total amount of this bid proposal, including all alternates, lawful money of the United States, for payment of which sum, well and truly be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally firmly by these presents.

Surety represents that it is listed on the current U. S. Department of the Treasury Financial Management Service list of approved bonding companies and that it is listed thereon as approved for an amount equal to or greater that the amount for which it obligates itself in this instrument, that surety currently is licensed to do business in the State of Louisiana, and that this bond is countersigned by a person who is under contract with the surety as a licensed agent/broker in this state, and who is residing in this state.

This Bid Bond shall be accompanied by appropriate power of attorney.

THE CONDITION OF THIS OBLIGATION IS SUCH that, whereas said Principal is herewith submitting its proposal to the Obligee on a Contract for:

CPSB J.I. Watson Historical Building HL-053-01

NOW, THEREFORE, if the said Contract be awarded to the Principal and the Principal shall, within such time as may be specified, enter into the Contract in writing and give a good and sufficient bond to secure the performance of the terms and conditions of the Contract with surety acceptable to the Obligee, then this obligation shall be void; otherwise this obligation shall become due and payable.

Calcasieu Parish School Board

of the Calcasieu Parish School Board, as set forth in paragraph 4.2.1 of the Instructions To Bidders,

BOND CERTIFICATION: The Principal certifies that he meets all bonding requirements

INCLUDE THIS FORM WITH BID UNLESS BID SECURITY CHECK IS INCLUDED

RESOLUTION

PROJECT NAME:	CPSB Lake Charles Bost HL-748-02	ton – Field House (Bldg F) Roof Repairs
LOCATION:	1509 Enterprise Blvd. Lake Charles, LA 70601	
BE IT RESOLVED t	hat	
Officer / Owner of _		
is hereby authorized	to sign any Contract or doc	ument on behalf of:
Company Name:		
		Name of Officer/Owner
		- 1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.
		Title of Officer/Owner
		Signature
SMODN TO AND SUBSCI	PIRED before me this	_day of
20, in Lake Charles, Lo		
	Not	ary Public
	Mv	Commission Expires

CPSB NON-COLLUSION AFFIDAVIT CPSB Lake Charles Boston – Field House (Bldg F) Roof Repairs PROJECT NAME: HL-748-02 LOCATION: 1509 Enterprise Blvd. Lake Charles, LA 70601 Appearer does hereby attest that: (1) Bidder is the Bidder that has submitted the above referenced Bid: (2) Bidder is fully informed respecting the preparations and contents of the attached Bid and of all pertinent circumstances respecting such Bid: (3) Such Bid is genuine and is not a collusive or sham Bid: (4) Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communications or conference with any other Bidder or to fix any overhead, profit or cost element of the Bid price or the Bid price of any other Bidder, or to secure through the collusion, conspiracy, connivance or unlawful agreement any advantage against the CALCASIEU PARISH SCHOOL BOARD, or any person interested in the proposed Contract; and (5) The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees or parties in interest, including this affiant. NAME OF BIDDER NAME OF AUTHORIZED SIGNATORY OF BIDDER TITLE OF AUTHORIZED SIGNATORY OF BIDDER DATE SIGNATURE OF AUTHORIZED SIGNATORY OF BIDDER SWORN TO AND SUBSCRIBED before me this _____ day of .

SUBMIT THIS FORM TO OWNER WITHIN TEN (10) DAYS AFTER BID OPENING

My Commission Expires _____

Notary Public

20____, in Lake Charles, Louisiana.

NON-COLLUSION AFFIDAVIT

PROJECT NAME:	CPSB Lake Char HL-748-02	les Boston – Field House (Bldg F) Roof Repairs
LOCATION:	1509 Enterprise B Lake Charles, LA	
* *		entitled Public Works Project, does hereby attest that: In uisiana Revised Statute 38:2224:
directly or indire- persons regularly alteration or dem	ctly, to secure the pure employed by the at	reporation, firm, association, or other organization, either ablic contract under which he received payment, other than ffiant whose services in connection with the construction, building or project or in securing the public contract were in affiant; and
corporation, firm payment of their in connection with	, association, or oth normal compensation	eived by affiant was paid or will be paid to any person, er organization for soliciting the contract, other than the on to persons regularly employed by the affiant whose services alteration or demolition of the public building or project were or affiant.
NAME OF BIDDER		NAME OF AUTHORIZED SIGNATORY OF BIDDER
DATE		TITLE OF AUTHORIZED SIGNATORY OF BIDDER
-	SIGNATURE OF AUT	HORIZED SIGNATORY OF BIDDER
SWORN TO AND SUBSC 20, in Lake Charles, Lo	RIBED before me thisuisiana.	day of,
		Notary Public

SUBMIT THIS FORM TO OWNER WITHIN TEN (10) DAYS AFTER BID OPENING

My Commission Expires

VERIFICATION OF EMPLOYEES AFFIDAVIT -

PROJECT NAME:	CPSB Lake Charle HL-748-02	s Boston – Field House (Bldg F) Roof Repairs	
LOCATION:	1509 Enterprise Blvd. Lake Charles, LA 70601		
* *		ntitled Public Works Project, does hereby attest that: In siana Revised Statute 38:2212.10:	
		in a status verification system (E-Verify) to verify that all na are legal citizens of the United States or are legal	
		l continue, during the term of the contract, to utilize a o verify the legal status of all new employees in the state	
		l require all subcontractors to submit to it a sworn tragraphs (A) and (B) of this Subsection.	
NAME OF BIDDER		NAME OF AUTHORIZED SIGNATORY OF BIDDER	
DATE		TITLE OF AUTHORIZED SIGNATORY OF BIDDER	
_	SIGNATURE OF AUTH	ORIZED SIGNATORY OF BIDDER	
SWORN TO AND SUBSCE 20, in Lake Charles, Lou		day of,	
	_	Notary Public	
		My Commission Expires	

ATTESTATION - PAST CRIMINAL CONVICTIONS OF BIDDERS

PROJECT NAME: **CPSB Lake Charles Boston – Field House (Bldg F) Roof Repairs**

HL-748-02

LOCATION: 1509 Enterprise Blvd;

Lake Charles, LA 70601

Appearer, as a Bidder on the above-entitled Public Works Project, does hereby attest that: In accordance with the requirements of **Louisiana Revised Statute 38:2227**:

- A. No sole proprietor or individual partner, incorporator, director, manager, officer, organizer, or member who has a minimum of a ten percent (10%) ownership in the bidding entity named below has been convicted of, or has entered a plea of guilty or nolo contendere to any of the following state crimes or equivalent federal crimes:
 - (a) Public bribery (R.S. 14:118)
 - (b) Corrupt influencing (R.S. 14:120)
 - (c) Extortion (R.S. 14:66)
 - (d) Money laundering (R.S. 14:23)
- B. Within the past five years from the project bid date, no sole proprietor or individual partner, incorporator, director, manager, officer, organizer, or member who has a minimum of a ten percent (10%) ownership in the bidding entity named below has been convicted of, or has entered a plea of guilty or nolo contendere to any of the following state crimes or equivalent federal crimes, during the solicitation or execution of a contract or bid awarded pursuant to the provisions of Chapter 10 of Title 38 of the Louisiana Revised Statutes:
 - (a) Theft (R.S. 14:67)
 - (b) Identity Theft (R.S. 14:67.16)
 - (c) Theft of a business record (R.S.14:67.20)
 - (d) False accounting (R.S. 14:70)
 - (e) Issuing worthless checks (R.S. 14:71)
 - (f) Bank fraud (R.S. 14:71.1)
 - (g) Forgery (R.S. 14:72)
 - (h) Contractors; misapplication of payments (R.S. 14:202)
 - (i) Malfeasance in office (R.S. 14:134)

NAME OF BIDDER	NAME OF AUTHORIZED SIGNATORY OF BIDDER
DATE	TITLE OF AUTHORIZED SIGNATORY OF BIDDER
SIGNATURE O	F AUTHORIZED SIGNATORY OF BIDDER

CERTIFICATION REGARDING UNPAID WORKER'S COMPENSATION INSURANCE

PROJECT NAME:	CDCD I also Charles Daston	Eigld Haves	DIA- F	Doof Domains
rkojeci name.	CPSB Lake Charles Boston -	- r ieiu nouse (Diug r) Nooi Nepairs

HL-748-02

LOCATION: 1509 Enterprise Blvd

Lake Charles, LA 70601

Appearer, as a Bidder on the above-entitled Public Works Project, does hereby certify that: In accordance with the requirements of Louisiana Revised Statute 23:1726(B):

- A. L.R.S. 23:1726 prohibits any entity against whom an assessment under Part X of Chapter 11 of Title 23 of the Louisiana Revised Statutes of 1950 (Alternative Collection Procedures & Assessments) is in effect, and whose right to appeal that assessment is exhausted, from submitting a bid or proposal for or obtaining any contract pursuant to Chapter 10 of Title 38 of the Louisiana Revised Statutes of 1950 and Chapters 16 and 17 of Title 39 of the Louisiana Revised Statutes of 1950.
- B. By signing below, Affiant certifies that no such assessment is in effect against the bidding / proposing entity.

NAME OF BIDDER	NAME OF AUTHORIZED SIGNATORY OF BIDDER
DATE	TITLE OF AUTHORIZED SIGNATORY OF BIDDER
SIG	TURE OF AUTHORIZED SIGNATORY OF BIDDER

SUBCONTRACTOR APPROVAL LIST

PROJECT NAME: CPSB Lake Charles Boston – Field House (Bldg F) Roof Repairs PROJECT NUMBER: HL-748-02

LOCATION: 1509 Enterprise Blvd., Lake Charles, LA 70601

WORK DESCRIPTION	SUBCONTRACTOR	LICENSE NUMBER	FED. I.D. NUMBER

Page	_of _	
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CONTRACT BETWEEN OWNER & CONTRACTOR

and

PERFORMANCE & PAYMENT BOND

This agreement, entered into this <a day >> day of <a day <a day >> day of <a day >> day >> day of <a day >> day >> day of <a day >> day of <a day >> day of <a day >> day >> day of <a day >> day >> day of <a day of <a day >> day of <a day >> day of <a day >> day of <a day of <a day >> day of <a

Witnesseth that the Contractor and the Owner, in consideration of premises and the mutual covenants; consideration and agreement herein contained, agree as follows:

Statement of Work: The Contractor shall furnish all labor and materials, and perform all of the work required to build, construct, and complete in a thorough and workmanlike manner:

<< Insert Project Name >>
<< HL-XXX-XXX</pre>

in strict accordance with the Contract Documents prepared by:

<< insert name and address of
Architect >>

It is recognized by the parties herein that said Contract Documents, including by way of example and not of limitation, the Drawings and Specifications, dated << insert date of Contract Documents >>, Addenda << # of Addenda >>>, the Instructions To Bidders, the Bid Form, the General Conditions Of The Contract For Construction, the Supplementary Conditions, any Addenda thereto, and the Federal Contract Clauses attached as Exhibit A (8 pages), impose duties and obligations upon the parties herein, and said parties thereby agree that they shall be bound by said duties and obligations. For these purposes, all of the provisions contained in the aforementioned Construction Documents are incorporated herein by reference, with the same force and effect as though said Construction Documents were herein set out in full.

Contract - 1

Time for Completion: The work shall be commenced on a date to be specified in a written order of the Owner, and shall be completed within << iinsert Contract Time >> consecutive calendar days from and after the said date. Time is of the essence.

Compensation to be Paid to the contractor: The Owner will pay, and the Contractor will accept, in full consideration for the performance of the Contract, the sum of <> contract Sum >> Dollars and no/100 Dollars (\$###,###.00), which sum represents the Base Bid, including Alternates No.. #######.

PERFORMANCE & PAYMENT BOND: To these presents personally came and
intervenedherein
acting for,
a corporation organized and existing under the laws of the State of,
and duly authorized to transact business in the State Of Louisiana, as Surety, who
declared that having taken cognizance of this Contract and of the Construction
Documents mentioned herein, he hereby in his capacity as its Attorney In Fact,
obligates his said company, as Surety for the said Contractor, unto the said Owner,
up to the sum of << insert Contract Sum >> and no/100 Dollars (\$###,###.00).

The condition of this Performance & Payment Bond shall be that should the Contractor herein not perform the Contract in accordance with the terms and conditions hereof, or should said Contractor not fully indemnify and save harmless the Owner, from all cost and damages which he may suffer by said Contractor's non-performance, or should said Contractor not pay all persons who have and fulfill obligations to perform labor and/or furnish materials in the prosecution of the work provided for herein, including by way of example: workmen, laborers, mechanics, and furnishers of materials, machinery, equipment, and fixtures, then said Surety agrees and is bound to so perform the Contract and make said payment(s).

Provided, that any alterations which may be made in the terms of the Contract or in the work to be done under it, or the giving by the Owner of any extensions of time for the performance of the Contract, or any other forbearance on the part of either the Owner of the Contractor to the other shall not in any way release the Contractor or the Surety from their liability hereunder, notice to the Surety of any such alterations, extensions, or other forbearance being hereby waived.

In witness hereof, the parties herein on the day and year first written above have executed this agreement in six (6) counterparts, each of which shall, without proof or accountancy for the other counterparts, be deemed an original thereof.

WITNESSES:	
	######################################
	Ву:
	Title
	Calcasieu Parish School Board OWNER
	Ву:
	Title
	######################################
	By:
	ATTORNEY IN FACT



Calcasieu Parish School Board - Hurricane Laura Damages Restoration Program

Exhibit A - Federal Contract Clauses

issue 210216

Page 1 of 8

Owner (Calcasieu Parish School Board) intends to pursue reimbursement of eligible Project costs from the Federal Emergency Management Agency (FEMA), therefore this Agreement is subject to compliance by Contractor with all applicable federal contract clauses, including but not limited to, the following:

1. Remedies

The parties agree that the Owner reserves all rights and privileges under applicable laws and regulations with respect to this contract in the event of a breach of contract, including but not limited to the right to institute legal proceedings in a court of competent jurisdiction seeking monetary damages, court costs and litigation expenses, as applicable.

2. Termination for Cause and Convenience

The parties agree that the Owner reserves the right to terminate the contract immediately, with written notice to the Contractor, in the event of a breach or default of the Contractor, including but not limited to situations in which the Contractor fails, after a reasonable opportunity to cure, to: (1) meet schedules, deadlines, and / or delivery dates within the time specified in the procurement solicitation, contract, and / or a purchase order; (2) make any payments owed; or (3) otherwise perform in accordance with the contract and / or the procurement solicitations. The Owner also reserves the right to terminate the contract immediately, with written notice to the Contractor, for convenience, if the Owner believes that it is in the best interest of the Owner to do so. In the event of a termination for convenience of the Owner, the Contractor will be compensated only for work performed and goods provided by the Owner as of the termination date. The amount of compensation due the Contractor in the event of a termination for the convenience of the Owner shall be a reasonable amount, using as a guide factors such as the percentage of work or services performed by the Contractor and accepted by the Owner as of the date of termination, the contract price and any unit prices specified in the contract, as applicable.

3. Small and Minority Businesses, Women's Business Enterprises, and Labor Surplus Area Firms

Owner encourages participation from small, minority-owned, women-owned, and labor surplus area business. Incorporation of these types of firms into the project team is encouraged. Additionally, prime contracts are required, if subcontracts are to be let, to take the following affirmative steps 1 through 5 of this section.

- (1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
- (2) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
- (3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;



Calcasieu Parish School Board - Hurricane Laura Damages Restoration Program **Exhibit A - Federal Contract Clauses**

issue 210216

Page 2 of 8

- (4) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;
- (5) Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

4. Contract Work Hours and Safety Standards Act

- a. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- b. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (a) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (a) of this section, in the sum of \$27 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (a)of this section.
- c. Withholding for unpaid wages and liquidated damages. The Owner shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b) of this section.
- d. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (a) through (d) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (a) through (d) of this section.

5. Clean Water Act & Federal Water Pollution Control Act

The Contractor hereby agrees to adhere to the provisions which require compliance with all applicable standards, orders, or requirements issued under Section 508 of the Clean Water Act which prohibits the



Exhibit A - Federal Contract Clauses

issue 210216

Page 3 of 8

use under non-exempt Federal contracts, grants or loans of facilities included on the EPA List of Violating Facilities.

Contractor agrees to comply with all applicable standards, orders or regulations issues pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C 1251 et seq.

- 1. The contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
- 2. The contractor agrees to report each violation to the Owner and understands and agrees that the Owner will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
- 3. The contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA.

6. Clean Air Act

- 1. The contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
- 2. The contractor agrees to report each violation to the Owner and understands and agrees that the Owner will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
- 3. The contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA.

7. Energy Efficiency

The Contractor hereby recognizes the mandatory standards and policies relating to energy efficiency which are contained in the State energy conservation plan issued in compliance with the Energy Policy and Conservation Act (P.L. 94-163).

8. Suspension and Debarment

Debarment and Suspension (Executive Orders 12549 and 12689) - A contract award (see <u>2 CFR 180.220</u>) must not be made to parties listed on the governmentwide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at <u>2 CFR 180</u> that implement Executive Orders 12549 (<u>3 CFR part 1986</u> Comp., p. 189) and 12689 (<u>3 CFR part 1989</u> Comp., p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.



Exhibit A - Federal Contract Clauses

issue 210216

Page 4 of 8

This contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such the contractor is required to verify that none of the contractor, its principals (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

Contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into to the extent set forth elsewhere in this contract. This certification is a material representation of fact relied upon by Owner. If it is later determined that Contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to Owner, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

9. Anti-Kickback Clause

The Contractor hereby agrees to adhere to the mandate dictated by the Copeland "Anti-Kickback" Act which provides that each Contractor or subgrantee shall be prohibited from inducing, by any means, any person employed in the completion of work, to give up any part of the compensation to which he is otherwise entitled.

10. Record Retention, Record Ownership, & Access to Records

The Contractor shall maintain all records in relation to this Agreement for a period of at least five (5) years after final payment.

All records, reports, documents, or other material related to this Agreement and/or obtained or prepared by Contractor in connection with the performance of the services contracted for herein shall become the property of the Owner and shall, upon request, be returned by Contractor to Owner, at Contractor's expense, at termination or expiration of this contract. Contractor agrees to allow the Owner access to Contractor's records.

11. No Obligation by Federal Government

The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the non-Federal entity, contractor, or any other party pertaining to any matter resulting from the contract.

12. Equal Employment Opportunity

Contractor agrees to abide by the requirements of the following as applicable: Title VI and Title VII of the Civil Rights Act of 1964, as amended by the Equal Opportunity Act of 1972, Federal Executive Order 11246, the Federal Rehabilitation Act of 1973, as amended the Vietnam Era of 1975, and the Americans with Disabilities Act of 1990. Contractor agrees not to discriminate in its employment practices, and will render services under this Agreement and any contract entered into as a result of this Agreement, without regard to race, color, religion, sex, sexual orientation, national origin, veteran status, political affiliation, or disabilities. Any act of discrimination committed by Contractor, or failure to comply with these



Calcasieu Parish School Board - Hurricane Laura Damages Restoration Program **Exhibit A - Federal Contract Clauses**

issue 210216

Page 5 of 8

statutory obligations when applicable shall be grounds for termination of this Agreement and any contract entered into as a result of this agreement.

Pursuant to 2 C.F.R. Part 200, Appendix II, C, the contract must include all clauses from 41 C.F.R. § 60-1.4(b). These are:

During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer, recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.
- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
- (3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.
- (4) The contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (5) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (6) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the



Exhibit A - Federal Contract Clauses

issue 210216

Page 6 of 8

Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

- (7) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24,1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (8) The contractor will include the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

13. Procurement of Recovered Materials

- 1. In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired—
- a. Competitively within a timeframe providing for compliance with the contract performance schedule;
- b. Meeting contract performance requirements; or
- c. At a reasonable price.
- 2. Information about this requirement, along with the list of EPA-designated items, is available at EPA's Comprehensive Procurement Guidelines web site, https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program.
- 3. The Contractor also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act."

14. Access to Records

The following access to records requirements apply to this contract:

a. The Contractor agrees to provide Owner, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and



Exhibit A - Federal Contract Clauses

issue 210216

Page 7 of 8

records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions.

- b. The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.
- c. The Contractor agrees to provide the FEMA Administrator or his authorized representatives access to construction or other work sites pertaining to the work being completed under the contract.
- d. In compliance with the Disaster Recovery Act of 2018, the Owner and the Contractor acknowledge and agree that no language in this contract is intended to prohibit audits or internal reviews by the FEMA Administrator or the Comptroller General of the United States.

15. DHS Seal, Logo, and Flags

The contractor shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre-approval.

16. Compliance with Federal Law, Regulations and Executive Orders

This is an acknowledgement that FEMA financial assistance will be used to fund all or a portion of the contract. The contractor will comply with all applicable Federal law, regulations, executive orders, FEMA policies, procedures, and directives.

17. No Obligation by Federal Government

The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the non-Federal entity, contractor, or any other party pertaining to any matter resulting from the contract.

18. Program Fraud and False or Fraudulent Statements or Related Acts

The Contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the Contractor's actions pertaining to this contract.

19. Byrd Anti-Lobbying

Byrd Anti-Lobbying Amendment, 31 U.S.C. § 1352 (as amended) Contractors who apply or bid for an award of \$100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. §1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient. Sample certification is attached on following page.



Exhibit A - Federal Contract Clauses

Date

issue 210216

Page 8 of 8

BYRD ANTI-LOBBYING CERTIFICATION	ON
RE: PROJECT NAME / HL-NUMBER: _	

Byrd Anti-Lobbying Certification for Contracts, Grants, Loans, and Cooperative Agreements (To be executed with Agreement if Contract Sum exceeds \$100,000)

The undersigned [Contractor] certifies, to the best of his or her knowledge, that:

- 1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- 2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form- LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Contractor,, certifies or affirms the truthfulness are accuracy of each statement of its certification and disclosure, if any. In addition, the Proposer understands and agrees that the provisions of 31 U.S.C. § 3801 <i>et seq.</i> , apply to this certification and disclosure, if any.	
Signature of Contractor's Authorized Representative	
Name and Title of Contractor's Authorized Representati	ve

General Conditions of the Contract for Construction

for the following PROJECT:

(Name and location or address)

Calcasieu Parish School Board Hurricane Laura Damages Restoration Program AIA Document A201TM_2017, General Conditions of the Contract for Construction, amended by Owner, issue 210225.

THE OWNER:

(Name, legal status and address)

Calcasieu Parish School Board 3310 Broad Street Lake Charles, LA 70615 337-217-4000

THE ARCHITECT:

(Name, legal status and address)

Refer to the Advertisement for Bids issued for the individual HL-Project for name and address of Architect

TABLE OF ARTICLES

- 1 GENERAL PROVISIONS
- 2 OWNER
- 3 CONTRACTOR
- 4 ARCHITECT
- 5 SUBCONTRACTORS
- 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS
- 7 CHANGES IN THE WORK
- 8 TIME

User Notes:

- 9 PAYMENTS AND COMPLETION
- 10 PROTECTION OF PERSONS AND PROPERTY
- 11 INSURANCE AND BONDS
- 12 UNCOVERING AND CORRECTION OF WORK
- 13 MISCELLANEOUS PROVISIONS

ADDITIONS AND DELETIONS:

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

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

For guidance in modifying this document to include supplementary conditions, see AIA Document A503™, Guide for Supplementary Conditions

- 14 TERMINATION OR SUSPENSION OF THE CONTRACT
- **CLAIMS AND DISPUTES** 15



INDEX Architect's Approvals (Topics and numbers in bold are Section headings.) 2.5, 3.1.3, 3.5, 3.10.2, 4.2.7 NOTE: This Document has been amended by Owner Architect's Authority to Reject Work without revision to references listed in this Index. 3.5, 4.2.6, 12.1.2, 12.2.1 Architect's Copyright Acceptance of Nonconforming Work 1.1.7, 1.5 9.6.6, 9.9.3, **12.3** Architect's Decisions Acceptance of Work 3.7.4, 4.2.6, 4.2.7, 4.2.11, 4.2.12, 4.2.13, 4.2.14, 6.3, 9.6.6, 9.8.2, 9.9.3, 9.10.1, 9.10.3, 12.3 7.3.4, 7.3.9, 8.1.3, 8.3.1, 9.2, 9.4.1, 9.5, 9.8.4, 9.9.1, Access to Work 13.4.2, 15.2 **3.16**, 6.2.1, 12.1 Architect's Inspections 3.7.4, 4.2.2, 4.2.9, 9.4.2, 9.8.3, 9.9.2, 9.10.1, 13.4 **Accident Prevention** 10 Architect's Instructions Acts and Omissions 3.2.4, 3.3.1, 4.2.6, 4.2.7, 13.4.2 3.2, 3.3.2, 3.12.8, 3.18, 4.2.3, 8.3.1, 9.5.1, 10.2.5, Architect's Interpretations 10.2.8, 13.3.2, 14.1, 15.1.2, 15.2 4.2.11, 4.2.12 Addenda Architect's Project Representative 1.1.1 4.2.10 Additional Costs, Claims for Architect's Relationship with Contractor 3.7.4, 3.7.5, 10.3.2, 15.1.5 1.1.2, 1.5, 2.3.3, 3.1.3, 3.2.2, 3.2.3, 3.2.4, 3.3.1, 3.4.2, **Additional Inspections and Testing** 3.5, 3.7.4, 3.7.5, 3.9.2, 3.9.3, 3.10, 3.11, 3.12, 3.16, 9.4.2, 9.8.3, 12.2.1, **13.4** 3.18, 4.1.2, 4.2, 5.2, 6.2.2, 7, 8.3.1, 9.2, 9.3, 9.4, 9.5, **Additional Time, Claims for** 9.7, 9.8, 9.9, 10.2.6, 10.3, 11.3, 12, 13.3.2, 13.4, 15.2 3.2.4, 3.7.4, 3.7.5, 3.10.2, 8.3.2, **15.1.6** Architect's Relationship with Subcontractors **Administration of the Contract** 1.1.2, 4.2.3, 4.2.4, 4.2.6, 9.6.3, 9.6.4, 11.3 3.1.3, **4.2**, 9.4, 9.5 Architect's Representations Advertisement or Invitation to Bid 9.4.2, 9.5.1, 9.10.1 Architect's Site Visits Aesthetic Effect 3.7.4, 4.2.2, 4.2.9, 9.4.2, 9.5.1, 9.9.2, 9.10.1, 13.4 4.2.13 Asbestos Allowances 10.3.1 Attorneys' Fees **Applications for Payment** 3.18.1, 9.6.8, 9.10.2, 10.3.3 4.2.5, 7.3.9, 9.2, **9.3**, 9.4, 9.5.1, 9.5.4, 9.6.3, 9.7, 9.10 Award of Separate Contracts 6.1.1, 6.1.2 Approvals 2.1.1, 2.3.1, 2.5, 3.1.3, 3.10.2, 3.12.8, 3.12.9, Award of Subcontracts and Other Contracts for Portions of the Work 3.12.10.1, 4.2.7, 9.3.2, 13.4.1 5.2 Arbitration **Basic Definitions** 8.3.1, 15.3.2, **15.4 ARCHITECT Bidding Requirements** Architect, Definition of 1.1.1 Binding Dispute Resolution 4.1.1 Architect, Extent of Authority 8.3.1, 9.7, 11.5, 13.1, 15.1.2, 15.1.3, 15.2.1, 15.2.5, 2.5, 3.12.7, 4.1.2, 4.2, 5.2, 6.3, 7.1.2, 7.3.4, 7.4, 9.2, 15.2.6.1, 15.3.1, 15.3.2, 15.3.3, 15.4.1 9.3.1, 9.4, 9.5, 9.6.3, 9.8, 9.10.1, 9.10.3, 12.1, 12.2.1, Bonds, Lien 13.4.1, 13.4.2, 14.2.2, 14.2.4, 15.1.4, 15.2.1 7.3.4.4, 9.6.8, 9.10.2, 9.10.3 Architect, Limitations of Authority and Responsibility Bonds, Performance, and Payment 2.1.1, 3.12.4, 3.12.8, 3.12.10, 4.1.2, 4.2.1, 4.2.2, 4.2.3, 7.3.4.4, 9.6.7, 9.10.3, **11.1.2**, 11.1.3, **11.5** 4.2.6, 4.2.7, 4.2.10, 4.2.12, 4.2.13, 5.2.1, 7.4, 9.4.2, **Building Information Models Use and Reliance** 9.5.4, 9.6.4, 15.1.4, 15.2 1.8 Architect's Additional Services and Expenses **Building Permit** 2.5, 12.2.1, 13.4.2, 13.4.3, 14.2.4 3.7.1 Architect's Administration of the Contract Capitalization

3.1.3, 3.7.4, 15.2, 9.4.1, 9.5

User Notes:

1.3

Certificate of Substantial Completion 9.8.3, 9.8.4, 9.8.5 **Certificates for Payment** 4.2.1, 4.2.5, 4.2.9, 9.3.3, **9.4**, 9.5, 9.6.1, 9.6.6, 9.7, 9.10.1, 9.10.3, 14.1.1.3, 14.2.4, 15.1.4

Certificates of Inspection, Testing or Approval

Certificates of Insurance

9.10.2

Change Orders

1.1.1, 3.4.2, 3.7.4, 3.8.2.3, 3.11, 3.12.8, 4.2.8, 5.2.3, 7.1.2, 7.1.3, **7.2**, 7.3.2, 7.3.7, 7.3.9, 7.3.10, 8.3.1, 9.3.1.1, 9.10.3, 10.3.2, 11.2, 11.5, 12.1.2

Change Orders, Definition of

7.2.1

CHANGES IN THE WORK

2.2.2, 3.11, 4.2.8, 7, 7.2.1, 7.3.1, 7.4, 8.3.1, 9.3.1.1,

Claims, Definition of

15.1.1

Claims, Notice of

1.6.2, 15.1.3

CLAIMS AND DISPUTES

3.2.4, 6.1.1, 6.3, 7.3.9, 9.3.3, 9.10.4, 10.3.3, **15**, 15.4 Claims and Timely Assertion of Claims 15.4.1

Claims for Additional Cost

3.2.4, 3.3.1, 3.7.4, 7.3.9, 9.5.2, 10.2.5, 10.3.2, **15.1.5**

Claims for Additional Time

3.2.4, 3.3.1, 3.7.4, 6.1.1, 8.3.2, 9.5.2, 10.3.2, **15.1.6**

Concealed or Unknown Conditions, Claims for 3.7.4

Claims for Damages

3.2.4, 3.18, 8.3.3, 9.5.1, 9.6.7, 10.2.5, 10.3.3, 11.3, 11.3.2, 14.2.4, 15.1.7

Claims Subject to Arbitration

15.4.1

Cleaning Up

3.15, 6.3

Commencement of the Work, Conditions Relating to 2.2.1, 3.2.2, 3.4.1, 3.7.1, 3.10.1, 3.12.6, 5.2.1, 5.2.3, 6.2.2, 8.1.2, 8.2.2, 8.3.1, 11.1, 11.2, **15.1.5**

Commencement of the Work, Definition of 8.1.2

Communications

3.9.1, 4.2.4

User Notes:

Completion, Conditions Relating to 3.4.1, 3.11, 3.15, 4.2.2, 4.2.9, 8.2, 9.4.2, 9.8, 9.9.1, 9.10, 12.2, 14.1.2, 15.1.2

COMPLETION, PAYMENTS AND

Completion, Substantial

3.10.1, 4.2.9, 8.1.1, 8.1.3, 8.2.3, 9.4.2, 9.8, 9.9.1, 9.10.3, 12.2, 15.1.2

Compliance with Laws

2.3.2, 3.2.3, 3.6, 3.7, 3.12.10, 3.13, 9.6.4, 10.2.2, 13.1, 13.3, 13.4.1, 13.4.2, 13.5, 14.1.1, 14.2.1.3, 15.2.8,

15.4.2, 15.4.3

Concealed or Unknown Conditions

3.7.4, 4.2.8, 8.3.1, 10.3

Conditions of the Contract

1.1.1, 6.1.1, 6.1.4

Consent, Written

3.4.2, 3.14.2, 4.1.2, 9.8.5, 9.9.1, 9.10.2, 9.10.3, 13.2, 15.4.4.2

Consolidation or Joinder

15.4.4

CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

1.1.4.6

Construction Change Directive, Definition of

Construction Change Directives

1.1.1, 3.4.2, 3.11, 3.12.8, 4.2.8, 7.1.1, 7.1.2, 7.1.3, **7.3**, 9.3.1.1

Construction Schedules, Contractor's 3.10, 3.11, 3.12.1, 3.12.2, 6.1.3, 15.1.6.2

Contingent Assignment of Subcontracts

5.4, 14.2.2.2

Continuing Contract Performance

15.1.4

Contract, Definition of

1.1.2

CONTRACT, TERMINATION OR SUSPENSION OF THE

5.4.1.1, 5.4.2, 11.5, **14**

Contract Administration

3.1.3, 4, 9.4, 9.5

Contract Award and Execution, Conditions Relating

3.7.1, 3.10, 5.2, 6.1

Contract Documents, Copies Furnished and Use of 1.5.2, 2.3.6, 5.3

Contract Documents, Definition of

1.1.1

Contract Sum

2.2.2, 2.2.4, 3.7.4, 3.7.5, 3.8, 3.10.2, 5.2.3, 7.3, 7.4, **9.1**, 9.2, 9.4.2, 9.5.1.4, 9.6.7, 9.7, 10.3.2, 11.5, 12.1.2, 12.3, 14.2.4, 14.3.2, 15.1.4.2, **15.1.5, 15.2.5**

Contract Sum, Definition of

9.1

Contract Time

1.1.4, 2.2.1, 2.2.2, 3.7.4, 3.7.5, 3.10.2, 5.2.3, 6.1.5, 7.2.1.3, 7.3.1, 7.3.5, 7.3.6, 7, 7, 7.3.10, 7.4, 8.1.1, 8.2.1, 8.2.3, 8.3.1, 9.5.1, 9.7, 10.3.2, 12.1.1, 12.1.2, 14.3.2, 15.1.4.2, 15.1.6.1, 15.2.5

Contract Time, Definition of

8.1.1

CONTRACTOR

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Contractor, Definition of 3.1, 6.1.2 2.5, 3.2.4, 3.7.3, 3.8.2, 3.15.2, 5.4.2, 6.1.1, 6.2.3, Contractor's Construction and Submittal 7.3.3.3, 7.3.4, 7.3.8, 7.3.9, 9.10.2, 10.3.2, 10.3.6, 11.2, **Schedules** 12.1.2, 12.2.1, 12.2.4, 13.4, 14 **3.10**, 3.12.1, 3.12.2, 4.2.3, 6.1.3, 15.1.6.2 **Cutting and Patching 3.14**, 6.2.5 Contractor's Employees 2.2.4, 3.3.2, 3.4.3, 3.8.1, 3.9, 3.18.2, 4.2.3, 4.2.6, 10.2, Damage to Construction of Owner or Separate 10.3, 11.3, 14.1, 14.2.1.1 Contractors 3.14.2, 6.2.4, 10.2.1.2, 10.2.5, 10.4, 12.2.4 Contractor's Liability Insurance Damage to the Work 3.14.2, 9.9.1, 10.2.1.2, 10.2.5, 10.4, 12.2.4 Contractor's Relationship with Separate Contractors and Owner's Forces Damages, Claims for 3.12.5, 3.14.2, 4.2.4, 6, 11.3, 12.2.4 3.2.4, 3.18, 6.1.1, 8.3.3, 9.5.1, 9.6.7, 10.3.3, 11.3.2, Contractor's Relationship with Subcontractors 11.3, 14.2.4, 15.1.7 1.2.2, 2.2.4, 3.3.2, 3.18.1, 3.18.2, 4.2.4, 5, 9.6.2, 9.6.7, Damages for Delay 6.2.3, 8.3.3, 9.5.1.6, 9.7, 10.3.2, 14.3.2 9.10.2, 11.2, 11.3, 11.4 Contractor's Relationship with the Architect Date of Commencement of the Work, Definition of 1.1.2, 1.5, 2.3.3, 3.1.3, 3.2.2, 3.2.3, 3.2.4, 3.3.1, 3.4.2, 3.5.1, 3.7.4, 3.10, 3.11, 3.12, 3.16, 3.18, 4.2, 5.2, 6.2.2, Date of Substantial Completion, Definition of 7, 8.3.1, 9.2, 9.3, 9.4, 9.5, 9.7, 9.8, 9.9, 10.2.6, 10.3, 8.1.3 11.3, 12, 13.4, 15.1.3, 15.2.1 Day, Definition of Contractor's Representations 8.1.4 3.2.1, 3.2.2, 3.5, 3.12.6, 6.2.2, 8.2.1, 9.3.3, 9.8.2 Decisions of the Architect Contractor's Responsibility for Those Performing the 3.7.4, 4.2.6, 4.2.7, 4.2.11, 4.2.12, 4.2.13, 6.3, 7.3.4, 7.3.9, 8.1.3, 8.3.1, 9.2, 9.4, 9.5.1, 9.8.4, 9.9.1, 13.4.2, Work 3.3.2, 3.18, 5.3, 6.1.3, 6.2, 9.5.1, 10.2.8 14.2.2, 14.2.4, 15.1, 15.2 **Decisions to Withhold Certification** Contractor's Review of Contract Documents 9.4.1, **9.5**, 9.7, 14.1.1.3 3.2 Contractor's Right to Stop the Work Defective or Nonconforming Work, Acceptance, Rejection and Correction of 2.2.2, 9.7Contractor's Right to Terminate the Contract 2.5, 3.5, 4.2.6, 6.2.3, 9.5.1, 9.5.3, 9.6.6, 9.8.2, 9.9.3, 14.1 9.10.4, 12.2.1 Contractor's Submittals **Definitions** 3.10, 3.11, 3.12, 4.2.7, 5.2.1, 5.2.3, 9.2, 9.3, 9.8.2, 1.1, 2.1.1, 3.1.1, 3.5, 3.12.1, 3.12.2, 3.12.3, 4.1.1, 5.1, 9.8.3, 9.9.1, 9.10.2, 9.10.3 6.1.2, 7.2.1, 7.3.1, 8.1, 9.1, 9.8.1, 15.1.1 Contractor's Superintendent **Delays and Extensions of Time 3.2**, **3.7.4**, 5.2.3, 7.2.1, 7.3.1, **7.4**, **8.3**, 9.5.1, **9.7**, 3.9, 10.2.6 Contractor's Supervision and Construction 10.3.2, **10.4**, 14.3.2, **15.1.6**, 15.2.5 Procedures **Digital Data Use and Transmission** 1.2.2, 3.3, 3.4, 3.12.10, 4.2.2, 4.2.7, 6.1.3, 6.2.4, 7.1.3, 1.7 7.3.4, 7.3.6, 8.2, 10, 12, 14, 15.1.4 Disputes Coordination and Correlation 6.3, 7.3.9, 15.1, 15.2 1.2, 3.2.1, 3.3.1, 3.10, 3.12.6, 6.1.3, 6.2.1 **Documents and Samples at the Site** Copies Furnished of Drawings and Specifications 3.11 1.5, 2.3.6, 3.11 Drawings, Definition of Copyrights 1.1.5 1.5, 3.17 Drawings and Specifications, Use and Ownership of Correction of Work 3.11 2.5, 3.7.3, 9.4.2, 9.8.2, 9.8.3, 9.9.1, 12.1.2, **12.2**, 12.3, Effective Date of Insurance

7.3.4

User Notes:

1.2

15.1.3.1, 15.1.3.2, 15.2.1

Cost, Definition of

Correlation and Intent of the Contract Documents

Emergencies 10.4, 14.1.1.2, 15.1.5 Employees, Contractor's 3.3.2, 3.4.3, 3.8.1, 3.9, 3.18.2, 4.2.3, 4.2.6, 10.2, 10.3.3, 11.3, 14.1, 14.2.1.1

8.2.2

(1145659762)

Insurance, Contractor's Liability Equipment, Labor, or Materials 1.1.3, 1.1.6, 3.4, 3.5, 3.8.2, 3.8.3, 3.12, 3.13, 3.15.1, 11.1 4.2.6, 4.2.7, 5.2.1, 6.2.1, 7.3.4, 9.3.2, 9.3.3, 9.5.1.3, Insurance, Effective Date of 9.10.2, 10.2.1, 10.2.4, 14.2.1.1, 14.2.1.2 8.2.2, 14.4.2 Execution and Progress of the Work Insurance, Owner's Liability 1.1.3, 1.2.1, 1.2.2, 2.3.4, 2.3.6, 3.1, 3.3.1, 3.4.1, 3.7.1, 11.2 3.10.1, 3.12, 3.14, 4.2, 6.2.2, 7.1.3, 7.3.6, 8.2, 9.5.1, Insurance, Property **10.2.5**, 11.2, 11.4, 11.5 9.9.1, 10.2, 10.3, 12.1, 12.2, 14.2, 14.3.1, 15.1.4 **Extensions of Time** Insurance, Stored Materials 3.2.4, 3.7.4, 5.2.3, 7.2.1, 7.3, 7.4, 9.5.1, 9.7, 10.3.2, 9.3.2 10.4, 14.3, 15.1.6, **15.2.5** INSURANCE AND BONDS **Failure of Payment** 9.5.1.3, **9.7**, 9.10.2, 13.5, 14.1.1.3, 14.2.1.2 Insurance Companies, Consent to Partial Occupancy 9.9.1 Faulty Work (See Defective or Nonconforming Work) Insured loss, Adjustment and Settlement of **Final Completion and Final Payment** 11.5 4.2.1, 4.2.9, 9.8.2, **9.10**, 12.3, 14.2.4, 14.4.3 Intent of the Contract Documents Financial Arrangements, Owner's 1.2.1, 4.2.7, 4.2.12, 4.2.13 2.2.1, 13.2.2, 14.1.1.4 Interest **GENERAL PROVISIONS** 13.5 Interpretation **Governing Law** 1.1.8, 1.2.3, **1.4**, 4.1.1, 5.1, 6.1.2, 15.1.1 13.1 Interpretations, Written Guarantees (See Warranty) 4.2.11, 4.2.12 **Hazardous Materials and Substances** Judgment on Final Award 15.4.2 10.2.4, 10.3 Identification of Subcontractors and Suppliers Labor and Materials, Equipment 5.2.1 1.1.3, 1.1.6, **3.4**, 3.5, 3.8.2, 3.8.3, 3.12, 3.13, 3.15.1, Indemnification 5.2.1, 6.2.1, 7.3.4, 9.3.2, 9.3.3, 9.5.1.3, 9.10.2, 10.2.1, 3.17, **3.18**, 9.6.8, 9.10.2, 10.3.3, 11.3 10.2.4, 14.2.1.1, 14.2.1.2 Information and Services Required of the Owner Labor Disputes 2.1.2, **2.2**, 2.3, 3.2.2, 3.12.10.1, 6.1.3, 6.1.4, 6.2.5, 8.3.1 9.6.1, 9.9.2, 9.10.3, 10.3.3, 11.2, 13.4.1, 13.4.2, Laws and Regulations 14.1.1.4, 14.1.4, 15.1.4 1.5, 2.3.2, 3.2.3, 3.2.4, 3.6, 3.7, 3.12.10, 3.13, 9.6.4, **Initial Decision** 9.9.1, 10.2.2, 13.1, 13.3.1, 13.4.2, 13.5, 14, 15.2.8, 15.2 15.4 Initial Decision Maker, Definition of Liens 2.1.2, 9.3.1, 9.3.3, 9.6.8, 9.10.2, 9.10.4, 15.2.8 1.1.8 Initial Decision Maker, Decisions Limitations, Statutes of 14.2.4, 15.1.4.2, 15.2.1, 15.2.2, 15.2.3, 15.2.4, 15.2.5 12.2.5, 15.1.2, 15.4.1.1 Initial Decision Maker, Extent of Authority Limitations of Liability 14.2.4, 15.1.4.2, 15.2.1, 15.2.2, 15.2.3, 15.2.4, 15.2.5 3.2.2, 3.5, 3.12.10, 3.12.10.1, 3.17, 3.18.1, 4.2.6, **Injury or Damage to Person or Property** 4.2.7, 6.2.2, 9.4.2, 9.6.4, 9.6.7, 9.6.8, 10.2.5, 10.3.3, 10.2.8, 10.4 11.3, 12.2.5, 13.3.1 Inspections Limitations of Time 3.1.3, 3.3.3, 3.7.1, 4.2.2, 4.2.6, 4.2.9, 9.4.2, 9.8.3, 2.1.2, 2.2, 2.5, 3.2.2, 3.10, 3.11, 3.12.5, 3.15.1, 4.2.7, 9.9.2, 9.10.1, 12.2.1, 13.4 5.2, 5.3, 5.4.1, 6.2.4, 7.3, 7.4, 8.2, 9.2, 9.3.1, 9.3.3, Instructions to Bidders 9.4.1, 9.5, 9.6, 9.7, 9.8, 9.9, 9.10, 12.2, 13.4, 14, 15, 1.1.1 15.1.2, 15.1.3, 15.1.5 Instructions to the Contractor Materials, Hazardous 3.2.4, 3.3.1, 3.8.1, 5.2.1, 7, 8.2.2, 12, 13.4.2 10.2.4. **10.3 Instruments of Service**, Definition of Materials, Labor, Equipment and 1.1.7 1.1.3, 1.1.6, 3.4.1, 3.5, 3.8.2, 3.8.3, 3.12, 3.13, 3.15.1, Insurance 5.2.1, 6.2.1, 7.3.4, 9.3.2, 9.3.3, 9.5.1.3, 9.10.2, 6.1.1, 7.3.4, 8.2.2, 9.3.2, 9.8.4, 9.9.1, 9.10.2, 10.2.5, 11 10.2.1.2, 10.2.4, 14.2.1.1, 14.2.1.2 Insurance, Notice of Cancellation or Expiration 11.1.4, 11.2.3

Init.

User Notes:

(1145659762)

Means, Methods, Techniques, Sequences and Procedures of Construction 3.3.1, 3.12.10, 4.2.2, 4.2.7, 9.4.2 Mechanic's Lien 2.1.2, 9.3.1, 9.3.3, 9.6.8, 9.10.2, 9.10.4, 15.2.8 Mediation 8.3.1, 15.1.3.2, 15.2.1, 15.2.5, 15.2.6, **15.3**, 15.4.1, 15.4.1.1 Minor Changes in the Work 1.1.1, 3.4.2, 3.12.8, 4.2.8, 7.1, 7.4 MISCELLANEOUS PROVISIONS Modifications, Definition of 1.1.1 Modifications to the Contract 1.1.1, 1.1.2, 2.5, 3.11, 4.1.2, 4.2.1, 5.2.3, 7, 8.3.1, 9.7, 10.3.2 **Mutual Responsibility** 6.2 Nonconforming Work, Acceptance of 9.6.6, 9.9.3, 12.3 Nonconforming Work, Rejection and Correction of 2.4, 2.5, 3.5, 4.2.6, 6.2.4, 9.5.1, 9.8.2, 9.9.3, 9.10.4, 12.2 **Notice 1.6**, 1.6.1, 1.6.2, 2.1.2, 2.2.2., 2.2.3, 2.2.4, 2.5, 3.2.4, 3.3.1, 3.7.4, 3.7.5, 3.9.2, 3.12.9, 3.12.10, 5.2.1, 7.4, 8.2.2 9.6.8, 9.7, 9.10.1, 10.2.8, 10.3.2, 11.5, 12.2.2.1, 13.4.1, 13.4.2, 14.1, 14.2.2, 14.4.2, 15.1.3, 15.1.5, 15.1.6, 15.4.1 Notice of Cancellation or Expiration of Insurance 11.1.4, 11.2.3 **Notice of Claims** 1.6.2, 2.1.2, 3.7.4, 9.6.8, 10.2.8, **15.1.3**, 15.1.5, 15.1.6, 15.2.8, 15.3.2, 15.4.1 Notice of Testing and Inspections 13.4.1, 13.4.2 Observations, Contractor's 3.2, 3.7.4 Occupancy 2.3.1, 9.6.6, 9.8 Orders, Written 1.1.1, 2.4, 3.9.2, 7, 8.2.2, 11.5, 12.1, 12.2.2.1, 13.4.2, 14.3.1 **OWNER** Owner, Definition of 2.1.1 **Owner, Evidence of Financial Arrangements 2.2**, 13.2.2, 14.1.1.4 Owner, Information and Services Required of the

2.1.2, **2.2**, 2.3, 3.2.2, 3.12.10, 6.1.3, 6.1.4, 6.2.5, 9.3.2,

9.6.1, 9.6.4, 9.9.2, 9.10.3, 10.3.3, 11.2, 13.4.1, 13.4.2,

1.5, 2.1.1, 2.3.32.4, 2.5, 3.4.2, 3.8.1, 3.12.10, 3.14.2,

4.1.2, 4.2.4, 4.2.9, 5.2.1, 5.2.4, 5.4.1, 6.1, 6.3, 7.2.1,

14.1.1.4, 14.1.4, 15.1.4

Owner's Authority

User Notes:

7.3.1, 8.2.2, 8.3.1, 9.3.2, 9.5.1, 9.6.4, 9.9.1, 9.10.2, 10.3.2, 11.4, 11.5, 12.2.2, 12.3, 13.2.2, 14.3, 14.4, 15.2.7 **Owner's Insurance** 11.2 Owner's Relationship with Subcontractors 1.1.2, 5.2, 5.3, 5.4, 9.6.4, 9.10.2, 14.2.2 Owner's Right to Carry Out the Work **2.5**, 14.2.2 Owner's Right to Clean Up Owner's Right to Perform Construction and to **Award Separate Contracts** 6.1 Owner's Right to Stop the Work Owner's Right to Suspend the Work Owner's Right to Terminate the Contract 14.2, 14.4 Ownership and Use of Drawings, Specifications and Other Instruments of Service 1.1.1, 1.1.6, 1.1.7, **1.5**, 2.3.6, 3.2.2, 3.11, 3.17, 4.2.12, 5.3 Partial Occupancy or Use 9.6.6, 9.9 Patching, Cutting and **3.14**, 6.2.5 Patents 3.17 Payment, Applications for 4.2.5, 7.3.9, 9.2, **9.3**, 9.4, 9.5, 9.6.3, 9.7, 9.8.5, 9.10.1, 14.2.3, 14.2.4, 14.4.3 Payment, Certificates for 4.2.5, 4.2.9, 9.3.3, **9.4**, 9.5, 9.6.1, 9.6.6, 9.7, 9.10.1, 9.10.3, 14.1.1.3, 14.2.4 Payment, Failure of 9.5.1.3, **9.7**, 9.10.2, 13.5, 14.1.1.3, 14.2.1.2 Payment, Final 4.2.1, 4.2.9, **9.10**, 12.3, 14.2.4, 14.4.3 Payment Bond, Performance Bond and 7.3.4.4, 9.6.7, 9.10.3, **11.1.2** Payments, Progress 9.3, **9.6**, 9.8.5, 9.10.3, 14.2.3, 15.1.4 PAYMENTS AND COMPLETION Payments to Subcontractors 5.4.2, 9.5.1.3, 9.6.2, 9.6.3, 9.6.4, 9.6.7, 14.2.1.2 **PCB** 10.3.1 Performance Bond and Payment Bond

Performance Bond and Payment Bond 7.3.4.4, 9.6.7, 9.10.3, 11.1.2

Permits, Fees, Notices and Compliance with Laws 2.3.1, 3.7, 3.13, 7.3.4.4, 10.2.2

PERSONS AND PROPERTY, PROTECTION OF 10

Init.

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7

Polychlorinated Biphenyl Samples, Definition of 10.3.1 3.12.3 Product Data, Definition of Samples, Shop Drawings, Product Data and 3.12.2 3.11, 3.12, 4.2.7 **Product Data and Samples, Shop Drawings** Samples at the Site, Documents and 3.11, **3.12**, 4.2.7 3.11 **Progress and Completion** Schedule of Values 4.2.2, **8.2**, 9.8, 9.9.1, 14.1.4, 15.1.4 **9.2**, 9.3.1 **Progress Payments** Schedules, Construction 9.3, **9.6**, 9.8.5, 9.10.3, 14.2.3, 15.1.4 3.10, 3.12.1, 3.12.2, 6.1.3, 15.1.6.2 Project, Definition of Separate Contracts and Contractors 1.1.4 1.1.4, 3.12.5, 3.14.2, 4.2.4, 4.2.7, 6, 8.3.1, 12.1.2 Project Representatives Separate Contractors, Definition of 4.2.10 6.1.1 **Property Insurance** Shop Drawings, Definition of 10.2.5, **11.2** 3.12.1 **Proposal Requirements Shop Drawings, Product Data and Samples** 3.11, **3.12**, 4.2.7 Site, Use of PROTECTION OF PERSONS AND PROPERTY 10 **3.13**, 6.1.1, 6.2.1 Regulations and Laws Site Inspections 1.5, 2.3.2, 3.2.3, 3.6, 3.7, 3.12.10, 3.13, 9.6.4, 9.9.1, 3.2.2, 3.3.3, 3.7.1, 3.7.4, 4.2, 9.9.2, 9.4.2, 9.10.1, 13.4 10.2.2, 13.1, 13.3, 13.4.1, 13.4.2, 13.5, 14, 15.2.8, 15.4 Site Visits, Architect's 3.7.4, 4.2.2, 4.2.9, 9.4.2, 9.5.1, 9.9.2, 9.10.1, 13.4 Rejection of Work 4.2.6, 12.2.1 Special Inspections and Testing Releases and Waivers of Liens 4.2.6, 12.2.1, 13.4 9.3.1, 9.10.2 Specifications, Definition of Representations 1.1.6 3.2.1, 3.5, 3.12.6, 8.2.1, 9.3.3, 9.4.2, 9.5.1, 9.10.1 **Specifications** Representatives 1.1.1, **1.1.6**, 1.2.2, 1.5, 3.12.10, 3.17, 4.2.14 2.1.1, 3.1.1, 3.9, 4.1.1, 4.2.10, 13.2.1 Statute of Limitations Responsibility for Those Performing the Work 15.1.2, 15.4.1.1 3.3.2, 3.18, 4.2.2, 4.2.3, 5.3, 6.1.3, 6.2, 6.3, 9.5.1, 10 Stopping the Work Retainage 2.2.2, 2.4, 9.7, 10.3, 14.1 9.3.1, 9.6.2, 9.8.5, 9.9.1, 9.10.2, 9.10.3 Stored Materials **Review of Contract Documents and Field** 6.2.1, 9.3.2, 10.2.1.2, 10.2.4 **Conditions by Contractor** Subcontractor, Definition of **3.2**, 3.12.7, 6.1.3 5.1.1 Review of Contractor's Submittals by Owner and **SUBCONTRACTORS** 3.10.1, 3.10.2, 3.11, 3.12, 4.2, 5.2, 6.1.3, 9.2, 9.8.2 Subcontractors, Work by Review of Shop Drawings, Product Data and Samples 1.2.2, 3.3.2, 3.12.1, 3.18, 4.2.3, 5.2.3, 5.3, 5.4, 9.3.1.2, by Contractor 9.6.7 3.12 **Subcontractual Relations 5.3**, 5.4, 9.3.1.2, 9.6, 9.10, 10.2.1, 14.1, 14.2.1 **Rights and Remedies** 1.1.2, 2.4, 2.5, 3.5, 3.7.4, 3.15.2, 4.2.6, 5.3, 5.4, 6.1, 6.3, 7.3.1, 8.3, 9.5.1, 9.7, 10.2.5, 10.3, 12.2.1, 12.2.2, 3.10, 3.11, 3.12, 4.2.7, 5.2.1, 5.2.3, 7.3.4, 9.2, 9.3, 9.8, 12.2.4, **13.3**, 14, 15.4 9.9.1, 9.10.2, 9.10.3 **Royalties, Patents and Copyrights** Submittal Schedule 3.17 3.10.2, 3.12.5, 4.2.7 Rules and Notices for Arbitration Subrogation, Waivers of 15.4.1 6.1.1, **11.3** Safety of Persons and Property Substances, Hazardous **10.2**, 10.4 10.3 **Safety Precautions and Programs Substantial Completion** 3.3.1, 4.2.2, 4.2.7, 5.3, **10.1**, 10.2, 10.4 4.2.9, 8.1.1, 8.1.3, 8.2.3, 9.4.2, **9.8**, 9.9.1, 9.10.3, 12.2,

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User Notes:

TIME Substantial Completion, Definition of 9.8.1 Substitution of Subcontractors Time, Delays and Extensions of 5.2.3, 5.2.4 3.2.4, 3.7.4, 5.2.3, 7.2.1, 7.3.1, 7.4, **8.3**, 9.5.1, 9.7, Substitution of Architect 10.3.2, 10.4, 14.3.2, 15.1.6, 15.2.5 2.3.3 Time Limits Substitutions of Materials 2.1.2, 2.2, 2.5, 3.2.2, 3.10, 3.11, 3.12.5, 3.15.1, 4.2, 5.2, 5.3, 5.4, 6.2.4, 7.3, 7.4, 8.2, 9.2, 9.3.1, 9.3.3, 9.4.1, 3.4.2, 3.5, 7.3.8 Sub-subcontractor, Definition of 9.5, 9.6, 9.7, 9.8, 9.9, 9.10, 12.2, 13.4, 14, 15.1.2, 5.1.2 15.1.3, 15.4 **Time Limits on Claims Subsurface Conditions** 3.7.4 3.7.4, 10.2.8, 15.1.2, 15.1.3 **Successors and Assigns** Title to Work 9.3.2, 9.3.3 13.2 UNCOVERING AND CORRECTION OF WORK **Superintendent 3.9**, 10.2.6 **Supervision and Construction Procedures Uncovering of Work** 1.2.2, **3.3**, 3.4, 3.12.10, 4.2.2, 4.2.7, 6.1.3, 6.2.4, 7.1.3, 12.1 7.3.4, 8.2, 8.3.1, 9.4.2, 10, 12, 14, 15.1.4 Unforeseen Conditions, Concealed or Unknown Suppliers 3.7.4, 8.3.1, 10.3 1.5, 3.12.1, 4.2.4, 4.2.6, 5.2.1, 9.3, 9.4.2, 9.5.4, 9.6, **Unit Prices** 9.10.5, 14.2.1 7.3.3.2, 9.1.2 Surety Use of Documents 5.4.1.2, 9.6.8, 9.8.5, 9.10.2, 9.10.3, 11.1.2, 14.2.2, 1.1.1, 1.5, 2.3.6, 3.12.6, 5.3 15.2.7 **Use of Site** Surety, Consent of **3.13**, 6.1.1, 6.2.1 9.8.5, 9.10.2, 9.10.3 Values, Schedule of **9.2**, 9.3.1 Surveys 1.1.7, 2.3.4 Waiver of Claims by the Architect Suspension by the Owner for Convenience 13.3.2 Waiver of Claims by the Contractor Suspension of the Work 9.10.5, 13.3.2, **15.1.7** 3.7.5, 5.4.2, 14.3 Waiver of Claims by the Owner 9.9.3, 9.10.3, 9.10.4, 12.2.2.1, 13.3.2, 14.2.4, **15.1.7** Suspension or Termination of the Contract 5.4.1.1, 14 Waiver of Consequential Damages **Taxes** 14.2.4, 15.1.7 3.6, 3.8.2.1, 7.3.4.4 Waiver of Liens **Termination by the Contractor** 9.3, 9.10.2, 9.10.4 Waivers of Subrogation 14.1. 15.1.7 **Termination by the Owner for Cause** 6.1.1, **11.3** 5.4.1.1, **14.2**, 15.1.7 Warranty **3.5**, 4.2.9, 9.3.3, 9.8.4, 9.9.1, 9.10.2, 9.10.4, 12.2.2, **Termination by the Owner for Convenience** 14.4 15.1.2 Termination of the Architect Weather Delays 8.3, 15.1.6.2 2.3.3 Termination of the Contractor Employment Work, Definition of 14.2.2 1.1.3 Written Consent TERMINATION OR SUSPENSION OF THE 1.5.2, 3.4.2, 3.7.4, 3.12.8, 3.14.2, 4.1.2, 9.3.2, 9.10.3,

TERMINATION OR SUSPENSION OF THE CONTRACT

14

User Notes:

Tests and Inspections

3.1.3, 3.3.3, 3.7.1, 4.2.2, 4.2.6, 4.2.9, 9.4.2, 9.8.3, 9.9.2, 9.10.1, 10.3.2, 12.2.1, **13.4**

1.1.1, 2.4, 3.9, 7, 8.2.2, 12.1, 12.2, 13.4.2, 14.3.1

13.2, 13.3.2, 15.4.4.2

4.2.11, 4.2.12

Written Orders

Written Interpretations

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ARTICLE 1 **GENERAL PROVISIONS**

§ 1.1 Basic Definitions

§ 1.1.1 The Contract Documents

The Contract Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter the Agreement) and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement, and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive, or (4) a written order for a minor change in the Work issued by the Architect. The Contract Documents shall include the Bid Documents as listed in the Instructions to Bidders and any modifications made thereto by addenda.

§ 1.1.2 The Contract

The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect or the Architect's consultants, (2) between the Owner and a Subcontractor or a Sub-subcontractor, (3) between the Owner and the Architect or the Architect's consultants, or (4) between any persons or entities other than the Owner and the Contractor. The Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Architect's duties.

§ 1.1.3 The Work

The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

§ 1.1.4 The Project

The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by the Owner and by Separate Contractors.

§ 1.1.5 The Drawings

The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.

§ 1.1.6 The Specifications

The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.

§ 1.1.7 Instruments of Service

Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect's consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

§ 1.1.8 Initial Decision Maker

The Initial Decision Maker is the person identified in the Agreement to render initial decisions on Claims in accordance with Section 15.2. The Initial Decision Maker shall not show partiality to the Owner or Contractor.

§ 1.2 Correlation and Intent of the Contract Documents

§ 1.2.1 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

§ 1.2.1.1 The invalidity of any provision of the Contract Documents shall not invalidate the Contract or its remaining provisions. If it is determined that any provision of the Contract Documents violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and

enforceable. In such case the Contract Documents shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Contract.

- § 1.2.2 Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.
- § 1.2.3 Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

§ 1.3 Capitalization

Terms capitalized in these General Conditions include those that are (1) specifically defined, (2) the titles of numbered articles, or (3) the titles of other documents published by the American Institute of Architects.

§ 1.4 Interpretation

In the interest of brevity the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

§ 1.5 Ownership and Use of Drawings, Specifications, and Other Instruments of Service

- § 1.5.1 The Contractor, Subcontractors, Sub-subcontractors, and suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication.
- § 1.5.2 The Contractor, Subcontractors, Sub-subcontractors, and suppliers are authorized to use and reproduce the Instruments of Service provided to them, subject to any protocols established pursuant to Sections 1.7 and 1.8, solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and suppliers may not use the Instruments of Service on other projects or for additions to the Project outside the scope of the Work without the specific written consent of the Owner, Architect, and the Architect's consultants.

§ 1.6 Notice

- § 1.6.1 Except as otherwise provided in Section 1.6.2, where the Contract Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission if a method for electronic transmission is set forth in the Agreement.
- § 1.6.2 Notice of Claims as provided in Section 15.1.3 shall be provided in writing and shall be deemed to have been duly served only if delivered to the designated representative of the party to whom the notice is addressed by certified or registered mail, or by courier providing proof of delivery.

§ 1.7 Digital Data Use and Transmission

The parties shall agree upon protocols governing the transmission and use of Instruments of Service or any other information or documentation in digital form.

(Paragraphs deleted)

ARTICLE 2 OWNER

§ 2.1 General

User Notes:

- § 2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. Except as otherwise provided in Section 4.2.1, the Architect does not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.
- § 2.1.2 If requested, the Owner shall furnish to the Contractor, within fifteen days after receipt of a written request, information necessary and relevant for the Contractor to evaluate, give notice of, or enforce mechanic's lien rights.

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Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner's interest therein.

§ 2.2 Program Manager

The Owner assigns **CSRS Disaster Recovery Management, LLC**, 6767 Perkins Rd., Ste. 200, Baton Rouge, LA 70808 as Program Manager and Owner's authorized representative. (*Paragraphs deleted*)

§ 2.3 Information and Services Required of the Owner

- § 2.3.1 The Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities.
- § 2.3.2 The term Architect, when used in the Contract Documents, shall mean the prime Designer (Architect, Engineer, or Landscape Architect), or his authorized representative, lawfully licensed to practice architecture, engineering, or landscape architecture in the State of Louisiana, identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number.
- § 2.3.3 If the employment of the Architect terminates, the Owner shall employ a successor and whose status under the Contract Documents shall be that of the Architect.
- § 2.3.4 The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.
- § 2.3.5 The Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Contractor's performance of the Work with reasonable promptness after receiving the Contractor's written request for such information or services.
- § 2.3.6 Unless otherwise provided in the Contract Documents, the Owner shall furnish to the Contractor one copy of the Contract Documents for purposes of making reproductions pursuant to Section 1.5.2.

§ 2.4 Owner's Right to Stop the Work

If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or repeatedly fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Section 6.1.3.

§ 2.5 Owner's Right to Carry Out the Work

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a ten-day period after receipt of notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such default or neglect. Such action by the Owner and amounts charged to the Contractor are both subject to prior approval of the Architect and the Architect may, pursuant to Section 9.5.1, withhold or nullify a Certificate for Payment in whole or in part, to the extent reasonably necessary to reimburse the Owner for the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the Architect's additional services made necessary by such default, neglect, or failure. If current and future payments are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. If the Contractor disagrees with the actions of the Owner or the Architect, or the amounts claimed as costs to the Owner, the Contractor may file a Claim pursuant to Article 15.

ARTICLE 3 CONTRACTOR

§ 3.1 General

§ 3.1.1 The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Contractor shall be lawfully licensed, if required in the jurisdiction

where the Project is located. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all matters under this Contract. The term "Contractor" means the Contractor or the Contractor's authorized representative.

- § 3.1.2 The Contractor shall perform the Work in accordance with the Contract Documents.
- § 3.1.3 The Contractor shall not be relieved of its obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect in the Architect's administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor.

§ 3.2 Review of Contract Documents and Field Conditions by Contractor

- § 3.2.1 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become generally familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of the Contract Documents.
- § 3.2.2 Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Section 2.3.4, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report to the Architect any errors, inconsistencies or omissions discovered by or made known to the Contractor as a request for information in such form as the Architect may require. It is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents.
- § 3.2.3 The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Architect any nonconformity discovered by or made known to the Contractor as a request for information in such form as the Architect may require.
- § 3.2.4 If the Contractor believes that additional cost or time is involved because of clarifications or instructions the Architect issues in response to the Contractor's notices or requests for information pursuant to Sections 3.2.2 or 3.2.3, the Contractor shall submit Claims as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.2 or 3.2.3, the Contractor shall pay such costs and damages to the Owner, subject to Section 15.1.7, as would have been avoided if the Contractor had performed such obligations. If the Contractor performs those obligations, the Contractor shall not be liable to the Owner or Architect for damages resulting from errors, inconsistencies or omissions in the Contract Documents, for differences between field measurements or conditions and the Contract Documents, or for nonconformities of the Contract Documents to applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities.

§ 3.3 Supervision and Construction Procedures

- § 3.3.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work under the Contract. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety thereof and shall be solely responsible for the jobsite safety of such means, methods, techniques, sequences, or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely notice to the Owner and Architect, and shall propose alternative means, methods, techniques, sequences, or procedures. The Architect shall evaluate the proposed alternative solely for conformance with the design intent for the completed construction. Unless the Architect objects to the Contractor's proposed alternative, the Contractor shall perform the Work using its alternative means, methods, techniques, sequences, or procedures.
- § 3.3.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors. Contractor shall strenuously enforce campus security

requirements and ensure compliance with Work Area limits defined on drawings. Contractor shall immediately honor any requests from Owner or Architect to temporarily interrupt Work due to excessive noise, dust or vibrations, at no additional expense to Owner.

§ 3.3.3 The Contractor shall be responsible for inspection of portions of Work already performed to determine that such portions are in proper condition to receive subsequent Work.

§ 3.4 Labor and Materials

§ 3.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

§ 3.4.2 Not Used.

§ 3.4.3 Contractor and its employees, officers, agents, representatives, and Subcontractors shall conduct themselves in an appropriate and professional manner, in accordance with the Owner's requirements, at all times while working on the Project. Any such individual who behaves in an inappropriate manner or who engages in the use of inappropriate language or conduct while on Owner's property, as determined by the Owner, shall be removed from the Project at the Owner's request. Such individual shall not be permitted to return without the written permission of the Owner. The Owner shall not be responsible or liable to Contractor or any Subcontractor for any additional costs, expenses, losses, claims or damages incurred by Contractor or its Subcontractor as a result of the removal of an individual from the Owner's property pursuant to this Section. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them. Contractor shall strictly comply with Owner's requirements regarding background checks and/or badging of employees.

§ 3.5 Warranty

- § 3.5.1 The Contractor warrants to the Owner and Architect that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.
- § 3.5.2 All material, equipment, or other special warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with Section 9.8.6.

§ 3.6 Taxes

Unless otherwise provided in the Contract Documents, the Contractor shall pay sales, consumer, use and similar taxes for the Work provided by the Contractor that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

§ 3.7 Permits, Fees, Notices and Compliance with Laws

- § 3.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permit as well as for other permits, fees, licenses, and inspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded.
- § 3.7.2 The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work.
- § 3.7.3 If the Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

§ 3.7.4 Concealed or Unknown Conditions

If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the Owner and the Architect before conditions are disturbed and in no event later than 14 days after first observance of the conditions. The Architect will promptly investigate such conditions and, if the Architect determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend that an equitable adjustment be made in the Contract Sum or Contract Time, or both. If the Architect determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Architect shall promptly notify the Owner and Contractor, stating the reasons. If either party disputes the Architect's determination or recommendation, that party may submit a Claim as provided in Article 15. Contractor acknowledges that Work on this Project involves storm-damage repair to damaged portions of existing buildings and exact existing conditions may not be fully captured and identified in the Contract Documents.

§ 3.7.5 If, during the course of the Work, the Contractor discovers human remains, unmarked burial or archaeological sites, burial artifacts, or wetlands, which are not indicated in the Contract Documents, the Contractor shall follow all procedures mandated by State and Federal law, including but not limited to La R.S. 8:671 et seq., the Office of Coastal Protection and Restoration, and Sections 401 & 404 of the Federal Clean Water Act. Request for adjustment of the Contract Sum and Contract Time arising from the existence of such remains or features shall be submitted in writing to the Owner pursuant to the Contract Documents.

§ 3.8 Allowances

§ 3.8.1 Allowances shall not be made on any of the Work.

(Paragraphs deleted)

§ 3.9 Superintendent

- § 3.9.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work. The Superintendent, or a qualified designee, shall be available at all times should the Owner require Contractor's presence on the Project site (for emergencies and similar situations). The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor. Important communications shall be confirmed in writing. Other communications shall be similarly confirmed on written request in each case.
- § 3.9.2 The Contractor, as soon as practicable after award of the Contract, shall notify the Owner and Architect of the name and qualifications of a proposed superintendent. Within 14 days of receipt of the information, the Architect may notify the Contractor, stating whether the Owner or the Architect (1) has reasonable objection to the proposed superintendent or (2) requires additional time for review. Failure of the Architect to provide notice within the 14-day period shall constitute notice of no reasonable objection.
- § 3.9.3 The Contractor shall not employ a proposed superintendent to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's consent, which shall not unreasonably be withheld or delayed.

§ 3.10 Contractor's Construction and Submittal Schedules

§ 3.10.1 The Contractor, promptly after being awarded the Contract, shall submit for the Owner's and Architect's review and approval a Contractor's construction schedule for the Work. The schedule shall contain detail appropriate for the Project, including (1) the date of commencement of the Work, interim schedule milestone dates, and the date of Substantial Completion; (2) an apportionment of the Work by construction activity; and (3) the time required for completion of each portion of the Work. The schedule shall provide for the orderly progression of the Work to completion and shall not exceed time limits current under the Contract Documents. The schedule shall be revised and submitted for review and approval at appropriate intervals as required by the conditions of the Work and Project. For projects with a contract sum greater than \$1,000,000.00, the Contractor shall include with the schedule, for the Owner's and Architect's information, a network analysis to identify those tasks which are on the critical path, i.e., where any delay in the completion of these tasks will lengthen the project timescale, unless action is taken. A revised

schedule shall be submitted for review and approval by Architect with each Application and Certificate for Payment. No payment shall be made until this schedule is approved by Architect.

- § 3.10.2 The Contractor, promptly after being awarded the Contract and thereafter as necessary to maintain a current submittal schedule, shall submit a submittal schedule for the Architect's approval. The Architect's approval shall not be unreasonably delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, and (2) allow the Architect reasonable time to review submittals. If the Contractor fails to submit a submittal schedule, or fails to provide submittals in accordance with the approved submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.
- § 3.10.3 The Contractor shall perform the Work in accordance with the most recent schedules approved by the Owner and Architect. If the Work is not on schedule, as determined by the Architect, and the Contractor fails to take action to bring the Work on schedule, then the Contractor shall be deemed in default under this Contract and the progress of the Work shall be deemed unsatisfactory. Such default may be considered grounds for termination by the Owner for cause in accordance with Section 14.2.
- § 3.10.4 Submittal by the contractor of a schedule or other documentation showing a completion date for his Work prior to the completion date stated in the contract shall not impose any obligation or responsibility on the Owner or Architect for the earlier completion date.
- § 3.10.5 In the event the Owner employs a commissioning consultant, the Contractor shall cooperate fully in the commissioning process and shall require all subcontractors and others under his control to cooperate. The purpose of such services shall be to ensure that all systems perform correctly and interactively according to the provisions of the Contract Documents.

§ 3.11 Documents and Samples at the Site

The Contractor shall make available, at the Project site, the Contract Documents, including Change Orders, Construction Change Directives, and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and the approved Shop Drawings, Product Data, Samples, and similar required submittals. These shall be in electronic form or paper copy, available to the Architect and Owner, and delivered to the Architect for submittal to the Owner upon completion of the Work as a record of the Work as constructed. This requirement is of the essence of the contract. The Architect shall determine the value of these documents and this amount shall not be approved for payment to the Contractor until all of the listed documents are delivered to the Architect in good order, completely marked with field changes and otherwise complete in all aspects.

§ 3.12 Shop Drawings, Product Data and Samples

- § 3.12.1 Shop Drawings are drawings, diagrams, schedules, and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier, or distributor to illustrate some portion of the Work.
- § 3.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.
- § 3.12.3 Samples are physical examples that illustrate materials, equipment, or workmanship, and establish standards by which the Work will be judged.
- § 3.12.4 Shop Drawings, Product Data, Samples, and similar submittals are not Contract Documents. Their purpose is to demonstrate how the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Architect is subject to the limitations of Section 4.2.7. Informational submittals upon which the Architect is not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Architect without action.
- § 3.12.5 The Contractor shall review for compliance with the Contract Documents, approve, and submit to the Architect, Shop Drawings, Product Data, Samples, and similar submittals required by the Contract Documents, in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal

schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of Separate Contractors.

- § 3.12.6 By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Contractor represents to the Owner and Architect that the Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.
- § 3.12.7 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples, or similar submittals, until the respective submittal has been approved by the Architect.
- § 3.12.8 The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from the requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples, or similar submittals, unless the Contractor has specifically notified the Architect of such deviation at the time of submittal and (1) the Architect has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals, by the Architect's approval thereof.
- § 3.12.9 The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples, or similar submittals, to revisions other than those requested by the Architect on previous submittals. In the absence of such notice, the Architect's approval of a resubmission shall not apply to such revisions.
- § 3.12.10 The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures. The Contractor shall not be required to provide professional services in violation of applicable law.
- § 3.12.10.1 If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of the Contractor by the Contract Documents, the Owner and the Architect will specify all performance and design criteria that such services must satisfy. The Contractor shall be entitled to rely upon the adequacy and accuracy of the performance and design criteria provided in the Contract Documents. The Contractor shall cause such services or certifications to be provided by an appropriately licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings, and other submittals prepared by such professional. Shop Drawings, and other submittals related to the Work, designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect. The Owner and the Architect shall be entitled to rely upon the adequacy and accuracy of the services, certifications, and approvals performed or provided by such design professionals, provided the Owner and Architect have specified to the Contractor the performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Architect will review and approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.
- § 3.12.10.2 If the Contract Documents require the Contractor's design professional to certify that the Work has been performed in accordance with the design criteria, the Contractor shall furnish such certifications to the Architect at the time and in the form specified by the Architect.

§ 3.13 Use of Site

The Contractor shall confine operations at the site to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, lawful orders of public authorities, and the Contract Documents and shall not unreasonably encumber the site with materials or equipment. Contractor shall strenuously enforce campus security requirements and ensure compliance with Work Area limits defined on drawings. Contractor is responsible for security of Work Area(s) and other portions of site in use by Contractor related to the Work. Contractor shall not interfere in any way with routine campus operations when working on occupied campuses, including parking lots, drives and roads required for vehicle and bus access and egress. Contractor and any entity for which Contractor is responsible shall not erect or post any sign on the Project site without the prior written consent of Owner.

§ 3.14 Cutting and Patching

- § 3.14.1 The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly. All areas requiring cutting, fitting, or patching shall be restored to the condition existing prior to the cutting, fitting, or patching, unless otherwise required by the Contract Documents.
- § 3.14.2 The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or Separate Contractors by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter construction by the Owner or a Separate Contractor except with written consent of the Owner and of the Separate Contractor. Consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold, from the Owner or a Separate Contractor, its consent to cutting or otherwise altering the Work.

§ 3.15 Cleaning Up

- § 3.15.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery, and surplus materials from and about the Project.
- § 3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and the Owner shall be entitled to reimbursement from the Contractor.

§ 3.16 Access to Work

The Contractor shall provide the Owner and Architect with access to the Work in preparation and progress wherever located.

§ 3.17 Royalties, Patents and Copyrights

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner and Architect harmless from loss on account thereof, but shall not be responsible for defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specifications, or other documents prepared by the Owner or Architect. However, if an infringement of a copyright or patent is discovered by, or made known to, the Contractor, the Contractor shall be responsible for the loss unless the information is promptly furnished to the Architect.

§ 3.18 Indemnification

- § 3.18.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 3.18.
- § 3.18.2 In claims against any person or entity indemnified under this Section 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under Section 3.18.1 shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.

ARTICLE 4 ARCHITECT

§ 4.1 General

- § 4.1.1 The Architect is the person or entity retained by the Owner pursuant to Section 2.3.2 and identified as such in the Agreement.
- § 4.1.2 Duties, responsibilities, and limitations of authority of the Architect as set forth in the Contract Documents shall not be restricted, modified, or extended without written consent of the Owner, Contractor, and Architect. Consent shall not be unreasonably withheld.

§ 4.2 Administration of the Contract

- § 4.2.1 The Architect will provide administration of the Contract as described in the Contract Documents and will be an Owner's representative during construction until end of Warranty Phase. The Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents.
- § 4.2.2 The Architect will visit the site at intervals appropriate to the stage of construction, or as otherwise agreed with the Owner, to become generally familiar with and to keep the Owner informed about the progress and quality of the portion of the Work completed to endeavor to guard the Owner against defects and deficiencies in the Work, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The Architect will not have control over, charge of, or responsibility for the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents.
- § 4.2.3 On the basis of the site visits, the Architect will keep the Owner reasonably informed about the progress and quality of the portion of the Work completed, and promptly report to the Owner (1) known deviations from the Contract Documents, (2) known deviations from the most recent construction schedule submitted by the Contractor, and (3) defects and deficiencies observed in the Work. The Architect will not be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The Architect will not have control over or charge of, and will not be responsible for acts or omissions of, the Contractor, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.

§ 4.2.4 Communications

The Owner and Contractor may communicate directly with each other, when deemed necessary by the Owner, and the Owner will notify the Architect of any decision. The Owner shall promptly notify the Architect of the substance of any direct communications between the Owner and the Contractor otherwise relating to the Project. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and suppliers shall be through the Contractor. Communications by and with Separate Contractors shall be through the Owner. The Contract Documents may specify other communication protocols.

- § 4.2.5 Based on the Architect's evaluations of the Contractor's Applications for Payment, the Architect will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.
- § 4.2.6 The Architect has authority to reject Work that does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable, the Architect will have authority to require inspection or testing of the Work in accordance with Sections 13.4.2 and 13.4.3, whether or not the Work is fabricated, installed or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect to the Contractor, Subcontractors, suppliers, their agents or employees, or other persons or entities performing portions of the Work.
- § 4.2.7 The Architect will review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data, and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect's action will be taken in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Architect's professional judgment to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or

User Notes:

performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5, and 3.12. The Architect's review shall not constitute approval of safety precautions or of any construction means, methods, techniques, sequences, or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

- § 4.2.8 The Architect will prepare Change Orders and Construction Change Directives, and may order minor changes in the Work as provided in Section 7.4. The Architect will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4. The Architect will monitor Change Order activity and advise Contractor to record Change Orders whenever required by La. R.S. 38:2192.
- § 4.2.9 The Architect will conduct inspections to determine the date or dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion pursuant to Section 9.8; receive and forward to the Owner, for the Owner's review and records, written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10; and issue a final Certificate for Payment pursuant to Section 9.10.
- § 4.2.10 If the Owner and Architect agree, the Architect will provide one or more Project representatives to assist in carrying out the Architect's responsibilities at the site. The Owner shall notify the Contractor of any change in the duties, responsibilities and limitations of authority of the Project representatives. There shall be no restriction on the Owner having a Representative.
- § 4.2.11 The Architect will interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of either the Owner or Contractor. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. If no agreement is made concerning the time within which interpretation required of the Architect shall be furnished in compliance with this Section 4.2, then delay shall not be recognized on account of failure by the Architect to furnish such interpretation until 15 days after written request is made for them.
- § 4.2.12 Interpretations and decisions of the Architect will be consistent with the intent of, and reasonably inferable from, the Contract Documents and will be in writing or in the form of drawings. When making such interpretations and decisions, the Architect will endeavor to secure faithful performance by both Owner and Contractor, will not show partiality to either, and will not be liable for results of interpretations or decisions rendered in good faith.
- § 4.2.13 The Architect's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.
- § 4.2.14 The Architect will review and respond to requests for information about the Contract Documents. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. If no agreement is made concerning the time within which interpretation required of the Architect shall be furnished in compliance with this Section 4.2, then delay shall not be recognized on account of failure by the Architect to furnish such interpretation until 15 days after written request is made for them. If appropriate, the Architect will prepare and issue supplemental Drawings and Specifications in response to the requests for information.

ARTICLE 5 SUBCONTRACTORS

§ 5.1 Definitions

- § 5.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include a Separate Contractor or the subcontractors of a Separate Contractor.
- § 5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

§ 5.2 Award of Subcontracts and Other Contracts for Portions of the Work

§ 5.2.1 Unless otherwise stated in the Contract Documents, the Contractor, as soon as practicable after award of the Contract, shall notify the Owner and Architect of the persons or entities proposed for each principal portion of the Work, including those who are to furnish materials or equipment fabricated to a special design. Within 14 days of receipt of the information, the Architect may notify the Contractor whether the Owner or the Architect (1) has reasonable objection to any such proposed person or entity or (2) requires additional time for review.

§ 5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection. The Contractor shall be solely responsible for selection and performance of all subcontractors. The Contractor shall not be entitled to claims for additional time and/or an increase in the contract sum due to a problem with performance or nonperformance of a subcontractor.

§ 5.2.3 The Contractor shall notify the Architect and the Owner when a subcontractor is to be changed and substituted with another subcontractor.

(Paragraph deleted)

§ 5.3 Subcontractual Relations

By appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work that the Contractor, by these Contract Documents, assumes toward the Owner and Architect Contractor shall include all sub-contractors as insureds under its insurance policies OR shall be responsible for verifying and maintaining the Insurance Certificates provided by each sub-tenant and each sub-contractor's compliance with the insurance requirements stated herein. Sub-contractors shall be subject to all of the requirements stated herein. The Owner reserves the right to request copies of sub-contractor's Certificates of Insurance and endorsements at any time Each subcontract agreement shall preserve and protect the rights of the Owner and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

§ 5.4 Not Used.

(Paragraphs deleted)

ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

§ 6.1 Owner's Right to Perform Construction and to Award Separate Contracts

§ 6.1.1 The term "Separate Contractor(s)" shall mean other contractors retained by the Owner under separate agreements. The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and with Separate Contractors retained under Conditions of the Contract substantially similar to those of this Contract, including those provisions of the Conditions of the Contract related to insurance and waiver of subrogation.

§ 6.1.2 When separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.

§ 6.1.3 The Owner shall provide for coordination of the activities of the Owner's own forces and of each Separate Contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with any Separate Contractors and the Owner in reviewing their construction schedules. The Contractor shall make any revisions to its construction schedule deemed necessary after a joint review and mutual agreement. The construction

schedules shall then constitute the schedules to be used by the Contractor, Separate Contractors, and the Owner until subsequently revised.

§ 6.1.4 Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces or with Separate Contractors, the Owner or its Separate Contractors shall have the same obligations and rights that the Contractor has under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6, and Articles 10, 11, and 12.

§ 6.2 Mutual Responsibility

- § 6.2.1 The Contractor shall afford the Owner and Separate Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.
- § 6.2.2 If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a Separate Contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly notify the Architect of apparent discrepancies or defects in the construction or operations by the Owner or Separate Contractor that would render it unsuitable for proper execution and results of the Contractor's Work. Failure of the Contractor to notify the Architect of apparent discrepancies or defects prior to proceeding with the Work shall constitute an acknowledgment that the Owner's or Separate Contractor's completed or partially completed construction is fit and proper to receive the Contractor's Work. The Contractor shall not be responsible for discrepancies or defects in the construction or operations by the Owner or Separate Contractor that are not apparent.
- § 6.2.3 The Contractor shall reimburse the Owner for costs the Owner incurs that are payable to a Separate Contractor because of the Contractor's delays, improperly timed activities or defective construction. The Owner shall be responsible to the Contractor for costs the Contractor incurs because of a Separate Contractor's delays, improperly timed activities, damage to the Work or defective construction.
- **§ 6.2.4** The Contractor shall promptly remedy damage that the Contractor wrongfully causes to completed or partially completed construction or to property of the Owner or Separate Contractor as provided in Section 10.2.5.
- **§ 6.2.5** The Owner and each Separate Contractor shall have the same responsibilities for cutting and patching as are described for the Contractor in Section 3.14.

§ 6.3 Owner's Right to Clean Up

If a dispute arises among the Contractor, Separate Contractors, and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and the Architect will allocate the cost among those responsible.

ARTICLE 7 CHANGES IN THE WORK

§ 7.1 General

- § 7.1.1 Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.
- § 7.1.2 A Change Order shall be based upon agreement among the Owner, Contractor, and Architect. A Construction Change Directive requires agreement by the Owner and Architect and may or may not be agreed to by the Contractor. An order for a minor change in the Work may be issued by the Architect alone.
- § 7.1.3 Changes in the Work shall be performed under applicable provisions of the Contract Documents. The Contractor shall proceed promptly with changes in the Work, unless otherwise provided in the Change Order, Construction Change Directive, or order for a minor change in the Work.
- § 7.1.4 As part of the pre-construction conference submittals, the Contractor shall submit the following for review and approval by Architect and Owner, prior to the Contractor's initial request for payment:
- § 7.1.4.1 Fixed job site overhead cost itemized with documentation to support daily rates.

- § 7.1.4.2 Bond Premium Rate with supporting information from the General Contractor's carrier.
- § 7.1.4.3 Labor Burden by trade for both Subcontractors and General Contractor. The Labor Burden shall be supported by the Worker's Compensation and Employer's Liability Insurance Policy Information Page. Provide for all trades.
- § 7.1.4.4 Internal Rate Charges for all significant company owned equipment.
- § 7.1.5 If the General Contractor fails to submit the aforementioned documentation as part of the pre-construction submittals, then pay applications shall not be processed until such time as the Owner receives and approves this information.

§ 7.2 Change Orders

- § 7.2.1 A Change Order is a written instrument prepared by the Architect and signed by the Owner, the Architect, and the Contractor issued after execution of the Contract, authorizing a change in the Work and/or an adjustment in the Contract Sum and/or the Contract Time. The Contract Sum and the Contract Time may be changed only by Change Order. A Change Order signed by the Contractor indicates his agreement therewith, including the adjustment in the Contract Sum or the Contract Time. Any reservation of rights, stipulation, or other modification made on the change order by the contractor shall have no effect.
- § 7.2.2 "Cost of the Work" for the purpose of Change Orders shall be the eligible costs required to be incurred in performance of the Work and paid by the Contractor and Subcontractors which eligible costs shall be limited to:
- § 7.2.2.1 Actual wages paid directly to labor personnel, with a labor burden markup exclusively limited to applicable payroll taxes, worker's compensation insurance, unemployment compensation, and social security taxes for those labor personnel performing the Work. Wages shall be the basic hourly labor rate paid an employee exclusive of fringe benefits or other employee costs. The labor burden percentage for the "Cost of the Work" is limited to categories listed herein. Employer-provided health insurance, fringe benefits, employee training (whether a requirement of employment or not), vacation pay, etc., are examples of ineligible labor burden costs which *shall not* be included, as these costs are already compensated by the Overhead and Profit markup. Supervision shall not be included as a line item in the "Cost of the Work", except when the change results in a documented delay in the critical path, as described in Section 7.2.7.
- § 7.2.2.2 Cost of all materials and supplies necessary and required to perform the Work, identifying each item and its individual cost, including taxes. Incidental consumables are not eligible costs and shall not be included.
- § 7.2.2.3 Cost of each necessary piece of machinery and equipment required to perform the Work, identifying each item and its individual cost, including taxes. Incidental small tools of a specific trade (i.e., shovels, saws, hammers, air compressors, etc.,) and general use vehicles, such as pickup trucks even for moving items around the site, fuel for these general use vehicles, travel, lodging, and/or meals are not eligible and shall not be included.
- § 7.2.2.4 Eligible Insurance costs shall be limited to documented increases in "Builder's Risk" insurance premium / costs only. Commercial General Liability, Automobile Liability, and all other required insurances, where referenced in the Contract shall be considered part of normal overhead. These costs are already compensated by the Overhead and Profit markup.
- § 7.2.2.5 Cost for the General Contractor Performance and Payment Bond premium, where the documented cost of the premiums have been increased due to the Change Order.
- § 7.2.3 Overhead and Profit The Contractor and Subcontractor shall be due home office fixed overhead and profits on the Cost of the Work, but shall not exceed a total of 16% of the direct cost of any portion of Work. The credit to the Owner resulting from a change in the Work shall be the sum of those items above, including overhead and profit. Where a change results in both credits to the Owner and extras to the Contractor for related items, overhead and profit shall be computed for credits to the Owner and extras to the Contractor. The Owner shall receive full credit for the computed overhead and profit on credit change order items.

- § 7.2.4 The cost to the Owner resulting from a change in the Work shall be the sum of: Cost of the Work (as defined at Section 7.2.2) and Overhead and Profit (as defined at Section 7.2.3), and shall be computed as follows:
 - § 7.2.4.1 When all of the Work is General Contractor Work; 8% markup on the Cost of the Work.
 - § 7.2.4.2 When the Work is all Subcontract Work; 8% markup on the Cost of the Work for Subcontractor's Overhead and Profit, plus 8% markup on the Cost of the Work, not including the Subcontractor's Overhead and Profit markup, for General Contractor's Overhead and Profit.
 - § 7.2.4.3 When the Work is a combination of General Contractor Work and Subcontract Work; that portion of the direct cost that is General Contract Work shall be computed per Section 7.2.4.1 and that portion of the direct cost that is Subcontract Work shall be computed per Section 7.2.4.2. Premiums for the General Contractor's bond may be included, but after the markup is added to the Cost of the Work. Premiums for the Subcontractor's Bond shall not be included.
- § 7.2.4.4 Subcontract cost shall consist of the items in Section 7.2.2 above plus Overhead and Profit as defined in Section 7.2.3.
- § 7.2.5 Before a Change Order is prepared, the Contractor shall prepare and deliver to the Architect the following information concerning the Cost of the Work, not subject to waiver, within a reasonable time after being notified to prepare said Change Order:

A detailed, itemized list of labor, material and equipment costs for the General Contractor's Work including quantities and unit costs for each item of labor, material and equipment.

An itemized list of labor, material and equipment costs for each Subcontractor's and/or Sub-Subcontractor's Work including quantities and unit costs for each item of labor, material and equipment.

For any item submitted under this Section to determine adjustments to Contract Sum, the Contractor shall keep and present copies of actual paid invoices, and/or other such documentation as Owner or Architect may require, that:

- a) substantiates claimed quantities actually purchased;
- b) substantiates claimed unit costs actually paid;
- c) substantiates claimed costs actually paid for equipment usage.
- § 7.2.6 After a Change Order has been approved, no future requests for extensions of time or additional cost shall be considered for that Change Order.
- § 7.2.7 Extended fixed job-site costs are indirect costs that are necessary to support the work in the field. Examples of fixed job-site costs are field office rental, salaries of field office staff, field office utilities, and telephone.

(Paragraph deleted)

Extended fixed job-site costs or equitable adjustment may be included in a Change Order due to a delay in the critical path, with the exception of weather-related delays. In the event of a delay in the critical path, the Contractor shall submit all changes or adjustments to the Contract Time within twenty-one (21) days of the event giving rise to the delay. The Contractor shall submit documentation and justification for the adjustment by performing a critical path analysis of its most recent schedule in use prior to the change, which shows an extension in critical path activities. The Contractor shall notify the Architect in writing that the Contractor is making a claim for extended fixed job-site overhead as required by Section 15.1.2. The Contractor shall provide proof that the Contractor is unable to mitigate financial damages through Alternate Work within this Contract or replacement work. "Replacement Work" is that work which the Contractor is obligated to perform under any construction contract separate from this Contract. Reasonable proof shall be required by the Architect that the delays affected the Completion Date.

- § 7.2.8 "Cost of the Work" whether General Contractor cost or Subcontractor cost shall not apply to the following:
 - § 7.2.8.1 Salaries or other compensation of the Contractor's personnel at the Contractor's principal office and branch offices.

- § 7.2.8.2 Any part of the Contractor's capital expenses, including interest on the Contractor's capital employed for the Work.
- § 7.2.8.3 Overhead and general expenses of any kind or the cost of any item not specifically and expressly included above in Cost of the Work.
- § 7.2.8.4 Cost of supervision refer to section 7.2.2.1, with exception as provided in Section 7.2.7.
- § 7.2.9 When applicable as provided by the Contract, the cost to Owner for Change Orders shall be determined by quantities and unit prices. The quantity of any item shall be as submitted by the Contractor and approved by the Architect. Unit prices shall cover cost of Material, Labor, Equipment, Overhead and Profit.

§ 7.3 Construction Change Directives

- § 7.3.1 A Construction Change Directive is a written order prepared by the Architect and signed by the Owner and Architect, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, the Contract Sum and Contract Time being adjusted accordingly.
- § 7.3.2 A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order.
- § 7.3.3 If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods, but not to exceed a specified amount:
 - .1 Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
 - .2 Unit prices stated in the Contract Documents or subsequently agreed upon;
 - .3 Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
 - .4 As provided in Section 7.3.4.
 - .5 For any item submitted under this Section to determine adjustments to Contract Sum, the Contractor shall keep and present copies of actual paid invoices, and/or other such documentation as Owner or Architect may require, that:
 - a) substantiates claimed quantities actually purchased;
 - b) substantiates claimed unit costs actually paid;
 - c) substantiates claimed costs actually paid for equipment usage.
- § 7.3.4 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Architect shall determine the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable amount. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the Architect may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.4 shall be limited to the following:
 - 1 Costs of labor, including social security, old age and employment insurance, applicable payroll taxes, and workers' compensation insurance;
 - .2 Costs of materials, supplies, and equipment, including cost of transportation, whether incorporated or consumed;
 - .3 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others:
 - .4 Costs of premiums for all bonds and insurance, permit fees, and sales, use, or similar taxes, directly related to the change; and
 - .5 Costs of supervision and field office personnel directly attributable to the change.

- § 7.3.5 If the Contractor disagrees with the adjustment in the Contract Time, the Contractor may make a Claim in accordance with applicable provisions of Article 15.
- § 7.3.6 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Architect of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.
- § 7.3.7 A Construction Change Directive signed by the Contractor indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.
- § 7.3.8 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Architect. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.
- § 7.3.9 Pending final determination of the total costs of a Construction Change Directive to the Owner, amounts not in dispute for such changes in the Work shall be included in Applications for Payment accompanied by a Change Order indicating the parties' agreement with part or all of such costs.
- § 7.3.10 When the Owner and Contractor agree with a determination made by the Architect concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and the Architect will prepare a Change Order. Change Orders may be issued for all or any part of a Construction Change Directive.

§ 7.4 Minor Changes in the Work

The Architect may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. The Architect's order for minor changes shall be in writing. If the Contractor believes that the proposed minor change in the Work will affect the Contract Sum or Contract Time, the Contractor shall notify the Architect and shall not proceed to implement the change in the Work. If the Contractor performs the Work set forth in the Architect's order for a minor change without prior notice to the Architect that such change will affect the Contract Sum or Contract Time, the Contractor waives any adjustment to the Contract Sum or extension of the Contract Time.

ARTICLE 8 TIME

§ 8.1 Definitions

- § 8.1.1 Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.
- § 8.1.2 The date of commencement of the Work is the date established in the Agreement.
- § 8.1.3 The date of Substantial Completion is the date certified by the Architect in accordance with Section 9.8.
- § 8.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.
- § 8.1.5 The Contract Time shall not be changed by the submission of a schedule that shows an early completion date unless specifically authorized by change order.

§ 8.2 Progress and Completion

§ 8.2.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work. Completion of the Work must be within the Time for Completion stated in the Agreement, subject to such extensions as may be granted under Section 8.3. The Contractor agrees to commence Work not later than fourteen (14) days after the transmittal date of Written Notice to Proceed from the Owner and to substantially complete the project within the time stated in the Contract. The Owner will suffer financial loss if the project is not substantially complete in the time set forth in the Contract Documents. The Contractor and the Contractor's Surety shall be liable for and shall pay to the Owner the sum stated in the Contract Documents as fixed, agreed and liquidated damages for each consecutive calendar day (Saturdays, Sundays and holidays included) of delay until the Work is substantially complete. The Owner shall be entitled to the sum stated in the Contract Documents. Such Liquidated Damages shall be withheld by the Owner from the amounts due the Contractor for progress payments.

§ 8.2.2 Not Used.

§ 8.2.3 The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

§ 8.3 Delays and Extensions of Time

- § 8.3.1 If the Contractor is delayed at any time in the commencement or progress of the Work by (1) an act or neglect of the Owner or Architect, of an employee of either, or of a Separate Contractor; (2) by changes ordered in the Work; (3) by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, adverse weather conditions documented in accordance with Section 15.1.6.2, or other causes beyond the Contractor's control; (4) by delay authorized by the Owner pending litigation; or (5) by other causes that the Contractor asserts, and the Architect determines, justify delay, then the Contract Time shall be extended for such reasonable time as the Architect may recommend, subject to Owner's approval of Change Order. If the claim is not made within the limits of Article 15, all rights for future claims for that month are waived.
- § 8.3.2 Claims relating to time shall be made in accordance with applicable provisions of Article 15.
- § 8.3.3 This Section 8.3 does not preclude recovery of damages for delay by either party under other provisions of the Contract Documents.

ARTICLE 9 PAYMENTS AND COMPLETION

§ 9.1 Contract Sum

§ 9.1.1 The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

(Paragraph deleted)

§ 9.2 Schedule of Values

At the Pre-Construction Conference, the Contractor shall submit to the Owner and the Architect a Schedule of Values prepared as follows:

- § 9.2.1 The Schedule of Values Format shall be as defined in the Contract Documents and acceptable to Architect and Owner. If applicable, the cost of Work for each section listed under each division, shall be given. The cost for each section shall include Labor, Materials, Overhead and Profit.
- § 9.2.2 The Total of all items shall equal the Total Contract Sum. This schedule, when approved by the Architect, shall be used as a basis for the Contractor's Applications for Payment and it may be used for determining the cost of the Work in deductive change orders, when a specific item of Work listed on the Schedule of Values is to be removed. Once the Schedule of Values is submitted at the Pre-Construction Conference, the schedule shall not be modified without approval from the Owner and Architect.

§ 9.3 Applications for Payment

- § 9.3.1 Monthly, the Contractor shall submit to the Architect the Application and Certification for Payment form, supported by any additional data substantiating the Contractor's right to payment as the Owner or the Architect may require. Application for Payment shall be submitted on or about the first of each month for the value of labor and materials incorporated into the Work and of materials, suitably stored, at the site as of the twenty-fifth day of the preceding month, less normal retainage as follows, per La R.S. 38:2248:
 - § 9.3.1.1 Projects with Contract price up to \$500,000.00 10% of the Contract price.
 - § 9.3.1.2 Projects with Contract price of \$500,000.00, or more 5% of the Contract price.

- § 9.3.1.3 No payment shall be made until the revised schedule required by Section 3.10.1 is received.
- § 9.3.1.4 The normal retainage shall not be due the Contractor until after substantial completion and expiration of the forty-five day lien period and submission to the Architect of a clear lien certificate, consent of surety, and invoice for retainage.
- § 9.3.2 Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. Payments for materials or equipment stored on the site shall be conditioned upon submission by the Contractor of bills of sale or such other procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, including applicable insurance.
- § 9.3.3 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information, and belief, be free and clear of liens, claims, security interests, or encumbrances, in favor of the Contractor, Subcontractors, suppliers, or other persons or entities that provided labor, materials, and equipment relating to the Work.

§ 9.4 Certificates for Payment

- § 9.4.1 The Architect will, within seven days after receipt of the Contractor's Application for Payment, either (1) issue to the Owner a Certificate for Payment in the full amount of the Application for Payment, with a copy to the Contractor; or (2) issue to the Owner a Certificate for Payment for such amount as the Architect determines is properly due, and notify the Contractor and Owner of the Architect's reasons for withholding certification in part as provided in Section 9.5.1; or (3) withhold certification of the entire Application for Payment, and notify the Contractor and Owner of the Architect's reason for withholding certification in whole as provided in Section 9.5.1.
- § 9.4.2 The issuance of a Certificate for Payment will constitute a representation by the Architect to the Owner, based on the Architect's evaluation of the Work and the data in the Application for Payment, that, to the best of the Architect's knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion, and to specific qualifications expressed by the Architect. However, the issuance of a Certificate for Payment will not be a representation that the Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work; (2) reviewed construction means, methods, techniques, sequences, or procedures; (3) reviewed copies of requisitions received from Subcontractors and suppliers and other data requested by the Owner to substantiate the Contractor's right to payment; or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

§ 9.5 Decisions to Withhold Certification

- § 9.5.1 The Architect may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Architect's opinion the representations to the Owner required by Section 9.4.2 cannot be made. If the Architect is unable to certify payment in the amount of the Application, the Architect will notify the Contractor and Owner as provided in Section 9.4.1. If the Contractor and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Certificate for Payment previously issued, to such extent as may be necessary in the Architect's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from acts and omissions described in Section 3.3.2, because of
 - .1 defective Work not remedied;
 - .2 third party claims filed or reasonable evidence indicating probable filing of such claims, unless security acceptable to the Owner is provided by the Contractor;
 - failure of the Contractor to make payments properly to Subcontractors or suppliers for labor, materials .3 or equipment;
 - reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;

- .5 damage to the Owner or a Separate Contractor;
- reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid .6 balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
- .7 failure to carry out the Work in accordance with the Contract Documents.
- § 9.5.2 When either party disputes the Architect's decision regarding a Certificate for Payment under Section 9.5.1, in whole or in part, that party may submit a Claim in accordance with Article 15.
- § 9.5.3 When the reasons for withholding certification are removed, certification will be made for amounts previously withheld.

(Paragraph deleted)

§ 9.6 Progress Payments

- § 9.6.1 After the Architect has issued a Certificate for Payment, the Owner shall make payment within thirty days except for projects funded fully or in part by a Federal reimbursement program. For such projects the Owner will make payment in a timely manner consistent with reimbursement.
- § 9.6.2 The Contractor shall pay each Subcontractor, after receipt of payment from the Owner, the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner. La R.S. 9:2784 (A) and (C) require a Contractor or Subcontractor to make payment due to each Subcontractor and supplier within fourteen (14) consecutive days of the receipt of payment from the Owner. If not paid, a penalty in the amount of ½ of 1% per day is due, up to a maximum of 15% from the expiration date until paid. The contractor or subcontractor, whichever is applicable, is solely responsible for payment of a penalty
- § 9.6.3 The Architect will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Architect and Owner on account of portions of the Work done by such Subcontractor.
- § 9.6.4 Neither the Owner nor Architect shall have an obligation to pay, or to see to the payment of money to, a Subcontractor or supplier, except as may otherwise be required by law. Pursuant to La. R.S. 38:2242 and La. R.S. 38:2242.2, when the Owner receives any claim of nonpayment arising out of the Contract, the Owner shall deduct 125% of such claim from the Contract Sum. The Contractor, or any interested party, may deposit security, in accordance with La. R.S. 38:2242.2, guaranteeing payment of the claim with the recorder of mortgages of the parish where the Work has been done. When the Owner receives original proof of such guarantee from the recorder of mortgages, the claim deduction will be added back to the Contract Sum
- § 9.6.5 The Contractor's payments to suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.
- § 9.6.6 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.
- § 9.6.7 Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Contractor for Work properly performed by Subcontractors or provided by suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor for which payment was made by the Owner. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor, create any fiduciary liability or tort liability on the part of the Contractor for breach of trust, or entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.
- § 9.6.8 The Contractor shall defend and indemnify the Owner from all loss, liability, damage or expense, including reasonable attorney's fees and litigation expenses, arising out of any lien claim or other claim for payment by any Subcontractor or supplier of any tier. Upon receipt of notice of a lien claim or other claim for payment, the Owner shall notify the Contractor. If approved by the applicable court, when required, the Contractor may substitute a surety bond for the property against which the lien or other claim for payment has been asserted.

(Paragraphs deleted)

§ 9.8 Substantial Completion

(Paragraph deleted)

- § 9.8.1. Substantial Completion is the stage in the progress of the Work when the Work is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use. The Architect shall determine if the project is substantially complete in accordance with this Section. In order to satisfy this definition of Substantial Completion, Acceptance of Substantial Completion shall be executed in writing by the Owner and approved by the CPSB Board (if necessary). All insurance requirements shall remain in place until such written execution and formal approval occurs.
- § 9.8.2 When the Contractor considers that the Work is Substantially Complete, the Contractor shall prepare and submit to the Architect a comprehensive list of items to be completed or corrected prior to final payment. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.
- § 9.8.3 Upon receipt of the Contractor's list, the Architect shall make an inspection to determine whether the Work is substantially complete. A prerequisite to the Work being considered as substantially complete is the Owner's receipt of the executed Roofing Contractor's and Roofing Manufacturer's guarantees, where roofing Work is part of the Contract. Prior to inspection by the Architect, the Contractor shall notify the Architect that the project is ready for inspection by the State Fire Marshal's office. If the Architect's inspection discloses any item, whether or not included on the Contractor's list, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use, the Contractor shall, before the Work can be considered as Substantially Complete, complete or correct such item upon notification by the Architect. In such case, the Contractor shall then submit a request for another inspection by the Architect to determine Substantial Completion.
- § 9.8.4 When the Architect determines that the project is Substantially Complete, he shall prepare a punch list of exceptions and the dollar value related thereto. The monetary value assigned to this list will be the sum of the cost estimate for each particular item of Work the Architect develops based on the mobilization, labor, material and equipment costs of correcting the item and shall be retained from the monies owed the contractor, above and beyond the standard lien retainage. The cost of these items shall be prepared in the same format as the schedule of values. At the end of the forty-five day lien period payment shall be approved for all punch list items completed up to that time. After that payment, none of the remaining funds shall be due the contractor until all punch list items are completed and are accepted by the Architect. If the dollar value of the punch list exceeds the amount of funds, less the retainage amount, in the remaining balance of the Contract, then the Project shall not be considered as substantially complete. If funds remaining are less than that required to complete the Work, the Contractor shall pay the difference.
- § 9.8.5 When the preparation of the punch list is complete the Architect shall prepare a Recommendation of Acceptance incorporating the punch list and submit it to the Owner. Upon approval of the Recommendation of Acceptance, the Owner may issue a Notice of Acceptance of Building Contract which shall establish the Date of Substantial Completion. The Contractor shall record the Notice of Acceptance with the Clerk of Court in the Parish in which the Work has been performed. If the Notice of Acceptance has not been recorded seven (7) days after issuance, the Owner may record the Acceptance at the Contractor's expense. All additive change orders must be processed before issuance of the Recommendation of Acceptance. The Owner shall not be responsible for payment for any Work associated with change orders that is not incorporated into the contract at the time of the Recommendation of Acceptance.
- § 9.8.6 Warranties required by the Contract Documents shall commence on the date of Acceptance of the Work unless otherwise agreed to in writing by the Owner and Contractor. Unless otherwise agreed to in writing by the Owner and Contractor, security, maintenance, heat, utilities, damage to the Work not covered by the punch list and insurance shall become the Owner's responsibility on the Date of Substantial Completion.
- § 9.8.7 If all punch list items have not been completed by the end of the forty-five (45) day lien period, through no fault of the Architect or Owner, the Owner may hold the Contractor in default. If the Owner finds the Contractor is in default, the Surety shall be notified. If within forty-five (45) days after notification, the Surety has not completed the punch list, through no fault of the Architect or Owner, the Owner may, at his option, contract to have the balance of the Work completed and pay for such Work with the unpaid funds remaining in the Contract sum. Finding the Contractor

in default shall constitute a reason for disqualification of the Contractor from bidding on future state contracts. If the surety fails to complete the punch list within the stipulated time period, the Owner may not accept bonds submitted, in the future, by the surety

§ 9.9 Partial Occupancy or Use

- § 9.9.1 Partial Occupancy is that stage in the progress of the Work when a designated portion of the Work is sufficiently complete in accordance with the Contract Documents so the Owner can occupy or utilize the designated portion of the Work for its intended use. The Owner may occupy or use any substantially completed portion of the Work so designated by separate agreement with the Contractor and authorized by public authorities having jurisdiction over the Work. Such occupancy or use may commence provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. Consent to occupy must be obtained in writing from Contractor's and/or Owner's insurer (whichever is deemed by Owner as the appropriate insurer), and the appropriate insurances must be confirmed in writing. When the Contractor considers the designated portion substantially complete the Contractor shall prepare and submit a list to the Architect as provided under Section 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld.
- § 9.9.2 Immediately prior to such partial occupancy or use, the Owner, Contractor, and Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.
- § 9.9.3 Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

§ 9.10 Final Completion and Final Payment

- § 9.10.1 Upon receipt of the Contractor's notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect will promptly make such inspection. When the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Architect will promptly issue a final Certificate for Payment stating that to the best of the Architect's knowledge, information and belief, and on the basis of the Architect's on-site visits and inspections, the Work has been completed in accordance with the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Certificate is due and payable. The Architect's final Certificate for Payment will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.
- § 9.10.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect, (3) a written statement that the Contractor knows of no reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment, (5) documentation of any special warranties, such as manufacturers' warranties or specific Subcontractor warranties, and (6) if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts and releases and waivers of liens, claims, security interests, or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien, claim, security interest, or encumbrance. If a lien, claim, security interest, or encumbrance remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging the lien, claim, security interest, or encumbrance, including all costs and reasonable attorneys' fees.
- § 9.10.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Architect so confirms, the Owner shall, upon application by the Contractor and certification by the Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed, corrected, and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of the surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect prior to

User Notes:

certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

- § 9.10.4 The making of final payment shall not constitute a waiver of Claims by the Owner for the following:
 - .1 Claims, security interests, or encumbrances arising out of the Contract and unsettled;
 - .2 Failure of the Work to comply with the requirements of the Contract Documents irrespective of when such failure is discovered:
 - .3 Terms of special warranties required by the Contract Documents; or
 - .4 Audits performed by the Owner, after final payment.
- § 9.10.5 Acceptance of final payment by the Contractor, a Subcontractor, or a supplier, shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

§ 10.1 Safety Precautions and Programs

The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract.

§ 10.2 Safety of Persons and Property

- § 10.2.1 The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury, or loss to
 - .1 employees on the Work and other persons who may be affected thereby;
 - .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody, or control of the Contractor, a Subcontractor, or a Sub-subcontractor; and
 - .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.
- § 10.2.2 The Contractor shall comply with, and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities, bearing on the health and safety of persons or property or their protection from damage, injury, or loss.
- § 10.2.3 The Contractor shall implement, erect, and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards; promulgating safety regulations; and notifying the owners and users of adjacent sites and utilities of the safeguards.
- § 10.2.4 When use or storage of explosives or other hazardous materials or equipment, or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.
- § 10.2.5 The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Sections 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2 and 10.2.1.3. The Contractor may make a Claim for the cost to remedy the damage or loss to the extent such damage or loss is attributable to acts or omissions of the Owner or Architect or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 3.18.
- § 10.2.6 The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner and Architect.

§ 10.2.7 The Contractor shall not permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition.

§ 10.2.8 Injury or Damage to Person or Property

If either party suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, notice of the injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

§ 10.3 Hazardous Materials and Substances

- § 10.3.1 The Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials or substances. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB) or lead, encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and notify the Owner and Architect of the condition.
- § 10.3.2 Upon receipt of the Contractor's notice, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. The Contract Time shall be extended appropriately.
- § 10.3.3 To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area if in fact the material or substance presents the risk of bodily injury or death as described in Section 10.3.1 and has not been rendered harmless, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), except to the extent that such damage, loss, or expense is due to the fault or negligence of the party seeking indemnity.
- § 10.3.4 The Owner shall not be responsible under this Section 10.3 for hazardous materials or substances the Contractor brings to the site unless such materials or substances are required by the Contract Documents. The Owner shall be responsible for hazardous materials or substances required by the Contract Documents, except to the extent of the Contractor's fault or negligence in the use and handling of such materials or substances.
- § 10.3.5 The Contractor shall reimburse the Owner for the cost and expense the Owner incurs (1) for remediation of hazardous materials or substances the Contractor brings to the site and negligently handles, or (2) where the Contractor fails to perform its obligations under Section 10.3.1, except to the extent that the cost and expense are due to the Owner's fault or negligence.
- § 10.3.6 If, without negligence on the part of the Contractor, the Contractor is held liable by a government agency for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents, the Owner shall reimburse the Contractor for all cost and expense thereby incurred.

§ 10.4 Emergencies

In an emergency affecting the safety of persons or property, the Contractor shall notify the Owner and Architect immediately of the emergency, simultaneously acting at his discretion to prevent damage, injury or loss. Any additional compensation or extension of time claimed by the Contractor on account of emergency Work shall be determined as provided in Article 15 and Article 7.

INSURANCE AND BONDS

NOTE: The following Article 11 contemplates Owner using a custom Owner-Contractor Agreement; AIA Document A101-2017 Exhibit A is not part of these documents.

§ 11.1 Contractor's Liability Insurance

The Contractor shall purchase and maintain without interruption for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work hereunder by the Contractor, its agents, representatives, employees or subcontractors. The duration of the contract shall be from the inception of the contract until the date of final payment.

(Paragraphs deleted)

§ 11.2 Minimum Scope and Limits of Insurance

§ 11.2.1 Worker's Compensation

Worker's Compensation insurance shall be in compliance with the Louisiana Worker's Compensation law and shall be statutory. Employers Liability is included with a minimum limit of \$1,000,000 per accident/per disease/per employee. If Work is to be performed over water and involves maritime exposure, applicable LHWCA, Jones Act or other maritime law coverage shall be included. A.M. Best's insurance company rating requirement may be waived for Worker's compensation coverage only with prior approval from the Owner.

§ 11.2.2 Commercial General Liability.

Commercial General Liability insurance, including Personal and Advertising Injury Liability and Products and On-going and Completed Operations Liability, shall have a minimum limit per occurrence based on the project value. The Insurance Services Office (ISO) Commercial General Liability occurrence coverage form CG 00 01 (current form approved for use in Louisiana), or equivalent, is to be used in the policy. Claims-made form is unacceptable. The aggregate loss limit must apply to each project and be reflected in the Certificate of Insurance. ISO form CG 25 03 (current form approved for use in Louisiana), or equivalent, shall also be submitted. The Owner's Project number and Project name shall be included on this endorsement. The Additional Insured endorsement for General Liability shall include coverage for on-going and completed operations. A waiver of subrogation in favor of the Owner shall be provided.

COMBINED SINGLE LIMIT (CSL) PER OCCURRENCE

Type of Construction	Projects up to \$1,000,000	Projects over \$1,000,000 up to \$10,000,000	Projects over \$10,000,000
New Buildings:			
Each Occurrence			
Minimum Limit	\$1,000,000	\$2,000,000	\$4,000,000
Per Project Aggregate	\$2,000,000	\$4,000,000	\$8,000,000
Renovations:	The building(s) va	lue for the Project is \$	·
Each Occurrence Minimum Limit	\$1,000,000**	\$2,000,000**	\$4,000,000**
	*-,***,***	+ -, · · · · · · · ·	4 1,000,000
Per Project Aggregate	2 times per occur limit**	2 times per occur limit**	2 times per occur limit**

**While the minimum Combined Single Limit of \$1,000,000 is required for any renovation, the limit is calculated by taking 10% of the building value and rounding it to the nearest \$1,000,000 to get the insurance limit. Example: Renovation on a \$33,000,000 building would have a calculated \$3,000,000 combined single limit of coverage (33,000,000 times .10 = 3,300,000 and then rounding down to \$3,000,000). If the calculated limit is less than the minimum limit listed in the above chart, then the amount needed is the minimum listed in the chart. Maximum per occurrence limit required is \$10,000,000 regardless of building value. The per project aggregate limit is then calculated as twice the per occurrence limit. If the Contractor maintains higher limits than the minimums shown above, the Owner requires and shall be entitled to coverage for the higher limits maintained by the Contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the Owner.

§ 11.2.3 Automobile Liability

Automobile Liability Insurance shall have a minimum combined single limit per occurrence of \$1,000,000. ISO form number CA 00 01 (current form approved for use in Louisiana), or equivalent, is to be used in the policy. This insurance shall include third-party bodily injury and property damage liability for owned, hired and non-owned automobiles. Such coverage shall eliminate any employee versus employee exclusion. Symbol 1 is preferred. The Owner shall be named as an Additional Insured and a waiver of subrogation in favor of the Owner shall be included.

§ 11.2.4 Excess Umbrella

Excess Umbrella Insurance may be used to meet the minimum requirements for General Liability, Employer's Liability and Automobile Liability only. Excess umbrella should follow form over the underlying coverage.

§ 11.2.5 Builder's Risk

- § 11.2.5.1 Builder's Risk Insurance shall be in an amount equal to the amount of the construction contract including any amendments and shall be upon the entire Work included in the contract. The policy shall provide coverage equivalent to the ISO form number CP 10 20, Broad Form Causes of Loss (extended, if necessary, including but not limited to: the perils of wind, earthquake, collapse, flood, convective storms, vandalism/malicious mischief, and theft, including theft of materials whether or not attached to any structure). The policy must include architects' and engineers' fees necessary to provide plans, specifications and supervision of Work for the repair and/or replacement of property damage caused by a covered peril, not to exceed 10% of the cost of the repair and/or replacement.
- § 11.2.5.2 Flood coverage shall be provided by the Contractor on the first floor and below for all projects, except as otherwise noted. The builder's risk insurance policy, sub-limit for flood coverage shall not be less than ten percent (10%) of the total contract cost per occurrence. If flood is purchased as a separate policy, the limit shall be ten percent (10%) of the total contract cost per occurrence (with a max of \$500,000 if NFIP). Coverage for roofing projects (only) shall **not** require flood coverage.
- § 11.2.5.3 With Owner's project-specific written approval, a Specialty Contractor may provide an installation floater in lieu of a Builder's Risk policy, with the similar coverage as the Builder's Risk policy, upon the system to be installed in an amount equal to the amount of the contract including any amendments. Flood coverage is not required.
- § 11.2.5.4 The policy must include coverage for the Owner, Contractor and any subcontractors as their interests may appear.
- § 11.2.6 Pollution Liability (required when asbestos or other hazardous material abatement is included in the contract) Pollution Liability insurance, third party and first party coverage, including gradual release as well as sudden and accidental, shall have a minimum limit of not less than \$1,000,000 per claim. A claims-made form will be acceptable. A policy period inception date of no later than the first day of anticipated Work under this contract and an expiration date of no earlier than 30 days after anticipated completion of all Work under the contract shall be provided. There shall be an extended reporting period of at least 24 months, with full reinstatement of limits, from the expiration date of the policy if the policy is not renewed. The policy shall not be cancelled for any reason, except non-payment of premium.

§ 11.2.7 Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and accepted by the Owner. The Contractor shall be responsible for all deductibles and self-insured retentions.

§ 11.3 Other Insurance Provisions

§ 11.3.1 The policies are to contain, or be endorsed to contain, the following provisions:

§ 11.3.1.1 Worker's Compensation and Employers Liability Coverage

§ 11.3.1.1.1 To the fullest allowed by law, the insurer shall agree to waive all rights of subrogation against the Owner, its officers, agents, employees and volunteers for losses arising from Work performed by the Contractor for the Owner.

§ 11.3.1.2 Commercial General Liability Coverage

§ 11.3.1.2.1 The Owner, its officers, agents, employees and volunteers are to be added as additional insureds as respects liability arising out of activities performed by or on behalf of the Contractor; including ongoing and completed operations of the Contractor. ISO Form CG 20 10 (for ongoing work) AND CG 20 37 (for completed work) (current forms approved for use in Louisiana), or equivalent, are to be used.

§ 11.3.1.2.2 The Contractor's insurance shall be primary as respects the Owner, its officers, agents, employees and volunteers for any and all losses that occur under the contract. The coverage shall contain no special limitations on the scope of protection afforded to the Owner, its officers, officials, employees or volunteers. Any insurance or self-insurance maintained by the Owner shall be excess and non-contributory of the Contractor's insurance.

§ 11.3.1.3 Builder's Risk

The policy must include an endorsement providing the following:

In the event of a disagreement regarding a loss covered by this policy, which may also be covered by the Owner, Contractor and its insurer agree to follow the following procedure to establish coverage and/or the amount of loss:

Any party to a loss may make written demand for an appraisal of the matter in disagreement. Within 20 days of receipt of written demand, the Contractor's insurer and either Owner or its commercial insurance company shall each select a competent and impartial appraiser and notify the other of the appraiser selected. The two appraisers shall select a competent and impartial umpire. The appraisers shall then identify the policy or policies under which the loss is insured and, if necessary, state separately the value of the property and the amount of the loss that must be borne by each policy. If the two appraisers fail to agree, they shall submit their differences to the umpire. A written decision by any two shall determine the policy or policies and the amount of the loss. Each insurance company agrees that the decision of the appraisers and the umpire if involved shall be binding and final and that neither party will resort to litigation. Each of the two parties shall pay its chosen appraiser and bear the cost of the umpire equally.

§ 11.3.1.4 All Coverages

§ 11.3.1.4.1 All policies must be endorsed to require Notice of Cancellation in accordance with Policy Provisions. Notifications shall comply with the standard cancellation provisions in the Contractor's policy. In addition, Contractor is required to also notify Owner of policy cancellations or reductions in limits as soon as the action is known.

§ 11.3.1.4.2 Neither the acceptance of the completed Work nor the payment thereof shall release the Contractor from the obligations of the insurance requirements or indemnification agreement.

§ 11.3.1.4.3 The insurance companies issuing the policies shall have no recourse against the Owner for payment of premiums or for assessments under any form of the policies.

§ 11.3.1.4.4 Any failure of the Contractor to comply with reporting provisions of the policy shall not affect coverage provided to the Owner, its officers, agents, employees and volunteers.

§ 11.3.2 Acceptability of Insurers

All required insurance shall be provided by a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located. Insurance shall be placed with insurers with a current A.M. Best's rating of **A-VII or higher**. This rating requirement may be waived for Worker's Compensation coverage only, but only if prior approval is received from the Owner. If at any time an insurer issuing any such policy does not meet the minimum A.M. Best rating, the Contractor shall obtain a policy with an insurer that meets the A.M. Best rating and shall submit another certificate of insurance within 30 days.

§ 11.3.3 Verification of Coverage

Contractor shall furnish the Owner with certificates of insurance, evidencing required amendatory endorsements or copies of the applicable policy language effecting coverage required by this clause. All certificates and evidence of endorsements are to be received and approved by the Owner including renewal evidence prior to expiration. Failure to provide and maintain the required insurance coverage throughout the term of the Agreement shall be a material breach

of the Agreement, and shall entitle Owner to all remedies provided for in the Agreement, any Amendment(s) thereto, or by operation of law. The Certificate Holder must be listed as follows:

Calcasieu Parish School Board
3310 Broad Street
Lake Charles, LA 70615
Attn: Project # HL-XXX-XXX (obtain Owner's Project Number from Architect).

Owner's Program Manager is to be included as an additional-insured, listed as follows:

CSRS Disaster Recovery Management, LLC 6767 Perkins Rd., Ste. 200 Baton Rouge, LA 70808

The Owner reserves the right to request complete certified copies of all required insurance policies at any time.

Upon failure of the Contractor to furnish, deliver and maintain required insurance, this contract, at the election of the Owner, may be suspended, discontinued, or terminated. Failure of the Contractor to purchase and/or maintain any required insurance shall not relieve the Contractor from any liability or indemnification under the contract.

If the Contractor does not meet the insurance requirements at policy renewal, at the option of the Owner, payment to the Contractor may be withheld until the requirements have been met, OR the Owner may pay the renewal premium and withhold such payment from any monies due the Contractor, OR the contract may be suspended or terminated for cause.

(Paragraphs deleted)

§ 11.3.4 Subcontractors

Contractor shall include all subcontractors as insureds under its policies OR shall be responsible for verifying and maintaining the certificates provided by each subcontractor. Subcontractors shall be subject to all of the requirements stated herein. The Owner reserves the right to request copies of subcontractor's certificates at any time. If Contractor does not verify subcontractors' insurance as described above, Owner has the right to withhold payments to the Contractor until the requirements have been met.

§ 11.3.5 Indemnification/Hold Harmless Agreement

Contractor agrees to protect, defend, indemnify, save, and hold harmless, the Calcasieu Parish School Board, its officers, agents, servants, employees and volunteers, from and against any and all claims, damages, expenses and liability arising out of injury or death to any person or the damage, loss or destruction of any property which may occur, or in any way grow out of, any act or omission of Contractor, its agents, servants and employees, or any and all costs, expenses and/or attorney fees incurred by Contractor as a result of any claims, demands, suits or causes of action, except those claims, demands, suits or causes of action arising out of the negligence of the Calcasieu Parish School Board, its officers, agents, servants, employees and volunteers.

Contractor agrees to investigate, handle, respond to, provide defense for and defend any such claims, demands, suits or causes of action at its sole expense and agrees to bear all other costs and expenses related thereto, even if the claims, demands, suits, or causes of action are groundless, false or fraudulent. The Owner may, but is not required to, consult with the Contractor in the defense of claims, but this shall not affect the Contractor's responsibility for the handling and expenses of all claims.

§ 11.4 Performance and Payment Bond

§ 11.4.1 The Owner shall have the right to require the Contractor to furnish bonds covering faithful performance of the Contract and payment of obligations arising thereunder as stipulated in bidding requirements or specifically required in the Contract Documents on the date of execution of the Contract.

§ 11.4.2 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.

§ 11.4.3 Recordation of Contract and Bond [La R.S. 38:2241 thru 38:2241.1]

The Contractor shall record within thirty (30) days the executed Contract Between Owner and Contractor and Performance and Payment Bond with the Calcasieu Parish Clerk of Court and promptly deliver documentation of such recordation to Owner.

ARTICLE 12 UNCOVERING AND CORRECTION OF WORK

§ 12.1 Uncovering of Work

§ 12.1.1 If a portion of the Work is covered contrary to the Architect's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by the Architect, be uncovered for the Architect's examination and be replaced at the Contractor's expense without change in the Contract Time.

§ 12.1.2 If a portion of the Work has been covered that the Architect has not specifically requested to examine prior to its being covered, the Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an equitable adjustment to the Contract Sum and Contract Time as may be appropriate. If such Work is not in accordance with the Contract Documents, the costs of uncovering the Work, and the cost of correction, shall be at the Contractor's expense.

§ 12.2 Correction of Work

§ 12.2.1 Before Substantial Completion

The Contractor shall promptly correct Work rejected by the Architect or failing to conform to the requirements of the Contract Documents, discovered before Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Architect's services and expenses made necessary thereby, shall be at the Contractor's expense. If the Contractor fails to correct Work identified as defective within a thirty (30) day period, through no fault of the Designer, the Owner may hold the Contractor in default. If the Owner finds the Contractor in default, the Surety shall be notified. If within thirty (30) days after notification, the Surety has not corrected the nonconforming Work, through no fault of the Architect or Owner, the Owner may contract to have nonconforming Work corrected and hold the Surety and Contractor responsible for the cost, including architectural fees and other indirect costs. If the Surety fails to correct the Work within the stipulated time period and fails to meet its obligation to pay the costs, the Owner may elect not to accept bonds submitted in the future by the Surety. Finding the Contractor in default shall constitute a reason for disqualification of the Contractor from bidding on future state contracts.

§ 12.2.2 After Substantial Completion

§ 12.2.2.1 In addition to the Contractor's obligations under Section 3.5, if, within one year after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Section 9.9.1, or by terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of notice from the Owner to do so, unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the one-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work, or Work covered by warranties, within a thirty (30) day period, through no fault of the Architect or Owner, the Owner may hold the Contractor in default. If the Owner finds the Contractor is in default, the Surety shall be notified. If within thirty (30) days after notification, the Surety has not corrected the non-conforming or warranty Work, through no fault of the Architect or Owner, the Owner may contract to have the nonconforming or warranty Work corrected and hold the Surety responsible for the cost including architects fees and other indirect costs. Corrections by the Owner shall be in accordance with Section 2.4. If the Surety fails to correct the nonconforming or warranty Work within the stipulated time period and fails to meet its obligation to pay the costs, the Owner may not accept bonds submitted, in the future, by the Surety.

§ 12.2.2.2 The one-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work.

- § 12.2.2.3 The one-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2.
- § 12.2.3 The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.
- § 12.2.4 The Contractor shall bear the cost of correcting destroyed or damaged construction of the Owner or Separate Contractors, whether completed or partially completed, caused by the Contractor's correction or removal of Work that is not in accordance with the requirements of the Contract Documents.
- § 12.2.5 Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents. Establishment of the one-year period for correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

§ 12.3 Acceptance of Nonconforming Work

If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

MISCELLANEOUS PROVISIONS ARTICLE 13

§ 13.1 Governing Law

The Contract shall be governed by the law of the place where the Project is located.

§ 13.2 Successors and Assigns

§ 13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to covenants, agreements, and obligations contained in the Contract Documents. Neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

(Paragraph deleted)

§ 13.3 Rights and Remedies

- § 13.3.1 Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.
- § 13.3.2 No action or failure to act by the Owner, Architect, or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed upon in writing.
- § 13.3.3 The Fourteenth Judicial Court in and for the Parish of Calcasieu, State of Louisiana shall have sole jurisdiction and venue in any action brought under this contract.

§ 13.4 Tests and Inspections

- § 13.4.1 Tests, inspections, and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules, and regulations or lawful orders of public authorities. The Contractor shall make arrangements for such tests, inspections and approvals with the Testing Laboratory provided by the Owner, and the Owner shall bear all related costs of tests, inspections and approvals. The Contractor shall give the Architect timely notice of when and where tests and inspections are to be made so that the Architect may be present for such procedures.
- § 13.4.2 If the Architect, Owner, or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection, or approval not included under Section 13.4.1, the Architect will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection, or

approval, by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Architect of when and where tests and inspections are to be made so that the Architect may be present for such procedures. Such costs, except as provided in Section 13.4.3, shall be at the Owner's expense.

- § 13.4.3 If procedures for testing, inspection, or approval under Sections 13.4.1 and 13.4.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for the Architect's services and expenses, shall be at the Contractor's expense.
- § 13.4.4 Required certificates of testing, inspection, or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Architect.
- § 13.4.5 If the Architect is to observe tests, inspections, or approvals required by the Contract Documents, the Architect will do so promptly and, where practicable, at the normal place of testing.
- § 13.4.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

(Paragraphs deleted)

ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT

§ 14.1 Termination by the Contractor

- § 14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of 30 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, for any of the following reasons:
 - Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be
 - .2 An act of government, such as a declaration of national emergency, that requires all Work to be
 - Because the Architect has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Section 9.4.1, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents; or

(Paragraph deleted)

- § 14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, repeated suspensions, delays, or interruptions of the entire Work by the Owner as described in Section 14.3, constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.
- § 14.1.3 If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days' notice to the Owner and Architect, terminate the Contract and recover from the Owner payment for Work executed, as well as reasonable overhead and profit for Work completed prior to stoppage.
- § 14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, or their agents or employees or any other persons or entities performing portions of the Work because the Owner has repeatedly failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days' notice to the Owner and the Architect, terminate the Contract and recover from the Owner as provided in Section 14.1.3.

§ 14.2 Termination by the Owner for Cause

- § 14.2.1 The Owner may terminate the Contract if the Contractor
 - repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
 - .2 fails to make payment to Subcontractors or suppliers in accordance with the respective agreements between the Contractor and the Subcontractors or suppliers;
 - repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
 - otherwise is guilty of substantial breach of a provision of the Contract Documents.
 - failure to complete the punch list within the lien period as provided in 9.8.7.

- § 14.2.2 When any of the reasons described in Section 14.2.1 exist, and upon certification by the Architect that sufficient cause exists to justify such action, the Owner may, without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven days' notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:
 - Exclude the Contractor from the site and take possession of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
 - .2 Accept assignment of subcontracts pursuant to Section 5.4; and
 - .3 Finish the Work by whatever reasonable method the Owner may deem expedient. Upon written request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.
- § 14.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished. Termination by the Owner shall not suspend assessment of liquidated damages against the Surety.
- § 14.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Architect's services and expenses made necessary thereby, and other damages incurred by the Owner and not expressly waived, such excess shall be paid to the Contractor. If such costs and damages exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The amount to be paid to the Contractor or Owner, as the case may be, shall be certified by the Initial Decision Maker, upon application, and this obligation for payment shall survive termination of the Contract.
- § 14.2.5 If an agreed sum of liquidated damages has been established, termination by the Owner under this Article shall not relieve the Contractor and/or Surety of his obligations under the liquidated damages provisions and the Contractor and/or Surety shall be liable to the Owner for per diem liquidated damages.

§ 14.3 Suspension by the Owner for Convenience

- § 14.3.1 The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work, in whole or in part for such period of time as the Owner may determine.
- § 14.3.2 The Contract Sum and Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay, or interruption under Section 14.3.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent
 - .1 that performance is, was, or would have been, so suspended, delayed, or interrupted, by another cause for which the Contractor is responsible; or
 - that an equitable adjustment is made or denied under another provision of the Contract.

§ 14.4 Termination by the Owner for Convenience

- § 14.4.1 The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause.
- § 14.4.2 Upon receipt of notice from the Owner of such termination for the Owner's convenience, the Contractor shall
 - cease operations as directed by the Owner in the notice; .1
 - .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work;
 - except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.
- § 14.4.3 In case of such termination for the Owner's convenience, the Owner shall pay the Contractor for Work properly executed.

ARTICLE 15 **CLAIMS AND DISPUTES**

§ 15.1 Claims

§ 15.1.1 Definition

A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, a change in the Contract Time, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes

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and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim. This Section 15.1.1 does not require the Owner to file a Claim in order to impose liquidated damages in accordance with the Contract Documents.

§ 15.1.2 Time Limits on Claims (See La R.S. 38:2189, and 38:2189.1).

§ 15.1.3 Notice of Claims

§ 15.1.3.1 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered prior to expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party and to the Initial Decision Maker with a copy sent to the Architect, if the Architect is not serving as the Initial Decision Maker. Claims by either party under this Section 15.1.3.1 shall be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later. A Reservation of Rights and similar stipulations shall not be recognized under this contract as having any effect. A party must make a claim as defined herein within the time limits provided.

§ 15.1.3.2 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party. In such event, no decision by the Initial Decision Maker is required.

§ 15.1.4 Continuing Contract Performance

§ 15.1.4.1 Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

§ 15.1.4.2 The Contract Sum and Contract Time shall be adjusted in accordance with the Architect's decision, subject to the right of either party to proceed in accordance with this Article 15. The Architect will issue Certificates for Payment in accordance with his/her decision.

§ 15.1.5 Claims for Additional Cost

If the Contractor wishes to make a Claim for an increase in the Contract Sum, notice as provided in Section 15.1.3 shall be given before proceeding to execute the portion of the Work that is the subject of the Claim. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4.

§ 15.1.6 Claims for Additional Time

§ 15.1.6.1 If the Contractor wishes to make a Claim for an increase in the Contract Time, notice as provided in Section 15.1.3 shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay, only one Claim is necessary.

(Paragraph deleted)

§ 15.1.6.2. If adverse weather conditions are the basis for a claim for additional time, the Contractor shall document that weather conditions had an adverse effect on the scheduled construction. An increase in the contract time due to weather shall not be cause for an increase in the contract sum. At the end of each month, the Contractor shall make one Claim for any adverse weather days occurring within the month. The Claim must be accompanied by sufficient documentation evidencing the adverse days and the impact on construction. Failure to make such Claim within twenty-one (21) days from the last day of the month shall prohibit any future claims for adverse days for that month. No additional adverse weather days shall be granted after the original or extended contract completion date, except those adverse weather days associated with a National Weather Service named storm or federally declared weather related disaster directly affecting the project site

§ 15.1.6.3 The following are considered reasonably anticipated days of adverse weather on a monthly basis:

January	11 days	July	6 days
February	10 days	August	5 days
March	8 days	September	4 days
April	7 days	October	3 days
May	5 days	November	5 days

December June 6 days 8 days

The Contractor shall ask for total adverse weather days. The Contractor's request shall be considered only for days over the allowable number of days stated above.

Note: Contract is on a calendar day basis.

§ 15.1.7 Waiver of Claims for Consequential Damages

The Contractor and Owner waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes

- damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such
- .2 damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit, except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 14. Nothing contained in this Section 15.1.7 shall be deemed to preclude assessment of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.

§ 15.2 Initial Decision

- § 15.2.1 Claims, excluding those where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2 or arising under Sections 10.3, 10.4, and 11.5, shall be referred to the Initial Decision Maker for initial decision. The Architect shall always serve as the Initial Decision Maker. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to litigation of any Claim arising prior to the date final payment is due. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.
- § 15.2.2 The Initial Decision Maker will review Claims and within ten days of the receipt of a Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim, (4) suggest a compromise, or (5) advise the parties that the Initial Decision Maker is unable to resolve the Claim if the Initial Decision Maker lacks sufficient information to evaluate the merits of the Claim or if the Initial Decision Maker concludes that, in the Initial Decision Maker's sole discretion, it would be inappropriate for the Initial Decision Maker to resolve the Claim.
- § 15.2.3 In evaluating Claims, the Initial Decision Maker may, but shall not be obligated to, consult with or seek information from either party or from persons with special knowledge or expertise who may assist the Initial Decision Maker in rendering a decision. The Initial Decision Maker may request the Owner to authorize retention of such persons at the Owner's expense.
- § 15.2.4 If the Initial Decision Maker requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of the request, and shall either (1) provide a response on the requested supporting data, (2) advise the Initial Decision Maker when the response or supporting data will be furnished, or (3) advise the Initial Decision Maker that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Initial Decision Maker will either reject or approve the Claim in whole or in part.
- § 15.2.5 The Initial Decision Maker will render an initial decision approving or rejecting the Claim. This initial decision shall (1) be in writing; (2) state the reasons therefor; and (3) notify the parties of any change in the Contract Sum or Contract Time or both. The initial decision shall be final and binding on the parties except that the Owner may reject the decision or suggest a compromise, or both.

§ 15.2.6 Not Used.

(Paragraph deleted)

Init.

§ 15.2.7 In the event of a Claim against the Contractor, the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor's default, the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

§ 15.2.8 If a Claim relates to or is the subject of a mechanic's lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.



CHANGE ORDER

Change Ord Date: Contract Da		<< CO number << date >> << Contract				
Project No.:	:	HL- <mark>XXX-XX</mark>				
Project Nan	ne:		Parish School Board aura Damages Restoration Pi XXXXXXX	rogram		
То:		Contractor : ddress 1 >> ddress 2 >>	>>			
You are her	reby direc	ted to make the	following change(s) in this Cont	tract: (Attach Itemized F	Recap Sheet)	
The Origina	al Contrac	t Sum		\$ #	##,###.##	
Net Change	e by Previ	ous Change Ord	der	<u>\$ #</u>	##.###.##	
Contract Su	ım Prior t	o this Change O	rder	\$ #	\$ ###,###.##	
Contract Su	ım will be		by this Change Order	<u>\$ #</u>	\$ ###.###.##	
New Contra	act Sum II	ncluding this Cha	ange Order	\$ #	##,###.##	
Contract Tir	me will be	INCREASED /	DECREASED by:		## days	
Revised Co	ontract Co	mpletion Date:		######	##, 20XX	
RECOMME	NDED		ACCEPTED	<u>APPROV</u>	<u>ED</u>	
<< Architect >> << Contractor >>		<< Contractor >>	Calcasieu Parish			
(DESIGNE	R)		(CONTRACTOR)	School B (OWNER)		
				P. O. Box Lake Cha		
Ву:			Ву:	By:		
Dated:			Dated:	Dated:		

APPLICATION FOR PAYMENT DOCUMENTS

The following documents are to be	e used for Contractor's	Applications for I	Payment:
Samples not included.			

Application for Payment:

AIA Document G702®–1992, Application and Certificate for Payment.

With:

Continuation Sheet:

AIA Document G703®-1992, Continuation Sheet.

Both prepared in accordance with their published Instructions.

END OF SECTION

BENEFICIAL OCCUPANCY

* Not for Recordation *

Dated: << date >>

Project No.: **HL-XXX-XXX**

Project Name: Calcasieu Parish School Board

Hurricane Laura Damages Restoration Program

XXXXXXXXXXXXX

Architect: << Architect >>

<< address 1>> << address 2 >>

Contractor: << Contractor >>

<< address 1>> << address 2 >>

Owner: Calcasieu Parish School Board

3310 Broad Street

Lake Charles, LA 70615

The Owner desires to utilize the portion(s) of the Project described below prior to Substantial Completion.

The portion(s) of the Project described below is/are, to the best of my knowledge and belief, complete to a point that they may be legally occupied, and utilized as intended, in accordance with the requirements of the Contract Documents.

The Owner's occupancy of any portion of this project does not violate any applicable warranties, and does not constitute Acceptance of the Project, as a whole.

The portion(s) of the subject Project described below is, to be best of my knowledge and belief, complete to a point that the Owner desires to use in accordance with the requirements of the Contract Documents.

Portion(s) Occupied: << describe portions of Project >>

Date Occupied: << insert date of Beneficial Occupancy >>

Warranty Items Covered by Occupancy (See attached list).

Punch List: Attached, dated _	
	(If not applicable, indicate "N/A")
Punch List Value \$	
Accepted by:	
	Architect
	<< Architect >>
	Contractor
	<< Contractor >>
	Owner
	Calcasieu Parish School Board

^{*} Not For Recordation *

<< date >>

HL-XXX-XXX

Dated:

Project No.:

RECOMMENDATION OF ACCEPTANCE

Project Name:	Calcasieu Parish School Board Hurricane Laura Damages Restoration Program XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX				
Architect:	<< Architect >> << address 1 >> << address 2 >>				
Contractor:	<< Contractor >> << address 1 >> << address 2 >>				
Owner:	Calcasieu Parish School Board 3310 Broad Street Lake Charles, LA 70615				
I hereby certify that, to the best of my knowledge and belief, this project is complete or substantially complete, in accordance with the plans and specifications to a point that it can be used for the purpose intended, and I hereby recommend that this project be accepted.					
Date of Acceptance	e by Architect: << date >>				
Contract Date of C	Completion: << date >>				
Number of Days Overrun / Underrun: << days >>					
Liquidated Damages Per Day Stipulated in Contract: << \$ XXX.XX >>					
Value of Punch List (Itemized List Attached): << \$ XXX.XX >>					
Was Part of the Project Occupied Prior To Acceptance: Yes / No					
Portion Occupied: Not Applicable (Attach Beneficial Occupancy Forms)					
Accepted:	rchitect >>				
For Use By Owner	:				
I concur in the Acc	ceptance of this project:Calcasieu Parish School Board				



Designation of Construction Contractor as Agent of a Governmental Entity Sales Tax Exemption Certificate

		, an agency of the officed
Legal Name of Governmental Entity	of the Otata of I	
States government, or an agency, board, commission, or instrumentality	of the State of L	ouisiana or its political subdivisions, including
parishes, municipalities and school boards, does hereby designate the fo	ollowing contracto	or as its agent for the purpose of making sales
tax exempt purchases on behalf of the governmental body:		
Name of Contractor		
Address		
City	State	ZIP
This designation of agency shall be effective for purchases of component of tangible personal property for the following named construction projec		erials, taxable services and leases and rentals
Construction Project		Contract Number
This designation and acceptance of agency is effective for the period		
Beginning Date (mm/dd/yyyy) End	Date (mm/dd/yyyy)	
Purchases for the named project during this period by the designated con	tractor shall be co	onsidered as the legal equivalent of purchases

directly by the governmental body. Any materials purchased by this agent shall immediately, upon the vendor's delivery to the agent, become the property of this government entity. This government entity, as principal, assumes direct liability to the vendor for the payment of any property, services, leases, or rentals made by this designated agent. This agreement does not void or supersede the obligations of any party created under any construction contract related to this project, including specifically any contractual obligation of the construction contractor to submit payment to the vendors of materials or services for the project.

This contractor-agent is not authorized to delegate this purchasing agency to others; separate designations of agency by this governmental entity are required for each contractor or sub-contractor who is to purchase on behalf of this governmental entity. The undersigned hereby certify that this designation is the entirety of the agency designation agreement between them. In order for a purchase for an eligible governmental entity through a designated agent to be eligible for sales tax exemption, the designation of agency must be made, accepted, and disclosed to the vendor before or at the time of the purchase transaction.

Designation of A	gency		Acceptance of Ac	ency	
Signature of Authorized Designator		Date (mm/dd/yyyy)	Signature of Contractor or Subcontractor Authorized	Acceptor	Date (mm/dd/yyyy)
Name of Authorized Designator		Name of Contractor's or Subcontractor's Acceptor			
Name of Governmental Entity		Name of Contractor			
Address		Address			
City	State	ZIP	City	State	ZIP

This designation of agency form, when properly executed by both the contractor and the governmental entity, shall serve as evidence of the sales tax exempt status that has been conferred onto the contractor. No other exemption certificate form is necessary to claim exemption from sales taxes. The agency agreement evidenced by this sales tax exemption certificate must be implemented at the time of contract execution with the governmental entity. The contract between the governmental entity and his agent must contain provisions to authenticate the conferment of agency.

ROOFING GUARANTEE (RG-2)

OWNER:	CALCASIEU PARISH SCHOOL BOARD					
ADDRESS:	DDRESS: P.O. BOX 800 LAKE CHARLES, LA 70602					
WHEREAS _						
Address						
accordance wit	herein called the "Roofing Contractor", has performed roofing and flashing in the Contract Documents for Project No					
Name of Projec	ct:					
Location/Addre	ess:					
Name and Type	e of Building(s):					
Type(s) of Roo	of Deck(s):					
Total Roof Are	ea:SF					
Flashing - Edge	e:LF Base:LF					
Date of Accept	rance: Guarantee Period: 2 Years					
Date of Expirat	tion:					

AND WHEREAS the Roofing Contractor has contracted to guarantee said work against water entry from faulty or defective materials and workmanship for the designated Guarantee period;

NOW THEREFORE the Roofing Contractor as the General Contractor guarantees, subject to the terms and conditions herein set forth, that during the Guarantee Period they will at their own cost and expense, make or cause to be made with approved procedures and materials such repairs to or replacements of said work resulting from water entry or faults or defects of said Work as are necessary to correct faulty and defective work and as are necessary to maintain said Work in watertight conditions and further to respond on or within two (2) working days upon written notification of leaks or defects by the Calcasieu Parish School Board. Furthermore, they will at their own cost or expense maintain the roof for (2) years after acceptance, in accordance with the current edition of the Roof Maintenance Manual published by the Roofing Industry Educational Institute. The roof shall be inspected a minimum of twice each year, and a report prepared documenting the conditions observed at each inspection. These inspections shall be made once during the months of April or May and once during the months of September and October. Two copies of each report shall be forwarded to the Calcasieu Parish School Board.

This Guarantee is made subject to the following terms and conditions:

- 1. Specifically excluded from this guarantee are damages to the Work, other parts of the building and building contents caused by:
 - A) Lightning, windstorm (includes hurricanes and tornados), hailstorm, earthquakes and other unusual phenomena of the elements;
 - B) Fire; and
 - C) Structural failures causing excessive roof deck, edgings and related roof components movement. When the Work has been damaged by any of the foregoing causes, the Guarantee will be null and void until such damage has been repaired by the Roofing Contractor, and until the cost and expense thereof has been paid by the Owner or another responsible party so designated.
- During the Guarantee Period, if the Calcasieu Parish School Board allows alteration of the Work by anyone other than a Contractor approved in writing by the Roofing Subcontractor, General Contractor, and Roofing Material Manufacturer prior to the work being performed, including cutting, patching and maintenance in connection with penetrations, attachment of other work, and positioning of anything on the roof, this Guarantee shall become null and void upon the date of said alterations. If the Calcasieu Parish School Board engages the Roofing Contractor to perform said alterations, the Guarantee shall not become null and void, unless the Roofing Contractor, prior to proceeding with said work, shall have notified the Calcasieu Parish School Board in writing, showing reasonable cause for claim that said alterations would likely damage or deteriorate the Work, thereby reasonably justifying atermination of this Guarantee.
- 3. During the Guarantee Period, if the original use of the roof is changed and it becomes used for, but for which it was not originally designed or specified, as a promenade, work deck, spray-cooled surface, flooded basin, or other use of service more severe than originally specified, this Guarantee shall become null and void upon the date of saidchange.
- 4. During the Guarantee Period, if any building or area of a building is changed to uses creating extremes of interior temperature and/or humidity, but for which it was not originally designed and specified, without provisions and alterations made to the building which effectively contain or control these conditions, this Guarantee shall become null and void upon the date of said change.
- 5. The Calcasieu Parish School Board shall promptly notify the Roofing Contractor in writing of observed, known or suspected leaks, defects or deterioration and shall afford reasonable opportunity for the Roofing Contractor to inspect the Work, and to examine the evidence of such leaks, defects or deterioration.
- 6. This Guarantee is recognized to be the only guarantee of the General and Roofing Contractor on said work, and shall not operate to restrict or cut off the Owner from other remedies and recourses lawfully available to him in case of roofing failure. Specifically, this Guarantee shall not operate to relieve the Roofing Contractor of his responsibility for performance of the original work, regardless of whether the Contract was a Contract directly with the Owner or a Subcontract with the Owner's General Contractor.

IN WITNESS THEREOF, this instrument has been duly executed this	
Roofing Contractor's Signature:	
Typed Name:	
Representing:	
Telephone Number:	
WITNESS_	

SECTION 00 0100 - ARCHITECT'S INSTRUCTIONS TO BIDDERS

1.01 GENERAL

- A. Refer to Instructions to Bidders included in the Project Manual for all Instructions to Bidders information except the following which are included in this section:
 - 1. Interpretation of the Bidding Documents
 - 2. Substitutions
 - 3. Addendum.
 - 4. Contract Completion Time and Liquidated Damages

1.02 INTERPERTATION OF THE BIDDING DOCUMENTS

- A. Bidders shall promptly notify the Architect thru Centerline (www.centerline.co) of any discrepancy, ambiguity, inconsistency or error which they may discover upon examination of the Bidding Documents or of the site and local conditions. Failure to notify the Architect thru Centerline of any discrepancy, ambiguity, inconsistency, or error upon discovery of the item shall cause the bidder to be bound by the interpretation of the Architect in regards to the discrepancy, ambiguity, inconsistency or error.
- B. Prospective bidders desiring further information or interpretations of the Drawings and/or Specifications must request such data from the Architect electronically via Centerline. Answers to all questions, inquiries and requests for additional information will be issued in the form of Addenda to the Drawings and Specifications and copies of each addendum will be posted on Central Bidding to all prospective bidders. Every request for such interpretation should be submitted electronically via email. To be given consideration, requests must be RECEIVED at least seven (7) days prior to date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the Specifications and/or Drawings.
- C. Refer to Specification Sections 00 0100a How to Access Bid Documents Plan Holders List and 00 0100b How to enter Request for Information (RFI) and Substitution Requests from Bidding Side.
- D. Any interpretation, correction or change of the Bidding Documents will be made by addendum. Interpretations, corrections or changes of the Bidding Documents made in any other manner will not be binding, and Bidders shall not rely upon such interpretations, corrections and changes.

1.04 SUBSTITUTIONS

- A. The materials, products and equipment described in the Bidding Documents establish a standard of required function, dimension, appearance and quality to be met by any proposed substitution. No substitutions shall be allowed after bidding.
- B. Where a single manufacturer or trade name appears in these Specifications, and / or the words "or equal" follow, it is the intent of these specifications that products of equal quality which meet the Architect's approval may be used. The brand, make or manufacturer listed describes the general style, type, character and quality of product desired.
- C. Requests for approval of substitute materials of equal quality and performance to those specified shall be RECEIVED by the Architect electronically via Centerline (www.centerline.co) no later than seven (7) days before the date set for the opening of bids.
- D. No substitution will be considered unless written request for approval has been submitted by the Proposer and has been received by the Architect no later than seven (7) days before the date set for the opening of bids. Each such request shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitute including model numbers, drawings, cuts, performance and test data and any other information necessary for an evaluation. A statement setting forth any changes in other materials, equipment or work that incorporation of the substitute would require shall be included. It shall be the responsibility of the proposer to include in his proposal all changes required of the Contract Documents if the proposed product is used. Prior approval is given

- contingent upon supplier being responsible for any costs which may be necessary to modify the space or facilities needed to accommodate the materials and equipment approved.
- E. If the Architect approves any proposed substitution, such approval will be set forth in an addendum. Bidders shall not rely upon approvals made in any other manner.

1.05 ADDENDA

- A. Addenda will be posted electronically on Central Bidding.
- B. Additional copies of addenda will be made available for inspection wherever Bidding Documents are on file for that purpose.
- D. Each Bidder shall ascertain from the Architect prior to submitting his bid that he has received all addenda issued, and he shall acknowledge their receipt on the Bid Form.

1.06 COMPLETION OF WORK AND LIQUIDATED DAMAGES:

- A. If this bid is accepted, the Bidder hereby agrees to commence the work under this contract on a date specified in a written "Notice to Proceed", by the Owner and to fully complete the project within **60 (Sixty)**, consecutive calendar days.
- B. The Bidder hereby agrees to that the Owner may retain the sum of **Five Hundred Dollars**, (\$500.00), from the amount of compensation to be paid the Bidder for each consecutive calendar day, (Saturday, Sundays, and holidays included), after the Contract Time that the work remains incomplete until Substantial Completion is achieved. Additionally, this sum shall be retained from the date which the Punch List Period ends until Final Completion is achieved. This amount is agreed upon as the proper measure of liquidated damages the Owner will sustain per day by the failure of the Bidder to complete the work at the stipulated Contract time, and is not construed in any sense as a penalty.

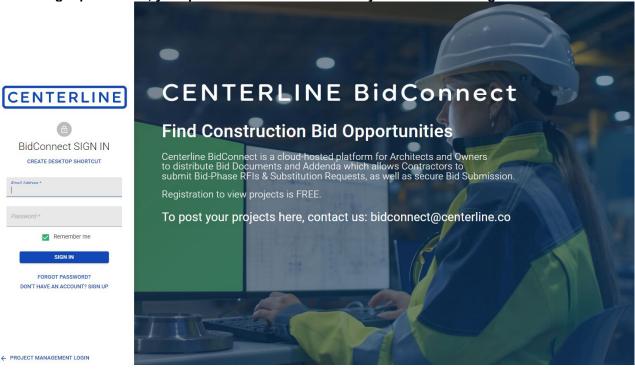
END OF SECTION

SECTION 00 0005a - HOW TO ACCESS BIDDING DOCUMENTS - PLAN HOLDER'S LIST

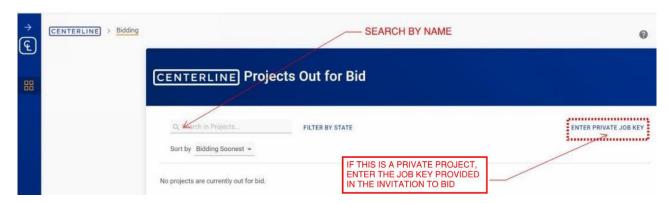
1. Go to the following site: www.centerlinebidconnect.com

If this is your first time to Centerline's bidding module, you will need to go to "Don't have an account? Sign Up" and fill out the form and your password will be emailed to you, then continue with instructions. Sign up if you are a first time user.

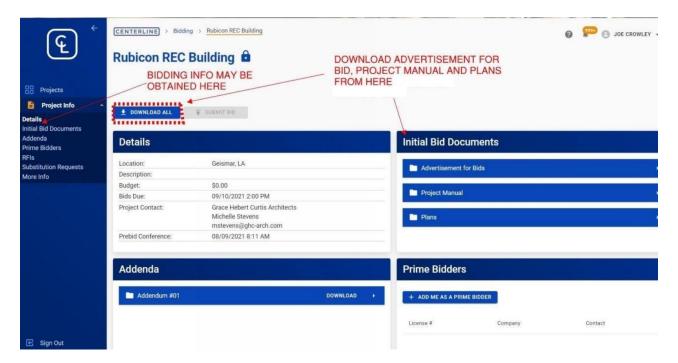
2. Type in your username (complete email address) and password. (if you forgot it, press "forgot password", your password will be emailed to you. Go back to login screen.



- 3. The first time you log in, you will be asked to change your password.
- 4. You will be taken to a page that looks like the screenshot on the next page that reads "Projects Out for Bid".
- 5. Once in scroll until you will see the project name that you are looking for.
- 6. Click on the project.
- 7. The BID MODULE IS ON THE LOWER LEFTHAND SIDE OF THE SCREEN.



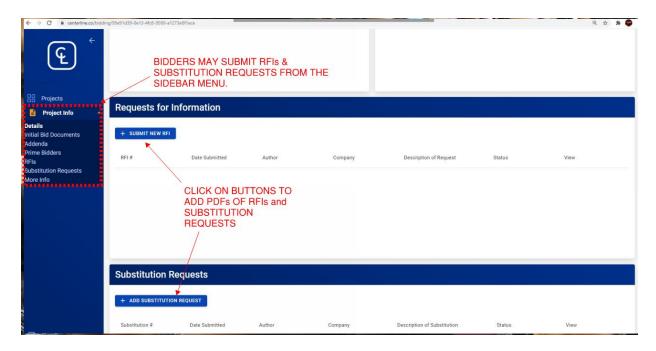
- 8. Select Project Info and a drop down menu is seen to the left.
- 9. You may download all Bid Documents, add yourself as a prime bidder and submit a bid on this page. Addenda, Prime Bidders, RFIs, Substitution Requests and More Info are placed here.
- 10. Print and download any info from this page.



END OF SECTION

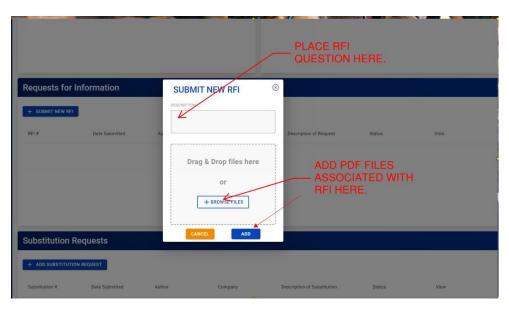
00 0005b - HOW TO ENTER REQUEST FOR INFORMATION (RFI) AND SUBSTITUTION REQUESTS FROM BIDDING SIDE

Once the bid is set up, and the User chooses the project and enters the password if a private bid, they will see the Submit buttons for NEW RFI's and SUBSTITUTION REQUESTS.



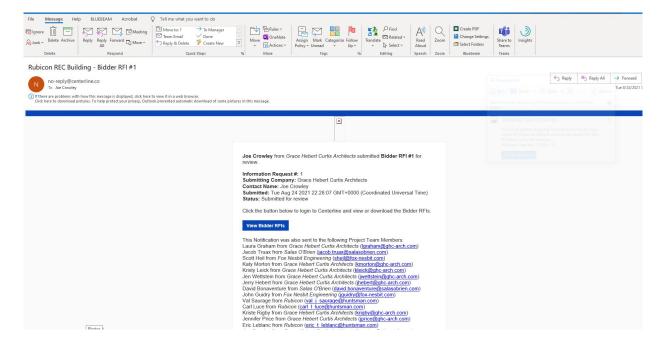
RFI

This is the SUBMIT NEW RFI form the contractor/sub-contractor will get. Simply fill in the information and attach files and press SUBMIT RFI. Your RFI will then appear in the log below.



3223113 / CPSB Lake Charles Boston School - Roofing Repairs Bldg. F 00 0100b - 1

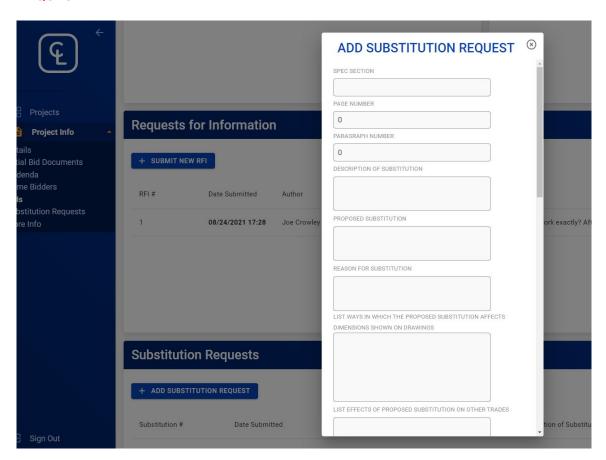
HOW TO ENTER REQUEST FOR INFORMATION (RFI) & SUBSTITUTION REQUESTS FROM BIDDING SIDE Once it is submitted, the User will receive an email to the person submitting it that it has been received. The Architect will receive a notification they have received an RFI for his project. You can click on the blue button in the email to take you to the RFI.



SUBSTITUTION REQUEST

This is what the Substitution Request looks like.

Simply fill in the information, attach necessary files and press SUBMIT SUBSTITUTION REQUEST.



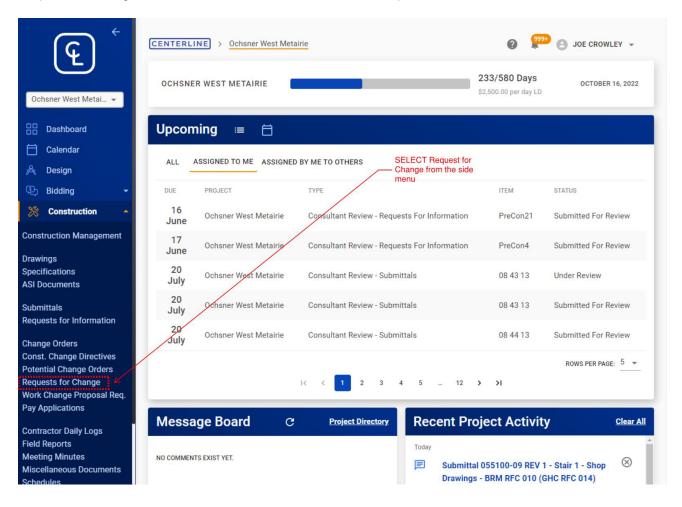
When you see the Substitution Request appear on the list where you submitted it, your Substitution Request has been submitted; you may VIEW the document and save or print as well from this location by clicking on the VIEW eyeball icon.

Once it is submitted, similar to RFIs, the User will receive an email noting that it has been received and the Architect will receive a notification that there is a Substitution Request for the project.

END OF SECTION

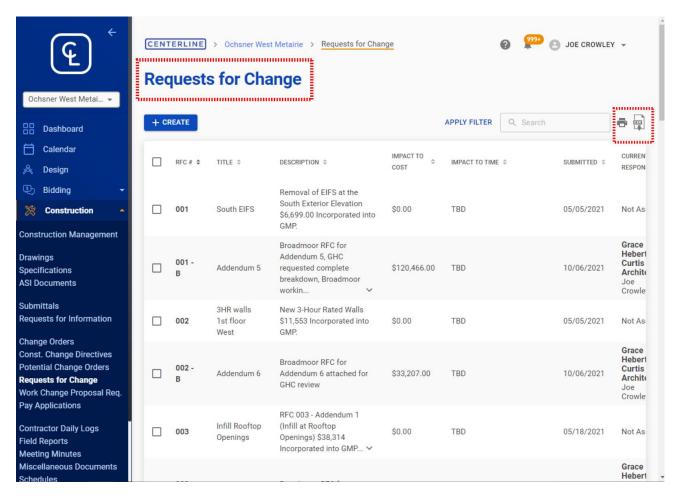
00 0005c - HOW TO ENTER REQUEST FOR CHANGE DURING CONSTRUCTION

Once the construction tab is open, and the User chooses the project and may select Request for Change to view documents that the Contractor is to price:



RFCs

The list of RFCs are displayed with the RFC #, brief description, potential impact to cost, impact to time, date submitted and current responsible party shown as seen below:



To print or save a copy of the RFC Log in PDF or Excel, click on the red rectangle in the upper right seen above.

Scroll down to view SUPPORTING DOCUMENTS which are organized by:

Current File and Previous Files.

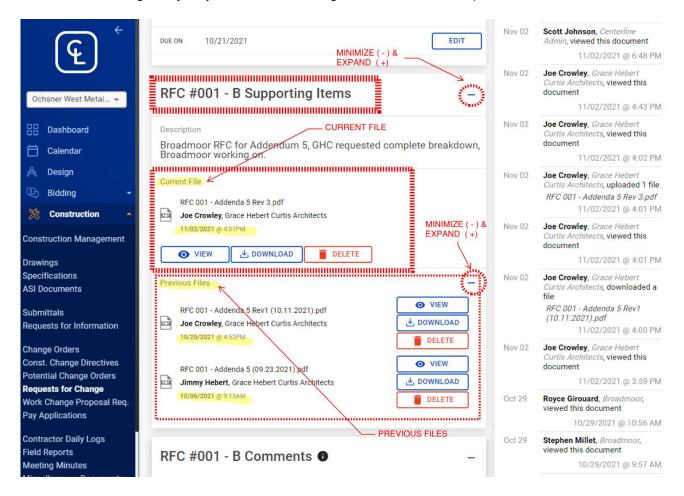
The Architect will place the Current File to be reviewed and responded to by the Contractor under the Current File tab highlighted below.

Only the files necessary to price the RFC will be located here. Previous files will be considered superseded by the Current File. Previous files may include a version of the Contractor's proposal with backup. Each file is date and time stamped to be able to easily track history of each document version.

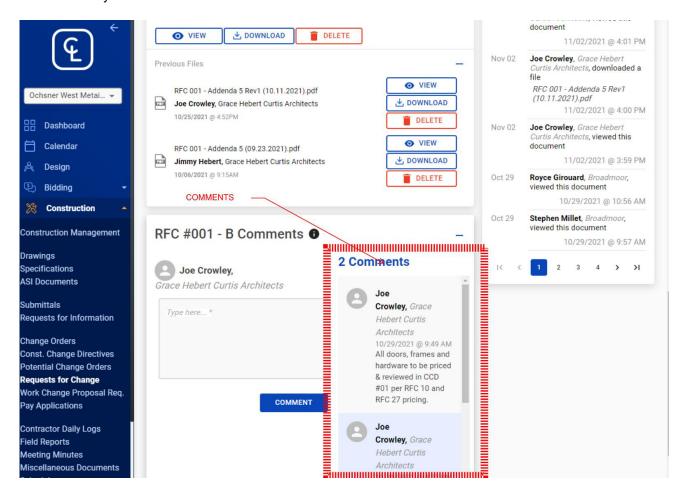
Minimize to not view all previous files if printing a summary page or expand to view previous version of files. See red circled area in the screenshot below.

Important Note to Architect, Contractor, et al: Current file must be a single file.

If posting multiple files, i.e.: drawings, specifications, sketches, narratives, cutsheets and similar, Zip the files together and post the Zip folder. If files are similar in size format, i.e.: ALL full size drawings, they may be included in a single file PDF as well and posted.



Comments relevant to the RFC are below the Previous Files and are date and time stamped. Anybody in the distribution group may add comments here. While they are not part of the current file, they may modify the Request for Change and need to be reviewed. Status updates and similar comments may also be added here.



END OF SECTION

SECTION 00 0110 - NOTICE OF AWARD

Date of Award: Month/Day/2023

TO: Contractor Name

ADDRESS: Address

State, LA Zip

PROJECT: Lake Charles Boston – Field House (Bldg F) Roof Repairs

Grace Hebert Curtis Architects LLC Project No.: 3223113

Contract For: Calcasieu Parish School Board

3310 Broad Street

Lake Charles, LA 70615

You are notified that your Bid dated Month Day, 2023 for the above Contract has been considered. You are the apparent Successful Bidder and have been awarded a Contract for: Lake Charles Boston – Field House (Bldg F) Roof Repairs.

The Contract Price of your Contract is: <u>xx Dollars, (\$xxx,xxx.xx)</u>.

This price includes Alternates numbered: List Alternates Included

Three original contracts accompany this Notice of Award.

You must comply with the following conditions precedent within fifteen (15) days of the date of this Notice of Award, this is by: Month Day, 2023.

- 1. You must deliver to the Architect three (3) fully executed original Contract documents. Each original of the Contract must bear your signature on all signatory lines within the Agreement
- 2. You must deliver with the executed contract, the signed Notice of Award, the required Performance and Payment Bonds and the required Insurance Certificates, (verifying additional insurer as required), and specified in Specification Section 00 0009 Supplementary Conditions.

Failure to comply with these conditions within the time specified will entitle the Owner to consider your bid in default, to annul this Notice of Award and to declare your Bid Security forfeited.

SECTION 00 0110 - NOTICE OF AWARD

Within ten (10) days after you comply with the alone (1) fully signed counterpart of the Agreemen	
By:	(Authorized Signature)
	(Authorized Signature)
	(Title)
	ACCEPTANCE OF AWARD
•	(Contractor)
By: _	(Authorized Signature)
	(Title)
	(Date)

SECTION 00 0120 - NOTICE TO PROCEED

TO:	Contractors Legal Name				
ADDRESS:	Contractors Address				
PROJECT:	Lake Charles Boston – Field House (Bldg F) Roof Repairs				
Grace Hebert	Curtis Architects LLC, Project Num	ber: <u>3223113</u>			
Contract For:	Calcasieu Parish School Board 3310 Broad Street Lake Charles, LA 70615				
Date. By that		e above Contract will commence to run on Start ur obligations under the Contract Documents. bstantial Completion.			
Also, before y	ou may start any Work at the site yo	ou must notify Architect of Start Date.			
	By: _	(Authorized Signature)			
	-	(Title)			
		ACKNOWLEDGED:			
	_	(Contractor)			
	Ву: _	(Authorized Signature)			
		(Authorized Signature)			
	-	(Title)			
	-	(Date)			

SECTION 00 0130 – APPLIED TECHNOLOGY COUNCIL (ATC) WINDSPEED DETERMINATION PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Applied Technology Council (ATC) Windspeed Determination for Lake Charles Boston Field House, 1509 Enterprise Blvd., Lake Charles, LA 70601.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

ATC Hazards by Location

Search Information

Address: 1509 Enterprise Blvd, Lake Charles, LA 70601,

USA

Coordinates: 30.2201385, -93.20315409999999

Elevation: 15 ft

Timestamp: 2021-05-04T15:24:50.011Z

Hazard Type: Wind



ASCE 7-16	ASCE 7-10	ASCE 7-05
MRI 10-Year 75 mph	MRI 10-Year 76 mph	ASCE 7-05 Wind Speed 108 mph
MRI 25-Year 86 mph	MRI 25-Year 87 mph	
MRI 50-Year 97 mph	MRI 50-Year 97 mph	
MRI 100-Year 106 mph	MRI 100-Year 107 mph	
Risk Category I 120 mph	Risk Category I 121 mph	
Risk Category II 🛕 130 mph	Risk Category II 🛕 131 mph	
You are in a wind-borne debris region if you are also within 1 mile of the coastal mean high water line.	You are in a wind-borne debris region if you are also within 1 mile of the coastal mean high water line.	
Risk Category III A 141 mph	Risk Category III-IV 🛕 141 mph	

If the structure under consideration is a healthcare facility and you are also within 1 mile of the coastal mean high water line, you are in a wind-borne debris region. If other occupancy, use the Risk Category II basic wind speed contours to determine if you are in a wind-borne debris region.

Risk Category IV _____ A 146 mph

You are in a wind-borne debris region.

If the structure under consideration is a healthcare facility and you are also within 1 mile of the coastal mean high water line, you are in a wind-borne debris region. If other occupancy, use the Risk Category II basic wind speed contours to determine if you are in a wind-borne debris region.

The results indicated here DO NOT reflect any state or local amendments to the values or any delineation lines made during the building code adoption process. Users should confirm any output obtained from this tool with the local Authority Having Jurisdiction before proceeding with design.

Disclaimer

Hazard loads are interpolated from data provided in ASCE 7 and rounded up to the nearest whole integer. Per ASCE 7, islands and coastal https://hazards.atcouncil.org/#/wind?lat=30.2201385&lng=-93.20315409999999&address=1509 Enterprise Blvd%2C Lake Charles%2C LA 70601%2... 1/2

areas outside the last contour should use the last wind speed contour of the coastal area – in some cases, this website will extrapolate past the last wind speed contour and therefore, provide a wind speed that is slightly higher. NOTE: For queries near wind-borne debris region boundaries, the resulting determination is sensitive to rounding which may affect whether or not it is considered to be within a wind-borne debris region.

Mountainous terrain, gorges, ocean promontories, and special wind regions shall be examined for unusual wind conditions.

While the information presented on this website is believed to be correct, ATC and its sponsors and contributors assume no responsibility or liability for its accuracy. The material presented in the report should not be used or relied upon for any specific application without competent examination and verification of its accuracy, suitability and applicability by engineers or other licensed professionals. ATC does not intend that the use of this information replace the sound judgment of such competent professionals, having experience and knowledge in the field of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the results of the

report provided by this website. Users of the information from this website assume all liability arising from such use. Use of the output of this website does not imply approval by the governing building code bodies responsible for building code approval and interpretation for the building site described by latitude/longitude location in the report.

SECTION 00 0160 – FEMA CONSENSUS BASED CODES, SPECIFICATIONS, AND STANDARDS PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. FEMA Consensus Based Codes, Specifications, and Standards for Public Assistance, FEMA Recovery Interim Policy FP-104-009-11 Version 2.1, including Appendix A and Appendix B.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)



Consensus-Based Codes, Specifications and Standards for Public Assistance FEMA Recovery Interim Policy FP- 104-009-11 Version 2.1

BACKGROUND

Section 323 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) authorizes FEMA to require, as a condition of grant funding, that the repair or construction of private and public facilities be done in accordance with "applicable standards of safety, decency, and sanitation in conformity with applicable codes, specifications and standards." Section 406 of the Stafford Act authorizes FEMA to provide contributions to state, local, tribal, territorial, and certain private nonprofit organizations for the repair, restoration, reconstruction, or replacement of a public facility damaged or destroyed by a major disaster and associated expenses incurred. As amended by Section 1235(b) of the Disaster Recovery Reform Act of 2018 (DRRA), Section 406(e) requires FEMA to fund repair, restoration, reconstruction, or replacement in conformity with "the latest published editions of relevant consensus-based codes, specifications, and standards that incorporate the latest hazard-resistant design and establish minimum acceptable criteria for the design, construction, and maintenance of residential structures and facilities that may be eligible for assistance under this Act for the purposes of protecting the health, safety, and general welfare of a facility's users against disasters."

PURPOSE

The purpose of the Recovery Interim Policy FP-104-009-11, *Consensus-Based Codes, Specifications and Standards for Public Assistance* (Policy) is to define the framework and requirements for consistent and appropriate implementation of consensus-based design, construction and maintenance codes, specifications and standards (*subsequently referred to as "consensus-based codes, specifications and standards" in this Policy*) for Public Assistance (PA) to promote resiliency and achieve risk reduction under the authority of the Stafford Act §§ 323 and 406(e) (42 U.S.C. §§ 5165a and 5172) and 44 Code of Federal Regulations (CFR) § 206, subpart M. These codes, specifications and standards only apply to repair and replacement of disaster damaged elements and facilities. Nothing in this Policy makes eligible the cost associated with ongoing operations and maintenance. This interim Policy supersedes the *Public Assistance Program and Policy Guide* (PAPPG)¹ subsection: FEMA Required Minimum Codes and Standards.

¹ Found in FEMA's Public Assistance Program and Policy Guide, FP104-009-2/April 2018. Chapter VII.B.2 Permanent Work Eligibility: Codes and Standards; FEMA Required Minimum Codes and Standards.



PRINCIPLES

Application of the latest nationwide consensus-based codes, specifications and standards that incorporate hazard-resistance for PA funded projects will:

- A Increase the Resiliency of Communities After a Disaster Facilities restored to a code, specification or standard that includes hazard-resistant designs and criteria will be strengthened and experience fewer interruptions and less damage in the future enabling those facilities to continue to function during and after a disaster.²
- B. Protect Lives and Property Use of consensus-based codes, specifications and standards that include hazard-resistant designs and criteria will further FEMA's core mission to protect lives and property by increasing the safety and resilience of facilities that receive PA funding.
- C. Support the Efficient Use of Federal Dollars Applicants using consensus-based codes, specifications and standards that incorporate hazard-resistance criteria for federally funded projects will reduce future vulnerability of disaster damagedfacilities thereby reducing the need for future Federal disaster recovery funding and other assistance.

REQUIREMENTS

A. APPLICABILITY

Outcome: To establish the applicability and the parameters for the implementation of this interim Policy.

 Applicants under disasters declared on or after the date of this interim Policy must apply the relevant consensus-based codes, specifications and standards identified in Appendix A - Consensus-Based Codes, Specifications and Standards to all permanent work PA projects for applicable facility types (buildings, electric power, roads, bridges, potable water and wastewater) for which they are seeking funding.

² In identifying standards for incorporation into this policy, FEMA considered resilience to mean: Able to prepare for anticipated hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions. Presidential Policy Directive 21 (PPD-21): Critical Infrastructure Protection and Resilience.



- 2. Applicants who fall into any of the following categories may submit to FEMA a written request to opt-in (example provided in Appendix B Opt-in Notification for Consensus-Based Codes, Specifications and Standards for Public Assistance) to the guidelines of this interim Policy. If the PA funded construction has started or is complete, FEMA will not provide PA funding for any duplicative work as a result of opting into this Policy.
 - a. Incidents declared between August 1, 2017, and the date of the initial publication of this Policy,
 - b. projects associated with incidents declared before August 1, 2017, but have not been obligated based on a finalized cost estimate as of the date of the initial publication of this Policy,
 - c. projects that have an Applicant accepted fixed cost estimate (Section 428)³, that have not been obligated, and the Applicant has submitted its written notification to FEMA, can be considered under this Policy. The Applicant must accept the revised scope of work and fixed cost estimate related to codes, specifications and standards within 90 days of FEMA's receipt of its written notification. If the Applicant does not accept the fixed cost estimate within the 90-day timeframe, the project will retain its original accepted fixed cost estimate,
 - d. projects associated with a cost estimate on appeal as of the date of the initial publication of this Policy, or
 - e. applicants where the disaster has been declared and they have not yet participated in the Recovery Scoping Meeting (RSM), the 180-day timeline will start from the date of the RSM.

For a, b, c, & d the Applicant must submit the written notification within 180 days of the initial publication of this Policy and must identify the disaster(s) and facility(s) for which they are opting in.

Projects that have an obligated accepted fixed cost estimate (Section 428) will not be considered under this Policy.

For work completed, Applicants will have to demonstrate compliance with all applicable local, state, tribal, territorial, and federal environmental and historic preservation laws, regulations and executive orders. Additionally, the Applicant will need to show compliance with all procurement requirements as laid out in 2 CFR § 200.

³ FEMA's PAAP Pilot Guide for Permanent Work (Version 4) is located at https://www.fema.gov/media-library/assets/documents/162756.



- 3. With the exception of projects involving buildings, where FEMA already has an existing minimum codes and standards policy, Applicants for all other infrastructure that fall under A.2 and who opt-in to this interim Policy can choose the facilities to apply the provisions of this Policy to within that disaster declaration.
- 4. This interim Policy applies to permanent work projects for the facilities where the consensus-based codes, specifications and standards are identified in Appendix A. Funding for locally adopted codes, specifications and standards for facilities not included in Appendix A or where the locally adopted codes, specifications or standards are more stringent or provide for more hazard resistance than the FEMA identified code, or standard, is eligible if it meets the five criteria under 44 C.F.R. § 206.226(d) as implemented in the PAPPG.⁴

B. IMPLEMENTATION

Outcome: Applicants understand the key implementation guidelines of this interim Policy.

- 1. When triggered in permanent work projects funded under the PA Program, FEMA will *require* Applicants to incorporate consensus-based codes, specifications and standards in the planning, design and execution of eligible repair, replacement, or new construction⁵ projects.
- 2. If the Applicant identifies different locally adopted codes, specifications or standards that are the equivalent to or more stringent than the consensus-based codes, specifications and standards, FEMA requires the Applicant's engineer, design professional or other qualified individual to justify that the hazard-resistant design criteria in the locally adopted code, specification or standard is equivalent to or more stringent than those approved under this Policy.
- 3. FEMA may deviate from this interim Policy in circumstances where utilization of the consensus-based code, specification or standard is technically infeasible; would create an extraordinary burden on the Applicant; or would otherwise be inappropriate for the facility, such as adversely affecting a facility that has been listed or is eligible to be listed on the National Register of Historic Places.

⁴ Eligibility criteria found in FEMA's Public Assistance Program and Policy Guide, FP104-009-2/April 2018. Chapter VII. Permanent Work Eligibility: Codes and Standards; or the most recent update to these criteria in the PAPPG.

⁵ This includes improved and alternate projects. Per 44 CFR § 206.203(d), funding for improved and alternate projects is capped at the cost to restore the facility to its pre-disaster design and function in accordance with codes and standards, including the required codes and standards referenced in this section, that would otherwise be applicable to the facility if rebuilt as it existed.



C. IDENTIFICATION REQUIREMENTS

Outcome: Identify the applicable consensus-based codes, specifications and standards.

- 1. The Applicant will be responsible for identifying and applying the applicable consensus-based codes, specifications and standards used in each PA project.
- 2. This interim Policy is limited to the following facility types: buildings, electric power, roads, bridges, potable water and wastewater.
- 3. The Applicant will use the consensus-based codes, specifications and standards outlined in Appendix A as the minimum design criteria for eligible projects.
- 4. The Applicant must use the following criteria when implementing any of the consensus-based codes, specifications and standards identified in Appendix A:
 - a The consensus-based codes, specifications and standards apply to the damaged facility, element or component, as appropriate, based on the work required to restore the facility to pre-disaster capacity and function.
 - b. If the Applicant elects to rebuild to an alternate or improved project that alters the pre-disaster function or capacity of the facility, the Applicant must incorporate any applicable consensus-based codes, specifications and standards to the new capacity or function of the facility.
 - c In the case where the consensus-based codes, specifications and standards are being applied and require an upgrade to an entire structural facility, including undamaged elements/components, the upgrade is only eligible for PA funding if there is a direct relationship between the upgrade work and eligible damage.
- 5. FEMA will update Appendix A of this interim Policy periodically to incorporate additional consensus-based codes, specifications and standards. FEMA will only consider design and construction codes, specifications and standards that incorporate hazard-resistant design.
- 6. When the consensus-based code, specification or standard allows for discretion or for variances in the facility design to be appropriate for the facility's location, these adjustments need to be identified, documented and submitted to FEMA for approval.



D. VERIFICATION REQUIREMENTS

Outcome: Compliance with the requirements must be established by the Applicant and will be validated by FEMA.

- 1. Upon completion of the project, the Applicant must provide proof of compliance with the applicable consensus-based codes, specifications and standards.
- Acceptable forms of proof include but are not limited to written certification by a registered engineer, design professional, or other qualified individual that the project was designed and constructed in compliance with the applicable consensus-based codes, specifications and standards identified.
- 3. Failure to include these consensus-based codes, specifications and standards or their equivalent in the planning, design and construction of eligible PA projects, when required or requested, will result in the denial or deobligation of FEMA project funding, subject to Section B.3.

E. ADDITIONAL ELIGIBLE WORK AND COSTS

Outcome: Identify additional work and costs associated with implementing consensus-based codes, specifications and standards that are eligible under the PA Program.

- 1. Eligible work and costs include engineering evaluation and analysis of the damaged elements/components of a facility that require consensus-based codes, specification and standards under this interim Policy along with PA eligible work to comply with law or regulation.
- 2. Funding for capped projects (improved, alternate, and alternative procedures) will be based on the estimated amount to restore the facility to its pre-disaster capacity and function including any eligible work such as work required by the consensus-based codes, specifications and standards in Appendix A.
- 3. The scope of work will be based on pre-disaster capacity, unless the adopted code or standard requires an increase to that capacity.

F. OTHER CONSIDERATIONS

Repair versus replacement calculation. When evaluating whether a facility is
eligible for replacement under 44 CFR § 206.226(f), upgrades to meet the
identified consensus-based codes, specifications and standards under this
interim Policy will be treated in the same manner as locally adopted codes,
specifications and standards for the purposes of calculating repair and
replacement costs.



2. When a consensus-based code, specification or standard offers discretion in design, FEMA will fund the least expensive alternative unless FEMA determines, after demonstration by the Applicant's engineer, design professional or other qualified individual that another alternative provides greater hazard risk reduction to the facility. In making a determination, FEMA will consider the additional risk reduction, the additional cost, technical feasibility, and whether the alternative is better achieved through other programmatic options, such as mitigation funding.

RESPONSIBLE OFFICE

Office of Response and Recovery Recovery Directorate Public Assistance Division

Keith Turi

Assistant Administrator Recovery Directorate

December 20, 2019

Date



ADDITIONAL INFORMATION

REVIEW CYCLE

This is an interim Policy and will be followed by additional implementation guidance. In conjunction with publishing the interim Policy, FEMA is requesting comments from the public to inform future Policy development. FEMA is particularly interested in identifying additional consensus-based codes, specifications and standards that incorporate hazard-resistant criteria. FEMA will consider adding consensus-based codes, specifications and standards to Appendix A based on the information submitted.

To help ensure continuous improvement in the process of implementing this interim Policy and subsequent updates, FEMA may request performance information and documentation from Applicants. FEMA will evaluate this performance information and the implementation of this interim policy in terms of its effectiveness in increasing the resilience of communities after a disaster, protecting lives and property. FEMA will periodically perform an in-depth review of this Policy.

DRRA 1235(b) requires FEMA, in consultation with other Federal agencies, to issue a final rulemaking by April 5, 2020, to define the terms 'resilient' and 'resiliency'. This time period applies only to the applicability of the definition of resilient and resiliency. FEMA is not using this interim Policy to issue a new definition for the terms "resilient" or "resiliency." Further, prior to the enactment of the DRRA, the Stafford Act already provided FEMA the authority to require certain standards through the establishment of minimum standards under Section 323 and to require hazard mitigation under Section 406. As such the latest standards FEMA adopts in this interim Policy and any successor versions of this Policy will be effective regardless of whether a final rulemaking defining resilient and resiliency has been completed.

AUTHORITIES

Sections 323 and 406 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. §§ 5165a & 5121, et seq., as amended.

DEFINITIONS

Consensus-based codes, specifications and standards: National or international voluntary codes, specifications and standards that incorporate the latest hazard-resistant designs.

Hazard-Resistant: Designs which take into account the probability of occurrence of hazards, within a reasonable recurrence interval, to decrease vulnerabilities.

QUESTIONS

Direct questions to: FEMA-Recovery-PA-Policy@fema.dhs.gov

FP- 104-009-11 - Version 2.1



Appendix A: Consensus-Based Codes, Specifications and Standards as of <u>December 20, 2019</u>

The latest published edition of the codes, specifications and standards published by the following organizations at the time of the disaster declaration will be incorporated into the design and construction of applicable facilities (currently limited to buildings, electric power, roads, bridges, potable water supply and wastewater) as described in this interim Policy. These codes, specifications and standards only apply to repair and replacement of disaster damaged elements and facilities. Nothing in this Policy makes eligible the cost associated with ongoing operations and maintenance.

Eligible building projects involving substantial improvement or new construction in flood hazard areas must meet, at a minimum, the floodproofing or elevation requirements as described in 44 CFR § 9.11(d), or the International Code Council's International Building Code, International Existing Building Code, International Energy Conservation Code, or International Residential Code, whichever is higher.

When triggered by the codes, specifications and standards identified by FEMA in this Policy, Applicants will incorporate the latest applicable criteria including, but not limited to the following:

- In areas where tornado shelter design wind speeds are 250 mph or greater, the Applicant must incorporate a storm shelter or safe room (designed to International Code Council (ICC) 500 standards) for elementary and secondary schools with an occupant load of 50 or more, Emergency Operations Centers (EOCs), 911 call stations, fire stations, rescue stations, ambulance stations, and police stations.
- Concerning requirements for wind, seismic, flood, temperature, ice and snow, and wildfire the Applicant must incorporate applicable design and construction standards contained in the International Building Code (IBC), International Existing Building Code (IEBC), International Residential Code (IRC) and their referenced standards [e.g., American Society of Civil Engineers (ASCE)/Structural Engineering Institute (SEI) 7; 24 and 41], and International Wildland-Urban Interface Code (IWUIC).

FP- 104-009-11 – Version 2.1 Page 9 of 18



Facility Type	Standard Setting Organization and Consensus-Based Codes, Specifications and Standards
Buildings	 International Code Council (ICC): International Building Code (IBC); International Existing Building Code (IEBC); International Residential Code (IRCC); International Energy Conservation Code (IECC); International Wildland-Urban Interface Code (IWUC); International Plumbing Code (IPC); International Mechanical Code (IMC); International Fuel Gas Code (IFGC); International Fire Code (IFC); ICC 500-14, ICC/NSSA Standard on the Design and Construction of Storm Shelters; ICC 600-14, Standard for Residential Construction in High-wind Regions Institute of Electrical and Electronics Engineers: National Electric Safety Code (NESC) National Fire Protection Association (NFPA): National Electrical Code (NEC); NFPA 1141, Standard for Fire Protection Infrastructure for Land Development in Wildland, Rural, and Suburban Areas; NFPA 1142, Standard on Water Supplies for Suburban and Rural Firefighting; NFPA 1144, Standard for Reducing Structure Ignition Hazards from Wildland Fire; NFPA 5000-2018, Building Construction and Safety Code American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE): Handbook of HVAC Applications American Society of Civil Engineers (ASCE): ASCE/SEI 7-16, Minimum Design Loads and Associated Criteria for Buildings and Other Structures: ASCE/SEI 24-14, Flood Resistant Design and Construction; ASCE/SEI 41-17, Seismic Evaluation and Retrofit of Existing Buildings; ASCE 8-17, Standard Specification for the Design of Cold-formed Stainless-Steel Structural Members; ASCE 49-07, Wind Tunnel Testing for Buildings and Other Structures American Concrete Institute (ACI): ACI 318-19, "Building Code Requirements for Reinforced Concrete; ACI 543R-12, Guide to Design, Manufacture, and Installation of Concrete Piles American Institute of Steel Construction (AISC): ANSI/AISC 303-16, Code of Standard Practice for Steel Buildings and Bridges; ANSI/AISC 360-19, Specification for Structural Steel Buildings; ANSI/

FP- 104-009-11 - Version 2.1



- American Society Mechanical Engineers (ASME): ASME/A17.1-2016/CSA B44-16, Safety Code for Elevators and Escalators
- American Iron and Steel Institute (AISI): AISI S100-16, North American Specification for the Design of Cold-formed Steel Structural Members
- American Wood Council (AWC): ANSI/AWC NDS-2018, National Design Specification (NDS) for Wood Construction-with 2018 NDS Supplement
- Timber Piling Council (TPC): TPC-2016, Timber Pile Const. Guide 2016
- **The Masonry Society (TMS):** TMS 402-2016, Building Code for Masonry Structures; TMS 602-2016, Specification for Masonry Structures
- Steel Joist Institute (SJI): SJI 100-15, 44th Edition Standard Specification Load Tables and Weight Tables for Steel Joists and Joist Girders K-Series, Series, DHL-Series, Joist Girders; SJI 200-15, Standard Specification for Composite Steel Joists, CJ-Series
- The Aluminum Association (TAA): ADM1, Aluminum Design Manual, Part 1 A Specification for Aluminum Structures, 2015
- Facilities Guideline Institute (FGI): (FGI), Guidelines for Design and Construction of Hospitals/Outpatient, 2018; (FGI), Guidelines for Design and Construction of Residential Health, Care, and Support, 2018
- Air Movement and Control Association (AMCA): AMCA 540-13, Test Method for Louvers Impacted by Wind Borne Debris
- Door and Access Systems Manufacturers Association (DASMA): ANSI/DASMA 108-2017, Standard Method for Testing Sectional Garage Doors, Rolling Doors and Flexible Doors: Determination of Structural Performance Under Uniform Static Air Pressure Difference; ANSI/DASMA 115-2016, Standard Method for Testing Sectional Garage Doors, Rolling Doors and Flexible Doors: Determination of Structural Performance Under Missile Impact and Cyclic Wind Pressure
- National Association of Architectural Metal Manufacturers (NAAMM): NAAMM FP 1001-17, Guide Specifications for Design of Metal Flag Poles
- ANSI/FM Approvals (FM): FM 2510-2019, Flood Abatement Equipment
- CFR Title 24: Housing and Urban Development
- CFR Title 44: Emergency Management and Assistance



Electric Power

- U.S. Department of Agriculture Rural Electric Service (RUS): RUS Bulletins
 Transmission 1724D-106, 1724E-200, 1724E-203, 1724E-204, 1724E-205, 1724E-206,
 1724E-214, 1724E-216, 1724E-224, 1724E-226, 1728F-810, 1728F-811, 1728H-701, 1730B-2
 Distribution 50-4, 1724D-106, 1724E-150, 1724E-151, 1724E-152, 1724E-153, 1724E-154,
 1728F-700, 1728F-803, 1728F-804, 1728F-806, 1730B-121, 1730B-2
 Substations 1724E-300
- International Code Council: International Building Code (IBC); International Existing Building Code (IEBC); International Residential Code (IRC); International Energy Conservation Code (IECC); International Wildland-Urban Interface Code (IWUIC)
- American Society of Civil Engineers (ASCE): (ASCE/SEI 7-16) Minimum Design Loads and Associated Criteria for Buildings and Other Structures, (ASCE MOP 74) Guidelines for Electrical Transmission Line Structural Loading
- Institute of Electrical and Electronics Engineers: National Electric Safety Code (NESC)
- National Fire Protection Association (NFPA): National Electric Code (NEC); NFPA 1141, Standard for Fire Protection Infrastructure for Land Development in Wildland, Rural, and Suburban Areas; NFPA 1144, Standard for Reducing Structure Ignition Hazards from Wildland Fire

FP- 104-009-11 – Version 2.1 Page 12 of 18



Roads and Bridges

- American Association of State Highway and Transportation Officials (AASHTO): A Policy on Geometric Design of Highways and Streets; Standard Specifications for Highway Bridges; LRFD Bridge Construction Specifications; LRFD Bridge Design Specifications; LRFD Movable Highway Bridge Design Specifications; AASHTO/AWS D1.5M/D1.5 Bridge Welding Code, 7th Edition; LRFD Guide Specifications for Accelerated Bridge Construction, 1st Edition; Guide Specifications for LFRD Seismic Bridge Design, 2nd Edition; Guide Specifications for Design of Bonded FRP Systems for Repair or Strengthening of Concrete Bridge Elements, 1st Edition, Guide Specifications for Bridges Vulnerable to Coastal Storms, 1st Edition, Guide Specifications for Design and Construction of Segmental Concrete Bridges, 2nd Edition; Guide Specifications for Wind Loads on Bridges During Construction, 1st Edition; Pavement Design, Construction, and Management: A Digital Handbook, 1st Edition; Guidelines for Geometric Design of Low-Volume Local Roads, 2019 Edition; AASHTO Drainage Manual, CD-ROM; Highway Drainage Guidelines, 4th Edition
- American Concrete Institute (ACI): ACI 301-16 Specifications for Structural Concrete; ACI-341.2R-14 Analysis and Design of Seismic-Resistant Concrete Bridge Systems, ACI-341.3R-07 Seismic Evaluation and Retrofit Techniques for Concrete Bridges, ACI-341.4R-16 Report on the Seismic Design of Bridge Columns Based on Drift, ACI-342R-16 Report on Flexural Live Load Distribution Methods for Evaluating Existing Bridges, ACI-343R-95 Analysis & Design of Reinforced Concrete Bridge Structures (Reapproved 2004), ACI-345.1R-16 Guide to Maintenance of Concrete Bridge Members, ACI-345.2R-13 Guide for Widening Highway Bridges, ACI-345R-11 Guide for Concrete Highway Bridge Deck Construction, ACI-548.10-10 Specification for Type MMS (Methyl Methacrylate Slurry) Polymer Overlays for Bridge and Parking Garage Decks, ACI-548.8-07 Specification for Type EM (Epoxy Multi-Layer) Polymer Overlay for Bridge and Parking Garage Decks, ACI-548.9-08 Specification for Type ES (Epoxy Slurry) Polymer Overlays for Bridge and Parking Garage Decks
- American Welding Society (AWS): D1.4/D1.4M: 2011Structural Welding Code-Reinforcing Steel;
- American Institute of Steel Construction (AISC): ANSI/AISC 303 Code of Standard Practice for Steel Buildings and Bridges
- American Society of Civil Engineers (ASCE): ASCE MOP 140 Climate-ResilientInfrastructure: Adaptive Design and Risk Management, 2018
- National Fire Protection Association (NFPA): NFPA 1141, Standard for Fire Protection Infrastructure for Land Development in Wildland, Rural, and Suburban Areas



• U.S. Department of Transportation (DOT), Federal Highway Administration (FHWA): Federal Lands Highway Project Development and Design Manual (PDDM) (2018); 23 CFR Part 625 - Design Standards for Highways; HIF-18-046 - Manual for Refined Analysis in Bridge Design and Evaluation, 2019; HIF-18_041 - Report on Techniques for Bridge Strengthening, 2019; HEC 17 - Highways in the River Environment- Floodplains, Extreme Events, Risk, and Resilience, 2nd Edition; HEC 25 - Highways in the Coastal Environment: Assessing Extreme Events, Volume 2, HDS 2 Highway Hydrology, 2nd Edition, Other Drainage and Hydraulic Design and Analysis – HDS 4, HDS 5, HDS 6, HEC 7, HEC 9, HEC 14, HEC 15, HEC 18, HEC 20, HEC 21, HEC 22, HEC 23, HEC 24, HEC 26; Geotechnical –Geotechnical Engineering Circulars 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, HIF-17-024 - Evaluation and Guidance Document for Post-Grouted Drilled Shafts for Highways



Potable Water

- Great Lakes Upper Mississippi River, Board of Provincial Public Health and Environmental Managers:
 Recommended Standards for Water Works 2012
- American Water Works Association (AWWA): Standards for Potable Water Source, Storage, Treatment, and Distribution; M2 Instrumentation & Control, Third Edition; M6 Water Meters: Selection, Installation, Testing & Maintenance, Fifth Edition; M22 Sizing Water Service Lines and Meters, Third Edition; M11 Steel Pipe: A Guide for Design and Installation, Fifth Edition; M23 PVC Pipe Design and Installation, Second Edition; M25 Flexible Membrane Covers and Linings for Potable-Water Reservoirs, Third Edition; M28 Rehabilitation of Water Mains, Third Edition; M31 Distribution System Requirements for Fire Protection, Fourth Edition; M33 Flowmeters in Water Supply, Third Edition; M41 Ductile-Iron Pipe and Fittings, Third Edition; M42 Steel Water-Storage Tanks, Revised Edition; M44 Distribution Valves: Selection, Installation, Field Testing & Maintenance, Third Edition; M55 PE Pipe Design and Installation; M68 Water Quality in Distribution Systems; M77 Condition Assessment of Water Mains; M45 Fiberglass Pipe Design, Third Edition
- National Fire Protection Association (NFPA): National Electric Code (NEC); NFPA 1141, Standard for Fire
 Protection Infrastructure for Land Development in Wildland, Rural, and Suburban Areas; NFPA 1142, Standard on
 Water Supplies for Suburban and Rural Firefighting; NFPA, 1144 Standard for Reducing Structure Ignition
 Hazards from Wildland Fire
- American Society of Testing and Materials (ASTM): ASTM-F-480-17, Standard Specification for Thermoplastic Well Casing Pipe and Couplings Made in Standard Dimension Ratios (SDR)
- National Standards Foundation (NSF) American National Standards Institute (ANSI): NSF/ANSI: Standard
 61, Drinking Water System Components Health Effects; NSF/ANSI Standard
 14, Plastic Piping System Components and Related Materials
- American Society of Civil Engineers (ASCE): (ASCE MOP 132) Renewal of Potable Water Pipes; (ASCE MOP 127) Hydraulics of Wells: Design, Construction, Testing, and Maintenance of Water Well Systems, 2014; (ASCE MOP 108) Pipeline Design for Installation by Horizontal Directional Drilling, Second Edition; (ASCE MOP) 106 Horizontal Auger Boring Projects, Second Edition; (ASCE MOP 140) Climate-Resilient Infrastructure: Adaptive Design and Risk Management, 2018; (ASCE/SEI 24-14) Flood Resistant Design and Construction; ASCE/SEI 7-16) Minimum Design Loads and Associated Criteria for Buildings and Other Structures
- Water Environment Federation: MOP 32 Energy Conservation in Water and Wastewater Treatment Facilities;
 MOP 26 GIS Implementation for Water and Wastewater Treatment Facilities;
 MOP 28 Upgrading and Retrofitting Water and Wastewater Treatment Plants
- International Code Council: International Building Code (IBC); International Existing Building Code (IEBC); International Energy Conservation Code, (IECC); International Residential Code (IRC); International Wildland-Urban Interface Code (IWUIC)

FP- 104-009-11 – Version 2.1 Page 15 of 18



Wastewater

- Great Lakes Upper Mississippi River, Board of Provincial Public Health and Environmental Managers: Recommended Standards for Wastewater Facilities (10 States Standards) 2014
- National Fire Protection Association (NFPA): National Electrical Code (NEC); NFPA 1141, Standard for Fire Protection Infrastructure for Land Development in Wildland, Rural, and Suburban Areas; NFPA, 1144 Standard for Reducing Structure Ignition Hazards from Wildland Fire
- American Society of Testing and Materials (ASTM): ASTM D-2321-18, Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity Flow Installations; ASTM F-1417-11a (2015), Standard Practice for Installation Acceptance of Plastic Gravity Sewer Lines Using Low-Pressure Air; ASTM C-12-17, Standard Practice for Installing Vitrified Clay Pipe Lines; ASTM C-828-11, Standard Test Method for Low Pressure Air Test of Vitrified Clay Pipe Lines; ASTM C-478-18, Standard Specification for Circular Precast Reinforced Manhole Sections; ASTM C-1244, Standard Test Method for Concrete Sewer Manholes Negative Air Pressure (Vacuum) Test Prior to Backfill
- American Society of Civil Engineers (ASCE): (ASCE MOP 108) Pipeline Design for Installation by Horizontal Directional Drilling, Second Edition; (ASCE MOP 106) Horizontal Auger Boring Projects, Second Edition; (ASCE MOP 60) Gravity Sanitary Sewer Design and Construction Second Edition, 2007; (ASCE MOP 140) Climate-Resilient Infrastructure: Adaptive Design and Risk Management, 2018; (ASCE/SEI 7-16) Minimum Design Loads and Associated Criteria for Buildings and Other Structures; (ASCE/SEI 24-14) Flood Resistant Design and Construction
- Water Environment Federation: MOP 8 Design of Water Resource Recovery Facilities; MOP FD-4 Design of Wastewater and Stormwater Pumping Stations; MOP 32 Energy Conservation in Water and Wastewater Treatment Facilities MOP 21 Automation of Water Resource Recovery Facilities, 4th Edition; MOP 26 GIS Implementation for Water and Wastewater Treatment Facilities, MOP FD-12 Alternative Sewer Systems, 2nd Edition; MOP FD-6 Existing Sewer Evaluation and Rehabilitation, 3rd Edition; MOP FD-17 Prevention and Control of Sewer System Overflows, 3rd Edition; MOP 25 Control of Odors and Emissions from Wastewater Treatment Plants; MOP FD-19 Natural Systems for Wastewater Treatment, 3rd Edition; MOP 28 Upgrading and Retrofitting Water and Wastewater Treatment Plants; MOP 38 Sustainability and Energy Management for Water Resource Recovery Facilities; FS Sanitary Sewer Systems: Lift Stations and Data Management Fact Sheet, 2019
- International Code Council: International Building Code (IBC); International Existing Building Code (IEBC); International Energy Conservation Code, (IECC); International Residential Code (IRC); International Wildland-Urban Interface Code (IWUIC)

FP- 104-009-11 – Version 2.1 Page 16 of 18



Appendix B: Opt-in Notification for Consensus-Based Codes, Specifications and Standards for Public Assistance

In accordance with the Federal Emergency Management Agency (FEMA) Recovery Interim Policy FP-104-009-11, Consensus-Based Codes, Specifications and Standards for Public Assistance (Policy), Applicants that meet the criteria below may elect to apply the Policy to one or more of their projects. If the PA funded construction has started or is complete, FEMA will not provide PA funding for any duplicative work as a result of opting into this Policy.

Applicants wishing to participate must make their election no later than either:

- May 4, 2020, (180 days from date of initial Policy publication), or
- 180 days after the date of the Recovery Scoping Meeting (RSM) for Applicants that have not yet participated in their RSM.

This notification does not apply to Applicants in declarations on or after the date of the initial Policy publication.

Applicants may elect to opt-in if they have any of the following:

- 1. Damaged facilities in incidents declared between August 1, 2017, and the date of the initial Policy publication.
- 2. Projects associated with incidents declared before August 1, 2017, but not obligated based on a finalized cost estimate as of the date of initial Policy publication,
- 3. Projects that have an accepted fixed cost estimate (Section 428) and that have not been obligated¹, or

Applicant must identify the disaster number, declaration date, project number, project title, and

4. Projects associated with a cost estimate on appeal as of the date of the initial Policy publication.

facility name/site location using the attachment to this Appendix.

We, (name of Applicant) , elect to opt-in to Recovery Interim Policy FP-104-009-11, Consensus-Based Codes, Specifications and Standards for Public Assistance for the facilities listed in the attachment.

Signature of Subrecipient's Authorized Representative and Title (Printed) Date

Subrecipient Name PA ID Number

Signature of Recipient's Authorized Representative and Title (Printed) Date

Recipient Name Name of State or Tribe

Attachment

¹ The Applicant must accept the revised scope of work and fixed cost estimate related to codes, specifications and standards within 90 days of FEMA's receipt of its written notification. If the Applicant does not accept the fixed cost estimate within the 90-day timeframe, the project will retain its original accepted fixed cost.



Attachment to the Opt-in Notification for Recovery Interim Policy FP-104-009-11

Name of Applicant_	PA ID Number _	
Date Submitted		

DR#	Declaration Date	Project # or DI # (specify)	Project Title or Facility Name

SECTION 01 1000 - SUMMARY

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Project information.
 - 2. Work covered by Contract Documents.
 - 3. Construction Areas.
 - 4. Access to site.
 - 5. Coordination with occupants.
 - 6. Work restrictions.
 - 7. Specification and drawing conventions.
- B. Related Requirements:
 - 1. Section 01 5000 "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.

1.2 PROJECT INFORMATION

- A. Project Identification: Lake Charles Boston Field House (Bldg F) Roof Repairs
 - 1. Project Location: 1509 Enterprise Blvd., Lake Charles, Louisiana 70601
- B. Owner: Calcasieu Parish School Board; 3310 Broad Street, Lake Charles, Louisiana 70615.
- C. Program Management: CSRS, Inc.; 1811 Ryan Street, Lake Charles, LA 70601.
- D. Architect: Grace Hebert Curtis Architects, LLC; 501 Government Street, Suite 200, Baton Rouge, Louisiana 70802.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of Project is defined by the Contract Documents and consists of the following:
 - 1. Lake Charles Boston Field House (Bldg F) Roof Repairs project consists of the renovation of an approximately 10,386 square foot existing school building.
- B. Type of Contract:
 - 1. Project will be constructed under a single prime contract.
- C. Sales Tax Exemption:
 - This project shall be considered sales tax exempt for all purchase and lease of materials, supplies or equipment for this project only by the Contractor and all Subcontractors. Contractor shall submit 2 original signed copies of each LDR Form 1020 to Owner for signature.

1.4 CONSTRUCTION AREAS

- A. The Work shall be conducted in areas as indicated within the drawings.
 - Contractor to submit a site plan indicating lay down areas, temporary electrical, dumpsters, temporary toilets, etc. for Architect and Owner's approval prior to commencing Work.
 - 2. Before commencing Work within each area, submit an updated copy of Contractor's construction schedule showing the sequence, commencement and completion dates for all areas of the Work.

1.5 ACCESS TO SITE

- A. General: Contractor shall have use of Project site for construction operations during construction period as indicated.
- B. Use of Site: Limit use of Project site to work in areas indicated in Construction Area drawings. Do not disturb portions of Project site beyond areas in which the Work is indicated.
 - 1. Limits: Confine construction operations to the limits indicated.
 - 2. Driveways, Walkways and Entrances: Keep driveways and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
 - Schedule deliveries to minimize impacts to adjacent roadways by construction operations. Do not obstruct roadways, sidewalks or other public ways without permit.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

1.6 COORDINATION WITH OCCUPANTS

- A. The building will be occupied at the time of construction and care shall be taken not to disturb normal operations of the occupants.
- B. Owner Limited Occupancy of Completed Areas of Construction: Owner reserves the right to occupy and to place and install equipment in completed portions of the Work, prior to Substantial Completion of the Work, provided such occupancy does not interfere with completion of the Work. Such placement of equipment and limited occupancy shall not constitute acceptance of the total Work.
 - Architect will prepare a Certificate of Substantial Completion for each specific portion of the Work to be occupied prior to Owner acceptance of the completed Work.
 - 2. Obtain a Certificate of Occupancy from authorities having jurisdiction before limited Owner occupancy.
 - 3. Before limited Owner occupancy, mechanical and electrical systems shall be fully operational, and required tests and inspections shall be successfully completed. On occupancy, Owner will operate and maintain mechanical and electrical systems serving occupied portions of Work.
 - 4. On occupancy, Owner will assume responsibility for maintenance and custodial service for occupied portions of Work.
- C. Cooperate with Owner to minimize conflict and facilitate Owner's operations.
- D. Schedule the Work to accommodate Owner occupancy.
- E. Coordinate any Utility Shutdowns with the Owner, providing at least 48 hours advance notice of necessary utility shutdowns.

1.7 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.
 - 1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Work hours shall occur within the requirements of authorities having jurisdiction and shall comply with all noise ordinances. Limit work to normal business working hours Monday through Sunday unless otherwise indicated, coordinated with Owner and as discussed at the Pre-Construction Conference. Any other work time to be approved by Owner in writing, prior to commencement of additional work time.

- C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
 - 1. Notify Architect/Owner not less than two days in advance of proposed utility interruptions.
 - 2. Do not proceed with utility interruptions without Architect/Owner's written permission.
- D. Nonsmoking Building and Site: Smoking is not permitted within the building or on site. This is a no-smoking campus.
- E. Controlled Substances: Use of tobacco products and other controlled substances on Project site is not permitted.
- F. No Contractor, Sub-Contractor or employee of each shall talk, communicate, harass, or take any action with the faculty, staff, or students.
- G. Employee Language and Behavior: Use of profane language will not be tolerated on site due to the proximity of the work to the adjacent school facilities. All employees whether employed by the Contractor or Sub-Contractors shall behave appropriately at all times due to the presence of students on campus.
- H. Employee Identification: All employees whether employed by the Contractor or Sub-Contractors shall be required to where their company shirt/logo at all times on site for security purposes.
- I. Employee Screening: Comply with Owner's requirements for drug screening of Contractor personnel working on Project site.
 - I. Maintain list of approved screened personnel with Owner's representative.

1.8 PERMITTING AND CODE COMPLIANCE

- A. Permits: Apply for, obtain, and pay for permits required to perform the work. Submit copies to Owner.
- B. Codes: Comply with applicable codes and regulations of authorities having jurisdiction. Submit copies of inspection reports, notices and similar communications to Owner.

1.9 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 - 1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
 - 2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.
- C. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:
 - 1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
 - 2. Abbreviations: Materials and products are identified by abbreviations scheduled on Drawings.

- 3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.
- D. Definitions for terms used in the Specifications:
 - 1. Provide: Furnish and install, complete with all necessary accessories, ready for intended use. Pay for all related costs.
 - 2. Approved: Acceptance of item submitted for approval. Not a limitation or release for compliance with the Contract Documents or regulatory requirements. Refer to limitations of "Approved" in General and Supplementary Conditions.
 - 3. Match Existing: Match existing as acceptable to the Owner.
 - 4. Intent: Drawings and Specifications are intended to provide the basis for proper completion of the work suitable for the intended use of the Owner. Anything not expressly set forth but which is reasonable implied or necessary for proper performance of the project shall be included.
 - 5. Writing Style: Specifications are written in the imperative mode. Except where specifically intended otherwise, the subject of all imperative statements is the Contractor. For example, "Provide tile" means Contractor shall provide tile.
- E. Dimensions: Verify dimensions indicated on drawings with field dimensions before fabrication or ordering of materials. Do not scale drawings.
- F. Existing Conditions: Notify Owner of existing conditions differing from those indicated on the drawings. Do not remove or alter structural components without prior written approval.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 1000

SECTION 01 2500 - SUBSTITUTION PROCEDURES

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section includes administrative and procedural requirements for substitutions.
 - 1. Substitutions for Convenience (as defined in this Section): Will only be considered in the Bidding Phase only in accordance with the Instructions to Bidders. Substitutions for convenience must be submitted electronically via email.

B. Related Requirements:

- 1. Section 01 6000 "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.
- 2. Divisions 02 through 33 Sections for specific requirements and limitations for substitutions.

1.03 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
 - 1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
 - 2. Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required in order to meet other Project requirements but may offer advantage to Contractor or Owner.

1.04 ACTION SUBMITTALS

- A. Substitution Requests: Submit electronic copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - Substitution Request Form (During Construction): Submit electronically via www.centerline.co.
 - 2. Substitution Request Form (Bidding Phase): Submit electronically via email. Submit during the bidding phase for consideration of substitutions prior to submittal of bids in accordance with the Instructions to Bidders.
 - 3. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Statement indicating why specified product or fabrication or installation cannot be provided, if applicable.
 - b. Coordination information, including a list of changes or revisions needed to other parts of the Work and to construction performed by Owner and separate contractors that will be necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
 - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - e. Samples, where applicable or requested.
 - f. Certificates and qualification data, where applicable or requested.
 - g. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.

- h. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
- i. Research reports evidencing compliance with building code in effect for Project, from ICC-ES.
- j. Detailed comparison of Contractor's construction schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
- k. Cost information, including a proposal of change, if any, in the Contract Sum.
- I. Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.
- m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
- 4. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation. Within seven days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
 - a. Forms of Acceptance: Change Order, Construction Change Directive, or Architect's Supplemental Instructions for minor changes in the Work.
 - b. Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.

1.05 QUALITY ASSURANCE

A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

1.06 PROCEDURES

A. Coordination: Revise or adjust affected work as necessary to integrate work of the approved substitutions.

PART 2 PRODUCTS

2.01 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.
 - 1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
 - Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - b. Requested substitution provides sustainable design characteristics that specified product provided.
 - c. Substitution request is fully documented and properly submitted.
 - d. Requested substitution will not adversely affect Contractor's construction schedule.
 - e. Requested substitution has received necessary approvals of authorities having iurisdiction.
 - f. Requested substitution is compatible with other portions of the Work.
 - g. Requested substitution has been coordinated with other portions of the Work.
 - h. Requested substitution provides specified warranty.

- i. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
- B. Substitutions for Convenience: Submit requests for substitution for convenience electronically via email.
 - 1. General: Architect will consider requests for substitution if received as per Instructions to Bidders. Requests received after that time will not be considered by Architect.
 - 2. Conditions for Consideration: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
 - a. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities. Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
 - b. Requested substitution does not require extensive revisions to the Contract Documents.
 - Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - d. Substitution request is fully documented and properly submitted.
 - e. Requested substitution will not adversely affect Contractor's construction schedule.
 - f. Requested substitution has received necessary approvals of authorities having jurisdiction.
 - g. Requested substitution is compatible with other portions of the Work.
 - h. Requested substitution has been coordinated with other portions of the Work.
 - i. Requested substitution provides specified warranty.
 - j. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 2600 - CONTRACT MODIFICATION PROCEDURES

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section includes administrative and procedural requirements for handling and processing Contract modifications.
- B. Related Requirements:
 - Section 01 2500 "Substitution Procedures" for administrative procedures for handling requests for substitutions made after the Contract award.

1.03 MINOR CHANGES IN THE WORK

A. Architect will issue supplemental instructions authorizing Minor Changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, via www.centerline.co.

1.04 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Work Change Proposal Requests issued by Architect are not instructions either to stop work in progress or to execute the proposed change.
 - 2. Within time specified in Proposal Request, when not otherwise specified, after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include costs of labor and supervision directly attributable to the change.
 - d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - e. Quotation Form: Provide information on AIA Document G701.
- B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Architect.
 - 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
 - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - 3. Indicate delivery charges, equipment rental, and amounts of trade discounts.
 - 4. Include costs of labor and supervision directly attributable to the change.
 - 5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - 6. Comply with requirements in Division 01 Section "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.
 - 7. Proposal Request Form: Provide information on AIA Document G701.

1.05 CHANGE ORDER PROCEDURES

- A. On Owner's approval of a Work Changes Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on AIA Document G701.
- B. All Change Orders shall be submitted to Owner with 5 original signed copies.

1.06 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: Architect may issue a Construction Change Directive on AIA Document G714. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 - Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
 - 2. All Construction Change Directives shall be submitted to Owner with 5 original signed copies.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
 - 1. Throughout the duration of the change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the contract within 10 days from the date materials are procured, equipment is utilized and man hours are performed.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 2900 - PAYMENT PROCEDURES

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.
- B. Related Requirements:
 - Section 01 2600 "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
 - 2. Section 01 3200 "Construction Progress Documentation" for administrative requirements governing the preparation and submittal of the Contractor's construction schedule.
 - 3. Section 01 3000 "Administrative Requirements" for administrative requirements governing the preparation and submittal of submittal schedule.

1.03 DEFINITIONS

A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

1.04 SCHEDULE OF VALUES

- A. A separate Schedule of Values will need to be submitted for each building.
- B. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.
 - 1. Coordinate line items in the schedule of values with other required administrative forms and schedules, including the following:
 - a. Application for Payment forms with continuation sheets.
 - b. Submittal schedule.
 - Items required to be indicated as separate activities in Contractor's construction schedule.
 - 2. Submit the initial schedule of values to Architect and Owner at the Pre-Construction Conference, on the Schedule of Values form provided as part of these Specifications.
- C. Format and Content: Schedule of Values shall be broken down with headings identifying which project and building the line items pertain to. Use Project Manual table of contents as a guide to establish line items for the schedule of values and provide at least one line item for each applicable Specification Section. Maximum cost associated with each line item shall not exceed \$50.000.
 - 1. Identification: Include the following Project identification on the schedule of values:
 - a. Project name and location.
 - b. Name of Architect.
 - c. State project number.
 - d. Contractor's name and address.
 - e. Date of submittal.
 - 2. Arrange schedule of values consistent with format of Schedule of Values included as part of these Specifications.
 - 3. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with Project Manual table of contents. Provide multiple line items for principal subcontract amounts in excess of five percent of the Contract Sum.
 - 4. Round amounts to nearest whole dollar; total shall equal the Contract Sum.

- 5. Provide a separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
 - Differentiate between items stored on-site and items stored off-site. If required, include evidence of insurance.
- 6. Provide separate line items in the schedule of values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
- 7. Each item in the schedule of values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
 - a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the schedule of values or distributed as general overhead expense, at Contractor's option.
- 8. Schedule Updating: Update and resubmit the schedule of values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.05 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment following the initial Application for Payment shall be consistent with previous applications and payments as certified by Architect and paid for by Owner.
 - 1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- B. Payment Application Times: Progress payments shall be submitted to Architect seven days before the regularly scheduled monthly progress meeting. The period covered by each Application for Payment is one month, ending on the last day of the month.
 - Submit draft copy of Application for Payment seven days prior to due date for review by Architect.
- C. Application for Payment Forms: Use AIA Document G702 and AIA Document G703 as form for Applications for Payment.
 - 1. All Applications for Payment shall be submitted with a minimum of 5 original signed copies from the Contractor.
- D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect will return incomplete applications without action.
 - 1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
 - Include amounts for work completed following previous Application for Payment, whether
 or not payment has been received. Include only amounts for work completed at time of
 Application for Payment.
 - 3. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
 - 4. Indicate separate amounts for work being carried out under Owner-requested project acceleration.
- E. Stored Materials: Include in Application for Payment amounts applied for materials or equipment purchased or fabricated and stored, but not yet installed. Only materials stored on site will be approved for payment.
 - 1. Provide certificate of insurance, evidence of transfer of title to Owner, and consent of surety to payment, for stored materials.
 - 2. Provide supporting documentation that verifies amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
 - 3. Provide summary documentation for stored materials indicating the following:
 - a. Materials previously stored and included in previous Applications for Payment.
 - b. Work completed for this Application utilizing previously stored materials.
 - c. Additional materials stored with this Application.

- d. Total materials remaining stored, including materials with this Application.
- F. Transmittal: Submit five signed and notarized original copies of each Application for Payment to Architect by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments if required.
 - 1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- G. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from entities lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.
 - 1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
 - 2. When an application shows completion of an item, submit conditional final or full waivers.
 - 3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
 - 4. Waiver Forms: Submit waivers of lien on forms, executed in a manner acceptable to Owner.
- H. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
 - 1. List of subcontractors.
 - 2. Schedule of values.
 - 3. Contractor's construction schedule (preliminary if not final).
 - 4. Combined Contractor's construction schedule (preliminary if not final) incorporating Work of multiple contracts, with indication of acceptance of schedule by each Contractor.
 - 5. Products list (preliminary if not final).
 - 6. Schedule of unit prices.
 - 7. Submittal schedule (preliminary if not final).
 - 8. List of Contractor's staff assignments.
 - 9. List of Contractor's principal consultants.
 - 10. Copies of building permits.
 - 11. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
 - 12. Initial progress report.
 - 13. Report of preconstruction conference.
 - 14. Certificates of insurance and insurance policies.
 - 15. Performance and payment bonds.
 - 16. Data needed to acquire Owner's insurance.
 - 17. Fixed job site overhead cost itemized as per 7.1.4 of the AIA A201 2007, General Conditions of the Contract for Construction as amended herein
- I. Application for Payment at Substantial Completion: After issuing the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
 - 1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
 - 2. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- J. Final Payment Application: Submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
 - 1. Evidence of completion of Project closeout requirements.
 - 2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
 - 3. Updated final statement, accounting for final changes to the Contract Sum.
 - 4. AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims."

- 5. AIA Document G706A, "Contractor's Affidavit of Release of Liens."
- 6. AIA Document G707, "Consent of Surety to Final Payment."
- 7. Evidence that claims have been settled.
- 8. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.
- 9. Final liquidated damages settlement statement.

PART 2 EXECUTION (NOT USED)
PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 3000 - ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.
- B. Related Requirements:
 - Section 01 2900 "Payment Procedures" for submitting Applications for Payment and the schedule of values.
 - Section 01 3200 "Construction Progress Documentation" for submitting schedules and reports, including Contractor's construction schedule.

1.03 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Architect's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."
- B. Informational Submittals: Written and graphic information and physical samples that do not require Architect's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."
- C. Centerline: Centerlineis a web based project management system to be used on this project. All project information will be maintained on this system. Information contained on this system will be the official log of all project information. The contractor shall pay all fees associated with his access to this project management system.
- D. Portable Document Format (PDF): An open standard file format licensed by Adobe Systems used for representing documents in a device-independent and display resolution-independent fixed-layout document format.
- E. Bluebeam Document (BSX): A standard file format licensed by Bluebeam Software, Inc. and available for use in creating, marking up, collaborating, and sharing PDF documents. Contractor shall pay all fees for access to this program for this project.

1.04 ACTION SUBMITTALS

- A. Submittal Schedule: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect and additional time for handling and reviewing submittals required by those corrections.
 - 1. Coordinate submittal schedule with list of subcontracts, the schedule of values, and Contractor's construction schedule.
 - Initial Submittal: Submit concurrently with startup construction schedule. Include submittals
 required during the first 60 days of construction. List those submittals required to maintain
 orderly progress of the Work and those required early because of long lead time for
 manufacture or fabrication.
 - 3. Final Submittal: Submit concurrently with the first complete submittal of Contractor's construction schedule.
 - a. Submit revised submittal schedule to reflect changes in current status and timing for submittals.
 - 4. Format: Arrange the following information in a tabular format:
 - a. Scheduled date for first submittal.
 - b. Specification Section number and title.
 - c. Submittal category: Action; informational.

- d. Name of subcontractor.
- e. Description of the Work covered.
- f. Scheduled date for Architect's final release or approval.
- g. Scheduled dates for installation.

1.05 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

- A. Architect's Digital Data Files: Electronic copies in PDF format of the Contract Drawings will be provided one time by Architect for Contractor's use in preparing submittals.
 - 1. Architect will furnish Contractor floor plans & reflected ceiling plans digital AutoCAD drawing files, indicated below, for use in preparing Shop Drawings and Project record drawings within 21 days of receiving request for files.
 - Architect makes no representations as to the accuracy or completeness of digital data drawing files as they relate to the Contract Drawings.
 - b. Digital Drawing Software Program: The Contract Drawings are available in AutoCAD 2010 or higher.
 - c. Contractor shall execute a data licensing agreement in the form of the Architect's CAD Release Letter included at the end of this Section.
 - d. The following AutoCAD files only will by furnished for each appropriate discipline:
 - 1) Overall floor plans.
 - 2) Overall reflected ceiling plans.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
 - 3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
 - Coordinate transmittal of different types of submittals for related parts of the Work so
 processing will not be delayed because of need to review submittals concurrently for
 coordination.
 - a. Architect reserve the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
 - 1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
 - 2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
 - 3. Resubmittal Review: Allow 15 days for review of each resubmittal.
 - 4. Sequential Review: Where sequential review of submittals by Architect's consultants, Owner, or other parties is indicated, allow 21 days for initial review of each submittal.
 - Concurrent Consultant Review: Where the Contract Documents indicate that submittals
 may be transmitted simultaneously to Architect and to Architect's consultants, allow 15
 days for review of each submittal. Submittal will be returned Architect before being
 returned to Contractor.
- D. Electronic Submittals: Identify and incorporate information in each electronic submittal file as follows:
 - Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
 - Name file with submittal number or other unique identifier, including revision identifier.

- a. File name shall use project identifier and Specification Section number followed by a
 decimal point and then a sequential number (e.g., LCB-RoofF-061000.01).
 Resubmittals shall include an alphabetic suffix after another decimal point (e.g.,
 LCB-RoofF-06100.01.A).
- 3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Architect.
- 4. Transmittal Form for Electronic Submittals: Use electronic form acceptable to Owner, containing the following information:
 - a. Project name.
 - b. Date.
 - c. Name and address of Architect.
 - d. Name of Architect.
 - e. Name of Contractor.
 - f. Name of firm or entity that prepared submittal.
 - g. Names of subcontractor, manufacturer, and supplier.
 - h. Category and type of submittal.
 - i. Submittal purpose and description.
 - j. Specification Section number and title.
 - k. Specification paragraph number or drawing designation and generic name for each of multiple items.
 - I. Drawing number and detail references, as appropriate.
 - m. Location(s) where product is to be installed, as appropriate.
 - n. Related physical samples submitted directly.
 - o. Indication of full or partial submittal.
 - p. Transmittal number, numbered consecutively.
 - q. Submittal and transmittal distribution record.
 - r. Other necessary identification.
 - s. Remarks.
- Metadata: Include the following information as keywords in the electronic submittal file metadata:
 - a. Project name.
 - b. Number and title of appropriate Specification Section.
 - c. Manufacturer name.
 - d. Product name.
- E. Options: Identify options requiring selection by Architect.
- F. Deviations and Additional Information: On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Architect on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same identification information as related submittal.
- G. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
 - 1. Note date and content of previous submittal.
 - Note date and content of revision in label or title block and clearly indicate extent of revision.
 - 3. Resubmit submittals until they are marked with approval notation from Architect's action stamp.
- H. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- I. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Architect's action stamp.

PART 2 PRODUCTS

2.01 SUBMITTAL PROCEDURES

- General Submittal Procedure Requirements: Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.
 - Post electronic submittals as PDF electronic files directly to the Project on www.centerline.co.
 - a. Architect will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.
 - 2. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Section 01 7700 "Closeout Procedures."
 - 3. Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
 - a. Provide a digital signature with digital certificate on electronically-submitted certificates and certifications where indicated.
 - b. Provide a notarized statement on original paper copy certificates and certifications where indicated.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
 - 1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.
 - 2. Mark each copy of each submittal to show which products and options are applicable.
 - 3. Include the following information, as applicable:
 - a. Manufacturer's catalog cuts.
 - b. Manufacturer's product specifications.
 - c. Full range of color charts.
 - d. Statement of compliance with specified referenced standards.
 - e. Testing by recognized testing agency.
 - f. Application of testing agency labels and seals.
 - g. Notation of coordination requirements.
 - h. Availability and delivery time information.
 - For equipment, include the following in addition to the above, as applicable:
 - a. Wiring diagrams showing factory-installed wiring.
 - b. Printed performance curves.
 - Operational range diagrams.
 - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
 - 5. Submit Product Data before or concurrent with Samples.
 - 6. Submit Product Data in the following format:
 - a. PDF electronic file.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data, unless submittal based on Architect's digital data drawing files is otherwise permitted.
 - 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Identification of products.
 - b. Schedules.
 - c. Compliance with specified standards.
 - d. Notation of coordination requirements.
 - e. Notation of dimensions established by field measurement.
 - f. Relationship and attachment to adjoining construction clearly indicated.
 - g. Seal and signature of professional engineer if specified.

- 2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches, but no larger than 30 by 42 inches.
- 3. Submit Shop Drawings in the following format:
 - a. PDF electronic file.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
 - 1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
 - 2. Identification: Attach label on unexposed side of Samples that includes the following:
 - a. Generic description of Sample.
 - b. Product name and name of manufacturer.
 - c. Sample source.
 - d. Number and title of applicable Specification Section.
 - e. Specification paragraph number and generic name of each item.
 - 3. For projects where electronic submittals are required, provide corresponding electronic submittal of Sample transmittal, digital image file illustrating Sample characteristics, and identification information for record.
 - 4. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
 - Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
 - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
 - 5. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
 - a. Number of Samples: Submit one full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return submittal with options selected.
 - 6. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
 - a. Number of Samples: Submit sets of Samples. Architect will retain two Sample sets; remainder will be returned.
 - Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
 - 2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.
- E. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
 - 1. Type of product. Include unique identifier for each product indicated in the Contract Documents or assigned by Contractor if none is indicated.
 - 2. Manufacturer and product name, and model number if applicable.
 - 3. Number and name of room or space.
 - 4. Location within room or space.

- 5. Submit product schedule in the following format:
 - a. PDF electronic file.
- F. Contractor's Construction Schedule: Comply with requirements specified in Section 01 3200 "Construction Progress Documentation."
- G. Application for Payment and Schedule of Values: Comply with requirements specified in Section 01 2900 "Payment Procedures."
- H. Test and Inspection Reports and Schedule of Tests and Inspections Submittals: Comply with requirements specified in Section 01 4000 "Quality Requirements."
- Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Section 01 7700 "Closeout Procedures."
- J. Maintenance Data: Comply with requirements specified in Section 01 7823 "Operation and Maintenance Data."
- K. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.
- L. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on AWS forms. Include names of firms and personnel certified.
- M. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- N. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- O. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- P. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- Q. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- R. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- S. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
 - 1. Name of evaluation organization.
 - Date of evaluation.
 - 3. Time period when report is in effect.
 - 4. Product and manufacturers' names.
 - 5. Description of product.
 - 6. Test procedures and results.
 - 7. Limitations of use.
- T. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.

- U. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
- V. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
- W. Design Data: Prepare and submit written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

2.02 DELEGATED-DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
 - 1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect.
- B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally signed PDF electronic file signed and sealed by a licensed, (in the state of the project location), responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
 - 1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

PART 3 EXECUTION

3.01 CONTRACTOR'S REVIEW

- A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
- B. Project Closeout and Maintenance Material Submittals: See requirements in Section 017700 "Closeout Procedures."
- C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement 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. Submittals shall be marked up using Bluebeam software: Contractor shall use BLUE color mark ups with Arial 10 point text, Architect shall use RED, Civil TEAL, Structural GREEN, Mechanical & Plumbing PLUM, Electrical ORANGE, Security BURNT ORANGE, Landscape MAGENTA, Audio-Video Consultant FOREST GREEN and Special Systems LIGHT PURPLE.

3.02 ARCHITECT'S ACTION

- A. General: Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- B. Action Submittals: Architect will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action, as follows:
 - 1. Final Unrestricted Release: When the Architect marks a submittal "Approved," or "No Exceptions Taken", the Work covered by the submittal may proceed provided it complies with requirements of the Contract Documents. Final payment depends on that compliance.

- 2. Final-But-Restricted Release: When the Architect marks a submittal "Approved as Noted," the Work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the Contract Documents. Final payment depends on that compliance.
- 3. Returned for Resubmittal: When the Architect marks a submittal "Revise and Resubmit," do not proceed with Work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal according to the notations; resubmit without delay. Repeat if necessary to obtain different action mark.
 - a. Do not use, or allow others to use, submittals marked "Revise and Resubmit" or "Rejected" at the Project Site or elsewhere where Work is in progress.
- 4. Other Action: Where a submittal is for information or record purposes or special processing or other activity, the Architect will return the submittal marked "Action Not Required."
- C. Informational Submittals: Architect will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.
- D. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Architect.
- E. Incomplete submittals are not acceptable, will be considered nonresponsive, and will be returned without review.
- F. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

3.03 ELECTRONIC FILE AGREEMENT LETTER:

A. Submit the text below in letter format, on contractor letterhead, signed by a authorized signatory of the contractor, to the project Architect to request electronic file documents.

Date

Grace Hebert Curtis Architects, LLC

501 Government St., Suite 200

Baton Rouge, LA 70802

Re: CPSB Lake Charles Boston School - Field House (Bldg F) Repairs

Dear Project Architect,

We are requesting that Grace Hebert Curtis Architects, LLC, (herein after "GHC"), provide electronic files, (floor plans, reflected ceiling plans, and roof plans only), for our convenience and use for the above referenced project, subject to the following terms and conditions:

GHC's electronic files are compatible with AUTOCAD 2014 GHC makes no representation as to the compatibility of these files with specific hardware or software beyond the specified release of the referenced specifications.

Data contained on these electronic files is part of GHC's instruments of service and shall not be used by us or anyone else receiving this data through or from us for any purpose. Use by us or by others will be at your sole risk and without liability or legal exposure to GHC. We agree to make no claim and hereby waive, to the fullest extent permitted by law, any claim or cause of action of any nature against GHC, its officers, directors, employees, agents or subconsultants which may arise out of or in connection with your use of the electronic files.

Furthermore, we shall, to the fullest extent permitted by law, indemnify and hold harmless GHC from all claims, damages, losses and expenses, including attorney's fees arising out of or resulting from your use of these electronic files.

These electronic files are not contract documents. Significant difference may exist between these electronic files and corresponding hard copy contract documents due to addendum, change orders or other revisions. GHC makes no representation regarding the accuracy or completeness of the electronic files you receive. In the event that a conflict

arises between the signed documents prepared by GHC and electronic files, the signed contract document shall govern. We shall be responsible for determining if any conflict exists. By your use of these electronic files, we are not relieved of our duty to fully comply with the contract documents, including and without limitation, the need to check, confirm and coordinate all dimensions and details, take field measurements, verify field conditions and coordinate your work with that of other contractors for the project.

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

Under no circumstances shall delivery of the electronic files for use by us be deemed a sale by GHC, and GHC makes no warranties, either expressed or implied, of merchantability and fitness for any particular purpose. In no event shall GHC be liable for any loss of profit or any consequential damages. These documents may not be distributed to any other party without the express written consent of GHC.

This request is allowed for floor plans, reflected ceiling plans, and roof plans only.

By signing this document, I agree to the terms above.	
Signature	Date
END OF SECTION	

SECTION 01 3100 - PROJECT MANAGEMENT AND COORDINATION

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. General coordination procedures.
 - 2. Requests for Information (RFIs).
 - 3. Project meetings.
- B. Contractor shall prepare and submit any and all items electronically via www.centerline.co. Email shall not be considered the means of notification of any item to the Architect, all contract communication shall be thru Centerline.
- C. Each contractor shall participate in coordination requirements. Certain areas of responsibility are assigned to a specific contractor.
- D. Related Requirements:
 - Section 01 3200 "Construction Progress Documentation" for preparing and submitting Contractor's construction schedule.
 - 2. Section 01 7300 "Execution" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.
 - Section 01 7700 "Closeout Procedures" for coordinating closeout of the Contract.

1.03 DEFINITIONS

A. RFI: Request from Owner, Architect, or Contractor seeking information required by or clarifications of the Contract Documents.

1.04 INFORMATIONAL SUBMITTALS

- A. Subcontract List: Prior to or at the Pre-Construction Conference provide a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
 - 1. Name, address, and telephone number of entity performing subcontract or supplying products.
 - 2. Number and title of related Specification Section(s) covered by subcontract.
 - 3. Drawing number and detail references, as appropriate, covered by subcontract.
- B. Key Personnel Names: Prior to or at the Pre-Construction conference, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home, office, and cellular telephone numbers and e-mail addresses. Provide names, addresses, and telephone numbers of individuals assigned as alternates in the absence of individuals assigned to Project.
 - 1. Post copies of list in project meeting room, in temporary field office, and by each temporary telephone. Keep list current at all times.

1.05 GENERAL COORDINATION PROCEDURES

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections, that depend on each other for proper installation, connection, and operation.
 - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.

- 2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
- 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
 - Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 - 1. Preparation of Contractor's construction schedule.
 - 2. Preparation of the schedule of values.
 - 3. Installation and removal of temporary facilities and controls.
 - 4. Delivery and processing of submittals.
 - 5. Progress meetings.
 - 6. Preinstallation conferences.
 - 7. Project closeout activities.
 - 8. Startup and adjustment of systems.
- D. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials. Coordinate use of temporary utilities to minimize waste.
 - 1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work. See other Sections for disposition of salvaged materials that are designated as Owner's property.

1.06 KEY PERSONNEL

- A. Key Personnel Names: Within 15 days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home, office, and cellular telephone numbers and email addresses. Provide names, addresses, and telephone numbers of individuals assigned as standbys in the absence of individuals assigned to Project.
 - 1. Post copies of list in project meeting room, in temporary field office, and by each temporary telephone. Keep list current at all times.

1.07 REQUESTS FOR INFORMATION (RFIS)

- A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI electronically via www.centerline.co.
 - 1. Architect will return RFIs submitted to Architect by other entities controlled by Contractor with no response.
 - Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:
 - 1. Project name.
 - 2. Project number.
 - 3. Date.
 - 4. Name of Contractor.
 - 5. Name of Architect.
 - 6. RFI number, numbered sequentially.
 - 7. RFI subject
 - 8. Specification Section number and title and related paragraphs, as appropriate.

- 9. Drawing number and detail references, as appropriate.
- 10. Field dimensions and conditions, as appropriate.
- 11. Contractor's suggested resolution. If Contractor's suggested resolution impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
- 12. Contractor's signature.
- 13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
 - a. Include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments on attached sketches.
- C. Architect's Action: Architect will review each RFI, determine action required, and respond. Allow seven working days for Architect's response for each RFI. RFIs received by after 1:00 p.m. will be considered as received the following working day.
 - 1. The following RFIs will be returned without action:
 - Requests for approval of submittals.
 - b. Requests for approval of substitutions.
 - c. Requests for approval of Contractor's means and methods.
 - d. Requests for coordination information already indicated in the Contract Documents.
 - e. Requests for adjustments in the Contract Time or the Contract Sum.
 - f. Requests for interpretation of Architect's actions on submittals.
 - g. Incomplete RFIs or inaccurately prepared RFIs.
 - 2. Architect's action may include a request for additional information, in which case Architect's time for response will date from time of receipt of additional information.
 - 3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Division 1 Section "Contract Modification Procedures."
 - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within 10 days of receipt of the RFI response.
- D. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly. Software log with not less than the following:
 - 1. Project name.
 - 2. Name and address of Contractor.
 - 3. Name and address of Architect.
 - 4. RFI number including RFIs that were dropped and not submitted.
 - 5. RFI description.
 - 6. Date the RFI was submitted.
 - 7. Date Architect's response was received.
 - 8. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
 - 9. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.
- E. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within seven days if Contractor disagrees with response.
 - 1. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
 - 2. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.

1.08 PROJECT MEETINGS

A. General: The Contractor will schedule and conduct meetings and conferences at Project site, unless otherwise indicated.

- Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.
- 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
- 3. Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Architect, within three days of the meeting.
- B. Preconstruction Conference: Architect will schedule and conduct a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 5 days after execution of the Agreement.
 - 1. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 2. Contractor to provide the following items to Owner at Preconstruction Conference:
 - a. General Contractor Project Team.
 - b. Licenses, Insurance and Bonds
 - c. List of Sub-contractors and major suppliers.
 - d. Cost breakdown (Schedule of Values), shall be in standard Construction Specifications Institute format
 - e. Construction Schedule
 - f. Fixed jobsite overhead cost itemized with documentation to support daily rates.
 - g. Bond Premium Rate with supporting information from the General Contractor's carrier.
 - h. Labor Burden by trade for both Subcontractors and General Contractor.
 - i. Internal Rate Charges for all significant company owned equipment.
 - 3. Agenda: Discuss items of significance that could affect progress, including the following:
 - a. Tentative construction schedule.
 - b. Phasing.
 - c. Critical work sequencing and long-lead items.
 - d. Designation of key personnel and their duties.
 - e. Lines of communications.
 - f. Procedures for processing field decisions and Change Orders.
 - g. Procedures for RFIs.
 - h. Procedures for testing and inspecting.
 - i. Procedures for processing Applications for Payment.
 - j. Distribution of the Contract Documents.
 - k. Submittal procedures.
 - I. Preparation of record documents.
 - m. Use of the premises.
 - n. Work restrictions.
 - o. Working hours.
 - p. Responsibility for temporary facilities and controls.
 - q. Procedures for moisture and mold control.
 - r. Procedures for disruptions and shutdowns.
 - s. Construction waste management and recycling.
 - t. Parking availability.
 - u. Office, work, and storage areas.
 - v. Equipment deliveries and priorities.
 - w. First aid.
 - x. Security.
 - y. Progress cleaning.
 - 4. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.

- C. Project Closeout Conference: Contractor will schedule and conduct a Project closeout conference, at a time convenient to Owner and Architect, but no later than 5 days prior to the scheduled date of Substantial Completion.
 - Conduct the conference to review requirements and responsibilities related to Project closeout.
 - 2. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the meeting. Participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 3. Agenda: Discuss items of significance that could affect or delay Project closeout, including the following:
 - a. Preparation of record documents.
 - b. Procedures required prior to inspection for Substantial Completion and for final inspection for acceptance.
 - c. Submittal of written warranties.
 - d. Requirements for preparing operations and maintenance data.
 - e. Requirements for delivery of material samples, attic stock, and spare parts.
 - f. Requirements for demonstration and training.
 - g. Preparation of Contractor's punch list.
 - h. Procedures for processing Applications for Payment at Substantial Completion and for final payment.
 - i. Submittal procedures.
 - j. Coordination of separate contracts.
 - k. Owner's partial occupancy requirements.
 - I. Installation of Owner's furniture, fixtures, and equipment.
 - m. Responsibility for removing temporary facilities and controls.
 - 4. Minutes: Entity conducting meeting will record and distribute meeting minutes.
- D. Progress Meetings: Contractor will conduct progress meetings once a week.
 - 1. Date of weekly progress meetings will be coordinated and determined at Pre-Construction Conference.
 - 2. Attendees: In addition to representatives of Owner, Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 3. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Contractor's Construction Schedule: Review progress since the last meeting.

 Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so.

 Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 - 1) Review schedule for next period.
 - b. Review present and future needs of each entity present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Status of submittals.
 - 4) Deliveries.
 - 5) Off-site fabrication.
 - 6) Access.
 - 7) Site utilization.
 - 8) Temporary facilities and controls.

- 9) Progress cleaning.
- 10) Quality and work standards.
- 11) Status of correction of deficient items.
- 12) Field observations.
- 13) Status of RFIs.
- 14) Status of proposal requests.
- 15) Pending changes.
- 16) Status of Change Orders.
- 17) Pending claims and disputes.
- 18) Documentation of information for payment requests.
- 4. Minutes: Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.
 - a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

PART 2 PRODUCTS (NOT USED)
PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 3200 - CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
 - 1. Startup construction schedule.
 - 2. Contractor's construction schedule.
 - 3. Construction schedule updating reports.
 - 4. Daily construction reports.
 - 5. Material location reports.
 - 6. Site condition reports.
 - 7. Special reports.
- B. Related Requirements:
 - 1. Division 01 Section "Administrative Procedures" for submitting schedules and reports.
 - 2. Division 01 Section "Quality Requirements" for submitting a schedule of tests and inspections.

1.03 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.
 - 1. Critical Activity: An activity on the critical path that must start and finish on the planned early start and finish times.
 - 2. Predecessor Activity: An activity that precedes another activity in the network.
 - 3. Successor Activity: An activity that follows another activity in the network.
- B. Cost Loading: The allocation of the schedule of values for the completion of an activity as scheduled. The sum of costs for all activities must equal the total Contract Sum unless otherwise approved by Architect.
- C. CPM: Critical path method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of Project.
- D. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- E. Event: The starting or ending point of an activity.
- F. Float: The measure of leeway in starting and completing an activity.
 - Float time is not for the exclusive use or benefit of either Owner or Contractor, but is a
 jointly owned, expiring Project resource available to both parties as needed to meet
 schedule milestones and Contract completion date.
 - 2. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the successor activity.
 - 3. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Project completion date.
- G. Resource Loading: The allocation of manpower and equipment necessary for the completion of an activity as scheduled.

1.04 INFORMATIONAL SUBMITTALS

- A. Format for Submittals: Submit required submittals in the following format:
 - PDF electronic file.

- B. Startup construction schedule.
 - Approval of cost-loaded start-up construction schedule will not constitute approval of schedule of values for cost-loaded activities.
- C. Startup Network Diagram: Of size required to display entire network for entire construction period. Show logic ties for activities.
- D. Contractor's Construction Schedule: Initial schedule, of size required to display entire schedule for entire construction period.
 - Submit a working electronic copy of schedule, using software indicated, and labeled to comply with requirements for submittals. Include type of schedule (initial or updated) and date on label.
- E. CPM Reports: Concurrent with CPM schedule, submit each of the following reports. Format for each activity in reports shall contain activity number, activity description, cost and resource loading, original duration, remaining duration, early start date, early finish date, late start date, late finish date, and total float in calendar days.
 - Activity Report: List of all activities sorted by activity number and then early start date, or actual start date if known.
 - 2. Logic Report: List of preceding and succeeding activities for all activities, sorted in ascending order by activity number and then early start date, or actual start date if known.
 - 3. Total Float Report: List of all activities sorted in ascending order of total float.
 - 4. Earnings Report: Compilation of Contractor's total earnings from commencement of the Work until most recent Application for Payment.
- F. Construction Schedule Updating Reports: Submit with Applications for Payment.
- G. Daily Construction Reports: Submit at weekly intervals.
- H. Material Location Reports: Submit at monthly intervals.
- I. Field Condition Reports: Submit at time of discovery of differing conditions.
- J. Special Reports: Submit at time of unusual event.
- K. Qualification Data: For scheduling consultant.

1.05 QUALITY ASSURANCE

- A. Scheduling Consultant Qualifications: An experienced specialist in CPM scheduling and reporting, with capability of producing CPM reports and diagrams within 24 hours of Architect's request.
- B. Prescheduling Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "Project Management and Coordination." Review methods and procedures related to the preliminary construction schedule and Contractor's construction schedule, including, but not limited to, the following:
 - 1. Review software limitations and content and format for reports.
 - 2. Verify availability of qualified personnel needed to develop and update schedule.
 - 3. Discuss constraints, including work stages and interim milestones.
 - 4. Review submittal requirements and procedures including review time required for review of submittals and resubmittals.
 - 5. Review requirements for tests and inspections by independent testing and inspecting agencies.
 - 6. Review time required for completion and startup procedures, including commissioning activities.
 - 7. Review and finalize list of construction activities to be included in schedule.
 - 8. Review procedures for updating schedule.

1.06 COORDINATION

A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.

- B. Coordinate Contractor's construction schedule with the schedule of values, submittal schedule, progress reports, payment requests, and other required schedules and reports.
 - 1. Secure time commitments for performing critical elements of the Work from entities involved.
 - 2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

PART 2 PRODUCTS

2.01 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

- A. Time Frame: Extend schedule from date established for the Notice to Proceed to date of final completion.
 - 1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- B. Activities: Treat each story or separate area as a separate numbered activity for each principal element of the Work. Comply with the following:
 - 1. Activity Duration: Define activities so no activity is longer than 20 days, unless specifically allowed by Architect.
 - 2. Procurement Activities: Include procurement process activities for the following long lead items and major items, requiring a cycle of more than 30 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
 - 3. Submittal Review Time: Include review and resubmittal times indicated in Division 1 Section "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's construction schedule with submittal schedule.
 - 4. Startup and Testing Time: Include not less than 15 days for startup and testing.
 - 5. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Architect's administrative procedures necessary for certification of Substantial Completion.
 - 6. Punch List and Final Completion: Include not more than 30 days for punch list and final completion.
- C. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule, and show how the sequence of the Work is affected.
 - 1. Products Ordered in Advance: Include a separate activity for each product. Include delivery date indicated in Division 01 Section "Summary." Delivery dates indicated stipulate the earliest possible delivery date.
 - 2. Work Restrictions: Show the effect of the following items on the schedule:
 - a. Uninterruptible services.
 - b. Partial occupancy before Substantial Completion.
 - c. Use of premises restrictions.
 - d. Provisions for future construction.
 - e. Seasonal variations.
 - f. Environmental control.
 - 3. Work Stages: Indicate important stages of construction for each major portion of the Work, including, but not limited to, the following:
 - a. Subcontract awards.
 - b. Submittals.
 - c. Purchases.
 - d. Mockups.
 - e. Fabrication.
 - f. Sample testing.
 - g. Deliveries.
 - h. Installation.
 - i. Tests and inspections.
 - j. Adjusting.

- k. Curing.
- I. Startup and placement into final use and operation.
- D. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and final completion, and the following interim milestones:
 - 1. Temporary enclosure and space conditioning.
- E. Cost Correlation: At the head of schedule, provide a cost correlation line, indicating planned and actual costs. On the line, show dollar volume of the Work performed as of dates used for preparation of payment requests.
 - 1. Refer to Section 012900 "Payment Procedures" for cost reporting and payment procedures.
- F. Upcoming Work Summary: Prepare summary report indicating activities scheduled to occur or commence prior to submittal of next schedule update. Summarize the following issues:
 - 1. Unresolved issues.
 - 2. Unanswered Requests for Information.
 - 3. Rejected or unreturned submittals.
 - 4. Notations on returned submittals.
 - 5. Pending modifications affecting the Work and Contract Time.
- G. Recovery Schedule: When periodic update indicates the Work is 14 or more calendar days behind the current approved schedule, submit a separate recovery schedule indicating means by which Contractor intends to regain compliance with the schedule. Indicate changes to working hours, working days, crew sizes, and equipment required to achieve compliance, and date by which recovery will be accomplished.
- H. Computer Scheduling Software: Prepare schedules using current version of a program that has been developed specifically to manage construction schedules.

2.02 CONTRACTOR'S CONSTRUCTION SCHEDULE (CPM SCHEDULE)

- A. General: Prepare network diagrams using AON (activity-on-node) format.
- B. Start-up Network Diagram: Submit diagram within 5 days of date established for the Notice to Proceed or at Pre-Construction meeting, whichever occurs sooner. Outline significant construction activities for the first 90 days of construction. Include skeleton diagram for the remainder of the Work and a cash requirement prediction based on indicated activities.
- C. CPM Schedule: Prepare Contractor's construction schedule using a cost- and resource-loaded, time-scaled CPM network analysis diagram for the Work. Provide for Architect's review at Pre-Construction meeting.
 - 1. Develop network diagram in sufficient time to submit CPM schedule so it can be accepted for use no later than 60 days after date established for the Notice to Proceed.
 - a. Failure to include any work item required for performance of this Contract shall not excuse Contractor from completing all work within applicable completion dates, regardless of Architect's approval of the schedule.
 - Conduct educational workshops to train and inform key Project personnel, including subcontractors' personnel, in proper methods of providing data and using CPM schedule information.
 - 3. Establish procedures for monitoring and updating CPM schedule and for reporting progress. Coordinate procedures with progress meeting and payment request dates.
 - 4. Use "one workday" as the unit of time for individual activities. Indicate nonworking days and holidays incorporated into the schedule in order to correlate with Contract Time.
- D. CPM Schedule Preparation: Prepare a list of all activities required to complete the Work. Using the start-up network diagram, prepare a skeleton network to identify probable critical paths.
 - 1. Activities: Indicate the estimated time duration, sequence requirements, and relationship of each activity in relation to other activities. Include estimated time frames for the following activities:
 - a. Preparation and processing of submittals.

- b. Mobilization and demobilization.
- c. Purchase of materials.
- d. Delivery.
- e. Fabrication.
- f. Utility interruptions.
- g. Installation.
- h. Work by Owner that may affect or be affected by Contractor's activities.
- i. Testing
- j. Punch list and final completion.
- k. Activities occurring following final completion.
- Critical Path Activities: Identify critical path activities, including those for interim completion dates. Scheduled start and completion dates shall be consistent with Contract milestone dates.
- 3. Processing: Process data to produce output data on a computer-drawn, time-scaled network. Revise data, reorganize activity sequences, and reproduce as often as necessary to produce the CPM schedule within the limitations of the Contract Time.
- 4. Format: Mark the critical path. Locate the critical path near center of network; locate paths with most float near the edges.
 - a. Subnetworks on separate sheets are permissible for activities clearly off the critical path.
- 5. Cost- and Resource-Loading of CPM Schedule: Assign cost to construction activities on the CPM schedule. Do not assign costs to submittal activities. Obtain Architect's approval prior to assigning costs to fabrication and delivery activities. Assign costs under principal subcontracts for testing and commissioning activities, operation and maintenance manuals, punch list activities, Project record documents, and demonstration and training (if applicable), in the amount of 5 percent of the Contract Sum.
 - a. Each activity cost shall reflect an appropriate value subject to approval by Architect.
 - b. Total cost assigned to activities shall equal the total Contract Sum.
- E. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis using a network fragment to demonstrate the effect of the proposed change on the overall project schedule.
- F. Initial Issue of Schedule: Prepare initial network diagram from a sorted activity list indicating straight "early start-total float." Identify critical activities. Prepare tabulated reports showing the following:
 - 1. Contractor or subcontractor and the Work or activity.
 - 2. Description of activity.
 - 3. Principal events of activity.
 - 4. Immediate preceding and succeeding activities.
 - 5. Early and late start dates.
 - 6. Early and late finish dates.
 - 7. Activity duration in workdays.
 - 8. Total float or slack time.
 - 9. Average size of workforce.
 - 10. Dollar value of activity (coordinated with the schedule of values).
- G. Schedule Updating: Concurrent with making revisions to schedule, prepare tabulated reports showing the following:
 - 1. Identification of activities that have changed.
 - 2. Changes in early and late start dates.
 - 3. Changes in early and late finish dates.
 - 4. Changes in activity durations in workdays.
 - 5. Changes in the critical path.
 - 6. Changes in total float or slack time.
 - 7. Changes in the Contract Time.

- H. Value Summaries: Prepare two cumulative value lists, sorted by finish dates.
 - In first list, tabulate activity number, early finish date, dollar value, and cumulative dollar value.
 - 2. In second list, tabulate activity number, late finish date, dollar value, and cumulative dollar value.
 - In subsequent issues of both lists, substitute actual finish dates for activities completed as of list date.
 - 4. Prepare list for ease of comparison with payment requests; coordinate timing with progress meetings.
 - a. In both value summary lists, tabulate "actual percent complete" and "cumulative value completed" with total at bottom.
 - b. Submit value summary printouts one week before each regularly scheduled progress meeting.

2.03 REPORTS

- A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site: Daily reports are to be submitted electronically via www.centerline.co.
 - 1. List of subcontractors at Project site.
 - 2. List of separate contractors at Project site.
 - 3. Approximate count of personnel at Project site.
 - 4. Equipment at Project site.
 - 5. Material deliveries.
 - 6. High and low temperatures and general weather conditions, including presence of rain or snow.
 - Accidents.
 - 8. Meetings and significant decisions.
 - 9. Unusual events (refer to special reports).
 - 10. Stoppages, delays, shortages, and losses.
 - 11. Meter readings and similar recordings.
 - 12. Emergency procedures.
 - 13. Orders and requests of authorities having jurisdiction.
 - 14. Change Orders received and implemented.
 - 15. Construction Change Directives received and implemented.
 - 16. Services connected and disconnected.
 - 17. Equipment or system tests and startups.
 - 18. Partial completions and occupancies.
 - 19. Substantial Completions authorized.
- B. Material Location Reports: At monthly intervals, prepare and submit a comprehensive list of materials delivered to and stored at Project site. List shall be cumulative, showing materials previously reported plus items recently delivered. Include with list a statement of progress on and delivery dates for materials or items of equipment fabricated or stored away from Project site. Indicate the following categories for stored materials:
 - 1. Material stored prior to previous report and remaining in storage.
 - 2. Material stored prior to previous report and since removed from storage and installed.
 - 3. Material stored following previous report and remaining in storage.
- C. Site Condition Reports: Immediately on discovery of a difference between field conditions and the Contract Documents, prepare and submit a detailed report. Submit with a Request for Information. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

2.04 SPECIAL REPORTS

A. General: Submit special reports directly to Owner within one day of an occurrence. Distribute copies of report to parties affected by the occurrence.

B. Reporting Unusual Events: When an event of an unusual and significant nature occurs at Project site, whether or not related directly to the Work, prepare and submit a special report. List chain of events, persons participating, response by Contractor's personnel, evaluation of results or effects, and similar pertinent information. Advise Owner in advance when these events are known or predictable.

PART 3 EXECUTION

3.01 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Scheduling Consultant: Engage a consultant to provide planning, evaluation, and reporting using CPM scheduling.
 - 1. In-House Option: Owner may waive the requirement to retain a consultant if Contractor employs skilled personnel with experience in CPM scheduling and reporting techniques. Submit qualifications.
 - 2. Meetings: Scheduling consultant shall attend all meetings related to Project progress, alleged delays, and time impact.
- B. Contractor's Construction Schedule Updating: At weekly intervals, update schedule to reflect actual construction progress and activities. Issue schedule before each regularly scheduled progress meeting.
 - 1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
 - 2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
 - 3. As the Work progresses, indicate final completion percentage for each activity.
- C. Distribution: Distribute copies of approved schedule to Architect, Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
 - When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities

END OF SECTION

SECTION 01 3233 - PHOTOGRAPHIC DOCUMENTATION

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section includes administrative and procedural requirements for the following:
 - 1. Preconstruction photographs.
 - 2. Periodic construction photographs.
 - 3. Final Completion construction photographs.

B. Related Requirements:

- 1. Section 01 3300 "Administrative Procedures" for submitting photographic documentation.
- Section 01 7700 "Closeout Procedures" for submitting photographic documentation as project record documents at Project closeout.

1.03 INFORMATIONAL SUBMITTALS

- A. Key Plan: Submit key plan of Project site and building with notation of vantage points marked for location and direction of each photograph. Indicate elevation or story of construction. Include same information as corresponding photographic documentation.
- B. Digital Photographs: Submit image files weekly within three days of taking photographs, via www.centerline.co.
 - 1. Digital Camera: Minimum sensor resolution of 10 megapixels.
 - 2. Format: Minimum 3200 by 2400 pixels, in unaltered original files, with same aspect ratio as the sensor, uncropped, date and time stamped, in folder named by date of photograph, accompanied by key plan file.
 - 3. Identification: Provide the following information with each image description in file metadata tag:
 - 4. Name of Project.
 - 5. Name and contact information for photographer.
 - 6. Name of Architect.
 - 7. Name of Contractor.
 - 8. Date photograph was taken.
 - 9. Description of vantage point, indicating location, direction (by compass point), and elevation or story of construction.
 - 10. Unique sequential identifier keyed to accompanying key plan.

PART 2 PRODUCTS

2.01 PHOTOGRAPHIC MEDIA

A. Digital Images: Provide images in JPG format, produced by a digital camera with minimum sensor size of 10 megapixels, and at an image resolution of not less than 3200 by 2400 pixels.

PART 3 EXECUTION

3.01 CONSTRUCTION PHOTOGRAPHS

- A. General: Take photographs using the maximum range of depth of field, and that are in focus, to clearly show the Work. Photographs with blurry or out-of-focus areas will not be accepted.
 - 1. Maintain key plan with each set of construction photographs that identifies each photographic location.
- B. Digital Images: Submit digital images exactly as originally recorded in the digital camera, without alteration, manipulation, editing, or modifications using image-editing software.
 - 1. Date and Time: Include date and time in file name for each image.
 - 2. Field Office Images: Maintain one set of images accessible in the field office at Project site, available at all times for reference. Identify images in the same manner as those submitted to Architect.

- C. Preconstruction Photographs: Before commencement of demolition, take extensive photographs of Project site and surrounding properties, including existing items to remain during construction, from different vantage points, as directed by Architect.
 - 1. Flag construction limits before taking construction photographs.
 - Take photographs to show existing conditions adjacent to property before starting the Work
 - 3. Take additional photographs as required to record settlement or cracking of adjacent structures, pavements, and improvements.
- D. Periodic Construction Photographs: Take photographs weekly, with timing each month adjusted to coincide with the cutoff date associated with each Application for Payment. Select vantage points to show status of construction and progress since last photographs were taken.
- E. Architect--Directed Construction Photographs: From time to time, Architect will instruct photographer about number and frequency of photographs and general directions on vantage points. Select actual vantage points and take photographs to show the status of construction and progress since last photographs were taken.
- F. Final Completion Construction Photographs: Take color photographs after date of Substantial Completion for submission as project record documents. Architect will inform photographer of desired vantage points.
 - Do not include date stamp.
- G. Additional Photographs: Architect may request photographs in addition to periodic photographs specified.
 - 1. Three days' notice will be given, where feasible.
 - 2. In emergency situations, take additional photographs within 24 hours of request.
 - 3. Circumstances that could require additional photographs include, but are not limited to, the following:
 - 4. Special events planned at Project site.
 - 5. Immediate follow-up when on-site events result in construction damage or losses.
 - 6. Photographs to be taken at fabrication locations away from Project site. These photographs are not subject to unit prices or unit-cost allowances.
 - 7. Substantial Completion of a major phase or component of the Work.
 - 8. Extra record photographs at time of final acceptance.
 - 9. Owner's request for special publicity photographs.

END OF SECTION

SECTION 01 4000 - QUALITY REQUIREMENTS

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- Section includes administrative and procedural requirements for quality assurance and quality control.
- B. The Contractor shall engage and pay for the services of an independent testing laboratory to perform inspections and tests of materials and construction as defined in the General Conditions and indicated in these specification, including that in the event of a test failure the Contractor shall also pay for any retesting. The Contractor is to select the testing lab and pay for all concrete design mix testing. Testing lab shall be subject to Architect and/or Owner's approval.
 - 1. Test reports shall be distributed to the Contractor, Architect, Engineer as appropriate for testing scope, and Owner via Centerline.

C. Related Requirements:

1. Divisions 02 through 33 Sections for specific test and inspection requirements.

1.03 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Architect.
- C. Mockups: Full-size physical assemblies that are constructed on-site. Mockups are constructed to verify selections made under Sample submittals; to demonstrate aesthetic effects and, where indicated, qualities of materials and execution; to review coordination, testing, or operation; to show interface between dissimilar materials; and to demonstrate compliance with specified installation tolerances. Mockups are not Samples. Unless otherwise indicated, approved mockups establish the standard by which the Work will be judged.
- D. Preconstruction Testing: Tests and inspections performed specifically for Project before products and materials are incorporated into the Work, to verify performance or compliance with specified criteria.
- E. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with specified requirements.
- F. Source Quality-Control Testing: Tests and inspections that are performed at the source, e.g., plant, mill, factory, or shop.
- G. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- H. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- I. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
 - 1. Use of trade-specific terminology in referring to a trade or entity does not require that certain construction activities be performed by accredited or unionized individuals, or that requirements specified apply exclusively to specific trade(s).

J. Experienced: When used with an entity or individual, "experienced" means having successfully completed a minimum of five previous projects similar in nature, size, and extent to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

1.04 CONFLICTING REQUIREMENTS

- A. Referenced Standards: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer conflicting requirements that are different, but apparently equal, to Architect for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

1.05 INFORMATIONAL SUBMITTALS

- A. Contractor's Quality-Control Plan: For quality-assurance and quality-control activities and responsibilities.
- B. Qualification Data: For Contractor's quality-control personnel.
- C. Contractor's Statement of Responsibility: When required by authorities having jurisdiction, submit copy of written statement of responsibility sent to authorities having jurisdiction before starting work on the following systems:
 - 1. Seismic-force-resisting system, designated seismic system, or component listed in the designated seismic system quality-assurance plan prepared by Architect.
 - 2. Main wind-force-resisting system or a wind-resisting component listed in the wind-force-resisting system quality-assurance plan prepared by Architect.
- D. Testing Agency Qualifications: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- E. Schedule of Tests and Inspections: Prepare in tabular form and include the following:
 - 1. Specification Section number and title.
 - 2. Entity responsible for performing tests and inspections.
 - 3. Description of test and inspection.
 - 4. Identification of applicable standards.
 - 5. Identification of test and inspection methods.
 - 6. Number of tests and inspections required.
 - 7. Time schedule or time span for tests and inspections.
 - 8. Requirements for obtaining samples.
 - 9. Unique characteristics of each quality-control service.

1.06 CONTRACTOR'S QUALITY-CONTROL PLAN

- A. Quality-Control Plan, General: Submit quality-control plan within 10 days of Notice to Proceed, and not less than five days prior to preconstruction conference. Submit in format acceptable to Architect. Identify personnel, procedures, controls, instructions, tests, records, and forms to be used to carry out Contractor's quality-assurance and quality-control responsibilities. Coordinate with Contractor's construction schedule.
- B. Quality-Control Personnel Qualifications: Engage qualified full-time personnel trained and experienced in managing and executing quality-assurance and quality-control procedures similar in nature and extent to those required for Project.
 - 1. Project quality-control manager may also serve as Project superintendent.

- C. Submittal Procedure: Describe procedures for ensuring compliance with requirements through review and management of submittal process. Indicate qualifications of personnel responsible for submittal review.
- D. Testing and Inspection: In quality-control plan, include a comprehensive schedule of Work requiring testing or inspection, including the following:
 - Contractor-performed tests and inspections including subcontractor-performed tests and inspections. Include required tests and inspections and Contractor-elected tests and inspections.
 - 2. Special inspections required by authorities having jurisdiction and indicated on the "Statement of Special Inspections."
 - 3. Owner-performed tests and inspections indicated in the Contract Documents, including tests and inspections indicated to be performed by the Commissioning Authority.
- E. Continuous Inspection of Workmanship: Describe process for continuous inspection during construction to identify and correct deficiencies in workmanship in addition to testing and inspection specified. Indicate types of corrective actions to be required to bring work into compliance with standards of workmanship established by Contract requirements and approved mockups.
- F. Monitoring and Documentation: Maintain testing and inspection reports including log of approved and rejected results. Include work Architect has indicated as nonconforming or defective. Indicate corrective actions taken to bring nonconforming work into compliance with requirements. Comply with requirements of authorities having jurisdiction.

1.07 REPORTS AND DOCUMENTS

- A. Test and Inspection Reports: Prepare and submit certified written reports specified in other Sections. Include the following:
 - Date of issue.
 - 2. Project title and number.
 - 3. Name, address, and telephone number of testing agency.
 - 4. Dates and locations of samples and tests or inspections.
 - 5. Names of individuals making tests and inspections.
 - 6. Description of the Work and test and inspection method.
 - 7. Identification of product and Specification Section.
 - 8. Complete test or inspection data.
 - 9. Test and inspection results and an interpretation of test results.
 - 10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
 - 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
 - 12. Name and signature of laboratory inspector.
 - 13. Recommendations on retesting and re-inspecting.
- B. Manufacturer's Technical Representative's Field Reports: Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections. Include the following:
 - 1. Name, address, and telephone number of technical representative making report.
 - 2. Statement on condition of substrates and their acceptability for installation of product.
 - 3. Statement that products at Project site comply with requirements.
 - 4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 - 5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 - 6. Statement whether conditions, products, and installation will affect warranty.
 - 7. Other required items indicated in individual Specification Sections.

- C. Factory-Authorized Service Representative's Reports: Prepare written information documenting manufacturer's factory-authorized service representative's tests and inspections specified in other Sections. Include the following:
 - 1. Name, address, and telephone number of factory-authorized service representative making report.
 - 2. Statement that equipment complies with requirements.
 - 3. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 - 4. Statement whether conditions, products, and installation will affect warranty.
 - 5. Other required items indicated in individual Specification Sections.
- D. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.08 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- C. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar in material, design, and extent to those indicated for this Project.
- F. Specialists: Certain Specification Sections require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
 - Requirements of authorities having jurisdiction shall supersede requirements for specialists.
- G. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 329; and with additional qualifications specified in individual Sections; and, where required by authorities having jurisdiction, that is acceptable to authorities.
 - 1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
 - 2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
- H. Manufacturer's Technical Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

- J. Preconstruction Testing: Where testing agency is indicated to perform preconstruction testing for compliance with specified requirements for performance and test methods, comply with the following:
 - 1. Contractor responsibilities include the following:
 - a. Provide test specimens representative of proposed products and construction.
 - b. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
 - c. Provide sizes and configurations of test assemblies, mockups, and laboratory mockups to adequately demonstrate capability of products to comply with performance requirements.
 - d. Build site-assembled test assemblies and mockups using installers who will perform same tasks for Project.
 - e. Build laboratory mockups at testing facility using personnel, products, and methods of construction indicated for the completed Work.
 - f. When testing is complete, remove test specimens, assemblies and mockups; do not reuse products on Project.
 - 2. Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality-assurance service to Architect and Commissioning Authority with copy to Contractor. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.

1.09 QUALITY CONTROL

- A. Contractor Responsibilities: Tests and inspections are Contractor's responsibility. Perform additional quality-control activities required to verify that the Work complies with requirements, whether specified or not.
 - 1. Contractor will furnish Architect, Engineers, and Owner with names, addresses and telephone numbers of testing agencies engages and a description of types of testing and inspecting they are engaged to perform.
 - 2. Payment for these services shall be made by the Contractor to the Testing Agency.
 - 3. Costs for retesting and re-inspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents shall be paid by the Contractor.
 - 4. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.
 - 5. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
 - 6. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
 - 7. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
 - 8. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- B. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Section 01 3300 "Submittal Procedures."
- C. Manufacturer's Technical Services: Where indicated, engage a manufacturer's technical representative to observe and inspect the Work. Manufacturer's technical representative's services include participation in pre-installation conferences, examination of substrates and conditions, verification of materials, observation of Installer activities, inspection of completed portions of the Work, and submittal of written reports.
- D. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.

- E. Testing Agency Responsibilities: Cooperate with Architect, and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
 - 1. Notify Architect, and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
 - 2. Determine the location from which test samples will be taken and in which in-situ tests are conducted.
 - 3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
 - 4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
 - 5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
 - 6. Do not perform any duties of Contractor.
- F. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
 - 1. Access to the Work.
 - 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 - 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
 - 4. Facilities for storage and field curing of test samples.
 - 5. Delivery of samples to testing agencies.
 - 6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
 - Security and protection for samples and for testing and inspecting equipment at Project site.
- G. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
 - Schedule times for tests, inspections, obtaining samples, and similar activities.
- H. Schedule of Tests and Inspections: Prepare a schedule of tests, inspections, and similar quality-control services required by the Contract Documents. Coordinate and submit concurrently with Contractor's construction schedule. Update as the Work progresses.
 - 1. Distribution: Distribute schedule to Owner, Architect, Commissioning Authority, testing agencies, and each party involved in performance of portions of the Work where tests and inspections are required.

1.10 SPECIAL TESTS AND INSPECTIONS

- A. Special Tests and Inspections: Contractor shall engage a qualified testing agency to conduct special tests and inspections required by authorities having jurisdiction, and as follows:
- B. Special Tests and Inspections: Conducted by a qualified testing agency as required by authorities having jurisdiction, as indicated in individual Specification Sections, and as follows:
 - 1. Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviews the completeness and adequacy of those procedures to perform the Work.
 - 2. Notifying Architect, and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
 - 3. Submitting a certified written report of each test, inspection, and similar quality-control service to Architect, with copy to Contractor and to authorities having jurisdiction.
 - 4. Submitting a final report of special tests and inspections at Substantial Completion which includes a list of unresolved deficiencies.
 - 5. Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.
 - 6. Retesting and reinspecting corrected work.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 TEST AND INSPECTION LOG

- A. Test and Inspection Log: Prepare a record of tests and inspections. Include the following:
 - 1. Date test or inspection was conducted.
 - 2. Description of the Work tested or inspected.
 - 3. Date test or inspection results were transmitted to Architect.
 - 4. Identification of testing agency or special inspector conducting test or inspection.
- B. Maintain log at Project site. Post changes and revisions as they occur. Provide access to test and inspection log for Architect's, Commissioning Authority's reference during normal working hours.

3.02 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
 - Provide materials and comply with installation requirements specified in other Specification Sections or matching existing substrates and finishes. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible. Comply with the Contract Document requirements for cutting and patching in Section 017300 "Execution."
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION

SECTION 01 5000 - TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.
- B. Related Requirements:
 - 1. Section 011000 "Summary" for work restrictions and limitations on utility interruptions.

1.03 USE CHARGES

A. General: Installation and removal of and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Architect, occupants of Project site, testing agencies, and authorities having jurisdiction.

1.04 INFORMATIONAL SUBMITTALS

- A. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.
- B. Erosion- and Sedimentation-Control Plan: Show compliance with requirements of EPA Construction General Permit or authorities having jurisdiction, whichever is more stringent. Submit for local permits as required by the authority having jurisdiction.
- C. Fire-Safety Program: Show compliance with requirements of NFPA 241 and authorities having jurisdiction. Indicate Contractor personnel responsible for management of fire-prevention program.
- D. Moisture-Protection Plan: Describe procedures and controls for protecting materials and construction from water absorption and damage.
 - 1. Describe delivery, handling, and storage provisions for materials subject to water absorption or water damage.
 - 2. Indicate procedures for discarding water-damaged materials, protocols for mitigating water intrusion into completed Work, and replacing water-damaged Work.

1.05 QUALITY ASSURANCE

- A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.
- C. Accessible Temporary Egress: Comply with applicable provisions in ICC/ANSI A117.1. Provide temporary egress at locations as indicated on Drawings.

1.06 PROJECT CONDITIONS

A. Temporary Use of Permanent Facilities: Engage Installer of each permanent service to assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

PART 2 PRODUCTS

2.01 MATERIALS

A. Chain-Link Construction Fencing: Minimum 2-inch, 0.148-inch- thick, galvanized steel, chain-link fabric fencing; minimum 6 feet high with galvanized steel pipe posts; minimum 2-3/8-inch- OD line posts and 2-7/8-inch- OD corner and pull posts, with 1-5/8-inch- OD top rails.

- 1. Fencing shall be installed to completely isolate the Work Area (s) fro existing adjacent school facilities where students may be present.
- 2. Gates shall be avoided if possible. Where necessary, they shall be capable of being padlocked from the school side.
- 3. Orange plastic fencing will not be acceptable.

2.02 TEMPORARY FACILITIES

- A. Contractor shall provide drinking water and portable toilet.
- B. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations.
 - 1. Store combustible materials apart from building.

2.03 EQUIPMENT

A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

PART 3 EXECUTION

3.01 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
 - 1. Locate facilities to limit site disturbance as specified in Division 01 Section "Summary."
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.02 TEMPORARY UTILITY INSTALLATION

- A. General: Install temporary service or connect to existing service.
 - 1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
- C. Electric Power Service: Provide electric power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations.
 - 1. Install electric power service overhead, unless otherwise indicated.
 - 2. Connect temporary service to Owner's existing power source, as directed by Owner.
- D. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.
 - 1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.
 - 2. Install lighting for Project identification sign.
- E. Provide superintendent with cellular telephone or portable two-way radio for use when away from field office.

3.03 SUPPORT FACILITIES INSTALLATION

- A. General: Comply with the following:
 - Provide construction for temporary offices, shops, and sheds located within construction area or within 30 feet of building lines that is noncombustible according to ASTM E 136. Comply with NFPA 241.
 - Maintain support facilities until Architect schedules Substantial Completion inspection. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.
- B. Traffic Controls: Comply with requirements of authorities having jurisdiction.

- 1. Protect existing site improvements to remain including curbs, pavement, and utilities.
- 2. Maintain access for fire-fighting equipment and access to fire hydrants.
- C. Parking: Provide temporary parking areas for construction personnel within limits of project site. Coordinate locations with Owner's representative to minimize interference of Owner's use of the Project site.
- D. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.
 - 1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties or endanger permanent Work or temporary facilities.
 - 2. Remove snow and ice as required to minimize accumulations
- E. Project Signs: Provide Project signs as indicated. Unauthorized signs are not permitted.
 - Identification Signs: Provide Project identification signs. Location of signs to be coordinated at Pre-Construction Conference.
 - 2. Temporary Signs: Provide other signs as indicated and as required to inform public and individuals seeking entrance to Project.
 - a. Provide temporary, directional signs for construction personnel and visitors.
 - 3. Maintain and touchup signs so they are legible at all times.
- F. Waste Disposal Facilities: Comply with requirements specified in Section 01 7419 "Construction Waste Management and Disposal."
- G. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.
 - 1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.

3.04 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.
 - 1. Comply with work restrictions specified in Section 01 1000 "Summary."
- B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
 - 1. Comply with work restrictions specified in Section 01 1000 "Summary."
- C. Temporary Erosion and Sedimentation Control: Provide measures to prevent soil erosion and discharge of soil-bearing water runoff and airborne dust to undisturbed areas and to adjacent properties and walkways, according to erosion- and sedimentation-control Drawings or if not provided the requirements of 2003 EPA Construction General Permit or authorities having jurisdiction, whichever is more stringent.
 - 1. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross tree- or plant- protection zones.
 - 2. Inspect, repair, and maintain erosion- and sedimentation-control measures during construction until permanent vegetation has been established.
 - 3. Clean, repair, and restore adjoining properties and roads affected by erosion and sedimentation from Project site during the course of Project.
 - 4. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.
- D. Stormwater Control: Comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.
- E. Site Enclosure Fence: Before construction operations begin, furnish and install site enclosure fence in a manner that will prevent people and animals from easily entering site except by entrance gates.
 - 1. Extent of Fence: As required to enclose entire Project site or portion determined sufficient to accommodate construction operations or as indicated on Drawings.

- 2. Maintain security by limiting number of keys and restricting distribution to authorized personnel. Furnish one set of keys to Owner.
- F. Security Enclosure and Lockup: Install temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. Lock entrances at end of each work day.
- G. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- H. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241; manage fire-prevention program.
 - 1. Prohibit smoking in construction areas.
 - 2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
 - 3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.

3.05 MOISTURE AND MOLD CONTROL

- A. Contractor's Moisture-Protection Plan: Avoid trapping water in finished work. Document visible signs of mold that may appear during construction.
- B. Exposed Construction Area: Before installation of weather barriers, when materials are subject to wetting and exposure and to airborne mold spores, protect as follows:
 - 1. Protect porous materials from water damage.
 - 2. Protect stored and installed material from flowing or standing water.
 - 3. Remove standing water from decks.
 - 4. Keep deck openings covered or dammed.

3.06 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal.
 - Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
- C. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.
- D. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
 - 1. Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.
 - 2. Remove temporary roads and paved areas not intended for or acceptable for integration into permanent construction. Where area is intended for landscape development, remove soil and aggregate fill that do not comply with requirements for fill or subsoil. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs, and sidewalks at temporary entrances, as required by authorities having jurisdiction.

3. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period. Comply with final cleaning requirements specified in Section 01 7700 "Closeout Procedures."

END OF SECTION

SECTION 01 6000 - PRODUCT REQUIREMENTS

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.
- B. Related Requirements:
 - 1. Section 01 2500 "Substitution Procedures" for requests for substitutions.

1.03 DEFINITIONS

- A. Products: Items obtained for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.
 - New Products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
 - Comparable Product: Product that is demonstrated and approved through submittal
 process to have the indicated qualities related to type, function, dimension, in-service
 performance, physical properties, appearance, and other characteristics that equal or
 exceed those of specified product.
- B. Basis-of-Design Product Specification: A specification in which a specific manufacturer's product is named and accompanied by the words "basis-of-design product," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of additional manufacturers named in the specification.

1.04 ACTION SUBMITTALS

- A. Comparable product requests or substitutions for the Contractor's convenience will not be considered after award of bid unless otherwise indicated.
- B. Comparable Product Requests: Submit request for consideration of each comparable product. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - Include data to indicate compliance with the requirements specified in "Comparable Products" Article.
 - Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within one week of receipt of a comparable product request. Architect will notify Contractor of approval or rejection of proposed comparable product request within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
 - a. Form of Approval: As specified in Section 01 3000 "Submittal Procedures."
 - b. Use product specified if Architect does not issue a decision on use of a comparable product request within time allocated.
- C. Basis-of-Design Product Specification Submittal: Comply with requirements in Section 01 3000 "Administrative Procedures." Show compliance with requirements.

1.05 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, select product compatible with products previously selected, even if previously selected products were also options.
 - 1. Each contractor is responsible for providing products and construction methods compatible with products and construction methods of other contractors.
 - 2. If a dispute arises between contractors over concurrently selectable but incompatible products, Architect will determine which products shall be used.

1.06 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.
- B. Delivery and Handling:
 - 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
 - Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses
 - 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 - 4. Inspect products on delivery to determine compliance with the Contract Documents and to determine that products are undamaged and properly protected.

C. Storage:

- 1. Store products to allow for inspection and measurement of quantity or counting of units.
- 2. Store materials in a manner that will not endanger Project structure.
- 3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
- 4. Protect foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
- 5. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
- 6. Protect stored products from damage and liquids from freezing.
- 7. Provide a secure location and enclosure at Project site for storage of materials and equipment by Owner's construction forces. Coordinate location with Owner.

1.07 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
 - 1. Manufacturer's Warranty: Written warranty furnished by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
 - 2. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for Owner.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution.
 - Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
 - 2. Specified Form: When specified forms are included with the Specifications, prepare a written document using indicated form properly executed.
 - 3. See Divisions 02 through 33 Sections for specific content requirements and particular requirements for submitting special warranties.

- C. CPSB Warranties and Guarantees: Prepare written documents that contain appropriate termans and identifications, ready for execution for all CPSB required warranties and guarantees.
- D. Submittal Time: Comply with requirements in Section 01 7700 "Closeout Procedures."

PART 2 PRODUCTS

2.01 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.
 - 1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 - 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 - 3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
 - 4. Where products are accompanied by the term "as selected," Architect will make selection.
 - 5. Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.
 - 6. Or Equal: For products specified by name and accompanied by the term "or equal," or "or approved equal," or "or approved," comply with requirements in "Comparable Products" Article to obtain approval for use of an unnamed product.
 - a. Products specified with "or equal" provisions will only be considered after award of bid at the discretion of the Architect. Refer to Section 012500 "Substitution Procedures" for requests for "or equal" products.

B. Product Selection Procedures:

- 1. Product: Where Specifications name a single manufacturer and product, provide the named product that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
- 2. Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
- 3. Products:
 - a. Restricted List: Where Specifications include a list of names of both manufacturers and products, provide one of the products listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered after award of bid unless otherwise indicated.
 - b. Non-restricted List: Where Specifications include a list of names of both available manufacturers and products, provide one of the products listed, or an unnamed product, that complies with requirements. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product.

4. Manufacturers:

- Restricted List: Where Specifications include a list of manufacturers' names, provide
 a product by one of the manufacturers listed that complies with requirements.
 Comparable products or substitutions for Contractor's convenience will not be
 considered unless otherwise indicated.
- Non-restricted List: Where Specifications include a list of available manufacturers, provide a product by one of the manufacturers listed, or a product by an unnamed manufacturer, that complies with requirements. Comply with requirements in "Comparable Products" Article for consideration of an unnamed manufacturer's product.
- c. Comparable products or substitutions for Contractor's convenience will not be considered after award of bid unless otherwise indicated.

- 5. Basis-of-Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product by one of the other named manufacturers.
 - Comparable products or substitutions for Contractor's convenience will not be considered after award of bid.
- C. Visual Selection Specification: Where Specifications include the phrase "as selected by Architect from manufacturer's full range" or similar phrase, select a product that complies with requirements. Architect will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.02 COMPARABLE PRODUCTS

- A. Comparable products or substitutions for Contractor's convenience will not be considered after award of bid unless otherwise indicated.
- B. Conditions for Consideration: Architect will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Architect may return requests without action, except to record noncompliance with these requirements:
 - 1. Evidence that the proposed product does not require revisions to the Contract Documents that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
 - 2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
 - 3. Evidence that proposed product provides specified warranty.
 - 4. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
 - 5. Samples, if requested.

PART 3 EXECUTION (NOT USED)

SECTION 01 7300 - EXECUTION

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:
 - 1. Construction layout.
 - 2. Field engineering and surveying.
 - 3. Installation of the Work.
 - 4. Cutting and patching.
 - 5. Progress cleaning.
 - 6. Protection of installed construction.
 - 7. Correction of the Work.
- B. Related Requirements:
 - 1. Section 01 1000 "Summary" for limits on use of Project site.
 - 2. Section 01 3300 "Administrative Procedures" for submitting surveys.

1.03 DEFINITIONS

- Cutting: Removal of in-place construction necessary to permit installation or performance of other work.
- Patching: Fitting and repair work required to restore construction to original conditions after installation of other work.

1.04 QUALITY ASSURANCE

- Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.
 - Structural Elements: When cutting and patching structural elements, notify Architect of locations and details of cutting and await directions from Architect before proceeding. Shore, brace, and support structural elements during cutting and patching. Do not cut and patch structural elements in a manner that could change their load-carrying capacity or increase deflection
 - 2. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety. Operational elements include the following:
 - a. Primary operational systems and equipment.
 - b. Fire separation assemblies.
 - c. Air or smoke barriers.
 - d. Fire-suppression systems.
 - e. Mechanical systems piping and ducts.
 - f. Control systems.
 - q. Communication systems.
 - h. Fire-detection and -alarm systems.
 - i. Electrical wiring systems.
 - Operating systems of special construction.
 - 3. Other Construction Elements: Do not cut and patch other construction elements or components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety. Other construction elements include but are not limited to the following:
 - a. Water, moisture, or vapor barriers.

- b. Membranes and flashings.
- c. Sprayed fire-resistive material.
- d. Equipment supports.
- e. Piping, ductwork, vessels, and equipment.
- f. Noise- and vibration-control elements and systems.
- 4. Visual Elements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.
- B. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of products and equipment.

PART 2 PRODUCTS

2.01 MATERIALS

- A. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
 - 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to Architect for the visual and functional performance of in-place materials.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Existing Conditions: The existence and location of utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of utilities, mechanical and electrical systems, and other construction affecting the Work.
- B. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
 - 1. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
 - 2. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
 - 3. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
- C. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:
 - 1. Description of the Work.
 - 2. List of detrimental conditions, including substrates.
 - 3. List of unacceptable installation tolerances.
 - 4. Recommended corrections
- D. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.02 PREPARATION

- A. Existing Utility Information: Furnish information to local utility that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.
- B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before

- fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- D. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of Contractor, submit a request for information to Architect according to requirements in Division 01 Section "Project Management and Coordination."

3.03 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
 - 1. Make vertical work plumb and make horizontal work level.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Sequence the Work and allow adequate clearances to accommodate movement of construction items on site and placement in permanent locations.
- F. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
- G. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
- H. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.
 - 1. Allow for building movement, including thermal expansion and contraction.
 - 2. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- I. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- J. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.04 CUTTING AND PATCHING

- A. Cutting and Patching, General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
 - 1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- B. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.
- C. Temporary Support: Provide temporary support of work to be cut.

- D. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- E. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
 - In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 - 2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
 - 3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
 - 4. Proceed with patching after construction operations requiring cutting are complete.
- F. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other work. Patch with durable seams that are as invisible as practicable. Provide materials and comply with installation requirements specified in other Sections, where applicable.
 - 1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate physical integrity of installation.
 - 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will minimize evidence of patching and refinishing.
 - Clean piping, conduit, and similar features before applying paint or other finishing materials.
 - b. Restore damaged pipe covering to its original condition.
 - 3. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition and ensures thermal and moisture integrity of building enclosure.
- G. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

3.05 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.
 - Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 - 2. Do not hold waste materials more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F.
 - 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
 - a. Use containers intended for holding waste materials of type to be stored.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
 - 1. Remove liquid spills promptly.
 - 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.

- F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- G. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways. Comply with waste disposal requirements in Section 017419 "Construction Waste Management and Disposal."
- H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.06 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Comply with manufacturer's written instructions for temperature and relative humidity.

3.07 CORRECTION OF THE WORK

- A. Repair or remove and replace defective construction. Restore damaged substrates and finishes.
 - 1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.
- B. Restore permanent facilities used during construction to their specified condition.
- C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
- D. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.
- E. Remove and replace chipped, scratched, and broken glass or reflective surfaces.

SECTION 01 7419 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. This Section includes administrative and procedural requirements for the following:
 - 1. Recycling nonhazardous construction waste.
 - 2. Disposing of nonhazardous demolition and construction waste.
- B. Related Sections include the following:
 - Division 1 Section "Temporary Facilities and Controls" for environmental-protection measures during construction, and location of waste containers at Project site.

1.03 DEFINITIONS

- A. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
- B. Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.
- C. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
- D. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.
- E. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.
- F. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.

1.04 PERFORMANCE REQUIREMENTS

- A. General: Achieve end-of-Project rates for salvage/recycling of 50 percent by weight of total non-hazardous solid waste generated by the Work. Practice efficient waste management in the use of materials in the course of the Work. Use all reasonable means to divert construction and demolition waste from landfills and incinerators. Facilitate recycling and salvage of materials, including the following:
 - 1. Construction Waste:
 - a. Metals.
 - b. Insulation.
 - c. Electrical conduit.
 - d. Packaging: Regardless of salvage/recycle goal indicated in "General" Paragraph above, salvage or recycle 100 percent of the following uncontaminated packaging materials:
 - 1) Paper.
 - 2) Cardboard.
 - Boxes.
 - 4) Plastic sheet and film.
 - 5) Polystyrene packaging.
 - 6) Wood crates.
 - 7) Plastic pails.

1.05 ACTION SUBMITTALS

A. Waste Management Plan: Submit plan within 7 days of date established for the Notice to Proceed describing waste management efforts in accordance with the specified requirements.

1.06 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Waste Management Conference: Conduct conference at Project site to comply with requirements in Section 01 3100 "Project Management and Coordination." Review methods and procedures related to waste management including, but not limited to, the following:
 - 1. Review and discuss waste management plan including responsibilities of waste management coordinator.
 - 2. Review and finalize procedures for materials separation and verify availability of containers and bins needed to avoid delays.
 - 3. Review procedures for periodic waste collection and transportation to recycling and disposal facilities.
 - 4. Review waste management requirements for each trade.

1.07 WASTE MANAGEMENT PLAN

A. Waste Reduction Work Plan: List each type of waste and whether it will be salvaged, recycled, or disposed of in landfill or incinerator.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 RECYCLING DEMOLITION AND CONSTRUCTION WASTE, GENERAL

- A. General: Recycle paper and beverage containers used by on-site workers.
- B. Recycling Incentives: Revenues, savings, rebates, tax credits, and other incentives received for recycling waste materials shall accrue to Contractor.
- C. Preparation of Waste: Prepare and maintain recyclable waste materials according to recycling or reuse facility requirements. Maintain materials free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to the recycling process.
- D. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical according to approved construction waste management plan.
 - Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 2. Stockpile materials away from construction area. Do not store within drip line of remaining trees
 - 3. Store components off the ground and protect from the weather.
 - 4. Remove recyclable waste from Owner's property and transport to recycling receiver or processor.

3.02 RECYCLING DEMOLITION WASTE

- A. Metals: Separate metals by type.
 - 1. Remove and dispose of bolts, nuts, washers, and other rough hardware.
- B. Piping: Reduce piping to straight lengths and store by type and size. Separate supports, hangers, valves, sprinklers, and other components by type and size.
- C. Conduit: Reduce conduit to straight lengths and store by type and size.

3.03 RECYCLING CONSTRUCTION WASTE

- A. Packaging:
 - Cardboard and Boxes: Break down packaging into flat sheets. Bundle and store in a dry location.
 - 2. Polystyrene Packaging: Separate and bag materials.
 - 3. Pallets: As much as possible, require deliveries using pallets to remove pallets from Project site. For pallets that remain on-site, break down pallets into component wood pieces and comply with requirements for recycling wood.

4. Crates: Break down crates into component wood pieces and comply with requirements for recycling wood.

3.04 DISPOSAL OF WASTE

- A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
 - 1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Do not burn waste materials.
- C. Disposal: Remove waste materials from Owner's property and legally dispose of them.

SECTION 01 7700 - CLOSEOUT PROCEDURES

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Substantial Completion procedures.
 - 2. Final completion procedures.
 - 3. Warranties.
 - 4. Final cleaning.
 - 5. Repair of the Work.
 - 6. Correction period inspection.

B. Related Requirements:

- 1. Section 01 3233 "Photographic Documentation" for submitting final completion construction photographic documentation.
- 2. Section 01 7300 "Execution" for progress cleaning of Project site.
- 3. Section 01 7800 "Closeout Submittals" for submitting record Drawings, record Specifications, record Product Data and operation and maintenance manual requirements.
- 4. Divisions 02 through 33 Sections for specific closeout and special cleaning requirements for the Work in those Sections.

1.03 ACTION SUBMITTALS

- A. Product Data: For cleaning agents.
- B. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.
- C. Certified List of Incomplete Items: Final submittal at Final Completion.

1.04 CLOSEOUT SUBMITTALS

- A. Certificates of Release: From authorities having jurisdiction.
- B. Certificate of Insurance: For continuing coverage.
- C. Field Report: For pest control inspection.

1.05 MAINTENANCE MATERIAL SUBMITTALS

A. Schedule of Maintenance Material Items: For maintenance material submittal items specified in other Sections.

1.06 SUBSTANTIAL COMPLETION PROCEDURES

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.
- B. Submittals Prior to Substantial Completion: Complete the following a minimum of 5 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 2. Submit closeout submittals specified in other Division 01 Sections, including project record documents, operation and maintenance manuals, final completion construction photographic documentation, damage or settlement surveys, and similar final record information

- 3. Submit closeout submittals specified in individual Divisions 02 through 33 Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
- 4. Submit maintenance material submittals specified in individual Divisions 02 through 33 Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Architect. Label with manufacturer's name and model number where applicable.
 - a. Schedule of Maintenance Material Items: Prepare and submit schedule of maintenance material submittal items, including name and quantity of each item and name and number of related Specification Section. Obtain Architect's signature for receipt of submittals.
- 5. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
- C. Procedures Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - 1. Advise Owner of pending insurance changeover requirements.
 - 2. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
 - 3. Complete startup and testing of systems and equipment.
 - 4. Perform preventive maintenance on equipment used prior to Substantial Completion.
 - 5. Advise Owner of changeover in heat and other utilities.
 - 6. Participate with Owner in conducting inspection and walkthrough with local emergency responders.
 - 7. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
 - 8. Complete final cleaning requirements, including touchup painting.
 - 9. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of 5 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.
 - 1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
 - 2. Results of completed inspection will form the basis of requirements for final completion.

1.07 FINAL COMPLETION PROCEDURES

- A. Submittals Prior to Final Completion: Before requesting final inspection for determining final completion, complete the following:
 - 1. Submit a final Application for Payment according to Section 01 2900 "Payment Procedures."
 - Certified List of Incomplete Items: Submit certified copy of Architect's Substantial
 Completion inspection list of items to be completed or corrected (punch list), endorsed and
 dated by Architect. Certified copy of the list shall state that each item has been completed
 or otherwise resolved for acceptance.
 - 3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of 5 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.

1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.08 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction. Punch list is to be generated with Bluebeam Software, using the Markups List to indicate items on record floor plans.
 - 1. Organize list of spaces in sequential order, starting with exterior areas first and proceeding from lowest floor to highest floor.
 - 2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
 - 3. Include the following information at the top of each page:
 - a. Project name.
 - b. Date.
 - c. Name of Architect.
 - d. Name of Contractor.
 - e. Page number.
 - 4. Submit list of incomplete items in the following format:
 - a. PDF electronic file, as generated using Bluebeam Software. Architect will return annotated file.

1.09 SUBMITTAL OF PROJECT WARRANTIES

- A. Time of Submittal: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated, or when delay in submittal of warranties might limit Owner's rights under warranty.
- B. Partial Occupancy: Submit properly executed warranties within 15 days of completion of designated portions of the Work that are completed and occupied or used by Owner during construction period by separate agreement with Contractor.
- Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.
 - 1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
 - 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
 - 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
 - 4. Warranty Electronic File: Scan warranties and bonds and assemble complete warranty and bond submittal package into a single indexed electronic PDF file with links enabling navigation to each item. Provide bookmarked table of contents at beginning of document.
- D. Provide additional copies of each warranty to include in operation and maintenance manuals.

1.10 CORRECTION PERIOD INSPECTION

A. No later than eleven (11) months following the date of substantial completion a Contractor's one-year correction period inspection of the facility shall be conducted by the Contractor for the purpose of reviewing Work believed by the Owner not to be in accordance with the requirements of the Contract Documents. The Contactor, an Owner's representative and the Architect if requested by the Owner shall attend the inspection. The Contractor shall correct to the satisfaction of the Owner all work found to be deficient. Contractor's obligations under this paragraph are in addition to any other obligation, warranty and guaranties furnished in the

Contract Documents by the Contractor, the installer or the manufacturer of products, equipment or systems.

PART 2 PRODUCTS

2.01 MATERIALS

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

PART 3 EXECUTION

3.01 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:
 - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
 - c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
 - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
 - e. Remove snow and ice to provide safe access to building.
 - f. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 - g. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces
 - h. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, attics, and similar spaces.
 - i. Remove labels that are not permanent.
 - j. Leave Project clean and ready for occupancy.
- Construction Waste Disposal: Comply with waste disposal requirements in Section 017419
 "Construction Waste Management and Disposal."

3.02 REPAIR OF THE WORK

- A. Complete repair and restoration operations before requesting inspection for determination of Substantial Completion.
- 3. Repair or remove and replace defective construction. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to specified condition.
 - 1. Remove and replace chipped, scratched, and broken glass, reflective surfaces, and other damaged transparent materials.
 - 2. Touch up and otherwise repair and restore marred or exposed finishes and surfaces. Replace finishes and surfaces that that already show evidence of repair or restoration.

- a. Do not paint over "UL" and other required labels and identification, including mechanical and electrical nameplates. Remove paint applied to required labels and identification.
- 3. Replace parts subject to operating conditions during construction that may impede operation or reduce longevity.
- 4. Replace burned-out bulbs, bulbs noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.

SECTION 01 7800 - 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 01 3000 Administrative Requirements: Submittals procedures, shop drawings, product data, and samples.
- B. Individual Product Sections: Specific requirements for operation and maintenance data.
- C. Individual Product Sections: Warranties required for specific products or Work.

1.03 SUBMITTALS

- A. Project Record Documents: Submit documents to Architect prior to delivery of final Application for Payment.
- B. Operation and Maintenance Data:
 - 1. Submit two copies of preliminary draft or proposed formats and outlines of contents before start of Work. Architect will review draft and return one copy with comments.
 - 2. Submit one copy of completed documents 15 days prior to final inspection. This copy will be reviewed and returned after final inspection, with Architect comments. Revise content of all document sets as required prior to final submission.
 - 3. Submit three 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 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other modifications to the Contract.
 - 5. Reviewed shop drawings, product data, and samples.
 - 6. Manufacturer's instruction for assembly, installation, and adjusting.
- 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. Specifications:
 - Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.

- a. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
- b. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
- c. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
- d. For each principal product, indicate whether record Product Data has been submitted in operation and maintenance manuals instead of submitted as record Product Data.
- e. Note related Change Orders and record Drawings where applicable.
- 2. Format: Submit record Specifications as paper copy.
- F. Record Prints: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued.
 - 1. Preparation: Mark record prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.
 - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
 - b. Accurately record information in an acceptable drawing technique.
 - c. Record data as soon as possible after obtaining it.
 - d. Record and check the markup before enclosing concealed installations.
 - e. Cross-reference record prints to corresponding archive photographic documentation.
 - 2. Content: Types of items requiring marking include, but are not limited to, the following:
 - a. Dimensional changes to Drawings.
 - b. Revisions to details shown on Drawings.
 - c. Locations of concealed internal utilities.
 - d. Changes made by Change Order or Construction Change Directive.
 - e. Changes made following Architect's written orders.
 - f. Details not on the original Contract Drawings.
 - g. Field records for variable and concealed conditions.
 - h. Record information on the Work that is shown only schematically.
 - Mark the Contract Drawings and Shop Drawings completely and accurately. Use
 personnel proficient at recording graphic information in production of marked-up record
 prints.
 - 4. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
 - 5. Mark important additional information that was either shown schematically or omitted from original Drawings.
 - 6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.

3.02 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.

3.03 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. Moisture protection and weather-exposed products: Include product data listing applicable reference standards, chemical composition, and details of installation. Provide recommendations for inspections, maintenance, and repair.
- D. Additional information as specified in individual product specification sections.
- E. 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.
- F. Provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.

3.04 ASSEMBLY OF OPERATION AND MAINTENANCE MANUALS

- A. Assemble operation and maintenance data into durable manuals for Owner's personnel use, with data arranged in the same sequence as, and identified by, the specification sections.
- B. Where systems involve more than one specification section, provide separate tabbed divider for each system.
- C. Prepare instructions and data by personnel experienced in maintenance and operation of described products.
- D. Prepare data in the form of an instructional manual.
- E. Binders: Commercial quality, 8-1/2 by 11 inch (216 by 280 mm) three D side ring binders with durable plastic covers; 2 inch (50 mm) maximum ring size. When multiple binders are used, correlate data into related consistent groupings.
- F. Cover: Identify each binder with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; identify title of Project; identify subject matter of contents.
- G. Project Directory: Title and address of Project; names, addresses, and telephone numbers of Architect, Consultants, Contractor and subcontractors, with names of responsible parties.
- H. Tables of Contents: List every item separated by a divider, using the same identification as on the divider tab; where multiple volumes are required, include all volumes Tables of Contents in each volume, with the current volume clearly identified.
- I. Dividers: Provide tabbed dividers for each separate product and system; identify the contents on the divider tab; immediately following the divider tab include a description of product and major component parts of equipment.
- J. Text: Manufacturer's printed data, or typewritten data on 24 pound paper.
- K. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
- L. Arrange content by systems under section numbers and sequence of Table of Contents of this Project Manual.
- M. Contents: Prepare a Table of Contents for each volume, with each product or system description identified, in three parts as follows:
 - 1. Part 1: Directory, listing names, addresses, and telephone numbers of Architect, Contractor, Subcontractors, and major equipment suppliers.
 - 2. Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:
 - a. Significant design criteria.
 - b. List of equipment.

- c. Parts list for each component.
- d. Maintenance instructions for special finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents.
- 3. Part 3: Project documents and certificates, including the following:
 - a. Shop drawings and product data.
- N. Provide a listing in Table of Contents for design data, with tabbed dividers and space for insertion of data.
- O. Table of Contents: Provide title of Project; names, addresses, and telephone numbers of Architect, Consultants, and Contractor with name of responsible parties; schedule of products and systems, indexed to content of the volume.

3.05 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.
- E. Include originals of each in operation and maintenance manuals, indexed separately on Table of Contents.

3.06 FINAL CLEANING

- A. General: General cleaning during construction is required by the General Conditions and included in Section "Temporary Facilities".
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to the condition expected in a normal, commercial building cleaning and maintenance program. Comply with manufacturer's instructions.
 - Clean the site, including landscape development areas, of rubbish, litter and other foreign substances. Sweep paved areas broom clean; remove stains, spills and other foreign deposits. Rake grounds that are neither paved nor planted, to a smooth even-textured surface, or final grade and dress with topsoil, sodding, or seeding if required elsewhere in the Specifications.
- C. Removal of Protection: Remove temporary protection and facilities installed for protection of the Work during construction.
- D. Compliance: Comply with regulations of authorities having jurisdiction and safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on the Owner's property. Do not discharge volatile, harmful or dangerous materials into drainage systems. Remove waste materials from the site and dispose of in a lawful manner.

SECTION 01 8000 - ELECTRONIC REPORTING & COMMUNICATIONS

THE GENERAL CONTRACTOR SHALL BE REQUIRED TO HAVE E-MAIL AND WEB ACCESSIBILITY ON THE CONSTRUCTION SITE AND IN THE CONTRACTORS MAIN OFFICE TO ALLOW FOR ELECTRONIC COMMUNICATIONS. CONSTRUCTION SUPERINTENDENT AND THE PROJECT MANAGER SHALL HAVE INDIVIDUAL E-MAIL ADDRESSES FOR USE DURING THE CONSTRUCTION PHASE. NOTE: EMAIL IS ONLY FOR ACCESS TO CENTERLINE, E MAIL SHALL NOT BE USED IN THE EXECUTION OF THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, ALL COMMUNICATION SHALL BE MAINTAINED AND DOCUMENTED THRU CENTERLINE.

1.01 THE ONLY LOGS TO BE PROVIDED, REVIEWED AND ACCEPTED AT THE CONSTRUCTION MEETINGS ARE THOSE LISTED BELOW OBTAINED FROM CENTERLINE. THE GENERAL CONTRACTOR SHALL PROVIDE THE FOLLOWING ITEMS BOTH ELECTRONICALLY AND/OR HARD COPIES AS OUTLINED BELOW:

1.02 DAILY FIELD REPORTS

A. Daily field reports shall be sent electronically the first working day after the date of the field report. File shall be sent as a PDF and shall be saved in the following method DFR_001_121423_LCB-RoofF.PDF, note the numbers in the middle are the report number and the date of the report.

1.03 WEEKLY FIELD REPORTS - FRIDAY

A. These shall be as Daily Field Reports but shall include a minimum of 10 electronic photographs. These photographs shall be of critical areas and shall be included in the same file as the Field Report.

1.04 REQUEST FOR INFORMATION

A. Request for Information shall be sent electronically to the Architect. All documents shall be sent in PDF format and saved in the following method RFI_001_LCB-RoofF.PDF. Each Request for Information shall be in one file only. Each Request for Information shall be numbered in numerical order.

1.05 APPLICATION FOR PAYMENT

A. Application for Payment shall be sent in an electronic and hard copy to the Architect. All documents shall be sent in PDF format and saved in the following method, AFP121423_LCB-RoofF.PDF. Each Application for Payment shall be in one file only.

1.06 SHOP DRAWINGS

A. Shop Drawings shall be sent electrically to the Architect via www.centerline.co, as per Section 013300. This document is also to be stored electronically at the project site for Architect and Contractor access during construction. All documents shall be sent in PDF format and saved in the following method SD_023000_01_LCB-RoofF.PDF. Each Shop Drawing shall have specification number and the submittal number for that specification section. The file above indicates specification section 02 3000 submittal number one. Upon completion of the project the contractor is to submit four (4) copies on CD of all Shop Drawings during the project closeout phase. These shall be in PDF format.

1.07 OPERATIONS AND MAINTENANCE MANUALS

A. Operations and Maintenance Manuals shall be sent hard copy to the Architect. After review and approval the Contractor shall submit an electronic copy to the Architect within seven (7) days of receipt of approved manuals. All documents shall be sent in PDF format and saved in the following method CM_023000_01_LCB-RoofF.PDF. Each O&M manual shall have specification number and the submittal number for that specification section. The file above indicates specification section 02 3000 submittal number one. Upon completion of the project the contractor is to submit four (4) copies on CD of the entire O&M manual. These shall be in PDF format.

SECTION 02 4100 - DEMOLITION

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Selective demolition of building elements for alteration purposes.

1.02 RELATED REQUIREMENTS

- A. Section 01 1000 Summary: Limitations on Contractor's use of site and premises.
- B. Section 01 5000 Temporary Facilities and Controls: Site fences, security, protective barriers, and waste removal.
- C. Section 01 6000 Product Requirements: Handling and storage of items removed for salvage and relocation.
- D. Section 01 7300 Execution and Closeout Requirement: Project conditions; protection of bench marks; survey control points, and existing construction to remain; reinstallation of removed products; temporary bracing and shoring.
- E. Section 01 7419 Construction Waste Management and Disposal: Limitations on disposal of removed materials; requirements for recycling.

1.03 REFERENCE STANDARDS

- A. 29 CFR 1926 U.S. Occupational Safety and Health Standards; current edition.
- B. NFPA 241 Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2019.

1.04 SUBMITTALS

- A. 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.
 - 2. Identify demolition firm and submit qualifications.
 - 3. Include a summary of safety procedures.

PART 2 PRODUCTS -- NOT USED

PART 3 EXECUTION

3.01 SCOPE

- A. Remove roofing and all associated accessories and trim for the installation of new roof.
- B. Items indicated for salvage, relocation and reinstallation shall be tagged with room/wall/location where they should be reinstalled or relocated. Items shall be stored and protected from damage throughout construction. Should items be damaged, it shall be the Contractor's responsibility to replace items with equal or better products, subject to approval of the Architect and Owner.
- C. Contractor shall visit the site and include removal and reinstallation of items in order to complete the Scope of Work in the Bid, whether specifically indicated in the Drawings or not for removal and reinstallation.
- D. Remove items indicated, for building alteration, including but not limited to following:
 - 1. Roofing System at Locations Indicated.
- E. Owner shall have first right of refusal to any items being removed.

3.02 GENERAL PROCEDURES AND PROJECT CONDITIONS

- A. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
 - 1. Obtain required permits.
 - 2. Use of explosives is not permitted.

- Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.
- 4. Provide, erect, and maintain temporary barriers and security devices.
- Use physical barriers to prevent access to areas that could be hazardous to workers or the public.
- 6. Conduct operations to minimize effects on and interference with adjacent structures and occupants.
- 7. Do not close or obstruct roadways or sidewalks without permit.
- 8. Conduct operations to minimize obstruction of public and private entrances and exits; do not obstruct required exits at any time; protect persons using entrances and exits from removal operations.
- 9. Obtain written permission from owners of adjacent properties when demolition equipment will traverse, infringe upon or limit access to their property.
- B. Do not begin removal until receipt of notification to proceed from Owner.
- C. Do not begin removal until built elements to be salvaged or relocated have been removed.
- D. Do not begin removal until vegetation to be relocated has been removed and specified measures have been taken to protect vegetation to remain.
- E. Protect existing structures and other elements that are not to be removed.
 - 1. Provide bracing and shoring.
 - 2. Prevent movement or settlement of adjacent structures.
 - 3. Stop work immediately if adjacent structures appear to be in danger.
- F. Minimize production of dust due to demolition operations; do not use water if that will result in ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.
- G. If hazardous materials are discovered during removal operations, stop work and notify Architect and Owner; hazardous materials include regulated asbestos containing materials, lead, PCB's, and mercury.

3.03 EXISTING UTILITIES

- A. Coordinate work with utility companies; notify before starting work and comply with their requirements; obtain required permits.
- B. Protect existing utilities to remain from damage.
- C. Do not disrupt public utilities without permit from authority having jurisdiction.
- D. Do not close, shut off, or disrupt existing life safety systems that are in use without at least 7 days prior written notification to Owner.
- E. Do not close, shut off, or disrupt existing utility branches or take-offs that are in use without at least 3 days prior written notification to Owner.
- F. Locate and mark utilities to remain; mark using highly visible tags or flags, with identification of utility type; protect from damage due to subsequent construction, using substantial barricades if necessary.

3.04 SELECTIVE DEMOLITION FOR 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 Architect before disturbing existing installation.
 - 3. Beginning of demolition work constitutes acceptance of existing conditions that would be apparent upon examination prior to starting demolition.
- B. Separate areas in which demolition is being conducted from other areas that are still occupied.
 - 1. Provide sound retardant partitions of construction indicated on drawings 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.
- 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.
- E. 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.
 - 4. Patch as specified for patching new work.

3.05 DEBRIS AND WASTE REMOVAL

- A. Remove debris, junk, and trash from site.
- B. Leave site in clean condition, ready for subsequent work.
- C. Clean up spillage and wind-blown debris from public and private lands.

SECTION 04 2000 - UNIT MASONRY

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Clay facing brick.
- B. Mortar.
- C. Reinforcement and anchorage.

1.02 RELATED REQUIREMENTS

- A. Section 07 6200 Sheet Metal Flashing and Trim: Through-wall masonry flashings.
- B. Section 07 9200 Joint Sealants: Sealing control and expansion joints.

1.03 REFERENCE STANDARDS

- A. ACI 530/530.1/ERTA Building Code Requirements and Specification for Masonry Structures and Related Commentaries; 2013.
- B. ASTM A153/A153M Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2009.
- C. ASTM C90 Standard Specification for Loadbearing Concrete Masonry Units; 2014.
- D. ASTM C144 Standard Specification for Aggregate for Masonry Mortar; 2011.
- E. ASTM C216 Standard Specification for Facing Brick (Solid Masonry Units Made From Clay or Shale); 2014.
- F. ASTM C270 Standard Specification for Mortar for Unit Masonry; 2014a.
- G. ASTM C404 Standard Specification for Aggregates for Masonry Grout; 2011.
- H. ASTM C979/C979M Standard Specification for Pigments for Integrally Colored Concrete; 2010.
- I. TMS 402/602 Building Code Requirements and Specification for Masonry Structures; 2016.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Preinstallation Meeting: Convene a preinstallation meeting one week before starting work of this section; require attendance by all relevant installers.

1.05 SUBMITTALS

- A. Product Data: Provide data for masonry units, fabricated wire reinforcement, and mortar.
- B. Samples:
 - 1. Colored Mortar
 - 2. Pigmented or color mortar sample, mixed with same sand and mortar ingredients to be used on the project.
- C. Manufacturer's Certificates: Certify that masonry units meet or exceed specified requirements.
 - 1. For brick, include size-variation data verifying that actual range of sizes falls within specified tolerances.
 - 2. For exposed brick, include test report for efflorescence according to ASTM C 67.
 - 3. Cementitious materials. Include name of manufacturer, brand name, and type.
 - 4. Mortar admixtures.
 - 5. Preblended, dry mortar mixes. Include description of type and proportions of ingredients.
 - 6. Grout mixes. Include description of type and proportions of ingredients.
 - 7. Joint reinforcement.
 - 8. Anchors, ties, and metal accessories.
- D. MIX DESIGNS: For each type of mortar and grout. Include description of type and proportions of ingredients.
 - Include test reports for mortar mixes required to comply with property specification. Test according to ASTM C 109/C 109M for compressive strength, ASTM C 1506 for water retention, and ASTM C 91/C 91M for air content.

- Include test reports, according to ASTM C 1019, for grout mixes required to comply with compressive strength requirement.
- 3. Include requirements of Section Cast in Place Concrete, for required mix design.
- E. COLD WEATHER AND HOT WEATHER PROCEDURES: Detailed description of methods, materials, and equipment to be used to comply with requirements.

F. INFORMATIONAL SUBMITTALS

- Retain "List of Materials Used in Constructing Mockups" Paragraph below for critical work where record of mockup materials is desired.
- 2. List of Materials Used in Constructing Mockups: List generic product names together with manufacturers, manufacturers' product names, model numbers, lot numbers, batch numbers, source of supply, and other information as required to identify materials used. Include mix proportions for mortar and grout and source of aggregates.
 - a. Submittal is for information only. Receipt of list does not constitute approval of deviations from the Contract Documents unless such deviations are specifically brought to the attention of Architect and approved in writing.

1.06 QUALITY ASSURANCE

- Comply with provisions of ACI 530/530.1/ERTA, except where exceeded by requirements of Contract Documents.
 - 1. Maintain one copy of each document on project site.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, handle, and store masonry units by means that will prevent mechanical damage and contamination by other materials.
- B. Store masonry units on elevated platforms in a dry location. If units are not stored in an enclosed location, cover tops and sides of stacks with waterproof sheeting, securely tied. If units become wet, do not install until they are dry.
- C. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.
- D. Store aggregates where grading and other required characteristics can be maintained and contamination avoided.
- E. Deliver preblended, dry mortar mix in moisture-resistant containers. Store preblended, dry mortar mix in delivery containers on elevated platforms in a dry location or in covered weatherproof dispensing silos.
- F. Store masonry accessories, including metal items, to prevent corrosion and accumulation of dirt and oil.

1.08 FIELD CONDITIONS

- A. Protection of Masonry: During construction, cover tops of walls, projections, and sills with waterproof sheeting at end of each day's work. Cover partially completed masonry when construction is not in progress.
 - Increase extent of cover in first subparagraph below as needed to suit local climatic conditions.
 - 2. Extend cover a minimum of 24 inches (600 mm) down both sides of walls, and hold cover securely in place.
 - 3. Where one wythe of multiwythe masonry walls is completed in advance of other wythes, secure cover a minimum of 24 inches (600 mm) down face next to unconstructed wythe, and hold cover in place.
- B. Do not apply uniform floor or roof loads for at least 12 hours and concentrated loads for at least three days after building masonry walls or columns.
- C. Stain Prevention: Prevent grout, mortar, and soil from staining the face of masonry to be left exposed or painted. Immediately remove grout, mortar, and soil that come in contact with such masonry.

- Protect base of walls from rain-splashed mud and from mortar splatter by spreading coverings on ground and over wall surface.
- 2. Protect sills, ledges, and projections from mortar droppings.
- 3. Protect surfaces of window and door frames, as well as similar products with painted and integral finishes, from mortar droppings.
- 4. Turn scaffold boards near the wall on edge at the end of each day to prevent rain from splashing mortar and dirt onto completed masonry.

1.09 HOT-WEATHER REQUIREMENTS:

A. Comply with hot-weather construction requirements contained in TMS 602/ACI 530.1/ASCE 6.

1.10 COLD-WEATHER REQUIREMENTS:

- A. Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen substrates. Remove and replace unit masonry damaged by frost or by freezing conditions. Comply with cold-weather construction requirements contained in TMS 602/ACI 530.1/ASCE 6.
- B. Cold-Weather Cleaning: Use liquid cleaning methods only when air temperature is 40 deg F (4 deg C) and higher and will remain so until masonry has dried, but not less than seven days after completing cleaning.

PART 2 PRODUCTS

2.01 MATERIALS, GENERAL

- A. Single Source Responsibility: Furnish each type of product from single manufacturer. Provide secondary materials only as recommended by manufacturer of primary materials.
- B. Masonry Units: Obtain exposed masonry veneer units of a uniform texture and color, or a uniform blend within ranges accepted for these characteristics.
- C. Cementitious Materials: Obtain cementitious ingredients of a uniform quality, including color, for each component.

2.02 MASONRY UNITS, GENERAL

- A. Defective Units: Referenced standards may allow a certain percentage of units to exceed tolerances and to contain chips, cracks, or other defects exceeding limits stated in standard. Do not install units where defects, including dimensions that vary from specified dimensions by more than stated tolerances, will be exposed in completed Work or will impair quality of completed masonry veneer.
- B. Special Shapes: Provide shapes indicated and as follows for each form of masonry unit required:
 - 1. For applications requiring units of form, color, texture, and size on exposed surfaces that cannot be produced by sawing standard unit sizes.
 - 2. For applications where shapes produced by sawing would result in sawed surfaces being exposed to view.
 - 3. For applications where stretcher units cannot accommodate special conditions including those at corners, movement joints, bond beams, sashes, and lintels.
 - 4. For units without cores or frogs and with exposed surfaces finished for ends of sills, caps, and similar applications that would otherwise expose unfinished unit surfaces.

2.03 BRICK UNITS

- A. Product Quality Standard: ASTM C 216 or ASTM C 652, Grade SW, Type FBS.
 - 1. Unit Compressive Strength: Minimum 3000 psi (20.7 MPa) for average of 5 bricks, and 2500 psi (17.2 MPa) for individual brick, gross area, according to ASTM C 67, Section 7.
 - Hot and Cold Water Testing:
 - a. Water Absorption: Maximum 17.0 percent for average of 5 bricks, and 20.0 percent for individual brick, according to ASTM C 67, Section 8 for 5 hour boiling test.
 - b. Saturation Coefficient: Maximum 0.78 for average of 5 brick, and 0.80 for individual brick.
 - c. Requirement Waivers:

- Absorption: Saturation coefficient requirement may be waived if there is maximum 8.0 percent absorption of random sampling of 5 bricks according to ASTM C 67, Section 8 for 24 hour submersion test.
- 2) Freezing and Thawing: Water absorption and saturation coefficient requirements may both be waived if there is maximum 0.5 percent loss in dry weight of any individual brick according to ASTM C 67, Section 9, for 50 cycles of freezing and thawing.
- 3. Initial Rate of Absorption: Between 5 and 25 g/m per 30 sq in (0.02 sq m) according to ASTM C 67, Section 10. Use of coating to establish initial rate of absorption is not permitted and will not be allowed.
- B. Basis of Design Products:
 - 1. Brick Veneer: To Match Existing Brick at Facility. Contractor to submit sample of proposed brick to Architect for verification prior to fabrication.
 - 2. Or prior approved equal.
- C. Manufacturers:
 - Belden Brick: www.beldenbrick.com/#sle.
 - 2. Boral Bricks. Inc: www.boralbricks.com.
 - 3. General Shale Brick: www.generalshale.com.
 - 4. Acme Brick: www.brick.com.
 - 5. Substitutions: See section 01 6000 Product Requirements.
- D. Facing Brick: ASTM C216, Type FBS Smooth, Grade SW.
 - 1. Actual size: 3-5/8" X 7-5/8" X 2-1/4".
 - 2. Special shapes: Molded units as required by conditions indicated, unless standard units can be sawn to produce equivalent effect.

2.04 MORTAR MATERIALS

- A. Portland Cement: ASTM C 150/C 150M, Type I or II, except Type III may be used for cold-weather construction. Provide natural color or white cement as required to produce mortar color indicated.
 - 1. Alkali content shall not be more than 0.1 percent when tested according to ASTM C 114.
- B. Hydrated Lime: ASTM C 207, Type S.
- C. Mortar Aggregate: ASTM C144.
 - 1. For mortar that is exposed to view, use washed aggregate consisting of natural sand or crushed stone.
 - 2. For joints less than 1/4 inch (6 mm) thick, use aggregate graded with 100 percent passing the No. 16 (1.18-mm) sieve.
 - 3. White-Mortar Aggregates: Natural white sand or crushed white stone.
 - 4. Colored-Mortar Aggregates: Natural sand or crushed stone of color necessary to produce required mortar color.
- D. Grout Aggregate: ASTM C404.
- E. Pigments for Colored Mortar: Pure, concentrated mineral pigments specifically intended for mixing into mortar and complying with ASTM C979/C979M.
 - 1. Color(s): To be selected by Architect from manufacturer's full range.
 - Manufacturers:
 - a. Davis Colors; True Tone Mortar Colors: www.daviscolors.com.
 - b. Solomon Colors; SGS Mortar Colors: www.solomoncolors.com.
- F. Water: Clean and potable.
- G. Cold-Weather Admixture: Nonchloride, noncorrosive, accelerating admixture complying with ASTM C 494/C 494M, Type C, and recommended by manufacturer for use in masonry mortar of composition indicated.

2.05 REINFORCEMENT AND ANCHORAGE

- A. Masonry Veneer Anchors: 2-piece anchors that permit differential movement between masonry veneer and structural backup, hot dip galvanized to ASTM A 153/A 153M, Class B.
 - 1. Anchor plates: Not less than 0.075 inch (1.91 mm) thick, designed for fastening to structural backup through sheathing by two fasteners; provide design with legs that penetrate sheathing and insulation to provide positive anchorage.
 - 2. Wire ties: Manufacturer's standard shape, 0.1875 inch (4.75 mm) thick.
 - 3. Vertical adjustment: Not less than 3-1/2 inches (89 mm).

2.06 MASONRY CLEANERS

- A. Verify acceptability of cleaner for cleaning masonry with pigmented mortar joints and for types of masonry units specified.
- B. Proprietary Acidic Cleaner: Manufacturer's standard-strength cleaner designed for removing mortar/grout stains, efflorescence, and other new construction stains from new masonry without discoloring or damaging masonry surfaces. Use product expressly approved for intended use by cleaner manufacturer and manufacturer of masonry units being cleaned.

2.07 MORTAR MIXES

- A. General: Do not use admixtures, including pigments, air-entraining agents, accelerators, retarders, water-repellent agents, antifreeze compounds, or other admixtures unless otherwise indicated.
 - 1. Do not use calcium chloride in mortar or grout.
 - 2. Use portland cement-limemortar unless otherwise indicated.
 - 3. For exterior brick and block masonry, use masonry cement or mortar cement mortar.
 - 4. For reinforced masonry, use masonry cement or mortar cement mortar.
 - 5. Add cold-weather admixture (if used) at same rate for all mortar that will be exposed to view, regardless of weather conditions, to ensure that mortar color is consistent.
- B. Preblended, Dry Mortar Mix: Furnish dry mortar ingredients in form of a preblended mix. Measure quantities by weight to ensure accurate proportions, and thoroughly blend ingredients before delivering to Project site.
- C. Mortar for Unit Masonry: ASTM C270, using the Proportion Specification.
 - 1. Exterior, non-loadbearing masonry: Type N.
- D. Pigmented Mortar: Use colored cement product or select and proportion pigments with other ingredients to produce color required. Do not add pigments to colored cement products.
 - 1. Pigments shall not exceed 10 percent of portland cement by weight.
 - 2. Pigments shall not exceed 5 percent of masonry cement or mortar cement by weight.
 - 3. Mix to match Architect's sample. Allow for two colors, one for each brick color.
 - 4. Application: Use pigmented mortar for exposed mortar joints with the following units:
 - a. Clay face brick.
- E. Grout for Unit Masonry: Comply with ASTM C 476.
 - 1. Use grout of type indicated or, if not otherwise indicated, of type (fine or coarse) that will comply with TMS 602/ACI 530.1/ASCE 6 for dimensions of grout spaces and pour height.
 - 2. Proportion grout in accordance with requirement on drawings.
 - Provide grout with a slump as indicated on drawings as measured according to ASTM C 143/C 143M.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
 - 1. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
 - 2. Verify that substrates are free of substances that impair mortar bond.

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

3.02 INSTALLATION, GENERAL

- A. Thickness: Build cavity and composite walls and other masonry construction to full thickness shown. Build single-wythe walls to actual widths of masonry units, using units of widths indicated.
- B. Use full-size units without cutting if possible. If cutting is required to provide a continuous pattern or to fit adjoining construction, cut units with motor-driven saws; provide clean, sharp, unchipped edges. Allow units to dry before laying unless wetting of units is specified. Install cut units with cut surfaces and, where possible, cut edges concealed.
- C. Select and arrange units for exposed unit masonry to produce a uniform blend of colors and textures. Mix units from several pallets or cubes as they are placed.
- D. Matching Existing Masonry: Match coursing, bonding, color, and texture of existing masonry.
- E. Wetting of Brick: Wet brick before laying if initial rate of absorption exceeds 30 g/30 sq. in. (30 g/194 sq. cm) per minute when tested according to ASTM C 67. Allow units to absorb water so they are damp but not wet at time of laying.

3.03 TOLERANCES

- A. Dimensions and Locations of Elements:
 - 1. For dimensions in cross section or elevation, do not vary by more than plus 1/2 inch (12 mm) or minus 1/4 inch (6 mm).
 - 2. For location of elements in plan, do not vary from that indicated by more than plus or minus 1/2 inch (12 mm).
 - 3. For location of elements in elevation, do not vary from that indicated by more than plus or minus 1/4 inch (6 mm) in a story height or 1/2 inch (12 mm) total.

B. Lines and Levels:

- 1. For vertical lines and surfaces, do not vary from plumb by more than 1/4 inch in 10 feet (6 mm in 3 m), 3/8 inch in 20 feet (9 mm in 6 m), or 1/2-inch (12-mm) maximum.
- 2. For lines and surfaces, do not vary from straight by more than 1/4 inch in 10 feet (6 mm in 3 m), 3/8 inch in 20 feet (9 mm in 6 m), or 1/2-inch (12-mm) maximum.
- 3. For faces of adjacent exposed masonry units, do not vary from flush alignment by more than 1/16 inch (1.5 mm) except due to warpage of masonry units within tolerances specified for warpage of units.

C. Joints:

- 1. For bed joints, do not vary from thickness indicated by more than plus or minus 1/8 inch (3 mm), with a maximum thickness limited to 1/2 inch (12 mm).
- 2. For exposed bed joints, do not vary from bed-joint thickness of adjacent courses by more than 1/8 inch (3 mm).
- 3. For head and collar joints, do not vary from thickness indicated by more than plus 3/8 inch (9 mm) or minus 1/4 inch (6 mm).
- 4. For exposed head joints, do not vary from thickness indicated by more than plus or minus 1/8 inch (3 mm).[Do not vary from adjacent bed-joint and head-joint thicknesses by more than 1/8 inch (3 mm).]

3.04 LAYING MASONRY WALLS

- A. Lay out walls in advance for accurate spacing of surface bond patterns with uniform joint thicknesses and for accurate location of openings, movement-type joints, returns, and offsets. Avoid using less-than-half-size units, particularly at corners, jambs, and, where possible, at other locations.
- B. Bond Pattern for Exposed Masonry: Unless otherwise indicated, lay exposed masonry in running bond; do not use units with less-than-nominal 4-inch (100-mm) horizontal face dimensions at corners or jambs.
- C. Stopping and Resuming Work: Stop work by stepping back units in each course from those in course below; do not tooth. When resuming work, clean masonry surfaces that are to receive

mortar, remove loose masonry units and mortar, and wet brick if required before laying fresh masonry.

3.05 MORTAR BEDDING AND JOINTING

- A. Lay solid masonry units with completely filled bed and head joints; butter ends with sufficient mortar to fill head joints and shove into place. Do not deeply furrow bed joints or slush head joints.
- B. Tool exposed joints slightly concave when thumbprint hard, using a jointer larger than joint thickness unless otherwise indicated.
- C. Corners: Provide interlocking masonry unit bond in each wythe and course at corners unless otherwise indicated.
 - 1. Provide continuity with masonry-joint reinforcement at corners by using prefabricated L-shaped units as well as masonry bonding.
- D. Intersecting and Abutting Walls: Unless vertical expansion or control joints are shown or required at juncture, bond walls together as follows:
 - 1. Provide individual metal ties not more than 16 inches (406 mm) o.c.

3.06 ANCHORED MASONRY VENEERS

- A. Anchor masonry veneers to wall framing and concrete and masonry backup with masonry-veneer anchors to comply with the following requirements:
 - 1. Fasten screw-attached anchors through sheathing to wall framing and to concrete and masonry backup with metal fasteners of type indicated. Use two fasteners unless anchor design only uses one fastener.
 - 2. Embed connector sections and continuous wire in masonry joints.
 - 3. Locate anchor sections to allow maximum vertical differential movement of ties up and down.
 - 4. Space anchors as indicated, but not more than 16 inches (458 mm) o.c. vertically and 24 inches (610 mm) o.c. horizontally, with not less than one anchor for each 2 sq. ft. (0.2 sq. m) of wall area. Install additional anchors within 12 inches (305 mm) of openings and at intervals, not exceeding 8 inches (203 mm), around perimeter.
- B. Provide not less than 2 inches (50 mm) of airspace between back of masonry veneer and face of sheathing or insulation.
 - 1. Keep airspace clean of mortar droppings and other materials during construction. Bevel beds away from airspace, to minimize mortar protrusions into airspace. Do not attempt to trowel or remove mortar fins protruding into airspace.

3.07 MASONRY-JOINT REINFORCEMENT

- A. General: Install entire length of longitudinal side rods in mortar with a minimum cover of 5/8 inch (16 mm) on exterior side of walls, 1/2 inch (13 mm) elsewhere. Lap reinforcement a minimum of 6 inches (150 mm).
 - 1. Space reinforcement not more than 16 inches (406 mm) o.c.
- B. Interrupt joint reinforcement at control and expansion joints unless otherwise indicated.
- C. Cut and bend reinforcing units as directed by manufacturer for continuity at corners, returns, offsets, column fireproofing, pipe enclosures, and other special conditions.

3.08 CONTROL AND EXPANSION JOINTS

- A. General: Install control and expansion-joint materials in unit masonry as masonry progresses. Do not allow materials to span control and expansion joints without provision to allow for in-plane wall or partition movement.
- B. Form expansion joints in brick as follows:
 - 1. Build in compressible joint fillers where indicated or required.
 - Form open joint full depth of brick wythe and of width indicated, but not less than 3/8 inch
 (10 mm) for installation of sealant and backer rod specified in Section 07 9200 "Joint
 Sealants."

- C. Provide horizontal, pressure-relieving joints by either leaving an airspace or inserting a compressible filler of width required for installing sealant and backer rod specified in Section 07 9200 "Joint Sealants," but not less than 3/8 inch (10 mm).
 - Locate horizontal, pressure-relieving joints beneath shelf angles supporting masonry.
- D. If location of control and expansion joints is not indicated on drawings, place vertical joints at 30' O.C., locate contro joints at points of natural weekness of masonty work.
 - 1. Locate additional control joints as follows:
 - a. At changes in wall height.
 - b. At intersecting walls forming a T or cross shape, (but not in all wall corners).
 - c. The corners of wall openings, (including window and door openings).
 - 1) Control joint is only required at one side of opening less than 15 feet in width unless otherwise noted.

3.09 FIELD QUALITY CONTROL

- A. Testing and Inspecting: Owner will engage special inspectors to perform tests and inspections and prepare reports. Allow inspectors access to scaffolding and work areas as needed to perform tests and inspections. Retesting of materials that fail to comply with specified requirements shall be done at Contractor's expense.
- B. Inspections: Special inspections according to Level B in TMS 402/ACI 530/ASCE 5.
 - Begin masonry construction only after inspectors have verified proportions of site-prepared mortar.
 - 2. Place grout only after inspectors have verified compliance of grout spaces and of grades, sizes, and locations of reinforcement.
 - 3. Place grout only after inspectors have verified proportions of site-prepared grout.
- C. Testing Prior to Construction: One set of tests.
- D. Testing Frequency: One set of tests for each 2000 sq. ft. (464 sq. m) of wall area or portion thereof.
- E. Clay Masonry Unit Test: For each type of unit provided, according to ASTM C 67 for compressive strength.
- F. Mortar Aggregate Ratio Test (Proportion Specification): For each mix provided, according to ASTM C 780.
- G. Mortar Test (Property Specification): For each mix provided, according to ASTM C 780. Test mortar for mortar air content and compressive strength.
- H. Grout Test (Compressive Strength): For each mix provided, according to ASTM C 1019.

3.10 REPAIRING, POINTING, AND CLEANING

- A. Remove and replace masonry units that are loose, chipped, broken, stained, or otherwise damaged or that do not match adjoining units. Install new units to match adjoining units; install in fresh mortar, pointed to eliminate evidence of replacement.
- B. Pointing: During the tooling of joints, enlarge voids and holes, except weep holes, and completely fill with mortar. Point up joints, including corners, openings, and adjacent construction, to provide a neat, uniform appearance. Prepare joints for sealant application, where indicated.
- C. In-Progress Cleaning: Clean unit masonry as work progresses by dry brushing to remove mortar fins and smears before tooling joints.
- D. Final Cleaning: After mortar is thoroughly set and cured, clean exposed masonry as follows:
 - 1. Remove large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels.
 - Test cleaning methods on sample wall panel; leave one-half of panel uncleaned for comparison purposes. Obtain Architect's approval of sample cleaning before proceeding with cleaning of masonry.

- 3. Protect adjacent stone and nonmasonry surfaces from contact with cleaner by covering them with liquid strippable masking agent or polyethylene film and waterproof masking tape.
- 4. Wet wall surfaces with water before applying cleaners; remove cleaners promptly by rinsing surfaces thoroughly with clear water.
- 5. Clean brick by bucket-and-brush hand-cleaning method described in BIA Technical Notes
- 6. Clean concrete masonry by applicable cleaning methods indicated in NCMA TEK 8-4A.
- 7. Clean masonry with a proprietary acidic cleaner applied according to manufacturer's written instructions.

3.11 MASONRY WASTE DISPOSAL

- A. Salvageable Materials: Unless otherwise indicated, excess masonry materials are Contractor's property. At completion of unit masonry work, remove from Project site.
- B. Excess Masonry Waste: Remove excess clean masonry waste that cannot be used as fill, as described above or recycled, and other masonry waste, and legally dispose of off Owner's property.

SECTION 06 1000 - ROUGH CARPENTRY

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Rough opening framing for doors, windows, and roof openings.
- B. Roof-mounted curbs.
- C. Roofing nailers.
- D. Preservative treated wood materials.
- E. Fire retardant treated wood materials.

1.02 RELATED REQUIREMENTS

A. Section 07 6200 - Sheet Metal Flashing and Trim: Sill flashings.

1.03 REFERENCE STANDARDS

- A. AWC (WFCM) Wood Frame Construction Manual for One- and Two-Family Dwellings; 2015.
- B. ASTM A153/A153M Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2009.
- C. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials; 2015a.
- D. AWC (WFCM) Wood Frame Construction Manual for One- and Two-Family Dwellings; 2015.
- E. AWPA U1 Use Category System: User Specification for Treated Wood; 2012.
- F. PS 1 Structural Plywood; 2009.
- G. PS 2 Performance Standard for Wood-Based Structural-Use Panels; 2010.
- H. PS 20 American Softwood Lumber Standard; 2010.
- . SPIB (GR) Grading Rules; 2014.

1.04 SUBMITTALS

- A. See Section 01 3300 Submittal Procedures.
- B. Product Data: Provide technical data on wood preservative materials and application instructions, fasteners.
- C. Fastener type and spacing.
- D. Material Certificates: For dimension lumber specified to comply with minimum allowable unit stresses. Indicate species and grade selected for each use and design values approved by the ALSC Board of Review.
- E. Samples: For rough carpentry members that will be exposed to view, submit two samples, 6by6 inch (152by152 mm) in size illustrating wood grain, color, and general appearance.

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.
- Fire Retardant Treated Wood: Prevent exposure to precipitation during shipping, storage, or installation.

PART 2 PRODUCTS

2.01 GENERAL REQUIREMENTS

- A. Coordinate Lumber Type with Construction Type of Existing Building. For Construction Type VA buildings, all lumber materials shall be Fire Retardant Treated.
- B. Dimension Lumber: Comply with PS 20 and requirements of specified grading agencies.
 - 1. Species: Southern Pine, unless otherwise indicated.
 - 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.

- C. Lumber fabricated from old growth timber is not permitted.
- D. Provide dressed lumber, S4S, unless otherwise indicated.

2.02 DIMENSION LUMBER FOR CONCEALED APPLICATIONS

- A. Grading Agency: Southern Pine Inspection Bureau, Inc; SPIB (GR).
- B. Sizes: Nominal sizes as indicated on drawings, S4S.
- C. Moisture Content: S-dry or MC19.
- D. Stud Framing (2 by 2 through 2 by 6 (50 by 50 mm through 50 by 150 mm)):
 - Species: Southern Pine. 1.
 - 2. Grade: No. 2.
- E. Miscellaneous Framing, Blocking, Nailers, Grounds, and Furring:
 - 1. Lumber: S4S, No. 2 or Standard Grade.
 - Boards: Standard or No. 3. 2.

2.03 EXPOSED DIMENSION LUMBER

- A. Grading Agency: Southern Pine Inspection Bureau, Inc; SPIB (GR).
- B. Sizes: Nominal sizes as indicated on drawings.
- C. Surfacing: S4S.
- D. Moisture Content: S-dry or MC19.
- E. Stud Framing (2 by 2 through 2 by 6 (50 by 50 through 50 by 150 mm)):
 - Species: Southern Pine. 1.
 - Grade: Clear. 2.

2.04 EXPOSED BOARDS

- A. Submit manufacturer's certificate that products meet or exceed specified requirements, in lieu of grade stamping.
- B. Moisture Content: Kiln-dry (15 percent maximum).
- C. Surfacing: S4S.
- D. Species: Southern Pine.
- E. Grade: Clear.

2.05 CONSTRUCTION PANELS

- A. Roof Sheathing: Any PS 2 type, rated Structural I Sheathing.
 - 1. Bond Classification: Exterior.
 - 2. Span Rating: 60.
 - Performance Category: 3/4 PERF CAT.
 - Thickness: 3/4 inch at Roof Sheathing; Contractor to verify thickness of existing roof sheathing and notify Architect if existing thickness varies from that specified
- B. Other Applications:
 - Plywood Concealed From View But Located Within Exterior Enclosure: PS 1, C-C Plugged or better, Exterior grade.
 - Plywood Exposed to View But Not Exposed to Weather: PS 1, A-D, or better.
 - Other Locations: PS 1, C-D Plugged or better.

2.06 ACCESSORIES

- A. Fasteners and Anchors:
 - Metal and Finish: Hot-dipped galvanized steel complying with ASTM A153/A153M for high humidity and preservative-treated wood locations, unfinished steel elsewhere.
 - Provide fasteners of size and type indicated that comply with requirements specified in this Article for material and manufacture.

- a. Where rough carpentry is in ground contact, pressure-preservative treated, or in area
 of high relative humidity, provide fasteners with hot-dip zinc coating complying with
 ASTM A 153/A 153M.
- 3. Nails, Brads, and Staples: ASTM F 1667.
- 4. Power-Driven Fasteners: NES NER-272.
- Wood Screws: ASME B18.6.1.
- 6. Lag Bolts: ASME B18.2.1.
- 7. Bolts: Steel bolts complying with ASTM A 307, Grade A; with ASTM A 563 hex nuts and, where indicated, flat washers.
- 8. 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.
 - b. Material: Stainless steel with bolts and nuts complying with ASTM F 593 and ASTM F 594, Alloy Group 1 or 2.
- 9. Metal Framing Anchors
 - a. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1) Alpine Engineered Products, Inc.
 - 2) Cleveland Steel Specialty Co.
 - 3) Harlen Metal Products, Inc.
 - 4) KC Metals Products, Inc.
 - 5) Simpson Strong-Tie Co., Inc.
 - 6) Southeastern Metals Manufacturing Co., Inc.
 - 7) USP Structural Connectors.
 - b. Allowable Design Loads: Provide products with allowable design loads, as published by manufacturer that meet or exceed those of products of manufacturers listed. Manufacturer's published values shall be determined from empirical data or by rational engineering analysis and demonstrated by comprehensive testing performed by a qualified independent testing agency.
 - Galvanized Steel Sheet: Hot-dip, zinc-coated steel sheet complying with ASTM A 653/A 653M, G60 coating designation.

2.07 FACTORY WOOD TREATMENT

- A. Treated Lumber and Plywood: Comply with requirements of AWPA U1 Use Category UC3b for exterior construction not in contact with the ground, and Use Category UC4a for items in contact with the ground.
 - 1. Fire-Retardant Treated Wood: Mark each piece of wood with producer's stamp indicating compliance with specified requirements.
 - 2. 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.
 - 3. Preservative Chemicals: Acceptable to authorities having jurisdiction.
 - 4. For exposed items indicated to receive a stained or natural finish, use chemical formulations that do not require incising, contain colorants, bleed through, or otherwise adversely affect finishes.
- B. Fire Retardant Treatment:
 - 1. Manufacturers:
 - a. Arch Wood Protection, Inc: www.wolmanizedwood.com.
 - b. Hoover Treated Wood Products, Inc: www.frtw.com.
 - c. Osmose. Inc: www.osmose.com.

- 2. Interior Type A: AWPA U1, Use Category UCFA, Commodity Specification H, low temperature (low hygroscopic) type, chemically treated and pressure impregnated; capable of providing a maximum flame spread index of 25 when tested in accordance with ASTM E84, with no evidence of significant combustion when test is extended for an additional 20 minutes.
 - a. Kiln dry wood after treatment to a maximum moisture content of 19 percent for lumber and 15 percent for plywood.
 - b. Treat rough carpentry items as indicated .
 - c. Do not use treated wood in applications exposed to weather or where the wood may become wet.
- C. Application: Treat items indicated on Drawings, and the following:
 - 1. Wood cants, nailers, curbs, equipment support bases, blocking, stripping, and similar members in connection with roofing, flashing, vapor barriers, and waterproofing.

D. Preservative Treatment:

- Manufacturers:
 - a. Arch Wood Protection, Inc: www.wolmanizedwood.com.
 - b. Viance, LLC: www.treatedwood.com.
 - c. Osmose, Inc: www.osmose.com.
- 2. 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.

PART 3 EXECUTION

3.01 PREPARATION

- A. Where wood framing bears on cementitious foundations, masonry and concrete construction install full width sill flashing continuous over top of foundation, lap ends of flashing minimum of 4 inches (100 mm) and seal.
- B. Coordinate installation of rough carpentry members specified in other sections.

3.02 INSTALLATION - GENERAL

- A. Select material sizes to minimize waste.
- B. Reuse scrap to the greatest extent possible; clearly separate scrap for use on site as accessory components, including: shims, bracing, and blocking.
- C. Where treated wood is used on interior, provide temporary ventilation during and immediately after installation sufficient to remove indoor air contaminants.

3.03 FRAMING INSTALLATION

- A. Set structural members level, plumb, and true to line. Discard pieces with defects that would lower required strength or result in unacceptable appearance of exposed members.
- B. Make provisions for temporary construction loads, and provide temporary bracing sufficient to maintain structure in true alignment and safe condition until completion of erection and installation of permanent bracing.
- C. Install structural members full length without splices unless otherwise specifically detailed.
- D. Comply with member sizes, spacing, and configurations indicated, and fastener size and spacing indicated, but not less than required by applicable codes and AWC (WFCM) Wood Frame Construction Manual.
- E. Install horizontal spanning members with crown edge up and not less than 1-1/2 inches (38 mm) of bearing at each end.
- F. Construct double joist headers at floor and ceiling openings and under wall stud partitions that are parallel to floor joists; use metal joist hangers unless otherwise detailed.

- G. Provide bridging at joists in excess of 8 feet (2.3 m) span at mid-span. Fit solid blocking at ends of members.
- H. Install hurricane straps and tie-down elements to meet local code requirements. Install per manufacturer's written instructions.

3.04 BLOCKING, NAILERS, AND SUPPORTS

- A. Provide framing and blocking members as indicated or as required to support finishes, fixtures, specialty items, and trim.
- B. In framed assemblies that have concealed spaces, provide solid wood fireblocking as required by applicable local code, to close concealed draft openings between floors and between top story and roof/attic space; other material acceptable to code authorities may be used in lieu of solid wood blocking.
- C. In metal stud walls, provide continuous blocking around door and window openings for anchorage of frames, securely attached to stud framing.
- D. 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.
- E. Where ceiling-mounting is indicated, provide blocking and supplementary supports above ceiling, unless other method of support is explicitly indicated.

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 prefabricated curbs are specified and 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. Attached to existing structure as recommended by manufacturer.

3.07 TOLERANCES

- A. Framing Members: 1/4 inch (6 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 01 7419 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.

SECTION 07 2000 - ROOF AND DECK INSULATION

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:
 - 1. Polyisocyanurate Roof Insulation.
 - 2. Gypsum Roof Deck Board
- B. Related sections:
 - 1. Division 07 Section "Preparation for Reroofing".
 - Division 07 Section "Flashing and Sheet Metal".
 - 3. Division 07 Section "SBS Modified Bituminous Membrane Roofing".

1.03 REFERENCES

- A. American Society for Testing and Materials (ASTM):
- B. ASTM C1396 Standard Specification for Gypsum Wallboard.
- C. ASTM C1289 Standard Specification for Faced Rigid Polyisocyanurate Thermal Insulation
- D. ASTM D5 Standard Test Method for Penetration of Bituminous Materials.
- E. ASTM D5147 Standard Sampling and Testing Modified Bituminous Sheet Material.
- F. Cast Iron Soil Pipe Institute, Washington, D.C. (CISPI)
- G. Factory Mutual Research (FM):
 - 1. Roof Assembly Classifications.
- H. National Roofing Contractors Association (NRCA):
 - Roofing and Waterproofing Manual.
- I. Underwriters Laboratories, Inc. (UL):
 - 1. Fire Hazard Classifications.
- J. Warnock Hersey (WH):
 - 1. Fire Hazard Classifications.
- K. Sheet Metal and Air Conditioning Contractors National Association (SMACNA)
- L. Steel Deck Institute, St. Louis, Missouri (SDI)
- M. Southern Pine Inspection Bureau, Pensacola, Florida (SPIB)
- N. Insulation Board, Polyisocyanurate (FS HH-I-1972)

1.04 SUBMITTALS

- A. Product Data: Provide manufacturer's specification data sheets for each product.
 - Roofing System Certification: Submit written certification that the roof deck insulation is acceptable for use by the SBS manufacturer as a component of their roofing system.
 - 2. Provide a sample of each insulation type.

1.05 SHOP DRAWINGS

- A. Submit manufacturer's shop drawings indicating complete installation details of tapered insulation system, including identification of each insulation block, sequence of installation, layout, drain locations, roof slopes, thicknesses, crickets and saddles.
- B. Shop drawing shall include: Outline of roof, location of drains, a complete board layout of tapered insulation components, thickness and the average "R" value for the completed insulation system.
- C. Certification:

- 1. Submit roof manufacturer's certification that insulation fasteners furnished, are acceptable to roof manufacturer.
- 2. Submit insulation fasteners, fastening pattern layout(s), and deck/substrate penetration depth(s) that resist the uplift pressures as per the specified SBS modified
- roofing system.
- 4. Submit roof manufacturer's certification that insulation furnished and installed is acceptable to roofing manufacturer as a component of roofing system and is eligible for roof manufacturer's system warranty.
- 5. Submit written certification that the roof deck insulation is acceptable for use as a component of the SBS manufacturer's roofing system.
- D. Submit written certification that the roof deck insulation, used in conjunction with the SBS modified roofing system, passes the UL1256 test for a fire rated assembly, if required.

1.06 QUALITY ASSURANCE

- A. Fire Classification, ASTM E-108.
- B. Manufacturer's Certificate: Certify that the roof system is adhered properly to resist the uplift pressures as per the specified SBS roofing system.
- Pre-installation Meeting: Refer to Division 07 roofing specifications for pre-installation meeting requirements.

1.07 DELIVERY. STORAGE AND HANDLING

- A. Deliver products to site with seals and labels intact, in manufacturer's original containers, dry and undamaged.
- B. Store all insulation materials in a manner to protect them from the wind, sun and moisture damage prior to and during installation. Any insulation that has been exposed to any moisture shall be removed from the project site.
- C. Keep materials enclosed in a watertight, ventilated enclosure (i.e. tarpaulins).
- D. Store materials above the ground. Any warped, broken or wet insulation boards shall be removed from the site.

1.08 WARRANTY

- A. Special Warranty: Modified Manufacturer agrees to repair or replace components of the insulation assembly within specified warranty period. Total system warranty required (Insulation, Membrane and Metal Flashings).
 - 1. Warranty Period: Thirty (30) Year, "No Dollar Limit" "Edge to Edge" Warranty from date of Substantial Completion.

PART 2 - PRODUCTS

2.01 ROOF DECK INSULATION

- A. Polyisocyanurate Board Insulation (MONOLITHIC unless indicated elsewhere): ASTM C 1289, Type II, Class 1, Grade 2, felt or glass-fiber mat facer on both major surfaces.
 - 1. Qualities: Rigid, closed cell polyisocyanurate foam core bonded to heavy duty glass fiber mat facers, both sides.
 - 2. Thickness: Base Layer 2.5". Second Layer 2.0".
 - 3. R-Value: 25.0 minimum.
 - 4. Size: 48 inches square maximum size when installed using hot asphalt.
 - 5. Size: 48 inches x 96 inches maximum size when installed using mechanical fasteners.
 - 6. Subject to compliance with requirements, provide one of the following:
 - a. Viking Products Flat Board.
 - b. GAF EnergyGuard Polyiso board
 - c. Atlas Roofing Corp.
 - d. Or approved equal
- B. Tapered Polyisocyanurate Roof Insulation, including Tapered Sumps; ASTM C1289:

- 1. Qualities: Factory Tapered, closed cell polyisocyanurate foam core bonded to heavy duty glass fiber mat facers.
 - a. Thickness: 1/2 inch minimum, see section details for particular thicknesses.
 - b. Size: 48 inches square maximum size when installed using hot asphalt.
 - c. Size: 48 inches x 96 inches maximum size when installed using mechanical fasteners.
 - d. Tapered Slope: 1/8": 12" per foot.
 - e. Tapered Sump Slope: 1/4" per foot.
 - f. Tapered Crickets: 1/4": 12" per foot.
 - g. Subject to compliance with requirements, provide one of the following:
 - h. Viking Products Tapered Insulation Panels.
 - i. GAF EnergyGuard Polyiso board.
 - j. Atlas Roofing Corp.
 - k. Or approved equal
- C. Gypsum Roof Deck Board: ASTM C 1177 or ASTM C 1278, water-resistant gypsum substrate, Class A Fire Rated, 1/2 inch thick.
 - 1. Subject to compliance with requirements, provide one of the following:
 - a. Viking Products gypsum board
 - b. GAF
 - c. Atlas Roofing Corp.
 - d. Or approved equal
 - e. Size: 4 feet x 8 feet x 1/2 inch.

2.02 RELATED MATERIALS

- A. Flame Resistant Fiber Cants and Tapered Edge Strips: Performed rigid insulation units of sizes/shapes indicated, matching insulation board or of perlite or organic fiberboard, as per the approved manufacturer.
 - 1. Acceptable Manufacturers:
 - a. Johns Manville
 - h GAF
- B. Provide preformed saddles, crickets, and other insulation shapes where indicated for sloping to drain. Fabricate to slopes indicated.
- C. Asphalt: Meets ASTM Specification D-312, Type IV. As specified in Section 07 52 16.12 SBS Modified Bituminous Membrane Roofing.
- D. Fasteners: Corrosion resistant screw fastener as recommended and approved by the SBS roofing system manufacturer.
 - 1. Factory Mutual Tested and Approved #14 fasteners with three (3) inches coated disc, length required to penetrate into the wood deck one inch by Olympic or equal.

PART 3 - EXECUTION

3.01 EXECUTION, GENERAL

- A. Comply with requirements of Division 01 Section and all project requirements.
- B. Install one lapped base-sheet course and mechanically fasten to substrate according to roofing system manufacturer's written instructions.
- C. Insulation Cant Strips: Install and secure preformed 45-degree insulation cant strips at junctures of roofing system with vertical surfaces or angle changes greater than 45 degrees.
- D. Install tapered insulation under area of roofing to conform to slopes indicated.
- E. Install insulation with long joints of insulation in a continuous straight line, with end joints staggered between rows, abutting edges and ends between boards. Fill gaps exceeding 1/4 inch with insulation.
 - 1. Cut and fit insulation within 1/4 inch of nailers, projections, and penetrations.

- F. Install insulation under area of roofing to achieve specified thicknesses and slopes. Where overall insulation thickness is 2.7 inches or greater, install two or more layers with joints of each succeeding layer staggered from joints of previous layer a minimum of 6 inches in each direction.
- G. Trim surface of insulation where necessary at roof drains so completed surface is flush and does not restrict flow of water.
- H. Install tapered edge strips at perimeter edges as necessary to fill between the roof deck board and the top of blocking, to direct water away from vertical surfaces, and that do not terminate at vertical surfaces.

3.02 INSPECTION OF SURFACES

- A. Roofing contractor shall be responsible for preparing an adequate substrate to receive insulation
- B. Verify that work which penetrates roof deck has been completed.
- C. Verify that wood nailers are properly and securely installed.
- D. Examine surfaces for defects, rough spots, ridges, depressions, foreign material, moisture, and unevenness. Do not proceed until defects are corrected.
- E. Do not apply insulation until substrate is sufficiently dry.
- F. Broom clean substrate immediately prior to application.
- G. Use additional insulation to fill depressions and low spots that would otherwise cause ponding water.
- H. Verify that temporary roof, if required, has been completed.
- I. Proceeding with installation means acceptance of substrate.

3.03 PROTECTION

- A. During execution of work covered in this section, the Contractor shall provide protections for the roof insulation from water and wind penetration at the end of each day's work.
- B. Protect the roof insulation in areas that will receive excessive traffic.
- C. All personnel shall wear clean, soft rubber soled shoes for any application work where they may be walking on insulation boards.

3.04 INSTALLATION

- A. Attachment with Mechanical Fasteners (monolithic boards only):
 - Approved insulation boards shall be fully attached to the deck with an approved mechanical fastening system. As a minimum, fastening shall be in accordance with the SBS modified roofing system specification to resist the specified uplift pressures at corners, perimeter, and field of roof.
 - a. Attach insulation with #14 HD fasteners.
 - b. Consult with SBS roofing system manufacturer for density and fastening patterns required for securing the insulation to the wood roof deck.
 - c. Fastening patterns shall resist the wind uplift pressures per IBC 2015 and ASCE7-10.
 - 2. Placement pattern(s) of fasteners shall be in accordance with the SBS modified roofing system specification to resist the specified uplift pressures. Zone 1 24 fasteners per 4x8 board, Zone 2 24 fasteners per 4x8 board and Zone 3 32 fasteners per 4x8 board. The greater of the two patterns shall be utilized. Zone Width 8'-0".
 - 3. Minimum fastener penetration depth into deck shall be 1". Penetrating all the way through the deck is not acceptable.
- B. Attachment with Hot Asphalt:
 - 1. Fully Adhered Insulation: Install insulation cover board to base layer of insulation using hot Type IV asphalt as specified in Section 07 52 16.12 SBS Modified Bituminous Membrane Roofing.

- 2. Adhere insulation cover board to resist uplift pressure at corners, perimeter, and field of roof and to restrain the individual panels from ridging.
- 3. Hot Type IV Asphalt shall be approved by the primary roofing product manufacturer.
- 4. The mopping rate for hot bitumen shall be as recommended by the insulation manufacturer and approved by the primary roofing product manufacturer.
- 5. Set each subsequent layer of insulation in hot Type IV asphalt at manufacturer's recommended rate to achieve wind uplift pressures, firmly pressing and maintaining insulation in place.
- 6. Apply weight to the insulation boards until the bitumen has cooled and secured the insulation to the substrate.
- 7. Install cover boards over insulation with long joints in continuous straight lines with end joints staggered between rows. Offset joints of insulation below a minimum of 6 inches (150 mm) in each direction. Loosely butt cover boards together and adhere to the substrate (tolerance 1/4 inch max).

3.05 CLEANING

A. Remove debris and cartons from roof deck. Leave insulation clean and dry, ready to receive roofing membrane or roof deck board.

3.06 CONSTRUCTION WASTE MANAGEMENT

A. Remove and properly dispose of waste products generated during installation. Comply with requirements of authorities having jurisdiction.

SECTION 07 5000 - PREPARATION FOR RE-ROOFING

PART 1 GENERAL

1.01 1.01 SCOPE OF WORK

- A. Remove existing roofing, base flashings, vent stack flashings, roofing membrane and miscellaneous item to the wood deck.
- B. Repair wood decking as required.
- C. Loose lay red rosin sheet over wood deck.

1.02 1.02 RELATED SECTIONS

- A. Section 06 1000 Rough Carpentry
- B. Section 07 2000 Roof and Deck Insulation
- C. Section 07 5500 SBS Modified Bitumen Roof Membrane
- D. Section 0 76000 Flashing and Sheet Metal

1.03 PRE-INSTALLATION CONFERENCE

- A. Attend conference specified in Section 07 5500.
- B. Review installation procedures and coordination required with related work.

1.04 SUBMITTALS

A. Submit product data and samples of materials to be used.

1.05 ENVIRONMENTAL REQUIREMENTS

A. Do not remove roofing existing roofing membrane or decking when weather conditions threaten the integrity of the building contents or intended continued occupancy. Maintain continuous temporary protection prior to new roofing system.

1.06 PROTECTION

- A. Roofing Contractor is to be responsible for all mechanical, electrical and plumbing services required for the removal and re-installation of the new roof system.
- B. During execution or work covered by these specifications, the Contractor shall provide protection for equipment, materials, and personnel inside and outside the building against falling debris, sparks, and water.
- C. It shall be the Contractor's responsibility to respond immediately to correction of roof leakage during construction. A 4-hour time limit shall be given from the time of notification of emergency conditions. In the event of water penetration during rain or storm, the Contractor shall provide for repair or protection of building contents and interior. If the Contractor does not respond or cannot be contacted, the Owner will effect repairs or emergency action and the Contractor shall be back charged for all expenses and damages, if any.

1.07 SCHEDULING

A. Schedule work to coincide with commencement of installation of new insulation and roofing system.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Temporary Protection: Sheet polyethylene. Provide weights to retain sheeting in position.
- B. Red Rosin Sheet.
- C. Primer: Garla-Prime by The Garland Company, Inc. or approved equal compatible with roofing system.

PART 3 EXECUTION

3.01 EXAMINATION

A. Roofing Contractor shall verify all existing site conditions.

B. Very that existing roof surface is clear and ready for work of this Section.

3.02 MATERIAL REMOVAL

- A. Remove all membrane, cant strips, insulation, cant strips, base flashings and items shown on the drawings. The complete removal of all nails to leave a smooth even surface for re-roofing.
- B. Under certain conditions it will be necessary and desirable to incorporate on or more of the following methods for removal of dirt, silt, gravel, debris, roof membrane and insulation from the roof surface in order to preserve the ecology, eliminate unsightly conditions and protect building:
 - 1. Roof vacuum system.
 - 2. Crane and hopper with dump truck system.
 - 3. Enclosed shuts with protective shrouds on building and ground surfaces.
- C. All debris dumped from the roof shall be transported from the roof via chutes into dumpsters or trucks, and this debris shall, be removed from the premises when vehicles are full. No debris shall be transported from the area being worked over an existing finished roof without and underlayment of 3/4" plywood.
- D. All roof equipment not in use or left filled will be parked on the column lines on 3/4" plywood.
- E. Contractor shall provide tie-ins at the end of each days work. Area of tie-in shall be spudded clean of all existing gravel.

3.03 TEMPORARY PROTECTION

- A. Provide temporary protective sheeting over uncovered deck surface.
- B. Turn sheeting up and over all parapets and curbing. Retain sheeting in position with weights or temporary fasteners.
- C. Provide for surface drainage from sheeting to existing drainage facilities.
- D. Do not permit traffic over unprotected or repaired deck surface.

3.04 INSTALLATION OF RED ROSIN

A. At wood deck areas, roll out the red rosin sheet and lap subsequent sheets 4" over the preceding one. Tack in place with specified fasteners.

SECTION 07 5500 - SBS MODIFIED BITUMEN ROOFING MEMBRANE

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary
 - 1. Conditions and Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section Includes:
 - 1. (SBS) Modified Bituminous Membrane Roofing.
- B. Related Requirements:
 - 1. Division 07 Section "Sheet Metal Flashing and Trim"
 - 2. Division 07 Section "Preparation for Re-Roofing"
 - 3. Division 07 Section "Joint Sealants"
 - 4. Division 07 Section "Roof Deck Insulation"
 - 5. Division 07 Section "Gypsum Roof Deck Board"

C. Scope of Work:

1. This project consists of removing existing roofing, insulation, and roofing down to the wood deck installing a new insulation assembly, high performance, fire retardant, SBS modified roofing membrane system. The finished system shall be complete including installation of sheet metal related items, edge metal, gutters, and downspouts. The finished system shall result in a water-tight installation.

1.03 DEFINITIONS

A. Roofing Terminology: Definitions in ASTM D 1079 and glossary of NRCA's "The NRCA Roofing and Waterproofing Manual" apply to work of this Section.

1.04 REFERENCES

- A. ASTM D 41, Specification for Asphalt Primer Used in Roofing, Damp-proofing, and Waterproofing
- B. ASTM D 312, Specification for Asphalt Used in Roofing
- C. ASTM D 451, Test Method for Sieve Analysis of Granular Mineral Surfacing for Asphalt Roofing Products
- D. ASTM D 1079, Terminology Relating to Roofing, Waterproofing, and Bituminous Materials
- E. ASTM D 1227, Specification for Emulsified Asphalt Used as a Protective Coating for Roofing
- F. ASTM D 1863, Specification for Mineral Aggregate Used on Built-Up Roofs
- G. ASTM D 2178, Specification for Asphalt Glass Felt Used in Roofing and Waterproofing
- H. ASTM D 2822, Specification for Asphalt Roof Cement
- I. ASTM D 2824, Specification for Aluminum-Pigmented Asphalt Roof Coating
- J. ASTM D 3019, Specification for Lap Cement Used with Asphalt Roll Roofing
- K. ASTM D 4601, Specification for Asphalt-Coated Glass Fiber Base Sheet Used in Roofing
- L. ASTM D 5147, 1991 Test Method for Sampling and Testing Modified Bituminous Sheet Materials
- M. ASTM E 108, Test Methods for Fire Test of Roof Coverings
- N. FM, Factory Mutual
- O. NRCA, National Roofing Contractors Association

1.05 PRE-APPLICATION MEETING

A. Approximately 2 weeks before the scheduled commencement of the modified bitumen sheet roof system and associated work, meet at Project site with Installer, installer of each component of associated work, installers of deck or substrate construction to receive roofing work, installers

of rooftop units and other work in the around roofing that must precede or follow roofing work (including mechanical work if any), Architect/Owner, roofing system manufacturer's representative, and other representatives directly concerned with performance of the Work, including (where applicable) Owner's insurers, test agencies, and governing authorities.

B. Objectives to include:

- 1. Review foreseeable methods and procedures related to roofing work.
- Tour representative areas of roofing substrates (decks), inspect and discuss condition of substrate, roof drains, curbs, penetrations and other preparatory work performed by other trades.
- 3. Review structural loading limitations of deck and inspect deck for deflections and for required attachment.
- 4. Review roofing systems requirements (drawings, specifications, and other contract documents).
- 5. Review required submittals, both completed and yet to be completed.
- 6. Review and finalize construction schedule related to roofing work and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
- 7. Review required inspection, testing, certifying, and material usage accounting procedures.
- 8. Review weather and forecasted weather conditions and procedures for coping with unfavorable conditions, including possibility of temporary roofing (if not a mandatory requirement)
- 9. Record discussion of the pre-application meeting, including decisions and agreements reached. Furnish a copy of this record to each party attending. If substantial disagreements exist at conclusion of conference, determine how disagreements will be resolved and set date for reconvening conference.
- 10. Review notification procedures for weather or non-working days.
- 11. Perform pull out test(s) with the specified fasteners, if not performed prior to the meeting, to verify the actual pull-out capacity of the fasteners, and adjust engineering calculations and fastener sizes/ layouts accordingly.

1.06 SUBMITTALS

- A. See Section 01 3300 Submittal Procedures, for submittal procedures.
- B. The following items shall be submitted in a letter issued by the Roof Manufacturer, along with the roofing submittals, prior to the Roofing Pre-Installation Conference:
 - 1. Certification by the Roofing Manufacturer that the installer is an "Approved Applicator", in good standing, and specifically stating that the installer is both acceptable and authorized to install the proposed roofing system(s), including all required warranties.
 - 2. Certification by the Roofing Manufacturer that the proposed system will comply with the manufacturer's requirements, to qualify the project for all specified warranties and guarantee(s).
 - 3. Letter from the Manufacturer stating that a FULL-TIME employee of the Manufacturer will provide site inspections a minimum of three days a week at no additional charge to the Owner and the Manufacturer will provide the specified 30 YR NDL Edge to Edge Warranty to include damage caused by less than 90 mph wind speed. The letter must be signed by a Corporate Officer and the Corporate Seal affixed.

C. Product Data:

- 1. Manufacturer's Design Standards and other data for each item or product provided, as needed to prove compliance with specified requirements.
- D. Manufacturer's installation instructions.
 - 1. Shop Drawings:
 - 2. The Roofing Manufacturer shall prepare Shop Drawings,
 - 3. Include all typical and non-typical roof system details, including, but not limited to: details of edge conditions, joints, corners, transitions, trim, flashing, closures, penetrations, supports, anchorages, and special details related to the project.

4. Detail and specify locations for attachments included in the Engineering Calculations.

E. Calculations:

- 1. The Roofing Manufacturer shall calculate the wind uplift pressures for each zone and exposure, from the specified Design Wind Speed.
- 2. Roofing system shall be designed in accordance with IBC-2021, and the wind uplift requirements of ASCE 7-16, for the geographical location. WIND SPEED REQUIREMENT MINIMUM 150MPH.
- Calculations defining wind loads on all roof areas, based on the specified Building Codes, allowable fastener loads, and required number of fasteners required to secure the roof system to the designated substructure.
- 4. Engineering Calculations shall be stamped by a Professional Engineer, licensed in the State of Louisiana.

F. Certifications:

- 1. Letter of certification from the Roofing Manufacturer that materials provided for the project have been produced in accordance with the strictest applicable standards to ensure quality.
- 2. Certified test results by a nationally recognized testing laboratory or a manufacturer's laboratory, and witnessed and certified by a professional engineer, in accordance the specified performance test methods and criteria for each product or system.
- 3. Roofing Manufacturer's certification that materials are in compliance with the specifications.
- 4. Manufacturer's affidavit that materials provided for, and used in the Project contain no Asbestos.
- G. Testing Reports: Showing that the roof system been tested in accordance with specified performance testing requirements.
- H. Field Reports: As prepared by the Roofing Manufacturer's Technical Field Representative and required to ensure conformance with the warranty and Weathertightness requirements specified herein and be distributed on a weekly basis to all parties involved.

1.07 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Manufacturer's Certificates: Signed by roofing manufacturer certifying that roofing system complies with specified performance requirements, will provide inspections, and issue the specified warranty.
- C. Sample Warranties: For manufacturer's special warranties.
- D. Class of Roofing System: Certification of Class A Roofing System.

1.08 CLOSEOUT SUBMITTALS

A. Maintenance Data: For roofing system to include in maintenance manuals.

1.09 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified firm that is authorized and approved by the roofing system manufacturer to install the manufacturer's product and that is eligible to receive manufacturer's special warranty. A minimum of five (5) years of experience is required.
- B. Manufacturer Qualifications: Roofing system manufacturer shall have a minimum of 10 years of experience in manufacturing modified bitumen roofing products in the United States and be ISO 9001 certified.
- C. Roofing products or methods to be considered must have a minimum of ten (10) years successful performance in roofing and re-roofing applications.
- D. It is the intent of this specification to provide a roof system with an ASTM E 108 Class A fire rating.
- E. Installer's Field Supervision: The roofing system installer is required to maintain a full-time Superintendent on the job site during all phases of modified bituminous sheet roofing work and

at any time roofing work is in progress. Proper supervision of workmen shall be maintained. A copy of the specification shall be in the possession of the Supervisor/Foremen and on the roof at all times.

F. It shall be the Contractor's responsibility to respond immediately to correction of roof leakage during construction.

1.10 DELIVERY, STORAGE, AND HANDLING

- A. Deliver roofing materials to Project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, approval or listing agency markings, and directions for storing and mixing with other components.
- B. Store and handle roofing sheets in a dry, well-ventilated, weather-tight place to ensure no possibility of significant moisture exposure. Store rolls of felt and other sheet materials on pallets or other raised surface. Stand all roll materials on end and cover these materials with a canvas tarpaulin or other breathable material (not polyethylene).
- C. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer. Protect stored liquid material from direct sunlight.
 - Discard and legally dispose of liquid material that cannot be applied within its stated shelf life.
- D. Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources. Store in a dry location. Comply with insulation manufacturer's written instructions for handling, storing, and protecting during installation.
- E. Do not leave unused rolled goods on the roof overnight or when roofing work is not in progress. These items must be stored as mentioned above.
- F. Handle and store roofing materials, and place equipment in a manner to avoid permanent deflection of deck.

1.11 FIELD CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed according to manufacturer's written instructions and warranty requirements.
- B. Weather Condition Limitations: Do not apply roofing membrane during inclement weather or remove roofing when a 40% chance of precipitation is expected.
- C. Do not apply roofing insulation or membrane to damp deck surface.
- D. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed during same day.
- E. Proceed with roofing work only when existing and forecasted weather conditions will permit unit of work to be installed in accordance with manufacturer's recommendations and warranty requirements.
- F. Surface on which the roofing membrane system is to be applied shall be clean, smooth, dry, free of fins, sharp edge, loose and foreign materials, oil and grease.
 - 1. Before beginning work, a representative of the manufacturer shall examine the roof surfaces in order to ensure that the substrate is acceptable.
 - 2. Do not begin installation until all defective conditions have been corrected.
 - All surface voids greater than 1/4 inch wide shall be properly filled with an acceptable fill material.

1.12 INSPECTIONS AND TESTS

- A. The Architect, Owner's Representative, Project Manager and Roofing Manufacturer's Technical Field Representative shall at all times have access to the job site and work areas.
- B. The Contractor shall provide proper and safe facilities for such access and inspection, in accordance with applicable Federal, State, and Local laws and regulations.

C. Inspections.

- 1. The Architect, Owner's Representative, and/or Project Manager's Inspections:
 - a. The Architect, Owner's Representative, and/or Project Manager will perform periodic inspections throughout the duration of the project.
 - b. The Architect, Owner's Representative, and/or Project Manager shall inspect the work after the completion of each major phase of construction.
- 2. Manufacturer's Inspections:
 - a. An Authorized Technical Field Representative of the Roofing Material Manufacturer shall make a site visit and inspection, no less than three (3) times each week, for the duration of the performance of Work, to ensure that the installation is installed in strict accordance with the Roofing Manufacturer's requirements, the Contract
 - b. Documents, the Project Specifications, the approved Shop Drawings and Engineering Data, and the Roofing Manufacturer's standard details. A written report of each site visit and inspection, consisting of photos and written documentation, shall be prepared by the Roofing Manufacturer's Authorized Technical Field Representative, and shall be forwarded over to the Architect, the Owner's Representative, and/or the Project Manager on each Monday following the prior week. FAILURE TO SUBMIT THE REPORTS MAY RESULT IN PAY APPLICATIONS BEING DENIED.
 - c. The Roofing Manufacturer's Authorized Technical Field Representative shall be responsible for:
 - Keeping the Architect, the Owner's Representative, and/or the Project Manager informed after periodic inspections as to the progress and quality of the work observed.
 - 2) Calling to the attention of the Contractor those matters observed which are considered to be in violation of the Contract requirements.
 - 3) Reporting to the Architect, the Owner's Representative, and/or the Project Manager, in writing, of any failure or refusal of the Contractor to correct unacceptable practices called to his attention.
 - 4) Confirming, after completion of the work, and based on his observations and tests, that he has observed no application procedures, or other issues in conflict with the Roofing Manufacturer's requirements, the Contract Documents, the Project Specifications, the approved Shop Drawings and Engineering Data, and/or the Roofing Manufacturer's standard details.
- D. Any failure by the Architect, the Owner's Representative, the Project Manager, or the roofing manufacturer's Technical Field Representative to observe, detect, pinpoint, or object to any defect or noncompliance with the requirements of the Roofing Manufacturer's requirements, the Contract Documents, the Project Specifications, the approved Shop Drawings and Engineering Data, and/or the Roofing Manufacturer's standard details of work in progress or completed work shall not relieve the Contractor of, or reduce, or in any way limit, his responsibility of full performance of the work required of him under the requirements of the Roofing Manufacturer, the Contract Documents, the Project Specifications, the approved Shop Drawings and Engineering Data, and/or the Roofing Manufacturer's standard details.
- E. The Architect, the Owner's Representative, an/or the Project Manager, on behalf of the Owner, may require tests and inspections as necessary to verify the quality of the roofing materials and/or workmanship of installation.
 - 1. The Contractor shall select the Testing Laboratory and shall pay for all costs associated with initial testing. Testing Agency subject to Architect and/or Owner's approval.
 - 2. The costs for any initial tests meeting the applicable requirements shall be the responsibility of the Contractor.
 - 3. The costs for any initial tests not meeting the applicable requirements be the responsibility of the Contractor.
 - 4. The costs for re-testing of any work not meeting the applicable requirements shall be the responsibility of the Contractor.
 - 5. Subsequent non-compliance with applicable requirements will result in the Owner assigning a full time, Third-Party Quality Control Representative to the project. The costs

- for the Third-Party Quality Control Representative shall be the responsibility of the Contractor, and shall be deducted by the Owner from the Contractor's payment for the work.
- 6. Laboratory tests shall be performed in accordance with the applicable ASTM standard testing procedures.

1.13 SEQUENCING AND SCHEDULING

- A. Sequence installation of modified bituminous sheet roofing with related units of work specified in other sections to ensure that roof assemblies, including roof accessories, flashing, trim, and joint sealers, are protected against damage from effects of weather, corrosion, and adjacent construction activity.
- B. All work must be fully completed on each day. Phased construction will not be accepted. Begin and apply as much roofing in one day as can be completed that same day.

1.14 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of the roofing system that fail in materials, workmanship, and aesthetics within specified warranty period. Warranty shall include damage up 90 mph wind speed. Warranty shall include insulation, membrane and edge metal.
 - 1. Warranty Period: Thirty (30) Year, "No Dollar Limit" "Edge to Edge" Warranty from date of Substantial Completion.
- B. Contractor Warranty: Submit roofing Installer's warranty, signed by Installer, covering the Work of this Section, including all components of roofing system such as membrane roofing, base flashing, roof insulation, fasteners, cover boards, substrate boards, vapor retarders, and walkway products, for the following warranty period:
 - 1. Warranty Period: Two years from date of Substantial Completion.
- C. Annual Inspections: Membrane manufacturer will provide, free of charge, at the annual request of the Owner, annual inspections for the life of the warranty.
- D. CPSB Roofing Guarantee: Provide CPSB Roofing Guarantee as included within the Project Manual. Roofing Contractor shall respond on or within two (2) working days upon written notification of leaks or defects by the Owner and shall at their own cost maintain the roof for two (2) years after acceptance in accordance with the current edition of the Roof Maintenance Manual published by the Roofing Industry Educational Institute. The roof shall be inspected a minimum of two (2) time per year and a report documenting the conditions shall be provided to the Owner. These inspections shall occur during the months of April or May and during the months of September or October.

PART 2 - PRODUCTS

2.01 PRODUCTS

- A. Description: fully-adhered 2-ply SBS modified bitumen system suitable for application method required, cap sheet to be mineral granule surface with UL Class A and FM Global wind uplift criteria, as required to meet the wind speed requirements of IBC-2015 and ASCE 7-10 (specified herein, above).
- B. Approved manufacturers are as listed below:
 - 1. The Garland Company, Inc.
 - 2. Soprema Roofing and Waterproofing
 - 3. Siplast, Inc.
 - 4. JohnsManville.
 - 5. Prior-approved equal.
- C. Source Limitations: Obtain components for roofing system from same manufacturer as membrane roofing or manufacturer approved by membrane roofing manufacturer.
- D. Substitutions: Follow all specified guidelines on substitution requests.

2.02 PERFORMANCE REQUIREMENTS

- A. General Performance: Installed roofing and base flashings shall withstand specified uplift pressures, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation or other defects in construction. Roofing and base flashings shall remain watertight.
- B. Material Compatibility: Roofing materials shall be compatible with one another and adjacent materials under conditions of service and application required, as demonstrated by roofing manufacturer based on testing and field experience.
- C. Roofing System Design: The roofing system shall resist the following uplift pressures based upon the following:
 - 1. Roofing System:
 - 2. Wind Speed: 150mph.
 - 3. Occupancy Category: III.
 - 4. Importance Factor: 1.65.
 - 5. Exposure Category: C.
 - 6. Height: 15 feet.
- D. Exterior Fire-Test Exposure: ASTM E 108 or UL 790, Class A. Identify products with appropriate markings of applicable testing agency.

2.03 ROOFING SHEET MATERIALS

- A. Base Ply: ASTM D 5147, Grade S, 110 mil minimum thickness, SBS- modified asphalt sheet (reinforced with glass fibers); smooth surfaced; heat fusible; suitable for application method specified. HPR Torch Base by The Garland Company, Inc. or prior-approved equal.
- B. Top Ply: ASTM D 6162, Grade G, Type III, 195 mil minimum thickness; SBS-modified asphalt sheet (reinforced with glass fibers; white granule surfaced; heat fusible; suitable for application method specified. Stressply IV Plus UV Mineral by The Garland Company, Inc. or prior-approved gual.

2.04 BASE FLASHING SHEET MATERIALS

- A. Base Ply Sheet: ASTM D 5147, Grade S, 90 mil minimum thickness, SBS-modified asphalt sheet (reinforced with glass fibers); smooth surfaced; heat fusible; suitable for application method specified.
- B. Granule-Surfaced Flashing Sheet: ASTM D 6162, Grade G, Type III, 195 mil minimum thickness; SBS-modified asphalt sheet (reinforced with glass fibers; white granule surfaced; heat fusible; suitable for application method specified. Stressply IV Plus Mineral by The Garland Company, Inc. or prior-approved qual.

2.05 AUXILIARY ROOFING MATERIALS

- A. Asphalt Primer: ASTM D 41.
- B. Asphalt Roofing Cement: ASTM D 4586, asbestos free, of consistency required by roofing system manufacturer for application.
- C. Quick Setting Grout: Pitch pocket base filler as provided by prime material supplier.
- D. Mastic Sealant: Polyisobutylene, plain or modified bitumen; non-hardening, non- migrating, non-skinning, and nondrying.
- E. Nails and Fasteners: Non-ferrous metal or galvanized steel, except that hard copper nails shall be used with copper; aluminum or stainless steel nails shall be used with aluminum; and stainless steel nails shall be used with stainless steel. Nails and fasteners shall be flush- driven through flat metal discs of not less than 1-inch diameter. Metal discs may be omitted when one piece composite nails or fasteners with heads not less than 1-inch diameter are used. Fasteners shall be designed for fastening roofing components to substrate; tested by manufacturer for required pullout strength, and acceptable to roofing system manufacturer.
- F. Roofing Granules: Color to match roofing.

- G. Miscellaneous Accessories: Provide those recommended by roofing system manufacturer.
- H. Roof Coating: Aluminum Roof Coating. Garlabrite by The Garland Company, In. or pre-approved equal.

2.06 WALKWAYS

- A. Walkway Pads: Reinforced asphaltic composition pads with slip-resisting mineral-granule surface, manufactured as a traffic pad for foot traffic and acceptable to roofing system manufacturer, 1/2 inch thick, minumum.
 - 1. Pad Size: 4 ft x 4 ft minimum.
- B. Walkway Cap Sheet Strips: ASTM D 6163 or ASTM D 6164, Grade G, Type I or II, SBS-modified asphalt sheet (reinforced with glass fibers or reinforced with polyester fabric); granular surfaced; suitable for application method specified, and as follows:
 - 1. Granule Color: To match color of roofing system granules.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements and other conditions affecting performance of the Work:
 - 1. Verify that roof openings and penetrations are in place, curbs are set and braced, and roof-drain bodies are securely clamped in place.
 - 2. Verify that wood cants, blocking, curbs, and nailers are securely anchored to roof deck at penetrations and terminations and that nailers match thicknesses of insulation
 - 3. Verify that surface plane flatness and fastening of steel roof deck complies with requirements specified in the appropriated steel deck specifications.
 - 4. Verify that deck is securely fastened with no projecting fasteners and with no adjacent units in excess of 1/16 inch out of plane relative to adjoining deck
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

- A. Refer to Division 7 "Preparation for Reroofing"
- B. Clean substrate of dust, debris, moisture, and other substances detrimental to roofing installation according to roofing system manufacturer's written instructions. Remove sharp projections.
- C. Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating onto surfaces of other construction. Remove roof-drain plugs when no work is taking place or when rain is forecast.

3.03 INSTALLATION, GENERAL

- A. Comply with roofing system manufacturer's written instructions.
- B. Substrate-Joint Penetrations: Prevent adhesives from penetrating substrate joints, entering building, or damaging roofing system components or adjacent building construction.

3.04 ROOFING INSTALLATION, GENERAL

- A. Start installation of roofing in presence of manufacturer's technical personnel.
- B. Cooperate with manufacturer, inspection and test agencies engaged or required to perform services in connection with installing modified bitumen sheet system.
- C. If applicable, where roof slope exceeds 3/4 inch per 12 inches, install roofing membrane sheets parallel with slope.
 - Back nail roofing sheets to substrate according to roofing system manufacturer's written instructions.
- D. Coordinate installation of roofing system so insulation and other components of the roofing system not permanently exposed are not subjected to precipitation or left uncovered at the end of the workday or when rain is forecast.

- Provide tie-offs at end of each day's work to cover exposed roofing sheets and insulation with a course of coated felt set in roofing cement or hot roofing asphalt, with joints and edges sealed.
- 2. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofying system.
- 3. Remove and discard temporary seals before beginning work on adjoining roofing.

3.05 MECHANICAL COORDINATION

- A. Roof top mounted equipment shall be mounted level.
 - 1. Provide curbs with sloped bases, as required to match the roof deck or structural framing slope. Where roof structure is level, provide level base curbs.
 - 2. Provide curbs with level tops, to allow equipment to be installed level.
 - 3. Provide curb types & heights as required to achieve required minimum base flashing criteria.
 - 4. Unless noted otherwise, curbs shall be fabricated from galvanized steel.
 - 5. Unless specifically noted otherwise, provide insulated curbs.
- B. Gas Equipment heights as required to achieve minimum 3" vertical clearance between roof surface and bottom of drip leg piping cap.
- C. For safety, ease of maintenance, and to minimize damage to roof system components, no equipment located within 5 feet of roof expansion joints and/or roof divider joints, vertical parapets; no equipment within 10 feet of roof edges.
- D. Roof system thermal insulation values based on HVAC system design.
- E. Coordinate the removal or relocation of mechanical equipment with the Owner's Representative, and/or Project Manager.
- F. Where roofing work involves removal, relocation, or replacement of existing mechanical equipment, coordinate and phase work to maintain climate control on building at all times.
- G. DO NOT DISCONNECT OR REMOVE MECHANICAL UNITS WITHOUT OWNER'S PRIOR APPROVAL

3.06 BASE-PLY SHEET INSTALLATION

- A. Heat Fused Base: Install one layer of SBS heat fused base sheet to a properly prepared substrate.
 - 1. Shingle in proper direction to shed water on each area of roofing.
 - 2. To a suitable substrate, lay out the roll in the course to be followed and unroll six (6) feet
 - 3. Using a roofing torch, heat the surface of the coiled portion until the burn-off backer melts away. At this point, the material is hot enough to lay into the substrate. Progressively unroll the sheet while heating and press down with your foot to insure a proper bond
 - 4. After the major portion of the roll is bonded, re-roll the first six (6) feet and bond it in a similar fashion.
 - 5. Repeat this operation with subsequent rolls with side laps of four (4) inches and end laps of eight (8) inches.
 - 6. Give each lap a finishing touch by passing the torch along the joint and spreading the melted bitumen evenly with a rounded trowel to insure a smooth, tight seal.
 - 7. Extend underlayment two (2) inches beyond top edges of cants at wall and projection bases. Install base flashing ply to all perimeter and projections details

3.07 MISCELLANEOUS ROOFING COMPONENTS

- A. Metal Edge (Shop Fabricated, ANSI/SPRI ES-1):
 - 1. Inspect the wood nailer to assure proper attachment and configuration.
 - 2. Run base ply over to the outside of blocking.
 - 3. Install metal cleat and fasten as called for.
 - 4. Prime metal edge at a rate of one hundred (100) square feet per gallon and allow surface to dry.
 - 5. Mechanically attach metal flashing at 3" c/c staggered.

- 6. Strip in flange with base flashing ply covering entire flange in bitumen with six (6) inches on to the field of roof. Assure ply laps do not coincide with metal laps.
- 7. Install a second ply of modified flashing ply over the base flashing ply, nine (9) inches onto the field of the roof.
- 8. Install cover plates as detailed.

B. Roof Drains:

- 1. Plug drain to prevent debris from entering plumbing.
- 2. Taper insulation to drain minimum of twenty four (24) inches from center of drain.
- 3. Run base ply over drain. Cut out plies inside drain bowl.
- 4. Set lead flashing (thirty (30) inch square minimum) in 1/4 inch bed of mastic. Run lead/copper into drain a minimum of two (2) inches. Prime lead/copper at a rate of one hundred (100) square feet per gallon and allow for drying.
- 5. Install stripping ply forty (40) inches square minimum.
- 6. Install modified membrane (forty-eight (48) inches square minimum).
- 7. Install clamping ring and assure that only the base ply, lead and stripping membrane are under the clamping ring.
- 8. Remove drain plug and install strainer.
- 9. Provide pitch damns at all drains where aggregate surfacing is being installed.

C. Curb Type Penetrations:

- 1. Minimum curb height is eight (8) inches. Prime vertical at a rate of 100 square feet per gallon and allow for drying
- 2. Set cant in insulation adhesive. Run base ply over cant a minimum of two (2) inches.
- 3. Install base flashing ply covering curb set in bitumen with six (6) inches on to field of the roof.
- 4. Install a top ply of modified flashing over the base flashing ply, nine (9) inches on to the field of the roof. Attach top of membrane to top of curb and nail at eight (8) inches c/c. Heat fuse six (6) inch strip of modified cap sheet at all vertical seams prior to coating.
- 5. Install pre-manufactured cover. Fasten sides at 24 inches c/c with fasteners and neoprene washers. Furnish all joint cover laps with butyl tape between metal covers
- 6. Set equipment on neoprene pad and fasten as required by equipment manufacturer.

D. Plumbing Vent:

- 1. Minimum vent height shall be eight (8) inches.
- 2. Run roof system over the entire surface of the roof. Seal the base of the stack with elastomeric sealant.
- Prime flange of new sleeve. Install properly sized sleeves set in 1/4 inch bed of roof cement.
- 4. Install base flashing ply by torch.
- 5. Install membrane by torch.
- 6. Caulk the intersection of the membrane with elastomeric sealant.
- 7. Turn sleeve a minimum of one (1) inch down inside of stack.

E. Flange Type Vents:

- 1. New vents shall match existing size and profile.
- Run roof system over the entire surface of the roof. Seal the base of the stack with elastomeric sealant.
- 3. Prime flange of new vent and set in 1/4 inch bed of elastomeric roof cement.
- 4. Install base flashing ply by torch.
- 5. Install membrane by torch.
- 6. Caulk the intersection of the membrane with elastomeric sealant.

F. Flashing At Wall:

- 1. Minimum flashing height is 8 inches.
- 2. Set cant in bitumen. Run all roofing plies over cant a minimum of 2 inches.
- 3. Prepare all walls and penetrations to be flashed with asphalt primer at the rate of 1/2 gallon per square

- 4. Heat fuse bottom ply of flashing membrane.
- 5. The heat fused flashing membrane will be adhered to an underlying base ply of glass felt bonded in asphalt when torching near wood nailers or combustible surfaces.
- 6. After the laps have been tested, and a complete positive bond has been achieved, the applicator shall heat the seam edge and trowel along the seam edge. Troweling shall continue until a sloped, beveled edge has been produced.
- 7. Heat fuse top ply of flashing membrane.
- 8. After the laps have been tested, and a complete positive bond has been achieved, the applicator shall heat the seam edge and trowel along the seam edge. Troweling shall continue until a sloped, beveled edge has been produced.
- 9. Install a termination bar at the top of all base flashing. The termination bar shall be mechanically attached every 8 inches on center. Apply a three course application of mastic and reinforcing mesh over the term bar and onto the wall.
- 10. All vertical laps in base flashing system shall receive a six (6) inch wide reinforcement utilizing the specified cap sheet.

3.08 SBS-MODIFIED BITUMINOUS MEMBRANE INSTALLATION

A. Heat Fused:

- 1. Over the SBS torch base sheet underlayment, lay out the roll in the course to be followed and unroll six (6) feet. Seams for the top layer of modified membrane will be staggered over the SBS torch base sheet seams.
- 2. Using a roofing torch, heat the surface of the coiled portion until the burn-off backer melts away. At this point, the material is hot enough to lay into the substrate. Progressively unroll the sheet while heating and press down with your foot to insure a proper bond.
- 3. After the major portion of the roll is bonded, re-roll the first six (6) feet and bond it in a similar fashion.
- 4. Repeat this operation with subsequent rolls with side laps of four (4) inches and end laps of eight (8) inches.
- 5. Give each lap a finishing touch by passing the torch along the joint and spreading the melted bitumen evenly with a rounded trowel to insure a smooth, tight seal.
- B. Laps: Accurately align roofing sheets, without stretching, and maintain uniform side and end laps. Stagger end laps. Completely bond and seal laps, leaving no voids.
 - 1. Repair tears and voids in laps and lapped seams not completely sealed.
 - 2. Apply roofing granules to cover exuded bead at laps while bead is hot.
- C. Install roofing sheets so side and end laps shed water.

3.09 FLASHING AND STRIPPING INSTALLATION

- A. Install base flashing over cant strips and other sloped and vertical surfaces, at roof edges, and at penetrations through roof, and secure to substrates according to roofing system manufacturer's written instructions and as follows:
 - 1. Prime substrates with asphalt primer if required by roofing system manufacturer.
 - 2. Flashing-Sheet Application: Torch apply flashing sheet to substrate.
- B. Extend base flashing up walls or parapets a minimum of 8 inches above roofing membrane and 6 inches onto field of roofing membrane.
- C. Mechanically fasten top of base flashing securely at terminations and perimeter of roofing.
 - Install a termination bar at the top of all base flashing. The termination bar shall be mechanically attached every 8 inches on center. Apply a three course application of mastic and reinforcing mesh over the term bar and onto the wall.
 - 2. All vertical laps in base flashing system shall receive a 6 inch wide heat fused reinforcing ply of mineral surfaced base flashing.
- D. Install roofing cap-sheet stripping where metal flanges and edgings are set on roofing according to roofing system manufacturer's written instructions.

3.10 SURFACING

A. Bleed Out:

- Immediately broadcast new clean minerals into the bleed out of the modified roof membrane.
- 2. The overall appearance of the finished roofing application is a standard requirement for this project. The Roofing Contractor shall make necessary preparations, utilize recommended application techniques (i.e. to immediately apply the specified granules into the bleed out) to ensure that the finished application is acceptable to the Owner. The Architect and Owner will be the sole judge as to whether the finished surface is acceptable.

B. Surfacing:

- 1. After a final inspection has been performed and all items have been corrected on the punch list, Contractor shall apply specified coating.
- C. Apply two applications of the specified coating at rate of 3/4 gallons per square per coat. First pas shall be North and South. Second pass shall be East and West.

3.11 FIELD QUALITY CONTROL

- A. Final Roof Inspection: Arrange for roofing system manufacturer's technical personnel to inspect roofing installation on completion.
 - 1. Notify Architect and Owner 48 hours in advance of date and time of inspection.
 - 2. Walk roof surface areas of the building, inspect perimeter building edges as well as flashing of roof penetrations, walls, curbs and other equipment. List all items requiring correction or completion and furnish copy of list to each party.
 - 3. The Architect reserves the right to request a thermographic scan of the roof during final inspection to determine if any damp or wet materials have been installed. The thermographic scan shall be provided for the Owner by the Roofing Material Manufacturer at a negotiated price.
 - 4. If water and/or moisture is discovered beneath the cap and/or base sheets as a result of improper installation, all membranes must be removed and replaced with new at no additional cost to the Owner. This includes any damaged roof deck board and/or insulation boards
 - a. If the deck system has sustained damage as a result of water and/or moisture as a result of improper installation. The Contractor must replace and/or make repairs to the deck at no additional cost to the Owner.
 - b. Conduct proper sequencing to eliminate water and moisture prior to reinstallation.
 - 5. If core cuts verify the presence of damp or wet materials, the Roofing Contractor shall be required to replace the damaged areas at his own expense and reimburse the Owner for the cost of the scan.
 - 6. Replace deteriorated or defective work found during inspections to a condition free of damage and deterioration at time of Substantial Completion.
 - 7. The SBS roofing membranes (including the cap sheet) must be free from, but not limited to, ripples, fish mouths, blisters, air pockets, bubbles, etc. The surface must be smooth, flat, and aesthetically pleasing for a finished appearance. The cap sheet surface must be free from, but not limited to, adhesives, mastics, smears, foot tracks of substances, and any other substance that will detract from and cause an unpleasing and unacceptable aesthetic appearance.
 - The SBS roofing membrane system will not be accepted if these type conditions are experienced.
 - 8. The Contractor is to notify the Architect upon completion of corrections.
 - Following the final inspection, acceptance will be made in writing by the material manufacturer.

3.12 PROTECTING AND CLEANING

A. Protect roofing system from damage and wear during remainder of construction period. When remaining construction does not affect or endanger roofing, inspect roofing for deterioration and damage, describing its nature and extent in a written report, with copies to Architect and Owner.

- B. Correct deficiencies in or remove roofing system that does not comply with requirements, repair substrates, and repair or reinstall roofing system to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.
- C. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

SECTION 07 6200 - SHEET METAL FLASHING AND TRIM

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Fabricated sheet metal items, including flashings, gutters, downspouts, counterflashings, and edge metal and fascia, reglets, receivers, hurricane clips, pitch pans, hoods, vents, cleats, termination bar, lead flashings, and other items indicated.
 - 1. Sealants for joints within sheet metal fabrications.

1.02 RELATED REQUIREMENTS

- A. Section 06 1000 Rough Carpentry: Wood nailers for sheet metal work.
- B. Division 07 Section "Preparation for Re-Roofing."
- C. Division 07 Section "Gypsum Roof and Deck Board."
- D. Division 07 Section "Roof and Deck Insulation."
- E. Division 07 Section "SBS Modified Bitumen Roof Membrane"
- F. Section 07 7100 Roof Specialties: Manufactured copings, flashings, and expansion joint covers.
- G. Section 07 7200 Roof Accessories: Manufactured metal roof curbs.
- H. Section 07 9200 Joint Sealants: Sealing non-lap joints between sheet metal fabrications and adjacent construction.

1.03 REFERENCE STANDARDS

- A. AAMA 2604 Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels; 2013.
- B. ASTM A666 Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar; 2015.
- C. ASTM B32 Standard Specification for Solder Metal; 2008 (Reapproved 2014).
- D. ASTM B209 Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2014.
- E. ASTM B209M Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate [Metric]; 2014.
- F. ASTM B749 Standard Specification for Lead and Lead Alloy Strip, Sheet, and Plate Products;
- G. ASTM C920 Standard Specification for Elastomeric Joint Sealants; 2014.
- H. ASTM D226/D226M Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing; 2009.
- ASTM D4586/D4586M Standard Specification for Asphalt Roof Cement, Asbestos-Free; 2007 (Reapproved 2012).
- J. CDA A4050 Copper in Architecture Handbook; current edition.
- K. SMACNA (ASMM) Architectural Sheet Metal Manual; 2012.
- L. ASTM A-446 Specification for Steel Sheet.
- M. ASTM B-221 Specification for Aluminum Extruded Shape.
- N. FS QQ-L-201 Specification for Lead Sheet.
- O. ASTM A792 Steel Sheet, Aluminum-Zinc Alloy-Coated, by the Hot-Dip Process.
- P. ASTM B486 Paste Solder.
- Q. ASTM D486 Asphalt Roof Cement, Asbestos-free.
- R. FS O-F-50 Flux, Soldering, Paste and Liquid.
- S. WH Warnock Hersey International, Inc. Middleton, WI.
- T. NRCA National Roofing Contractors Association Roofing Manual.

1.04 SUBMITTALS

- A. See Section 01 3000 Submittal Procedures.
- B. Product Data: For each type of product, including hoods, vents, edge metal, coping, fascia, and all other sheet metal fabrications.
 - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each manufactured product and accessory.
 - 2. Indicate type, gauge, and finish of metal.
- C. Shop Drawings: Indicate material profile, jointing pattern, jointing details, fastening methods, flashings, terminations, and installation details.
- D. Samples: Submit two samples 12 by actual width of unit and in required profile inch (305 by 305 mm) in size illustrating metal finish color.
- E. Qualification Data: For fabricator.
- F. Product Certificates: For each type of coping and roof edge flashing that is ANSI/SPRI ES-1 tested for pressures of required wind speed.
- G. Roofing System Manufacturer's Certification: Metal edge systems and other miscellaneous metals furnished are acceptable to roofing manufacturer as a component of roofing system and are included in the manufacturer's roof system warranty.

1.05 COORDINATION

- A. Coordinate sheet metal flashing and trim layout and seams with sizes and locations of penetrations to be flashed, and joints and seams in adjacent materials.
- B. Coordinate sheet metal flashing and trim installation with adjoining roofing and wall materials, joints, and seams to provide leak-proof, secure, and noncorrosive installation

1.06 QUALITY ASSURANCE

- A. Perform work in accordance with SMACNA (ASMM) and CDA A4050 requirements and standard details, except as otherwise indicated.
- B. Maintain one copy of each document on site.
- C. Fabricator and Installer Qualifications: Company specializing in sheet metal work with five years of documented experience. Company shall employ skilled workers who custom fabricate sheet metal flashing and trim similar to that required for this Project.
 - 1. For copings and roof edge flashings that are ANSI/SPRI ES-1 tested, shop shall be listed as able to fabricate required details as tested and approved
- D. PreInstallation Meetings: Conduct conference at Project Site.
 - 1. Review construction schedule. Verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - 2. Review special roof details, roof drainage, roof-penetration flashing, equipment curbs, and condition of other construction that affect sheet metal flashing and trim.
 - 3. Review requirements for insurance and certificates if applicable.
 - 4. Review sheet metal flashing observation and repair procedures after flashing installation.
- E. In-Field Mockups: The Contractor shall provide and install 10 feet long sample mockups for each different condition as follows: edge metal, fascia, coping, and gutter. The mockups shall be fabricated from the same material scheduled and specified to be used throughout. The Contractor shall allow for any dimensional, shape, or profile adjustment to the satisfaction and approval of the Architect.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in manufacturer's original, unopened containers or packages with labels intact and legible.
- B. Stack material to prevent twisting, bending, and abrasion, and to provide ventilation. Slope metal sheets to ensure drainage.
- C. Prevent contact with materials that could cause discoloration or staining.

1.08 MANUFACTURER'S INSPECTIONS

- A. When the project is in progress, the Roofing System Manufacturer will provide the following:
 - 1. Keep the Architect informed as to the progress and quality the work as observed.
 - 2. Provide job site inspections, three times weekly.
 - 3. Report to the Architect in writing, any failure or refusal of the Contractor to correct unacceptable practices called to the Contractor's attention.
 - 4. Confirm, after completion of the project and based on manufacturer's observations and tests, that manufacturer has observed no applications procedures in conflict with the specifications other than those that may have been previously reported and corrected

1.09 WARRANTY

- A. Contractor's Warranty: The Contractor shall provide the Owner with a notarized written warranty assuring that all sheet metal work including caulking and fasteners to be watertight and secure for a period of two years from the date of final acceptance of the building. Warranty shall include all materials and workmanship required to repair any leaks that develop, and make good any damage to other work or equipment caused by such leaks or the repairs thereof.
- B. Special Warranty on Finishes (Shall Be Included with the SBS Roofing System Warranty): Manufacturer agrees to repair finish or replace sheet metal flashing and trim that shows evidence of deterioration of factory-applied finishes within specified warranty period.
 - 1. Exposed Panel Finish: Deterioration includes, but is not limited to, the following:
 - a. Color fading more than 5 Hunter units when tested according to ASTM D 2244.
 - b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
 - c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
- C. Special Blow-Off and Leak-Tight Warranty: Edge metal system manufacturer agrees to make repairs or replace the edge metal system due to failure within the specified warranty period.
 - Blow-Off and Leak-Tight Warranty Period: 30 years from date of Substantial Completion.

PART 2 PRODUCTS

2.01 PERFORMANCE REQUIREMENTS

- A. General: Sheet metal flashing and trim assemblies shall withstand wind loads, structural movement, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Completed sheet metal flashing and trim shall not rattle, leak, or loosen, and shall remain watertight.
- B. Sheet Metal Standard for Flashing and Trim: Comply with NRCA's "The NRCA Roofing Manual" requirements for dimensions and profiles shown unless more stringent requirements are indicated.
- C. ANSI/SPRI ES-1 Wind Design Standard: Manufacture and install roof edge flashings that are tested according to ANSI/SPRI ES-1 and capable of resisting the pressures for required wind speed.
- D. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes to prevent buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects

2.02 MATERIALS AND GAUGES

- A. Where sheet metal is required and no material or gauge is indicated, furnish and install the highest quality and gauges commensurate with referenced standard to match existing.
 - Edge and Fascia Metal:
 - a. 22 gauge G-90 galvalume prefinished with a Kynar 500 based flourpolymer coating. Color selected by Architect.
 - 2. Sill Flashing, Flashing at Storefront Systems, & Generic Flashing Metal:
 - 22 gauge G-90 galvalume prefinished with a Kynar 500 based flourpolymer coating.
 Color selected by Architect.
 - 3. Reglets:

- a. 22 gauge G-90 galvalume prefinished with a Kynar 500 based flourpolymer coating.
 Color selected by Architect.
- 4. Receivers:
 - a. 22 gauge G-90 galvalume prefinished with a Kynar 500 based flourpolymer coating. Color selected by Architect.
- 5. Counterflashing:
 - a. 24 gauge G-90 galvalume prefinished with a Kynar 500 based flourpolymer coating. Color selected by Architect.
- 6. Hurricane Clips:
 - a. ASTM A 67; commercial quality, 2D annealed finish, 304 stainless steel, 20 gauge.
- 7. Pitch Pans, Bonnets, Draw Bands, Box Curb Caps, Pipe Hoods, Gravity Vents, Gooseneck Vents, and Pier Caps:
 - a. ASTM A 67; commercial quality, 2D annealed finish, 304 stainless steel, 24 gauge.
- 8. Expansion Joint Cover:
 - a. 24 gauge G-90 galvalume prefinished with a Kynar 500 based flourpolymer coating. Color selected by Architect.
- 9. Continuous Cleat:
 - a. Galvanized, 20 gauge.
- 10. Termination Bar:
 - a. 1/8 inch X 3/4 inch extruded Aluminum.
- 11. Lead Flashings:
 - a. Sheet complying with FS QQ-L-201. Grade B; formed from Common De-Silvered Pig Lead complying with ASTM B-29. Weight 4.0 lbs. /sq. ft. unless otherwise specified.
- 12. Gutters:
 - a. 22 gauge G-90 galvalume prefinished with a Kynar 500 based flourpolymer coating.
 Color selected by Architect.
- 13. Gutter Brackets:
 - a. 1/8 inch (thick) x 1 inch hot dipped galvanized flat stock for gutter brackets shall extend up the entire back height of the gutter and be attached with a minimum of two 8 inches x 2 inches wood grip screws. The brackets will be installed in 36 inches centers and match profile of new gutter. Brackets shall be wrapped with same prefinished metal as gutters.
- 14. Gutter Spacers:
 - a. ASTM A67; commercial quality, 2D annealed finish, 304 stainless steel, 16 gauge x 1 inch wide. Spaced at 36 inches on centers alternating between gutter and brackets.
- 15. Downspouts:
 - a. Pre-painted, Metallic-Coated Steel: 22 gauge.

2.03 NAILS, RIVETS, AND FASTENERS

- A. Nails: Copper, Stainless Steel or Galvanized depending on application.
- B. Rivets: Copper, Aluminum, Stainless Steel or Galvanized depending on application.
- C. Exposed Fasteners and Washers: Stainless Steel Screws with covered neoprene gaskets.
- D. Unexposed Fasteners and Washers: Cadmium plated

2.04 RELATED MATERIALS

- A. Flux: Raw Muriatic Acid killed with Zinc Chloride.
- B. Solder: Conform to current ASTM B-12. 50% tin and 50% lead.
- C. Burning Rod for Lead: Same composition as lead sheet.
- D. Joint Sealant: Polyurethane, see Joint Sealant Section.
- E. Underlayment: Vinyl Membrane, Polyethylene, 6 mils (0.15 mm) thick
- F. Primer: Zinc chromate type.
- G. Protective Backing Paint: Zinc molybdate alkyd.

- H. Sealant to be Concealed in Completed Work: Non-curing butyl sealant.
- I. Sealant to be Exposed in Completed Work: 1; elastomeric sealant, 100 percent silicone with minimum movement capability of plus/minus 25 percent and recommended by manufacturer for substrates to be sealed; clear.
- J. Plastic Cement: 1, Type I.

2.05 FABRICATION

- A. Form sections true to shape, accurate in size, square, and free from distortion or defects.
- B. Form pieces in longest possible lengths.
- C. Hem exposed edges on underside 1/2 inch (13 mm); miter and seam corners.
- D. Form material with flat lock seams, except where otherwise indicated; at moving joints, use sealed lapped, bayonet-type or interlocking hooked seams.
- E. Fabricate corners from one piece with minimum 18 inch (450 mm) long legs; seam for rigidity, seal with sealant.
- F. Fabricate vertical faces with bottom edge formed outward 1/4 inch (6 mm) and hemmed to form drip.
- G. Fabricate flashings to allow toe to extend 2 inches (50 mm) over roofing gravel. Return and brake edges.
- H. Shop fabricate work to greatest extent possible. Comply with details shown, and with applicable requirements of NRCA, SMACNA, and other industry practices.
- I. Fabricate for waterproof and weather-resistant performance; with expansion provisions for running work, sufficient to permanently prevent leakage, damage or deterioration of work.
- J. Fabricate all inside and outside corner coping joints using a standing seam. Final seam profile to be approved by Architect prior to installation.
- K. Form exposed sheet metal work without excessive oil-canning, buckling and tool marks, true to line and levels as indicated, with exposed edges folded back to form hems

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify all existing work is complete to a point where this installation may commence
- B. Verify roof openings, curbs, pipes, sleeves, ducts, and vents through roof are solidly set, reglets in place, and nailing strips located.
- C. Verify roofing termination and base flashings are in place, sealed, and secure.
- D. In the event of discrepancy, notify Architect. Do not proceed until discrepancies have been resolved.
- E. Sheet metal items scheduled for replacement shall be field measured prior to fabrication. Sizes shall match existing.
- F. Field measure site conditions prior to fabricating work.

3.02 PREPARATION

- A. Install starter and edge strips, and cleats before starting installation.
- B. Back paint concealed metal surfaces with protective backing paint to a minimum dry film thickness of 15 mil (0.4 mm).

3.03 INSTALLATION

- A. Secure flashings in place using concealed fasteners, and use exposed fasteners only where permitted..
- B. Apply plastic cement compound between metal flashings and felt flashings.
- C. Fit flashings tight in place; make corners square, surfaces true and straight in planes, and lines accurate to profiles.

- D. Solder metal joints for full metal surface contact, and after soldering wash metal clean with neutralizing solution and rinse with water.
- E. Lead Flashing Installation:
 - 1. Set all leads in a bed of asphalt mastic. Prime both sides of lead flashing.
 - 2. At pipe vents, turn lead down into pipe opening and crimp.

F. Cleats:

- 1. Provide continuous cleats for all edge metal to secure loose edges of sheet metal work.
- 2. Space butt joints approximately 1/8 inch apart.
- 3. Fasten cleats to the supporting construction with stainless steel fasteners evenly spaced to resist pressures as set forth herein, but in no case, greater than 12 inches on center. Fasten to concrete or masonry with screws driven in expansion shields set in concrete or masonry. Cleat should be fabricated to a size to ensure a rigid installation

3.04 FIELD QUALITY CONTROL

- A. See Section 01 4000 Quality Requirements, for field inspection requirements.
- B. Inspection will involve surveillance of work during installation to ascertain compliance with specified requirements.

3.05 CLEANING

- A. Clean exposed metal surface removing substances which might cause corrosion of metal or deterioration of finish.
- B. Remove protective plastic sheeting from metal surfaces

SECTION 07 7100 - ROOF SPECIALTIES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Manufactured roof specialties, including copings and fascias.
- B. Roof expansion joint covers.

1.02 RELATED REQUIREMENTS

- A. Section 07 5200 Modified Bituminous Membrane Roofing
- B. Section 07 7200 Roof Accessories: Manufactured curbs, and roof hatches.

1.03 REFERENCE STANDARDS

- A. AAMA 2605 Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels; 2013.
- B. ANSI/SPRI/FM 4435/ES-1 Test Standard for Edge Systems Used with Low Slope Roofing Systems; 2017.
- C. AAMA 2605 Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels; 2013.
- D. NRCA (RM) The NRCA Roofing Manual; 2017.
- E. SMACNA (ASMM) Architectural Sheet Metal Manual; 2012.
- F. SPRI ES-1 Wind Design Standard for Edge Systems Used with Low Slope Roofing Systems; 2011.

1.04 SUBMITTALS

- Product Data: Provide data on shape of components, materials and finishes, anchor types and locations.
- B. Shop Drawings: Indicate configuration and dimension of components, adjacent construction, required clearances and tolerances, and other affected work.
- C. Samples: Submit two appropriately sized samples of coping and gravel stop.

1.05 QUALITY ASSURANCE

- A. Perform work in accordance with SMACNA (ASMM) details.
- B. Components: Design and size components to withstand dead and live loads caused by positive and negative wind pressure activing normal to the plane of the wall as calculated in accoradance with code requirement for design pressures. Assemblies shall meet all Local Code Requirements, FEMA Consensus based codes, and ASCE 7-16.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Roof Edge Flashings and Copings:
 - 1. Architectural Products Co: www.archprod.com.
 - 2. ATAS International, Inc: www.atas.com/#sle.
 - 3. W.P. Hickman Company; PermaSnap 2 Coping: www.wph.com.
- B. Control and Expansion Joint Covers:

2.02 COMPONENTS

- A. Roof Edge Flashings: Factory fabricated to sizes required; mitered, welded corners; concealed fasteners
 - 1. Configuration: Fascia, cant, and edge securement for roof membrane.
 - Pull-Off Resistance: Tested in accordance with ANSI/SPRI/FM 4435/ES-1 using test
 methods RE-1 and RE-2 to positive and negative design wind pressure as defined by
 applicable local building code.
- B. Copings: Factory fabricated to sizes required; mitered, welded corners; concealed fasteners.

- 1. Configuration: Concealed continuous hold down cleat at both legs; internal splice piece at joints of same material, thickness and finish as cap; concealed stainless steel fasteners.
- 2. Pull-Off Resistance: Tested in accordance with ANSI/SPRI/FM 4435/ES-1 using test method RE-3 to positive and negative design wind pressure as defined by applicable local building code.
- 3. Material: Formed aluminum sheet, 0.050 inch (1.3 mm) thick, minimum.
- 4. Finish: 70 percent polyvinylidene fluoride.
- 5. Color: To be selected by Architect from manufacturer's full range.
- 6. Manufacturers:
 - a. W.P. Hickman Company; PermaSnap 2 Coping: www.wph.com.
- C. Expansion Joint Covers: Composite construction of 3-inch (76 mm) wide flexible EPDM flashing of white color with closed cell urethane foam backing, each edge seamed to aluminum sheet metal flanges, designed for nominal joint width of 1 inch (25.4 mm). Include special formed corners, tees, intersections, and wall flashings, each sealed watertight.

2.03 FINISHES

A. PVDF (Polyvinylidene Fluoride) Coating: Superior Performance Organic Finish, AAMA 2605; multiple coat, thermally cured fluoropolymer finish system; color as indicated.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that deck, curbs, roof membrane, base flashing, and other items affecting work of this Section are in place and positioned correctly.

3.02 INSTALLATION

- A. Install components in accordance with manufacturer's instructions and NRCA (RM) applicable requirements.
- B. Seal joints within components when required by component manufacturer.
- C. Coordinate installation of components of this section with installation of roofing membrane and base flashings.
- D. Coordinate installation of sealants and roofing cement with work of this section to ensure water tightness.

SECTION 07 7200 - ROOF ACCESSORIES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Manufactured curbs.

1.02 RELATED REQUIREMENTS

- A. Section 07 5200 Modified Bituminous Membrane Roofing
- B. Section 07 6200 Sheet Metal Flashing and Trim: Roof accessory items fabricated from sheet metal.
- C. Section 07 7100 Roof Specialties: Other manufactured roof items.

1.03 REFERENCE STANDARDS

- ASTM A653/A653M Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2015.
- B. ASTM A792/A792M Standard Specification for Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process; 2010 (Reapproved 2015).
- C. FM (AG) FM Approval Guide; current edition.

1.04 SUBMITTALS

- A. See Section 01 3000 Submittal Procedures.
- B. Product Data: Manufacturer's data sheets on each product to be used.
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
 - 4. Maintenance requirements.
- C. Shop Drawings: Submit detailed layout developed for this project and provide dimensioned location and number for each type of roof accessory.
- D. Warranty Documentation:
 - 1. Submit manufacturer warranty.
 - Ensure that forms have been completed in Owner's name and registered with manufacturer.

1.05 QUALITY ASSURANCE

- A. Perform work in accordance with SMACNA (ASMM) details.
- B. Components: Design and size components to withstand dead and live loads caused by positive and negative wind pressure activing normal to the plane of the wall as calculated in accoradance with code requirement for design pressures. Assemblies shall meet all Local Code Requirements, FEMA Consensus based codes, and ASCE 7-16.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Store products under cover and elevated above grade.

1.07 WARRANTY

- A. See Section 01 7800 Closeout Submittals, for additional warranty requirements.
- B. Correct defective Work within a five year period after Date of Substantial Completion.

PART 2 PRODUCTS

2.01 ROOF CURBS

- A. Manufacturers:
 - 1. AES Industries Inc.: www.aescurb.com.
 - 2. The Pate Company: www.patecurbs.com.
 - 3. Roof Products & Systems (RPS): www.rpscurbs.com.

- B. Roof Curbs Mounting Assemblies: Factory fabricated hollow sheet metal construction, internally reinforced, and capable of supporting superimposed live and dead loads and designated equipment load with fully mitered and sealed corner joints welded or mechanically fastened, and integral counterflashing with top and edges formed to shed water.
 - Roof Curb Mounting Substrate: Curb substrate consists of flat roof deck sheathing with insulation.
 - Sheet Metal Material:
 - 3. Galvalume Steel: Hot-dip aluminum zinc alloy coated steel sheet complying with ASTM A792/A792M; AZ60 (AZM180) coating designation; 18 gauge, 0.048 inch (1.2 mm) thick.
 - 4. Fabricate curb bottom and mounting flanges for installation directly on metal roof panel system to match slope and configuration of system.
 - a. Extend side flange to next adjacent roof panel seam and comply with seam configurations and seal connection, providing at least 6 inch (152 mm) clearance between curb and metal roof panel flange allowing water to properly flow past curb.
 - b. Where side of curb aligns with metal roof panel flange, attach fasteners on upper slope of flange to curb connection allowing water to flow past below fasteners, and seal connection.
 - c. Maintain at least 12 inch (305 mm) clearance from curb, and lap upper curb flange on underside of down sloping metal roof panel, and seal connection.
 - d. Lap lower curb flange overtop of down sloping metal roof panel and seal connection.
 - 5. Provide layouts and configurations indicated on drawings.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.02 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using methods recommended by manufacturer for achieving acceptable results for applicable substrate under project conditions.

3.03 INSTALLATION

- A. General: Install roof accessories according to manufacturer's written instructions.
 - 1. Install roof accessories level, plumb, true to line and elevation, and without warping, jogs in alignment, excessive oil canning, buckling, or tool marks.
 - 2. Anchor roof accessories securely in place so they are capable of resisting indicated loads.
 - 3. Use fasteners, separators, sealants, and other miscellaneous items as required to complete installation of roof accessories and fit them to substrates.
 - 4. Install roof accessories to resist exposure to weather without failing, rattling, leaking, or loosening of fasteners and seals.
- B. Metal Protection: Protect metals against galvanic action by separating dissimilar metals from contact with each other or with corrosive substrates by painting contact surfaces with bituminous coating or by other permanent separation as recommended by manufacturer.
 - 1. Coat concealed side of uncoated aluminum and stainless-steel roof accessories with bituminous coating where in contact with wood, ferrous metal, or cementitious construction.
 - Underlayment: Where installing roof accessories directly on cementitious or wood substrates, install a course of felt underlayment and cover with a slip sheet, or install a course of polyethylene sheet.
 - 3. Bed flanges in thick coat of asphalt roofing cement where required by manufacturers of roof accessories for waterproof performance.
- C. Roof Curb Installation: Install each roof curb so top surface is level.

D. Seal joints with elastomeric or butyl sealant as required by roof accessory manufacturer.

3.04 REPAIR AND CLEANING

- A. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing according to ASTM A 780.
- B. Touch up factory-primed surfaces with compatible primer ready for field painting according to Section 09 9000 "Painting and Coating."
- C. Clean exposed surfaces according to manufacturer's written instructions.
- D. Clean off excess sealants.
- E. Replace roof accessories that have been damaged or that cannot be successfully repaired by finish touchup or similar minor repair procedures.

3.05 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Date of Substantial Completion.

